Wireless Equipment

Important Note:

Regulations for products with radio frequency change from country to country. Therefore, HomeWorks products with radio frequency are not available in all countries. You should consult Lutron to understand which products with radio frequency are available in your country.

HomeWorks products with radio frequency have been developed around two different frequencies – 434 MHz and 868 MHz. If HomeWorks products with radio frequency are available in your country, you must use the correct frequency for the regulations of your country. In most cases, you can use the HomeWorks software to select the appropriate models for your country.



10.2

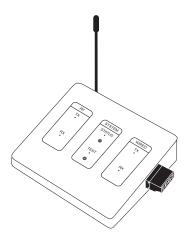
Hybrid Signal Repeater

HYBRID SIGNAL REPEATER

The HomeWorks® hybrid signal repeater allows P5 Processors to communicate with wireless tabletop keypads. Hybrid signal repeaters work with P5 processors that have a hybrid signal repeater link. All wireless tabletop keypads must be located within 9m (30 feet) of a hybrid signal repeater. Up to five hybrid signal repeaters can be added to each P5 processor. Up to 32 wireless tabletop keyapds can be used in a single HomeWorks system.

COMMUNICATION TO P5 PROCESSOR

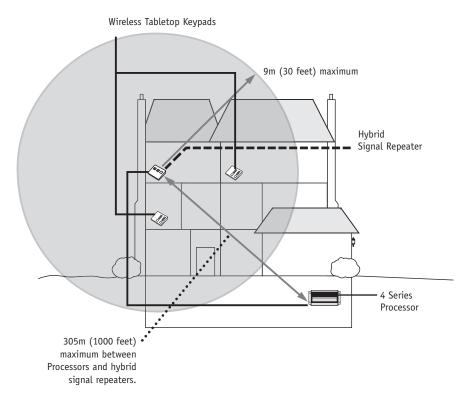
The hybrid signal repeater connects to 4 or 8 series processors on link 8. Additional repeaters must be within 18m (60 feet) of another repeater for wireless communication. Or, they may also be wired to another connected repeater or the processor.



Hybrid Signal Repeater HR-REP-868 HR-REP-434

RF SYSTEM COMMUNICATION

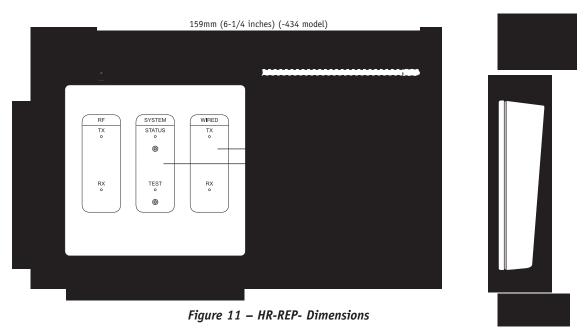
Wireless tabletop keypads must be located within 9m (30 feet) of a hybrid signal repeater. Multiple hybrid signal repeaters may be necessary to provide adequate coverage.



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Hybrid Signal Repeater

Model Number	HR-REP-434 (operates near 434 MHz)			
Tiodet Namber	HR-REP-868 (operates near 868 MHz)			
Input Voltage	9VDC transformer or by link 8 on processor.			
Regulatory Approvals	CE, C-Tick, VDE			
Environment	Ambient operating temperature: 0-40°C, 32-104°F Ambient operating humidity: 0-90% humidity, non-condensing. Indoor usonly.			
Low-Voltage Wire Type	Two pair [one pair 1.0mm² (#18 AWG), one pair 1.0-0.5mm² (#18-22 AWG) twisted shielded] Class 2/PELV wire. Lutron® wire model # GRX-CBL-346S-500 may be used.			
Low-Voltage Wiring Configuration	Daisy-chain. Termination not required. Total length of wire on any link cannot exceed 305m (1,000 feet) per wire run.			
Low-Voltage Connections	One 4-pin removable terminal block. Terminal block will accept up to four 1.0mm² (#18 AWG) wires. Pin 2 should not be connected if using included transformer.			
Addressing	Via the HomeWorks® Illumination Software, using unique device serial numbers. Units must be installed prior to addressing. Counts as 1 of 5 on a 4 or 8 series processor.			
Diagnostics	Test button provides RF communication check. LEDs show communication link status.			
ESD Protection	Meets or exceeds the IEC 61000-4-2 standard.			
Surge Protection	Meets or exceeds ANSI/IEEE standard c62.41.			
Coverage	Each wireless table keypad must be within 9m (30 feet) of a hybrid signa repeater.			
Shipping Weight	0.7kg (1.5 pounds)			
Keypad LED Count	15 Keypad LEDs (if powered via Link 8)			





