



M202SMB Surface Mount Box Instructions

General

The **CommScope®** M202SMB surface mount box (SMB) is designed for interior surface-mounted applications and can support multiple types of copper terminations. The standard unit is equipped with one adapter, which can support two M-series outlets. The opening on the front side of the box can be fitted with different adapters that will allow for a wide range of connectivity applications. The SMB can accommodate cable entry through three sides of the box and through the base. The SMB can be mounted to a standard electrical box using the screws provided or if mounting to a wall or other smooth, flat surface, by using the double-sided adhesive tape provided.

Ordering information is listed below:

Material ID	Part No.	Color
760057349	M202SMB-003	Black
760057356	M202SMB-246	Ivory
760057331	M202SMB-262	White
760057364	M202SMB-270	Gray

How to Contact Us

- To find out more about **CommScope®** products, visit us on the web at <http://www.commscope.com/>
- For technical assistance:
 - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.
 - Within the United States, report any missing/damaged parts or any other issues to **CommScope** Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

Parts List

Verify parts against the parts list below:

Quantity	Description	Quantity	Description
1	Base	1	Dust cover
1	Cover	2	Mounting screws
1	Adapter	3	Cable ties
1	Cover attachment screw	1	Double-sided adhesive tape
1	Paper label	1	Instruction sheet
1	Clear label cover		

Available Accessories

Material ID	Part No.	Description
760009464	M30FP-BLANK-003	Blank adapter (Black)
760009472	M30FP-BLANK-246	Blank adapter (Ivory)
760009480	M30FP-BLANK-262	Blank adapter (White)
760009498	M30FP-BLANK-270	Blank adapter (Gray)
760009423	M30FP-1RJ45-003	Single adapter (Black)
760009431	M30FP-1RJ45-246	Single adapter (Ivory)
760009449	M30FP-1RJ45-262	Single adapter (White)
760009456	M30FP-1RJ45-270	Single adapter (Gray)
760008649	M30FP-2RJ45-003	Duplex adapter (Black)
760008656	M30FP-2RJ45-246	Duplex adapter (Ivory)
760008664	M30FP-2RJ45-262	Duplex adapter (White)
760008672	M30FP-2RJ45-270	Duplex adapter (Gray)
760005256	M81-SVHS-110-003	S-video outlet (Black)
760005264	M81-SVHS-110-246	S-video outlet (Ivory)
760005272	M81-SVHS-110-262	S-video outlet (White)
760005280	M81-SVHS-110-270	S-video outlet (Gray)
760028704	M30FP-VGA-PT-003	VGA adapter (Black)
760028712	M30FP-VGA-PT-246	VGA adapter (Ivory)
760028720	M30FP-VGA-PT-262	VGA adapter (White)
760028738	M30FP-VGA-PT-270	VGA adapter (Gray)
760017541	M30FP-3RCA-110-003	3-port RCA adapter (Black)
760017558	M30FP-3RCA-110-246	3-port RCA adapter (Ivory)
760017566	M30FP-3RCA-110-262	3-port RCA adapter (White)
760017574	M30FP-3RCA-110-270	3-port RCA adapter (Gray)
108009424	M81-BNC-B	BNC coupler
108009432	M81C-B	Coaxial coupler

Note: Outlets are available in a variety of colors. Refer to the **CommScope** catalog or contact your account representative for more information.

Additional Configurations

Possible Configurations per SMB Opening	Part No.
(1) Blank	M30FP-BLANK
(1) M-series outlet	(see note)
(2) M-series outlets	(see note)
(1) S-video outlet	M81-SVHS-110
(2) S-video outlets	M81-SVHS-110
(1) VGA adapter	M30FP-VGA-PT
(1) RCA adapter	M30FP-3RCA-110
(1) BNC coupler	M81-BNC-B
(2) BNC couplers	M81-BNC-B
(1) Coaxial coupler	M81C-B
(2) Coaxial couplers	M81C-B

