Prosecutor Digital

Trunk-Mounted Unit



Operation Manual

Prosecutor of Texas LLC Humble, Texas www.policevideo.com

March 2006 Rev. B

IMPORTANT

To keep your warranty valid, it is important to consult with a Prosecutor of Texas technician before installing the Prosecutor Digital System, as well as reading, filling out and returning the following form.

Failure to do so will VOID the Prosecutor Digital warranty.

Tel: (281) 446-9010

Fax: (281) 446-9013

Email: prosecutoroftexas@policevideo.com

Website: www.policevideo.com

Failure to submit this document within 10 days from installation will void the product warranty:

Prosecutor of Texas Warranty Registration 1906 Treble Drive, Humble, TX 77338

Prosecutor After Installation Test Worksheet

Invoice # Se	erial #	Date	
Wireless frequency#			
I. Pre-Test Verification			PASS
Inspect vehicle and record any abnormalitie Notes:	es before installation beg	ins.	
 Install Prosecutor Digital System per installa Verify connection of DB25M-DB25M control of Verify connection of Camera cable to control Verify connection of Interface cable between Verify connection of Windshield LED cable at Verify connection of the Power cable connect Make sure POWER button on the control head on the left side of the control head. 	cable between control he I head. In control head and interfa assembly. Ited directly to battery and	ead and vault. aces. d connected to the vault.	ON-OFF switch
II. System Test			
1. Ensure that the hard drive has been inserted vault is in the vertical position for "Ready-to-Re 2. Press POWER button to power up the syste	cord/ Playback" mode.		
image.3. Check ZOOM and FOCUS buttons function camera focus on object when any ZOOM button	n is pressed.	·	
 Check RECORD, PLAY, STOP, REW, and FF With the transmitter, walk about 300 feet in fr After 2-3 seconds, the RECORD and AUDIO ON Red (Record) LED and Green (Audio) LED sh 	ront of the vehicle. Turn the street of the	he transmitter " ON ". Talk clear nate on the control head. Also,	ly into the MIC. , the windshield
6. Turn "OFF" the MIC. The DVR should continuindicator should be on.7. Check STOP, REW, and PLAY on the record	ded video. Check the qua	ality of the recorded video and	audio
8. Turn " ON " the siren switch. The system sho 9. Turn " ON " the light-bar switch. The system sh 10. Turn " OFF " the power. Turn " ON " the light-bar message should appear in the video.	nould go to RECORD and	the LTS message should appe	ear in the video.
11. Switch the BSEAT rocker to back seat MIC attention to background noise.12. Check the monitor for back seat images and		·	
the main camera. 13. Switch the BSFAT rocker to the original po	osition. Check the monitor	or for camera images	

Prosecutor After Installation Test Worksheet

PASS

III. System Programming

Using the hand-held IR remote, point it to the control head and perform the following functions:

- 1. Ensure that the Program Lock key on the back of the vault is in the horizontal position for "Ready-to-Program"
- 2. Do a Master Reset by pressing PAUSE/STILL for at least 6 seconds. Make note of the version number.

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VERSION	
 Press and hold STOP for 5 seconds to get into Programming Menu. From the Main Menu, check the default settings: 	
Set Time/Date : (Input current time & date) Interface Selection : Interface Enabled : OFF	
From the Main Menu: Record Settings Menu, check the default setting: Alarm Rec	Dwell 30 min
From the Main Menu : Record Settings - DVR Settings - SET MENU, check the de	fault settings:
RECORD MODE : FIELD REC FPS : 60P REC QUALITY : NORMAL AUTO RECORD : OFF AUTO REVERSE : OFF CLEAR HD : OFF	
5. Modify setup per customer request	
IV. Power Down	
 Press POWER button on the control head to power down the system. Make sure POWER button on the control head is the only button that stays lighted. 	
V. Appearance	
 Check System for prominent visual damage or scratch. Check for proper serial numbers. Clean up LCD display as needed. 	
INSTALLED BY DATE_	
TESTED BY DATE_	
CUSTOMER CONFIRMED DATE_	

Please Read



CAUTION! RISK OF ELECTRICAL SHOCK! DO NOT OPEN!



CAUTION! TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGE IS PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

NOTE

This equipment has been tested and found to comply with the limits for class A digital device, pursuant of part 15 of the FCC Rules. These limits are designed for reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

USER-INSTALLER CAUTIONS

YOUR AUTHORITY TO OPERATE THIS FCC VERIFIED EQUIPMENT COULD BE VOIDED IF YOU MAKE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THIS PARTY RESPONSIBLE FOR COMPLIANCE TO PART 15 OF THE FCC RULES.

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Foreword

We thank you for your purchase of the Prosecutor Digital System (Trunk-Mounted Unit). You have purchased a high quality system that will provide you with many years of trouble-free service.

Should you have any question about the system or any problems, please call (800)- 482-9211 or fax (281)-446-9013. We service all components of the system in-house as well as through our evergrowing Dealer Base.

This guide will provide the user with enough information to operate the Prosecutor Digital System properly and effectively. As you read through this guide, if you have any questions, ideas, or suggestions about the system or the guide itself, please feel free to call us at your convenience.

Thank You

Prosecutor of Texas, LLC. 1906 Treble Drive Humble, TX 77338

Tel: (281) 446- 9010

(800) 482- 9211

Fax: (281) 446- 9013

Email: prosecutoroftexas@policevideo.com

Website: www.policevideo.com

Features & Specifications

System

Small Trunk Vault

16 X Optical Zoom Low Light Auto Focus Camera, 1.0 Lux, 8X Digital Zoom with Auto Zoom Function

Easy to use Overhead Controls

Programmable Industrial Environmentally Grade DVR with Removable 80 GB Hard Disk

Environmentally Controlled Vault and DVR

Record activation by body transmitter control

Record Over Protection

Radar Gun, Laser, GPS, Alcohol Tester Interface included Covert Mode

Outside Vehicle Viewable "Record" & "Audio On" Indicators

Backseat Microphone Standard Equipment

Dual Wireless Microphone Capability

On-screen Time and Date Stamp with Title

Manual and Automatic Operation

Camera Position can easily be adjusted via Windshield Bracket

Backseat Camera available



Figure 1: Prosecutor System

Camera

Model : LG LVC 640 CCD Camera

Hi-Resolution : more than 450 TV Lines – Solid State
Optics : Lens - 16X Zoom (f=3.9-63mm)

Min. Illuminance : 1.0 Lux

White Balance : Auto/Preset/Manual

Digital Zoom : 8X

Operating Temp. : 0 deg.C - 40 deg. C

Power : 12VDC 4W

Dimension : 2.65"W X 2.56"H X 4.4"D

Regulation : FCC – Class A

Focus : Auto/Near/Manual/Wide

Back Light Compensation



Figure 2: Camera

Integrated Control Head

4 inch color TFT LCD monitor

Durable membrane switch with backlight

Both LCD Monitor and Keypad Backlight can be turned off for "quiet" operation

Audio volume control and LCD brightness control

LED output indicating both audio and recording are functional

A/V Input / Output

Constructed with 18 gauge steel

Dimensions: 11 L x 6.25 W x 3 D inches (27.94 cm x 15.88 cmx7.62 cm)

Weight: 3.7lbs (1.68kg)



Figure 3: Integrated Control Head

Features & Specifications

Modular Control Head

Uses External LCD Monitor or Laptop Screen

Durable membrane switch with backlight

Both External LCD monitor and Keypad Backlight can be turned off

for "quiet" operation

Audio volume control

LED output indicating both audio and recording are functional

A/V Input / Output

Constructed with 18 gauge steel

Dimension: 6.25" W x 2.28" H x 5.9" D (15.88 cm x 6.55 cm x 15 cm).

Weight: 2.1 lbs (.94 kg)



Figure 4: Modular Control Head

Vault

Constructed with 14-gauge steel, lockable and tamper resistant

Dimensions:11.5" W X 6.5" H X 16" D(29.21 cm x 16.51 cm x 40.64 cm)

Weight: 28.82 lbs (13.02 kg)

Removeable Vault with bracket mounted in trunk

Non-reflective black powder coated matte finish

Tamper resistant locking door & Programming Keylock

Environmentally Controlled

Specialty Radar / Laser / GPS / Alcohol Meter Interface ready

Dual Wireless Microphone Capability (optional)

Shielded antenna input & A/V Input / Output

Raised Mounting Straps Included

Back Seat Microhpone

Optional Back Seat Camera Ready



Figure 5: Vault



Industrial Grade Cobra-1200 Digital Video Recorder Compliant with FCC Part 15 Class B and CE rules

Double Shock-Mounted Hi-G-Force 80GB IDE Removable 2.5-inch Hard

Drive

Additional IDE Mobile Rack for insertion of Hard Drive into PC

Operating Temperature : 10-40° C (50-105° F)

Recording Time : Up to 35 hours recording in Real Time

using the Normal Quality Mode with Audio

Video Recording : 60 fps at 720 x 480 pixels video inputs, NTSC

50 fps at 720 x 576 pixels video inputs, PAL

On-Screen Display : Time/Date, Title, 5 Status Indicators, Hard Disk Used, Interface Readout, and Programming Menu when selected

RS-232 Interface to most Radar / Laser / GPS / Card Reader &

Alcohol Tester Measuring Devices

Recording can be started with Audio Transmitter, Siren Signal, or Lights

Signal

Recording can be activated with Overhead Controls

 $CD\ containing\ Remote\ Viewer\ Software\ for\ PC,\ User's\ Manual,$

Archiving High Speed Copy



Figure 6: DVR in Vault

Features & Specifications

VHF Audio Transmitter and Receiver

Compliant with FCC Part 74 and Industry Canada RSS-123 rules Transmitter dimension 3.6" H X 2.5" W X 1" D (9 cm x 6.5cm x 2.5cm)

Weight : 2.82 or (0.08 kg)

High quality Wireless Microphone System with Ultra-sonic Tone-

Coded-Squelch

Frequencies in VHF range – more than 50 Working range : 300ft - Maximum 1000ft

Battery life: 12-15 hours with 2 AA NiMH Rechargable Batteries

(included). Max. 25 hrs with 2500 MA batteries

Comes with a Dual-Station Battery Charger

Wind-Screen and Tie clip

Holster: Forward Cantered; optional Patent Leather or Basket Weave

Audio Receiver mounted inside the Vault

Shielded Antenna mounted on $trunk-\frac{1}{4}$ or $\frac{1}{2}$ wave whip design Built-in Microphone or External Omni Directional Lapel Microphone



Figure 7: VHF Audio Transmitter & Receiver and Charging Base

900MHz Spread Spectrum Transmitter and Receiver (Optional)

Compliant with FCC Title 47 Part 15 Subpart C

Digitally Coded over 9000 Combinations, automatically matches code when transmitter is place in the reviever base.

