



VANTAGE

Installation

TPT650 ROUGH IN ASSEMBLY — MODEL: TPT650-INSTALL-16

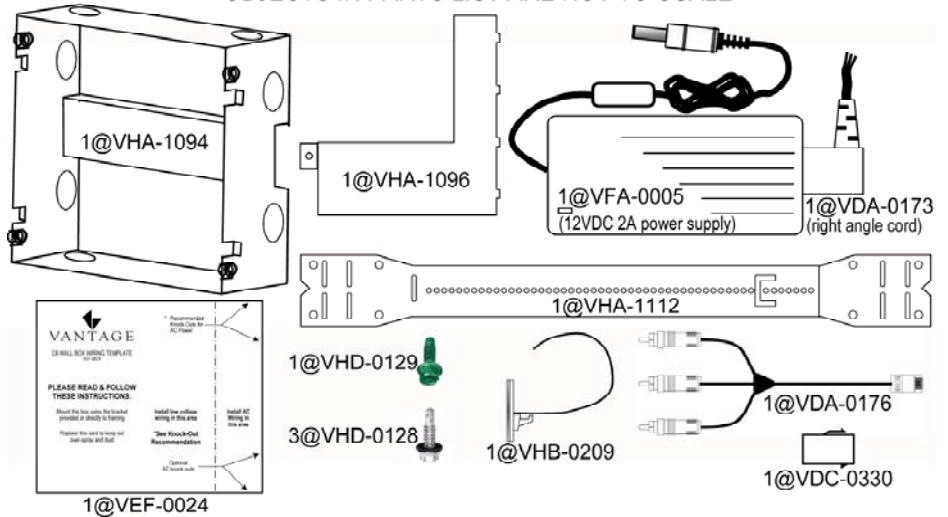
Overview

Vantage's TPT650 Wall Box is designed to MOUNT the TPT650 LCD Touchscreen. The box has eight knockouts for 1/2" (10mm) 2-screw connectors, two on each side making it very versatile for any installation. This is also ideal for installations using conduit for wire runs. The VEF-0024 mounting box is mounted directly to framing studs or to the telescoping bracket (provided). An optional 24" telescoping bracket is also available from Vantage, part number VHA-1113. Replace the template inside of the wall box during construction to help keep out overspray and dust. Also see Installation Instructions for TPT650 Touchscreens.

Parts List

Part Number	Description	Quantity
VHA-1094	SHM, WALL BOX, C-6 (REV-A)	1
VHA-1096	SHM, POWER BKT, C-6 REV-A	1
VFA-0005	PWR SPLY-ETS120200UTC-P5P-SZ CUI 12VDC 2A POWER SUPPLY	1
VDA-0173	CBL-POWER CORD, IEC-C5-RA, 5.25" - AC POWER CORD	1
VHA-1112	BRKT-WALL BOX MOUNT, 16"	1
VEF-0024	TEMPLATE-INSTRUCTIONS, C-6 WALL BOX WIRING/DUST COVER	1
VHD-0129	SCR-HEX-WASHER/SLOT TAPPING-F, 8-32 x 3/8", GREEN (GND)	1
VHD-0128	SCR-HEX-WASHER/SLOT TAPPING-F, 6-32 x 3/8"	3
VHB-0209	PLASTIC-HOLD DOWN STRAP	1
VDA-0176	CABLE, RJ45 TO RCA MALE AUDIO/VIDEO, 18"	1
VDC-0330	CABLE CONNECTOR, RJ45 TO RJ45	1

