

Crestron **V-IMCW**  
V-Panel Interface Module

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Installation Guide



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



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### Industry Compliance

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



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# V-Panel Interface Module: V-IMCW

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## Introduction

The V-IMCW is the interface module that is included with Crestron's tilt and VESA mount model V-Panel Touchpanel Displays (V12-TILT, V15-TILT, V12, and V15). It offers a simple, passive pluggable connection for these or any model V-Panel that features a DM CAT type connection.

The V-IMCW can be mounted in a standard 1-gang electrical box, to a flat surface, or to a 19-inch rack-rail. The V-IMCW is normally mounted near the touchpanel, which connects to the front of the module using a V-Cable Triamese Cable (V-CBL-T). DigitalMedia™ Cable (DM-CBL) is commonly run from the rear of the module to the digital graphics engine (DGE) at the central equipment location up to 200 feet (61 meters) away.

## Features and Functions

- Mounts in a single-gang wall box
- Includes inserts to match black or white faceplates
- Surface mount and rack rail installation options included

## Specifications

Specifications for the V-IMCW are listed in the following table.

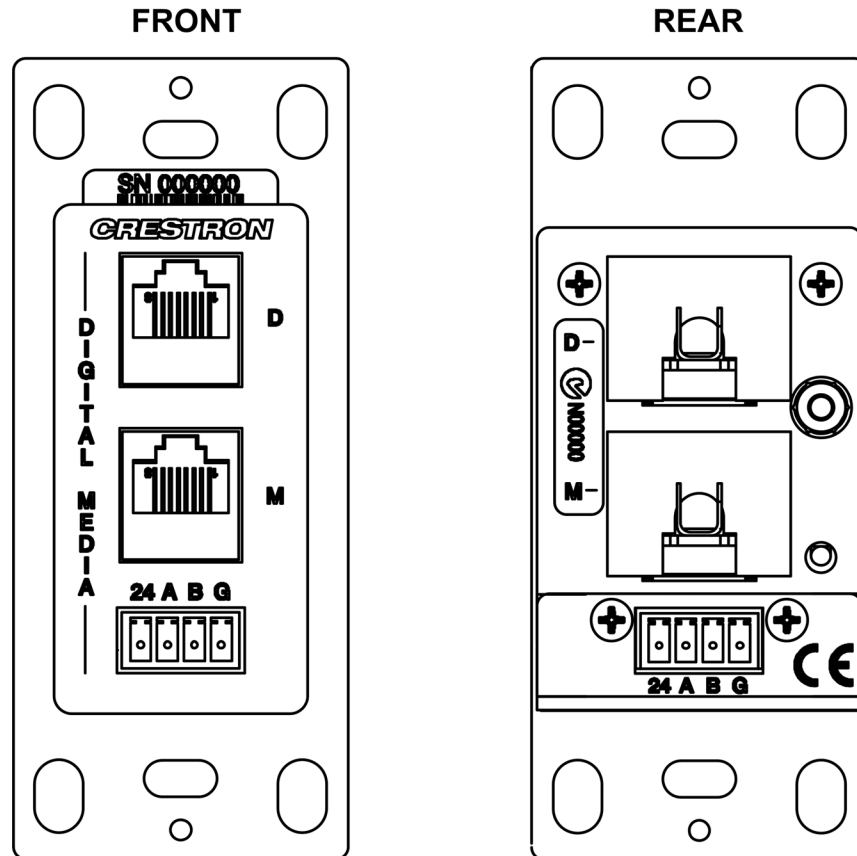
### *V-IMCW Specifications*

<b>SPECIFICATION</b>	<b>DETAILS</b>
Environmental Temperature Humidity	32° to 112° F (0° to 45° C) 10% to 90% RH (non-condensing)
Enclosure Construction	Metal, black matte powder coat finish, includes (2) metal decorator style inserts to allow choice of black or white front panel
Flush Wall Mount	1-gang mountable in a standard electrical box, 2 inch (51 mm) deep minimum; requires third-party decorative faceplate (not included)
Surface Mount Rack Mount	Surface mount bracket included Mountable to a single 19-inch EIA rack rail
Dimensions Height Width Depth	4.12 in (105 mm) 1.72 in (44 mm) 1.93 in (49 mm) with surface mount bracket 1.55 in (40 mm) 1.49 in (38 mm) with surface mount bracket
Weight	4 oz (114 grams)

