MVP-9000i Modero Wireless Touch Panel with Intercom

Overview

The AMX MVP-9000i-XX Modero Wireless Touch Panel is a mobile device that communicates with a NetLinx Master via a standard 802.11a/b/g Wireless Access Point. Panel to panel communication is enabled via a full duplex VoIP intercom interface with SIP integration. The MVP-9000i utilizes a 9" Color Active LCD to display a 800 x 480 pixel image using over 16.7M colors, offers control via four programmable capacitive touch buttons and a capacitive touch directional pad in addition to its touch screen, and features programmable firmware that can be upgraded via the device's mini-USB port. The MVP-9000i comes in black (MVP-9000i-GB, **FG5967-01**) and white (MVP-9000i-GW, **FG5967-02**).

For detailed installation, configuration, programming, file transfer, and operating instructions, refer to the *MVP-9000i Operation/Reference Guide*, available on-line at **www.amx.com**.

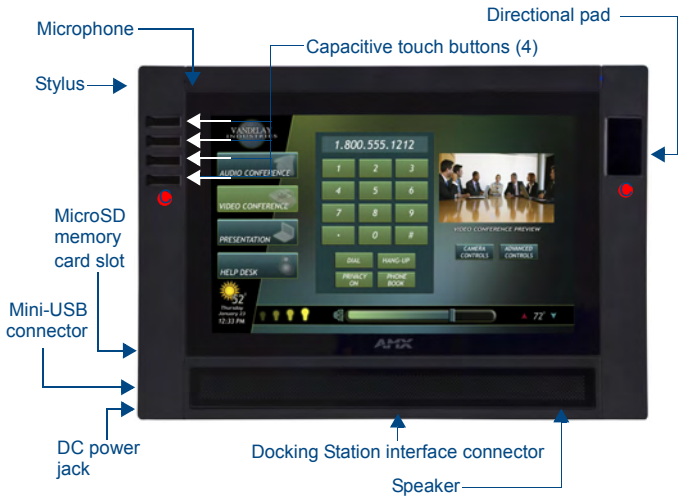

FIG. 1 MVP-9000i-GB Touch Panel components

Specifications

MVP-9000i Specifications (FG5967-01/02)	
Dimensions (HWD):	• 7.62" x 10.98" x 1.06" (19.35 cm x 27.89 cm x 2.69 cm)
Weight:	• 3.40 lbs (1.54 kg)
Power Requirement (without charging):	• Constant current draw: 1.7 A @ 12 VDC • Startup current draw: 1.9 A @ 12 VDC • If panel is mounted onto a TDS or WDS, add 0.1 A to the above figures.
Power Requirement (while charging):	Panel while charging battery: • Constant current draw: 3.3 A @ 12 VDC • Startup current draw: 3.9 A @ 12 VDC • If panel is mounted onto a TDS or WDS, add 0.1 A to the above figures.
Minimum power supply required:	• PS3.0 Power Supply **(FG423-30)** • PS-POE-AT High Power PoE Injector (**FG423-81**) through the Table Docking Station and Wall Docking Station
Power Modes:	• ON: All necessary modules are powered up and device remains online with the Netlinx Master. • ASLEEP: Only the backlight will be turned off after the user selectable time of inactivity has elapsed. **Panel resumes the ON mode in ~ 1 second.** • STANDBY: Power to all components other than the touch screen is turned off after the user selectable time of inactivity has elapsed. Device will turn back on by touching the screen. • SHUTDOWN: Power to all peripherals and components is turned off. The system remains in this mode until it is rebooted.
Certifications:	• FCC Class B • CE • IEC60950 • RoHS • UL • Telec - Japan approval (pending)