Hybrid Signal Repeater

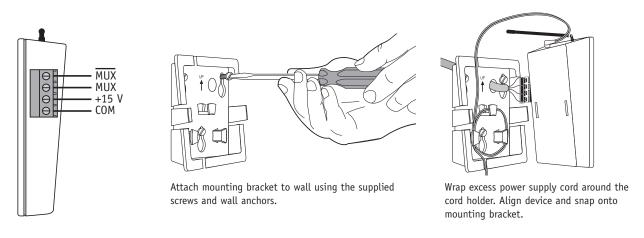


Figure 12 - Wiring Diagram

Figure 13 - Mounting

RF TX/RX LEDs

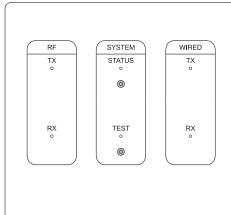
Indicate RF Link activity.

STATUS Button

Used when addressing the Hybrid Repeater from the HomeWorks Illumination, Software.

STATUS LED

Indicates the status of the HomeWorks system. Note: When the Hybrid Repeater is powered, but has not yet been assigned an address from the HomeWorks Illumination Software, the STATUS and TEST LEDs will be dimly illuminated.



addressed using the HomeWorks Illumination Software.

TEST LED

WIRED TX/RX LEDs

TEST Button

Indicate Wired Link activity.

Activates RF communication tests. To

activate the tests, press and hold the TEST Button until the TEST LED begins to flash.

Note: For communication tests, the Hybrid Repeater, HomeWorks Processor, and other

RF devices must first be configured and

A slow flash indicates RF communications tests are in progress

Figure 14 - Operation

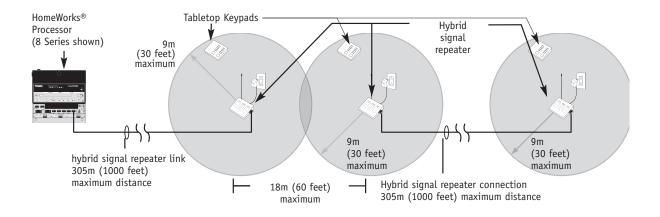


Figure 15 - Wiring and Communication Overview

Wireless Tabletop Keypads

HomeWorks. wireless tabletop keypads provide maximum flexibility to locate the devices where the homeowner can conveniently monitor and control lighting, window treatments, and other home systems. Tabletop keypads are ideal for night stands, coffee tables, and kitchen counters. Keypad buttons are programmed to create a customised control that meets the individual needs of each home. Keypads have LEDs that provide real-time status indication. Custom engraving is available to clearly identify each button's function.

SLIM AND LARGE BUTTON DESIGNS

The wireless tabletop keypads are available with slim button (5-, 10-, or 15-button) and large button (6-button) configurations. Metal faceplates can be added to enhance the look of any tabletop keypad. Units can be ordered for communication near 434 MHz or 868 MHz.

COMMUNICATION TO HYBRID SIGNAL REPEATER

All wireless tabletop keypads must be located within 9m (30 feet) of a hybrid signal repeater. Each *HomeWorks* P5 Processor with a hybrid signal repeater link is capable of controlling up to 32 wireless tabletop keypads.

ORDERING METHOD

- Order keypad with buttons/faceplate.
 HRT-model-colour
 Available colours: snow (SW)
 or midnight (MN) only
- After engraving is determined, order engraved faceplate with same number of buttons as control.

