

# Remote Power Panels with Breakers

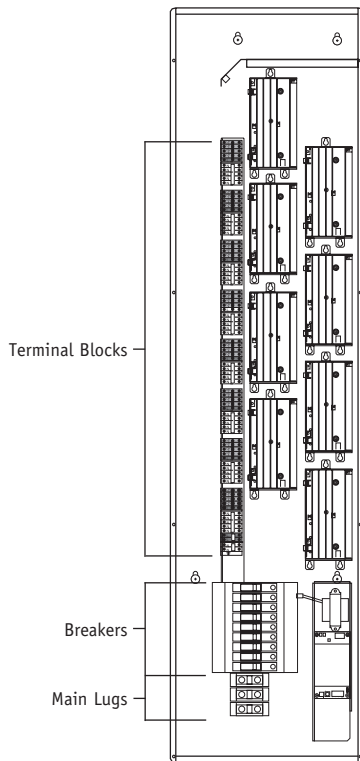
|                     |
|---------------------|
| 8 Series            |
| Panels & Enclosures |
| N/A                 |
| N/A                 |

Remote power panels with breakers are available in two different sizes, each of which may be either surface-mounted or recess-mounted, in an electrical closet or other equipment room. The number of remote power panels—and the types of components within them—may be specified to fit the size, lighting plan, and design of a home.

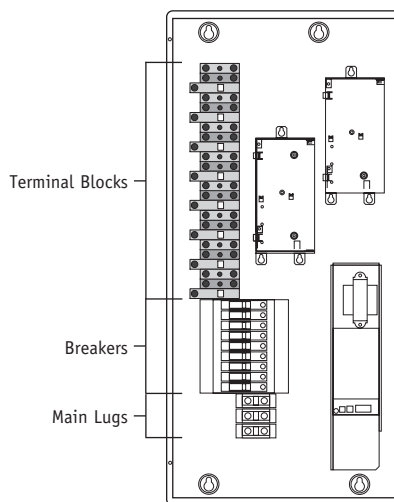
Both the HWBP-8D and HWBP-2S include factory-installed wiring from the breakers to the terminal blocks. Remote power panels may be distributed throughout the home for added flexibility during installation of the line-voltage wiring.

Remote power panels with breakers require only one feed from the main distribution panel, reducing the number of wiring connections required (feed-through panels require up to nine separate feeds).

Remote power panels with breakers may contain remote power modules and a module interface. Panels with breakers may not contain HomeWorks® processors.



