



Contract No.: 174-9613

Agreement to Supply: In-Car Mobile Video Recording System.

This agreement, made and entered into this the 5th day of February, 2008, is by and between the CITY OF FORT LAUDERDALE, a Florida municipality, City Hall 100 North Andrews Avenue, Fort Lauderdale, FL 33301, hereinafter called the "City" and Contractor:

Name: Coban Research and Technologies, Inc.

Address: 12503 Exchange Dr., Ste. 536 City: Stafford State: TX Zip: 77477

A Corporation A Partnership An Individual Other: _____

authorized to do business in the State of Florida, hereinafter called the "Company" or "Contractor." Witnesseth that: Whereas, the City did issue a Request for Proposal (RFP) for supplying the requirements of the City for the items and/or service listed above and the Contractor submitted a proposal that was accepted and approved by the City.

Formal authorization of this contract was adopted by the City Commission on: October 7, 2008 Pur-24, 08-1478

Now, therefore, for and in consideration of the mutual promises and covenants herein contained, the parties covenant and agree as follows:

1. The Company agrees to provide to the City products and services for an in-car mobile video recording system in accordance with the following specifications, terms, covenants and conditions:

a. This contract Form G-110, the Request for Proposal containing General Conditions, Special Conditions, Specifications, addenda, if any, and other attachments forming a part of RFP Number 174-9613, the Contractor's proposal in response to the RFP, the Contractor's Best and Final Offer Response, the Fort Lauderdale Statement of Work, the design document titled Fort Lauderdale Police Department, and the Payment Milestones form a part of this contract and by reference are incorporated herein.

b. In construing the rights and obligations between the parties, the order of priority in cases of conflict between or among the documents shall be as follows:

- First, this contract Form G-110, Rev. 12/00;
- Second, the Fort Lauderdale Statement of Work;
- Third, the design document titled Fort Lauderdale Police Department;
- Fourth, the Payment Milestones;
- Fifth, the City's RFP and all addenda thereto;
- Sixth, the Contractor's Best and Final Offer Response;
- Seventh, the Contractor's response to the RFP.

c. **Taxes Exempt:** State Sales (85-8013875578C-1) and Federal Excise (59-600319) Taxes are normally exempt, however, certain transactions are taxable. Consult your tax practitioner for guidance where necessary.

d. **Invoicing:** Contractor will forward all invoices in duplicate for payment to the following: Finance Department, 100 N. Andrews Avenue, 6th Floor, Fort Lauderdale, FL 33301. If discount, other than prompt payment terms applies, such discount MUST appear on the invoice.

2. Contract Special Conditions: The following special conditions are made a part of and modify the standard provisions contained in this contract Form G-110.

Warranty and maintenance and wireless support for years 2 through 5 are subject to and contingent on the City's annual prior appropriation of funds therefor.

The word "Finance," contained in the first paragraph of Part IV, Section 8 of the RFP is changed to "Police."

The phrase "Finance Director," contained in the second paragraph of Part IV, Section 8 of the RFP is changed to "Police Chief."

The quantity "269" in Item No. 14 of the Contractor's Exhibit C - Price Form, contained in the Contractor's Best and Final Offer Response, is deleted.

The second sentence of the fourth paragraph on Page 1 of the Fort Lauderdale Statement of Work is amended and restated to provide as follows: **"33 additional units will be delivered by February 27, 2009."**

The Contractor shall ensure that the in-car video system will enable the City to comply with the Florida public records law and any and all other applicable laws, rules, and regulations regarding video retention and reproduction.

Notwithstanding the term of this Contract, the warranty and maintenance period for each mobile video camera unit shall be based upon delivery and installation within periodic successive two month time periods beginning upon the date of delivery. The warranty and maintenance period for mobile video camera units installed within two months following the delivery date shall commence upon the delivery date. The warranty and maintenance period for mobile video camera units delivered but not installed within the two months following the delivery date shall commence on the date that is the beginning of the successive two month period following the delivery date if such mobile video camera unit is installed within that succeeding two month period. Thereafter, the warranty and maintenance period for mobile video camera units delivered shall commence on the date that is the beginning of each successive two month period if those mobile video camera units are installed within the two month period following the date that is the beginning of the successive two month period.

The Contractor shall comply with all directions given by the City pursuant to Subsection 2 of Section 2 of Part V of the RFP.

This Contract, together with the Limited Warranty Statement and Software License Agreement, shall be governed by the laws of the State of Florida. Venue for any lawsuit by either party against the other party, or otherwise arising out of this Contract, the Warranty Statement, or the Software License Agreement, and for any other legal proceeding, shall be in Broward County, Florida, or in the event of federal jurisdiction, in the Southern District of Florida.

The phrase "Mobile Hardware 1st half," contained in Milestone 4 of the Payment Milestones, means delivery to the City of 99 mobile video camera units, 35 video camera units having previously been delivered to the City in accordance with the Fort Lauderdale Statement of Work.

The phrase "Mobile Hardware 2nd half," contained in Milestone 6 of the Payment Milestones, means delivery to the City of 134 mobile video camera units.

The word "not," on the first line of the paragraph titled "FORCE MAJEURE" on Page 8 of the Fort Lauderdale Statement of Work, is deleted.

The following sentence, shown as stricken through, contained on Page 18 of the Fort Lauderdale Statement of Work, is deleted: ~~"The CITY will be solely responsible for any and all such claims made against COBAN which are based on the CITY's use of the materials, system or services provided by COBAN hereunder."~~

Any and all references in the Contractor's response to the RFP suggesting that the Contractor's response to the RFP contains confidential information are deleted.

3. Contract Summary:

a. Attachments:

Fort Lauderdale Statement of Work, Design Document titled Fort Lauderdale Police Department, and Payment Milestones, Coban Research and Technologies, Inc.'s response to the RFP and Best and Final Offer Response,

b. Insurance: Yes No

c. Performance Bond/Letter of Credit: Yes No

d. Procurement Specialist's Initials: MW

4. Contractor's Phone Numbers: Office: 281-277-8288 Ext. 131 Cell:

5. Contractor's Fax Number: 281-277-8256

6. Contractor's E-Mail Address: larrym@cobantech.com Website:

City of Fort Lauderdale

By: [Signature]
Director of Procurement Services (City Manager's Designee)

Date: 2/05/2009

Approved as to form:

[Signature]
Senior Assistant City Attorney

Contractor/Vendor

AWAN CHEN
Name of Company Officer (please type or print)

By: [Signature]
Authorized Officer's Signature

Title: PRESIDENT

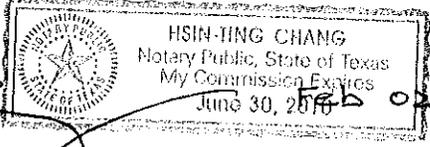
Date: 2/02/09

Kang-Lin Lee
Secretary (please type or print)

Attest: [Signature]
Signature of Secretary

G-110, Rev 12/00

STATE OF TEXAS
COUNTY OF FORT BEND

[Signature]
 Feb 02, 2009



Prepared for:
Fort Lauderdale
Police Department



**ORIGINAL
BID**

Bid Response:

RFP#174-9613 In Car Mobile Video Project

**Fort Lauderdale Police Department
Fort Lauderdale, Fla.**

ORIGINAL

Bidder:

Coban Research and Technologies, Inc.
12503 Exchange Dr. Ste. 536
Stafford, TX. 77477
www.cobantech.com



Coban Research and Technologies, Inc.

12503 ExchangeDr., Suite 536

Stafford, Texas 77477

March 22, 2007

City of Fort Lauderdale, Florida

Department of Procurement Services

100 N. Andrews Avenue, Suite 619

Fort Lauderdale, FL 33301

Subject: RFP# - 174-9613

Dear Mr. Michael Walker:

The overall capabilities of the proposed system involve and address the video capture, video transfer, video storage, and video management required by Fort Lauderdale Police Department RFP# 174-9613. Cobans digital in car video and mobile data computer solutions are built on proven, tested technologies.

The system proposed in this offering is capable of the following:

Video Capture:

Coban's Video Capture Solution provides the richest functions in the industry.

- a. Supports all video formats: Mpeg-1, 2, 4.
- b. Programmable Pre/Post Event Recording
- c. Industry-leading 900 MHz Microphone that has range of over 1000 ft wearable microphone, a robust, self-contained unit with durable, optional external microphone.
- d. Touch screen interface for easy of use and quick data entry.
- e. Optional back seat / rear facing camera
- f. Smart Power Module "SPM"- detects voltage fluctuation to and from the vehicle to our system to protect recorder/cpu and vehicle battery. It also contains a 50 minute backup battery as well. If a low voltage situation is detected in the vehicle the Smart Power Module kicks in and cuts power consumption from the vehicle and runs the in car video system from the backup battery for a period of time. If the low voltage solution is not corrected, the Smart Power Module will initiate a "clean" shutdown of the system. No other vendor on the market today has a device that provides the functionality of our SPM.
- g. Recording media: 30 GB removable hard disk, can store 25 Hours of Mpeg2 video, 50 hours of Mpeg1 video or 70-90 hours of Mpeg-4 video and provide a backup for wireless uploads
- h. Event data (such as event type, offender's info, ticket and case numbers, etc) can be entered using keyboard, touch screen monitor, or magnetic strip reader.
- i. Metadata (such as date/time, lightbar status, speed radar readings, GPS coordinates, etc) are recorded automatically.

Video Transfer:

Coban's Video Transfer Solution provides all three video transfer methods.

- a. Removable hard disk upload. High speed USB 2.0 transfer.
- b. Wireless upload. Fail-safe checkpoint transfer. (802.11a or g)
- c. Wired upload. High speed Gigabit transfer.

Video Storage:

Coban's Video Storage Solution provides flexible and scalable solutions for different requirements and needs. It is understood that the storage solution will be provided and managed by the Fort Lauderdale Police Department I.T department, however, below is a list of just some of the supported solutions

Coban has deployed or is capable of integrating with, some of which are detailed in this RFP by the department already:

- a. Disk Raid system, internal or external Raid 5/6 DAS or iScsi systems for fault tolerance.
- b. Digital Tape Library, LTO 3 technology stores Terabytes to Petabytes of video data and has a built-in robotic arm that automates video archival and retrieval. Tape Libraries are used as extended storage devices with Cobans DVMS solution, not as typical backup / restore devices. The advantage to this is that any officer with the proper rights and permissions can retrieve a video from the tape library using Cobans DVMS application with no human intervention as well as without having to wait for the lengthy restore process to complete before having access to the file.
- c. Manual DVD Solution: Low cost DVD backup. Suitable for small departments. Videos are bunched into video sets; each set can fit into one DVD disk. Users select which set to backup to DVD.
- d. Automated DVD Solution: Selected types of videos are backed up to DVDs automatically using Auto-DVD writer. The DVD writer also prints labels on the DVDs for easy retrieval.

Any or all of the above solutions can be used with Cobans solution and more importantly, ARE being used by departments across the country today successfully.

Video Management:

Coban's Video Management Solution is a Policy-Based Automation System, which helps system administrators focus on the overall system performance rather than operational details. (See attached manual for more details)

- a. Videos can be searched using all event data and metadata collected by the in-car units.
- b. Administrator determines which types of videos are backed up to long-term storage (tape library or DVD disks) and the retention period of each type of videos. Once the retention period expires, videos are removed from the system automatically.
- c. Administrator sets up user access rights (such as video access, report printing, and general data management functions) to the system. All the user activities are logged into audio trail for complete chain of custody.
- d. Administrator defines the event types and the in-car unit settings (such as video format, transfer method, and several operation modes). The settings are pushed to all the in-car units automatically.
- e. After videos have been selected to export, DVMS provides an option to burn videos to media such as CD/DVD and VHS tapes.

A team of skilled specialists who have extensive digital video and network/wireless technology implementation experience back all of our solutions and will work with the Fort Lauderdale Police Departments' Information Technology and Fleet Service technicians to implement the solution detailed in this RFP. Coban is an Information Technology company, our solutions are designed and implemented using Coban Solution Architects, not a 3rd party company. We understand the digital in car video world as well as the data management solutions and infrastructures needed to successfully deploy a project of this magnitude. Just ask our clients!

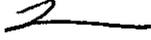
Coban will provide the Fort Lauderdale Police Department industry-leading equipment, software, and services accompanied by the service levels and reliability required of any system supporting our law enforcement agencies. We invite your examination of our proposed solutions. Our conservative approach has given us a track record of successes, which we are proud to share with you.

The proposed solution offered in our response includes the following features:

- Three back office record / storage options based on MPEG 1, MPEG2, MPEG 4 Compressions (4 selectable bit rate resolutions of Mpeg4). Dual Hard Drive solutions as a standard with every system.
- In-Car Hardware Equipment – TopCam G-II Digital Video Recorder that has no equal in flexibility and functionality.
- The ability to provide a Centralized Storage solution accommodating the locations detailed in the RFP; utilizing industry standard hardware and software provided by the department that will allow the department to scale the solution upwards at their own pace as their need for additional storage grows without having to tear out existing infrastructure to accommodate expansion. Cobans Digital video Management Solution is the most robust, scalable and functional video management solution on the market today.

We appreciate your interest in Coban and look forward to working with you and your staff. I will act as Coban's primary contact throughout the quotation evaluation process. Should you have any questions, please contact me at (281) 277-8288 Ext: 131 or via email at larrym@cobantech.com.

Sincerely,



Lawrence K. Marr

Channel Account Manager

Coban Research and Technologies, Inc.

12503 Exchange Dr., Suite 536

Stafford, Texas 77477

phone: 281.277.8288 x131

fax: 281.277.8256

BID/PROPOSAL SIGNATURE PAGE

How to submit bids/proposals: It is preferred that bids/proposals in hard copy be mail. If mailing a hard copy, it will be the sole responsibility of the Bidder to ensure that his bid reaches the City of Fort Lauderdale, City Hall, Procurement Department, Suite 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, prior to the bid opening date and time listed. Bids/proposals submitted by fax or email will NOT be accepted.

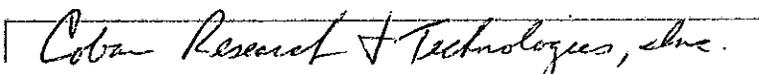
The below signed hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal I will accept a contract if approved by the CITY and such acceptance covers all terms, conditions, and specifications of this bid/proposal.

Please Note: If responding to this solicitation through RFP Depot, the electronic version of the bid response will prevail, unless a paper version is clearly marked **by the bidder** in some manner to indicate that it will supplant the electronic version.

Submitted by: 
(signature)

(date) 03/22/07

Name (printed) Brian Chang Title: President

Company: (Legal Registration) 

CONTRACTOR, IF FOREIGN CORPORATION, SHALL BE REQUIRED TO OBTAIN A CERTIFICATE OF AUTHORITY FROM THE DEPARTMENT OF STATE, IN ACCORDANCE WITH FLORIDA STATUTE §607.1501 (visit <http://www.dos.state.fl.us/doc/>).

Address: 12503 Exchange Drive, Suite 536

City Stafford State: TX Zip 77477

Telephone No. 281-277-8288 Ext: 131 FAX No. 281-277-8256

E-MAIL: larrym@cobantech.com

Delivery: Calendar days after receipt of Purchase Order (section 1.02 of General Conditions): 45

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/23/2007

PRODUCER

COMMQUEST INSURANCE
 6100 Corporate Drive Ste 268
 Houston, TX 77036-3436
 (713) 590-4668

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Coban Research & Technologies

 12503 Exchange Drive
 Stafford, TX 77477
 281-277-8288

INSURERS AFFORDING COVERAGE

NAIC #

INSURER A: **Evanston Insurance Company**
 INSURER B: **Farmers Insurance Exchange**
 INSURER C: **St Paul Travelers**
 INSURER D: **The Burlington Insurance**
 INSURER E: **Safeco**

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
D		GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability	411BW08345	11-27-06	11-27-07	EACH OCCURRENCE \$ 1,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC				DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B		AUTOMOBILE LIABILITY <input type="checkbox"/> ANYAUTO <input type="checkbox"/> ALLOWNED AUTOS <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	069410729	05-18-06	05-18-07	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
		GARAGE LIABILITY <input type="checkbox"/> ANYAUTO				BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
		EXCESS/UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE RETENTION \$				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EA ACC \$ AGG \$
E		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	04-WC-477980-10	01-01-07	01-01-08	WC STATU-TORY LIMITS <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C A		OTHER Personal Proprty Professional Liability	I660-8026B707-06 SP-825361	06-17-06 05-18-06	06-17-07 05-18-07	Contents: \$ 540,000 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Wen Han Tu



Office of the Secretary of State

CERTIFICATE OF INCORPORATION OF

COBAN Research and Technologies, Inc.
Filing Number: 800053410

The undersigned, as Secretary of State of Texas, hereby certifies that Articles of Incorporation for the above named corporation have been received in this office and have been found to conform to law.

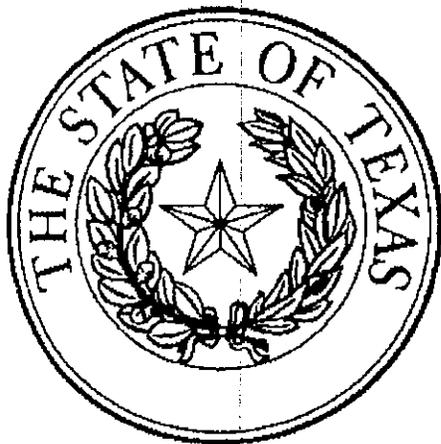
Accordingly, the undersigned, as Secretary of State, and by virtue of the authority vested in the Secretary by law, hereby issues this Certificate of Incorporation.

Issuance of this Certificate of Incorporation does not authorize the use of a name in this state in violation of the rights of another under the federal Trademark Act of 1946, the Texas trademark law, the Assumed Business or Professional Name Act, or the common law.

Dated: 02/08/2002

Effective: 02/08/2002

FEIN # 01-0593612



Gwyn Shea

Gwyn Shea
Secretary of State



Project Change Request Form

SECTION A: CHANGE REQUEST DESCRIPTION

Request Date: _____

Change #: _____

Type of Change:

- Non-Compliance
- Functional/Design Change
- Requirements' Change
- Regulatory
- Other (Specify) _____

Priority:

- Critical
- High
- Medium
- Low

Requestor: _____

Description of the Requested Change: _____

Reason for Change: _____

SECTION B: IMPACT ASSESSMENT

Background: _____

Technical Impact: _____

Budget Impact: _____

Schedule Impact: _____

Performance Impact: _____

Enterprise Impact (impact to other projects): _____

Total Estimated Cost: _____

Estimated Revised Completion Date: _____



SECTION D: RESPONDING PROJECT MANAGEMENT APPROVAL

I. _____
[NAME – Level I Approver] Date

Status: Approved Cancelled Denied Approved With Specified Conditions

If Cancelled
Reason for Cancellation:

If Denied
Reason for Denial:

If Approved with Specified Conditions
Conditions (list specific actions, attaching documents if necessary):

Additional Comments:

II. _____
[NAME – Level II Approver] Date

Status: Approved Cancelled Denied Approved With Specified Conditions

If Cancelled
Reason for Cancellation:

If Denied
Reason for Denial:

If Approved with Specified Conditions
Conditions (list specific actions, attaching documents if necessary):

Additional Comments



City of Fort Lauderdale • Procurement Services Department
100 N. Andrews Avenue, #619 • Fort Lauderdale, Florida 33301
954-828-5933 FAX 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

RFP 174-9613
IN-CAR MOBILE VIDEO

ISSUED February 26, 2007

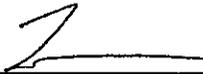
1. The opening date has changed in RFP 174-9613. The RFP currently states that the Proposals are due by March 12, 2007 prior to 2:00pm. The RFP should now read that the Proposals are due by March 26, 2007 prior to 2:00pm Eastern Standard Time.

All other terms, conditions, and specifications remain unchanged.

This Addendum No. 1 should be submitted with your RFP Proposal.

Michael Walker, CPPB
Procurement and Contracts Manager

Company Name: COBAN RESEARCH & TECHNOLOGIES, INC.
(please print)

Bidder's Signature: 

Date: 3/22/07



ADDENDUM NO. 2

RFP 174-9613
IN-CAR MOBILE VIDEO

ISSUED February 28, 2007

1. The following ICMV Addendum Material stated below is to provide additional Environment Description Clarification, Upload Clarification, Back Office Equipment Clarification, Acceptance Test Clarification, and RFP Changes as stated, Additional RFP response requirements and Additional requirements for the final awarded vendor. This information will also assist vendors in their questions that they have already submitted in the questions/answers section of RFPdepot.

Environment Description Clarification

The city police department operates with three 10 hour overlapping shifts per day. There are currently approximately 45 vehicles per shift; all 45 vehicles from a shift may be in the upload areas with video to upload at the same time. The system needs to be able to scale to accommodate up to 70 vehicles at shift change. Initially all uploads will occur at the Police Headquarters location. Uploads are planned to be performed via the preferred method of wireless to the extent that the wireless uploads are completed within a 30 minute timeframe for the number of vehicles that will be simultaneously performing uploads at shift change. LAN upload stations will supplement the wireless upload stations as needed based on vendor recommendations. Each upload area will have the number and type of access points as recommended by the vendor. There are two parking areas around Police HQ that can be equipped with wireless and LAN upload stations, with additional parking areas can also be utilized for uploads if required for expected capacity. Each vehicle can be expected to be in one of the parking areas for 30 minutes immediately prior, during, or after a shift worked by the vehicle. The city is looking for guidance from the vendors for expected hours of video per vehicle per shift, based on defined triggers and video retention guidelines specified in the RFP. Each vehicle will be recording 4CIF video (as per APCO recommendations). Each vehicle must be capable of uploading wirelessly, with a LAN connection, and with removable media.

Network core equipment is connected between each floor of the police HQ by fiber.



100Mb or 1GB ports can be provided at the network core as recommended by the vendor. Each access point is expected to be less than 300 feet from the network core equipment. The vendor is expected to quote parts and labor for access point and LAN upload station installation. After contract award, an engineering site survey will be performed by the vendor to identify specific wireless AP locations and numbers, as well as any other LAN or electrical requirements.

Upload Clarification

With respect to uploads, the city is looking for recommendations from the vendors for the following, a range of numbers for each answer is acceptable as long as the vendor specifies the factors (i.e. hours per shift, video quality etc) on which the range is based:

- 1. Number of upload areas required at HQ to accommodate wireless uploads for the specified number of vehicles.***
- 2. Quantity and model of access points required at each upload area.***
- 3. Number of outdoor LAN upload stations and indoor removable media upload stations required in an installation of the size proposed to accommodate special situations in which a large portion of the fleet may be recording more than 3 hours of video per shift.***

The upload mechanism needs to needs to accommodate uploading of all video from all vehicles on a shift within 30 minutes. Wireless is preferred and is intended to be the primary upload mechanism, the city is looking for recommendations from the vendor for the number of upload areas and access points to achieve this. If wireless technology is not capable of meeting the 30 minute upload window for all the vehicles then a number of vehicles may perform LAN uploads. There will also need to be a number of removable media stations to accommodate special situations, but use of removable media is not intended to be a primary means of uploading data.

Pricing in the RFP response should indicate unit price of wireless upload stations, LAN upload stations and removable media stations. The estimated quantity of each should be recommended by the vendor to meet the needs of the city as expressed in the RFP and addendum, and be sufficient for five years of service. After contract award and as part of the contract, the vendor will be responsible for an engineering site survey to identify the specific number of required upload areas, wireless access points, LAN upload stations, and associated cabling, power and mounting hardware for upload stations. The RFP response should have cost for LAN upload stations, wireless upload stations, and removable media upload stations, additional costs for cabling and power will be expected to be



provided as a result of the engineering survey. The RFP response should have cost and description of scope for an engineering survey.

Back Office Equipment Clarification

The city plans purchase the following equipment, based on vendor recommendations and vendor review of final equipment list:

- *A server or pair of clustered servers with which to manage the vendor provided DVMS application and database,*
- *storage sufficient to accommodate the video data required to be available online for 90 days*
- *an archival device of disk, optical, or tape to store the video data required to be available for up to 1 year as well as evidence and data otherwise tagged for retention beyond the 1 year retention period*
- *a tape library and Veritas software to perform backup of the DVMS system and video data*
- *an automated high capacity DVD burning device (Rimage Producer 8100N or similar)*

With respect to back office equipment, the city is looking for recommendations from the vendors for the following:

1. *Specifications for server(s), storage, archival, backup, and DVD burner devices to ensure compatibility with the vendor's system to meet RFP requirements. Specifications should include but not limited to Operating system, number of CPU's, RAM, number of NIC's, RAID etc.*
2. *Specifications for server(s), storage, archival, backup, and DVD burner devices to provide optimal performance of an enterprise class system in all areas including upload, processing, and access.*
3. *Whether to cluster the server or not*
4. *Estimated storage requirements for the system, given the stated retention guidelines, 4CIF quality, and vendor estimate video/vehicle/shift. If a range of required storage is provided please identify the variables that affect the range.*

The city would also like detailed information regarding any benchmark testing the vendor has performed on their system with respect to uploads.

Acceptance Test Clarification

Reference RFP section 8.1.1. Acceptance testing will be conditional upon the system meeting the baseline time for upload as described in section 8.1.1, as well as other requirements specified in the RFP and not explicitly



excluded in the vendor's RFP response. The vendor should provide a copy of a sample Acceptance Test Plan with the RFP response.

RFP Changes

P12 "Top Three Vendor System Evaluation Process"

The selected vendors will each be required to meet the following requirements:

1. **Field testing** - Vendor must provide a complete video system of the exact configuration offered for the purposes of additional evaluation within 10 days of the request. This should include equipment for two vehicles, a server with the digital video management system, and a removable media docking station. Each vehicle should be equipped to perform LAN, wireless, and removable media upload. The exceptions to the exact configuration requirement are that the server provided does not need to provide the expected production storage requirements.
2. **Lab testing** - Vendor must **also** provide two DVR units capable of uploading via LAN, wireless, and removable media; a wireless access point of the type quoted for this project configured appropriately to be able to test simultaneous LAN and Wireless uploads in a test lab on a desktop, a removable media upload station, and a 2nd server with digital video management system installed. These two DVR units for lab testing are not intended to be mounted in police vehicles for evaluation testing. Vendor to provide sufficient guidance for police technical staff to perform configuration and operation of the system in a desktop lab environment.

Items 3, 4, 5, 6 remain the same.

Upload test environment

The two DVR units for **Lab testing** will be used to perform a benchmark of upload testing in a test lab environment, for both wired and wireless uploads. The upload testing components are not planned to be integrated with the City Police Department's network for upload testing. The City will provide an Ethernet switch. The vendor supplied access point will be connected to the switch which will connect to the vendor provided server connected with minimum 100Mbps port. Simultaneous uploads of various file sizes will be benchmarked with wireless uploads and with LAN uploads.

P26 – 8.1 "Wireless Vehicle Upload stations" and 8.2 "LAN Vehicle upload stations"

The city will NOT be responsible for running Ethernet and power to all LAN upload stations and wireless access points. The city will provide 100Mb or 1Gb ports into network core equipment as required by the vendor, the vendor will be responsible for cabling, power etc required for wireless and LAN upload stations. The Price Form submitted by the vendor should include cost for each individual upload station, it is expected that the cost for ancillary parts and



equipment and services required for cabling and power is not expected to be included as part of response to the RFP but will be identified after the engineering site survey has been performed by the vendor after award of contract.

P27 8.1.1 Minimum baseline time

The wireless upload does not have to be 802.11g, but cost must be considered to accommodate all 269 vehicles. The number of upload areas may be two or three, vendor can provide one answer assuming two upload areas and one answer assuming three upload areas. The size of video file will be 3 GB not 1 GB.

Additional RFP response requirements

Vendor to provide a sample acceptance test plan for in car video solution as well as the upload and back office applications, with the response to the RFP.

Additional Requirements for the final awarded vendor

Vendor to provide a Statement of work, a project plan, and an acceptance test plan tailored for the city's project specifics, after contract award.

2. Page 21, Section 3. Warranty and Maintenance, Item 3 states: The vendor will provide pricing for maintenance for years 2,3,4,5 and 6 in Exhibit C- Price Form.

This should be changed to delete year 6. Also delete in its entirety Item 45 in Exhibit C-Price Form (Year 6-Warranty and Maintenance).

All other terms, conditions, and specifications remain unchanged.

This Addendum No. 2 should be submitted with your RFP Proposal.

Company Name: *J. COGAN RESEARCH & TECHNOLOGIES, INC.*
(please print)

Bidder's Signature: *J.*

Date: 3/22/07



Coban Research and Technologies, Inc.

12503 ExchangeDr., Suite 536

Stafford, Texas 77477

March 22, 2007

City of Fort Lauderdale, Florida

Department of Procurement Services

100 N. Andrews Avenue, Suite 619

Fort Lauderdale, FL 33301

Dear Mr. Michael Walker:

Coban Research and Technologies is pleased to respond to the Fort Lauderdale Police Department's Request for Proposal #174-9613 for Fort Lauderdale Police Department Digital In-Car Video Camera Systems. Over the past 5 years Coban has worked closely with numerous law enforcement agencies across the country to have a greater understanding of the needs and infrastructure requirements in regard to digital in car video solutions. In support of this, Coban will provide an end-to-end solution in response to the requests of the Fort Lauderdale Police Department.

Cobans' headquarters is located in Stafford, Texas and has been a leader in the digital in car video industry for over 5 years. This location employs 32 full time employees ranging from sales, network engineers, technical support and administration. Coban also has approximately 12 regional sales managers that are strategically located throughout the United States.

The overall capabilities of the proposed system involve and address the video capture, video transfer, video storage, and video management.

Video Capture:

Coban's Video Capture Solution provides the richest functions in the industry.

- a. Supports all video formats: Mpeg-1, 2, 4.
- b. Programmable Pre/Post Event Recording
- c. 900 MHz Microphone that has range of over 1000 ft.
- d. Touch screen interface for easy of use and quick data entry.
- e. Optional back seat camera
- f. Smart Power Module "SPM"- detects voltage fluctuation to and from the vehicle to our system to protect recorder/cpu and vehicle battery. It also contains a 50 minute backup battery as well. If a low voltage situation is detected in the vehicle the Smart Power Module kicks in and cuts power consumption from the vehicle and runs the in car video system from the backup battery for a period of time. If the low voltage solution is not corrected, the Smart Power Module will initiate a "clean" shutdown of the system. No other vendor on the market today has a device that provides the functionality of our SPM.
- g. Recording media: 30 GB removable hard disk, can store 25 Hours of Mpeg2 video, 50 hours of Mpeg1 video or 70-90 hours of Mpeg-4 video and provide a backup for wireless uploads
- h. Event data (such as event type, offender's info, ticket and case numbers, etc) can be entered using keyboard, touch screen monitor, or magnetic strip reader.
- i. Metadata (such as date/time, lightbar status, speed radar readings, GPS coordinates, etc) are recorded automatically.

Video Transfer:

Coban's Video Transfer Solution provides all three video transfer methods.

- a. Removable hard disk upload. High speed USB 2.0 transfer.
- b. Wireless upload. Fail-safe checkpoint transfer.
- c. Wired upload. High speed Gigabit transfer.

Video Storage:

Coban's Video Storage Solution provides flexible and scalable solutions for different requirements and needs. It is understood that the storage solution will be provided and managed by the Fort Lauderdale

Police Department I.T department, however, below is a list of just some of the supported solutions Coban has deployed or is capable of integrating with:

- a. Disk Raid system, internal or external Raid 5/6 DAS or iScsi systems for fault tolerance.
- b. Digital Tape Library, LTO 3 technology stores Terabytes to Petabytes of video data and has a built-in robotic arm that automates video archival and retrieval. Tape Libraries are used as extended storage devices with Cobans DVMS solution, not as typical backup / restore devices. The advantage to this is that any officer with the proper rights and permissions can retrieve a video from the tape library using Cobans DVMS application with no human intervention as well as without having to wait for the lengthy restore process to complete before having access to the file.
- c. Manual DVD Solution: Low cost DVD backup. Suitable for small departments. Videos are bunched into video sets; each set can fit into one DVD disk. Users select which set to backup to DVD.
- d. Automated DVD Solution: Selected types of videos are backed up to DVDs automatically using Auto-DVD writer. The DVD writer also prints labels on the DVDs for easy retrieval.

Video Management:

Coban's Video Management Solution is a Policy-Based Automation System, which helps system administrators focus on the overall system performance rather than operation details. (See attached manual for more details)

- a. Videos can be searched using all event data and metadata collected by the in-car units.
- b. Administrator determines which types of videos are backed up to long-term storage (tape library or DVD disks) and the retention period of each type of videos. Once the retention period expires, videos are removed from the system automatically.
- c. Administrator sets up user access rights (such as video access, report printing, and general data management functions) to the system. All the user activities are logged into audio trial for complete chain of custody.
- d. Administrator defines the event types and the in-car unit settings (such as video format, transfer method, and several operation modes). The settings are pushed to all the in-car units automatically.
- e. After videos have been selected to export, DVMS provides an option to burn videos to media such as CD/DVD and VHS tapes.

A team of skilled specialists who have extensive video and digital technology implementation experience back all of our solutions.

Coban can provide the Fort Lauderdale Police Department industry-leading equipment, software, and services accompanied by the service levels and reliability required of any system supporting our law enforcement agencies. We invite your examination of our proposed solutions. Our conservative approach has given us a track record of successes, which we are proud to share with you.

Coban has responded to all technical requirements and understands the general conditions of the RFP. Attached is Coban's response, additional detailed information that outlines Coban's pricing, an alternate solution, and Coban brochures.

If Coban is awarded the bid and when the Fort Lauderdale Police Department and Coban have mutually agreed on the services to be provided, as well as assuring all proper terms and conditions are in place, a Statement of Work and final pricing will be presented for your signature. The estimates provided in this quote will expire 90 days from March 26, 2007.

We appreciate your interest in Coban and look forward to working with you and your staff. I will act as Coban's primary contact throughout the quotation evaluation process. Should you have any questions, please contact me at (281) 277-8288 Ext: 131 or via email at larrym@cobantech.com.

Sincerely,

Lawrence K. Marr
Channel Account Manager
Coban Research and Technologies, Inc.
12503 Exchange Dr., Suite 536
Stafford, Texas 77477
phone: 281.277.8288 x131
fax: 281.277.8256

PART V – MOBILE VIDEO RECORDING SYSTEM REQUIREMENTS

Technical and Functional Requirements

Other Requirements

1. Delivery Date

- 1. Please provide a specific time frame for initiation of back office installation and installation of first MVR vehicle systems, expressed relative to the contract execution date.**

RESPONSE: An accurate project timeline cannot be delivered prior to the site survey completion and final server/wireless/wired/ storage solution is proposed to the department.

- 2. Please provide specific time frame for delivery of features and functionality to be provided that are not currently part of standard shipping product.**

RESPONSE: Please refer to the item specifications for timelines of availability of non “standard” offerings.

2. Installation

- 1. The City requires a local service shop based in Broward County to provide installation, warranty, and maintenance work. The local service shop must provide all service on the City’s Police Department premises. The City recommends (not requires) the vendor negotiate an agreement with current local service shop performing vehicle technology (GPS and laptop and RF modem) service for the City Police Department. The contractor may select their own Broward County local service shop to negotiate an agreement.**

Service shop vendor will be evaluated and given points consideration, as part of this RFP.

RESPONSE: Coban will be glad to arrange installation and service training for the local shop that handles the GPS, Laptop and RF modem installations and service, if the department can provide the contact information for this vendor. Currently we do have a service center in the state of Florida, however, it is not located in Broward county.

- 2. Vendor to ensure enough staff available through the local service shop to install the number of requested vehicles each week to reach deployment target during the next two years. The City will provide 2 weeks notice prior to installations and will request a maximum of 15 units a week. The City may not request this number of units to be installed in any particular week, and is not committing to installing the total number of units stated in this RFP as it is an estimate.**

RESPONSE: Coban complies with this line item.

- 3. Installations must meet specifications as described in “Technical and Functional Requirements – Equipment Installation”.**

RESPONSE: Coban complies with this line item.

3. Warranty and Maintenance

1. All components shall be warranted to ensure they are fit for their intended purpose under law enforcement agency usage for 1 year.

RESPONSE: Coban complies with this line item.

2. Maintenance includes parts and labor required to cover repair or replacement of all MVR system components that fail under law enforcement agency usage.

RESPONSE: Coban complies with this line item.

3. The vendor will provide pricing for maintenance for years 2, 3, 4, 5 Exhibit C – Price Form.

RESPONSE: Please see Exhibit C.

4. All defective equipment shall be repaired or replaced with next day response, with a standard schedule of Monday – Friday with hours of 8am – 5pm. Maintenance provider to keep sufficient replacement or loaner parts on hand to ensure the vehicle’s MVR systems do not have to be down while waiting for MVR systems or individual components to be repaired or for replacement parts to arrive.

RESPONSE: Coban complies with this line item.

5. Vendor to provide adequate staffing to ensure that no vehicles will have malfunctioning equipment more than one entire working business day.

RESPONSE: For this type of service FLPD and Coban shall negotiate the terms mentioned in the above line item. For this type of service, the FLPD fleet technicians must also be trained on the installation and service of the in car video systems as well as keep a spare parts/system inventory on hand at the Department Fleet Garage, this will greatly reduce down time as well as costs to the department. The FLPD fleet technicians will be the “first line of defense” when a system is having a problem. Our technical support technicians will perform level 1 troubleshooting with these techs(or designated support contact from FLPD) to avoid unnecessary service calls.

6. For warranty purposes, the warranty time begins with the initial installation of said equipment in the desired vehicle.

RESPONSE: Coban complies with this line item.

7. All warranty, maintenance, upgrades, and installations to be performed at the City Police Department’s location.

RESPONSE: Coban complies with this line item.

8. The City requires the vendor to negotiate an agreement with the selected local service shop to provide installation, warranty, and maintenance work.

Coban complies with this line item, however, Coban would like to recommend that the FLPD fleet technicians also be trained on the installation and service of the in car video systems, this will greatly reduce down time as well as costs to the department. The FLPD fleet technicians will be the “first line of defense” when a system is having a problem. Our technical support technicians will perform level 1 troubleshooting with these techs(or designated support contact from FLPD) to avoid unnecessary service calls. Cobans authorized service center doe not reside in Broward county, however, If the FLPD can supply a contact for a desired service provider currently used by FLPD,

Coban will train said vendor on installations and support for FLPD.

9. Vendor to providing regular training and certification for the selected local service shop to become an authorized service shop for the in car video vendor.

RESPONSE: Coban complies with this line item.

10. Annual retraining or as needed for local service shop to support product upgrades or changes to be included in warranty and maintenance coverage.

RESPONSE: Coban complies with this line item.

11. The cost of software and firmware updates to be included in warranty and maintenance coverage.

RESPONSE: Coban complies with this line item.

12. Installation of software and firmware updates to be included in warranty and maintenance coverage.

RESPONSE: Coban does not perform software or firmware upgrades. They will supply the department with said updates, but the departments I.T staff is responsible for applying the updates. If this is required of the vendor, appropriate pricing can be supplied.

13. MVR system battery to be replaced under warranty if it does not support specified MVR recording times and upload times.

RESPONSE: Coban complies with this line item. Backup UPS batteries are covered under initial 1 year warranty only, labor and shipping for replacement of batteries is not included. If this is necessary please notify Coban so they can supply pricing for this.

14. Wireless audio transmitter battery to be replaced under warranty if it does not meet specified talk times and standby times.

RESPONSE: Coban complies with this line item. Microphone batteries are covered under initial 1 year warranty, labor and shipping for replacement of batteries is not included. If this is necessary please notify Coban so they can supply pricing for this.

15. The city should not be required to pre-pay to qualify for multi-year maintenance terms.

RESPONSE: Extended warranty coverage must be paid prior to the expiration of the initial 1 year warranty period. Not necessarily "up front" but before the 1 year warranty is expired.

16. Vendor is responsible for all shipping and handling of parts.

RESPONSE: Coban will pay for shipping one way to the department. If expedited shipping service is requested, FLPD will be invoiced accordingly on the difference.

17. Vendor to provide back office support for their applications via a secure remote access means such as WebEx.

RESPONSE: Coban complies with this line item. Secure remote access connection must be established and maintained by the FLPD IT department.

18. Vendor to provide a 24 hour technical support hotline for Digital Video Management application or database system failure with a 4 hour response time for after hours and weekend support.

RESPONSE: Standard hours of support are Monday through Friday 8:00am to 5:30 pm CST. Terms for 24 Hour/4 Hour response type of support must be negotiated prior

to pricing being submitted to FLPD. Additional information pertaining to department expectations regarding this level of support is needed.

19. The City may negotiate for additional contingency maintenance services.

RESPONSE: Coban complies with this line item.

20. Please provide a documented change control process for change control management.

21. Please provide a documented issue resolution process, including definitions of issue classifications.

22. Please provide any exclusion of parts, labor or other cost items from maintenance coverage.

4. Training

1. Vendor to provide an End Users class to “train the trainer” on the use of the MVR vehicle system and the use of the workstation client to access uploaded video for viewing and DVD requests at the City Police Department’s site.

RESPONSE: Coban complies with this line item.

2. Vendor to provide system administrator class at the City Police Department’s site to cover all aspects of the system in detail.

RESPONSE: Coban complies with this line item.

3. Vendor to provide training as required certifying the local service shop to become an authorized service shop for the MVR vehicle system. Annual recertification training to be included in warranty and maintenance coverage.

RESPONSE: Coban complies with this line item.

4. Trainers must be experienced instructors who are thoroughly familiar with all technical aspects of the system.

RESPONSE: Coban complies with this line item.

5. Please provide a course syllabus for each class to be provided.

RESPONSE: Training curriculum is integrated with department policy. Once awarded, Coban will request a copy of department policy in regard to in car video. They will then develop a syllabus for the training based on FLPD policy.

5. Documentation

1. Vendor to provide 5 hard copies as well as electronic versions of all requested documentation.

RESPONSE: Coban complies with this line item.

2. Vendor to include documentation for procedures for regular maintenance of MVR vehicle system components.

RESPONSE: Coban complies with this line item.

3. Vendor to include documentation for procedures for regular maintenance of MVR system back office application and database.

RESPONSE: Coban complies with this line item.

4. Vendor to provide documentation of system as installed and configured, in MS Word and/or Visio format which is editable by the customer. Information in the document including but not limited to:
 - a. System architecture and Network diagram
 - b. Identification of all vehicle equipment and the physical configuration
 - c. All configurable system parameters
 - d. All application and database passwords.

RESPONSE: Can be provided once all of this information is obtained. Typically this is post installation.

5. Written installation instructions tailored for the City's specific configuration.

RESPONSE: Can be provided once all of this information is obtained. Typically this is post installation.

6. MVR vehicle system User Manual

RESPONSE: Can be provided once all of this information is obtained.

7. Workstation User Manual

RESPONSE: Can be provided once all of this information is obtained.

8. System Administrator manual including instructions covering the change of all configuration settings.

RESPONSE: Coban complies with this line item.

9. Please provide a list of documentation to be provided.

RESPONSE: Items 6, 7 & 8 are included in this response for review. Other items noted in this list will be made available post installation, once all information is obtained.

6. Admissibility of Evidence

1. Vendor must be able to provide a White Paper establishing that its technology has undergone rigorous field testing by an independent and relevant scientific body. The White Paper would form the basis of a defense to any scientific challenge mounted under Frye or Daubert.

RESPONSE: Mpeg-1 & 2 are industry standard formats accepted globally as "industry standard" video formats. The encoding mechanisms have all been tested and are known to the public market. Mpeg-1 & 2 have "industry standards" that apply to the encoding of these types of video, Mpeg-4 does not, Mpeg-4 video can be encoded in any manner the provider wishes (which is why every vendors mpeg-4 videos are different), Mpeg-4 video also allows for superimposition of "additional" data in the video (meaning it can be changed/modified easier), Mpeg 1 & 2 do not allow superimposition of additional video/data once recorded. All data must be encoded to an Mpeg-1 or 2 video at the time of recording and cannot be added or removed once encoded without breaking the MD5 digital signature.

2. Vendor must be able to provide an expert witness to testify in a court of law, to support court cases utilizing video from their MVR system, at a reasonable fee. Please specify your hourly rate for expert witness testimony.

RESPONSE: Coban complies with this line item.

7. Back Office Components

The City shall provide servers and storage devices on which to run the Digital video management software and to manage videos in active and archival storage.

These components shall include servers which may be clustered, with fabric attached SAN storage, a tape device and Veritas software for backup, an archival storage device, and an automated DVD burning and labeling device.

1. Vendor shall install and configure the digital video management software, database, workstation software and any other required back office software to work on the city provided servers, backup device and archival device.

RESPONSE: Coban complies with this line item. However, wireless infrastructure information and LAN/WAN infrastructure must be reviewed prior to proposing a storage/upload solution for this project. This is not a "canned" solution that can just have storage and software thrown at it to achieve what the department wants. It must be researched, site surveys must be conducted on not only the wireless portion of the project but also on the wired Ethernet portion of the project. If vendors are to provide Ethernet upload connections into the core network connections, they need to know how many? Length of each cable run, location and type of run it will be?(block wall, multi level, drop ceiling, etc.). Our successes with large, multiple location deployments proves our ability to make the solution work, but the key to any project such as this is planning and research. Once the site surveys are completed. Coban commits to supplying FLPD an accurate proposal on the wireless, wired and storage solution recommendations for this project within 7 business days from completion of site survey and receipt of FLPD LAN/WAN infrastructure. To do so at this point and time would be pointless without having all the data needed to provide a workable solution.

2. Please identify any constraints, equipment specifications, or additional software purchases required in order to ensure interoperability with their applications.

RESPONSE: This list can be provided once the data mentioned in item 1 of this section is obtained. One piece of software necessary for the LTO tape library is Tivoli Storage Manager. Additional required hardware, software or miscellaneous items will be delivered

3. Please provide recommendations for an enterprise class archival storage device.

RESPONSE: This list can be provided once the data mentioned in item 1 of this section is obtained.

4. Please identify storage space required by the proposed applications and database in addition to storage required for active storage of video. These components will be installed and configured by the City prior to vendor installing the digital video management system.

RESPONSE: The FLPD wireless infrastructure information and LAN/WAN infrastructure must be reviewed prior to proposing a storage/upload solution for this project. This is not a "canned" solution that can just have storage and software thrown at it to achieve what the department wants. It must be researched, site surveys must be conducted on not only the wireless portion of the project but also on the wired Ethernet portion of the project. If vendors are to provide Ethernet upload connections into the

core network connections, they need to know how many? Length of each cable run, location and type of run it will be?(block wall, multi level, drop ceiling, etc.). Our successes with large, multiple location deployments proves our ability to make the solution work, but the key to any project such as this is planning and research. Once the site surveys are completed, Coban commits to supplying FLPD an accurate proposal on the wireless, wired and storage solution recommendations for this project within 7 business days from completion of site survey and receipt of FLPD LAN/WAN infrastructure. To do so at this point and time would be pointless without having all the data needed to provide a workable solution.

Digital video management system must work with above specified components to perform:

1. Backup of digital video system server and digital media assets.

RESPONSE: By using TSM, Cobans DVMS solution is able to auto archive videos to the LTO tape library based on the retention criteria set up by the S.A, LTO library acts as an extended or near line storage archive that allows videos to be searched and retrieved from the library by an end user with the proper rights with no human intervention required. The LTO libraries are generally used in conjunction with SERVER/RAID/SAN devices, videos remain on the SERVER/RAID/SAN for a specified period of time but are also automatically archived to the LTO library within 24 hours of uploading (based on retention criteria of the video). The LTO library uses TSM to manage the video files so that you do not have to use it as a typical "backup / restore" device. Server applications and databases can be backed up using Veritas software, however, TSM allows our solution to interface with the LTO library and retrieve videos for the users without having them wait for the lengthy restore process that is associated in using a device like this as a "backup / restore" device. Users can retrieve videos from the LTO library from their workstation within minutes, as opposed to having to wait for a S.A to locate the file and restore it locally for the user to then view or export.

2. Automated transfer of digital assets to and from archival device. Restore of a video file from archive should be at a file level and not require a complete file system restore.
3. **RESPONSE: Coban complies with this line item**
4. Automated delete of files that have exceeded archival retention (if not otherwise flagged for retention) from tape archive if rewriteable media used for archival; automated identification and notification of media that has exceeded the archival retention period if read-only media.

RESPONSE: Coban complies with this line item.

5. Automated burn and label of DVD of videos that meet specified administrative requirements or are requested through the Digital video management software.

RESPONSE: Coban complies with this line item.

6. Other functionality as specified in Technical and Functional Requirements.

RESPONSE: Coban complies with this line item.

8. Uploads

The City plans to utilize wireless, LAN, and removable media uploads. Wireless will be the preferred upload mechanism but will be utilized only to the extent that uploads are satisfactorily handled. LAN will be used for upload for the majority of remaining vehicles. Removable media will be used as needed to accommodate heavy users of video. Benchmark testing will be performed on all three upload mechanisms in order to help determine initial allocation of upload mechanisms across vehicles.

8.1 Wireless Vehicle upload stations

The City requires Cisco equipment for the fixed portion of wireless infrastructure (Access points). The vendor shall work with a Cisco representative to identify a local resource to perform a site survey to identify the number and location of access points as well as the specific model of access points to minimize wireless upload times. The City recommends using a local Cisco representative in tri-county area (Dade, Broward, Palm Beach), with whom the City has worked with in the past, to identify the local resource.

The City to review and approve network design and equipment list, end of life components are not acceptable. Access points must support Power over Ethernet (POE). Vendor to contract with a local resource to purchase, install, and configure/tune the wireless access points. The City will be responsible for running Ethernet and power to all wireless access points. Vendor will be responsible for meeting wireless upload time benchmarks as a part of final acceptance of the system.

RESPONSE: Coban complies with this line item. However, an accurate solution cannot be provided for this project until the site surveys for both wireless and wired Ethernet infrastructure have been completed. Once completed, Coban agrees to submit an upload/storage proposal that will meet the requirements of this project.

8.1.1 Please identify the minimum baseline time the vendor is willing to commit to for completion of simultaneous 802.11g wireless upload of 1 GB of video data each from 15 cars in 3 locations. Please also identify any additional constraints or conditions under which the throughput test will be conducted. Baseline time to be defined by the number of minutes it takes for all 15 vehicles to successfully complete the upload.

RESPONSE: Coban can comply with this line item. However, an accurate solution cannot be provided for this project until the site surveys for both wireless and wired Ethernet infrastructure have been completed. Once completed, Coban agrees to submit an upload/storage proposal that will meet the requirements of this project.

8.2 LAN Vehicle upload stations

The City will be responsible for running Ethernet to all LAN upload station locations. Vendor to identify wiring or other requirements the City must meet in order for vendor to install LAN vehicle upload stations.

RESPONSE: Coban complies with this line item. However, an accurate solution cannot be

provided for this project until the site surveys for both wireless and wired Ethernet infrastructure have been completed. Once completed, Coban agrees to submit an upload/storage proposal that will meet the requirements of this project.

8.3 Removable media upload stations.

The City will require several removable media upload stations.

RESPONSE: Existing workstations in the FLPD can be designated as upload workstations. These workstations will have the DVMS client and a USB 2.0 upload cradle attached to them. Minimum requirements for these workstations are as follows: XP pro, 100/gigabit Ethernet, 1 available USB 2.0 port, speakers, decent graphics card, minimum 256 MB RAM, P4 processor, CD/DVD combo +/- burner (if officers are to export videos from these workstations.) Mpeg 2 codec if mpeg-2 video is to be viewed from these stations.

PART VI – VENDOR QUALIFICATIONS AND RESPONSE REQUIREMENTS

1. Vendor Qualifications:

1.1 Vendor experience with digital mobile video systems

Vendor should have deployed digital mobile vehicle systems at multiple law enforcement agencies.

1. Please identify the number of law enforcement agencies with currently deployed mobile digital systems provided by the vendor.

RESPONSE: 50 departments currently (several of these are multi precinct deployments). Several additional departments scheduled for installation over the next 90 days as well.

2. Please identify approximate total number of mobile digital video units provided by the vendor, which are currently deployed at law enforcement agencies.

RESPONSE: 1600+, with additional units on order and being deployed over the next 90 days.

3. Please identify the date of deployment at a law enforcement agency of the first mobile digital system provided by the vendor.

RESPONSE: 06/2003.

4. Please identify the generation/version of product being quoted and the initial ship date of this version of system. Products released during the time frame of this RFP that are new versions of previously shipping and deployed products are acceptable.

RESPONSE: Topcam G-II Overhead/Detached

4. Please identify the initial ship date of the prior version of product.

RESPONSE: 06/2003

5. Please identify when the next generation of product is expected to ship.

RESPONSE: Not available at this time.

6. Please elaborate on the product roadmap.

RESPONSE: Based on the design of our systems, Coban is testing various technologies that can be discussed directly with the FLPD if desired, however, due to the competitive nature of this industry, Coban respectfully declines to elaborate on “future” offerings in this document, however, we will discuss this with FLPD in private. One feature that has been recently released is a partnership with an industry leader in the field of ALPR (Automatic License Plate Recognition) technology. Coban offers an optional ALPR application that integrates with their existing systems.

7. Please describe participation in industry groups for mobile video technology.

RESPONSE: Coban has participated in every IACP requested test as well as attending all IACP conferences. We also attend various trade shows and conferences pertaining to in car video technology, law enforcement equipment, etc. We also have presented numerous times with LEMVI (Law Enforcement Mobile Video Institute) and do so whenever requested by them.

1.2 Vendor ability to provide long term support for the system

1. How long does support continue for previous product versions?

RESPONSE: Technical support is offered on all systems purchased by a department until there are no longer any of those particular models in operation in the field or until the end of life cycles have been reached on the components of those systems. This support may be covered under extended warranties or at billable service rate.

2. How will the company handle deployments and backwards compatibility if a new generation of product is released midway through a multi-year deployment?

RESPONSE: Cobans in car video application/DVMS is backwards compatible within multiple platforms, however, certain features or functions may not be available to previous systems due to the fact that additional hardware/components may be added to the “new” product line that cannot be integrated with the previous system.

3. Please provide a copy of the company’s latest audited financial reports.

RESPONSE: Please see attached file named BS.PDF.

4. **Note:** The City may run a D&B or LexisNexis report on the vendor.

1.3 Vendor experience with similar agencies

Vendor should have clients that have purchased and implemented in car mobile digital solutions for a minimum of 6 months of field operation. Such deployments should be a minimum of 25 vehicles.

RESPONSE: Coban complies with this line item.

1. It is desired to have references for law enforcement agencies with different types of upload (LAN, Wireless, removable media). Law enforcement agencies with greater than 100 vehicles deployed are of particular interest.

RESPONSE: Coban complies with this line item.

2. Please provide references for at least three law enforcement agencies, including those with the largest number of deployed units.

RESPONSE: Coban complies with this line item. Please see included references.

3. Please provide all the information in “Exhibit B – Referral list” for each of the references.

RESPONSE: Coban complies with this line item.

2. Response Requirements:

2.1 Format

1. Response to Technical and Functional Requirements – “Exhibit A” – to be provided in Microsoft Word format on CD or DVD.

- a. The vendor must respond to all items listed in Exhibit A - Technical and Functional requirements. The vendor must indicate one of “YES-Standard”, “YES-Custom”, or “NO” for each numbered item. The “Comments and Explanation” area should be used to answer questions posed in the RFP, or to elaborate on any answer provided by the vendor.

- i. **YES – STANDARD** : Any Technical or Functional Requirement item answered “YES Standard” means the feature is part of standard shipping product or is a standard product option as delivered.
 - ii. **YES – CUSTOM** : Any Technical and Functional requirement item answered “YES Custom” means there is some amount of product customization (hardware or software) required beyond that normally performed by the customer with the administrative tools provided by the vendor. Any item answered “YES Custom” should also be included in future product releases as standard product, or explicitly identified in the RFP response as not being included as standard product in future releases.
2. Response to Other Requirements
- a. The vendor must respond to all items listed in the Other Requirements section by providing requested information and noting any exception(s).

2.2 Pricing and Quote

- 1. Vendor to provide pricing and line item breakdown of pricing for a ‘turn-key’ system, exclusive of the following items:
 - a. The City to purchase the backend server, backup and archival devices.
 - b. The City responsible for supplying Ethernet and power to LAN docking stations and wireless access points.

RESPONSE: Coban complies with this line item.

- 2. All pricing MUST include inside delivery and be quoted FOB: Destination.

RESPONSE: Coban complies with this line item.

- 3. Vendor to provide breakout of costs according to “Exhibit C – Price Form”. Items that do not have a separate cost listed must be indicated as “Included” if the item is included but the cost is not broken out separately, or “NA” if the item is not included in the vendors quote.

RESPONSE: Coban complies with this line item.

- 4. All prices to include detailed description including manufacturer name, part number, description, quantity with unit cost and qty cost.

RESPONSE: Coban complies with this line item.

- 5. Vendor shall provide pricing for all items answered “YES – Standard” or “YES - Custom” in this proposal. If item is not already accommodated on the price form then the item should be added to the form.

RESPONSE: Coban complies with this line item.

- 6. Vendor to provide pricing for any additional hardware, software, or services for all items answered “YES - Custom” or “YES- Standard” or described in the “Comments and Explanation” section of any RFP specification. This includes but is not limited to pricing required for codecs to view each available option of recording format, extra illuminated LED on the dashboard, all required recording triggers, all identified hardware and software interfaces such as I/Mobile and GPS unit, automatic mute of the AM/FM radio speakers, LAN upload port on the vehicle, workstation licenses and codecs, specified DVMS reports, etc.

RESPONSE: Coban complies with this line item.

7. Any item answered "YES - Standard" means the feature is part of standard shipping product or is a standard product option and must be included in cost of the system.

RESPONSE: Coban complies with this line item.

8. Any item answered "YES - Custom" must include price for all additional hardware, software, or services as well as a **time frame for delivery** after contract execution.

RESPONSE: Coban complies with this line item.

9. If there are specific items answered "YES – Custom" that are not available when initial installations begin, vendor to upgrade units at no additional cost to the city.

RESPONSE: Coban complies with this line item.

10. Any product customization required beyond that normally performed by the customer with the Administrative tools provided by the vendor must be specifically identified and any associated costs also identified.

RESPONSE: Coban complies with this line item.

11. Any items included in the system delivered to the City should be incorporated as part of the standard system, available in future releases. Please identify any items answered as "YES - Custom" that will NOT be included as a standard feature in future releases.

RESPONSE: Coban complies with this line item.

12. Vendor to include recommended spare parts list.

RESPONSE: Coban recommends a spare parts inventory of 10% per component or full systems be purchased for emergency use. Coban recommends the department consider equipping each officer with a wireless microphone as opposed to equipping the vehicle with one microphone that is shared between officers.

13. Vendor to provide information and terms regarding quantity discounts.

RESPONSE: Pricing provided is based on the total fleet being outfitted.

14. Vendor should specify whether the prices that they are proposing will be fixed for the first two years of the initial five-year term, and if the City can negotiate the pricing at any time if prevailing market conditions suggest that better pricing can be provided for products determined to be of equal or better quality/functionality.

RESPONSE: Coban complies with this line item.

3. Price Form

Refer to "Exhibit C – Price Form".

RESPONSE: Please see Exhibit C.

Exhibit B – Reference List

1st Referral

Agency	Pinellas County Sheriff
Date of initial deployment with first vehicle running in production	12/2005
Number of initially deployed vehicles	19
Number of currently deployed vehicles	27 (estimate another 28 units in 2007)
Total Fleet size	400
Type of upload and number of each (LAN, Wireless, removable media)	Removable hard drive currently, LTO tape library, multiple locations
Differences in hardware or software from what is proposed for the City	Solution for FLPD not fully proposed yet.
Contact Name, number, email	Sgt. Richard Nalven, 727-42-8267, rnalven@pcsonet.com

2ND Referral

Agency	Seattle Police Department
Date of initial deployment with first vehicle running in production	6/28/2004
Number of initially deployed vehicles	83
Number of currently deployed vehicles	178 (replacing existing system with VMDT-G-II and equipping the remaining fleet with VMDT G-II in 2007)
Total Fleet size	310
Type of upload and number of each (LAN, Wireless, removable media)	Wireless Upload Mpeg-2, multiple locations, Centralized storage.
Differences in hardware or software from what is proposed for the City	Solution for FLPD not fully proposed yet
Contact Name, number, email	Bruce Hills, 206-615-0092, bruce.hills@seattle.gov

3RD Referral

Agency	Santa Barbara County Sheriff
Date of initial deployment with first vehicle running in production	09/2004
Number of initially deployed vehicles	47
Number of currently deployed vehicles	53
Total Fleet size	70
Type of upload and number of each (LAN, Wireless, removable media)	Wireless Mpeg-1, centralized storage, 3584 LTO tape library, multiple locations.
Differences in hardware or software from what is proposed for the City	Solution for FLPD not fully proposed yet

Contact Name, number, email	Clay Neilson, 805-681-4348, can2898@sbsheriff.org
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Additional Referrals

Additional referrals can also be provided at vendors' discretion. PLEASE SEE ATTACHED REFERENCE SHEET FOR ADDITIONAL REFERENCES.

Exhibit A – Technical and Functional Requirements

Definitions

Digital Asset: Recorded video, audio, and associated metadata.

Type 1 Digital Asset: A duplicate recording that has been recorded that does not contain the chain of custody evidence and support.

Type 2 Digital Asset: A duplicate recording that has been created that passes the applicable integrity, consistency, and authenticity checks. The record contains all chain of custody evidence and support.

MVR System: Mobile Video Recording System which includes all hardware and software for recording audio/video in the vehicle, uploading to the storage server, and managing the digital assets throughout their lifecycle.

MVR Vehicle System: The components of the MVR system which are installed in the vehicle.

Recorder: The component which performs the recording to digital media. The Recorder controls may be referenced which are accessible on the laptop performing video monitoring.

Digital Video Management software: The application which manages video in the back office.

FLPD: Fort Lauderdale Police Department

YES – Standard: This feature or capability is part of the vendor’s current product offering as a standard feature or an available standard option and is included in the cost quoted.

YES - Custom: This feature or capability is not part of the vendor’s current product offering, but can be provided to FLPD as described. Vendor will need to identify all additional costs as well as schedule implications. Vendor must provide a date for implementation of the custom items and also commit to including all items identified as “YES – Custom” as part of the standard product in future releases.

NO – The feature or capability is not available from this vendor. Alternative solutions may however be described by the vendor.

“Shall” or “must” denotes mandatory requirements from which the MVR system solution may not deviate, and are highlighted in light blue

“Should” or “may” states preferred requirements from which the MVR system may deviate.