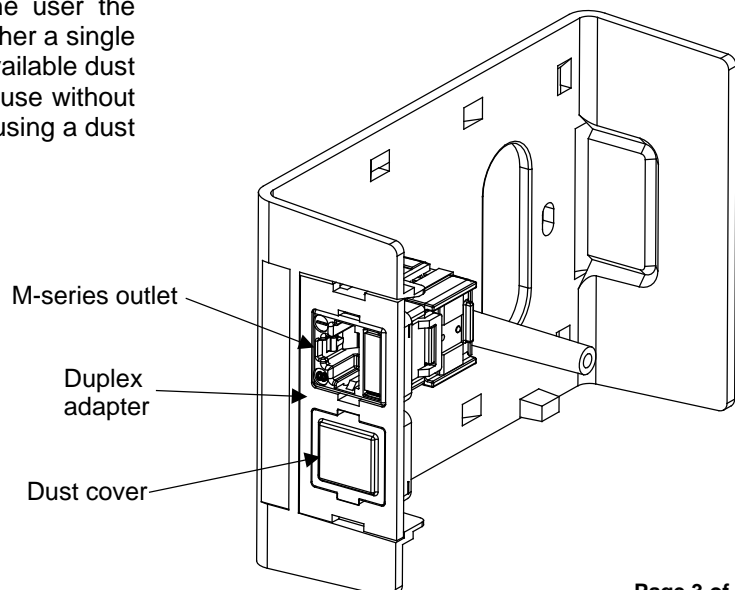
Note: Outlets are available as Cat 5e and Cat 6 and in a variety of colors. Refer to the **CommScope** catalog or contact your account representative for more information.

Using the above table as a guide, it is possible to adapt the opening in the SMB for numerous configurations.

For example: To install (1) S-video outlet and (1) BNC coupler, all in white, you would use:

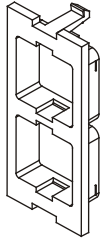
- (1) 760005272 – M81-SVHS-110-262
- (1) 108009424 – M81-BNC-B
- (1) 760008664 – M30FP-2RJ45-262

Offering single and duplex adapters allows the user the flexibility to install a single outlet or coupler in either a single adapter or in a duplex adapter and to use the available dust cover in the unused port. This allows for future use without changing adapters. The figure below illustrates using a dust cover in a duplex adapter.

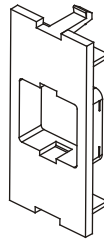


Determine Adapters To Be Used

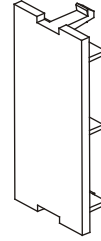
A full range of adapters are available for use in the 2-port SMB.



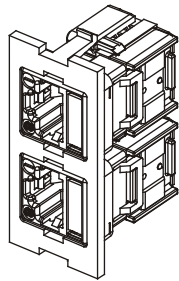
Duplex Adapter
(One Furnished with Box)
M30FP-2RJ45



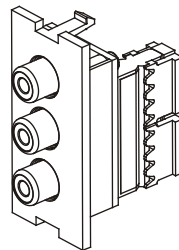
Single Adapter
M30FP-1RJ45



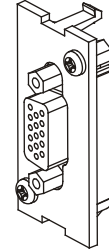
Blank Adapter
M30FP-BLANK



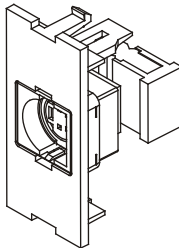
M-Series Outlets
(Adapter not Included)
(See Note on page 3)



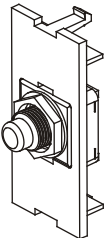
3-Port RCA Adapter
(Includes Adapter)
M30FP-3RCA-110



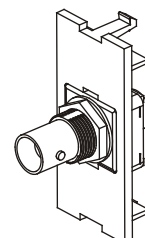
VGA Adapter
(Includes Adapter)
M30FP-VGA-PT



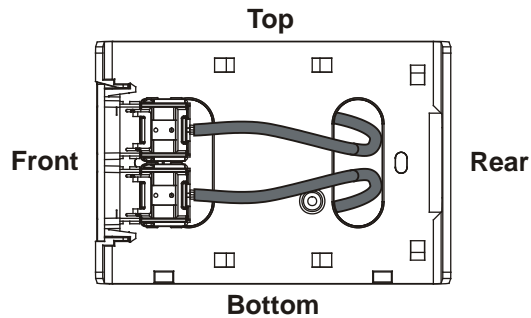
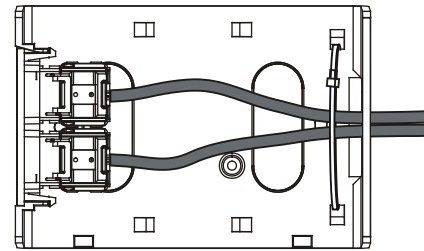
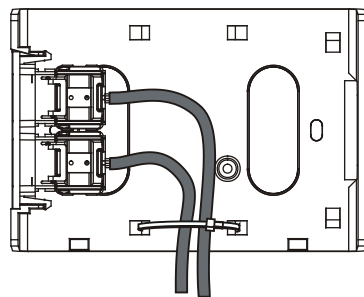
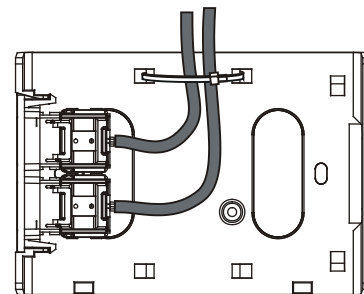
S-Video Outlet
(Adapter not Included)
M81-SVHS-110



