RENOIR® II 0-10V DIMMING CONTROL

Cat. Nos. AWRMG-7XX, AWSMG-7XX & AWSMT-7XX

INSTALLATION



ENGLISH

PK-93970-10-00-2E

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!
- TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH ELECTRICAL CODES AND REGULATIONS.
- •• IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT AN ELECTRICIAN.
- . DO NOT GANG VERTICALLY.
- ·· ONLY INSTALL FOR THE ALLOWED LOAD TYPES. INSTALLATION FOR ANY OTHER LOAD TYPE WILL VOID WARRANTY AND POSSIBLY CAUSE DAMAGE TO THIS DEVICE AND/OR CONNECTED EQUIPMENT.
- •• USE THIS DEVICE WITH COPPER OR COPPER CLAD WIRE ONLY.

INPUT - 120 - 277 VAC 60 HZ OUTPUT - 7D 16A

FEATURES AND OPERATION

- Turn Device ON or OFF Pressing the switch will turn the device ON if the device is OFF. If the device is ON, pressing the switch will turn the device OFF.
- Set Device Level Adjust the knob or slider to set the desired output level. When the device turns ON, the device always turns ON to the level set by the slider or
- Set Cutoff Level The Cutoff Level is the lowest voltage the dimmer will output. To set the cutoff level, adjust the knob or slider to the desired minimum output level, then push and hold the power button for 10 seconds. The dimmer will adjust to the new level. When the knob or slider is at the full minimum position, each time the button is held for 10 seconds the minimum level will alternate between factory default and true minimum. If your load is flickering, not turning ON, or suffering from any other erratic behavior at the minimum setting, raising the cutoff level may eliminate the problem. If your load will not dim, reset the cutoff level to 0 and then reset desired minimum level.
- Set Maximum Level The Maximum Level is the highest voltage the dimmer will output. To set the level, adjust the knob or slider to the maximum output. After the green LED blinks, lower the output to the desired level (within 10s), then push and hold the power button for 10 seconds. The dimmer will adjust to the new level. To return to factory default (maximum), position the knob or slider to its maximum position, watch for the green LED to blink, and then push and hold the power button for 10 seconds. Your device will return to the maximum brightness position. The Maximum Level programming state will terminate after 20 seconds, or when the knob or slider is placed at the minimum position.
- Preset Operation While device is off, set level of device. Then press button. The device will turn on at the set level.
- Power Restore Upon restoration of power, the device turns ON to the state it was in at the time of power loss.
- 5-Way Operation Link together 2, 3, 4, or 5 devices for multi-way dimming. All connected devices must be powered by the same electrical circuit to ensure proper communication between the devices.
- **LED Locator** At the bottom of the switch is an LED locator. This locator illuminates when the device is OFF so you can find the device in the dark.
- Remote Control If you are using a remote, the operation at the remote is identical to the operation at the master. A slight reaction delay may be noticed if operating level changes very quickly.

INSTALLATION REQUIREMENTS

- These devices are designed for installation into a metal 2" x 3" (5.08 cm x 7.62 cm) single gang or multi-gang device back box. 2-1/2" (6.35 cm) or deeper back boxes are required. These devices are **not** designed for a multi-gang field configured box. In some installations where conduit entry is from the side, or, in multi-gang installations where nipples between two adjacent boxes are used, deeper back boxes may be necessary. Test fit installation prior to rough-in.
- Installation of multiple devices into a single box may require de-rating and other specific installation provisions. Reference Multi-Gang Installations for more details.
- As devices vent top/bottom, devices should not be installed vertically (one over the other).
- To avoid flickering, flashing, or lights on one device adjusting when another device's level is changed, do not share neutrals. Run separate neutrals for each load circuit back to the device. (See Figure 1).

INSTALLATION INSTRUCTIONS

- WARNING: TO AVOID FIRE, SHOCK OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!
- Remove existing wall plate and switch, if applicable.
- Connect wires per WIRING DIAGRAM. If traveler wire is not used it must be insulated (wire connector or electrical tape).
- Installation may now be completed by carefully positioning all wires to provide room in outlet box for device. Mount device into box with mounting screws supplied.
- Install device control push button and control assembly (see Figure 2). Snap racepiate into piace.
- **6.** Restore power at circuit breaker or fuse. **Installation is complete.**
- **7.** Test Device operation.

FCC Compliance Statement

The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(i.) This device may not cause harmful interference (ii.) This device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by Leviton could void the user's authority to operate this equipment. 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.

