

LED / CFL / MAGNETIC LOW VOLTAGE / INCANDESCENT SLIDE DIMMER

Single Pole or 3-Way

Cat. No. RSDM10-120-WVL – LED/CFL 450W (3.75A), MLV 1000VA, Incandescent 1000W
120VAC, 60Hz



HUBBELL
Control Solutions

INSTALLATION INSTRUCTIONS

WARNINGS AND CAUTIONS:

- **TO AVOID FIRE, SHOCK, OR DEATH: TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring or servicing fixture!
- **TO AVOID FIRE, SHOCK, OR DEATH:** use with compatible **dimnable** LED and CFL bulbs, magnetic low-voltage transformers, incandescent or 120V halogen fixtures only.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- To avoid overheating and possible damage to this device and other equipment, **DO NOT** install to control a receptacle, a motor or a transformer-operated appliance, or any other lighting sources than those specified.
- If you are unsure about any part of these instructions, consult an electrician.

WARNINGS AND CAUTIONS:

- Use this device with **copper or copper clad wire only**.
- Use only one (1) dimmer in a 3 or 4-way circuit. The switch(es) will turn the light on at the brightness level selected at the dimmer.
- When multiple bulbs are used with one dimmer **DO NOT** mix bulb types. All bulbs shall be either LED; CFL or incandescent. Using the same make/model of each bulb will enhance performance.
- When magnetic low voltage circuits are operated at a dim level, with all lamps inoperative, excess current may flow through the transformer. To avoid possible transformer failure due to overcurrent, use a transformer that incorporates thermal protection or a fuse at the primary windings.

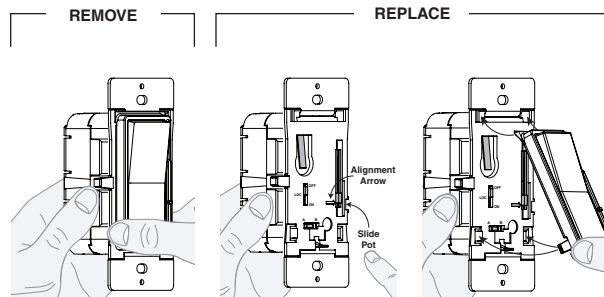
DI-401-DSM10-02C-X2

Tools needed to install your Dimmer

Slotted/Phillips Screwdriver Electrical Tape Ruler
Pliers Pencil Cutters

Changing the color of your Dimmer

If a color change kit is provided with your device, proceed with the following step if you need to change the color. Otherwise, proceed with the "Installing Dimmer by itself or with other devices" section.



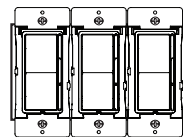
Press the side of the color kit at either bottom tab and pull forward to release.

Align slide pot with alignment arrow as shown. Move the slide bar of the color kit to the bottom.

Insert top tabs of the color kit into the slots on the top of the dimmer. Then press the bottom of the color kit in until it snaps into place.

Installing Dimmer by itself or with other devices

In incandescent and in MLV multi-dimmer installations, the reduction of the dimmer's capacity is required. Refer to the chart for maximum load per dimmer. No derating is required for use in dimmable CFL or dimmable LED multi-dimmer installations.



MAXIMUM LOAD PER DIMMER FOR MULTI-DEVICE				
Cat. No.	Load	Single	Two Devices	More than 2 Devices
RSDM10-120-WVL	INC	1000W	800W	700W
	MLV	1000VA	800VA	700VA
	LED/CFL	450W (3.75A)	450W (3.75A)	450W (3.75A)

MAXIMUM BULB WATTAGE

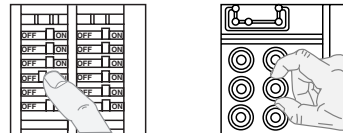
Low-voltage dimmers are rated in Volt-Amps (VA). The maximum bulb wattage is determined by the efficiency of the transformer in the low-voltage lighting system. Transformer efficiencies will vary from different manufacturers; consider 80% efficient as average. Use the chart to determine maximum bulb wattage for typical transformer efficiency ratings.

MAXIMUM BULB WATTAGE AT 80% EFFICIENCY			
Rating	Single	Two Gang	More than 2 Gang
1000VA	800W	640W	560W

Installing your Dimmer

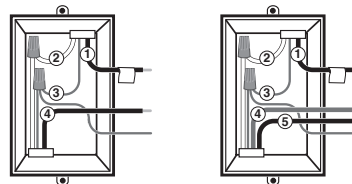
NOTE: Use check boxes when Steps are completed.

- Step 1** **WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring or servicing fixture!



- Step 2** **Identifying your wiring application (most common):**

NOTE: If the wiring in the wall box does not resemble any of these configurations, consult an electrician.



