

Introduction

Features and Functions

The CLW-DIM1RF (-DIM1RF) is a stand-alone wall box dimmer that can also act as a wireless Cresnet® device that reports to a Crestron® control processor via a wireless gateway such as the Crestron C2N-MNETGW. The CLW -DIM1RF has two preset lighting levels that can be adjusted (refer to note below). The CLW-DIM1RF features an internal antenna for communication with Crestron wireless switches using the 2.4 GHz ISM frequency range.

NOTE: The two preset levels are noted as Preset 1-High and Preset 1- Low. “Preset 1-High” is usually used for turning lights on to full brightness while preset “Preset 1- Low” is usually used for turning the lights off. Although “Preset 1-High” and “Preset 1-Low” are usually used for “On” and “Off” respectively, the light level for each preset can be customized by the user. Refer to “Operating Button and Switch” on page 4 for more information on customizing light levels.

The CLW-DIM1RF features a three-position mode selection switch. Refer to “Operating Button and Switch” on page 5 for more information. In the absence of Cresnet communications, the dimmer can still be used to control lighting.

The CLW-DIMS1RF (-DIMS1RF) is similar to the -DIM1RF with the added capability of working with a slave unit (CLW-SLVD1RF) in a multi-switch / single circuit application.

The CLW-SLVD1RF (-SLVD1RF) is a slave unit that when used in conjunction with the -DIMS1RF acts as an additional dimmer control point in a multi-dimmer / single circuit application. It does not connect to a Cresnet system and cannot be used without a -DIMS1RF. The -SLVD1RF does not have a mode selection switch and is not programmable. It emulates the operation of the -DIMS1RF to which it is connected.

The -DIM1RF, -DIMS1RF, and -SLVD1RF are available in white, almond, and black. White units are designated by part numbers ending in “W”. Almond units are designated by part numbers ending in “A”. Black units are designated by part numbers ending in “B”. Each dimmer can be covered with a decorative faceplate (not supplied).

Specifications

Following are specifications for the -DIM1RF, -DIMS1RF, and -SLVD1RF.

CLW-DIM1RF, CLW-DIMS1RF, & CLS-SLVD1RF Specifications

SPECIFICATION	DETAILS
Power Requirements	Line Power, 120 VAC, 60 Hz
Operating Frequency	2.4 GHz ISM
Default RF ID	-DIM1RF: 00 -DIMS1RF: 00
Switch Type	Dimmer
Load Type	Incandescent, Tungsten-Halogen, Magnetic Low Voltage
2-Series Control System Update File ^{1,2}	Version 3.117 or later
Load Ratings ³	
Incandescent/Tungsten Halogen	-DIM1RF: 1000W -DIMS1RF: 1000W -SLVD1RF: N/A
Magnetic Low Voltage ⁴	-DIM1RF: 1000VA/750W -DIMS1RF: 1000VA/750W -SLVD1RF: N/A
Operating Temperature and Humidity	32°F to 104°F (0°C to 40°C) 10 to 90% Relative Humidity (Non-Condensing)
Dimensions and Weight	-DIM1RF and -DIMS1RF: Height: 4.13 in (10.48 cm) Width: 2.38 in (6.03 cm) Depth: 1.88 in (4.77 cm) Weight: 4.9 oz (0.67 kg) -SLVD1RF: Height: 4.13 in (10.48 cm) Width: 1.75 in (4.45 cm) Depth: 1.88 in (4.77 cm) Weight: 3.6 oz (0.50 kg)

1. The latest software versions can be obtained from the Crestron website. Refer to the NOTE following these footnotes.
2. Crestron 2-Series control systems include the AV2 and PRO2. Consult the latest Crestron Product Catalog for a complete list of 2-Series control systems.
3. Refer to Derating Charts for Multigang Installations on page 3.
4. VA ratings are for input power to the transformer. If you do not know the input power requirement of the transformer, use the bulb’s wattage rating to determine proper rating.

NOTE: Crestron software and any files on the website are for Authorized Crestron dealers and Crestron Authorized Independent Programmers (CAIP) only. New users may be required to register to obtain access to certain areas of the site (including the FTP site).

