

Cat. Nos.  
86676  
86677



Cat. Nos.  
86678  
86679

**RENOIR™**

Single Pole (One location)

Slide Dimmer

Fluorescent

Cat. Nos.:

86676-1 (120VAC), 86676-7 (277VAC)  
86677-1 (120VAC), 86677-7 (277VAC)  
86678-1 (120VAC), 86678-7 (277VAC)  
86679-1 (120VAC), 86679-7 (277VAC)

**INSTALLATION INSTRUCTIONS**



PK-92884-00-00-0A

**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**. This warranty excludes and there is disclaimed liability for labor for removal 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 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)  
[www.leviton.com](http://www.leviton.com)



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**FEATURES**

- Leviton's Decora® style design
- Slide control for easy and precise operation
- Separate preset ON/OFF rocker switch and minimum brightness adjustment

**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, USE ONLY WITH THE APPROPRIATE 120V OR 277V DIMMING BALLAST FOR CONTROLLING THE SPECIFIC FLUORESCENT LAMPS.

**OTHER CAUTIONS:**

1. EVERY LEVITON RENOIR™ DIMMER FITS STANDARD 2" x 3" (5.08 cm x 7.62 cm) OUTLET BOX.
2. DIMMER MUST BE MOUNTED VERTICALLY FOR PROPER HEAT DISSIPATION.
3. ALL FIXTURES MUST BE GROUNDED.
4. DISCONNECT POWER WHEN SERVICING FIXTURE.
5. 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:**

**WARNING: DO NOT GANG DIMMERS VERTICALLY (ONE DIRECTLY ABOVE ANOTHER).**

Leviton Renoir™ dimmers have anodized aluminum fins that dissipate heat generated by proper functioning of the dimmers. If lack of space dictates fin removal, do so ONLY at the break-off points shown in Fig. 2. Any other kind of fin removal will be considered as an alteration of the unit and will thus VOID the warranty, stated or implied.

**DOUBLE GANGING:** Break off the right side set of fins from the left unit, and the left side set of fins from the right unit. Trim off the inside section of each cover plate by cutting along the mark inside the plate with a sharp blade.

**TRIPLE GANGING:** Break off the right side set of fins from the left unit, the left side set of fins from the right side unit, and both sets of fins from the center unit. Trim off the inside section of the end cover plates and both sections from the center cover plate, using a sharp blade.

To gang more than three units, follow instructions for center unit of triple gang installation.

**DERATING:**

When ganging these units, no derating is necessary, except as shown on the adjacent table when both sets of fins have been removed.

**FLUORESCENT DIMMING SYSTEMS**

Fluorescent Dimming Systems consist of a fluorescent dimming control properly connected to a fluorescent fixture(s) with recommended ballast(s) and seasoned 40 Watt Rapid-Start lamps (Refer to Tables 1 and 2).

**FLUORESCENT FIXTURES AND LAMP HOLDERS:**

Most fluorescent fixtures designed for dimming have recommended ballasts which are compatible with Leviton Fluorescent Renoir™ Dimmers. The system works best with those fixtures in which the lamps are mounted not more than 1/2" (1.27 cm) from the reflector of the fixture. The fixture should be grounded.

**NOTE:** Lampholders must be of the circuit disconnecting type.

**LAMPS:**

The Leviton Fluorescent Renoir™ Dimmers are designed to control from two up to forty 40-Watt rapid-start lamps. **DO NOT EXCEED THE RATING OF THE INDIVIDUAL DIMMER!**

For smoothest operation, it is recommended that only one brand of lamp be used for each installation and that the lamps be seasoned for 100 hours at full brightness.

In an installation where an extremely low level of brightness is desired, it may be necessary to match the lamps controlled by each ballast for equal minimum brightness. This is necessary due to the variation in lampry even from the same manufacturer. It is particularly important that the lamps make firm electrical connections in their sockets and that any defective lamps be replaced promptly.

**BALLASTS:**

Each Leviton Fluorescent Renoir™ Dimmer has been tested and is recommended for use with several popular dimming ballasts. Each manufacturer's ballasts have slightly different characteristics. Therefore, it is recommended that only one type of ballast be used throughout each system. All Leviton Fluorescent Renoir™ Dimmers will perform well with the ballasts given in Table 2.

