HOMEWORKS®

Installation Instructions

Please Read Before Installing

SOLos™
HomeWorks® and Sivoia QED™ Integrator
HWI-Q96

12 V⎓ 100 mA

Danger - Locate and remove fuse or lock circuit breaker in the OFF position before proceeding.

1. **Turn Power OFF.** Turn off power to *HomeWorks* panel and *Sivoia QED* Electronic Drive Units at the circuit breaker panel or fuse box.

2. **Mount the HWI-Q96.** To install the HWI-Q96 in the enclosure (HWI-LV32, HWI-LV17, or HWI-LV24), consult enclosure instructions to determine the correct location. The mounting bracket mounts using the holes labeled for the HWI-CCI or HWI-CCO. Mount the HWI-Q96 with the screws provided.

3. **Set Address.** Set the *HomeWorks* H48 Link address on the DIP switch to the address assigned to this HWI-Q96 by the *HomeWorks* Utility. See **HWI-Q96 Addressing** (next page) to determine the switch settings. Each HWI-Q96 or Dimmer Hub (H48) must have a unique address.

4. **Connect *Sivoia QED* Communication Link.** Using the included four pin terminal block labeled "To *Sivoia QED* Communication Link", connect the *Sivoia QED* communication link (see Figure 4). Use four conductor 18 AWG (twisted and shielded) Class 2 wire. Lutron wire model # GRX-CBL-346S-500 may be used so long as the 18 AWG wires are used for +12 V and Common (terminals 1 & 2). Maximum 4,000 ft. (1220 m) total wire run distance for entire *Sivoia QED* system. Wire in a daisy chain or home run wiring configuration.
Note: If only one Sivoia QED Electronic Drive Unit (EDU) is providing power to the HWI-Q96, please use Lutron transformer model # GRX-12VDC to power the HWI-Q96 to ensure proper operation. [Disconnect +12 V wire from EDU (terminal 2), and leave COM wire (terminal 1) connected.]

Danger - Do not connect high voltage wiring to the HWI-Q96.

5. **Connect *HomeWorks* H48 Link.** Using the included four pin terminal block labeled "To *HomeWorks* Processor H48 Link", connect the *HomeWorks processor* H48 link (See Figure 4). Use two pair [one pair 18 AWG (1.0 mm²), one pair 22-18 AWG (0.5-1.0 mm²) twisted shielded] Class 2 wire. Lutron wire model # GRX-CBL-346S-500 may be used so long as the 18 AWG wires are used for +15 V and Common (terminals 1 & 2). Maximum 1,000 ft. (305 m) total wire run distance. Wire in a daisy chain wiring configuration only.

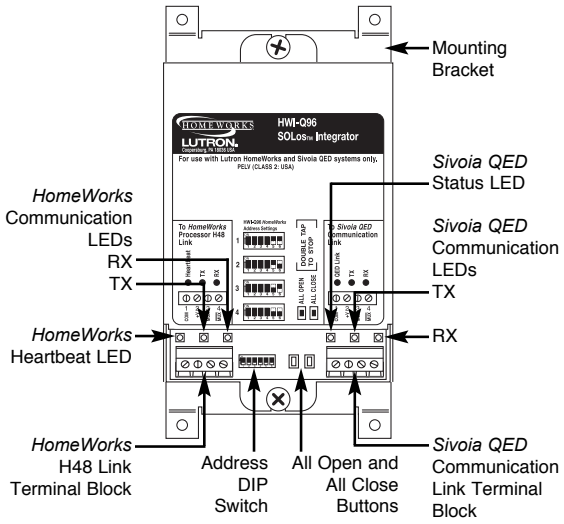
6. **Terminate the H48 Link.** If any HWI-Q96 or Dimmer Hub is located more than 50 feet from the processor, the last HWI-Q96 or Dimmer Hub on the chain must utilize a link terminator across terminals 3 and 4. LT-1 link terminators that are included with the processor or HWI-Q96 may be used for this application (see Figure 2). If LT-1s are unavailable, a 1/2 Watt resistor between 100 and 150 Ohms may be placed from pin 3 to pin 4 to provide termination. Termination at the processor end of the chain is also required; a second LT-1 or resistor should be wired from pin 3 to pin 4 on the *HomeWorks* processor terminal block (see Figure 2).

7. **Turn Power ON.** Return the supply breaker to the ON position. Confirm that the processor is powered ON as well.

8. **Check For Heartbeat.** Check the *HomeWorks* heartbeat LED. It should be flashing. If it is off, check the connections to the *Sivoia QED* communication link. If this condition persists, contact Lutron.

9. **Check For Processor Communication.** Check the *HomeWorks* Communication LEDs (TX and RX). Make sure the *HomeWorks* Utility database is loaded in the processor and the H48 link is started. The communication LEDs should be ON or blinking. If they are OFF, check the *HomeWorks* connection to the HWI-Q96 at the terminal block and the connection to the processor. Verify the processor is powered. Verify the link terminator is installed properly.

