

## M204ASMB Surface Mounted Box Installation

### General

The **CommScope**® M204ASMB surface mounted box (SMB) is designed for interior surface-mounted applications and can support multiple types of copper terminations. The standard unit is equipped with two adapters, which can each support two M-series outlets. The openings on the front and rear 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 two 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:

Ordering Number	Catalog Number	Color
760057380	M204ASMB-003	Black
760057398	M204ASMB-246	Ivory
760057372	M204ASMB-262	White
760057406	M204ASMB-270	Gray
760116038	M204ASMB-317	Red

### How to Contact Us

- To find out more about **CommScope**® solutions, visit us on the web at <http://www.commscope.com/>
- For customer support regarding **CommScope** products, contact your local account representative or call 1-800-544-1948 or (828) 459-5000.

### Parts List

Verify contents from the parts listed below:

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

## Available Accessories

Ordering Number	Catalog Number	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	Catalog Number
(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 (see note 2)
(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 1:** 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.

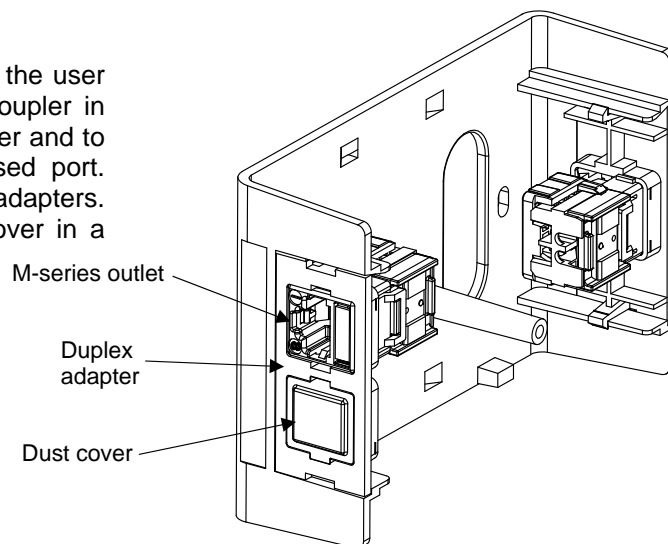
**Note 2:** Due to the large connector housing on VGA cables, only one VGA adapter can be used with this box per application.

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

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

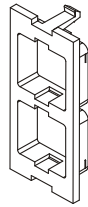
- (1) 760005272 – M81-SVHS-110-262
- (1) 108009424 – M81BNC-B
- (1) 760008664 – M30FP-2RJ45-262
- (1) 760009480 – M30FP-BLANK-262

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 here illustrates using a dust cover in a duplex adapter.

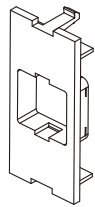


## Determine Adapters To Be Used

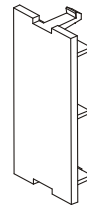
A full range of adapters are available for use in the 4-port SMB.



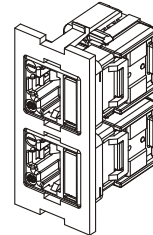
**Duplex Adapter  
(Two Furnished with Box)  
M30FP-2RJ45**



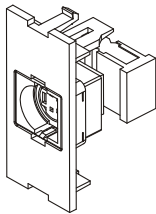
**Single Adapter  
M30FP-1RJ45**



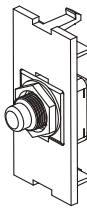
**Blank Adapter  
M30FP-BLANK**



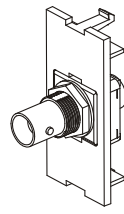
**M-Series Outlets  
(Adapter not Included)  
(See Note 1 on page 3)**



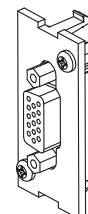
**S-Video Outlet  
(Adapter not Included)  
M81-SVHS-110**



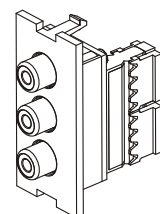
**Coaxial Coupler  
(Adapter not Included)  
M81C-B**



