

Crestron **V24-IMCW-C**
Interface Module for V24R-C
and V24RL-C

Installation Guide



This document was prepared and written by the Technical Documentation department at:



Regulatory Compliance

As of the date of manufacture, the V24-IMCW-C has been tested and found to comply with specifications for CE marking and standards per EMC and Radiocommunications Compliance Labelling.



Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following conditions:
(1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Industry Canada (IC) Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The specific patents that cover Crestron products are listed at www.crestronpatents.com.

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Interface Module for V24R-C and V24RL-C: V24-IMCW-C

Introduction

The V24-IMCW-C is an interface module designed for use with a V24R-C or V24RL-C V-Panel™ 24” HD Touch Screen Display. It affords a convenient, pluggable connection for the touch screen, providing front panel jacks for DigitalMedia 8G+™ (DM 8G+™) and power. On the rear is a DM 8G+ pass-through jack for connection to a DM 8G+ transmitter or switcher¹. Power is provided to the V24-IMCW-C by an external power pack², which may be connected to either the front or rear panel.

Every V24R-C and V24RL-C touch screen ships with one V24-IMCW-C included. The V24-IMCW-C may also be purchased separately for use with a V24R-WALL-C touch screen.

Using the hardware provided, the V24-IMCW-C can be mounted in a 1-gang electrical box, to a flat surface or to a 19-inch rack rail.

1. For DM 8G+ wiring, use Crestron® DM-CBL-8G DigitalMedia 8G™ cable or generic CAT5e (or better) UTP or STP. Maximum wire length for DM 8G+ is 330 feet (100 meters) between devices. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise, which may impact performance at resolutions above 1080p. All wire and cables sold separately. Refer to the DigitalMedia™ Design Guide (Doc. 4546) for complete system design guidelines. It is available from the Crestron Web site (www.crestron.com/dmresources).
2. Item(s) sold separately or included with touch screen display.

Features and Functions

- Provides a wall plate connection for a V-Panel 24” HD Touch Screen Display
- Mounts in a single-gang electrical box or mud ring
- Includes inserts to match black, white or almond faceplates
- Includes surface mount and rack rail installation options
- Provides pass-through connections for 24VDC power and DigitalMedia 8G+

Specifications

Specifications for the V24-IMCW-C are listed in the following table.

V24-IMCW-C Specifications

SPECIFICATION	DETAILS
Power Requirements Power Pack	3.7 Amps @ 24 VDC
Environmental Temperature Humidity	32° to 113° F (0° to 45° C) 10% to 90% RH (non-condensing)
Enclosure Construction Flush Wall Mount Surface Mount Rack Mount	Metal, black finish, includes (3) metal inserts to allow choice of black, white or almond front panel Mounts in a 1-gang electrical box or in a 1-gang opening in a typical 6 inch (150 mm) deep floor box, 2.5 inch (64 mm) minimum mounting depth required decorator style faceplate not included Surface mount bracket included Mountable to a single 19-inch EIA rack rail

(Continued on following page)

V24-IMCW-C Specifications (Continued)

SPECIFICATION	DETAILS
Dimensions	
Height	4.12 in (105 mm)
Width	1.72 in (44 mm) 1.93 in (49 mm) with surface mount bracket
Depth	1.58 in (40 mm)
Weight	5 oz (141 g) with bracket

