





Scene Capable Dimmer 120VAC, 60Hz

# **Incandescent and Magnetic Low-Voltage**

Cat. No. MCMØ6-1, 600 W/VA (w/brightness level display) Cat. No. MCM1Ø-1, 1000 W/VA (w/brightness level display)

Total minimum wattage must exceed 60W or 60VA

# **INSTALLATION INSTRUCTIONS**



PK-93080-10-00-0A

# LIMITED 2 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such two year period the product is returned prepaid, with proof of purchase date, and a description of the problem to Leviton Manufacturing Co., Inc., Att: Quality Assurance Department, 59-25 Little Neck Parkway, Little Neck, New York 11362-2591 (In Canada send to Leviton Mfg. of Canada Ltd., 165 Hymus Blvd., Point Claire, (Quebec), Canada H9R 1E9). This warranty excludes and there is disclaimed liability for labor for remova of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment. overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.

> For Technical Assistance Call: 1-800-824-3005 (U.S.A. Only) 1 800 405-5320 (Canada Only) www.leviton.com



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#### **FEATURES**

- Scene Capabilities
- Power interruption load returns to existing state
  - ON/OFF LED indicates status of load
  - Color conversion available

### FCC COMPLIANCE STATEMENT

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

## **INSTALLATION INSTRUCTIONS**

WARNING: TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.

WARNING: IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT A QUALIFIED ELECTRICIAN.

WARNING: TO AVOID OVERHEATING AND POSSIBLE DAMAGE TO THIS DEVICE AND OTHER EQUIPMENT, DO NOT INSTALL TO CONTROL A RECEPTACLE, FLUORESCENT LIGHTING, OR A MOTOR - OR TRANSFORMER - OPERATED APPLIANCE OTHER THAN APPROPRIATE LOW-VOLTAGE LIGHTING.

WARNING: A 17100 REPEATER MUST BE USED IF THERE IS MORE THAN ONE CIRCUIT.

CAUTION (For Incandescent Only): USE WITH INCANDESCENT OR 120V HALOGEN FIXTURES ONLY.

#### **CAUTION (For Magnetic Low-Voltage Only):**

- 1. USE WITH MAGNETIC LOW-VOLTAGE TRANSFORMERS, INCANDESCENT, OR 120V HALOGEN FIXTURES ONLY. USE A LEVITON ELECTRONIC LOW-VOLTAGE DIMMER TO CONTROL ELECTRONIC (SOLID STATE) LOW-VOLTAGE TRANSFORMERS.
- 2. WHEN A MAGNETIC LOW-VOLTAGE CIRCUIT IS 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.

  WIRE CONNECTOR / # OF COND. COMBINATION CHART 1.5 #12 W/1 to 3 #14 #16 or #18 | 2. #14 W/1 #16 W/1 or 2 #18 or

#### OTHER CAUTIONS:

- 1. DISCONNECT POWER WHEN SERVICING OR CHANGING BULBS.
- 2. USE THIS DEVICE ONLY WITH COPPER OR COPPER CLAD WIRE. WITH ALUMINUM WIRE USE ONLY DEVICES MARKED CO/ALR OR CU/AL.

### **MULTI-GANG INSTALLATION:**

Leviton's Decora® Style design

Minimum Brightness AdjustmentBrightness Level Display

Soft fade ON/OFF

Double Tap functions

When ganging dimmers, the side sections of the mounting strap must be removed. Use pliers to carefully bend side sections back and forth until they break off (refer to Figure 1). The side sections dissipate heat, so removing them requires a derating of the dimmer's capacity (refer to chart).

# MAXIMUM BULB WATTAGE (For Magnetic Low-Voltage Only):

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 75% efficient as average. Use the chart to determine maximum bulb wattage for typical transformer efficiency ratings.