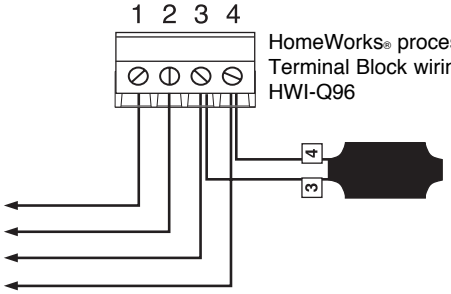
Figure 1 - HWI-Q96



10. **Check For *Sivoia QED* Communication.** The Sivoia QED Communication LEDs (RX and TX) are normally off, and will blink when an event occurs. After the limits have been set for each *Sivoia QED* shade, verify *Sivoia QED* communication link wiring. Press either the All Open or All Close button on the HWI-Q96. Any *Sivoia QED* shades that are properly wired (even if they are not addressed) should open or close. Double tap either the All Open or All Close button to stop the shade movement. Check the *Sivoia QED* Communication LEDs (TX and RX).

11. **If the connected *Sivoia QED* system works intermittently with the *HomeWorks* processor, check link wiring and HWI-Q96 / *HomeWorks* processor termination.**

Figure 2 - LT-1 Installation



HomeWorks® processor H48 Link Terminal Block wiring for furthest HWI-Q96

Figure 3 - DIP Switch Settings

Set DIP switches 5-6 to give the HWI-Q96 a unique *HomeWorks* H48 Link address from 1 to 4. DIP Switches 1-4 should always be in the OFF (DOWN) position.

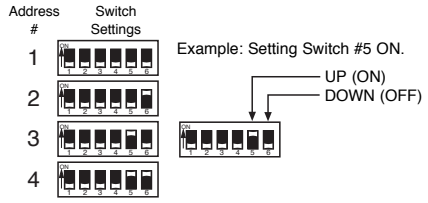
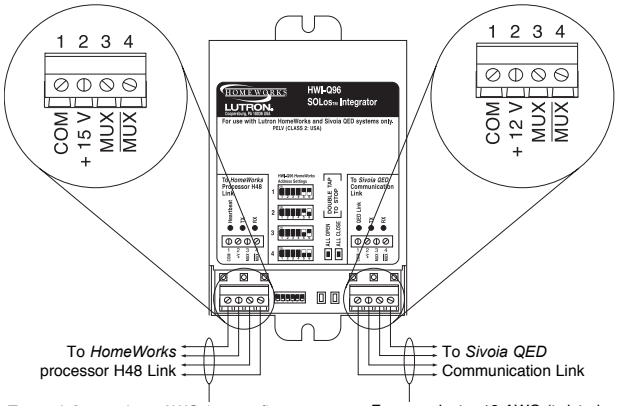


Figure 4 - System Wiring



Two pair [one pair 18 AWG (1.0 mm²), one pair 22-18 AWG (0.5-1.0 mm²) twisted shielded] Class 2 wire. Lutron wire model # GRX-CBL-346S-500 may be used so long as the 18 AWG wires are used for +15V and Common (terminals 1 & 2).

Max. 1,000 ft. (305 m) total wire run distance. Daisy-chain wiring configuration only.

Four conductor 18 AWG (twisted and shielded) Class 2 wire. Lutron wire model # GRX-CBL-346S-500 may be used so long as the 18 AWG wires are used for +12V and Common (terminals 1 & 2).

Max. 4,000 ft. (1220 m) total wire run distance for the *Sivoia QED* system. Home run or daisy-chain wiring configuration.

Technical and Sales Assistance

If you need assistance, call the toll-free ***Lutron Technical Support Center***. Please provide exact model number when calling.

(800) 523-9466 (U.S.A., Canada and the Caribbean)

Other countries call:

Tel: (610) 282-3800

Fax: (610) 282-3090

Visit our Web site at www.lutron.com

LIMITED WARRANTY

Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within two years after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid. Telephone the Lutron Technical Support Center toll free at 800-523-9466. After the two year period, a pro-rated warranty applies to this product until eight years after the purchase. For more information regarding this warranty contact your Lutron representative.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO TWO YEARS FROM PURCHASE. THIS WARRANTY DOES NOT COVER THE COST OF INSTALLATION, REMOVAL OR REINSTALLATION, OR DAMAGE RESULTING FROM MISUSE, ABUSE, OR IMPROPER OR INCORRECT REPAIR, OR DAMAGE FROM IMPROPER WIRING OR INSTALLATION. THIS WARRANTY DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES. LUTRON'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, OR USE OF THE UNIT SHALL NEVER EXCEED THE PURCHASE PRICE OF THE UNIT.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.This product may be covered by one or more of the following U.S. patents: 4,889,999; 5,170,068; 5,237,207 and corresponding foreign patents. U.S. and foreign patents pending. Lutron, HomeWorks, and Sivoia are registered trademarks and Sivoia QED is a trademark of Lutron Electronics Co., Inc.

© 2004 Lutron Electronics Co., Inc.

Lutron Electronics Co., Inc.
7200 Suter Road
Coopersburg, PA 18036-1299
Made and printed in the U.S.A. 2/04 P/N 043-186 Rev. A

LUTRON®