OBJECTS IN PARTS LIST ARE NOT TO SCALE



Installation

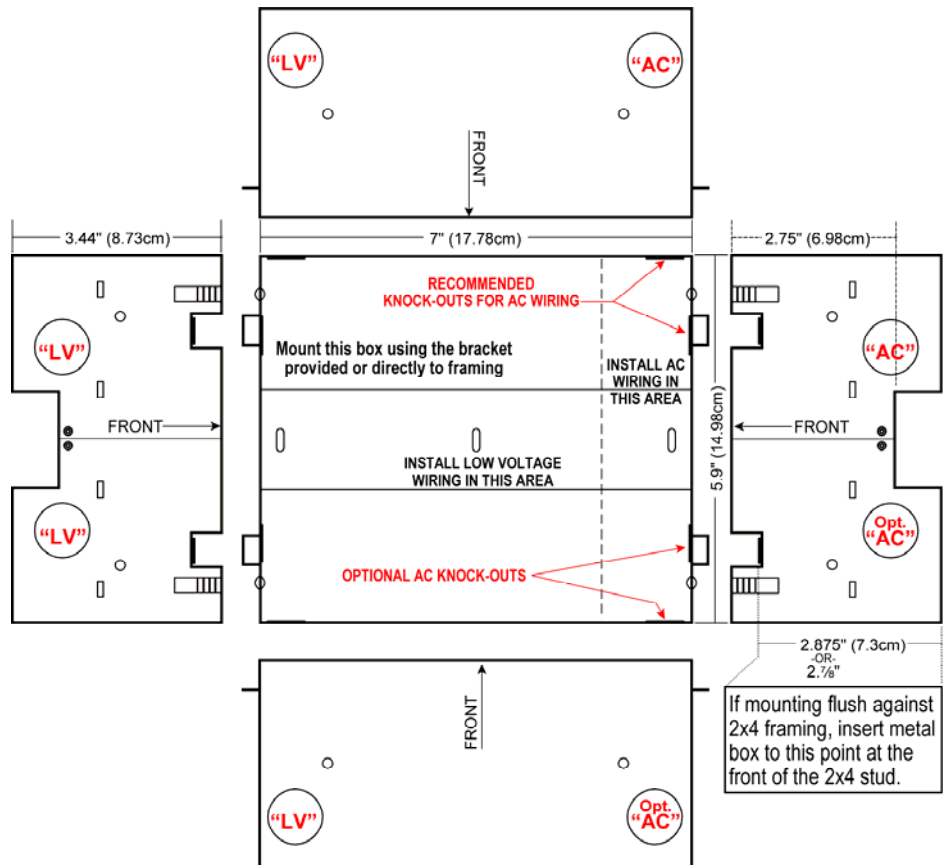
Installation of Vantage products should be performed or supervised by a *Certified Vantage Installer*.

- Please study these instructions *before* installing
- *Sheetrock cutout must match C6 WALL BOX WIRING TEMPLATE* Shipped inside the wall box
- Use knock-outs in the upper Right-hand side for AC wiring - recommended
- It is recommended that communication/low voltage connections, use the knock-outs farthest away from the AC knock-outs
- Please note knock-out locations for "LV", "AC" symbols.

Location/Wiring For All Installations

1. The recommended mounting wall height is six inches above that of a typical keypad station or approximately 50" to 58" from the floor to the bottom of the wall box. However, it may be installed at any height fitting your installation requirements.
2. When choosing the location note that connections to AC voltage wires and Communication wires have limited knockout locations – **see FIG: 1**
3. The wall box does not have a top and bottom – either direction will work.
4. Power supply is 1 to 1 ratio. Only connect *ONE* TPT650 to any power supply.

FIG:1



New Construction

- This box is designed to be mounted in standard framed walls with 1/2" to 5/8" thick sheetrock.
- The box must be mounted at a depth in the wall so *when the sheetrock is installed or the wall is finished* the box will be recessed approximately 1/8" to 1/4" from the front face of the sheetrock depending on the thickness of the sheetrock.
 - On a standard 2x4 wall with 1/2" or 5/8" thick sheetrock the box will be at an acceptable depth by bending the 16" mounting bracket at the locations shown in **FIG: 2** and **FIG: 3**
 - On a wall with thicker sheetrock, mount the box so that the wall box is recessed 1/8" to 1/4" from the open face of the finished wall.

TIP: The metal box, VHA-1094, may be secured on the left or right side directly against a 2x4 in the wall. If the box fits tight enough against the 2x4 framing stud, the bracket is not needed, however it can still be used for additional stability. The 4 bend out stops in the front of the VHA-1094, are used to as a guide for proper depth for 1/2" to 5/8" thick sheetrock. Slide the metal box back until the raised stops touch the front of the framing stud.

