

**Overview**

The MD-702 (FG5969-55BL) 7" Modero G5 Wall Mount Touch Panel features the G5 Graphics Engine, Quad Core Processor, and a capacitive multi-touch display. This panel now supports two operational modes: as a customizable Modero panel to be configured with RPM or TPDesign5/Netlinx Studio, or as an Acendo Book scheduling panel which connects directly to popular room scheduling software.



FIG. 1 MD-702

**Product Specifications**

MD-702 SPECIFICATIONS	
Dimensions (HWD)	4 7/8" x 7 3/8" x 2 1/4" (123.9mm x 187.5mm x 58mm), with Backbox
Weight	1.05 lbs (.480 Kg), with Backbox / 0.8 lbs (.363 Kg), without Backbox
Power Consumption	<ul style="list-style-type: none"> <li>• Full-On: 14.5W maximum</li> <li>• Standby: 5.8W</li> <li>• Shutdown: 1W</li> <li>• Start-Up Inrush Current: Not applicable due to PoE standard</li> </ul>
External Power Supply Required	Optimal performance requires use of one of the following AMX PoE power supplies (not included): <ul style="list-style-type: none"> <li>• PS-POE-AT-TC, PoE Injector, 802.3AT Compliant (FG423-84)</li> <li>• NXA-ENET8-POE+, Gigabit PoE Ethernet Switch (FG2178-64)</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>• FCC Part 15 Class B</li> <li>• AUS/NZ</li> <li>• EN 55032:2012/AC:2013 Class B</li> <li>• CISPR32:2015</li> <li>• IEC/EN-60950</li> <li>• KN32 Class B</li> <li>• CAN-ICES-3(B)/NMB-3(B)</li> <li>• UL 60950-1</li> <li>• RoHS/WEEE compliant</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Temperature (Operating): 32°F to 104°F (0°C to 40°C)</li> <li>• Temperature (Storage): 4°F to 140°F (-20°C to 60°C)</li> <li>• Humidity (Operating): 20% to 85% RH</li> <li>• Humidity (Storage): 5% to 85% RH</li> <li>• Power ("Heat") Dissipation: On: 49.5 BTU/hr, Standby: 19.8 BTU/hr</li> </ul>
Included Accessories	<ul style="list-style-type: none"> <li>• Installation Template, 7" Wall Mount (68-2265-02)</li> <li>• Backbox, Wall Mount, 7" (5095917-00)</li> </ul>

**MD-702 Installation**

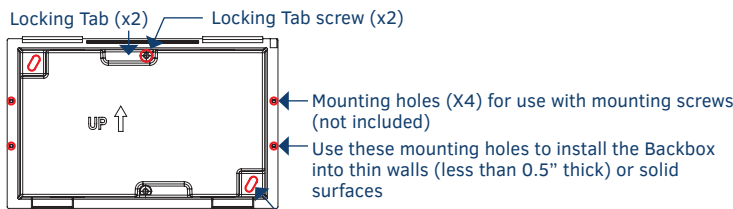
The MD-702 can be installed via several mounting options: Use the included clear plastic Backbox to attach the panel to most standard wall materials. Other optional AMX mounting solutions include the MSA-MMK2-07 Multi Mount Kit, the MSA-AMK2-07 Any Mount Kit, CB-MXSA-07 Rough-In Box and the MSA-RMK-07 Rack Mount Kit. Refer to the Quick Start Guide included with each mounting kit for instructions.

**Power Over Ethernet**

Power for the MD-702 is supplied via Power Over Ethernet (PoE), utilizing an AMXcertified PoE injector such as the PS-POE-AT-TC, PoE Injector, 802.3AT Compliant (FG423-84). Connect the incoming Ethernet cable to the RJ-45 port on the MD-702.

**Plastic Backbox**

The MD-702 comes with a clear plastic Backbox (FIG. 2). This Backbox can be used to mount the touch panel into most standard wall materials. The Backbox can also be used to mount the panel into other mounting options.



Mounting holes for installing the Backbox into a Rough-In Box (screws not included)

FIG. 2 7" BACKBOX (FRONT VIEW)

**STEP 1: Install the Plastic Backbox**

Use the included Installation Template to determine the placement of the Backbox in the mounting surface. The outside edges of the template are the same dimensions as the touch panel, which allows you to troubleshoot possible conflicts with wall edges, doors, and other potential obstacles.

