# Assembly and Installation

Surface Mount Chase

Each MPS-SMC kit contains the following:

Item	Qty	Size in MU's	Part Number	Description
1	2	ALL	MPS-FLATSIDE-2	4 ½" deep side panel, black anodized 1/8" aluminum
2	2	ALL	MPS-EXTRU-xxMU	Extruded rail section, xx = # of chase MU's
3	1	ALL	MPS-BOX1 / MPS-MBOX1	Back boxes. Standard Chase: 8MU, 16MU, 19MU & 28MU Modular Chase: 32MU (2 x 16MU), 38MU (2 x 19MU) & 56MU (2 x 28MU) or longer.
4	8	7, 14, 19, 28	10-32 x ½-MPP-BLK	10-32 x ½" phillips pan head screw, black
	10	32, 38,56		
5	2	ALL	MPS-LBL-xx	Label strip kit with plastic cover, mtg buttons & label strip
6	16	8	MPS-SMN-10/32	Square Machine Nut (10-32)
	32	16		
	38	19		
	56	28		
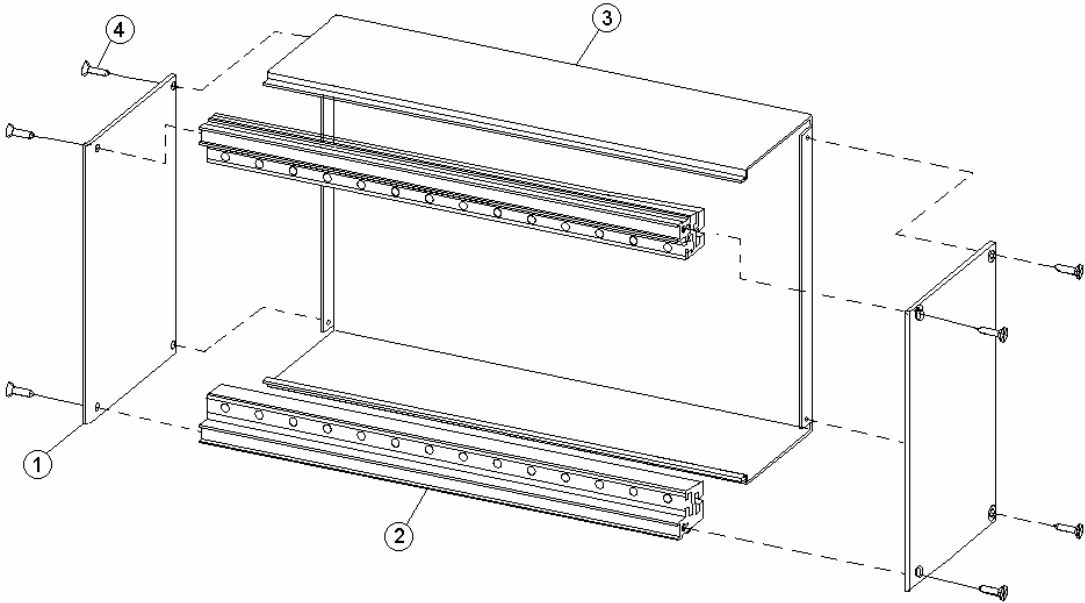
It is important to keep the mounting rails vertical and in plane during assembly so that the panels will mount properly. This is accomplished by using a panel as an aid during assembly. The extruded rails must be adjusted so that the rack ears cover up the end of the extruded rail. If this is not done the rail can ride up, exposing the unfinished end.

Back Boxes

The standard back box sizes include 8MU, 16MU, 19MU and 28MU. Any of these can be joined end-to-end to create longer chase assemblies. For example (2) 16MU can be joined to create a 32MU unit

Step-By-Step

1. For Standard back boxes continue to step 2. For Modular Back Boxes, assemble the boxes, end to end, using the 10-32 hardware supplied before moving on to step 2.

2. Start by installing the two extrusion to the edge of the back box. A special "L" access slots is located on the outside of each extrusion into which the front edge of the back box is inserted.

3. Install the correct number of square machines nuts (10-32) into the module mounting slot (upper) on both extrusions (2 x 8 for a 8MU, 2 x 16 for a 16MU, etc)

4. Then assemble the two flatside ① with the two extrusion ② and back box ③ using the eight screws ④. Do not tighten these screws at this time.

5. Mount an MPS panel to the extrusion in the center of the unit, using the screws provided with the panel. Before tightening the panel mounting screws, manually compress the top and bottom rail together. While holding tension this way, tighten the two panel mounting screws. (This pre-loads the rail and ensures alignment with the rack ears, while keeping the mounting surfaces parallel).

6. Tighten the 8 screws ④ in the ends of the extrusion.

Label Strip

A label strip is provided for the front top and bottom of each unit. The Label strip provides a dress appearance for the unit by covering the panel mounting screws, and provides a way to easily label functions by slipping printed paper labels under the provided plastic cover strip. Please remove the protective covering from the clear plastic before use.

Two mounting buttons are provided for each label strip. These buttons are installed under the heads of the panel mounting screws after final assembly. We recommend that buttons be placed at approximately 1/3 and 2/3 of the distance across the rack adapter.