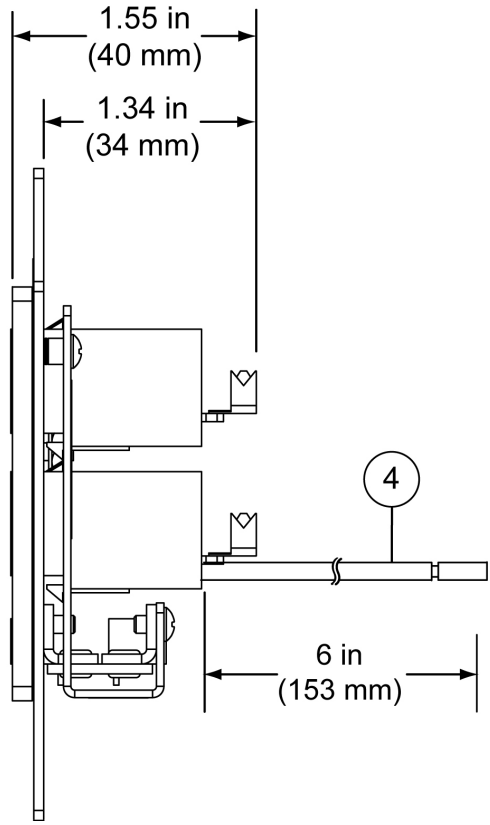
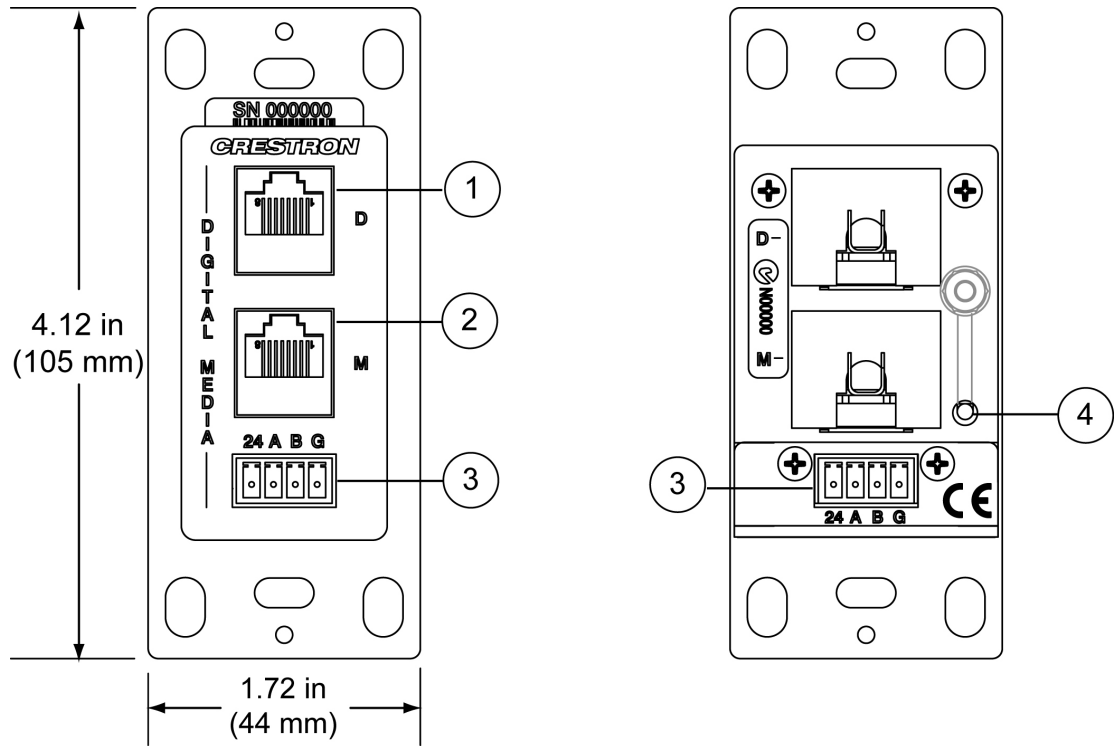
## Physical Description

This section provides information on the connections, controls and indicators available on your V-IMCW.

