Triton

A DOVER INDUSTRIES COMPANY

96XX FMV HIGHTOPPER
USER GUIDE

VERSION 3.0

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SECTION 1
INTRODUCTION

What is Full Motion Video?

The Full Motion Video (FMV) system is a multimedia presentation option for Triton Systems ATMs. An ATM equipped with a Full Motion Video system can display live-action video, graphical animation and text (e.g. stock quotes, news headlines, advertisement-related offers, weather reports, etc.) in a stream of dynamically changing and eye-catching multimedia events.

To provide an even richer media experience the FMV also offers full stereo audio output of voice and/or music content. The audio channel can operate in conjunction with and in support of the action in the primary video pane, or as an independent media experience.

The visual media elements are displayed within a high-resolution color screen that is segmented into various panels or *panes*, each providing its own dynamically changing stream of content. The content within each pane can be displayed independently of the other panes, or may be synchronized to one or more panes.

What this User Manual Covers

This User Manual provides the information you need to install, setup and use your Full Motion Video system. This includes:

Section 2, Display

- An outline of the typical arrangement of panes in the FMV display area and a summary of the types of content that can appear in each pane.

Section 3, Components

- Descriptions of the primary components of the FMV Hightopper and FMV assemblies.

Section 4, Installation and Removal

- Installation procedure for the FMV Hightopper and FMV Door Panel Assembly. Removal procedure for the FMV Door Panel Assembly.

Section 5, Operation

- Basic information on FMV operation. Adjustment of FMV controls. Procedure for loading multimedia content.

Section 6, Maintenance

- General cleaning and user-level troubleshooting information.

Safety Precautions

This section is designed to assist you in identifying potentially unsafe conditions while working with the FMV. Required safety features have been installed in the FMV to protect you from injury. However, you should use good judgment to identify potential safety hazards:

- Read all of these instructions before installing and using your Full Motion Video system.
- Follow all warnings and instructions marked on the FMV and/or contained in this User Manual.
- Unplug the FMV from the wall outlet before cleaning. For cleaning instructions, see Section 6, Maintenance.
- Do not use the FMV near water.
- Do not place the FMV on an unstable cart, stand, or table. The FMV may fall, causing serious damage to the unit.
- Slots and openings in the chassis are for ventilation. To ensure reliable operation of the FMV and to protect it from overheating, these openings must not be blocked or covered.

- The FMV should never be placed near or over a radiator or heater.
- Never push objects of any kind into the FMV through chassis openings, as they may touch dangerous voltage points or short out parts that could result in fire or electric shock.
- Never spill liquid of any kind on the FMV.
- If you use an extension cord with the FMV, make sure that the total of the ampere ratings on the devices plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total of all devices plugged into the wall outlet does not exceed 15 amperes.
- Adjust only those controls that are covered by these operating instructions, since improper adjustment of other controls may result in damage and may require extensive work by a qualified technician to restore the FMV to normal operation.
- Do not attempt to service the FMV yourself, as opening or removing the chassis may expose you to dangerous voltage. Refer all servicing to service personnel.
- Unplug the FMV from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - If the power cord or plug is damaged or frayed.
  - If the FMV has been exposed to rain or water.
  - If the FMV does not operate normally when the operating instructions are followed.
  - If the FMV has been dropped or the chassis has been damaged.
  - If the FMV exhibits a distinct change in performance, indicating a need for service.
- Unless the manufacturer indicates that a device can be *hot-plugged*, you should turn off the computer before connecting peripheral devices.
- Do not use or leave the AC Adapter near a fire, stove, or other hot environment.
- Do not immerse the AC Adapter in water or expose it to moisture.
- Do not cover the AC adapter with anything (such as a book, box, paper, etc.).

SECTION 2
DISPLAY

FMV Display Layout

The FMV displays visual media elements within a high-resolution color screen. See Figure 2-1. This screen is segmented into various panels or *panes*, each providing its own dynamically changing stream of content.

There are eight basic panes, which can be organized into a five or six-pane display (some panes can appear in the same physical area of the display). The types of panes are listed here:

- Video Window
- Network/Venue Window
- News Runner Window
- Ad Posts Window
- Posters Window
- Ad Banner Window
- Promotions Window
- Ticker Window

Refer to Figure 2-2 (Five-Pane Display) and Figure 2-3 (Six-Pane Display) as you read the following descriptions of the display panes.

Video Window

This pane provides an 800 (wide) x 600 (high) pixel display window. This pane will typically display full-motion video and animation effects. It is capable of displaying a wide range of graphical media formats, such as MPEG, AVI, and QuickTime Movie clips.

Network/Venue Window

This pane provides a 224 (wide) x 128 (high) pixel display window. This pane will usually display smaller animated text and graphics which may, for example, be utilized to reflect the logo or other brand-specific images and advertising text related to the business operating the ATM, or perhaps the network or organization that processes the ATM transactions. This pane can display “web page” style text (i.e. HTML format) and graphical elements such as animated GIF images.

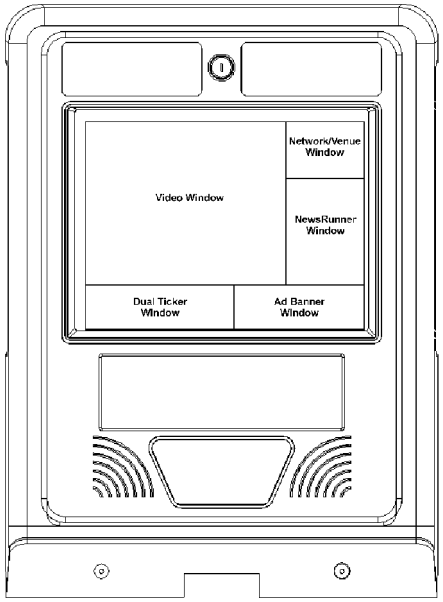

Figure 2-1. FMV Multimedia Display.

News Runner Window

This pane provides a 224 (wide) x 472 (high) pixel display window. This pane can display animated text and graphic content related to current news headlines or other current events. This pane can display “web page” style text (i.e. HTML format) and graphical effects such as animated GIF images.

Ad Posts Window

This pane provides a 224 (wide) x 472 (high) pixel display window. This pane can display animated text and graphic content, typically focused on the presentation of product or service-related advertising. This pane can display “web page” style text (i.e. HTML format) and graphical effects such as animated GIF images.

Poster Window

This pane provides a 224 (wide) x 472 (high) pixel display window. This pane can display text and graphic content, typically focused on the presentation of product or service-related advertising in a fixed or low refresh rate image. This pane can display “web page” style text (i.e. HTML format) and graphical effects such as animated GIF images.

Ad Banner Window

This pane provides a 500 (wide) x 168 (high) pixel display window. This pane can display animated text and graphic content, typically focused on the presentation of product or service-related advertising. This pane can display “web page” style text (i.e. HTML format) and graphical effects such as animated GIF images.

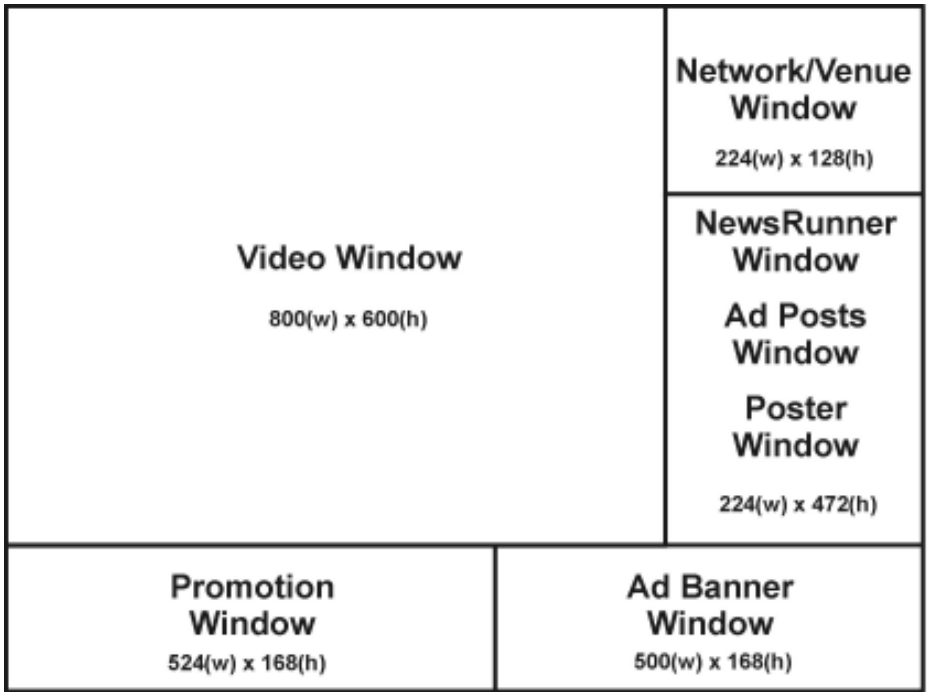

Figure 2-2. Five-Pane Display.

Promotion Window

This pane provides a 524 (wide) x 128 (high) pixel display window. This pane can display animated text (HTML-style), typically focused on product promotions.

Ticker Window

This pane is only available on the six-pane display. This pane is positioned in the lower part of the space normally fully occupied by the Video Window. The pane provides an 800 (wide) x 40 (high) pixel display window. This pane typically presents moving text using a variety of scrolling marquee or “ticker-tape” display modes.

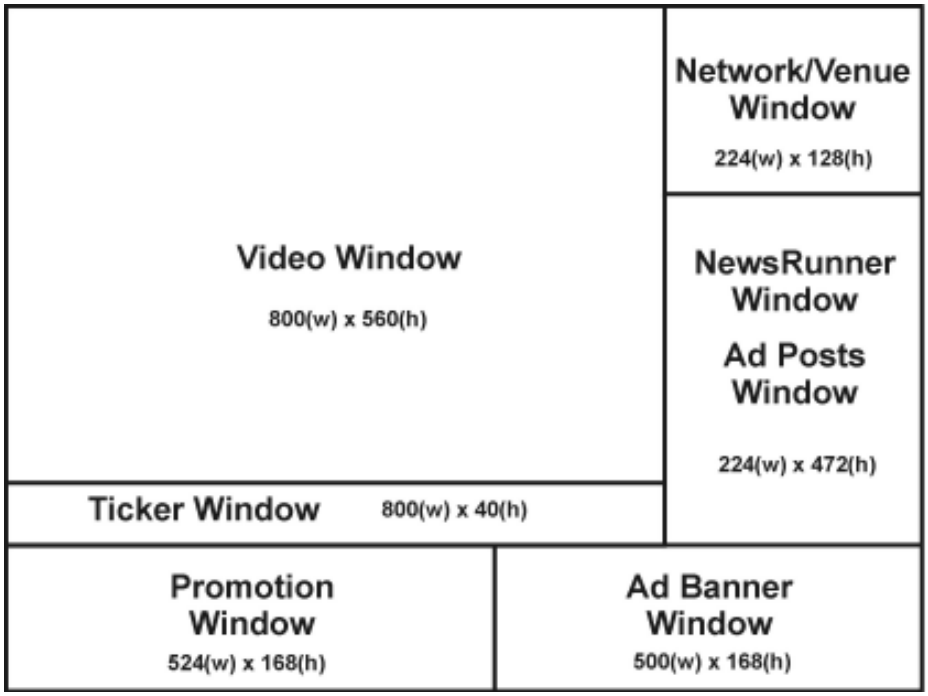

Figure 2-3. Six-Pane Display.