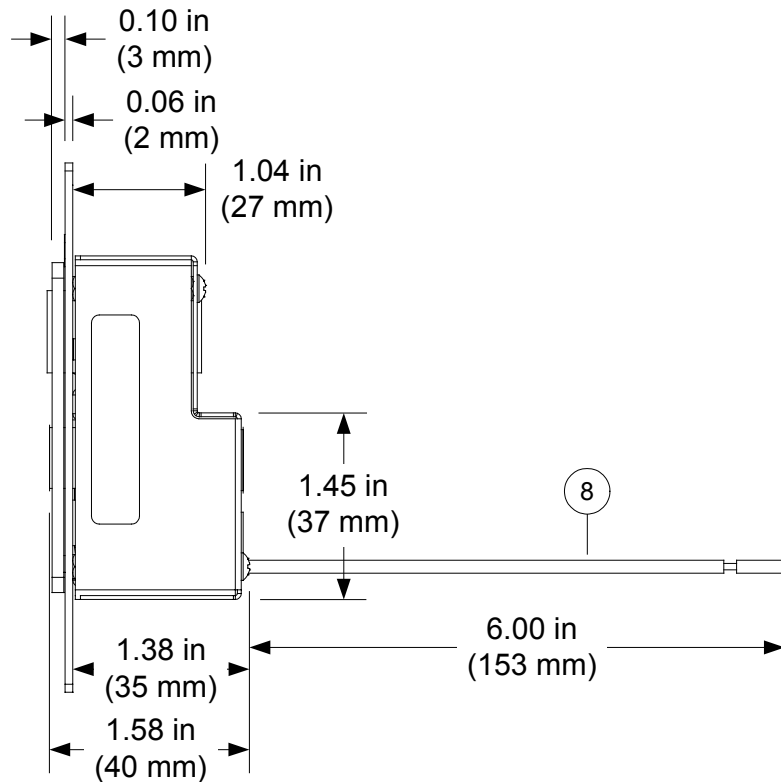
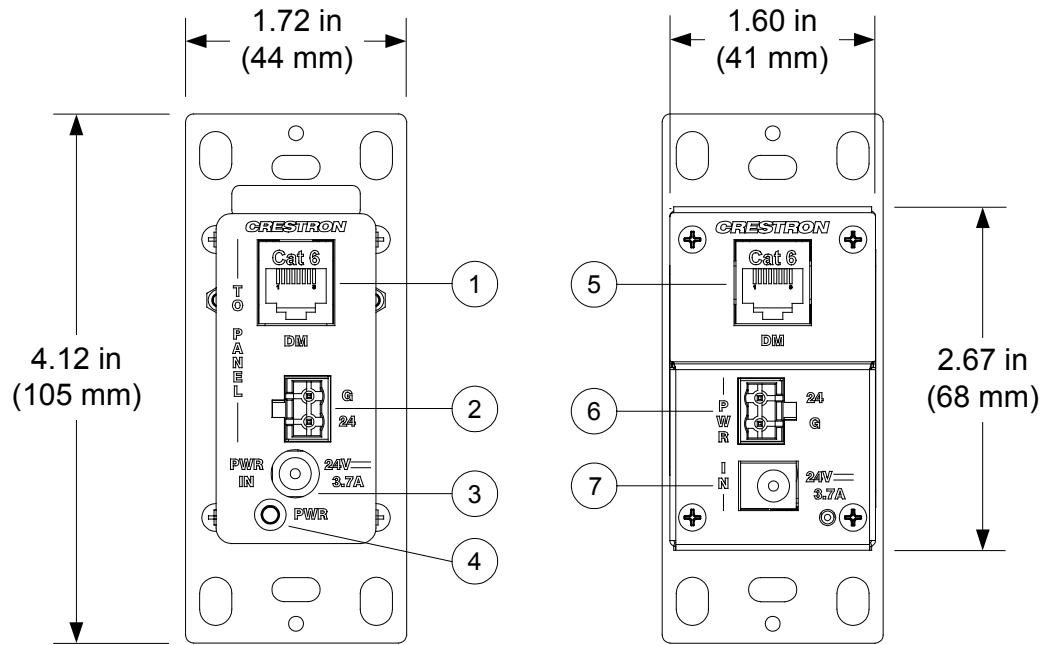
Physical Description

This section provides information on the connections, controls and indicators available on the V24-IMCW-C.

