



HomeWorks Illumination to HomeWorks QS Checklist

- Determine what equipment will be re-used and what equipment will be replaced**

Certain HomeWorks Illumination components can be reused in HomeWorks QS, however, you (and the customer) may decide it's a logical time to update hardware. For instance, now would be a good time to upgrade keypads or shade drives if that is something the customer desires. For more information, refer to Application Note #586:
<http://www.lutron.com/PasswordProtectedDocumentLibrary/Design%20and%20Program%20HWI%20to%20HWQS%20Upgrades.pdf>

- Processor Count**

Since the HomeWorks QS processor only has 2 configurable links, there may be applications where multiple HomeWorks QS processors are needed to replace one HomeWorks Illumination processor.

 - Determine all existing link types
 - Determine how many HomeWorks QS processors are needed to support all the existing (and new) link types. H48/Q96, HWI keypads, Power Panel, RF, and QS will all require their own links.

- Panel Link Considerations**

Lutron recommends replacing all RPM and MI modules built prior to 2003 (Date Code: K53 or older). If these modules are not replaced, the following issues may occur: - Fade rates may be different between older RPM modules and the newer modules. - Compatibility issues may occur between the HWI-MI module and the HWQS processor.

 - Count of HWI-MI-120 or HWI-MI-230 (depending on supply voltage) needing replacement
 - Count of RPMs needing replacement

- HWI Keypad Link**

To use HWI keypads and contact closure interfaces (HWI-CCO & HWI-CCI) with your upgraded HWQS system, the following are required:

 - HWI keypad link license (HQ-HWI-KP-SW — purchase required)
 - HWI link translator (HQ-HWI-LX — purchase required)
 - 15 V- power supply to power HWI keypads & contact closure interfaces

For power supply part numbers and wiring diagrams, see section 1C of the following document:
<http://www.lutron.com/TechnicalDocumentLibrary/048537.pdf>

Interprocessor Link

To connect multiple HWQS processors together, the original 4-conductor Lutron® cable will be replaced by CAT5/5E Ethernet Cable. The system can be networked in the following ways:

- Standard Networking: Connection using an Ethernet hub/switch/router
- Ad-Hoc Networking: Direct Ethernet connection from PC to processors
- It is best practice to have the processors wired directly to each other with Ethernet, or you may experience undesirable delays in the event of a network failure.

For more information, visit www.lutron.com/networking

H48 Interface Mounting

For HWI processors that included an integrated HWI-H48 Interface (H8P5-MI-H48-, H8P5-H48-, H4P5-H48-, or H4P5-H48-HRL-), a separate HWI-H48 interface board will be required to connect to the wired Maestro® dimmers. A separate HWI-H48 interface board will also be required if replacing an HWI-D48 interface (integrated or separate). If space for an HWI-H48 interface board is not already available in an existing enclosure, the HWI-H48 interface board can be mounted externally in an HWI-LV17.

- HWI-H48 interface board(s)
- Enclosure for mounting H48 board(s)
- For wire runs of 50 ft (15.25 m) or more between the processor and interface(s), a Link Translator (HQ-HWI-LX) and Link Terminator (LT-1) are required.

H48/Q96 Link

To integrate Sivoia QED® shades with an HWQS system, the following are required:

- Sivoia QED® link license (HQ-HWI-Q96-SW [purchase required])
- HQ-HWI-LX Link Translator required when the wire-run distance between Processor and Q96 or H48 interfaces exceeds 50 ft (15.25 m).
- Link Terminator (LT-1) must be connected to the last HWI-H48 Dimmer Interface board or Q96 QED Shade Interface on the link
- Sivoia QED® shades and HWI-Q96 interfaces do not use 24 V- power supply as HWQS systems do.

For power supply part numbers and wiring diagrams, see section 1E of the following document:

<http://www.lutron.com/TechnicalDocumentLibrary/048537.pdf>

Integration Links: Contact Closure

If utilizing the integrated contact closure input on the HWI processor, there are a few options available to utilize contact closure interfaces with the HWQS system.

- If a QS wired or RF link is available, the following contact closure interfaces may be used to interface with the HWQS processor:
 - a. QSE-IO (QS wired)
 - b. HWQS keypad (QS wired)
 - c. QSE-CI-WCI (QS wired)
 - d. HQR-VCRX-WH (RF wireless)
- If customer has the HWI keypad link enabled and has the following interfaces already installed, they may be used on this link to interface with the HWQS processor:
 - a. HWI-CCI-8
 - b. HWI seeTouch keypad

Integration Links: RS232 Integration

For customers integrating devices using serial connections, these devices can be integrated to the HWQS processor using a serial to Ethernet converter. Please see the [HomeWorks® QS Integration with RS232 and Ethernet Devices application note](#) for more information.

- Digi One SP or B & B Electronics ES1A Ethernet to RS-232 converter

HWI Processor Upgrade to HWQS for HWI-PNL-8

The existing enclosure(s) will help determine where the new processor(s) may be mounted. When using an existing enclosure, additional components will be required for mounting/powering the new processor.

The following components are needed to use HomeWorks QS processor(s) in a HWI-PNL-8:

- PNL-8-PWRKIT — For mounting HWQS power supply(s) (up to 2)
- QSPS-DH-1-75-H— HWQS power supply(s) (up to 2)
- HQP6-2 — HWQS processor(s) (up to 2)
- NM power cable - Since legacy HWI-PNL-8 panels lack the mating harness required, it is necessary to hard-wire the PowerKit to the terminal block above to provide power to the PowerKit.
- You cannot mount a processor in a panel with circuit breakers.

See section 2A of the following application note for more information:

<http://www.lutron.com/TechnicalDocumentLibrary/048537.pdf>

HWI Processor Upgrade to HWQS for HWI-LV32

The following components are needed to use HomeWorks QS processor(s) in a HWI-LV32:

- PNL-8-PWRKIT — For mounting HWQS power supply(s) (up to 2)
- QSPS-DH-1-75-H— HWQS power supply(s) (up to 2)
- HQP6-2 — HWQS processor(s) (up to 2)

See section 2B of the following application note for more information:

<http://www.lutron.com/TechnicalDocumentLibrary/048537.pdf>