

For more detailed installation and operating instructions, refer to the *Modero Touch Panel Series* of Instruction Manuals available on-line at www.amx.com.



FIG. 1 10 Foot Modero Table Top Cable

Overview of the Modero Table Top Cable

The Modero Table Top Touch Panels come with a standard 10' (3.048 m) Modero cable (**CA2250-50**) that supports Ethernet, Audio/Video, and Power connections. The cable comes terminated with two RJ45 connectors (Ethernet and Audio/Video) and a single 2-pin mini-Phoenix connector for power.

If your installations require custom cable configurations, you can always purchase bulk (non-terminated) cable from **Liberty Wire and Cable** under the nomenclature "AMX Table Top Cable - Modero" (phone#: (800) 530 8998 or +1-719-388-7518). When building a custom table top cable, please refer to the table below to calculate the maximum length of the cable for your particular installation/setup.

Maximum Table Top Cable Lengths for Modero Panels				
Panel Sizes:	7" and 10" Panels	12" Panel	15" Panel	17" Panel
Setup I: Using a panel <i>without</i> a battery base*:				
Maximum cable length	150' (45.72 m)	49' (14.94 m)	39' (11.89 m)	10' (3.05 m)
Setup II: Using a panel <i>with</i> a battery base*:				
Maximum cable length	56' (17.07 m)	25' (7.62 m)	15' (4.57 m)	10' (3.05 m)

* The total Modero cable run from the 13.5 V power source (PSN6.5)

Specifications

Modero Table Top Cable Specifications	
Dimensions:	• Length: 10 feet (3.048 m)
Connectors:	- Ethernet RJ-45 connector (White) routes Ethernet signals between the touch panel and the AVB/Ethernet Breakout Box. - Audio/Video RJ-45 connector (Black) routes differential audio/video signals between the touch panel and the box. 2-pin 3.5 mm mini-Phoenix power connector to route power from the external breakout box to the target panel.
Included Accessories:	• One Modero Table Top Cable (CA2250-50)
Optional Accessories:	Note: All 1200V, VG-Series, and CV10 Table Top panels routing an Audio/Video signal from a breakout box must use the appropriate number of CAT5 Suppression Ferrites which are included as part of installation kits accompanying your particular Modero panel. CA and CV models do not require a ferrite. Each of the following Installation Kits come with the appropriate number of CAT5 Suppression Ferrites. These ferrites must be installed onto their appropriate locations. - Installation Kit for 12" and 17" NXD panels (KA2251-01): 2-pin mini-Phoenix connector (41-5025) - Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) - One CAT5 Suppression Ferrite (04-0014) - Four Drywall clips (62-5924-05) and #6 -metal strips (80-0192) - Installation Kit for 15" NXD panels (KA2251-02): 2-pin mini-Phoenix connector (41-5025) - Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) - Two CAT5 Suppression Ferrites (04-0014) - Four Drywall clips (62-5924-05) and #6 -metal strips (80-0192) - Installation Kit for 12" NXT panels (KA2251-03): 2-pin mini-Phoenix connector (41-5025) - Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) - Two CAT5 Suppression Ferrites (04-0014) - Installation Kit for 15" and 17" NXT panels (KA2251-04): 2-pin mini-Phoenix connector (41-5025) - Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) - One CAT5 Suppression Ferrite (04-0014) - Installation Kit for 10" NXT panel (KA2259-01): 2-pin 3.5 mm mini-Phoenix connector (41-5025) - One CAT5 Table Top Suppression Ferrite (04-0014) - One cylindrical CAT5 USB Mouse Suppression Ferrite (04-0018-SA)

Table Top Cable Wiring

FIG. 2 shows a top view of the finished cable.

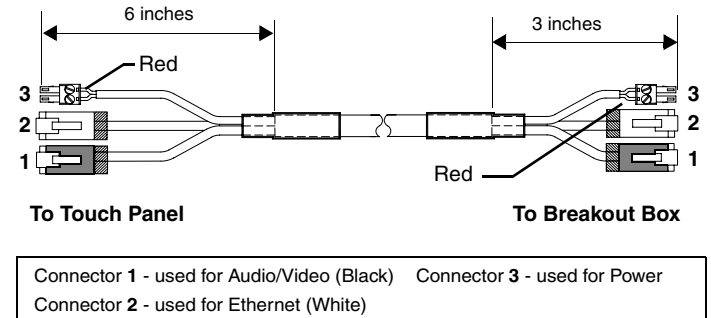


FIG. 2 Finished Table Top Cable - showing standard terminations (top view)

The following table provides the associated wiring information for each of the three (3) available connectors.