Camera and Mobile Video Recorder Controls

1. The recorder controls shall be designed and organized to minimize officer workload. Record button should be readily identifiable by size, color, location or other design features.	YES Standard X	YES Custom	NO
Comments and Explanation:			
2. The MVR vehicle system shall have an illuminated record indicator readily visible to persons outside the vehicle within viewing area of the camera that	YES Standard X	YES Custom	NO

indicates when the system is actively recording.			
Comments and Explanation:			
3. The officer should be able to turn off the illuminated record indicator that is visible to persons outside the vehicle.	YES Standard X	YES Custom	NO
Comments and Explanation:			
4. The MVR vehicle system shall have an LED installed on the dash that is readily visible to the officer but is not readily visible outside the vehicle that indicates when the system is actively recording.	YES Standard	YES Custom	NO X
Comments and Explanation: Cobans systems have an LED recording indicator on the camera for the officer to view from the outside of the vehicle as well as a recording status indicator on the display screen as well as their wireless microphones be able to indicate recording status.			
5. The officer should be able to turn off the LED installed on the dash.	YES Standard	YES Custom	NO X
Comments and Explanation: Coban does not use a dash mounted indicator. However, the officer is able to turn off the LED indicator on the camera and can dim or turn off the display if the recording indicator is wished to be hidden from persons in the vehicle.			
6. Recorder controls shall include a. Play b. Record start/stop c. Fast Forward d. Rewind e. Stop f. Pause g. Data Entry h. In-car mic on/off switch None of the controls shall allow the officer to erase recorded video.	YES Standard X	YES Custom	NO
Comments and Explanation:			
7. Camera Controls that should be easily accessible on the camera or recorder. a. Autozoom b. Zoom in/out c. Auto Focus on/off d. Backlight compensation	YES Standard X	YES Custom	NO
Comments and Explanation:			

<p>8. The following indicators should be displayed on the MVR vehicle system</p> <ul style="list-style-type: none"> a. System power on b. Microphone on c. Media inserted and operational with remaining capacity/time available d. Recording e. Fast Forward f. Stop g. Time counter h. Diagnostic indicator 	<p>YES Standard</p> <p style="text-align: center;">X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>9. Recording functions shall be activated (triggered) by any of the following:</p> <ul style="list-style-type: none"> a. User pushes record button on the unit b. User activates the wireless microphone transmitter c. Any activation of emergency lights or siren d. Impact sensor 	<p>YES Standard</p> <p style="text-align: center;">X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>10. Please describe optional capabilities for recording activation including hardware, software, and cost for additional triggers including</p> <ul style="list-style-type: none"> a. Vehicle exceeds preconfigured speed (Please explain how speed constraints are monitored) b. Acceleration threshold. (Please explain how acceleration threshold is monitored) c. Others – please identify 			
<p>Comments and Explanation: Speed activation can be done via three inputs: 1.) Vehicle speedometer, 2.) Radar Integration or 3.) GPS integration(GPS must connect to video system). Speed activation thresholds are set by the system administrator in the DVMS console on the server.</p>			
<p>Coban can accept up to 8 digital input signals including: speed, lightbar, siren, crash sensor, radar, GPS, shotgun lock, braking</p>			
<p>11. The MVR Vehicle system shall automatically mute the vehicle AM/FM radio speakers upon activation of recording. Please describe how this is performed and how the speakers are subsequently unmuted.</p>	<p>YES Standard</p>	<p>YES Custom</p>	<p>NO</p> <p style="text-align: center;">X</p>
<p>Comments and Explanation: Coban does not interface with the vehicles radio system.</p>			

12. All MVR Vehicle system programmable parameters shall be contained in non-volatile memory.	YES Standard X	YES Custom	NO
Comments and Explanation:			
13. The officer should be able to configure some of the MVR vehicle parameters of the system. Please list all parameters that the officer can always configure.	YES Standard X	YES Custom	NO
Comments and Explanation: Officer can adjust zoom and focus manually, brightness, color/black and white mode on main camera, Which cameras are recording (if multiple cameras are deployed), in car covert mic on/off, traffic watch mode, close shot mode. Please see included user manual for additional reference.			
14. The officer should have some parameters of the MVR vehicle system which can be made available for him based on system administrator defined configuration. Please list all parameters that are can be restricted or opened up for the officer to configure.	YES Standard	YES Custom X	NO
Comments and Explanation: Would need to discuss with the department to determine which functions and features are desired to be modified by the operator. Providing each officer the ability to configure the in car systems themselves could result in an administrative nightmare in determining which systems are configured which way.			
15. The MVR vehicle system shall have parameters which are not available for the officer to configure and are only available to the system administrator. Please list all parameters that are only accessible to the system administrator.	YES Standard X	YES Custom	NO
Comments and Explanation: Video Format for all cameras, pre and post event buffer times, programmable microphone button functionality, event list, shutdown thresholds (both time and voltage), event retention criteria. Due to the expansive capability of our DVMS application, it would require much more space to list all parameters and we would respectfully request that the department please see included documentation for additional references in regard to these functions.			

Primary Camera

The primary camera is the camera directed toward the front of the vehicle.

16. The camera shall be a color camera.	YES Standard X	YES Custom	NO
Comments and Explanation:			
17. The camera and lens shall be equipped with auto	YES	YES	NO

focus, automatic exposure, and automatic white balance.	Standard X	Custom	
Comments and Explanation:			
18. The camera shall automatically adjust for varying light levels from day to night.	YES Standard X	YES Custom	NO
Comments and Explanation:			
19. The camera shall be capable of providing a clear image with minimum illumination of 1 lux/.3 lux preferred. (Lower lux results in better night vision) Please describe the minimum illumination required in lux.	YES Standard	YES Custom	NO X
Comments and Explanation: Minimum Lux rating is 1.5, however, our cameras have been deployed successfully in numerous departments with no night time video issues.			
20. Does the camera have infrared capability?	Partial Comply		
Comments and Explanation: Front facing does not, rear facing does.			
21. The primary camera shall be ruggedized and resistant to damage from vibration, shock, as well as variations in humidity and temperature. Please identify whether the camera meets the military standard MIL-STD-810F, what is the Mil-std "method" (ie Method 516.5 for shock) used, and what are the operating and non-operating specifications for <ul style="list-style-type: none"> • Shock (i.e. Method 516.5), • Vibration (i.e. Method 514.5) • Temperature (i.e. Method 501.4, 502.4) • Humidity (i.e. Method 507.4) 	YES Standard	YES Custom X*	NO
Comments and Explanation: Cobans systems are currently undergoing the "official" 810F testing procedures, however, they have been tested by an independent lab based on the listed requirements in this item and have passed. Test results can be provided to the department if requested. Keep in mind, these tests normally apply to notebooks or other removable devices. These systems are fixed mounted devices.			
22. The camera shall operate within the range of temperatures from 0 to 120 degrees Fahrenheit. What is the operating temperature range? What is the storage temperature range?	YES Standard	YES Custom	NO X
Comments and Explanation: Operating temperature range from manufacturer is 32F-122F, Storage temperatures are 14F-158F. However, we would like to point out that operating temperatures are based on the vehicle being used, which would mean that there is an officer in the vehicle. Those temperature ranges would not be likely to be encountered since the officer would have either the heat or air conditioning running			

inside the vehicle. External temperatures outside the vehicle and internal temperatures vary tremendously. We have deployed numerous systems in states with climates similar to those of Fort Lauderdale (and even more extreme in some cases). Pinellas County Sheriff has been using our systems for almost 2 years and we have never had a temperature related failure.			
23. The camera shall have backlight compensation setting.	YES Standard X	YES Custom	NO
Comments and Explanation: This feature is built into the cameras firmware.			
24. The camera shall prevent glare and light blooming during operation. Please describe the means by which this is achieved.	YES Standard X	YES Custom	NO
Comments and Explanation: The camera is equipped with an auto iris and real time light compensation. There is no need for manual adjustment. This feature is controlled by the camera firmware.			
25. The motorized zoom should offer a minimum of 18X optical zoom. Please identify the optical zoom and digital zoom capabilities.	YES Standard	YES Custom	NO X
Comments and Explanation: Camera supplied is 10x Optical x 4x Digital zoom, total zoom capability 40x. We have deployed hundreds of these cameras across the country with no issues reported on zoom capability. The camera used falls well within range of IACP recommended specifications.			
26. The camera shall be a solid state imaging system that shall not be subject to burn in, or interference by magnetic fields.	YES Standard X	YES Custom	NO
Comments and Explanation:			
27. The camera shall have a minimum resolution of 450 horizontal lines.	YES Standard X	YES Custom	NO
Comments and Explanation: Our camera is rated at 470 lines.			
28. The camera shall provide both automatic and manual focus capabilities, which are user selectable.	YES Standard X	YES Custom	NO
Comments and Explanation:			
29. The camera shall default to auto focus.	YES Standard X	YES Custom	NO
Comments and Explanation:			
30. The camera shall be capable of rotating 180 degrees on a horizontal plane in either direction without having to loosen any screws or knobs.	YES Standard X	YES Custom	NO
Comments and Explanation:			

31. The camera shall provide a minimum field of view of 24 feet width at a distance of 35 feet (40 degrees).	YES Standard X	YES Custom	NO
Comments and Explanation: Angle of view is 46 degrees.			
32. The camera shall offer a signal-to-noise ratio of at least 46db.	YES Standard X	YES Custom	NO
Comments and Explanation: Camera is rated more than 50dB.			

Rear-facing Camera

The rear-facing camera is intended to monitor the back seat.

33. The system shall have a miniature rear-facing camera that will record the rear passenger compartment of the vehicle.	YES Standard X	YES Custom	NO
Comments and Explanation: Optional all in one front and rear facing camera or separate rear facing camera. Both rear facing cameras are IR capable, 0 lux cameras.			
34. The rear-facing camera default operation shall be black and white with low light capability that requires no adjustment by the officer. Please specify the capabilities of the rear-facing camera in low light situations.	YES Standard X	YES Custom	NO
Comments and Explanation: all in one rear facing camera is black and white / IR lit 0 lux. Separate rear facing camera is Color / Black and white/ IR lit / 0 lux.			
35. Does the rear-facing camera include an infrared lighting system?	YES		
Comments and Explanation: Yes, rear facing camera is IR lit. LEDS built into the housing of the camera. All in one camera is 6 LED and separate camera is 12 LED.			
36. The rear-facing camera shall be a miniature camera that can be mounted covertly in the cab. Please describe mounting options.	YES Standard X	YES Custom	NO
Comments and Explanation: Department can select front and rear facing all in one camera, rear facing camera is built into the main housing of the front camera OR the department can implement a separate IR lit camera that can be placed in several locations throughout the vehicles interior. Separate camera is color and IR capable. All in one rear facing is black and white IR capable.			
37. The rear-facing camera shall have a minimum of 380 lines of horizontal resolution.	YES Standard X	YES Custom	NO
Comments and Explanation:			
38. The officer shall have the option of recording	YES	YES	NO

primary, rear-facing, or both cameras simultaneously.	Standard X	Custom	
Comments and Explanation:			
39. Please describe the means by which the rear-facing camera recording function may be activated.			
Comments and Explanation: If dual simultaneous recording is selected both front and rear facing cameras are activated when the system is activated. If dual camera independent recording is selected officer can manually activate rear camera.			

Video Monitoring

40. The MVR Vehicle system should not require a separate video monitor and must allow real-time monitoring of video through a Panasonic Toughbook laptop. Please identify the type (i.e. USB, Ethernet) and number of each port required, and what each port is used for. Please also identify compatible Panasonic Toughbook Models and resource requirements of the laptop (RAM, processor, hard drive).	YES Standard X	YES Custom	NO X, Partial comply
Comments and Explanation: Cobans in car video unit can be integrated with the Panasonic Toughbook, however, the display monitor is still required for the system, it can be stowed away when not in use. Implementing a solution that is dependent on the MDC for viewing would result in the officer losing their camera system as well if the MDC fails. IACP specifications request that the in car video system be independent of the MDC and not rely on the MDC to function. We have successfully integrated with Cf-28,29 as well as several other non Panasonic MDCs. The only thing necessary for integration is that the MDC be running Windows XP pro and have an available Ethernet port.			
41. The MVR vehicle system utilizing the Panasonic Laptop for video monitoring and control shall not adversely impact I/Mobile application response or limit functionality of the I/Mobile application running on the Panasonic Laptop.	YES Standard X	YES Custom	NO
Comments and Explanation: The processing, storing and management of all recorded video is still handled solely by Cobans TopCam system. There is no impact on applications running on the laptop from our integration.			
42. Please provide minimum resource specifications required of the Panasonic Toughbook to support the MVR vehicle system functionality. <ul style="list-style-type: none"> • Processor • RAM • Hard drive space 			

Comments and Explanation: Windows XP pro and minimum of 100 BaseT Ethernet.			
43. The MVR vehicle system shall be capable of using a video monitor instead of using the laptop for monitoring. Please provide: <ul style="list-style-type: none"> • Dimensions of the monitor • The actual viewable size of the displayable portion of the monitor (length x width). • Resolution of the monitor 	YES Standard X	YES Custom	NO
Comments and Explanation: Detached model dimensions (wireless receiver and removable hard drive built into the detached monitor display housing): 6 13/16"W x 6 3/8"H x 3"D, Overhead flip down mount dimensions: 6 13/16"W x 6 3/8"H x 1" sun light readable touch screen display. 6.4" viewable screen, 640w x 480h.			
44. The MVR vehicle system shall be capable of displaying a live picture from the camera when the system is on, even if recording is not in progress.	YES Standard X	YES Custom	NO
Comments and Explanation:			
45. The MVR vehicle system shall include a system speaker separate from the DVR unit and the laptop, which will provide monitoring of live audio from the portable transmitter microphone or from recorded sound during playback mode.	YES Standard X	YES Custom	NO
Comments and Explanation:			
46. The MVR vehicle system shall have a volume control, which will allow the user to adjust audio level and turn the sound off if desired.	YES Standard X	YES Custom	NO
Comments and Explanation:			
47. The MVR vehicle system shall allow the user to disable or dim any illumination on the camera, recorder, and MVR application on the monitor/laptop. Please describe what actions are required by the officer in order to disable or dim the illumination for each component.	YES Standard X	YES Custom	NO
Comments and Explanation: Officer can adjust brightness on system using brightness control button or can use "night mode" found in our "more features" folder on the display or can simply turn the display off using the on/off button (doing so does not affect the system operation, it only controls the display. Wireless microphone can be programmed by the officer to operate in covert mode (vibrate only) by pressing both microphone buttons down simultaneously for 3 seconds (whether recording or in stand by mode.) Officer can disable record indicator lights by accessing on / off button on touch screen display.			
48. The MVR vehicle system shall allow the user to disable or dim any illumination on the wireless	YES Standard	YES Custom	NO

microphone. Please describe what actions are required by the officer in order to disable or dim the illumination.	X		
Comments and Explanation: Wireless microphone can be programmed by the officer to operate in covert mode (vibrate only) by pressing both microphone buttons down simultaneously for 3 seconds (whether recording or in stand by mode.)			
49. The MVR vehicle system shall have programmable auto zoom. Pressing this button shall automatically zoom the motorized zoom lens to the agency's preconfigured magnification, pause to perform a momentary auto focus, then lock the focus for a programmable amount of time before returning to agency's preferred wide angle position. How long does it take to zoom, to focus, and to return to previous unzoomed position?	YES Standard X*	YES Custom	NO
Comments and Explanation: Approximately 5 seconds for entire cycle. The department can configure how far or short the camera zooms, we will have the ability to allow the department to configure the length of time that the camera pauses at the zoom length in Q2 of 2007.			
50. The MVR vehicle system shall be capable of displaying and recording: date/time, user identification information and microphone activation indicator.	YES Standard X	YES Custom	NO
Comments and Explanation:			
51. The MVR vehicle system shall be capable of displaying and recording the following indicators simultaneously with the video and audio data: <ul style="list-style-type: none"> • siren indication, • emergency light indication, • speed as read from speedometer, • braking indicator Please describe what information is available for display through each interface for the items listed above and the types of equipment with which the MVR will interface. Please provide a breakdown on the pricing sheet of any additional hardware, software, services or costs associated with these interfaces.	YES Standard X	YES Custom	NO
Comments and Explanation: As long as a physical connecting point is available in the vehicle.			
52. The MVR vehicle system should optionally be capable of displaying and recording the following	YES Standard	YES Custom	NO

<p>indicators simultaneously with the video and audio data:</p> <ul style="list-style-type: none"> • Audio on, • Rear door opening • Shotgun/Rifle lock opening <p>Please describe what information is available for display through each interface for the items listed above, types of equipment with which the MVR will interface, and number of interfaces available. Please provide a breakdown on the pricing sheet of any additional hardware, software, services or costs associated with each interface.</p>	X		
<p>Comments and Explanation: As long as a physical connecting point is available in the vehicle.</p>			
<p>53. The MVR vehicle system should optionally be capable of displaying and recording Radar information (such as target and patrol speeds) simultaneously with the video and audio data: Please describe what information is available for display and brand/models of equipment with which the MVR will interface. Please provide a breakdown on the pricing sheet of any additional hardware, software, services or costs associated with each interface.</p>	<p>YES Standard</p> <p>X</p>	<p>YES Custom</p>	NO
<p>Comments and Explanation: Supported makes are Kustom Signals, MPH, Stalker, Decateur. We cannot provide interface cable for radars since we are not authorized resellers for these devices, the department would need to procure the appropriate cable for the radar units.</p>			
<p>54. The MVR vehicle system should be capable of displaying and recording GPS information. Please describe.</p>	<p>YES Standard</p> <p>X</p>	<p>YES Custom</p>	NO
<p>Comments and Explanation: System can record and display GPS coordinates on screen and in video playback.</p>			
<p>55. The MVR vehicle system should interface with the existing GPS unit FLPD is currently using in the vehicle. Please describe capabilities of interfacing with an existing Trimble Placer GPS 450 unit in the vehicle and use of the data. Will the MVR system be able to accept and use GPS coordinates obtained from the existing Trimble Placer 450's MDT port?</p>	<p>YES Standard</p>	<p>YES Custom</p> <p>X</p>	NO
<p>Comments and Explanation: This depends on where the GPS is connected, to the notebook or the video system? Coban may request one model of this device to test</p>			

compatibility.			
56. FLPD shall be able to disable or not include any integrated GPS device normally included with the MVR vehicle system, as part of the standard installation.	YES Standard X	YES Custom	NO
Comments and Explanation:			
57. Metadata displayed on the screen should be configurable by the agency for the MVR vehicle system.	YES Standard X	YES Custom	NO
Comments and Explanation:			
58. The MVR vehicle system shall allow the officer to select from a preconfigured list to classify the video. This information shall be capable of being used as a "searchable" field in the video management software. Please provide information regarding the amount of list items and the type of fields that may be used by the officer to classify the video.	YES Standard X	YES Custom	NO
Comments and Explanation: Unlimited event list, first name, last name, case ID #, Ticket Number, type of offense, gender. If additional information is imported (address, vehicle license plate, etc.) those will also become search criteria in the Digital Video Management Solution.			
59. The MVR vehicle system shall allow the officer to enter additional information such as case number or demographic information as metadata with the video. This information shall be capable of being used as "searchable" fields in the video management software. Please provide information regarding the amount and type of fields that may be used by the officer to classify the video.	YES Standard X	YES Custom	NO
Comments and Explanation: Unlimited event list, first name, last name, case ID #, Ticket Number, type of offense, gender. If additional information is imported (address, vehicle license plate, type of violation/citation, etc.) those will also become search criteria in the Digital Video Management Solution.			
60. The MVR vehicle system should allow the officer to enter additional free form text information into a single text field that is associated with the video as metadata. This information shall be capable of being used as "searchable" fields in the video management software. Please describe what is available and what restrictions can be placed upon the data entry into these fields.	YES Standard	YES Custom X	NO

<p>Comments and Explanation: Cobans solution does allow the officer input specific information either by a template or limited free form entry in certain fields, however, if the department would provide us with a list of fields / entry points, we can develop the software to accommodate those specific requests.</p>			
<p>61. The MVR vehicle system should allow the officer to identify a video recording in such a manner that it will be flagged to be held indefinitely on the server.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>62. The MVR vehicle system shall be capable of interfacing with Intergraph Public Safety I/Mobile product for easy import of metadata from recently received messages. The MVR vehicle system must allow the officer the capability of importing the following information from recent messages as metadata to associate with the video recording:</p> <ul style="list-style-type: none"> • Case number, event number, and event type from recent event query or dispatch messages. • Owner name from recent vehicle tag query. <p>All query responses and messages are in individual files stored locally on the laptop's hard drive in specific directories in html format with a text label preceding the information of interest. Please describe capabilities and limitations of this interface.</p>	<p>YES Standard</p>	<p>YES Custom X</p>	<p>NO</p>
<p>Comments and Explanation: Coban and Intergraph are alliance partners and we are currently working on the interface for this, however, the availability of this solution is solely dependent on Intergraphs timeline for development.</p>			
<p>63. The MVR vehicle system should be capable of interfacing with a magnetic stripe reader to import name from DL information as metadata to associate with the video. Please describe capabilities and limitations, including what data may be used as metadata and the steps the officer would go through to associate the name with the video as metadata.</p>	<p>YES Standard</p>	<p>YES Custom X</p>	<p>NO</p>
<p>Comments and Explanation: If the card reader is attached to the integrated laptop, the Intergraph application will provide the information to populate the data fields for the metadata in the video (software interface between Intergraph and Coban system will be needed). Standard fields are first name, last name, DL # (if applicable) case ID#, Ticket #. We will know more once the interface is completed between the two applications. If the card reader is attached directly to the in car video system, we will be able to pull the data from the license to our video metadata fields, however, this will not populate the Intergraph application with data, it would be separate from that system. We would also like to request a "sample" Florida DL to and make sure that</p>			

all fields available on the DL can be captured properly.			
64. The MVR vehicle system should provide the capability of being accessed via a wireless connection to transmit preview video (streaming) over a wireless connection of sufficient bandwidth. Please describe what actions are required, if any, on the part of the officer to initiate transmittal of preview video, and expected required bandwidth. Please also describe what actions are required on the part of the person viewing the streaming video, and whether this video can be viewed only from the server or can be viewed from any authorized workstation with the appropriate client software.	YES Standard X	YES Custom	NO
Comments and Explanation: There are several factors that must be considered prior to deploying a streaming solution. The department must have the available wireless infrastructure throughout the city or area of coverage, this infrastructure must have sufficient bandwidth available to support streaming video. Will this wireless infrastructure be solely dedicated to the video project or shared with department data streams as well? Cobans in car video systems have the capability of streaming video, their systems act only as a node on the wireless network, the main bottle neck is the bandwidth available.			
65. The video recording component shall be ruggedized and resistant to damage from vibration, shock, as well as variations in humidity and temperature. Please identify whether the recording component meets the military standard MIL-STD-810F, what is the Mil-std "method" (i.e. Method 516.5 for shock) used, and what are the operating and non-operating specifications for <ul style="list-style-type: none"> • Shock (i.e. Method 516.5), • Vibration (i.e. Method 514.5) • Temperature (i.e. Method 501.4, 502.4) • Humidity (i.e. Method 507.4) 	YES Standard	YES Custom X	NO
Comments and Explanation: All of Cobans systems are currently undergoing the "official" 810F testing for certification. However, the systems have been tested at an independent lab using the specifications in this listed item and they all have met this requirement. Test results can be supplied to the department if requested.			
66. Please describe any known compatibility issues of the in car software on the laptop with software distribution applications such as Netmotion or Altiris. Are there any sites using these applications which are also using the laptop for video monitoring and control?			

Comments and Explanation: To the best of our knowledge, Netmotion is loaded on the MDC's and controls all communication ports. If Netmotion security settings/routing tables block the port used for integration of the MDC and video system, the integration will not function properly. Our video system uses standard ports and an available Ethernet connection, as long as the Netmotion application is configured to allow traffic on that port and the appropriate port protocols are open, there should be no problem. We cannot configure the Netmotion application but, we will assist the department with diagnosing any integration issues, however, any Netmotion configuration changes will need to be made by a designated FLPD IT member.

Video Recording and in-car playback

67. The MVR vehicle system shall be capable of recording events uninterrupted for a minimum of four hours at 4CIF and a minimum frame rate of 29.97 frames per second. If the current product does not support this specification please identify whether the product being quoted is expected to support the specification and when.	YES Standard X	YES Custom	NO
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Comments and Explanation: We support 4CIF format @ 30FPS

68. The MVR vehicle system shall be able to record in multiple formats in multiple resolutions.	YES Standard X	YES Custom	NO
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Comments and Explanation: Cobans systems are capable of recording Mpeg1, 2 or Mpeg4 (4 selectable bit rate resolutions of Mpeg4) all at 30 FPS. If multiple cameras are deployed the department can record multiple formats as well. (example: front facing mpeg2 and rear facing mpeg1 or both cameras the same format)

69. **Recording Resolution Options** - Please identify the various options for recording resolution in Common Intermediate Format (CIF, 4CIF, D1 etc) and pixels (pixel columns x pixel rows i.e. 352x288, 704x576), Bit rate (bit/Sec), Actual frames per second, and compression and encoding format including Profile and Level if applicable (MPEG2, "MPEG4 Advanced Simple Profile Level 3" etc.), and the amount of storage required for each hour of video/audio/metadata at each available resolution.

CIF Format	Resolution in pixels	Bit rate	Actual Frames per second	Compression and encoding format	Storage in Mbytes of 1 hour of video / audio / metadata
CIF	352x240	1.2Mbps	30	Mpeg-1	600MB
D1	704x480	2.5Mbps	30	Mpeg-2	1.2GB
SIF	320x240	800Kbps	30	Mpeg-4	400MB
SIF	320x240	1.2Mbps	30	Mpeg-4	600MB

SIF	320x240	1.5Mbps	30	Mpeg-4	800MB
4SIF	640x480	2.5Mbps	30	Mpeg-4	1.2GB

70. Please identify for each option in the “Recording Resolutions Options” question above, whether the compression and encoding format is an industry standard or does it require a proprietary codec/viewer to view it? Please describe.

RESPONSE: All of the above are industry standard formats. However, Mpeg-4 format will require a codec to play back Mpeg-4 video or the video must be rendered to a portable format such as .avi or .wmv.

71. Please identify for each option in the “Recording Resolutions Options” question above, is there any rendering or conversion required of the video file in order for it to be edited in an industry standard video editing tool such as AVID? Please describe the rendering or conversion that is required and what file format is output as a result.

RESPONSE: There is no rendering or conversion needed to edit the videos using industry standard video editing tool. To be able to edit Mpeg-4 videos, an Mpeg-4 codec needs to be installed on the PC or the video must be converted into a DivX compatible AVI format using Cobans conversion utility program. Please keep in mind as well, if the department is using Mpeg-2 video format, any PC wishing to view an Mpeg-2 video will need an Mpeg-2 codec installed on it. Most newer PC’s with DVD rom drives in them have this codec already, if not, one can be supplied by Coban or downloaded by the FLPD and installed on the PC. Cobans Digital Video Management Software solution also gives the department the ability to export an Mpeg-2 video to a DVD format to be played back in commercial DVD players.

72. How does the System Administrator adjust the settings in the system to change which of the formats identified in the “Recording Resolutions Options” question above is used to record data in the MVR vehicle system?

RESPONSE: All video format selections are available to the S.A in the Digital Video Management Software solution. The S.A simply selects the video format for the appropriate camera and then saves the change. Once the officers log into the system those setting changes will be applied to the in car unit with no need to go car to car to make any other changes.

73. Please identify the size of the local storage device in the MVR vehicle system and any options for different size storage.

RESPONSE: Cobans system come standard with a 40 GB ruggedized removable hard drive and one 30 GB fixed mounted failsafe drive.

74. The MVR vehicle system shall record in real time.	YES Standard X	YES Custom	NO
Comments and Explanation:			
75. The recording device shall operate independently of the laptop.	YES Standard X	YES Custom	NO
Comments and Explanation:			
76. The recording device shall initiate recording with any of the installed recording triggers, regardless of whether the officer is logged into the system.	YES Standard X*	YES Custom	NO
Comments and Explanation: If the MDC and Video systems are integrated (connected) we can pass the Windows login through to the video system which will allow us to automatically login to the video system. Once boot up and login are complete all triggers are operable. If the video system is not integrated with the MDC, the officer must log in to the video system to initiate the system. Due to the fact that the SA can configure each vehicle/system individually, certain triggers / options may or may not be available to the system/officer based on the system configuration profile created by the S.A.			
77. The MVR vehicle system should be capable of allowing the officer to take a digital snapshot of the camera view. The snapshots should also be capable of having metadata associated with it, and may be uploaded with the video files. Please describe this capability, including the format in which the picture is saved, average size of a snapshot, which metadata is available and how the use of and upload of a digital snapshot differs from that of standard recorded video.	YES Standard X	YES Custom	NO
Comments and Explanation: If the video system is in record mode and a snapshot is taken, the snapshot is automatically associated with the video (and its metadata). The snapshots are in JPEG format and each one is about 30K or so in size. The snapshots are uploaded when the videos are uploaded; there are no special procedures required for this.			
78. The MVR vehicle system shall be capable of pre-event recording for a minimum of 30 seconds prior to the recorder being activated. Please identify minimum and maximum pre-event lengths and how it is configured.	YES Standard X	YES Custom	NO
Comments and Explanation: Minimum is 0 seconds, there is no maximum setting, only thing to keep in mind is that longer pre-event recording will eat up storage space on hard drive faster.			

79. The department shall be able to configure the MVR system to mute the audio for pre-event recording.	YES Standard X	YES Custom	NO
Comments and Explanation:			
80. The MVR vehicle system should be capable of post-event recording. Please describe capabilities, including minimum and maximum post-event lengths and how it is configured.	YES Standard X	YES Custom	NO
Comments and Explanation: Minimum is 0 seconds, there is no maximum setting, only thing to keep in mind is that longer post-event recording will eat up storage space on hard drive faster.			
81. The MVR vehicle system should provide the officer with the ability to view and control any previously recorded video while continuing to record, including viewing previous portions of the currently recording video.	YES Standard X	YES Custom	NO
Comments and Explanation:			
82. The officer should have the ability to view pre-event recorded video of the currently recording video while continuing to record.	YES Standard X	YES Custom	NO
Comments and Explanation:			
83. The user shall be provided with the ability to "mute" either channel of audio during playback to assist the officer in determining the clearest channel of audio.	YES Standard	YES Custom X	NO
Comments and Explanation: Will be available in June of 2007			
84. When reviewing video the officer shall be able to move to different portions of a video for playback by entering a time selection or through the use of a slider control or similar mechanism.	YES Standard X	YES Custom	NO
Comments and Explanation:			
85. Recording time left on digital media shall be displayed upon officer login to the system and shall prompt the officer when the media is near full capacity.	YES Standard X	YES Custom	NO
Comments and Explanation:			
86. All metadata should be capable of being superimposed or absent on the screen during playback mode.	YES Standard	YES Custom	NO X
Comments and Explanation: If metadata is displayed on screen during recording, it will show up in video playback.			

Audio Transmitter/Receiver

The wireless audio transmitter includes the transmitter/receiver and microphone.

87. Wireless audio transmitter shall have a range of 1000 feet with line of sight at ideal conditions. What are the antenna and equipment requirements to meet this requirement?	YES Standard X	YES Custom	NO
Comments and Explanation: Antennas are built into the wireless receiver and transmitters no additional vehicle antennas are needed.			
88. Audio transmitter shall have an internal antenna and shall continue to function if any external mic or antenna is disconnected.	YES Standard X	YES Custom	NO
Comments and Explanation:			
89. Audio transmitter should have universal connector to allow for easy external microphone replacement.	YES Standard X	YES Custom	NO
Comments and Explanation:			
90. Audio transmitter shall have built-in redundant internal microphone which automatically activates if the external microphone is separated from the transmitter. Please describe options for wireless microphone configuration, such as to have an external lapel microphone wired to the wireless transmitter.	YES Standard X	YES Custom	NO
Comments and Explanation: Cobans wireless microphones have a built in microphone and an optional externally attached lapel microphone. No special configuration is needed to use either or. Wireless microphone has programmable buttons that can function as a mute or bookmark button or can configure the microphone for standard ops (LED and tone notification) or for covert ops (vibrate only) mode. This can be done whether the system is recording or in standby mode.			
91. The wireless microphone shall be weather resistant and shall remain operable during inclement weather conditions. The microphone shall be sealed internally to reduce the possibilities of water / condensation from entering the microphone and damaging it.	YES Standard X	YES Custom	NO
Comments and Explanation:			
92. Audio transmitter shall be ruggedized and resistant to damage from vibration, shock, as well as	YES Standard	YES Custom	NO

<p>variations in humidity and temperature. Please identify whether the audio transmitter meets the military standard MIL-STD-810F, what is the Mil-std "method" (i.e. Method 516.5 for shock) used, and what are the operating and non-operating specifications for</p> <ul style="list-style-type: none"> • Shock (i.e. Method 516.5), • Vibration (i.e. Method 514.5) • Temperature (i.e. Method 501.4, 502.4) • Humidity (i.e. Method 507.4) 	X		
<p>Comments and Explanation: Cobans wireless microphone is ruggedized and resistant to damage from shock, vibration as well as variations in humidity and temperature. Our microphones have been on the market for over 5 years and are one of the most impressive components departments mention about our systems. However, our microphones have not been "officially" 810F tested, this is actually the first time in 5 years that this has been requested by a department.</p>			
<p>93. The wireless mic shall operate within the range of temperatures from 0 to 120 degrees Fahrenheit. What is the operating temperature range? What is the storage temperature range?</p>	YES Standard X	YES Custom	NO
<p>Comments and Explanation: Operating Temp: -20 to 60 C, Storage Temp: -40 to 80 C</p>			
<p>94. Audio transmitter shall use FCC-approved frequency bands. Please identify what bands are used.</p>	YES Standard X	YES Custom	NO
<p>Comments and Explanation: 902-928MHz and Digital Spread Spectrum</p>			
<p>95. Audio transmitter shall use digital transmission which is encrypted to prevent eavesdropping. Please describe encryption method.</p>	YES Standard X	YES Custom	NO
<p>Comments and Explanation: Digital Spread Spectrum. Allows only the synchronized receiver to re-compile transmission from wireless transmitter that is synchronized to the receiver. White papers on D.S.S can be provided if requested.</p>			
<p>96. Audio transmitter shall be able to be synchronized to the receiver in the vehicle, and will accommodate operation of multiple in-car video systems at the same event without interference. Please identify how many units may be operated in the same proximity without interference, how synchronization is performed between the audio transmitter and the specific recorder, and how often synchronization must be performed for a unit.</p>	YES Standard X	YES Custom	NO
<p>Comments and Explanation: Up to 20 separate vehicles can be on site all recording</p>			

<p>simultaneously with no interference. Synchronization is achieved by the officer pressing the wireless transmitters contacts to the wireless receivers contacts, a synchronization tone will alert the officer that the synchronization is completed.(typically about 3 seconds). If the vehicles are take home cars the microphone should remain synchronized to the vehicle, if they are shift cars and the officers are designated their own microphones, they will need to synchronize them each time they enter the vehicle. We suggest that the officer get in the habit of synching their mics every time they enter a vehicle for their shift.</p>			
97. Recorded audio shall be synchronized with recorded video.	YES Standard X	YES Custom	NO
Comments and Explanation:			
98. Audio transmitter shall use a rechargeable battery with 15 hours minimum standby and 3.5 hours minimum talk time.	YES Standard X	YES Custom	NO
Comments and Explanation: 8-10 hours talk time on full charge. 14 days standby.			
99. The MVR vehicle system shall include an in-car charger for the audio transmitter. Please describe how long it takes to fully charge the audio transmitter.	YES Standard X	YES Custom	NO
Comments and Explanation: Microphone charges to 95% within 90 minutes and is 100% charged at 4.5 hours.			
100. The audio transmitter should indicate its battery charge level. Please describe how this is indicated to the officer.	YES Standard X	YES Custom	NO
Comments and Explanation: Color coded LED lights indicate battery charge level as well as TONE or Vibration.			
101. An in-car wired microphone shall be provided as well, that will record on a separate audio channel from the wireless microphone system.	YES Standard X	YES Custom	NO
Comments and Explanation:			
102. Simultaneous use of the wireless microphone and in-car microphone system shall be supported on separate audio channels.	YES Standard X	YES Custom	NO
Comments and Explanation:			
103. Recording of the second channel of audio (in car mic) shall have the ability to be turned on or off manually by the officer from the display/control center.	YES Standard X	YES Custom	NO
Comments and Explanation:			
104. The wireless microphone shall be activated simultaneously when the recorder is activated. The	YES Standard	YES Custom	NO

officer should not have to activate the wireless microphone manually when the recorder is activated.	X		
Comments and Explanation:			
105. Operator shall be able to activate video recording from the remote audio transmitter.	YES Standard X	YES Custom	NO
Comments and Explanation:			
106. Operator shall have the ability to deactivate audio from remote audio transmitter (mute), but NOT disable video recording other than by stopping the recorder in the vehicle.	YES Standard X	YES Custom	NO
Comments and Explanation:			
107. The wireless mic should indicate that the MVR system is recording. Please describe how the wireless mic indicates this.	YES Standard X	YES Custom	NO
Comments and Explanation: LED and tone or vibration (covert mode)			
108. The wireless mic should indicate that audio recording of the mic is muted. Please describe how the wireless mic indicates this.	YES Standard X	YES Custom	NO
Comments and Explanation: Flashing LED and tone or vibration (covert)			
109. Operator shall be able to mute playback of audio while monitoring or recording.	YES Standard X	YES Custom	NO
Comments and Explanation:			

Security Features

110. The in car recording system shall have the capability to restrict access to the programming functions, including but not limited to time/date features.	YES Standard X	YES Custom	NO
Comments and Explanation:			
111. The recording device shall have the capability of preventing the user from erasing and recording over previously recorded information.	YES Standard X	YES Custom	NO
Comments and Explanation:			
112. The in car system shall provide a means of preventing the officer from copying videos from the in-car unit. Please describe how this is achieved.	YES Standard X	YES Custom	NO
Comments and Explanation: User rights and permissions (both local on system and user rights assigned in Digital Video Management Solution) set by the S.A restrict the officer to the access of files on the in car video unit. System Administrator can restrict			

access to files and / or ports (USB 2.0, serial) on the system making the files recorded unavailable to user.			
113. The in car system should prevent an officer from viewing previously recorded video recorded by a different officer that has not yet been uploaded. Please describe how this is achieved.	YES Standard X	YES Custom	NO
Comments and Explanation: All videos recorded by an officer during a shift are associated with their login/user credentials, when that one officers' shift is over, we are assuming that they log out of the system and the next officer logs in for the next shift. The videos that recorded in the previous shift under the other officers login ID will not be available for viewing or playback by the current officer.			
114. When an officer views a previously recorded file in the MVR vehicle system, is a temporary file created of the video that could later be recovered? Please elaborate.			
Comments and Explanation: There is no log file created on the in car unit when a video is viewed. The officer will be viewing the actual recorded video. Once the videos are uploaded then a "chain of custody" audit trail is created that allows the S.A to view a log of who what and when a video file has been viewed or exported.			
115. Time stamping shall be consistent within all system components. Please describe how this is achieved.	YES Standard	YES Custom X*	NO
Comments and Explanation: The only in car component that has a clock in it is the CPU control console, if GPS is connected to video system, the CPU clock can be synched with GPS satellite time. We are currently are working on an MDC integration interface for those departments that wish to use the Windows login from the MDC, to synchronize the video system time with the MDC, this will be available in 06/2007			
116. The vehicle video capture system shall provide a mechanism to capture the time and date of the recording. This information shall become a part of the Chain of Custody audit log of Type 2 recordings.	YES Standard X	YES Custom	NO
Comments and Explanation:			
117. If removable media is used - The active storage system shall be able to include the media ID of any removable media used to transfer the digital asset from the vehicle video capture system. This media ID shall become part of the Chain of Custody audit log of Type 2 recordings.	YES Standard X	YES Custom	NO
Comments and Explanation: Removable Hard Drive serial number is stored in the video log file.			
118. All Type 2 digital asset recording systems using	YES	YES	NO

<p>electronic transfer of the recorded material shall have an automated authentication mechanism. Digital asset authentication shall be attached to the digital asset sequence when first recorded. The video recording equipment shall use a digital signature that has been standardized and approved by the American Bar Association (ABA) [Digital Signature Guidelines, Information Security Committee, Electronic Commerce & Infrastructure Technology Division, of the American Bar Association. 1996]</p>	<p>Standard X</p>	<p>Custom</p>	
<p>Comments and Explanation: We use an MD5 hash algorithm to generate a digital signature for each recorded video. When generating a type 2 digital asset, the digital signature is included and can be verified using our included playback program.</p>			
<p>119. Prior to the electronic transfer of Type 2 digital assets, metadata shall be attached.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>120. Digital Video Management System should allow for Type 1 digital asset to be created with or without display of Metadata</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>121. Metadata, including time stamping, shall remain accurate with respect to the recording as it was captured, despite any time sync irregularities in a secondary unit, archival system, or viewer.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>122. The recorder shall identify the vehicle in which the recorder is mounted. Please explain.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: The S.A will create a list of vehicles and vehicle configuration in our Digital Video Management Solution, if the officer logs into the video system (no MDC integration) they will be required to input the vehicle number. If the department is using wireless or wired upload, the vehicle id # will be assigned to the hard drive at the time of initial check out.</p>			
<p>123. The MVR vehicle system should require the user to login with a user specific user name and password.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: The systems can be set to use the Windows login via MDC integration or use a separate user login for video system only.</p>			
<p>124. Please describe any capabilities to integrate user information with Microsoft Active Directory.</p>			

Comments and Explanation: We do not “import” information from Active Directory, but our Digital Video Management Solution can use users’ Windows login information to verify the users rights to Digital Video Management Solution.			
125. Removable media shall indicate the officer CCN (unique officer identifier predesignated by FLPD) of the officer assigned to the media or the vehicle ID and the officer assigned to transfer the media, if applicable, and the Media ID.	YES Standard X*	YES Custom	NO
Comments and Explanation: Coban uses their own unique serial numbering system to track removable media. We do not recommend that the department associate these drive ID’s with officers or vehicles (in the system) since both may change over a period of time. (officers retire or quit, vehicles are taken out of service, etc.). It is desired to keep one single fixed ID for each removable drive for chain of evidence purposes. If the department wants to put a spreadsheet together for “inventory” purposes (who has which drive and what vehicle it is located in) they may do so, as long as it is separate from the Digital Video Management Solution.			
126. Non-removable media shall include the officer CCN or the vehicle ID and the officer assigned to transfer the media, if applicable, and shall be related to a specific digital asset.	YES Standard X	YES Custom	NO
Comments and Explanation: Video system ID can be the same as vehicle ID, you do not want to associate the system with individual officers, since that will change over time. It would be an administrative nightmare.			
127. During system initiation, the MVR system should have the capability to visually indicate to the officer if the system has been tampered with.	YES Standard X	YES Custom	NO
Comments and Explanation: When and if a setting / configuration has been changed our system will notify the officer of the changes made.			
128. During system initiation, the recorder shall perform a self-test to insure complete functionality. If it does not pass the self-test, it shall immediately notify the user.	YES Standard X	YES Custom	NO
Comments and Explanation:			
129. The recorder shall be able to monitor itself during operation. The recorder shall immediately notify the user if a component of the recorder fails while in operation.	YES Standard X	YES Custom	NO
Comments and Explanation:			
130. The recording device shall be physically mounted in the vehicle, following manufacturer’s recommendations, to prevent removal without tools and deter theft of the device, unless it is designed to	YES Standard X	YES Custom	NO

be removable.			
Comments and Explanation:			
131. If removable, the recording device shall be secured using a physical lock that prevents unauthorized removal of recorder from the vehicle. Please describe this mechanism and the number of differently keyed locks that are available.	YES Standard N/A	YES Custom N/A	NO N/A
Comments and Explanation: Recording system is not removable.			
132. If removable media is used, the recording media shall be secured using a locking mechanism that prevents unauthorized removal of the storage media from the recorder. Please describe this mechanism and the number of differently keyed locks that are available.	YES Standard X	YES Custom	NO
Comments and Explanation: Barrel Key locking mechanism, one.			
133. If removable media is used, the recording device shall indicate when media is inserted in the device.	YES Standard X	YES Custom	NO
Comments and Explanation: System is not functional without removable media being inserted.			
134. If removable media is used, each media shall contain tamper detection, damage protection, and markings that uniquely identify each media.	YES Standard X	YES Custom	NO
Comments and Explanation: Removable hard drive is housed in a ruggedized metal enclosure, the only way to access the hard drive is to totally disassemble this housing and even if that were the case, the hard drive inside of this casing cannot be connected to any other standard PC due to the fact that the connectors on these drives do not fit any standard PC on the market today, which would in essence render the drive useless to the end user. These drives are designed to be used specifically with our systems.			
135. Non-removable recording media shall be housed inside the recorder or a secured enclosure to prevent tampering with and/or destruction of the media.	YES Standard X	YES Custom	NO
Comments and Explanation:			
136. The recording media should be designed and warranted to last for a minimum of 6 years under law enforcement use. Please provide guidelines on the life cycle of the recording media.	YES Standard	YES Custom	NO X
Comments and Explanation: Fixed mounted internal hard drive can be covered under warranty for up to 3 years (if extended warranty is purchased), removable hard drive is warranted for 1 year. The load / unload cycle rating for these drives by the manufacturer is 600,000 cycles and are rated at 500G's operational and 1200 G's non			

operational. CF or P2 cards “durability” ratings decrease when the media is removed from its secured housing ours increases and their load / unload cycles are far less than our hard drives. Just as in the standard PC market, hard drive storage will continue to increase, these drives will eventually be replaced with higher capacity drives. We have had these hard drives in the field in several departments across the country with a very low failure rate. In addition to this, the fixed mounted hard drive acts as a “failsafe” drive and contains a copy of the videos that are recorded to the removable hard drive during a shift. If the removable hard drive fails the fixed hard drive will have a redundant copy of the videos that can be retrieved from the system.

Chain of custody when digital asset is transferred

<p>137. Chain of custody items shall be recorded as part of the audit log for the initial transfer. Please describe the items recorded as part of the chain of custody from the original recording devices to the active storage system. Chain of custom items should include such items as wireless/LAN connection made with recorder, media (in the case of removable media) removed from the recorder, time/date of transfer, username (if applicable) who performed the transfer, etc.</p>	<p>YES Standard X*</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Chain of custody log tracks who performed upload, how upload was performed, how many files were uploaded, time/date of transfer. We do not track removal of media due to the fact that if the media is removed from the system prior to shut down, the system is non operable, these are not “hot swappable” drives that can be removed and added to the system anytime desired, the drive must be locked in position for the system to operate properly, if the drive is not, the system will prompt the user to insert the drive. System will (should) always be off prior to removal of the hard drive.</p>			
<p>138. Integrity of the accurate and lossless transfer from the original recorder shall be validated. Please describe how an integrity check is performed to ensure the digital asset transferred from the original recording device is accurate, prior to clearing any data from the recorder.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: If the S.A enables the “enforce integrity check” option in the Digital Video Management Solution, the system will validate each MD5 based digital signature each time a video is transferred from the in car unit to the server.</p>			
<p>139. Chain of custody items shall be recorded as part of the audit log for transfers to archival storage. Please describe the items recorded as part of the chain of custody between the active storage and</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>

archival storage.			
Comments and Explanation: We record the date, time and video file name when the system transfers a video from active to archival storage.			
140. Integrity of the accurate and lossless transfer from active to archival storage shall be validated. Please describe how an integrity check is performed to ensure the digital asset transferred to archival storage is accurate, prior to clearing any data from the active storage.	YES Standard X	YES Custom	NO
Comments and Explanation: If the S.A enables the “enforce integrity check” option in the Digital Video Management Solution, the system will validate each MD5 based digital signature each time a video is transferred between storage systems.			
141. Chain of custody items shall be recorded as part of the audit log for the retrieval of digital assets from archival back to active storage. Please describe the items recorded as part of the chain of custody between archival storage and the active storage system.	YES Standard X	YES Custom	NO
Comments and Explanation: We record the date, time and video file name when the system transfers a video from archival to active storage.			
142. Integrity of the transfer from archival to active storage shall be validated. Please describe how an integrity check is performed to ensure the digital asset transferred is accurate and lossless.	YES Standard X	YES Custom	NO
Comments and Explanation: If the S.A enables the “enforce integrity check” option in the Digital Video Management Solution, the system will validate each MD5 based digital signature each time a video is transferred between storage systems.			
143. Chain of custody items shall be recorded as part of the audit log for items replicated onto departmentally acceptable media for presentation in court or other official capacity. Please describe the chain of custody is recorded and how an integrity check is performed to ensure the digital asset transferred is accurate.	YES Standard X	YES Custom	NO
Comments and Explanation: We record the date, time, user, reason for export and video file name when the system exports a video to an external media (CD,DVD or tape). If the “enforce integrity check” option is enabled, it will validate the MD5 based digital signature each time a video is moved between storage systems.			

Uploads

144. The MVR system shall be capable of 3 means of upload: LAN, wireless, and removable media.	YES Standard	YES Custom	NO
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	X		
Comments and Explanation: Gigabit Ethernet, Wireless 802.11 a/g and removable hard drive.			
145. The MVR system shall allow for the use of different upload mechanisms to the same MVR server by different users.	YES Standard X	YES Custom	NO
Comments and Explanation:			
146. Please describe how to configure the system to accommodate different upload mechanisms by different users.			
Comments and Explanation: Removable hard drive requires no configuration. Wireless and wired Ethernet upload methods are achieved via secure FTP protocol. The in car video unit is assigned an IP address that allows it to connect directly to the server to initiate uploads. The S.A will configure the vehicles accordingly using the templates provided in our Digital Video Management Solution. For additional configuration information please refer to included user manuals. Users are not assigned "upload method" rights. Upload methods are defined in the vehicle configuration portion of our Digital Video Management Solution.			
147. At the time of upload, the MVR system shall allow an officer to select either LAN or wireless.	YES Standard X	YES Custom	NO
Comments and Explanation: This will require a manual initiation policy for wireless and wired uploads, if it is set to automatic and the officer is in a wireless "hot spot" the system will attempt to connect via first available connection.			
148. Please describe how an officer selects a different upload mechanism at the time of upload.			
Comments and Explanation: At the end of the shift or when the officer wants to upload video, the officer selects upload video from our menu screen then selects the type of upload they want to do "wireless" (wireless will initiate once the wireless button is pressed) or "wired" (wired cable must be connected prior to selecting wired.) Officer will also have the option of having the system shutdown after upload or return to login screen.			
149. Removable media must be one of the means of upload, please describe the media and the upload process.	YES Standard X	YES Custom	NO
Comments and Explanation: Removable hard drive is removed from the system and brought into the department to a workstation that has a Coban USB 2.0 upload cradle attached to it. The officer will then insert the drive into the cradle and click on the upload videos icon on the desktop. The application will ask the officer to enter the serial number of the hard drive and optionally the user ID of the person performing the upload. (this can be enabled or disabled by the S.A). The hard drive will then commence with the upload, once upload is completed and verified, the officer can			

either check out the drive again for the next use or simply remove the drive from the cradle.			
150. If removable media is used please provide information regarding the duty cycle rating of the media and the media docking connections in both the vehicle and upload station.			
Comments and Explanation: Load / unload cycle rating is 600,000 cycles. USB 2.0 connection on both docking connections.			
151. If removable media is used is used please provide information regarding the shock rating ("G" rating) of the removable media when outside the recording unit.			
Comments and Explanation: Operational is 500 G's and non operational is 1200 G's rated by manufacturer.			
152. If removable media is used please provide expected upload time for one vehicle with a 1 Gbyte file of video, starting with the physical connection to the docking station and ending when data has been uploaded and the user may remove media from the docking station.			
Comments and Explanation: As a typical rule of thumb, 1 hour of Mpeg1 video (600MB) will upload in approximately 1 – 1.5 minutes, Mpeg-2 (1.2 GB) approximately 1.5 – 2 minutes per hour and Mpeg-4 will vary depending on which bit rate resolution is used.			
153. If removable media is used please provide expected degradation in upload times for each additional user performing a simultaneous upload.			
Comments and Explanation: Just as with any upload solution, there are several factors to take into consideration, How many concurrent uploads are going on at any one given time? Is the network infrastructure used for other "data" traffic as well or segregated for the video solution only?(is total bandwidth dedicated to video upload? Or shared?) What is the network backbone infrastructure? (10base, 100 Base, gigabit). A typical formula that we use to calculate available network bandwidth for each upload station is to take network bandwidth and divide it by the number of concurrent upload workstations.			
154. LAN connection must be one of the means of upload, please describe the upload process, including any actions required on the part of the officer.	YES Standard X	YES Custom	NO
Comments and Explanation: Officer connects LAN cable to upload port and upload is either initiated automatically or manually by the officer, officer unplugs cable after upload is complete or leaves connected for next shift. (dependent on how system is configured by S.A.)			

155. Please provide information regarding the duty cycle rating of interconnection points for LAN upload in both the vehicle and at the upload station.			
Comments and Explanation: This is dependent on what type of docking station or port is used on the network side. This will be determined during site survey.			
156. A LAN upload port shall be able to be installed within the vehicle. Please provide information regarding the options for the LAN connection point within the vehicle. (i.e. is an external port mounted on the vehicle fender, is the Laptop Ethernet port used, is there a separate port that can be mounted anywhere inside the vehicle etc.)	YES Standard X	YES Custom	NO
Comments and Explanation: Port is installed in the interior of the vehicle. Typical installation point is on the windshield support column. This can be located elsewhere if the department requests.			
157. If LAN connection is used please provide expected upload time for one vehicle with a 1 Gbyte video file starting with the physical connection to a 100Mbps LAN and ending when the user is notified of completion of upload.			
Comments and Explanation: As a typical rule of thumb, 1 hour of Mpeg1 video (600MB) will upload in approximately 1.5 - 2 minutes, Mpeg-2 (1.2 GB) approximately 2 – 3 minutes per hour and Mpeg-4 will vary depending on which bit rate resolution is used.			
158. If LAN connection is used please provide the expected degradation in upload times for each additional user performing a simultaneous upload.			
Comments and Explanation: Just as with any upload solution, there are several factors to take into consideration, How many concurrent uploads are going on at any one given time? Is the network infrastructure used for other “data” traffic as well or segregated for the video solution only?(is total bandwidth dedicated to video upload? Or shared?) What is the network backbone infrastructure? (10base, 100 Base, gigabit). A typical formula that we use to calculate available network bandwidth for each upload station is to take network bandwidth and divide it by the number of concurrent upload workstations. This can be determined after site survey has been completed.			
159. The MVR vehicle system shall provide a means by which the officer knows a connection has been made with the server and an upload has been initiated. Please describe.	YES Standard X	YES Custom	NO
Comments and Explanation: Display will notify officer of upload/connection status.			
160. The MVR vehicle system shall provide a means	YES	YES	NO

by which the officer knows an upload has been completed. Please describe.	Standard X	Custom	
Comments and Explanation: Display will notify officer of upload/connection status/progress.			
161. Wireless connection must be one of the means of upload, please describe the upload process, including any actions required on the part of the officer.	YES Standard X	YES Custom	NO
Comments and Explanation:			
162. If wireless connection upload capability is integrated with the DVR, the system shall provide capability to set an IP address, subnet mask, and default route. Please describe how the administrator accesses these settings.	YES Standard X	YES Custom	NO
Comments and Explanation: S.A can set the IP, Subnet mask and default route on the in car unit the same as they would on any other XP based PC. Network Connection/ TCPIP properties.			
163. If wireless connection upload capability is integrated with the DVR, the system shall provide a robust connection. Please describe the wireless components in the vehicle including identifying the transmitter power and antenna gain. Please also identify any options for an external antenna.	YES Standard X	YES Custom	NO
Comments and Explanation: Integrated 802.11 a/g card with and an External Fixed Mount Antenna Cable with reverse polarity connector. 100mw max transmitter power / antenna gain is approximately 3-4db.			
164. If wireless connection upload capability is integrated with the DVR, the system shall provide support for WPA2 and authentication. Please describe how the administrator accesses these settings.	YES Standard X	YES Custom	NO
Comments and Explanation: S.A can configure this using the Windows Wireless Network configuration or the Atheros Wireless Network config client.			
165. If wireless connection upload capability is integrated with the DVR, the system shall provide upgradeability for future higher bandwidth wireless technologies, such as 802.11n. Please describe how upgradeability will be achieved, including identification of components that must be replaced.	YES Standard	YES Custom X	NO
Comments and Explanation: From what we have been told by numerous Wireless / RF companies, 802.11N is no longer being looked at as a wireless technology for public			

<p>safety. If there is a new platform available Coban always looks into and test potential upgrades to technologies. Upgradeability could include replacing the integrated wireless card to simply adding a PCMCIA card to achieve functionality.</p>				
<p>166. If wireless connection is used, the system should provide capability to use the wireless connection provided through the Panasonic Laptop. Please describe as well as identifying the interfaces/ports through which data to be uploaded flows between the DVR and the Panasonic, and any limits on bandwidth between the DVR and laptop.</p>		<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: crossover Ethernet cable and minimum 100base connection.</p>				
<p>167. If wireless connection is used, the system should be able to be configured to perform an automated upload regardless of whether the officer is logged in to the unit. Please describe.</p>		<p>YES Standard</p>	<p>YES Custom</p>	<p>NO X</p>
<p>Comments and Explanation: Officer must be logged into the system whether via the Windows pass through login or separate log in for video system. System is not operable until a valid login is entered. This also necessary for the chain of custody logs created by the system.</p>				
<p>168. If wireless connection is used with wireless transmitter <u>in the DVR</u> please provide expected upload times for one vehicle with 1 GByte of video, audio, and metadata, within 50 feet of the 802.11g Access point, starting with wireless connection to the Access point, and ending when the user is notified of completion of upload or can turn off his/her laptop.</p>				
<p>Comments and Explanation: This table is based on the following: Wireless upload time are based on 1 car to 1 access point, within about 60 feet range with clear line of sight. These are real-life numbers, not lab-based optimal results. These are not “set in stone” numbers but actual field results from other departments using wireless upload methodology. Until site survey is completed these numbers can be used as a “baseline”. Keep in mind as well, other vendors providing “faster” upload times may be transferring smaller, lower quality files and may be providing “Lab Optimal results”</p>				
Format	Resolution	Bit Rate	Size for one hour of Video	Wireless Upload Time (802.11 G) for one hour video
Mpeg-1	352 X 240	1200 K bit/Sec (1.2 M bit/Sec)	600 MB	8-10 Minutes

Mpeg-2	704 X 480	2500 K bit/Sec (2.5 M bit/Sec)	1200 MB (1.2 GB)	16-20 Minutes	
Mpeg-4 (1)	320 X 240	600 K bit/Sec	350 MB	5-6 Minutes	
Mpeg-4 (2)	320 X 240	900 K bit/Sec	520 MB	7-9 Minutes	
Mpeg-4 (3)	320 X 240	1200 K bit/Sec (1.2 M bit/Sec)	650 MB	9-11 Minutes	
Mpeg-4 (4)	320 X 240	1500 K bit/Sec (1.5 M bit/Sec)	800 MB	10-12 Minutes	
<p>169. If wireless connection is used with wireless transmitter <u>in the laptop</u> please provide expected upload times for one vehicle with 1 Gbyte of video, audio, and metadata, within 50 feet of the 802.11g Access point, starting with wireless connection to the Access point, and ending when the user is notified of completion of upload or can turn off his/her laptop.</p>					
<p>Comments and Explanation: Please see above chart. We cannot provide accurate numbers without knowing specifics on the laptop resources and its ability to function as a wireless gateway.</p>					
<p>170. The MVR vehicle system shall allow for a wireless upload to continue if the vehicle is turned off. Please describe.</p>			<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Vehicle being off or on has no effect on wireless upload. As long as vehicle battery can support the in car video system operating while the vehicle is off, the upload will continue. If the video system notices a low voltage signal from the vehicle battery, it will switch over to our backup battery and attempt to complete upload.</p>					
<p>171. The MVR vehicle system shall provide a means of configuring the system such that if the MVR vehicle continues an upload after they vehicle is turned off, the vehicle battery will not be drained and the system will automatically perform a graceful shutdown after a specified amount of time. Please describe, including customer configurable parameters.</p>			<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: As long as vehicle battery can support the in car video system operating while the vehicle is off, the upload will continue. If the video system notices a low voltage signal from the vehicle battery, it will switch over to our backup battery and attempt to complete upload. S.A can configure shutdown timer and voltage threshold. Video system will run off of the vehicle battery until it reaches the</p>					

voltage threshold set by the department.			
172. If LAN or wireless upload is used, the system should be capable of performing “checkpoint” uploads, such that if a file is partially uploaded and then interrupted, when the upload procedure begins again the upload continues uploading the same file from the point in the file at which it stopped, without having to upload the previously uploaded part of the file again.	YES Standard X	YES Custom	NO
Comments and Explanation:			
173. If LAN or wireless upload is used, the system should allow for prioritized uploads of video files. Please describe how this works.	YES Standard	YES Custom	NO X
Comments and Explanation: All videos are uploaded with the same priority.			
174. The server shall allow at least 30 concurrent connections for simultaneous uploads. What is the maximum number of concurrent connections allowed by the server for uploads, assuming sufficient upload stations. Please identify hardware constraints if any. Please provide details of any benchmark testing that has been performed. Please also describe how the client responds if the server has exceeded the maximum allowed concurrent connections.	YES Standard	YES Custom	NO
Comments and Explanation: Number of users able to access the system at once is directly related to the server hardware and number of seat licenses purchased for the server and SQL database application. Once the Site survey is performed for the wireless and wired upload solutions, an accurate quote for the servers / storage solution can be provided. Our software does not limit the number of users that can access video. It is limited by the number of SQL server and Windows 2003 Server CAL's(Client access licenses) the department purchases. Usually, each user that connects to the server needs one CAL for Windows 2003 server (depends on how server is set up, licensed per server or per seat?) With SQL server, because we use a connection polling technique, for each 3-4 users, we need one SQL CAL to support the operation properly. Once site surveys have been completed an accurate server proposal can be delivered to the FLPD.			
175. Please describe the expected degradation of upload times to be expected when multiple users are uploading to the server at the same time from different upload points. (i.e. 3 different users attaching to 3 different LAN upload points at the same time)			
Comments and Explanation: Just as with any upload solution, there are several factors			

<p>to take into consideration, How many concurrent uploads are going on at any one given time? Is the network infrastructure used for other "data" traffic as well or segregated for the video solution only?(is total bandwidth dedicated to video upload? Or shared?) What is the network backbone infrastructure? (10base, 100 Base, gigabit). A typical formula that we use to calculate available network bandwidth for each upload station is to take network bandwidth and divide it by the number of concurrent upload workstations.</p>			
<p>176. The digital recorder shall have the capability of automatically uploading and installing software upgrades without user intervention. Please describe how this works with each of the upload mechanisms.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Any in car video software updates or settings changes are loaded retrieved from the server after uploading for wired and wireless. They are loaded to the removable hard drive when the drive is checked out from the server and applied to the in car unit when the drive is inserted and the system is logged into.</p>			
<p>177. The digital recorder shall have the capability of automatically uploading and installing fleet wide all user names and passwords, without user intervention. Please describe how this works with each of the upload mechanisms.</p>	<p>YES Standard N/A</p>	<p>YES Custom N/A</p>	<p>NO N/A</p>
<p>Comments and Explanation: User names and passwords are not stored locally on the in car video system. They are retrieved via the server when the officer connects to the network or are loaded to the removable hard drive when the officer checks out their drive for their shift.</p>			
<p>178. The digital recorder shall have the capability of automatically uploading and installing fleet wide configuration, with minimal user intervention. Please describe how this works with each of the upload mechanisms.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Any in car video software updates or settings changes are loaded retrieved from the server after uploading for wired and wireless. They are loaded to the removable hard drive when the drive is checked out from the server and applied to the in car unit when the drive is inserted and the system is logged into.</p>			

Digital Video Management Software

Miscellaneous

<p>179. The Digital Video Management software should be capable of running on Windows 2003 server or Linux platform and should require no proprietary hardware to operate. Please identify the server</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
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required operating system.			
Comments and Explanation: Windows 2003 Server and Full License SQL 2005			
180. The Digital Video Management software should use an enterprise grade database. Oracle or SQL-Server are preferred. Please identify the database.	YES Standard X	YES Custom	NO
Comments and Explanation: FULL licensed SQL not my SQL or SQL express.			
181. The digital video management software shall be able to operate in a clustered server environment. Please identify any sites which are currently operating in this configuration.	YES Standard X	YES Custom	NO
Comments and Explanation: This has been tested and confirmed, however, no current clients request this.			
182. The digital video management software shall require the user to login with a unique user name/password combination. Please describe, including any integration of user account information with Microsoft Active Directory.	YES Standard X	YES Custom	NO
Comments and Explanation: The S.A can specify all users use their Windows account to login to DVMS. In this case, users do not need to enter a user ID and password each time they launch the DVMS client. If A.D settings are not implemented, then each user will log in using a unique user ID and password created for them by the S.A.			
183. The digital video management software should allow the system administrator to create "templates" or groups to streamline the user setup process. These "templates" shall also have the ability to set rights and permissions for users included in each group.	YES Standard X	YES Custom	NO
Comments and Explanation:			
184. The Digital Video Management software shall allow the system administrator to setup user profiles to allow individual users to access and utilize the Digital Video Management software.	YES Standard X	YES Custom	NO
Comments and Explanation:			
185. The administrator shall also have the ability to set user rights and permissions. These rights and permissions shall include all of the following but not be restricted to: View video, export/copy video, check in/check out of removable media for vehicles (if removable media is used), run reports, check the integrity of a video, and video information entry. Please list the permissions the administrator may assign to individual users or templates.	YES Standard X	YES Custom	NO

Comments and Explanation: All of the above, Tape Management (for tape libraries), retain/unretain videos.			
186. The administrator shall also have the ability to set user rights to limit a user to being able to only view videos from staff in his/her assigned group. Multiple groups must be allowed. Please describe.	YES Standard X	YES Custom	NO
Comments and Explanation: Standard configuration by S.A.			
187. The administrator shall have the ability to set user rights to limit a user to being able to only view specific tagged videos or videos assigned to a specific category. Please describe.	YES Standard X	YES Custom	NO
Comments and Explanation: There is a function for the S.A to grant/revoke certain users access rights to certain videos. This function in addition to the DVMS solutions access control mechanism allows the S.A maximum flexibility and control over video access in the system.			
188. The Digital Video Management software shall allow the system administrator to setup and track the department's digital in car video system configurations.	YES Standard X	YES Custom	NO
Comments and Explanation:			
189. The Digital Video Management software shall log and provide detailed reports on the following: unit errors, system maintenance, and removable media maintenance (if removable media is used).	YES Standard X	YES Custom	NO
Comments and Explanation:			
190. If removable media is used, the Digital Video Management software shall allow the system administrator to check in and check out the removable media for the officers and track the use of the removable media.	YES Standard X	YES Custom	NO
Comments and Explanation:			
191. The Digital Video Management software shall capture audit information when a user logs into the system.	YES Standard X	YES Custom	NO
Comments and Explanation:			
192. The Digital Video Management software shall provide auditing of all user actions relating to a video, including each time a video was viewed, each time a video was copied to removable media, each time a video was exported, each time a DVD was burned, and each time metadata for a video was added/edited. Please describe and provide a screen	YES Standard X	YES Custom	NO

shot of a sample audit log showing all these actions.			
Comments and Explanation: Any activity regarding a video is logged into the system log. The logs include when a video is uploaded to the server, moved to extended storage, played back, exported and finally removed from the system. Metadata changes are currently recorded to the user's activity log file and will be recorded to the video log file in 06/2007.			
193. The Digital Video Management software should provide the capability of adding notes to a video file describing why it was viewed or why metadata was changed.	YES Standard	YES Custom X	NO
Comments and Explanation: Will be available in 06/2007			
194. The Digital Video Management software shall provide a summary report that shows all officers that have been entered in the system and last time each officer uploaded a file. Please describe and provide an example.	YES Standard	YES Custom X	NO
Comments and Explanation: Available in 06/2007, information is in the system, just not in report form.			
195. The Digital Video Management software shall provide a summary report that shows all officers that have been entered into the system and the amount of data the officers have uploaded over a specified period of time. Please describe and provide an example.	YES Standard X	YES Custom	NO
Comments and Explanation:			

Video Statistic Report - Detail By officer					
Officer ID	Officer Name	Nums of Uploaded Videos	Total Hours	Size in MB	
65520	Kevin Farnham	169	48.40	845	
74414	Robert Miller	162	38.18	100,602	
77088	Ryan Strunk	140	27.38	51,100	
87815	Christopher Hug	137	36.20	108,641	
77721	Angel E Rivera	131	26.18	27,903	
73780	Andrew Winer	125	33.27	97,000	
15641	Chuck Pelfrey	112	29.25	90,496	
77092	Stuart Bell	110	26.38	108,790	
72245	Victorie Kersten	107	22.33	32,421	
15499	Mark Holso	98	20.90	71,442	
17239	Mark Kusler	93	23.55	49,383	
17223	Jon Hancotte	91	19.78	28,756	
51678	Chad Fickle	84	22.18	6,720	
55546	Ben Clark	82	17.62	30,586	
55547	Tim Bennett	82	18.30	75,686	
77090	Stephanie Estree	80	17.13	33,920	
77093	Todd Elliott	80	28.15	12,640	
17010	Esteban Rivera	80	18.73	14,560	
75221	Andrew Horn	76	22.95	47,196	
17954	William Gensch	74	19.50	15,540	
73788	Troy Gilleylen	72	14.88	29,376	
75225	Scott Cipcic	70	21.40	59,710	
16509	Mark Woolfolk	69	16.28	40,848	
17582	Brian Sparschu	65	14.38	38,025	
83705	Nichole Marshall	62	11.83	41,106	
56655	Chris Klein	61	11.57	12,200	

* One or more videos are not found online.