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

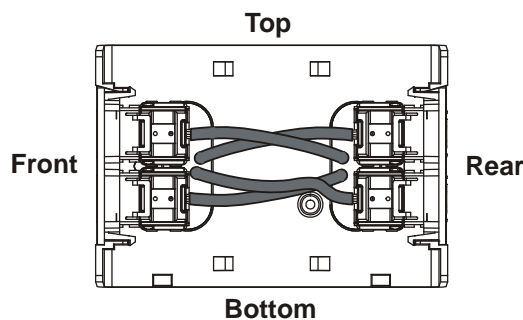


**VGA Adapter  
(Includes Adapter)  
M30FP-VGA-PT**

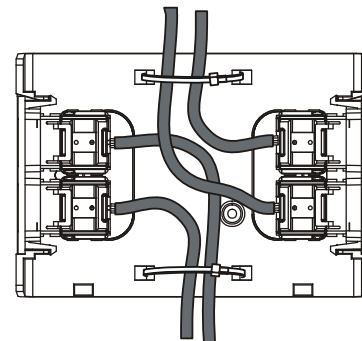


**3-Port RCA Adapter  
(Includes Adapter)  
M30FP-3RCA-110**

## Step 1 – Determine Cabling Configuration



**Cable Entry Thru Base**



**Cable Entry Thru Bottom and Top**

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

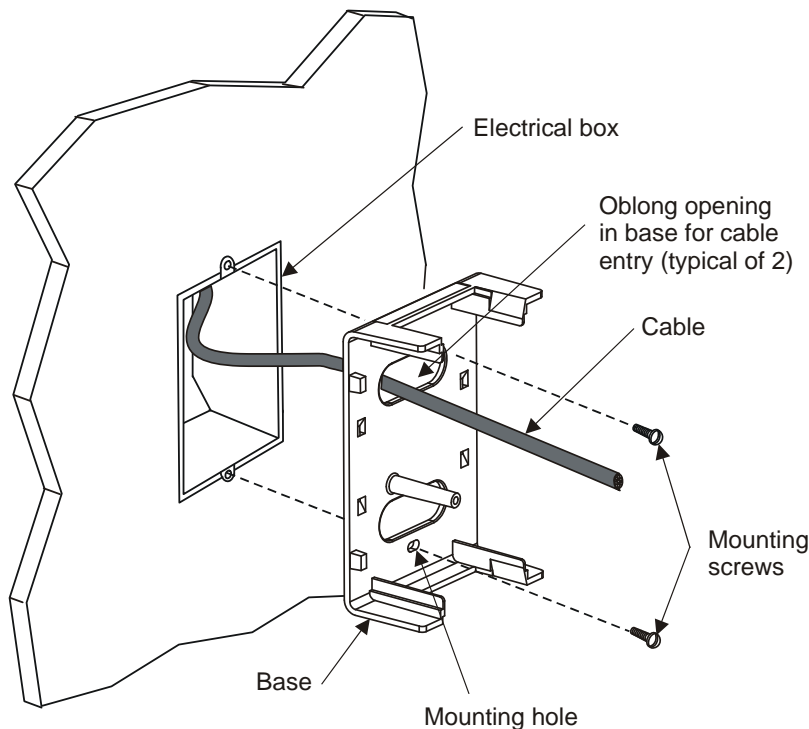
The SMB can accommodate cable entry from three different locations as described below and shown in the figure above:

- **Cable Entry Through Base** – Cables from a standard single electrical box enter base through any of two oblong openings provided.
- **Cable Entry Through Bottom or Top Sides** – Cables enter through bottom, top or both sides of SMB from either an electrical raceway or from surface mounted conduit. In this configuration, knockouts 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