**TO INSTALL:**

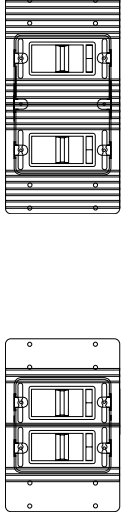
1. **WARNING:** TO AVOID FIRE, SHOCK, OR DEATH; **TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
2. Remove existing wall plate and switch, if applicable.
3. Remove 3/4" (1.9 cm) of insulation from each circuit conductor. Make sure the ends of wires are straight.
4. Connect wires per **WIRING DIAGRAM** as follows: Twist strands of each lead tightly together, align with wire connector and number of conductor combinations). Screw each connector on clockwise making appropriate circuit conductors, and push firmly into appropriate wire connector (see chart for allowable wire connector and number of conductor combinations). Secure each connector with electrical tape.

sure no bare conductors show below the wire connectors. Secure each connector on clockwise making

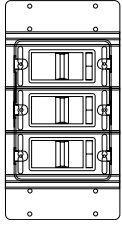
As you move the slider upward, the brightness level increases. The rocker switch below the slider panel is for ON/OFF switching. With the rocker in the ON position and the slider in the minimum brightness position, adjust the trim for the desired level (described in the next step).

The trim adjustment is located at the top of the dimmer back cover, just behind the metal lined plate. Using a small insulated screwdriver, turn the trim adjustment until you've reached the desired brightness level.

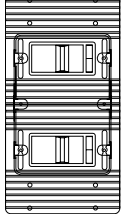
WIRE CONNECTOR / # OF COND. COMBINATION CHART	
1- #12 w/ 1 to 3 #14, #16 or #18	2- #14 w/ 1 #16 w/ 1 or 2 #18 or #20
2- #12 w/ 1 #14 w/ 1 #16 or #18	3- #14 w/ 1 or 2 #18 or #20
2- #12 w/ 1 #16 w/ 1 or 2 #18	4- #14 w/ 1 #16 or #18
4- #16 w/ 1 or 2 #18, #20 or #22	1- #14 w/ 1 #18 w/ 1 to 3 #20
1- #14 w/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



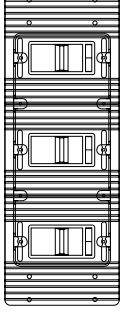
Double Ganging – Narrow Dimmers



Triple Ganging – Narrow Dimmers



Double Ganging – Wide Dimmers



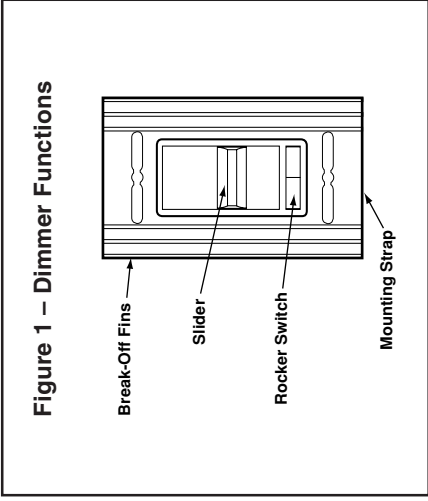
Triple Ganging – Wide Dimmers

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86677	16
86679	36

7. Check for proper operation by setting the slider to its maximum position and returning it to minimum. If operation is not satisfactory, repeat step 5.
8. **TURN OFF POWER.** Installation may now be completed by carefully positioning all wires to provide room in outlet box for dimmer. Mount dimmer into box with mounting screws supplied. Snap plastic cover into place.
9. Restore power at circuit breaker or fuse. **INSTALLATION IS COMPLETE.**

**TROUBLESHOOTING**

- Light does not turn ON
    - Circuit breaker or fuse has tripped.
    - Lamp is burned out.
    - Lampholders are not making good contact.
    - Lamp switch is OFF.
  - Dimmer does not operate
    - Dimmer BLACK wire miswired to load and Dimmer RED wire miswired to LINE Hot.
  - Lights flickering
    - Ballast are not on the approved list.
    - Lamp has a bad connection.
    - Trim adjustments set too low.
    - Line voltage is too low.
- REMEMBER:** It is recommended that only one brand of lamp be used for each installation and that the lamps be seasoned for 100 hours at full brightness.