Multiple units can be used with No interference: 40 available channels

1000 ft Range with internal antenna

Full duplex two-way voice communication (optional)

Remote Activation of Transmitter when DVR in Record Mode

6 - 8 Hours of Talk Time per charge, Standby two days

Rechargeable Battery Charges while in base

Convenient Mounted Charging and Receiver Base up front next to officer

Built-in Microphone or External Lapel Microphone

Operating Temperature 10 – 110 degrees F

Transmitter Dimensions: 63.7 mm x 32 mm x 111.5 mm (WxDxH)

Transmitter Weight: 156g

Figure 8: 900MHz Spread Spectrum Transmitter & Reciever / Charging Base

Wiring Harness

Control Cable : 25 Conductor shielded with DB-25 connector Power Cable : 16 gauge stranded–fused to battery 10A Radar/Laser/GPS/Interface : 2 Conductor shielded with DB-9 connector

(optional)

Antenna : Shielded 50 ohm terminated via RF to chassis

of vault

Interface : 6 Conductor Shielded to Lights, Siren, Ignition,

Brakes and Turn Signals

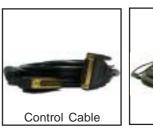








Figure 9: Wiring Harness

Instructions in Brief

Control Head

1. AUDIO ON

The Audio Light will be ON when the wire less microphone is turned ON.

2. LOW TAPE

The Low Tape Light is the warning that the hard disk is 95% used.

3. OUT TAPE

The Out Tape light indicates that the hard disk is full.

4. RECORD

The Record light indicates that the DVR is in Recording mode.

5. ZOOM IN

Press this button to Zoom In the image of the front camera.

6. ZOOM OUT

Press this button to Zoom Out the image of the front camera.

7. NEAR FOCUS

Press this button to focus the objects.

8. FAR FOCUS

Press this button to focus the objects.

9. STOP

Press this button to STOP the tape.

10. REWIND

Press this button to perform reverse playback when in the "Play" mode.

11. PLAY

Press this button to play the video.

12. FF

Press this button to perform fast forward playback when in the "Play" mode.

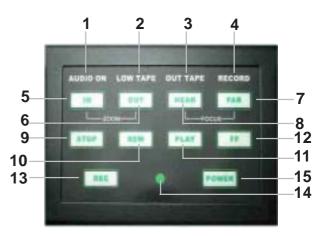


Figure 10 : Bottom of Control Head



Figure 11: Side of Control Head

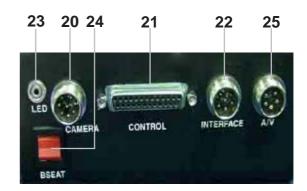


Figure 12: Rear Panel of Control Head

Instructions in Brief

13. RECORD

Press this button to start the recording. The light on the **RECORD** button (No. 4) will be on when the DVR is in the "Record" mode.

14. IR REMOTE SENSOR

Point the IR remote control toward the sensor.

15. POWER

Press to turn the power on and off.

16. MONITOR LCD DISPLAY

This displays the live images from the camera or recorded video from the DVR.

17. SPEAKERS

Plays the live sound from the microphone or from the DVR.

18. BRIGHTNESS

This controls the brightness of the LCD display.

19. VOLUME/MONITOR CONTROL

Move this knob clockwise or counter-clockwise to control the speaker's volume. You can also control the LCD monitor and control head's display light by this knob.

Vault

- 1. Antenna Connector (PL259)
- 2. Power Connector (4 Pin Din)
- 3. Rear Camera & microphone connector (8 Pin Din)
- 4. Connector for Radar /Laser /GPS /Laptop /Card Reader Alcohol Meter(DB-9)
- 5. Vault Control Connector (DB-25)
- 6. 5 Amp Circuit Breaker
- 7. A/V Connector (5 Pin Din)
- 8. Program Key Lock

20. CAMERA INPUT

Connect the front camera to this connector.

21. CONTROL

DB-25 connector for control head interfacing with vault.

22. INTERFACE

Connector for interfacing with siren, light bar, and ignition.

23. LED

This LED will turn on when the DVR receives the "record" and "audio" signal from the control head. This will help the Officer determine the control head record status from outside the vehicle.

24. BSEAT

You can select the front or rear camera / microphone by switching the **BSEAT** switch.

25. A/V Connector

This connector gives the user access to the audio and video output and can input an additional audio or video signal. This is a factory installed option.

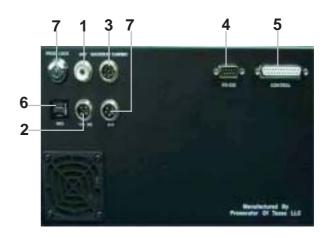


Figure 13: Rear Panel of Vault

When the key is in the vertical position, the Prosecutor System and the IR remote control functions are in the "Ready to Record or Playback" mode. When the key is in the horizontal position, the Prosecutor System and IR remote control functions are in the "Ready to Program" mode.

Instructions in Brief

IR Remote Control

POWER

Don't use this button. The DVR power is controlled by the internal microprocessor. The DVR will automatically power up when 12VDC is applied to the DVR.

REC

Press these two (2) buttons simultaneously to manually start recording.

PAUSE/STILL

Press during recording to pause recording. Press during the playback to freeze the picture.

Caution

If this button is held for 6 seconds then it will master reset the system and clear all the programming to factory default. The DVR Programming will not be reset.

STOP

Press this button to stop running the DVR. Alternatively press and hold that button for 3 to 5 seconds to access the programming mode.

PLAY

Press this button to start the playback mode.

REW

Press this button to perform reverse playback when in the "Play" mode.

F.F.

Press this button to perform fast forward playback when in the "Play" mode. In "Programming" mode, use this button to access the menu selection.

TRACKING

Us the (+) and (-) buttons to adjust the recording volume level between 0 and 10. It is recommended that the level be set to 10.

Use (+) and (-) buttons in the "Programming" mode to move the cursor upward or downward.



Figure 14: IR Remote Control

To properly install the Prosecutor Digital System, please read and perform each of the following steps in order.

Preparation

Disconnect the car battery cables. Remove the lower half of the rear seat. Remove the kick panel and trim strips on front and rear passenger side of the car. Remove or loosen the lower half of the trim on the door post between the front and the rear door enough to get cables under.

Camera Mount

Remove the mount foot from the camera mount. If you are using a windshield mounted camera, mount the foot to the window by following the directions on the included adhesive package, making sure to follow the instructions exactly. If you are not mounting the camera to the windshield, follow the directions on the adhesive package and mount the foot in the desired location, paying special attention not to obstruct air bag deployment. Allow adhesive to set until the end of the installation before mounting the camera.

LED

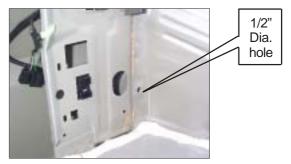
The LED wire connection will hook into the rear of the control head. Place the LED cable somewhere on the front dashboard, making the LED end visible outside the front windshield of the vehicle. (On the driver's side of the windshield is recommended. This way the cable can be placed up the side panel and run across the edge of the headliner to the rear connection of the control head.)

Trunk Unit Mount

When installing in a Ford Crown Victoria, Prosecutor recommends mounting the vault inside the trunk on the lower left (driver's) side adjacent to the air suspension switch. See diagram:



Partially remove carpet from work area.



Find the 1/2" dia. locating hole.



Measure 5-3/4" across from the hole.



Measure 3-7/8" out from the edge, use 17/64 metal drill bit to drill a hole.



Measure 6-5/16" back from the center of the first hole, get the center point of the secondhole and use 17/64 metal dril bit to make a hole.



Put the carpet back on, punch holes through carpet to match drilled holes. Place (2) ½" x 1" hex head bolts on the left 2 holes of mounting plate, (remember thumbscrew of the mounting plate should face to the bumper direction) and match holes drilled in trunk floor. Place flat washer, then lock washers and hex nuts (or lock nuts) on bolts from outside of trunk floor. Tighten bolts to secure mounting plate.



Place a hex head sheet metal screw at the middle hole of mounting plate.



Put the vault on mounting plate and lock them together by using the mounting plate thumb-screw.



Connect all applicable cables to the vault. .



