

# **SNAP® Compact Fiber Patch Panel Installation Instructions**





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#### **System Description**

Compact DIN-Rail or surface mount fiber optic patch panel. The device's compact size allows minimum space requirements within control cabinetry. While often used as a patch panel, the device also includes a splice tray to allow fusion splicing of field cabling (pigtails sold separately and are not included in the SNAP product packaging). The SNAP Patch Panel features a sliding faceplate with capture mechanism to allow the patch panel to be kept open "hands-free" while allowing the user to connect or disconnect fiber on the back of the faceplate.

#### **Package Contents**

Your SNAP Compact Fiber Optic Patch Panel packaging should contain the following:

- 1. SNAP Patch Panel with 6ea. fiber optic adapters, two cable glands (Maximum field cable diameter 12mm) and two dust plugs pre-installed.
- 2. Recloseable bag containing:
  - a. Zip-ties
  - b. Hex wrench
  - c. Numbered stickers

Note: If you observe any product damage, or missing parts upon unpacking of the product, please contact DINSpace immediately at <a href="mailto:support@dinspace.com">support@dinspace.com</a> or by calling 214-613-0349.

### Warranty and Repair Information

DINSpace guarantees all of its standard products to be of first-class construction and provides a lifetime warranty against any defects in material and workmanship. The warranty does not apply to damage caused by abnormal or unreasonable use of any of the products (including repairs or alterations other than by DINSpace technical support). This warranty is in place of all other warranties, including warranty of fitness for a particular purpose and warranty of merchantability and excludes any liability for incidental or consequential damages.

#### **Repairs**

If your DINSpace product has a manufacturer's defect covered by our warranty, we will either repair or replace it, at our option, without charge. Please contact DINSpace customer support to describe the issue, and if a return is deemed necessary to resolve the issue, a Return Merchandise Authorization (RMA) number will be issued. No returns will be accepted without an RMA number. Send to the address below. Include your name, address, phone number and the RMA number with your return. A product not covered by the warranty can be repaired. Note that repair costs and handling charges may apply. If so, you will be notified prior to any service.



#### Mounting the SNAP Patch Panel - Rear DIN-Rail Option

The SNAP Patch panel is shipped with the DIN-Rail clip pre-installed for a rear DIN-Rail mount. To mount the patch panel to 35mm DIN-Rail:

- 1. Position the rear panel of the patch panel directly in front of the DIN-Rail, making sure the bottom of the patch panel DIN-Rail clip hooks under the bottom of the DIN-Rail, as shown in **Figure 1**.
- 2. Gently pull the bottom of the patch panel upward to compress the spring and allow the top rail to be engaged.
- 3. Rotate the patch panel up toward the DIN-Rail until the top of the patch panel DIN-Rail clip is over the DIN-Rail.
- 4. Relieve the upward pressure on the patch panel, and the captured spring will extend, holding the patch panel tightly to the DIN-Rail as seen in Figure 2.



Figure 1

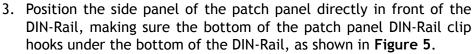


Figure 2

#### Mounting the SNAP Patch Panel - Side DIN-Rail Option

The SNAP Patch panel is shipped with the DIN-Rail clip pre-installed for a rear DIN-Rail mount. In order to side mount the SNAP Patch Panel:

- 1. Using a 2.5mm Hex Wrench, remove the two hex-nuts securing the DIN-Rail clip on the rear of the SNAP Patch Panel as seen in Figure 3.
- 2. Secure the DIN-Rail Clip (spring clasp on bottom) to the two predrilled holes on the side of the SNAP Patch Panel, using the same two hex-nuts and DIN-Rail clip as seen in **Figure 4**.



- 4. Gently pull the bottom of the patch panel upward to compress the spring and allow the top rail to be engaged.
- 5. Rotate the patch panel up toward the DIN-Rail until the top of the patch panel DIN-Rail clip is over the DIN-Rail.
- 6. Relieve the upward pressure on the patch panel, and the captured spring will extend, holding the patch panel tightly to the DIN-Rail as seen in Figure 6.



Figure 5



Figure 3



Figure 4



Figure 6

**Note:** The SNAP's DIN-Rail Clip is rated to support 25 pounds, 15x the weight of the patch panel, assuming the patch panel is mounted on the DIN-Rail in a vertical orientation with the spring loaded portion of the DIN-Rail clip on the bottom. Significant rotational torque on the patch panel can result in a failure of the DIN-Rail clip.



### Mounting the SNAP Patch Panel - Rear Surface Mount Option

The SNAP Patch panel is shipped with the DIN-Rail clip pre-installed for a rear DIN-Rail mount. In order to surface mount the Patch Panel:

- 1. Using a 2.5mm Hex Wrench, remove the two hex-nuts securing the DIN-Rail clip on the rear of the SNAP Patch Panel as seen in **Figure 7** and **Figure 8**.
- 2. Unfasten the faceplate from the SNAP Patch Panel using the hex wrench provided in the packaging.
- 3. Remove the faceplate from the SNAP Patch Panel, as seen in **Figure 9**, to allow access to the rear of the Patch Panel.
- 4. Use surface mount hardware (not included) to mount the SNAP Patch Panel to the surface using the four pre-drilled mounting holes in the rear of the SNAP Patch Panel.
- 5. Replace the faceplate onto the SNAP Patch Panel.