Print Save As Close

196. The Digital Video Management software shall provide a summary report that shows all video files that are larger than a specified size. Please describe and provide an example.	YES Standard	YES Custom X	NO
Comments and Explanation: Will be available in 06/2007, information is in system, just not in report form.			
197. The Digital Video Management software shall provide an easy means of generating a chain of custody report which can be easily saved to a DVD along with a video file for courtroom purposes. Please describe this process.	YES Standard	YES Custom X	NO
Comments and Explanation: Available in 06/2007, information is in system, just not in report form.			
198. Digital Video Management system should allow for additional files such as MS Word documents, JPEG files etc to be associated with a video file. Please describe.	YES Standard X	YES Custom	NO
Comments and Explanation: Need more information on how the department wants to "associate" these files, do you mean for export? If so, then these files can simply be			

copied to the CD /DVD by placing them in the content folder prior to export.

Active and Archival Storage

199. The active storage system shall provide an automated mechanism for backing up digital assets to tape.	YES Standard X	YES Custom	NO
Comments and Explanation:			
200. The backup mechanism shall not result in a degradation or compression of source digital media.	YES Standard X	YES Custom	NO
Comments and Explanation:			
201. The means by which digital assets are moved from active storage to archival storage shall be as automated as possible. Please describe this process including any constraints on the equipment that may be used as an archive device, and identify any manual intervention required.	YES Standard X	YES Custom	NO
Comments and Explanation: Videos are archived within 24 hours of uploading to DVD or LTO tape device(if applicable) or to a secondary raid storage solution (based on the type of video it is). These solutions are all automated and require no human intervention (other than DVD solution, someone must remove burned/labeled disks and keep blank bin full. Please see included DVMS manual for additional reference. Detailing this process in this document will take a tremendous amount of space.			
202. The Digital Video Management software shall have the ability to retrieve videos from the active storage server or from archival storage. The department shall have the ability to retrieve individual videos from the archival device without going through a standard "restore" process of an entire drive, file system, or directory.	YES Standard X	YES Custom	NO
Comments and Explanation: Capable of doing so from Server, External RAID, SAN or LTO tape library. DVD's must be retrieved from storage and loaded into system.			
203. The digital video management software shall allow the system administrator to set the retention parameters for active (active to archival) and archival (archival to deletion) storage from one central location.	YES Standard X	YES Custom	NO
Comments and Explanation:			
204. The digital video management software shall allow the system administrator to set the retention time frame in active and archival storage based on	YES Standard X	YES Custom	NO

<p>metadata associated with the video, as well as to specifically mark a video for a specific or indefinite (never delete) retention time in active or archival storage. Please describe the available retention and archival settings, including what criteria may be used to set retention and archival settings.</p>			
<p>Comments and Explanation: Unlimited retention time, archive to DVD or LTO tape, Archive to primary/secondary RAID, length of time on primary/secondary RAID, Length of time on LTO Tape. Retention times for videos can be manually or automatically set by S.A</p>			
<p>205. The digital video management software should provide a means of electronic notification for each digital asset intended to be automatically removed, prior to removal from archival storage.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			

Video Access, Playback, and Export

<p>206. The Digital Video Management system shall include a client application that can be installed on individual workstations to allow authorized individuals to access video functions such as to view video and request a DVD to be created of the specified video. Please describe the viewing process and whether a file is copied locally for viewing purposes, also describe the DVD request, burn, and label process.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Viewing video is from the server/storage, when exporting the file is pulled locally to machine requesting export. Videos can be manually or automatically burned to DVD. If automated DVD burner is used, disks are labeled after export. If manual export is used, officer must label disk themselves. For additional information on export process, please see attached DVMS manual.</p>			
<p>207. The Digital Video Management system shall include a client application that can be installed on individual workstations to allow authorized individuals at a remote site such as a court room to access video functions such as to view videos. Please identify the network bandwidth requirements and any other special needs to provide this capability.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: DVMS can be installed on any PC meeting our minimum requirements and is connected to the network that the server resides on. Minimum bandwidth is 10Mbps.</p>			

<p>208. The Digital Video Management system shall allow for at least 10 workstation users to simultaneously access video management functions. Please describe how the system handles multiple users without adversely affecting performance. Please identify the number of users which may simultaneously access the system to view videos without adversely affecting performance, if this is limited by hardware please provide sizing guidelines.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Number of users able to access the system at once is directly related to the server hardware and number of seat licenses purchased for the server and SQL database application. Once the Site survey is performed for the wireless and wired upload solutions, an accurate quote for the servers / storage solution can be provided. Our software does not limit the number of users that can access video. It is limited by the number of SQL server and Windows 2003 Server CAL's(Client access licenses) the department purchases. Usually, each user that connects to the server needs one CAL for Windows 2003 server (depends on how server is set up, licensed per server or per seat?) With SQL server, because we use a connection polling technique, for each 3-4 users, we need one SQL CAL to support the operation properly. As for bandwidth, if 10 concurrent users are accessing video simultaneously, gigabit Ethernet is recommended.</p>			
<p>209. If the DVM software can have a situation where a workstation user cannot logon due to the number of users already logged on, the DVM system shall provide the system administrator a means of identifying who is accessing the DVM system at any particular time and logging off one or more users. Please describe the capabilities of the system in this manner.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: Our DVMS client closes the SQL connection once data is retrieved so that it free's up that license for other uses. If the server connections are maxed out, the S.A can disconnect or add more licenses to accommodate additional users.</p>			
<p>210. The DVM system shall allow multiple concurrent workstation users to access the system while at least 30 uploads are being performed. Please identify the number of maximum concurrent uploads and concurrent workstation users that can be accommodated by the system without adversely affecting performance of the system, assuming that network bandwidth and number of upload stations</p>	<p>YES Standard</p>	<p>YES Custom</p>	<p>NO</p>

are not a constraining factor.			
Comments and Explanation: Number of users able to access the system at once is directly related to the server hardware and number of seat licenses purchased for the server and SQL database application. Once the Site survey is performed for the wireless and wired upload solutions, an accurate quote for the servers / storage solution can be provided. Our software does not limit the number of users that can access video. It is limited by the number of SQL server and Windows 2003 Server CAL's(Client access licenses) the department purchases. Usually, each user that connects to the server needs one CAL for Windows 2003 server (depends on how server is set up, licensed per server or per seat?) With SQL server, because we use a connection polling technique, for each 3-4 users, we need one SQL CAL to support the operation properly.			
211. A request to create a DVD of a video in active storage shall automatically cause a DVD to be burned and labeled with no user intervention other than to keep the DVD burner loaded with blank DVD's. Please describe.	YES Standard X	YES Custom	NO
Comments and Explanation: Works as requested, burned DVD's must be removed from the system. We are currently speaking with Rimage to discuss the interface with their systems.			
212. A request to create a DVD of a video in archive storage shall automatically cause a DVD to be burned and labeled with no user intervention other than to keep the DVD burner loaded with blank DVD's. Please describe, including how the video file is retrieved from the archival device.	YES Standard X	YES Custom	NO
Comments and Explanation: DVMS export client will retrieve the video from archival storage (secondary RAID, SAN or LTO library and will complete the export process as requested.			
213. The Digital Video Management software shall provide the user with the ability to "mute" either channel of audio during playback to assist the user in determining the clearest channel of audio.	YES Standard X	YES Custom	NO
Comments and Explanation:			
214. The Digital Video Management software should allow the user to view a time log of the video during playback. The user should be able to "skip" to any particular frame in the video by selecting a specific time frame or through the use of a slider control or similar mechanism.	YES Standard X	YES Custom	NO
Comments and Explanation:			
215. The Digital Video Management software shall	YES	YES	NO

allow the person viewing a particular video to take a “snapshot” of a still frame of video and enhance the image without affecting the integrity of the original video.	Standard X	Custom	
Comments and Explanation:			
216. The Digital Video Management software shall be able to export video, audio, and metadata into a format which can be played on any PC running Windows Media Player or in a “standard” DVD player. Please describe the format and resolution the video/audio/metadata will be exported to, what data is or is not exported, and the compression and loss in quality to be expected during the export process, if any.	YES Standard X	YES Custom	NO
Comments and Explanation: When exported to a .wmv format (typically what Mpeg-4 is converted to.), the resolution is SIF (320x240), the metadata such as lightbar, microphone status, speed radar reading, etc will be exported with the video. The user can then playback the video and review the metadata using Windows Media Player. If the video is exported to a DVD player format, it will be standard DVD format with no metadata. Mpeg1 & Mpeg- 2 (data) are exported as the original files with metadata can be played back using Windows Media Player. (Mpeg-2 data files require an Mpeg-2 codec installed on PC trying to view video.)			
217. The Digital Video Management software shall be able to export video, audio, and metadata into a format which can be edited by a standard video software editing package such as AVID.	YES Standard X	YES Custom	NO
Comments and Explanation:			
218. The Digital Video Management software shall be able to export video into a format which can be played on any PC running Windows Media Player or in a “standard” DVD player, without including audio or metadata. Please describe.	YES Standard	YES Custom	NO X
Comments and Explanation: This is the first request of a video being exported with no audio. Can the department explain why and which scenario this would be used in?			
219. Please provide a benchmark for the amount of time required to export a 1 GB video to Windows Media Player format, including identifying the source and output file resolution and format.			
Comments and Explanation: This highly depends on the CPU and CD/DVD write speed / power of the computer that is doing the encoding process. Rough estimates on a P4 3.0GHz CPU with 1 GB RAM, it takes about 30 – 40 minutes to convert 1.5 hours of Mpeg-4 SIF format video (about 1GB) to WMV format. If exporting Mpeg1 or Mpeg-2 data format this time is much shorter, because there is no conversion necessary.			

<p>220. Please provide a benchmark for the amount of time required to export a 1 GB video to “standard” DVD format, including identifying the source and output file resolution and format.</p>			
<p>Comments and Explanation: This highly depends on the CPU and CD/DVD write speed / power of the computer that is doing the encoding process. Rough estimates on a P4 3.0GHz CPU with 1 GB RAM, it takes about 30 – 40 minutes to convert 1.5 hours of Mpeg-4 SIF format video (about 1GB) to DVD format. If exporting Mpeg1 or Mpeg-2 data format this time is much shorter, because there is no conversion necessary.</p>			
<p>221. The Digital Video Management software should be able to redact or distort portions of a video for playback to obscure faces or license plates to assist in maintaining confidential informant’s of juvenile’s identities. The original video file must remain untouched.</p>	<p>YES Standard X*</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: We provide a feature will can be used to “block” out a certain area of the video when playing back with the DVMS software. To be able to add effects to the original video, the PD needs to use third party video editing software. Please keep in mind, we are in the business of capturing and storing evidentiary quality video, not forensic analysis or redaction. We stick to our strengths and leave those items to the “pros” in those industries. (Such as AVID).</p>			
<p>222. The Digital Video Management software shall be able to manage large numbers of videos. Please identify the practical limit to the number of videos that can be handled in the online/active portion of the system. If this is limited by hardware please provide guidelines for sizing of hardware to manage a given number of video files.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation: There really is no practical limit for the number of records supported; it is pretty much limited to the amount of storage the department has available. Once the site surveys are completed the proper server and storage solutions can be proposed.</p>			
<p>223. The Digital Video Management software shall allow the user to search for videos on the system by selecting certain search criteria such as, date and time, officer I.D, type of infraction, type of offense, case #, Drivers license number, offender name, race. This list shall be customizable to allow the department to extend their video search capabilities.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
<p>Comments and Explanation:</p>			
<p>224. The Digital Video Management software should have a customizable video search entry field, which</p>	<p>YES Standard</p>	<p>YES Custom</p>	<p>NO</p>

will allow the department to associated additional search field criteria to the video after it has been uploaded, without affecting the original video. Please describe how many fields and what type.			X*
Comments and Explanation: We do not offer a “free form” or customizable entry field item, however, we do provide the ability for the officer to add additional information to the video after upload that can be then used for extended search criteria. (example: uploaded video did not contain suspect name, officer can enter that data at a later time and it will then become a searchable field for that video.)			
225. The Digital Video Management software should allow for import of other digital media. Please describe these capabilities and what formats are allowed to be imported.	YES Standard	YES Custom	NO X
Comments and Explanation: Currently, we do not import other video or digital media into our system. The reason for this is that the naming conventions used on those other types of media do not comply with our file name scheme, also, there is no way for us to authenticate & track these types of media in our system. With that being said, the department CAN copy those said files into the content folder prior to export and have them exported on the DVD disk with the video.			
226. The Digital Video Management software should allow for an additional server to be located at a remote site. This additional server will allow for local upload of video and will automatically synchronize with the main server. Please describe these capabilities.	YES Standard X	YES Custom	NO
Comments and Explanation: “Store and forward” servers can be located at outlying locations that will store the uploaded video locally for a shorter period of time. These servers can then be configured to upload all or specific videos to the main centralized storage location during “off peak” times. These locations MUST have a robust connection back to the main location for this solution.			

Reliability

227. MVR system shall maintain consistent audio/visual recording quality and not be adversely affected due to interference from any of the following sources: <ul style="list-style-type: none"> ▪ High-powered television stations ▪ Other radio frequency interference (including UHF, VHF, and 800Mhz transmitters) ▪ Automobile alternator, ignition, and electrical systems ▪ Automobile heaters / air conditioner fan motors ▪ Other patrol vehicle electrical systems to 	YES Standard X	YES Custom	NO
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<p>include radios, emergency lights, siren, mobile data computers, and speed measuring devices</p> <ul style="list-style-type: none"> ▪ Another GPS unit installed in the vehicle. ▪ High voltage power lines, traffic signals, neon signs etc. 			
Comments and Explanation:			
<p>228. When in operation, the MVR system shall not generate electromagnetic or radiation that interferes with communications or other electronic equipment found within a police vehicle.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation:			
<p>229. Loss of power to the system shall not result in the unit requiring reprogramming, reloading of software or Operating system software.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation:			
<p>230. Sudden loss of power shall not cause loss of any recorded data.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation:			
<p>231. The MVR system shall be able to return to a "ready to record" mode after sudden loss of power without requiring user intervention.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation: Sudden loss of power does not affect our system due to our 50 minute backup battery.			
<p>232. The MVR vehicle system shall have a means of maintaining accurate date and time for up to 1 week with power removed.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation:			
<p>233. Date and time within the MVR system shall be self-adjusting for daylight savings time and leap years.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation:			
<p>234. The MVR system should have self-charging backup battery such that it continues recording upon loss of power, and should gracefully shutdown prior to available power being exhausted. Please identify how long the system can continue recording prior to shutdown, and what configurability is available.</p>	<p>YES Standard X</p>	<p>YES Custom</p>	<p>NO</p>
Comments and Explanation: Shutdown timer and cut off voltage threshold are configurable. Record times with the vehicle off will vary depending on the vehicles battery and charging system, if the low voltage or shutdown time thresholds are met,			

the system will initiate a graceful shutdown. A vehicle "voltage" log will be recorded as well so that the department can diagnose what and when happened to the vehicle power as well as any digital IO connection connected to the system. Backup battery is rated at 50 minutes.	
235. Please identify the recording time that will be guaranteed in a unit that will otherwise result in the MVR system backup battery being replaced under warranty.	
Comments and Explanation: Backup battery is rated at 50 minutes and is charged by the vehicles alternator when the car is running. However, if the backup battery is constantly used (vehicle battery / alternator) not charging properly and causing our UPS battery to kick in more frequently, the life cycle of the battery will be shorter than a battery that is installed in a properly functioning vehicle. Typical life span of these batteries is 12-18 months. UPS batteries are covered under the initial one year warranty only. Does not include labor or shipping. Batteries are easily replaced.	
236. Please identify the peak and operating load current draw of the MVR system as proposed.	
Comments and Explanation: Operating draw is 3.5, Peak draw 4.5 amps,	

Installation

237. All equipment shall be capable of installation in the following vehicles while still meeting the other requirements stated herein: Ford Crown Victoria, Dodge Charger, Dodge Magnum. Please describe dimensions and vehicle mounting options for the camera, recorder, wireless mic transmitter/receiver and any other required equipment.	YES Standard X	YES Custom	NO
Comments and Explanation: Please see attached product specifications.			
238. MVR Equipment shall have a lifecycle of at least 6 years under law enforcement agency usage, or have replacement coverage under warranty and maintenance. Please provide expected lifecycle for all MVR components.	YES Standard	YES Custom	NO X
Comments and Explanation: Pricing for extended warranty is for 5 years.			
239. Please describe capabilities of installation in following vehicles while still meeting the other requirements stated herein: Chevrolet Suburban, Ford F-150, Motorcycles.			
Comments and Explanation: Motorcycle unit is not available yet, Expected release is Q4 of 2007. Other vehicles can be installed. Would just need photos and vehicle survey of each vehicle.			
240. Equipment must not be installed in any original	YES	YES	NO

vehicle manufacturer's designated air bag deployment zone.	Standard X	Custom	
Comments and Explanation:			
241. Equipment must not be installed in such as manner as to interfere with a passenger in the front passenger seat.	YES Standard X	YES Custom	NO
Comments and Explanation:			
242. Camera must be installed such that its field of vision is through the area cleaned by the vehicle wiper blades.	YES Standard X	YES Custom	NO
Comments and Explanation:			
243. No item other than the camera shall extend below the AS-1 line. Reference Federal Motor Vehicle Safety Standard 205 [October 1, 2002] Glazing Materials (ANSI/SAE Z26.1).	YES Standard X	YES Custom	NO
Comments and Explanation: Detached Topcam model does not mount overhead.			
244. Installation must meet all applicable Federal safety standards.	YES Standard X	YES Custom	NO
Comments and Explanation:			
245. Items installed or located in the vehicle trunk shall remain in place during a reasonable foreseeable crash and shall not become a hazard to the vehicle fuel system or to passengers forward of the system.	YES Standard X	YES Custom	NO
Comments and Explanation:			
246. No part of any equipment in the interior of the passenger compartment shall obscure for the 10% female through the 90% male SAE sizes any speedometer, warning lights, gauges, essential controls, or mirrors placed in the vehicle by the original equipment manufacturer. Further, no installed equipment will interfere with the operation of vehicle controls such as the transmission shifter, headlamp controls, windshield wipers, electric door locks, window controls etc.	YES Standard X	YES Custom	NO
Comments and Explanation:			
247. Installed equipment shall be properly fused to minimize shock and fire hazards.	YES Standard X	YES Custom	NO
Comments and Explanation:			
248. All systems shall be properly grounded	YES	YES	NO

according to applicable industry standards.	Standard X	Custom	
Comments and Explanation:			
249. All wiring shall meet industry standards applicable to the wire application. For example, wiring and electronic components contained within the system housings such as the camera body and control panel body meet applicable Underwriters Laboratory (UL) standards for gauge, insulation type, fusing, connectors, heat sinks etc. Wiring exterior to these components will meet all applicable Society of Automotive Engineers (SAE) standards for gauge, insulation type, fusing, connectors etc.	YES Standard X	YES Custom	NO
Comments and Explanation:			
250. Installations shall be neat with all wiring dressed and tie-wrapped away from operating controls of the vehicle. Tape is not to be used in place of tie-wraps.	YES Standard X	YES Custom	NO
Comments and Explanation:			
251. Shrink wrap shall be used in areas prone to exposure to water from internal (i.e. A/C condensation) or external sources.	YES Standard X	YES Custom	NO
Comments and Explanation:			
252. Appropriate service loops shall to be provided in the cables to allow for easy service of the mobile video system components.	YES Standard X	YES Custom	NO
Comments and Explanation:			
253. Manufacturers shall provide information in their installer's guide or owners manual that specifies the proper wiring, fuses, connectors, and connection points with the vehicle electrical system and grounding points.	YES Standard X	YES Custom	NO
Comments and Explanation:			
254. The MVR system shall operate on a power source that is filtered, regulated, and short-circuit protected. The voltage supplied to the MVR system components shall meet the manufacturer's specifications and shall not vary with fluctuations of the vehicle's electrical system of between 9 and 18 volts.	YES Standard X	YES Custom	NO
Comments and Explanation:			

255. All cables, fasteners, and other hardware required for installation shall be supplied.	YES Standard X	YES Custom	NO
Comments and Explanation:			

Exhibit C – Price Form

Note: All quantities are estimated. Any quantities listed in this RFP as estimated or projected are provided for tabulation and information purposes only. No warranty or guarantee of quantities is given or implied. It is understood that the Contractor will furnish the City's needs as they arise. Estimated quantities listed below are over a two-year period with the majority projected to be purchased in year one.

Vehicle Equipment

Item #	Description	Vendor P/N: We are vendor/manufacturer on all equipment	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
1	Recorder	Topcam G-II	Coban / SYSG2-SCSMD	269	4750.00	\$1,277,750.00
2	Primary camera		SCCMR-01	269	Included in Item 1.	
3	Secondary camera		SCOPT-08	269	\$250.00	\$67,250.00
4	Dash mounted LED record indicator			269	N/A	N/A
5	Standard triggers <ul style="list-style-type: none"> • Record button • Wireless Mic • emergency lights or siren • impact sensor 			269	1 st three items are N/C, impact sensor is \$150.00	\$40,350
6	In car speaker		SCOPT-04	269	Included in Item 1.	N/C
7	In car wireless microphone		No part number, item is built into Topcam G-II unit SCMIC-PKGBT	269	Included in Item 1.	N/C

	charger							
8	Wireless microphone transmitter/receiver			SCMIC-PKGBT = TRANSMITTER	269	Included in Item 1.	N/C	
9	Wireless microphone belt clip or belt case			SCMICRECE=Receiver SCMIC-LC03	269	Included in Item 1.	N/C	
10	In-car fixed microphone			SCMICMC202	269	Included in Item 1.	N/C	
11	802.11g wireless external antenna			AWIR-INT	269	\$150.00	\$40,350.00	
12	Mute of vehicle AM/FM radio speakers				269	N/A	N/A	
13	Metadata recorded with video (siren, lights, speed, braking indicator)			No part numbers associated with this feature.	269	Included in Item 1.	N/C	
14	I/Mobile Interface	Intergraph		Coban / NOTE: This feature can be implemented however, after discussions with Alan @ Intergraph, FLPD will need to make this request to them for the interface portion of the I/mobile software to be completed. Coban offers	269	TBD	TBD	

			hourly development rates of \$150.00 / hour or blocks of development time at discounted rates.					
15	LAN port		WIR-20	269	40.00	\$10,760.00		
16	Any software client licenses or codecs for vehicles		WDVMS-LC: This license fee is for the DVMS solution and in car mobile video software. We do not charge per seat license fees for the DVMS software.	269	\$170.00	\$45,730.00		
Total Vehicle Equipment							\$1,482,190.00	

Optional Vehicle Equipment

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
17	Optional triggers <ul style="list-style-type: none"> • speed • acceleration • others 		NOTE: Speed reading is captured via GPS.	269	N/C up to 8 inputs	N/C
18	Additional metadata recorded with video per RFP (Audio on, door opening, shotgun rack)		No part number associated with this item.	269	N/C up to 8 inputs.	N/C
19	GPS Interface (Ft Laud equipment)		No part number associated with this item.	269	\$100.00 If required	\$26,900.00

20	Additional removable media		SCMHD-1840	25	350.00	\$8,750.00
21	Additional wireless microphones		SCMIC-PKGBT	25	335.00	\$8,375.00
22	Additional wireless microphone batteries		SCMIC-BP01	50	20.00	\$1,000.00
23	Additional wireless microphone chargers		NOTE: ALL Package B wireless microphone kits come with all chargers, If the department buys 25 additional Package B kits, they get 25 chargers. Separate charging kit is: SCMICCHG01= Car charger SCMICAD1230= AC adpater SCMICYE2109= DC Charging Cable	25	35.00	\$875.00
Total Optional Vehicle Equipment						\$ 45,900.00

Server and Workstation

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
24	Digital Video Management Software for the server		WDVMS-LC: Please see item #16, DVMS software is licensed per car not per server or per	1	N/C	N/C

25	Database server license		seat.	WSSQL-LC SQL 2005 w/ 10 CALS (per server)	1	\$2,750.00	\$2,750.00
26	Digital Video Management software, codecs & licenses for client workstations (concurrent use)			WDVMS-LC: Please see item #16, DVMS software is licensed per car not per server or per seat. MPEG-2 CODEC= WMPG2-LC Server/Database Concurrent licenses need to be determined via site survey.	10	25.00	250.00
27	Reports per RFP				1	N/C	N/C
Total Server and Workstation							
							\$ 3000.00

Upload Infrastructure

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty*	Unit Cost	Extended Cost
28	Docking station for removable media			6	175.00	\$1,050.00
29	LAN upload station			TBD after site survey is completed.	TBD after site survey is completed. Volume pricing may be available on these items depending on how many are required.	
30	Wireless upload station		CISCO Aironet 1310 OR	TBD after site survey	CISCO= \$2,700.00	TBD after site survey

			Proxim AP-4000	is completed.	Proxim = \$1,800.00	is completed. Volume pricing may be available on these items depending on how many are required.
Total Upload Infrastructure \$ TBD						

*Qty as recommended by vendor.

Backoffice and Upload station installation Services

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
31	Back office installation and configuration		LSET02 LSET-03 LSET-04 LSET-05	TBD after site survey is completed.	1,000.00 LSET-05 = Tape Library config @ \$1,500.00 / day	TBD after site survey is completed.
32	LAN upload station installation			TBD after site survey is completed.	1,000.00	TBD after site survey is completed.

33	Wireless upload station installation			TBD after site survey is completed.	500.00	TBD after site survey is completed.
34	Removable media docking station installation		6		250.00	\$1,500.00
Total Backoffice and Upload station installation Services						
\$ TBD after site survey is completed.						

Training

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
35	Administrative Training		LTRAN-02	TBD once total number of officers to be trained is determined.	\$1,000.00 / Day	
36	In car video system training		LTRAN-02	TBD once total number of officers to be trained is	\$1,000.00 / Day	

			determined.	
Total Training				\$

Vehicle installation Services

Item #	Description	Vendor P/N	Manufacturer and Manufacturer P/N	Qty	Unit Cost	Extended Cost
37	Vehicle installation		LINST-01	269	\$350.00	\$94,150.00
38	Optional triggers			269	SEE ABOVE PRICING	
39	Optional metadata collection			269	SEE ABOVE PRICING	
Total Vehicle Installation Services						\$ 94,150.00

Other Services

Item #	Description	Vendor P/N	Qty	Unit Cost	Extended Cost
40	Year 1 - Warranty and Maintenance	Under Warranty	269	No Cost	No Cost
41	Year 2 - Warranty and Maintenance		269	\$300.00	\$80,700.00
42	Year 3 - Warranty and Maintenance		269	\$400.00	\$107,000.00
43	Year 4 - Warranty and Maintenance		269	\$600.00	\$161,400.00
44	Year 5 - Warranty and Maintenance		269	\$800.00	\$215,200.00

9150.00

2,082,647.00
50,000

Total Other Services	\$457,407.00
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Total Proposal Cost: \$ 2,082,647.00 ** (Does not include Back end installation, training, wireless / wired upload solutions, project management or shipping.) Please see attached itemized quote and RFP response for further reference.



CONFIDENTIAL

Sales Quote

Quote #	Date
LKM032207TC	03/22-07

13 Exchange Dr., Ste.536
 Stafford, Texas 77477
 281.277.8288

Bill To:
 Customer Name **FLPD**
 Customer Address
 City, State:
 Contact:

Ship To: FLPD

Sales Representative	Terms	FOB Point	Quotation Expiration
Larry Marr	NET 30 DAYS	FLPD	90 DAYS

Part Number	Description	List Price	Quantity	Total
Coban In-Car				
In-Car Systems				
SYSG2-SCSMD	TopCam Gen II - 6.4" Detached Monitor System Single Camera & Microphone with Coban Smart Power Module	\$ 4,750.00	269	\$ 1,277,750.00

Coban Options

SCOPT-08	Add Additional Back Seat Infrared Camera to Main Camera Module (This upgrade must be addressed during initial order)	\$ 250.00	269	\$ 67,250.00
SCOPT-09	Detached Wide Angle Camera	\$ 250.00		Optional
SCOPT-03	Dual Microphone Receiver Module (Receiver Only)	\$ 395.00		Optional
MIC-CHG06	6 Mic Charging Station	\$ 350.00		Optional
OPT-05	Magnetic Card Reader	\$ 295.00		Optional
SCOPT-01	GPS	\$ 250.00	269	\$ 67,250.00
SCOPT-02	MDT- Hardware Integration (includes cables with setup)*	\$ 100.00	269	\$ 26,900.00
SCOPT-04	Crash Sensor*	\$ 150.00	269	\$ 40,350.00
SCOPT-10	Radar Integration (pd must provide cable)*	\$ 150.00		Optional
	Gigabit ethernet upload	\$ 40.00	269	\$ 10,760.00
SCOPT-07	Video Streaming-requires wireless infrastructure	\$ 250.00		Optional
SYSTS-01	Tech Support Kit -	\$ 495.00	5	\$ 2,475.00

*= Radar integration, MDC Integration and additional triggers must be requested prior to deployment.

Coban Spares

SCMIC-PKGBT	Package B (Transmitter)	\$ 335.00	25	\$ 8,375.00
SCMIC-TANT	Transmitter Antenna	\$ 12.00		\$ -
SCMIC-BP01	Lithium Ion Battery	\$ 20.00	50	\$ -
SCMIC-LC03	Microphone - Leather Pouch	\$ 20.00		\$ -
SCMHD-1840	40GB Removable HDD	\$ 350.00	25	\$ 8,750.00
SCCMR-01	Complete Sony 11A Camera w/o IR	\$ 670.00		\$ -
SCCMR-02	Complete Sony 11A Camera w/ IR	\$ 845.00		\$ -

Coban Wireless

In-Car Antenna				
/IR-INT	TopCam In-Car Wireless (External Antenna Assembly)	\$ 150.00	250	\$ 37,500.00

Coban BackOffice

Software				
WDVMS-LC	DVMS Software License Fee / In-Car Unit	\$ 170.00	269	\$ 45,730.00
WMPG2-LC	Mpeg 2 Codec - required for network machines viewing mpeg2	\$ 25.00	10	\$ 250.00
WSQL-LC	SQL 2005 5 Cals, (Coban recommends that the FLPD purchase SQL themselves due to the ability of the department to receive governmental pricing or the department may already have existing enterprise license agreement.)	\$ 1,988.00	1	\$ 1,988.00
SM-LC	TSM License (keep in mind Veritas backup software must support TSM agent.) Not included in this price. TSM required for LTO tape library.	\$ 1,095.00	1	\$ 1,095.00
Hardware				
BUPL-01	Mobile HDD Up-Load Stand - one per location for backup upload solution to wireless	\$ 175.00	6	\$ 1,050.00
Access Point				
All wireless deployments require a site survey(see below),				
WAP-01	Cisco AP- Cisco Aironet 1310 Outdoor Access Point/Bridge - wireless AP Cisco Aironet Power Injector LR2 - power injector Cisco Aironet Antenna 9.5 dBi with Outdoor Wall Mount Aironet Lightning Arrester - lightning arrester CISCO AIRONET 1300 ROOF MOUNT KIT - for AP 5 ft Low Loss Cable Assembly w/RP-TNC Connectors 20 ft Low Loss Cable Assembly w/RP-TNC Connectors	\$ 2,700.00	TBD after site survey is completed. Volume pricing may be available on these items depending on how many are required.	25,675.00
WAP-02	Proxim AP- Proxim Orinoco AP-4000, 802.11 A/B/G (Optional, Super G capable). PRX AE 802.3af 1pt Injector 14dBi Linear Patch Antenna, N Female Lightning Arrester DC 4 GHz Bent-Arm Uni. Wall/Roof Mount - for Antenna 12" NEMA 3R Encl Type 1 SOI - for AP 10' 1/2 LL N/M N/M SOI 30' 1/2 LL N/M N/M SOI	\$ 1,800.00	TBD after site survey is completed. Volume pricing may be available on these items depending on how many are required.	937,000
Automated DVD Burner				
BDVD-25	Automated Robotic CD/DVD Back-up Solution (Based on Primera Bravo II system. If rimage system is used additional development time may be necessary.)	\$ 4,845.00		Optional

Coban Services

Back Office Pre-Config				
	All prices are based on one working day and person. An additional charge of \$1000.00 per day will need to be added for additional days and if Hardware setup is required (see LINST-02)			
LSET-02	Stand Server Hardware & software configuration MAIN	1000.00/Day	TBD, after site survey is completed.	
LSET-03	Server with Internal RAID Hardware & software configuration	1000.00/Day	TBD, after site survey is completed.	
LSET-04	External RAID Hardware & software configuration MAIN - SAN	1000.00/Day	TBD, after site survey is completed.	
LSET-05	Tape Library DVMS Integration and software configuration	\$1,500.00/day	TBD, after site survey is completed.	

LSET-08	Onsite Wireless Site Survey - per day per tech. Estimate 3 days for site survey for wireless and wired upload solutions. 2 Technicians per day. If the FLPD cannot provide lift access to rooftop areas and additional fee of \$400.00 a day for lift rental will be applied. SITE SURVEY MUST BE COMPLETED TO SUPPLY A QUOTE FOR BACK END EQUIPMENT RECOMMENDATION.	\$ 1,200.00	6	\$ 7,200.00
T-01	Workstation Hardware & software configuration	\$ 250.00	6	\$ 1,500.00
T-06	Automated DVD Burner Hardware & software configuration	\$ 500.00		\$ -
LSET-07	Wireless Upload Hardware & software configuration (per access point)	\$ 500.00	TBD, after site survey is completed.	

In-Car Installation

LINST-01	In-Car Hardware Installation / Car - Includes Travel*	\$ 350.00	269	\$ 94,150.00
Recommend training Department fleet technicians and or current FLPD service center for installation, See LTRAN-01 for pricing.				

Training

	Training prices are based on one trainer per day. An additional charge of \$1000.00 per day will need to be added for additional day.			
LTRAN-01	In-Car Installation Training - Include Travel (2 days training if this platform is selected, up to 2 cars per per day.	\$1500/day		
LTRAN-02	On-Site Officer Training - include Travel			
	6 days In car video operation/DVMS end user training	\$ 1,000.00	6	\$ 6,000.00
	1 day DVMS System admin training	\$ 1,000.00	1	\$ 1,000.00
Alternative/On Going Training				
	Web training can be an alternative method of training for small departments. For larger departments, it is recommended to provide onsite "train the trainer" or classroom training.			
LTRAN-04	Online Web Training (per session) (up to 3 hours)	\$ 500.00		\$ -

Warranty / Service

WARR-G23	TopCam G2- Second Year Extended Warranty (include DVMS Annual License Fee & Standard 1st yr. Manufacturers	\$ 300.00	269	\$ 80,700.00
	TopCam G2- Third Year Extended Warranty (include DVMS Annual License Fee & Standard 1st yr. Manufacturers	\$400.00	269	\$ 107,600.00
	TopCam G2- Fourth Year Extended Warranty (include DVMS Annual License Fee & Standard 1st yr. Manufacturers	\$600.00	269	\$ 161,400.00
	TopCam G2- Fifth Year Extended Warranty (include DVMS Annual License Fee & Standard 1st yr. Manufacturers	\$ 800.00	269	\$ 215,200.00
LSERV-02	VMDT/PV/TopCam After Warranty Service Charge/Hour	\$ 150.00		\$ -
LSERV-03	Project Management Fee / Hr.	\$ 150.00	180	\$ 27,000.00

Shipping

LSHIP-01	Shipping per unit cost (TopCam) ground/insured	\$ 50.00	269	\$ 13,450.00
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Total \$ 2,312,673.00



**Anticipated Subcontractors for Fort Lauderdale
P.D. In car video Project.**

**Coleman Technologies, Inc.
1550 Sawgrass Corporate Parkway, Suite 360
Sunrise, FL, 33323
954-838-9018
Role: Wireless/Wired Site survey and deployment.**

**J.A Electronics
Buena Vista, FL
ROLE: Authorized service center for Coban installations and
warranty repair.**

3:49 PM
03/19/07
Cash Basis

Coban Research And Technologies Inc
Balance Sheet
As of February 28, 2007

CONFIDENTIAL

	<u>Feb 28, 07</u>
ASSETS	
Current Assets	
Checking/Savings	
1001 · Chase Bank - Checking	9,909.09
1003 · MetroBank - Checking	119,053.67
1005 · MetroBank Money Market	108,839.64
1006 · Post Oak Bank - Money Market	5,005.89
Total Checking/Savings	<u>242,808.29</u>
Accounts Receivable	
1100 · Accounts Receivable	178,882.51
Total Accounts Receivable	<u>178,882.51</u>
Other Current Assets	
1200 · Inventory Asset	1,510,821.15
1240 · A/R-Other	1,273.00
Total Other Current Assets	<u>1,512,094.15</u>
Total Current Assets	<u>1,933,784.95</u>
Fixed Assets	
1400 · Office Furniture	63,369.37
1410 · Tools & Equipment	175,843.85
1420 · Hardware	68,730.25
1435 · Office Imporvement	20,326.94
1440 · Accumulated Depreciation	-59,490.00
Total Fixed Assets	<u>268,780.41</u>
Other Assets	
1205 · Inventory Reserve	374,143.45
1210 · Employee Loan	770.90
1600 · Security Deposit	19,278.75
1610 · Loan to Shareholder	250,000.00
1630 · Deferred Income Tax Assets	555,705.90
1650 · Intangible Assets	11,061.00
1800 · Long Term Investment	129,031.32
Total Other Assets	<u>1,339,991.32</u>
TOTAL ASSETS	<u><u>3,542,556.68</u></u>
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	562,046.49
Total Accounts Payable	<u>562,046.49</u>
Credit Cards	
2205 · MetroBank Visa-0169	3,012.14
2207 · Chase - Jerry 3288	-111.09
2208 · Metro - Spencer 0031	7,714.48
2209 · Chase Card - Chris 4597	-114.74
2210 · Chase Card -Dina 9731	79.20
2211 · MetroBank - Cindy 0254	11,231.11
2230 · Reimbursement	152.62
Total Credit Cards	<u>21,963.72</u>

3:49 PM
03/19/07
Cash Basis

Coban Research And Technologies Inc
Balance Sheet
As of February 28, 2007

	<u>Feb 28, 07</u>
Other Current Liabilities	
2100 · Payroll Liabilities	1,939.30
2105 · Health Insurance Payable	16,450.98
2110 · Employee DCAP Payable	3,795.08
2410 · Loan from Bank	820,000.00
2420 · Sales Tax Payable	9,196.68
2425 · Use Tax Payable	178.86
Total Other Current Liabilities	<u>851,560.90</u>
Total Current Liabilities	<u>1,435,571.11</u>
Total Liabilities	1,435,571.11
Equity	
3020 · Capital Stock	7,662.00
3030 · Paid-in Capital	6,838,408.00
3900 · Retained Earnings	-4,406,477.60
Net Income	-332,606.83
Total Equity	<u>2,106,985.57</u>
TOTAL LIABILITIES & EQUITY	<u><u>3,542,556.68</u></u>



CONFIDENTIAL



VMDT Gen II
TopCam Gen II
Interrogation Unit
GWD-900 Microphone

Hardware Overview

Coban Research and Technologies, Inc.
12503 Exchange Drive, Suite 536
Stafford, Texas 77477
Tel: 1-281-277-8288
Fax: 1-281-277-8256



Content

VMDT Gen II Hardware Specifications	3
VMDT Gen II Module Overview	5
TopCam Gen II Hardware Specification	9
TopCam Gen II Module Overview	11
Interrogation Hardware Specification	14
Interrogation Module Overview	16
VMDT & TopCam Gen II Operation	18
GWD 900 Microphone Hardware Overview	19
GWD 900 Microphone Operations	24
System Maintenance	25



VMDT Gen II Hardware Specification

CPU Control Module Specifications:

Physical Dimensions:	7" (w) x 9" (L) x 2 9/16" (D)
Processor:	1.6 GHz Intel Mobile Processor with 256k L2 Cache
Memory:	1G SDRAM
Operating System:	Microsoft Window XP
PCMCIA Slot:	Two Type II PCMCIA or One Type III PCMCIA For: CDPD, CDMA, GPRS, wireless communication, or extended flash memory, etc.
Serial Port:	(1) RS-232 serial ports For: GPS, radar gun, magnetic strip reader, RF modem, fingerprint device, wireless communication device, etc.
10/100/1000 Network Port:	(1)10/100/1000 BaseT LAN Port
USB Port:	(4) USB Ports
Digital I/O:	(8) digital inputs and (8) digital outputs
Operating Temperature:	0°C ~ 50°C
Storage Temperature:	-10°C ~ 70°C
Power Supply:	Input range 9~16V DC with UPS and Power conditioner
Power Consumption:	3.0 Amps, 4.5 Amps with 12" Sunlight Readable TFT Infrared sensing Touch Screen Monitor

12" Monitor Module Specifications:

Physical Dimensions:	12" W x 9 3/4" H x 2 3/16" (D)
Model:	12" Transflective LCD Infrared Touch Screen Monitor
Touch Screen:	IR Type Touch Screen – Glove Friendly
Max. Color Depth:	32 bits
Resolution:	1024 (W) x 768 (H)
Pixel Arrangement:	R, G, B Vertical Strip
Pixel Pitch:	0.30mm (H) x 0.30m (V)
Brightness:	1200 cd/ m ²
Viewing Angle:	+/- 45° (H), -10° ~ +30° (V)
Contrast Ratio:	> 18
Surface Treatment:	Anti-Glare and Hard Coating
Input:	LVDS
Operating Temperature:	0°C ~ 50°C

GWD900 Water Resistant Wireless Microphone Specifications:

Modulation Mode:	Bi-Directional DSS (Digital Spread Spectrum)
Frequency:	902 ~ 928MHz
Operating Range:	1000 ft
Battery:	Rechargeable Li-Ion battery
Air Time:	8 ~ 10 hours of continuous operation
Standby Time:	14 ~ 16 days
Microphone:	Integrated internal microphone
Channels:	20 Channels with Automatic Synchronization



VMDT Gen II Hardware Specifications

Camera Specifications

Image Sensor:	¼ type IT CCD (Super HAD CCD)
Number of Effective Pixels:	768 (H) x 494 (V)
Horizontal Resolution:	470 TV Lines
Zoom:	40 (10 Optical x 4 Digital)
View Angle:	Approx. 48 degree (wide end) Approx. 2.7 degree (tele end)
Min. Illumination:	Less than 0.07 lux (F 1.4, 1/25 shutter)
S/N Ratio:	More than 50 dB
Electronic Shutter:	1/60 sec. To 1/10,000 sec. 16 steps
Spot AE:	Yes
Privacy Masking Zone:	Yes
Focusing System:	Auto (Sensitivity: H, L), One Push AF, Manual, Infinity / Interval AF, Zoom Trigger AF
White Balance:	Auto, ATW, Indoor, Outdoor, One Push WB, Manual WB
Backlight Compensation:	ON/OFF

Mobile Hard Drive Specifications

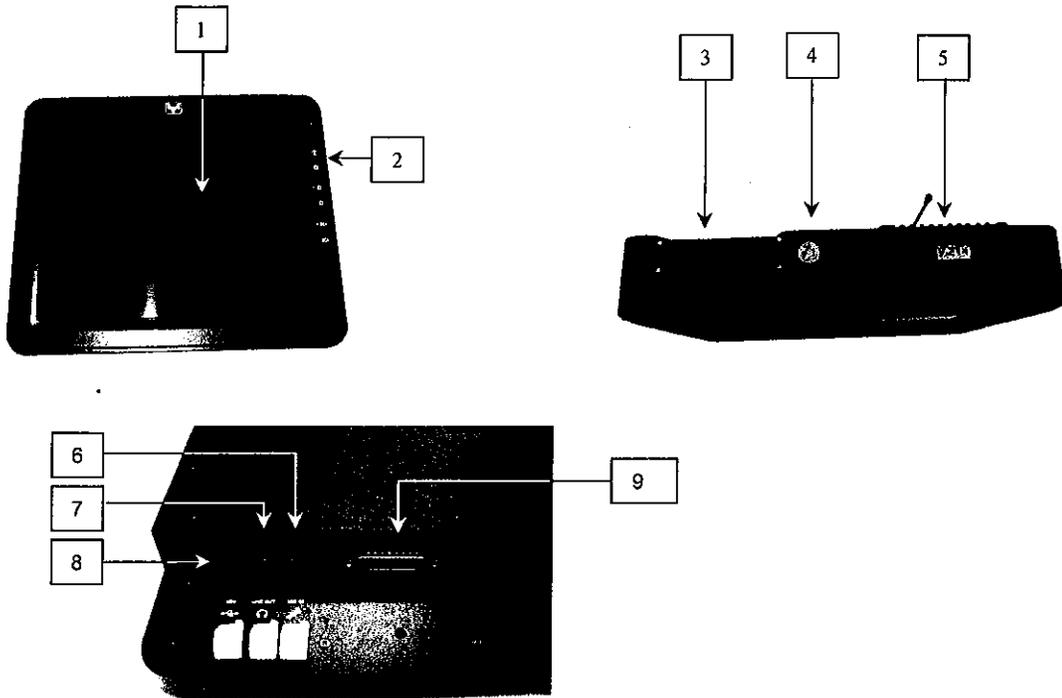
Mobile Hard Drive:	1.8" Travelstar 40 GB HDD
Operating Temperature:	5°C ~ 55°C
Storage Temperature:	-40°C ~ 65°C
Vibration & Shock:	500G / 2 ms shock in operating 1200G / 1 ms shock in non-operating
Data Transfer:	Up to 66.6 MB/sec
Seek Time:	12 ms read
Interface:	USB 2.0

Back Light Spill Proof Keyboard

Physical Dimensions:	11.25" (W) x 6.25" (D) x 1.80" (H)
Material:	Industrial silicone rubber
Life:	Greater than 10 million cycles
Shock Specification:	50g 11msec on 3 axis
Vibration Specification:	Power spectral density (PSD): .04g ² /Hz
Operating and Storage:	-40°C ~ 90°C
Approvals and Licenses:	NEMA 4, 4X, 12, UL-1950, CE, FCC Class 15, Part B

VDMT Gen II Module Overview

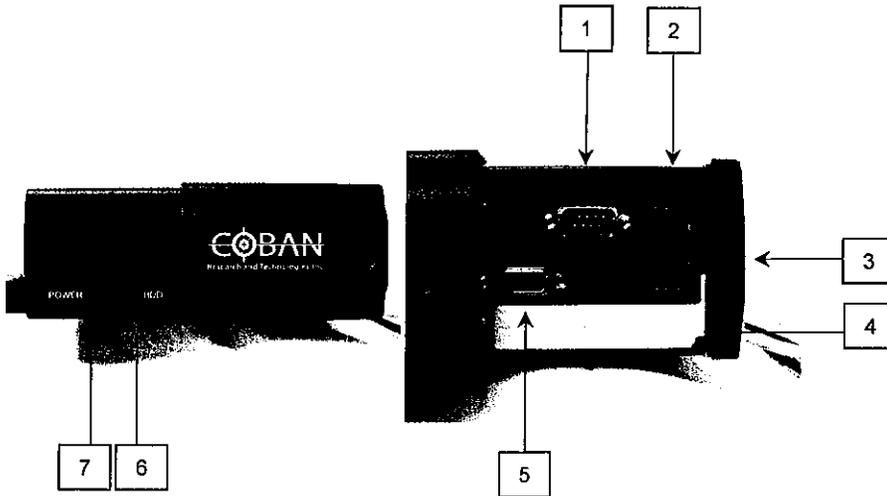
Touch Screen Monitor Module Overview



1. 12" Infrared sensing Touch Screen Monitor
2. Monitor control / display buttons
3. Removable Hard Drive Bay
4. Removable Hard Drive Bay Lock
5. Wireless Microphone Receiver
6. In-Car / Covert Microphone Input
7. Audio Line Out
8. USB 2.0 Port
9. 44 Pin Monitor Cable Input

VMDT Gen II Module Overview

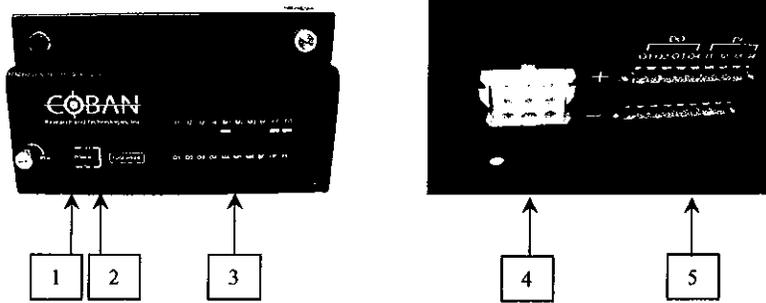
CPU Module



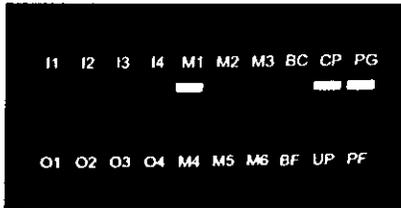
1. DB -9 9pin serial connector
2. RJ-45 10/100/1000 Ethernet port
3. USB 2.0 ports
4. Type II PCMCIA or 1 Type III PCMCIA Slots: For CDPD, CDMA, GPRS, wireless or communication or other device.
5. External VGA output connection, for diagnostics.
6. LED HDD Activity Display
7. LED Power Display

VMDT Gen II Module Overview

Smart Power Module



1. Recessed ON/OFF switches
2. Internal Fuse
3. Digital IO LED Diagnostic Panel
4. MNStar 9 Pin Molex Connector
5. Digital IO Ports



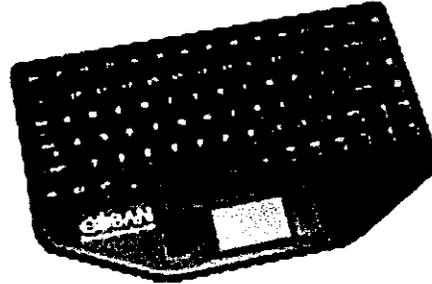
- | | | |
|--------------------------|------------------------|-----------------------|
| 1. I1-14 Digital Inputs | 6. M4 – Light Ba | 11. PG – Power Good |
| 2. O1-O4 Digital Outputs | 7. M5 – Spare | 12. BF – Battery Full |
| 3. M1 - Ignition | 8. M6 – Siren | 13. UP – UPS Power |
| 4. M2 - Break | 9. BC – Battery Charge | 14. PF – Power Fail |
| 5. M3 - Gun Lock | 10. CP – Car Power | |

VMDT Gen II Module Overview

Digital Camera Module



TG3 Keyboard



GWD900 Weather Resistant Wireless Microphone & Charger

(for more information please refer to GWD900 Wireless Microphone Owner Manual)



Mobile Hard Drive





TopCam Gen II Hardware Specifications

TOPCAM G2 Control Module Specifications:

Physical Dimensions:	7" (w) x 9" (L) x 2 9/16" (D)
Processor:	Intel® Pentium® Mobile Processor 1.6 GHz
SDRAM:	512 MB RAM
Operating System:	Microsoft Window XP
PCMCIA Slot:	Two Type II PCMCIA or One Type III PCMCIA For: CDPD, CDMA, GPRS, wireless communication, or extended flash memory, etc.
Serial Port:	(1) RS-232 serial ports For: GPS, radar gun, magnetic strip reader, RF modem, fingerprint device, wireless communication device, etc.
10/100/1000 Network Port:	(1)10/100/1000 BaseT LAN Port
USB Port:	(4) USB Ports
Digital I/O:	(8) digital inputs and (8) digital outputs
Operating Temperature:	0°C ~ 50°C
Storage Temperature:	-20°C ~ 70°C
Power Supply:	Power supply input range 9V ~ 16V DC With build-in (Uninterrupted Power Supply)

TOPCAM G2 Monitor Module Specifications:

Model:	6.4" Transflective LCD Monitor
Touch Screen:	Infrared Touch Screen
Max. Color:	32 bits
Pixels:	640 (W) x 480 (H)
Viewing Angle:	+/- 45° (H), -10° ~ +30° (V)
Contrast Ratio:	> 18
Surface Treatment:	Anti-Glare and Hard Coating
Input:	VGA
Operating Temperature:	0°C ~ 50°C

GWD900 Water Resistant Wireless Microphone Specifications:

Modulation Mode:	Bi-Directional DSS (Digital Spread Spectrum)
Frequency:	902 ~ 928MHz
Operating Range:	1000 ft
Battery:	Rechargeable Li-Ion battery
Air Time:	8 ~ 10 hours of continuous operation
Standby Time:	14 ~ 16 days
Microphone:	Integrated Internal Microphone
Channels:	20 Channels with Automatic Synchronization

Mobile Hard Drive Specifications:

Mobile Hard Drive:	1.8" Travelstar 40 GB Hard Disk
Operating Temperature:	5°C ~ 55°C
Storage Temperature:	-40°C ~ 65°C
Vibration & Shock:	600G / 2 ms shock in operating 1500G / 1 ms shock in non-operating
Interface:	USB 2.0



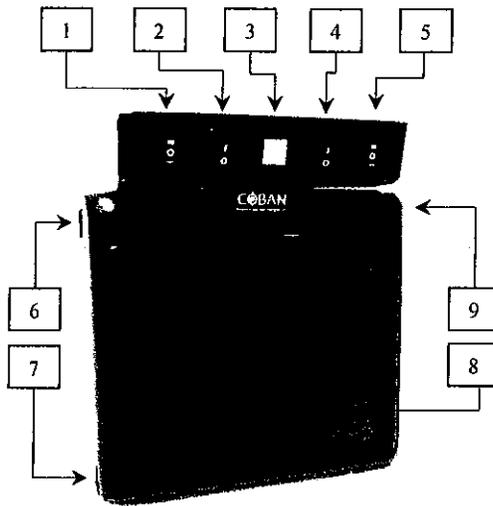
TopCam Gen II Hardware Specifications

Specifications:

Dimensions:	2" (H) x 2" (W) x 3 5/8" (D)
Image Sensor:	1/4 type IT CCD (Super HAD CCD)
Number of Pixels:	768 (H) x 494 (V)
Horizontal Resolution:	470 TV Lines
Zoom:	40 (10 Optical x 4 Digital)
Angel of View:	Approx. 46 degree (wide end) Approx. 4.6 degree (tele end)
Min. Illumination:	1.5 lux (F1.8 1/60 sec (NTSC) 0.10 lux (F1.8 1/4 sec (NTSC)
S/N Ratio:	More than 50 dB
Electronic Shutter:	1/4 sec. To 1/10,000 sec. 20 steps
Focusing System:	Auto (Sensitivity: H, L), One Push AF, Manual, Infinity / Interval AF, Zoom, Trigger AF
White Balance:	Auto, ATW, Indoor, Outdoor,
Backlight Compensation:	ON/OFF

TopCam Gen II Module Overview

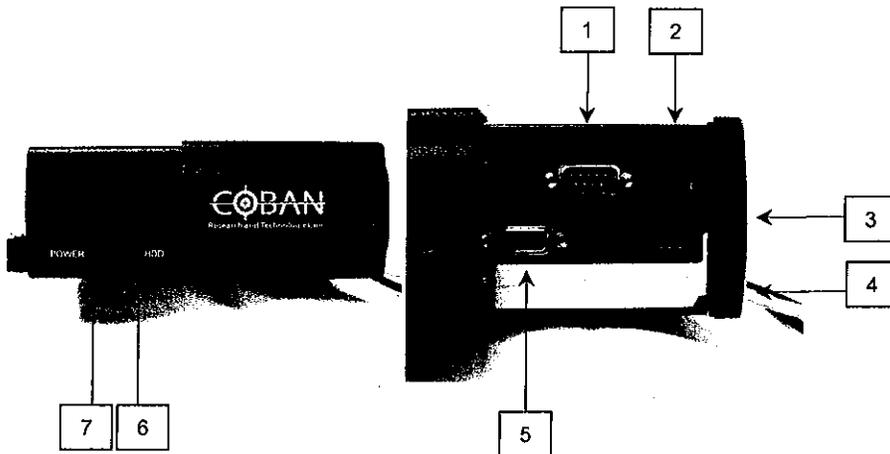
TopCam 6.4" LCD Control Module



- 1 Volume Control
- 2 Change Camera View
- 3 System On/OFF
- 4 Monitor On / Off
- 5 Monitor Brightness Control
- 6 Hard drive Bay
- 7 Touch screen stylus
- 8 6.4" Touch screen
- 9 Microphone receiver

TopCam Gen II Module Overview

CPU Module



1. DB -9 9pin serial connector
2. RJ-45 10/100/1000 Ethernet port
3. USB 2.0 ports
4. Type II PCMCIA or 1 Type III PCMCIA Slots: For CDPD, CDMA, GPRS, wireless or communication or other device.
5. External VGA output connection, for diagnostics.
6. LED HDD Activity Display
7. LED Power Display

Digital Camera Module

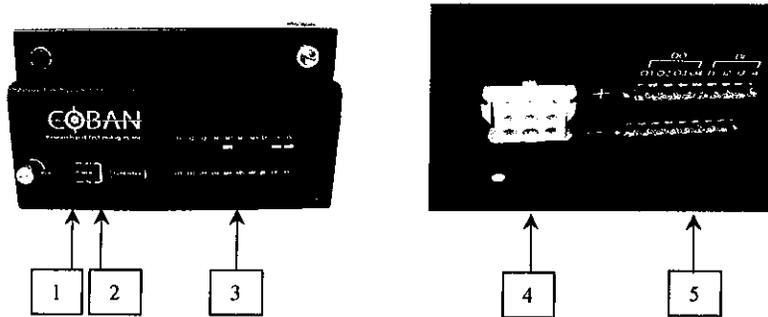


Mobile Hard Drive



TopCam Gen II Module Overview

Smart Power Module



1. Recessed ON/OFF switches
2. Internal Fuse
3. Digital IO LED Diagnostic Panel
4. MNstar 9 Pin Molex Connector
5. Digital IO Ports



- | | | |
|--------------------------|-------------------------|-----------------------|
| 6. I1-14 Digital Inputs | 11. M4 – Light Ba | 16. PG – Power Good |
| 7. O1-O4 Digital Outputs | 12. M5 – Spare | 17. BF – Battery Full |
| 8. M1 - Ignition | 13. M6 – Siren | 18. UP – UPS Power |
| 9. M2 - Break | 14. BC – Battery Charge | 19. PF – Power Fail |
| 10. M3 - Gun Lock | 15. CP – Car Power | |

GWD900 Weather Resistant Wireless Microphone & Charger (for more information please refer to GWD900 Wireless Microphone Owner Manual)





Interrogation Unit Hardware Specifications

Interrogation Control Module Specifications:

Physical Dimensions:	7" (w) x 9" (L) x 2 9/16" (D)
Processor:	Intel® Pentium® Mobile Processor 1.6 GHz
SDRAM:	512 MB RAM
Operating System:	Microsoft Window XP
PCMCIA Slot:	Two Type II PCMCIA or One Type III PCMCIA For: CDPD, CDMA, GPRS, wireless communication, or extended flash memory, etc.
Serial Port:	(1) RS-232 serial ports For: GPS, radar gun, magnetic strip reader, RF modem, fingerprint device, wireless communication device, etc.
10/100/1000 Network Port:	(1)10/100/1000 BaseT LAN Port
USB Port:	(4) USB Ports
Digital I/O:	(8) digital inputs and (8) digital outputs
Operating Temperature:	0°C ~ 50°C
Storage Temperature:	-20°C ~ 70°C
Power Supply:	Power supply input range 9V ~ 16V DC With build-in (Uninterrupted Power Supply)

Interrogation Monitor Module Specifications:

Model:	M150 Flat Panel Touch Screen Display
Touch Screen:	TFT, Active-matrix
Display Color:	16M
Resolution:	1024 x 768
Pixels:	640 (W) x 480 (H)
Display Angle:	adjustable from 0 to 60 degrees
Viewing Angle:	Horizontal-150 degree total typical Vertical- 135 degree total typical
Contrast Ratio:	350:1
Input:	VGA
Operating Temperature:	0°C ~ 50°C

Mobile Hard Drive Specifications:

Mobile Hard Drive:	1.8" Travelstar 40 GB Hard Disk
Operating Temperature:	5°C ~ 55°C
Storage Temperature:	-40°C ~ 65°C
Vibration & Shock:	600G / 2 ms shock in operating 1500G / 1 ms shock in non-operating
Interface:	USB 2.0

Camera Specifications:

Dimensions:	2" (H) x 2" (W) x 3 5/8" (D)
Image Sensor:	¼ type IT CCD (Super HAD CCD)
Number of Pixels:	768 (H) x 494 (V)
Horizontal Resolution:	470 TV Lines
Zoom:	40 (10 Optical x 4 Digital)
Angel of View:	Approx. 46 degree (wide end) Approx. 4.6 degree (tele end)
Min. Illumination:	1.5 lux (F1.8 1/60 sec (NTSC)) 0.10 lux (F1.8 ¼ sec (NTSC))
S/N Ratio:	More than 50 dB



Interrogation Unit Hardware Specifications

Camera Specifications Continue:

Electronic Shutter:	1/4 sec. To 1/10,000 sec. 20 steps
Focusing System:	Auto (Sensitivity: H, L), One Push AF, Manual, Infinity / Interval AF, Zoom, Trigger AF
White Balance:	Auto, ATW, Indoor, Outdoor,
Backlight Compensation:	ON/OFF

AC / DC Switch Mode Power Supply

Physical Dimensions:	2.25"X7"X8.25"
Weight:	3 pounds
Output Voltage:	13.8 VDC
Rated Output Current:	20 A
Output Current:	23 A
Power Source:	200-260 VAC/50Hz

Interrogation Module Overview

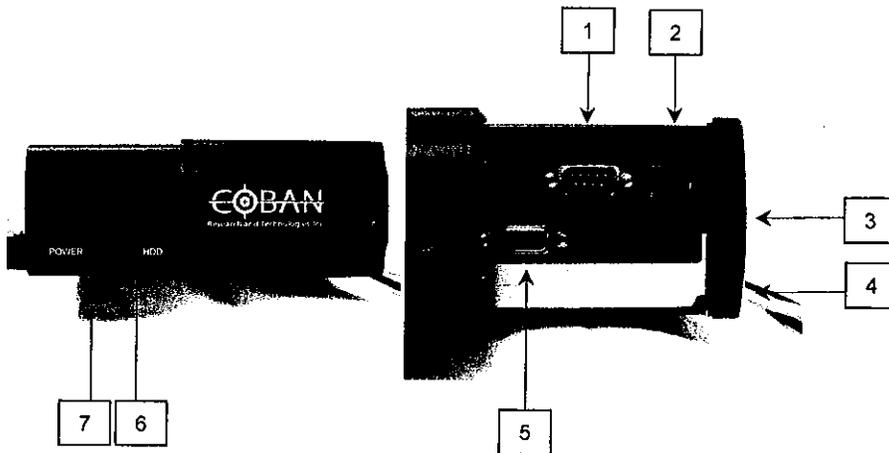
15" Touch Screen LCD Module



AC / DC Switch Mode Power Module



CPU Module



1. DB -9 9pin serial connector
2. RJ-45 10/100/1000 Ethernet port
3. USB 2.0 ports
4. Type II PCMCIA or 1 Type III PCMCIA Slots: For CDPD, CDMA, GPRS, wireless or communication or other device.
5. External VGA output connection, for diagnostics.
6. LED HDD Activity Display
7. LED Power Display

Digital Camera Module



Mobile Hard Drive



USB Upload Cradle





VMDT & TopCam Gen II Operation

Power ON

Please insert car key into the ignition switch and rotate it to ACC position, or start the engine, before powering up the Coban System.

