

## Power Extender Dimming Control Fluorescent Only

**Cat. No. PE200-1**  
Rating: 1920VA  
120VAC, 50/60Hz

**Cat. No. PE200-7**  
Rating: 3000VA  
277VAC, 50/60Hz

For use with Advance Transformer Mark 10™  
Powerline or Hi-lume® dimming ballasts.

For more information go to [www.leviton.com](http://www.leviton.com)

## INSTALLATION INSTRUCTIONS



DI-000-PE200-00B

### LIMITED 5 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 five years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option, if within such five year period the product is returned prepaid, with proof of purchase date, and a description of the problem to Leviton Manufacturing Co., Inc., Attn: 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 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 five 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](http://www.leviton.com)



DI-000-PE200-00B

## FEATURES

- Works with Mark 10™ or Hi-lume® 120V (Cat.No. PE200-1) and 277V (Cat. No. PE200-7) dimmable ballasts. NOTE: Hi-lume® is a registered trademark of the Lutron Electronics Co., Inc.
- Low-end adjustment available for setting the minimum brightness level.
- Works with any Dimensions 3200 Series Multizone Controller/Dimmer to extend load capacity on any zone.

## DESCRIPTION

The Leviton Power Extender, Cat. No. PE200-1 and PE200-7, will emulate the characteristics of the dimmer that it is connected to in terms of dimming range and resolution.

### Compatibility

- **Box Mounted Dimmers** – Must use a 120V, 600VA Mark 10™ version of the following families: Monet, Illumatech, Sureslide, Mural, and Touch Point.  
**NOTE:** When using Hi-lume® ballasts, incandescent dimmers must be used.
- **D3200** – Zone must be configured to work with fluorescent loads. Refer to D3200 User guide for details.  
**NOTE:** When using Hi-lume® ballasts, the zone must be set for incandescent load.
- **Architectural Systems** – Works with all families.

**NOTE:** For dimmers that include a Neutral wire, the dimmer Neutral wire must be connected.

**NOTE:** The PE200 has a minimum level adjustment.

## FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## 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.

### OTHER CAUTIONS:

1. BOTH LIGHTING FIXTURE AND CONTROLLER MUST BE GROUNDED.
2. DISCONNECT POWER WHEN SERVICING FIXTURE OR CHANGING LAMPS.
3. TO BE USED FOR DIMMING ONLY WITH ADVANCE MARK 10™ OR HI-LUME® DIMMING BALLASTS.
4. USE THIS DEVICE ONLY WITH COPPER OR COPPER CLAD WIRE. WITH ALUMINUM WIRE USE ONLY DEVICES MARKED CO/ALR OR CU/AL.