MVP-9000i Specifications (Cont.)	
Battery Duration:	• Four days of normal use (25% On state, 25% Standby, and 50% Shutdown). • Five hours of continuous use (continuous On state).
Memory:	• 2GB internal microSD (1.5GB accessible to user)
Screen Properties:	• Screen resolution: 800 x 480 pixels (HV) @ 60 Hz refresh rate • Aspect ratio: 16 x 9 • Brightness (luminance): 400 cd/m2 • Channel transparency: 8-bit Alpha blending • Contrast ratio: 900:1 max. • Display colors: 16.7M colors (8-bit color depth) • Dot/pixel pitch: 0.246 mm • Panel type: TFT Color Active-Matrix
Active Screen Area:	• 7.75" x 7.40" (196.80 mm x 188.08 mm) • 9" diagonal)
Viewing Angle:	• Up/Down/Left/Right: 85/85/85/85
Audio:	• Mono speaker: 4 Ohm, 2 Watts 300Hz cutoff frequency
Infrared Communication:	• IR Transmit only, including AMX 38KHz, AMX 455KHz, and 3rd party IR.
Operating/Storage Environments:	• Operating Temperature: 0° C (32° F) to 40° C (104° F) • Operating Humidity: 20% - 85% RH • Storage Temperature: -20° C (-4° F) to 60° C (140° F) • Storage Humidity: 5% - 85% RH
Included Accessories	• PS4.4 Power Supply **(FG423-45)** • Stylus (pre-installed onto the left side of the unit)
Other AMX Equipment:	• MVP-TDS-9-GB Black Table Docking Station **(FG5967-10)** • MVP-TDS-9-GW White Table Docking Station (**FG5967-11**) • MVP-WDS-9-GB Black Wall Docking Station (**FG5967-12**) • MVP-WDS-9-GW White Wall Docking Station (**FG5967-13**) • CC-MINIUSB Mini USB to PC Cable Adapter (**FG5967-20**) • MVP-BP-9 Replacement Battery Pack (**FG5967-21**) • PS-POE-AT High Power PoE Injector (**FG423-81**)

Connector Locations

FIG. 2 MVP-9000i-GW Kickstand View, showing connector locations

With the unit facing you, the microSD card slot (for loading and saving files such as photos), the mini-AB USB port (for programming and downloading firmware) and the DC power jack are located on the lower left side of the device. The connector for the Table Docking Station is located on the bottom of the device. The MVP-9000i may be operated while docked in a Table Docking Station or Wall Docking Station, connected via the included power supply, or through battery power.

The MVP-9000i supports an Ethernet over USB driver for panel downloads and firmware updates through its mini-USB port instead of through a standard Ethernet port. The mini-USB port may also be used, with an adaptor, with USB memory sticks and USB headphones.

Note: *The mini-USB port cannot be used to power the device or charge the battery. Operation and charging must be done through the Docking Station connector or through the power jack.*

Warning: *Although firmware upgrades can be done over wireless Ethernet; it is strongly recommended that firmware KIT files be transferred over a direct USB connection and only when the panel is connected to a power supply. If battery*

power or wireless connection fails during a firmware upgrade, the panel flash file system may become corrupted.

Setup Pages

The panel is equipped with setup pages that allow you to set and configure various features on the panel. Consult the *MVP-9000i Operation/Reference Guide* for detailed information on the *Setup* pages.

Accessing The Protected Setup Page

1. Press down and hold both the bottom left pushbutton and down on the directional pad (indicated in FIG. 1) simultaneously for 3-5 seconds. This opens the *Setup* page.
2. Press the **Protected Setup** button on the Setup page. This opens a keypad for password entry.
3. Enter the panel password into the keypad (default is ***1988)*** and select **Done** to access the *Protected Setup* page.

Setting the Panel's Device Number

In the *Protected Setup* page:

1. Press the *Device Number* field to open the Device Number keypad.
2. Enter a unique Device Number assignment for the panel**.**
3. Press **Done** to return to the *Protected Setup* page.

Configuring the Panel's Wireless IP Settings

The first step is to configure the wireless communication parameters. This only configures the card to communicate to a target WAP and it is still necessary to tell the panel which Master it should be communicating with; see *Master Connection*.

Consult the *MVP-9000i Modero ViewPoint Touch Panels Operation/Reference Guide* for setting the wireless communication using a static IP address.

Wireless Communication Using a DHCP Address

In the *Protected Setup* page:

1. Select **Wireless Settings**. Wireless communication is set within the IP Settings section of this page.
2. Toggle the *DHCP/Static* field (from the IP Settings section) until the choice cycles to *DHCP*. This action causes all fields in the IP Settings section (other than Host Name) to be greyed-out.

Do not alter any of these remaining greyed-out fields in the IP Settings section. Once the panel is rebooted, these values are obtained by the unit and displayed in the *DNS* fields after power-up.

