HomeWorks® Wiring and Communication Overview

Wire Type Key

- **Type A:** Two pair – one pair #18 AWG (1.0 mm²), one pair #18–22 AWG (1.0–0.5 mm²) twisted shielded – NEC Class 2/IEC PELV wire. Lutron® wire model # GRX-CBL-346S-500 may be used.
- **Type B:** Standard RS-232 Cable (all pins straight through).
- **Type C:** One pair #18-22 AWG (1.0-0.5 mm²) twisted shielded Class 2 wire.
- **Type D:** Standard ethernet cable.
- **Type E:** Lutron wire model # SVQ-CBL-250. Seven conductor cable for power and communications.

Maximum total zones per HomeWorks® Wired Processor is 256

Enlarged view of *HomeWorks* Processor Links

Link 1 MI Link
Link 7 RS232 DB9F
Link 9 Ethernet 10/100 RJ45
Link 3 RS232 DB9F
Link 2 Inter-processor
Link 4
Link 5
Link 6
Link 8
INIT
500-10040

Wire Type B Max. 50 ft. (15 m) Total Point-to-Point

Connect to audio, home automation, and other devices controlled using ethernet.
Note: *This ethernet link is also used to program the* HomeWorks *system, both directly using a laptop, or remotely using a modem.*

Wire Type B Max. 50 ft. (15 m) Total Point-to-Point

Connect to audio, home automation, and other devices controlled using RS-232.
Note: *This RS-232 link is also used to program the* HomeWorks *system, both directly using a laptop, or remotely using a modem.*

Wire Type A Max. 1000 ft. (305 m) Total Daisy-Chain

To additional processors. 16 maximum per *HomeWorks* system.

HWI-PNL-8Remote Power Panel

Remote Power Modules

HWI-PNL-5 Remote Power Panel

HWBP-2S Remote Power Panel

HWBP-8D Remote Power Panel

Wire Type A Max. 1000 ft. (305 m) Total Daisy-Chain

HWI-MI-120 Stand-Alone Module Interface

To additional Module Interfaces. Maximum per MI Link is 16 (one of which may be integral to the *HomeWorks* Processor).

To additional Hybrid Repeaters (maximum 5 per link).

Wire Type A Max. 2000 ft. (610 m) Total Daisy-Chain

Link 8 can be configured to control any of the same devices as Links 4,5, and 6, or can be configured to control Hybrid Repeaters.

Links 4, 5, and 6 can be configured to control any of the following:

GRAFIK Eye *Control Units/ Wallbox Power Modules*

Keypads/ Contact Closure Boards

Dimmer/Q96 Interfaces

Wire Type A Max. 10 keypads per home run Max. 1000 ft. (305 m) per home run Max. 4000 ft. (1220 m) total wire length Any configuration

Wire Type A Max. 2000 ft. (610 m) Total Daisy-Chain

GRAFIK Eye® Control Units/ Wallbox Power Modules

To additional *GRAFIK Eye* Control Units/ Wallbox Power Modules (maximum 8 per link).

Keypads

HWI-ENC-CC Contact Closure Enclosures

To additional keypads/ Contact Closure Boards (maximum 32 devices per link, maximum 10 devices per home run).

HWI-CCI-8 Contact Closure Input Board (wire input from driveway sensors, photocells, security systems, etc.)

HWI-CCO-8 Contact Closure Output Board (wire output to shades, screens, gates, spas, thermostats, etc.)

Wire Type A Max. 1000 ft. (305 m) Total Daisy-Chain

HWI-LV17-120 Low-Voltage Enclosure

Maestro® Local Lighting Controls

HWI-H48 Dimmer Interface

To additional *Maestro* Controls. Maximum 8 *Maestro* Controls per bus. Maximum 6 buses per HWI-H48 (total maximum is 48 *Maestro* Controls per HWI-H48).

Wire Type C-Max. 500 ft. (152.5 m) per wire Run. Max 1000 ft. (305 m) total per bus Any configuration.

To additional HWI-H48 Dimmer Interfaces. Maximum 4 Dimmer Interfaces per link, (one of which may be integral to the *HomeWorks* Processor).

HWI-Q96 Q96 Integrator

SVQ-10-PNL Sivoia QED® Power Panel

Wire Type E Max. 1000 ft. (305 m) Total Home Run

***Sivoia QED* Motorized Shades**

Wire Type A Max. 1000 ft. (305 m) Total Daisy-Chain

To additional HWI-Q96 Integrators. Maximum 4 Q96 Integrators per link.

To additional *Sivoia QED* Motorized Shades. Maximum 10 shades per SVQ-10-PNL. Maximum 96 shades per Q96.