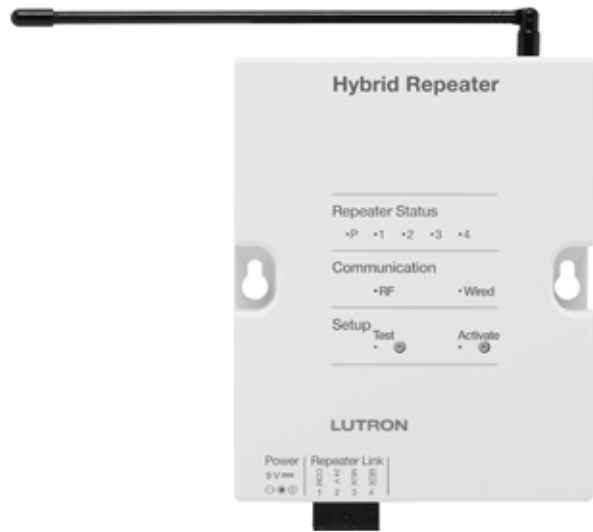


HomeWorks® QS Hybrid Repeaters

HomeWorks® QS Hybrid Repeaters add wireless Radio Frequency (RF) communication and extend the range of RF signals that are sent between dimmers, switches, keypads, visor control receivers, shades/draperies, and other devices. Repeaters ensure error-free communication between system components and prevent interference from neighboring systems.

The first repeater connects to the HomeWorks® QS processor to provide RF communication that extends up to 30 ft (9 m) in every direction. Up to four (4) total Hybrid Repeaters can be used per link to extend the RF range for larger system applications. Each Repeater has an RF range of 30 ft (9 m) between repeater and devices or 60 ft (18 m) between repeaters, covering a total area of approximately 2500 sq ft (232 m²).



Model Numbers	Frequency
HQR-REP-120	434 MHz
HQK-REP	868 MHz
HQM-REP	868 MHz Limited
HQN-REP	865 MHz
HQR-REP-120-BA	434 MHz (Brazil)
HQQ-REP	434 MHz Limited

Only available in White (WH).

HomeWorks® QS software will select the correct frequency/channel code for compatibility with your particular geographic region.

HomeWorks® QS Hybrid Repeaters

Specifications

Model Number	HQR-REP-120; HQK-REP; HQM-REP; HQN-REP; HQR-REP-120-BA; HQQ-REP
Power	Hybrid Repeater: DC adapter: 9 V \equiv 300 mA Link: 24 V \equiv 50 mA DC adapter: Input: 100-240 V \sim 50/60 Hz 6.5 W Output: 9 V \equiv 300 mA
Typical Power Consumption	Hybrid Repeater: 0.6 W Test conditions: one LED on, powered by a 9 V \equiv adapter.
Regulatory Approvals	Hybrid Repeater: FCC, IC, COFETEL, CE, CCC, TRA, CTICK, ANATEL, IDA, SUPERTEL, SUTEL
Environment	Ambient operating temperature: 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. Indoor use only.
Low-Voltage Wire Type	Two pair – one pair 18 AWG (1.0 mm ²), one pair 22 AWG to 18 AWG (0.5 mm ² to 1.0 mm ²) twisted shielded – NEC® Class 2/PELV cable. Required for connecting the first repeater to the processor and may be used to connect additional Hybrid Repeaters.
Communications	The first Hybrid Repeater communicates with the HomeWorks® QS processor on the RF wired link. Subsequent Repeaters may be wired on this link or may communicate over Radio Frequency (RF). All RF devices must be located within 30 ft (9 m) of a Repeater. All Repeaters must be within 60 ft (18 m) of another Repeater.
ESD Protection	Tested to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
Surge Protection	Tested to withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
Power Failure	Power failure memory: should power be interrupted, the Repeater will return to its previous state when power is restored.
Mounting	Mount on a wall, ceiling, or level surface using the two #6 (M3) screws provided.
Connections	Hybrid Repeater: RS485
Warranty	http://www.lutron.com/resiinfo