1. Checkout Mobile Hard Drive from the DVMS® workstation. (Please refer to Digital Video Management System User Manual-Checkout HDD for more detail)
2. Insert the Mobile Hard Drive in to the Hard Drive Slot, for TopCam it is located on the driver side panel of the TopCam Module. For VMDT, the Hard Drive Slot is located on the top on the Monitor module.
3. Secure and lock the Mobile Hard Drive before proceeding any further.
4. Press the System ON / OFF switch to turn on the system.
5. Touch Screen Monitor will light up and system will produce a confirmation tone to indicate TopCam is booting up.
6. At this time, slide the Wireless Microphone's Contacts directly on top of the Receiver's Register Contacts, for TopCam it is located on the passenger side of the Coban TopCam CPU Module. For VMDT, the Receiver Register Contact is located on top of the Monitor module. A confirmation tone will sound to indicate the Receiver's Register Contact has synchronized the frequencies of the Receiver and the Wireless Microphone. The Wireless Microphone is now on Standby Mode and is ready for use. The frequency synchronization process might take up to 10 seconds.
7. The Wireless Microphone is capable of keeping the last frequency setting. If the Wireless Microphone will be used with the same Receiver, there is no need to synchronize the frequency setting again. (However, it is a good practice to always synchronize your wireless mic at the beginning of each shift.)
8. After initial start-up, Coban system will proceed to run the Mobile Recorder Software. (Please refer to Mobile Recorder User's Manual for operation)

Power OFF

Press Menu and select Exit on the Window. System will confirm user's decision; press "Yes" and system will proceed to shut down. Please remove the Mobile Hard Drive from the CPU Module for upload. (Refer to Coban Video Management System User's Manual for Hard Disk Up-Load Procedure). If wired or wireless upload solutions are being used, the system will prompt the officer to upload the recorded videos prior to shutting down the system. The officer will also have the option of shutting down the recorder after uploading is completed automatically. If the system unit is integrated with an MDC, the system can also shutdown the MDC if selected by the officer.

Power On with a Discharged Vehicle Battery

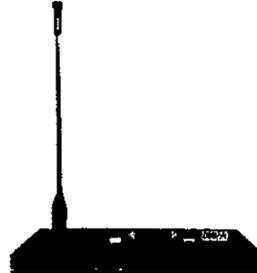
When the vehicle battery voltage drops below a pre-determined level, the system will inform user power is out and request for system shut down. At this time, please start the car to provide power for the system, or if this is not possible, stop recording and save all important information.

GWD 900 Microphone Hardware Overview

Wireless Microphone Transceiver



Wireless Microphone Receiver

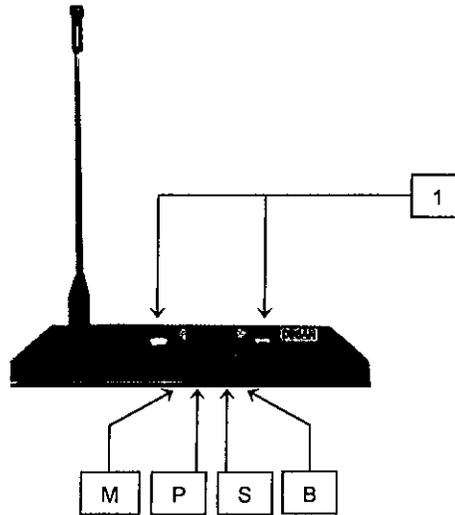


Charger, AC Wall Charger Cable & DC In-Car Charger Cable



GWD 900 Microphone Hardware Overview

Wireless Microphone Receiver



- 1** Receiver's Register Contact
The register contacts are used to synchronize the frequency of the receiver and the wireless microphone.
- M** Green LED
Green LED OFF for Microphone on Standby Mode
Green LED ON for Microphone on Recording Mode (only under Recording Mode)
- P** Red LED
Red LED OFF for Panic Mode OFF
Red LED ON for Panic Mode ON (only under Recording Mode)
- S** Yellow LED
Yellow LED OFF for Strong Signal
Yellow LED ON for Signal is Marginal or Weak (only under Recording Mode)
- B** Red LED
Red LED OFF for Full Battery
Red LED ON for Low Battery (only under Recording Mode and will show after 2 minutes after initiation of the recording.)

Installation -No installation is required from the user. The GWD900 wireless microphone receiver is build in to the Coban VMDT and TopCam system.

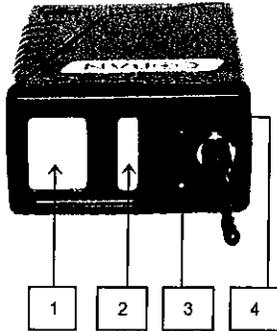
Power Connection - The receiver will become energized in standby mode whenever the Coban VMDT or TopCam system is ON and will automatically be activated when the system is under recording mode.

Receiver's Antennas - To prevent damage, the antenna for the receiver is package separately. Remove the antenna from the package and tighten the titanium antenna to the receiver. Do not try to lengthen, shorten, or tamper with the antennas, which might result in damage of the audio system and may violate FCC regulations.

Receiver's Register Contact - The register contact is used to synchronize the frequency of the receiver and the wireless microphone.

GWD 900 Microphone Hardware Overview

Wireless Microphone Transceiver



LED Indicators (Within the Button 1 & 2)

Green LED (Button 2 -for Online State)
 Green LED OFF for Standby Mode
 Green LED ON for Recording Mode
 Green LED Fast Blink for Mute Recording
 Green LED Slow Blink for Low Battery

Red LED (Button 1 – for Future Use)
 Red LED OFF
 Red LED ON

Yellow LED (Button 2 - for Signal Quality)
 Yellow LED OFF for Strong Signal
 Yellow LED ON for Signal is Marginal or Weak

1 Button One: **Audio / Video Recording ON** (*Press Button 1 once*)
 This action will initiate the Coban system to record both audio and video data. To stop recording, press the stop button on the Coban system monitor module or Button 2, if Department has it programmed as Stop Recording. (This setting **MUST** be requested and approved by the department).

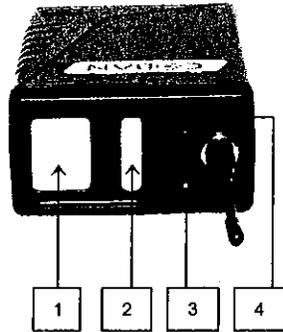
Program Warning Type (*Under Standby or Recording Mode*)
 (*Press Button 1 & Button 2 simultaneously for 1 second*)
 The Microphone will toggle between Combo* warning and Vibrate warning.

* Combo Warning consist of Tone, LED and Vibrate

	Vibrate	Tone / LED / Vibrate
Record	2 Short Vibrate	2 Short Tone, Green LED & 2 Short Vibrate
Mute	2 Short Vibrate	2 Short Tone, Green LED Fast Blink & 2 Short Vibrate
Out of Range	1 Short Vibrate	1 Short Tone, Yellow LED & 1 Short Vibrate
Low Battery	1 Short Vibrate Every Minute	Green LED Blinks Every 4 Seconds & 1 Short Tone Every Minute

GWD 900 Microphone Hardware Overview

Wireless Microphone Transceiver



2 Button Two: **Programmable Button** (Function of Button 2 will need to be programmed according to Department's policy under DVMS System Profile)

Mute Recording / Stop Video Recording / Marker
(Press Button 2 during Recording Mode)

Programmed as Mute Recording:

This action will mute the audio recording, however it will not stop the video recording. Press Button Two again to Un-Mute recording.

Program as Stop Recording:

This action will stop both audio & video recording.

Program as Marker:

This action will place a marker on the specific section of the video which provide user a easy point of search when they are reviewing the video

Program Warning Type (Under Standby or Recording Mode)

(Press Button 1 & Button 2 simultaneously for 1 second)

The Microphone will toggle between Combo* warning and Vibrate warning.

* Combo Warning consist of Tone, LED and Vibrate

3 Buzzer

4 Microphone

GWD 900 Microphone System Overview

Wireless Microphone Transceiver



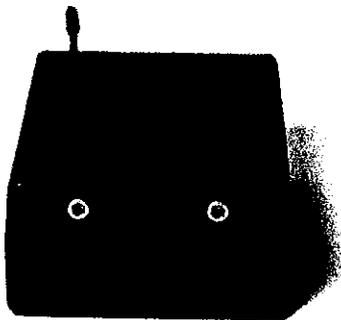
Battery Selection and Installation

A rechargeable lithium-ion battery powers the GWD-900 wireless microphone. The wireless microphone housing is designed to prevent incorrect installation of the battery. Do not force the battery in to the housing. Reversed batteries may cause damage to the wireless microphone. The battery compartment is located at the bottom of the wireless microphone. Slide off the battery cover and remove the silicon seal, at this point the battery is free to slide out.



Transmitting Antenna

The GWD900 Wireless Microphone includes a flexible antenna, which is packaged separately to prevent damage. Remove the antenna from the package and tighten the antenna to the wireless microphone. For best result, allow the antenna to extend fully. If the signal is marginal, please experiment with positioning the wireless microphone on your body. (Shirt pocket, shoulder strap, etc) Do not attempt to remove, replace or change the length of the transmitting antenna, which might result in damage of the audio system and may violate FCC regulations.



Wireless Microphone Contact

The wireless microphone contact is used to synchronize the frequency of the wireless microphone and the receiver. It is also the contact for the battery charger.



Mobile Recorder User's Manual

Version: 2006Q4

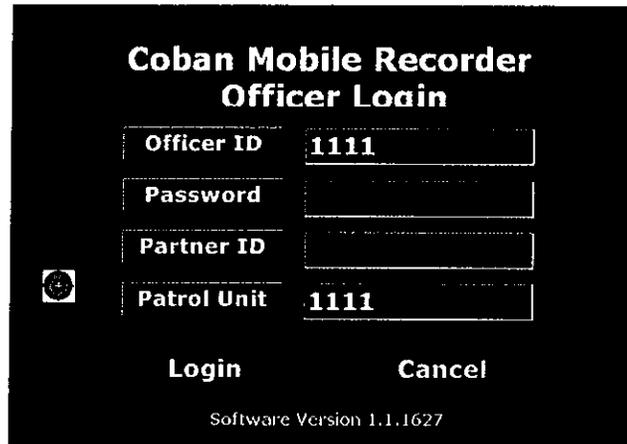
Coban Research and Technologies, Inc.
12503 Exchange Drive, Suite 536
Stafford, Texas 77477
Tel: 1-281-277-8288
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Mobile Start Recorder Software

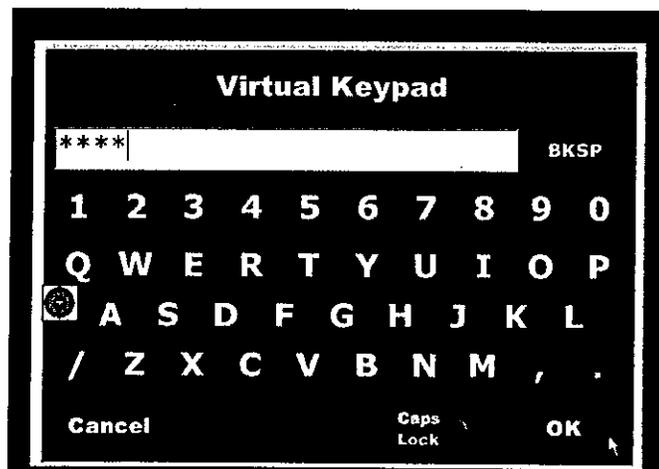
After TopCam System has been activated, the Mobile Start Recorder Software will initiate and display the following *Officer Log-In* screen when initiation is completed.



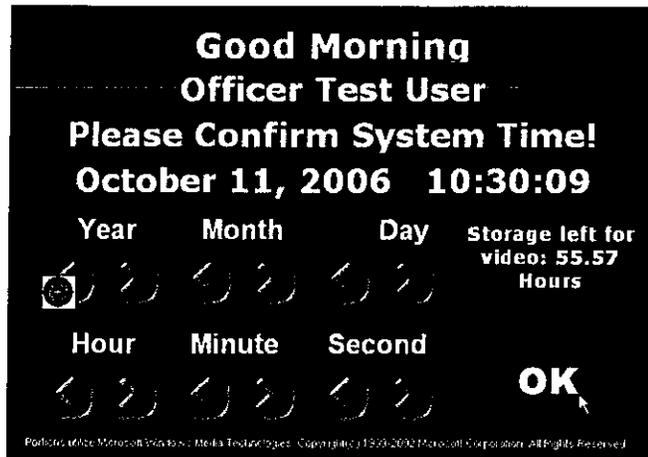
The image shows a black screen with white text and input fields. At the top, it says "Coban Mobile Recorder" and "Officer Login". Below this are four input fields: "Officer ID" with the value "1111", "Password" (empty), "Partner ID" (empty), and "Patrol Unit" with the value "1111". To the left of the "Patrol Unit" field is a small circular icon. At the bottom, there are two buttons: "Login" and "Cancel". Below the buttons, it says "Software Version 1.1.1627".

Officer Log-In Screen

Officer ID will be entered automatically according to the Officer ID used to check out that Mobile Hard Drive. If the default ID is incorrect, press the "Officer ID" label and the Number Keypad will be available for user to make changes. Enter password by pressing "Password" label and the number keypad will appear. Press "OK" when finished and follow by pressing the "Log-In" button to proceed. User also has the option to enter Partner ID and Patrol Unit ID if it is needed.



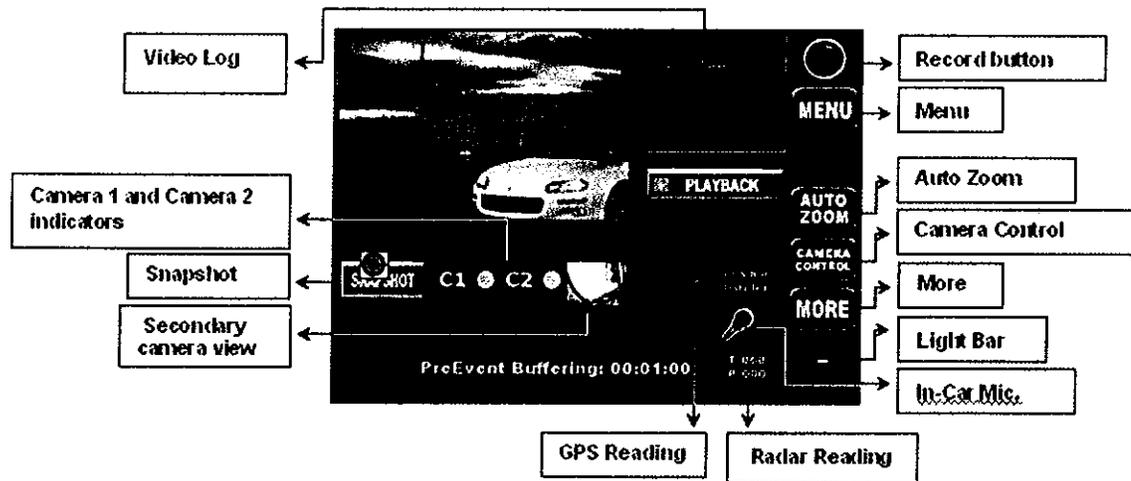
The image shows a black screen with white text and a virtual keypad. At the top, it says "Virtual Keypad". Below this is a text input field containing "****" and a "BKSP" button. The keypad consists of three rows of letters: "1 2 3 4 5 6 7 8 9 0", "Q W E R T Y U I O P", and "A S D F G H J K L". Below the keypad are three buttons: "Cancel", "Caps Lock", and "OK".



Date / Time Confirmation Screen

The officer may use the “<” and “>” buttons to adjust the system date and time. This screen will show the available recording time, and will give the officer a warning message if the available recording time is less than four hours.

After confirming the system time, please press the “OK” button to proceed to the **Camera View Screen**.



Camera View Screen

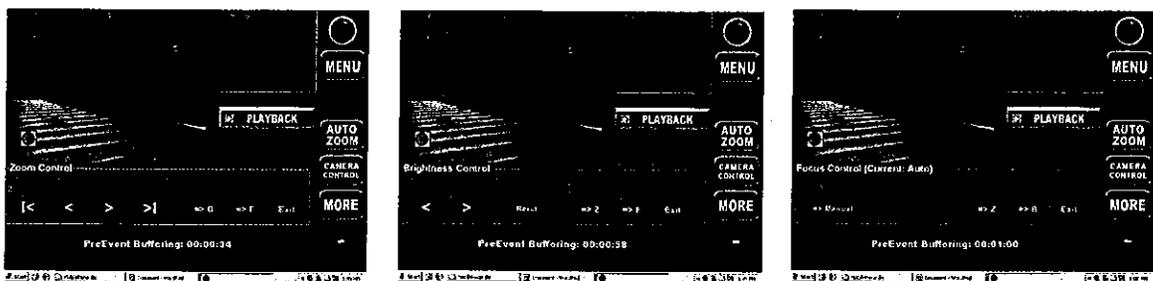
This screen displays the camera input and provides options for the officer to start recording or exit to the main menu. It also provides icons that reflect the light bar status, radar gun reading, GPS (if installed), and the in-car microphone ON / OFF status. At the bottom of this screen, it shows the Pre-Event Buffering time, which indicates the length of video that is being pre-recorded prior to officer pressing the Record button.

Officer may initiate recording by turning on the light bar or siren (if equipped as a system trigger), activating the wireless microphone, or pressing the “**Record Button**” on the screen.

The **Menu** button gives you access to Camera View, Playback, Switch Officer, or Exit.

Auto Zoom, when pressed, will automatically zoom onto the subject, pause for 3 seconds and zoom back to officer's original zoom setting. There is no need to disengage.

Press **Camera Control** to access **Zoom, Brightness & Focus Control**. Example: while in Zoom Control, officers may manually zoom to specific areas like the background or foreground of the subject. User may tap on the “|<”, “>|” for fast zoom or “<” and “>” for slow zoom. To access Brightness Control tap on “=>B”, to access Focus Control tap on “=>F”.



More lets you access additional enhancement options such as: *(Please refer to Page 6 for more detail)*

- System Summary
- Close Shot
- View Snapshots
- Pre-Event Playback
- Equipment Test
- Show Settings
- Color / Black & White Mode
- Record Indicator
- Traffic Watch
- Night Mode
- Exit

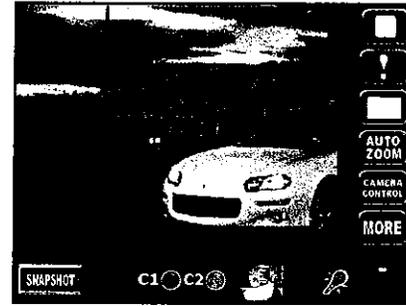
Light Bar: Blinks while light bar is activated.

In-Car Covert Microphone: Blinks while covert microphone is recording.

Video Log is a documentation log of events occurred during recording and viewing of video. User may opt to enlarge the camera view by simply tap on the main camera screen.



Camera View with Video Log



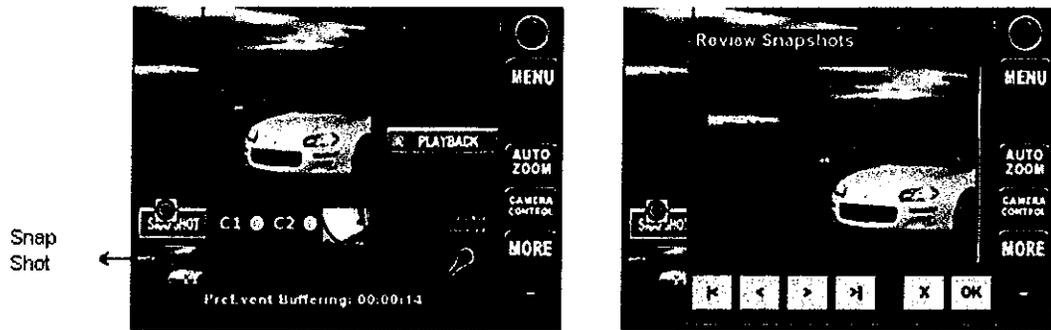
Camera View without Video Log

C1 and C2 will indicate which camera is in use if there are two cameras installed. Note that if there is only one camera installed for the system, you will not see C1 and C2 camera indicator. When **C1** or **C2** is recording, the red blinker next to C1 or C2 will indicate its recording status. You can click on C1 or C2 to place the desired camera view on the main display area.

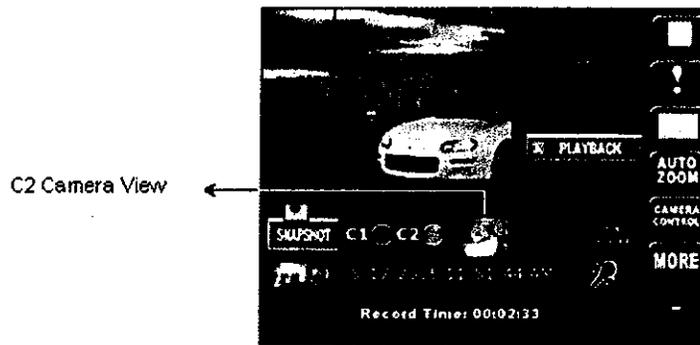
When there are two cameras installed on the system, they can be configured to use Sync mode (two cameras are controlled by one set of control buttons) or Async mode (two cameras are controlled separately with its own set of control buttons). When the unit is configured to use Async mode, when recording is triggered (by light bar or wireless microphone, not by pressing the record button on the screen), the front facing camera starts recording. The record button on the screen can be used to start recording on the camera displayed on the main display area. In addition to the basic setting for Async mode, the system administrator might have configured the unit in different ways:

1. The in-car unit can be configured as Suspect Transfer Vehicle. When set to Suspect Transfer Vehicle, if wireless microphone is used to activate recording, both front and rear cameras are activated. This feature ensures the rear-facing camera can be activated remotely using wireless microphone before the transferred suspects enter the vehicle.
2. The in-car unit can be set to automatically or ask the officer each time if he/she wants to stop both cameras, when both cameras are recording and stop button is pressed. If this option is set to ask officer every time, when both cameras are recording and stop button is pressed, the system will ask the officer should both cameras be stopped. If the officer does not make a selection in 10 seconds, the system will only stop the camera that shows in the main display area.
3. The in-car unit can be set to stop the front facing camera automatically when the rear facing camera is activated, or ask the officer every time. If this option is set to ask officer every time, when the rear facing camera is started and the front facing camera is recording, the system will ask the officer should the front facing camera be stopped. If the officer does not make a selection in 10 seconds, the system will not stop the front facing camera.

This screen shows a picture taken using **Snap Shot**. Officer will be able to review snapshots taken, and notate them for possible use as evidence. Officer may double click on the snapshot and the snapshot will be enlarged. Click **OK** or **X** to close screen. If there are multiple snapshots, officer may toggle between each.

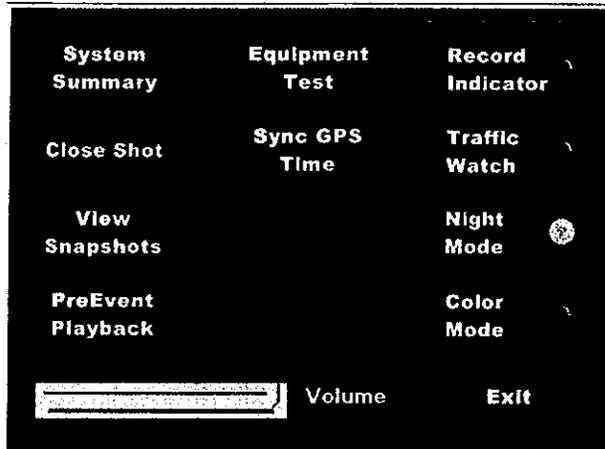


Secondary Camera View: If installed, will be configured as C2 (camera 2) a second image will appear below the primary camera image next to the C2 icon.



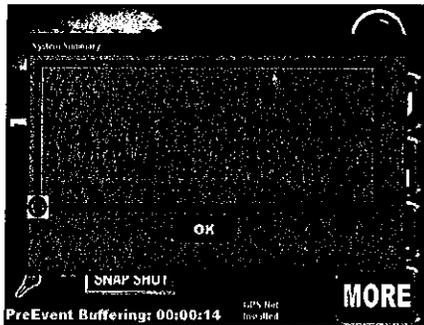
Radar Speed Reading: If installed, T=Target Speed and P=Pursuit Speed

GPS Reading: If installed, GPS reading will be displayed.

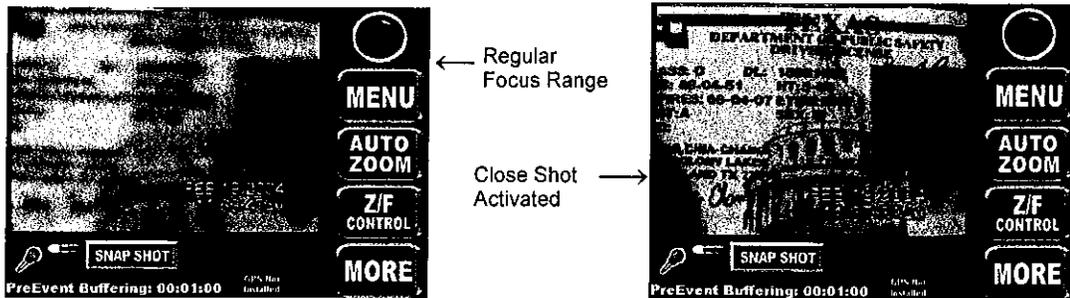


The More function:

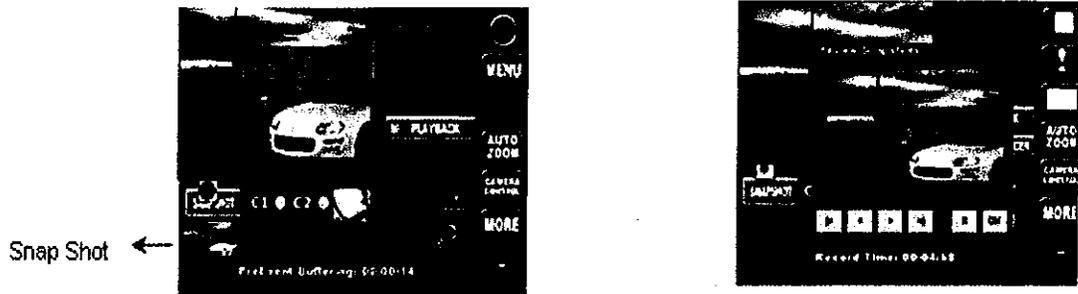
- **System Summary** provides officer with information such as number of recorded videos, number of offender records entered and available recording time with existing Mobile HDD.



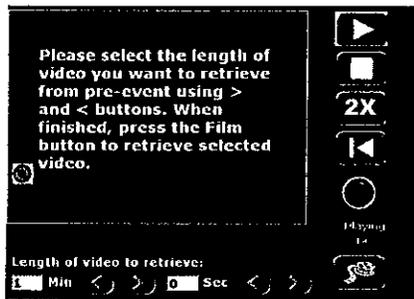
- **Close Shot:** Coban's camera is designed to focus beyond the patrol car's windshield so it will not focus on the rain drops on rainy days; however, the officer may use close shot mode to bring the focus point down to within one inch from the camera for 5 seconds, and during this time, a snapshot will be taken for later review.



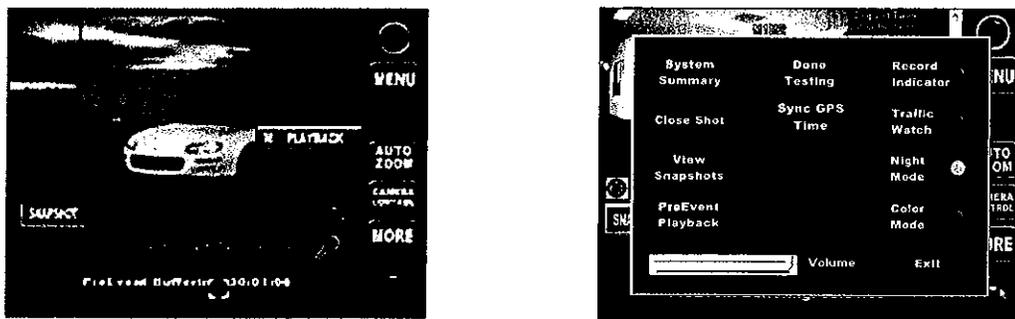
- **View Snapshots:** Allows officer to view snapshot taken. Again, double clicking on the photo will enlarge the photo, and double clicking again returns photo to its original size.



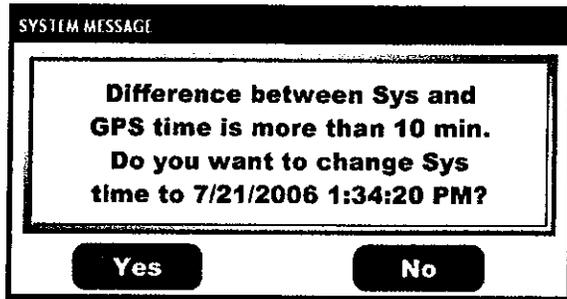
- **PreEvent Playback:** the officer may playback the pre-event video to determine if he/she would like to start the recording. The officer can press "<" and ">" buttons to adjust the length of the pre-event section to playback, then press the "extract" button (on the lower-right corner, a film icon) to retrieve the selected length of pre-event. This means the officer can playback longer pre-event than it is defined in the back-office system. Besides, if a longer-than-defined pre-event is selected for playback, and recording is triggered during pre-event playback (by light bar or the on-screen record button), the extra length of pre-event is included in the final video. The important feature is: the pre-event time can be extended on-the-fly when needed. If recording starts during pre-event playback (through light bar or on-screen record button), this screen closes itself and recording will start.



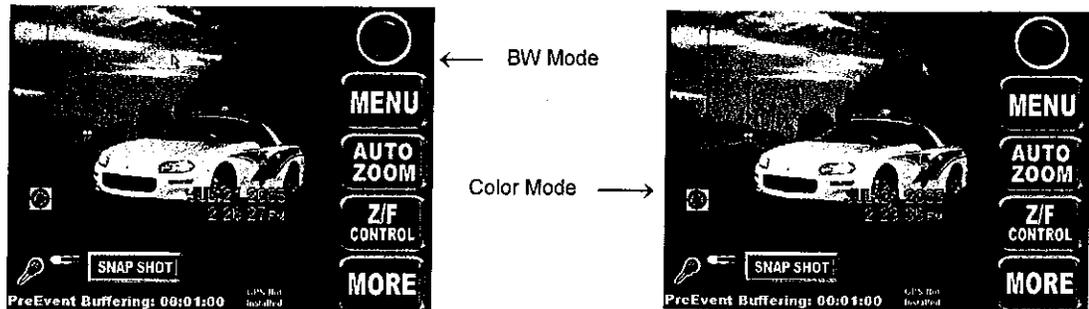
- **Equipment Test:** Allows officers to test out settings of in-car unit. To exit test mode, either click on "Click here to exit Test Mode," or, click back on **More** and click **Done Testing**.



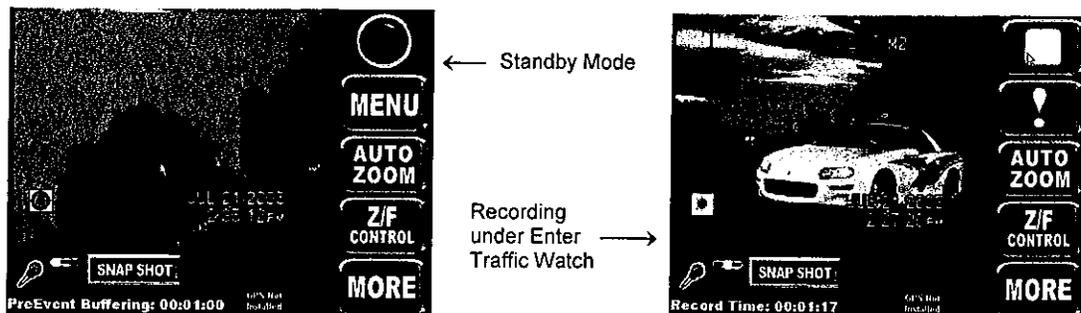
- **Sync GPS Time:** Officer may use this button to sync video clock to GPS / Satellite time clock if the time is off by more than 10 minutes.(if GPS is installed)



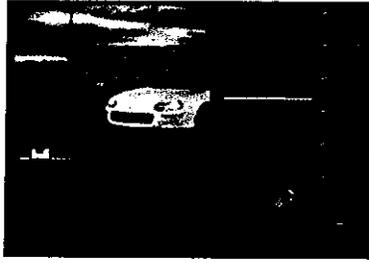
- **Color Mode:** Use this button to turn Color mode on and off. By default, color mode is on, turning it off may be useful at night to enhance lighting and reduce glare. Officer may return to normal color view by pressing the **Color Mode** button again. The circle button indicator is red while using normal color mode and gray while in black and white mode.



- **Record Indicator:** While in record mode, a red indicator LED located in front of the camera will be flashing to alert the user of its recording status. Also, the circle on the Record button will be red while recording and gray while on standby.
- **Traffic Watch:** On Camera View Screen, the camera's zoom lens might be set at different view range depending on officer's focal point. For example, screen shot on the left clearly shows that the officer is focusing on the background of the subject. If officer were to start recording at this point, he will need to manually zoom out to obtain the entire scene. By clicking on **Traffic Watch**, when officer hits Record, the camera automatically zooms out so the officer will have a wider view angle without having to manually zoom out.

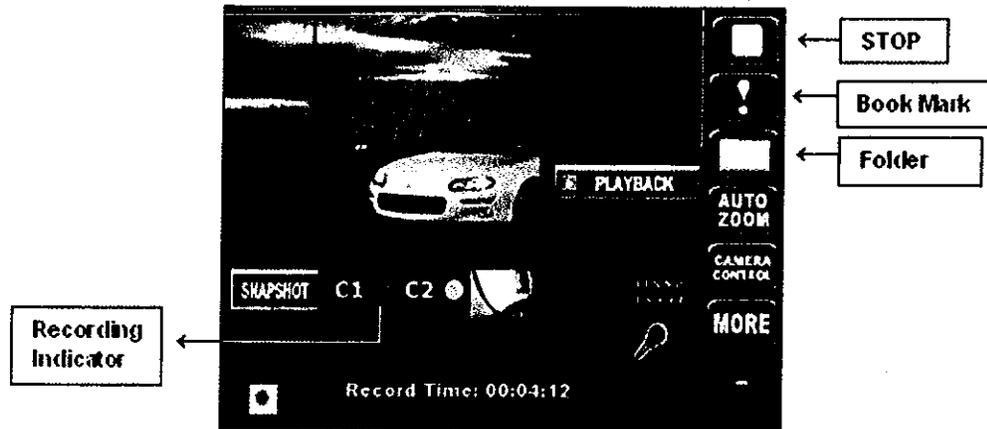


- **Night Mode:** Night Mode dims the in-car monitor for clarity and fewer glares during the evening. To deactivate Night Mode, simply click on **Night Mode** again from the **Menu** screen.



← Night Mode

- **Exit:** Allows user to exit the **MORE** mode.

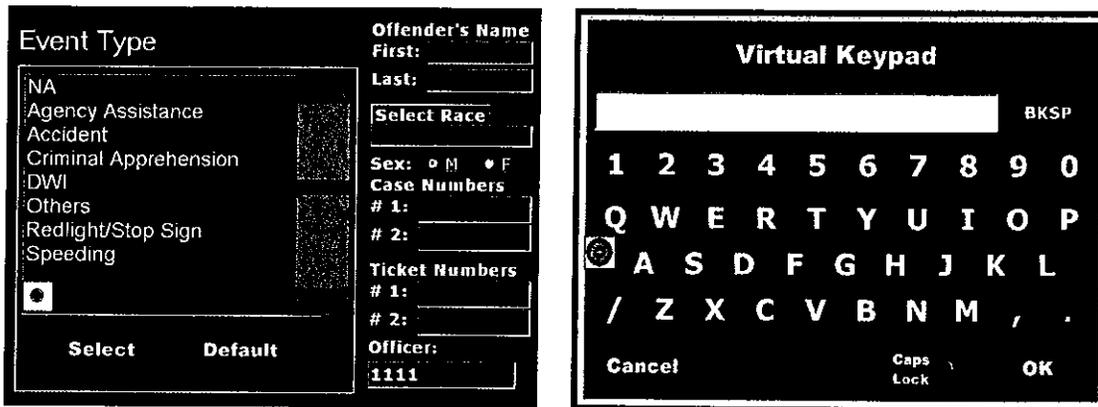


Recording Mode

This screen provides buttons for the officer to stop recording, insert bookmarks, and enter data associated with the video.

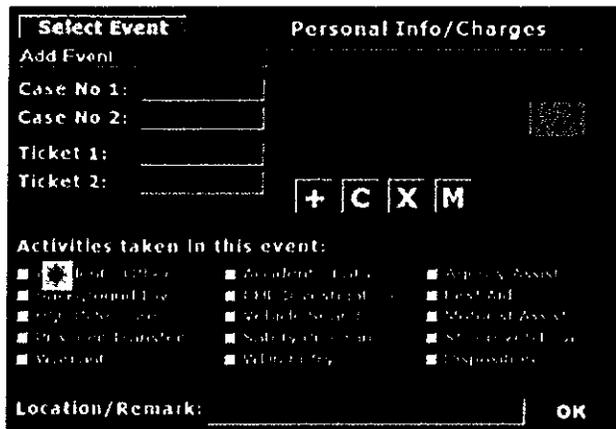
The **Recording Indicator**, blink when recording is activated. If Camera 1 is recording, then the **C1** button will blink; if Camera 2 is recording, then **C2** button will blink.

The officer may stop recording by pressing the **“Stop”** button. The Select Event Type Screen will pop up for user to indicate type of event related to the video. Please make a selection; this will help the user identify the type of event on the BackOffice video search. The system will then return to Camera View Screen and Wireless Microphone will also return to standby. The **Virtual Keypad** allows officer to key in numerical entries. By pressing on the associated label (such as **Case Number** or **Ticket 1**), officer may key in data.



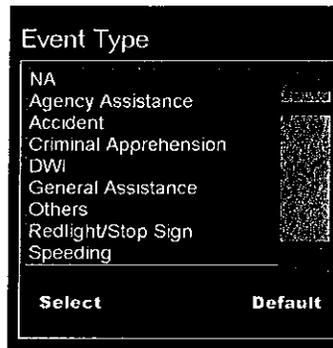
During recording officer may insert bookmarks by pressing the **“Bookmark”** button. When the recorded video is played back at a later time, bookmarks help the officer identify certain points in the video quickly.

The **Data Entry Button** “☐” is used to enter information associated with the video. When the button is pressed, the unit displays the **Data Collection Screen**. (Please refer to page 10 for more detail)



Data Collection Screen

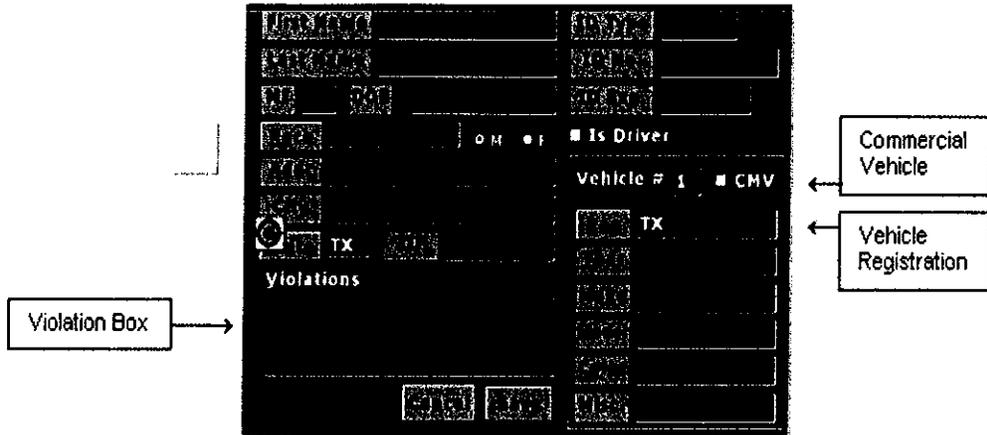
While in recoding, press on the **Folder** icon or press **Data** button under Playback, user will be able to input data for offenders. Each recorded video is linked with an event type (event can be defined as traffic stop, accident, assistance, or any other definable event type). Each event may have multiple Personal Info / Charges data, one location description, and one set of officer activities (bottom part of the screen).



By pressing the **“Select Event”**, the officer may select the event type from a pre-defined event list. Once event type is selected, the officer may then start adding personal information of offenders, or select the applicable activities.

- To add an offender's data, press the **Add “+”** button.
- To change the offender's data, press the **Change “C”** button.
- To delete an offender's data, press the **Delete “X”** button.
- To move an offender's data from one event to another, press the **Move “M”** button.

When the officer presses the **Add “+”** or **Change “C”** button, the Offender's Data Screen will display.



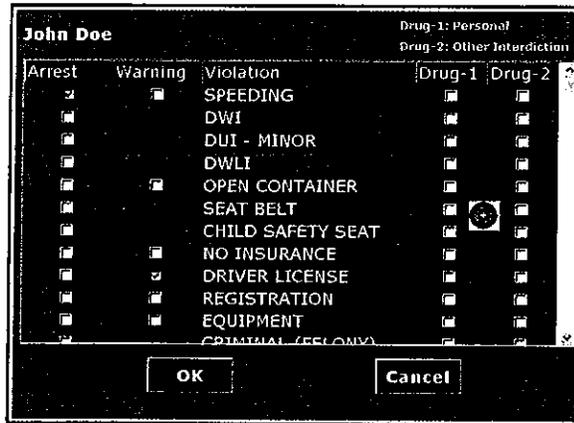
Offender's Data Screen

If the optional magnetic card reader is equipped, the officer can swipe the driver license and all the data on the magnetic strip will be read onto the screen (as shown on the sample screen above). The officer can press the **“Race”** button to select offender's race, and press the **Vehicle Registration** button (represented by the **“Reg”** button) to select the vehicle registration state.

The **“CMV”** checkbox is used to indicate if the vehicle is a commercial vehicle.

Using the keyboard, the officer can enter detailed information such as vehicle make, year, and plate number.

The officer can press the **“Violations”** box to select the type of violation(s) that apply to the event. When this box is pressed, **Violation Selection Screen** will appear.



Violation Selection Screen

The officer may select the violation by checking the proper checkboxes. If a certain event involves drug interdiction, the officer can press the **“Drug-1”** or **“Drug-2”** boxes on one of the violations. **“Drug-1”** is used to indicate personal use of the drug; **“Drug-2”** is for other drug interdictions (such as Drug Trafficking or Dealing).

When all the violations are selected, press the "OK" button and return to the *Offender's Data screen*. The screen will be loaded with the violation data selected on this screen.

Offender's Data Screen After Selecting Violations

After the violations are selected, the Offender's Data Screen displays violations in a summarized format. Selected violations are separated by commas. The notation (A), (W), (AD1), or (AD2) indicates the officer's action towards each violation.

- A- Arrest
- W- Warning
- AD1- Arrest for personal Drug Use
- AD2- Arrest for Other Interdiction

The officer can then press "Save" button to save the data entered, or press the "Cancel" button to void the new data. Either way, the unit displays the *Data Collection* screen with the new data loaded (if the new data is saved).

Data Collection Screen after Offender's Data Has Been Added

Each offender occupies one line on the Personal Info/Charges list. The notation before each offender's name contains a summary about the data collected. A "*" symbol indicates violations have been selected for this offender, a "D" indicates the offender is a driver, and the number indicates the vehicle that the offender was in.

The officer may press the "OK" button to return to Camera View Screen.



Main Menu Screen

From Main Menu screen, there are four options for user:

- **"CAMERA VIEW"** - selecting this option will return officer back to Camera View Screen with camera view.
- **"PLAYBACK"**- this option will allow the officer to playback previously recorded video.
- **"SWITCH OFFICER"**- this option will lead the officer back to Officer Log-In Screen which will allow another officer to log in.
- **"EXIT SYSTEM"** - this option will lead officer to shutdown procedure.



Play Back / Video List

Each entry on this screen represents one event / video logged by the system. Officer can press the “**Play**” button to playback the video.

The officer may press the “**Data**” button to add or edit the data for each event through the Data Collection screen.

Officer may select “**Retain**” to keep the video indefinitely at the DVMS server. Video will not be deleted unless manually un-retained by an authorized user on the server.

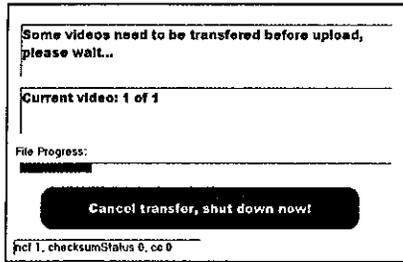
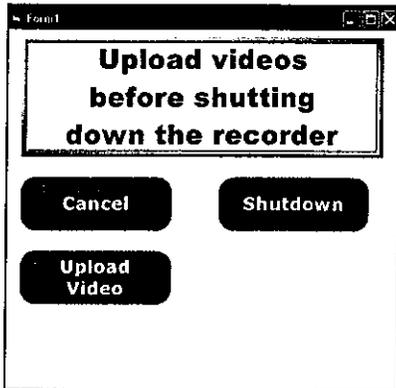
Press “**Exit**” to return to Main Menu.



Play Video Screen:

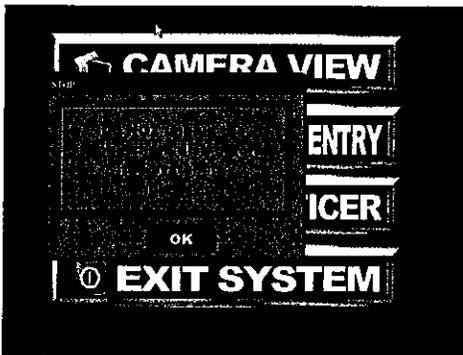
- Press the “” button to stop video and return to Video List Screen.
- Press “” button to pause video.
- Press “**2X**” (Double Speed) button to fast-forward the video.
- Press “**1X**” (Normal Speed) button to cancel and return to normal play.
- Press “**I<**” (Beginning of Video) button to move the playhead to the beginning of the video.

The officer can also click anywhere on the timeline (the blue bar underneath the date and time information) and the playhead will move to the corresponding point in the video.



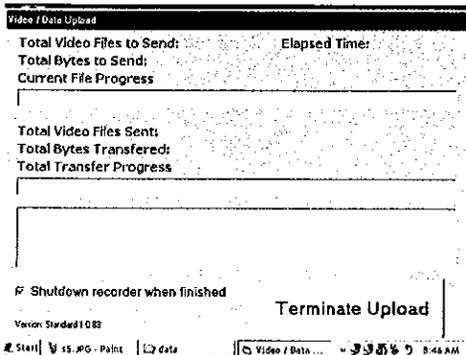
Exit

When “**Exit System**” is selected from the main menu, user has the option to shutdown right away or uploads videos first. Sometimes the system needs to finish processing the videos before it is shut down or upload videos. You may turn off the engine and leave the vehicle. The system will shut itself down once videos are processed for MHDD storage or uploaded.



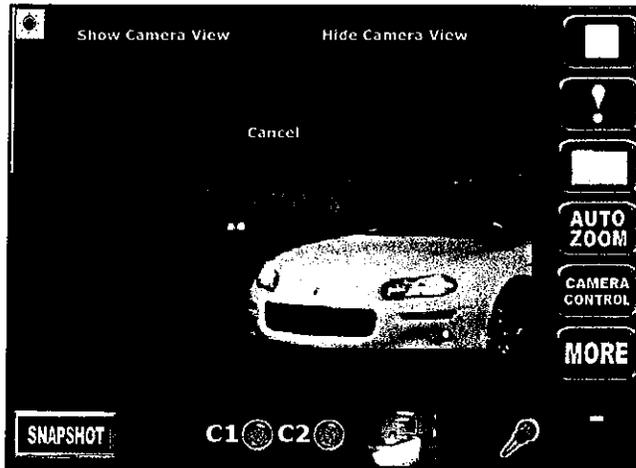
Shutdown:

If you shutdown the system without uploading video, it will remind you to wait for the system to be completely off before you attempt to remove the hard disk.



Upload Video:

By Default, after videos are uploaded, the system will shut down automatically. You may uncheck the checkbox to leave the unit on after upload has been completed.

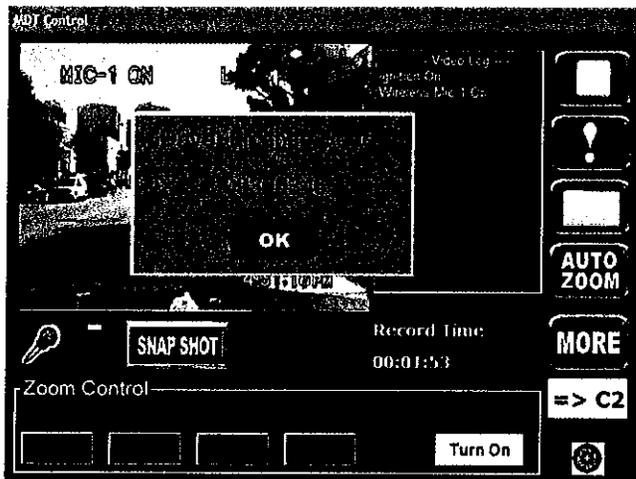


Program Pop-Up

Officers may access any program at any time by pressing the blue Coban icon “”.

This Blue Window will have a list of programs that are currently installed in the TopCam. Simply touch the program you want and TopCam will bring the program up for use.

A “Show camera view” shortcut has been created for user. When user is running other programs or applications they may return to Mobile Start Recorder at a touch of a button! Press “Cancel” to resume.



If a mag-swipe is installed and there is a mag-stripe on the back of the driver's license, the driver's data can be read from mag-swipe. The data will be stored and transferred to the server along with the video.

Maintenance

The TopCam System is designed to operate in rough and hostile environments. Simple routine maintenance will extend the life of the unit and ensure the unit's dependability. **BEFORE CLEANING ANY PART OF THE SYSTEM PLEASE MAKE CERTAIN THE UNIT IS POWERED OFF.**

General care Care for CPU Module:

- Do not open OR tamper with the CPU Module
- Make sure ventilation openings are not blocked.
- Use only soft, dry cloth or a soft cloth lightly moistened with mild detergent to wipe the exterior of the module. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol, benzene, or acetone, as these may damage the finish of the module. Avoid getting liquid on the CPU Module.
- Should any solid object or liquid fall into the computer, shut down your computer and have the computer checked by qualified personnel before operating it any further.

Care for Touch Screen Monitor Module:

- Do not get liquid on the Touch Screen Monitor Module
- Do not use water, window cleaner, acetone, aromatic solvent or dry rough towel to clean the screen.
- Avoid rubbing the LCD screen as this can damage the screen. Use only soft cloth to wipe the screen. Micro fiber cloths, similar to cloths used for cleaning eyeglasses are the best.

Care for Digital Camera

- Do not wipe the lens with window cleaners, acetone, aromatic solvent, or dry rough towels.
- Avoid touching the lens with bare hands
- Only use soft, dry cloth to wipe the lens.

Care for Keyboard

- Do not use solvents or petroleum-based cleaners.
- For minor spills, wipe with a damp cloth.
- Only use soft cloth with small amount of water.

Care for Mobile Hard Drive

- Avoid contact with water.
- Avoid dust and other residue build-up at the connectors. Please call Customer Service if connector is blocked. **DO NOT ATTEMPT TO CLEAN CONNECTOR WITH SHARP OBJECTS OR WIRE BRUSHES.**

Care for Wireless Microphone

- Do not immerse in water.
- For minor spills, wipe with a damp cloth.

Please Call Coban Customer Service Department or Coban Authorized Repair Center Immediately If:

- Module is exposed to liquid, dropped or damaged.

**If you need further assistance please contact
Coban Support Team at 281-277-8288**



CONFIDENTIAL

DVMS®

Digital Video Management System

V. 2006Q4

Coban® Research and Technologies, Inc.
12503 Exchange Drive, Suite 536
Stafford, Texas 77477
Tel: 1-281-277-8288
Fax: 1-281-277-8256

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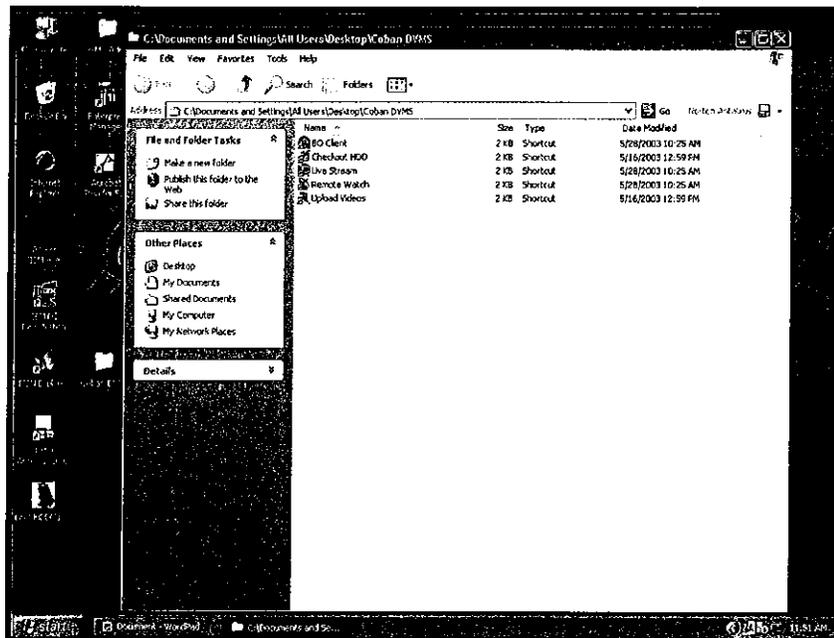
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DVMS® is a Digital Video Management System developed by Coban® Research And Technologies that stores, archives, manages and retrieves digital video and data associated with the video.



Accessing DVMS

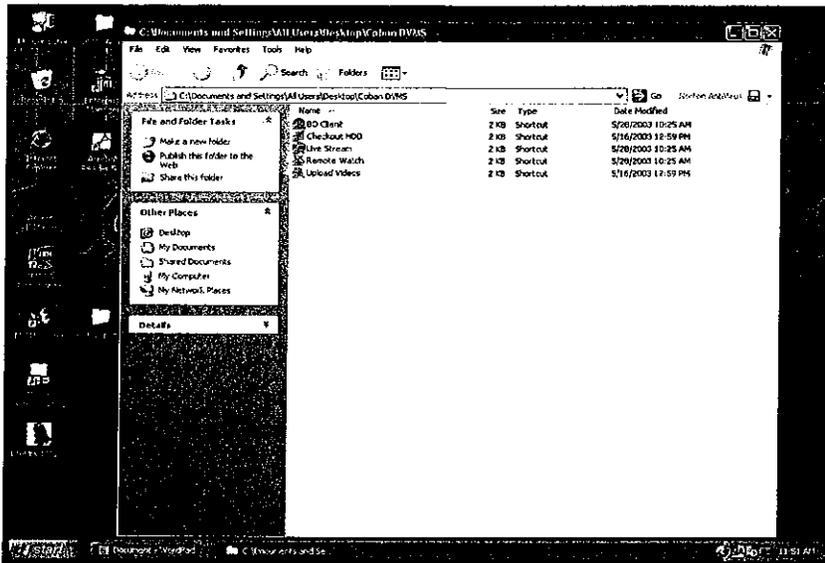
Double click on the Coban® DVMS® folder on your desktop.



DVMS® is divided into five major components:

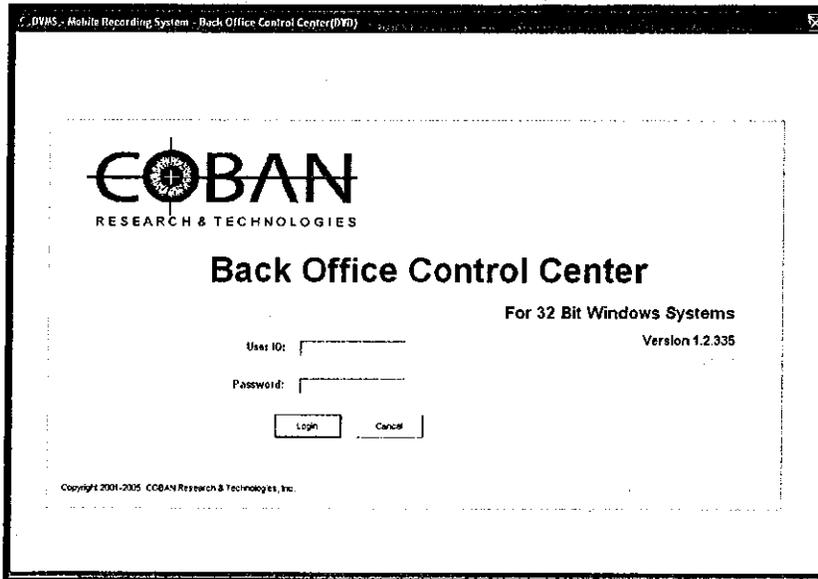
- BO Client
- Checkout HDD
- Live Stream
- Remote Watch
- Upload Videos

Depending on each department's configuration, not all options will be available. For departments with limited wireless bandwidth, Live Stream and Remote Watch will not be shown.



BO Client:

To access the BO Client, double click on the **BO Client Icon**.



Log on Screen:

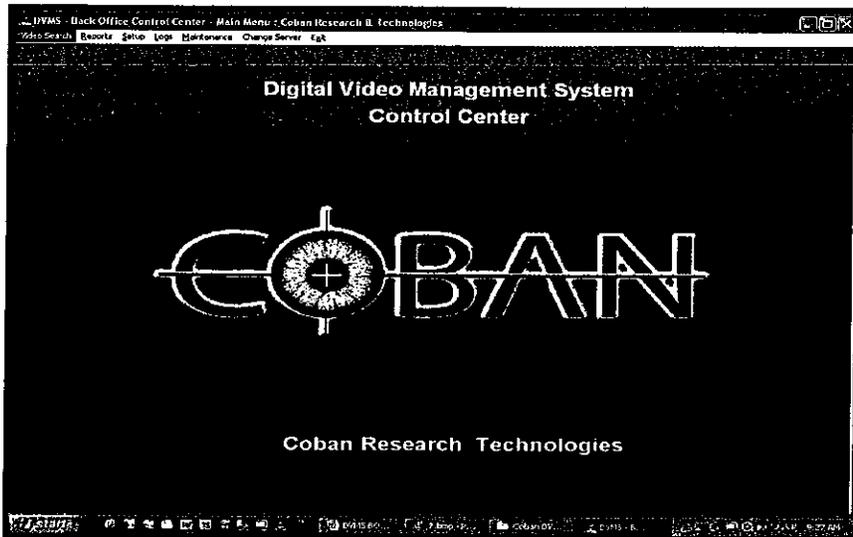
Please enter user ID and password to access the Coban ® Digital Video Management System ®.