Physical Description

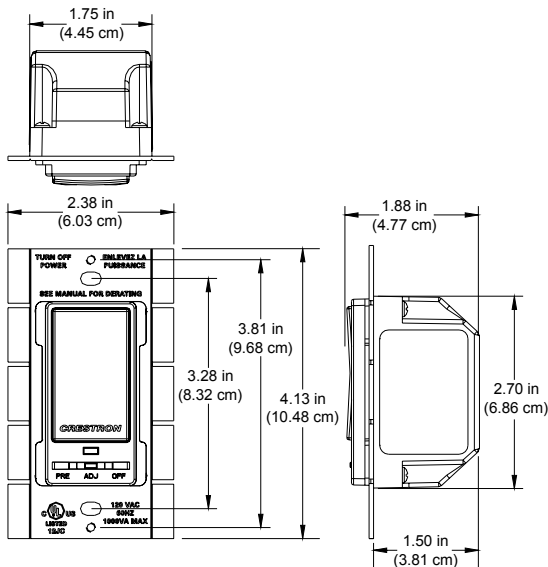
The -DIM1RF and -DIMS1RF contain one large pushbutton, a light emitting diode (LED) with software adjustable brightness*, and a three-position slider-switch, shown after this paragraph. The -SLVD1RF is similar to the -DIM1RF and -DIMS1RF but does not have the slider-switch. Line voltage connections are made at the rear of the dimmer.

* LED brightness can only be adjusted through Crestron programming software.

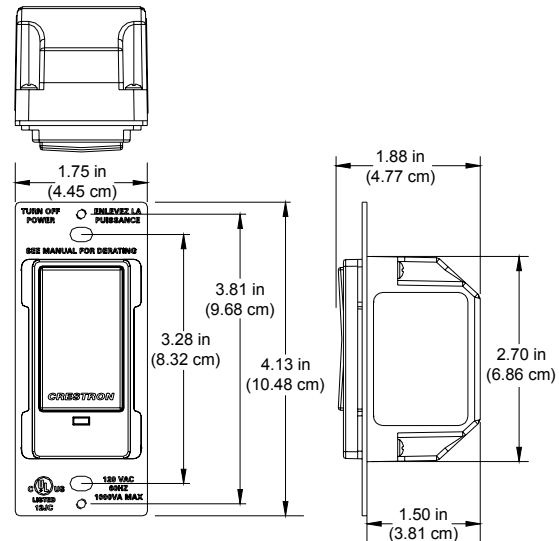
CLW-DIM1RF/-DIMS1RF (L) and CLW-SLVD1RF (R)
shown in white



Physical view of CLW-DIM1RF/-DIMS1RF (clockwise from top; Top, Side, and Front)



Physical view of CLW-SLVD1RF (clockwise from top; Top, Side, and Front)



The -DIM1RF, -DIMS1RF, and -SLVD1RF mount in a standard wallbox and are covered using a decorative faceplate (not included).

Industry Compliance

This unit has been manufactured to comply with UL's Standards for Safety in Canada and the United States. Formal approval is pending.

Compliance Statement (Part 15.19)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two 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.

Warning (Part 15.21)

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

RF Exposure (OET Bulletin 65)

To comply with FCC's RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement

The term "IC" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

IC: 5683A-CWD1011

Important Notes

Read before installation.

- Codes: Install in accordance with all local and national electrical codes.
- **CAUTION:** TO REDUCE THE RISK OF OVERHEATING AND POSSIBLE DAMAGE TO OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A RECEPTACLE OR A MOTOR OPERATED APPLIANCE (i.e. BATH FAN).
- Wiring: Use copper wire only. For supply connections, use wires rated for at least 75°C.
- Lamp Type: The -DIM1RF, -DIMS1RF, and -SLVD1RF are designed for use with permanently installed incandescent, magnetic low voltage, or tungsten-halogen only.
- Temperature: The -DIM1RF, -DIMS1RF, and -SLVD1RF are designed to be used where temperatures are between 32° to 104°F (0° to 40°C).
- Wallboxes: Devices mount in standard wallboxes. For easy installation, Crestron recommends using 3 1/2" deep wallboxes. Several devices can be installed in one wall box (multigang). This requires the removal of side sections (refer to diagram on page 3) and the derating of the dimming device. For a smooth appearance, one-piece multigang faceplates (not supplied) can be installed.
- Other Switch Devices: Mechanical 3- or 4-way switches will not work with the -DIM1RF, -DIMS1RF, or -SLVD1RF.
- Spacing: If mounting one device above another, leave at least 4 1/2" vertical space between them.
- Low Voltage Applications: Use with core and coil (magnetic) low voltage transformers only. Do not use any solid-state electronic low voltage transformers.

Operation of a low voltage circuit with all lamps inoperative or removed may result in current flow in excess of normal levels. To avoid transformer overheating and premature transformer failure, Crestron recommends the following:

- Do not operate low voltage circuits without operative lamps in place.
- Replace burned-out lamps as quickly as possible.

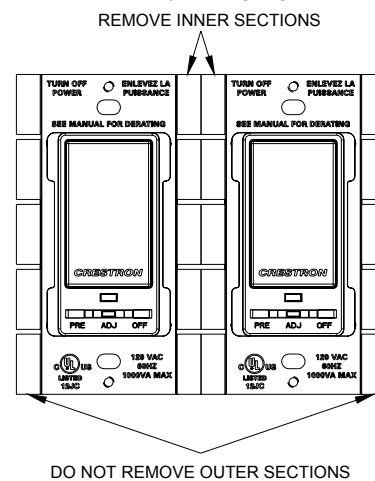
- Use transformers that incorporate thermal protection or fuse transformer primary windings to prevent transformer failure due to overcurrent.