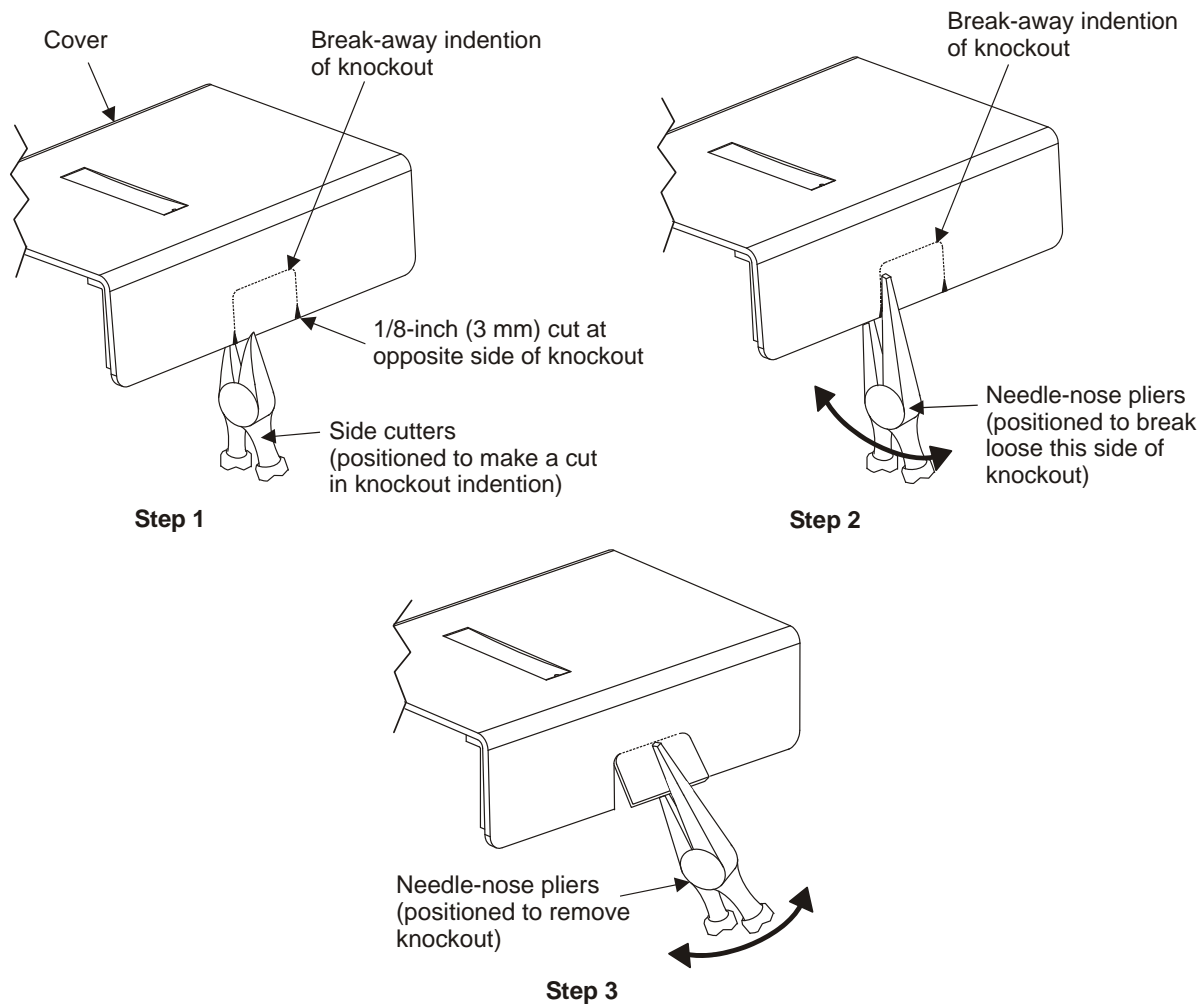
1. Route cables through any of two large oblong openings provided in base. It is best to use entrances that provide for the least amount of bending and stress on cables.
2. Peel away protective backing from one side of double-sided adhesive tape and stick tape to back of base unit.

**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 Top or Bottom Sides



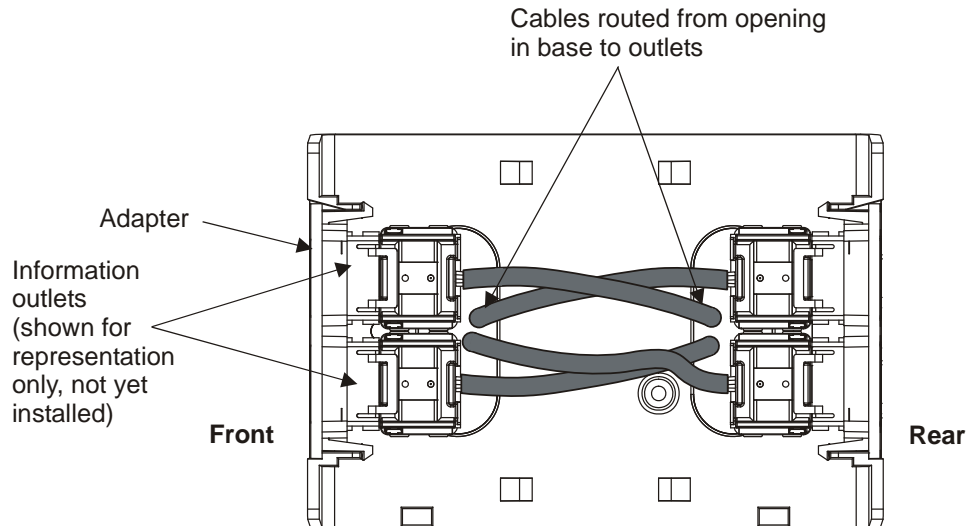
Before mounting base using this cable entry, the knockout molded into cover should be removed first.

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 (3 mm) 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 the mounting screw method or double-sided adhesive tape method described on page 5. **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 (1.6 mm) space between base and raceway for cover to fit.