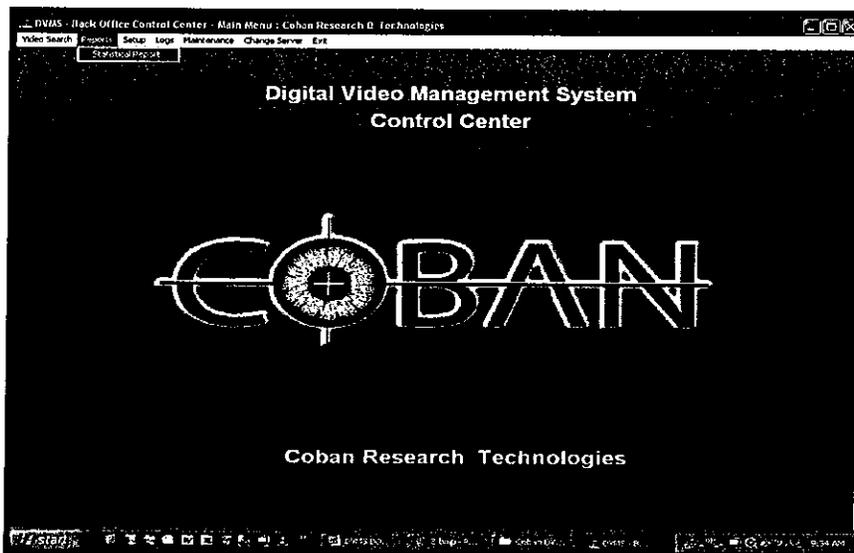
Main Menu Screen

Menu Selection:

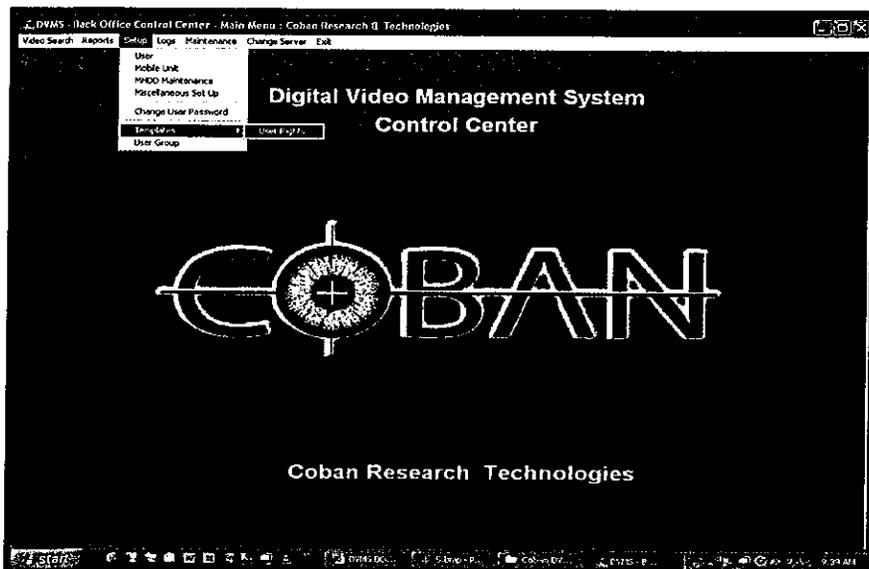
- Video Search
- Reports
- Setup
- Logs
- Maintenance
- Tape
- Change Server
- Exit



Video Search
Go To Page: 8

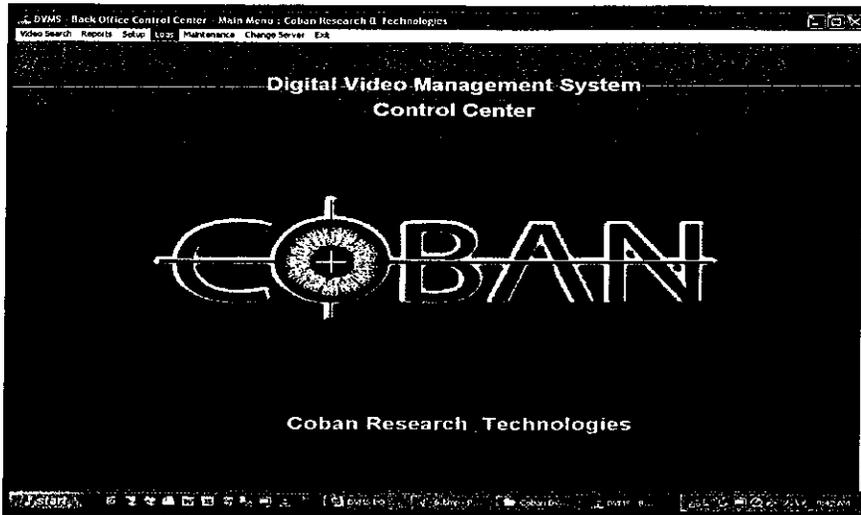


Reports
Go To Page: 33
• Statistical Report



Setup
Go To Page : 36

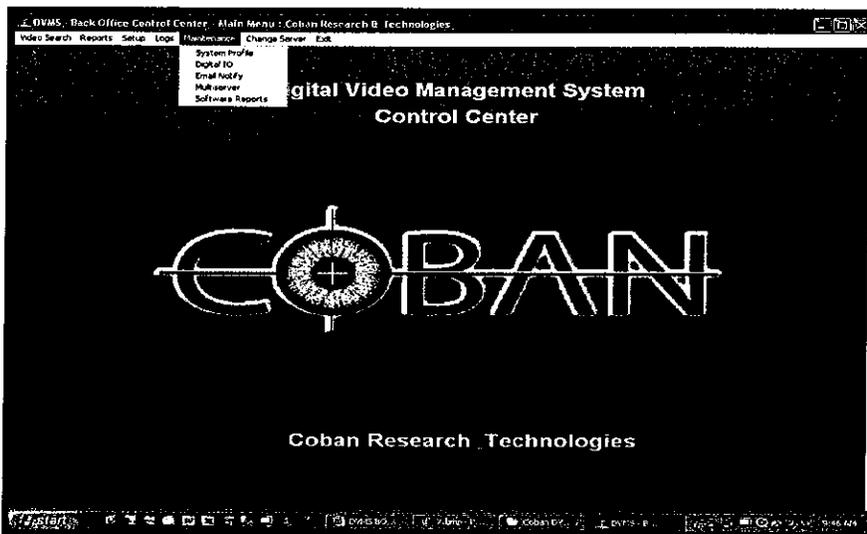
- User
- Mobile Unit
- MHDD Maintenance
- Miscellaneous Setup
- Change User Password
- Templates
 - User Rights
- User Group



Logs

Go To Page: 44

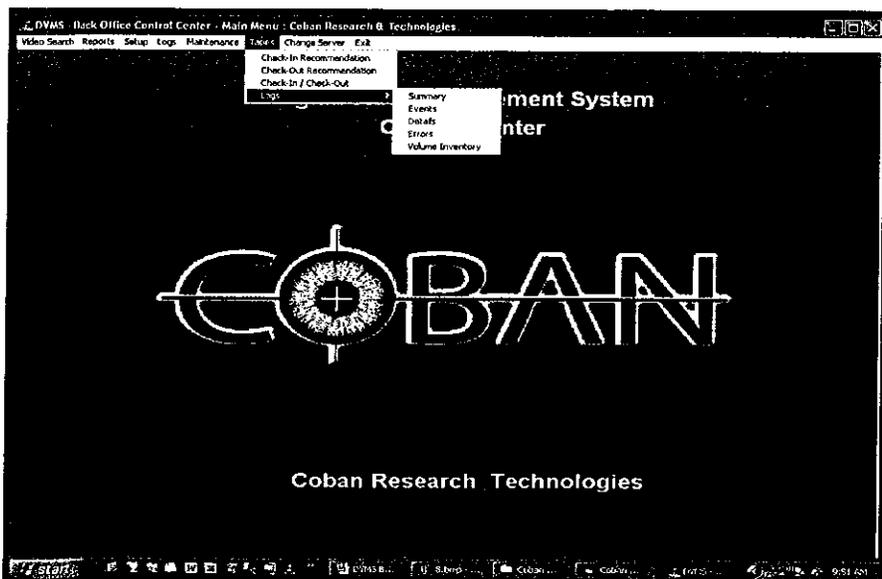
- Unit Error
- System
- In-Car Log
- Video Logs



Maintenance

Go To Page: 47

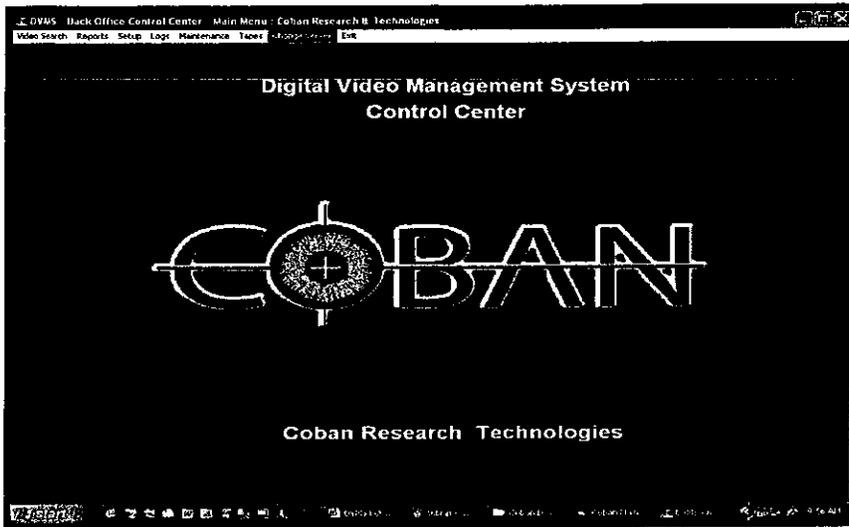
- System Profile
- Digital IO
- Email Notify
- MultiServer
- Software Reports



Tapes (Tape Library Solution Only)

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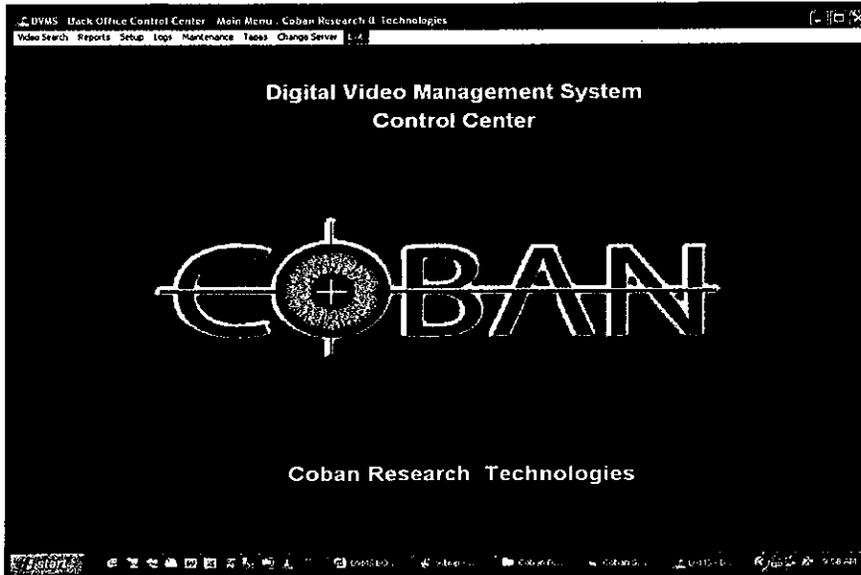
- Check-In Recommendation
- Check-Out Recommended
- Check-In / Check-Out
- Logs
 - Summary
 - Events
 - Details
 - Errors
 - Volume Inventory



Change Server

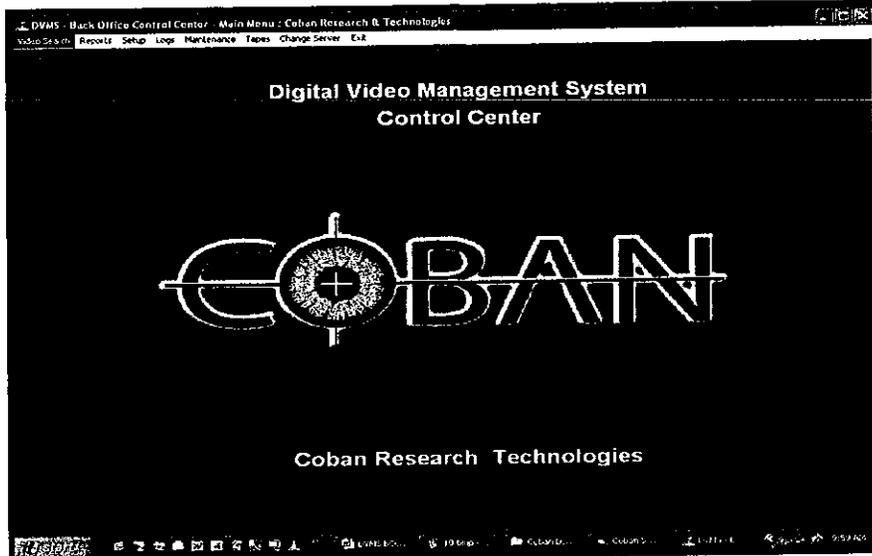
Go To Page: 63

When user clicks on **change server**, a dialog box will allow user to change to a different server, if alternates exists.



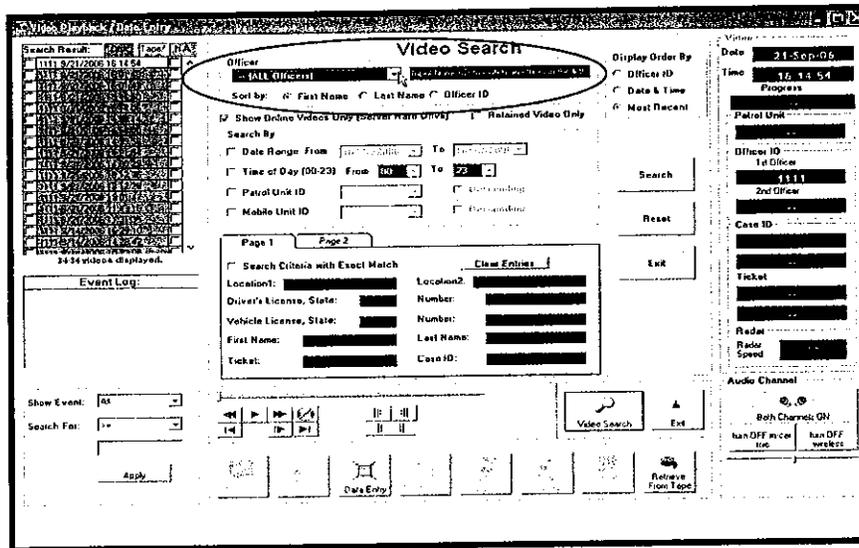
Exit DVMS

Go To Page: 64



Video Search:

Select Video Search.



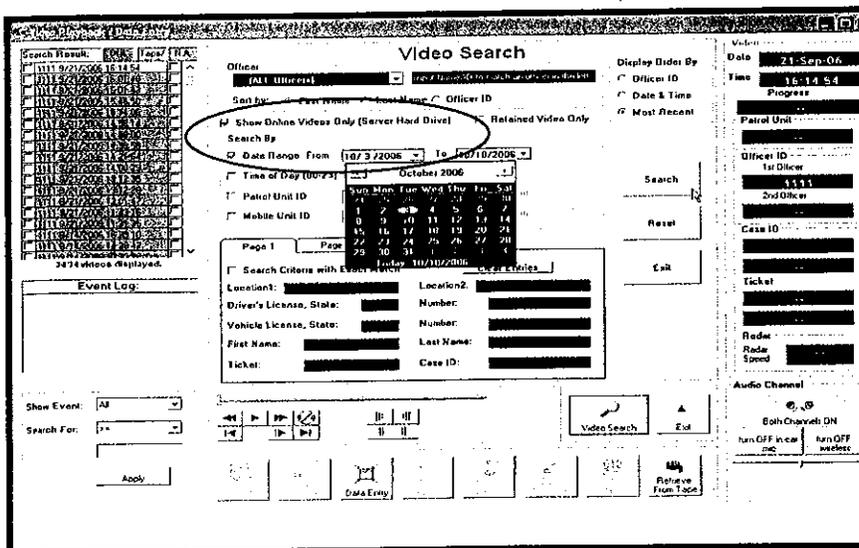
Video Search Screen:

Search video by using officer's name:

Click on **Officer ▼** to view names list.

Sort Officer's Name:

Users may select to sort officers' name list by First Name, Last Name or by Badge ID.

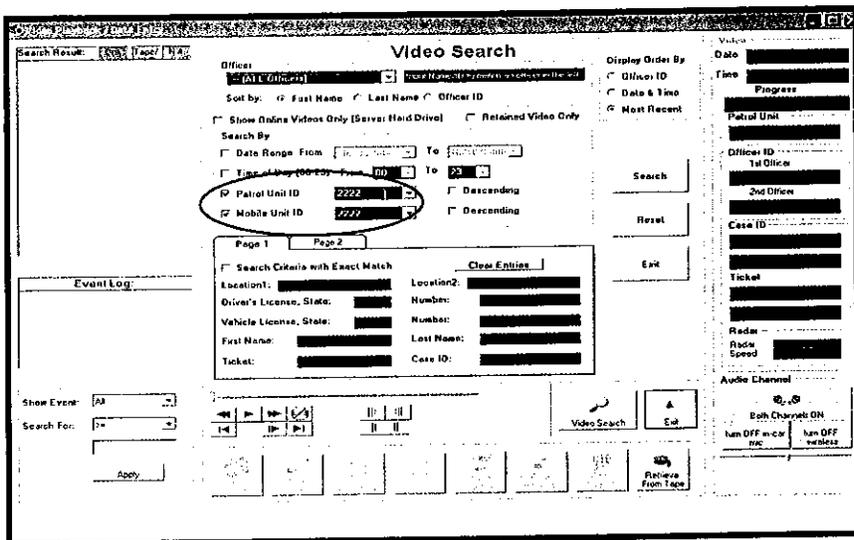


Show Online Videos Only

If checked, DVMS will search for those Videos stored on the Server's Hard Drive Only

Date Range

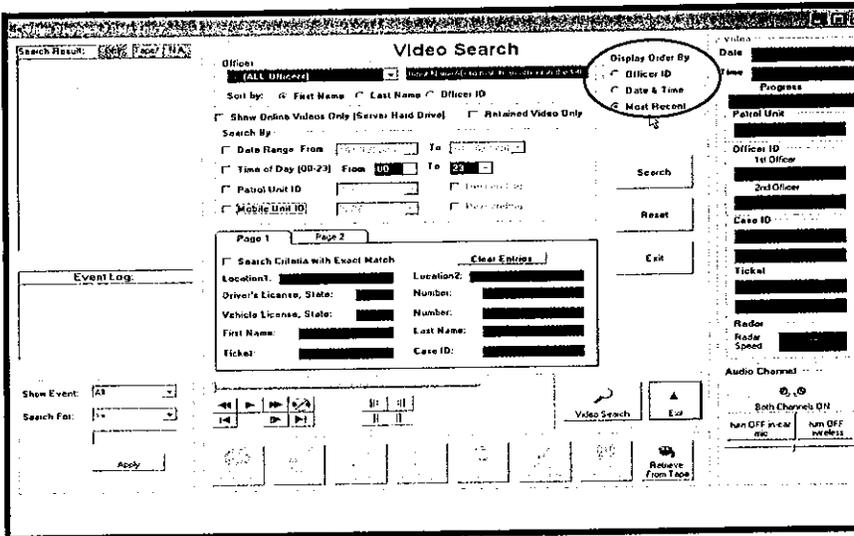
If checked, DVMS ® will generate videos that were captured during the defined time period. Click on the **From ▼** and **To ▼** for drop down calendar.



Video Search Cont':

Patrol Unit ID or Mobile Unit ID

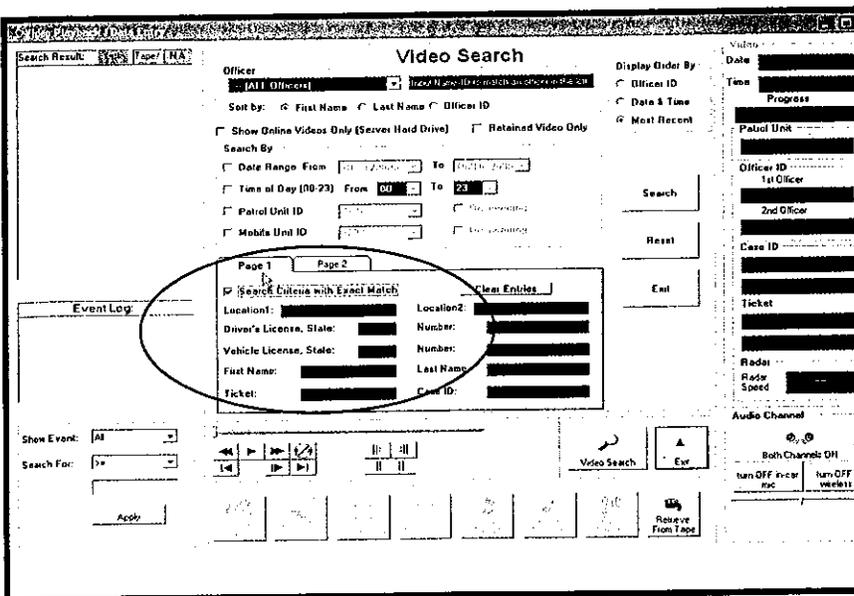
Users may search videos that were generated from a specific patrol car or a particular Coban Mobile Unit.



Sort Video By:

Users have the option to select how they want the videos to be displayed:

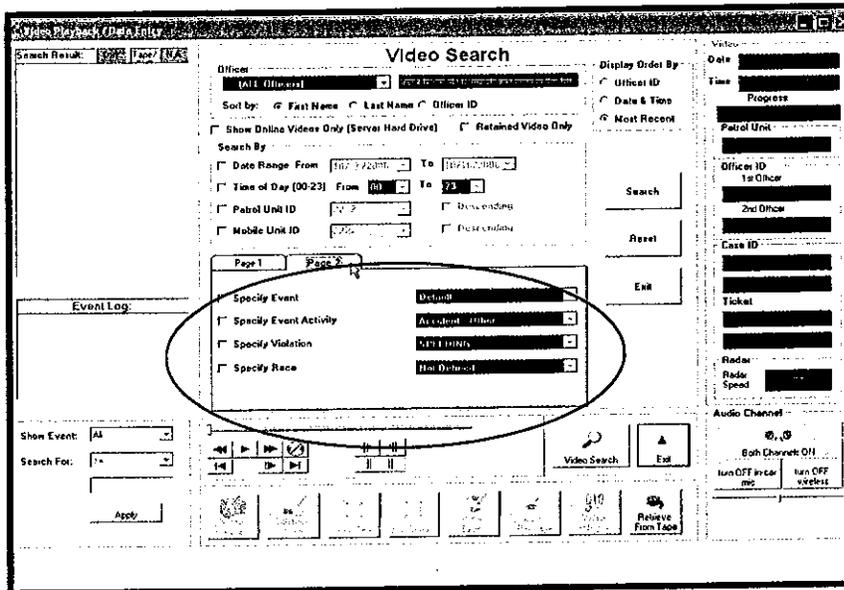
- Officer ID
- Date & Time
- Most Recent



Page 1:

Search Criteria with Exact Match

If checked, Users may enter additional search criteria such as Incident Location, Driver's License Number, or Driver's First or Last Name to specify search.



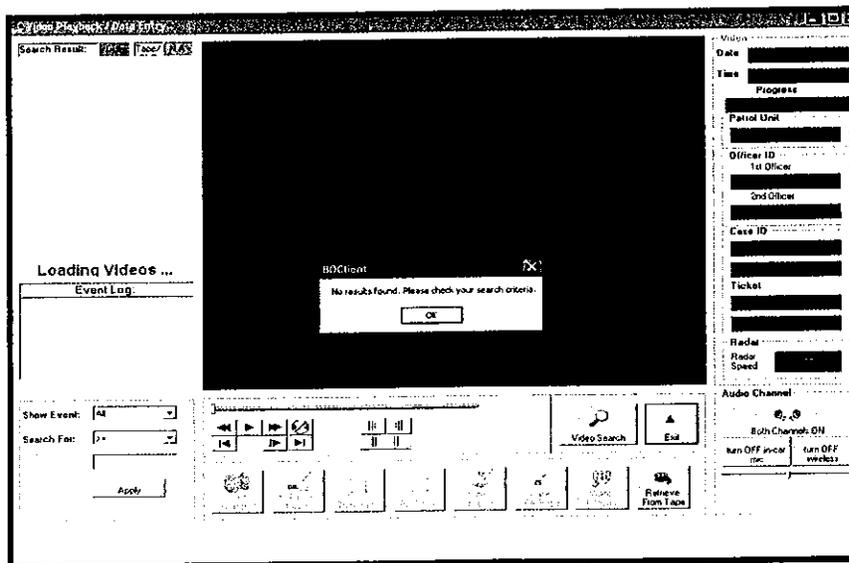
Video Search Cont':

Page 2:

Search by Checking:

- Specify Event
- Specify Event Activity
- Specify Violation
- Specify Race

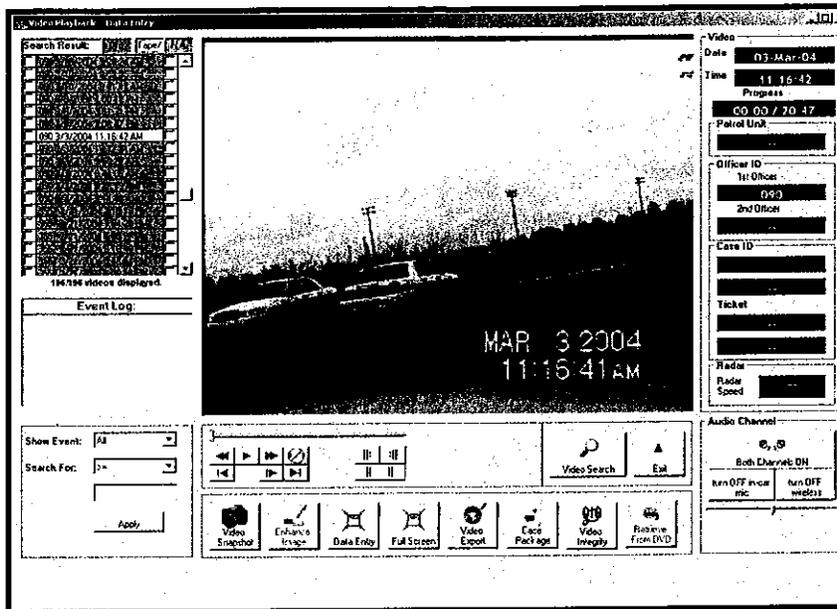
Note: Event, Activity, Violation and Race have been pre-defined. Each agency may modify terms and definitions by going to Maintenance > System Profile Maintenance > Event Definition to specify Event Definition.



To Search:

Users may press the **Search** button located at the middle of the screen.

If no record is found, "**No Record Found. Please Check your Search Criteria**" will appear on the top of the screen. User may re-define the search criteria and try again.



Video Search Cont':

Video Tags

Search results will appear on the left side of the **Video Playback**. Search results or video tags are displayed by date and time with offender's name attached below.

4956-4/1/2002 4:42:56 PM

GREEN highlight on the Video Tag indicates that this record is on-line and on the hard drive; video and data are available in the system for immediate viewing.

4956-4/1/2002 4:43:37 PM

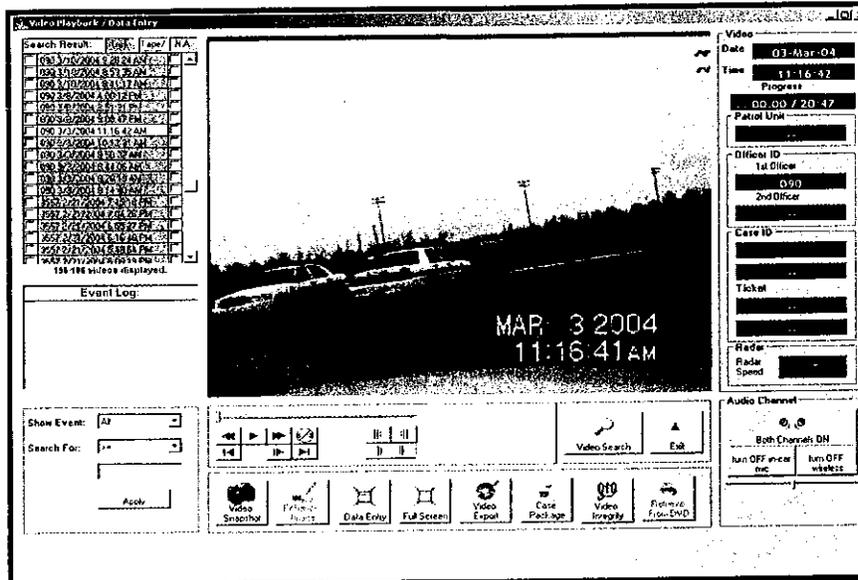
BLUE highlight on the Video Tag indicates that this record is off-line. DVMS does NOT have the video in the system (the video might be deleted after the set expiration date); however data and notes are available for viewing.

4956-4/1/2002 4:42:56 PM

CLEAR highlight on the Video Tag indicates that the current video / data is displayed on the screen.

4/20/2002 3:30:53 PM

Yellow highlight of the Video Tag indicates that this record is on tape or DVD and is available for viewing.

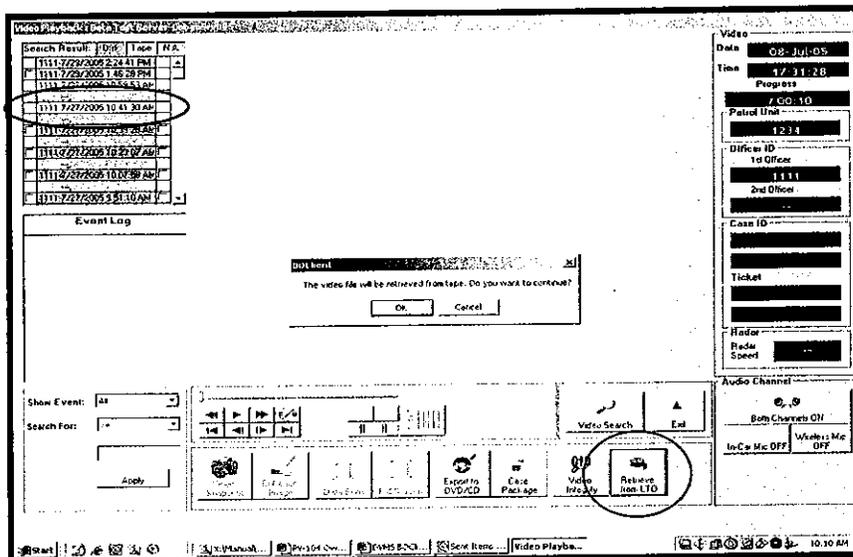


Video Search Cont':

To Play:

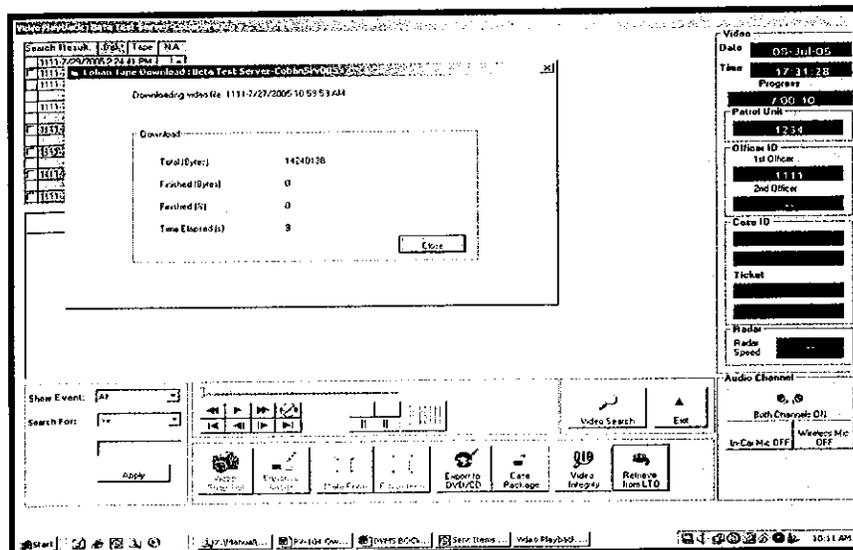
Highlight any Green Video Tag, and press 

The video will be displayed at the center of the screen with the data and status simultaneously displayed on the left and right hand sides.

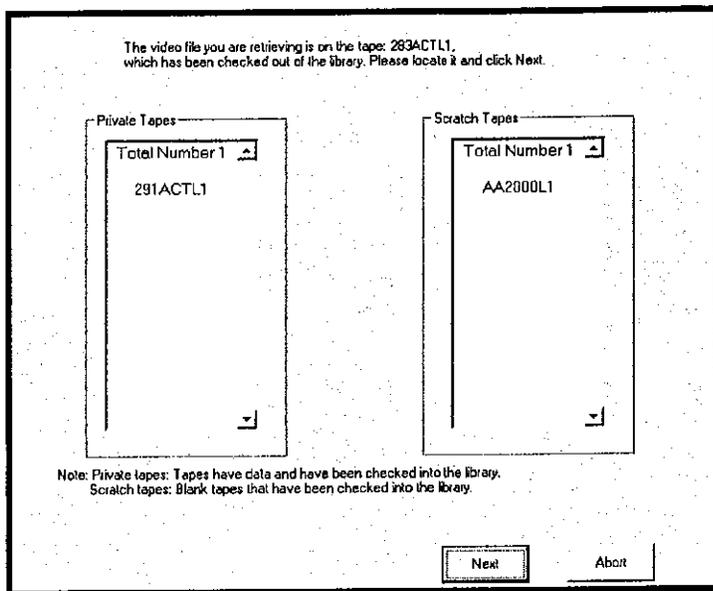


Play Video within the Tape Library Systems:

For those Yellow Video Tag items shown in the video list, their video files are not on hard disk but on a tape system. To play such a video, highlight the video tag first and then click the **Retrieve** button.



At this time a window will pop-up to reconfirm user's decision, press **OK** to proceed.

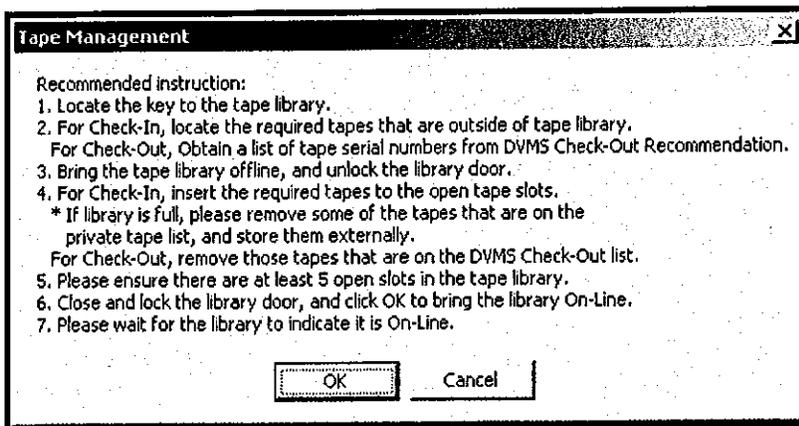
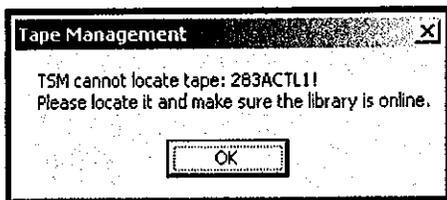


Video Search Cont':

Play Video within the Tape Library Systems Cont':

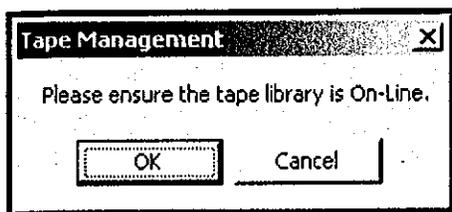
If the appropriate tape is already in the tape library, a pop-up window will show the progress of retrieving. When the retrieval is completed, the window will disappear and the video image will be shown on the screen.

If the appropriate tape is not in the tape library, the user will need to check in the tape first before the video can be retrieved. Press **OK** to close window.

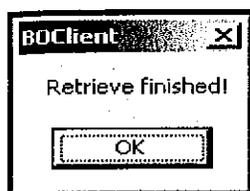


DVMS will lead you through the process of check-in tapes. Press **Next** to proceed and for further direction.

Please follow the instructions of the help file, and the application will lead you through the check-in/out process. Press **OK** to proceed.



DVMS will reconfirm with the user *twice* to make sure the tape library is ON-Line before proceeding any further.



This window will appear to inform user the retrieval process has been completed. To view video press **OK**.

Video Search Cont':

Additional Query:

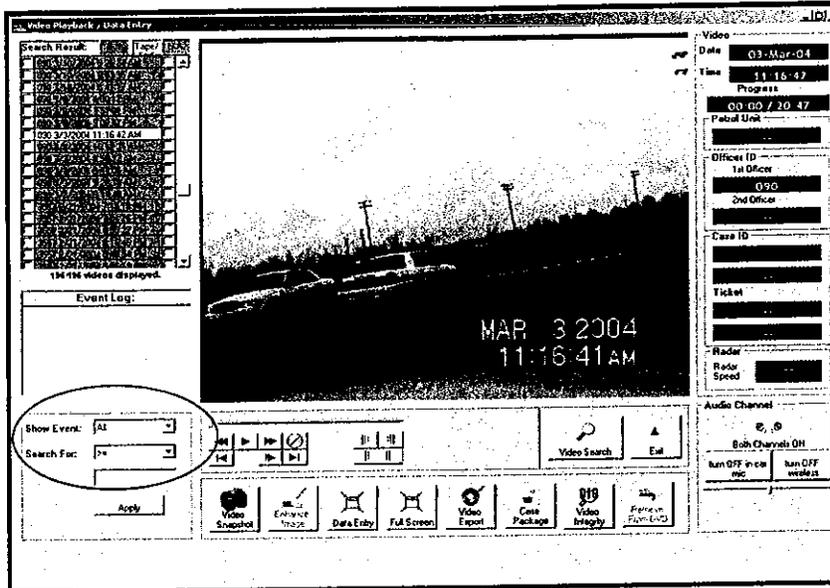
After selecting a video, users may narrow down the video logs further by asking DVMS to show a particular section of the video log that meets the following query.

Select query by pressing **Show Event▼**

- All (default)
- User Alert
- Speed Radar
- Siren
- Light-bar
- Wireless Microphone

Follow by select **Search For▼**

- >= (Greater Than)
- <= (Less Than)
- Contains



For example:

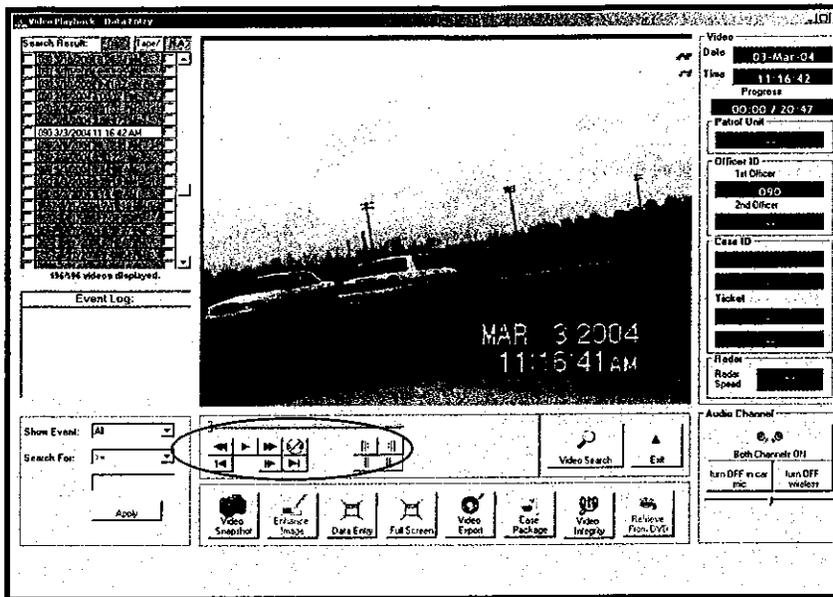
In a 20-minute video log, users may only want to view those sections of logs where offender violated the speed limit.

By using **Additional Query:**

Select **Speed Radar** under **Show Event**,
>= (Greater Than or equal to) for **Search Event**,
and enter 55 for **Reading**.

DVMS will regenerate video clips within the 20-minute video and show only those sections with Offender's Speed greater than 55MPH

- For Speed Radar, please enter reading over or greater than 55 miles per hour reading in the space.



Video Search Cont':

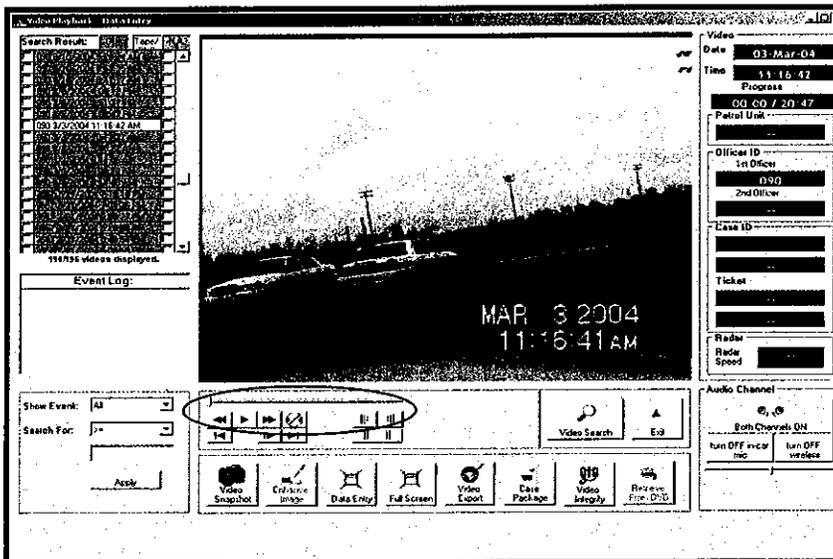
To Forward or Rewind:

Click on for fast forward.

Click on for fast rewind.

Click on for slow forward.

Click on for slow rewind.



Each click will forward or rewind the video for 10 seconds.

Or, user may simply click on the "Play Head" and drag along the Time Line then press to play.

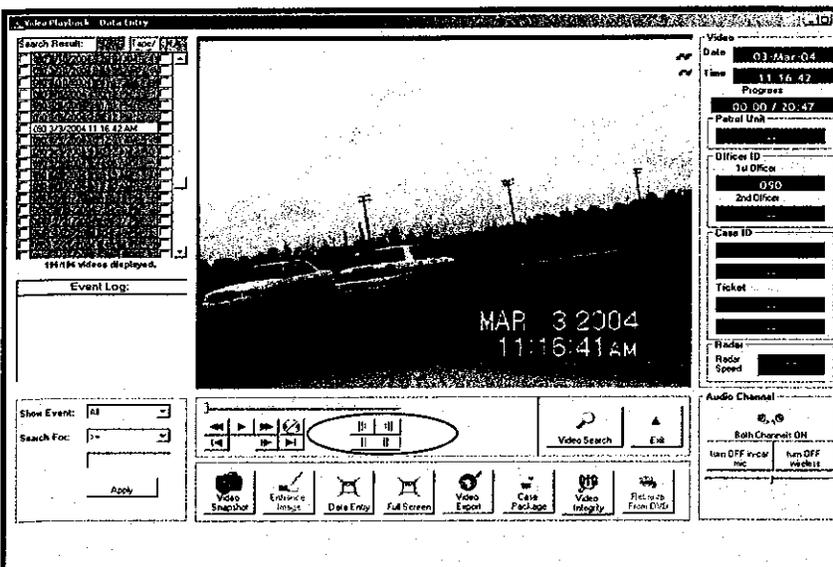
To Play Loop:

Click to set loop START position.

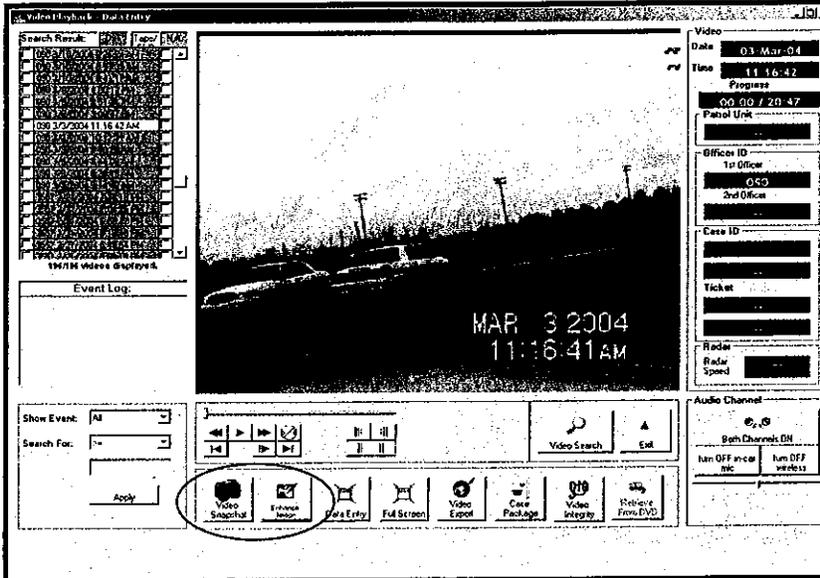
Click to set loop END position.

Click to toggle the loop function, press once to use it or stop it.

Click to clear the settings.



When a loop is set and used, the video will keep playing



within the specified range as a loop, until stopped.

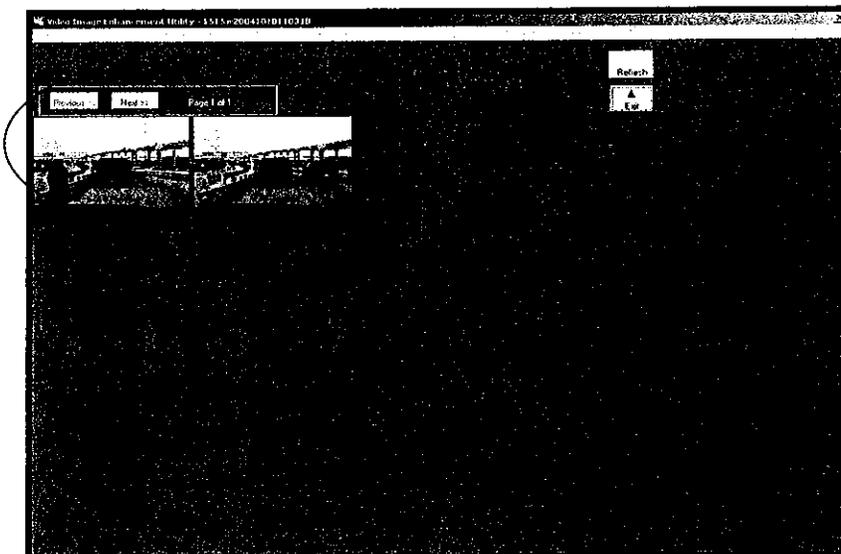
Video Search Cont':

Video Snapshot:

While a video is shown on the window, users may take a snapshot, which produces an image file that can be seen later through the image enhancement function.

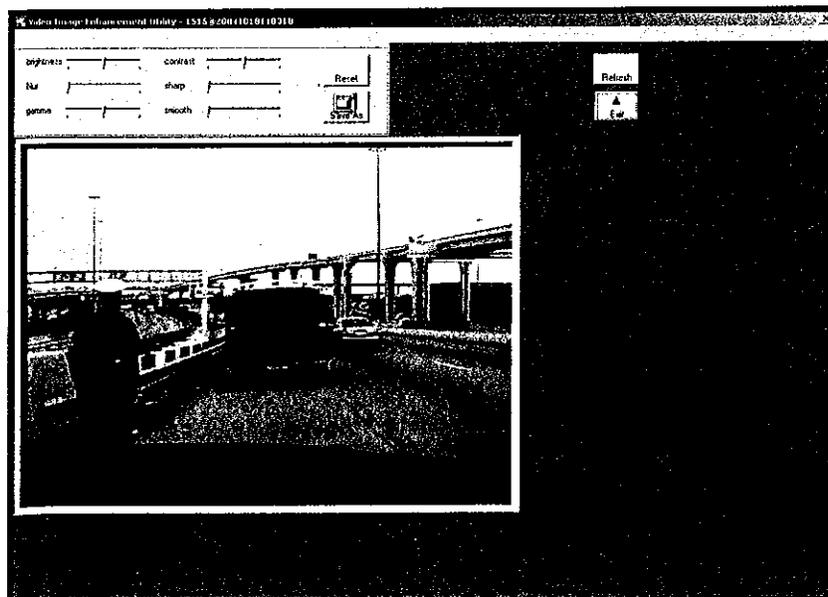
Enhance Image:

Snapshots can be seen through **Enhance Image** function.



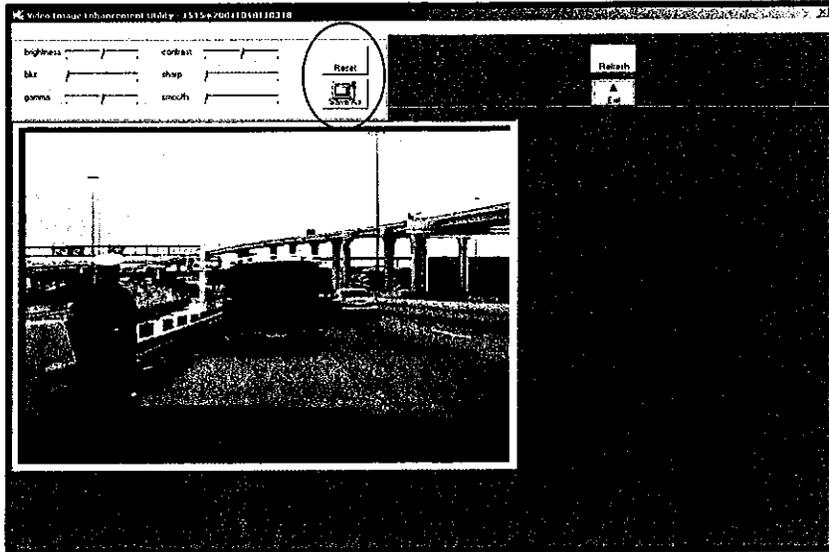
Enhance Image:

After pressing the **Enhance Image** button, the **Video Image Enhancement Utility Screen** will appear with the **Video Snapshots**. When images exceed more than one page, users can use the page navigation frame to see all images.



Double click a single image. An enlarged image will be shown as well as an image enhancement control frame where users can adjust:

- Brightness
- Contrast
- Blur
- Sharp
- Gamma
- Smooth

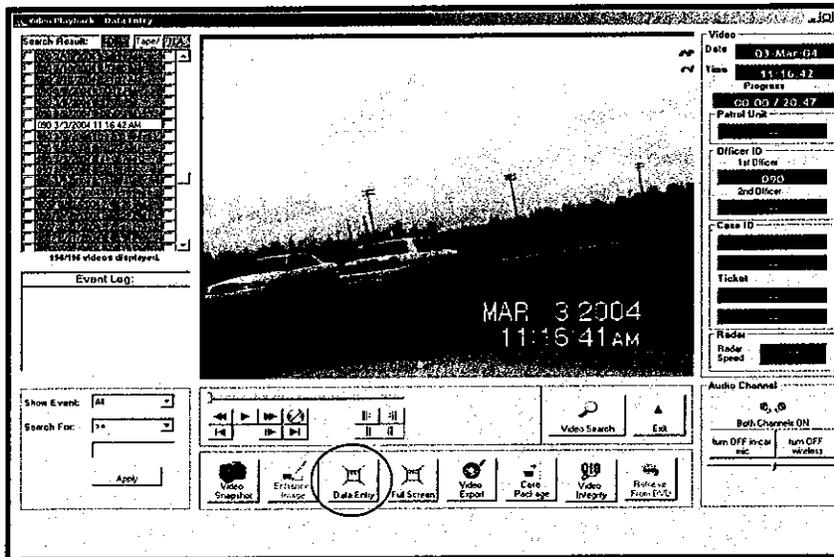


Video Search Cont':

Enhance Image Cont':

The **Reset** button can toggle the modified image back to original settings. Clicking the button again will bring back the modified image.

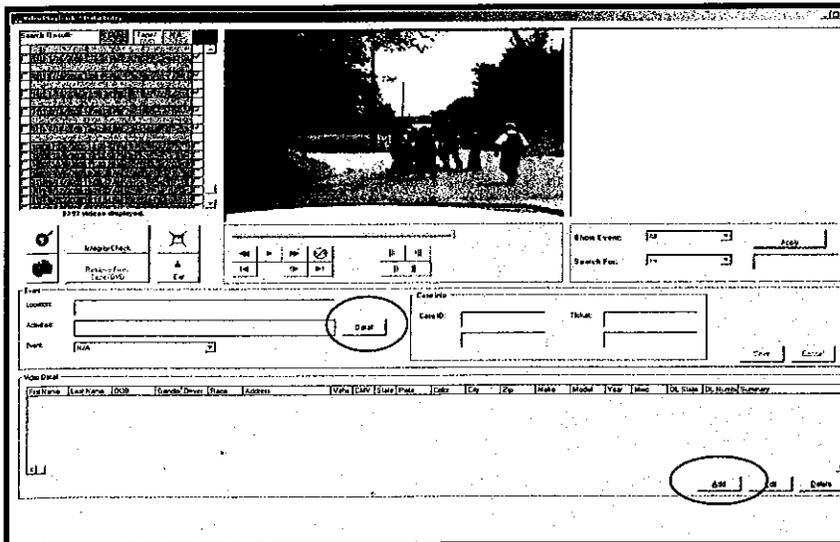
To save a copy of the current image at another location, click **Save As**. A window will pop up for user to specify the location.



Data Entry

Click . The video screen will show a smaller video window and two data entry forms:

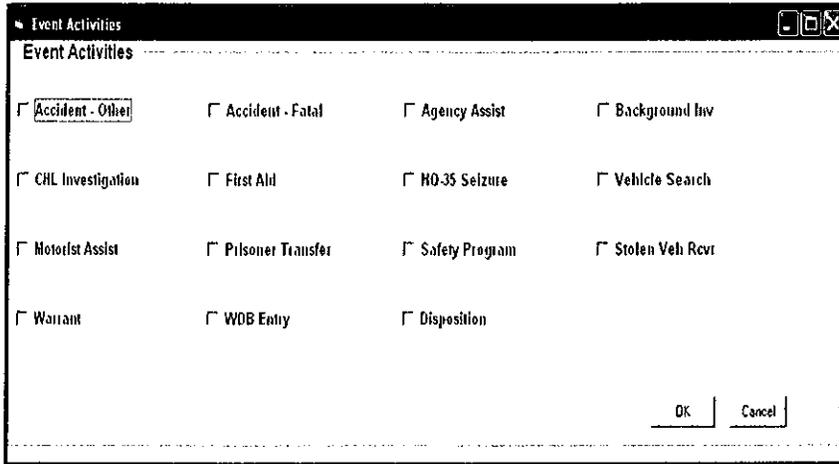
- Events Form
- Video Detail Form.



This file will contain information collected during the incident. User may also choose to add or edit Event File at this screen.

Event Entries

Press **Detail** to Select Event.



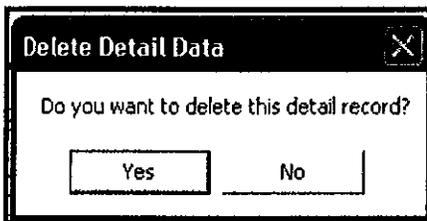
Video Search Cont':

Data Entry Cont':

Select Event: (Reason for stop)
For Configuration: Go to Page: 54

- Accident – Other
- CHL Investigation
- Motorist Assist
- Warrant
- Accident – Fatal
- Agency Assistance
- First Aid
- Prisoner Transfer
- WDB Entry

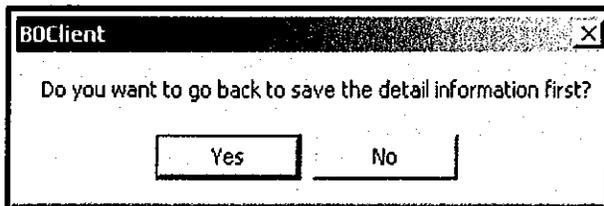
Note: Event, Activity, Violation and Race have been pre-defined. Each agency may modify terms and definitions by going to Maintenance > System Profile Maintenance > Event Definition to specify Event Definition.



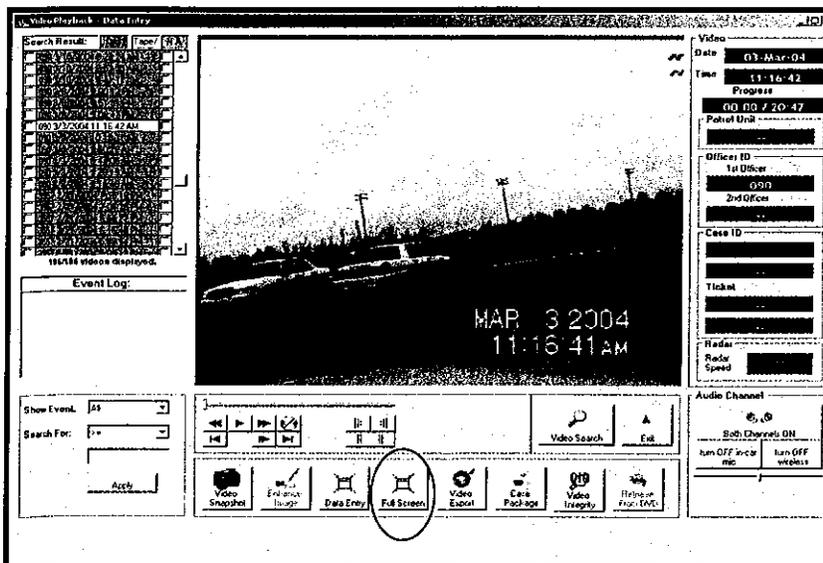
Data Entry Cont':



When selecting **Delete**, this pop-up window will reconfirm the decision with the user.



This pop-up window will appear if the user did not save any new entries before accessing other video and data.



Full Screen Zoom



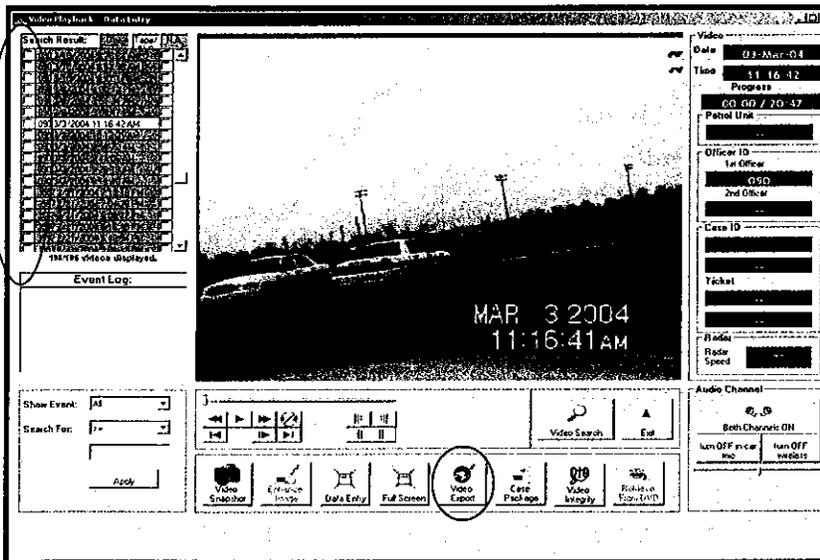
Click **Full Screen** for Full Screen zoom. Full Screen will show a larger video window and play controls.



Video Search Cont':

Full Screen Zoon Cont':

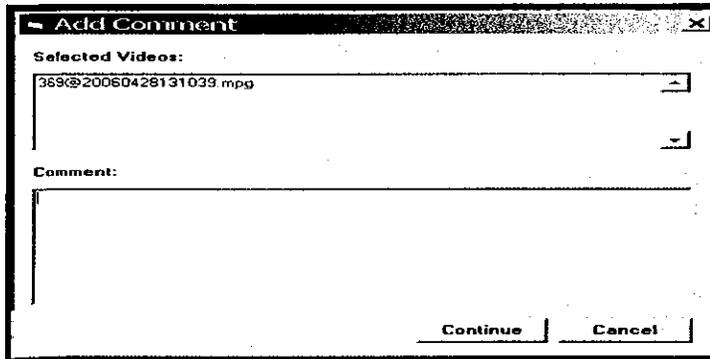
In Full Screen, click on  to return to Double Screen Zoom.



Export Videos:

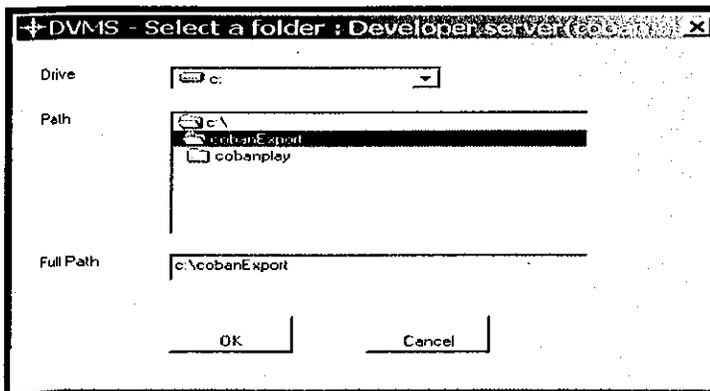
Select the Video Logs that need to be copied by checking the **Video Tag Box** on the left side of the Video Logs.

Press the  button to copy videos to a specified folder. User may then copy the folder to CD / DVD or other media.



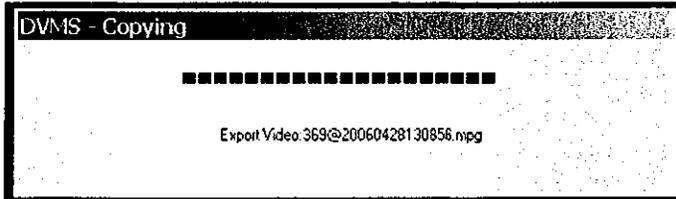
Client BurnCD/DVD

Please confirm video file and enter Comment for video log, such as reason why video was exported or information on video.



Please indicate where videos will be copied to by selecting the appropriate drive and path before selecting **OK**.

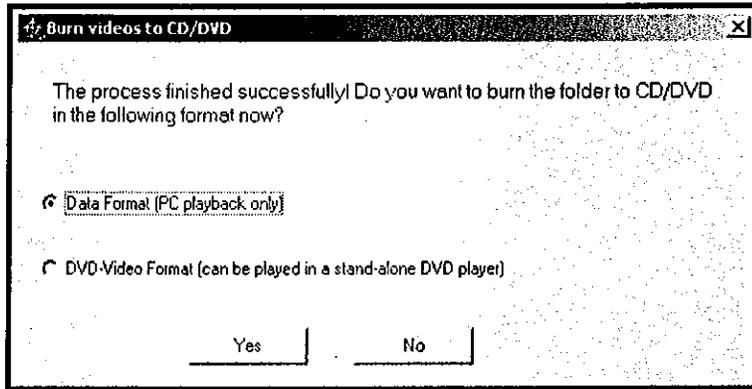
Note: DO NOT change the path!



Video Search Cont':

Export videos Cont':

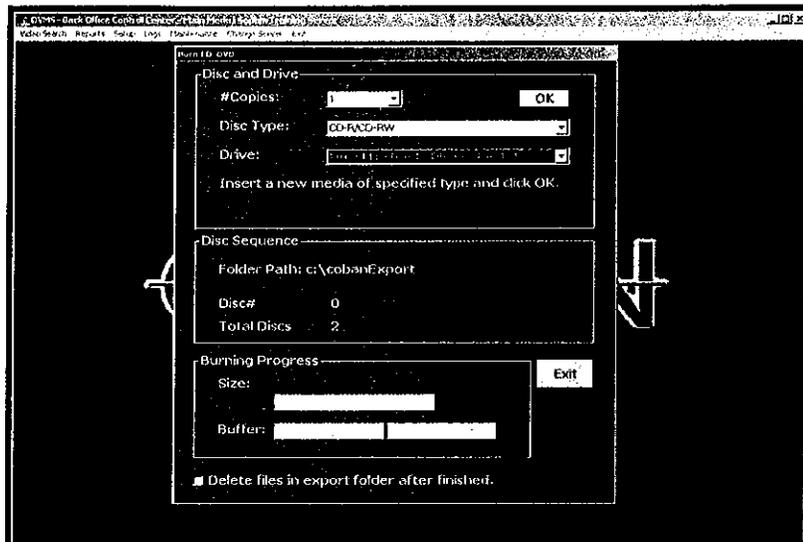
DVMS will display the progress of copying.



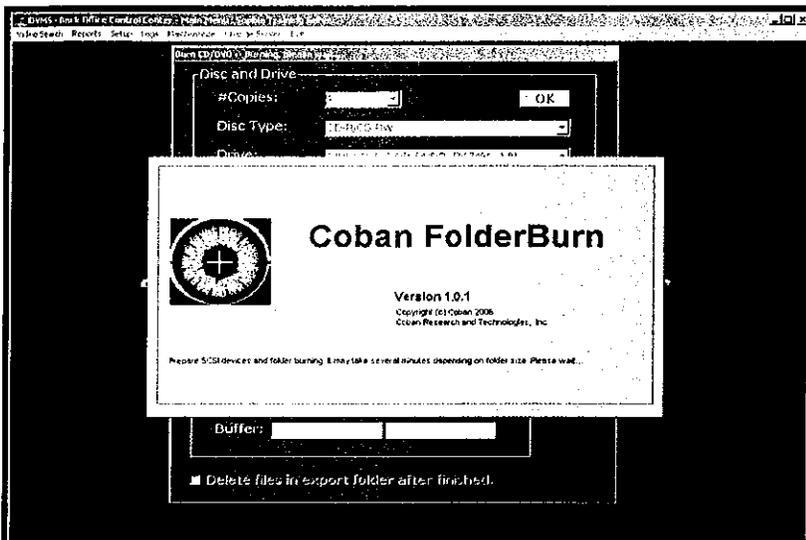
Select Data Format or DVD-Video Format .