Attaching the cables to the rear of the vault.

Connect the control head cable, rear camera and MIC cable, antenna cable and the power cable to the rear of the vault. Bundle the cables to create a service loop so that the vault can easily be unlocked, removed from the base plate and cables disconnected.

Control Head

Remove the control head mounting plate from the control head (4 screws on front). Remove the sun visors inner attachments (closest to the rear view mirror). Position the control head mounting plate between the sun visors such that when the control head is attached, the monitor can be viewed from driver's position. Align the hole over the sun visor's inner attachment holes and reinstall the sun visor attachments, making sure the control head mounting plate is captured by the attachments. If additional support is desired (requires making holes in headliner), 3/4-inch self-drilling screws can be used to attach the mounting plate to the secondary metal under the headliner. Wait to mount the control head until the end of the installation.



Attaching the control head mounting plate between the sun visors.

Note

If you have a ticket light (round light) added to your vehicle, you have to use the ticket light adapter.

To determine whether or not you need the ticket light adapter, position the control head behind the light. You should have at least 2 inches between the control head and window, but still be able to get to the monitor controls on top of the control head. Most Ford Crown Victorias will not need this. Most Chevy Caprices will.

Antenna Mount

This is a common lip antenna. Position the antenna at the desired location on top of the trunk. For mounting see the instructions enclosed with the antenna.

Note

If the Radio Frequency Interface is significant, a permanent 1/4 or 1/2 inch wave VHF antenna may be needed to mount through the fender of trunk.

Rear Camera & Microphone

Position the camera and microphone to the desired location at the rear of the vehicle. For mounting, see the instructions enclosed with the rear camera.

Interface Cable

This is the gray cable with a 6-pin connector on one end and the orange, black, blue, and white wires on the other end. Route the interface cable from the control head to the fuse box. Start at the center of the headliner, to the driver side of the central cable, leaving about 4 inches of the 4 pin plug end of the cable hanging down. Route across, under edge of the headliner, down the door to the fuse box. Attach the **orange** wire to switched 12V. Extend **white** wire to the light box wire that gets 12V when the overhead lights are activated. Attach the **blue** wire (+) and the **black** wire (-) to the siren. If the siren is AC instead of DC, you can use the same connections. Attach the **green** wire to the ground. *Note:* For AC-The Blue wire is **Hot**, the Black wire is **Neutral**.

DB-25 Control Cable

This is the 25 foot DB-25 male to DB-25 male cable. Connect one side of the cable to the control head and other to the vault. Route the cable through the backseat to the front of the car, up the front door post, along the front edge of the headliner, to the middle of car. Leave about 4 inches hanging from the headliner. (Pictures of cables being routed located on next page with power cable routing)

Power Cable

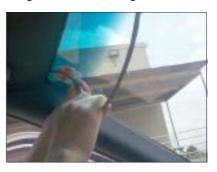
This is the gray cable with red and black wires on one end and a 4 pin connector on the other end. Verify the 4-pin connector is connected to the vault in the trunk. Route the cable through the rear seat panel, under the back seat and carpet, to the battery area of the car (routing through the firewall to the battery is preferred). Secure the red wire (through the firewall) to +12V to the battery. Connect the black and green wires together to chassis ground.



View of DB-25 and power cables coming from trunk, positioned behind the rear passenger side seat, heading toward front passenger seat. Note: cables go under carpet.



View of DB-25 located on front passenger side, under trim, heading upward toward headliner. Note: power cable will go through firewall towards battery.



View of DB-25 located on front View of DB-25 cable, under headliner, passenger side, under trim, heading heading toward control head.

Final Assembly

Attach the front camera to the camera mount and attach the camera cable to the control box. Also, attach the control cable, interface cable and LED cable to the control box. Securing the cables out of sight in the headliner, mount the control head to the back plate using the 2 screws that were previously removed. Secure vault to base plate and lock in place. Verify cables are properly routed and are not pinched or in a bind.



View of camera being attached to windshield mount. Note: cable of camera goes upwards into headliner.



View of DB-25, interface, LED, camera and power cables being connected to control head.



View of control head being mounted with wires already attached to connections

Reinstall previously removed panel, trim, seats and other hardware. Reconnect car battery cables.

Power Up the System

After completing the installation assembly, turn on the volume/monitor control switch. If the light on the **POWER** does not turn on, check all the system connections and fuse in the power cable near the car battery. If the **POWER** light is illuminated on the control head, the system can be turned on by using one of the following methods:

Control head activation - Press the **POWER** button on the control head. Microphone activation - Place the remote microphone transmitter power switch in the "**ON**" position. The system will be powered up and **AUDIO ON** and **RECORD** indicators should illuminate. The audio receiver powers up automatically when the power cable is connected to the battery and the control cable is connected to the control head.

Connections

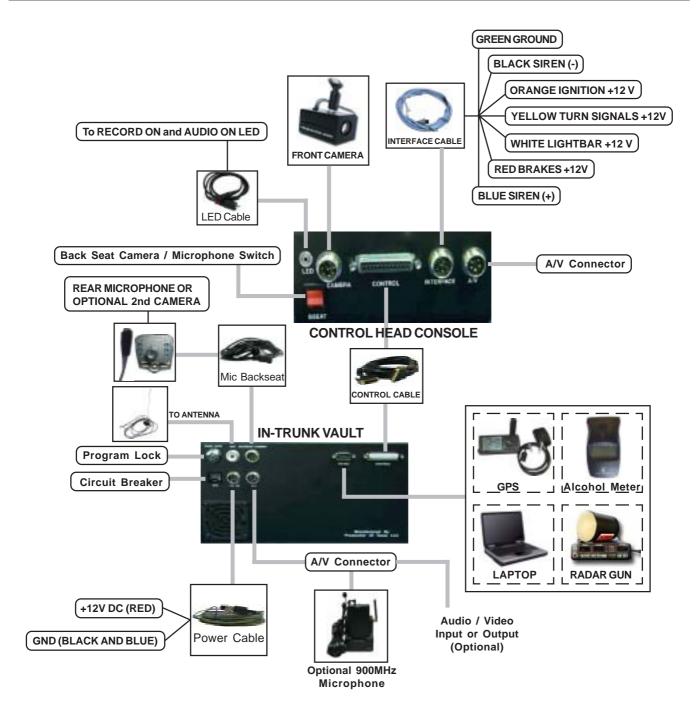


Figure 15: Description of Connections

Basic Operations

POWER UP THE SYSTEM

Complete the installation of the "In Trunk System" as described in the previous section. Turn on the volume/monitor control switch. If the light on the POWER does not turn on, check all the system connections. If the light on the POWER is on, then you can turn on the system using one of the following methods:

1. From Control Head

Press the "POWER" button on the control head and it will turn on the system

2. Microphone Activation

Place the Microphone/Transmitter power switch in the "**ON**" position, the green LED will come on the Microphone/Transmitter and the system will automatically turn on.

3. Light Bar Activation

If you have connected the white wire to the light bar then activation of the light bar will automatically power up the system and go immediately into the RECORD mode.

4. Back Seat Microphone / Camera

When you turn on the Back Seat Microphone / Camera switch on the rear of the control head the entire system will power up automatically and go into the Recording mode. When you turn this switch off the system will remain powered up.

If the system is already powered up then either of the following actions will trigger the system to record.

1. Siren Activation

If you have connected the blue and black wires to the siren, the system will automatically go into the **RECORD** mode when the siren is activated if the system is previously power up.

2. Brakes and/or Turn Signal Activation

If you have connected either or both the yellow wire to the Turn Signals and the red wire to the Brakes then upon activation of these functions will display the message in the video. They are programmable to automatically activate the system to RECORD but the default programming for this function is OFF.

Note

The wireless receiver consumes 140 mA of current. We recommend disconnection of the control cable from the control head if the vehicle is not used for more than a week.

Optional 900 MHz Wireless Microphone

The 900 MHz audio receiver powers up automatically when the power cable connects to the battery. See precautions above. Since the receiver is also the charger base it can pull up to 330ma while the transmitter is charging. Upon complete charge the battery draw will drop back to 140mA nominal. This transmitter has two methods of activation;

- 1) The transmitter in the "**OFF**" position is set for automatic activation. Whenever the DVR goes into the RECORD mode the transmitter is automatically turned on along with a faint beep of the transmitter for the duration of the recording. It can not be turned off by the user. Upon exit of the RECORD mode the transmiter will automatically be turned off again.
- 2) With the Microphone/Transmitter power switch in the "**ON**" position, the green LED on the base station will come on along with a faint beep of the transmitter and the system will automatically turn on and record audio and video. When this switch is turned off the unit will also exit the RECORD mode after any programmable dwell time is timed out.

Basic Operations

Note: Inside the battery compartment of the transmitter is a master on/off switch. If the transmitter is not used for more than two days this should be turned off so as not to deplete the battery.

INSERT HARD DRIVE

With the system powered off, insert the mobile rack containing the hard drive into the drive bay opening. Once inserted, lock the mobile rack using the key and power up the system.

START RECORDING

Ensure that the Program Lock key on the back of the vault is in the vertical position for "Ready-to-Record/Playback" mode. You can start recording by either pressing the control head's RECORD button or by pressing the REC buttons on the IR remote control. When recording, the RECORD indicator will illuminate on the control head and the "REC" message will display on-screen. You can also program the DVR to power up in the "Record" mode.

Use the (+) and (-) buttons to adjust the recording volume level between 0 and 10. It is recommended that the level be set to 10.