### Step 3 – Cable Routing

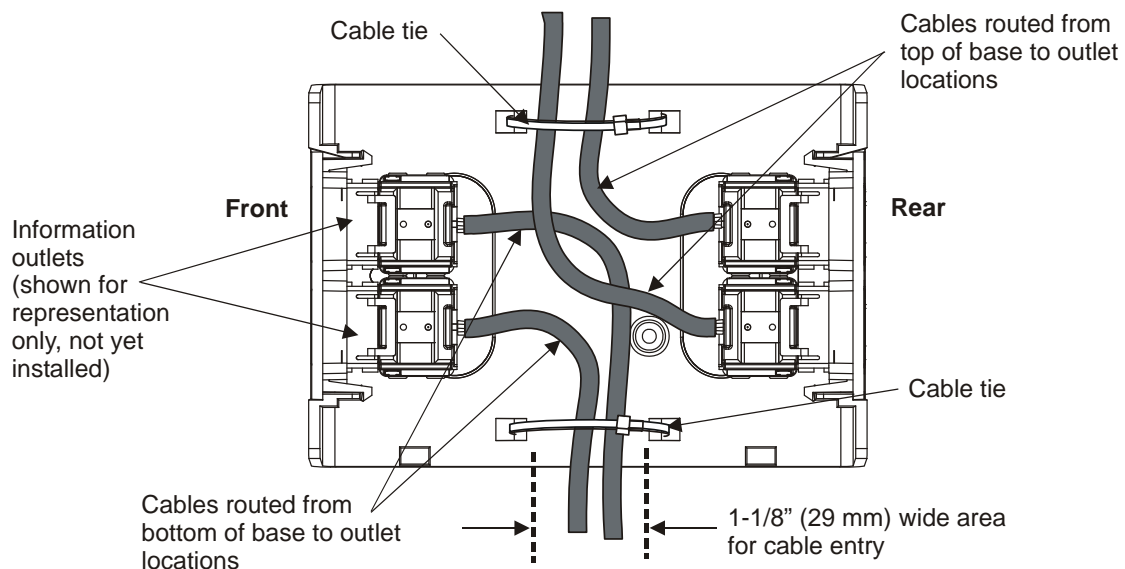
#### A. For Entry Through Base



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 the 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 Bottom or Top Sides



1. Route cables into base within the 1-1/8" (29 mm) wide areas 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. Cables can enter from the bottom, the top, or both.

## Step 4 – Prepare Cable and Terminate Information Outlets

1. Prepare cables and terminate outlets per local practices.

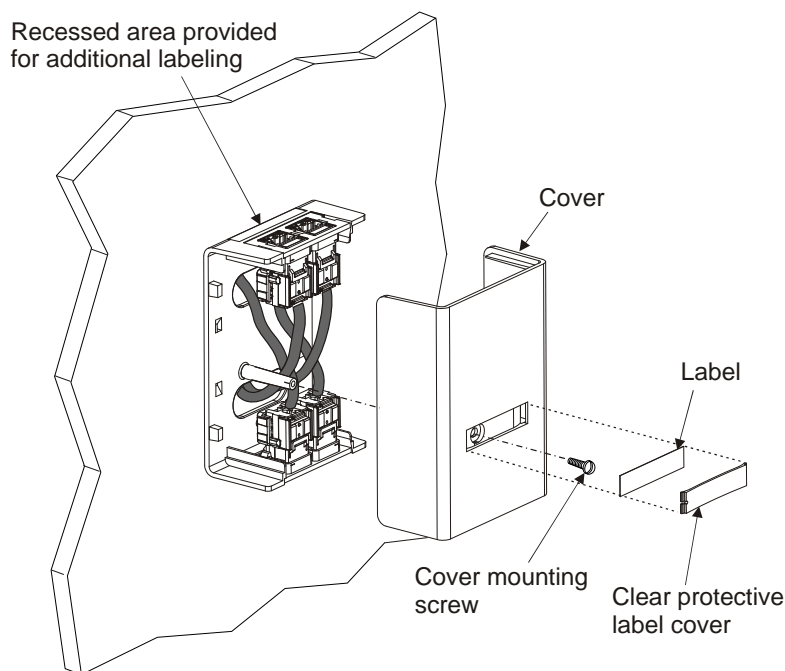
**Note:** Always use care to minimize movement and stress on exposed twisted-pair conductors near outlets.

## Step 5 – Snap Outlets into Adapter

1. Once terminated, outlets should be snapped into adapters from inside of base area. Outlets should be mounted into adapters so the mating plugs (once connected) will have their release tabs located toward base of box.
2. Slide adapters into openings on front or rear of base. Once in place, adapters may still slide up and down, but will be secured once the cover has been installed. Adapters may also be snapped in (or removed) from the 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 adapters for labeling. It is recommended that an adhesive label be used in these areas to enhance the labeling. One recommendation is the use of a white polyester adhesive label strip that is 1/4 inch (6 mm) wide. This material is commonly available on a spool. If a spool is used, cut a 2-inch (102 mm) piece and apply it in recessed area provided on base.