SECTION 3
COMPONENTS

FMV Components

The FMV system consists of the following major components:

- FMV Hightopper Housing
- FMV Door Panel Assembly

FMV Hightopper Housing

The FMV Hightopper Housing is a two-part removable extension to the top of the ATM. The Hightopper provides a support frame to hold the FMV Door Panel Assembly.

The front and rear halves of the Hightopper Housing are pre-assembled at the factory. The front half provides a large opening into which the front panel is inserted during the installation procedure (see Section 4, Installation and Removal, for details). See Figure 3-1 for a view of the Hightopper Housing with FMV Door Panel Assembly installed.

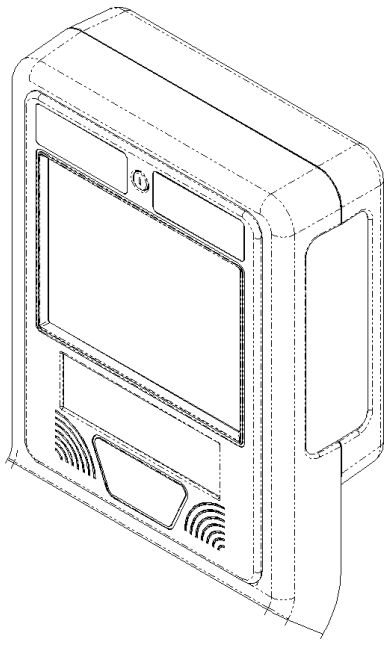

Figure 3-1. FMV Hightopper Housing.

Door Panel Assembly

The FMV Door Panel Assembly is made up of the FMV module, stereo speakers and front panel frame. Refer to Figures 3-2 through 3-4 for various views of the FMV Door Panel Assembly.

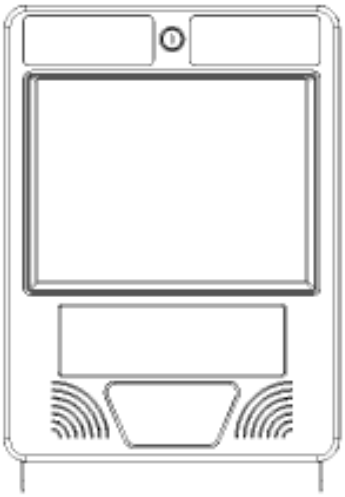

Figure 3-2. FMV Door Panel Assembly (Front View).

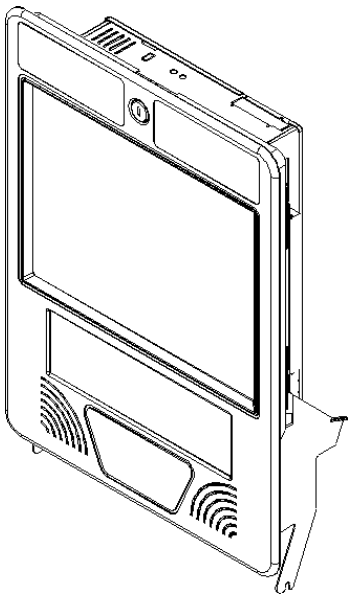

Figure 3-3. FMV Door Panel Assembly (Isometric View).

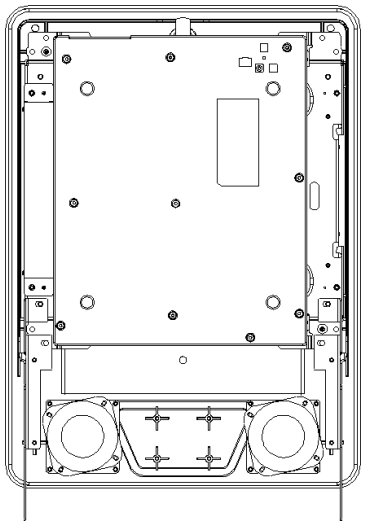

Figure 3-4. FMV Door Panel Assembly (Rear View).

Once installed, the panel assembly can only be unlocked and opened using the provided access key. The key remains in the lock mechanism and can only be removed once the key is turned to the locked position.

When open, the panel lowers to a fixed access position, as shown in Figure 3-5.

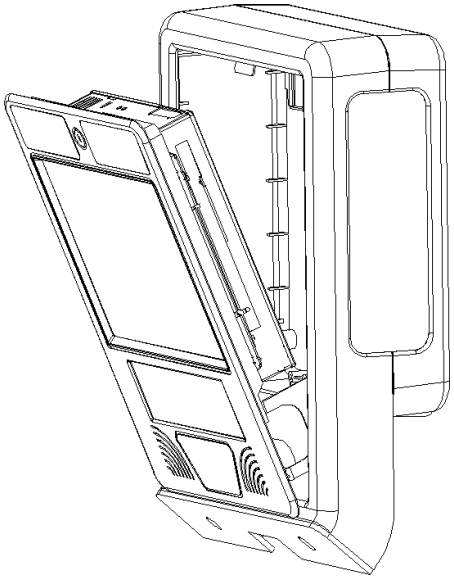

Figure 3-5. FMV Door Panel Access Position.

Hightopper Rear Panel

A ventilation fan is installed on the rear panel of the Hightopper Housing, as shown in Figures 3-6a and 3-6b. This fan helps ensure the FMV module is maintained at the proper operating temperature.

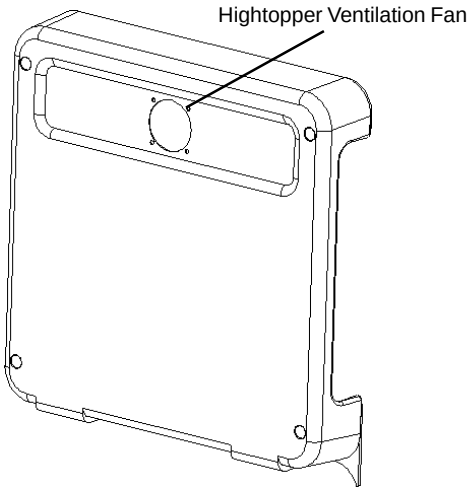

Figure 3-6a. Hightopper Rear Panel.

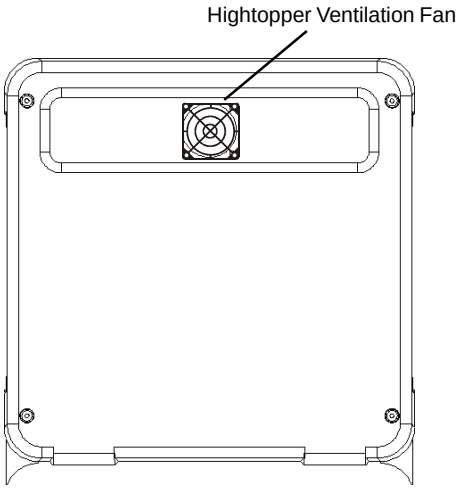

Figure 3-6b. Hightopper Rear Panel.

Hightopper Side Panels

The sides of the Hightopper Housing provide openings into which advertising panels can be inserted, as shown in Figure 3-7.

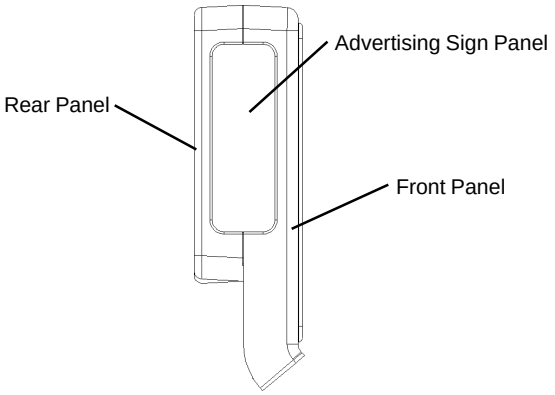

Figure 3-7. Hightopper Side View.

FMV Module

The FMV chassis is a PC-based control module with integrated high-resolution LCD display, internal RAM and hard drive storage, floppy disk and CD/DVD drives. The FMV module is attached to the removable front panel assembly.

Front View (Figure 3-8)

LCD Display. The FMV offers a high-resolution color Liquid Crystal Display (LCD) screen that displays the visual component of multimedia content.

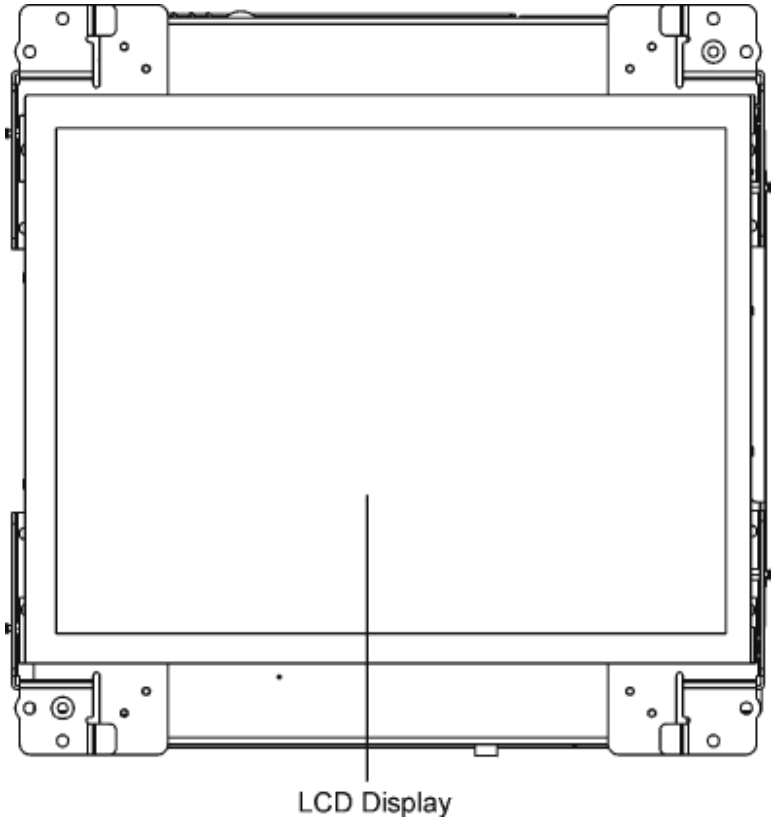

Figure 3-8. FMV Module (Front View).

Rear View (Figure 3-9)

Speaker connector. Provides an output to the stereo speakers, which are attached to the Hightopper front panel assembly.

Power button. Press this button to apply power to the FMV module. To remove power from the FMV, press and hold this button for at least 5 seconds to initiate the power-down sequence.

LED indicator. This LED will illuminate when power is applied to the FMV module.

Volume buttons. These buttons enable you to adjust the audio volume.

