Wallbox Power Module

HomeWorks® Wallbox Power Modules (WPM) control six zones of lighting. The WPM is designed to be located in closets, equipment rooms, and other locations in the home where it is "hidden" from view. Clients use keypads to control the lights connected to the WPM.

CONNECTION TO PROCESSOR

The WPM is wired like a six-zone GRAFIK Eye® control unit (GRX-3506). Each *HomeWorks* processor has three configurable links each capable of controlling up to eight WPM or *GRAFIK Eye* control units. This connection requires two pair [one pair 1.0mm² (#18 AWG), one pair 0.5-1.0mm² (#18-22 AWG) twisted shielded] Class 2/PELV wire. Lutron® wire model GRX-CBL-346S-500 may be used. The maximum cable length is 610m (2,000 feet), and this link must be wired in a daisy-chain configuration.

The wattage and load type specifications of the WPM are the same as six-zone *GRAFIK Eye* control unit (GRX-3106/3506 models). All connections on the back of the WPM are identical to those on the six-zone *GRAFIK Eye* control unit.

DEFAULT SCENE BUTTON

Each WPM has a default scene button on the front that allows a user to toggle between a preset scene and OFF. This scene is stored inside the WPM and can be activated at any time. The default scene provides "fail-safe" operation allowing the WPM to be controlled locally if communication to the processor is lost.

Default scene status LED

Default scene button
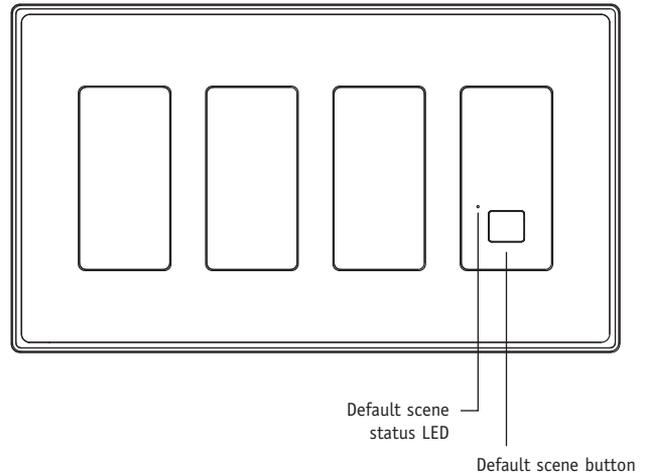
Wallbox Power Module

WPM BENEFITS:

• Minimises the number of controls on the wall

• Provides a cost-effective dimming solution to jobs with lower wattage loads

• Reduces overall job cost by up to 5-20% when less than 96 control zones are required

• Install in areas where available space is minimal

• Compatible with LINC™ prewire boxes

Note: *Use 89mm (3-1/2 inches) deep wallboxes for ease of installation of* GRAFIK Eye *control units.*

