

# **Instruction Sheet**

860584457 Revision J / Dec 2022 www.commscope.com

# **Distribution Module Panel (DM)**

### General

The CommScope® distribution panels (DM) are available in a 24- or 48-port, straight, angled or recessed angled configuration.

The panel consists of a rack mounted base unit, rear cable management hardware, and labels for port numbering. Each panel mounts in a 19-inch (483mm) equipment rack with universal hole spacing.

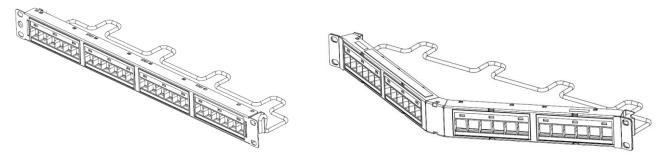
Ordering information is listed below:

Material ID	Part No.	Description	
760162800	UNP-6A-DM-1U-24	Uniprise Distribution Module Panel, Cat 6A, UTP, 1U, 24 port	
760162818	UNP-6A-DM-2U-48	Uniprise Distribution Module Panel, Cat 6A, UTP, 2U, 48 port	
760162826	UNPA-6A-DM -1U-24	Uniprise Angled Distribution Module Panel, Cat 6A, UTP, 1U, 24 port	
760162834	UNPA-6A-DM -2U-48	Uniprise Angled Distribution Module Panel, Cat 6A, UTP, 2U, 48 port	
760180000	CPP-5E-DM-1U-24	CommScope Distribution Module Panel, Cat 5E, UTP, 1U, 24 port	
760180018	CPP-5E-DM-2U-48	CommScope Distribution Module Panel, Cat 5E, UTP, 2U, 48 port	
760180026	CPPA-5E-DM-1U-24	CommScope Angled Distribution Module Panel, Cat 5E, UTP, 1U, 24 port	
760180034	CPPA-5E-DM-2U-48	CommScope Angled Distribution Module Panel, Cat 5E, UTP, 2U, 48 port	
760180042	UNP-6-DM-1U-24	Uniprise Distribution Module Panel, Cat 6, UTP, 1U, 24 port	
760180059	UNP-6-DM-2U-48	Uniprise Distribution Module Panel, Cat 6, UTP, 2U, 48 port	
760180067	UNPA-6-DM-1U-24	Uniprise Angled Distribution Module Panel, Cat 6, UTP, 1U, 24 port	
760180075	UNPA-6-DM-2U-48	Uniprise Angled Distribution Module Panel, Cat 6, UTP, 2U, 48 port	
760237022	CPPR-5E-DM-1U-24	CommScope Recessed Angled Distribution Module Panel, Cat 5E, UTP, 1U, 24 Port	
760237023	CPPR-5E-DM-2U-48	CommScope Recessed Angled Distribution Module Panel, Cat 5E, UTP, 2U, 48 Port	
760237024	NPP-6-DM-1U-24	NETCONNECT Distribution Module Panel, Cat 6, UTP, 1U, 24 port	
760237025	NPP-6-DM-2U-48	NETCONNECT Distribution Module Panel, Cat 6, UTP, 2U, 48 port	
760237026	NPPA-6-DM-1U-24	NETCONNECT Angled Distribution Module Panel, Cat 6, UTP, 1U, 24 port	
760237027	NPPA-6-DM-2U-48	NETCONNECT Angled Distribution Module Panel, Cat 6, UTP, 2U, 48 port	
760237028	NPPR-6-DM-1U-24	NETCONNECT Recessed Angle Distribution Module Panel, Cat 6, UTP, 1U, 24 Port	
760237029	NPPR-6-DM-2U-48	NETCONNECT Recessed Angle Distribution Module Panel, Cat 6, UTP, 2U, 48 Port	
760237030	UNPR-6-DM-1U-24	Uniprise Recessed Angled Distribution Module Panel, Cat 6, UTP, 1U, 24 Port	
760237031	UNPR-6-DM-2U-48	Uniprise Recessed Angled Distribution Module Panel, Cat 6, UTP, 2U, 48 Port	
760237032	NPP-6A-DM-1U-24	NETCONNECT Distribution Module Panel, Cat 6A, UTP, 1U, 24 port	