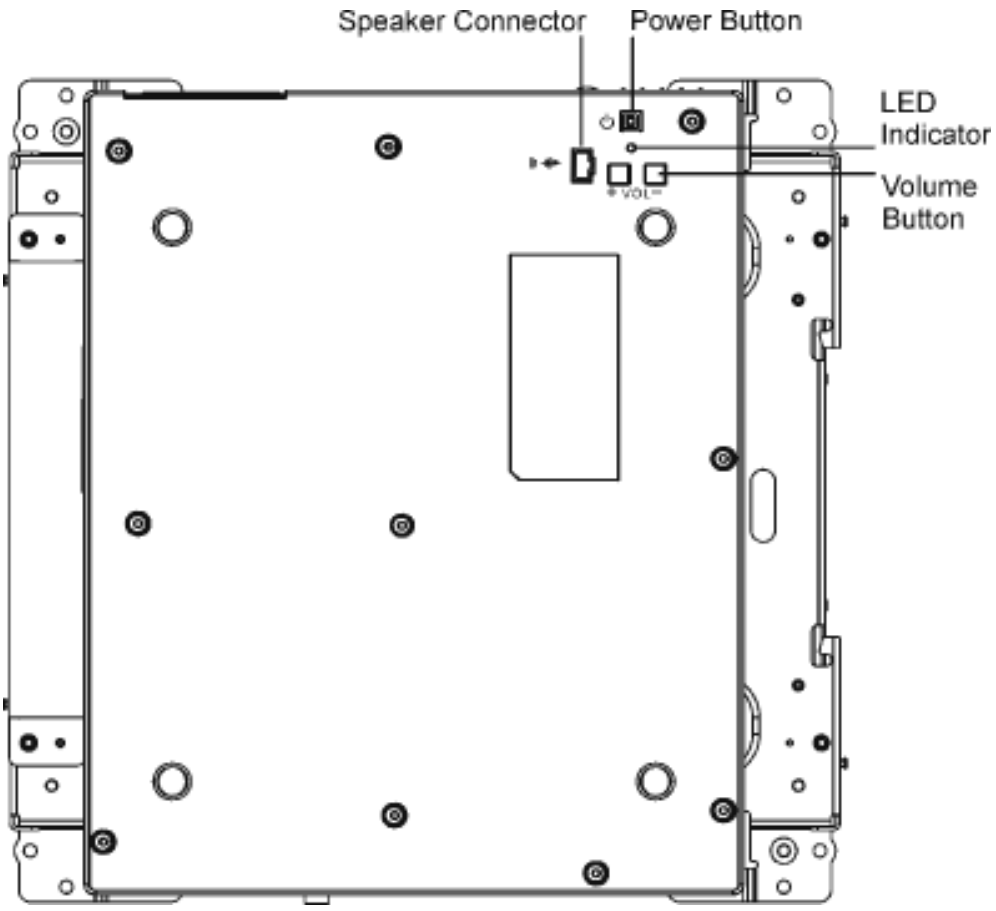

Figure 3-9. FMV Module (Rear View).

Top View (Figure 3-10)

Brightness control. This is a thumb wheel control, used to increase or decrease the brightness of the FMV display.

Ext. microphone jack. This mono microphone jack can used to connect an external microphone to the FMV.

PCMCIA socket buttons. The FMV has two PCMCIA connectors (two PCMCIA type II connectors or one PCMCIA type III connector).

PCMCIA socket cover. Open this cover to access the PCMCIA sockets. The computer's PCMCIA sockets let you extend the capabilities of the FMV by inserting PC cards.

Headphone jack. Connect stereo headphone to this jack to listen to the FMV audio output.

IEEE 1394 (Optional). The 1394 designation is an IEEE protocol for a high performance serial bus. The need for 1394 and other next-generation network topologies and protocols is driven by the rapidly growing need for mass information transfer.

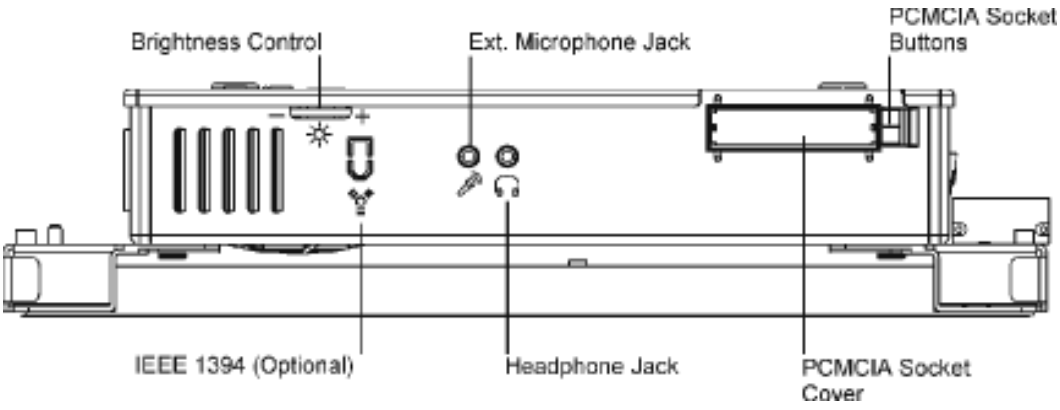

Figure 3-10. FMV Module (Top View).

Right View (Figure 3-11)

DVD ROM Drive. The DVD drive is also capable of reading standard data CD and DVD ROM disks. Using CD or DVD media, large multimedia update files can easily be transferred to the FMV internal hard drive. Some forms of multimedia content may be run directly from the CD or DVD disk. In such cases you will leave the disk in the DVD drive.

Left View (Figure 3-12)

Printer port. This port allows you to easily connect a parallel printer or plotter using this 25-pin bi-directional female port.

Serial port. This port allows you to connect the FMV to an external serial device, such as an external modem.

DC-IN Connector. Plug the FMV Power Module into this connector.

External mouse/keyboard connector. You can connect an external keyboard, numeric keypad, or IBM PS/2 compatible mouse to the socket marked with the keyboard/mouse icon.

External monitor port. This port allows you to easily connect an external VGA/SVGA display monitor to your FMV, using the 15-pin female connector.

Ventilation opening. These openings allow heat to flow out of the FMV module chassis. **Don't block these opening when the system is in operation!**

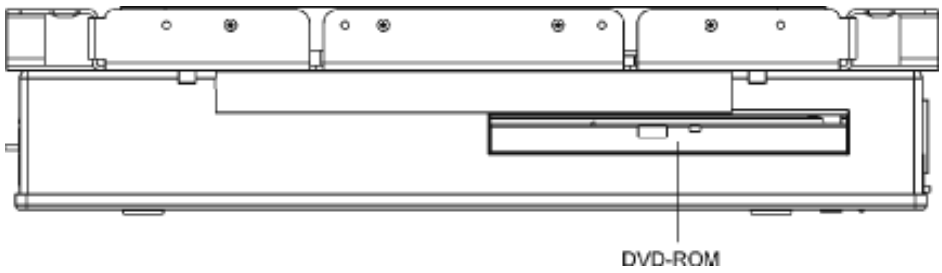

Figure 3-11. FMV Module (Right View).

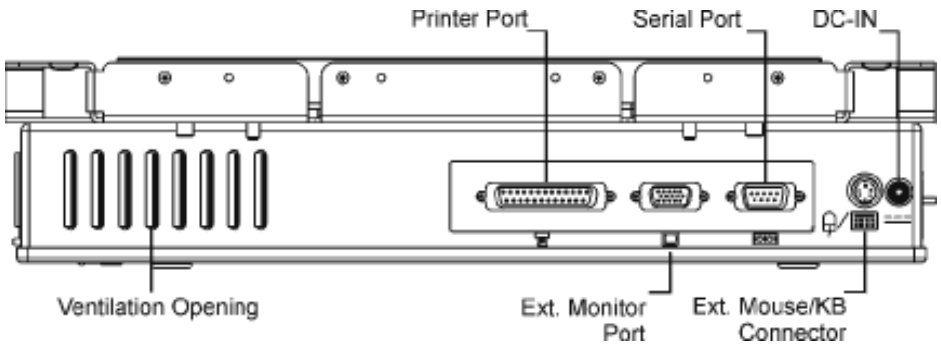

Figure 3-12. FMV Module (Left View).

Bottom View (Figure 3-13)

USB port. The FMV includes a Universal Serial Bus (USB) port. USB is the latest development in Plug and Play technology. It will eventually replace the need for separate connectors for external keyboards, serial ports, and parallel (printer) ports.

System fan. The system fan will allow proper ventilation to the FMV module's internal components.

Floppy disk drive (FDD). The FMV module provides a 3.5" floppy disk 1.44MB.

Hard disk drive. The FMV uses a removable 2.5" IDE hard disk drive with 4GB or more storage capacity.

RJ-45 connector. This connector can be used to connect the FMV to a local network.

RJ-11 connector. Used to connect the FMV to the telephone line.

Kensington lock. The FMV includes a keyhole to be used with a standard Kensington lock. You can connect the Kensington lock to a fixed object (using a security chain) to deter the theft of the FMV module.

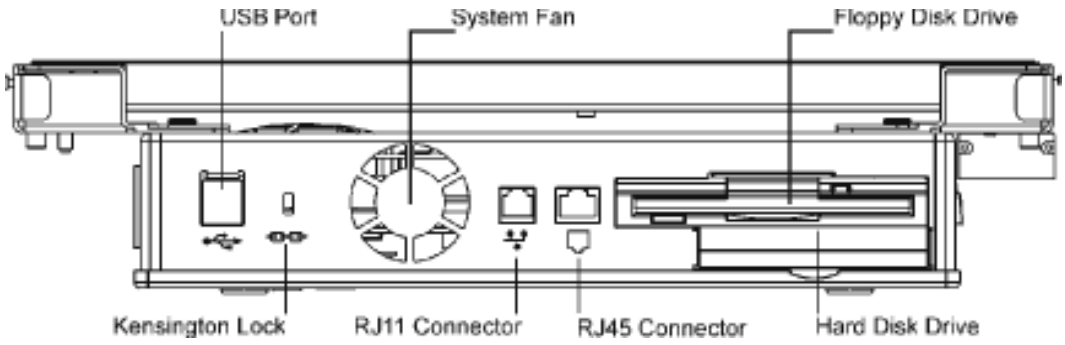

Figure 3-13. FMV Module (Bottom View).

SECTION 4
INSTALLATION AND REMOVAL

Installation Procedure

This section provides step-by-step instructions for installing the FMV. The following conditions are assumed:

- **The ATM cabinet has been installed, and does not have a standard Lowtopper or Hightopper light panel installed. If your ATM has an existing standard Lowtopper or Hightopper installed it must be removed prior to installing the FMV Hightopper assembly. See Appendixes B and C for the applicable removal procedures.**
- **The ATM dispenser mechanism has been removed to provide free access to the interior of the lower security container.**

You will perform the following steps to install the FMV:

1. Install Hightopper Housing.
2. Install Hightopper Ventilation Fan Power Cable.
3. Install FMV 4-Pin Modular Cable.
4. Connect Surge Suppressor Module.
5. Install FMV Power Cable.
6. Install FMV Door Panel Assy.
7. Apply power and verify proper operation.

Required Tools

- #2 Phillips Screwdriver, 6-inches long.
- #2 Phillips Screwdriver, short shaft (3-4 inches or less), for removing ATM power supply panel.