1. After ensuring proper placement, cut an opening in the mounting surface for the Backbox, using the included Installation Template as a guide  
 Note: Consider making the actual cutout opening slightly smaller than the provided dimensions. This provides a margin of error if the opening needs to be expanded. Too little wall material removed is always better than too much.
2. Thread the incoming cables (Ethernet and Micro-USB) from their terminal locations through the surface opening, leaving enough slack in the wiring to accommodate any re-positioning of the panel.
3. Remove the Backbox knockouts and thread incoming cables through the knockouts.
4. Gently push the Backbox into the mounting surface.
  - This Backbox uses two Locking Tabs to secure the Backbox to the wall. For typical mounting surfaces, such as drywall, the locking tabs are the primary method for securing the Backbox to the wall.
  - To ensure a stable installation, the thickness of the wall material must be a minimum of .50 inches (1.27cm) and a maximum of .875 inches (2.22cm). The mounting surface should also be smooth and flat. For thin walls or solid surfaces, use mounting screws (not included) - see FIG. 2.
5. Extend the Locking Tabs by tightening the Locking Tab screws until snug (FIG. 3):

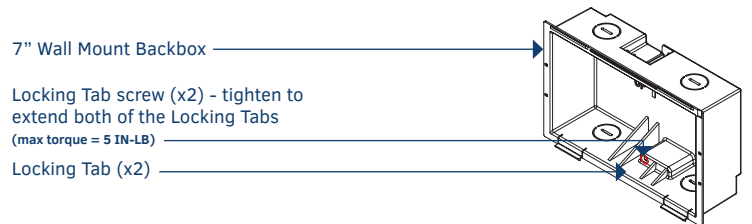


FIG. 3 7" BACKBOX - LOCKING TAB AND LOCKING TAB SCREW (X2)

**CAUTION:** The maximum recommended torque to screw in the locking tabs on the plastic Backbox is 5 IN-LB [56 N-CM]. Excessive torque on the tab screws can strip out the locking tabs or damage the Backbox.

- Extend the Locking Tabs only AFTER the Backbox is inserted into the wall.
- When installing the Backbox, make sure that it is positioned correctly.
- The Backbox is clear to allow visual confirmation that the tabs have been extended and are gripping the wall, as well as in assisting with removal if necessary.

**STEP 2: Insert Connectors on the Touch Panel**

1. Before installing the touch panel into the Backbox, connect the Ethernet and USB cables to the rear of the panel.
2. Remove power at the terminal end before continuing with the installation. Note: Do not disconnect the connectors from the touch panel. The unit must be installed with the attached connectors before being inserted into the mounting surface.

**STEP 3: Secure the Touch Panel To the Backbox**

The Backbox uses notches on the front edges (top and bottom) to secure the panel into place. Follow the steps below to install the panel into the Backbox, starting the upper edge of the touch panel:

**UPPER TABS FIRST**

1. Center the top edge of the touch panel against the upper outside edge of the Backbox and latch the top of the panel onto the Backbox top-hooks (FIG. 4):

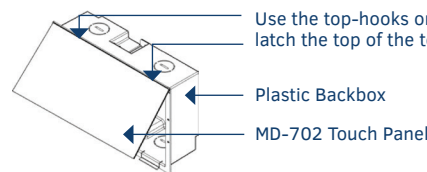


FIG. 4 ENGAGING THE TOP EDGE OF THE PANEL WITH THE TOP HOOKS ON THE BACKBOX

2. Gently press the top edge of the touch panel into place to engage the panel's notches and the top-hooks on the Backbox.

**LOWER TABS- Gently Press Into Place**

1. Swing the bottom edge of the touch panel into position until it rests against the lower outside edge of the Backbox.  
 Note: If a gap is observed between the panel and the Backbox, or binding is felt while locking down the panel, stop and verify there are no cables in the way. Do not force the panel into position, or the touch screen or the panel electronics may be damaged.
2. Gently press the bottom edge of the panel gently but firmly and ONLY IN THE PLACES INDICATED BELOW until the tabs click into place to secure the panel (FIG. 5):

