

NGRX-PB Power Booster

Description

- Provides capability for a zone on a GRAFIK Eye® 3000 Series Control Unit to control a larger load. Allows the zone to dim or switch a fully-loaded circuit of lighting.
- Dims or switches most popular lighting sources and load types.
- Models available for 120 V~, 220-240 V~ (non-CE), 230 V~ (CE), or 100 V~ input power.

Works with:

- GRAFIK Eye® 3000 Series Control Units
- LP Dimming Panels
- HomeWorks® Remote Power Panels
- Neutral-referenced wallbox dimmers by Lutron.



Models and Capacities

Input Power	Capacity	Model Number
120 V~	2000 W/VA ¹	NGRX-PB-WH
220-240 V~ (non-CE)	2400 W/VA	NGRX-PB-AU-WH
230 V~ (CE)	1200 W/VA (flush mount with faceplate) 1840 W/VA (surface mount without faceplate)	NGRX-PB-CE-WH
100 V~	1600 W/VA	NGRX-PB-JA-WH

Two Power Boosters may be used on a zone to double the capacity. Use the HP Dimming Module System for zones that exceed the capacity of the Power Booster.

¹ Measured current will not exceed continuous load rating due to voltage drop in the dimmer.

Job Name:	Model Numbers:
Job Number:	

Specifications

Power

- Input power: 120 V~, 220-240 V~ (non-CE), 230 V~ (CE), or 100 V~. All voltages 50/60 Hz, phase-to-neutral.
- Load (output) power: Phase independent of Control Unit.

Sources/Load Types

Operates these sources with a smooth continuous Square Law dimming curve or on a full conduction non-dim basis:

- Incandescent (Tungsten)
- Halogen
- Magnetic Low-Voltage Transformer¹
- Lutron Tu-Wire® Electronic Fluorescent Dimming Ballast
- Neon/Cold Cathode

Key Design Features

Patented RTISS® circuitry compensates in real time for incoming line voltage variations: No visible flicker with +/-2% change in RMS voltage/cycle and +/-2% Hz change in frequency/second.

Terminals

Accept up to two 12 AWG (2.5 mm²).

Environment

32 °F - 104 °F (0 °C - 40 °C). Relative humidity less than 90% non-condensing.

Mounting

Surface or recess mount indoors only.

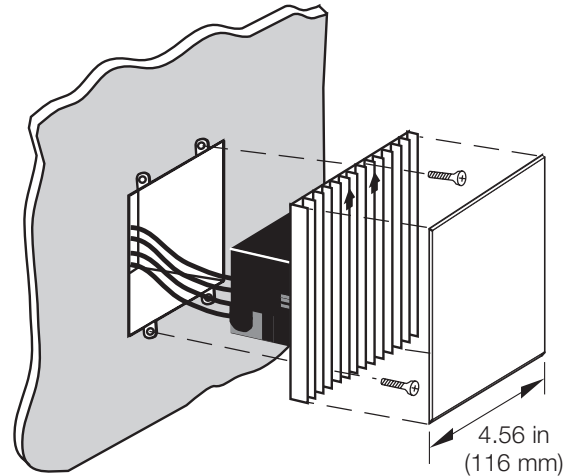
¹Must have iron core (magnetic) transformers

Job Name:	Model Numbers:
Job Number:	