HKT-model-colour-E

Available plastic colours: snow (SW) and midnight (MN)
Available metal finishes: bright brass (BB), satin brass (SB), bright chrome (BC), satin chrome (SC), bright nickel (BN), satin nickel (SN), antique brass (QB), antique bronze (QZ), clear anodised aluminium (CLA), black anodised aluminium (BLA) or brass anodised aluminium (BRA)

SLIM BUTTON

5-Button



Keypad: HRT-5RL-434-xx HRT-5RL-868-xx

Faceplate only: HKT-5RL-xx-E

Description: 5-button with master

on/off and raise/lower

10-Button



Keypad: HRT-10RL-434-xx

HRT-10RL-868-xx

Faceplate only: HKT-10RL-xx-E

Description: 10-button with master

on/off and raise/lower

15-Button



Keypad: HRT-15RL-434-xx

HRT-15RL-868-xx

Faceplate only: HKT-15RL-xx-E

Description: 15-button with master

on/off and raise/lower

LARGE BUTTON

6-Button



Keypad: HRT-6LRL-434-xx

HRT-6LRL-868-xx

Faceplate only: HKT-6LRL-xx-E

Description: 6-button with raise/lower



Wireless Tabletop Keypads

Model Numbers	All wireless tabletop keypads.				
Input Voltage	9VDC, 50/60Hz (with plug-in low-voltage transformer). 3VDC (with two AAA batteries).				
Regulatory Approvals	CE, C-Tick, VDE				
Frequency of Operation	Near 434 MHz or near 868 Mhz				
Environment	Ambient operating temperature: 0-40°C, 32-104°F Ambient operating humidity: 0-90% humidity, non-condensing. Indoor use only.				
Cooling Method	Passive cooling.				
Addressing	Via the HomeWorks® Illumination Software, using unique device serial numbers. Counts as 1 of the 32 keypads addresses on the hybrid repeater link.				
Diagnostics	LEDs provide diagnostics for troubleshooting.				
ESD Protection	Meets or exceeds the IEC 61000-4-2 standard.				
Surge Protection	Meets or exceeds ANSI/IEEE standard c62.41.				
Mounting	Units powered by plug-in transformer must be located near a power receptacle. Unit must be placed within 9m (30 feet) of hybrid signal repeater.				
Shipping Weight	0.3 pounds (0.1kg)				
Keypad Link LED Count	0				

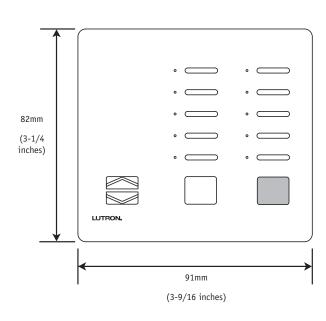




Figure 19 – Dimensions

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Transformers for Wireless Equipment

Low voltage transformers may be used to supply power to the hybrid signal repeater and the tabletop keypads. The transformers are available in plug styles for the U.K. and Europe. The transformers are also available in white or black.

Model Numbers	TE240-9DC-3-WH (European plug, white), TE240-9DC-3-BL (European plug, black), TU240-9DC-3-WH (U.K. plug, white), TU240-9DC-3-BL (U.K. plug, black)		
Input Voltage	220-240 VAC, 50/60 Hz		
Output Voltage	9 VDC regulated		
Output Current	300 mAmps		
Regulatory Approvals	CE		
Environment	Ambient operating temperature: 0-40°C, 32-104°F; Indoor use only.		
Shipping Weight	.184 kg (.4 pounds)		
Cord Length	190.5 cm (75 inches)		

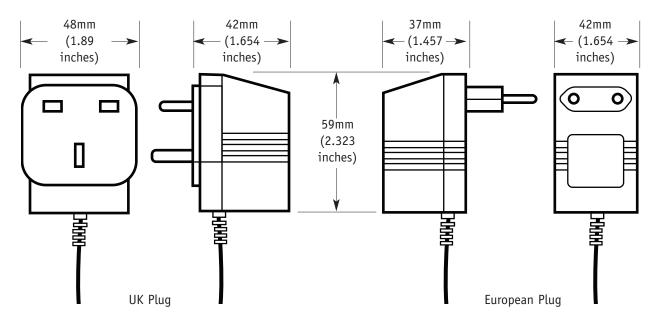


Figure 20 – Dimensions

Notes		