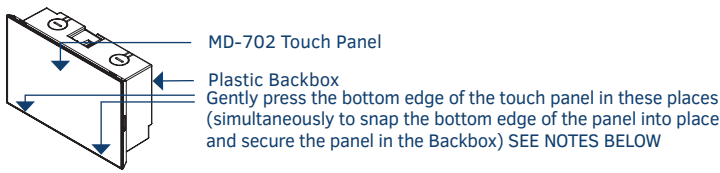


FIG. 5 SNAPPING THE BOTTOM EDGE OF THE PANEL INTO THE BACKBOX

3. Reconnect the terminal Ethernet and USB to their respective locations on either the Ethernet port or NetLinx Master.

### Removing the MD-702 from the Backbox

The tabs on the bottom edge of the Backbox lock down the MD-702 and must be unlatched in order to remove the touch panel from the Backbox. To do this, you'll need a small flathead screwdriver.

1. With a small flathead screwdriver, carefully press straight into the access holes on the bottom of the bezel (near the center of the bottom tabs) to disconnect the two bottom clips (FIG. 6):

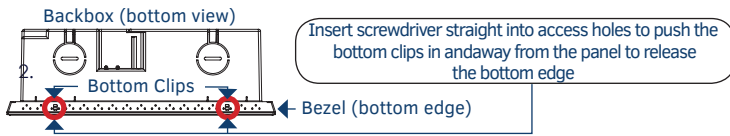


FIG. 6 MD-702/BACKBOX ASSEMBLY - BOTTOM VIEW

2. Grasp the bottom of the panel and pull gently outward until the side of the panel is free of the snap. Use your other hand to stabilize the front of the touch panel (FIG. 7):

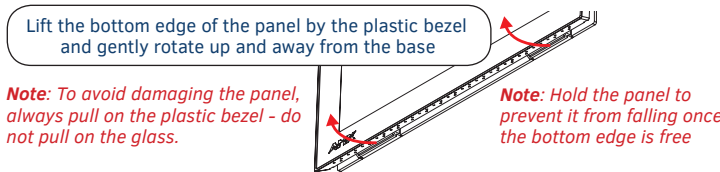


FIG. 7 MD-702/BACKBOX ASSEMBLY (RELEASING THE BOTTOM EDGE OF THE PANEL)

**Note:** Always pull on the frame of the touch panel. NEVER pull on the glass edge.

3. With the edge of the touch panel free, carefully lift up and out to remove the touch panel from the Backbox. Be careful not to pull on the cables or connectors.

### Powering On/Off Modero G5 Panels

Modero G5 touch panels may be powered on by touching and holding the Sleep button. To power off the panel, press and hold the Sleep button, and select **Power Off** on the on-screen menu (FIG. 8):

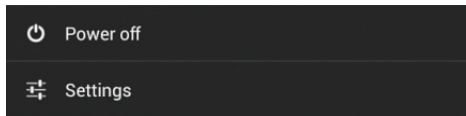


FIG. 8 SLEEP BUTTON - PRESS AND HOLD TO ACCESS POWER OFF/SETTINGS OPTIONS

### Selecting Modero Or Acendo

MD-702/MD-1002 panels will be configured in the field to operate as either a Modero G5 panel or as an Acendo Book scheduling panel.

Upon first boot, a wizard application allows the user to select the operating mode for the device to run – either Modero G5 or Acendo Book

Once the operating mode is configured, that operating mode will be set from then on.

In order to change operating mode after one was selected, a Factory Data Reset will reset the operating mode back to a point to which the user can select the operating mode using the wizard application.

### Select Operational Mode

Select either Modero G5 or Acendo Book mode (will prompt panel reboot). This option is presented for brand new units or a unit that is reset to factory settings. (FIG. 9)

When Modero G5 is selected (in FIG. 9), this is the default screen until a UI is loaded via USB or TPDesign5.

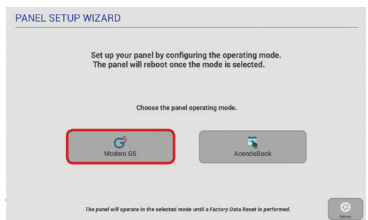


FIG. 9 OPERATING MODE SELECTION

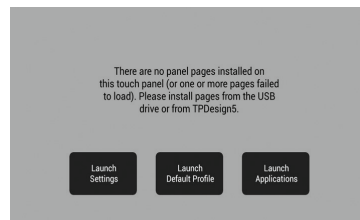


FIG. 10 MODERO G5 DEFAULT SCREEN

## Configuration and Programming

Modero G5 touch panels are equipped with a **Settings** menu that provides the ability to configure various features on the panels. To access the **Settings** menu, press and hold the Sleep button, and select **Settings**.