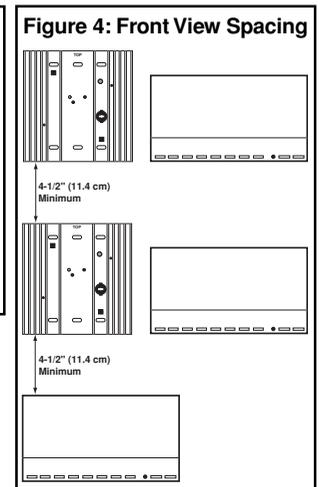
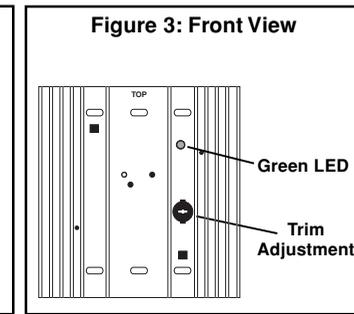
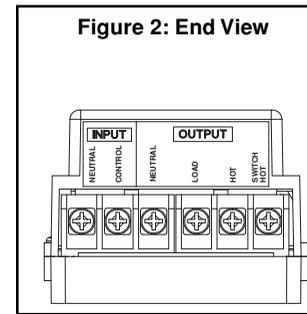
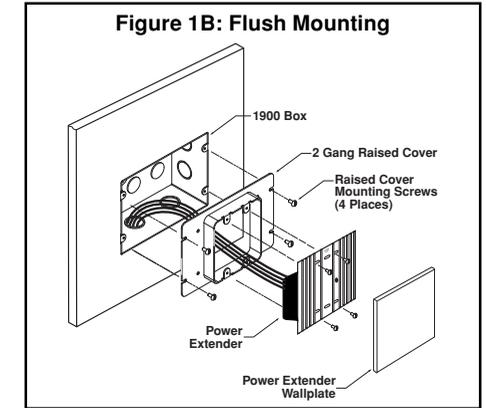
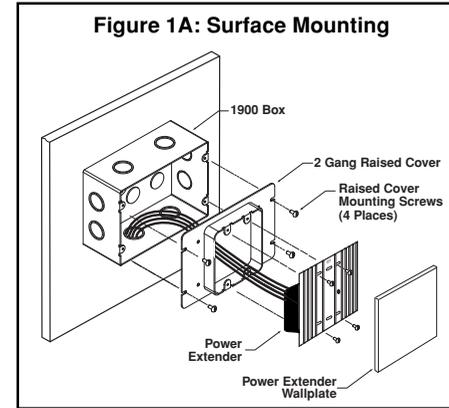
**NOTE:** The Power Extender must be installed in a 1900 Box with Raised Cover or a properly grounded metal 2-gang wall box, 3.5" (8.9 cm) deep (refer to Figure 1A and 1B). Depending on the application and the number of connections, more space may be needed. If so, use an appropriate size box or box extension.

### TO INSTALL:

1. **WARNING:** TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKERS OR FUSES AND TEST THAT POWER IS OFF BEFORE WIRING!  
MORE THAN ONE CIRCUIT BREAKER CAN POWER THIS DEVICE. DISCONNECT "ALL" POWER SOURCES BEFORE SERVICING CONTROL.
2. Remove 1/2" (1.3 cm) of insulation from each circuit conductor in wall box. Make sure that ends of conductors are straight.
3. Connect lead wires per appropriate WIRING DIAGRAM and FIGURE 2 as follows: All connections to the output terminals should be made using #12 AWG wire. Each power terminal can accept up to two(2) #12 wires. The recommended installation torque is 9.0 in.-lbs. for line voltage connections.
4. Carefully position all wires to provide room in wall box for Power Extender. All Power Extenders must have 4-1/2" spacing above and below each unit for proper ventilation and heat dissipation (refer to Figure 4). Line voltage wiring should be at least 6 ft. away from sound or electronic equipment wiring. Mount Power Extender to outlet box with "TOP" facing up (refer to Figure 3).

**For Wall Box Mounting:** Refer to Figure 1A.

**For Flush Mounting:** Refer to Figure 1B.



**For Panel Mounting (not shown),** Proceed as follows:

- a. The enclosure must be in accordance with all local and national electrical codes.
  - b. Leviton DOES NOT recommend using a door to enclose the front of a panel, since this restricts airflow to the controls.
  - c. If mounting multiple controls in an enclosure:
    - Ambient temperature within an enclosure "MUST REMAIN BETWEEN" 32°-104° F (0°-40° C).
    - If not mounting in a metal enclosure, all units "MUST" be mounted in a wall box.
  - d. To improve heat dissipation of controls, remove the faceplate from the unit.
5. Restore power at circuit breaker or fuse.
  6. Turn ON the dimmer.
  7. Using the dimmer control, verify that the load DIMS and BRIGHTENS smoothly and the lamps do not flicker.
  8. Attach wallplate by aligning tabs on back of plate with grooves in fins on Power Extender (refer to Figure 1A and Figure 1B). **INSTALLATION IS COMPLETE.**

## OPERATION

The operation of the PE200 follows the operation of the dimmer that it is connected to. To operate the PE200, the dimmer must be operated as follows:

- ON:** Turn ON the dimmer.
- Turn OFF:** Turn OFF the dimmer.
- DIM:** Adjust the dimmer DIM level.
- BRIGHTEN:** Adjust the dimmer BRIGHTNESS level.
- Green LED:** Illuminates when load in ON.
- Air Gap:** Activating the air gap on the dimmer will cause the PE200 to turn its controlled Load OFF.  
**CAUTION:** The Power Extender will still remain powered, but it will not activate the load.

