WPC 160 A Series • Installation Guide

The Extron WPC 160 A EU and WPC 160 A MK are wall mounted plates that accept video, audio, and USB signals through one female 15-pin HD connector, one 3.5 mm tip-ring-sleeve (TRS) connector, and one USB B connector. The signals pass through the unit without modification and are output from the back via captive screw connectors. The captive screw connectors take wires from 18 AWG (1.02 mm) to 26 AWG (0.40 mm).

The two form factors are shown in the figure at right:

- The WPC 160 A EU (left) mounts onto 80 mm one-gang European EU junction boxes. The plate is 3.1 inches x 3.1 inches (81 mm x 81 mm).

- The WPC 160 A MK (right) mounts onto MK type one-gang UK electric junction boxes. The plate is 3.35 inches x 3.35 inches (85 mm x 85 mm).
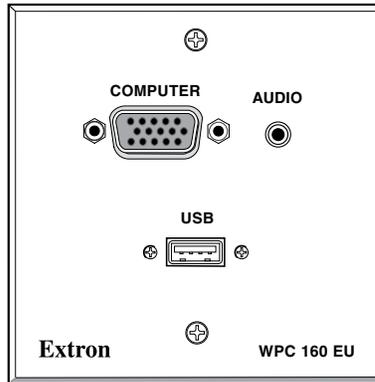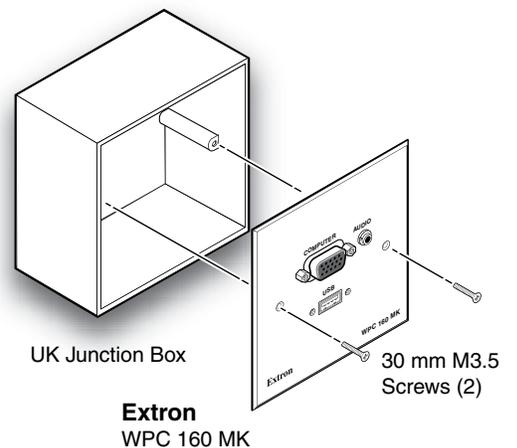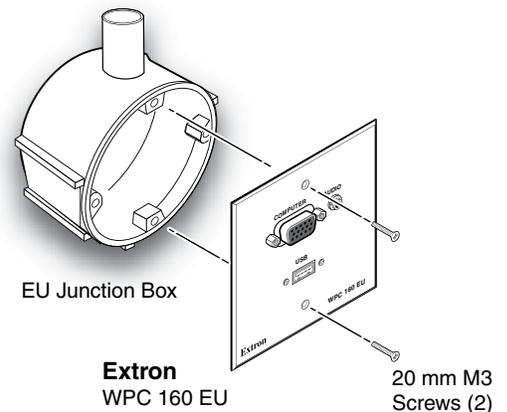

WPC 160 EU
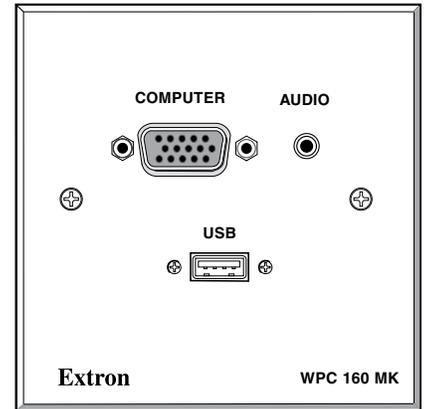
WPC 160 MK

VGA Wiring

> **NOTE:** Extron recommends Extron MHRVGA bulk cable (part number **22-024-01**) or assembled cables (part numbers **26-112-15**, **26-112-36**, **26-238-01**, and **26-238-25**). The wire colors for these products are shown in the VGA Connections table at the top of the next page. If other cable products are used, the colors may not correspond to those shown in the table.

The DDC and ID bit DIP switches, the +5 V pin, and the DDC pins are optional but they can affect the monitors supported by the system (see the table to the right of "DDC and ID Bit DIP Switch Settings" on the next page).

To connect wires from the VGA input to these modules, some wires must be cut shorter than others (see the table in the "VGA Connections" section on the next page). Follow these instructions:

1. Run the unterminated end of the cable to the junction box.

2. Strip away 3 inches (7.5 cm) from the end of the outer jacket of the cable.

3. Unravel each of the coaxial shields and twist each, individually, to make a wire.

4. Cut 1 inch (2.5 cm) from the end of the individual wires marked with an asterisk in the VGA Connections table on the next page.

5. Strip 3/16 inches (5 mm) of the inner jacket from the end of each wire and secure the wire to the appropriate captive screw connector (see the VGA Connections and TRS Connections tables on the next page).