Coaxial Coupler
(Adapter not Included)
M81C-B



BNC Coupler
(Adapter not Included)
M81-BNC-B

Step 1 – Determine Cabling Configuration**Cable Entry Thru Base****Cable Entry Thru Rear****Cable Entry Thru Bottom Side****Cable Entry Thru Top Side**

Note: M-series outlets in duplex adapters shown for illustration purposes

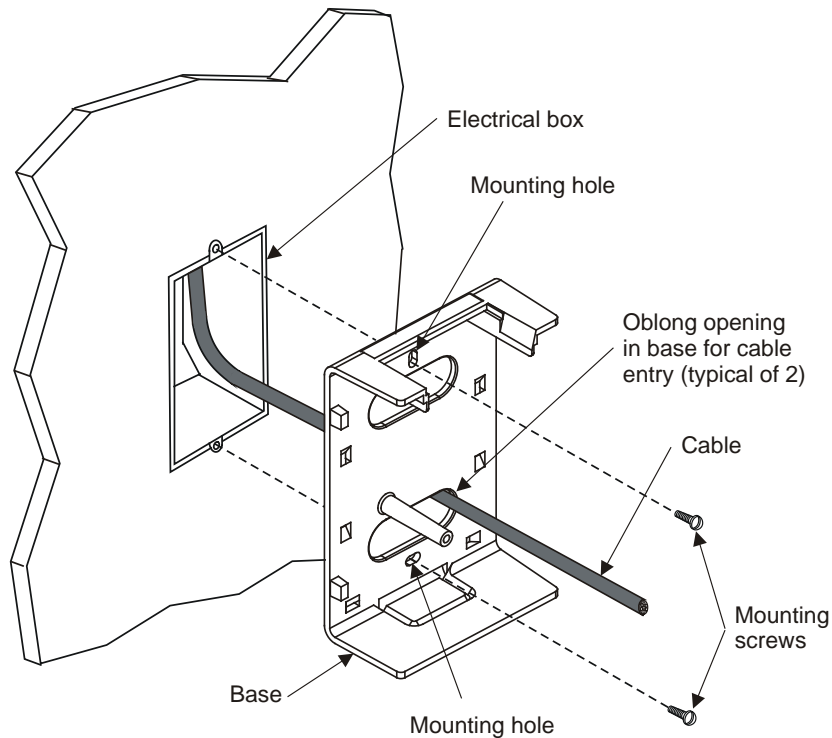
The SMB can accommodate cable entry from four different locations as described below and shown in figure above:

- **Cable Entry Through Base** – Cables from a standard single electrical box enter base through any of two oblong openings provided.
- **Cable Entry Through Rear** – Cables enter rear of base from either an electrical raceway or from surface mounted conduit. A knockout molded into base will need to be removed to allow cable entry.
- **Cable Entry Through Bottom Side** – Cables enter bottom side of SMB from either an electrical raceway or from surface mounted conduit. In this configuration, a knockout molded into cover will need to be removed to allow cable entry.
- **Cable Entry Through Top Side** – Cables enter top side of SMB from either an electrical raceway or from surface mounted conduit. In this configuration, a knockout molded into cover will need to be removed to allow cable entry.

Step 2 – Mount Base Unit

Note: Procedure to mount base unit will depend on type of cable entry selected in Step 1. Therefore, this section is divided into three parts.

Mounting Base Unit for Cable Entry Through Base



A. Mounting Screw Method

1. Route cables through any of two large oblong openings provided in base. It is best to use entrances that provide for the least amount of bending and stress on cables.
2. Position base over electrical box so the two mounting holes provided in base line up with mounting holes in electrical box. Secure using screws provided with unit.