Note

See the Programming - DVR Settings section for more details.

STOP RECORDING

Press the "STOP" button on the control head or press the "STOP" button on the IR remote control to terminate the recording. The recording can also be terminated by pressing the "PAUSE/STOP" button on the DVR.

REMOVE HARD DRIVE

When the hard drive is 95% full, a **LOW TAPE** light will illuminate on the control head. When the hard drive is 100% full, the control head will begin beeping, and the **OUT TAPE** light will illuminate on the control head.

First, ensure that the recording has been terminated. Power off the system. Unlock the mobile rack using the key. Lift the handle out by 90 degrees and gently pull the rack out of the drive bay.

AUTO POWER DOWN

The Prosecutor System has an automatic power down feature in case the user turns off and exits the vehicle and does not manually power down the system. The Prosecutor System will automatically turn off after the default time of one hour if no manual buttons or any automatic function is initiated within in this time frame. This time is programmable in the Battery Protection Mode Menu. This will allow the system to be used with the vehicle off if the user desires, but if the user forgets to turn it off, it will automatically shutdown to conserve battery power after one hour.

CAMERA

The video camera mounted in the windshield can be manually moved at any time to gain a better view of the target scene. Upon zooming in the camera to get a license plate view or other reason, the camera will autofocus for 1 second and then go to the focus locked mode. This allows a constant in focus image of the target view even if things move in the view. However the user can manually focus the camera with the "Near" and "Far" buttons on the control head. When the camera is zoomed out again the camera will again auto focus for one second and then go to the locked mode. Briefly pressing the "Zoom In" button will cause the camera to enter the "Auto Zoom" mode. This is programmable to zoom in for a programmed period of time and zoom out again automatically. See "Camera Settings" for more details.

COVERT MODE

The Prosecutor system can work in the covert mode which means it is still recording and operating but looks like it is switched off. On the left side of the control head is the volume/monitor on/off control. To enter the covert mode rotate the volume to the lowest level unit you feel the switch engage. All lights to the keypad and the LCD montors will be turned off. Warning: If you press any button on the control head the beep will be audible.

Basic Operations

Handle for pulling the mobile rack out of the drive bay

Insert key to lock / unlock the mobile rack when removing / installing the hard drive

Figure 1: Removing Hard Disk

LED Indicator Cable

The external LED cable from the control head has two LEDs. The red LED signifies the DVR is in the Record mode and the green LED signifies the audio is on and working. This is a visual indication from outside the vehicle that the system is recording properly for the user to view conveniently.

A/V Interface

The A/V Interface connector allows the external audio/video input or output on either the control head or vault. The vault connector is usually used for the 900Mhz External Wireless audio but can be used for other purposes. This option is not standard and needs to be installed at the factory. The installed plug is a dummy.

BackSeat Microphone and Camera

The backseat microphone and/or camera is connected to the vault. The standard configuration is with backseat microphone only. Therefore you must connect this cable to the vault or when you select the backseat switch you will not see video from the front camera. When selected you enable the back seat microphone but are still recording the wireless microphone. Make sure the volume control on the control head is turned down or you will hear feedback when selecting this option.

COMMON QUESTIONS

- 1) The unit operates erratically: Check the "Program Lock" in the rear of the vault and make sure the program lock is on
- 2) I get no picture on the monitor: Make sure the backseat microphone connector is installed on the vault. The reason for this is that if no back seat camera is installed the video has to be looped through this connector via a jumper. If the connector is not installed then no video will pass from the front camera to the monitor.
- 3) The car battery is being drained: The Prosecutor System pulls 140mA from the car battery constantly. Therefore in about 1-2 weeks this will drain the battery if the vehicle is not used. If the vehicle is not being used for extended periods of time, disconnect the power to the battery via the yellow fuse holder on the power cable. You might also install a cut off switch on the power switch for convenience. Verify the ignition wire is connected properly. The ignition must be connected to the switched 12VDC side of the ignition. The Prosecutor System enables the climate control system whenever the ignition is on. Therefore if wired incorrectly and the temperature gets too cold or too hot the heater or fan will come on and deplete the battery rapidly.
- 4) **No power to control head**: Check the fuse on the power cable in the yellow case close to the battery. Also check the circuit breaker on the rear of the vault. If either are blown, verify the connection of the power cable to the vault and make sure the detent is correct for if this reversed will blow either or both. Verify the control cable is tight on both the vault and the control head.
- 5) **Low voltage**: Verify the installation is directly to the battery terminals and not using an auxillary fuse panel or other location. If an old installation check the power connection for might have gotten corroded and needs cleaning.

In this section we discuss some of the powerful programming features of the Prosecutor Digital System.

Before programming, the toggle key on the back of the vault must be turned to the horizontal position for "Ready-to-Program" mode.

The "PROGRAMMING" mode can only be accessed by using the IR remote control. The following table shows the IR remote control button functions used in the "PROGRAMMING" mode.

Things to Note

"STOP" Press and hold the remote control's "Stop" button for 5 seconds to access the Main Menu

"F.F." Press this button to enter or exit any selection

"+" Press this button to move the cursor up

"-" Press this button to move the cursor down

ACCESSING MAIN MENU

To access the on-screen programming, press the "STOP" button of the remote control for about 5 seconds. If you get the "Programming is Locked" message then you must first unlock the Programming key lock on the rear of the vault. The following programming menu will be appear on the monitor of the control head LCD.

If you have never changed the factory default password then just press "STOP" again on the IR remote. The following will appear.

User Passwod 00000000

If you have previously selected a password other than the default you will need you will need to enter in that password now. See the "MODE AND PASSWORD" section.

Main Menu

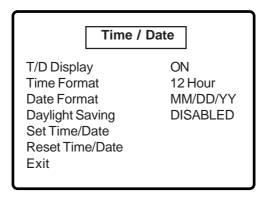
Set Time/Date
Mode and Password
Record Settings
Display Settings
Camera Settings
Interface Selection
Master Reset
Exit

TIME & DATE SETUP

An Internal clock generates the time and date that is super-imposed on the LCD display. After the clock is set, the date and time modes are displayed on the monitor screen (live picture).

Display Time & Date on Screen

- 1. Under the "Set Time & Date" menu place the cursor in front of T/D display and press the "F.F" button of the remote control.
- 2. Press the "+" or "-" button to select "ON" or "OFF".
- 3. Press the "F.F." button again to make your selection.
- 4. To exit out of the Set Time & Date, place cursor in front of "Exit" and press the "F.F." button.
- 5. Exit out of all of the menus to activate above your selection.



Selecting Time Format

- 1. Place the cursor in front of "Time Format" and the "F.F" button.
- 2. The cursor will start blinking.
- 3. Now push the "+" or "-" button to select either the "12" or "24" time display modes.
- 4. After selecting the desired mode press the "F.F." button.
- 5. Exit all of the menus to activate your selection.

Selecting Date Format

- 1. Place the cursor in front of "Date Format" and press the "F.F" button.
- 2. The cursor will start blinking.
- 3. Chose the format from the selection yy/mm/dd or mm/dd/yy or dd/mm/yy by pressing either the "+" or "-" button.
- 4. Exit of all the menus to activate your selection.

Daylight Saving

- 1. Place the cursor in front of "Daylight Saving" and press the "FF". button. The cursor will start blinking.
- 2. Press the "+" and "-" buttons to change the value to U.S.A., Canada, or DISABLED.
- 3. Exit all of the menus to activate your programming changes.

Set Time & Date

- 1. Place the cursor in front of the "Set Time/Date" and press the "F.F." button.
- 2. The "Time and Date" window will pop up on the screen as shown in the figure below.

1:11:37 P 3/12/04TH

- 3. By pressing the "+" or "-" button you can change the Time or Date.
- 4. Press the "REW" and "F.F." button to move the cursor either left or right.
- 5. After setting the Time and/or Date press the "STOP" button.
- 6. Exit all of the menus to activate your selection.

Reset Time & Date

- 1. Place the cursor in front of "Reset Time/Date" and press the "F.F." button.
- 2. It will reset the time and date to the factory default settings.
- 3. Exit all of the menus to activate your selection.

MODE AND PASSWORD

This menu is the administration menu that only authorized persons should enter. It allows you to change the basic configuration of the Prosecutor System operational mode from hot climates to normal climates. Do not change the operational mode of the Prosecutor System without consulting the factory for the unit is specially configured at the factory for either of these operational modes. Also this menu allows access to change the user password and the administrator passwords. Make sure you write down the passwords for future reference so you do not forget. All passwords are case sensitive.

- 1. Enter the main menu programming mode.
- 2. Place the cursor in front of "Mode and Password" using the "+" or "-" button.
- 3. Press the "F.F." button, and the menu below will appear on the screen.

Mode and Password

Change User Password
Change Admin Password
Climate Setting
Battery Protection Mode
Exit

- 1. Place the cursor in front of "Change User Password" using the "+" or "-" button.
- 2. Press the "F.F." button, and the following menu will appear on the screen.

User Password 00000000

- 1. Enter the current password. If you have never previously entered a password press "STOP"
- 2. Press "FF" button to select letters or numbers.
- 3. Use the "up" button to select numbers and the "Down" button to select letters.
- 4. Press "STOP" when you have entered the entire password correctly (case sensitive).

After entering the current password the following will be displayed.

New User Password 00000000

- 1. Enter the new password.
- 2. Press "FF" button to select letters or numbers.
- 3. Use the "up" button to select numbers and the "Down" button to select letters.
- 4. Press "STOP" when you have entered the entire password correctly (case sensitive).