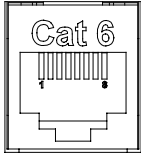
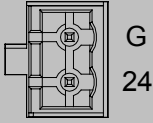

V24-IMCW-C Physical View (Front and Rear)



V24-IMCW-C Overall Dimensions

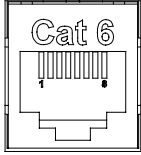
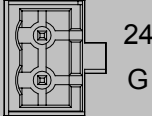
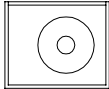


Connectors, Controls & Indicators

#	CONNECTORS ¹ , CONTROLS & INDICATORS	DESCRIPTION																		
1	<p>TO PANEL DM</p> 	<p>(1) 8-pin RJ-45 female, shielded; Connects to a V24R-C touch screen via a V-CBL-SC cable²</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>COLOR</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>White/Orange</td> </tr> <tr> <td>2</td> <td>Orange</td> </tr> <tr> <td>3</td> <td>White/Green</td> </tr> <tr> <td>4</td> <td>Blue</td> </tr> <tr> <td>5</td> <td>White/Blue</td> </tr> <tr> <td>6</td> <td>Green</td> </tr> <tr> <td>7</td> <td>White/Brown</td> </tr> <tr> <td>8</td> <td>Brown</td> </tr> </tbody> </table>	PIN	COLOR	1	White/Orange	2	Orange	3	White/Green	4	Blue	5	White/Blue	6	Green	7	White/Brown	8	Brown
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4	Blue																			
5	White/Blue																			
6	Green																			
7	White/Brown																			
8	Brown																			
2	<p>TO PANEL G, 24</p> 	<p>(1) 2-pin 5 mm detachable terminal block; Connects to a V24R-C touch screen via a V-CBL-SC cable²</p>																		
3	<p>PWR IN 24VDC 3.7A</p> 	<p>(1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input from power pack²</p>																		
4	<p>PWR LED</p>	<p>(1) Green LED, indicates DC power supplied from power pack</p>																		

(Continued on following page)

Connectors, Controls, & Indicators (Continued)

#	CONNECTORS ¹ , CONTROLS & INDICATORS	DESCRIPTION																		
5	<p>DM</p> 	<p>(1) 8-pin RJ-45 female, shielded; DM 8G+ input; Connects to DM 8G+ output of a DM[®] transmitter or switcher via CAT5e or Crestron DM-CBL-8G cable^{2, 3}</p> <table border="1"> <thead> <tr> <th>PIN</th> <th>COLOR</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>White/Orange</td> </tr> <tr> <td>2</td> <td>Orange</td> </tr> <tr> <td>3</td> <td>White/Green</td> </tr> <tr> <td>4</td> <td>Blue</td> </tr> <tr> <td>5</td> <td>White/Blue</td> </tr> <tr> <td>6</td> <td>Green</td> </tr> <tr> <td>7</td> <td>White/Brown</td> </tr> <tr> <td>8</td> <td>Brown</td> </tr> </tbody> </table>	PIN	COLOR	1	White/Orange	2	Orange	3	White/Green	4	Blue	5	White/Blue	6	Green	7	White/Brown	8	Brown
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6	<p>PWR IN 24, G</p> 	<p>(1) 2-pin 5 mm detachable terminal block; 24 Volt DC power input from power pack²</p>																		
7	<p>PWR IN 24VDC 3.7A</p> 	<p>(1) 2.1 x 5.5 mm DC power connector; 24 Volt DC power input from power pack²</p>																		
8	<p>Ground</p>	<p>(1) Flying lead, ground wire</p>																		

1. An interface connector for the **PWR IN 24, G** port is provided with the unit.
2. Item(s) sold separately or included with touch screen display.
3. For DM 8G+ wiring, use Crestron DM-CBL-8G DigitalMedia 8G cable or generic CAT5e (or better) UTP or STP. Maximum wire length for DM 8G+ is 330 feet (100 meters) between devices. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise, which may impact performance at resolutions above 1080p. All wire and cables sold separately. Refer to the DigitalMedia Design Guide (Doc. 4546) for complete system design guidelines.

Setup

Network Wiring

When wiring the DM[®] network, consider the following:

- Use Crestron[®] Certified Wire.
- Use Crestron power supplies for Crestron equipment.
- Provide sufficient power to the system.
- For DM 8G+ wiring, use Crestron DM-CBL-8G DigitalMedia 8G[™] cable or generic CAT5e (or better) UTP or STP. Maximum wire length for DM 8G+ is 330 feet (100 meters) between devices. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise, which may impact performance at resolutions above 1080p. All wire and cables sold separately. Refer to the DigitalMedia[™] Design Guide (Doc. 4546) for complete system design guidelines.