Note: The base may be rotated 180 degrees if desired.

B. Adhesive Tape Method

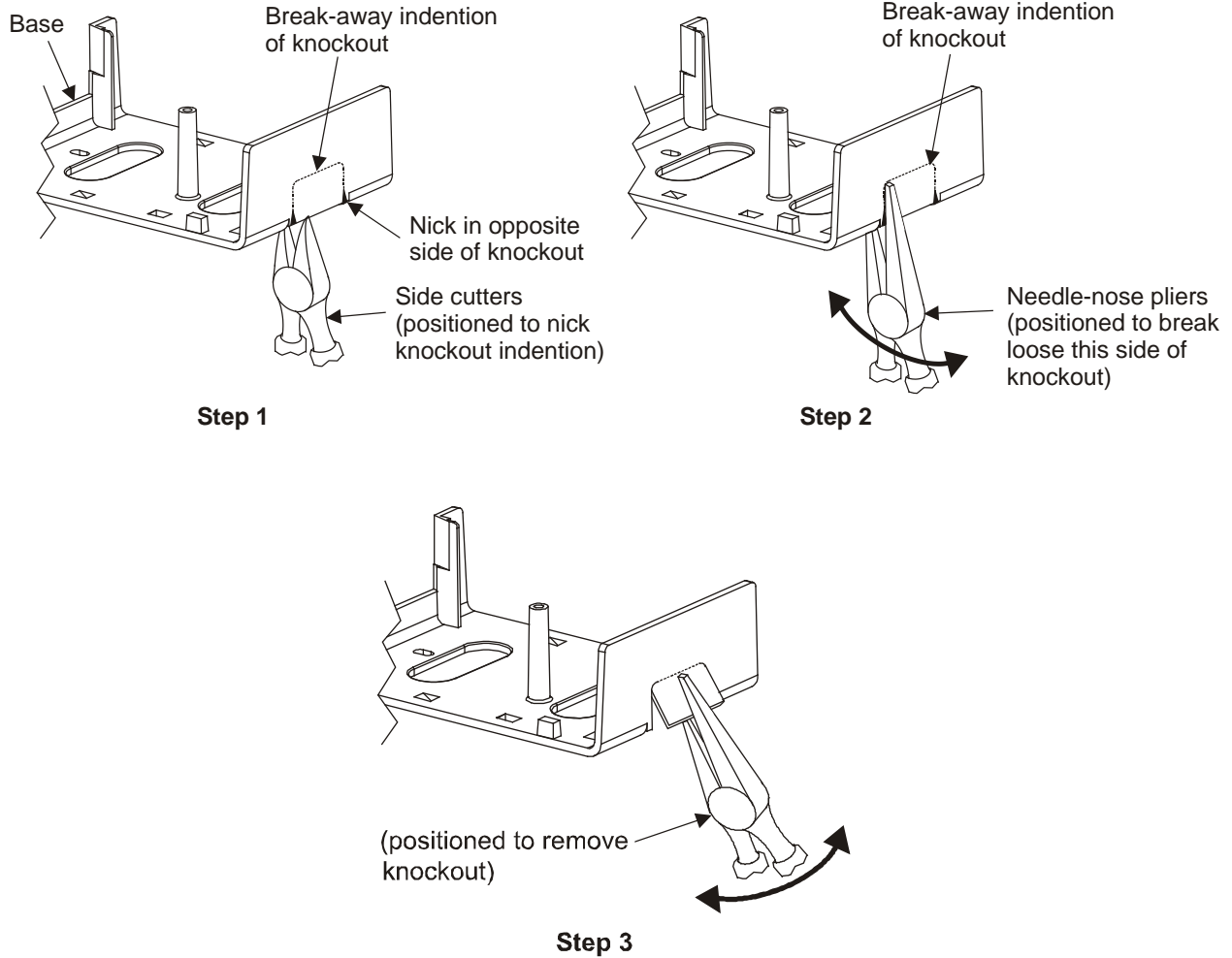
1. Route cables through any of two large oblong openings provided in base. It is best to use entrances that provide for the least amount of bending and stress on cables.
2. Peel away protective backing from one side of double-sided adhesive tape and stick tape to back of base unit.

Note: Position tape on back of base unit so as not to interfere with openings that cables will be routed through. Tape may need to be trimmed to fit around cable openings and screw hole openings.

