analog address™

INSTALLATION GUIDE

The Analog Address™ system is an analog architectural house lighting control system. The system includes up to eight analog channels that drive digital dimmers. The system may also include panic and work light channels. The system includes a processor unit and a number of control stations. Control stations include:

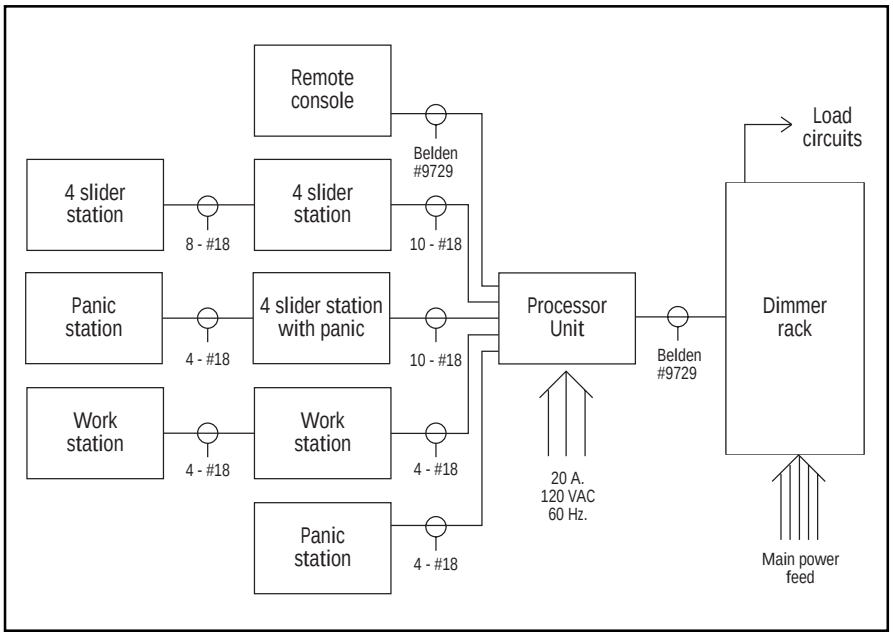
Slider stations	Wall-mounted stations that control channel intensity levels
Panic stations	Wall-mounted stations that activate the panic channel
Work light stations	Wall-mounted stations that activate the work light channel
Lockout stations	Wall-mounted keyswitch lockout stations that disable associated control station(s)

Analog signals from control stations converge at the processor unit. The processor unit converts the analog signals to DMX512 digital signals and sends them to a dimmer rack. A remote console (probably your main lighting control console) may send DMX512 control data to the processor unit. The processor unit combines control console data with Analog Address system data, and sends DMX512 control data to the dimmer rack.

Wiring information

System components are designed to accommodate both independent home-run wiring from each control station, or daisy-chain wiring of identical control wires (i.e. specific channel numbers, work light channel or panic channel). Each slider station requires an independent take control and drive home run. All other circuits may be daisy chained if desired.

Typical wiring diagram

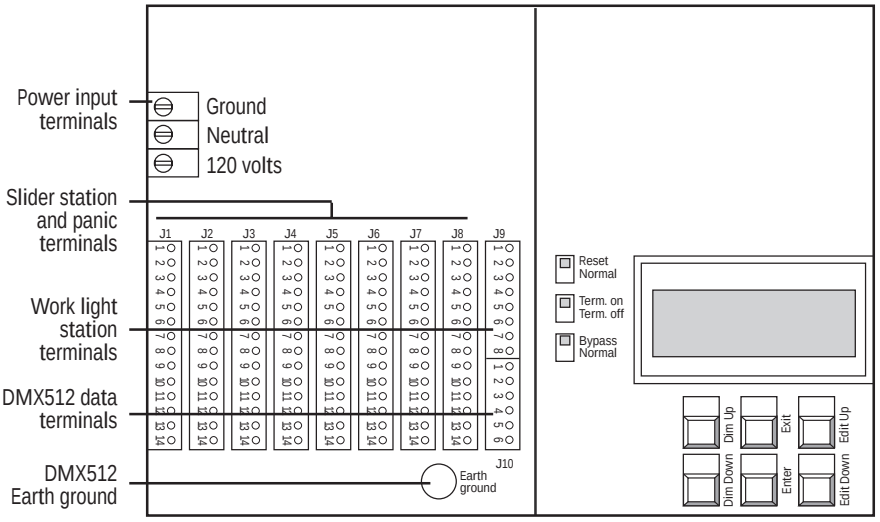


Wiring Processor Unit

The processor unit is available in both wall-mount and rack-mount versions. If your system includes a rack-mount version mounted in an L86 Installation Rack, the power input and DMX512 data output will be wired at the factory, eliminating steps three and four from the instructions below. Wiring the processor unit involves terminating any of the following circuits included in your system.

Circuit	*Quantity*	*Wire specification*
Power input	3	# 12 AWG wires (or as required by local code)
DMX512 data input	1	Belden 9729 cable
DMX512 data output	1	Belden 9729 cable
Slider stations	4 + no of chans.	#18 AWG* wire
Work light stations	4	#18 AWG* wires per home run
Panic stations	4	#18 AWG* wires per home run

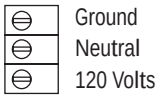
** # 16 AWG required for runs over 500 feet long.*



1. Processor Unit circuit board

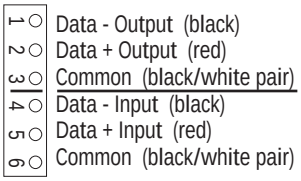
1. **Remove front panels.** Terminal strips are located under left access panel; processor and programming buttons are located under right access panel.