Consult the *MVP-9000i Operation/Reference Guide* for setting a Host Name.

Configuring the Card's Wireless Settings

This section configures both the communication and security parameters from the internal wireless card to the WAP.

Once you have set up the wireless card parameters, you must configure the communication parameters for the target Master; see *Master Connection*.

Consult the *MVP-9000i Operation/Reference Guide* for configuring the wireless card for unsecured access to the WAP.

Configuring The Wireless Card for Secured Access To the WAP

In the *Protected Setup* page:

1. Select **Wireless Settings**.
2. Enter the SSID information automatically by pressing the **Site Survey** button.
3. Select a **WEP** secured WAP from within the Site Survey page, and press the **Connect** button.
4. Write down the SSID name, Current Key string value, and panel MAC Address information so you can later enter it into the appropriate WAP dialog fields in order to "sync-up" the secure connection. These values must be identically reproduced on the target WAP.

Consult the *MVP-9000i Operation/Reference Guide* for manually entering the SSID information.

Master Connection

The panel requires you establish the type of connection you want made between it and your master. In the *Protected Setup* page:

1. Select *System Settings*
2. Select *Type* to toggle between *USB* and *Ethernet*.
3. When using *Ethernet*, press the listed *Mode* to toggle through the available connection modes:

Connection Modes

Mode	Description	Procedures
Auto	The device connects to the first master that responds. This setting requires that you set the System Number.	Setting the System Number: 1. Select the System Number to open the keypad. 2. Set your System Number and select **Done**.
URL	The device connects to the specific IP of a master via a TCP connection. This setting requires that you set the Master's IP.	Setting the Master IP: 1. Select the Master IP number to the keyboard. 2. Set your Master IP and select **Done**.
Listen	The device "listens" for the master to initiate contact. This setting requires you provide the master with the device's IP.	Confirm device IP is on the Master URL list. You can set the Host Name on the device and use it to locate the device on the master. Host Name is particularly useful in the DHCP scenario where the IP address can change.

4. Select the *Master Port Number* to open the keypad and change this value. The default setting for the port is *1319*.
5. Set your Master Port and select **Done**.

If you have enabled password security on your master, you need to set the username and password within the device.

6. Select the blank field *Username* to open the keyboard.
7. Set your Username and select **Done**.
8. Select the blank field *Password* to open the keyboard.
9. Set your Password and select **Done**.
10. Press the **X** button to return to the *Protected Setup* page.
11. Press the **Reboot** button to reboot device and confirm changes.

Touch Panel Calibration

In the *Protected Setup* page, follow these steps:

1. Select the **Calibrate** icon.
2. Touch each target on the screen as they appear. Once calibrated the panel confirms and instructs you to touch the screen to continue.

Panel Intercom Configuration

Incorporating an intercom capable panel into your NetLinx system

Download the module for the intercom panel from **www.amx.com**, and include it in your NetLinx project file. For searching purposes, the module *manufacturer* is **AMX** and the *model* is **Intercom**.

***Note*:** *The intercom module will only work with AMX intercom capable panels.*

Cleaning the Touch Overlay and Case

Always use a clean cotton cloth and a spray bottle containing water or a vinegar-based cleaner when cleaning the MVP-9000i, as alcohol-based cleaners can damage the device. **Do not directly spray the device**: instead, spray the cloth to clean the touch screen overlay. Do **NOT** use an abrasive of any type to clean the MVP-9000i, as this may permanently damage or remove the device's finish.

Battery Life and Replacement

The battery powering the MVP-9000i is designed for upwards of 300 deep discharge rechargings. Regular shallow rechargings will extensively increase expected battery life, and the device should be stored in either a Table Charging Station or Wall Charging Station when not in use to keep it at an optimum charge. The battery has reached its effective end of life after it can no longer hold more than a 70 percent charge.

Proper Battery Maintenance

NOTE: To insure maximum performance and reliability of your AMX Wireless Touch Panel, please insure that a full charge is performed every 3 months if not used regularly. If a battery is left uncharged beyond this time frame, it may result in premature battery lifespan degradation and will require replacement.

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3000 RESEARCH DRIVE, RICHARDSON, TX 75082 • 800.222.0193 • fax 469.624.7153 • technical support 800.932.6993 • www.amx.com