Data Format can play with windows media, VLC media player, Divx, etc.

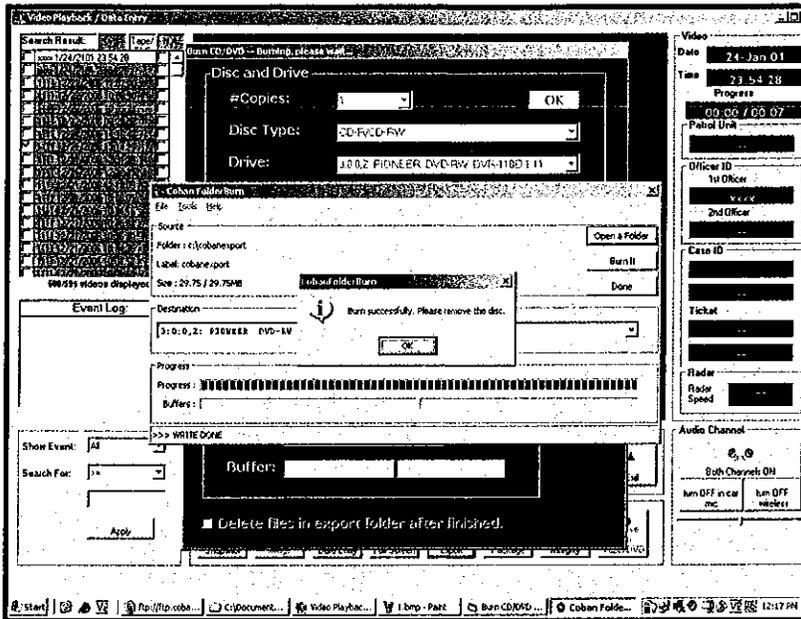
DVD-Video Format: Can be played at a stand-alone DVD player.



DVMS will generate an image file of CobanFolderBurn. It may take several minutes depending on the folder size



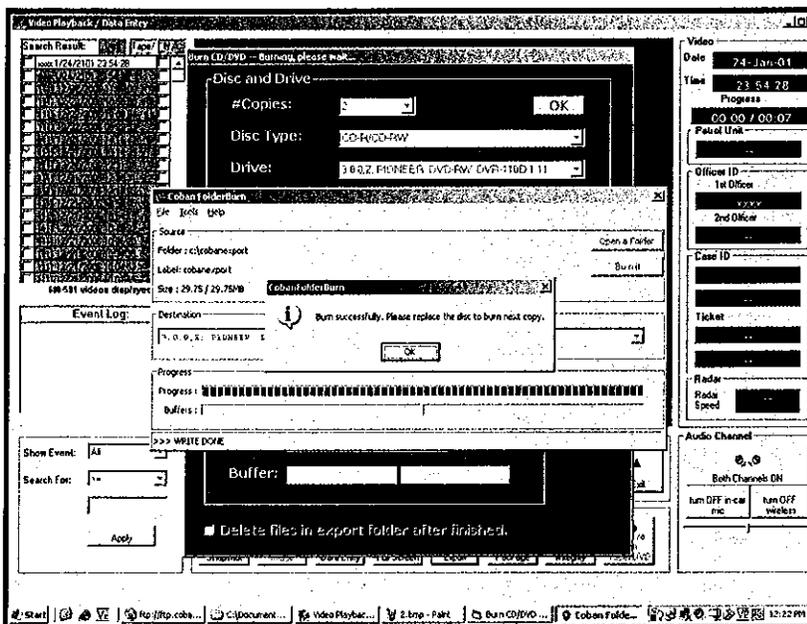
Burning folder image of CobanBurnFolder



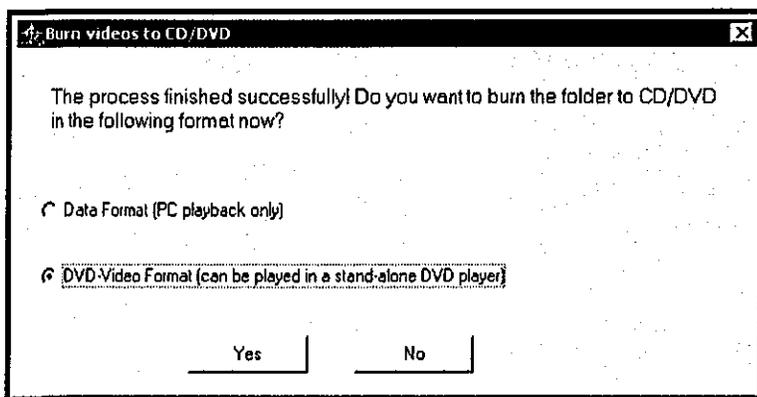
Video Search Cont':

Export Videos:

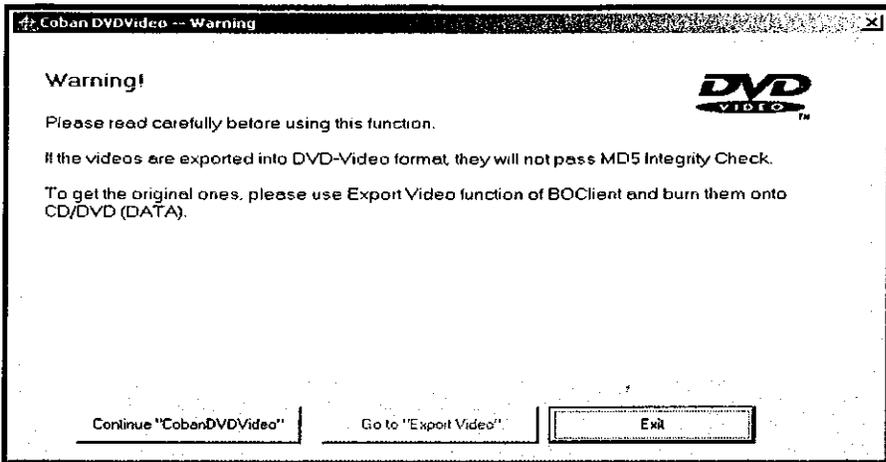
Complete the Burning Process of CobanBurnFolder



For multiple DVD, please insert blank disk.



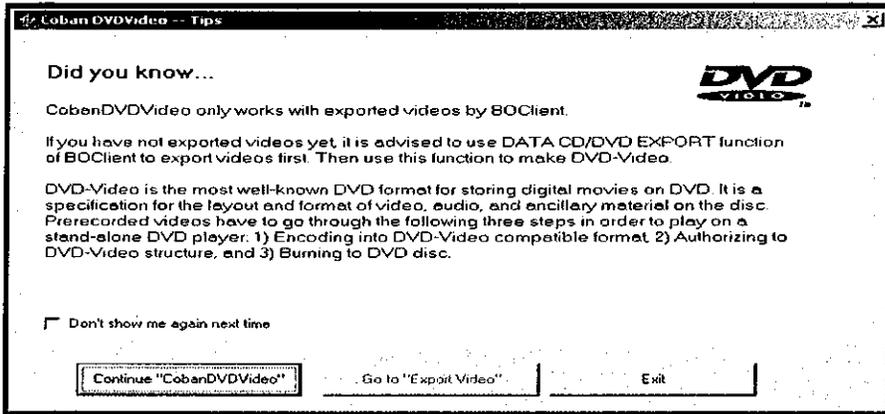
Select **DVD-Video Format** (can be played in a stand-alone DVD player.)



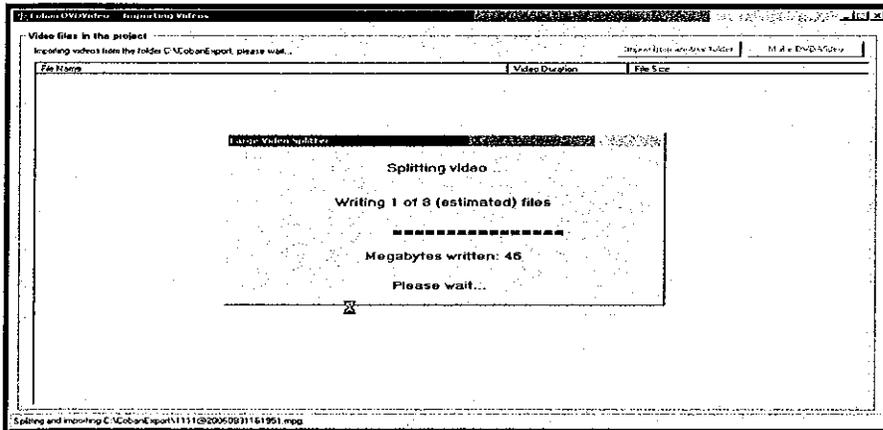
Video Search Cont':

Export Videos Cont::

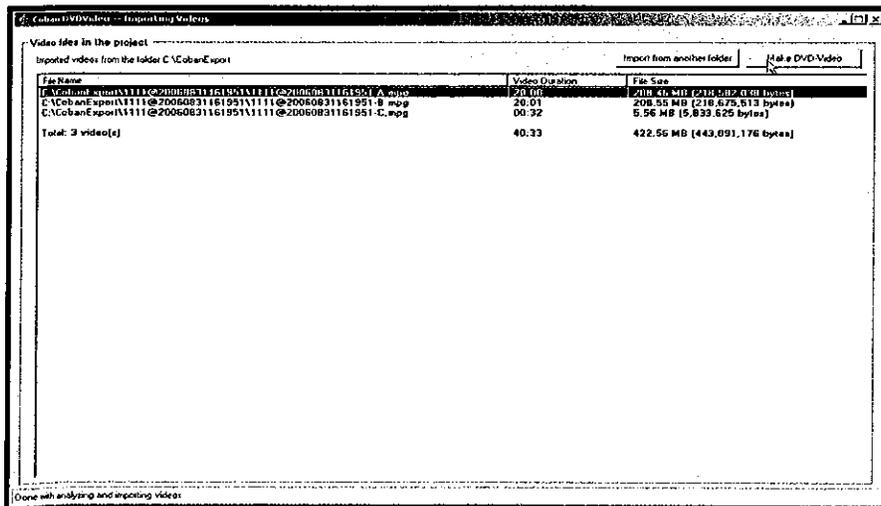
Click Continue
"CobanDVD-
Video"

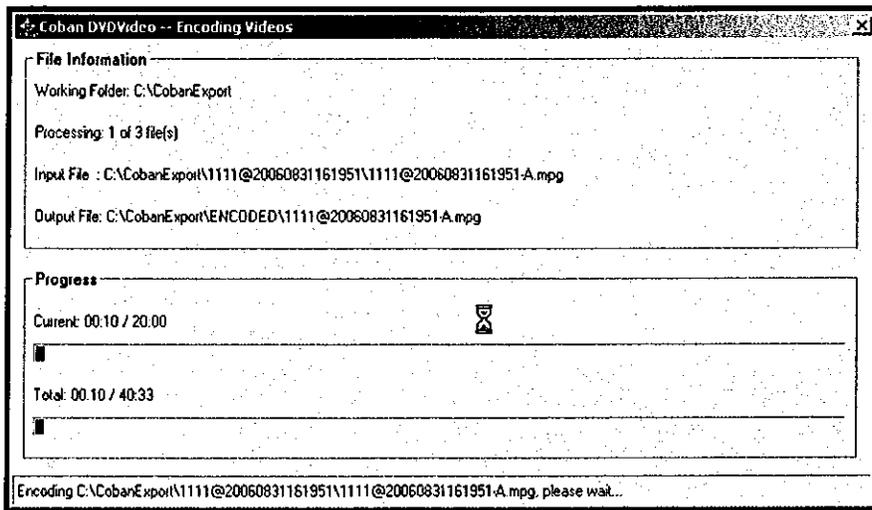


Click Continue
"CobanDVD-
Video"



Importing videos and
Splitting videos to 20 minute
increments.

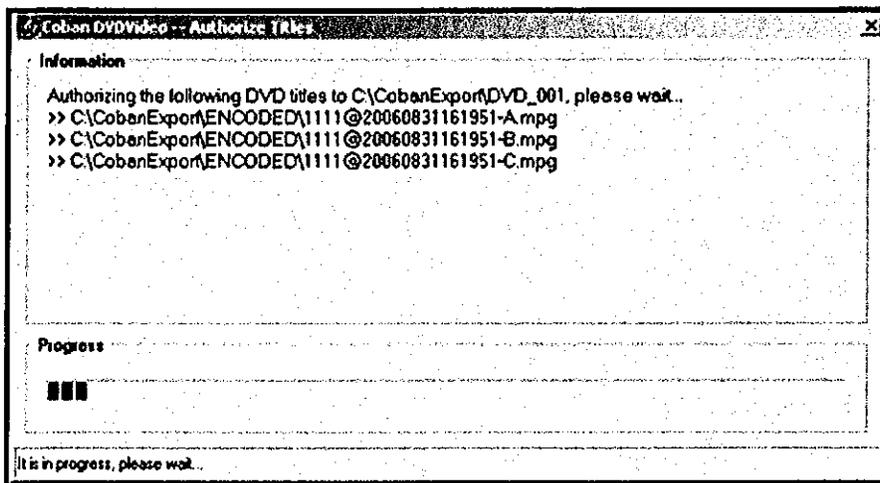




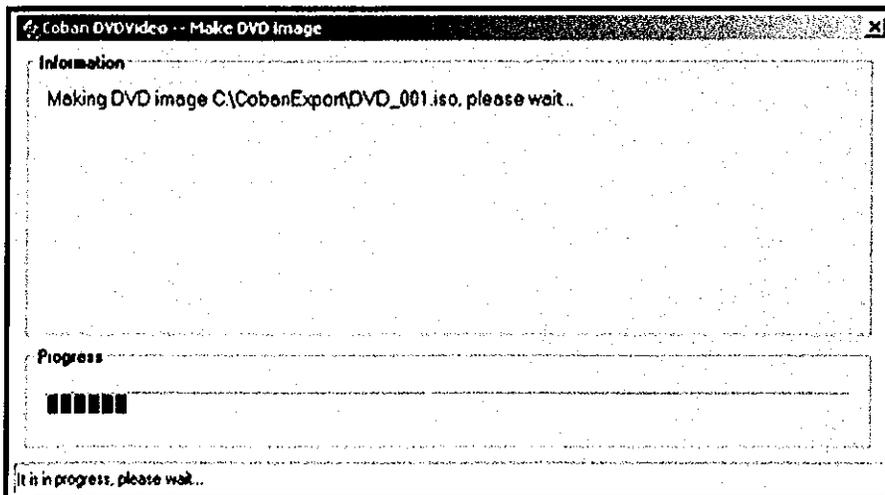
Video Search Cont':

Export Videos Cont:

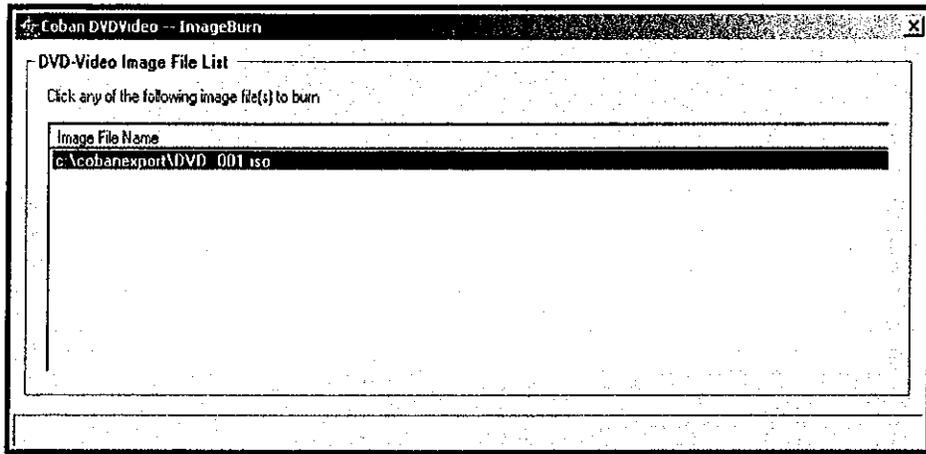
Encoding Videos, please wait.....



Authorizing the following DVD title to DVD_001.



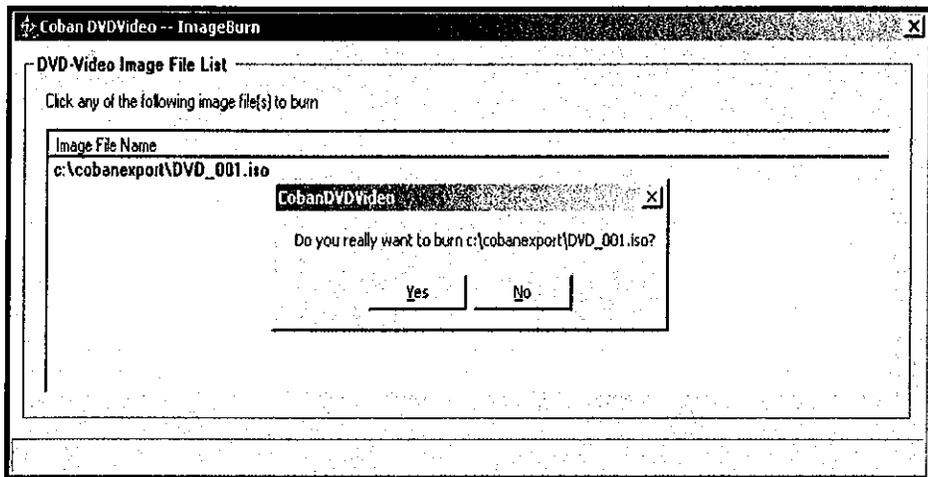
Creating a DVD_001.iso image. ISO is a disk image.



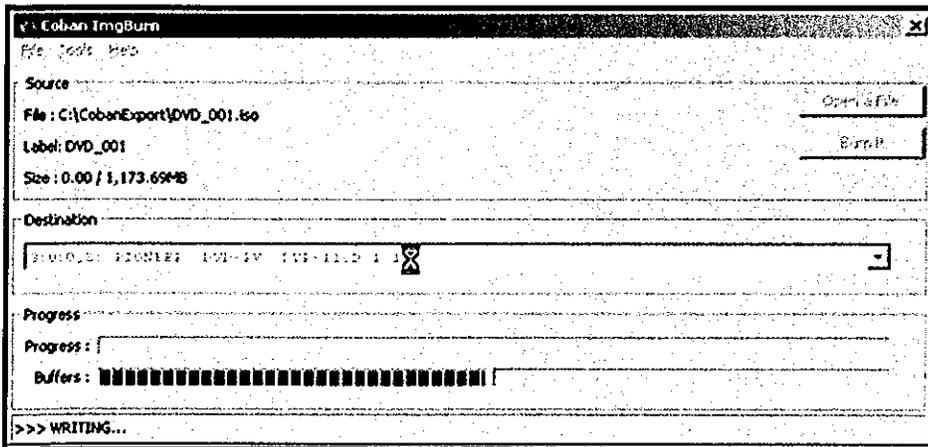
Video Search Cont':

Export Videos Cont:

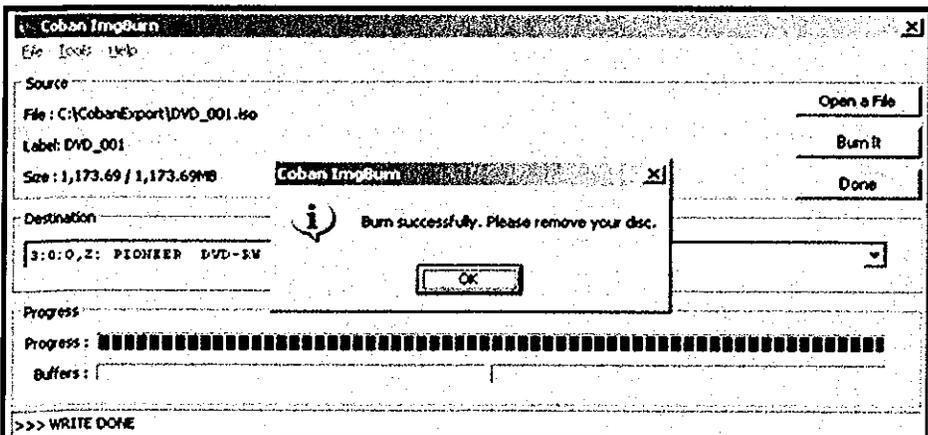
Click any of the following Image file(s) to burn to disc.



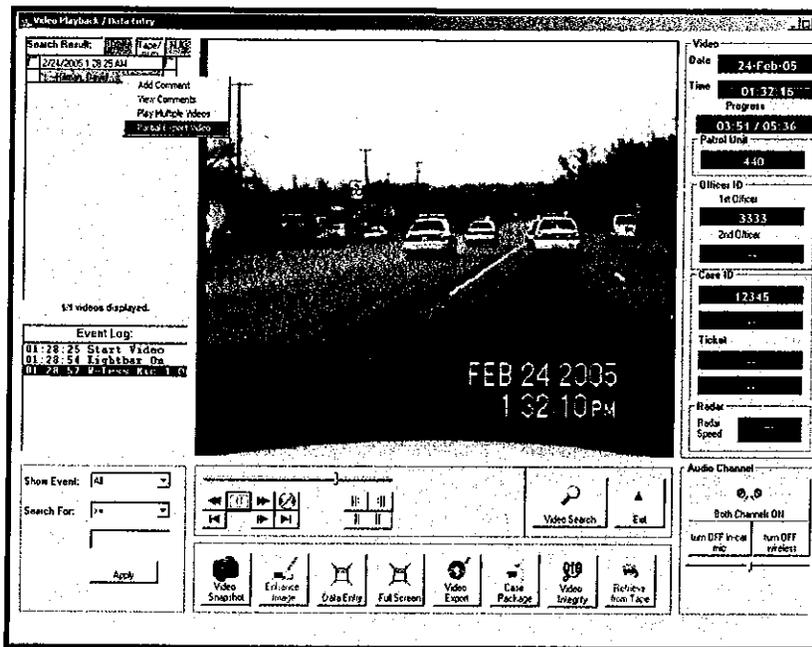
Click Yes to burn the iso image.



Make certain to select the correct type of destination drive. Click **Burn It**.



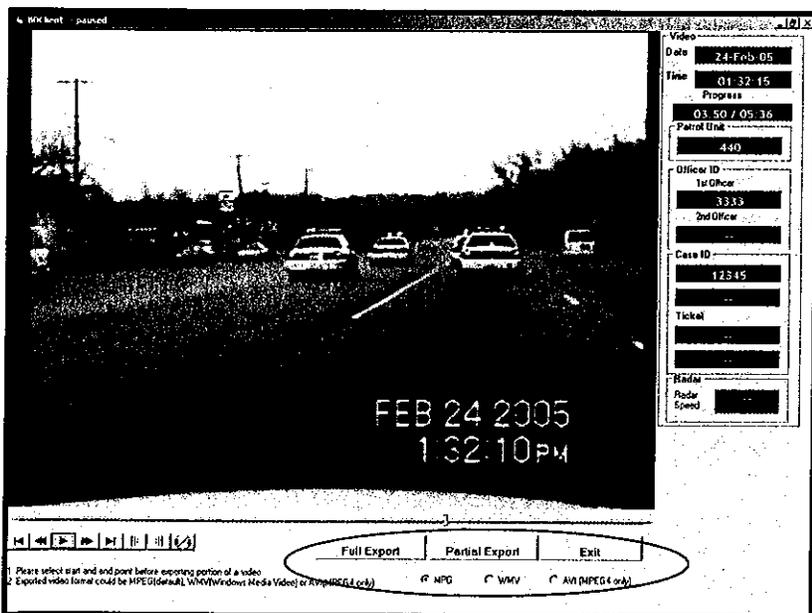
Burn successfully. Please Remove the disc.



Video Search Cont':

Partial Export Video

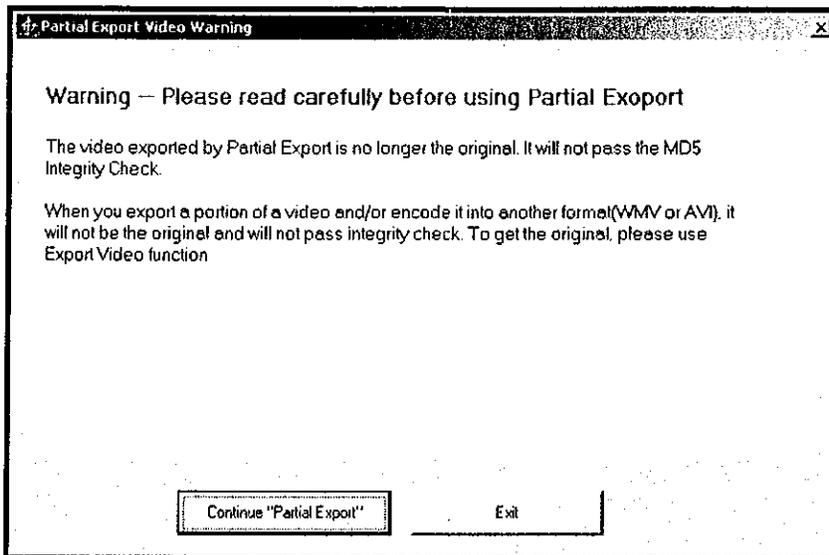
Run the BOClient application from the desktop. Right click on the video entry from the list and select "**Partial Export Video**".



With Partial Export Video Interface user can choose to either fully export a video or partially export a video. The exported video can be encoded into WMV format or AVI (MPEG4 only) format by selecting the option MPEG (default), WMV or AVI

Fully Export a video: select the option MPEG (default), WMV or AVI and click "Full Export" button. It will export the video (encoded if selecting a format other than MPEG) into specified folder

Partially Export a video: select the start point of a video by clicking on the  button followed by select the end point of a video by clicking on the  button (default start point is 0 and end point is the duration of the video). Then select the option MPEG (default), WMV or AVI. And click "Partial Export" button. It will export the portion of the video from the start point to the end point (encoded if selecting a format other than MPEG) into specified folder. Selection of start point and end point can be cancelled by clicking on the button. 



Video Search Cont':

PartialExportVideo

Partial Export Video (PartialExportVideo) is a part of the Coban DVMS Application Group, which contains several programs providing cutting-edge solutions for digital video surveillance applications. Coban DVMS addresses issues of capturing, transferring, storing, and managing of digital videos. As part of Coban DVMS, PartialExportVideo provides additional features and functions to the original export function of BOClient. For example, it can export portions of a video, encode a video into WMV format (Windows Media Video format, which can be played on any Windows based computer with Media Player 9 or higher), and AVI (MPEG4 only) format. And even more interesting, when encoding into WMV format, markers are added into the encoded video, which includes all event logs, and which also allows the viewer to click on any individual marker and have the video jump to that specific segment of the video.

When a user exports a video, BOClient will also export CobanPlay for the user to playback the exported video and logs. Although the exported mpeg format video can be played back using any player (such as Microsoft's Media Player or Real Network's Real Player), the logs associated with the video will not be available. With CobanPlay, when a video is played back, all the logs will be displayed with the video.

NOTE:

Not all videos are the same format (MPEG 1, 2, or 4). Videos may not be viewed properly without the proper codec. To view videos that do not play, you must also install its corresponding codec.

If exporting as MPEG 2, user must have the MPEG2 codec installed.

For example: **Moonlight Codec**

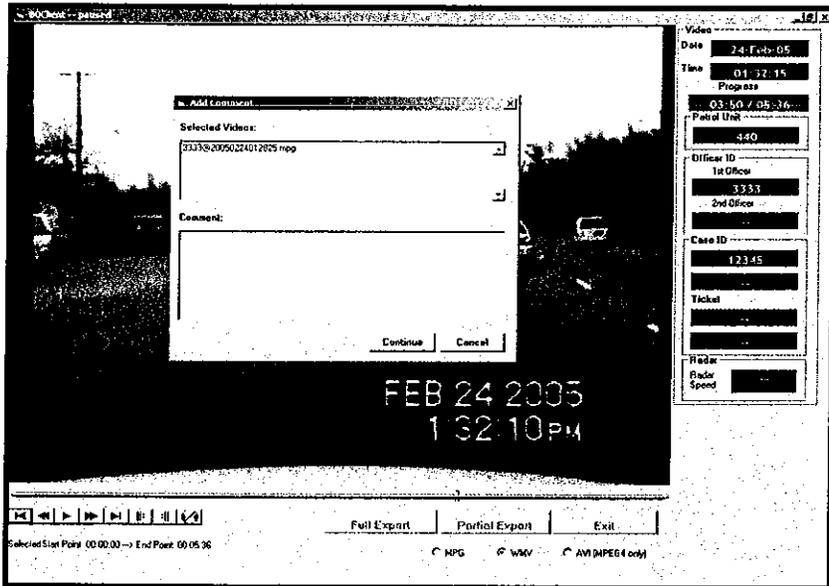
If exporting as WMV, user must have Window Media Player 9 or higher.

If exporting using AVI, user must install DivX, which will install the MPEG4 codec.

MPEG 1 requires no additional codec.

WARNING:

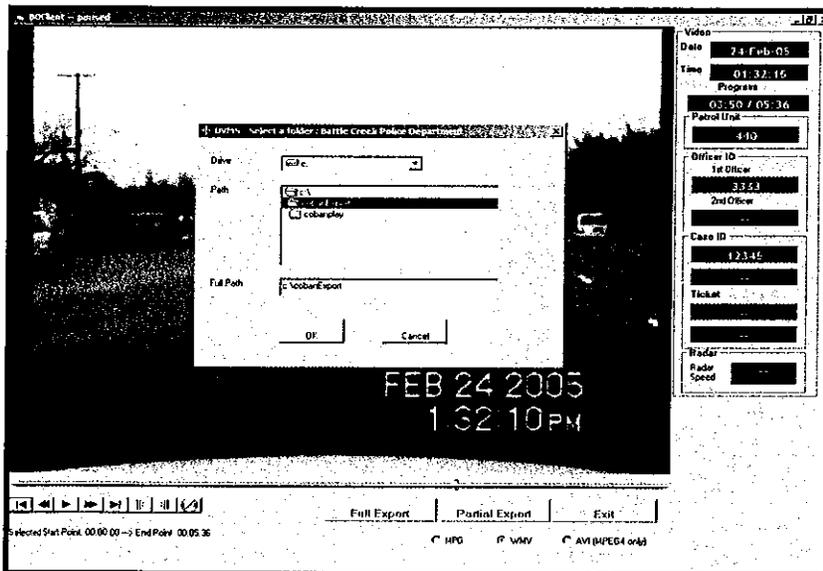
Videos copied using Partial Export will **NOT BE THE ORIGINAL**, and therefore will not pass the MD5 integrity check. If videos are burned to another video format (MPG, AVI, WMV) other than the original format, the burned video will not be the original. It is *advised* that, to use video as evidence, use Export Video in Video Search in BO Client to obtain the original.



Video Search Cont':

Partial Export Video Cont'

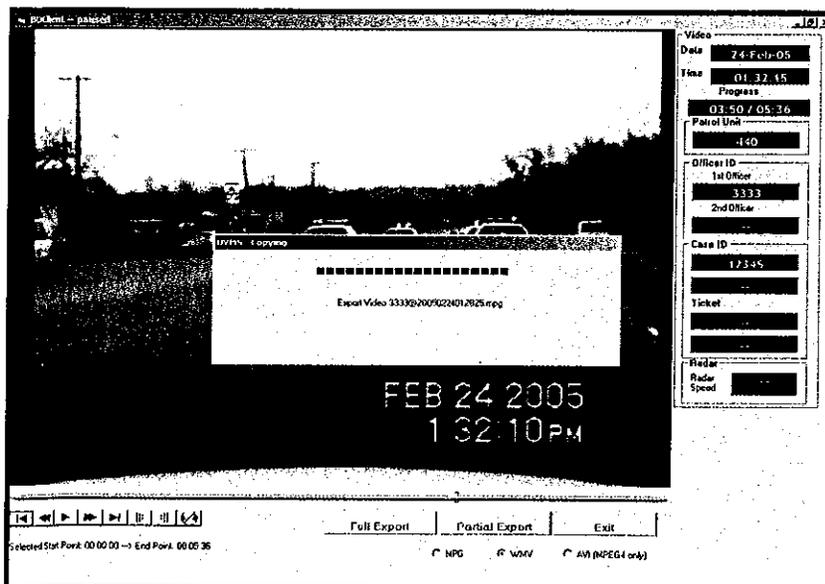
After selecting Export, user will be able to add comments (optional) to the exported video.



Select the folder where exported video will be saved.

C:\cobanExport is the default folder.

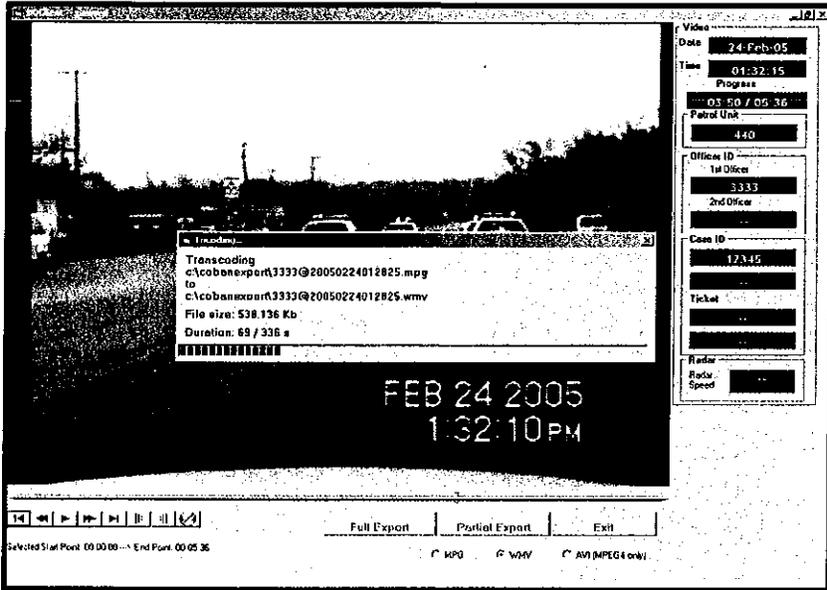
Note: DO NOT change the path!



Cut (if partially export) and copy the video to the export folder

To Cut the video, select the start point of a video by clicking on the

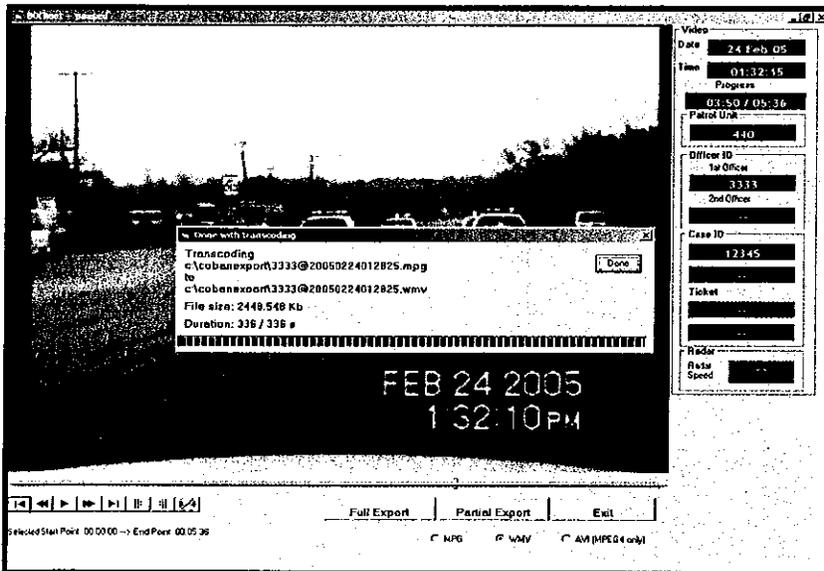
⏪ button followed by select the end point of a video by clicking on the ⏩ button.



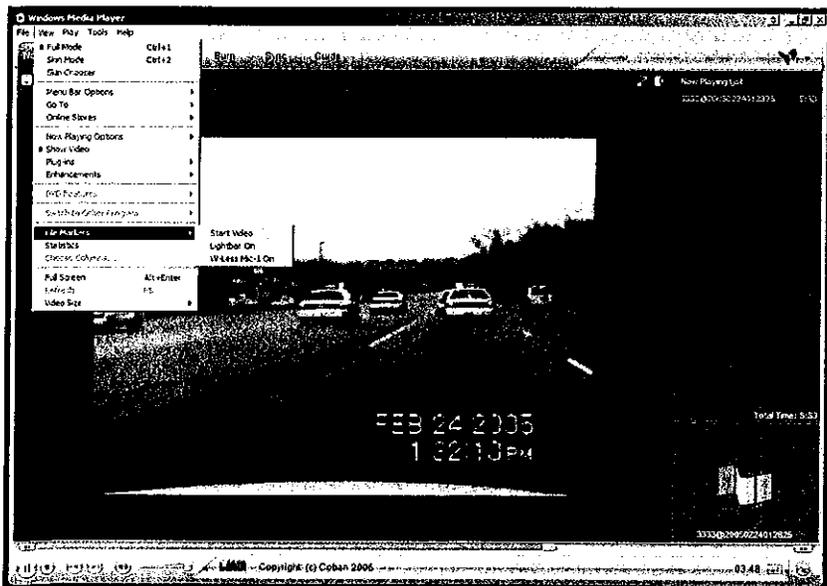
Video Search Cont':

Partial Export Video Cont'

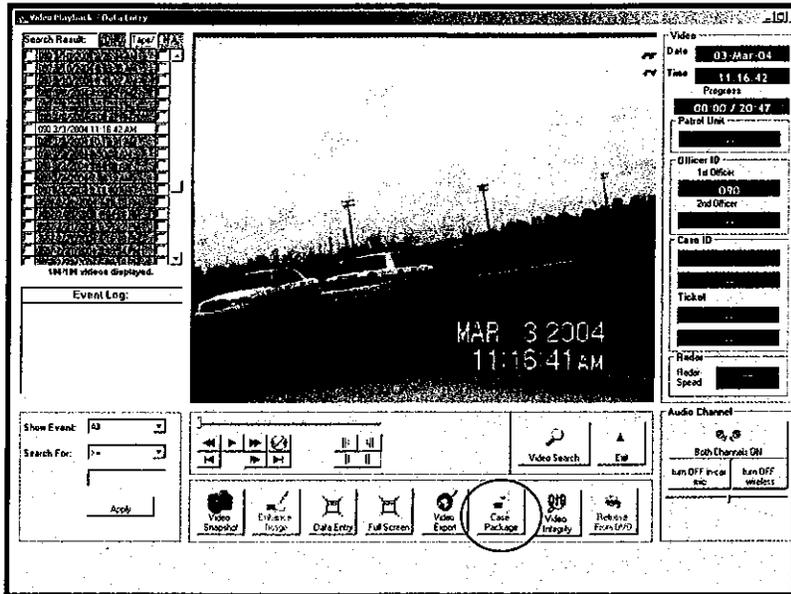
Encoding will start if user selects a video format other than MPEG.



Encoding complete.



Windows Media Player plays the encoded video (WMV format). From View -> File Markers, it shows added markers.

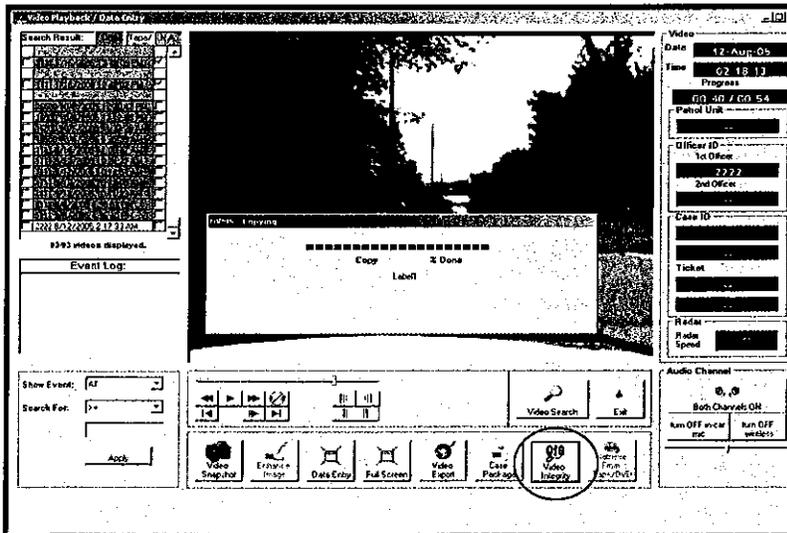


Video Search Cont':

Case Package:

The **Case Package** function is similar the Export to CD / DVD function.

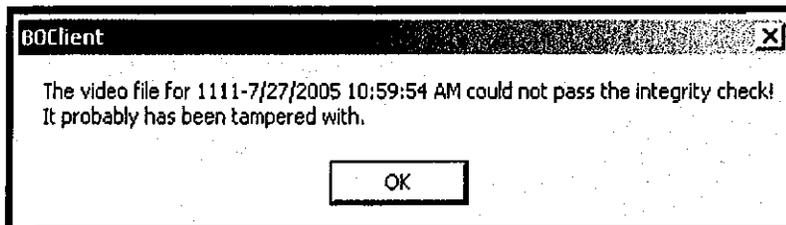
The differences with **Case Package** are all the videos / data with the same Case ID as that of the current video will be exported. Case reports and snapshots related with these videos will also be exported as well



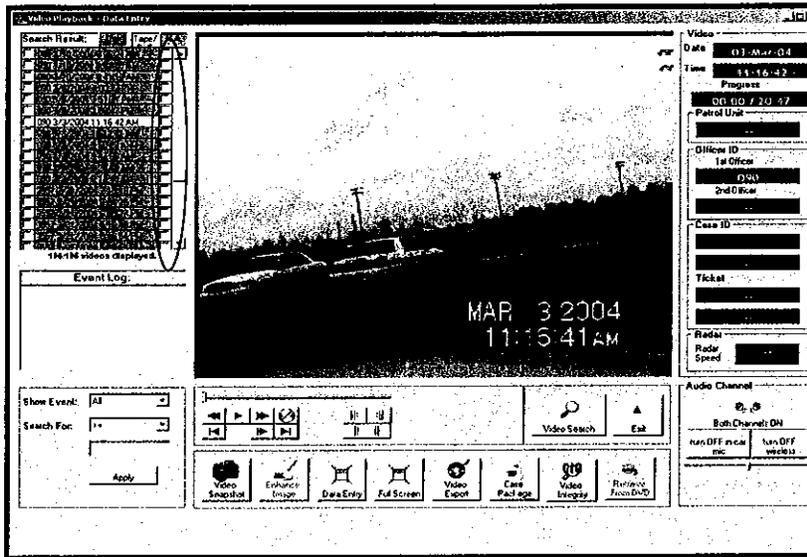
Video Integrity:

Users may want to use the **Video Integrity** check to determine if the video has been tampered with after the initial recording.

This process may take from seconds to minutes depending on the size of the video file. During the process, a small window will pop-up and show the progress. When integrity check is finished, a pop-up message box will show the result.



This window will inform the user that DVMS is in the process of performing an Integrity Check. DVMS will inform the user if the selected video did not pass the integrity check.

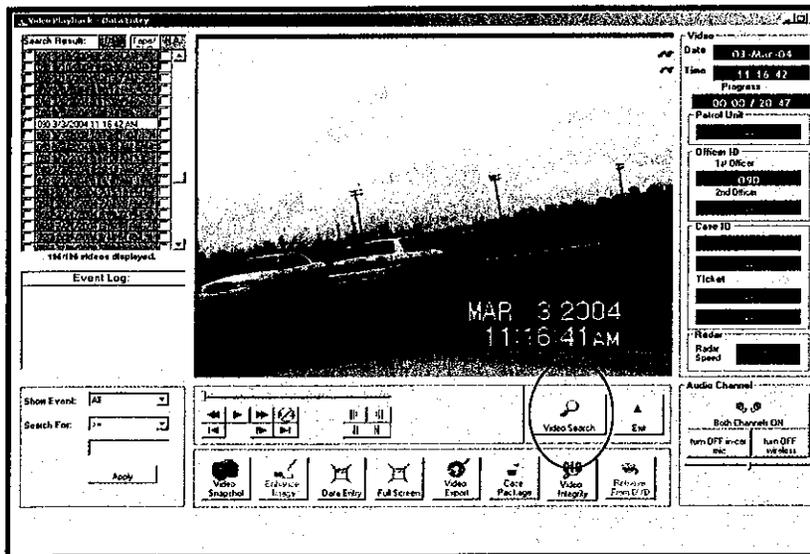


Video Search Cont':

To Retain Videos:

Check the Video Tag Box on the right side of the Video Logs. This action will retain the selected video indefinitely even after the set expiration date.

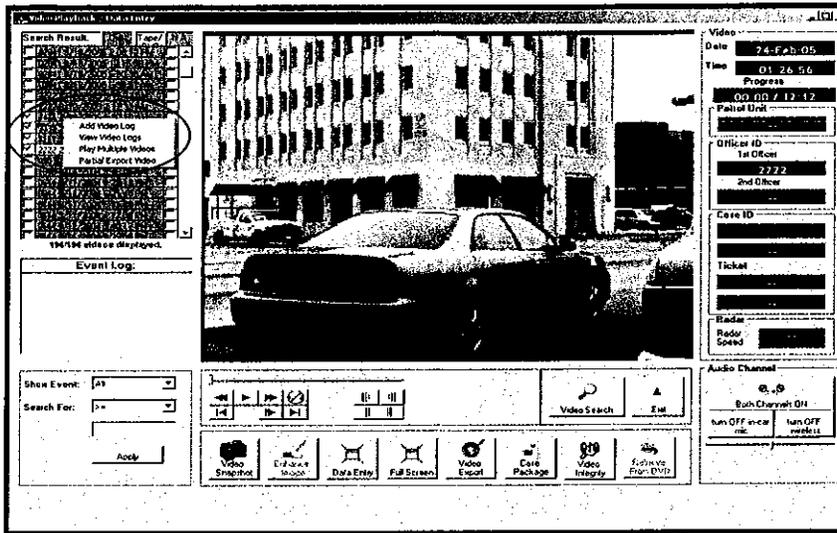
This function is useful if a particular video/data is involved in a longer than usual court case or is not classified as a "retainable" video in the DVMS classifications (traffic stop or other stop that a complaint was filed on after the video has been uploaded.)



Return to Video Search:

User may return to Video Search Screen by pressing



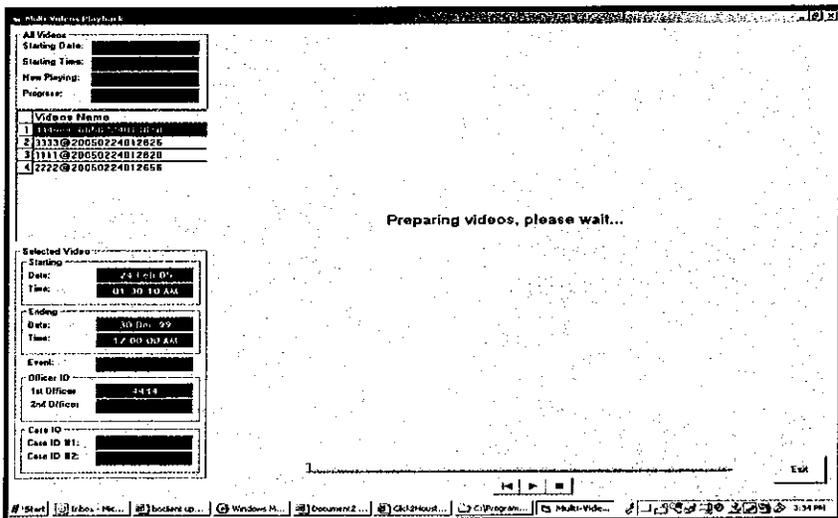


Video Search Cont':

Play Multiple Videos

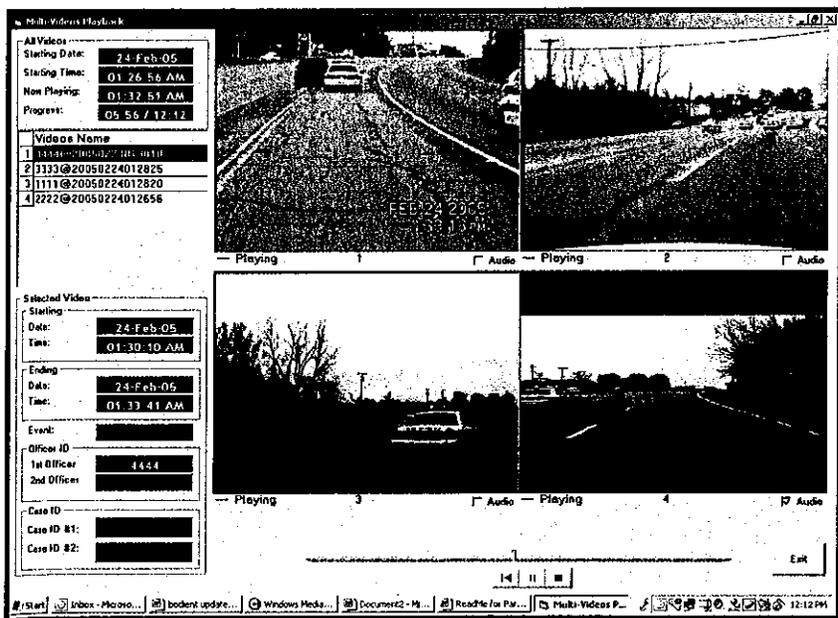
This function allows user to see the same event recorded by different officers from different angles.

To play multiple videos, check the Video Tag Box next to the video and right click to select Play Multiple Video.



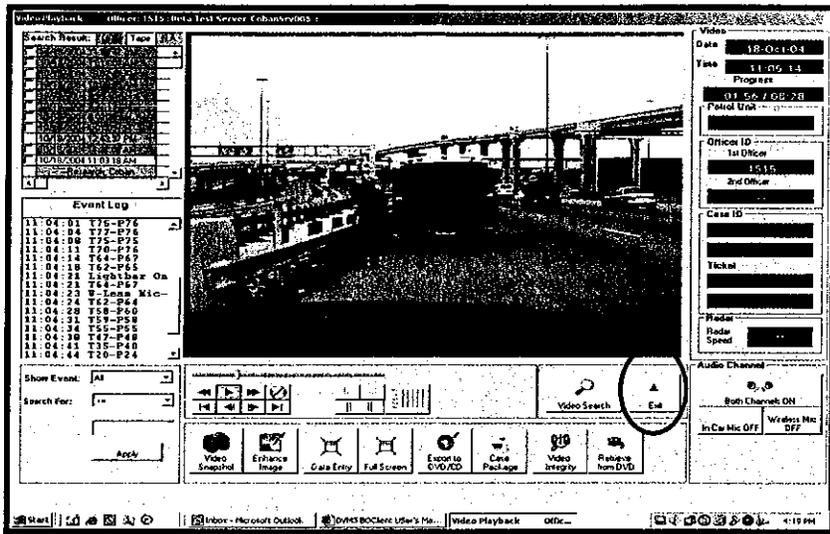
A maximum of 9 videos may be selected to play simultaneously.

Videos will be processed to play. Selected videos will not play if their total elapsed time exceeds 24 hours.



Each video plays in sync to its recorded time, enabling viewer to see the video from different angles and aspects in respect to when the video was recorded.

Viewing from multiple angles allow viewers to better see how the event unfolded, or patch-up missing links which may be critical to their case.



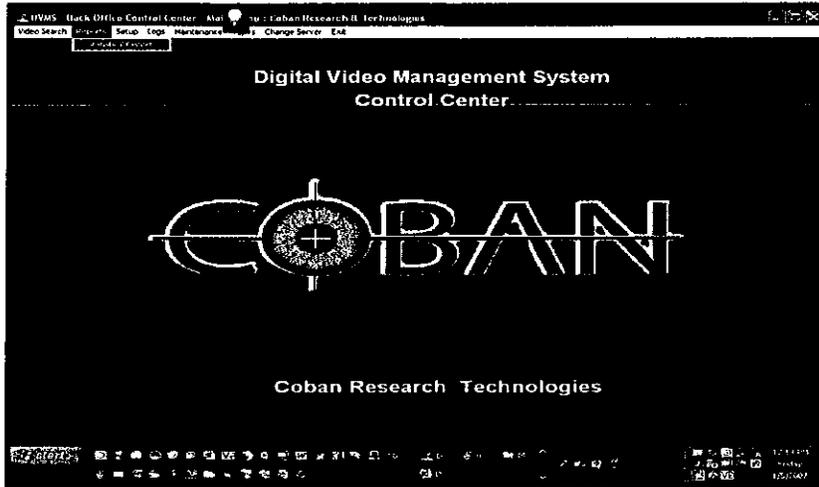
Video Search Cont':

Exit:

Press, Menu.



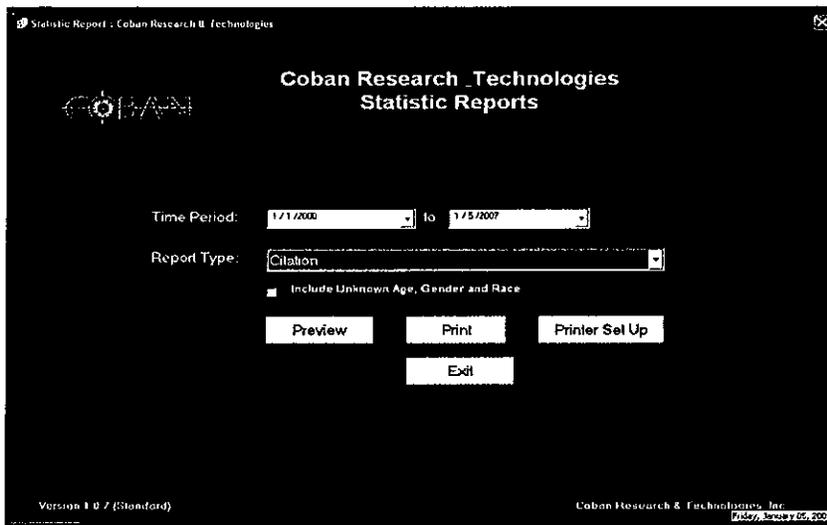
to return to the Main



Report:

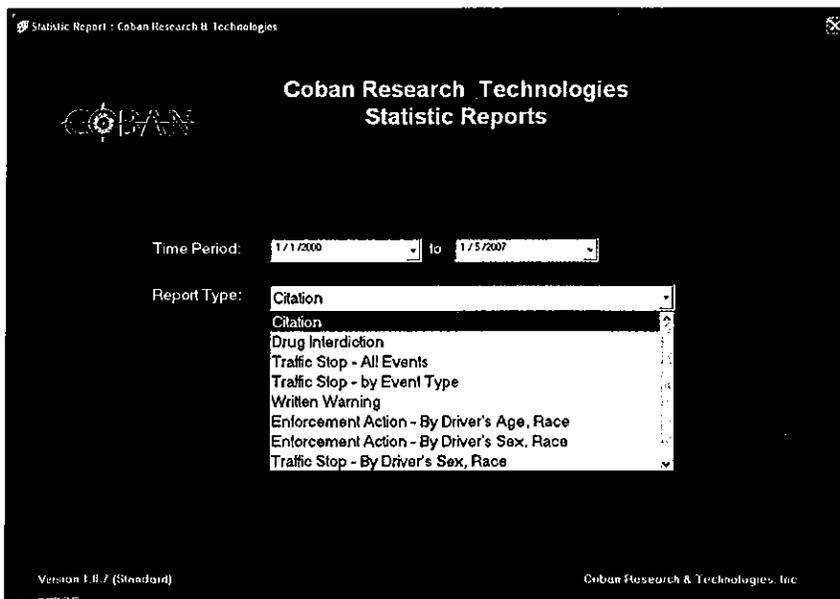
Administrators may utilize this section to generate reports:

- Statistical Report



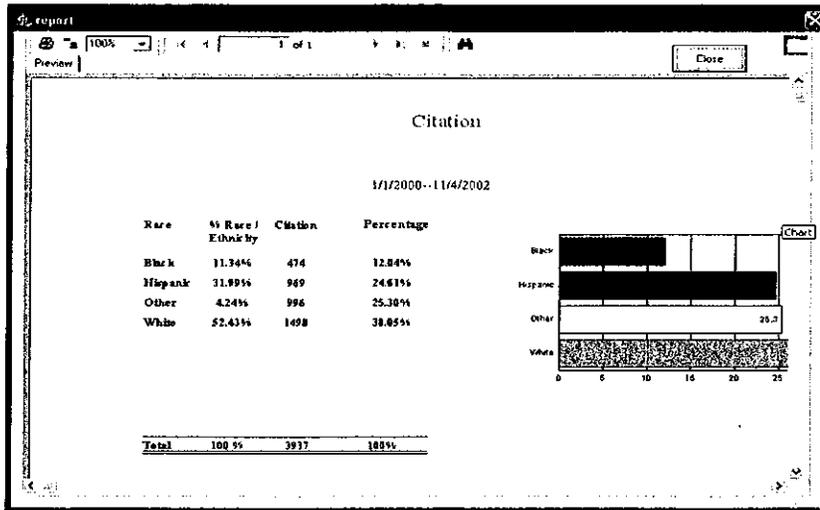
Statistical Report

Select *Time Period* ▼ for pull down calendar.



Select *Report Type* ▼ from pull down menu

- Citation
- Drug Interdiction
- Traffic Stop-All Events
- Traffic Stop By Event Type
- Written Warning
- Enforcement Action Taken By Driver's Sex and Race
- Traffic Stop Cases By Driver's Sex, Race
- Traffic Stop Cases By Driver's Sex, Age.



Report Cont':

Citation Report:

For Example:

With this report, we have selected 01/01/2000 to 7/19/2002 for the Time Period and Citation for Report Type.

Coban Research Technologies Statistic Reports

Time Period: 1/1/2000 to 1/5/2007

Report Type: Traffic Stop - by Event Type

- Drug Interdiction
- Traffic Stop - All Events
- Traffic Stop - by Event Type
- Written Warning
- Enforcement Action - By Driver's Age, Race
- Enforcement Action - By Driver's Sex, Race
- Traffic Stop - By Driver's Sex, Race
- Traffic Stop - By Driver's Sex, Age

Version 1.0 / (Standard) Coban Research & Technologies, Inc.

Report on Traffic Stop-By Event Type:

For Example:

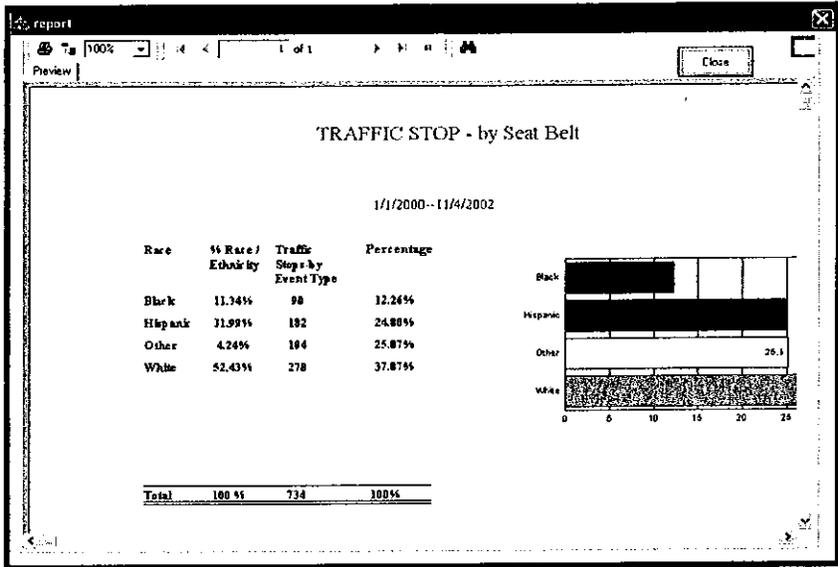
With this report, we have selected 01/01/2000 to 06/08/2006 for the Time Period and Traffic Stop-By Event Type for Report Type.

Select Event Type

<input type="checkbox"/>	MVA	Accident
<input type="checkbox"/>	GA	General Assistance
<input type="checkbox"/>	AOA	Assist Other Agency
<input type="checkbox"/>	OTH	Other
<input type="checkbox"/>	DTC	Disobey T/C Device
<input type="checkbox"/>	VBR	Speeding
<input type="checkbox"/>	DUII	Drive Under Influence
<input type="checkbox"/>	WRNT	Warrant Service
<input type="checkbox"/>	EQP	Equipment Violation
<input type="checkbox"/>	DWS	Drive While Suspended

Next Cancel

Select at least one Event Type from the Pop-Up Window followed by selecting *Next*.



Report Cont':

Written Warning:

For Example:

With this report, we have selected 01/01/2000 to 11/04/2002 for the Time Period and Written Warning for Report Type.

Print

Printer: System Printer (\\Brianoffice\HP LaserJet 2100PP)

Print Range: All Pages

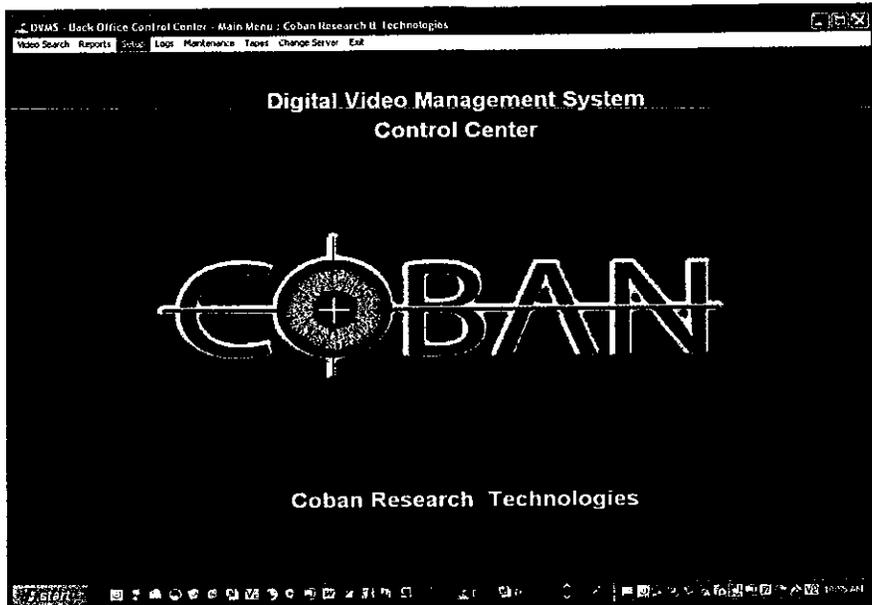
From: 1 To: _____

Copies: 1

Collate Copies

OK Cancel

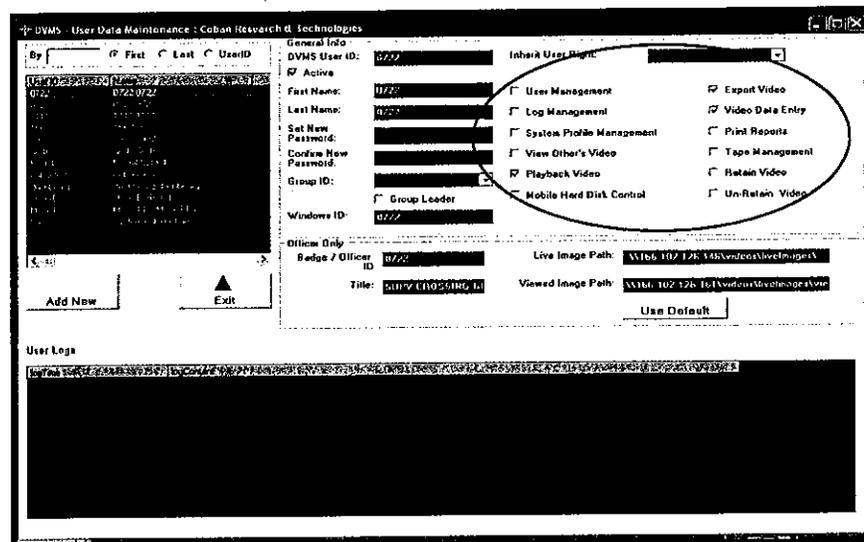
Print reports by pressing  button on the upper left hand corner.