Single Pole

1. Line (Hot)
2. Neutral
3. Ground
4. Load

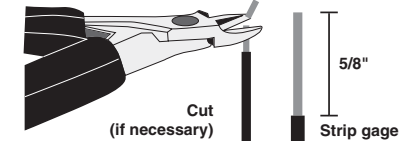
3-Way

1. Line or Load (See note below)
2. Neutral
3. Ground
4. First Traveler – note color
5. Second Traveler – note color

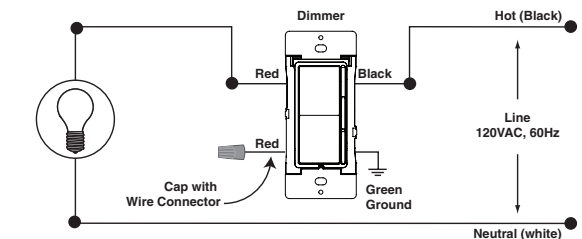
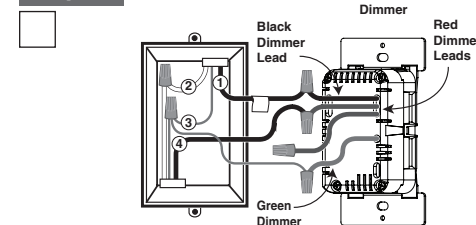
NOTE: For 3-Way applications, note that one of the screw terminals from the old switch being removed will usually be a different color (Black) or labeled Common. Tag that wire with electrical tape and identify as the common (Line or Load) in both the dimmer wall box and 3-way wall box.

Step 3 Preparing and connecting wires:

- Make sure that the ends of the wires from the wall box are straight (**cut if necessary**).
- Remove 5/8" (1.6 cm) of insulation from each wire in the wall box.
- **For Single-Pole Application, go to Step 4a.**
- **For 3-Way Application, go to Step 4b.**



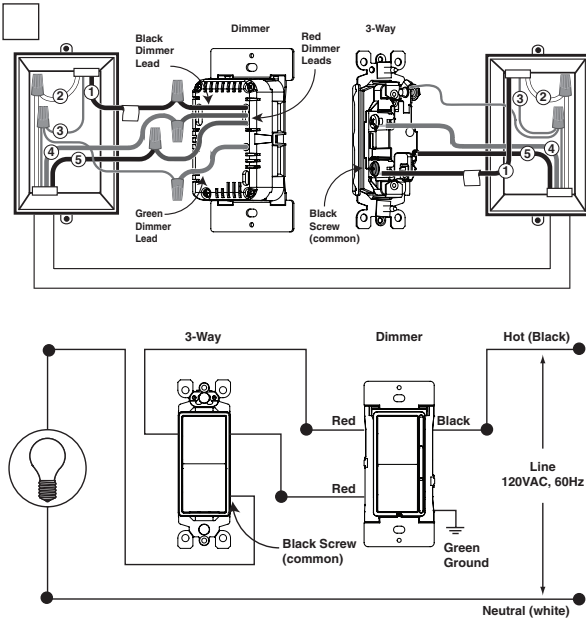
Step 4a Single-Pole Wiring Application:



Connect wires per WIRING DIAGRAM as follows:

- Green or bare copper wall box wire to **GREEN** dimmer lead.
 - Line Hot wall box wire to **BLACK** dimmer lead.
 - Load wall box wire to **RED** dimmer lead.
 - Remaining **RED** Dimmer lead should have a label affixed. **DO NOT REMOVE** this label in a single pole application.
 - **NOTE:** If the insulating label is not affixed to the second **RED** lead use electrical tape or a wire connector to cover.
- Proceed to Step 5.**

Step 4b 3-Way Wiring Application:



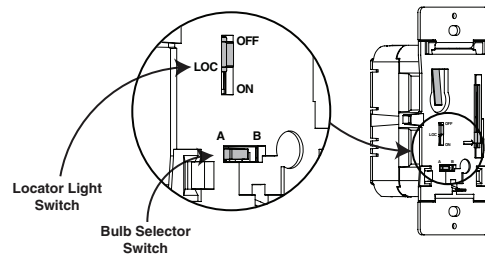
Connect wires per WIRING DIAGRAM as follows:

- Green or bare copper wall box wire to **GREEN** dimmer lead.
 - Common (Line hot or Load) wire to **BLACK** dimmer lead.
 - Remove insulating label and connect the first traveler wire to the **RED** dimmer lead.
 - Connect the second traveler wire to the remaining **RED** dimmer lead.
- Proceed to Step 5.