### *V-IMCW Physical View*

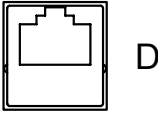
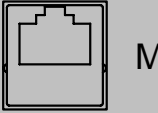
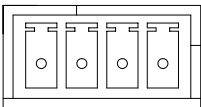


*V-IMCW Overall Dimensions*





*Connectors, Controls & Indicators*

#	CONNECTORS <sup>1</sup> , CONTROLS & INDICATORS	DESCRIPTION																		
1		<p>(1) 8-wire RJ-45 female; Connection for HDMI Video Data</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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8	Brown																			
3	 <p>24 A B G</p>	<p>DMNET Control and Power. Pass-through interface port to power and control V-Panel.</p>																		
4	<p>GROUNDING WIRE<sup>2</sup></p>	<p>(1) 6" Flying lead, grounding wire.</p>																		

1. Interface connectors are provided with the unit.
2. A grounding lead is provided for connection to earth ground (building steel). This ground connection is recommended to provide a common ground reference for signals provided to the V-Panel, and to reduce the incidence of possible damage to the unit from static discharge.

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## Setup

### Network Wiring

When wiring the V-IMCW, consider the following:

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**NOTE:** DMNet wiring and Cresnet<sup>®</sup> wiring are not compatible.

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- Use Crestron Certified Wire.
- Use Crestron power supplies for Crestron equipment.

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**CAUTION:** Provide sufficient power to the system. Insufficient power can lead to unpredictable results or damage to the equipment. Please use the DMNet Power Calculator to help calculate how much power is needed for the system ([www.crestron.com/calculators](http://www.crestron.com/calculators)).

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Refer also to “Check Network Wiring” which starts on page 14.

### Supplied Hardware

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

#### *Supplied Hardware for the V-IMCW*

DESCRIPTION	PART NUMBER	QTY
Assy, Insert, w/Tape, Black	4508461	1
Assy, Insert, w/Tape, White	4508465	1
Metal, Bracket, 16 GA CRS	2016054	1
Conn, RJ-45, 8 pos 8-pin, shielded, Punch Down, Straight, Panel Mount	2023984	2
Conn, Plug, 4-pin, SKT, Single Row	2003576	1
Screw, #06-32 X 3/4" Oval, Slot	2009684	2

### Installation

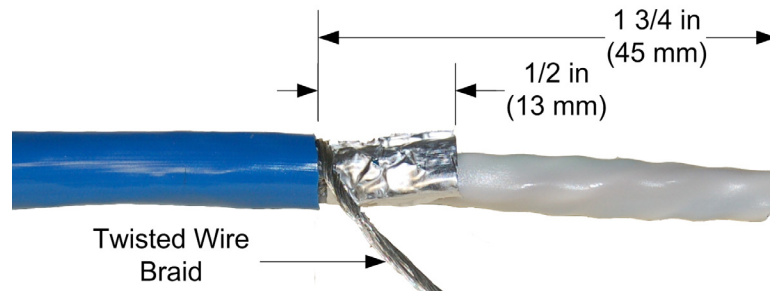
The V-IMCW can be installed in a 1-gang box, rack mounted, or mounted to any flat surface using the provided surface mount bracket. To install the unit in any configuration requires that the DigitalMedia<sup>™</sup> cable

(DM-CBL-P) first be terminated to the three supplied connectors. The only special tool required is a 110 punch down tool.

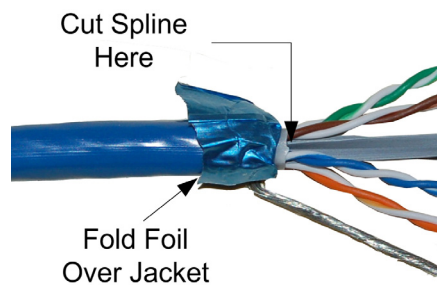
**Terminating the Cable**

Terminate the DigitalMedia cable to the supplied interface connectors, and install the connectors on the V-IMCW as follows.