Parts Supplied

- FMV Hightopper Housing (2-part Housing, pre-assembled).
- FMV Door Assembly.
- FMV Power Supply Module.
- Surge Suppressor Module.
- Line Sharing Device and Power Module (optional).
- 4-Pin Modular Cables.
- Hightopper Ventilation Fan w/Power Cable.
- Ventilation Fan Power Supply Adapter Board.
- Mounting Brackets (2).
- #8-32, 3/8" PAN head Phillips Screws (10).
- Adhesive cable clips (5).
- AC adapter cable (for FMV power module) (1).

Step 1: Install Hightopper Housing.

The FMV Hightopper Housing is pre-assembled at the factory. The Housing consists of front and rear halves which mate together.

1-1 Open the FMV shipping box and remove the FMV Door Panel Assy.

1-2 Unlock and open the control panel of the ATM. The control panel should remain open and fully extended during the installation procedure**. Turn off power to the ATM and disconnect the ATM power cord from the facility power outlet!**

1-3 Remove the Hightopper Housing from the shipping box. Set the Hightopper Housing on the ATM back housing, as shown in Figure 4-1. Ensure the Hightopper mounting boss posts mate together securely with the corresponding bosses on the ATM, as shown in Figure 4-2.

1-4 Attach the two mounting brackets to secure the Hightopper Housing to the top of the ATM back housing. Each bracket is secured using four (4) of the ten (10) provided Phillips screws (see Figures 4-3 and 4-4).

1-5 Secure the lower part of the Hightopper Housing to the ATM back housing (at the mounting bosses) using the remaining two (2) provided Phillips screws, as shown in Figure 4-5. The fully installed Hightopper Housing is shown in Figure 4-6.

1-6 For reference purposes Figure 4-7 shows the location of key cable clips. The cable clips will be installed in the applicable steps of this installation procedure, and are used to secure the FMV ventilation fan power cable, 4-Pin Modular Cable and FMV power module cable.

NOTE

SOME CABLE CLIPS SHOWN IN THE FOLLOWING FIGIURES MAY BE PRE-INSTALLED AT THE FACTORY.

Figure 4-1. Place FMV Hightopper Housing on ATM.

Figure 4-2. Ensure Mounting Bosses fit securely.

Figure 4-3. Placing Mounting Brackets.

Figure 4-4. Securing Mounting Brackets.

Figure 4-5. Securing Mounting Bosses.

Figure 4-6. Hightopper housing installed.

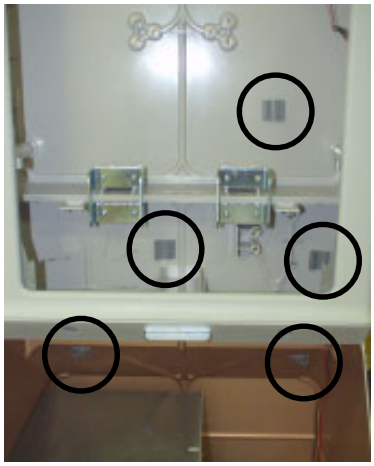

Figure 4-7. Location of cable clips.

Step 2: Install Hightopper Ventilation Fan Power Cable.

A ventilation fan on the rear panel of the Hightopper housing provides airflow to keep the temperature of the Hightopper within normal levels. This fan receives power from the ATM power supply.

There are two methods of connecting the power cable; the method used will depend on the type of Card Cage backplane installed in the ATM:

- The first type of backplane provides a built-in jack to receive the FMV power cable plug.
- The second type of backplane requires that a special adapter board be installed on the backplane to tap power for use by the FMV. The FMV power cable plugs into this adaptor board.

NOTE

If you remove any other cables to gain access to J8, make a note of the correct placement of these cables. Remember to properly reconnect these cables before closing and securing the power supply panel!

2-1 From within the Hightopper, locate the ventilation fan power cable. One end of the cable is attached to the body of the ventilation fan (see Figure 4-8).

Figure 4-8. Ventilation Fan Power Cable.

Route the free end of the cable through two cable clips and into the ATM (see Figures 4-9 through 4-11).

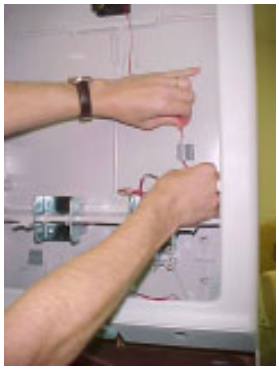

Figure 4-9. Routing Fan Power Cable through cable clip.

Figure 4-10. Fan Power Cable routed through two Hightopper cable clips.

Figure 4-11. Feeding Fan Power Cable into ATM Upper Enclosure.

2-2 Place a cable clip on the inner surface of the ATM back housing, as shown in Figure 4-12, and feed the fan power cable through this clip and into the cable pass-through slot, as shown in Figure 4-13. Leave the cable in this position for now.

2-3 Disconnect the power plug from the ATM power supply. Remove the screws that secure the power supply panel to the Card Cage and open the panel. See Figure 4-14.

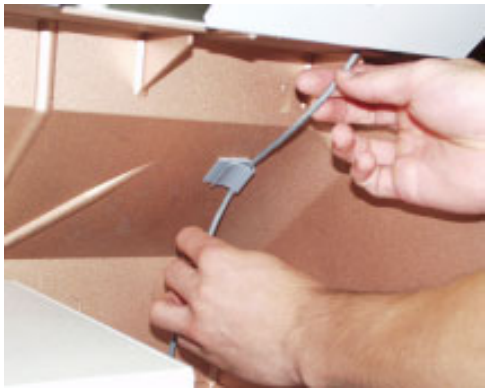

Figure 4-12. Feed Fan Power Cable through cable clip in ATM upper enclosure.

Figure 4-13. Feed Fan Power Cable into ATM security cabinet.

Figure 4-14. ATM Power Supply opened.

2-4 Open the ATM cabinet door. Feed the ventilation fan power cable up through the access hole beneath the Card Cage, as shown in Figure 4-15. Feed at least 8 inches of the cable into the Card Cage.

Figure 4-15. Feed Fan Power Cable into Card Cage.

2-5 Return to the Card Cage. Check for a dedicated FMV fan power jack on the rear of the backplane, as shown in Figures 4-16 and 4-17. A mirror has been placed in the photo to show the location of the jack, if present. Reach behind the backplane to verify the presence of the jack. If the jack is present, plug the FMV power cable into it, as shown in Figure 4-18, then skip to Step 2-9.

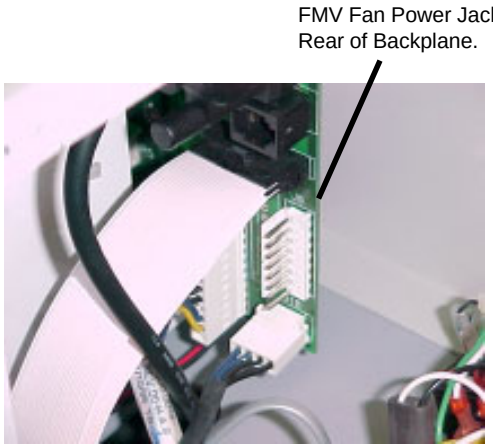

Figure 4-16. Closeup of Card Cage Backplane.

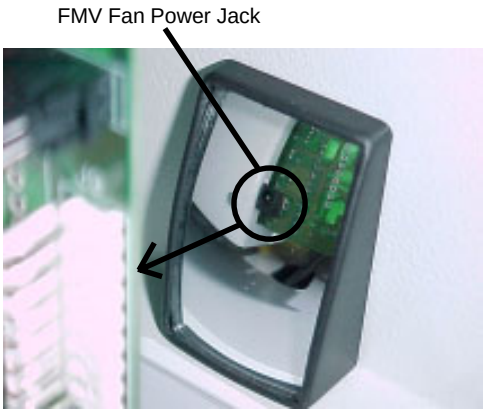

Figure 4-17. Mirror Shows FMV Fan Power Jack on Rear of Backplane.

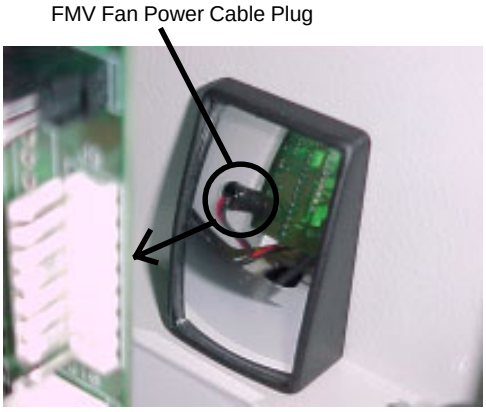

Figure 4-18. Mirror Shows FMV Fan Power Cable Plug Connected to Power Jack.

2-6 If backplane does not have a dedicated FMV fan power jack, disconnect the cable that is connected to J8 on the backplane. See Figure 4-19 for the location of this cable.

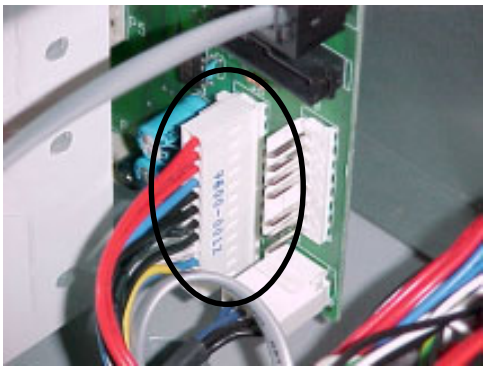

Figure 4-19. Power Supply connector at J8.

2-5 Connect J1 of the adapter board to the power supply cable that was disconnected from J8, as shown in Figure 4-20.

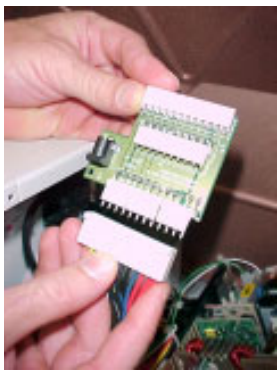

Figure 4-20. Connect Power Supply Cable to J1 on Adapter Board.

2-7 Connect the ventilation fan power cable connector to the corresponding jack on the adapter board, as shown in Figure 4-21.

Figure 4-21. Connect Fan Power Cable to J4 on Adapter Board.

2-8 Connect the adapter board to J8 on the Card Cage backplane, as shown in Figure 4-22.

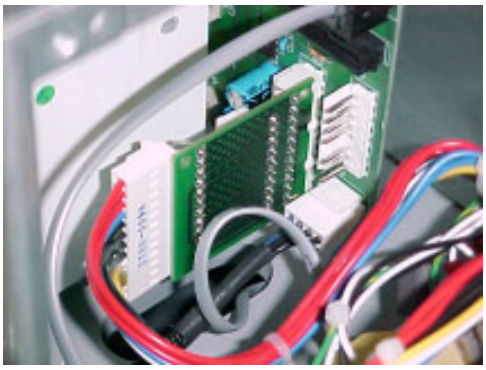

Figure 4-22. Adapter Board connected to J8 on Card Cage back plane.