COMPONENTS

Wallbox Power Module

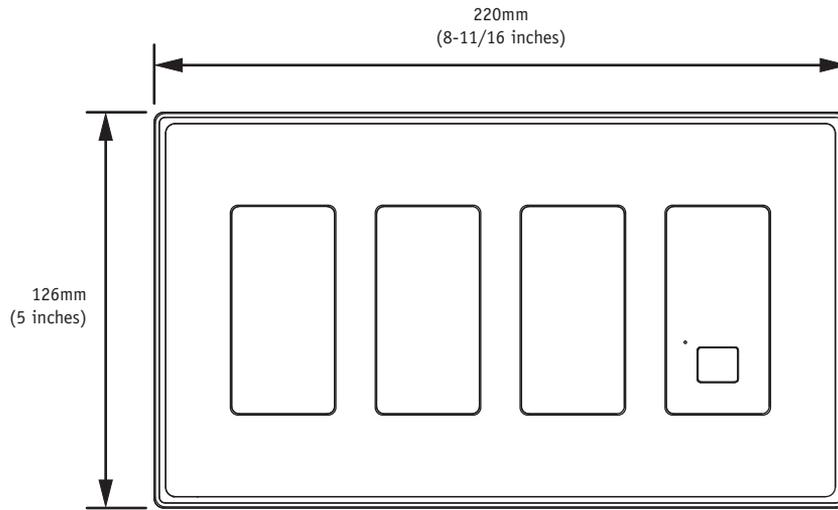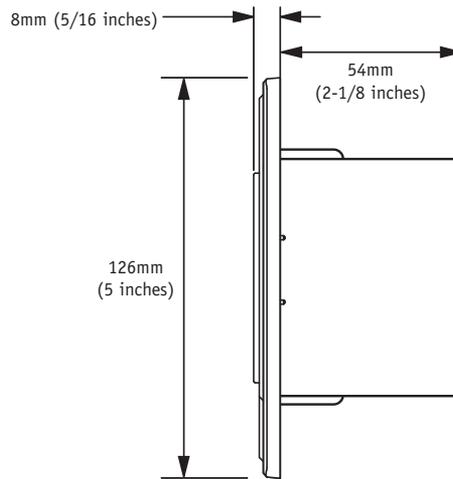| Control Units	
Model	HWI-WPM-6D-230CE: control six zones of lighting. (CE compliant) HWI-WPM-6D-240: control six zones of lighting. (non-CE)
Input voltage	220-240VAC, 50/60Hz
Regulatory approvals	CE, C-Tick (CE compliant model)
Load types	Incandescent, magnetic low voltage, electronic low voltage (requires Lutron® low-voltage transformers), fluorescent non-dim, neon/cold cathode. The outputs are also compatible with *Lutron* Power Boosters and interfaces in *section 6*.
Maximum load (CE)	2200W/VA per control unit, 800W/VA per zone.
Maximum load (non CE)	3000W/VA per control unit, 1200W/VA per zone.
Minimum load	25W/VA per zone.
Environment	Ambient temperature: 0-40°C, 32-104°F Ambient humidity: 0-90% humidity, non-condensing. Indoor use only.
Cooling method	Passive cooling.
Line-voltage connections	*See figure 3 and 4, page 4.12.*
Low-voltage wire type	Two pair [one pair 1.0mm² (#18 AWG), one pair 0.5-1.0mm² (#18-22 AWG) twisted shielded] Class 2/PELV wire. *Lutron* wire model GRX-CBL-346S-500 may be used.
Low-voltage wiring configuration	Maximum of 610m (2,000 feet) total. Must be wired in a daisy-chain configuration. *See figure 5, page 4.20.*
Low-voltage connection	One 4-pin removable terminal block. Each of the four terminals will accept up to two 1.0mm² (#18 AWG) wires. Do not connect terminal 2 on processor communication link connector or between WPM units.
Addressing	Via rotary dial. Use 1 of 8 addresses on a GRAFIK Eye®/WPM link.
ESD protection	Meets or exceeds the IEC 61000-4-2 standard.
Surge protection	Meets or exceeds ANSI/IEEE standard c62.41.
Air gap	Provided when all circuits are off.
Power-failure memory	Non-volatile RAM.
Fail-safe operation	If communication with the processor is interrupted, all Wallbox Power Modules will still allow local control.
Dimensions	*See figures 1 and 2, page 4.19.*
Mounting	4-gang US wallbox, 70mm (2-3/4 inches) deep minimum, 89mm (3-1/2 inches) deep recommended for ease of wiring. If mounting one control above another, leave at least 11.4cm (4-1/2 inches) vertical spacing between them. *Lutron* model 241400 may be used.
Shipping weight	0.9kg (2 pounds)

Wallbox Power Module

220mm
(8-11/16 inches)

126mm
(5 inches)

Figure 1 — front view

8mm (5/16 inches)

54mm
(2-1/8 inches)

126mm
(5 inches)

Figure 2 — side view

Wallbox (Lutron model 241-400 may be used).