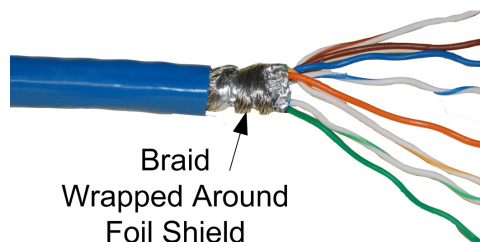
1. Strip 6 inches (153 mm) of the DigitalMedia Cable to expose the three inner cables.
2. For the 'D' or 'M' cable, strip the outer jacket 1 3/4 inch (45 mm) from end. Gather and twist the braid. Refer to the illustration below.



3. Trim the foil shield to 1/2 inch (13 mm) and fold it back against the outer jacket of the cable. Refer to the illustration below.

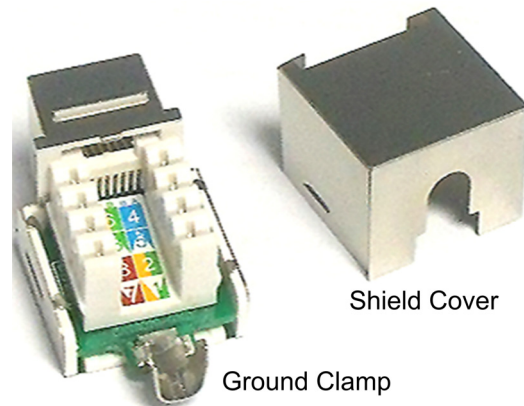


4. Remove the white inner jacket and separate the twisted pairs to expose the spline. Cut the spline so that it is near flush with the outer jacket. Return the twisted pairs to their original position.
5. Fold the foil shield back to its original position over the wire pairs. Neatly wrap the twisted braid around the foil shield. Only the silver side of the foil shield is conductive. Refer to the illustration below.



**NOTE:** The braid should wind neatly around the foil shield. Loose braid may cause shorts or difficulty completing assembly of the connector.

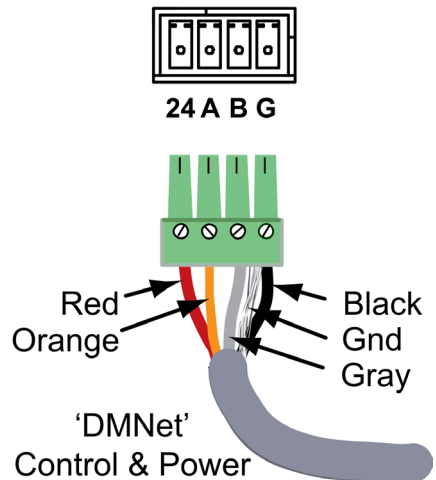
**NOTE:** Do not allow the twisted pairs to untwist for more than 1/2 inch (13 mm).



6. Remove the shield cover from a supplied RJ-45 connector. Place the CAT5/6 'D' or 'M' cable so the area with the braid wrapped around the shield foil is positioned within the connector's ground clamp.
7. Starting with the terminals closest to the ground clamp, insert the twisted pairs into the terminals and use a 110 tool to push them down. Refer to the following table for pin/color assignments.

PIN	COLOR	PIN	COLOR
7	White/Brown	1	White/Orange
8	Brown	2	Orange
3	White/Green	5	White/Blue
6	Green	4	Blue