*Note: Information on the Settings menu, panel configuration, and programming is provided in the Modero G5 Programming Guide, available at [www.amx.com](http://www.amx.com).*

### Setting the Panel's Device Number and Device Name

1. In the **Settings** menu, select **NetLinx**. This opens a password keypad.
2. Enter the panel password into the keypad (the default is **1988**) and select **OK** to access the **NetLinx** page.
3. Press **Device Number** to open the **NetLinx** editing window.
4. Enter a unique Device Number assignment for the panel and press **OK**.
5. Enter a unique Device Name assignment for the panel and press **OK**.

### Configuring the Panel's IP Address

These steps configure the panel to communicate with a network; it is still necessary to connect to the **NetLinx** Master (see *Connecting to a NetLinx Master* below).

### Network Communication via DHCP

1. In the **Ethernet** page, press **DHCP/Static** field to open the **DHCP/Static** window. Note that **DHCP** is the default setting.
2. Select **Host Name**, enter the new host name
3. Press **OK** to save changes.

### Network Communication via Static Address

1. In the **Ethernet** page, press **DHCP/Static** to open the **DHCP/Static** window.
2. Select **Static** to open the **Static IP** window.
3. Press any field to open a keypad or keyboard (depending on the field), and enter the appropriate network address information.
4. Press **OK** to save your changes and return to the **Ethernet** page.

### Connecting to a NetLinx Master

To establish the type of connection to make between the panel and the **NetLinx** Master:

1. In the **NetLinx** page, press **Mode** to choose the connection mode (**URL**, **Listen** or **Auto**):

CONNECTION MODES		
Mode	Description	Procedures
URL	The device connects to the target Master's IP address via a TCP connection.	<ol style="list-style-type: none"> <li>1. Select <b>URL</b> in the Mode menu.</li> <li>2. Enter the Master IP/URL, Master Port Number, and Username/Password (if required by the Master).</li> <li>3. Press <b>OK</b> to save changes.</li> </ol>
Listen	This mode allows the panel to "listen" for the Master's communication signals. Note that in this mode, the System Number and Master IP/URL fields are read-only.	<ol style="list-style-type: none"> <li>1. Select <b>Listen</b> in the Mode menu.</li> <li>2. Confirm the panel's IP address is on the Master's URL list (via <b>NetLinx</b> Studio).</li> <li>3. Press <b>OK</b> to save changes.</li> </ol> <p><b>Note:</b> The Host Name (set on the <b>Ethernet</b> page), can be used to locate the panel on the Master (particularly useful for DHCP connections where the IP address can change).</p>
Auto	Use this mode when both the panel and the <b>NetLinx</b> Master are on the same Subnet.	<ol style="list-style-type: none"> <li>1. Select <b>Auto</b> in the Mode menu.</li> <li>2. Enter the System Number and Username and Password (if applicable).</li> <li>3. Press <b>OK</b> to save changes.</li> </ol>

2. If password security is enabled on the target Master, enter the Username and Password:
  - a. Select **Username** to open the **NetLinx** window.
  - b. Enter the **Username and Password** required by the Master.
  - c. Press **OK** to save changes and return to the **NetLinx** page.

### Related Software and Additional Documentation (at [www.amx.com](http://www.amx.com))

- Programming the Modero G5 touch panels requires the use of either Rapid Project Maker (RPM) or the latest version of **NetLinx** Studio and **TPDesign5**, both available to download at [www.amx.com](http://www.amx.com). Refer to the **NetLinx** Studio and **TPDesign5** online help for information.
- For information on designing touch panel pages intended to optimize the Modero G5 experience, refer to the **G5 Considerations Guide**.
- For additional information on the MD-702 panel, refer to the **Modero G5 Touch Panel Instruction Manual**.
- For detailed information on the **Settings** menu as well programming information and instructions on upgrading firmware, refer to the **Modero G5 Programming Guide**.
- Detailed specifications drawings for the MD-702 are available to download from [www.amx.com](http://www.amx.com).