The PE200 has an air gap relay built in, therefore, the ballasts will be disconnected by an air gap when the dimmer is OFF or the air gap control on the dimmer is activated.

## TROUBLESHOOTING

- The Power Extender is not powered
  - Circuit breaker is OFF.
  - Power wires are not connected properly.
- The load does not turn ON, but the Power Extender is powered
  - The dimmer is OFF.
  - The dimmer air gap switch is activated.
  - The dimmer is connected to a separate circuit, and the circuit breaker is OFF.
  - Dimmer is mis-wired
    - Control Neutral (from dimmer) wire is not connected to the Neutral of the Line pair feeding the dimmer.
- No full range dimming
  - Remove wallplate if necessary and ensure the Power Extender trim adjustment (refer to Figure 3) is set to its fully counter-clockwise (ccw) minimum level.

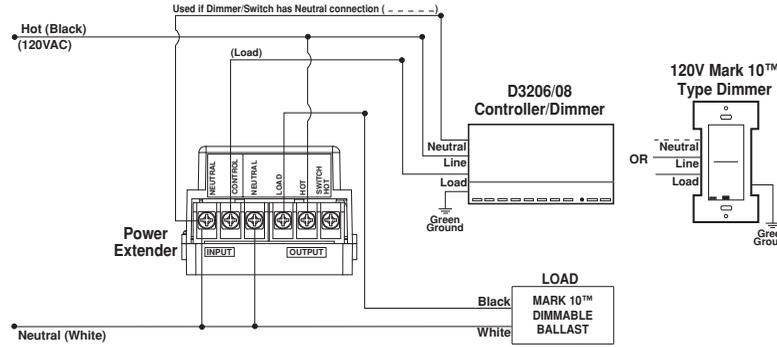
**TABLE 1**  
Cat. No. PE200-1, 120V – For use with Advance Mark 10™ 120V Dimming Ballasts

Advance Mark 10™ Part No.	Lamps	Max. # Ballasts Single Gang
REZ-1T32	CFM26W/GX24Q	62
REZ-1T32	CFM32W/GX24Q	50
REZ-1T42	CFM42W/GX24Q	39
REZ-2Q26	CFQ26W/G24Q	33
REZ-132	F25T8	62
REZ-2S32	F25T8	32
REZ-3S32	F25T8	22
REZ-132	F32T8	53
REZ-2S32	F32T8	27
REZ-3S32	F32T8	18
REZ-1TTS40	FT40W/2G11	47
REZ-2TTS40	FT40W/2G11	24