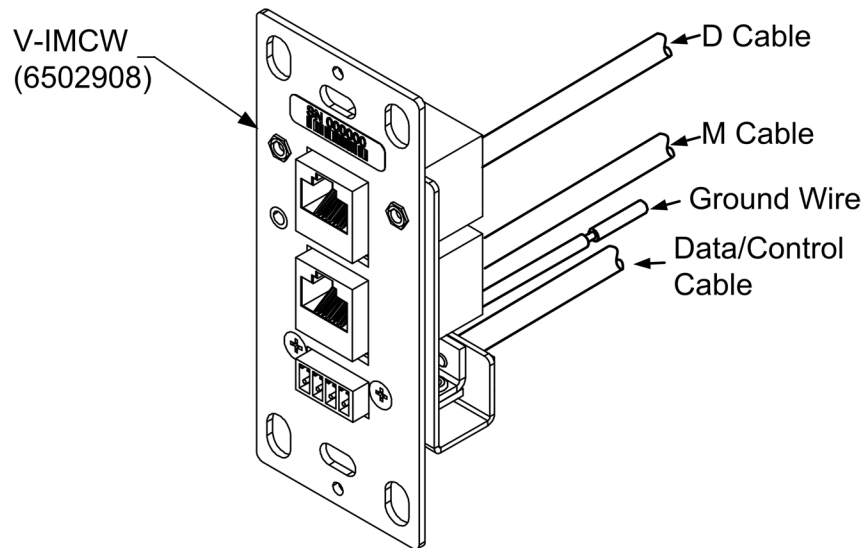
8. When all the wires have been installed, trim the ends flush with the sides of the terminals, and crimp the ground clamp over the cable shield. Replace the connector shield cover.
9. Repeat steps 6 – 8 for the remaining CAT5/6 cable.
10. Terminate the DMNet cable to the supplied 4-pin connector as shown in the illustration on the following page.



**Attaching the Cable**

To accomplish any of the possible installations, the DigitalMedia cable with connectors attached, must be assembled to the V-IMCW main assembly, as shown in the following illustration.

**V-IMCW Main Assembly – Cables Attached**

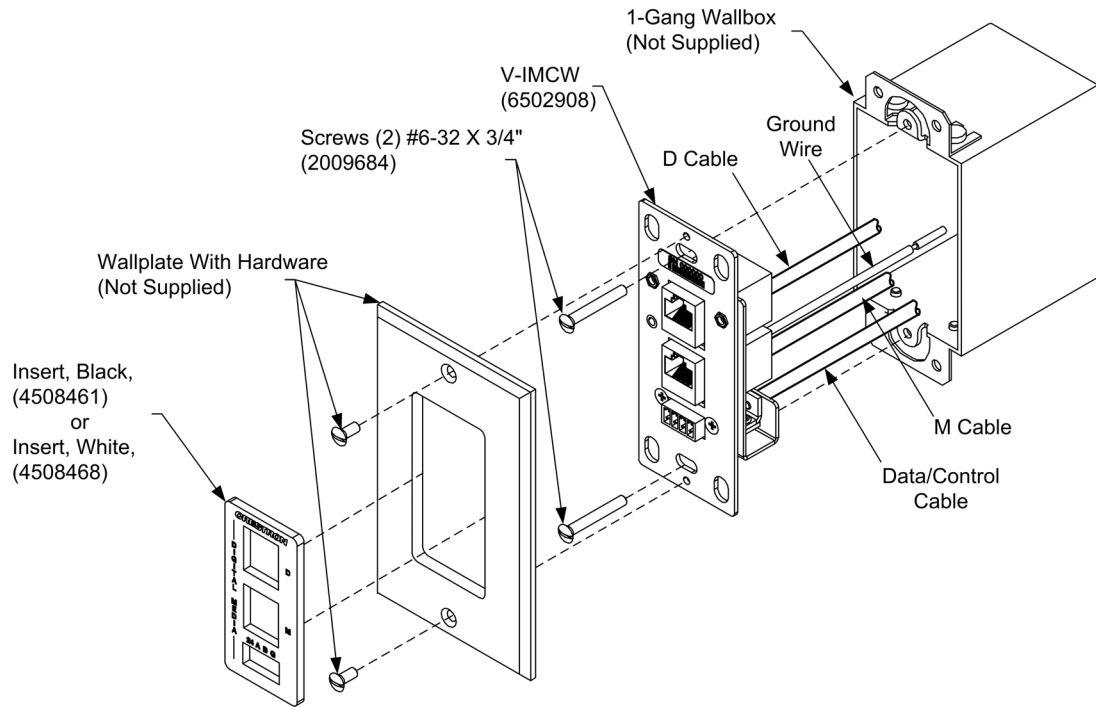


1. The D and M cable connectors snap into position on the main assembly, as shown.
2. The DMNet Data/Control cable connector simply plugs into the **24ABG** interface connector on the rear of the main assembly.

