Wallbox Power Module

4/8 Series
- Remote Dimming Controls
- Grafik Eye®/WPM Link
- N/A

WALLBOX POWER MODULE (HWI-WPM-6D-120)

HomeWorks® Wallbox Power Modules (WPM) control six independent zones of lighting and fit in a 4-gang wallbox. The WPMs are designed to be placed in closets, equipment rooms, and other locations in the home where it is “hidden” from view. Homeowners use system keypads to control the WPM.

CONNECTION TO WIRED PROCESSOR

The WPMs are wired like a six-zone GRAFIK Eye® control unit. Each HomeWorks wired processor has a minimum of three configurable links (see pg. 90 for processor details), each capable of controlling up to eight WPM or GRAFIK Eye control units. This connection requires two pair – one pair #18 AWG (1.0 mm²), one pair #18-22 AWG (1.0-0.5 mm²) twisted shielded – Class 2 wire. Lutron® wire model # GRX-CBL-346S-500 may be used. The maximum cable length is 2000 feet (610 m). This link must be wired in a daisy-chain configuration.

The wattage and load type specifications of the WPM are the same as a six-zone GRAFIK Eye control unit. All connections on the back of the WPM are identical to those on the six-zone GRAFIK Eye control unit. See GRAFIK Eye multi-zone local lighting controls on pg. 66.

DEFAULT SCENE BUTTON

Each WPM has a default scene button on the front of the unit that allows a user to toggle between a preprogrammed scene (defined in the HomeWorks software) and OFF. This scene is stored inside the WPM and can be accessed at any time. The default scene provides “fail-safe” operation, allowing the WPM to be controlled locally in the unlikely event communication to the processor is interrupted. Connect an NTGRX-1S control to the SSA input to allow remote operation of the default scene.

WPM BENEFITS:

- 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 yachts, luxury buses, small condominiums, or anywhere space is a premium
- Add remote zones without installing an enclosure

Note: Use 3½ inch (89 mm) deep masonry wallboxes for ease of installation of Wallbox Power Modules.
## Wallbox Power Module (cont.)

<table>
<thead>
<tr>
<th>Model Number</th>
<th>HWI-WPM-6D-120: Control six independent zones of lighting.</th>
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</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>120 V ~ 50/60 Hz</td>
</tr>
<tr>
<td>Regulatory Approvals</td>
<td>UL, CSA, NOM</td>
</tr>
<tr>
<td>Load Types</td>
<td>Incandescent, magnetic low-voltage, neon/cold cathode, fluorescent (requires GRX-FDBI-16A-120 or Hi-Power 2•4•6™), electronic low-voltage (requires ELVI-1000 or Hi-Power 2•4•6). Outputs are compatible with Lutron. NGRX-PB-WH and Hi-Power 2•4•6 Power Boosters for higher wattage applications, and LUT-LBX for low-wattage loads.</td>
</tr>
<tr>
<td>Maximum Load</td>
<td>1920 W/VA per control unit, 800 W/VA per zone.</td>
</tr>
<tr>
<td>Minimum Load</td>
<td>25 W/VA per zone.</td>
</tr>
</tbody>
</table>
| Environment        | Ambient operating temperature: 0 °C to 40 °C, 32 °F to 104 °F  
Ambient operating humidity: 0-90% humidity, non-condensing. Indoor use only. |
| Cooling Method     | Passive cooling.                                         |
| Heat Generated     | 82 BTUs per hr.                                          |
| Fully Loaded       |                                                           |
| Line-Voltage Connections | See Fig. 6, pg. 122.                                      |
| Low-Voltage Wire Type | Two pair – one pair #18 AWG (1.0 mm²), one pair #18-22 AWG (1.0-0.5 mm²) twisted shielded – Class 2 wire. Lutron wire model # GRX-CBL-346S-500 may be used. |
| Low-Voltage Wiring Configuration | Maximum of 2000 feet (610 m) total. Must be wired in a daisy-chain configuration.  
See Fig. 5, pg. 122. |
| Low-Voltage Connections | One 4-pin removable terminal block. Each of the four terminals will accept up to two #18 AWG (1.0 mm²) wires.  
Do not connect Terminal 2 on processor communication link connector. |
| Addressing         | Via rotary dial located behind faceplate. Use 1 of 8 addresses on a GRAFIK Eye. link. |
| Diagnostics        | LED provided to indicate proper communications with processor. |
| 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 six circuits are off.                   |
| Fail-Safe Operation| In the unlikely event that communication with the processor is interrupted, all wallbox power modules will still operate, offering local control. |
| Dimensions         | See Figs. 1, 2, pg. 121.                                  |
| Mounting           | 4-gang US wallbox, 2 3⁄4 in (70 mm) deep minimum, 3 1⁄2 in (89 mm) deep recommended for ease of wiring. If mounting one control above another, leave at least 4 1⁄2 in (11.4 cm) vertical spacing between them. |
| Shipping Weight    | 2 lbs. (0.9 kg)                                           |
Wallbox Power Module (cont.)

Figure 1 – Front View
Dimensions

Figure 2 – Side View
Dimensions

Wallbox Power Module

Faceplate (included)

Figure 3 – Mounting

Wallbox (Lutron part number 241-400 may be used).
Wallbox Power Module (cont.)

Position | Proper Module Output/Purpose
---|---
0 | All Zones OFF
1-8 | Address for normal operation
9 | Zone 1 Full ON, all others OFF
A | Zone 2 Full ON, all others OFF
B | Zone 3 Full ON, all others OFF
C | Zone 4 Full ON, all others OFF
D | Zone 5 Full ON, all others OFF
E | Zone 6 Full ON, all others OFF
F | All Zones Full ON

**Table 1 – Rotary Address Dial Operation**

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

![Figure 4 – Rotary Address Dial Location (faceplate removed)](image)

Wire to processor’s configurable link
Wire to other WPM/GRX Control Units

![Figure 5 – Connection to Wired Processor](image)

Distribution Panel
Hot/Live
Neutral

Earth/Ground from Distribution Panel

![Figure 6 – Line-Voltage Wiring Diagram](image)

Connection between #2 terminals is not made between a Wired Wallbox Power Module and the HomeWorks® Processor.
Connection between #2 terminals is not made between two Wired Wallbox Power Modules or GRAFIK Eye® control units.