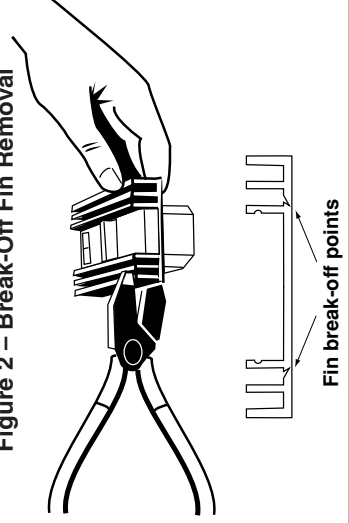
Outlet boxes required for ganging Leviton Renoir™ dimmers when no fins are removed.

Wide Dimmers	Narrow Dimmers				
	0	1	2	3	4
0	•	•	•	•	•
1	1	3	5	7	8
2	4	6	7	9	11
3	7	9	10	11	13
4	9	11	12	14	16

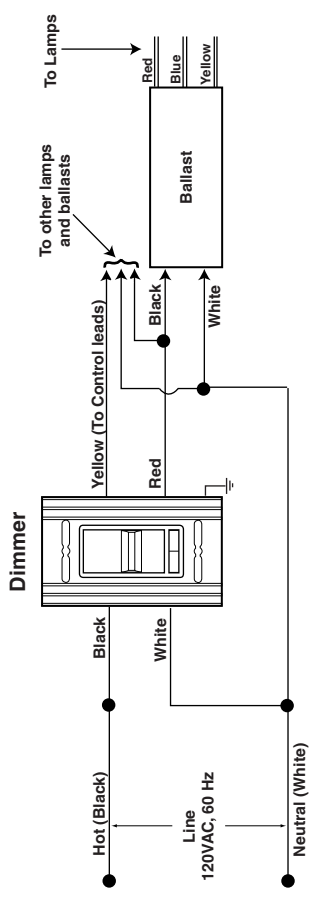
Outlet boxes required for ganging Leviton Renoir™ dimmers when all inside fins are removed.

Wide Dimmers	Narrow Dimmers						
	0	1	2	3	4	5	6
0	0	1	2	3	4	5	6
1	1	3	4	5	6	7	8
2	3	5	6	7	8	9	10
3	5	7	8	9	10	11	12
4	7	9	10	11	12	13	14
5	9	11	12	13	14	15	16
6	11	13	14	15	16	17	18