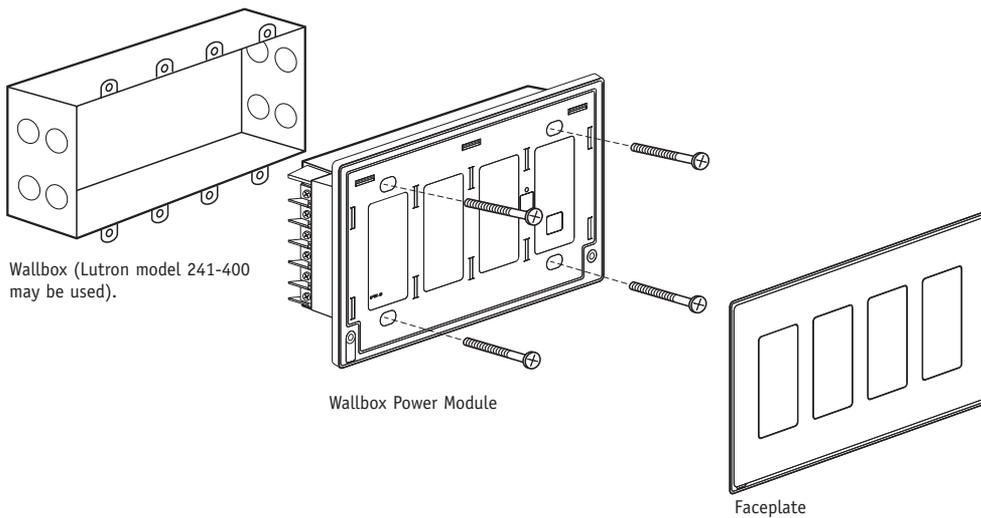Wallbox Power Module

Faceplate

Figure 3 — mounting

Wallbox Power Module
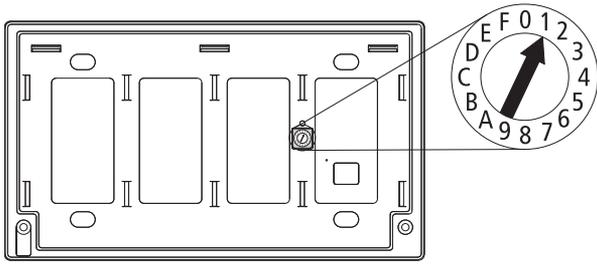
Figure 4 – rotary address switch location
(faceplate removed)

Position	Proper module output/purpose
0	All outputs OFF
1-8	Address for normal operation
9	Output 1 full ON, all others OFF
A	Output 2 full ON, all others OFF
B	Output 3 full ON, all others OFF
C	Output 4 full ON, all others OFF
D	Output 5 full ON, all others OFF
E	Output 6 full ON, all others OFF
F	All outputs full ON

Table 1 – rotary address dial operation
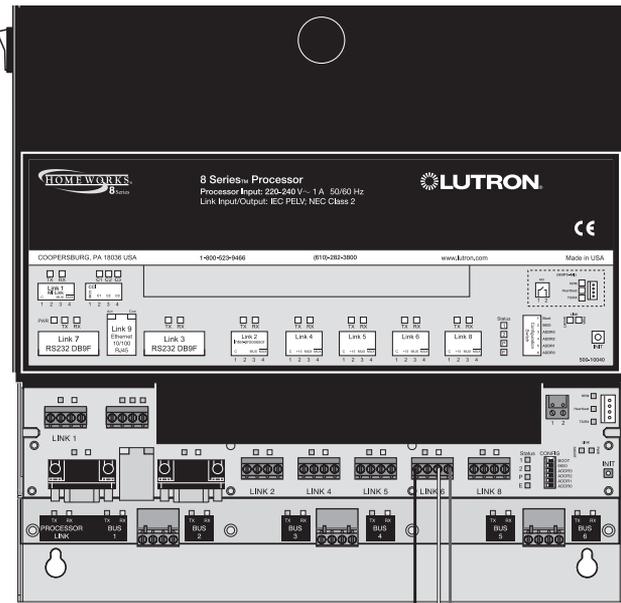
Pin 1 - One 1.0mm² (#18 AWG) for common
Pin 2 - Do not connect
Pins 3 and 4 - One pair 1.0-0.5mm² (#18-22 AWG)
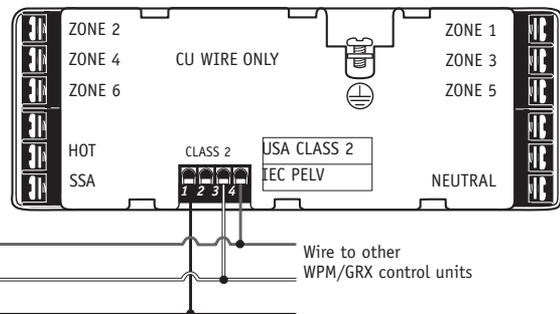twisted/shielded for data

Wire to other
WPM/GRX control units

Figure 5 – connection to processor

COMPONENTS