Wire Table			
Wire	Connector 1	Connector 2	Connector 3
1	White/Orange	White/Orange	Red
2	Orange/White	Orange/White	Black
3	White/Green	White/Green	-
4	Blue/White	Blue/White	-
5	White/Blue	White/Blue	-
6	Green/White	Green/White	-
7	White/Brown	White/Brown	-
8	Brown/White	Brown/White	-

The following figures provide a description (FIG. 3) and a cross-section view (FIG. 4) of the Modero Table Top Cable:

DESCRIPTION:	9/PAIRS COMPOSITE CABLE CONSISTING OF: ELEMENT #1: TWO 4/PAIR 24 AWG STRANDED TINNED COPPER, POLYETHYLENE INSULATION, ELEMENT #2: 1/PAIR 18 AWG STRANDED TINNED COPPER, PVC INSULATION AND FOIL SHIELDED OVERALL PAPER BINDER AND FLEX-PVC JACKET.
ELEMENT #1:	2 X 4/PAIRS: 24 AWG STRANDED COPPER CONDUCTOR: 24 AWG 7/32 TINNED COPPER; OD .024" NOMINAL INSULATION: .0075" WALL POLYETHYLENE; OD .039" NOMINAL COLOR CODE: P1: WHITE/BLUE, BLUE P2: WHITE/ORANGE, ORANGE P3: WHITE/GREEN, GREEN P4: WHITE/BROWN, BROWN PAIR: 2 CONDUCTORS TWINNED LEFT HAND LAY (TWISTED AT VARIED LAYS TO MINIMIZE CROSS TALK) CABLE: 4/P CABLED LEFT HAND LAY (BLUE BINDER, ORANGE BINDER) BINDER: PAPER TAPE
ELEMENT #2:	1 PAIR: 18 AWG SHIELDED CONDUCTOR: 18 AWG 16/30 TINNED COPPER; OD .046" NOMINAL INSULATION: .010" WALL PVC; OD .066" NOMINAL COLOR CODE: BLACK, RED DRAIN WIRE: #22 7/30 TINNED COPPER SHIELD: ALUM/POLYESTER TAPE (FOIL SIDE IN)
FINAL ASSEMBLY:	TWO ELEMENT #1 & ELEMENT #2 CABLED ON COMMON AXIS TO MINIMIZE DIAMETER
BINDER:	CLOTH TAPE 25% OVERLAP
JACKET:	.045" WALL FLEXIBLE PVC,
COLOR:	BLACK MATT
DIAMETER:	.375 INCHES NOMINAL
MARKING:	NONE

FIG. 3 Table Top Cable - Specification Elements

Note: Each bundle of 4 twisted pairs includes a colored tape indicator for identification.

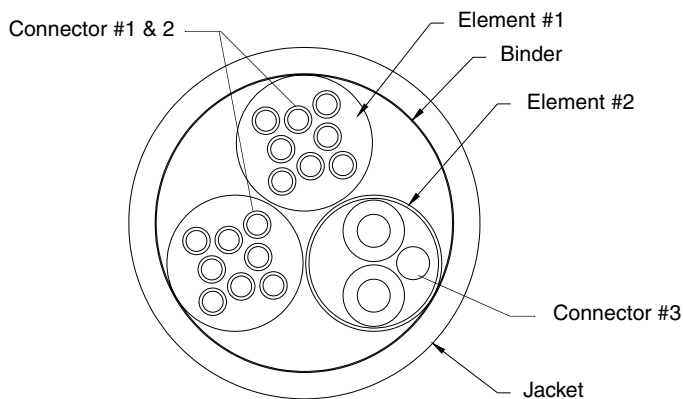


FIG. 4 Table Top Cable - cross-section view

Installing the CAT5 Suppression Ferrites (V and VG Panels)

Before connecting the RJ-45 cables to the Modero Touch Panel, install the necessary number of CAT5 Suppression Ferrites (FIG. 5) to the RJ-45 Audio/Video cable. These ferrites come as part of the Installation Kits mentioned in the Specification table.

No tools are required for this installation.

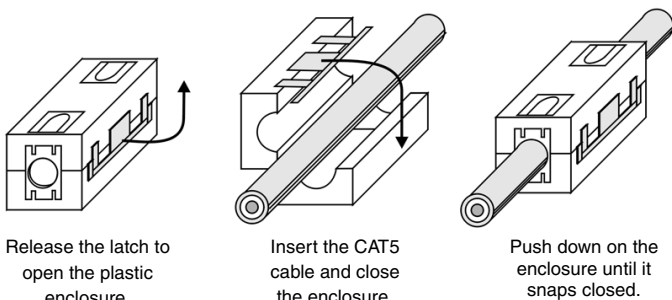


FIG. 5 Installing the CAT5 Suppression Ferrites

Note: All 1200V-Series, VG-Series, and Table Top CV10 panels require the installation of an appropriate number of CAT5 Suppression Ferrites when they use an RJ-45 cable to feed an A/V signal from the breakout box.

