DIGITAL ENTERCEPTOR 2 TECHNICAL SHEET
DIGITAL IN-CAR VIDEO RECORDER SYSTEM

2-Piece Modular Design

- **Live Video Stream - ready** - Stream high-quality LIVE video to multiple authorized viewers for real-time situational awareness
- Switch User Profiles of the MDE2 by inserting Flash Thumb drive into the front door of the unit. This allows the department to quickly change cars and change user information with a supervisor.
- Superior wireless mic. with range tested over
- 2,000' (line of sight)
- Supports wireless uploads, ethernet uploads
- and direct-to-DVD in vehicle (optional)
- High quality tamperproof video
- Full D1 HD recording resolutions
- Officer-safe Over Head mount or Console mount
- Operates up to 2 cameras (records 2 Cameras and 2 Audio sources simultaneously)
- "Mark" tags video for easy search and retrieval
- Powerful Browser based video management software
- Fits in all vehicles

"The Martel MDE2 leads the industry in improving officer safety and security; improving officer field training, both for recruits and veteran officers; reducing liability costs to the department or community; gaining better conviction rates; and finally, improving police community relations while gaining increased public support and confidence in the department."

FEATURES
Martel MDE2
- Multiple download options:
- Removable SDHC Memory card Wireless high-speed 802.11 g/n downloads – easily
upgradeable to new wireless technologies (optional)

- Multiple passwords and user configurations
- Ability to tag events with customizable codes
- Easy to use interface, data entry and user and supervisor menus
- Industry-leading GPS Optional
- Automatic firmware updates and camera settings
- Multiple resolution settings ranging from high, Med, Low
- Meets (draft) IACP Minimum Specifications
- Operates up to 2 cameras and up to 2 audio sources
(record 2 cameras simultaneously)
- Multiple event triggers, including emergency lights or
siren activation, manual record switch, remotely by
activating the audio transmitter(s), vehicle speed and up
to 3 auxiliary inputs (eg. crash sensor, Radar, etc.)
Integrates with most radar systems, Decatur, MPH, Kustom Signals, Stalker.

DVR Specifications
Martel DVR is manufactured entirely in California and has the following advanced protocol.
Texas Instruments Ic Chips.
Linux Direct operating system. The operating system is not based on a PC and there are NO Windows operating
system crashes.
New for 2009 "Marking Feature" During Recording with your police car camera you can press the Mark button
on the touchscreen. Mark as many spots in recording as you wish. On playback jump to the exact point in the
video by hitting the Mark button.

- **New for 2009 "Police Event Tagging Button"** Now you can tag a recording with an event such as DUI.
  Event tags are user-customizable to comply with your agency's unique policies and procedures.
- **New for 2009 "Digital in Car Video Radar Interfacing"** Shows target speed, speed of cruiser, direction
  of target either away or towards.
- **New for 2009 "Drivers License Reader"** "Swipe a Suspects driver license and his personal information
  is immediately put on screen and recorded into the video. Information such as address, birth date,
  height, weight and eye color.
- **New 2 Piece Design Fits any Vehicle!**Every unit is hand assembled by an American engineer with
  more than 10 years of experience. Each system is individually signed by that same craftsman as a
  symbol of pride and experience.
- **New , All Martel Digital Enterceptor 2's Are 802.11n Wireless Video File Transfer enabled.** No
  laptop or MDC or computer required for file transfer. This means Enterceptor has an add on kit that will
  allow hands free transfers from a Police Car to a Police station with no officer involvement. No Computer
  Needed in Police Car. Encrypted and Automatic file transfer upon successful connection to the Police
  Stations computer network.
- MDE2 Video Resolution is 720 X 480 MPEG2 High Definition. Our Video system is HD (High Definition).
- Touch Screen controls just like the Apple iphone. - No old fashion buttons.
- No Trunk Mounting or Rear Mirror mounting that a suspect can easily Steal off the window after
  assaulting an officer. Our MDE2 Unit Mounts
  on the visor and is a Steel, Lockable Vault for maximum protection.
- Switch User Profiles of the MDE2 by inserting Flash Thumb drive into the front door of the unit. This
  allows the department to hot seat
  cars and change user information with a supervisor.
- License Plate Auto Zoom. Just push the ZOOM button on the touch screen and the camera will Zoom in

on the license plate, focus for 3 seconds and zoom back to its original setting. Industry First.