**Remote Power Panel with Breakers (HWBP-8D)**

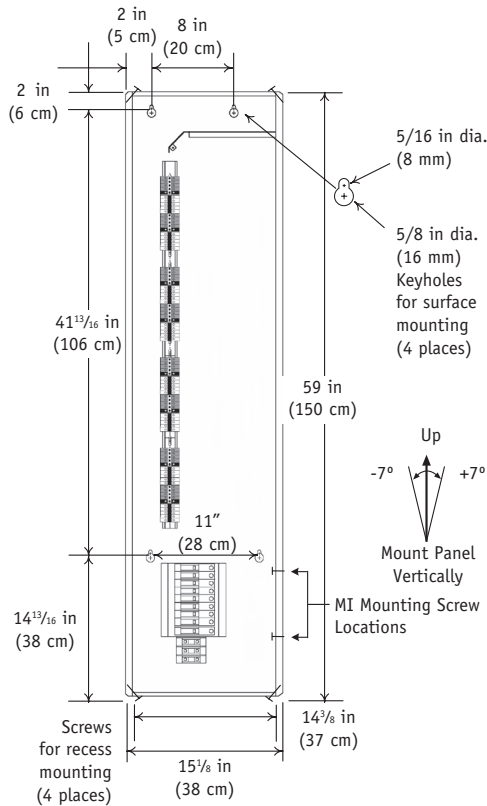


**Remote Power Panel with Breakers (HWBP-2S)**

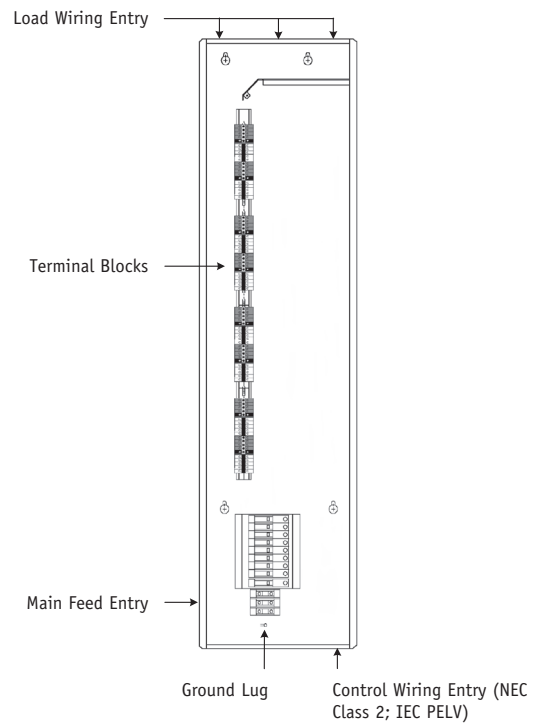
# Remote Power Panels with Breakers (cont.)

|   |   |
|---|---|
| Model Numbers                                 | <p>Single Phase:<br/>           HWBP-8D-15-120L3: 15 A circuit breakers for up to 8 RPMs (4A, 4U, 4M, 4FSQ).<br/>           HWBP-8D-20-120L3: 20 A circuit breakers for up to 8 RPMs (4A, 4U, 4M, 4FSQ).</p> <p>Three Phase:<br/>           HWBP-8D-15-120L4: 15 A circuit breakers for up to 8 RPMs (4A, 4U, 4M, 4FSQ).<br/>           HWBP-8D-20-120L4: 20 A circuit breakers for up to 8 RPMs (4A, 4U, 4M, 4FSQ).</p>  |
| Capacity                                      | Eight RPMs (HW-RPM-4A, HW-RPM-4U, HW-RPM-4FSQ, and HW-RPM-4M) and one module interface. <i>See Fig. 3, pg. 156.</i>   |
| Input Voltage                                 | <p>Single phase: 120 V<math>\sim</math>/240 V<math>\sim</math> 1-phase 3-wire 175 A max feed.<br/>           Three phase: 120 V<math>\sim</math>/208 V<math>\sim</math> 3-phase 4-wire 175 A max feed.</p>  |
| Regulatory Approvals                          | UL, CSA, NOM  |
| Environment                                   | <p>Ambient operating temperature: 0 °C to 40 °C, 32 °F to 104 °F<br/>           Ambient operating humidity: 0-90% humidity, non-condensing. Indoor use only.</p>  |
| Cooling                                       | Passive cooling. Mount in a place where the vented cover will not be blocked.   |
| Heat Generated Fully Loaded                   | 750 BTUs per hr. maximum.   |
| Line-Voltage Connections                      | Use copper wire only, supply conductors 60/75 °C. DIN rail-mounted terminal blocks provided for line-voltage remote power module wiring and MI power. Terminal blocks should be tightened to 3.5-5.0 in.-lbs. (0.40-0.57 N•m). <i>See Fig. 2, 3 pg. 156.</i>  |
| DIN Rail Terminal Blocks                      | Terminal blocks will accept one #18-10 AWG (1.0-2.5 mm <sup>2</sup> ) wire or two #18-16 AWG (1.0-1.5 mm <sup>2</sup> ) wires. Terminal blocks should be tightened to 3.5-5.0 in.-lbs. (0.40-0.57 N•m). All terminal blocks are shipped with bypass jumpers installed. After verifying that each circuit is wired correctly, remove the bypass jumpers for system operation.  |
| Arc Fault Circuit Interruptor (AFCI) Breakers | These panels can be ordered with AFCI breakers or the AFCI breakers can be installed in the field. Contact Lutron Customer Service for ordering details.  |
| Ground Bar Terminals                          | 24 ground termination points.   |
| Miswire Protection                            | All terminal blocks are shipped with bypass jumpers installed.  |
| Mounting                                      | Must be installed in a way to provide sufficient access and working space according to National Electrical Code (NEC). May be surface-mounted or flush-mounted. Panel fits between standard 16 in (406 mm) on-center stud framing. When flush mounting in a 2x4 stud bay, to accommodate the depth of the panel – 4 $\frac{1}{8}$ in (10.5 cm) – the sheetrock must be built out or a frame must be constructed. Panel must be mounted vertically (+/- 7 degrees from vertical). Allow at least 12 in (30 cm) air space at top and bottom and a minimum of 12 in (30 cm) clearance in front of panel, or allow air space as required by local codes (whichever is greater). Remote power panels will hum slightly and internal relays will click while in use. Mount where such noise is acceptable. Mount the panel so that line-voltage wiring will be at least 6 feet (1.8 m) from audio or electronic equipment and its wiring. |
| Dimensions                                    | 14 $\frac{3}{8}$ in (36.5 cm) x 59 in (150 cm) x 4 $\frac{1}{8}$ in (10.5 cm) <i>See Fig. 2, pg. 156.</i>   |
| Construction                                  | <p>Enclosure: 16-gauge galvanized sheet metal (unpainted).<br/>           Cover: Painted (black) metal cover with ventilation holes.<br/>           Cover is attached using eight phillips-head screws.</p>   |
| Shipping Weight                               | 55 lbs. (25 kg) without RPMs  |