6. Secure the faceplate to the junction box using the screws provided (see the figures at right).

7. Connect the VGA input, audio input, or both.

EU Junction Box

Extron WPC 160 EU

20 mm M3 Screws (2)

UK Junction Box

Extron WPC 160 MK

30 mm M3.5 Screws (2)

VGA and TRS Connections

HD-15 Pin	TRS	Captive Screw Pin	Color
1 Red*		R	Red coax
2 Green*		G	Green coax
3 Blue*		B	Blue coax
4 ID Bit 2		N/A	Green (not used)
5 Ground		÷ (right block)	Violet
6 Red Gnd*		Rg	Red coax shield
7 Green Gnd*		Gg	Green coax shield
8 Blue Gnd*		Bg	Blue coax shield
9 DDC +5 V* (see note at right)		+5	Gray
10 Sync Gnd*		÷ (main block)	Black (red/black pair)
11 ID Bit 0		N/A	Blue (not used)
12 ID Bit 1 or DDC		D	Yellow
13 H sync*		H	Red (red/black pair)
14 V sync*		V	White (white/black pair)
15 ID Bit 3 or Clock		C	Black (white /black pair)
*	Tip	Audio T (Left)	Orange
*	Ring	Audio R (Right)	Brown
*	Sleeve	Audio S (Ground)	Shield
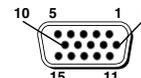
Female HD-15 Pin Locations
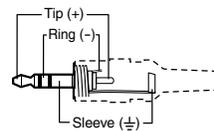
Tip (+) / Ring (−) / Sleeve (÷)
3.5 mm Stereo Plug Connector (balanced audio)
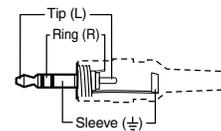
Tip (L) / Ring (R) / Sleeve (÷)
3.5 mm Stereo Plug Connector (unbalanced audio)
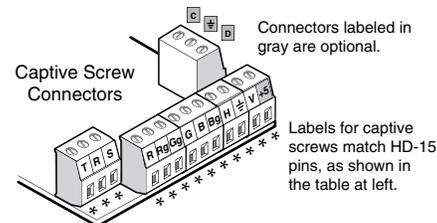
Connectors labeled in gray are optional.

Captive Screw Connectors

Labels for captive screws match HD-15 pins, as shown in the table at left.

*Cut these wires 1 inch shorter. See the table at left.

NOTE: VGA pin 9 may be used to detect DDC availability. Check the manual for your display to see if this feature is required for DDC communication. If you are unsure, do not use the pin.

DDC and ID Bit DIP Switch Settings

The table at left below shows the function of the DIP switches. The table at right below shows how the switches affect the monitors supported and some of the more common ID bit settings. Check the manual supplied with your display to see if ID bit termination is required by your AV system. If you are unsure, set all switches to off.

DIP Switches
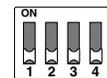
NOTE: If DDC is to be used, switches 1 and 3 must be set to on and switches 2 and 4 must be set to off.
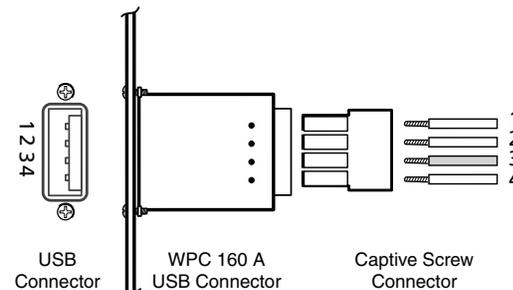
Switch	ID Bit Pin	Off	On
1	ID 0	HD-15 pin 11 open	HD-15 pin 11 to ground
2	ID 1	HD-15 pin 12 pass-thru	HD-15 pin 12 to ground
3	ID 2	HD-15 pin 4 open	HD-15 pin 4 to ground
4	ID 3	HD-15 pin 15 pass-thru	HD-15 pin 15 to ground

Display Used	DIP Switch			
	1	2	3	4
No ID bit required	Off	Off	Off	Off
Monochrome monitor (not XGA)	On	Off	Off	Off
Color monitor (not XGA)	Off	On	Off	Off
Color monitor (supports XGA)	Off	On	On	Off

USB Connections

USB Connector	Signal	Captive Screw Pin
1	+5 V (bus)	1
2	Data +	2
3	Data -	3
4	Ground	4

Wire the 4-pole captive screw connector (provided) as shown in the figure at right. Insert the connector into the slots on the back of the WPC 160.

USB Connector

WPC 160 A USB Connector

Captive Screw Connector

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