Multigang Installations

In multigang installations, several controls are grouped horizontally in one wallbox. For a smooth appearance, one-piece multigang faceplates (not supplied) can be installed.

1. When combining controls in a wallbox, remove inner side sections prior to wiring (refer to the following figure).

Inner Sections of Multiganged Switches



The load capacity must also be derated. The following charts provide derating information for various applications.

Derating Information for Incandescent and Tungsten Halogen Applications

Part Number	No Side Removed	One Side Removed	Two Sides Removed
-DIM1RF	1000W	600W	400W
-DIMS1RF	1000W	600W	400W
-SLVD1RF	No Derating Necessary		

*Derating Information for Magnetic Low Voltage Applications**

Part Number	No Side Removed	One Side Removed	Two Sides Removed
-DIM1RF	1000VA/750W	600VA/450W	400VA/300W
-DIMS1RF	1000VA/750W	600VA/450W	400VA/300W
-SLVD1RF	No Derating Necessary		

* VA ratings are for input power to the transformer. If you do not know the input power requirement of the transformer, use the bulb's wattage rating to determine proper rating.

2. To remove a side section, bend the side section back and forth with a pair of pliers until the section breaks off from the mounting plate. Use a file or sandpaper to remove any excess metal.

Installation

NOTE: The -DIMS1RF must be installed in the same wallbox that contains the connections to the load.

NOTE: The -DIM1RF, -DIMS1RF, and -SLVD1RF require a neutral wire for operation. If no neutral is present, contact a licensed electrician for installation or contact Crestron Customer Service for alternative wiring options.

WARNING: Turn off power at the circuit breaker. Installing with power on can result in serious personal injury and damage to the device.

NOTE: New installations should be checked for short circuits prior to installing the -DIM1RF, -DIMS1RF, or -SLVD1RF. With power off, close the circuit and restore power. If the lights do not work or a breaker trips, check and correct the wiring or fixture (if necessary). Install the -DIM1RF, -DIMS1RF, or -SLVD1RF only when the short is no longer present. **The warranty is void if the -DIM1RF, -DIMS1RF, or -SLVD1RF is installed and operated with a shorted load.**

1. Turn power off at the circuit breaker.
2. If installing multiple dimmers (-DIM1RF or -DIMS1RF), note the serial number on each device and make sure they are being installed in the proper location.
3. Wire the device for the appropriate application. Choose either “CLW-DIM1RF / CLW-DIMS1RF Wiring” or “CLW-DIMS1RF with CLW-SLVD1RF Wiring”, shown on this page and the following page.

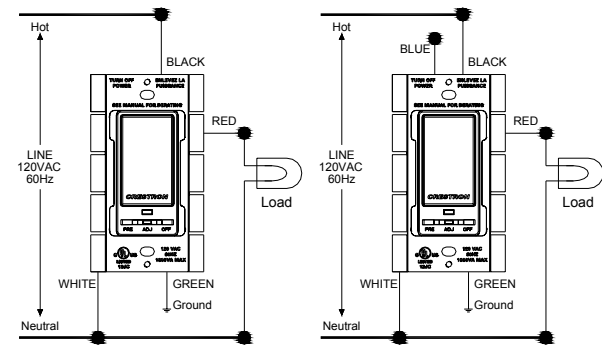
NOTE: Alternative wiring methods can be obtained from the Dealer/Tech Resources | Design Center section of the Crestron website (http://www.crestron.com/dealer-tech_resources/design_center/hot_design_tips_and_diagrams/tech_sales_tips/).

CLW-DIM1RF / CLW-DIMS1RF Wiring

NOTE: The -DIM1RF and -DIMS1RF require a neutral wire for operation. If no neutral is present, contact a licensed electrician for installation or contact Crestron customer service for alternative wiring options.

The following wiring diagram illustrates installation of the -DIM1RF or -DIMS1RF.

Wiring Diagram for CLW-DIM1RF (L) / CLW-DIMS1RF (R)



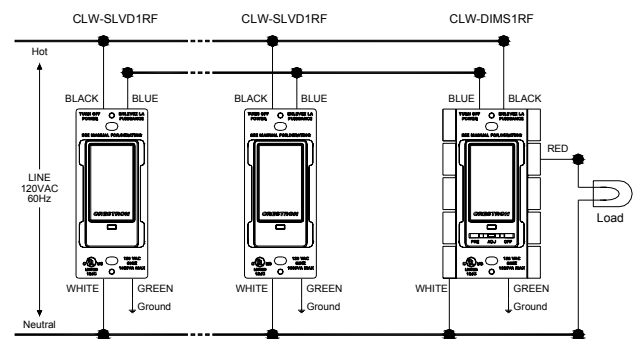
NOTE: The RED (Load) and BLACK (Hot) wires are #14 AWG. The BLUE (Slave) and WHITE (Neutral) wires are #18 AWG. The GREEN (Ground) wire is #16 AWG.