After entering the new password the following will be displayed.

Confirm Password 00000000

- 1. Enter the new password again by the same method above.
- 2. Press "STOP" when you have entered the entire password correctly (case sensitive). You will return back to the Mode and Password menu.

Administrator Password

To change the Administrator Password select "Change Admin Password" from the Mode and Password menu. Follow the steps similar to changing the User password.

Climate Setting

- 1. Place the cursor in front of "Climate Setting" using the "+" or "-" button.
- 2. Press the "F.F." button and you will note a blinking cursor in front of the selection.
- 3. Use the "+" or "-" to toggle the selection from "Normal" to "Hot"
- 4. Press the "F.F." button and you will return to the selection mode to return to the main menu select "Exit" and press "F.F"

WARNING DO NOT CHANGE THE CLIMATE SETTING WITHOUT CONSULTING THE FACTORY.

The climate setting changes the function of the climate control of the vault. In "**Normal**" mode the heater is connected and turns on when the vault is too cold. When the climate control is set for "**HOT**" the heater circuit is connected to cooling units and turns on when the unit is too hot. Therefore changing this setting without the proper hardware installed will cause serious damage to the Prosecutor electronics in the vault.

Battery Protection Mode

Record Time Out Manual, 10 – 180 min No Record Time Out Manual, 10-180 min Cimate Control Manual/Auto

These new features allow the user to program how long the system remains powered up after the vehicle ignition is turned off, thus protecting the battery from draining. The climate control also allows the user to select when the climate control is active. When manual the system has to be turned on manually for the climate control to operate. In the Auto mode, after ignition is turned on the unit automatically goes into the climate control mode.

Record Time Out Manual, 10-180 min.

This first mode sets the time before turning off the system after the ignition is turned off while the system remains in the record mode. If programmed for "Manual", this leaves the system on indefinitely until the user presses the "Power" button manually. If you select a time from 10 minutes to 180 minutes, the unit will remain powered up for this programmable time and then turn off even though the unit was left in the record mode.

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This is useful for departments that continuously record from the moment the vehicle is started to the time the shift ends. If the officer turns off the ignition and exits the vehicle and forgets to turn off the system, the system will automatically turn off and not drain the battery.

No Record Time Out Manual, 10-180 min.

This second mode sets the time before turning off the system after the ignition is turned off while the system is powered up. In this mode if no functions on the system are operated this starts the time out. If programmed for "Manual", this leaves the system on indefinitely until the user presses the "Power" button manually. If you select a time from 10 minutes to 180 minutes, the unit will remain powered up for this programmable time after the last function is pressed by the user.

This is useful for departments that leave the system on continuously but not always in the record mode, or have an event during the day from the powered down mode and the system remains in the powered up mode. If the officer turns off the ignition and exits the vehicle and forgets to turn off the system, the system will automatically turn off and not drain the battery.

Climate Control

The climate control allows the user to select when the climate control is active. When "manual" the system has to be turned on manually via the power button or LTS/Audio activation from off mode for the climate control to operate. In the Auto mode, after ignition is turned on the unit automatically goes into the climate control mode. When in the auto mode the unit will show all keypad lights on and the LCD display a dull blue illumination. If the unit is activated or powered up the unit will turn on to the fully operational mode.

RECORD SETTINGS

Access the sub menu of the Record Setting by placing the arrow next to Record setting and press the "F.F." button. The following sub menu will appear

ALARM REC DWELL

The setting you choose will be the minimum recording time after the Alarm Record Signal goes from high to low, or active to inactive. The default setting is 30 minutes. Select "ALARM REC DWELL". The cursor will start blinking. Press the "+" and "-" buttons to change the settings. The available settings are from 0 to 180 minutes in one-minute increments. Exit all of the menus to activate your programming changes. When the DVR begins recording, it will display the "REC" message on-screen, as well as the percent hard disk usage and recording rate. See the DVR Settings section for more information.

DVR SETTINGS

Select "DVR Settings". The following sub-menu for the DVR will appear.

Main Menu

SET MENU
ID :
ID LOCATION :
ID ENABLE : OFF
DATE-TIME : OFF
ALARM REC : 1 MIN
EXIT :

Note

Only the "**Set Menu**" item on this menu is to be used. The other menu items for the DVR are not used or are already included using the functionality in the Prosecutor Digital System.

Select the "Set Menu" item. The following sub-menu will appear.

YEAR -MONTH-DAY TIME

EXIT SET MENU

DATE : YEAR-MONTH-DAY TIME

RECORD MODE : FIELD
REC FPS : 60P
REC QUALITY : NORMAL
AUTO RECORD : OFF

AUTO REVERSE : OFF (ON, OFF)

MULTIPLEXER : 1 (CH) 1P

CLEAR HD : OFF (OFF, ON)

Exit Set Menu

Select this item to exit out of the menu when finished programming the DVR settings.

Date

Not used. The date and time are programmed in the Prosecutor Digital System.

Record Mode and Rec FPS

Changing the **RECORD MODE** and **RECORD FPS** will affect the recording quality and available recording duration. The default setting for **RECORD MODE** is "**FIELD**". The default setting for **REC FPS** is "**60P**" for NTSC or "**50P**" for PAL. Using the combination of these settings provides real-time recording. It is recommended that these settings be used. See the following table for estimated recording duration versus recording quality in using these settings (real-time).

Record Quality

Changing the **RECORD QUALITY** will affect the available recording duration. The default setting is "**NORMAL**". It is recommended that this setting be used. See the following table for estimated recording duration versus recording quality in real-time (FIELD 60 FPS NTSC or FIELD 50 FPS PAL).

Recording Duration in Real-Time (Field 60 FPS NTSC / 50 FPS PAL) using 80MB Hard Disk

NTSC FORMAT

Quality Duration

High16 Hours 47 MinutesNormal21 Hours 33 MinutesBasic37 Hours 38 Minutes

PAL FORMAT

Quality Duration

High 15 Hours 56 Minutes
Normal 20 Hours 45 Minutes
Basic 36 Hours 04 Minutes

Auto Record

The default setting is "OFF". If you turn on this feature, the DVR will begin recording as soon as the DVR is powered up.

Auto Reverse

The default setting is "**OFF**". If you turn on this feature, when the hard disk is full the DVR will automatically return to the beginning of the disk and record over the previously recorded information. It is recommended that the "**OFF**" setting be used.

Multiplexer

Not used.

Clear HD

The default setting is "**OFF**". Selecting "**ON**" will return the DVR to recording from the beginning of the hard disk. The value then is automatically reset to "**OFF**" until selecting "**ON**" again.

HARD DISK USAGE

When in the "Record" mode, the percent hard disk usage will be displayed in the top left-hand corner of the screen. Just below this the "Record" mode is indicated. To the right of this the current recording rate is indicated.



Figure 17: Mornitor View

ALARM REC DWELL

The setting you choose will be the minimum recording time after the Alarm Record Signal goes from high to low, or active to inactive. The default setting is 30 minutes.

Select "ALARM REC DWELL". The cursor will start blinking. Press the "+" and "-" buttons to change the settings. The available settings are from 0 to 180 minutes in one-minute increments. Exit all of the menus to activate your programming changes.

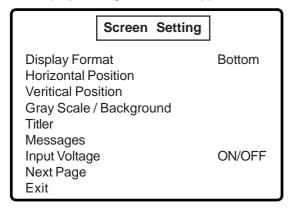
DISPLAY SETTINGS

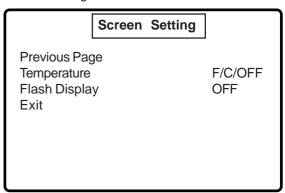
The DVR adds alphanumeric information to the video signal from the camera and sends it to the DVR for recording or to the monitor to display. The display settings let you select the position, the gray scale and the format of the text. Following are the options in display settings.

Display Format

The display format displays alphanumeric information either on the top or bottom of the screen. To set the display use the following instructions.

- 1. From the remote control press the "STOP" button for 5 seconds, the main menu will appear on the screen.
- 2. Under the main menu move the cursor in front of "Display Settings" and press the "F.F." button.
- 3. The "Display Settings" menu will appear on the screen as shown in the figure below.





- 4. Place the cursor in front of "Display Format" using the "+" or "-" button and press the "F.F." button.
- 5. Now choose either "Top" or "Bottom" using the "+" or "-" button.
- 6. Press the "F.F." button to chose your selection.
- 7. Exit all of the menus to activate your selection.

Horizontal Position

Horizontal position sets the alphanumeric text position horizontally. Follow the steps below to set the horizontal position.

- 1. Place your cursor in front of "Horizontal Position" and press the "F.F." button.
- 2. A small box will appear on the screen.
- 3. Press the "+" or "-" button to select the appropriate position.
- 4. After selecting the position press the "F.F" button
- 5. Exit all of the menus to activate your selection.

Vertical Position

Vertical position sets the alphanumeric text position vertically. If the Display Format is set on "**TOP**" then the vertical position lets you choose the position from the top of the screen to the middle of the screen. If the display format is set to the bottom then the vertical position can be moved from the middle of the screen to the bottom of the screen. Follow the steps below to set the vertical position.

- 1. Place the cursor in front of "vertical position" press the "F.F." button.
- 2. A small box will pop up on the screen.
- 3. Press the "+" or "-" button to select the appropriate vertical position.
- 4. After selecting the position press the "F.F." button.
- 5. Exit all of the menus to activate your selection.

