

Dimmer with Radio Frequency Receiver

MRF2-6CL 120 V~ 60 Hz 600 W (Single-Pole or Multi-Location)

Companion Dimmer

MA-R 120 V~ 60 Hz 8.3 A MSC-AD 120 V~ 60 Hz 8.3 A

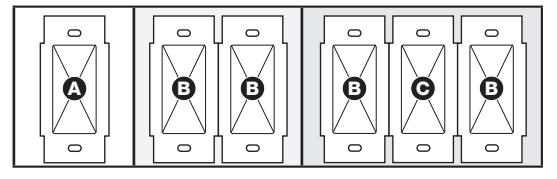
P/N 0301704 Rev. A
11/2013**Important Notes. Please read before installing**

- CAUTION!** When installing Halogen/Incandescent/CFL/LED/MVL Dimmers: To reduce the risk of overheating and possible damage to other equipment, **DO NOT** use to control receptacles, motor-operated appliances, fluorescent lighting fixtures, electronic low-voltage fixtures, non-dimmable compact fluorescent (Energy Saver) lamps, or transformer-supplied appliances.
- Install in accordance with all national and local electrical codes.
- When no "grounding means" exist within the wallbox, then the NEC® 2008, Article 404.12 allows a Dimmer without a grounding connection to be installed as long as a green ground-wire wallplate is used. For this type of installation, use a wire connector onto the green ground wire or remove the green ground wire on the Dimmer and use an appropriate wallplate such as Claro® or Satin Colors series wallplates by Lutron.
- Do not paint the Dimmers or the Companion Dimmers.
- The Dimmers are not compatible with standard 3-way or 4-way switches. Use only with Lutron® Companion Dimmers.
- In any 3-way/4-way circuit use only one Dimmer with up to 9 Companion Dimmers.
- Do not use where the total load is greater than the rating indicated in the Derating Chart below.

Multigang Installations

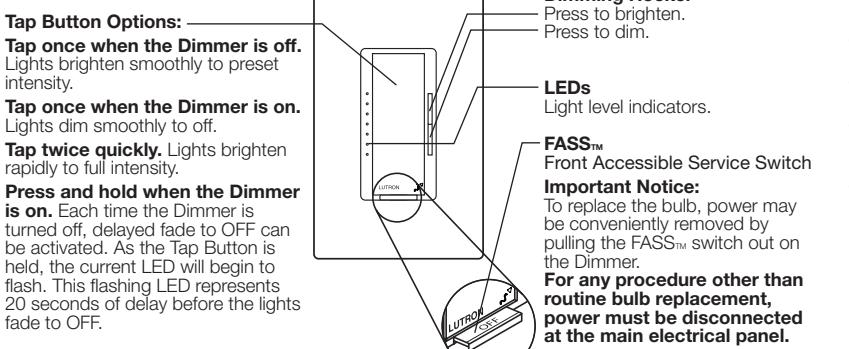
In multigang installations, several controls are grouped horizontally in one multigang wallbox. When combining dimmers in a wallbox, derating is required; however, no derating is required for remote dimmers.

Mixing lamp types (using a combination of CFL/LED, and Incandescent/Halogen bulbs) and ganging with other dimmers or electronic switches may reduce maximum wattage as shown in the chart below.

Derating Chart

CFL/LED Total Wattage			Incandescent/Halogen Total Wattage		
A	B	C	A	B	C
1 W - 25 W	+ 0 W - 500 W	0 W - 400 W	0 W - 300 W		
26 W - 50 W	+ 0 W - 400 W	0 W - 300 W	0 W - 200 W		
51 W - 75 W	+ 0 W - 300 W	0 W - 200 W	0 W - 100 W		
76 W - 100 W	+ 0 W - 200 W	0 W - 100 W	0 W - 50 W		
101 W - 125 W	+ 0 W - 100 W	0 W - 50 W	0 W		
126 W - 150 W	+ 0 W	0 W	0 W		

MLV Total Wattage			Maximum Load		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

Dimmer Operation**Set-Up**

Important: Set up Wireless Controller or Sensor to a Dimmer before use.

