# Frequently Asked Questions

## HIGH DENSITY PATCHING FRAME





55100-703

## Q. I only see one part number, are other versions of High Density Patching Frame available?

A. No. The High Density Patching Frame (P/N 55100-703) is only available in the black finish, 45U x 19"EIA width to provide a single complete and cost effective solution for most high density copper/patch panel cross connect applications. Similar complete frame solutions are available to support copper terminations on 66 or 110-style blocks. Alternately, CPI provides three styles of open 2-post rack and five styles of vertical cable managers that can be combined à la carte to meet other cross connect requirements.

To support rack-mount servers or other devices requiring simultaneous front-and-rear support, consider CPI's QuadraRack® Server Frame, TeraFrame® Cabinet System, GlobalFrame® Cabinets, SteelFrame Cabinets or MegaFrame® Cabinets. Contact CPI Technical Support for assistance at 800-834-4969 or visit www.chatsworth.com.

#### Q. What is the primary application for High Density Patching Frame?

A. High Density Patching Frame was designed to maximize support for copper premise cabling and high density patch panels while minimizing floor space use. It is ideal for supporting the MC, IC, HC or any other cable-intensive facility.

# Q. What is High Density Patching Frame's maximum Port/Cable Capacity?

A. The 19" wide EIA mounting rails can accommodate up to 45U of patch panels, which is:

- 11 each 4U x 96-port Cat5e/6 patch panels for a total of 1056 ports, or
- 22 each 2U x 48-port Cat5e/6 patch panels for a total of 1056 ports, or
- 45 each 1U x 24-port Cat5e/6 patch panels for a total of 1080 ports.

Estimate cable fill using the CPI Cable Fill Table at <a href="https://www.chatsworth.com/cablefill">www.chatsworth.com/cablefill</a>. When developing maximum port/cable capacity on High Density Patching Frame, CPI recommends the addition of Horizontal Cable Guides (P/N 12341-701 to match 2U patch panels or P/N 12340-701 to match 4U patch panels) or Cable Distribution Spools (P/N 15002-001, 2 each for 2U patch panels or 4 each for 4U patch panels) to assist in the vertical-to-horizontal transition of patch cords.

### **Q.** What is the Port/Cable Capacity when using rack-mount Horizontal Cable Managers?

A. Generally, CPI recommends the use of rack-mount horizontal wire management panels in-between patch panels. Although this method reduces the overall port capacity on each Frame, patch cords are more easily traced during MACs when routed closer to their terminal ports in horizontal wire managers.

CPI offers two sizes of 19" wide rack-mountable horizontal (ring-style) wire managers:

- 1U version (P/N 13070-719) which supports up to 48-ports
- 2U version (P/N 13075-719) which supports up to 96-ports

For planning purposes, CPI recommends allowing 3U per 48 ports of capacity for a maximum capacity of 720 ports when 1U managers and 48-port panels are combined.

#### Q. Can fiber patching be managed on High Density Patching Frame?

A. While High Density Patching Frame was designed for copper UTP-based applications, CPI recognizes that Frames often serve as transition points between fiber and copper media, especially MC-to-IC or IC-to-HC applications. So, the frame will accommodate fiber patch panels and splice boxes. But is not intended for use as a top-to-bottom fiber solution.

When used with fiber, CPI recommends the addition of Cable Distribution Spools (P/N 15008-001). This kit includes four large cable spools and attachment hardware. Spools attach to the cable pass-through ports located top-to-bottom along both sides on the front of the frame, and allow fiber patch cord slack to be managed properly.

### Q. Are there other recommended Cable Management Accessories?

A. While cable management and radius bend control can be accomplished without additional accessories, the customer may consider using the Patch Panel Wire Management Bar (P/N 12176-701) behind each patch panel to provide an additional secure point for premise cable. Also, Lower Jumper Trays (P/N 12187-719) can be interconnected with Transition Plates (P/N 12186-701) to create a continuous trough on the front side along the bottom 3U of a bay of frames for routing patch cords side-to-side or frame-to-frame.

### Q. How much floor space does High Density Patching Frame use?

A. The High Density Patching Frame is 86"H x 29.1"W x 18.6"D (2184 mm x 739 mm x 472 mm).



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### O. What is the weight bearing capacity of High Density Patching Frame?

A. High Density Patching Frame can easily accommodate the weight of patch panels and cabling when filled top-to-bottom. The total frame system can support up to 750 lb (340.2 kg) evenly distributed, while each fin supports 110 lb (49.9 kg), included in the 750 pound total.

#### Q. What is included with High Density Patching Frame?

A. The product includes a pair of mounting rails (12-24 tapped both sides), a pair of cable access base angles, a pair of cable management fins, 28 cable management rings, top trough, all assembly hardware and instructions, and 50 equipment mounting screws.