- Touch Screen Controls for easy recording.
- Pre-Event Recording - Captures up to 2 minutes of video prior to record activation. Documents Probable Cause & Eliminates Racial Profiling Claims. Its like having your own personal Time Machine! (Definition of Pre-event recording: The unit constantly captures images and puts them in temporary memory. When a trigger is received, the unit starts recording to the Secure Digital (SDHC) card, but it also has up to 3 minutes before the officer actually activated the recording.
- Adjustable Pre-Alarm setting: 1 to 2 minutes
- 2.4 GHz Digital Wireless Microphone - 40 digital channels ensure multiple systems can operate in close proximity without interference.
- Wireless Mic Auto Activation - the MDE2 automatically turns on the wireless microphone whenever the system is activated. Likewise the wireless microphone activates the MDE2. This means never worrying your officer forgot to turn on their video or audio recording.
- The Martel MDE2 has No moving parts, which means nothing can break down. No hard drives, no spinning DVD burners, no moving parts period. Testing has shown us that this is the only way to have a digital video system last more than 6 months in a police car without service. Hard drives will fail due to climate and motion. DVD burners will fail due to climate and writing to disc errors.
- Martel MDE2 records directly to Solid State Secure Digital (SDHC) Flash cards.
- 4 Gigabyte SDHC card can hold 8.5 Hours of Recording Time on normal mode & 5 hours on high resolution.
- Recording Over Protection - officers can review video but can not delete or rewrite.
- Built to withstand Temperatures from -40 Fahrenheit to 190+ Fahrenheit without a heater or cooling fans!
- Easy to learn 3 Button operation: Record, Play, Auto Zoom on license plate.
- The MDE2 can withstand 50Gs of Shock, ensuring survival of your video recording in case of a collision.
- Download the video from the Secure Digital (SDHC) card using the supplied USB-2 reader onto your computer then erase the card. Each Card can be used 1 Million times.
- Digital image stabilization (Removes shaking from your video)
- On Screen indicators show "W" when your wireless microphone is activated. "L" for light bar, "B" for brakes.
- Simple 1 piece design for easy installation - Installs in minutes. Nothing in the Trunk of the Car!
- Linux Direct operating system. The operating system is not based on a PC and there are NO Windows operating system crashes.
- Supervisor Controls - Lockable Supervisor Door, Protect the card and advanced functions including Secure Digital Card Video Access.
- Optional GPS: With an external GPS receiver module the system can record both Location and Speed of the police vehicle.
- If the DVR is damaged or destroyed, all recordings are safe, having been written and finalized on the card up until that point. Most other systems require finalization of the file upon ending of a shift risking a complete loss of recordings.
- Digital Video Evidence Management Software - Search Events by time, date, office name, badge number etc. Add notes, play and burn DVDs for court
- Maintenance Free
- Dimensions 5.75W" x 6.75D x 2H
- One Year Warranty - Parts & Labor
- The Only Digital police in car Video System on the Market today that is rated by the Military.

Sony Camera Features:

Sony Super HAD technology - Digital Signal Processing

- Digital image stabilization (Removes shaking from your video)
- 22X Optical Zoom 242X Digital Zoom.
- 480 TV Lines of Resolution
-
- Touch screen License Plate zoom in and lock
- Wide-angle Lens 3.5 – 65 degrees
- 0.005 Lux in Normal Mode,0.01 Lux in Lowlight Mode
- Auto Adjustments Focus, White Balance, Back light
- Dimensions: 2.3"W x 4.2" D x 2.6" H
- Weight: 8.4 Ounces approximately

Touchscreen Features:
The MDE2 Digital Police Camera is so advanced it doesn't even need buttons. We use a 4.3 inch touch screen to control the unit, eliminating mechanical buttons that may have break or get stuck. The touch screen on the MDE2 is military tested 810F spec, making it unique among police in-car video systems.