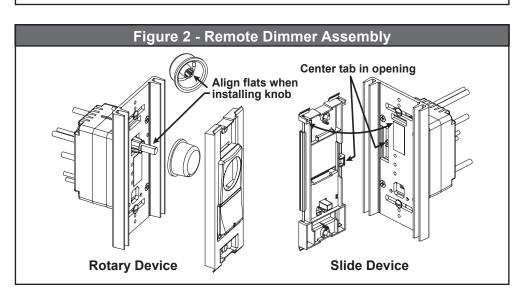
IC Compliance Statement

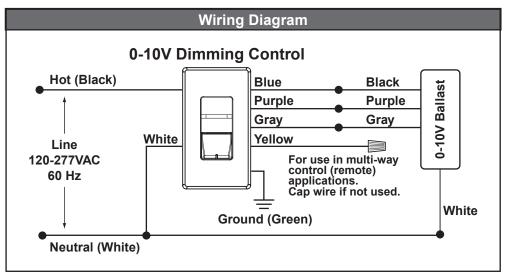
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. IMPORTANT! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This Class B digital apparatus complies with Canadian ICES-003.

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.

Figure 1 - DO NOT share neutral wires Hot (Black) Black Blue Ballast Purple Purple For use in multi-way Yellow Gray Gray 0-10V White Green Ground White Neutral (White) Run a separate neutral wire for each load circuit Black Hot (Black) Blue 0-10V Ballast Purple Purple Yellow Gray Gray White Green Ground White Neutral (White) Run a separate neutral wire for each load circuit





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MULTI-GANG INSTALLATION REQUIREMENTS

Multi-Gang Installations:

A multi-ganged installation exists when multiple devices are installed in the same back box. In multi-gang installations, the following may be required:

- Device de-rating

- Fin removal
- Use of joiner bars for adjacent devices.
- Back box size

NOTE: TEST FIT DEVICE INSTALLATION WITH THE WALL PLATE PRIOR TO BREAKING FINS OR INSTALLING DEVICES TO ENSURE YOU UNDERSTAND ALL REQUIREMENTS.

De-ratings:

When fins are broken, some devices must be de-rated. Reference table below to determine the device ratings when 0, 1, or 2 fins are removed.

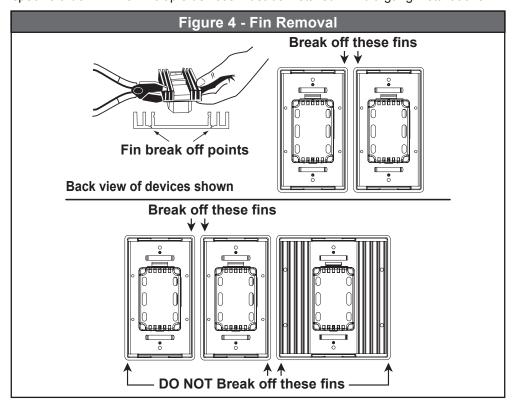
Fluorescent - 0-10VDC Sinking Control - 120-277VAC/VCA, 60Hz

Use only permanently installed electronic ballasted luminaire of fluorescent, HID or LED load type with driver/ballast setup for 0-10VDC sinking control. Dimmer will sink maximum 75mA. Intended for the control of Advance Mark 7[™], Universal SuperDim[™], Lutron[®] TVE, Leviton Sector[®], or Sylvania Quicktronic Powersense[®] ballast. CAUTION: To reduce the risk of overheating and possible damage to other equipment, DO NOT install to control a receptacle, a motor-operated appliance, or a transformer supplied aplliance.

Fluorescent 0-10VD	0, 1 or 2 fins removed	
AWRMG-7D	Amps	16.0
AWRMT-7D	VA @ 120V	1920
AWSMG-7D_	VA @ 230V	3680
AWSMT-7D_	VA @ 277V	4432

Fin Removal:

When it is desired to install devices in as small a space as possible, all inside fins of like sized, adjacent devices can be broken off. Figure 4 show how to break off fins and the specific order in which multiple devices must be installed in multi-gang installations.



Back Box Size & Joiner Bars:

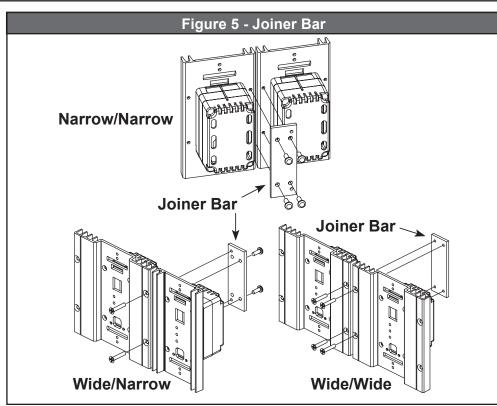
To determine the required back-box size in multi-gang installations, reference table below. In applications where the devices do not line up with back box device mounting holes, use joiner bars to join the controls together. Reference Figure 5.