2-9 If installing the FMV 4-Pin Modular (telephone-line) Cable using a Line Sharing Device, leave the power supply access cover open and proceed with **Step 3, Option A**. Otherwise, close and secure the power supply access panel, connect the power plug and close the lower security container access door.

Step 3, Option A: Install FMV 4-Pin Modular Cable Using a Line Sharing Device.

This is the recommended method of installing the FMV Modular Cable. If a Line Sharing Device is not available or will not be used in this installation, refer to the alternative procedure: **Step 3, Option B: Install FMV 4-Pin Modular Cable Using a Dedicated Telephone Line.**

NOTE

IN ADDITION TO ENABLING THE ATM AND FMV TO SHARE THE SAME TELEPHONE LINE WITHOUT CONFLICT, THE LINE SHARING OPTION ALSO PROVIDES ADDITIONAL OVERVOLTAGE PROTECTION FOR THE FMV BY ROUTING THE SHARED TELEPHONE LINE THROUGH THE ATM POWER SUPPLY'S SURGE SUPPRESSION CIRCUIT. ***THE DEDICATED-LINE OPTION USES THE EXTERNAL SURGE SUPPRESSOR MODULE TO PROVIDE THIS PROTECTION!***

3a-1 Note the location of the existing telephone-line jumper cable between the surge suppressor and Card Cage backplane, as shown in Figure 4-23. Remove this cable.

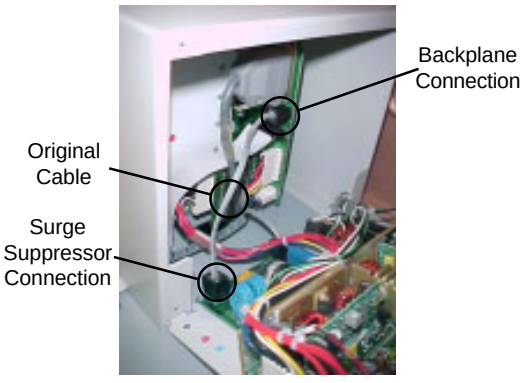

Figure 4-23. Original cable between Surge Suppressor and Card Cage backplane.

3a-2 Place the Line Sharing Device on top of the Card Cage, as shown in Figure 4-24.

Figure 4-24. Line Sharing Device on top of Card Cage.

3a-3 Insert either end of a modular cable into the Card Cage interface cable slot, as shown in Figure 4-25. Pressing down on the modular plug's locking tab helps insert the plug through the slot.

Figure 4-25. Inserting modular cable Into Card Cage.

3a-4 Pull approximately 6-inches of the cable into the Card Cage and connect the plug at the end of the cable to the modular jack on the power supply surge suppressor module, as shown in Figure 4-26.

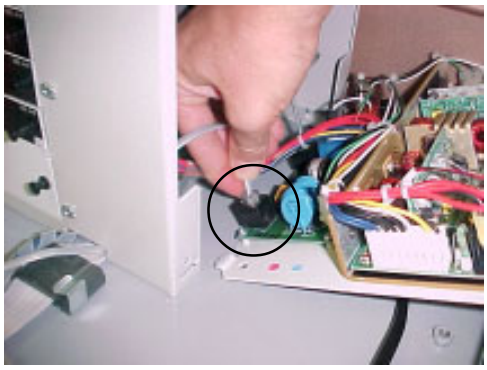

Figure 4-26. Connecting modular cable to jack on Surge Suppressor module.

3a-5 Connect the plug at the free end of the cable to the **LINE** jack on the Line Sharing Device, as shown in Figure 4-27.

Figure 4-27. Connecting modular cable to LINE jack on Line Sharing Device.

3a-6 Feed a second modular cable into the Card Cage using the procedure of **Step 3a-3**. Pull approximately 8-inches of this cable into the Card Cage and connect the plug at the end of the cable to the modular jack on the backplane of the Card Cage, as shown in Figure 4-28.

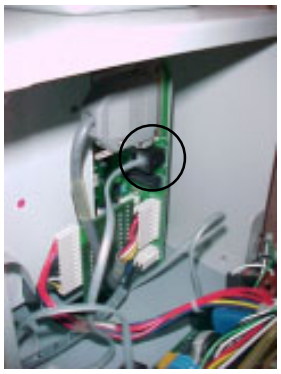

Figure 4-28. Modular cable connected to Card Cage backplane.

3a-7 Connect the plug at the free end of this cable to the **DEVICE 1** jack on the Line Sharing Device, as shown in Figure 4-29.

Figure 4-29. Connecting modular cable to DEVICE 1 jack on Line Sharing Device.

3a-8 Place a cable clip on the front of the Card Cage and route the two modular cables through this clip, as shown in Figure 4-30. Pull any remaining slack inthe cables into the Card Cage enclosure. Close and secure the power-supply panel.

Figure 4-30. Routing modular cables through cable clip.

3a-9 Next, route and connect the power adapter cable for the Line Sharing Device. From the rear of the ATM security cabinet, feed the power adapter cable through the lower access hole, as shown in Figure 4-31.

Figure 4-31. Feeding Line Sharing Device power cord into ATM.

3a-10 From inside the security cabinet route the cable through the existing cable clips and into the ATM upper enclosure, as shown in Figures 4-32 and 4-33.

3a-11 Run this power cord through the cable clip shown and connect the power plug to the corresponding jack on the Line Sharing Device, as shown in Figure 4-34. ***DO NOT plug the Line Sharing Device power module into the AC outlet at this time.***

Figure 4-32. Feeding Line Sharing Device power cord into ATM upper enclosure.

Figure 4-33. Feeding Line Sharing Device power cord into ATM upper enclosure.

Route power cord through this cable clip.

Figure 4-34. Connecting Line Sharing Device power cord plug.

3a-12 Next, connect the plug at one end of the third modular cable to the **DEVICE 3** jack on the Line Sharing Device, as shown in Figure 4-35. Feed this cable through the cable clip, as shown in Figure 4-36 and into the Hightopper, as shown in Figures 4-37 and 4-38.

3a-13 Pull any remaining slack in the 4-Pin Modular Cable into the Hightopper. Place a cable clip on the upper back wall of the ATM back housing and secure the modular cable on this clip, as indicated in Figure 4-39. Form one or more loops in the remaining cable length as needed to leave about 8-10 inches of the cable free.

Figure 4-35. Connecting FMV modular cable connector into Line Sharing Device.

Figure 4-36. Connecting power cable connector to FMV.

Figure 4-37. Connecting power cable connector to FMV.

Figure 4-38. Connecting power cable connector to FMV.

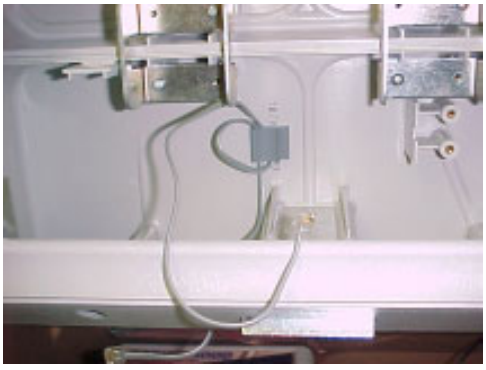

Figure 4-39. Connecting power cable connector to FMV.

Step 3, Option B: Install FMV 4-Pin Modular Cable Using a Dedicated Telephone Line.

This is an alternative method of installing the FMV Modular Cable! Use only if the Line Sharing Option (Step 3, Option A) is NOT used. In this procedure, the FMV modular cable will be connected through a surge suppressor module to a facility telephone jack.

IMPORTANT!

ENSURE THE SELECTED TELEPHONE LINE IS NOT SHARED WITH THE ATM (PARTY LINE, LINE-SPLITTER, ETC.) OR ANY OTHER DEVICE. THE FMV REQUIRES A DEDICATED PHONE LINE TO PREVENT CONFLICTS WITH ATM OPERATIONS (CUSTOMER TRANSACTIONS, DAY CLOSES, ALARM REPORTING, ETC.).

3b-1 From inside the Hightopper housing, route the 4-Pin Modular Cable down into the ATM, as shown in Figure 4-40.

Figure 4-40. Route 4-Pin Modular Cable into ATM Upper Enclosure.

3b-2 In the ATM upper enclosure, place two cable clips on the inner back housing surface and route the 4-Pin Modular Cable through these clips and into the security vault access hole, as shown in Figures 4-41 and 4-42.

Figure 4-41. Secure 4-Pin Modular Cable in ATM back housing cable clip.

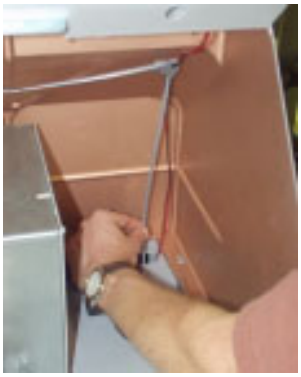

Figure 4-42. Route 4-Pin Modular Cable through cable access hole.

3b-3 Open the ATM cabinet and feed the modular cable down through the existing cable clips and out through the access hole near the bottom of the cabinet. DO NOT connect the modular cable to the telephone line at this time!

3b-4 Place a cable clip on the upper back wall of the ATM back housing, as indicated in Figure 4-43. Pull any remaining slack in the 4-Pin Modular Cable into the Hightopper. Form one or more loops in the remaining cable length as needed to secure the loop on the cable clip, leaving about 8-10 inches of the cable free, as shown in Figure 4-44.

Figure 4-43. Secure 4-Pin Modular Cable in ATM Back Housing cable clip.

Figure 4-44. Secure 4-Pin Modular Cable in ATM Upper Enclosure cable clip.

Step 4: Connect Surge Suppressor Module.

The external surge suppression module provides additional electrical protection for the telephone lines to the ATM/FMV. Connect the module according to the following instructions:

4-1 If the Line Sharing Option is used the ATM telephone line serves both the ATM and the FMV unit. Disconnect the ATM telephone line from the existing facility connector. You will connect this cable to the surge suppressor module in a later step.

If the Line Sharing Option was NOT used, the FMV modular cable should be available at the access hole of the ATM cabinet. You will connect this cable to the surge suppressor module in a later step.

4-2 Note the location of the LINE and EQUIPMENT jacks on the surge suppressor module. Hold the module as shown in the figure, so that the LINE jack is on the left, as shown in Figure 4-45.

Figure 4-45. Note location of LINE jack (on the left).

4-3 Connect a modular patch cable to the LINE jack on the surge suppressor module, as shown in Figure 4-46.

Figure 4-46. Connect modular patch cable to LINE jack.

4-4 Connect the free end of the modular patch cord to the facility telephone jack.

4-5 Connect the modular cable from Step 5-1 to the EQUIPMENT jack on the surge suppressor module, as shown in Figure 4-47.

Figure 4-47. Connect Modular Cable to EQUIPMENT jack.

4-6 Connect the sure suppressor module to a convenient AC outlet, as shown in Figure 4-48. Ensure the indicator light on the surge suppressor illuminates.