**Installing in 1-Gang Box**

To install the V-IMCW in a 1-gang box, refer to the illustration on the following page.

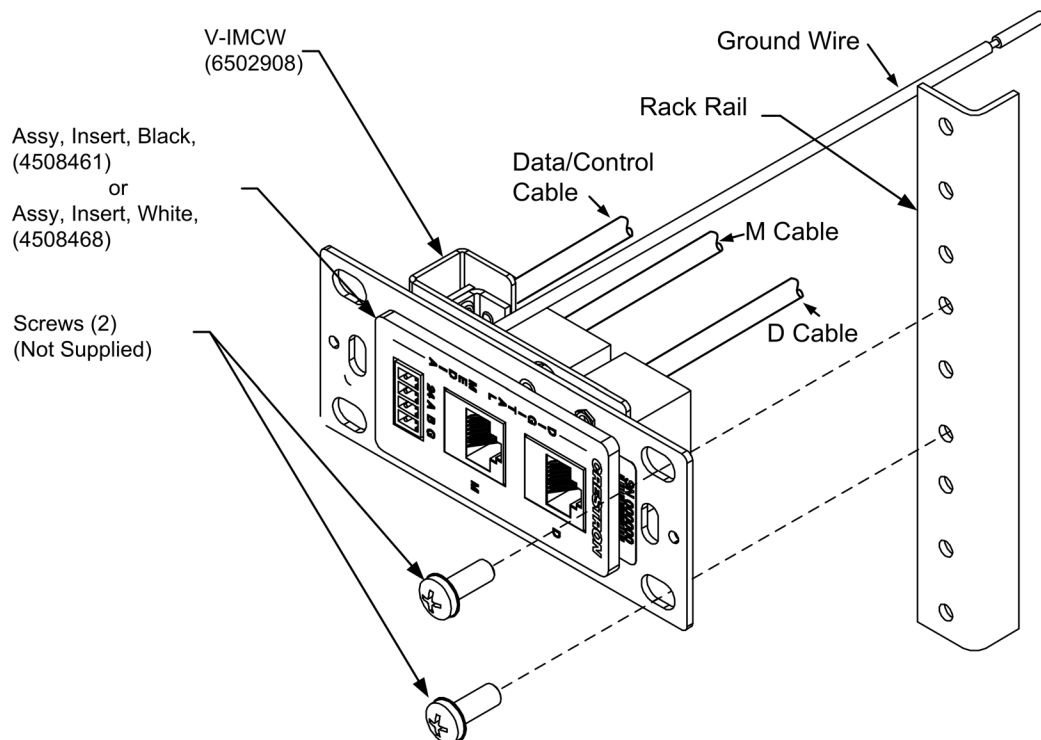
***V-IMCW 1-Gang Box – Exploded View***



**Rack Mounting**

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

