

# MOBILE IN-CAR HI-8 VIDEO CAMERA RECORDING SYSTEM

ITEM: I-TRAK VIDEO SYSTEM (For the Crown Victoria Police Interceptor and/or Chevrolet Impala)

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>MINIMUM REQUIREMENTS</u>
<u>1.0</u>	<u>GENERAL</u>	
1.01		<p>Video system is housed in an overhead console that installs to the headliner in a Ford Crown Victoria Police Interceptor. Installation requires console to be secured directly to the chassis of the vehicle using the passenger and drivers side visor mounting clip screws and the factory dome light location. No additional screws or drilling required.</p> <p>Standard Package includes:</p> <ul style="list-style-type: none"><li>• SONY EVO-250 Hi-8 recorder.</li><li>• Wireless audio transmitter with leather holster and microphone.</li><li>• In-car microphone.</li><li>• Audio playback with dual volume controls for independent left and right channel playback.</li><li>• 3" Color "TFT" monitor.</li><li>• Officer Safety red or white color dome light.</li><li>• Camera with mounting bracket.</li><li>• All system controls.</li><li>• All electronic circuitry.</li><li>• Time and date on tape</li><li>• Text for Brake pedal and Emergency lights on tape</li><li>• Metal enclosure with key lock</li></ul>
1.02		<p>Electrical installation of the overhead system is accomplished by connecting a pre-terminated harness to the FORD factory plug, and ring terminal on the ground, located inside the passenger's side kick panel.</p>
1.03		<p>In order to save upfront costs, and long term removal and reinstallation expenses, the basic installation described above will require approximately 30 minutes of installation time for one person.</p>
1.04		<p>The recorder disconnects from its enclosure for easy servicing and exchange. No tools are required to execute the removal and reinstallation of the recorder.</p>
1.05		<p>Enhanced Record Over Protection</p> <p>The system protects recorded evidence from accidental erasure. The execution of the STOP command, upon completion of reviewing previously recorded evidence, will automatically activate the fast forward function of the recorder in order to locate blank tape.</p>

## **2.0**

### **CAMERA**

- 2.01 SONY EVO 400 Color Camera/Optical zoom.
- 2.02 1/3" Hyper HAD CCD Image sensor.
- 2.03 Auto iris 12:1 power optical zoom with an auto focus.  
Procedure runs every time the lens changes position.
- 2.04 Horizontal resolution – minimum 460 lines.  
Vertical resolution – minimum 350 lines.
- 2.05 Minimum illumination – 1 Lux
- 2.06 Automatic Exposure compensation.
- 2.07 Manual telephoto and wide-angle controls.
- 2.08 Recording and Audio Transmission indicators located on the camera. Connectors on the camera harness can be used to install an alternate record indicator and an alternate audio indicator replacing the indicator(s) mounted on the camera.
- 2.09 Dimensions: Ultra small  
Length 4.250 in.  
Height 2.375 in.  
Width 2.375 in.
- 2.10 Switching mechanism that allows a secondary camera to be the recording input source.
- 2.11 Camera Mount: SMC glass or bracket mount.

## **3.0**

### **RECORDER**

- 3.01 Sony Hi-8 recording format using IDEVO-250 professional grade recorder.
- 3.02 Records minimum of 400 lines of horizontal resolution using a Hi-8 Tape.
- 3.03 Uses high performance 5-head recording system, 4-helical scanning, rotating heads, and 1-Flying erase head.
- 3.04 Records Hi-Fi Audio using depth multiplexing.
- 3.05 Allows for independent recording and playback of interior and exterior microphone.

## **4.0**

## **CONTROL PANEL**

- 4.01 Has nighttime viewable: FF, RW, Stop, Play, and Record.
- 4.02 Red L.E.D. Record On indicator.
- 4.03 Green L.E.D. Audio On indicator.
- 4.04 Yellow L.E.D. Interior Microphone On indicator.
- 4.05 Yellow L.E.D. Record Over Protection indicator.
- 4.06 Flashing L.E.D. End of Tape indicator.
- 4.07 One touch auto zoom – sequence includes:  
Zoom in – Auto Focus ON – Hold – Zoom out – Refocus.
- 4.08 Telephoto zoom-in control.
- 4.09 Wide zoom-out control.
- 4.10 Power On/Off.
- 4.11 Fully enclosed 3” TFT color LCD monitor.
- 4.12 Brightness control for monitor.
- 4.13 Monitor control on/off/auto.
- 4.14 Audio playback with dual volume controls that also allow for left and right independent playback of the body pack microphone and interior microphone.
- 4.15 All push buttons on front panel control head are no smaller than .180” X .370 “.
- 4.16 RCA outputs for video, interior microphone and transmitter microphone.
- 4.17 Two Female PCB mounted DB-9 connectors for future applications. Forward connector used primarily to support second camera output
- 4.18 Keypad controls will include Record, Stop, Auto, Power, Play, Fast Forward, Rewind, Interior Mic, Zoom in, Zoom out, Monitor power, camera, Freq., Brightness
- 4.18.1 Power, Interior Mic, Camera and Freq. have alternate action switches. Monitor on/off auto shall be a three-way slide switch. Brightness shall be a potentiometer. All other switches are momentary.

- 4.18.1.1 Camera: Main (out) Second (in)
- 4.18.1.2 Freq.: F1(out) F2(in)
- 4.18.1.3 Record, Power switches are red, Freq., camera and Interior mic are grey, all others are black
- 4.18.1.4 Text over buttons will be back lit in yellow, Text, time and arrow (program engaged) will be in green in programming mode only
- 4.18.2 Slide switches will be inside the housing on the bottom. Slide 1 disables the power off, slide 2 enables programming mode.
- 4.18.3 Program mode will change Play, FF, Zoom in and Zoom out to Text, Time, down and up respectively.

**5.0                    AUDIO RECEIVER**

**AZDEN**

- 5.01 VHF
- 5.02 Dual frequency manually set F1/F2
- 5.03 BNC Connector for Antenna.

**6.0                    AUDIO TRANSMITTER**

**AZDEN**

- 6.01 VHF
- 6.02 L.E.D. battery status indicator.
- 6.03 Removable/replaceable lapel microphone.
- 6.04 Power on switch.
- 6.05 Dual frequency manually set F1/F2
- 6.06 Remote turn on must be activated by a digital encoded transmitter

**7.0                    MICROPHONE**

**PLUG IN**

- 7.01 Electret Omnidirectional Type with Tie Clip.

7.02 Does not require plastic clip to adhere microphone to lapel.

**8.0**                    **CONSOLE**

**OVERHEAD OFFICER SAFETY DOME LIGHT**

8.01 .060 inch aluminum construction.

8.02 Powder Coat Finish.

8.03 Noninvasive installation.

8.04 Includes red and white dome light.

**9.0**                    **SPEAKER PLAYBACK**

9.01 Amplifiers with separate volume controls for interior and exterior audio playback.

**10.0**                   **CABLE HARNESS**

10.01 The Cable Harness Assembly is the wiring for the entire system.

10.02 Ten foot power cable

10.03 Must be MVS302 compliant.

10.04 Connections for power ground.

10.04 Light bar activation.

10.05 Brake input.

10.06 Interior microphone.

10.07 Fuse holders.

10.07.1.1            **MISCELLANEOUS**

**11.01**                    Optional radar interface may be purchased as a separate item to overlay RADAR information using Speed Trak Elite, Genesis, Stalker Dual or equivalent protocols. Radar interface may only be connected to one EVI-400 camera. (Switching to the secondary camera will automatically disable radar interface).