NOTE: For optimum performance and ESD (electrostatic discharge) protection, Crestron strongly recommends using DM-CBL-8G cable.

Supplied Hardware

The hardware supplied with the V24-IMCW-C is listed in the following table.

Supplied Hardware for the V24-IMCW-C

DESCRIPTION	PART NUMBER	QTY
Assy, Insert, Black	4513890	1
Assy, Insert, White	4513789	1
Assy, Insert, Almond	4513891	1
Metal, Bracket, 16 GA CRS	2016054	1
Conn, Plug, 2-pin, SKT, Single Row	2003582	1
Plastic, Hole Plug, Ferrule Dust Cap	2031467	1
Screw, #06-32 x 3/4", Combo HD	2009211	2
Screw, #06-32 x 3/16", Pan, Phil	2007203	2

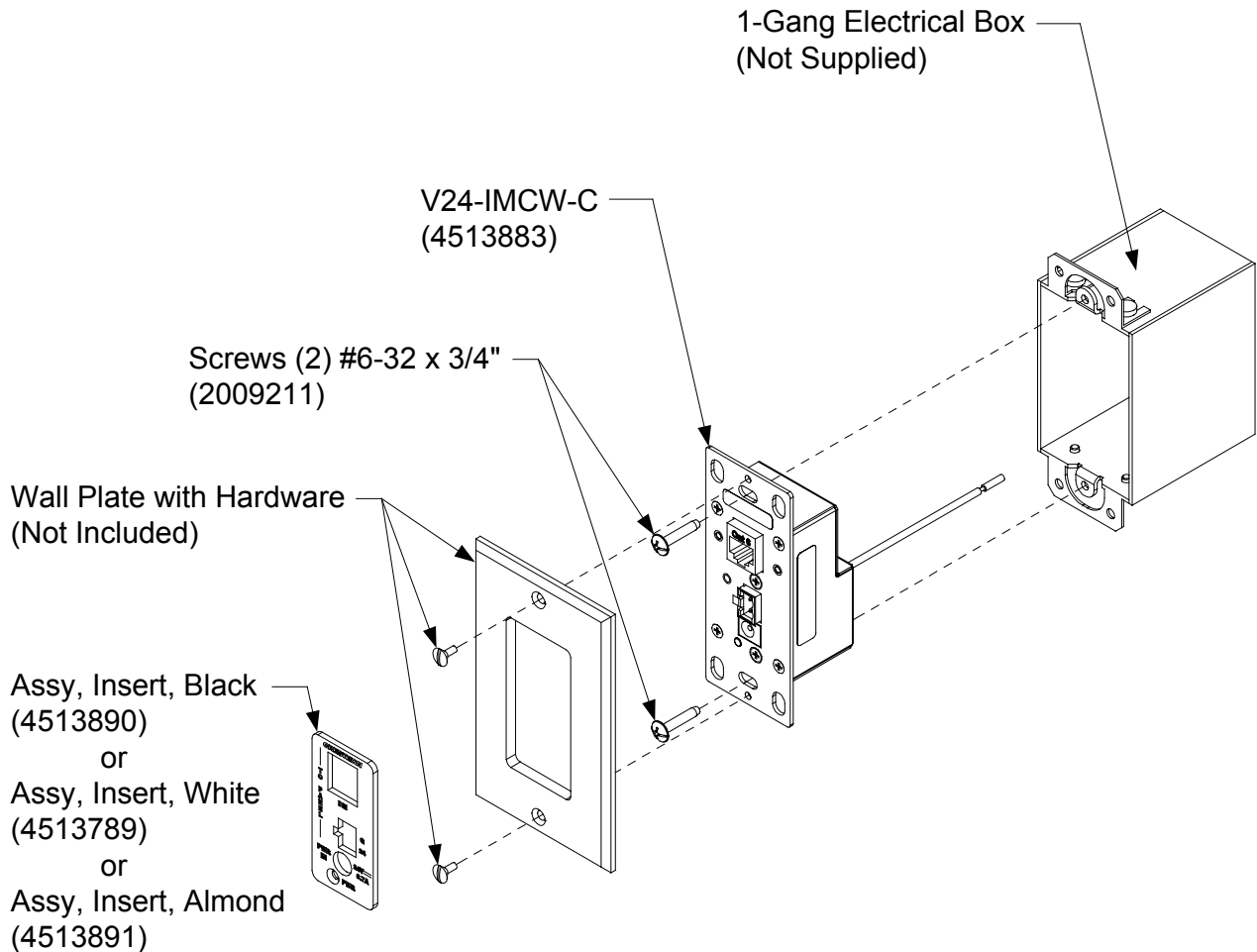