#### Q. How does High Density Patching Frame ship?

A. The product ships unassembled with all components in a single carton 15"H x 12"D x 87"L (381 mm x 305 mm x 2210 mm). Shipping weight is 63 lb (28.6 kg).

### O. What tools are required to assemble High Density Patching Frame?

A. High Density Patching Frame assembles with standard hardware (nuts and bolts). Use a 9/16" socket and open-end wrench to attach the top trough and base-angles to the equipment mounting rails. Use a 3/4" socket and open-end wrench to attach the fins to the mounting rails. A Phillips-head screwdriver is required to attach the cable management rings (and to mount patch panels and any horizontal cable management accessories).

#### **Q.How is High Density Patching Frame installed?**

A. Each High Density Patching Frame should be attached at the base to the floor (building structure). High Density Patching Frame's base angles are pre-punched with 3/4" (19 mm) diameter holes that are spaced 16" (410 mm) in width and 12-1/2" (318 mm) in depth. CPI offers Rack Installation [Hardware] Kits for concrete slab (P/N 40604-001), wood (P/N 40607-001) or raised floors (see CPI Catalog, Section 1, Installation Products, Raised Floor Rack Support For 3" Channel). Determine the type of floor material or height of raised floor panels. Order one kit of the appropriate type for each frame.

### Q. How are High Density Patching Frames bayed?

A. There is a baying kit specifically for High-Density Patching Frame (P/N 55104-701). Order one kit for each Frame-to-Frame (side-by-side) connection. Installation requires a 3/4" socket and open-end wrench.

#### Q. When do I need additional equipment mounting screws?

A. High Density Patching Frame includes 50 each #12-24 combination pan head pilot point equipment mounting screws (P/N 40605-005). Each patch panel requires four mounting screws. If your frame will support more than twelve patch panels, you will need more screws. For example, to reach maximum capacity:

- 22 each, 2U x 48-port Cat5e/6 patch panels, you'll need 1 additional bag.
- 45 each, 1U x 24-port Cat5e/6 patch panels, you'll need 3 additional bags.

### Q. How is Cable Runway attached to High Density Patching Frame?

A. Attach Cable Runway to the top of High Density Patching Frame to deliver premise cables from overhead. Cable Runway does not inhibit use of the High Density Patching Frame's integrated top-mount trough.

Attach Cable Runway to the top of High Density Patching Frame in perpendicular orientation with a Cable Runway J-Bolt Kit (P/N 11308-X01). Predrilled holes in the top-mount trough allow attachment of 6" (150 mm), 9" (230 mm), 12" (300 mm), 15" (380 mm), 18" (460 mm) and 24" (610 mm) wide Cable Runway. You will also need Cable Runway Protective End Caps (P/N 10642-001) to cover the cut ends of the Cable Runway.

Attach Cable Runway to the top of High Density Patching Frame in parallel orientation with the Cable Runway Mounting Kit. Kits are available for 12"W (300 mm), P/N 55105-712, 18"W (460 mm), P/N 55105-718 and 24"W (610 mm), P/N 55105-724, Cable Runway. This kit elevates cable runway 1" (25 mm) above the top trough on the frame, making the total height of the frame, kit and runway 89-1/8" (2264 mm).

### O. How are premise cables secured to High Density Patching Frame?

A. Cables are secured to the rear fin with CPI Saf-T-Grips (Velcro straps-preferred method) or nylon cable ties. Specially designed inverted U-shaped tabs formed in the rear cable management fin allow quick attachment of cable with CPI Saf-T-Grips (P/N 06006-201 or 06009-201). Alternately, closed slots allow attachment with cable ties. Tabs/Slots are spaced to provide a smooth vertical-to-horizontal transition of premise cabling and to allow cables to fan into the back of patch panels--eliminating the need for rear-side horizontal cable management.

### Q. Is High Density Patching Frame compatible with other CPI products?

A. High Density Patching Frame is compatible with all 19" wide shelves and horizontal power strips designed for use with the Standard or Universal Racks (2-post racks with 3" deep equipment mounting channels). It can also be used with all 19" wide rack-mount cable managers and any 19" wide rack-mount 66 or 110-style block mounting brackets from CPI's Structured Termination Systems. Alignment holes on the outside of the frame's cable management fins allow baying to other CPI 2-post equipment racks (Universal, Standard, 6" Deep Standard Racks), CPI vertical cable managers (VCS Vertical Cabling Sections, CCS Combination Cabling Section, and MCS Master Cabling Section), or the QuadraRack 4-Post Frame or Server Frame. Consideration must be given to any cable runway mounted across the top of a bay containing both High Density Patching Frame and any of these other products, as the overall heights of the frame/racks/cable runway are different.