Design Features

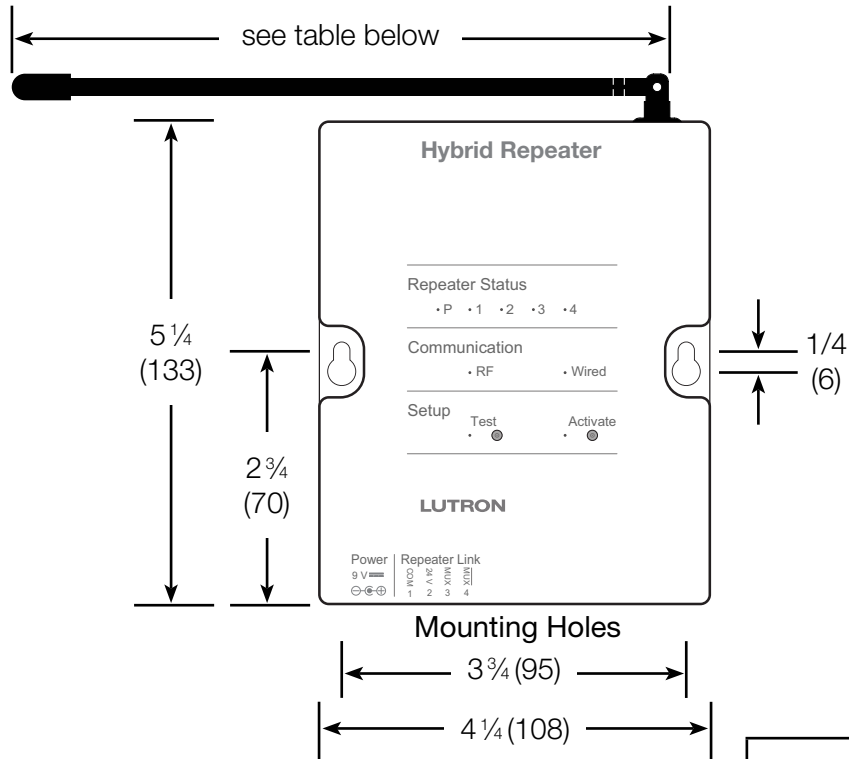
- Test button - enters the RF repeater test mode.
- Activate button - provides repeater activation within system.
- RS485 port to connect to the HomeWorks® QS RF link and to other repeaters through a wired link (daisy-chain).

HomeWorks[®] QS Hybrid Repeaters

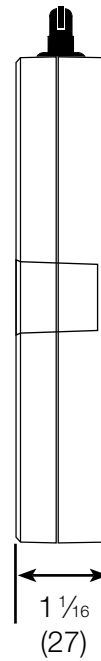
Dimensions

Measurements shown as: in (mm)

Front View



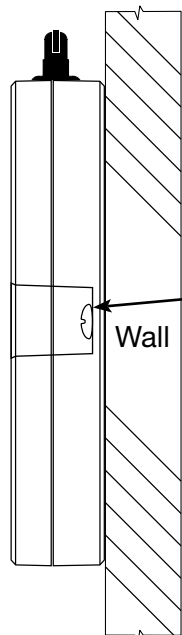
Side View



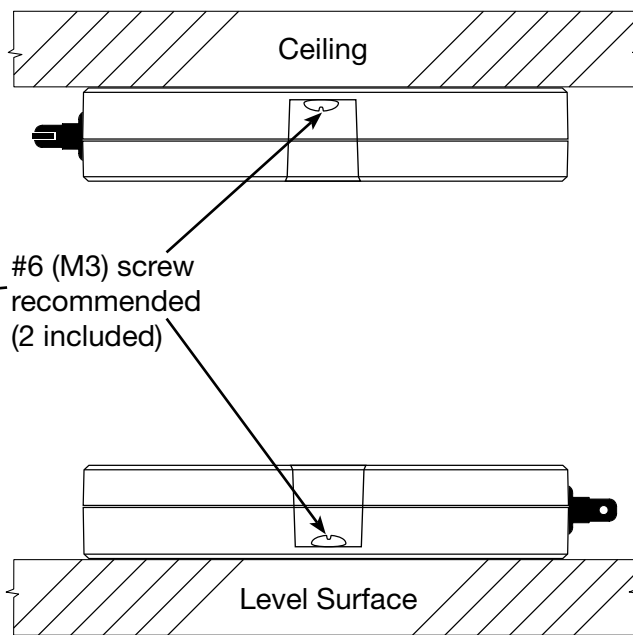
Model	Dimension
HQR-REP-120, HQR-REP-120-BA, HQQ-REP	6.25 (158.8)
HQK-REP, HQM-REP, HQN-REP	3.13 (79.4)