Gray Scale / Background

"Gray Scale / Background" sets the gray scale and background color of the alphanumeric text on the display. Follow the procedure below to set the gray scale or background color.

- 1. Place the cursor in front of "gray scale/background" and press the "F.F." button.
- 2. A small box will pop up on the screen.
- 3. Press the "+" or "-" button to select the appropriate gray scale or background color.
- 4. After selecting the gray scale or background color press the "F.F." button.
- 5. Exit all of the menus to activate your selection.

Titler

You can program up to a 20 character title on the screen. Follow the steps below to program the title on the screen. The default title is:

"PROSECUTOR DIGITAL"

- 1. Place the cursor in front of "Title" using the "+" or "-" button then press the "F.F." button.
- 2. Use the "+" or "-" button to select an alphanumeric character.
- 3. Use the "F.F." button to enter next character or use "REW" button to edit a previously entered character.
- 4. You can enter up to 20 characters in a title.
- 5. After entering the title press the "STOP" button to exit out of the title editing mode.
- 6. Exit all of the menus to activate your selection.

Thing to know

- "-" button moves the alphabet in ascending order and numerics in descending order.
- "+" button moves the alphabet in descending order and the numerics in ascending order.
- "F.F." button moves the cursor toward the right postion.
- "REW" back space
- "STOP" exits out of the editing mode.

Messages

The Prosecutor Digital System has five message inputs that can appear on-screen. Each message can display up to 6 characters. These messages are activated on the LCD display when the control head gets a signal from the interface cable. See the "Installation" section for the connections (pin-outs) of the interface cable. Three message inputs are standard with the system. By default these are "SRN" (when the siren is turned on), "LTS" (when the lights are turned on), and "AUD" (when the audio is turned on). Messages 4 and 5 are options for brakes and turn signal and can be purchased separately from Prosecutor.

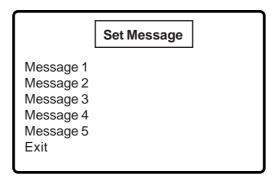
Set Message

- 1. Place the cursor in front of "Message" using the "+" or "-" button and press the "F.F." button.
- 2. Press the "F.F." button, the menu below will appear on the screen.

Set Message

Set message Set message record Exit

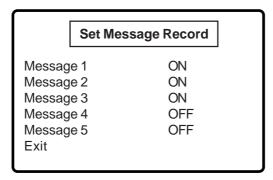
- 1. Place the cursor in front of "Set Message" using the "+" or "-" button.
- 2. Press the "F.F." button, and the following menu will appear on the screen.



- 1. Place the cursor in front of the message that you want to change and press the "F.F." button.
- 2. A blinking cursor will appear on the screen.
- 3. Enter the letter or numeric character, using the "+" or "-" buttons.
- 4. After entering the first letter press the "F.F." button to move the cursor to the next place.
- 5. Again use the "+" or "-" button to select the next letter.
- 6. Repeat steps 3 to 5 until you enter the complete title.
- 7. After entering the title press the "Stop" button, it will return you to the Set Message menu.
- 8. Enter the all the remaining messages the same way.
- 9. Select Exit to return to the Set Message menu.

Set Message Record

- 1. Place the cursor in front of "Set Message record" using the "+" or "-" button.
- 2. Press the "F.F." button, and the following menu will appear on the screen.



- 1. Place the cursor in front of the message that you want to change and press the "F.F." button.
- 2. A blinking cursor will appear on the screen.
- 3. Using the "+" or "-" buttons toggle between ON or OFF.
- 4. After selection press the "F.F." button.
- 5. Again use the "+" or "-" button to select the next Message to program.
- 6. Repeat steps 1 to 5 until you entered all messages.
- 7. Select "Exit" to return to the Set Message menu.
- 8. Select "Exit" again to return to the "Display Settings" menu.

Input Voltage

The DVR can display the input voltage on the screen. You can turn off or on the voltage message from the "display settings" menu. A "**LOW VOLTAGE**" message will start flashing on the screen if the input voltage is less than 9V. The DVR will not record or operate if the input voltage is less than 9V.

Follow the steps below to turn the voltage display on or off.

- 1. Now place the cursor in front of Input Voltage and press the "F.F." button.
- 2. Press the "+" or "-" button to select "ON" or "OFF".
- 3. Exit all of the menus to activate your selection.

Temperature

A built in temperature sensor tracks the internal temperature of the DVR and Vault. You can view the internal temperature by enabling the temperature display in the display setting menu. If the temperature goes higher than 90 F (32 C) then the fan is turned on. If the temperature goes lower than 40 F (4 C) then the heater is turned on. If the temperature goes lower than 32 F (0 C) then the DVR will be turned off. The display can either be in Fahrenheit (F) or Celcius (C). Follow the steps below to enable the temperature display on the screen.

- 1. Place the cursor in front of Temperature and press the "F.F" button.
- 2. Press the "+" or "-" button to select "F", "C" or "OFF".
- 3. Exit all of the menus to activate your selection.

Flash Display

This feature flashes the entire on-screen display every second. This allows the user to view the scene behind the on-screen data unobscured. This is useful in content rich viewing where there is no dead viewing area of the picture to place the on-screen data.

- 1. Under the main menu place the cursor in front of "Flash Display" and press the "F.F." button.
- 2. Press the "+" or "-" button to select "ON" or "OFF".
- 4. Exit all of the menus to activate your selection.

Camera Settings

This new menu items allows the system to program all setups of the camera and setup and enable the auto zoom function.

Camera Settings

Auto Zoom Mode On/Off Camera Setup Exit

Auto Zoom Mode

After you have done the following programming the auto zoom function will be initiated by pressing the "Zoom In" button on the keypad. Upon pressing and releasing you will hear on beep of the keypad and the camera will zoom in automatically and after the preset time will zoom back to the original starting position.

You may at any time cancel the Auto Zoom Mode by briefly pressing the "Zoom Out" button. You will hear a beep and the camera will zoom back to the original setting immediately.

You may also focus near or far at any time during the Auto Zoom mode so a clear image can be obtained. This feature is mainly used for recording a clear view of the license plate of a vehicle. Both vehicles must be stationary for the camera to auto focus correctly on the license plate. The same is true for when the camera times out. Therefore this feature should only be used if the vehicle is stationary.

The auto zoom mode must be set to "ON" for this function to operate and to enter to Auto Zoom Setup.

Auto Zoom Mode

Auto Zoom ON

Preset time 1,2,3,4,5,6,7,8,9,10 15,20,25,30,45 secs, 1-10 min

Auto Zoom Setup

Exit

When you enter to Auto Zoom Setup the key of the remote control are define as follows.

FFW: Zoom In
REW: Zoom Out
+: Focus Far
-: Focus Near
STOP: Save and Exit

When you enter the auto zoom setup mode you must only use the remote control to zoom the camera in or out to the preset zoom in position. You can manually focus if you choose by using the respective buttons on the remote. DO NOT USE THE KEYPAD FOR ANY CAMERA FUNCTION WHILE IN THIS PROGRAMMING MODE.

After you have selected the desired zoom and focus position, press "Stop" to save and exit.

The preset time selects how long the camera remains zoomed in before automatically zooming out to the last manually zoomed position.

Camera Setup

The "Camera Setup" menu can program all the camera setups and functions. Place the cursor in front of "Camera Setup" and press "FF". Following menu will appear on the monitor. The "FF", Trk Up/Down will be used as normal to change the selected items. The "Stop" button can be used at any time to save and exit this menu. The following menu is the factory defaults along with all user programming selections.

Menu 1

Initial set OFF
Black light off ON
Color ON
Negative OFF
Focus PUSH AUTO
Flickerless OFF
WBC mode AUTO

Menu 2

Camera ID OFF
Sharpess 10
Brightness 43
Zoom start X1
Zoom end X128
Focus from 1 CM
AE mode AUTO

INTERFACE SELECTION

The Interface Selection sub-menu displays the choices of the types of external devices that can interface to the Prosecutor System. This includes radar guns, laser speed guns, GPS, Alcohol Meters, Laptops, Data Radios, Accelerometers and any RS-232 compatible device. This menu also lets you set the baud rate between the interface and the external device. The following menu will appear if you select the "Interface Selection" from the Main Menu.

Interface Selection

Enable Interface

ON/OFF

Generic

Select Radar Gun

Select Laser Gun

Select GPS

Select Alcohol Meter

Select Card Reader

Set Baud Rate

Exit

- 1. Place the cursor in front of the desired selection by using the "+" and
- "-" buttons and press the "F.F" button to select it.
- 2. Press the "+" or "-" button to select the desired sub-menu.
- 3. When you have located the make and model of the interface you desire press "F.F" to select it and exit back to the Interface Selection menu above.
- 4. Select "Exit" to go back to the Main Menu.

To enable or disable the Interface completely, select "Enable Interface" and use the "+" and "-" buttons to toggle ON or OFF.

NOTE

Generic

Accepts any RS-232 data and displays it on the monitor. This can be from a computer, data radio, laptop, or other device with RS-232 communications. The DB-9 Connector uses Pin 2 for RXD (Recieving Data) and Pin 5 which is ground.

The following are the radar guns currently available to interface directly with the Prosecutor System. If you do not see the desired unit on this list, please contact Prosecutor for updates.