Installation

The V24-IMCW-C can be installed in either a 1-gang box, rack mounted or mounted to any flat surface using the provided surface mount bracket.

Installing in 1-Gang Box

To install the V24-IMCW-C in a 1-gang box, ensure the unit is mounted into the electrical box as shown in the following illustration.

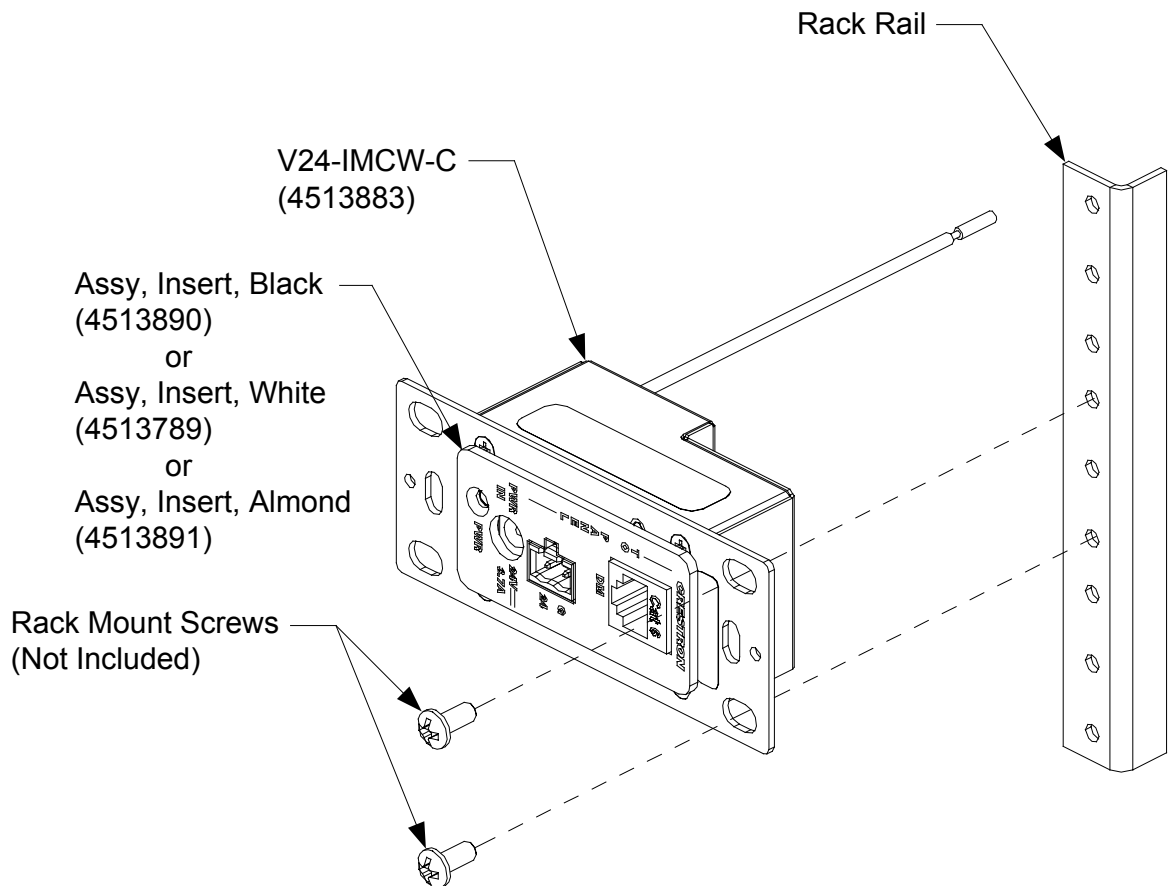
V24-IMCW-C in 1-Gang Box (Exploded View)



Rack Mounting

The V24-IMCW-C can be mounted in a rack with other equipment using two of the four mounting holes on the corners of the interface module, as shown in the following illustration.