The label strip may be removed for service or update by slipping a flat bladed screwdriver under the end and prying up. Certain types of shafts will mar the surface of the rack ear and so if this is a concern, wrap the shaft of the screwdriver with tape before use.

Flush Mount Ring

Each MPS-FMR kit contains the following:

Item	Qty	Size in MU's	Part Number	Description
1	2	ALL	MPS-FMR-EAR	Flush mount ring ear
2	2	ALL	MPS-EXTRU-xxMU	Extruded rail section, xx = # of chase MU's
3	4	ALL	10-32 x ½-MPP-BLK	10-32 x ½" phillips pan head screw, black
4	2	ALL	MPS-LBL-xxMU	Label strip kit with plastic cover, 2 mtg buttons & 1 label Strip, xx = # of chase MU's
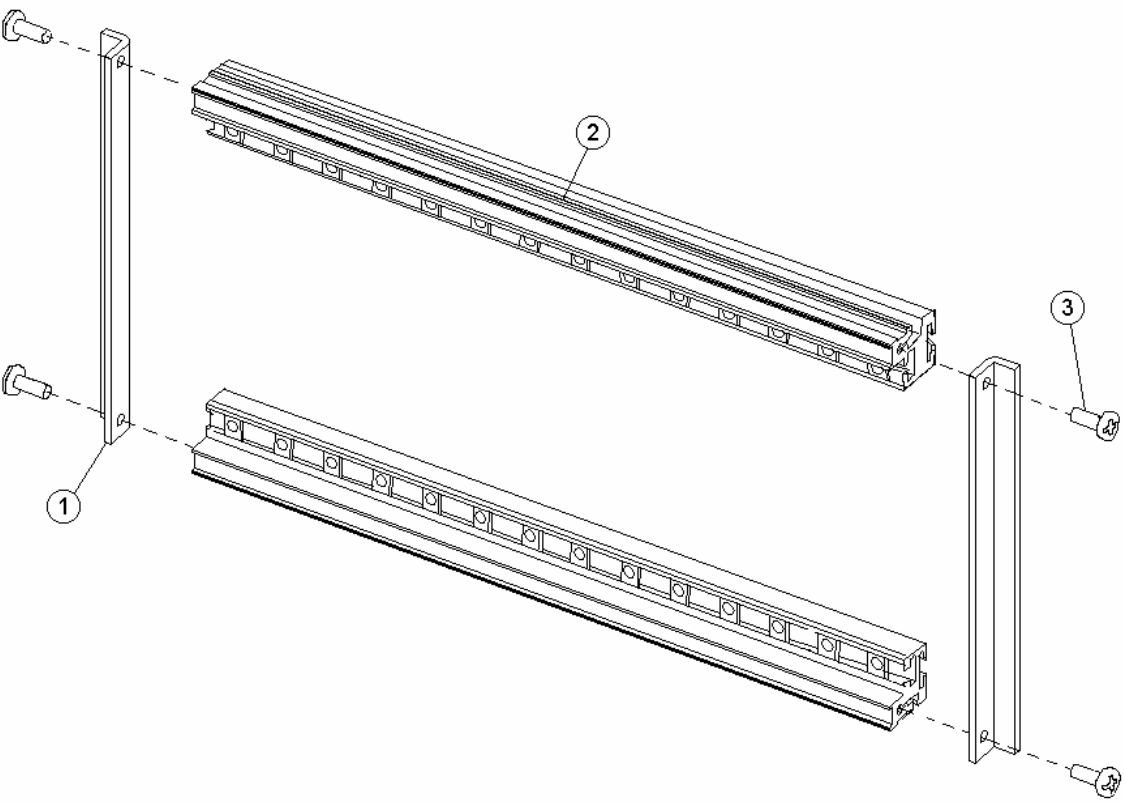
   It is important to keep the mounting rails   in alignment with each other so that the panels will mount properly. This is accomplished by using a MPS panel as an aid during assembly. The extruded rails must be adjusted so that the rack ears cover up the end of the extruded rail. If this is not done the rail can ride up, exposing the unfinished end.

Step-By-Step

1. Start by loosely assembling the two side ears   with the front two extrusions using four screws   . Do not tighten these screws at this time.
2. Install the correct number of square machine nuts (10-32) into the module mounting slot (upper) on both extrusions (2 x 8 for a 8MU, 2 x 16 for a 16MU, etc)
3. Install the supplied 6-32 x 1.5" machine screws into the flush mounting slot in the back on both extrusions (4 for a 8/16MU, 6 for a 19/28MU, etc). These screws,

with supplied 6-32 Knep nuts, are used to attach the Flush Mount Ring to the screw cover wire-way.

4. Mount an MPS panel to the rails in the center of the unit, using the screws provided with the panel. Before tightening the panel mounting screws, manually compress the top and bottom rail together. While holding tension this way, tighten the two panel mounting screws. (This pre-loads the rail and ensures alignment with the ears, while keeping the mounting surfaces parallel)

5. Place the assembly face down on a flat work surface. Apply downwards pressure to the unit by hand to keep the ears parallel against the work surface, and tighten the 4 screws in the ends of the extrusion. This will assure that the unit is square.