3. Peel away other protective backing from piece of tape and position base on wall where desired and press firmly.

Note: For mounting base to any other surface, mounting hardware will need to be obtained locally.

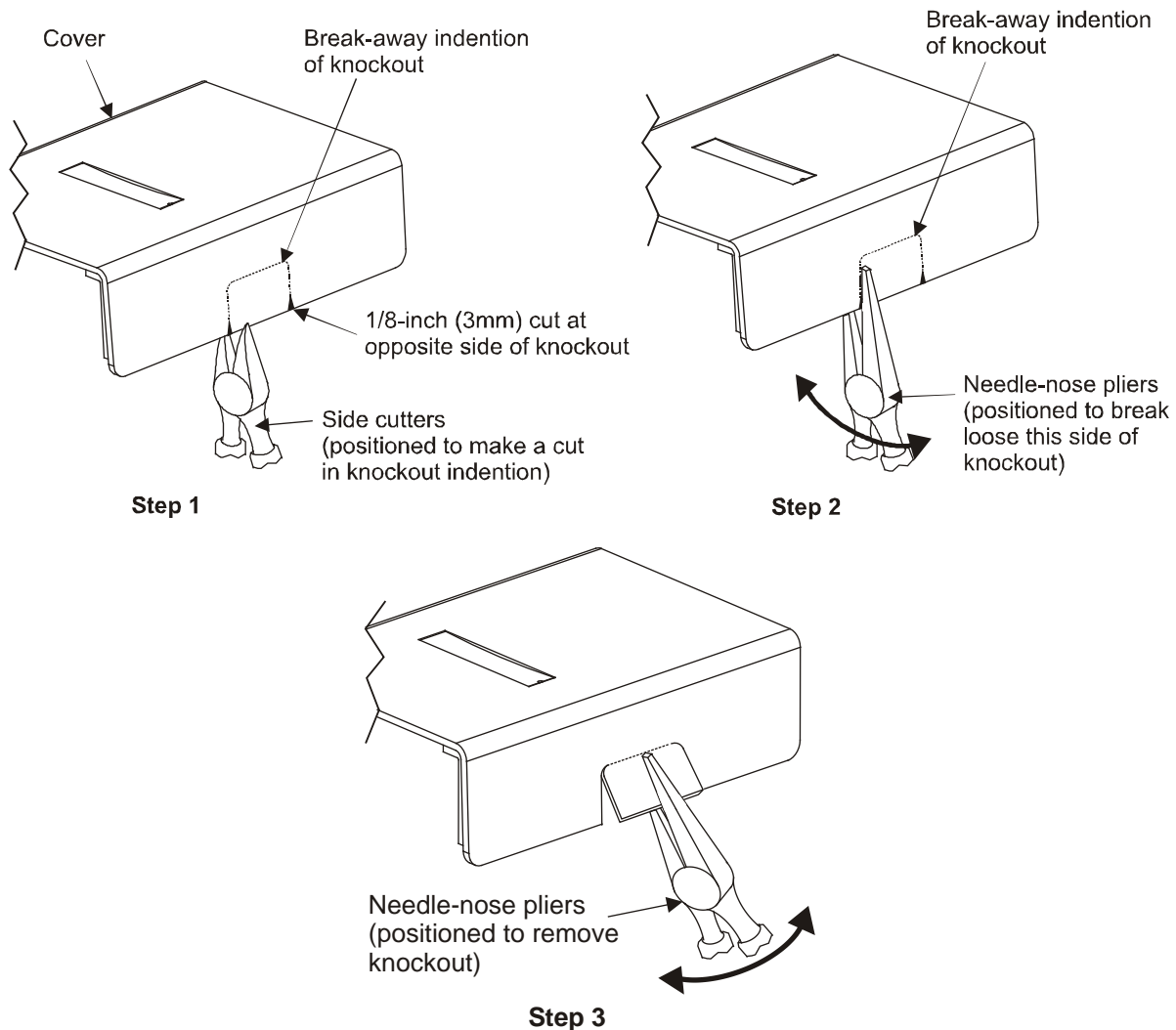
Mounting Base Unit for Cable Entry Through Rear



Note: Before mounting base using this cable entry, the knockout molded into base unit must be removed first.