- No more buttons! A truly digital system doesn't need them
- 5.0 inch Touch Screen control - Rec., Stop, Play, License plate zoom
- Off/On Switch for Covert Recording of Suspects
- Anti-Glare Surface
- Scratch resistant - almost impossible to scratch.
- Folds up when not in use
- brightness adjustable
- Dimensions approximately: 4.75"W x 4.25"H x 1"D

Digital Wireless Microphone Transceiver Features:

The Martel Digital Enterceptor 2.4GHz PRO Digital Police Wireless Microphone system is designed specifically for Police car video applications. The system is comprised of:
- 2.4GHz digital spread spectrum: 40 Channels of operation provides excellent quality and up to 2000 Feet of range.
- Compact transmitter is only 2 inches long and includes an internal microphone.
- Body pack transmitter includes rechargeable battery with 8 hour in-use time and 14 day standby.
- The 2.4GHz Receiver and recharge station mounts on the visor of the Police car and outputs the received signal to the car's recording system.
- The system provides crystal clear audio, which can be vital for recorded evidence. The transmitter and receiver sync in the charging cradle with 50 possible channels for interference free operation at the scene.
- Leather Duty Holster Included
- Size 2.5 in. x 1.2 in. x 0.94 in. or 64 mm x 46 mm x 24 mm

Police car Camera Automatic Hands Free Wireless Download

Heres how Police Car Cameras Wireless download 802.11n works:

The Police car with a MDE2 system in it, drives near the police station. The MDE2 system automatically connects to a 802.11N wireless network that has been provided by Martel. The Police Car Camera system sends a password to the wireless receiver located in the police station.

Indicator lights on your touch screen will tell you when a fully encrypted high speed connection is made. Red, for no connection. Yellow, for a weak connection and Green for a strong connection.

When the password is received and the connection is secure the wireless receiver then tells the MDE2 Police Car Camera to begin the transfer. Upon completing the transfer, the receiver then checks the integrity of the file and verifies all video has transferred successfully. Finally the receiver commands the MDE2 Police Car Camera to erase all files so the vehicle and camera system are ready to continue patrolling.

If the police car camera pulls away from the station and the transfer is not complete, the download will pause. When you come back into contact with the station, the download starts from where it left off. Police Car Camera Smart Transfer Technology.

Security and Encryption: We utilize the most secure WiFi network available. Advanced 128bit security and SPI firewall protection safeguards both the video transfer and the computers on your network.

Video Management enables cataloging, searching, annotating, playback and archiving of video files produced with Martel Electronics Digital In-Car Video System.

Minimum System Requirements

- Windows XP (with Service Pack 2)

- Windows Media Player 9 or greater

- Pentium IV 1.4GHz or compatible AMD processor

- 512MB RAM

- 150MB storage space (application) and at least 100GB for video file storage (see Appendix A to estimate your video storage needs)

- 8MB Video RAM (shared RAM is acceptable)

- 1024 x 768 video resolution (96 DPI for LCD monitors)

- DVD+/-R(W) DVD/CD writer

- Available USB 2.0 Port

- USB 2.0 High-Speed external CF card reader

Recommended System Requirements

- Windows XP (with Service Pack 2) {Vista is currently not supported}

- Windows Media Player 9 or greater

- Intel Dual Core CPU or compatible Dual Core AMD processor

- 1024MB RAM (1GB RAM)

- 150MB storage space (application) and at least 500GB for video file storage (see Appendix A to estimate your video storage needs)

- 64MB Video RAM or better (shared RAM is acceptable)

1280 x 1024 video resolution (or comparable widescreen setting) [96 DPI for LCD monitors]

• DVD+/-R(W) DVD/CD writer

• Available USB 2.0 Port

Wireless Download Complete Integrated Wireless Download Solution

•No laptop or MDC Computers required for file transfer

• Secure and Automatic file transfer upon successful connection to the your network

• Automatic removal of files from the SD card after the files are successfully transferred and verified for integrity.

•If the connection to the network is lost or the transfer is interrupted the files will be saved and the software will resume the transfer when it reconnects to the network

• After successful transfer from the MDE2 to the designated computer the files will be automatically uploaded into Video Management

• All file transfers will be logged for a complete audit trail for the department

•Agency can access and share real-time or archived video with other agencies via the Web, without proprietary software.