Select Radar Gun

Decatur

Generic

Kustom

MPH Python

Municipal TS-4

RG2RS

Stalker Dual SL

Next Page

Exit

Select Radar Gun

Previous Page

Targetron Rapid Fire

Tribar Muni Quip

Exit

Laser Guns

LTI 20.20 Laser Atlanta

GPS

NEMA 0183 LAT/LONG NEMA 0183 LAT/LONG/SPD KPH NEMA 0183 LAT/LONG/SPD MPH

Alcohol Meter

AlcolMeter SD-400P Intoxilyzer 400

RG2RS

This is a special radar gun interface, which, when installed with the Proseuctor System, will enable the following radar guns to connect to the DVR. The RG2RS must be purchased separately and is not included with the Prosecutor System. The following are the radar guns supported by the RG2RS.

ACM STALKER Decatur HUNTER, GENESYS 1 & II KUSTOM KR-10SP, TROOPER MPH K-55 TARGETRON RAPID FIRE PLUS

Card Reader

The card reader selection allows single, dual and 3 track magnetic card readers to be connected to the RS-232 input. The raw data from the magnetic card like drivers license, access control cards, etc, will be read and displayed on the video screen. Card readers that have RS-232 output can connect directly, but for ones that do not or if you want to tap the data of an existing card reader in other equipment, contact Prosecutor for the additional interface card required.

BAUD RATE

Here you select the correct Baud Rate for your Interface Device. The choices available are: 1200, 2400, 4800, & 9600.

MASTER RESET

Master Reset resets all the programming to factory default settings. Follow the steps below to do a Master Reset.

- 1. On the Main Menu, place the cursor in front of "Master Reset".
- 2. Press the "F.F." button to choose the selection.
- 3. The Master Reset sub-menu will appear on the screen.
- 4. Use the "+" or "-" buttons to place the cursor in front of " Do Master Reset"
- 5. Press the "F.F." button to perform a master reset on the DVR.
- 6. A copyright menu will appear on the screen notifying you that the DVR has been reset.

Warning

If you do a Master reset this will clear all settings and exit the programing mode.

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Playback

RECORD PROTECTION

The DVR utilizes Wavelet compression technology which captures each frame truely without manipulation of the video clip. The data on the hard disk is a proprietary format and can not be read or copied without our software. In addition, the video is water-marked with date and time making it completely tamper-proof.

PLAYBACK - The video from the DVR can be played back using 3 methods.

In-Vehicle Playback

First, ensure that the Program Lock key on the back of the vault is in the vertical position for "Ready-to-Record/Playback" mode. Using the buttons on the control head, press PLAY, REW, FF, and STOP as applicable to play back the video on the control head's monitor.

Playback on a PC

The Prosecutor Digital System comes with a second IDE Mobile Rack which, when installed in the drive bay of a PC, is used to insert the hard disk from the DVR. A USB to IDE converter can be used for external operation. Also provided is a CD containing the easy-to-use DVR Clipper software which, when installed on the PC, is used to view any of the video on the hard disk. This software does not alter the original recording on the hard disk. Specific images can be saved in bit mapped (.bmp) format.

Archiving and Conversion

The Prosecutor adv2avi.exe software allows for archiving and converting the proprietary format to the standard AVI format used on all PCs. Once converted, any media player, editing software, enhancement software or any third party video software can be used to manipulate, cut clips and burn to CD or DVD for use. This software copies the Prosecutor hard disk to another Windows hard disk at the maximum speed of the hard disk and PC, reducing backup time to minimum. However the limit of this is the hard disk and currently about 40 seconds per GB.

Playback on a DVR

An additional Cobra-1200 DVR can be purchased for the purpose of playing back the video on the hard disk. Use the controls on the front panel of the DVR to view the video. Additional information about use of the DVR for playback is contained in the DVR User's manual included on the compact disc that comes with the Prosecutor Digital System.

adv2avi PAL/NTSC_audio.exe (version 2.2) Video Processing Program. (WinXP/2000 only)

The "Setup_adv2avi.msi" file installs "adv2avi_NTSC_audio.exe" video processing program and the required codec on your WinXP system.

A new feature in version 2.2 is batch processing. Batch processing copies all of your recorded video and converts it to .avi files in one easy to use step. This also means that you will no more have to clean up all the .adv files on your system, since they are deleted automatically when converted to .avi files.

Instructions:

Insert the hard disk from the recording unit into the rack mounted in the PC and lock the rack. Turn on the PC.

- 1. Run "Setup_adv2avi.msi" to install "adv2avi_NTSC_audio.exe" program and codec. (WinXP only)
- 2. To start up "adv2avi_NTSC_audio.exe" from the start menu, click the "start" button down to the left on your screen. Then click "All Programs", look for "AVE" and click on it, then click "adv2avi" and finally click "adv2avi_NTSC_audio.exe".

Prosecutor Software

A window comes up with menu items "File", "Tools" and "About". Click on the "Tools" menu option and you see three sub options. "Copy Video ...", ".ADV->.AVI ...", "Batch process video..." (6.) and "Clean Sweep ...".

3. Click "Copy Video ..." to invoke a save as dialog box, titled "Copy Destination". Type in the save name you want for your raw video from the recording unit; you can use up to 31 characters, don't type in a file extension, the file extension is automatically inserted by the program. Click "Save" and another dialog box appears, "Copy Raw Video to Windows Hard Disk". Here you see your chosen file name and copy destination plus other info about the hard disks and estimated time for the copy process.

The important thing to notice here is "Free hard disk space" compared to "MB of video". If "Free hard disk space" is less than "MB of video" the copy process can NOT be done. You have to choose another hard disk (if you have more than one hard disk in the PC or network hard disks) to save the video on through clicking "Save As ...", or delete files on your existing hard disk and try again.

If you have enough free space, click "Copy Video" and the copying process starts, you will see "Copying ..." and a progress bar. All your recorded video is now being saved to your windows hard disk. Wait until the program alerts you with a message box and a sound that the copying is finished. Dialog box "Copy Raw Video to Windows Hard Disk" is automatically closed when you click "OK" on the message box.

- 4. You are now back to the three menu items. Click "Tools" again and now choose ".ADV->.AVI ..." and you see the dialog box "Video File Conversion .ADV -> . AVI". Click "Change From" and you see an open dialog box. You should see your saved video files in a numbered sequence with a file extension .adv, if not, browse to the destination where you saved them. Click the one you want to convert to avi and click "Open". Now click "Change To" and you see a save as dialog box named "Conversion Destination". Type in any name you want for your avi file and click "Save". Now click "OK" and you will see "Converting... Wait ..." and your raw video is being converted to standard avi format. Wait until the program alerts you that the conversion is complete. Click "OK" on the message box saying ".adv Video file "file name_XXXX.adv" conversion SUCCEEDED!" and then click "Close".
- 5. Now double click the saved avi file in "Windows Explorer" and the video will start playing in your default avi player, probably "Windows Media Player".

Repeat step 4 to convert more raw .adv video files to .avi video files.

- 6. Batch process all of your recorded video by click "Tools" -> "Batch process video...". You will see same dialog box as in step 3. After the video is copied conversion to .avi files starts automatically.
- 7. There is one more option under "Tools", the "Clean Sweep ..." utility. Clean Sweep erases the video hard disk totally. This is not necessary but it's a security measure to delete all video on the hard disk. The recording unit does NOT delete the video previously recorded on the hard disk.
- 8. To exit the program click "File" and then "Exit".

Disable checkdisk when Window XP startup

Click start button and run . Type regedit into open and enter goto HKEY_LOCAL_MACHINE -> SYSTEM Controlset 001->Control -> SessionMager Change data in BootExcute by double click on BootExcute and type/k before *

Example: Autocheck, autochk/k*

Hardware requirements and recommendations:

Recommended PC for the playback of the video is 2.8 GHz CPU, 256 MB RAM, a big hard disk minimum 120 GB and a good graphics card like nVidia 5200FX. The video will work on slower PC's but frames may be skipped.

For the copying and conversion any PC will do, but faster PC means faster copying and conversion.

PROSECUTOR OF TEXAS LLC. TERMS & CONDITIONS OF SALE AND LIMITED WARRANTY

In consideration of **PROSECUTOR OF TEXAS** ("Seller") selling its products to Buyer, and for all sales by Seller, unless specifically agreed in writing by Seller, the following Terms & Conditions shall exclusively apply to all such sales, regardless of any other documents, prior agreements, or prior course of dealing:

1.Acceptance

The acceptance of all offers by Seller is expressly limited to the terms herein.

AND ANY ADDITIONAL OR DIFFERENT TERMS SUGGESTED BY BUYER OR PRINTED ON BUYER'S OWN TERMS AND CONDITIONS ARE HEREBY REJECTED UNLESS EXPRESSLY ASSENTED TO IN WRITING BY SELLER.

2. Shipment and Deliveries

- (a) Unless otherwise specifically agreed to in writing, Seller does not guarantee a particular date for shipment or delivery of the goods quoted. Shipment and delivery dates quoted are estimates of approximate dates.
- (b) Unless otherwise specified, all shipments and deliveries shall be F.O.B. Seller's warehouse dock in Houston, Texas. Upon shipment request, Seller shall only assume expenses and risks of placing the goods quoted into the possession of the carrier, making contracts for the transportation of such goods as may be reasonable under the existing circumstances at time of shipment, giving notification to Buyer of shipment and delivering or tendering in due form any document necessary to obtain possession of the goods.

ANY LOSSES, DAMAGES OR CLAIMS ARISING OUT OF THE ACTS OR OMISSIONS OF THE CARRIER SHALL BE THE RESPONSIBILITY OF THE BUYER.

(c) If partial shipments are contemplated pursuant to the order, Seller shall have the right to deliver any portion of the equipment or material ordered and to bill Buyer therefor. Buyer agrees to pay for the same in accordance with the terms of payment herein.