Figure 7



Figure 8



Figure 9

### Connecting Field Fiber Optic Cable - Patch Option

After mounting the SNAP Patch Panel to the DIN-Rail or surface as described above:

- 1. Loosen cable gland (Maximum field cable diameter 12mm) to allow field distribution cable to enter the SNAP Patch Panel. Loosen the cable gland(s) that you will be using, and pass the field fiber optic cable through the gland as seen in **Figure 10**.
- 2. Terminate the appropriate termination hardware to the field fiber optic strands taking care to match the termination hardware to the interior adapter style of the SNAP faceplate. See table below:

SNAP Patch Panel	Field Fiber Termination required
SNAP-12ST-MM	Multimode ST adapter
SNAP-12ST-SM	Singlemode ST adapter
SNAP-12SC-ST-MM	Multimode SC adapter
SNAP-12SC-ST-SM	Singlemode SC adapter
SNAP-12SC-MM	Multimode SC adapter
SNAP-12SC-SM	Singlemode SC adapter
SNAP-24-LC-MM	Multimode LC adapter
SNAP-24-LC-SM	Singlemode LC adapter

SNAP-24-LC-SM Singlemode LC adapter

Note: If you are gluing the field terminators onto the field cable, make sure you allow sufficient time for the adhesive to dry before attempting to secure the connector into the interior adapters of the SNAP faceplate. DINSpace cannot be responsible for replacing adapter hardware if damaged due to termination errors.

- 3. After securing the field connectors to the interior adapter interfaces of the SNAP faceplate, close the faceplate and secure it with the two hex nuts provided.
- 4. Tighten the cable gland to create a seal against the field fiber cable.



Figure 10



### Connecting Field Fiber Optic cable - Fusion Splice Option

To terminate field fiber optic cable using fusion splicing, you must first ensure that you have appropriate fiber optic pigtails (sold separately or provided by Customer) to fuse to the Field Fiber, and you are using SNAP R30086 splice protectors:

SNAP Patch Panel	Pigtail Required	Pigtail Part Number
SNAP-12ST-MM	Multimode pigtail with ST adapter - 900µ sheath	SNAP-Pigtail-01ST-MM
SNAP-12ST-SM	Singlemode pigtail with ST adapter - 900µ sheath	SNAP-Pigtail-01ST-SM
SNAP-12SC-ST-MM	Multimode pigtail with SC adapter - 900µ sheath	SNAP-Pigtail-01SC-MM
SNAP-12SC-ST-SM	Singlemode pigtail with SC adapter - 900µ sheath	SNAP-Pigtail-01SC-SM
SNAP-12SC-MM	Multimode pigtail with SC adapter - 900µ sheath	SNAP-Pigtail-01SC-MM
SNAP-12SC-SM	Singlemode pigtail with SC adapter - 900µ sheath	SNAP-Pigtail-01SC-SM
SNAP-24-LC-MM	Multimode pigtail with LC adapter - 900µ sheath	SNAP-Pigtail-01LC-MM
SNAP-24-LC-SM	Singlemode pigtail with LC adapter - 900µ sheath	SNAP-Pigtail-01LC-SM

- 1. Loosen the SNAP Enclosure cable gland(s) and pass field fiber through to enter the SNAP enclosure Note: In cases where fusion splicing is used, it may be preferable to remove the faceplate hinge (Figure 11) mechanism to ensure that no snagging occurs.
- 2. Strip back the fiber optic pigtail to the  $250\mu$  cladding layer.
- 3. Strip back the field fiber to the 900µ sheathing layer.
- 4. Perform the fusion splice Note: Keep in mind that cladding to cladding distance of the splice must be less than the length of the SNAP Splice protector (DINSpace Part Number: SNAP R30086) in order to protect the splice properly.
- 5. Insert fused cables into ant mechanical enclosure with pigtail and field fiber sheathes inside the Fiber Splice Protector on either end, as seen in **Figure 12**.



Figure 11

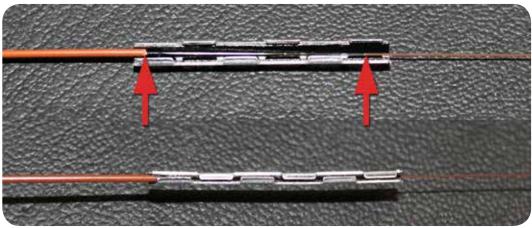


Figure 12



6. Insert closed Fiber Splice Protector into the splice holder tray as shown in Figure 13.



Figure 13

- 7. Wrap excess pigtail inside the provided spooling cage. Use provided Zip ties to secure excess pigtail cables into spooling cage Note: Some users prefer Velcro straps for looser binding).
- 8. Close SNAP faceplate while gently taking up slack in the field fiber cable before tightening the cable gland against the field cable to create a seal.



## Appendix A - Dimensional drawings