•Multiple real-time access to cameras without video quality loss
•*Provides guidance to police officers in the field. Real-time situation analysis with Superiors.*
•*Acess video through backberry or iphone cell phones.*

Real time Wireless video Streaming to Cell Phones and Headquarters.
- Selectable MPEG-4 / MJPEG compression
- Full D1 resolution at 30/25 FPS
- Multi-stream with variable frame rate in the same compression
- Main Features
- - Support for multiple sites surveillance (available with Enterprise version only)
- - Manage up to 64 cameras with tree-directory display
- - Support 1, 4, 6, 8, 9, 10, 16, 25, 36, 49, 64 window layout
- - Support Megapixel MPEG-4 / H.264 / MJPEG format
- - Customizable logo and user interface
- - Multiple-channel live view in full-screen mode
- - Support different frame rate on live view and recording
- - Digital zoom on live view and playback
- - Maximum 30 seconds pre-event recording
- - Search video clips by date, time and event
- - Time-based search bar
- - 4-channel synchronized playback

POLICE IN CAR VIDEO SYSTEM OPTIONAL ACCESSORIES

Driver License Scanner

Optional: Drivers License ID Scanner for MDE2 and DVD Partner
Price: $600

Scans and Reads all types of Local, State and Federal ID cards. Information from the ID or Drivers License then appears on the video recording on the police video system and on the touch screen. It is capable of reading both magnetic ID cards and Temporary Bar Code ID's. This accessory provides irrefutable evidence of Identity Theft on camera.

Optional: GPS Interface for MDE2 and DVD Partner
Price: $250

Global Positioning Satellite interface device gives you latitude, longitude and Speed of the police vehicle. The GPS device automatically corrects time and date using NASA satellites for extreme accuracy.

Optional: Rear Seat Suspects Covert Microphone for MDE2 and DVD Partner
Price: $149

Built into every MDE2 and DVD Partner police car video system is a rear seat covert microphone jack. Use the microphone to listen into suspects conversations or simply collect evidence. On the side of the Touch Screen monitor, there is an ON/OFF switch for covert recording.

Optional: Extra 4 Gigabyte SDHC Card for MDE2 and DVD Partner
Price: $30

4 Hours Record time in High Quality mode
8.5 Hours Record time in Normal Quality mode

Optional: Extra 8 Gigabyte SDHC Card for MDE2 and DVD Partner
Price: $60

8 Hours Record time in High Quality mode
17 Hours Record time in Normal Quality mode

Optional: Extra 16 Gigabyte SDHC Card for MDE2 and DVD Partner

16 Hours Record time in High Quality mode
34 Hours Record time in Normal Quality mode

Optional: Extra 32 Gigabyte SDHC Card for MDE2 and DVD Partner

32 Hours Record time in High Quality mode
68 Hours Record time in Normal Quality mode

Optional: Extra 2.4GHz PRO in car video Digital Wireless Transmitter for MDE2 & DVD Partner

Package Includes:
2.4GHz Digital Transmitter
Internal built-in microphone
External lapel microphone for working highways

Optional: Rear Facing Suspect Camera for MDE2 and DVD Partner

Color Night Vision
10 IR LED Lights
Auto Image Adjustment
Dimensions: 1.25"W x 1.25"H x 1.77"L

Optional: Police 2.4Ghz Desktop Charger for MDE2 and DVD Partner

Charges Transmitter in the station
Plugs into ac outlet allowing full Charges
A must have for Police Departments running 24 hours a day
Comes with Docking charger and AC adaptor

Optional: Radar interface cable for MDE2 and DVD Partner

Allows the speed to be inserted into the top part of the video for court. Compatible with almost all brands of radar.

Optional: USB Real time live streaming video cable. Must be installed at time of order. This option allows you to send video through a laptop or wireless router in the vehicle. Martel only provides the cable. You will need an IT department or consultant for setup.

Features:

Plug-and-play USB 2.0 device allows for easy capture video & audio
Windows XP already has the driver pre-loaded
Requires an outside consultant or IT department
Martel does not offer support on how to set up a wireless network. We supply only the USB streaming cable.

Optional: USB Flash Drive for MDE2 and DVD Partner

Allows a Quick Change of the officers user information on the screen, without having to get a Supervisor to unlock the system. Onscreen information changed includes the Officers name and badge number. Great for departments with multiple shifts.

Leather Transmitter Holster for MDE2, DVD Partner and MDP3

Optional: Crash Sensor for MDE2 and DVD Partner

If your cruiser is hit or you crash your car, this sensor will automatically turn on the video system and capture the 3 minutes prior and during the accident. A "G" will be displayed on-screen showing the crash sensor has activated. Potential savings of claims and insurance are dramatic.

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