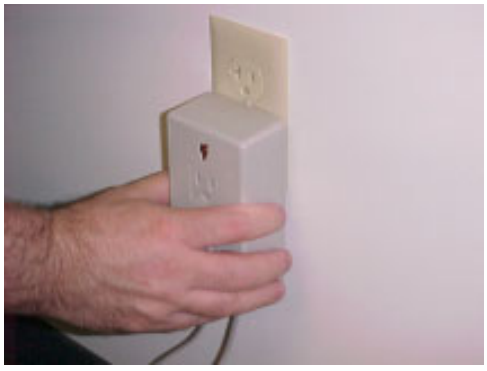

Figure 4-48. Connect Surge Suppressor to wall outlet.

Step 5: Install FMV power cable.

The FMV receives power from a DC power module, which connects to a standard AC power outlet.

5-1 Place the FMV power module in the ATM upper enclosure, as shown in Figure 4-49.

Figure 4-49. Placement of FMV Power Module.

5-2 Loop the module's AC power cord and place it behind the card cage, as shown in Figure 4-50. Leave enough of the plug end of the cable free to connect to the AC adapter cable in the next step.

5-3 Connect the AC adapter cable to a free receptacle on the side of the card cage, as shown in Figure 4-51.

5-3 Connect the free end of the AC adapter cable to the module's AC power cord plug, as shown in Figure 4-52.

Figure 4-50. Place module power cord behind card cage.

Figure 4-51. Connect AC adapter cable to card cage outlet.

Figure 4-52. Connect module power cord plug to AC adapter cable.

5-3 Feed the FMV power cord through the indicated cable clip and into the Hightopper, as shown in Figures 4-53 through 4-55.

Figure 4-53. Feeding FMV Power Module cable through cable clip in ATM Upper Enclosure.

5-4 Pull any remaining slack in the power cable into the Hightopper. Route the cable through two cable clips on the ATM back housing hood, as shown in Figure 4-56. Loop the cable around the final cable clip (with the FMV modular cable), leaving about 12 inches free to connect to the FMV Door Panel Assembly in a later step, as shown in Figure 4-57.

Figure 4-54. Feeding FMV Power Module cable into Hightopper enclosure.

Figure 4-55. Pulling FMV Power Module cable into Hightopper.

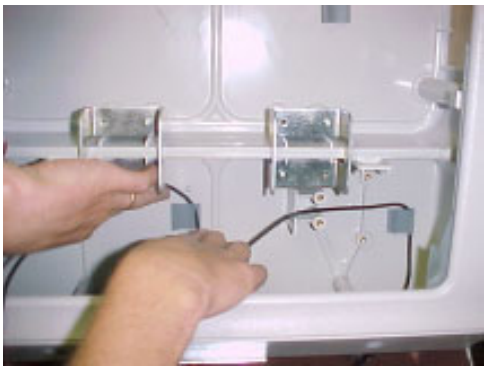

Figure 4-56. Secure FMV Power Module cable in cable clip.

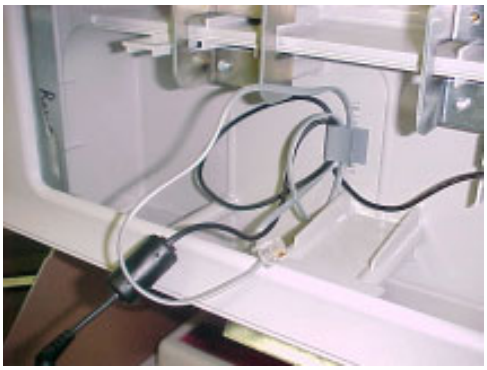

Figure 4-57. Secure FMV Power Module cable (and modular cable) in cable clip.

Step 6: Install FMV Door Panel Assembly.

The FMV Door Panel Assembly is an integrated assembly that fits into the front opening of the Hightopper Housing. The mounting system for the panel enables quick installation and removal.

6-1 Close the ATM control panel back housing. Carefully insert the FMV Door Panel Assembly into the Hightopper front opening, face down and lower end first, as shown in Figure 4-58. The mounting struts on either side of the FMV panel assembly must rest within the notched hinge brackets on the lower left and right sides of the Hightopper Housing. See Figure 4-59 for a close-up view of this arrangement.

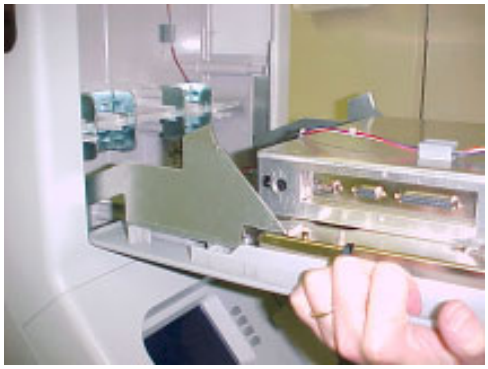

Figure 4-58. FMV Door Panel Assembly inserted into Hightopper.

Figure 4-59. Closeup view of mounting bracket resting in notched support.

6-2 While holding the module in this position, locate the smaller of the two 4-Pin Modular Cable jacks (RJ11) on the FMV, as shown in Figure 4-60. Connect the free end of the 4-Pin Modular Cable to this jack, as shown in Figure 4-61.

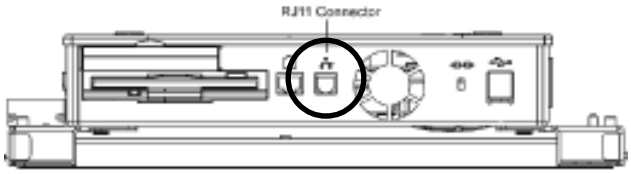

Figure 4-60. FMV 4-Pin Modular Cable connection.

Figure 4-61. Connecting 4-Pin Modular Cable.

6-3 Route the power cable through the cable clip on the rear panel of the FMV and connect the power plug to the jack on the left side of the module, as shown in Figures 4-62 and 4-63.

6-4 Carefully “roll” the panel up and forward on the hinge brackets. See Figures 4-64 through 4-66. Maintain a two-handed grip on the sides of the panel. The panel should move smoothly. When the panel is nearly vertical it will drop slightly into the final resting position on the hinge brackets. This is normal. Continue the closing action. The panel should close cleanly into the Hightopper opening.

6-5 Now lower the panel. See Figure 4-67. The panel will stop at about a 23-degree angle from the vertical. This is the normal access position.

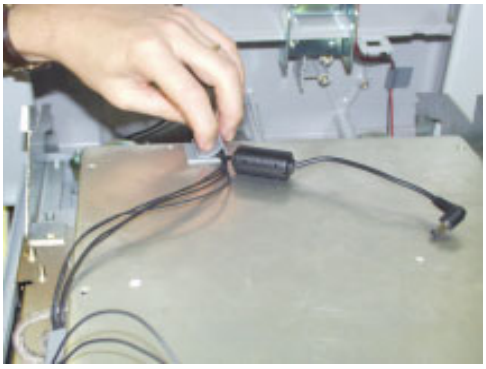

Figure 4-62. Routing power cable through FMV Hightopper cable clip.

Figure 4-63. Connecting power cable connector to FMV.

Figure 4-64. Closing FMV Door Panel.

Figure 4-65. Closing FMV Door Panel.

Figure 4-66. FMV Door Panel fully closed.

Figure 4-67. FMV Door Panel opened to normal access position.

Step 7: Apply power and verify proper operation.

Follow these steps to apply power and verify proper operation of the FMV unit.

NOTE: If the FMV does not appear to be working properly once power is applied, see Section 6, Maintenance, for help in locating and correcting the problem.

7-1 **Ensure the ATM dispenser mechanism has been reinstalled, if necessary.** Connect the ATM power cord to the AC outlet. Turn the ATM power switch to ON (I). Close and lock the ATM upper enclosure.

7-2 Plug the Line Sharing Device power module into an AC outlet.

7-3 The FMV telephone-line setup and unit initialization will be performed in Section 5: Operation.

7-4 Press the green power-on button on the rear panel of the FMV Door Assembly chassis (See Section 3, Components, for location of this pushbutton). The green power-on LED should light and the FMV chassis fan should also operate.

7-5 After a few moments the FMV screen will begin to display content (if applicable, audio content should also be heard).

7-6 Adjust the screen brightness and volume controls for the best picture and sound, as necessary (see Section 5, Maintenance, for location and adjustment procedures for these controls).

7-7 Close and lock the FMV Door Panel Assembly using the provided access key.

Removal Procedure

Removal of the FMV Door Panel Assembly is a simple matter of disconnecting a few electrical connections and sliding the unit away from its support brackets.

Follow these steps to remove the FMV Door Panel Assembly from the ATM Hightopper housing:

1. Turn off and disconnect power to the FMV.
2. Release the Door Panel Assembly from its hinge supports.
3. Disconnect the 4-Pin Modular Cable and power cables.
4. Remove the Door Panel Assembly from the Hightopper.

Step 1: Turn off and disconnect power to the FMV.

1-1 Unlock and open the FMV Door Panel. Lower the panel to the normal access position. Turn off the FMV power by pressing and holding the green power button on the rear of the panel assembly until the green power-on LED is no longer illuminated (normally takes 3-5 seconds).

1-2 Unlock and open the ATM control panel door. Turn off ATM power by placing the switch on the right side of the card cage to the OFF (0) position.

1-3 Disconnect the FMV Power Module power cord from the card cage AC outlet.

Step 2: Release the Door Panel Assembly from its hinge supports.

CAUTION! Do not remove the FMV Door Panel Assembly completely from the Hightopper housing in this step! The 4-Pin Modular Cable and power cables are still connected!

2-1 Unlock and lower the Door Panel Assembly to the normal access position. Grasp the sides of the panel. Push the panel forward slightly, and then lift it approximately 1-2 inches to release it from the hinge brackets.

2-2 Lower the panel assembly to a near horizontal position (see Figure 4-58). Rest the assembly support struts on the hinge bracket notches (see Figure 4-59).

Step 3: Disconnect the 4-Pin Modular Cable and power cables.

3-1 Disconnect the 4-Pin Modular Cable connection. Refer to Figures 4-60 and 4-61 for the location of this connection.

3-2 Disconnect the power cable connection. See Figure 4-63 for the location of this connection.

Step 4: Remove the Door Panel Assembly from Hightopper.

4-1 Remove the FMV Door Panel Assembly completely from the Hightopper housing.

4-2 Restore power to the ATM by placing the card cage power switch to the ON (I) position.

SECTION 5
OPERATION

FMV Activation

Once the FMV unit has been installed (according to the instructions in Section 4 - Installation), the unit must be initialized or ***activated***. Activation prepares the FMV for first use and is a procedure that is performed in coordination with the FMV media service provider.

To successfully activate the FMV you will need the following:

- Phone number for the telephone line servicing the FMV.
- Voice telephone number at the FMV installation location (this will be used for coordination between the FMV installer personnel and the FMV media service provider).
- Portable telephone unit to verify local dial-up access to an Internet Service Provider from the phone line servicing the FMV.
- Description of the Business Type at the FMV location (Convenience Store, Gas Station, etc.).
- Address of the business establishment where the FMV is installed.
- **Venue** number for the FMV unit at this installation location.This is a serialized 5-digit unit identification number that is required by the media service provider. This number is located on the FMV chassis sticker. An example of a typical Venue number is: **20001**.

Follow these steps to activate the FMV unit:

1-1 Ensure the telephone line servicing the FMV is plugged into a working phone jack.