Setup

This section is for the administrator to customize and configure back office settings:

- User
- Mobile Unit
- MHDD Maintenance
- Miscellaneous Set Up
- Change Password
- Templates
 - User Rights
- User Group

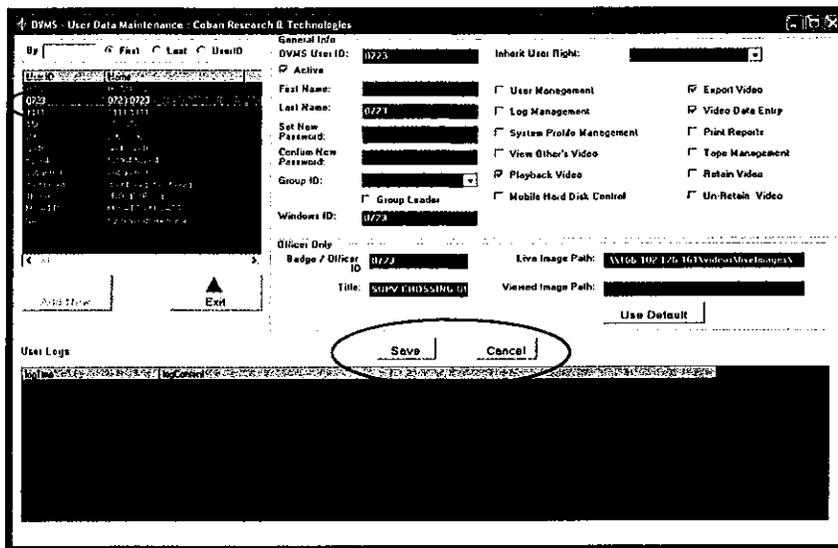


User

This section allows the system administrator to enter user information and set user access rights. Also provides administrators with a user log-on for every transaction.

Access Rights:

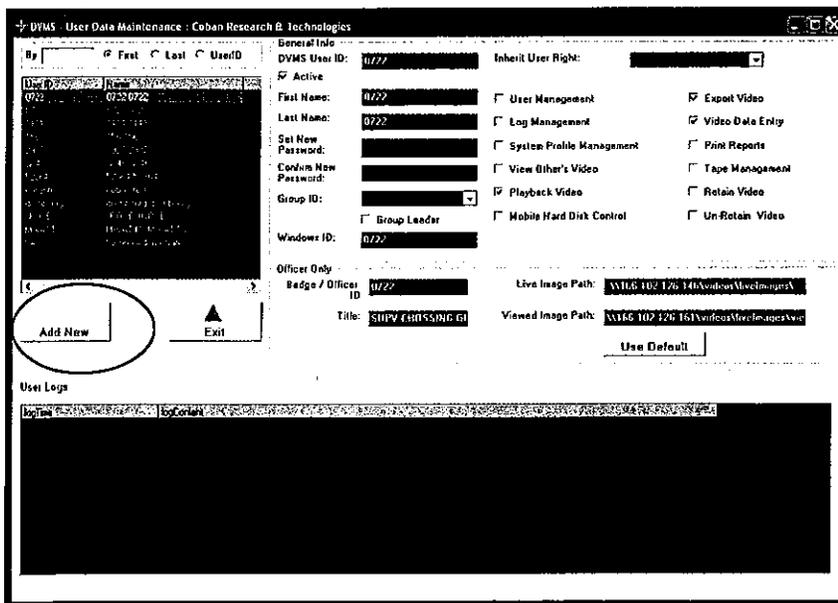
- User Management – Allows modification of user rights.
- Log Management – Allows viewing and settings changes to system log settings.
- System Profile Management – Allows changes to the System Profile.
- View Other's Videos – Allows the current user to view other user's videos.
- Playback Video – Allows the current user to review his/her own videos.
- Mobile Hard Disk Control – Gives access to various MHDD options.
- Export Video – Allows the user to export videos to removable media.
- Video Info Entry – Allows the user to enter information on the videos.
- Print Reports – Allows the user to print reports.
- Tape Management – Gives the user access to Advanced Tape Management options.
(LTO User Only)
- Retain Video – Gives the user the ability to tag a video as "retained."
- Un-retain Video – Gives the user the ability to remove the "retain" tag from a video.



Setup Cont':

To Edit User Profile:

Highlight the User ID and Name; general Information of the user will appear on the right hand side of the screen. The system administrator may edit the user profile and reset access rights. *Save* or *Cancel* the changes.



Add:

Press the *Add New* button and create a User ID for the new user and enter his or her information. Be sure to check the appropriate access rights for the new user. Set Password and then press the *Save* button. The new user now has the ability to access DVMS within the parameters of the set access rights.

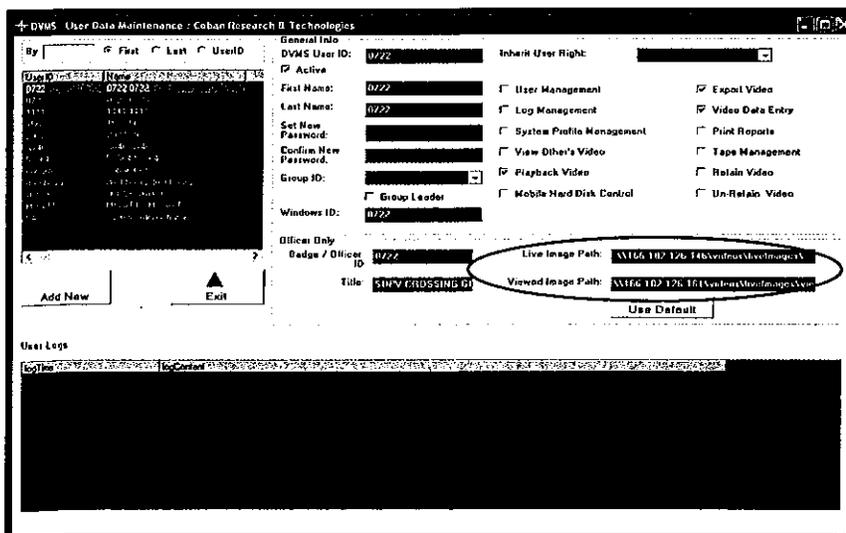
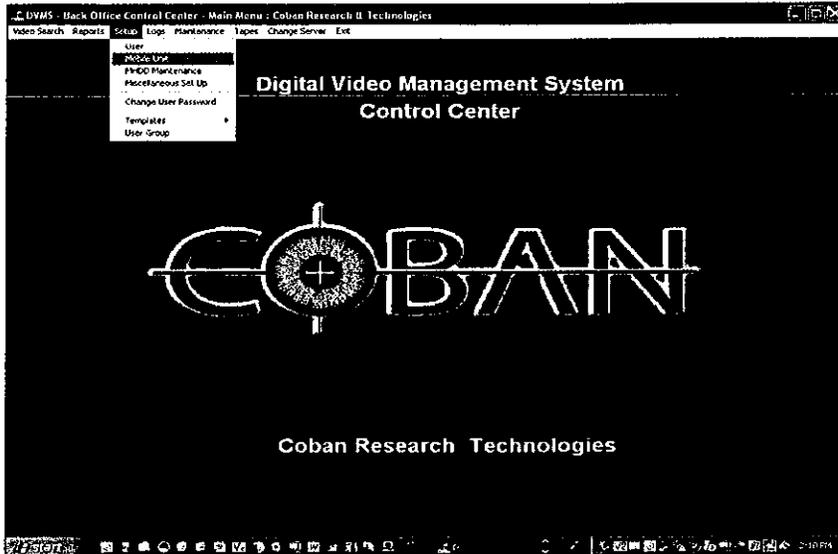


Image Path:

For Live or Viewed Video Streaming, please enter the path that will be used. This feature is only for departments using streaming solution.

Note: System Administrator must have *User Management Rights* to change, add, or edit user profiles. Users without proper credentials **will not** be able to view this interface.



Setup Cont':

Mobile Unit

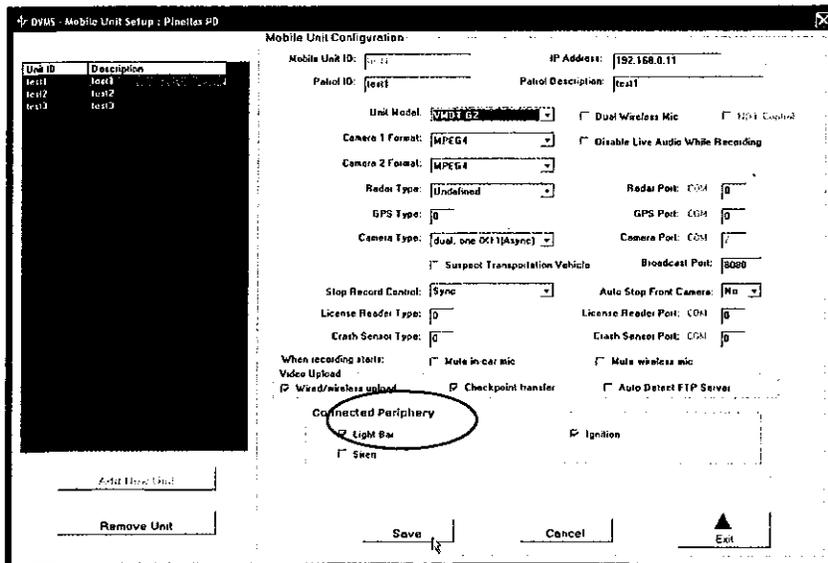
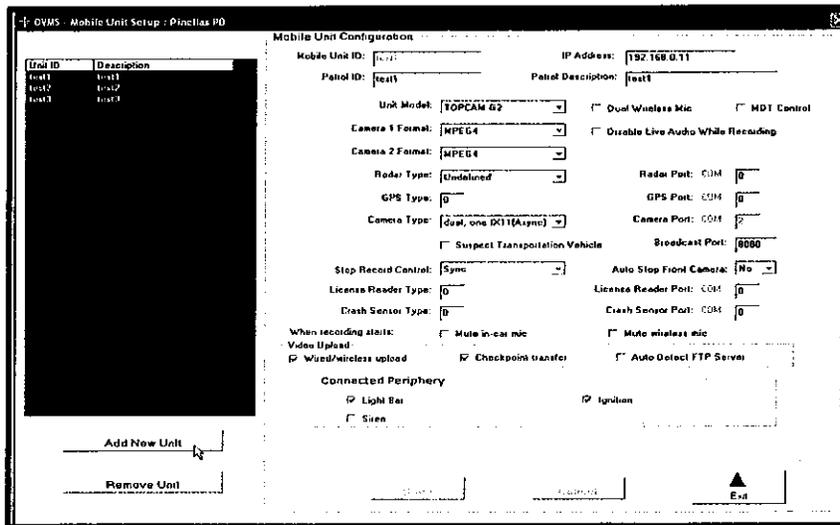
It is essential for the administrator to complete this portion each time a new Coban unit is added or change.

If administrator has any questions on this section please contact the service center. It is critical for DVMS to obtain the correct information for Mobile Unit Setup.

Add New Unit:

Press the **Add New Unit** button, followed by filling in the Mobile Unit Configuration.

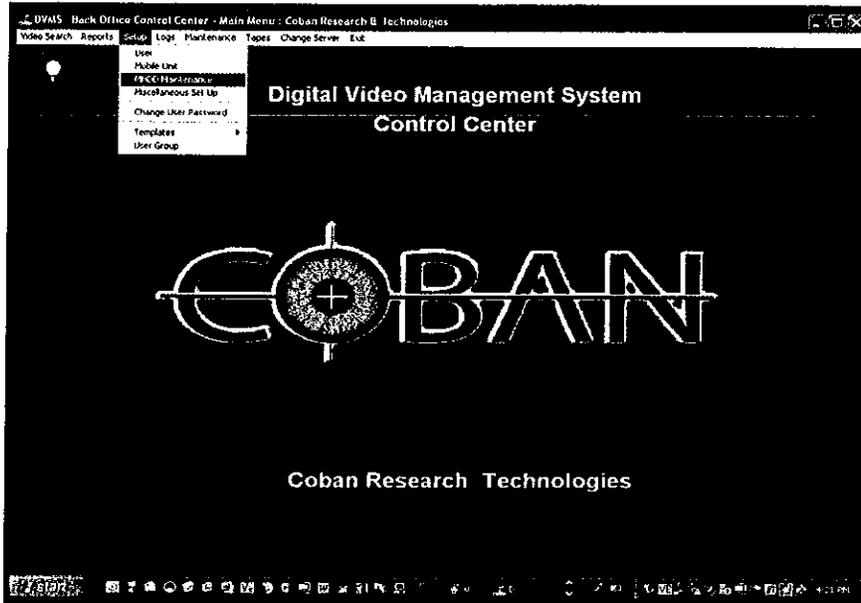
Refer to **Appendix A: Mobile Unit Configuration** p. 68-69



Please check the peripherals that apply to the vehicle, followed by pressing the Save button. DVMS will reconfirm user's decision.

To Edit Mobile Unit Setup:

Click on the unit that is to be changed. Once clicked, the unit's information shows up under *Mobile Unit Configuration*. Administrator may then edit the configuration. Click the **Save** button to save the new changes.

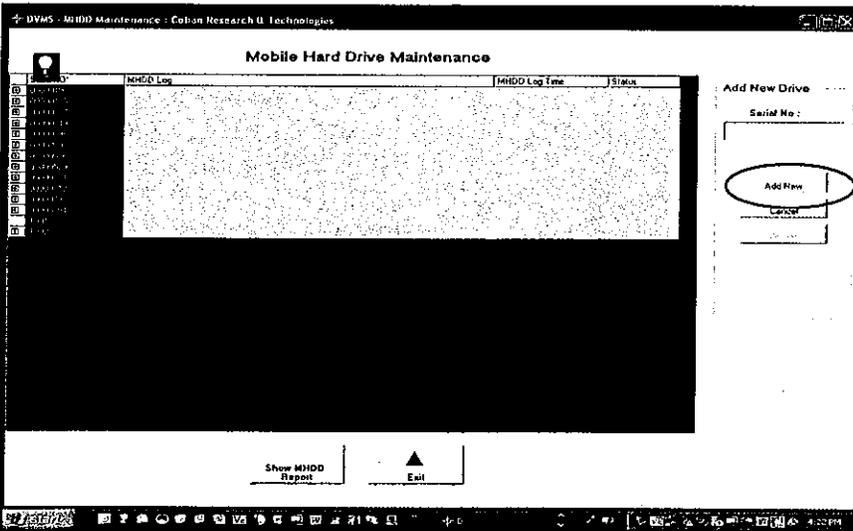


Setup Cont':

Maintenance MHDD:

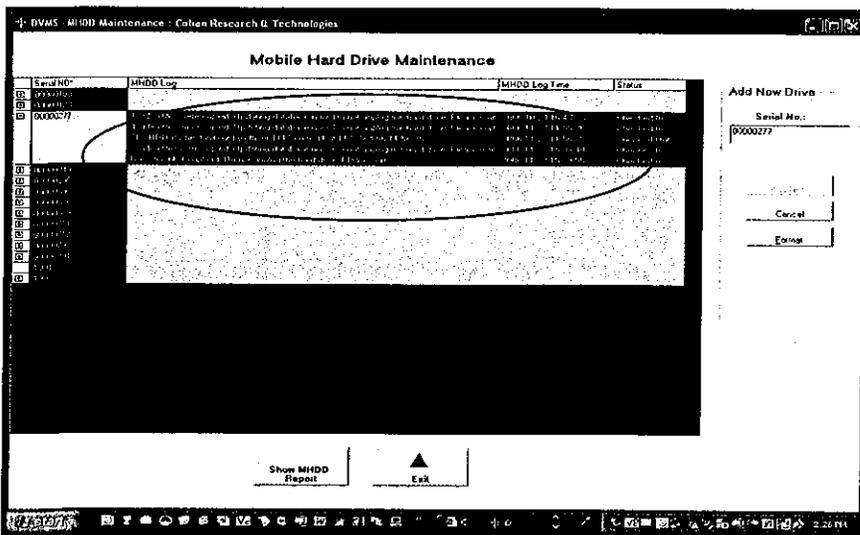
DVMS will maintain and log all mobile hard drive activities automatically. No 3rd party intervention is required.

This feature is unique in that it provides information concerning chain of custody.



Add Mobile Hard drive:

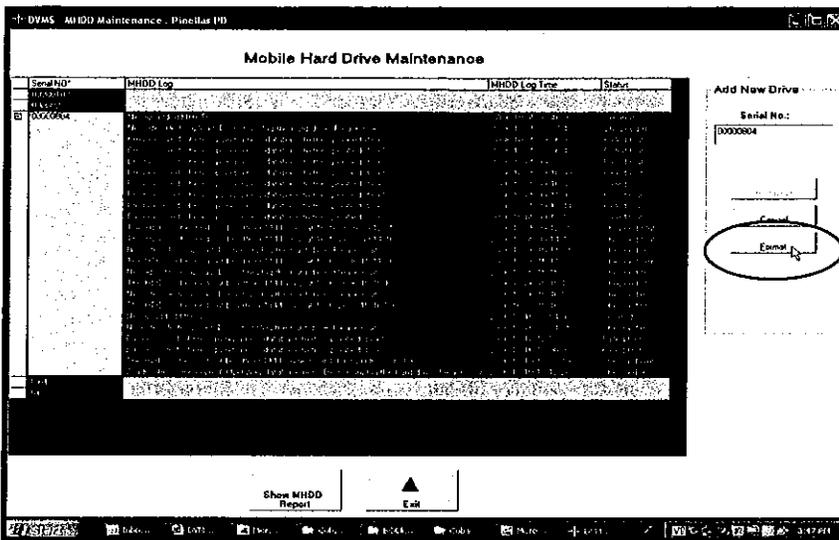
To add additional Mobile Hard Drives, administrator simply types in the mobile hard drive serial number in the format of 00000xxx. Then, click **Add New**.



MHDD Log Screen:

To View MHDD Log:

Click on the desired MHDD Serial Number; the MHDD Log will display in the center of the screen, along with MHDD Log Time and its current Status (when hard drive was created and if hard drive was Checked In or Checked Out and if videos were uploaded successfully or not).

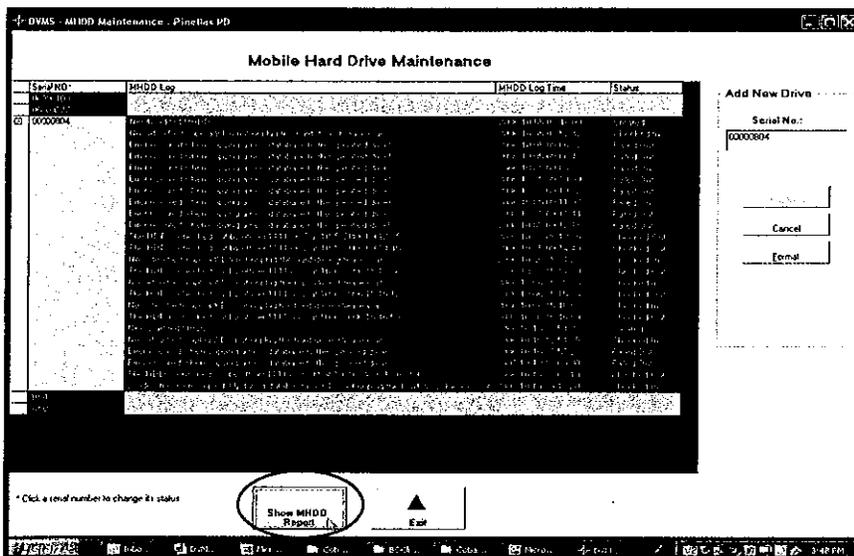


Setup Cont':

To Format MHDD:

Insert the MHDD into the Upload Cradle, enter the Serial Number of the MGDD that is to be formatted and select the **Format** button on the right. Please do not remove the MHDD until DVMS indicates that it is safe to do so.

Note: Formatting the Hard Drive will result in all data lost. Please make sure drive has been upload before formatting.

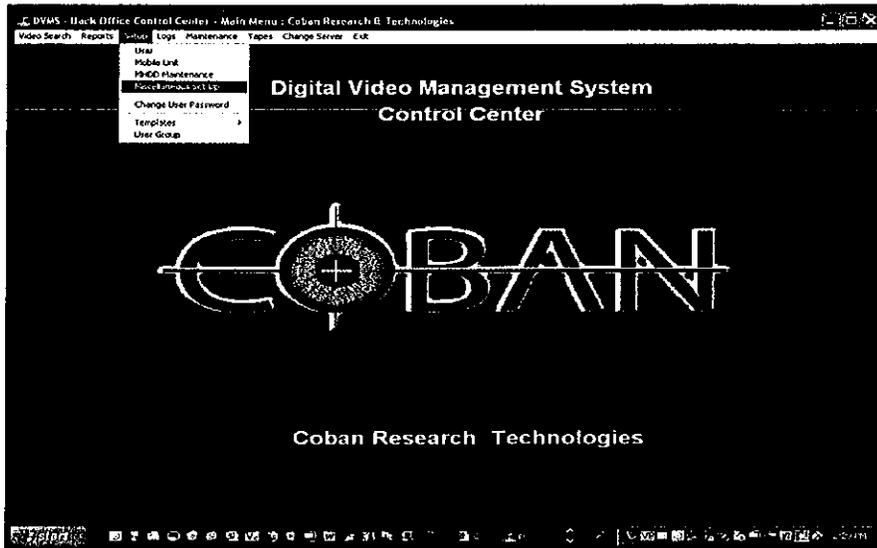


View MHDD Report:

To view the current report on all MHDD, click the **Show MHDD Report** button.

The MHDD Report will display the latest activities on every MHDD.

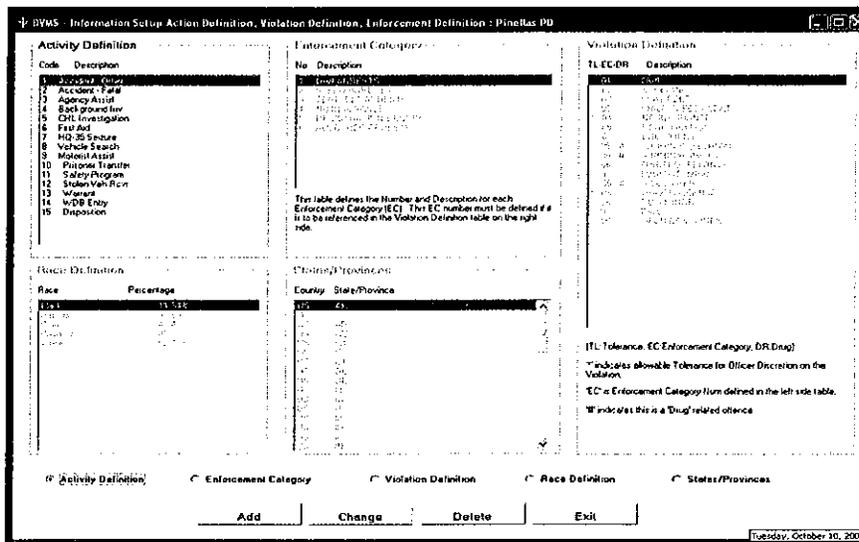
Click on **Show Status Log** to return to MHDD Log Screen.



Setup Cont':

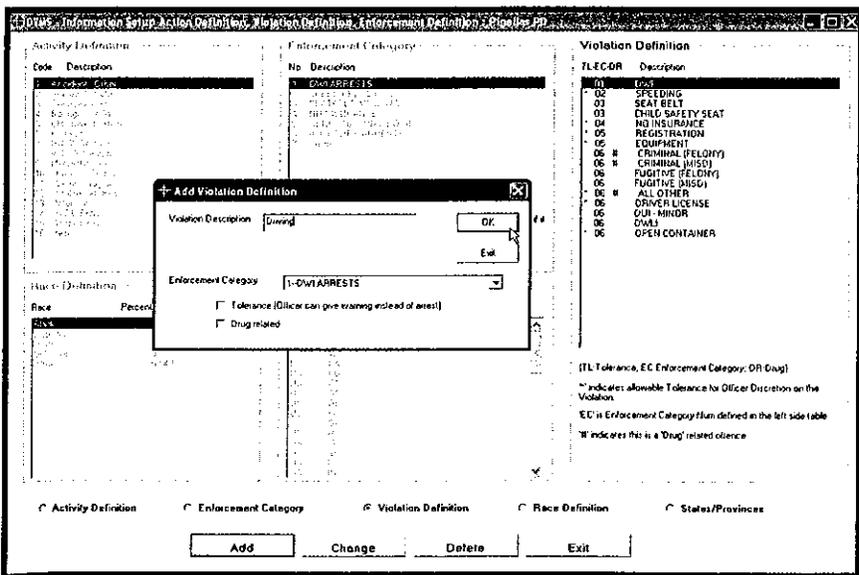
Miscellaneous Set Up:

Allows administrator to define Activity definition, Enforcement Category, Violation Definition, Race Definition, and State / Province.



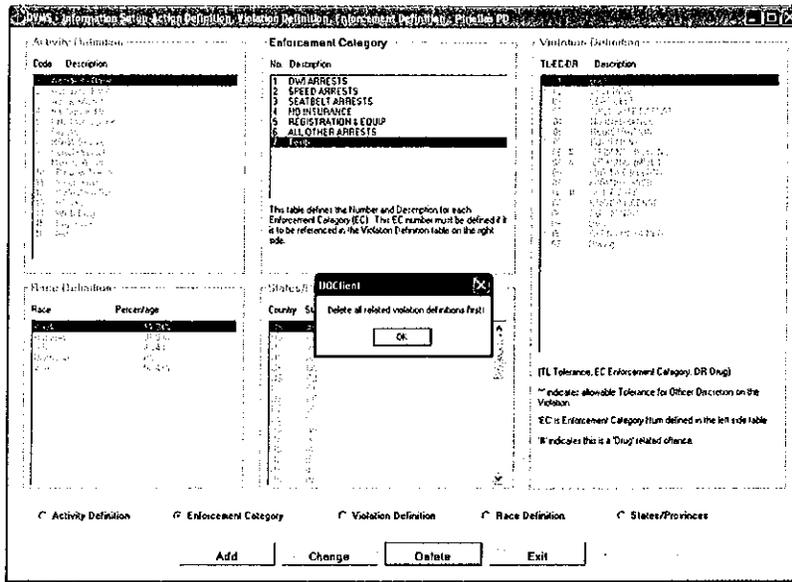
Administrator may setup additional Activity Definition, Violation, Definition, and Enforcement Category. Additionally, administrator may define the race and state of origin of suspect.

Violation Definition and Enforcement Category reference each other, as indicated by their numbering. Below each table gives an explanation of the symbols beside the numbers



To add Violation Definitions, administrator will need to choose which Enforcement Category to associate with it.

To Change Violation Definitions, administrator may change the name of the Violation associates with which Enforcement Category.

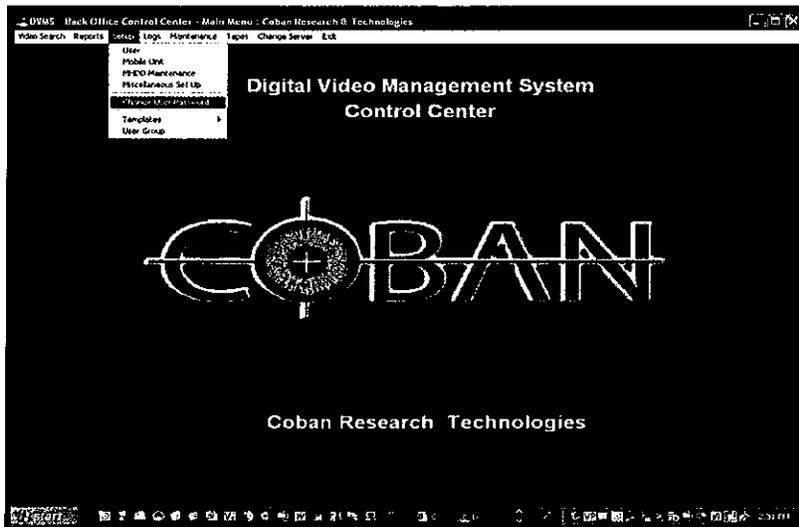


Setup Cont':

Miscellaneous Set Up Cont':

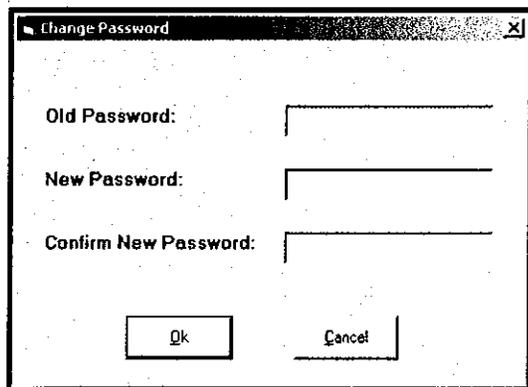
To Delete an Enforcement Category, administrator will need to first delete all Violation Definitions associated with that Enforcement Category.

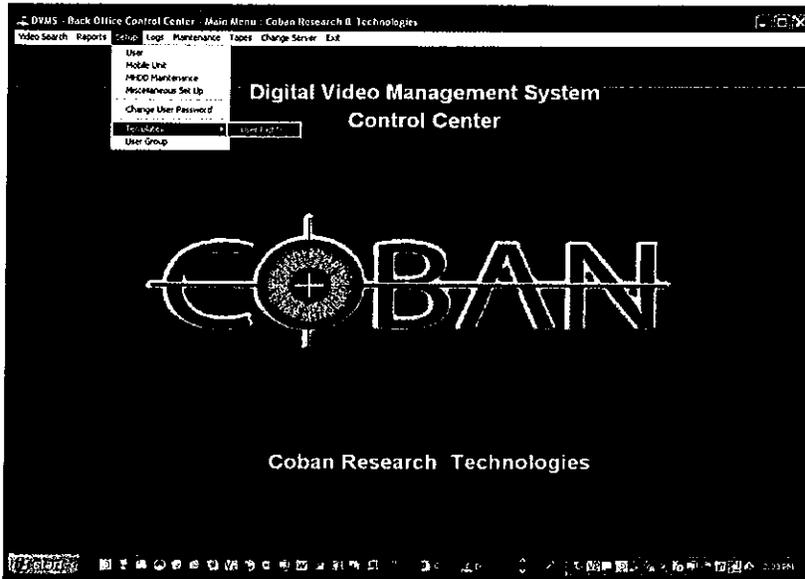
Note: Do not delete ALL data from these tables. There MUST be at least one entry in each.



Change User Password:

This feature allows the administrator to change user passwords.



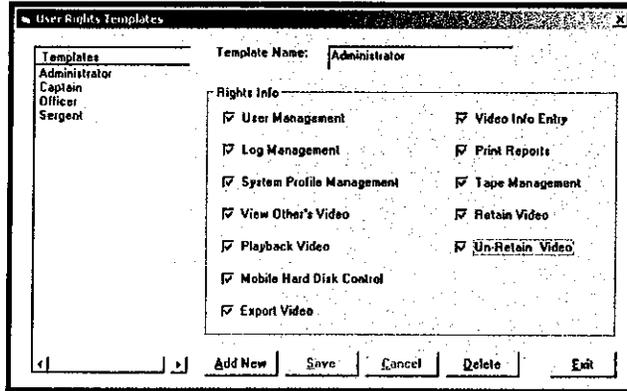


Setup Cont':

Template > User Rights:

Administrators may update or change user templates.

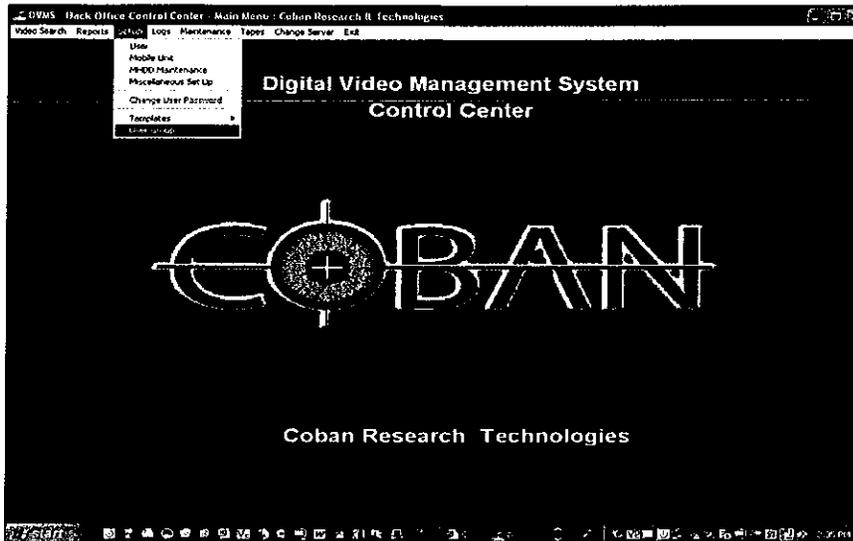
To access, click: Setup > Templates > User Rights.



Administrator may add and delete user templates for later use and apply them to its respected category template.

This feature allows the administrator to blanket a whole category of Users, depending on the officer's rank. So, as Users are added, these same rights will apply to them as well.

To add new template, click **Add New**. Add name in Template Name filed; choose corresponding rights for Template, and select **Save**

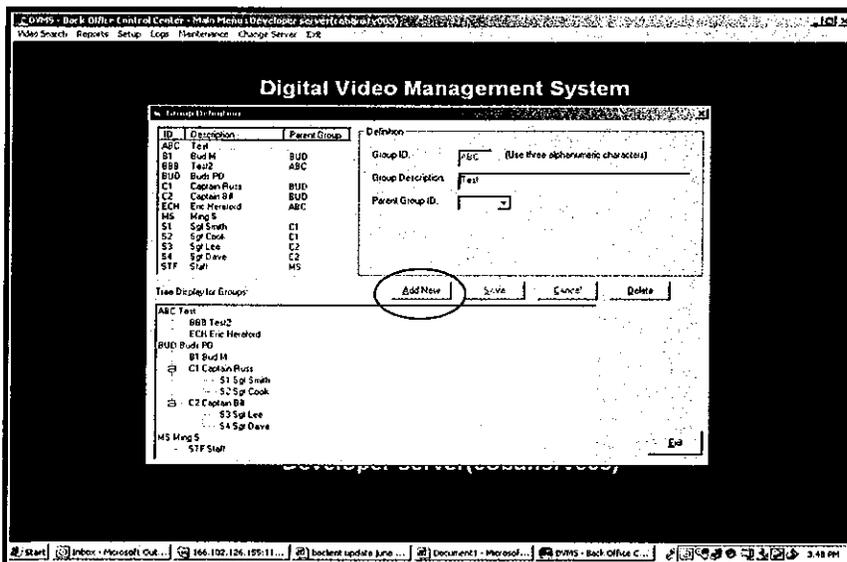


Setup Cont':

User Group:

In **User Group**, the administrator may set user groups.

Users may add, change, or delete Groups or Group Definitions by accessing Setup > User Groups.



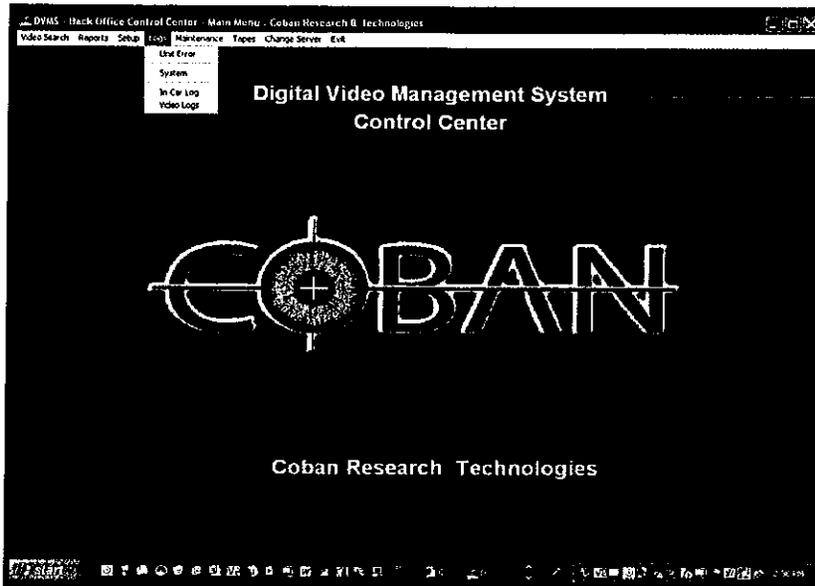
The administrator may define groups' ID, Description and Parent Group.

Add New Group Definition:

Select **Add New**, add **Group ID** in the related field, (Group IDs are three alphanumeric characters associated with the Group Descriptions) add full description in Group Description field, select parent ID Group. Click **Save**.

User Groups provide an easy-to-read representation of the hierarchical structure of your department.

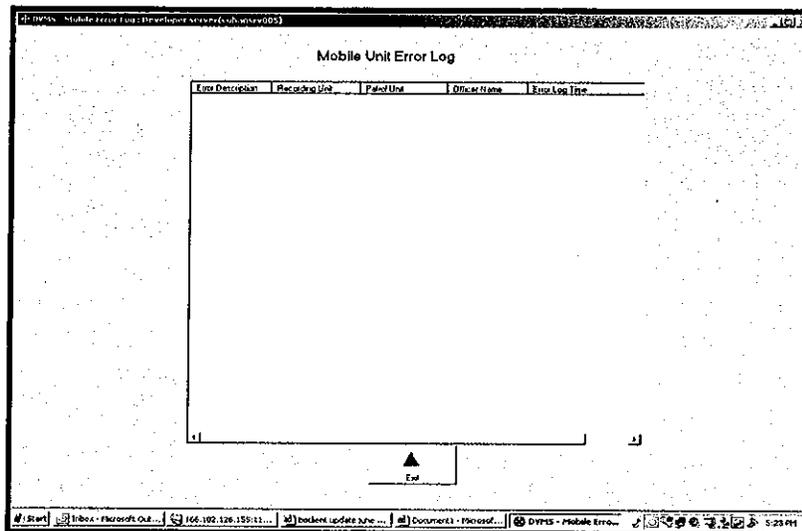
The main purpose of setting this up is to define which videos management may view. For instance, if Group A is the parent of Group B, Group A will have authorization to view Group B's videos. This is useful for Lieutenants and Sergeants that may want to view their subordinates' videos.



Logs:

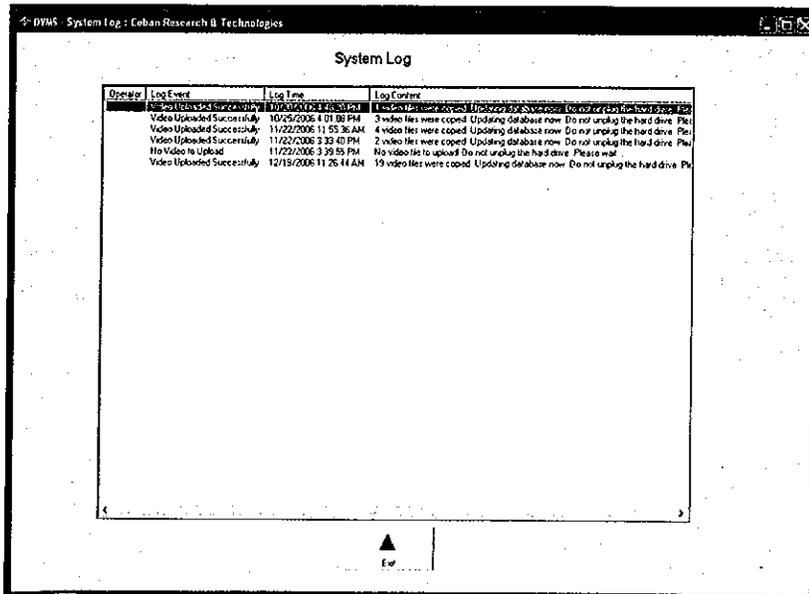
The **Logs** drop down menu compiles all logs associated with the back office interface and in-car unit.

DVMS will automatically log all Unit Errors, System activities and In-Car Logs and Video Logs. Information generated under this log is for service personnel only.



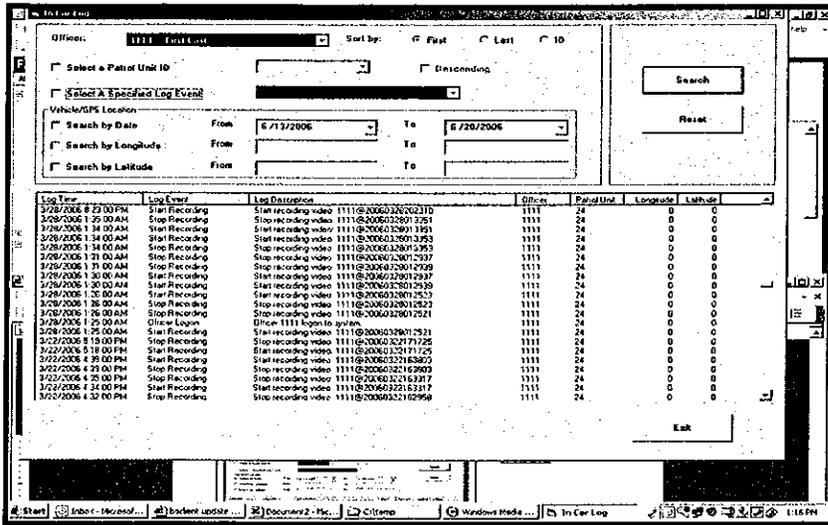
Unit Error Log:

Defines the Error Description, Recording Unit, Patrol Unit, Officer Name, and the Error Log Time.



System Log:

The **System** log displays all hard drive activities. Display allows the administrator to view which officer initiated task, the log event, log time, and log content.



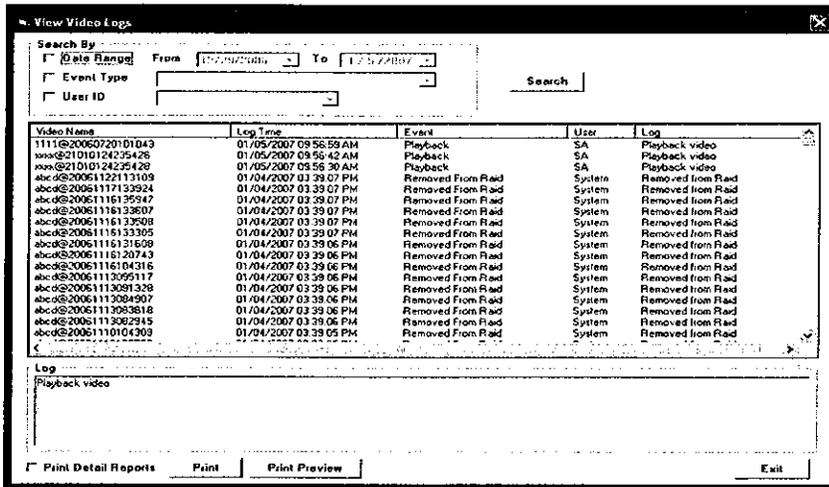
Logs Cont':

System Log Cont':

In-Car Log:

In-Car Log allows the administrator to sort information about officer activities when they were patrolling. Administrators are able to search and sort information via Patrol Unit ID, Specified Log Event, or via Vehicle/GPS Location through Date and Longitude or Latitude.

Depending on the search criteria used, the administrator can call and organize multiple levels of data. The administrator's scope of search criteria may be broad, or specific, using multiple "sorts" to receive a more specific piece of information.



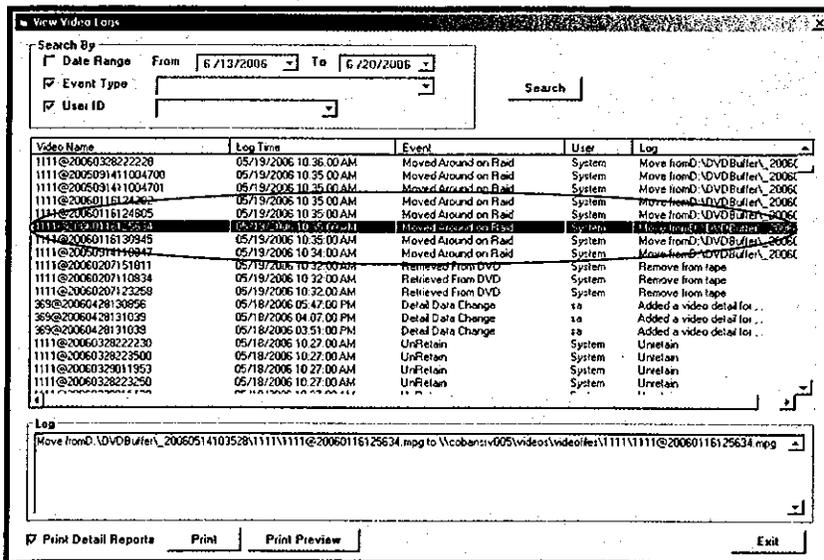
Video Logs:

Video Logs gives a summary of the actions taken on a video.

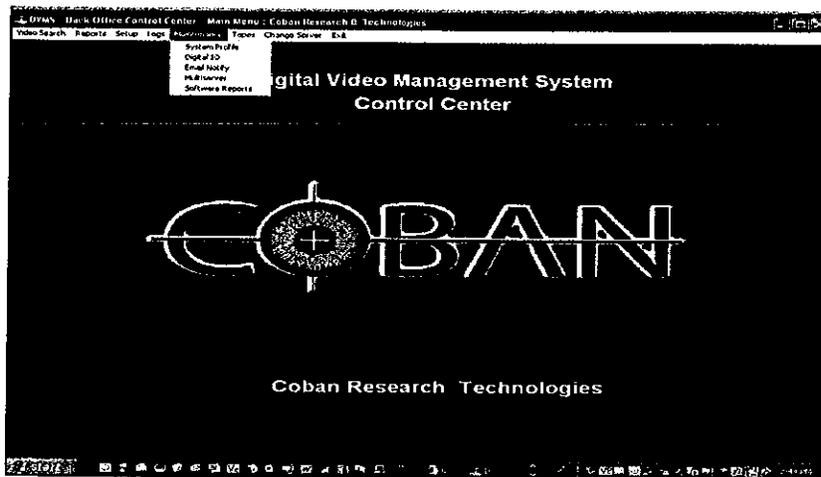
Once again, this is important in terms of chain of evidence

Administrator may search for specific Dates, Event Types or by officer's User ID. Once the administrator is satisfied with the search result, the log may be viewed under *Logs*, or viewed under *Print Preview*.

Administrator may print out this log as well.



To view a detailed description of the log, simply click on the video name and the log will show under *Logs*. Toggle between *Print View* or *List View* for detailed logs.



Maintenance:

This section is to be used by Administrators for configuring the DVMS and In-Car solution.

- System Profile
 - DVMS System Profile
 - Department Identity
 - Video Database Cleanup Policy
 - HDD Format Policy
 - Default Setting for Hard Drive Upload
 - Access Control
 - In Car Configuration
 - General Setting
 - In-Car Wireless Mic Setting
 - Shutdown Option
 - Video Format
 - Text Insertion on Video
 - Peripheral Setting
 - Real-Time Image / Video Transfer
 - Wire / Wireless Video Upload
 - Pre / Post Event Buffer Size
 - Server Configuration
 - Video Server Configuration
 - Secondary Raid
 - FTP Setting
 - Video Server IP
 - Event Definition
- Digital IO
- Email Notify
- Multiserver
- Software Reports

Changes made here are Global Settings; the back office server and in-car units will be affected by configuration changes. If there are any discrepancies in understanding, please contact Coban first before making a decision that will impact this solution.

Note: Making changes here will overwrite individual settings!

System Profile Maintenance

DVMS System Profile | In Car Configuration | Server Configuration | Event Definition

Department Identity

Agency name: Language code: HDD Format Policy

Agency ID: Country code: After number of uploads: (GB)

Initial map location: Default state: After total size uploaded: (GB)

Video/Database Cleanup Policy

Start cleanup when disk usage is more than %

Stop cleanup when disk usage is lowered to %

When disk usage between 70% and 80%, delete videos that have not been accessed in (days)

Keep records in database for (days)

Default Settings for Hard Drive Upload

User needs to log on when uploading videos

Checkout hard drive after uploading videos

Delete files from mobile hard drive after uploading videos

Verify video integrity when uploading videos

Access Control

Use Windows logon for DVMS (Not applicable for Autost users)

System last accessed:

Lock system if not accessed in days

Daily Schedule

Daily maintenance starts at:

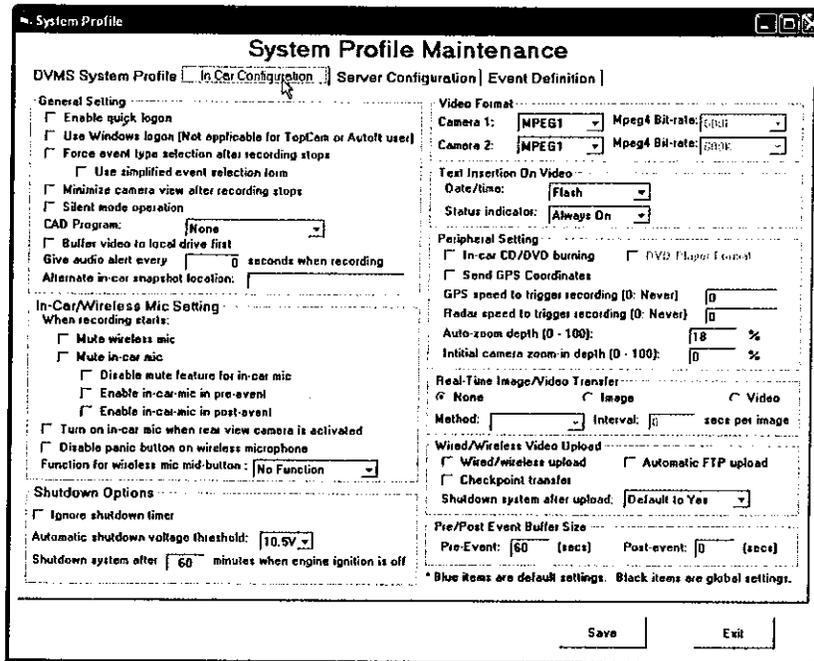
Maintenance:

System Profile Maintenance

DVMS System Profile:

This interface allows the administrator to set the video database cleanup policy threshold. Within the guidelines, administrator will also be able to determine how many days to keep videos after this limit, and when to delete the videos if the videos are not accessed in an "x" number of days.

- Department Identity – Identifies the agency name, agency ID, and their initial map location.
 - *Agency Name* – Shows the name of the police department.
 - *Agency ID* – Shows the agency identity tag.
 - *Initial Map Location* – Shows the longitude and latitude point location of the agency, via Map Point.
- HDD Format Policy – defines intervals where Mobile HDD needs to be maintained and formatted.
- Video / Database Cleanup Policy – settings to define % thresholds of storage before cleanup and a trigger to delete videos that have not been accessed for an extended period of time.
- Daily Cleanup Schedule – allows administrator to set time on when to move server hard drives and digital tapes (if applicable).
- Default Settings for Hard Drive Upload - policy defines if user needs to log on when uploading videos, checkout hard drive after uploading, delete files from mobile hard drive after upload, and checking integrity of video during video upload.
- Access Control - Administrator may set BO Client to use Windows login credentials and automatically login to BO Client. Administrator will need to logoff from their current Windows session so that others will not gain access to administrative rights in System Profile Maintenance.



Maintenance:

System Profile Maintenance

In-Car Configuration:

Changes made here are **Global Settings**, both back officer server and in-car units will be affected by configuration change. If there are any discrepancies in understanding, please contact Coban first before making any changes. Making changes in the Global Settings will have an impact your custom defined settings.

Blue font indicates **Default** setting
Black font indicates **Global** setting

General Setting:

- Enable Quick Logon – automatically logs in an officer after he/she logs in once, as long as the same hard drive is used in the same unit.
- Use Windows Logon – administrator may set BO Client to use Windows login credentials and automatically login to BO Client. The administrator will need to logoff from the current Windows session so that others will not gain access to administrative rights to their Windows account, and the System Profile Maintenance.
- Force Event Type Selection after Recording Stops – forces officer to categorize every video with an Event Type.
 - Use simplified event selection form – a simplified Event Type form for officer to categorize per video.
- Minimize Camera View after Recording Stop – camera display is minimized after recording stops so that officers will have the maximum view of the in-car interface.
- Silent Mode Operation – disables all the audible tones when officer presses on the touch screen monitor of the in-car unit.
- CAD Program – administrator may choose which CAD program to use: None, ZClient, or Total Computer. (VMDT only)
- Buffer Video to Local Drive First -- records video to the local drive, then transfers videos to the Mobile Hard Drive at the end of the shift. **DO NOT ENABLE THIS OPTION WITHOUT FIRST CONSULTING COBAN.**

- Give audio alert every "x" seconds when recording – plays an audible beep at defined intervals to indicate that the unit is recording. Setting this to "0" disables this function.
- Alternate In-Car Snapshot Location – specifies an alternate location to store snapshots. If left blank, the snapshots will be stored in the officer's folder, with the videos.

In-Car/Wireless Mic Settings Details:

- Mute Wireless Mic – mutes wireless mic when recording starts. Officer may still manually enable wireless mic by pressing on the record button.
- Mute In-Car Mic – disables the automatic activation of the In-car covert Microphone when recording is initiated. Many officers request this feature because ALL background noise is recorded in the video, including all the "beeps and crackles" from the walkie-talkie or radio. Muting in-car mic minimizes these noises.
 - Disable mute feature for in-car mic – choose to not mute in-car mic while recording.
 - Enable in-car mic in pre-event – feature enables in-car mic to record all audio during pre-event recording. This means that, if pre-event is set to 5 minutes, audio for the recorded video will also be recorded during the 5 minutes of pre-event.
 - Enable in-car mic in post-event – feature enables in-car mic to record all audio during post-event recording. This means that, if post-event is set to 5 minutes, audio for the recorded video will also be recorded 5 minutes after video stopped recording.
- Turn on In-Car Mic When Rear View Camera is Activated – allows for in-car mic to automatically record when the rear camera is activated so that any sound made by a detainee will also be captured.
- Disable panic button on wireless microphone – disables the Panic function on the Wireless Microphone. Leave it disabled if the panic mode is not configured.
- Function for wireless mic mid button – administrator can set the mid button as: no function, mute, stop recording, or marker.

Shutdown option:

Shutdown option depends largely on vehicle and in-car unit's battery capacity. For example, even if "10.5V" or "shutdown after 20 minutes" is chosen, if the battery allotment does not have that much power, unit will shutdown regardless of setting.

10.5V (drop down): The mobile unit will shut down if the voltage threshold is below 10.5V.

20 minutes (user enter): The mobile unit will shut down after the ignition is off after 20 minutes.

Video Format:

- Administrator may set the video format for Camera 1 and Camera 2. If Mpeg4 is selected, Mpeg4 bit-rate may be set as well.

Text Insertion On Video:

- Date/time – date and time may be set to: flash, static, or don't display on the in-car unit screen.
- Status indicator – status indicator may be set to be: always on, flash, or never display on the in-car unit screen.

Peripheral Setting:

Before administrator chooses to select "send GPS coordinates," important factors and peripherals such as wireless infrastructure and Coban sanctioned and compatible GPS unit must first be in place. The same applies for "in-car CD/DVD burning."

Please contact Coban before activating enable to avoid any confusion & downtime.

- If "In-Car CD/DVD Burning" is selected, administrator may select their DVD player format. If "In-Car CD/DVD Burning" is not selected, "DVD Player Format" will be grayed out. Once again, before administrator chooses "In-Car CD/DVD Burning," it is advised to first contact Coban for CD/DVD equipment compatibility and other peripherals.

Note: Connecting any unapproved device may void warranty on systems.

- Radar speed to trigger recording – administrator may set a speed which, if car exceeds, will trigger automatic recording. Must have interface with radar.
- Auto-zoom depth – Sets the maximum zoom level that the "Auto Zoom" function will use.
- Initial camera zoom-in depth – when officer starts recording, the camera will automatically zoom-in for a close shot of the suspect's vehicle. It is advised to select a zoom depth which does not catch every particle on cruiser's windshield, but also does not just record the suspect car's trunk.

Recommendation: The AutoZoom dept should be set to 50% and the Initial Camera zoom should be set to 0 to 10%.

Example: Autozoom is how close to the object you want to zoom in. Just like your camera. With 100%, the object will be as close as the optical zoom allow. The lower the %, the further the object and a larger areas of recording. For example, if a patrol man is sitting at his favorite stop monitoring the traffic and he had his camera AutoZoom at 50%. This setting will said zoom in close to any vehicle that pass by. If he pick out a vehicle and start the pursuit, once the light bar turn on and recording start, the camera will automatic set to the initial zoom setting which should be 0 to 10%. This will give him a larger area to record.

Real-Time Image / Video Transfer: Systems must be configured for streaming prior to enabling this feature.

- Options are given (None, Image, and Video) to transfer image and videos.
- Only Image transfer has 3 options: Always, When Recording, and Manual. Department should contact Coban first to verify transfer mechanism and infrastructure before selecting to avoid any downtime.

Pre/Post Event Buffer Size:

- Allows administrator to set pre / post event buffer size.

The screenshot shows the 'System Profile Maintenance' window with the 'Server Configuration' tab selected. The window is titled 'System Profile Maintenance' and has a sub-header 'DVMS System Profile | In Car Configuration | Server Configuration | Event Definition |'. The 'Video Server Configuration' section includes fields for 'Drive Letter for "Videos" Share' (set to 'C:'), 'Server configured as' (radio buttons for 'Network' and 'Stand Alone'), 'Computer Name/IP' (set to 'DUGANDEHYE01M'), 'Share Name' (set to 'Videos'), 'Video location' (set to 'C:\Videos\'), 'Storage system' (set to 'TSM Tape System'), and 'Copy videos to main server' (checked). The 'Secondary RAID' section has 'Secondary RAID' (unchecked) and 'Send email when secondary RAID is full' (checked). The 'FTP Settings' section has 'For wired/wireless uploading' (Server IP, Login ID, Password) and 'For Video streaming/Live image/GPS' (Server IP, Login ID, Password). The 'Video Server IP' section has a field for 'Video Server IP' (set to 'COBANSERVER18') and an 'Update' button. At the bottom are 'Save' and 'Exit' buttons.

Maintenance Cont':

System Profile Maintenance

Server Configuration

- Video Server Configuration
- Secondary RAID
- FTP Settings
- Video Server IP (update)

Administrator may add additional video drives and set policy where videos will be stored, either on the Primary or Secondary RAID.

Video Server Configuration:

- Drive Letter for "Videos" Share – denotes drive letter for shared video files.
- Server Configured as – allows administrator to configure server in a network environment or as stand alone server.
- Computer name or IP – administrator can set IP address for the video server.
Note: Do not change IP address or computer name without consulting Coban.
- Video Location – assigned location for videos.
- Storage Option – denotes how videos are to be stored. Choices: single drive, DVD, TSM Tape System, or Tape + DVD. Choice depends on the storage device utilized.
- Copy videos to main server – administrator has the option to copy all videos to the main server.
- Auto DVD burning – administrator can set policy for when to burn videos onto DVD. Storage system selection of "DVD" or "Tape + DVD" must be selected to enable "Auto DVD burning" choice. Administrator can also specify DVD size.

NOTE: Most DVDs are 4.7GB in size, but that does not necessarily mean that you can burn a video that's 4.7GB. Burn size mainly depends on DVD quality. It is recommended to set DVD size between 3.5 – 3.8GB.

Secondary RAID:

- Secondary RAID – allows administrator to store videos onto a secondary RAID (provided that department has a secondary RAID). Administrator also has the choice to be notified by email when the secondary RAID achieves a certain level of capacity.

FTP Settings: for wireless upload only.

- FTP Settings – settings to configure the FTP's IP, username, and password.

Video Server IP:

- Video Server IP – administrator can change or update location of video server's IP address. Press ***update*** to update the video server IP location.

System Profile Maintenance

DVMS System Profile | In Car Configuration | Server Configuration | **Event Definition**

DVMS starts Primary RAID cleanup when disk usage is more than 80 %; cleanup stops when disk usage is lowered to 70 %.
When disk usage is between 70% and 80%, delete videos that have not been accessed in 150 days.

DVMS WILL ONLY DELETE VIDEOS FROM PRIMARY-RAID/SECONDARY-RAID/TAPE THAT ARE UN-RETAINED.

DVMS keeps records in database for 2000 days.

DVMS WILL ONLY DELETE RECORDS WHEN ASSOCIATED VIDEOS ARE DELETED FROM THE PRIMARY-RAID, SECONDARY-RAID, AND TAPE.

Event Definition and Storage Policy:

Event	Description	Auto Retain	Retaining Days*	Days on Primary RAID*	Tape	Days*	Inactive
D	Delete		0		X	365	
AA	Agency Assistance		0		X	365	X
AC	Accident		0		X	365	X
Auto...	Fire	X	365	366			
CA	Criminal Apprehension	X	3	4	X	10	X
DW1	DWI	X	60	366			X
aug1	aug1	X	365	366			
aug2	aug2	X	Indefinite	Indefinite	X	Indefinite	
aug3	aug3	X	365	366			
aug4	aug4	X	365	366			
GA	General Assistance		2		X	5	X
High...	Highway Collapse	X	365	366			
OTH	Other		0				X

*Retaining Days, Days on RAID/Tape are all based on the dates when videos were uploaded

Add Change Deactivate

Auto Retain marks this type of event for automatic retention when videos are uploaded to the server.
Days on Primary RAID is the MAXIMUM days you want to keep video on Primary RAID.
Inactive event will not be available in the event list for the officer to use on the in-car recording units.

Save Exit

Maintenance Cont':

System Profile Maintenance

Event Definition: These events will appeared on in car unit event type screen.

This interface summarizes the administrative policies set in previous System Profile Maintenance configurations tabs. Policy Summary will reflect the changes made. Administrator will need to *exit* System Profile Maintenance for changes to take effect.

System Profile Maintenance

DVMS System Profile | In Car Configuration | Server Configuration | **Event Definition**

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AA	Agency Assistance		0		X	365	X
AC	Accident		0		X	365	X
Auto...	Fire	X	365	366			
CA	Criminal Apprehension	X	3	4	X	10	X
DW1	DWI	X	60	366			X
aug1	aug1	X	365	366			
aug2	aug2	X	Indefinite	Indefinite	X	Indefinite	
aug3	aug3	X	365	366			
aug4	aug4	X	365	366			
GA	General Assistance		2		X	5	X
High...	Highway Collapse	X	365	366			
OTH	Other		0				X

*Retaining Days, Days on RAID/Tape are all based on the dates when videos were uploaded

Add Change Deactivate

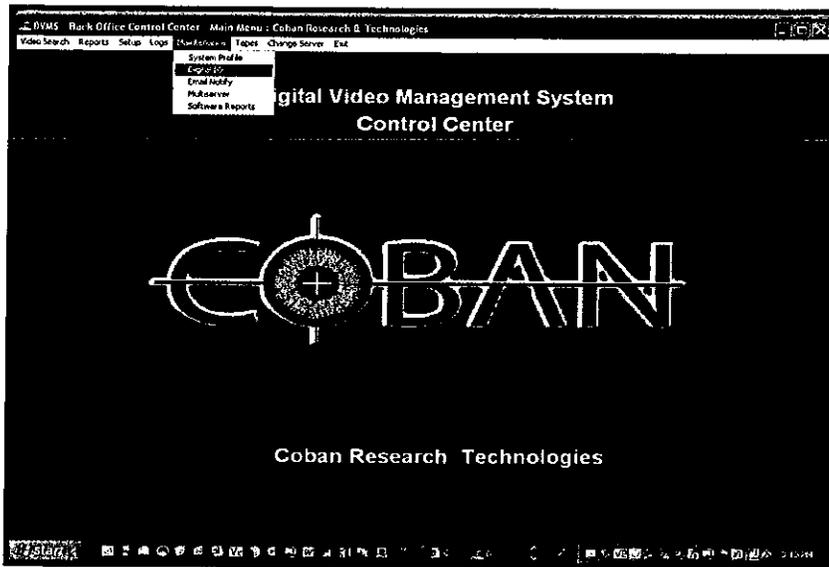
Auto Retain marks this type of event for automatic retention when videos are uploaded to the server.
Days on Primary RAID is the MAXIMUM days you want to keep video on Primary RAID.
Inactive event will not be available in the event list for the officer to use on the in-car recording units.