Mounting

Vertical



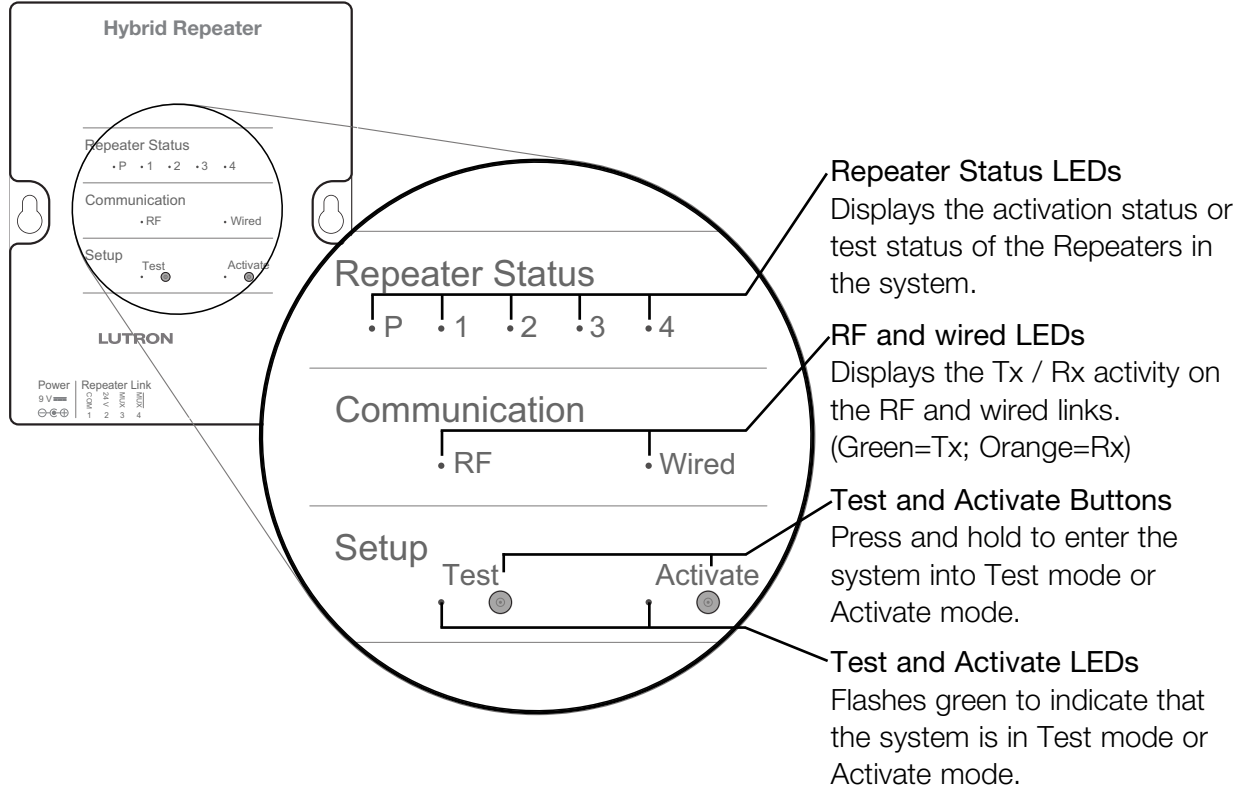
Horizontal



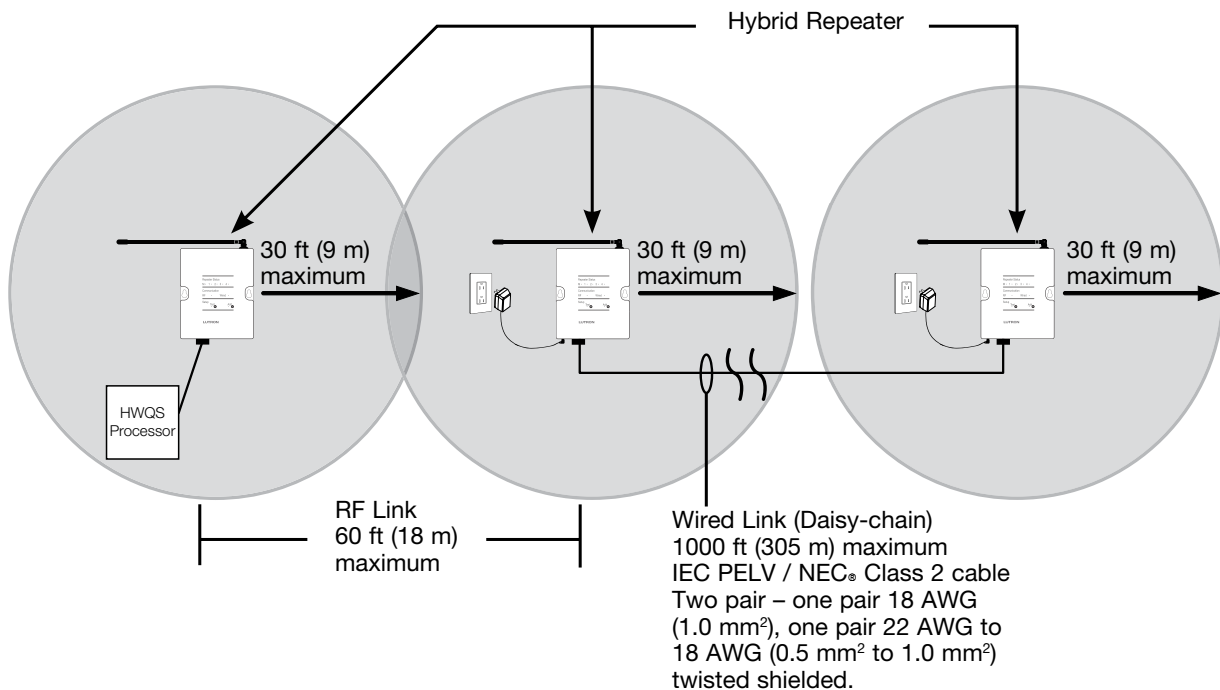
#6 (M3) screw recommended (2 included)

HomeWorks® QS Hybrid Repeaters

Operation



Wired and RF Configuration

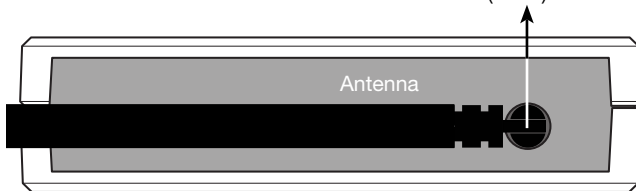


HomeWorks[®] QS Hybrid Repeaters

Connections

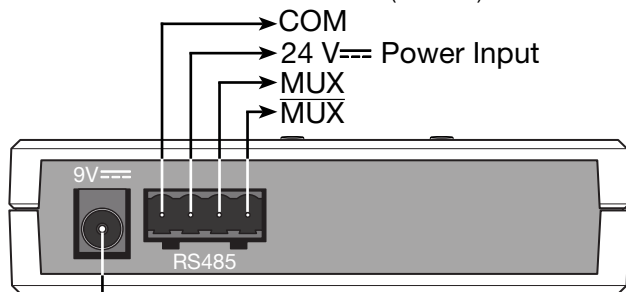
Top View


RF range:
 To Repeater:
 60 ft (18 m)
 To other devices:
 30 ft (9 m)



Bottom View

Wired Link (Daisy Chain)
 maximum 1000 ft (305 m)



Power Jack (to adapter)
 IEC PELV/NEC[®] Class 2


NOTE: Power must be provided by a 9 V adapter or 24 V power on the HomeWorks[®] QS processor link.