CLW-DIMS1RF with CLW-SLVD1RF Wiring

NOTE: The -DIMS1RF must be installed in the same wallbox that contains the connections to the load.

The following wiring diagram illustrates installation of the -DIMS1RF with multiple -SLVD1RFs.

Wiring Diagram of CLW-DIMS1RF with multiple CLW-SLVD1RFs



NOTE: Do not connect the BLUE (Slave) wire to the Black (Hot) or RED (Load) wires.

NOTE: The RED (Load) and BLACK (Hot) wires are #14 AWG. The BLUE (Slave) and WHITE (Neutral) wires are #18 AWG. The GREEN (Ground) wire is #16 AWG.

NOTE: If a -DIMS1RF is installed without a -SLVD1RF, the BLUE lead (Slave) should be capped.

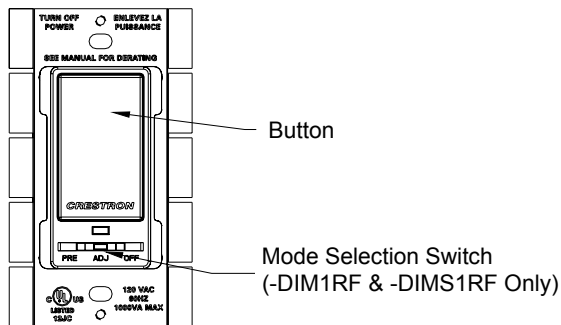
4. Push all Class 1 power wires back into the wallbox and fasten the device to the wallbox with the provided screws.
5. Attach decorative faceplate.
6. Restore power.

Operating Button and Switch

The -DIM1RF, -DIMS1RF, and -SLVD1RF have one large pushbutton. The single button may be pushed at the top or bottom to perform certain functions. The -DIM1RF and -DIMS1RF also have a three-position mode selection switch. The function of the pushbutton is determined by the position of the mode selection switch. Refer to the following diagram.

NOTE: The -SLVD1RF does not have a mode selection switch. It will act in the same mode as the -DIMS1RF.

Buttons of CLW-DIM1RF, -DIMS1RF, and -SLVD1RF



OFF

When the mode selection switch is in the “OFF” position, the pushbutton will not have any function and the load is disconnected from the power source. This **must** be used when changing light bulbs to ensure that the load is fully disconnected from power.

ADJ

When the mode selection switch is in the “ADJ” position, tapping the top of the button set the light to the Preset 1-Hi level. Tapping the bottom of the button will set the light to the Preset 1-Lo level.

Pressing the button on the bottom will ramp the light level down until it reaches 0%, or until the button is released.

Pressing the button on the top will ramp the light level up until it reaches 100%, or until the button is released.

PRE

NOTE: Before storing a preset, the lighting must be adjusted to the desired level while in the ADJ mode.

When the switch is in the PRE position, it is in the preset mode and can be used to recall and/or store preset lighting levels. The pushbutton is used to recall and/or store the “Preset 1-High” and “Preset 1-Low” presets. Pressing and releasing the pushbutton will fade to the preset lighting level over a preset amount of time*. Tapping the pushbutton while the light is fading will cause the light level to “jump” directly to the preset without fading.

Pressing and holding the a button until the LED flashes will store the current lighting level.

* The preset fade time can only be adjusted through Crestron programming software.

To store preset values for “Preset 1-High” and “Preset 1-Low”; while in the PRE mode, recall the lighting level to be changed. Switch to the ADJ mode and adjust the lighting to the desired level. Move the mode selection switch to PRE. Press and hold the pushbutton until the LED flashes to store the new preset value.

NOTE: If a new preset value for “Preset 1-High” is lower than the stored value for “Preset 1-Low”, the previously stored value for “Preset 1-Low” becomes “Preset 1-High”. Similarly, if a new preset value for “Preset 1-low” is higher than the value stored for “Preset 1-High”, the previously stored value for “Preset 1-High” becomes “Preset 1-Low”.

NOTE: The default preset light values for each preset are:

- Preset 1-High: 100%
- Preset 1-Low: 0%

NOTE: The device may be warm to the touch during operation. This is normal.

Restoring Default Settings

To restore the dimmer’s default settings for lighting levels, preset fade time (two seconds), and ramp time (five seconds), move the mode selection switch to the PRE position. While holding the pushbutton, move the mode selection switch to the ADJ position and back to the PRE position. Release the pushbutton. The LED will flash to confirm that the default values have been restored.

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 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 supercedes all previous warranties.

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