Save Exit

Event Definition defines video types; Storage Policy defines how long to store the videos. In this example, videos pertaining to DWI cases will be *auto retained* and be stored *indefinitely*.

The administrator will notice that you can't delete an Event Type. To disable an event, administrator simple highlights the event, and click on *Deactivate*. An "X" will show under "Inactive." To reactivate an Event Definition, simply click on the Event Definition, and choose *Activate*. The "X" will disappear upon activation.

NOTE: The note here indicates that video storage on the RAID / Tape *starts* when the video is uploaded onto the RAID / Tape, and not when the video was first uploaded onto the department's server. For example, an officer uploaded a video onto their server on July 20, and later uploaded onto their RAID (per Storage Policy) on August 15. So, "Days on 1st RAID" counts off from August 15, and not July 20.



Maintenance Cont':

Edit Digital IO:

ID	Short Description	Long Description	Action Type	Record	Auto Zoom	Delay Second
1	LBR	Light Bar	ON/OFF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0
2				<input type="checkbox"/>	<input type="checkbox"/>	0
3				<input type="checkbox"/>	<input type="checkbox"/>	0
4	Ign	Ignition	ON/OFF	<input type="checkbox"/>	<input type="checkbox"/>	0
5				<input type="checkbox"/>	<input type="checkbox"/>	0
6	Siren	Siren	ON/OFF	<input type="checkbox"/>	<input type="checkbox"/>	0
7				<input type="checkbox"/>	<input type="checkbox"/>	0
8				<input type="checkbox"/>	<input type="checkbox"/>	0

Short Description: Action: Record: Auto Zoom:

Long Description: Delay Seconds:

Digital IO

Administrator will be able to set digital IO options. These options affect on-screen displays on the in-car unit. These settings can be pre-defined, and set to be on or off. Administrator may also set for in-car unit to record when these settings are triggered, such as recording starts when lightbar is on. Delay (in seconds) may also be predefined so that recording starts in x seconds after digital IO is activated.

Email Notify

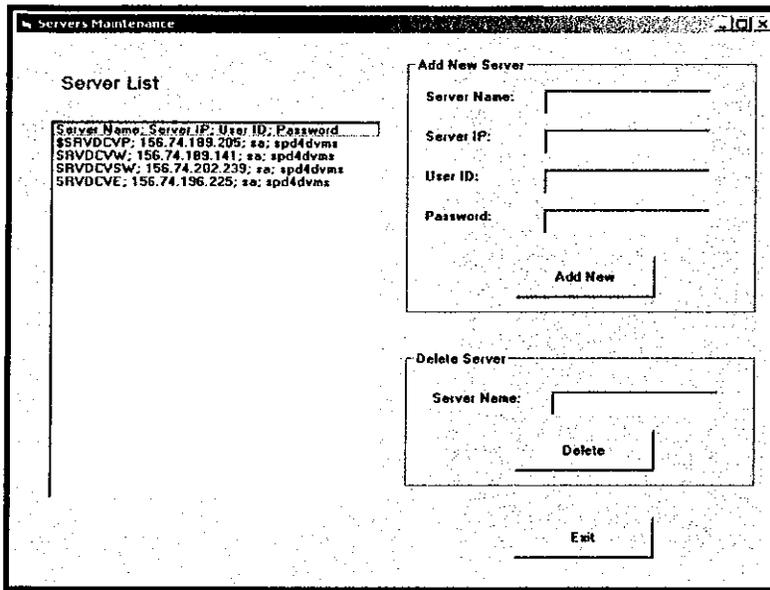
Mail Server:

Send From:

Address	On Emergency	On Information	Secondary Storage
<input type="text" value="ljang@cobantech.com"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Email Notify:

Allows administrator to set BO Client to send an email to designated personnel. Applicable only to Server on the Network.



Maintenance Cont':

Multiserver:

Allows administrator to designate multiple servers to choose from.

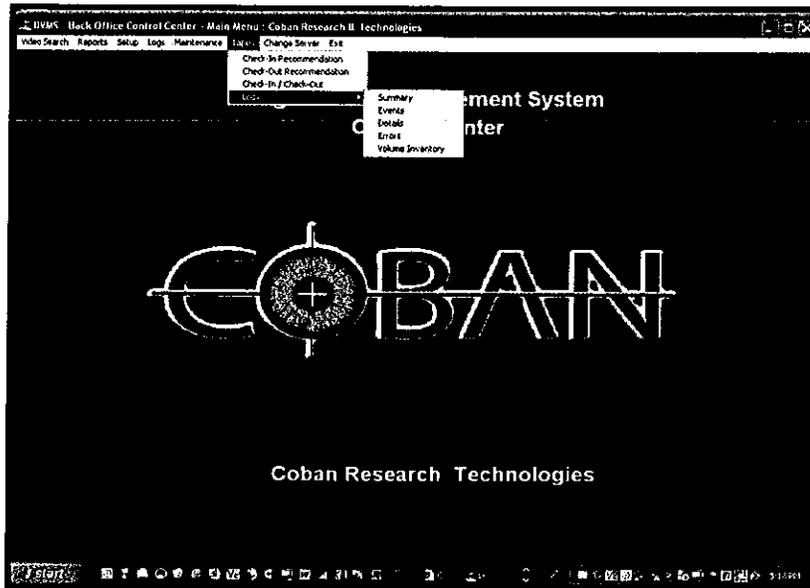
The administrator is able to set up multiple servers. If there are multiple servers set up here, when clicking on **Change Servers** in BO Client, you will see the choices.

This is typically used for multi-precinct cities with large departments



Software Reports:

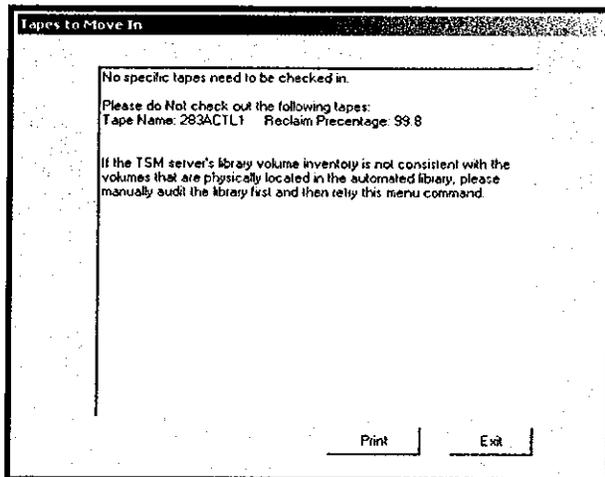
Software Reports summarizes for the administrator all the settings in BO Client.



Tapes

If tape library system is used:

- Check-in Recommendation
- Check-out Recommendation
- Check-in/out Logs
 - Summary
 - Events
 - Details
 - Volume Inventory

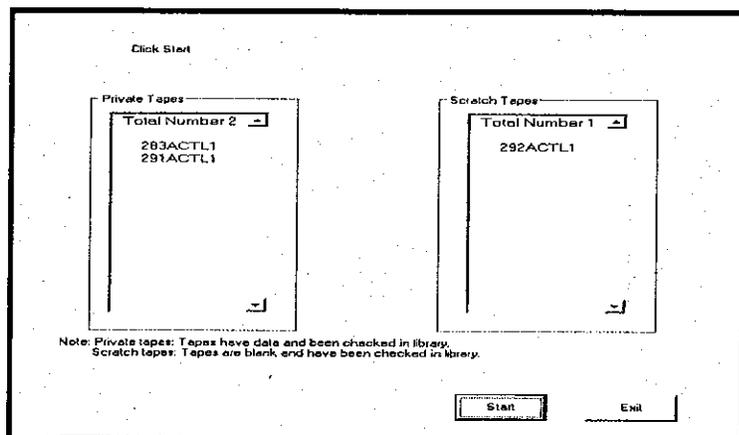


Check-in Recommendation

DVMS will generate a list of tapes that are recommended for Check-In.

Check-out Recommendation

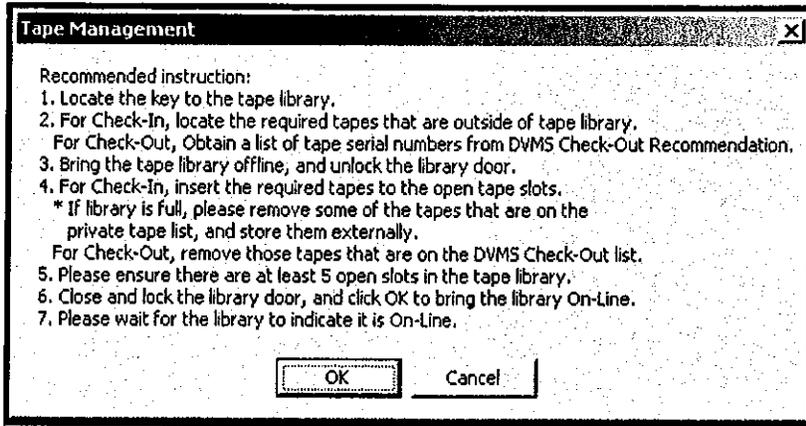
A list of fully used tapes will be shown in the textbox. These tapes may be removed and stored externally. Their slots will become available for new or unused tape



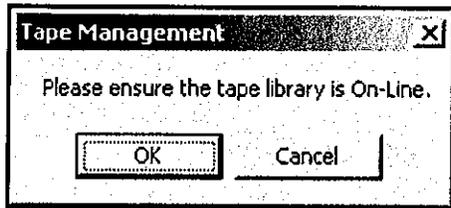
Check In/Check Out

To check in or check out tapes from the tape library, please select this option.

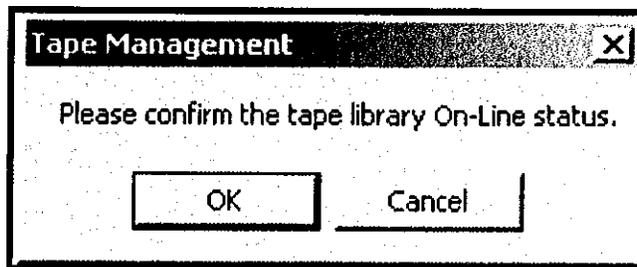
This screen will inform the user which tapes are currently being used (private tape) and what tapes are available for use (scratch tape). Press **Start** to begin the check-in or check-out process.



Follow the instructions of the help file, and the application will lead you through the check in-out process. When the instructions have been completed select **OK** to proceed.



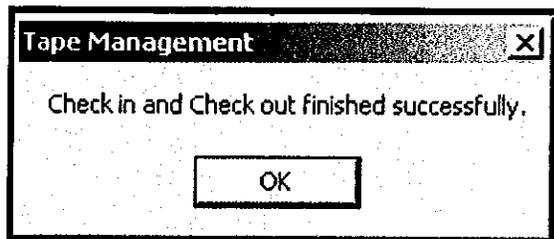
This window confirms with the Administrator to make sure the tape library is ON-Line before proceeding any further.



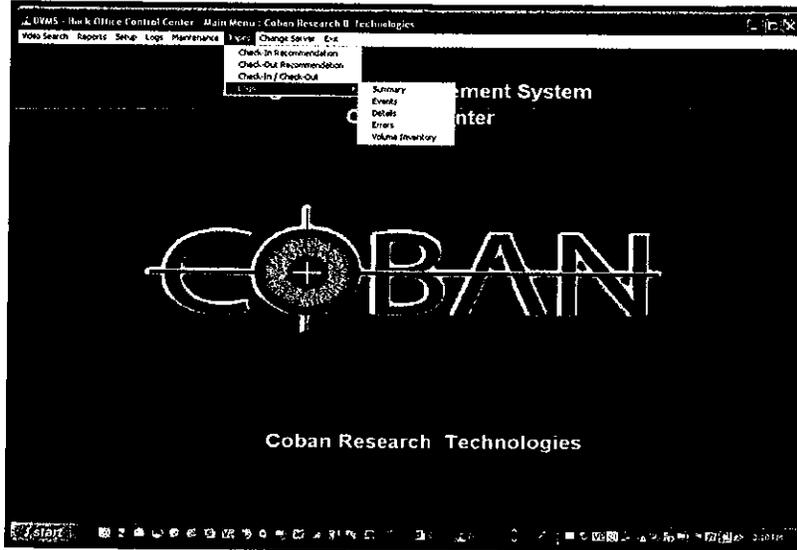
Tape Cont':

Check In-Out Cont':

Another window will confirm tape library status once again with user.



This window will notify the user Check-In/Out is completed.

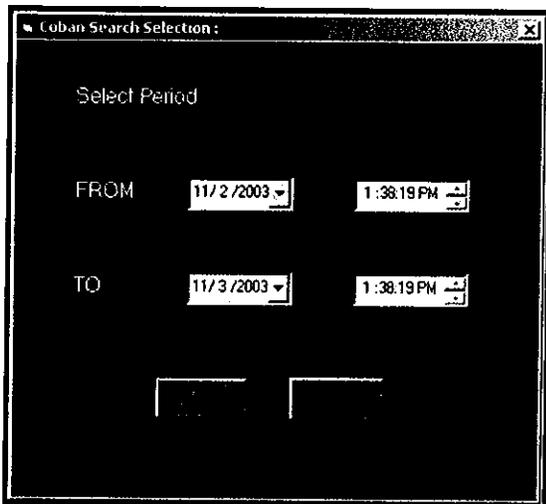


Tape Cont'

Logs

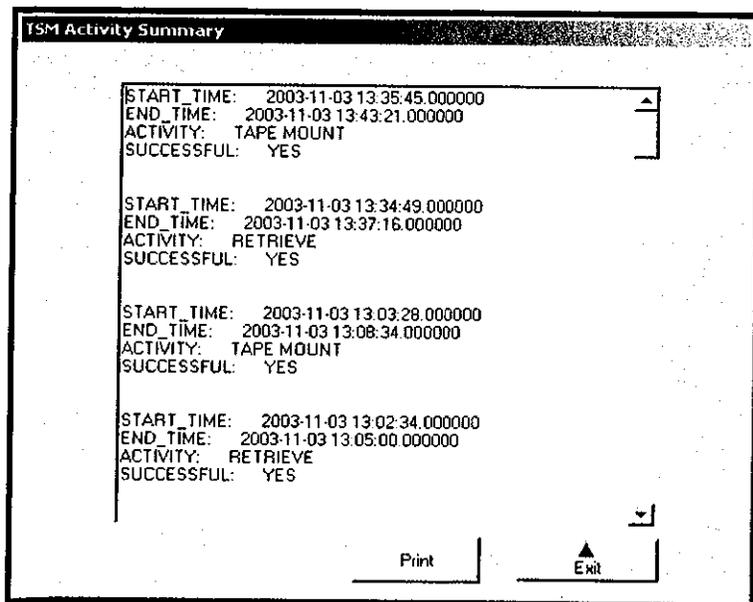
Information is provided to help the Administrator track the logs and status of tape system.

- Summary
- Events
- Details
- Errors
- Volume Inventory

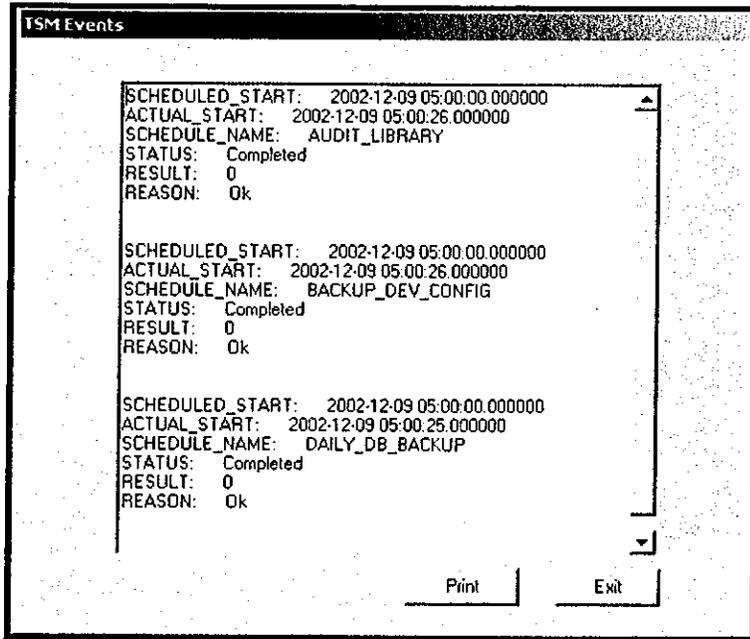


Log-Summary

A pop-up window lets the user select a time period for logs he or she may be interested in.



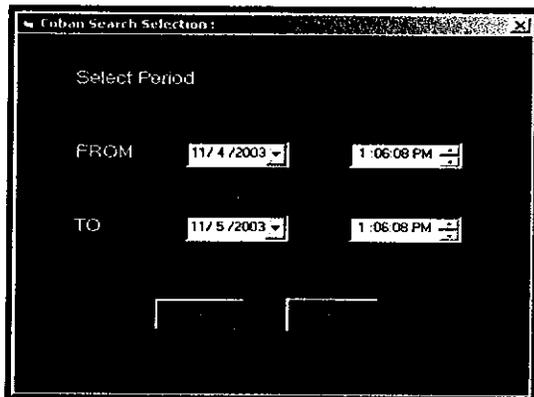
A summary of the recent operations executed by the tape system will be generated. The information may also be printed out when user clicks the **Print** button.



Tape Cont':

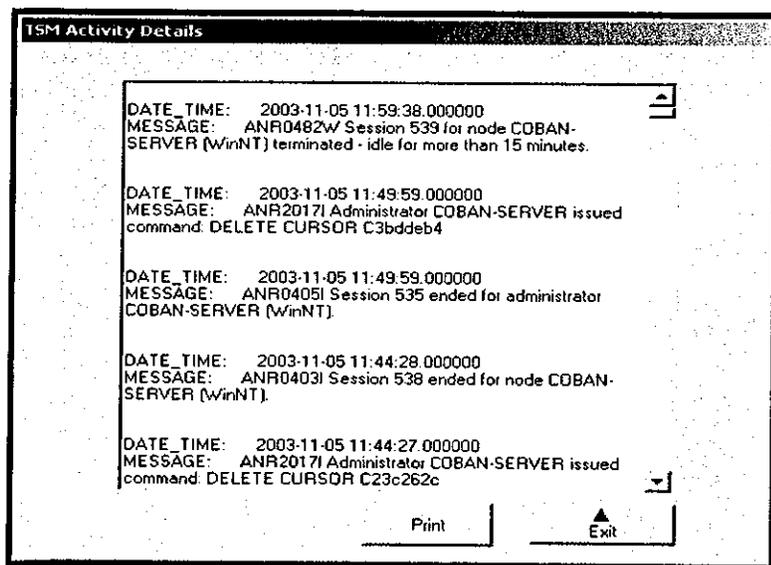
Logs-Events

Information and detail on the scheduled events that have occurred recently. Information may also be printed out when user clicks the **Print** button.

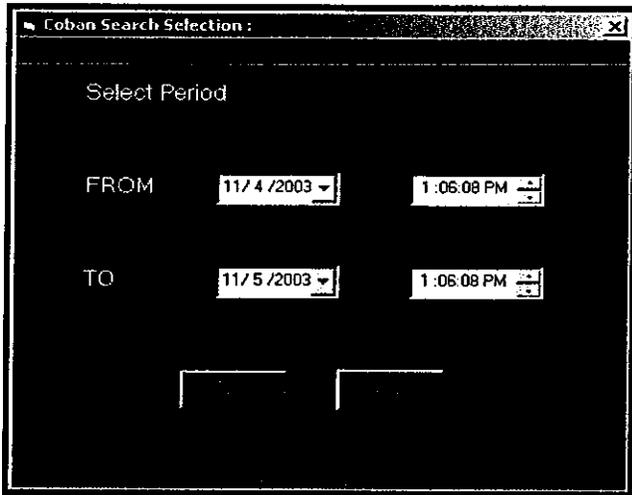


Logs-Details

A pop-up window lets the user select a time period for logs he or she may be interested in.



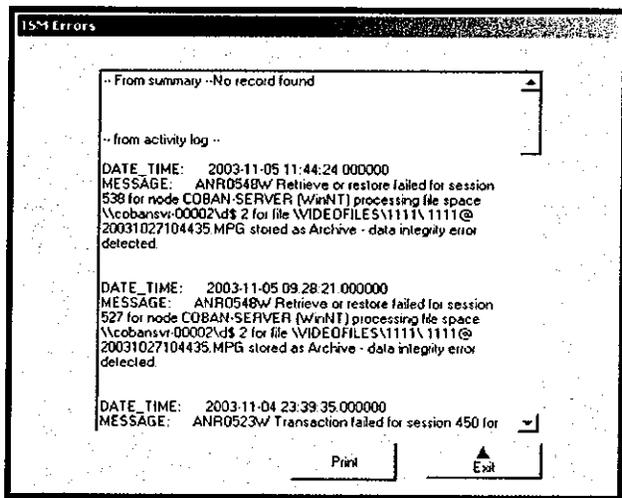
Detailed information on the operations executed by the tape system will appear on screen. The information may be printed when user clicks the **Print** button.



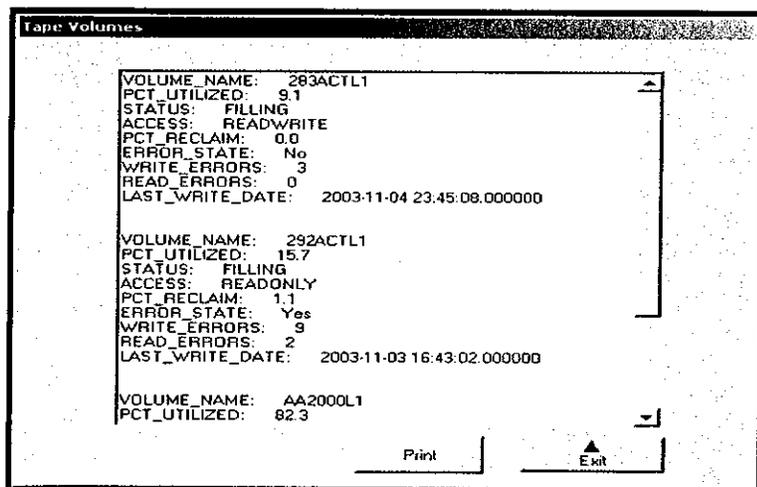
Tape Cont':

Logs-Errors:

A pop-up window lets user select a time period for logs he or she may be interested in.



Error related information from selected period is shown here. The information may also be printed out when user clicks the Print button.



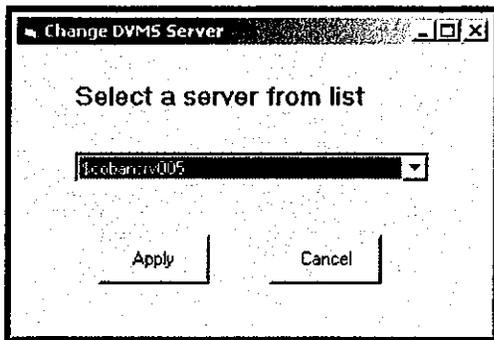
Log-Volume Inventory

Detailed information related with each tape volume is provided here.

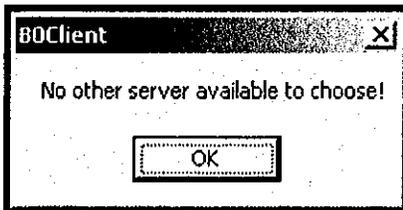


Change Server.

This option will allow user to switch to another DVMS server.
(Typically for large department with multi-precincts.)



If additional servers are available, administrator may select from the drop down list.

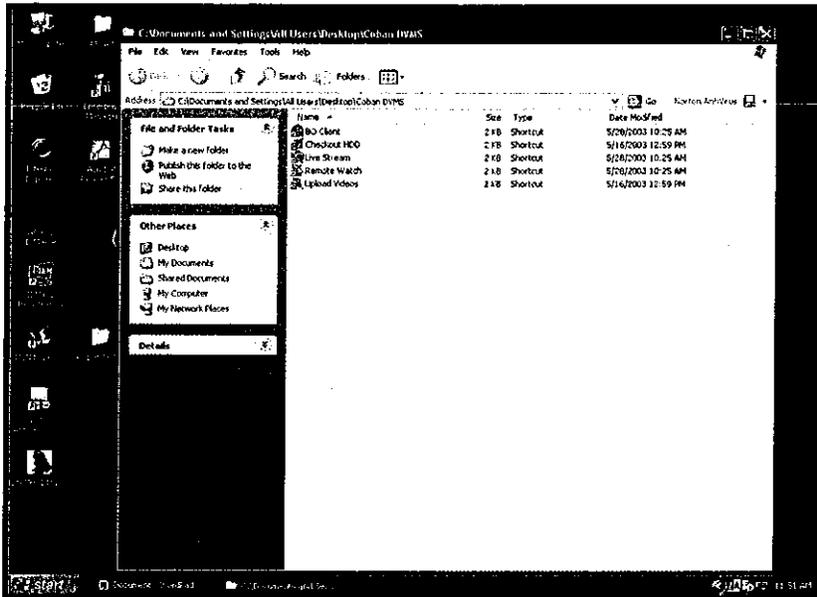


If there are no additional servers available, DVMS will inform the user by displaying the following window.



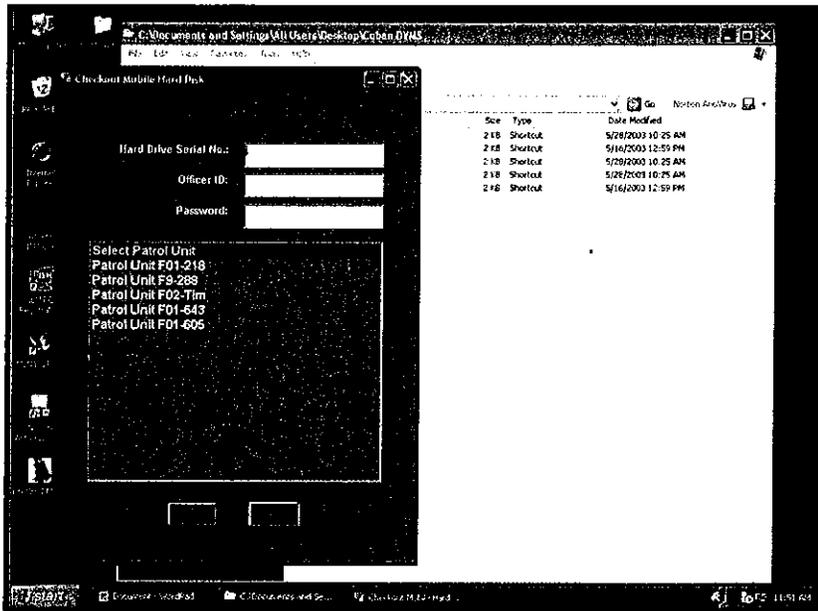
Exit.

This option will lead user out of the BO Client.



Checkout HDD:

Before the officer uses the MHDD-Mobile Hard Drive Disk, DVMS will need to record information such as MHDD check-out day and time, officer ID, and patrol unit number, etc. This is to ensure video and data collected will have a clear chain of evidence.



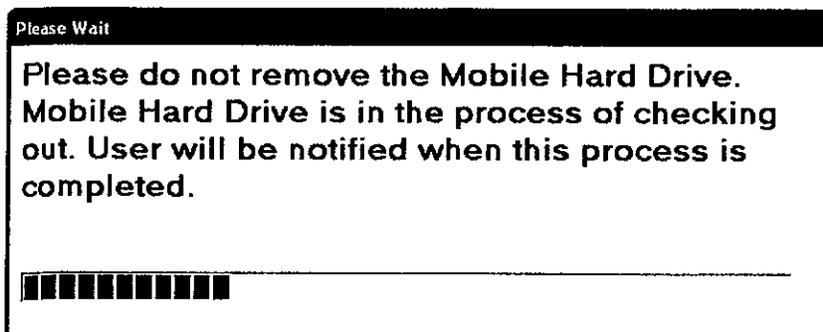
Checkout HDD Screen:

To check out:

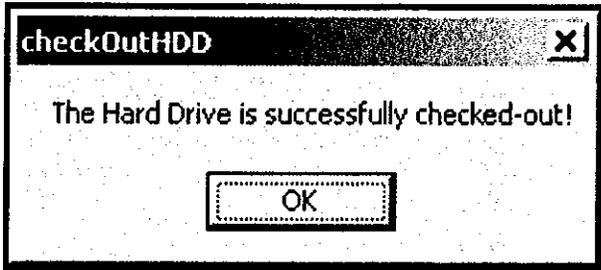
- Select MHDD and place it in the Up-load cradle.
- Enter the selected MHDD's serial number.
- Enter Officer's ID or Badge Number.
- Enter officer's password
- Select the patrol unit that will be used.
- Press **OK**



DVMS will warn user if there are videos in the MHDD that has not been uploaded. User will need to Upload the video prior to check out.

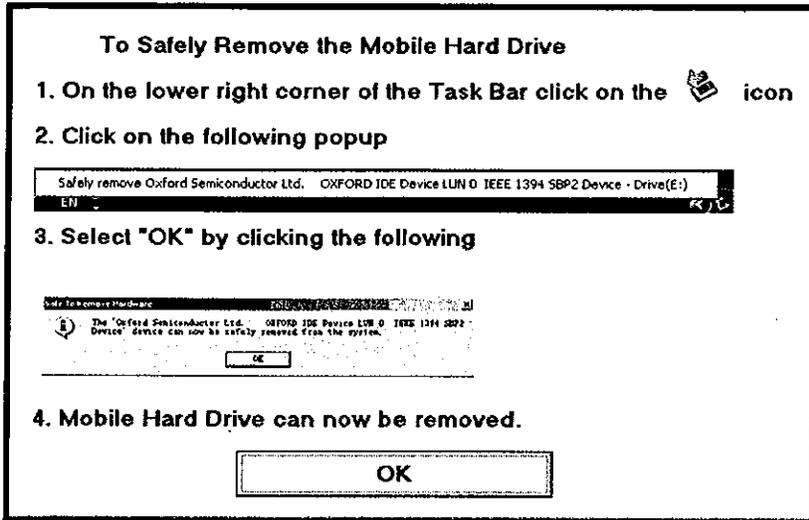


This message box will warn user that DVMS is still accessing the MHDD.
PLEASE DO NOT REMOVE THE MHDD AT THIS STAGE.



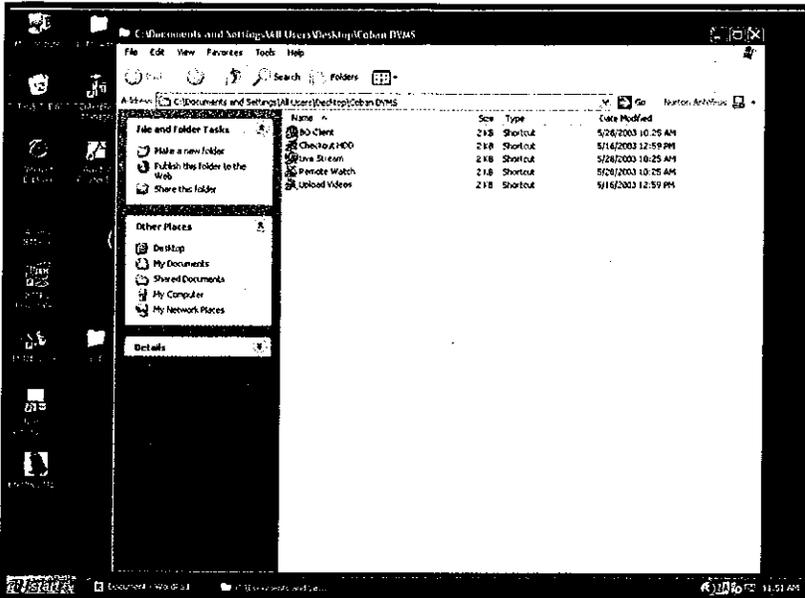
Checkout HDD Cont':

This message box will inform officer that DVMS has performed all the necessary tasks. **PLEASE DO NOT REMOVE THE MHDD AT THIS STAGE.**



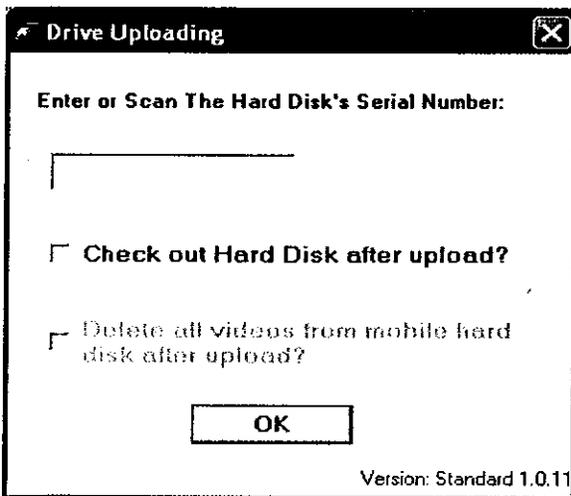
Please follow the DVMS direction to properly disengage the MHDD.

User must select OK to close this screen and remove MHDD from cradle.



Upload Videos:

To access video upload, double click the **Upload Videos** icon.

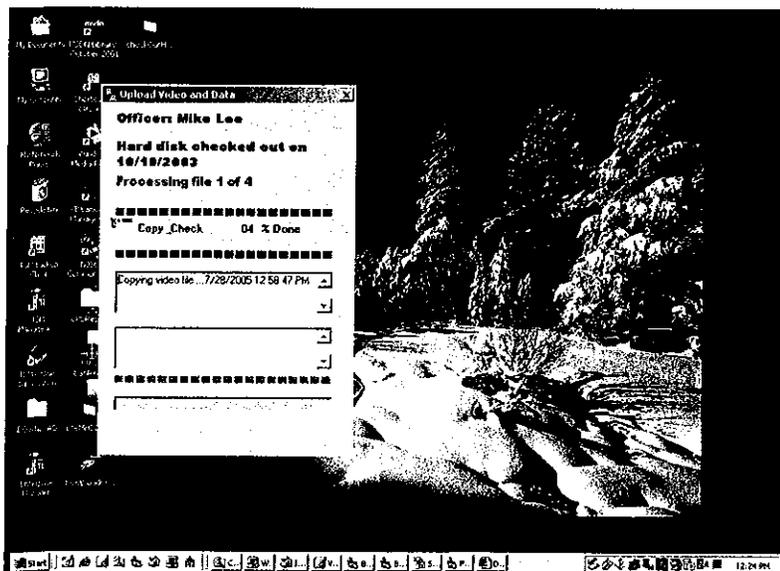


Upload Video Screen

To Upload:

1. Place the MHDD in the upload cradle
2. Enter or Scan the Serial Number of the MHDD
3. By checking **Check out Hard Disk** after upload, DVMS will run the checkout application automatically after uploading.

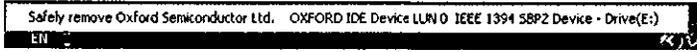
Note: If select Check out Hard disk's after upload? Videos will not be recovered.



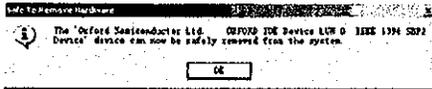
This message box will inform the user DVMS is still accessing the MHDD, please do not remove MHDD from the cradle.

To Safely Remove the Mobile Hard Drive

1. On the lower right corner of the Task Bar click on the  icon
2. Click on the following popup



3. Select "OK" by clicking the following



4. Mobile Hard Drive can now be removed.



Upload Videos Cont':

Please follow the DVMS direction to properly disengage the MHDD.

User must select OK to close this screen and remove MHDD from cradle.

Appendix A: Mobile Unit Configuration

Mobile Unit ID: Unit S/N

Patrol ID: Vehicle Unit ID

IP Address: IP address or name of the mobile unit

Patrol Description: Vehicle Description

Unit Model: Select the type of mobile recorder digital system.

- TOPCAM G2
- VMDT G2
- TOPCAM G1
- PV G1
- VMDT – A
- VMDT – B
- Interrogation Unit

Dual Wireless Mic: Applicable only to the vehicle carries dual Wireless Mic. (For Gen II systems)

MDT Control: Integration with Labtop solution.

Disable Live Video When Recording: If selected, audio will be disabled during recording session.

Camera 1 and Camera 2 Format: video format

- MPEG1: 600MB/Hr
- MPEG2: 1.2GB/Hr
- MPEG4: 300-400MB/Hr

Important Notes:

If recording as MPEG 2, user must have the Moonlight codec installed.

If recording as MPEG1, user must have Window Media Encoder 9 or above installed.

If recording as MPEG4, user must install DivX player.

Camera Type: Select the in camera type.

- single IX47: front camera only
- single IX11: front camera only
- dual, both IX11(Sync): mobile unit have 2 physical cameras. One camera is facing the front and the other is facing the back of the vehicle.
- dual, one IX11 (Sync): mobile unit have 1 physical camera capable of recording front and rear.
- dual, both IX11 (Async): mobile unit have 2 physical cameras. One camera is facing the front and the other is facing the back of the vehicle.
- dual, one IX11 (Async): mobile unit have 1 physical camera capable of recording both front and rear.

Notes:

Sync mode (two cameras are controlled by one set of control buttons).

Async mode (two cameras are controlled separately with its own set of control buttons).

- a. If two cameras are installed, there will be two camera view windows. One big window occupies the main area of the screen showing one camera's input, one small window is at the lower part showing the other camera. If the cameras are set to ASync mode, the camera that is displayed in the big window is the one that responds to the control buttons (start and stop). If cameras are set to Sync mode, there is only one set of controls. To switch the viewing windows, click on the small viewing window, the system switches the camera display windows for both cameras. If the cameras are set to ASync mode and one is in recording mode the other one is not in recording mode, when viewing windows switch, the control button will change to reflect the available recording function (start or stop) to the camera that occupies the main viewing window.
- b. If two cameras are configured to Async mode, the in-car unit can be configured as **Suspect-transport-vehicle**. If set to Suspect-transport-vehicle, when wireless microphone is used to activate recording, both front and rear cameras are activated. This feature ensures that the rear-facing camera can be activated remotely using wireless microphone before transferred persons enter the vehicle.
- c. If two cameras are configured to Async mode, the in-car unit can be set to automatically stop both cameras or ask the officer each time if he/she wants to stop both cameras when stop button is pressed. If this option is set to ask officer every time, when both cameras are recording and stop button is pressed, the system will ask the officer if both cameras should be stopped. If the officer does not make a selection in 10 seconds, the system will only stop the camera that shows in the big camera view window.
- d. If two cameras are configured to Async mode, the in-car unit can be set to stop the front facing camera automatically when the rear facing camera is activated, or ask the officer every time. If this option is set to ask officer every time, when the rear facing camera is started and the front facing camera is recording, the system will ask the officer if the front facing camera should be stopped. If the officer does not make a selection in 10 seconds, the system will not stop the front facing camera.

When recording starts: Mute in-car mic and Mute wireless mic by default are not selected.

This mean during videos recording session, the in-car mic and wireless mic are enabled.

Video Upload:

- wired/wireless upload: for cradle (wired) and wireless video upload.
- checkpoint transfer:
- Auto Detect FTP Server: Mobile unit will automatically detect FTP Server is selected.

Connected Periphery: Select the peripheral(s) that will trigger video recording.

- Light Bar
- Ignition
- Siren

**If you need further assistance please contact
Coban Support Team at
Toll Free Number: 1-866-81-COBAN (1-866-812-6226)**



CONFIDENTIAL

Safety Information,
Limited Warranty Statement &
Software License Agreement

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Stafford, TX 77477
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Fax: 1-281-277-8256
Toll Free: 1-866-81-COBAN (866-812-6226)

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If purchaser does not agree with these terms and conditions, they should promptly contact Coban Research and Technologies, Inc. for instruction on return of the entire Coban Digital In Car Video System, including Coban Software for a refund. A 15% restocking charge will be applied.

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Coban Digital In Car Video System

The warranty applies within the fifty (50) United States and all States or Territory of Australia.

This Limited Warranty is non-transferable

This Limited Warranty is null and void if the factory applied serial number or tamper evident labels have been damaged, altered or removed from the product.

If the affected product is being purchased pursuant to a written Agreement signed by Coban, the warranty contained in that written Agreement will apply. Otherwise, the following warranty applies.

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

Coban Research and Technologies, Inc. ("COBAN") warrants the Coban Manufactured VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System ("PRODUCT"), against defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment.

COBAN, at their discretion, will at no charge repair the PRODUCT (with new or reconditioned parts), replace it with the same or equivalent PRODUCT (using new or reconditioned Products), during the warranty period, provided that the purchaser notifies COBAN according to the terms of this warranty. The repaired or replaced PRODUCT is warranted for the remaining original applicable warranty period. All replaced parts of the PRODUCT shall become the property of Coban.

This expressed limited warranty is extended by COBAN to the original end-user purchasing the PRODUCT for purposes of commercial, or industrial, or governmental use only, and is not assignable or transferable to any other party. This is the complete warranty for the PRODUCT manufactured by COBAN. COBAN assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of COBAN. Unless made in a separate written agreement between COBAN and the original end-user purchaser, COBAN does not warrant the installation, maintenance, or service of the PRODUCT.

COBAN cannot be responsible in any way for any ancillary equipment not furnished by COBAN, which is attached to or used in connection with the PRODUCT, or for operation of the PRODUCT with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system, which may use the PRODUCT, is unique, COBAN disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS:

This warranty sets forth the extent of COBAN'S responsibilities regarding the PRODUCT. Repair, replacement, or refund of the purchase price, at COBAN'S option, is an exclusive remedy.

THE WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. COBAN DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF

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III. HOW TO GET WARRANTY SERVICE:

Purchaser must notify a Coban Authorized Service Center or Coban's Customer Service Department at 281-277-8288 within the applicable warranty period for information regarding warranty service. If COBAN determines that all or part of the PRODUCT require return for repair or replacement, a Return Merchandise Authorization Number (RMA#) will be issued. Please follow Coban's instructions (specified in existing contract or Statement of Work agreed upon between Coban and the Purchaser) and return the PRODUCT freight paid to Coban or its Authorized Service Center with the RMA number.

Proof of purchase in the form of a bill of sale (which is evidence that the product is within the warranty period) must be presented to obtain warranty service. In addition, if replacements are required and you wish to receive the most expedient service available, you will be required to provide COBAN with a credit card authorization to bill your credit card in the event that you fail to return the original parts. The credit card will only be charged for COBAN'S list price for the part if the part has not been returned within thirty days.

FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS MAY RESULT IN DELAYS, AND MAY CAUSE THE PURCHASER TO INCUR ADDITIONAL CHARGES, OR MAY VOID YOUR WARRANTY.

It is the Purchaser's responsibility to backup the contents of your hard drive, including any data that may be have stored or software that may have been installed on the hard drive. It is possible that the contents of the hard drive will be lost or that the drive may need to be reformatted in the course of service and COBAN will not be held liable for any damage to or loss of any program, data or other information stored on any media or any part of any PRODUCT service hereunder. It is HIGHLY recommended that the Purchaser create a valid disk "image" after final installation is completed. This image will need to be updated as changes are made to the units and kept safe by the PURCHASER for data recovery purposes. Coban assumes no liability or responsibility in developing a disaster recovery policy for the Purchaser. Any and ALL data reconstruction will be performed by the PURCHASER, unless specifically stated in the initial contract between Coban and the Purchaser. Coban shall not be liable for delays or failure to perform with respect to this agreement due to (i) causes beyond the party's reasonable control and not avoidable by diligence, (ii) acts of God, epidemics, war, riots, or delays in transportation which are beyond the party's reasonable control and not avoidable by diligence, or (iii) inability for causes beyond its control and not avoidable by diligence to obtain necessary labor, materials, or manufacturing facilities, or delays caused by subcontractors due to similar causes. In the event of any such delay (each such event being beyond the party's reasonable control and not avoidable by diligence), the date of performance shall be extended for a period equal to the time lost by reason of the delay.

IF DURING THE REPAIR OF THE PRODUCT THE CONTENTS OF THE HARD DRIVE ARE ALTERED, DELETED, OR IN ANY WAY MODIFIED, COBAN IS NOT

RESPONSIBLE WHATSOEVER TO RECOVER OR RESTORE SAID CONTENTS. YOUR PRODUCT WILL BE RETURNED TO YOU CONFIGURED AS ORIGINALLY PURCHASED (SUBJECT TO AVAILABILITY OF SOFTWARE)

Be sure to remove all third party hardware, software, features, parts, options, alterations, and attachments not warranted by COBAN prior to sending the PRODUCT to COBAN for service. COBAN is not liable for any loss or damage to these items.

IV. WHAT THIS WARRANTY DOES NOT COVER:

- Defects or damage resulting from use of the PRODUCT in other than its normal and customary manner.
- Defects or damage from misuse, accident, water, or neglect.
- Defects or damage from improper testing, operation, maintenance, installation alteration, modification, or adjustment.
- Damage due to tampering with internal components
- Breakage or damage to antennas unless caused directly by defects in material workmanship.
- A PRODUCT subjected to unauthorized PRODUCT modifications, disassemblies, or repairs (including, without limitation, the addition to the PRODUCT of non-Coban supplied equipment) that adversely affects performance of the PRODUCT.
- PRODUCT that has had the serial number removed or made illegible.
- Batteries
- Freight costs to the repair depot.
- A PRODUCT, which, due to illegal or unauthorized alteration of the software / firmware in the PRODUCT, does not function in accordance with COBAN, published specifications or with the FCC type acceptance labeling in effect for the PRODUCT at the time the PRODUCT was initially distributed from COBAN.
- Scratches or other cosmetic damages to PRODUCT surfaces that do not affect the operation of the PRODUCT.
- Normal and customary wear and tear
- Damage due to connection to improper voltage supply
- Non-COBAN manufactured equipment

IV. GOVERNING LAW

In the case that this PRODUCT is sold in the United States, the laws of the State of Texas govern this warranty.

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- **Storage/Network Use.** Purchaser may install the DVMS client software on their existing internal local area network. The Purchaser may not make unauthorized copies of the Coban Mobile Start software without the express written consent of COBAN. Coban assumes no liability for software installation failures due to incompatible hardware, software or network security issues that are controlled by

the Purchaser's Information Technology Department. Coban will not be responsible to install said software on the Purchaser's local area network, unless specifically contracted to do so. Instructions shall be provided to the Purchaser to accomplish this task.

- **Back-up Copy.** A back-up copy of the COBAN SOFTWARE is included with the PRODUCT. You may use the back-up copy solely for archival purpose.

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Safety Information

! WARNING !

Failure to properly set up, operate, and care for the Coban Systems can increase the risk of electric shock or fire. Failure to properly install and secure the Coban Digital In Car Video System can also increase the risk of the system falling and possibly resulting in bodily harm. To reduce the risk of serious injury, death, or damage to the Coban System:

- Read these instructions
- Keep these instructions
- Heed all warnings
- Follow all instructions.

Use While Driving

Check the laws and regulations on the use of Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System in the area where you drive. Always give full attention to driving and to the road. * It is suggested that the overhead monitor on the Topcam@ unit be in the "stowed" position while driving.

General Electrical Precautions

As with many other electrical devices, failure to take the following precautions can result in serious injury or death from electric shock or fire, or damage to the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I / G-II System.

Stay Away from Dangerous Voltage Inside the Coban Digital In Car Video System.

Contact with energized parts inside the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System can cause serious injury or death from electric shock. This can also lead to fire and/or damage to the Coban System.

Do Not Take the Coban Digital In Car Video System Apart

Do not attempt to service, repair or tamper with the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System yourself. Refer all servicing to Coban Customer Service Department or Coban Authorized Service Personnel. Do not attempt to modify the Coban System in any way.

Do Not Insert Anything Into or obstruct Ventilation Openings

Voltage is present within the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II Systems when the System is connected to power whether it is turned on or off. To eliminate all voltage to the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System, first turn off the Coban Digital In Car System, and then disconnect the power cable from the System. (This should be done either by an Authorized Service Technician or under the guidance of an Authorized Service Technician.)

- Take precautions from dropping, inserting or spilling anything into the Coban System
- Do not insert objects into ventilation openings when cleaning the Coban System (such as q-tips, rags, cotton swabs or other materials.)

- Do not use abrasive or flammable cleansers on the Coban System.
- Only clean the unit in the "system off" mode.
- Follow the cleaning instructions provided in the system manual.

Take Precautions To Keep The Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System From Falling.

To reduce the risk of the Coban System from falling or injuring the user or damaging the unit, please properly set up and operate the system according to the Vehicle Installation Manual.

Avoid Damaging Any Electrical Cable

- Protect the cables from being stepped on or pinched, particularly at plugs, and the point where they exit from the apparatus.
- Do not jerk, knot, sharply bend, or otherwise abuse the cables.
- Do not expose the cables to sources of heat.
- When disconnecting the cables from the Coban System components or the power source, pull on the plugs – **DO NOT PULL ON THE CABLES!**
- Arrange all connectors and cables so that passengers are not likely to trip over or accidentally pull on them as they move around or enter and exit the vehicle. If any cable becomes damaged in any way, immediately discontinue use of the system immediately and call the Coban Authorized Repair Center or Coban Customer Service Department.

Do Not Expose The Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System To Liquid Or Moisture

- Do not use this apparatus near water or expose it to rain, moisture, or dripping or splashing liquids.
- Do not place objects filled with liquids, such as beverages on or near the Coban Digital In Car Video System.
- Do not clean the Coban System with water, liquid cleaners, solvents, or aerosols.

Prevent The Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System from Overheating

Do not block any ventilation openings. Install in accordance with the Coban Vehicle Installation Manual. Install the Coban System in a well-ventilated area. Do not place the Coban System near any soft surface that may block ventilation openings. Do not install near any heat sources or any apparatus that produces heat.

Only Use the Type of Power Source Indicated on the Coban VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II Owner's Manual

Only Use Attachments / Peripherals Specified and Authorized by the Coban Research and Technologies, Inc.

Safety Information

About Musculoskeletal Disorders

Use of keyboards, mouse, or other electronic input devices may be linked to serious injuries or disorders.

When you use the keyboard or other electronic input devices, as with many activities, you may experience occasional discomfort in your hands, arms, shoulders, neck, or other parts of your body. However, if you experience symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensations, or stiffness, **DO NOT IGNORE THESE WARNING SIGNS. PROMPTLY SEE A QUALIFIED HEALTH PROFESSIONAL,** even if symptoms occur when you are not using these apparatuses. Symptoms such as these can be associated with painful and sometimes permanently disabling injuries or disorders of the nerves, muscles, tendons, blood vessels, and other parts of the body. These musculoskeletal disorders (MSDs) include carpal tunnel syndrome, tendonitis, tenosynovitis, vibration syndromes, and other conditions.

While researchers are not yet able to answer many questions about MSDs, there is general agreement that many factors may be linked to their occurrence, including medical and physical conditions, stress and how one copes with it, overall health, and how a person positions and uses their body during work and other activities. Some studies suggest that the amount of time a person performs an activity may also be a factor.

Some guidelines that may help you work more comfortably and possibly reduce your risk of experiencing an MSD. These guidelines address topics such as:

- You should position yourself in a comfortable posture.
- Keeping your hands, fingers, and other body parts relaxed.
- Take breaks regularly.

if you have questions about how your own lifestyle, activities, or medical or physical condition may be related to MSDs, see a qualified health professional.

If you need further assistance please contact
Coban Research and Technologies, Inc.
At 1-866-81-COBAN (866-812-6226)



CONFIDENTIAL

**Safety Information,
Limited Warranty Statement &
Software License Agreement**

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Stafford, TX 77477
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Fax: 1-281-277-8256
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Notice to User

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This product contains software owned by Coban and licensed by third parties. Use of such software is subject to the terms and conditions of license agreements enclosed with this product. Some of the software may not be transported or used outside the United States. Software specifications are subject to change without notice.

If purchaser does not agree with these terms and conditions, they should promptly contact Coban Research and Technologies, Inc. for instruction on return of the entire Coban Digital In Car Video System, including Coban Software for a refund. A 15% restocking charge will be applied.

Limited Warranty Statements

Coban Digital In Car Video System

The warranty applies within the fifty (50) United States and all States or Territory of Australia.

This Limited Warranty is non-transferable

This Limited Warranty is null and void if the factory applied serial number or tamper evident labels have been damaged, altered or removed from the product.

If the affected product is being purchased pursuant to a written Agreement signed by Coban, the warranty contained in that written Agreement will apply. Otherwise, the following warranty applies.

I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

Coban Research and Technologies, Inc. ("COBAN") warrants the Coban Manufactured VMDT, VMDT-PV/12, MDT, MDT-PV and TOPCAM G-I/G-II System ("PRODUCT"), against defects in material and workmanship under normal use and service for a period of one (1) year from the date of shipment.

COBAN, at their discretion, will at no charge repair the PRODUCT (with new or reconditioned parts), replace it with the same or equivalent PRODUCT (using new or reconditioned Products), during the warranty period, provided that the purchaser notifies COBAN according to the terms of this warranty. The repaired or replaced PRODUCT is warranted for the remaining original applicable warranty period. All replaced parts of the PRODUCT shall become the property of Coban.

This expressed limited warranty is extended by COBAN to the original end-user purchasing the PRODUCT for purposes of commercial, or industrial, or governmental use only, and is not assignable or transferable to any other party. This is the complete warranty for the PRODUCT manufactured by COBAN. COBAN assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of COBAN. Unless made in a separate written agreement between COBAN and the original end-user purchaser, COBAN does not warrant the installation, maintenance, or service of the PRODUCT.

COBAN cannot be responsible in any way for any ancillary equipment not furnished by COBAN, which is attached to or used in connection with the PRODUCT, or for operation of the PRODUCT with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system, which may use the PRODUCT, is unique, COBAN disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. GENERAL PROVISIONS:

This warranty sets forth the extent of COBAN'S responsibilities regarding the PRODUCT. Repair, replacement, or refund of the purchase price, at COBAN'S option, is an exclusive remedy.

THE WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. COBAN DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL COBAN BE LIABLE FOR DAMAGES IN EXCESS OF THE ORIGINAL PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCES, COMMERCIAL LOSS, LOST PROFITS, OR SAVINGS OR OTHER INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PRODUCT TO THE FULL EXTENT THAT MAY BE DISCLAIMED BY LAW.

III. HOW TO GET WARRANTY SERVICE:

Purchaser must notify a Coban Authorized Service Center or Coban's Customer Service Department at 281-277-8288 within the applicable warranty period for information regarding warranty service. If COBAN determines that all or part of the PRODUCT require return for repair or replacement, a Return Merchandise Authorization Number (RMA#) will be issued. Please follow Coban's instructions (specified in existing contract or Statement of Work, agreed upon between Coban and the Purchaser) and return the PRODUCT freight paid to Coban or its Authorized Service Center with the RMA number.

Proof of purchase in the form of a bill of sale (which is evidence that the product is within the warranty period) must be presented to obtain warranty service. In addition, if replacements are required and you wish to receive the most expedient service available, you will be required to provide COBAN with a credit card authorization to bill your credit card in the event that you fail to return the original parts. The credit card will only be charged for COBAN'S list price for the part if the part has not been returned within thirty days.

FAILURE TO FOLLOW THE ABOVE INSTRUCTIONS MAY RESULT IN DELAYS, AND MAY CAUSE THE PURCHASER TO INCUR ADDITIONAL CHARGES, OR MAY VOID YOUR WARRANTY.

It is the Purchaser's responsibility to backup the contents of your hard drive, including any data that may be stored or software that may have been installed on the hard drive. It is possible that the contents of the hard drive will be lost or that the drive may need to be reformatted in the course of service and COBAN will not be held liable for any damage to or loss of any program, data or other information stored on any media or any part of any PRODUCT service hereunder. It is HIGHLY recommended that the Purchaser create a valid disk "image" after final installation is completed. This image will need to be updated as changes are made to the units and kept safe by the PURCHASER for data recovery purposes. Coban assumes no liability or responsibility in developing a disaster recovery policy for the Purchaser. Any and ALL data reconstruction will be performed by the PURCHASER, unless specifically stated in the initial contract between Coban and the Purchaser. Coban shall not be liable for delays or failure to perform with respect to this agreement due to (i) causes beyond the party's reasonable control and not avoidable by diligence, (ii) acts of God, epidemics, war, riots, or delays in transportation which are beyond the party's reasonable control and not avoidable by diligence, or (iii) inability for causes beyond its control and not avoidable by diligence to obtain necessary labor, materials, or manufacturing facilities, or delays caused by subcontractors due to similar causes. In the event of any such delay (each such event being beyond the party's reasonable control and not avoidable by diligence), the date of performance shall be extended for a period equal to the time lost by reason of the delay.

IF DURING THE REPAIR OF THE PRODUCT THE CONTENTS OF THE HARD DRIVE ARE ALTERED, DELETED, OR IN ANY WAY MODIFIED, COBAN IS NOT

RESPONSIBLE WHATSOEVER TO RECOVER OR RESTORE SAID CONTENTS. YOUR PRODUCT WILL BE RETURNED TO YOU CONFIGURED AS ORIGINALLY PURCHASED (SUBJECT TO AVAILABILITY OF SOFTWARE)

Be sure to remove all third party hardware, software, features, parts, options, alterations, and attachments not warranted by COBAN prior to sending the PRODUCT to COBAN for service. COBAN is not liable for any loss or damage to these items.

IV. WHAT THIS WARRANTY DOES NOT COVER:

- Defects or damage resulting from use of the PRODUCT in other than its normal and customary manner.
- Defects or damage from misuse, accident, water, or neglect.
- Defects or damage from improper testing, operation, maintenance, installation alteration, modification, or adjustment.
- Damage due to tampering with internal components
- Breakage or damage to antennas unless caused directly by defects in material workmanship.
- A PRODUCT subjected to unauthorized PRODUCT modifications, disassemblies, or repairs (including, without limitation, the addition to the PRODUCT of non-Coban supplied equipment) that adversely affects performance of the PRODUCT.
- PRODUCT that has had the serial number removed or made illegible.
- Batteries
- Freight costs to the repair depot.
- A PRODUCT, which, due to illegal or unauthorized alteration of the software / firmware in the PRODUCT, does not function in accordance with COBAN, published specifications or with the FCC type acceptance labeling in effect for the PRODUCT at the time the PRODUCT was initially distributed from COBAN.
- Scratches or other cosmetic damages to PRODUCT surfaces that do not affect the operation of the PRODUCT.
- Normal and customary wear and tear
- Damage due to connection to improper voltage supply
- Non-COBAN manufactured equipment

IV. GOVERNING LAW

In the case that this PRODUCT is sold in the United States, the laws of the State of Texas govern this warranty.

V. TRADEMARKS

VMDT, TOPCAM, DVMS, Mobile Start, Coban, and Coban logos are registered trademarks of Coban Research and Technologies, Inc. Microsoft, Windows, Window XP Embedded and Windows logos are registered trademarks of Microsoft Corporation. Firewire and Sony logo are registered trademark of Sony Corporation. Intel, Pentium and Celeron are registered trademarks of Intel Corporation. CompactFlash and SanDisk logo are registered trademarks of SanDisk Corporation. GWD 900 and Gomet logo are registered trademarks of Taiwan Gomet Technology Co., Ltd.

IEI and ICP are registered trademarks of ICP Electronics Inc. PS/2, Travelstar and IBM logo are registered trademarks of IBM Corporation

Software Copyrights

The COBAN PRODUCT described in this instruction manual may include copyrighted Coban PRODUCT programs stored in semiconductor memory and other media. Laws in the United States and other countries preserve certain exclusive rights for COBAN copyrighted PRODUCT programs, including the exclusive right to copy or reproduce the copyrighted PRODUCT program in any form. Accordingly, any copyrighted COBAN PRODUCT programs contained in the COBAN PRODUCT described in this instruction manual may not be copied or reproduced in any manner without the express written permission of COBAN. Furthermore, the purchase of COBAN PRODUCT shall not be deemed to grant either directly or by implication, estoppel or otherwise, any license under the copyrights, patents or patent applications for COBAN, except for the normal non-exclusive, royalty-free license to use that arises by operation of law in the sale of a product.

End-User License Agreement (EULA) For Coban Software

This End-User License Agreement ("LICENSE") is a legal agreement between the Purchaser and Coban Research and Technologies, Inc. ("COBAN"), the manufacturer of the VMDT, VMDT-PV, MDT, MDT-PV and TOPCAM Systems ("PRODUCT"). All COBAN software, including Coban Mobile Start Software ("MOBILE START") and third party software not otherwise licensed by a specific end user license agreement included with your PRODUCT, downloaded from COBAN websites or provided by COBAN as updates / upgrades, shall be referred to as COBAN SOFTWARE. The COBAN SOFTWARE includes PRODUCT software, the associated media, any printed materials, and any "on-line" or electronic documentation, as well as COBAN supplied or facilitated updates / upgrades thereto. Notwithstanding for foregoing, software distributed together with separate end user software license agreements (the "Third Party EULA"), including but not limited to Windows® operating system provided by Microsoft Corporation, shall be covered by respective Third Party EULAs. You may use the COBAN SOFTWARE only in connection with the use of PRODUCT. By installing, copying, downloading or otherwise using the COBAN SOFTWARE, you agree to be bound by the terms of this LICENSE. If Purchaser does not agree to the terms of this LICENSE, the Purchaser should promptly contact COBAN for instruction on return of the entire PRODUCT and COBAN SOFTWARE for a refund. A 15% restocking charge will be applied.

Coban Software License

Copyright laws and international copyright treaties, as well as other intellectual property laws and treaties protect the COBAN SOFTWARE. The COBAN SOFTWARE is licensed, not sold.

Grant of License

This LICENSE grants you the following rights:

- **Software.** You may install and use one copy of the COBAN SOFTWARE on the PRODUCT
- **Storage/Network Use.** Purchaser may install the DVMS client software on their existing internal local area network. The Purchaser may not make unauthorized copies of the Coban Mobile Start software without the express written consent of COBAN. Coban assumes no liability for software installation failures due to incompatible hardware, software or network security issues that are controlled by

the Purchaser's Information Technology Department. Coban will not be responsible to install said software on the Purchaser's local area network, unless specifically contracted to do so. Instructions shall be provided to the Purchaser to accomplish this task.

- **Back-up Copy.** A back-up copy of the COBAN SOFTWARE is included with the PRODUCT. You may use the back-up copy solely for archival purpose.

Description of Other Rights and Limitations

- **Limitation on Reverse Engineering.** De-compilation and Disassembly. You may not modify, reverse engineer, de-compile, or disassemble the COBAN SOFTWARE or HARDWARE in whole or in part without the express consent from Coban. Failure to obtain consent may void any and all warranties.
- **Separation of Components.** The COBAN SOFTWARE is licensed as a single product. Its component parts may not be separated for use on more than one PRODUCT.
- **Single PRODUCT.** The COBAN SOFTWARE is licensed with the PRODUCT as a single integrated product. The COBAN SOFTWARE may only be used with the PRODUCT.
- **Rental.** You may not rent or lease the COBAN SOFTWARE.
- **Software Transfer.** Software / Hardware / Licenses are NOT transferable.
- **Termination.** Without prejudice to any other rights, COBAN may terminate this LICENSE if the Purchaser fails to comply with the terms and conditions of this LICENSE. In such event, the Purchaser must destroy all copies of the COBAN SOFTWARE and all of its component parts.

Prohibition on Export

EXCEPT FOR EXPORT TO CANADA AND AUSTRALIA, THE COBAN SOFTWARE AND ANY UNDERLYING TECHNOLOGY MAY NOT BE EXPORTED OUTSIDE THE UNITED STATE OR TO ANY FOREIGN ENTITY OR "FOREIGN PERSON" AS DEFINED BY U.S. GOVERNMENT REGULATION, INCLUDING WITHOUT LIMITATION, ANYONE WHO IS NOT A CITIZEN, OR LAWFUL PERMANENT RESIDENT OF THE UNITED STATES. PURCHASER AGREES THAT BY DOWNLOADING OR USING THE COBAN SOFTWARE, THEY ARE AGREEING TO THE FOREGOING AND THEY ARE WARRANTING THAT THEY ARE NOT A "FOREIGN PERSON" OR UNDER THE CONTROL OF OR ACTING ON BEHALF OF THE FOREIGN ENTITY.

U.S. Government Restricted Rights

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