- Press and hold the Dimmer's Tap Button (Figure 1) for approximately 3 seconds. Once all the LEDs start to blink slowly, release the Tap Button and go to step 2.
- Press and hold the Off Button on the Wireless Controller (Figure 2) or Sensor (Figure 3) for approximately 6 seconds.
- Once the Dimmer learns the Wireless Controller or Sensor, the LEDs and load will flash 3 times and the Dimmer will exit Set-Up mode.
- Repeat steps 1–3 to set up multiple Wireless Controllers or Sensors to a single Dimmer. Repeat steps 1–3 to set up a single Wireless Controller or Sensor to multiple Dimmers.

Technical Assistance

For questions concerning the installation or operation of this product, call the Lutron Technical Support Center. Please provide exact model number.

Internet: www.lutron.com

E-mail: product@lutron.com

TOLL FREE: 1.800.523.9466 (U.S.A., Canada, Caribbean)

Tel: +1.610.282.3800

Fax: +1.610.282.1243

Mexico: +1.888.235.2910

Central/South America: +1.610.282.6701

Troubleshooting

Symptoms	Possible Causes
Load does not turn on or LEDs do not light up.	<ul style="list-style-type: none"> FASS™ switch on the Dimmer (or Companion Dimmer) is in the Off position. Light bulb(s) burned out. Breaker is OFF or tripped. Load not properly installed. Wiring error. Call Lutron® Technical Support Center.
Light does not respond to Radio Frequency Wireless Controller or Sensor.	<ul style="list-style-type: none"> The Dimmer failed to learn Wireless Controller or Sensor; see Set-Up. The Dimmer has already received and responded to a command, or is already at the Light Setting that the Wireless Controller or Sensor is receiving. The Wireless Controller or Sensor is outside the operating range. The Wireless Controller or Sensor batteries are low. The Wireless Controller or Sensor batteries are installed incorrectly.
When in set-up mode, the LEDs flash when trying to setup with the Wireless Controller or Sensor.	<ul style="list-style-type: none"> The maximum number of Wireless Controllers/Sensors have been reached. To remove a controller or sensor, tap the Wireless Controller or Sensor three times on the third tap hold for 3 seconds and then tap 3 more times. This will remove the Wireless Controller from all Dimmers or Switches it was previously setup with.

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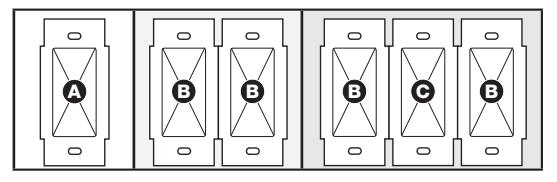
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Multigang Installations

In multigang installations, several controls are grouped horizontally in one multigang wallbox. When combining dimmers in a wallbox, derating is required; however, no derating is required for remote dimmers.

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126 W - 150 W	+ 0 W	0 W	0 W		

MLV Total Wattage			Maximum Load		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

BVM Total Wattage			Carga máxima		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

AFC/DEL Total Wattage			Carga máxima		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

BTM Total Wattage			Carga máxima		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

MLV Total Wattage			Carga máxima		
A	B	C	A	B	C
450 W/600 VA	400 W/500 VA	300 W/400 VA			

AFC/DEL Total Wattage			Carga máxima		
A	B				

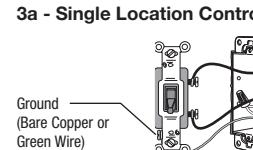
Installation

1 **Turning Power OFF**
Turn power OFF at circuit breaker
(or remove fuse).

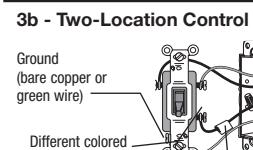


2 **Removing Wallplate and Switch**
Remove the wallplate and switch mounting screws.
Carefully remove the switch from the wall (**do not remove the wires**).

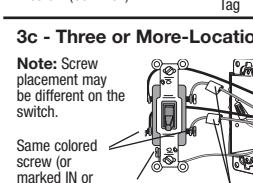
3 **Identifying the Circuit Type and Tagging the Wire on the COMMON Terminal of the Switches**



One switch controlling a light fixture:
This switch will be a single-pole. The switch will have insulated wires connected to two screws of the same color plus a green ground screw.