- A licensed Electrician should complete inside wiring assembly as shown in **FIG: 4**, and replace the **C6 WALL BOX WIRING TEMPLATE** for protection – see **FIG: 4** and **FIG: 5**
 - Do not use the Wall Box as a Junction, the available space requires that the high voltage run be terminated in the box.
 - Also see steps **7 & 13** below in the *Retrofit Construction* section – step **8** below may also be considered in new construction.

Retrofit Construction

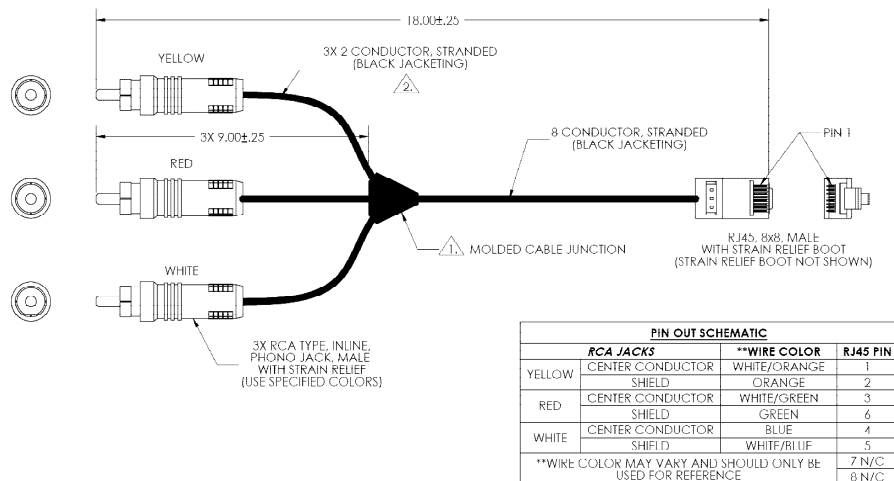
- Retrofit for this product may not be easy to achieve, please carefully read the instructions before deciding on a retrofit location.*
- A licensed Electrician must be able to get power to the location selected.
- Installer must be able to get network wiring to the selected location.
- Locate studs in the wall using a stud finder.
- Use the heavy card stock template labeled **C6 WALL BOX WIRING TEMPLATE** to trace an outline for the cutout hole in the sheetrock.
- Cut the sheetrock out and bend the sheetrock stop taps in on each side of the VHA-1094.

TIP: If the cut out hole is flush with the edge of a framing stud, the metal box, VHA-1094, may be secured on the left or right side directly against the 2x4 in the wall. If the box fits tight enough against the 2x4 framing stud, the bracket is not needed, however it can still be used for additional stability.
- Pull AC power and other communication lines through the hole in the wall and through appropriate knock-outs in the metal box.
- Only use **ONE** power supply for each TPT650.
- Optional Method: The electrician may decide to mount the 12VDC 2A POWER SUPPLY at a remote location
 - Use 16/2 American Wire Gauge (AWG) or 18/2AWG wire
 - 16/2AWG – maximum length 100ft. (30.48m)
 - 18/2AWG – maximum length 50ft. (15.24m)
 - Cut the "barrel" end off – about 5" from the end of the wire – farthest point away from the 12VDC 2A POWER SUPPLY. Splice into the end of the extended wire run at the wall box side. Splice the other end into the other side of the wire run. **IMPORTANT:** Keep polarity the same; notice the original power cord has white dashed lines on one side. Make sure your connections are to the same wire at each end of the two wire splice. The high voltage side of the 12VDC 2A POWER SUPPLY must be connected to a reliable earth ground.
- Mount the 16" Support Bracket VHA-1112 to the Studs on each side of the hole by reaching in with a small palm drill and secure with self tapping screws. NOTE: if the wall is 1/2" to 5/8" thick, bending the 16" bracket at the locations illustrated in **FIG: 2** will provide the proper depth by pulling the bracket to the back of the sheetrock inside the hole.
- If the 16" Support Bracket VHA-1112 is used, it must be perfectly centered from TOP to BOTTOM in the cutout hole.
- This box is designed to be mounted in standard framed walls with 1/2" to 5/8" thick sheetrock, ideally.
- The box must be mounted at a depth in the wall so the box will be recessed approximately 1/8" to 1/4" from the front face of the sheetrock or finished side of the wall.
 - On a standard 2x4 wall with 1/2" or 5/8" thick sheetrock the box will be at an acceptable depth by bending the 16" mounting bracket at the locations shown in **FIG: 2**
 - On a wall with thicker sheetrock, mount the box so that the wall box is recessed 1/8" to 1/4" from the open face of the finished wall.
- A licensed Electrician should secure all high-voltage wire runs in the box
 - All wire runs into the box should be *secured* using 2-screw connectors or equivalent as shown at the right
- Bend in the four sheetrock stops on each side of VHA-1094 and carefully insert the metal box with secured wire runs through the hole and secure the box to the 16" Support Bracket VHA-1112 and/or wall stud.
- A licensed Electrician should complete inside AC wire assembly as shown in **FIG: 4** and **FIG: 5**,
 - Do not use the Wall Box as a Junction, the available space requires that the high voltage run be terminated in the box.
- The box is now ready to receive the TPT650 Touchscreen.