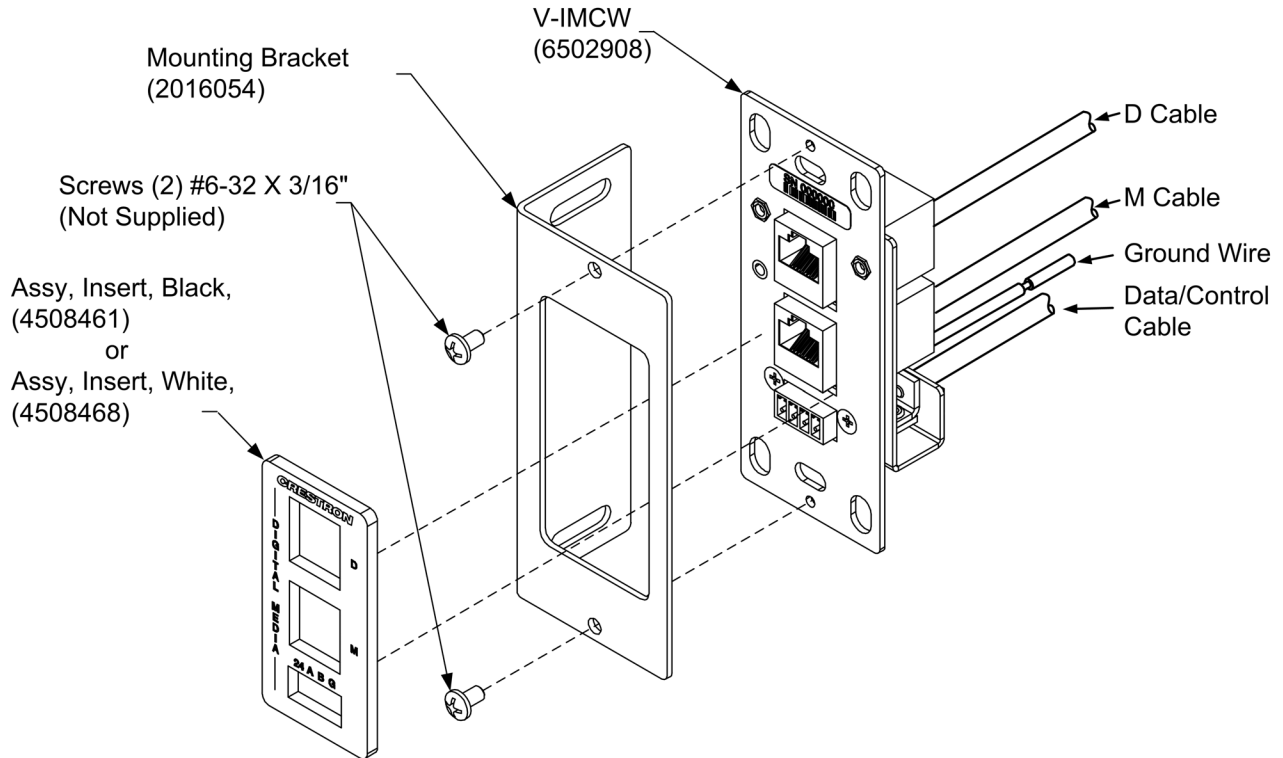
***V-IMCW Rack Mount – Exploded View***



*Installing on  
a Level  
Surface*

To mount the V-IMCW to a level surface, attach the unit to the surface mount bracket, as shown in the following illustration.