Step 5 Dimmer Bulb Selector Switch:

Cat. No. RSDM10-120-WVL is pre-set at the factory with the bulb selector switch set to **Mode A** (LED/MLV/Incandescent). For CFL bulb applications the switch should be moved to **Mode B** (CFL). The lamp selector slide switch also allows the user to adjust the minimum light level when dimming. Information on this feature is found under **PROGRAMMING**.

NOTE: See illustration for location of bulb selector switch.

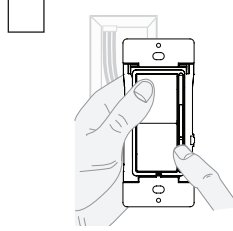


LED/Incandescent (Mode A): The selector switch is pre-set at the factory to this mode. Use this mode for dimmable LED bulbs and incandescent/halogen bulbs. To avoid flickering at the low end of the dimming range you can pre-set the minimum light level. See **PROGRAMMING** to manually program the minimum light level.

CFL (Mode B): To be used for dimmable CFL bulbs only. In this mode the dimmer provides a pre-set kick-start to aid the lamp in starting. To avoid flickering at the low end of the dimming range you can pre-set the minimum light level. See **PROGRAMMING** to manually program the minimum light level.

Locator Light Switch (LOC): The LED Locator Light will illuminate when the load is OFF. To disable the Locator Light move the Locator Light Switch to the OFF position.

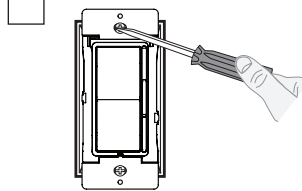
Step 6 Testing your Dimmer prior to mounting in the wall box:



- Restore power at circuit breaker or fuse.
 - Carefully holding dimmer, move slider control lever to highest position and press the top of the rocker. Lights should turn ON to brightest level.
- If lights does not turn ON, refer to the **TROUBLESHOOTING** section.

Step 7 Dimmer Mounting:

TURN OFF POWER AT CIRCUIT BREAKER OR FUSE.



Installation may now be completed by carefully positioning all wires to provide room in wall box for dimmer. Mount dimmer into box with mounting screws supplied. Attach wallplate.

Step 8 Restore Power:

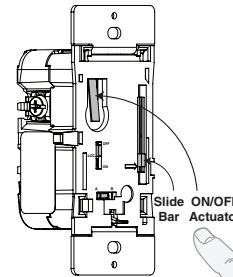
Restore power at circuit breaker or fuse. **Installation is complete.**

Programming

Setting Minimum Light Level

1. Press bottom of rocker to turn the dimmer OFF and move the slide bar to the bottom.
2. Remove color kit (see Changing the color of your Dimmer section on page 1).
3. Set the bulb selector switch to the LED/Incandescent position (Mode A).
4. Press on/off actuator to turn the load ON.
5. Set the bulb selector switch to the CFL position (Mode B).
6. Raise or lower the slide control level to achieve the desired minimum light level.
7. Set the bulb selector switch back to LED/Incandescent position (Mode A).
8. A momentary flash of the bulb will occur confirming the new setting.
9. Press on/off actuator to turn the load OFF.
10. Replace color kit (see Changing the color of your Dimmer section on page 1).

NOTE: For dimmable CFL lamps you must return the bulb selector to the CFL position (Mode B).



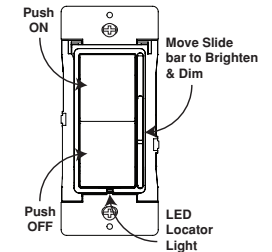
OPERATION

ON/OFF:

- Press top of Rocker
 - Lights will turn ON.
- Press bottom of Rocker
 - Lights will turn OFF.

BRIGHTEN & DIM:

- Move slide bar
 - Lights will BRIGHTEN or DIM.



Troubleshooting

Lights flickering

- Lamp has bad connection.
- Wires not secured firmly with wire connectors.

CFL and LED flickers at low end of dimming range

- Increase the low end of the dimming range.

PROGRAMMING Section - setting minimum light level

CFL or LED bulb flickers throughout dimming range

- Ensure the bulbs are marked dimmable.

Light does not turn ON

- Circuit breaker or fuse has tripped.
- Lamp is burned out.
- Lamp Neutral connection is not wired.

LED bulb(s) remains ON or glow when dimmer is OFF

- Ensure the Locator Light Switch is in the OFF position.

FCC STATEMENT

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.

IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

LIMITED 5 YEAR WARRANTY AND EXCLUSIONS
For Hubbell Control Solutions warranty and exclusions information:
www.hubbell.com/hubbellighting/en/warranty

For additional information, contact Hubbell Techline at
1-800-888-8006 or visit Hubbell website at www.hubbell.com