1. Position side cutters at bottom edge of base at knockout indentation line as shown in Step 1. The indentation line is best viewed from inside of base. Using side cutters, make a 1/8-inch (3mm) cut in base along indentation line.
2. Position needle-nose pliers on knockout to be removed, next to indentation line, and rock pliers back and forth until edge breaks loose (see Step 2).
3. Repeat this on opposite edge of knockout.
4. Position needle-nose pliers in center of knockout and rock back and forth until entire knockout breaks loose (see Step 3).
5. Position base as desired and secure it to wall using either the mounting screw method or double-sided adhesive tape method described on page 6. **Disregard item 1 that addresses routing cables through base.**

Mounting Base Unit for Cable Entry Through Top or Bottom Sides



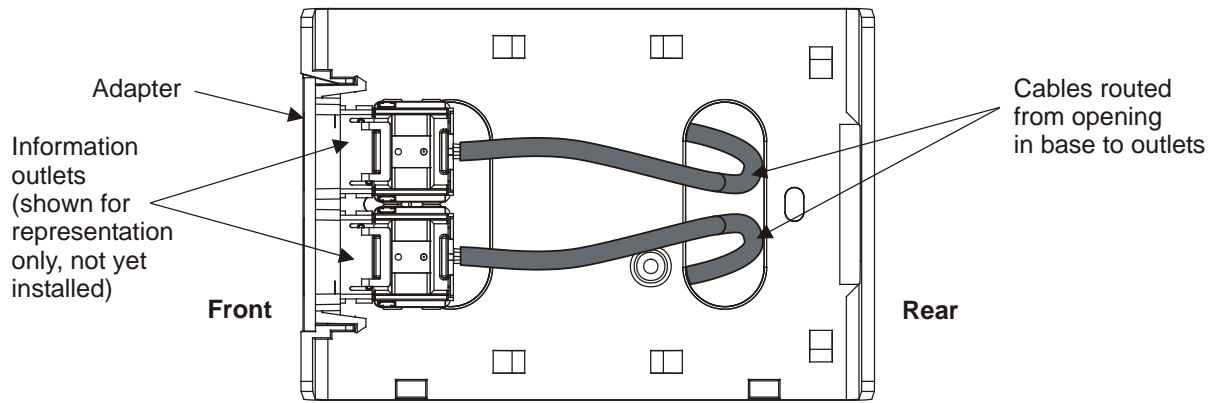
Before mounting base using this cable entry, the knockout molded into cover should be removed first.

1. Position side cutters at bottom edge of cover at knockout indentation line as shown in Step 1. The indentation line is best viewed from inside of cover. Using side cutters, make a 1/8-inch (3mm) cut in cover along indentation line.
2. Position needle-nose pliers on knockout to be removed, next to edge, and rock pliers back and forth until edge breaks loose.
3. Repeat this on opposite edge of knockout.
4. Position needle-nose pliers in center of knockout and rock back and forth until knockout breaks loose.
5. Set aside cover.
6. Position base as desired and secure it to wall using either the mounting screw method or double-sided adhesive tape method described on page 6. **Disregard item 1 that addresses routing cables through base.**

Note: If SMB is to be installed tight against an electrical raceway, allow about 1/16-inch (1.6mm) space between base and raceway for cover to fit.

Step 3 – Cable Routing

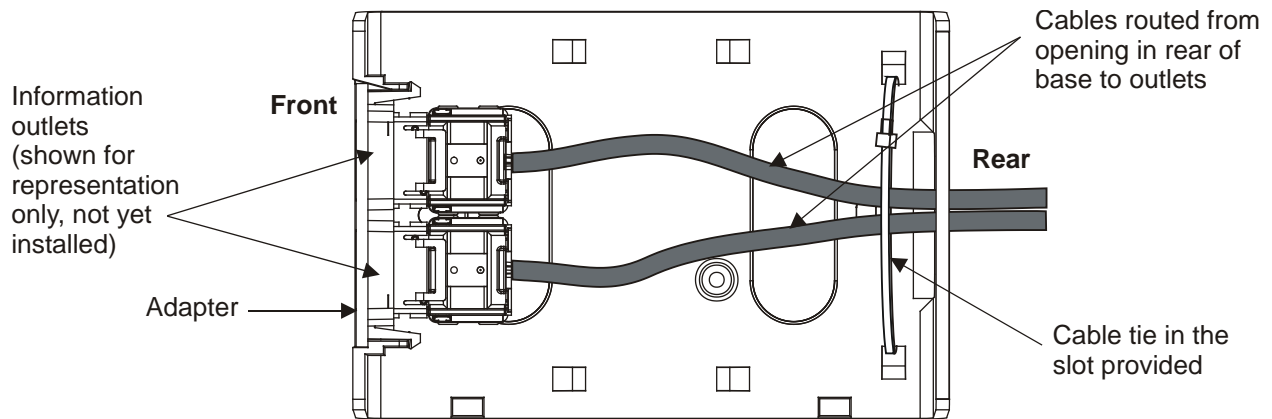
A. For Entry Through Base



1. The figure above shows the most common cable routing for entry through base. For this type of entry, cables will already have been routed through one of large oblong openings provided in base as part of base mounting procedure.