Two switches controlling a light fixture:
Both switches will be 3-way. Each switch will have insulated wires connected to three screws plus a green ground screw. One of these wires is connected to a screw of a different color (not green) or labeled COMMON. Tag this wire on both switches to identify when rewiring.



Three or more switches controlling a light fixture:
Two switches will be 3-way and any others will be 4-way. Tag the two 3-way switches as in the Two-Location diagram above. The 4-way switch will have insulated wires connected to four screws plus a green ground screw. Tag the two same-color insulated wires that are connected to opposite colored screws. Follow this procedure for each 4-way switch.

4 Disconnecting the Switch Wires

Important Note: The wall switch may have two wires attached to the same screw (see illustrations below for examples). Tape these two wires together before disconnecting. When rewiring, connect wires to the Dimmer the same way they were connected to the switch.



One wire in the backwired hole and one to the screw.



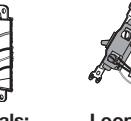
One continuous wire to the screw.



Push-in Terminals: Insert screwdriver. Pull wire out.



Screw Terminals: Turn screws to loosen.



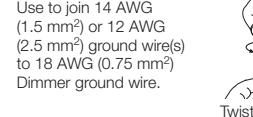
Looped Wire: Turn screw to loosen.

5 Wiring

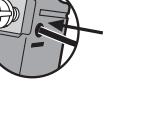
When making wire connections, follow the recommended strip lengths and combinations for the supplied wire connector.

Note: All wire connectors provided are suitable for **copper wire only**. For aluminum wire, consult an electrician.

Trim or strip wallbox wires to the length indicated by the strip gauge on the back of the Dimmer.



Push-in terminals:
Insert wires fully.
Note: Push-in terminals are for use with 14 AWG (1.5 mm²) or 18 AWG (0.75 mm²) solid copper wire only. DO NOT use stranded or twisted wire.

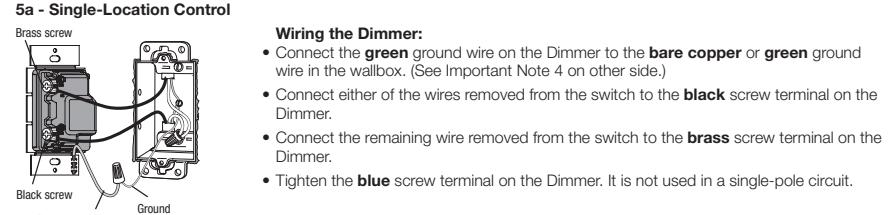


Screw terminals:
Tighten securely.
Note: Screw terminals are for use with 14 AWG (1.5 mm²) or 18 AWG (0.75 mm²) solid copper wire only. DO NOT use stranded or twisted wire.

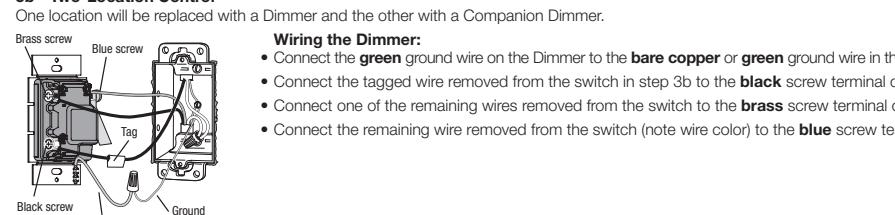
For installations involving more than one control in a wallbox, refer to Multigang Installations before beginning.

Use the screw or push-in terminals when making connections on the Dimmer or Companion Dimmer.

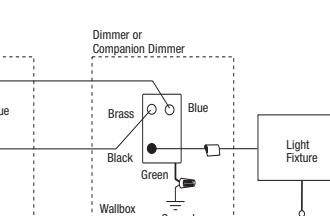
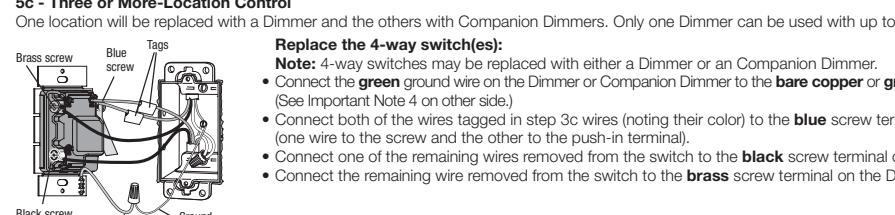
Wire all controls before mounting.