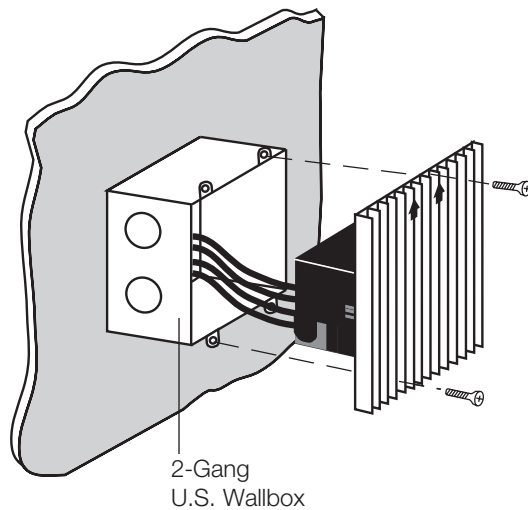
Dimensions and Mounting

- Recess or surface mount in 2-gang U.S. wallbox 3.5 in (89 mm) deep. Indoors only.
- Power Booster generates heat; mount only where ambient temperature is 32 °F - 104 °F (0 °C - 40 °C).
- Mount with arrows facing up to ensure adequate cooling.
- Allow 4.5 in (115 mm) above and below unit and between faceplates when mounting several in a vertical layout.
- For better heat dissipation, surface mount without faceplate.
- Mount so line (mains) voltage wiring is at least 6 ft (1.8 m) from sound or electronic equipment and wiring.
- Mount Interface within 7° of true vertical.

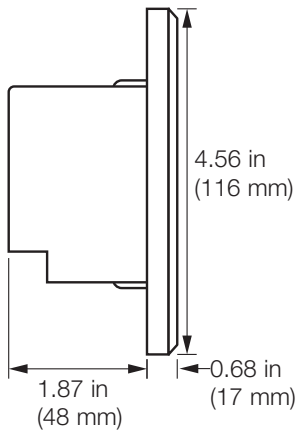
Recess Mount with Faceplate



Surface Mount without Faceplate



Side View



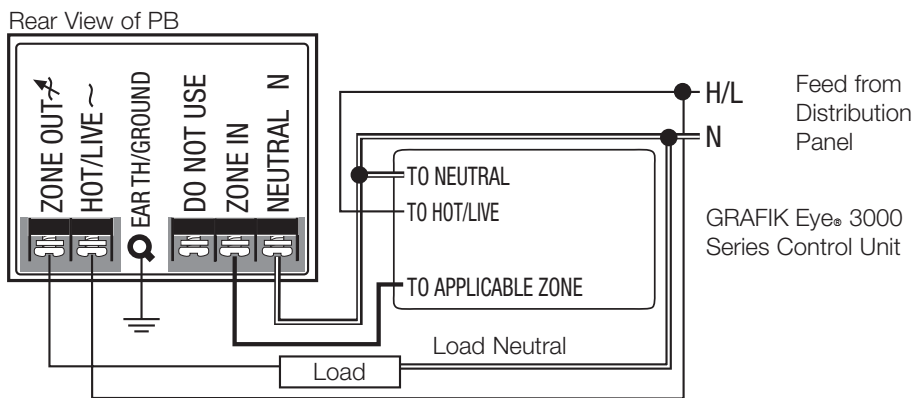
Job Name:	Model Numbers:
Job Number:	

Wiring

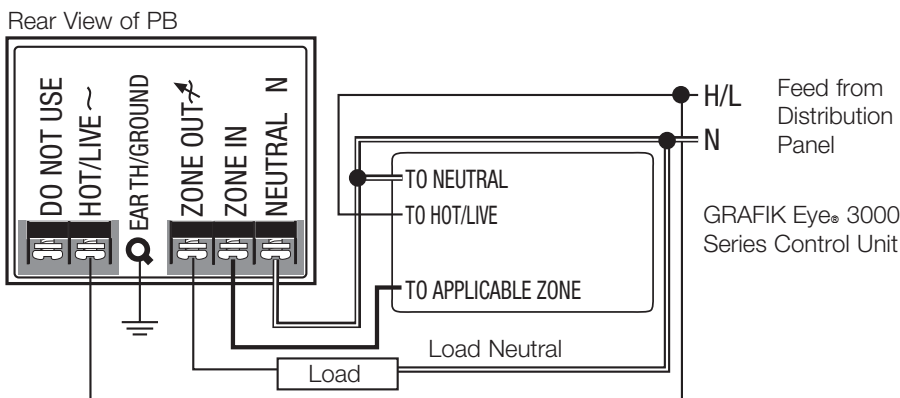
- Pull 12 AWG (2.5 mm²) Copper (Cu) wires (75 °C minimum) for input power and load circuit.
- Strip 0.5 in (12 mm) insulation from wires before connecting.
- Run separate neutral for load circuit - no common neutrals. Neutral (N) terminal is for Control Unit, not the load neutral.