**TABLE 2**  
Cat. No. PE200-7, 277V – For use with Advance Transformer 277V Mark 10™ Dimmable Ballasts

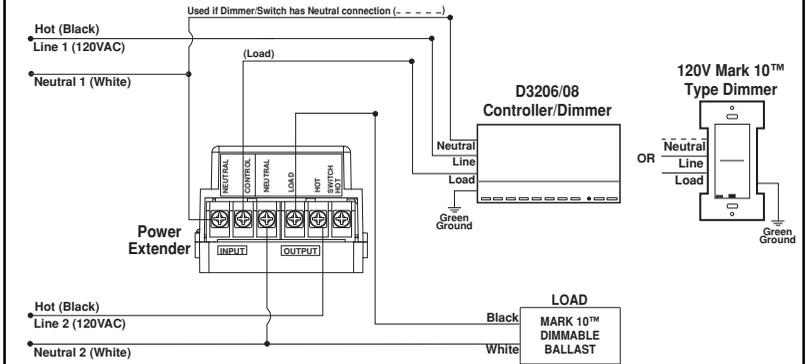
Advance Mark 10™ Part No.	Lamps	Max. # Ballasts Single Gang
VEZ-1T32	CFM26W/GX24Q	98
VEZ-1T32	CFM32W/GX24Q	77
VEZ-1T42	CFM42W/GX24Q	60
VEZ-2Q26	CFQ26W/G24Q	52
VEZ-132	F25T8	98
VEZ-2S32	F25T8	49
VEZ-3S32	F25T8	34
VEZ-132	F32T8	83
VEZ-2S32	F32T8	42
VEZ-3S32	F32T8	29
VEZ-1TTS40	FT40W/2G11	72
VEZ-2TTS40	FT40W/2G11	36

**Wiring Diagram 1A**  
120V Single Feed Wiring Application w/Mark 10™ Ballast



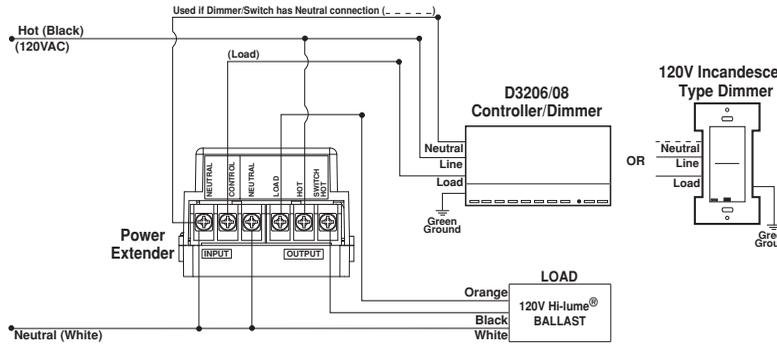
**Single Feed Wiring:** Line Hot can be controlled by one circuit breaker as long as the total load does not exceed the rating of the circuit breakers.

**Wiring Diagram 1B**  
120V Dual Feed Wiring Application w/Mark 10™ Ballast



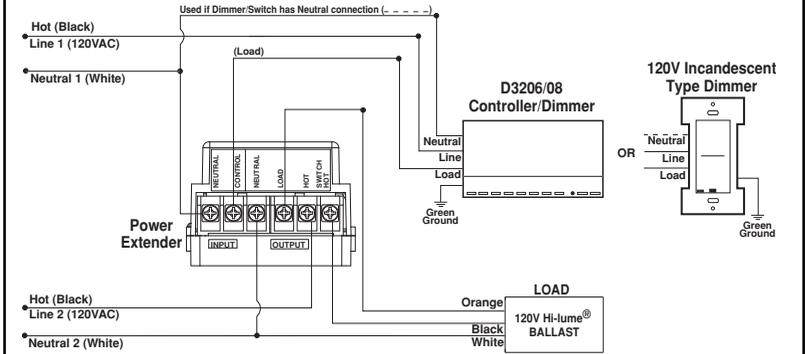
**Dual Feed Wiring:** The Input control circuit and the Output load circuit can be supplied by two circuit breakers on a single phase or by two separate phases.