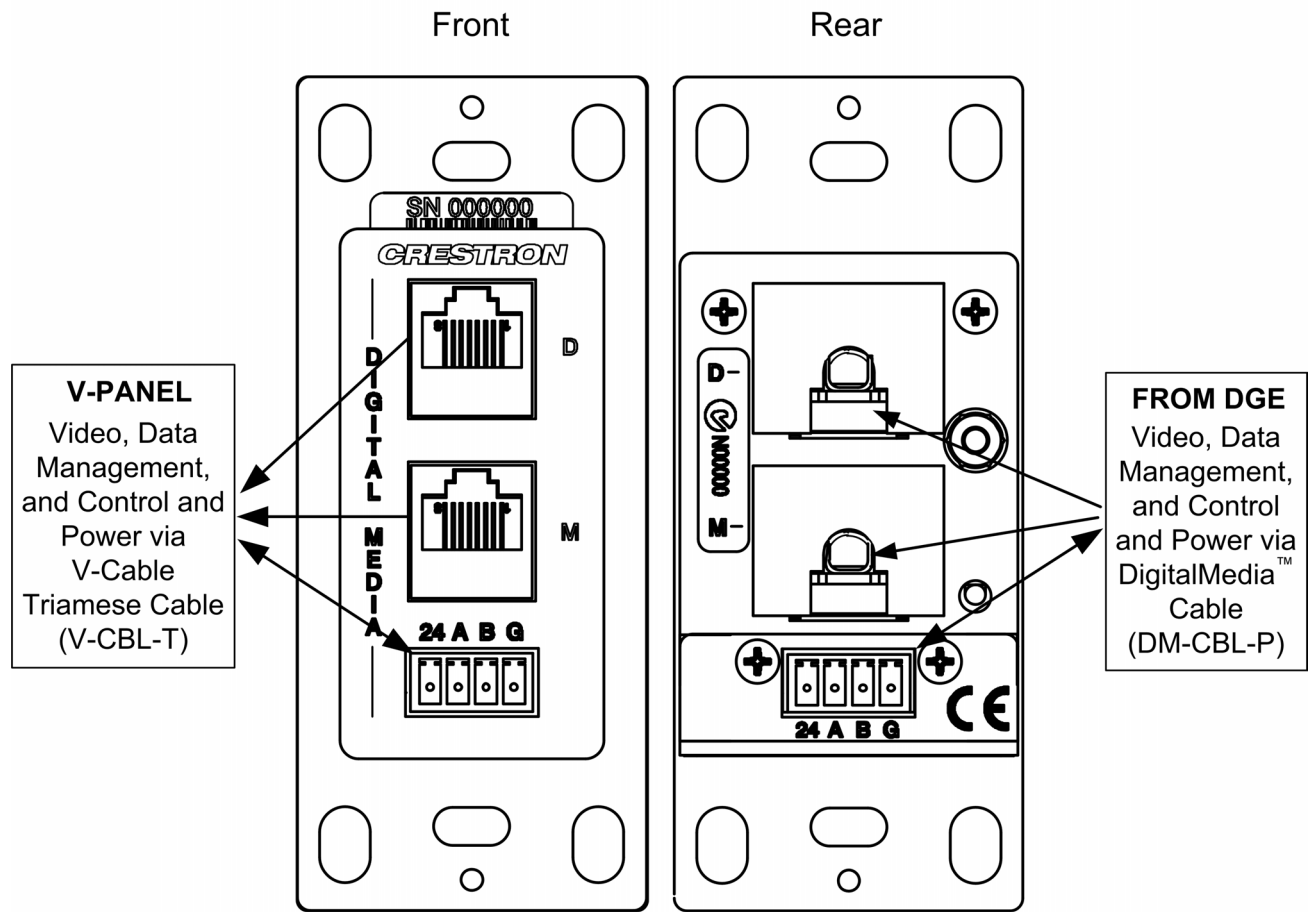
***V-IMCW Bracket Mount – Exploded View***



**Hardware Hookup**

Make the necessary connections as called out in the illustration on the next page. Refer to “Network Wiring” on page 6 before attaching the 4-position terminal block connector. Apply power after all connections have been made.

*Hardware Connections for the V-IMCW*



**NOTE:** Ensure the unit is properly grounded by connecting the flying ground wire 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.

#### *V-IMCW Troubleshooting*

<b>TROUBLE</b>	<b>POSSIBLE CAUSE(S)</b>	<b>CORRECTIVE ACTION</b>
V-Panel does not function.	Device is not receiving sufficient power.	Use a Crestron approved power source and verify connections.
		Use the Crestron Power Calculator to help calculate how much power is needed for the system.
	One or more cables are not properly connected	Verify connections.
Loss of functionality due to electrostatic discharge.	Improper grounding.	Check that all ground connections have been properly made.

## Check Network Wiring

*Use the Right Wire*

In order to ensure optimum performance over the full range of your installation topology, Crestron Certified Wire and only Crestron Certified Wire may be used. Failure to do so may incur additional charges if support is required to identify performance deficiencies because of using improper wire.

*Calculate Power*

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**CAUTION:** Use only Crestron power supplies for Crestron equipment. Failure to do so could cause equipment damage or void the Crestron warranty.

**CAUTION:** Provide sufficient power to the system. Insufficient power can lead to unpredictable results or damage to the equipment. Please use the DMNet Power Calculator to help calculate how much power is needed for the system ([www.crestron.com/calculators](http://www.crestron.com/calculators)).

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## Further Inquiries

If you cannot locate specific information or have questions after reviewing this guide, please take advantage of Crestron's award winning customer service team by calling Crestron at 1-888-CRESTRON [1-888-273-7876].

You can also log onto the online help section of the Crestron website ([www.crestron.com/onlinehelp](http://www.crestron.com/onlinehelp)) to ask questions about Crestron products. First-time users will need to 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 V-IMCW, 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 website periodically for manual update availability and its relevance. Updates are identified as an “Addendum” in the Download column.

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## 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; touchscreen 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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(2024033)**

**12.09**

Specifications subject to  
change without notice.