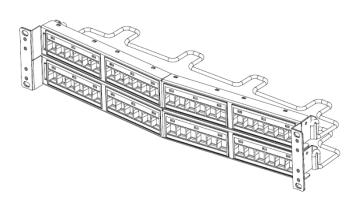
760237033	NPP-6A-DM-2U-48	NETCONNECT Distribution Module Panel, Cat 6A, UTP, 2U, 48 port
760237034	NPPA-6A-DM-1U-24	NETCONNECT Angled Distribution Module Panel, Cat 6A, UTP, 1U, 24 port
760237035	NPPA-6A-DM-2U-48	NETCONNECT Angled Distribution Module Panel, Cat 6A, UTP, 2U, 48 port
760237036	NPPR-6A-DM-1U-24	NETCONNECT Recessed Angled Distribution Module Panel, Cat 6A, UTP, 1U, 24 Port
760237037	NPPR-6A-DM-2U-48	NETCONNECT Recessed Angled Distribution Module Panel, Cat 6A, UTP, 2U, 48 Port
760237038	UNPR-6A-DM-1U-24	Uniprise Recessed Angled Distribution Module Panel, Cat 6A, UTP, 1U, 24 Port
760237039	UNPR-6A-DM-2U-48	Uniprise Recessed Angled Distribution Module Panel, Cat 6A, UTP, 2U, 48 Port

Note: sample product images shown below.



DM Flat Panel UNP-6A-DM-1U-24

DM Angled Panel UNPA-6A-DM-1U-24



DM Recessed Angled Panel UNPR-6A-DM-2U-48

#### **How to Contact Us**

- To find out more about CommScope® products, visit us on the web at 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 PartnerPRO™ Network Partner.
  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795 or email to claims@commscope.com. Outside the United States, contact your local account representative or PartnerPRO Network Partner.

## **Tools Required**

- Phillips head screwdriver
- Cable jacket scoring tool
- D-914 punch tool with M110 blade.

# **Specifications**

#### **Wire Termination**

Wire Size:

22-24 AWG (0.64 - 0.51 mm) Solid Copper 22-24 AWG (0.64 - 0.51 mm) Seven Stranded Copper

Insulation Size:

0.042 inch maximum DOD

Insulation Types:

Polyethylene, Polypropylene, and FEP

IDC Reterminations:

20 minimum

Modular Jack Mating Cycles:

750 minimum

#### **Environmental Data**

Temperature Range:

-40°F (-40°C) to 158°F (70°C) (Storage)

14°F (-10°C) to 140°F (60°C) (Operational)

Humidity:

95% Noncondensing

### **Parts List**

Verify parts against parts list below:

Quantity						
24-Port Flat Panel	48-Port Flat Panel	24-Port Ang Panel	48-Port Ang Panel	24-Port R-Ang Panel	48-Port R-Ang Panel	Description
1	_	_	_	_	_	24-port flat panel
_	1	_	_	_	_	48-port flat panel
_	_	1	_	_	_	24-port angled panel
_	_	_	1	_	_	48-port angled panel
_	_	_	_	1	_	24-port recessed angled panel
_	_	_	_	_	1	48-port recessed angled panel
4	4	4	4	4	4	P12-24 x ½" mounting screws *
1	2	1	2	1	2	Label holder kit
1	2	1	2	1	2	Cable management bar
4	8	4	8	4	8	Hook-and-loop straps



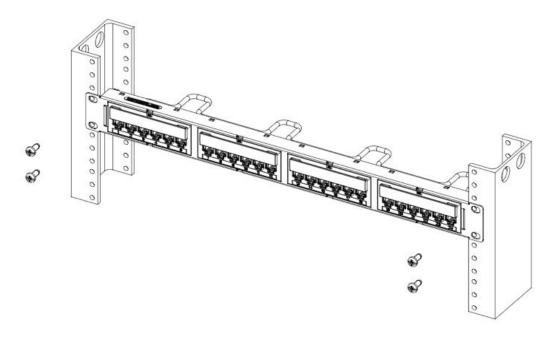
# WARNING – Important Safety Instructions

When using this product, the following basic safety precautions should be followed to reduce the risk of fire, electric shock, and injury to persons:

- 1. Never install communications wiring in wet locations unless it is designed for wet locations.
- 2. Never install this product during a lightning storm. There is a remote risk of electric shock.
- 3. Never touch uninsulated communication wiring or terminals unless the communication circuit has been disconnected at the network interface.
- 4. **Caution:** All wiring that connects to this equipment must meet applicable local and national building codes and network wiring standards for communication cable.
  - \* NPP Panels do not include 12-24 mounting screws.