1-2 Power up the FMV unit.

1-3 Call the service representative at Media Sidestreet (telephone number 888-820-8219, ext. 253) and indicate you are performing an **eye-FRAMES activation**. Provide the following information to the service representative:

a. **Venue** number for the FMV unit at this installation location, obtained from the FMV chassis sticker.

b. **Voice telephone number** at the FMV installation location.

c. **FMV telephone-line number** (this is the telephone line servicing the FMV).

d. **Address** of the business establishment where the FMV is installed.

e. **Description of the Business Type** at the FMV location (Convenience Store, Gas Station, etc.).

f. **Name of technician** performing the physical installation of the FMV unit.

The FMV requires local-dialup access to an **Internet Service Provider** (ISP). The ISP phone number will be provided by the Media Sidestreet service representative, based on the address and FMV phone number at the installation location. Perform these steps when directed by the service representative:

2-1 At the service jack disconnect the telephone cable that will service the FMV. Connect a portable telephone to this jack and listen for a dial tone.

2-2 Call the dial-up number to the ISP. If the call is handled as a local call you should hear the distinctive beeps and tones associated with a modem connection. If you receive any indication that the call is outside your local calling area, hang up and request a different ISP number from the Media Sidestreet representative. Repeat until a valid local access number is found.

2-3 Disconnect the portable phone and reconnect the FMV telephone line to the phone jack.

Continue to follow the instructions of the service representative and provide any additional information or assistance as directed to complete the activation.

FMV Operation

The FMV is a self-contained multimedia presentation system. Once initialized, the FMV operates automatically, presenting multimedia content without the need for operator intervention. Periodic updates to the content can usually be handled behind the scenes, transparent to the normal operation of the ATM.

On those occasions when a more extensive update to the multimedia content stored in the FMV is required, operator (or third party service personnel) action may be needed to physically install an update media disk (CD-ROM).

Sources of Multimedia Content

An initial set of basic multimedia content will be pre-installed on the FMV at the factory. Additional content and updates will usually be provided via arrangement with the FMV media service provider.

Currently, the FMV can receive content using the following methods:

- Telephone-LIne Interface
- CD/DVD

Telephone-Line Interface

This communications link provides a channel through which original multimedia content can be downloaded over the commercial telephone line. It also enables updates to dynamic content, such as stock quotes or weather reports.

The FMV unit uses the telephone line connection to establish communications with a remote content service provider. The FMV downloads periodic updates and time-sensitive content from the server.

CD/DVD

The FMV includes a CD/DVD drive, enabling hundreds of megabytes of multimedia content to be conveniently transferred from CD or DVD media to the FMV internal hard drive.

See the nest section for instructions on loading multimedia content using the CD/DVD drive.

Loading Multimedia Content into the FMV

Periodic content updates can be received from a service provider using the ATM telephone-line communications interface or CD or DVD based storage media. If any updates are received over the telephone line they are automatically incorporated into the multimedia presentation.

If a CD or DVD-based update is required, follow these steps to load the CD or DVD:

- Step 1: Open the FMV
- Step 2: Open Disk Tray
- Step 3: Insert Disk
- Step 4: Close Disk Tray
- Step 5: Close the FMV

Step 1: Open the FMV

Unlock and open the FMV Door Panel and lower the panel to the access position, as shown in Figure 5-1.

Step 2: Open Disk Tray

Press the eject button on the CD/DVD drive (see Figure 5-4). The disk tray will extend slightly (see Figure 5-5). Grasp the tray and extend it to the fully open position (see Figure 5-6).

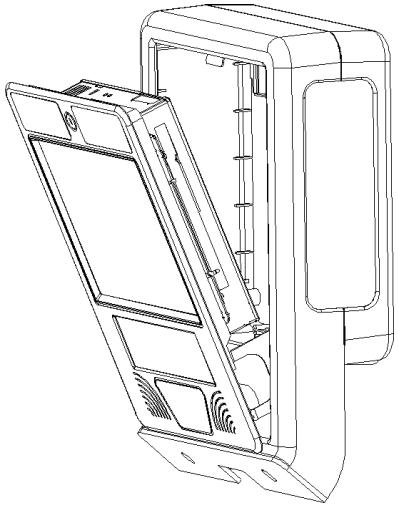

Figure 5-1. FMV panel in access position.

Figure 5-4. Pressing Eject button on CD/DVD drive tray.

Figure 5-5. Opening CD/DVD drive tray.

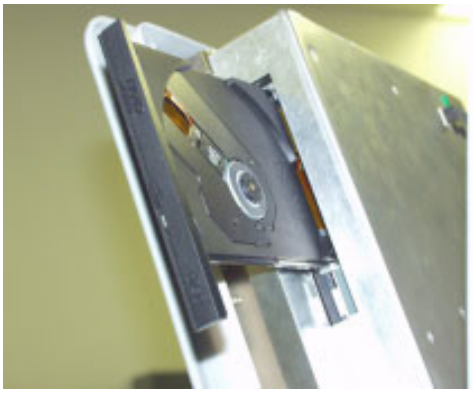

Figure 5-6. CD/DVD Tray Fully Extended.

Step 3: Insert Disk

If there is an existing disk in the drive, remove it. Carefully place the update CD or DVD on the disk tray, face (label-side) up. Press the disk down until it snaps onto the tray (see Figure 5-7). **Note: the CD label should face to the rear of the FMV chassis.**

Figure 5-7. Press to seat disk on disk tray.

Step 4: Close Disk Tray

Apply light pressure on the disk tray to close it (see Figure 5-8). The FMV will automatically scan the disk and load the content. Unless specifically directed by your service provider to remove the disk, leave it installed in the drive.

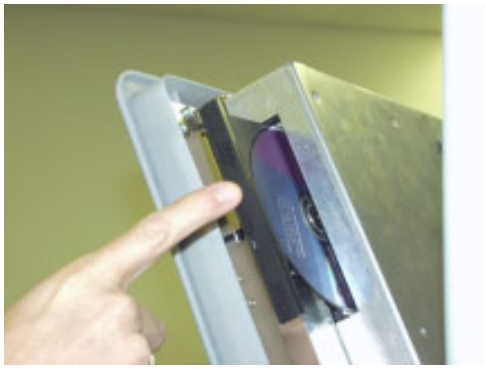

Figure 5-8. Press to close drive tray.

Step 5: Close the FMV

Close and lock the FMV panel. The unit will automatically scan the disk and begin displaying the new content.

FMV Adjustments

There are two user-accessible adjustments on the FMV:

- Brightness
- Volume

To access these controls you must unlock the FMV front panel and lower the panel to the access position, shown in Figure 5-1.

Brightness

The brightness control is a thumb wheel on the top of the FMV module chassis. See Figure 5-2 for the location of this control. This control is used to adjust the brightness of the LCD display.

Figure 5-2. Location of brightness control (top view of FMV module).

To adjust the brightness, make sure content is being displayed. If possible, make the adjustment under the normal lighting conditions in the area of the ATM. Simply adjust the thumb wheel to increase or decrease the display brightness. Try to produce a picture that is easy to see under the prevailing lighting conditions.

Volume

The volume control consists of two pushbuttons on the rear panel of the FMV module chassis. See Figure 5-3 for the location of these controls. One pushbutton is used to lower the audio volume, while the other pushbutton is used to raise the audio volume.

To adjust the volume, make sure audio content can be heard. Press either pushbutton as required to raise or lower the audio volume. Aim for a volume level that is not too loud for customers using the ATM, yet is loud enough to be audible to patrons or other individuals in the general vicinity of the unit.

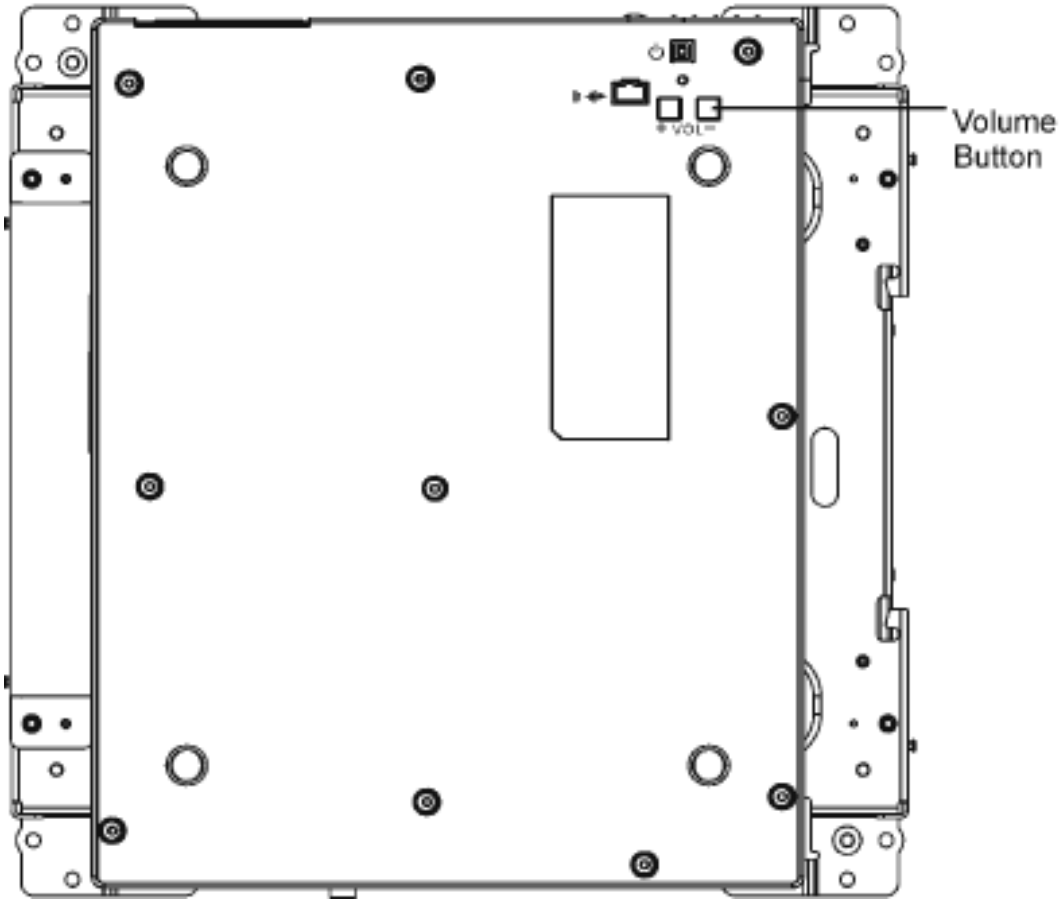

Figure 5-3. Location of volume controls
(rear view of FMV module).

SECTION 6
MAINTENANCE

Introduction

This section describes general maintenance and troubleshooting procedures for the Full Motion Video system.

The following procedures are not meant to be a substitute for the services of qualified technical service personnel. If the procedures in this section do not solve a problem you're having with the FMV, be sure to contact your service provider for assistance.

General Maintenance

General maintenance consists of periodically cleaning the FMV Hightopper Housing and FMV LCD display screen.