V24-IMCW-C Rack Mount (Exploded View)



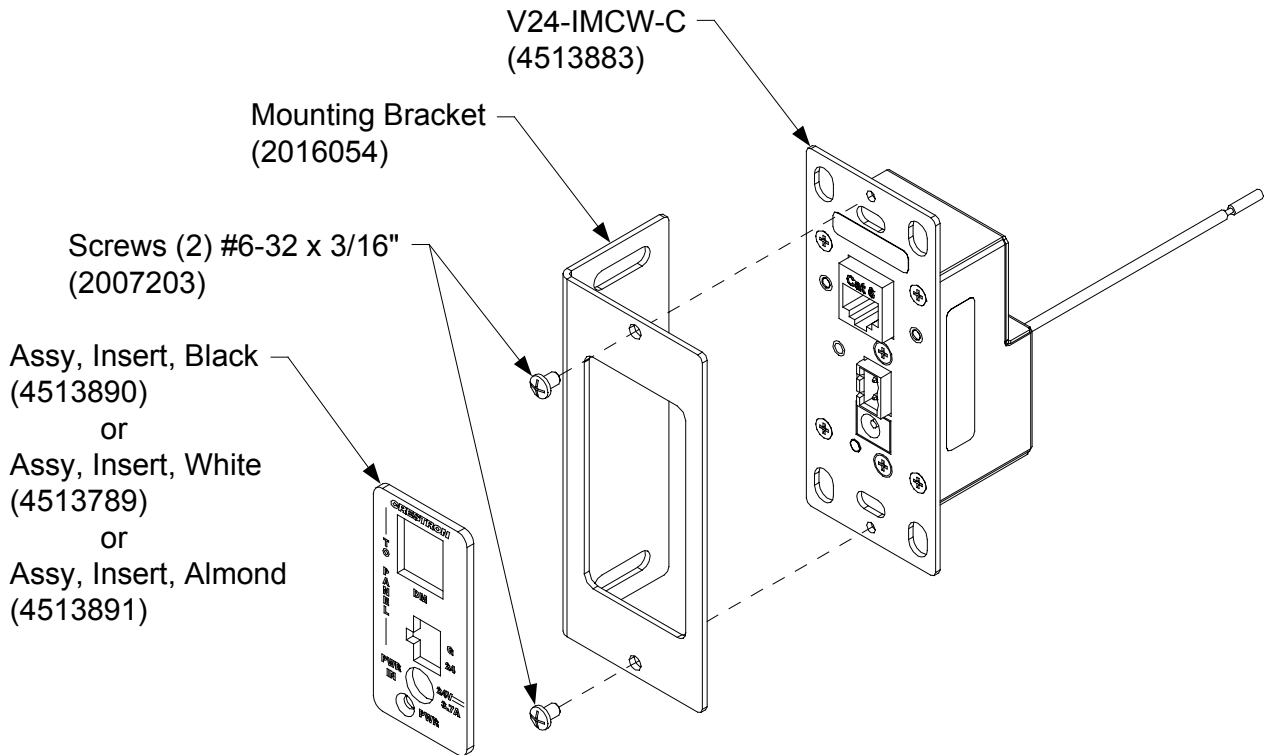
WARNING: To prevent bodily injury when mounting or servicing this unit in a rack, observe the following guidelines:

- When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.
 - If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.
-

Installing on a Level Surface

To prepare the V24-IMCW-C to be mounted onto a level surface, ensure the unit is attached to the surface mount bracket, as shown in the following illustration.