### TO INSTALL:

- 1. WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!
- 2. Remove existing wallplate and switch or dimmer, if applicable
- 3. Remove 3/4" (1.9 cm) of insulation from each circuit conductor. Make sure that ends of conductors are straight.
- 4. Connect lead wires per appropriate WIRING DIAGRAM as follows: WARNING: CONNECT A MAGNETIC LOW-VOLTAGE DIMMER ONLY TO THE PRIMARY (HIGH-VOLTAGE) SIDE OF A MAGNETIC LOW-VOLTAGE TRANSFORMER. Twist strands of each lead tightly and, with circuit conductors, push firmly into appropriate wire connector (see chart for allowable wire connector and number of conductor combinations). Screw connectors on clockwise making sure that no bare conductor shows below the wire connectors. Secure each connector with electrical tape.
- 5. Carefully position all wires to provide room in outlet box for dimmer. Mount dimmer into box with mounting screws supplied.
- Restore power at circuit breaker or fuse. Turn the dimmer ON by pressing the upper half of the rocker. The GREEN LED will turn OFF to indicate power to the dimmer (when the dimmer is OFF, the LED is ON).

**NOTE:** This model incorporates a trim adjustment which will allow the installer to precisely set the low end of the dimming range to suit each installation. This adjustment is preset at the factory and should require no further adjustments for most installations. If adjustment is required proceed as follows, otherwise continue with step 9:

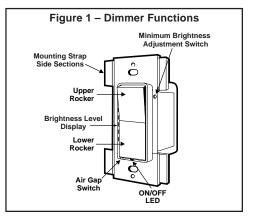
- 7. The brightness adjustment is located on the side of the dimmer (refer to Figure 1). Using a small, insulated screwdriver, depress the brightness adjustment switch. To increase the minimum brightness, press the upper half of the rocker. To decrease the minimum brightness, press the lower half of the rocker.
- 8. Release the rocker. Release adjustment switch and minimum brightness is set. Check for proper operation by tapping the lower half of the rocker so the lights turn OFF, then tapping the upper half of the rocker so the lights turn ON. The lights will turn ON to the new minimum brightness set. If operation is not satisfactory, repeat step 7.
- 9. Attach  $Decora^{\otimes}$  wallplate (not included). INSTALLATION IS COMPLETE.

NOTE: On the lower left corner of the switch frame, there is an air-gap switch. When servicing a controlled fixture, pull lever out (OFF position). This will cut the power to the fixture. After servicing is complete, push the lever in (ON position) to restore power. The lever must be pushed in all the way (ON position) for normal operation.

WIRE CONNECTOR / # OF COND. COMBINATION CHART				
1- #12 w/ 1 to 3 #14, #16 or #18 2- #12 w/ 1 #14 w/ 1 #16 or #18 2- #12 w/ 1 #16 w/ 1 or 2 #18 2- #14 w/ 1 to 3 #16, #18 or #20 4- #16 w/ 1 or 2 #18, #20 or #22 1- #14 w/ 1 to 4 #16, #18 or #20 2- #14 w/ 1 to 3 #16, #18 or #20 2- #14 w/ 1 to 3 #16, #18 or #20	2- #14 w/ 1 #16 w/ 1 or 2 #18 or #20 3- #14 w/ 1 or 2 #18 or #20 4- #14 w/ 1 #16 or #18 2- #16 w/ 1 #18 w/ 1 or 2 #20 or #22 1- #14 w/ 1 #18 w/ 1 to 3 #20 3- #14 w/ 1 #16 w/ 1 #18, #20, #22 3- #14 w/ 1 #18 w/ 1 #20 or #22			

		Two	More than
Cat. No.	Single	Gang	2 Gang
MCMØ6-1	600W/VA	500W/VA	400W/VA
MCM1Ø-1	1000W/VA	800W/VA	700W/VA

MAXIMUM BULB WATTAGE AT 75% EFFICIENCY					
Rating	Single	Two Gang	More than 2 Gang		
600VA	450W	375W	300W		
1000VA	750W	600W	525W		

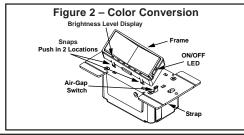


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### **COLOR CONVERSION PROCEDURE**