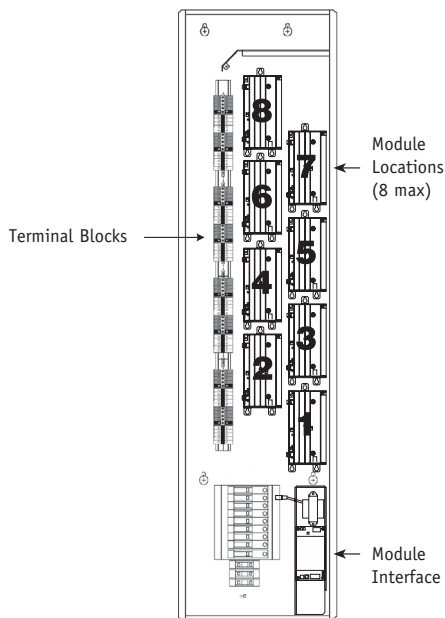
# Remote Power Panels with Breakers (cont.)



**Note:** The panel is 4 1/8 in (10.5 cm) deep past cover mounting tabs.  
**Figure 1 – HWBP-8D Dimensions and Mounting**



**Figure 2 – HWBP-8D Wiring Entry**



- 1 Module Interface
- Up to 8 Remote Power Modules

**Figure 3 – HWBP-8D Configuration**

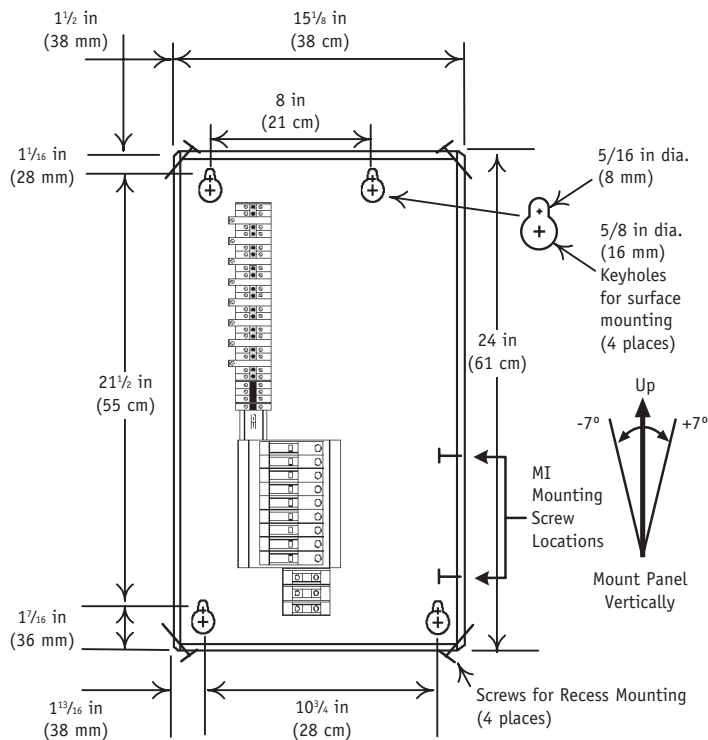
BACK ROOM

# Remote Power Panels with Breakers (cont.)

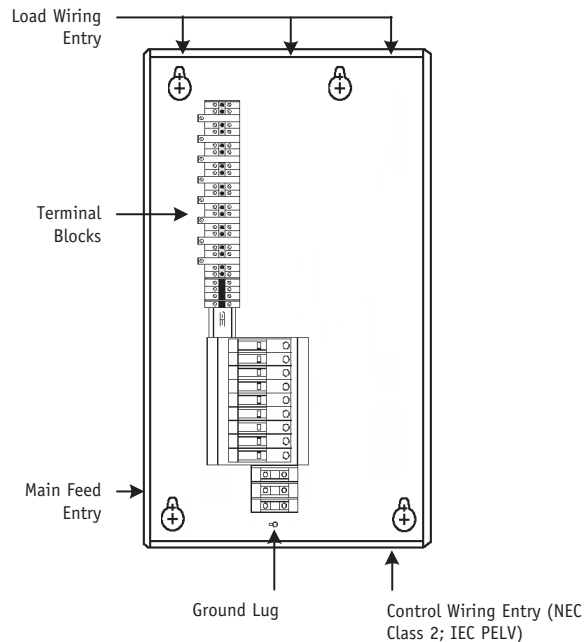
|   |   |
|---|---|
| Model Numbers                                 | <p>Single Phase:<br/>           HWBP-2S-15-120L3: 15 A circuit breakers for up to 2 HW-RPM-4R modules.<br/>           HWBP-2S-20-120L3: 20 A circuit breakers for up to 2 HW-RPM-4R modules.</p> <p>Three Phase:<br/>           HWBP-2S-15-120L4: 15 A circuit breakers for up to 2 HW-RPM-4R modules.<br/>           HWBP-2S-20-120L4: 20 A circuit breakers for up to 2 HW-RPM-4R modules.</p>  |
| Capacity                                      | Two HW-RPM-4R modules and one module interface. <i>See Fig. 3, pg. 158.</i>   |
| Input Voltage                                 | <p>Single phase: 120 V<math>\sim</math>/240 V<math>\sim</math> 1-phase 3-wire 175 A max feed.<br/>           Three phase: 120 V<math>\sim</math>/208 V<math>\sim</math> 3-phase 4-wire 175 A max feed.</p>  |
| Regulatory Approvals                          | UL, CSA, NOM  |
| Environment                                   | <p>Ambient operating temperature: 0 °C to 40 °C, 32 °F to 104 °F<br/>           Ambient operating humidity: 0-90% humidity, non-condensing. Indoor use only.</p>  |
| Cooling                                       | Passive cooling. Mount in a place where the vented cover will not be blocked.   |
| Heat Generated Fully Loaded                   | 101 BTUs per hr. maximum.   |
| Line-Voltage Connections                      | Use copper wire only, supply conductors 60/75 °C. DIN rail-mounted terminal blocks provided for line-voltage Remote Power Module (RPM) wiring and MI power. Terminal blocks should be tightened to 3.5-5.0 in.-lbs. (0.40-0.57 N•m). <i>See Fig. 2, 3 pg. 158.</i>  |