V24-IMCW-C Bracket Mount (Exploded View)

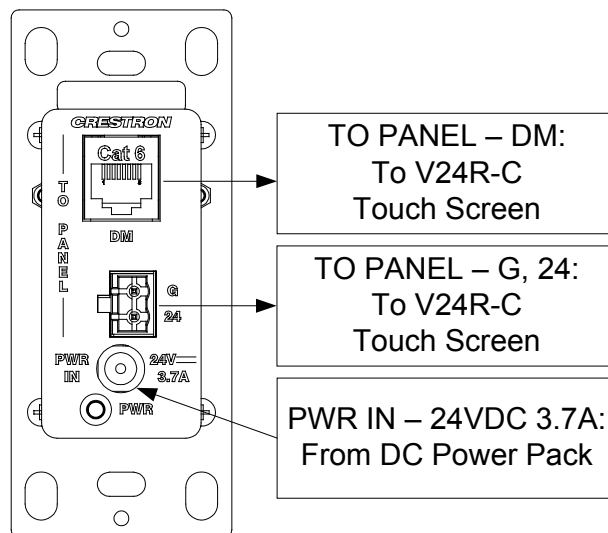


Hardware Hookup

Make the necessary connections as called out in the illustrations below. Refer to “Network Wiring” on page 7 before attaching the 4-position terminal block connector. Apply power after all connections have been made.

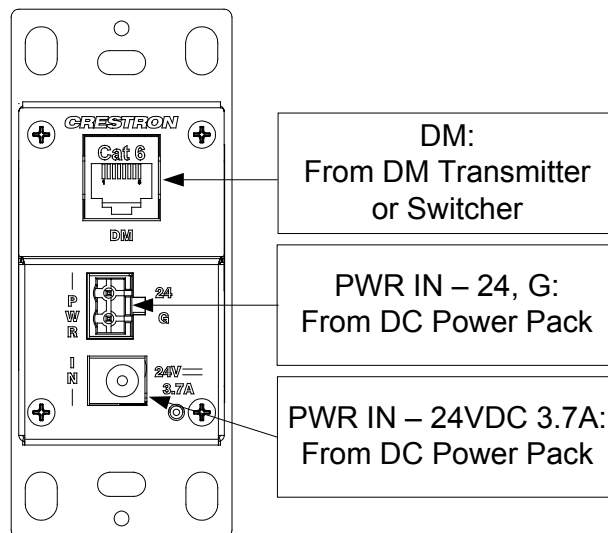
When making connections to the V24-IMCW-C, use Crestron power supplies for Crestron equipment.

Hardware Connections for the V24-IMCW-C (Front)



* A ferrule dust cap (2031467) is provided to cover the front panel DC power jack when not in use.

Hardware Connections for the V24-IMCW-C (Rear)



CAUTION: The V24-IMCW-C can be powered via the **24 G** 2-pin connection on the rear of the unit or the **24VDC 3.7A** jacks on either the front or the rear of the unit. To avoid possible damage to the unit, use only one of these connectors.

NOTE: Ensure the unit is properly grounded by connecting the chassis ground lug to an earth ground (building steel).

Problem Solving

Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

V24-IMCW-C Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Device does not function.	Device is not receiving sufficient power.	Use a Crestron approved power source and verify connections.
PWR LED does not illuminate.	Device is not receiving sufficient power.	Use a Crestron approved power source and verify connections.
Loss of functionality due to electrostatic discharge.	Improper grounding.	Check that all ground connections have been made properly.

Reference Documents

The latest version of all documents mentioned within the guide can be obtained from the Crestron Web site (<http://www.crestron.com/dmresources>).

List of Related Reference Documents

DOCUMENT TITLE
DigitalMedia Design Guide

Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or refer to the listing of Crestron worldwide offices on the Crestron Web site (www.crestron.com/offices) for assistance within a particular geographic region.

To post a question about Crestron products, log onto the Online Help section of the Crestron Web site (www.crestron.com/onlinehelp). First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features and extends the capabilities of the V24-IMCW-C, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron Web site periodically for manual update availability and its relevance. Updates are identified as an “Addendum” in the Download column.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealer. Only authorized Crestron dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a Crestron Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to Crestron, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. Crestron reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by Crestron, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

Crestron Limited Warranty

Crestron Electronics, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from Crestron, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from Crestron or an authorized Crestron dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any.

Crestron shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall Crestron be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. Crestron is not liable for any claim made by a third party or made by the purchaser for a third party.

Crestron shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, Crestron makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.



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Specifications subject to
change without notice.