**Wiring Diagram 2A**  
120V Single Feed Wiring Application w/Hi-lume® Ballast



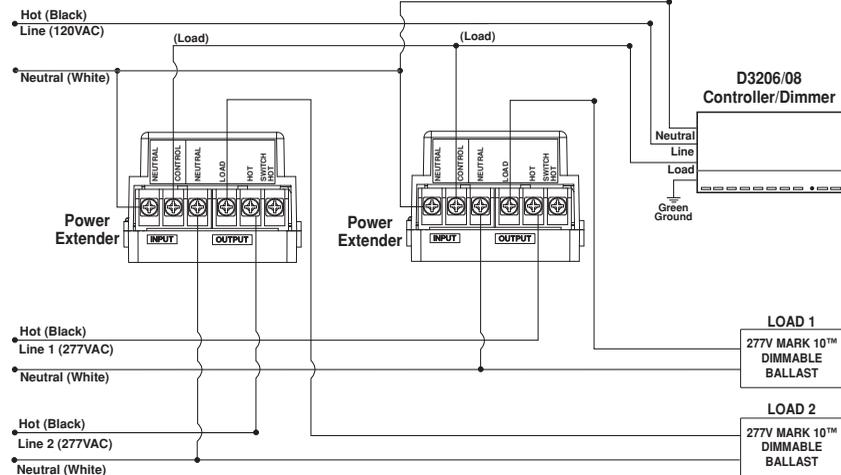
**Single Feed Wiring:** Line Hot can be controlled by one circuit breaker as long as the total load does not exceed the rating of the circuit breakers.

**Wiring Diagram 2B**  
120V Dual Feed Wiring Application w/Hi-lume® Ballast



**Dual Feed Wiring:** The Input control circuit and the Output load circuit can be supplied by two circuit breakers on a single phase or by two separate phases.

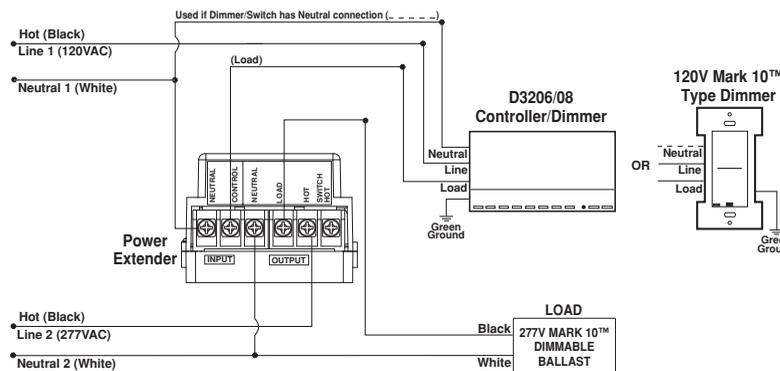
**Wiring Diagram 4: Dual Feed Wiring Application w/Controller and Two Power Extenders (277V depicted)**



**Dual Feed Wiring:** The Input control circuit and the Output load circuit can be supplied by two circuit breakers on a single phase or by two separate phases.

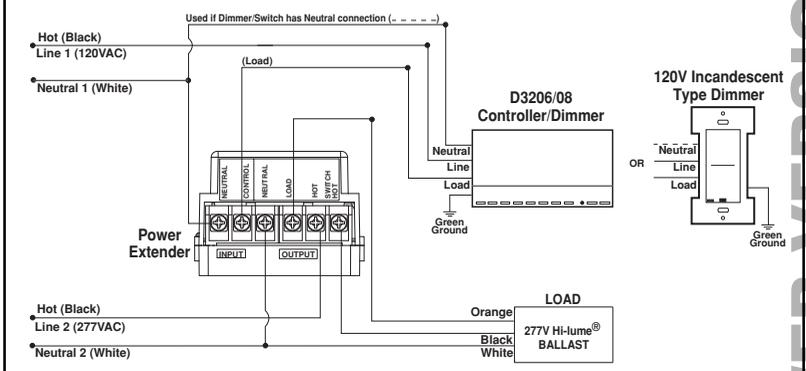
**NOTE:**  
Up to 4 Power Extenders can be connected together.

**Wiring Diagram 3A**  
277V Dual Feed Wiring Application w/Mark 10™ Ballast



**Dual Feed Wiring:** The Input control circuit and the Output load circuit can be supplied by two circuit breakers on a single phase or by two separate phases.

**Wiring Diagram 3B**  
277V Dual Feed Wiring Application w/Hi-lume® Ballast



**Dual Feed Wiring:** The Input control circuit and the Output load circuit can be supplied by two circuit breakers on a single phase or by two separate phases.