| DIN Rail Terminal Blocks                      | Terminal blocks will accept one #18-10 AWG (1.0-2.5 mm <sup>2</sup> ) wire or two #18-16 AWG (1.0-1.5 mm <sup>2</sup> ) wires. Terminal blocks should be tightened to 3.5-5.0 in.-lbs. (0.40-0.57 N•m). All terminal blocks are shipped with bypass jumpers installed. After verifying that each circuit is wired correctly, remove the bypass jumpers for system operation.  |
| Arc Fault Circuit Interruptor (AFCI) Breakers | These panels can be ordered with AFCI breakers or the AFCI breakers can be installed in the field. Contact Lutron Customer Service for ordering details.  |
| Ground Bar Terminals                          | 24 ground termination points.   |
| Miswire Protection                            | All terminal blocks are shipped with bypass jumpers installed.  |
| Mounting                                      | Must be installed in a way to provide sufficient access and working space according to National Electrical Code (NEC). May be surface-mounted or flush-mounted. Panel fits between standard 16 in (406 mm) on-center stud framing. When flush mounting in a 2x4 stud bay, to accommodate the depth of the panel – 4 $\frac{1}{8}$ in (10.5 cm) – the sheetrock must be built out or a frame must be constructed. Panel must be mounted vertically (+/- 7 degrees from vertical). Allow at least 12 in (30 cm) air space at top and bottom and a minimum of 12 in (30 cm) clearance in front of panel, or allow air space as required by local codes (whichever is greater). Remote power panels will hum slightly and internal relays will click while in use. Mount where such noise is acceptable. Mount the panel so that line-voltage wiring will be at least 6 feet (1.8 m) from audio or electronic equipment and its wiring. |
| Dimensions                                    | 14 $\frac{3}{8}$ in (36.5 cm) x 24 in (61 cm) x 4 $\frac{1}{8}$ in (10.5 cm) <i>See Fig. 1, pg. 158.</i>  |
| Construction                                  | <p>Enclosure: 16-gauge galvanized sheet metal (unpainted).<br/>           Cover: Painted (black) metal cover with ventilation holes.<br/>           Cover is attached using four phillips-head screws.</p>  |
| Shipping Weight                               | 19 lbs. (8.6 kg) without RPMs   |