1. The CAT5 Suppression Ferrite is housed within a plastic enclosure (shown in FIG. 5) with a latch release on one side. Pull to release the latch and open the enclosure.
2. Grasp the Black RJ-45 Audio/Video cable being connected to the panel. This end of the cable is longer than the opposing end which connects to the breakout box (6 inches vs 3 inches). Refer to FIG. 6 for more detailed information.
3. Insert the panel-end of the Black RJ-45 Audio/Video cable into the groove along the inside of the enclosure.

Note: The CAT5 Suppression Ferrites MUST be installed onto the cable connected to the Modero's Audio/Video RJ-45 connector (just behind the connector).

4. Snap the enclosure shut with the cable inside and you're done.
5. Repeat this process again **only** when installing an additional CAT5 Suppression Ferrite (model specific).

Installing the CAT5 Suppression Ferrites for a CV10 Panel

Before connecting the RJ-45 cables to the Modero Touch Panel, install the necessary number of CAT5 Suppression Ferrites (FIG. 5) to their appropriate locations. These ferrites come as part of the Installation Kits mentioned in the Specification table.

No tools are required for this installation.

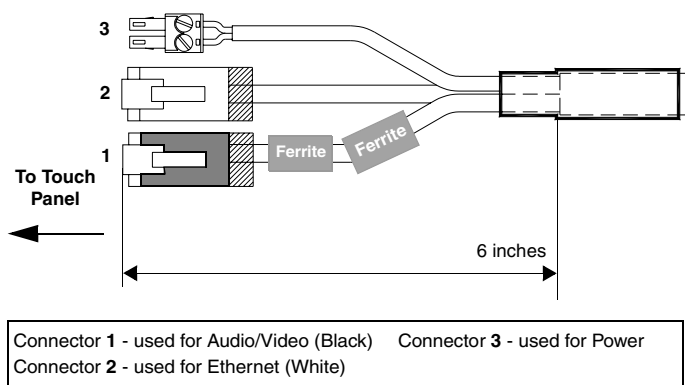


FIG. 6 Ferrite connector location on Audio/Video RJ-45 cable

Note: All 1200V-Series, VG-Series, and Table Top CV10 panels require the installation of an appropriate number of CAT5 Suppression Ferrites when they use an RJ-45 cable to feed an A/V signal from the breakout box.

1. The CAT5 Suppression Ferrite is housed within a plastic enclosure (shown in FIG. 5) with a latch release on one side. Pull to release the latch and open the enclosure.
2. Grasp the end of the Modero Table Top cable being connected to the panel. This end of the cable is longer than the opposing end which connects to the breakout box (6 inches vs 3 inches). Refer to FIG. 7 for more detailed information.
3. Insert the shrink-wrap section of the cable into the groove along the inside of the ferrite enclosure.

Note: The CAT5 Suppression Ferrite MUST be installed onto the shrink-wrap section of the cable, at the location just before the cables split-off and separate.

4. Snap the enclosure shut with the shrink-wrap inside, and proceed to the installation of the second Suppression Ferrite onto the USB mouse cable.
5. Follow these similar procedures to install the additional cylindrical CAT5 USB Mouse Suppression Ferrite (04-0018-SA):
 - Locate the USB mouse device that will be connected to the rear USB connector on the NXT panel.
 - Choose a location on the cable (closest to the connection point on the touch panel) and insert it into the groove along the inside of the cylindrical enclosure.
 - Snap the enclosure shut with the USB cable inside, and you're done.

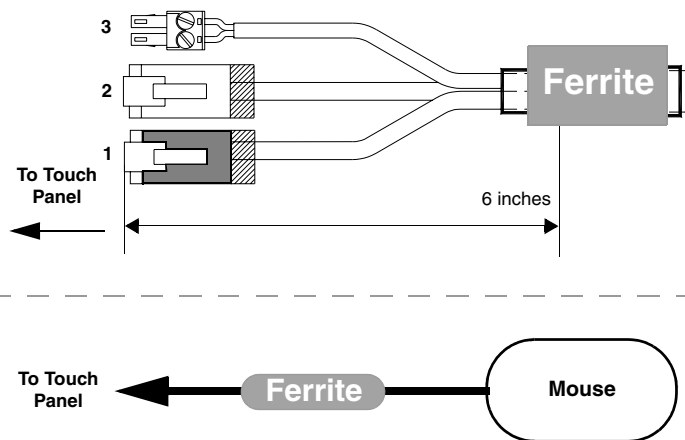


FIG. 7 CV10 Ferrite connector location on the Table Top and mouse cables