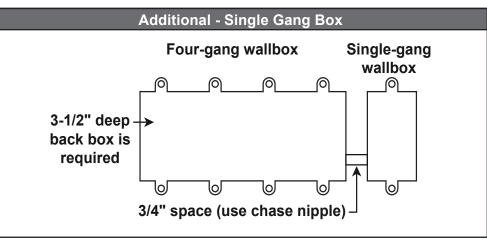
Basic Configurations		Number & Type of WIDE				
		0	1	2	3	
NARROW	0	Backbox - # Gangs		1	4	6**
		Device Configuration		W	W+W	W+W+W
		Wallplate Part #		AWP0F-01x	AWP0F-02x	AWP0F-03x
		Backbox - # Gangs	1	3	5	8**
e of	1	Device Configuration	N	W+N	W+N+W	W+W+N+W
er & Type		Wallplate Part #	AWP0F-10x	AWP0F-11x	AWP0F-12x	AWP0F-13x
	2	Backbox - # Gangs	2	4	6	8
Number		Device Configuration	N*+*N	W+N*+*N	W+N*+*N+W	W*+*W+N*+*N+W
Ŋ		Wallplate Part #	AWP00-20x	AWP00-21x	AWP00-22x	AWP00-23x
	3	Backbox - # Gangs	4**	6**	7	9
		Device Configuration	N+N+N	W+N+N+N	W+N*+*N*+*N+W	W*+*W+N*+*N*+*N+W
		Wallplate Part #	AWP0F-30x	AWP0F-31x	AWP00-32x	AWP00-33x

- 1. Find the cells that correspond to your application by identifying the row with the number of wide heatsink devices you have, and the columns that correspond to the number of narrow heat sink devices you have. In the cell you'll find the following:
- 2. The number indicates the number of "Gangs" required.
- 3. The letters under the number indicate the order devices should be installed, N=narrow, W=wide.
- 4.- W* = right fin break-off on wide device, N* = right fin break-off on narrow device.
- *W = left fin break-off on wide device, *N = left fin break-off on narrow device.
- *W* = fin break-off on both sides of wide device, *N* = fin break-off on both sides of narrow device
- 5.** indicates that use of jumper bars is required. Jumper bars can be found in the kit with the faceplate.
- **6.** Replace 'x' in the faceplate part number with the desired color: W=White, I=Ivory, T=Light Almond, E=Black, G=Gray, K=24K Gold, L=Satin Stainless, R=Antique Bronze, B=Brushed Brass.

NOTE: Metal finishes are not available on custom face plates.

Basic WIDE/NARROW configurations, for additional configurations see: www.leviton.com/RENOIRII





Multi-Way Control:

-Hot

- Neutral

Ground

Hot

Device/Switch

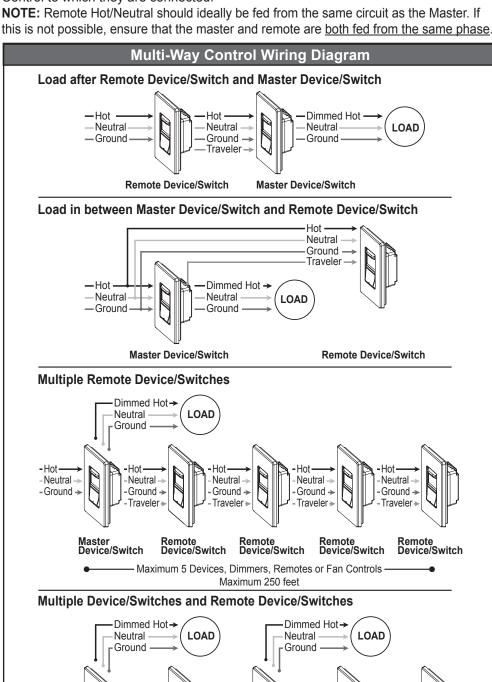
Neutral

Ground →

Traveler

The Renoir® II product line supports up to 5-way control. Any combination of Dimmers, Fan Controls, Switches, or Remotes are supported with a MAXIMUM OF 5 DEVICES. Total run length from end to end is MAXIMUM 250 FEET. Remotes require Uncontrolled Hot, Neutral, & Ground for proper operation. One traveler wire is to run in between all masters and remotes. Remotes draw 15mA power (ea) from the Control to which they are connected.

NOTE: Remote Hot/Neutral should ideally be fed from the same circuit as the Master. If



Hot

Neutral

Ground →

Traveler

Remote Device/Switch

Neutral

·Ground ·

Traveler

Remote Device/Switch

Neutral

Ground →

Traveler

Device/Switch

Maximum 5 Devices, Dimmers, Remotes or Fan Controls

Maximum 250 feet

Remote Device/Switch

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