Note: Always use care to minimize movement and stress on cables and twisted-pair conductors.

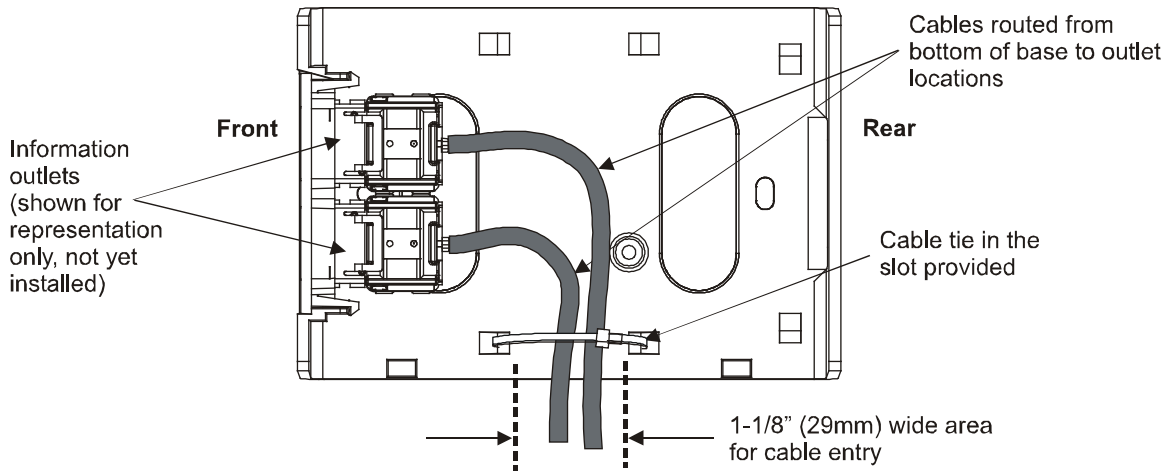
B. For Entry Through Rear



1. Route cables through knockout previously removed in Step 2.
2. After routing cables into base, insert a cable tie in slots provided and secure cables to base as shown.

Note: Always use care to minimize movement and stress on cables and twisted-pair conductors.

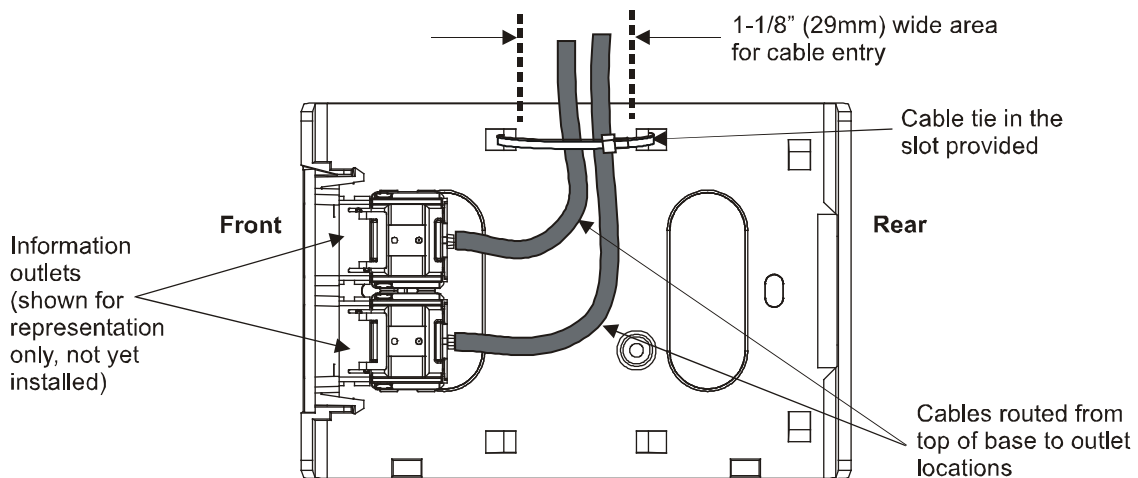
C. For Entry Through Bottom Side



1. Route cables into base within the 1-1/8" (29mm) wide area as shown above.
2. After routing cables into base, insert a cable tie in slots provided and secure cables to base as shown.