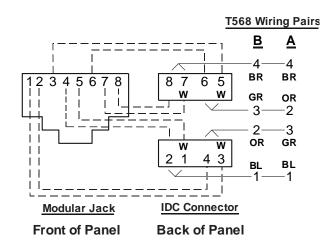
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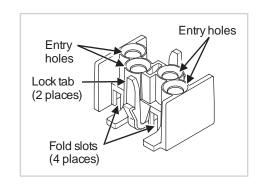
## Step 1 – Mount Panel to Rack



1. Mount panel to rack.

Step 2 - Terminate Conductors on Rear of Panel





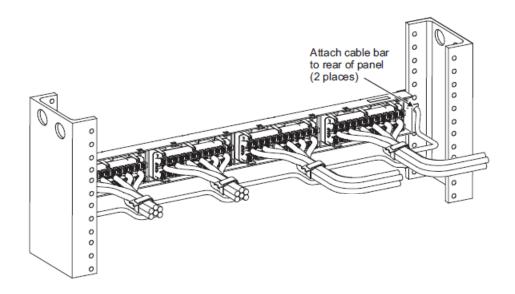
**T568 Wiring Diagram** 

**Termination Manager** 

**Note:** The module comes with a T568B wiring designation label installed. If T568A wiring is desired, first remove the "B" type label, change accordingly. If the module comes with a combined T568 A&B wiring designation label installed, choose T568A wiring or T568B wiring according to label designation.

- 1. Prepare cable for termination. Terminate conductors on the IDC terminals per the wiring diagram shown above and utilizing the provided termination manager.
- 2. See pages 7 and 8 for correct procedure on using the termination manager.

# **Step 3 – Assemble and Install Rear Cable Manager**



- 1. Once cables have been terminated, attach cable bar to rear of panel. For 48-port panels, two cable bars are provided. Insert four hook-and-loop straps to cable bar.
- 2. Lay cables evenly in bends of cable bar and secure using the hook-and-loop straps provided.

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# **Step 4 – Attaching Information Labels**

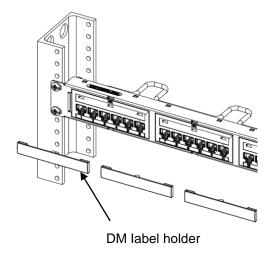


Figure 1

- 1. Enter information on the white information labels provided in label holder kits. Snap holders into panel modules and insert labels into label holders as shown in figure 1.
- 2. To print a designation label, go to <a href="http://www.commscope.com/Resources/Labeling-Templates">http://www.commscope.com/Resources/Labeling-Templates</a> and scroll down to *Panels* and select the proper label template.

Note: Labeling website has two options for printing labels; letter size and A4 size.

## **Patch Panel Termination Manager Instructions**

The termination managers provide pair positioning, control, and strain relief features to the rear termination area of the panel. See Figure 1. Instructions for using the termination manager are listed below.

\*Not applicable for Cat5e panels\*

## Feed Pairs into Termination Manager (Figure 2)

- 1. Trim jacket back at least 3 inches (76mm) to expose twisted pairs.
- 2. Without crossing over or rearranging pairs out of the jacket, position pairs in-line per pair colors below:

## **T568B Wiring Application (Shown)**

Blue, Brown, Orange, Green

### **T568A Wiring Application**

Blue, Brown, Green, Orange

- 3. Insert pairs through 4 holes on top surface of termination manager, one pair per hole, as shown.
- 4. Continue to feed pairs through termination manager until resistance is encountered at the jacket. This will usually be about 1/4 inch (6mm) from the jacket.

## Fold Pairs into Slots (Figure 3)

Fold each pair over into adjoining slots on bottom end of termination manager. Conductor colors must be arranged in the slots as listed below:

#### **T568B Wiring Application (Shown)**

BL/OR Pairs – Blue/Orange conductors on top BR/GR Pairs – both White conductors on top

#### **T568A Wiring Application**

BL/GR Pairs – Blue/Green conductors on top BR/OR Pairs – both White conductors on top

Important: Add twist as needed to align pairs with slots. Never remove twist for any pair. Do not allow pairs to untwist inside termination manager or inside cable jacket.