BACK ROOM

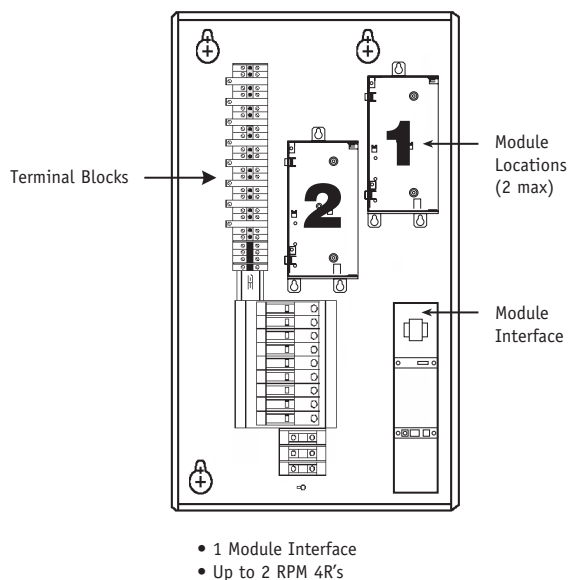
# Remote Power Panels with Breakers (cont.)



Note: The panel is 4 1/8 in (10.5 cm) deep past cover mounting tabs.  
**Figure 1 - HWBP-2S Dimensions and Mounting**



**Figure 2 - HWBP-2S Wiring Entry**



**Figure 3 - HWBP-2S Configuration**

BACK ROOM