3. Assignment

This Agreement is not assignable without written consent of Seller and any attempted assignment without such consent shall be void.

4. Excusable Delays

Seller shall be excused from and under no circumstances shall be liable for any loss of damage caused by, included but not limited to, delay in performance, or failure to fill any order or orders due to fire, strikes, labor matters, governmental regulations, acts of the elements, transportation, failure 'to receive materials or causes of a like or different nature reasonably beyond its control in the reasonable conduct of its business.

5. Returns

Returns of standard stocking items with no restocking fee can only be made within thirty (30) days of invoice to Buyer. All such returns must be in unopened original packaging. Any other returns must have prior written consent of Seller and restocking fee of not less than fifty percent (50%) will apply.

6. Changes or Cancellation

Order may be changed or canceled by Buyer only with the consent of Seller and upon payment of equitable adjustment charge or cancellation charges. Such charges shall take into account costs and expensesthereto incurred, purchase or contract commitments made by the Seller and all other losses due to such modifications or cancellations including a reasonable profit.

7. Limited Warranty

The only warranty to Buyer is the one printed on the warranty certificate included with the product, except as otherwise provided in any written agreement signed by Seller.

- a) SELLER'S PRINTED PRODUCT WARRANTY. For 90 days from the date of shipment, Seller will pay for parts and labor; and Seller will for a period of one (1) year from date of shipment pay for parts only. Seller warrants to Buyer that the equipment and materials quoted is free from defects in material or workmanship UNDER NORMAL USE AND SERVICE. If a printed product warranty certificate is supplied with the equipment and such certificate specifies a warranty period of a longer duration, said warranty certificate shall control the length of the warranty period. If said warranty certificate contains other terms and conditions which either conflict with or are additional to the provisions of these terms, terms which are additional shall be incorporated by reference herein and terms which are in conflict with any provision contained herein shall have no force or effect.
- b) PERMISSIBLE VARIATIONS, STANDARDS AND TOLERANCES. Except in the particulars specified by Buyer and expressly agreed to in writing by Seller, all material and equipment shall be produced in accordance with Seller's standard practices. All equipment and material, including that produced to meet an exact specification, shall be subject to tolerances and variations consistent with usages of the trade and within practical and reasonable factory inspection methods. Equipment or materials which are rated or certified by independent rating or certifying trade associations or organizations and bear their respective symbols or sales, shall signify only that such equipment was produced to meet such standard within the permissible variations and tolerances, such equipment or material will meet the safety, ratings or capacity requirements to which the symbol or seal applies under laboratory testing procedures specified by said associations or organizations as distinguished from field testing. Seller makes no certification as to installed performances of the equipment or material other than as heretofore set forth.

WITHIN THE AFOREMENTIONED LIMITATIONS SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY IMPLIED WARRANTY AS TO CORRECTNESS OF ANY STANDARDS OR RATINGS WHICH ARE INCONSISTENT WITH THE AFORESTATED FACTS AND RESTRICTIONS.

- c) WARRANTIES EXCLUDED. SELLER EXPRESSLY DISCLAIMS AND EXCLUDES ANY EXPRESS OR IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS OR IS INCONSISTENT WITH THE WARRANTY HEREIN EXPRESSLY SET FORTH.
- d) Equipment manufactured or supplied by others (manufacturers other than Seller) but furnished by Seller hereunder carries the same warranty to Buyer as Seller receives from the other manufacturer.
- e) NOTWITHSTANDING ANY PROVISION TO THE CONTRARY, should Buyer specify that Seller supply a particular manufacturer's product which is not the brand standardly supplied by Seller, Buyer shall look only to the other manufacturer's warranty and Seller shall not warrant such item. Buyer shall obtain only the warranty which comes with such other manufacturer's product.
 - f) EXCLUSIONS: Seller's warranty does not cover the following.
 - (1) in transit damage claims, improper handling by carrier or post office
 (NOTE only the consignee of the shipment can file a claim with the common Carrier)

- (2) damages caused by incorrect use, modification, carelessness, unauthorized Iterations, improper storage or unauthorized service, installation or repairs;
- (3) damages caused by fire, flood, lightning, collision, acts of God or other events beyond the control of Seller:
- (4) products or parts thereof that have had serial numbers removed, altered or defaced;
- (5) products received for repair without a RMA number and a sales or delivery receipt showing the date of original purchase;
- (6) hostile operating conditions;
- (7) use of components that do not meet Seller's specifications;
- (8) damage or failure caused by or resulting from the operation of the product with incorrect voltage;
- (9) external parts such as cabinets or keypads;
- (10) periodic maintenance and adjustments resulting from normal use such as video head clean ing, etc.; and
- (11) damage resulting from using cleaning cassettes.
- g) In the event Buyer makes a warranty claim and Seller's warranty does not apply, Buyer shall reimburse Seller for all reasonable expenses incurred by Seller in diagnosing the installation/repair problem. Seller shall not be responsible for any damages to the Product or other property due to installation or service by a party not authorized by Seller.

8. Buyer's Exclusive Remedies.

If the Product to be supplied to Buyer shall fail to conform to this contract or any applicable express or implied warranty, Buyer shall immediately notify Seller of such condition and afford Seller a reasonable opportunity to inspect said Product. Seller shall, at its option, either repair or replace such nonconforming Product. Seller shall not be responsible for labor charges for removal or installation of such equipment or material or charges for transportation, handling and shipping except as provided in Seller's written service policy. No Product shall be returned without Seller's consent.

SELLER SHALL NOT BE LIABLE FOR ANY SPECIAL, DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF A COMMERCIAL NATURE ARISING OUT THE USE OF OR INABILITY TO USE SELLER'S PRODUCT BY REASON OF THE FACT THAT SUCH PRODUCT DOES NOT CONFORM TO THE CONTRACT OR TO ANY EXPRESS OR IMPLIED WARRANTY. SELLER'S MAXIMUM LIABILITY SHALL BE LIMITED TO THE COST OF REPAIR AND/OR REPLACEMENT OF THE PRODUCT CLAIMED TO BE DEFECTIVE OR NONCONFORMING SUBJECT TO SELLER'S RIGHT OF REMOVAL AND RETURN OF PRODUCT.

All of the foregoing shall constitute Buyer's **sole and exclusive remedy** and Seller's **sole and exclusive liability** for supplying nonconforming or defective Product.

9. Credit Approval.

Shipments and deliveries of Product shall at all times be subject to the approval of Seller's Credit Department. If Buyer shall fail to make any payments in accordance with the terms and provisions of this agreement, Seller, in addition to its other rights and remedies, but not in limitation thereof, may, at its option, decline to make shipments or deliveries hereunder except upon receipt of payment or satisfactory security or upon such terms and conditions satisfactory to Seller.

10. Terms of Payment.

Payment terms for goods shipped hereunder will be net thirty (30) days from the date of invoice. Seller reserves the right to add to any account outstanding for more than thirty (30) days and Buyer agrees to pay a service charge of 1-1/2% of the principal amount due at the end of each month or the maximum allowable legal interest rate, if a lesser amount.

11. Creation of a Lien.

In the event that 'the purchase price is not paid when due and credit is extended to the Buyer, then in consideration therefor Buyer grants to Seller a security interest in the Product and said security interest shall extend to all parts or accessories now or hereafter attached to the Product and the proceeds therefrom.

12. Taxes.

Prices quoted by Seller do not include any existing or future sales, use or similar taxes which are or may be levied upon the sale, delivery or service of the Product by federal, state or other governmental authorities. Such taxes shall be for the account of the Buyer who shall promptly pay the amount thereof to the Seller on or before the time when such tax or taxes are payable by Seller to applicable taxing authority or authorities. If the sale is tax exempt, Buyer shall provide Seller with a proper tax exemption certificate upon acceptance of order or in any event, prior to shipment of Product. Should any question as to applicability of such taxes to any sales later arise, Buyer shall fully cooperate in resolving such question and pay any such taxes then determined to be owing.

13. Waiver.

Seller's failure at any time to require performance by Buyer of any provision of these terms and conditions shall not be deemed a waiver of future compliance therewith and shall not affect the right of the Seller to require compliance therewith at any time thereafter.

14. Indemnity.

Buyer agrees to save and indemnify and keep harmless Seller against all liability, claims, demands or judgment for damages arising from accidents to persons or property occasioned by Buyer, his agents, or employees, and will defend any and all suits and will reimburse and indemnify Seller for all expenditures or expenses including court costs and counsel fees made or incurred by Seller by reason of such accident.

15. Unauthorized Representations.

Buyer agrees that it is not Sellers agent, assign or authorized dealer. All performance claims, additional warranty periods, or other representations made to third party purchasers shall not be binding on Seller and shall be the sole responsibility of the Buyer. Buyer shall indemnify Seller for any and all damages incurred by Seller due to any unauthorized representations.

16. Time For Claims.

ANY CLAIM(S) BY BUYER ARISING FROM THE PERFORMANCE OR NONPERFORMANCE BY SELLER MUST BE BROUGHT WITHIN ONE (1) YEAR FROM THE DATE SUCH CLAIM AROSE.

17. Applicable Law.

All sales shall be governed and construed under the laws of the State of Texas. Should any part of this agreement, for any reason be declared invalid, such decision shall not affect the validity of the remaining portion, which will remain in force and effect as if this agreement had been executed with the invalid portion eliminated.

Notes

Notes

Prosecutor of Texas LLC.



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