Note: Always use care to minimize movement and stress on cables and twisted-pair conductors.

D. For Entry Through Top Side



1. Route cables into base within the 1-1/8" (29mm) wide area as shown above.
2. After routing cables into base, insert a cable tie in slots provided and secure cables to base as shown.

Note: Always use care to minimize movement and stress on the cables and twisted-pair conductors.

Step 4 – Prepare Cable and Terminate Information Outlets

1. Prepare cables and terminate outlets per local practices.

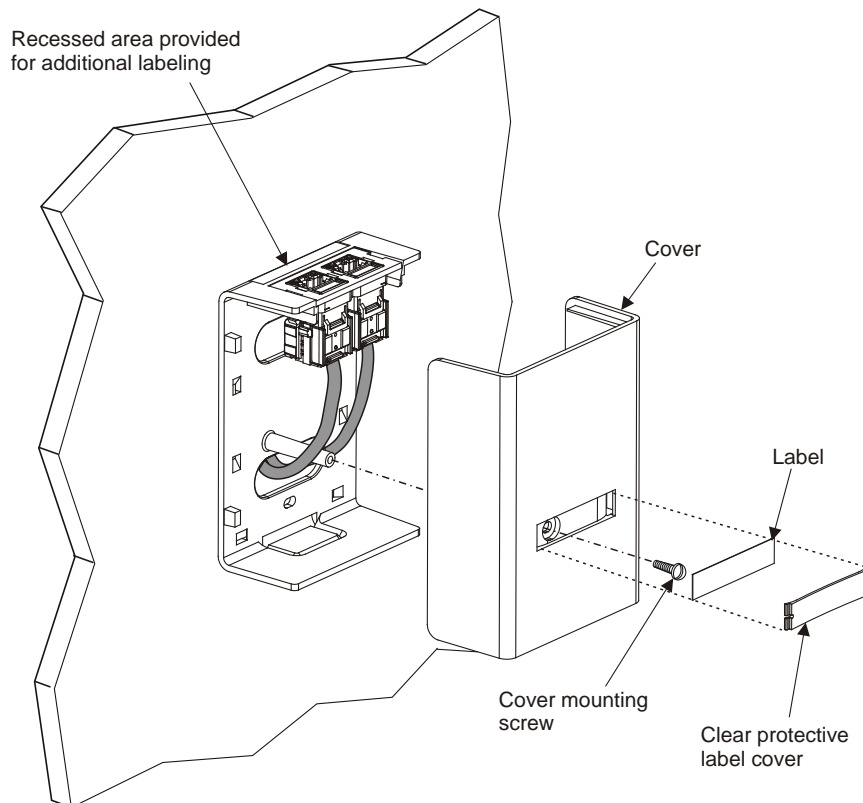
Note: Always use care to minimize movement and stress on exposed twisted-pair conductors near outlets.

Step 5 – Snap Outlets into Adapter

1. Once terminated, outlets should be snapped into adapter from inside of base area. Outlets should be mounted into adapter so the mating plugs (once connected) will have their release tabs located toward base of box.
2. Slide adapter into opening on front side of base. Once in place, adapter may still slide up and down, but will be secured once the cover has been installed. Adapter may also be snapped in (or removed) from front with the cover installed.

Note: A dust cover should be used in any adapter port that is not populated with an outlet. The cover snaps into the adapter from outside of the box, in a similar fashion to adapter snapping into base.

Step 6 – Install Cover and Label



1. Align cover as shown above and install on base. Secure using the provided cover mounting screw.
Note: If using raceways, surface mounted box and cover should be installed first. Various raceways can then be butted up against outside of box and then attached to wall.
2. Label box as desired using the provided label and then insert it and clear protective cover into indentation provided in box cover.

Note: There is also a recessed area provided on base below the adapter for labeling. It is recommended that an adhesive label be used in this area to enhance the labeling. One recommendation is the use of a white polyester adhesive label strip that is 1/4 inch (6mm) wide. This material is commonly available on a spool. If a spool is used, cut a 2-inch (102mm) piece and apply it in recessed area provided on base.