2. **Mount box to wall.** Four mounting holes are located on back of processor unit box.



2. Power input terminals

3. **Terminate power input.** Terminate 120 volt service, neutral and ground to power input terminals in upper left corner of circuit board (see illustration 2). Dress wires with minimal slack so they will not interfere with low-voltage input wires.

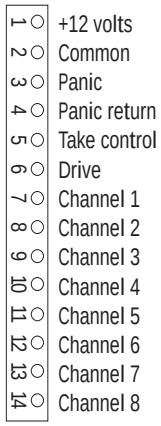


3. DMX512 data terminals

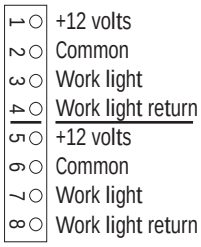
4. **Terminate DMX512 output.** See illustrations 1 and 3 to locate DMX512 data terminals (**J10**).

   Control cable has two twisted pairs and a bare or braided drain wire. Use the black and red pair to carry data, the black and white pair as common, and the bare wire (shield) as Earth ground. Dress wires with minimal slack to eliminate interference from high voltage power feeds.

   a) Connect the black data wire to terminal 1 (data - output) on the data terminal strip.
   b) Connect the red data wire to terminal 2 (data + output) on the data terminal strip.
   c) Connect both wires from the black and white pair to terminal 3 (common).
   d) Connect the bare or braided wire to the terminal lug on the circuit board labeled **Earth ground**.



4. Analog channel and panic terminals



5. Work light terminals

5. **Terminate DMX512 input.** If you are wiring a remote control console to your system, terminate DMX512 input to data terminals 4 through 6, as you did for DMX512 output (see illustration 3).

   a) Connect the black data wire to terminal 4 (data - input) on the data terminal strip.
   b) Connect the red data wire to terminal 5 (data + input) on the data terminal strip.
   c) Connect both wires from the black and white pair to terminal 6 (common).
   d) Connect the bare or braided wire to the terminal lug on circuit board labeled **Earth Ground**.

6. **Terminate analog channel circuits from slider stations.** The processor unit includes eight 14-terminal strips labeled **J1** through **J8** to terminate analog channels (see illustration 1). All slider station wires, except take control and drive, may either have independent home run wires, or may be daisy chained to other stations to reduce wire count. **Each station's take control and drive wires must have independent home run wires.** Terminals 1 through 14 are identified in illustration 4.

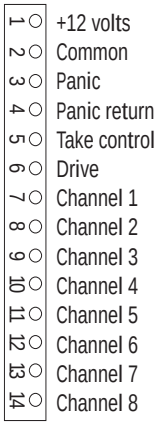
7. **Terminate work light circuits.** The processor unit includes two sets of work light terminals on an 8-terminal strip labeled **J9** on the circuit board. If you have more that two work light stations, daisy chain stations into either one of the two work light circuits. Terminals are identified in illustration 5.

8. **Terminate panic circuits.** Panic station terminals are located on slider station terminal strips (terminals 1 through 4, see illustration 4). If your system approaches the maximum number of independent slider and panic stations you may need to daisy chain panic circuits.

9. **Reinstall front access panels.**

10. **Refer to *Analog Address User Manual* for processor unit operation instructions.**

Wiring slider stations



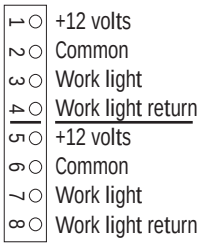
6. Slider station terminals

Each slider station requires the following # 18 AWG wires:

- Take control
- Drive
- +12 volts
- Common
- Panic and panic return (if station has an integral panic switch, or if the panic channel is daisy chained through the station)
- 1 wire for each analog channel potentiometer on station

Terminate wires to terminal strip located on back of slider station circuit board as indicated in illustration 6. Take control and drive must have independent home run wires. All other wires may be daisy chained to the same circuits from other stations to reduce wire count, if desired.

Wiring work light stations



7. Work light station terminals

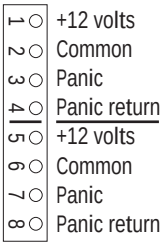
Work light stations require the following # 18 AWG wires:

- +12 volts
- Common
- Work light
- Work light return

Two sets of work light terminals are provided on an 8-terminal strip on the back of work light station circuit board. The terminal sets are bussed to accommodate daisy chaining. Note that the processor unit is equipped with two work light terminals.

Terminate wires as indicated in illustration 7.

Wiring panic stations



8. Panic station terminals

Panic stations require the following # 18 AWG wires:

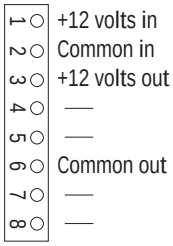
- +12 volts
- Common
- Panic
- Panic return

Two sets of panic terminals are provided on an 8-terminal strip on the back of the panic station circuit board. The terminal sets are bussed to accommodate daisy chaining.

Processor unit is equipped with eight panic terminals. However, panic terminals share power and common terminals with slider stations. If the combined number of independent panic stations and slider stations is greater than eight, you may need to daisy chain extra panic wiring through slider stations.

Terminate wires as indicated in illustration 8.

Wiring keyswitch lockout stations



9. Keyswitch station terminals

Keyswitch lockout stations require the following # 18 AWG wires:

- +12 volts in
- Common in
- +12 volts out
- Common out

An 8-terminal connector is located on the back of the keyswitch lockout station circuit board. Terminate wires as shown in illustration 9. Terminate the +12 volts out and common out wires to the +12 volts and common circuits on the associated slider, panic or work light station.

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