VDA-0176

The **TPT650-INSTALL-16** kit ships with one VDA-0176 A/V connector cable. Additional cables may be purchased from Vantage Controls. This cable connector is designed to connect directly to the A/V equipment on the RCA connectors side. Use a straight through RJ45 coupler allowing the installer to run longer CAT5e wire runs with RJ45 type connectors to the TPT650 and the VDA-0176 connector cable. A/V wire runs should not exceed 200ft. The TPT650 can have up to four of these connectors on the back for 4 A/V cameras.



RJ45 Connector for Audio/Video

If you build your own A/V RJ45 connectors, please follow the PIN-OUTS shown at right.

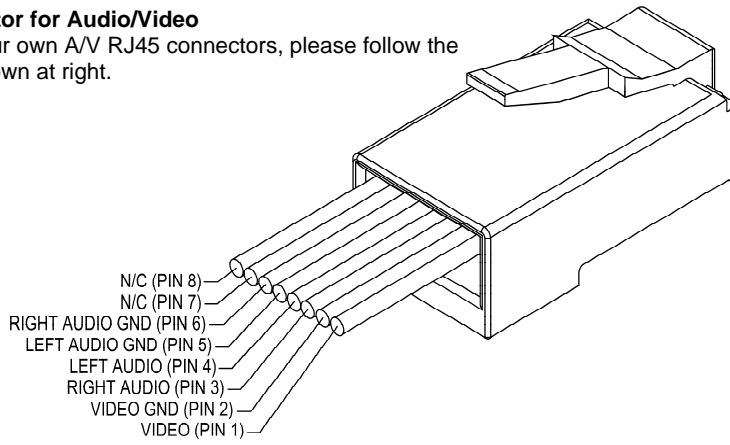
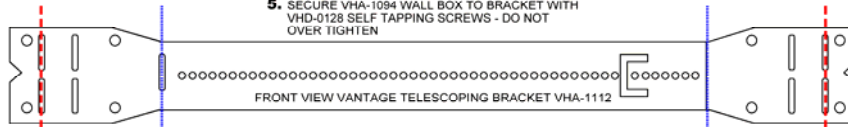


FIG: 2

1. CAREFULLY BEND TELESOPING BRACKETS AT THESE TWO POINTS
2. EXTEND TELESOPING BRACKET TO FIT BETWEEN STUDS
3. *BEND AROUND FRONT OF FRAMING STUD FOR NEW CONSTRUCTION OR REVERSE BEND FOR RETROFIT
4. SECURE BRACKET WITH SELF TAPPING SCREWS
5. SECURE VHA-1094 WALL BOX TO BRACKET WITH VHD-0128 SELF TAPPING SCREWS - DO NOT OVER TIGHTEN



***BEND OUT AROUND 2X4 AT RED DASHED LINE FOR NEW CONSTRUCTION**
***REVERSE BEND IN AT RED DASHED LINE FOR RETROFIT ONLY!**