5a - Single-Location Control

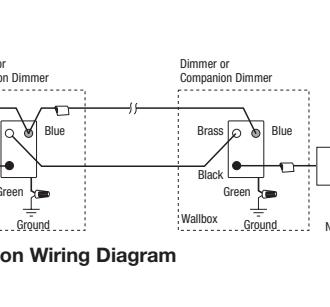
Single Location Wiring Diagram

5b - Two-Location Control

Wiring the Companion Dimmer (MA-R):
Connect the green ground wire on the Companion Dimmer to the bare copper or green ground wire in the wallbox. (See Important Note 4 on other side.)
Connect the wire tagged in step 3b to the black screw terminal on the Dimmer or Companion Dimmer.
Connect the same color wire connected to the blue screw terminal on the Dimmer or Companion Dimmer to the blue screw terminal on the Companion Dimmer.
Connect the remaining wire removed from the switch to the brass screw terminal on the Companion Dimmer.

**5c - Three or More-Location Control**

Replace the 3-way switches:
Connect the green ground wire on the Dimmer or Companion Dimmer to the bare copper or green ground wire in the wallbox. (See Important Note 4 on other side.)
Connect the wire tagged in step 3b to the black screw terminal on the Dimmer or Companion Dimmer.
Connect the same color wire connected to the blue screw terminal on the Dimmer or Companion Dimmer that replaced a 4-way switch (wire color noted above) to the blue screw terminal on the Dimmer or Companion Dimmer.
Connect the remaining wire removed from the switch to the brass screw terminal on the Dimmer or Companion Dimmer.

**6 Mounting Switches to Wallbox**

Form wires carefully into the wallbox, mount and align Dimmer (and Companion Dimmers), Attach Claro® or Satin Colors® Wallplate(s) (Sold separately).

**7 Turning Power ON**

Turn power ON at circuit breaker (or replace fuse).

**Instalación**

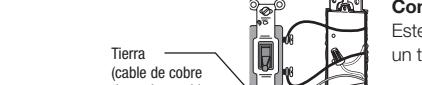
1 **Desconexión de la alimentación**
Desconecte la alimentación en el disyuntor (o quite el fusible).

ADVERTENCIA

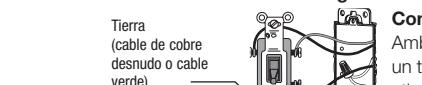
2 **Retiro de la placa de pared y del interruptor**
Retire la placa de pared y los tornillos de montaje del interruptor.

Peligro de choque. Podría resultar en lesiones graves o la muerte. Desconecte la alimentación en el cortacircuito antes de instalar el Atenuador.

3 **Identificación del tipo de circuito y etiquetado del cable en el borne "COMÚN" de los interruptores.**

3a - Control de posición única

Control de una lámpara con un interruptor:
Este interruptor será unipolar. El interruptor tendrá cables aislados conectados a dos tornillos del mismo color más un tornillo verde de tierra.

3b - Control desde dos lugares

Control de una lámpara con dos interruptores:
Ambos interruptores serán de 3 vías. Cada interruptor tendrá cables aislados conectados a tres tornillos más un tornillo de tierra de color verde. Uno de los cables está conectado a un tornillo de distinto color (no verde) o etiquetado como COMÚN. Identifique este cable en ambos interruptores para poder distinguirlo cuando vuelva a cablear.

3c - Control desde tres o más lugares

Control de una lámpara con tres interruptores o más:
Los interruptores serán de 3 vías y los demás de 4. Etiquete los dos interruptores de 3 vías tal como se muestra en el diagrama anterior para control desde dos lugares. El interruptor de 4 vías tendrá cables aislados conectados a cuatro tornillos, además de un tornillo de tierra de color verde. Etiquete los dos cables aislados del mismo color que están conectados a tornillos de colores opuestos. Siga este procedimiento para cada interruptor de 4 vías.