Cleaning the Enclosure

The Hightopper Housing and FMV Door Panel are made of highly durable materials, resisting scratches and finger smudges. However, occasional cleaning of these surfaces may be desirable. A SOFT, DRY or SLIGHTLY DAMP cloth may be used for cleaning. For best results with cleaning liquids, dampen the cloth with a weak solution of a mild detergent and water.

*****WARNING*****

Avoid using abrasive cleaners on any surface of the Hightopper! Do not spray cleaner liquids directly on the unit!

Cleaning the LCD Display Screen

The FMV LCD display is protected by a glass window that should be cleaned only with a SOFT cloth slightly dampened with a window or glass cleaning solution.

*****WARNING*****

Do not use any abrasive cleaners on the LCD window, as it will scratch! Do not use Isopropyl Alcohol-based cleaning fluids on the LCD window, as they tend to leave a film behind after drying! Do not spray liquids onto the screen, as they may run down inside the unit and cause damage!

Troubleshooting

Locating a Problem

Problems with your FMV can be caused by something as minor as an unplugged power cord – or as major as a damaged hard disk. The information in this chapter is designed to help you find and solve minor problems. If you try all the suggested solutions and you still have a problem, make a list of what steps you have taken to correct the problem and contact your service provider.

Successful troubleshooting is the result of careful observation, deductive reasoning, and an organized approach to solving the problem.

The problems that you will encounter can be divided into two basic categories: hardware problems and software problems. Hardware problems can be further divided into electrical and mechanical problems. You will know you have a hardware problem if the screen is dark, the FMV cannot read the disk drives, or you get an error message during the Power-On Self Test (POST).

Software errors can occur at several levels. The ROM BIOS and the operating system can give you a large number of error messages. On top of this, each application software package has its own set of error messages. It is important to determine whether the software error message you are getting is from the application or the operating system. Once you know this, you can look in the respective manual for a solution to the problem.

Checking Cables and Connections

Start by performing a careful visual inspection of the exterior of the FMV. If no LEDs are illuminated, make sure that your FMV and its peripherals are getting power and communicating with each other properly.

To check the power cables, and connections:

- If you are using the Full Motion Video FMV with the AC adapter, check the power outlet, the power cord, and any power switches that may affect your FMV.
- Check the wall outlet or power strip with an item that you know is functioning properly. A lamp or radio is a convenient item for checking the power. You may also need to check the fuses or circuit breakers in your electrical service panel.
- If a wall switch controls the outlet, make sure that the switch is on.
- If the outlet is controlled by a dimmer switch, use a different outlet.
- If your FMV is plugged into a power strip with an On/Off switch, make sure the switch is on.
- With the FMV's power switched off, check all cable connections. If the FMV is connected to any peripheral devices, look for loose or disconnected cables.
- If the FMV is too close to a wall, a cable connection may be loose or the cables may be crimped.
- Do not substitute cables for different devices (other than the manufacturer recommended cables) even if they look exactly alike. The wiring inside the cable may be different.
- When you are certain that you have power available and all connections are good, turn the FMV on again. If the FMV still does not start, you may have a hardware problem.

Power-On Self Test

The Power-On Self Test (POST) runs every time you turn on the FMV. The POST checks memory, the main system board, the display, the keyboard, the disk drives, and other installed options.

A few seconds after you turn on your FMV, a copyright message appears on your display screen. A memory test message appears next; as the test continues, memory size increases until all installed memory is tested. Normally, the only test routine visible on the screen will be the memory test.

Two kinds of malfunctions can be detected during the POST:

- Error messages that indicate a failure with the hardware, the software, or the *Basic Input/Output System* (BIOS). These *critical malfunctions* prevent the FMV from operating at all or could cause incorrect and apparent results. An example of a critical error is microprocessor malfunction.
- Messages that furnish important information on the power-on and boot processes (such as memory status). These *non-critical malfunctions* are those that cause incorrect results that may not be readily apparent. An example of a non-critical error would be a memory chip failure.

In general, if the POST detects a system board failure (a critical error), the FMV halts and generates a series of beeps. If failure is detected in an area other than the system board (such as the display, keyboard, or an adapter card) an error message is displayed on the screen and testing is stopped.

The POST does not test all areas of the FMV, but only those that allow it to be operational enough to run any diagnostic program. If your system does not successfully complete the POST, but displays a blank screen, emits a series of beeps, or displays an error code, consult your service provider.

General Hardware Problems

A few common hardware problems and suggested solutions are presented in the table below:

Failure in the installation of the Audio driver.

Be sure to first remove the current audio device from your system. Please follow the instruction on the installation of audio driver.

The display screen is dark

Make sure that the FMV is not in monitor off under Win2000. Any key would wake up the LCD and disable monitor off function under Win2000. If the controls are turned too far down, the screen will be dark.

An incorrect date and time are displayed.

Correct the date and time using the DOS DATE and TIME commands or the options in the Setup Utility. (You can also set the date and time in Windows 2000 by double clicking the clock on the task bar or in the control panel.) If the date and time become incorrect after a short time, your CMOS battery may be depleted. Contact your service provider to change the battery.

The message: "Invalid system disk, Replace the disk, and then press any key" appears during boot.

Check and make sure that you do not have a non-bootable floppy diskette inserted in your floppy drive. If your FDD is empty, you may not have an operating system installed on your drive. Contact technical support for assistance.

You hear irregular beeps during operation of the system and the system halts.

The problem is beyond the scope of this manual. Contact technical support.

An unidentified message is displayed.

Reboot the FMV and run the BIOS system setup. Confirm the Setup parameters. If the same message is displayed after booting up again, contact technical support for assistance.

The system cannot access the DVD-ROM drive.

Check that a CD is properly inserted in the drive. Make sure that you are using the correct program for that kind of CD. For example, the system cannot read a data CD using an audio program.

You cannot operate the printer.

Check the printer cable connection. Ensure that the printer power switch is turned on. Confirm that the printer is on-line.

You can't save data to disk.

- Ensure that the disk has been formatted. Consult your operating system manual for information on formatting floppy diskettes.
- The diskette is write-protected. Eject the diskette, remove the write protection, and try again.
- The diskette is full. Try using another diskette or free up some space on the diskette. The disk drive is not operating. Contact your service provider for support.

You cannot use the mouse.

- Check the cable connection.
- Check the mouse with another application to see if there is a software incompatibility problem.
- If possible, check the mouse with another FMV to see if it works. If it doesn't operate on a different system, the mouse might be broken.

Contacting Your Service provider

If you still have a problem after reading the preceding sections, the next step is to contact your service provider. Your service provider can determine if the problem is something that requires the FMV to be taken to the shop. Before you call your service provider, however, prepare the following information:

- How is your FMV configured? Your service provider needs to know what peripheral devices you are using.
- What messages, if any, are on the screen?
- What software were you running at the time?
- What have you done already to try to solve the problem? If you have overlooked a step, your service provider may be able to solve the problem over the phone.

APPENDIX A
SPECIFICATIONS

GENERAL SPECIFICATIONS	
CPU	Intel Pentium III, Socket 370 CPU's
	Intel Celeron (On die 128KB L2 Cache) 433, 500, 600, 600+MHz
MEMORY	Three 144-pin SODIMM Slots (1 - 128 Meg DIMM Installed.)
	3.3V TSOP DRAM
	Supports 66/100/133MHz synchronous DRAM
PCMCIA SOCKETS	Two PCMCIA type II or one PCMCIA type III connectors
	Supports ZV port
AUDIO	Sound Blaster Pro Compatible
	PCI sound/AC 97 ready
	External audio inputs and amplified output
	Headphone jack
I/O PORTS	15-pin female D-connector video port
	9-pin male D-connector 16550 UART RS-232 serial port
	25-pin female D-connector EPP/ECP aware parallel port
	6-pin mini-DIN external keyboard and PS/2 mouse connector
	2-pin external AC adapter
	Two PCMCIA type II or one PCMCIA type III slots
	Two Universal Serial Bus (USB) port
	One headphones jack
	One microphone jack
	One RJ-11 connector
	One RJ-45 connector
	One IEEE 1394 connector
COMMUNICATIONS	Fax/modem card
	Ethernet LAN card

MASS STORAGE	
HARD DRIVE	Standard Capacity: at least 4GB
	Type: 2.5" (MCC Specification) IDE
	Height: 12.7 mm
FLOPPY DISK DRIVE	Media Type/Capacity: 3.5", 1.44MB
CD ROM / DVD ROM DRIVE	5.25" standard 12.7mm
VIDEO SYSTEM	
DISPLAY	Supports: TFT 14.1" XGA, 15.0 XGA/SXGA+LCM
	Supports: Samsung: LT150XS-T01(CMOS)
	Supports: Samsung: LT150XS-L01(LVDS)
	Supports: Hann Star: LT150X41 (CMOS)
	Video Controller: S3 Savage MX
	Data Path: 32-bit AGP local bus
	Video DRAM: 8MB SGRAM
	LCD Resolution:
	Supports up to 1600x1200x16.7M colors on external CRT
	Supports up to 1280x1024x262K colors on LCD (SXFA)
	Supports 1400x1050x262K colors on LCD (SCGA+)
ELECTRICAL	
AC ADAPTER	Universal input - auto-sensing - 2 wire AC and 2 wire DC
OPERATING ENVIRONMENT	
TEMPERATURE	OPERATING: 5°C ~ 40°C
	STORAGE: -20°C ~ 60°C
HUMIDITY	OPERATING: 30% ~ 90% (non-condensing)
	NON-OPERATING: 10% ~ 90% (non-condensing)
ALTITUDE	OPERATING: -200 to 10,000 feet above sea level
	NON-OPERATING: -200 to 30,000 feet above sea level

SOFTWARE SPECIFICATIONS	
BIOS	System BIOS: AMI BIOS
	Video BIOS: S3
OPERATING SYSTEM	Windows 2000
SOFTWARE DRIVERS	Display driver
	Audio driver
	CD-ROM driver
	CardBus driver
	Suspend to Disk utility

APPENDIX B
LOWTOPPER SIGN REMOVAL

Equipment Needed

#2 Phillips Magnetic Screwdriver 6” Long (1) (not supplied)

Removal Procedure

1. Disconnect power to the ATM and open the hood. If the ATM is already equipped with a small, lighted sign, unplug the power cord for the sign from the side of the card cage.

2. Remove the two mounting boss screws that attach the small sign housing to the ATM hood and set aside. Remove the small sign housing from the unit.

3. If a fluorescent bulb wiring harness assembly is installed in the unit, remove the light assembly by removing the screws that attach the ballast and the light socket to the ATM hood. The ATM is now ready for installtion of the FMV Hightopper assembly.

APPENDIX C
HIGHTOPPER SIGN REMOVAL

Equipment Needed

#2 Phillips Magnetic Screwdriver 6” Long (1) (not supplied)

Removal Procedure

1. Disconnect power to the ATM and open the hood. If the ATM is already equipped with a Hightopper sign, unplug the power cord for the sign from the side of the card cage.

2. Remove the two mounting boss screws that attach the Hightopper sign housing to the ATM hood and set aside. Remove the Hightopper sign housing from the unit.

3. If a fluorescent bulb wiring harness assembly is installed in the unit, remove the light assembly by removing the screws that attach the ballast and the light socket to the ATM hood. The ATM is now ready for installation of the FMV Hightopper assembly.