6. The Flush Mount Ring is now ready to accept panels and be attached to the wire-way.

Label Strip

The label strip is provided with the kit. The label strip provides a dress appearance for the unit by covering the panel mounting screws, and provides a way to easily label functions by slipping printed paper labels under the provided plastic cover strip. Please remove the protective covering from the clear plastic before use.

Two mounting buttons are provided for each label strip. These buttons are installed under the heads of the panel mounting screws after final assembly. We recommend that buttons be placed at approximately 1/3 and 2/3 of the distance across the rack adapter.

Label strip may be removed for service or update by slipping a flat bladed screwdriver under the end and prying up. Certain types of shafts will mar the surface of the rack ear and so if this is a concern, wrap the shaft of the screwdriver with tape before use.

Mounting

Flush Mount Rings are intended to be mounted on the wall over a standard 6" high screw-cover wire-way. This is done by aligning and them passing the installed 6-32 x1.5" machine screws through the tapped holes in the flanges, top and bottom (those used to attach the standard cover) and then tightening the 6-32 Knep nuts until the Flush Mount Ring (FMR) is flush with the surface of the wall.

Wire-way Specifications

Provide and install 6" tall screw cover wire-way where MPS Flush Mount Rings are required. The wire-way shall be B-Line brand Type 1 Screw Cover Wire-way or equal. Typical part numbers are: Cat # 6424 G (24" long), Cat # 6436 G (36" long). Cut to length indicated in Wire-way Schedule and install closed end caps. Install wire-way flush to or just behind the finished wall surface or finished acoustical

treatment, with the open, flanged side out. Ensure that the wall surface is unobstructed and flat, for 3" in all directions around the wire-way, to avoid conflict with signal connector panels to be installed over the flanged wire-way. The rough wall opening shall be no more than 1/8" larger than the wire-way in all directions. The FMR will cover the rough opening for a distance of 1/2". Refer to the acoustical consultant for specific recommendations on sealing and treating wire-way to avoid noise transmission, if necessary.

Wire-way Schedule		
FMR Part Number	*Panel Mod Units*	*Gutter Width (inside clear)*
MPS-FMR-8MU	8	7”
MPS-FMR-16MU	16	14”
MPS-FMR-19MU	19	16-5/8”
MPS-FMR-28MU	28	25-1/2”
MPS-FMR-32MU	32	28”
MPS-FMR-38MU	38	33.25””
MPS-FMR-56MU	56	49”

(other sizes can be specified as along as they are increments of our basic module width 1MU/0.875”)

Mounting Panels to Ring and Ring to Wire-way

1. Adjust (slide) the 6-32 x 1.5” attaching screws, located on the back of both extrusions, to line up with the tapped holes in the flange (screw cover mounting holes). Then insert all screws through these holes and tighten the 6-32 Knep nuts until ring is flush with the surface of the wall.

2. Assemble the MPS panels.

3. Snap on Label Strip over all screws.
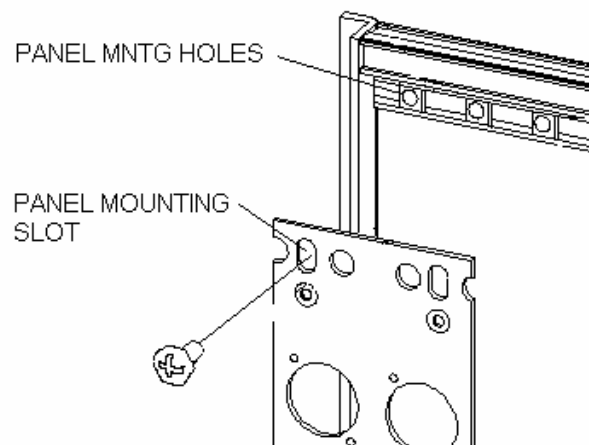
Cable Management Considerations

In addition to the built-in cable management features of the Modular Panel System, we have discovered several conventions in our installations which make installation and service easier.

Consider the cable load in the chase. Avoid long end-to-end feeds where cable must run through long distances of panel chase before it gets to the panel which is it's destination. It's a good idea to keep the total cable load under about a 3" bundle at any one point in the chase. If long continuous chases are desirable for operational purposes, provide multiple up-feed risers into the chase.

In cases of extremely high density, multiple risers per chase (especially 56MU chases and longer) are advisable. Alternatively, snap-cover gutter can be placed horizontally on a wall, with chases located strategically above, with cutouts for cable to pass from the gutter into the chase. Place F-Blanks at locations where risers meet chases. This allows access to the cable entrance pulling point without having to remove active panels.

Cable Dress at the panel is important. By keeping cables as close to the panel as possible, conflicts with other cables in the chase are minimized. Tie Bar is located at the top of the panel in order to ensure that all cables exit the panel at the top and naturally form a service loop as they fall into the chase interior. When dressing cable into a chase, attempt to keep a 1-2" service loop in this manner. This will allow one panel to be dropped out for service by itself without necessitating the removal of adjacent panels.