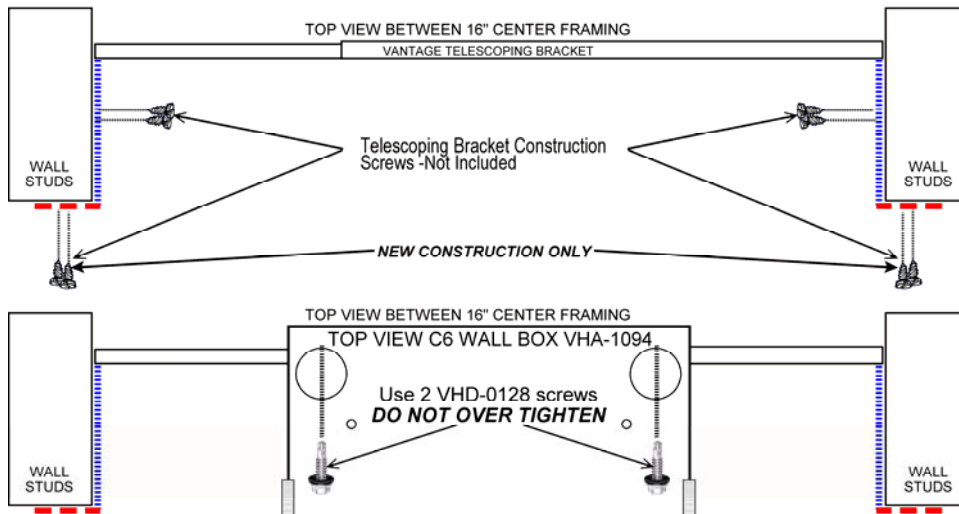
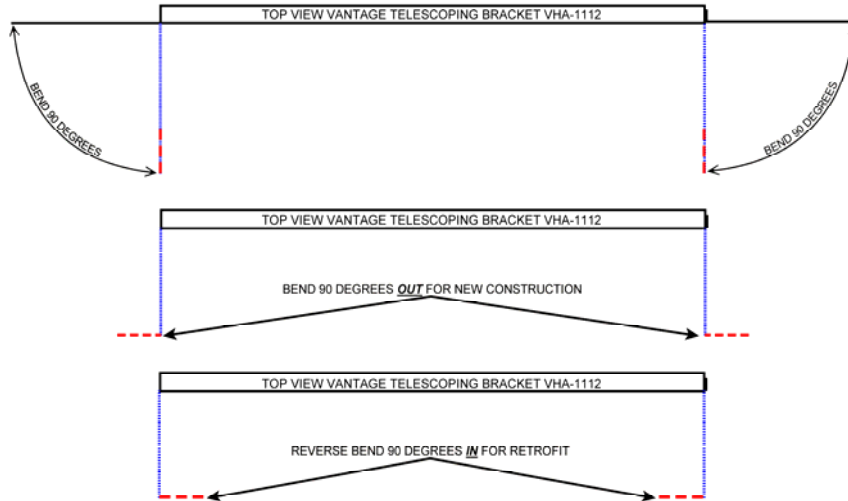


FIG: 3

Install the telescoping bracket – VHA-1112 – between framing studs as indicated in the drawing below. Use two screws (provided) to connect the wall box to the telescoping bracket. Install the bracket and metal box so the metal wall box is slightly recessed (approximately 1/8") from the front face of the sheet rock to ensure that the TPT 650 LCD Touchscreen will not protrude out from the wall.