6. Ensure that both conductors of each pair are in slots completely without being pinched over bottom end surface.

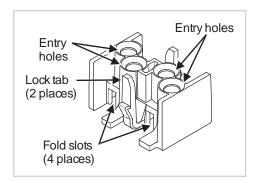


Figure 1. Termination Manager

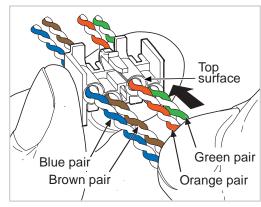


Figure 2. Feed Pairs into Termination Manager

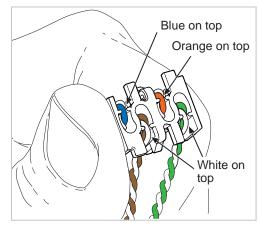


Figure 3. Fold Pairs Back into Slots

# **Snap Termination Manager onto Rear Housing** (Figure 4)

- Snap assembled termination manager onto rear housing with pair colors in proper position. Push on using the termination manager housing, not by pushing with the cable. (Ensure that both lock tabs on manager fully seat into rear housing).
- 8. After termination manager is snapped onto rear housing, untwist individual pairs fully and line up correct color conductor and white conductor with the label on the rear housing.

# **Seat Wires into IDC Terminal Slots** (Figure 5)

- Grasping each untwisted pair, push the conductors down into IDC terminal slots to seat them before punching down. Seat down into slots as far as possible. (It may be easier to use needle nose pliers to perform this task).
- 10. Using the D-914 punch tool with M110 blade on HI impact setting, punch down conductors making sure the tool is straight and that conductors fully engage in the IDC terminals. Stagger the punch-down tool up and down, so that it stays in alignment with the staggered terminal slots.

#### **Recommendations to Aid Assembly**

- The termination manager should be snapped onto the rear housing immediately after the pairs have been fed and folded over into the slots. All termination managers should be installed on the panel before proceeding to seat and punch down conductors.
- 2. Flex cables down for easier access, then seat and punch down the entire top row of the panel.
- 3. Flex cables up for easier access, then seat and punch down the entire bottom row.

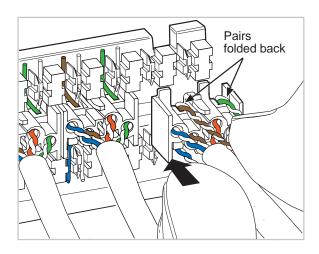


Figure 4. Snap Termination Manager onto Rear Housing

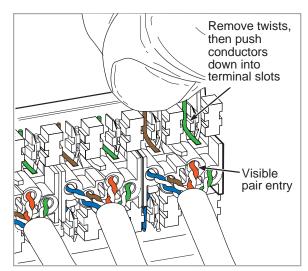


Figure 5. Seat Untwisted Pairs into IDC Terminal Slots

# ADDENDUM:

# 25 pr Cable Termination if Required

Table A. 25-Pair Cable Terminations						
(B-Wiring Application)						
IDC No.	1	2	3	4	5	6
1	W/BL	W/GY	R/BR	BK/G	Y/O	V/BL
2	BL/W	GY/W	BR/R	G/BK	O/Y	BL/V
3	W/O	R/BL	R/GY	BK/BR	Y/G	V/O
4	O/W	BL/R	GY/R	BR/BK	G/Y	O/V
5	W/G	R/O	BK/BL	BK/GY	Y/BR	V/G
6	G/W	O/R	BL/BK	GY/BK	BR/Y	G/V
7	W/BR	R/G	BK/O	Y/BL	Y/GY	V/BR
8	BR/W	G/R	O/BK	BL/Y	GY/Y	BR/V

Note: Pair 25 is used for spare pair.

	Table B. 25-Pair Cable Terminations (A-Wiring Application)						
IDC No.	1	2	3	4	5	6	
1	W/BL	W/GY	R/BR	BK/G	Y/O	V/BL	
2	BL/W	GY/W	BR/R	G/BK	O/Y	BL/V	
3	W/G	R/O	BK/BL	BK/GY	Y/BR	V/G	
4	G/W	O/R	BL/BK	GY/BK	BR/Y	G/V	
5	W/O	R/BL	R/GY	BK/BR	Y/G	V/O	
6	O/W	BL/R	GY/R	BR/BK	G/Y	O/V	
7	W/BR	R/G	BK/O	Y/BL	Y/GY	V/BR	
8	BR/W	G/R	O/BK	BL/Y	GY/Y	BR/V	

Note: Pair 25 is used for spare pair.

WIRE COLOR	ABBREVIATION		
BLUE	BL		
WHITE	W		
GREEN	G		
BROWN	BR		
ORANGE	0		
RED	R		
GRAY	GY		
BLACK	ВК		
YELLOW	Y		
VIOLET	V		