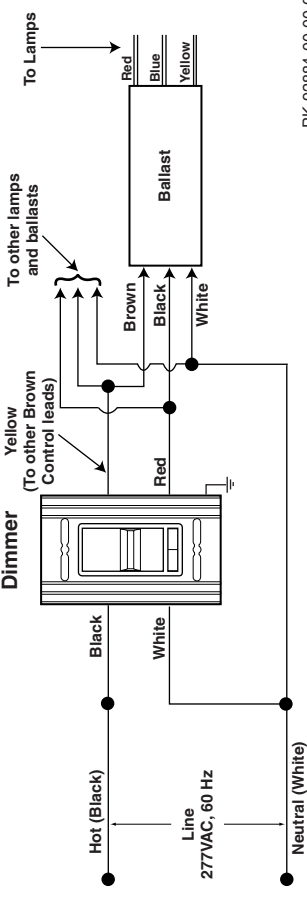
Figure 2 – Break-Off Fin Removal



Wiring Diagram 1 – Single Location Control Application for 120V



Wiring Diagram 2 – Single Location Control Application for 277V

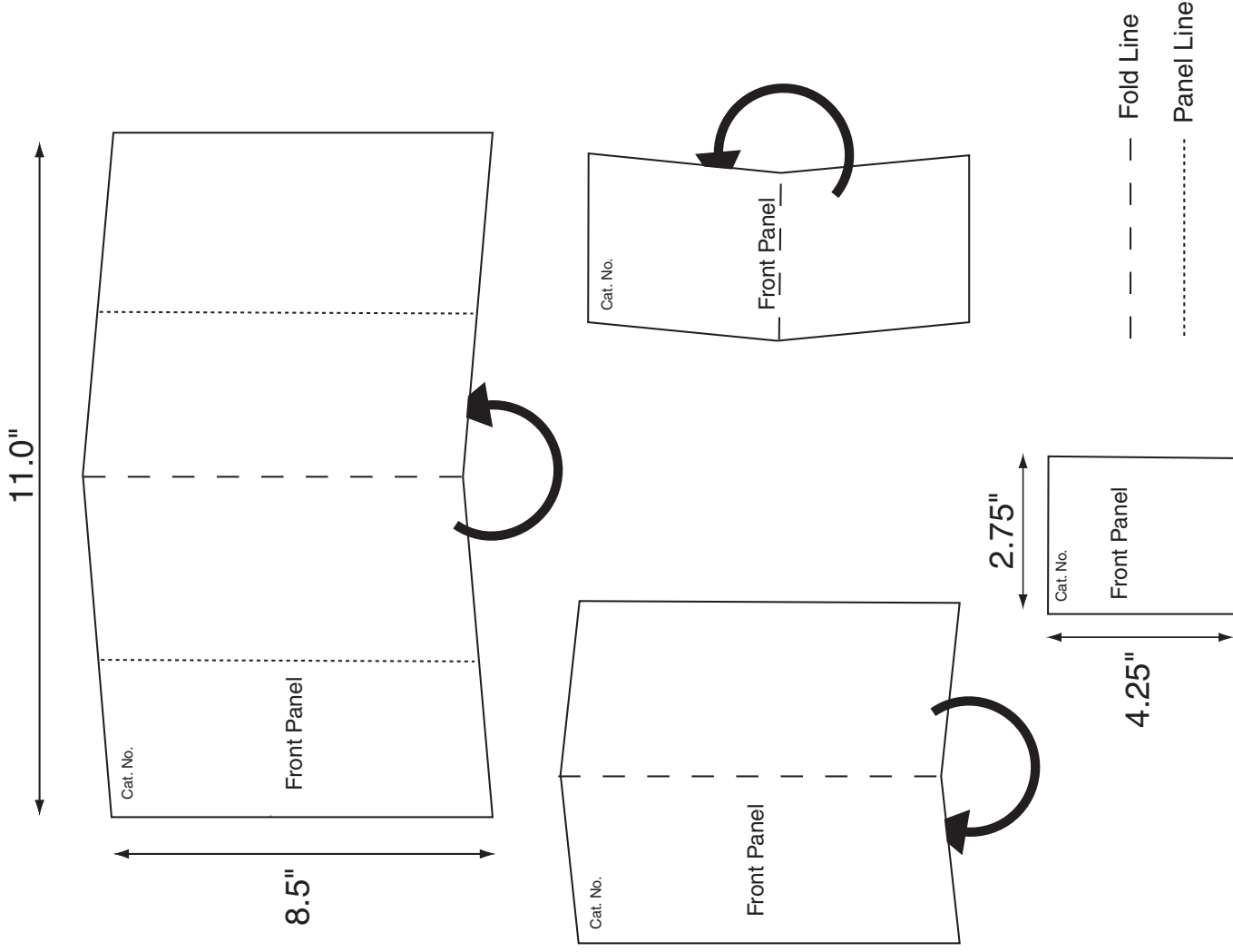


PK-92884-00-00-0A

Cat. No.	Description	Voltage AC Only	Number of 40W Rapid Start Lamps Controlled
86676-1	Single Pole Slide	120V	2-12 Lamps
86676-7	Single Pole Slide	277V	2-12 Lamps
86677-1	Single Pole Slide	120V	4-20 Lamps
86677-7	Single Pole Slide	277V	4-20 Lamps
86678-1	Single Pole Slide	120V	6-30 Lamps
86678-7	Single Pole Slide	277V	6-30 Lamps
86679-1	Single Pole Slide	120V	8-40 Lamps
86679-7	Single Pole Slide	277V	8-40 Lamps

	Single Lamp		Two Lamps	
	120V	277V	120V	277V
Advance Trans. Co.	DIM-140-H		DIM-240-H	
	DIM-140-L			
Universal Mfg. Co.	550-L	679-L	502-A	678-A
	550-L-TC-P		502-A-TC-P	
Valmont Electric/GE	8G-5001W		8G-5001W	

# FOLD SCHEME



## LEVITON INSTRUCTION SHEET/MANUAL SPECIFICATIONS

- Artwork No/Rev Level: PK-92884-10-00-0A
- Color(s): Black over
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
- Font Families: Helvetica
- Material Type: 50 Lb. offset
- Coating:
- Paper size: 11" X 8.5"
- Overall size: 2.75" X 4.25"
- Final fold size: 2.75" X 4.25"

## DOCUMENTATION

- ECO No.: N/A
- Artist: rde Date: 08/05/02

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