The Power Booster may be on the same circuit as the Control Unit *only if* the total load does not exceed the rating of the breaker.

Single-Feed Wiring for NGRX-PB 100 V~, 120 V~, and 220-240 V~



Single-Feed Wiring for NGRX-PB-CE (230 V~)

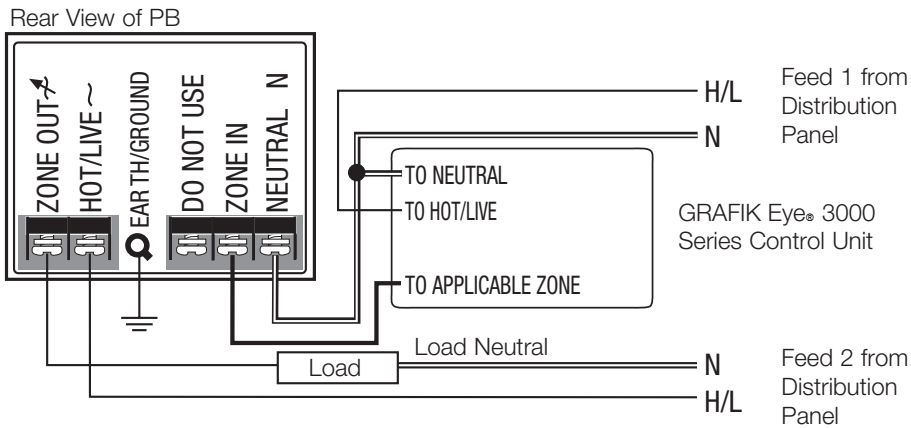


Job Name:	Model Numbers:
Job Number:	

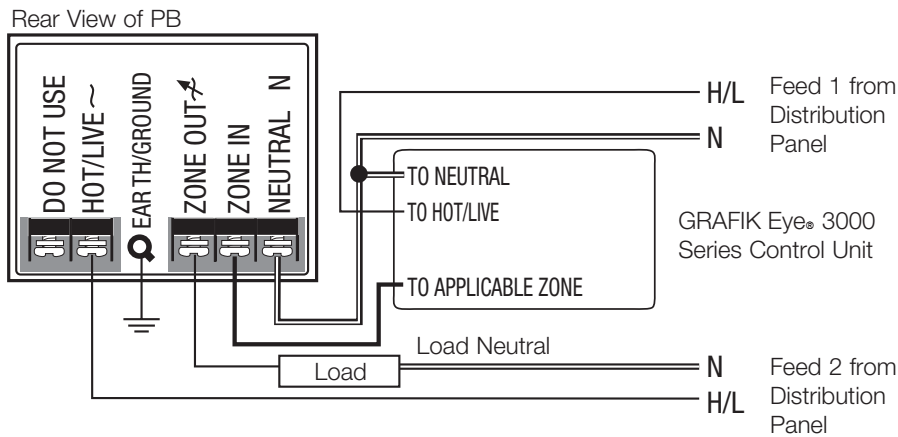
Multiple Power Feeds

The load breaker/MCB may be on a different phase than the control breaker/MCB.

Dual-Feed Wiring for NGRX-PB 100 V~, 120 V~, and 220-240 V~



Dual-Feed Wiring for NGRX-PB-CE (230 V~)



With Other Lutron Lighting Controls

To wire a Power Booster to lighting control equipment other than a GRAFIK Eye[®] 3000 Series Control Unit:

- Run a Neutral wire from the control equipment to Neutral N on the PB.
- Run a dimmed hot wire from the control equipment to Zone In on the PB.

Job Name:	Model Numbers:
Job Number:	