The color of this device can be changed to suit your interior design requirements. Simply obtain a color conversion kit of the appropriate color from your Leviton distributor and proceed as follows (please note that wallplate must be

- 1. Select the color of the face you desire.
- 2. The frame has snaps on its sides. Using a small screwdriver, gently remove the frame from the strap (refer to
- 3. Take the new frame and position it properly to the strap. Notice that the frame has a cut-out for the air-gap switch lever. Line up the plastic snaps with the square holes in the strap. Insert the snaps on one side of the frame into the strap.
- 4. Firmly press sideways and down to slip the other snaps into place. The frame snaps in with a audible click. Ensure that all four snaps are secure. Replace Decora® wallplate. The color conversion is complete.



# **TO PROGRAM**

Programming scenes occurs at the Scene Controller for this dimmer. If programming is required, refer to Scene

### **OPERATION**

ON: Tap the upper half of the rocker. The lights will brighten to the last set light level.

Tap the lower half of the rocker. The lights will dim to OFF. OFF:

**BRIGHTEN:** Press and hold the upper half of the rocker to the desired light level.

FULL BRIGHT: If the lights are OFF, double tap the upper half of the rocker. The lights will turn ON FULL

If the lights are ON, tap the upper half of the rocker once. The lights will turn ON FULL

BRIGHT.

The previous light level will remain in memory upon next ON operation (see above). FAST OFF: Double tap the bottom half of the rocker. The lights will immediately turn OFF.

Press and hold the lower half of the rocker to the desired level.

#### **BRIGHTNESS LEVEL DISPLAY:**

Indicates the level of brightness when the lights are ON. Indicates the previous level of brightness when the lights are OFF (refer to Figure 1).

NOTE: To alert you that there is power to the dimmer when the load is OFF, the ON/OFF LED remains ON. To alert you that the load is ON, the ON/OFF LED remains OFF.

NOTE: If lights are OFF, regardless if you tap or press and hold the upper half of the rocker, the lights will go to

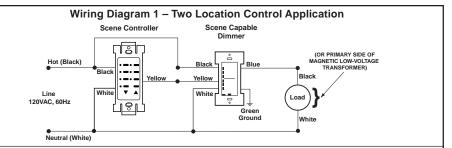
NOTE: If a power interruption should occur while the device is ON, the light load will return to its previous light level when power is restored within 10 seconds.

# TROUBLESHOOTING

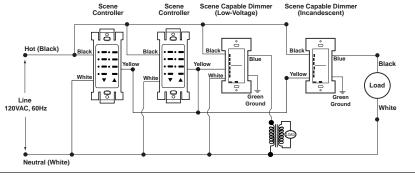
- Light does not turn ON and ON/OFF LED does not turn ON
- Circuit breaker or fuse has tripped. - Lamp switch is OFF, if applicable.
- Lamp is burned out.
- Lamp is not connected to line Neutral.
- Air gap switch is open.
- Dimmer does not operate
- Dimmer BLACK wire miswired to lamp and Dimmer BLUE wire miswired to LINE Hot.
- · Light turns ON and Dimmer works, but Controller does not work
- There are no connections from Controller to Dimmer (YELLOW wire).
- Controller is miswired.
- Lights Flickering
- Lamp has a bad connection.
- Lamp load is less than 60W or 60VA.

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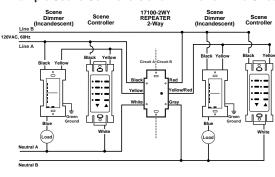
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# Wiring Diagram 2 - Scene Dimming: Low-Voltage and Line Voltage with Multiple Scene Controllers and Scene Dimmers



#### Wiring Diagram 3 - Scene Dimming: Line Voltage with Multiple Scene Controllers and Dimmer on Two Circuits



## Wiring Diagram 4 – Scene Dimming: Low-Voltage and Line Voltage with Multiple Scene Controllers and Dimmer on Two Circuits