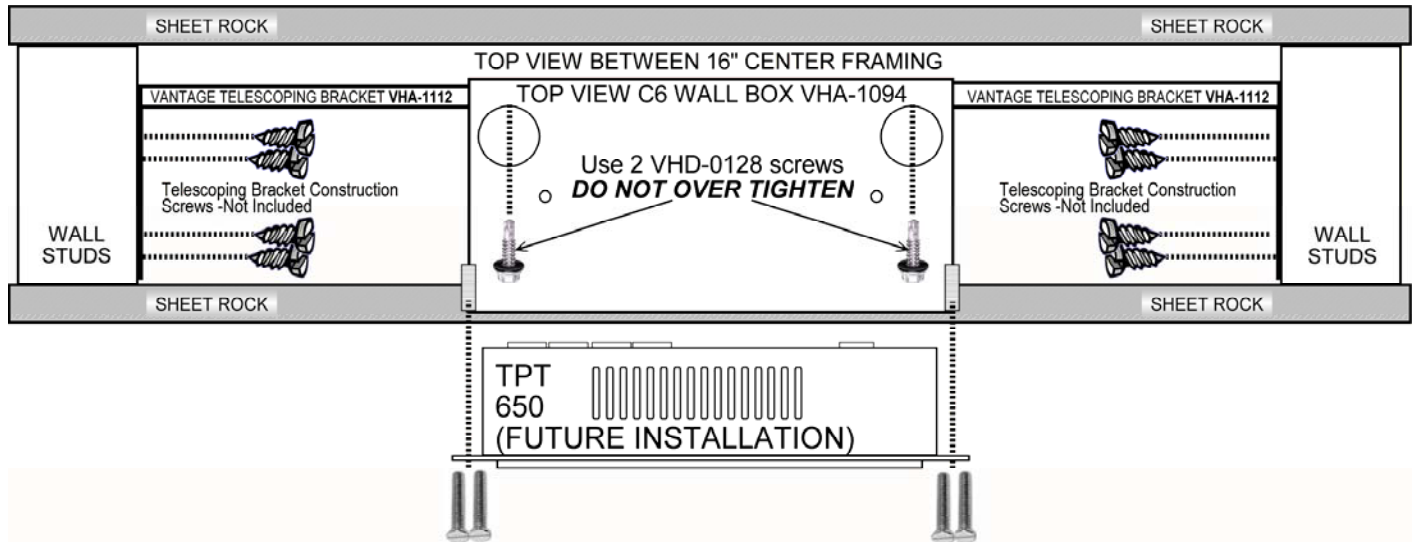


FIG: 4

Complete 120VAC wiring connections as illustrated in picture below.

- A licensed Electrician should terminate the 120VAC house wiring to the AC power cord and power supply as illustrated.
- Secure the 12VDC 2A POWER SUPPLY's power cord to the center of the metal box VHA-1094, using the PLASTIC-HOLD DOWN STRAP – VHB-0209
- Do to space restrictions, **DO NOT USE THE WALL BOX AS AN ELECTRICAL JUNCTION**

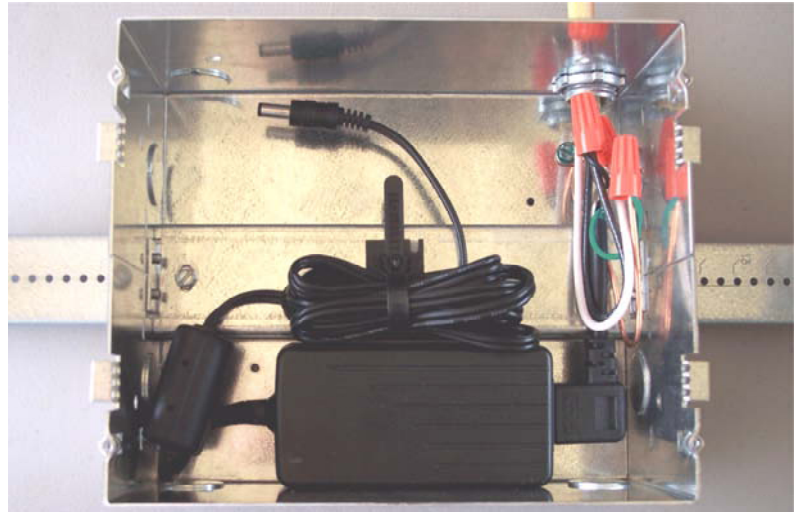


FIG: 5

Complete assembly as illustrated in picture below.

- Insert the AC wiring metal cover bracket, VHA-1096 in the slots on the right hand side and secure with the 3rd HEX screw as illustrated.
- Replace the C6 WALL BOX WIRING TEMPLATE to protect the inside of the box from dust and overspray during construction.

NOTE: TPT650 Wiring

- CAT5e network cable with RJ45 connectors.
- Romex or equivalent 120-220VAC power supply*
- Each TPT650 may also have up to four A/V cables using CAT5e with RJ45 connectors and an A/V Connector Cable – part number VDA-0176* – on the A/V end.

*See the **TPT650** installation sheet