4 Desconexión de los cables del interruptor.

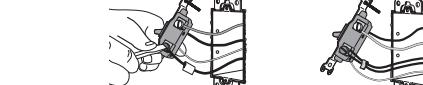
Nota Importante: El interruptor de pared puede tener dos cables conectados al mismo tornillo (vea los ejemplos ilustrados a continuación). Una ambos cables con cinta adhesiva antes de desconectarlos. Cuando realice el cableado nuevamente, conecte los cables al atenuador de la misma forma en que estaban conectados al interruptor que se reemplaza.



Un cable en el orificio para cables.



Un cable continuo al tornillo.



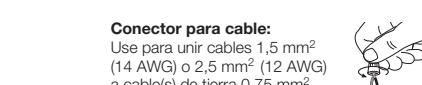
Terminales a presión: Introducir el desatornillador y extraiga el cable.



Terminales de tornillo: Afloje el tornillo.

5 Cableado

Cuando se hagan las conexiones de los cables, se deben respetar las recomendaciones para la longitud de los extremos desnudos y demás combinaciones correspondientes al conector de cable provisto. **Nota:** Todos los conectores que se proporcionan son para **cable de cobre sólido**. Para cables de aluminio, consulte a un electricista. Recorte o pele los cables de la caja de empotrar hasta la medida indicada en el reverso del atenuador.



Terminales a presión: Inserta firmemente.



Terminales de tornillo: Afloja firmemente.

• Para instalaciones con más de un control en una caja, consulte la sección "Instalación con varios dispositivos acoplados" antes de comenzar.
• Use los bornes de tornillo o de presión cuando haga conexiones en el atenuador o el atenuador accesorio.
• Complete el cableado de todos los controles antes del montaje.

5a - Control desde un solo lugar

Cableado del atenuador:
• Conecte el cable de tierra verde del atenuador al cable de **cobre sin aislamiento** o al cable a tierra **verde** de la caja de empotrar. (Ver Nota Importante 4 del otro lado.)

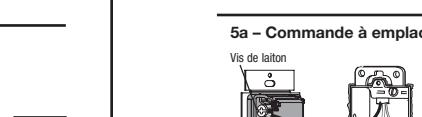
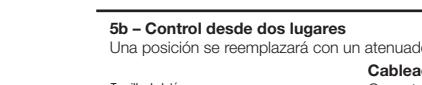


Diagrama de cableado de una sola posición

5b - Control desde dos lugares

Cableado del atenuador:
• Conecte el cable a tierra verde del atenuador al cable de **cobre sin aislamiento** o al cable a tierra **verde** de la caja de empotrar.

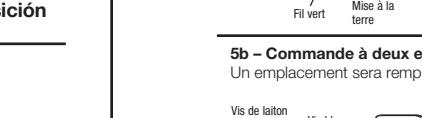


Diagrama de cableado de dos posiciones

5c - Control desde tres o más lugares

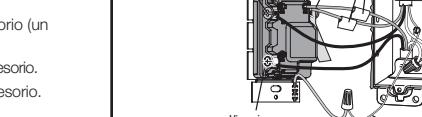
Cableado del atenuador:
• Conecte el cable de tierra verde del atenuador al cable de **cobre desnudo** o **de cobre verde** de la caja de empotrar (Ver la Nota Importante 4 en el reverso). • Conecte el cable etiquetado extraído del interruptor en el paso 3b al borne de tornillo **negro** del atenuador.



Diagrama de cableado de tres posiciones o más

6 Montaje de los Interruptores en la caja de empotrar.

Montaje de los Interruptores en la caja de empotrar.
Coloque los cables cuidadosamente en la caja de empotrar, Monte y alinee el atenuador (y los atenuadores accesorios). Coloque placas de pared Claro® o Satin Colors® (se venden por separado).



Alinee el atenuador y ajuste los tornillos.

7 ENCENDIDO de la alimentación

Conecte la alimentación en el disyuntor (o reemplace fusiles).

Installation

1 **Couper le courant OFF**
Couper le courant au disjoncteur (ou retirer le fusible).



2 **Retrait de la plaque murale y de l'interrupteur**
Retirer la plaque murale y les vis de montage de l'interrupteur.



3 **Identifier le type de circuit et le repérage du fil sur la borne COMMON des interrupteurs.**

3a - Commande à emplacement unique