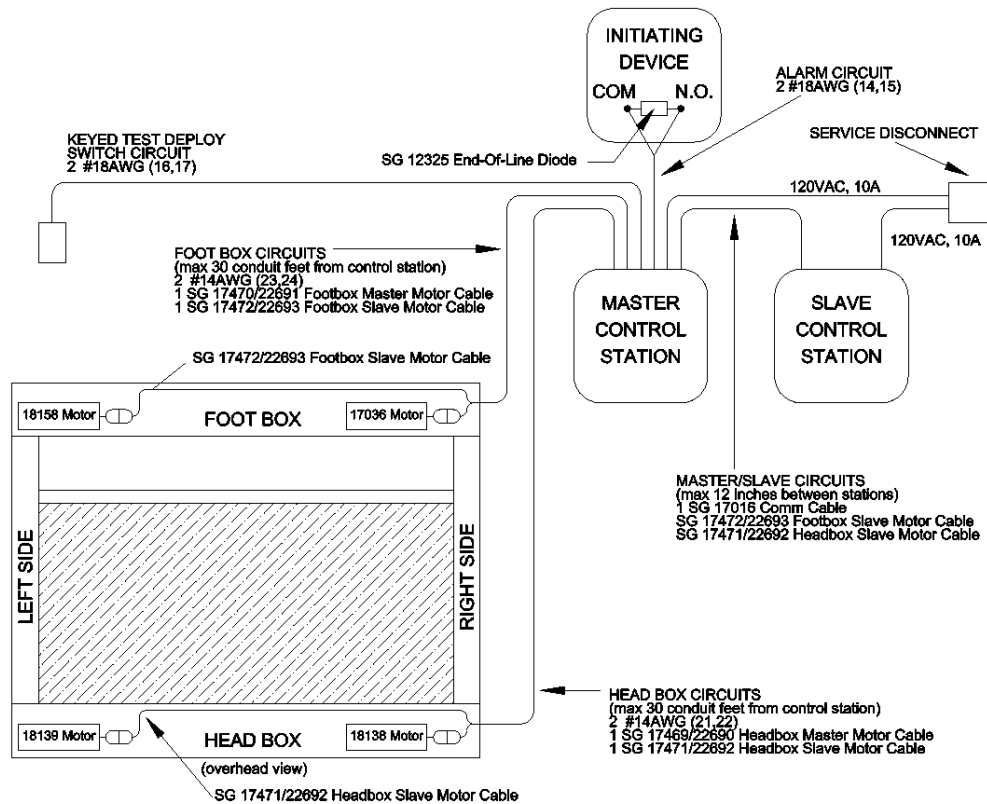




Model 3000 Electrician's Guide

Quad Motor Configuration

1. Install END-OF-LINE DIODE (furnished by Smoke Guard) at the INITIATING DEVICE.
2. Provide ALARM CIRCUIT from INITIATING DEVICE to MASTER CONTROL STATION.
3. Provide SERVICE DISCONNECT SWITCH and 120VAC to MASTER and SLAVE CONTROL STATIONS. (10A max)
4. Provide HEAD BOX AND FOOT BOX CIRCUITS from MASTER CONTROL STATION to HEAD BOX and FOOT BOX.
5. Provide conduit from MASTER CONTROL to SLAVE CONTROL.
6. Provide optional KEYED TEST DEPLOY SWITCH circuit as required.



This product is intended to be installed in accordance with the National Electric Code NFPA 70, National Alarm Code NFPA 72 and within the limits of the authority having jurisdiction.

Electrical Contractor Main Responsibilities

Alarm circuit

- Provide a conduit as required to connect two 18 or 20 AWG stranded wires between the control station low voltage compartment and the initiating device. Label the wires 14 and 15.
- At the building alarm device, connect the wires between the normally open contacts in parallel with Smoke Guard EOL-Diode, P/N 12325. Order of wires does not matter.

120 VAC

- Install main power wiring through a 1/2" conduit into each control station high voltage compartment. Connect L, N and GND to terminal block.
- Provide service disconnect switch near control station.

Head box and foot box circuits

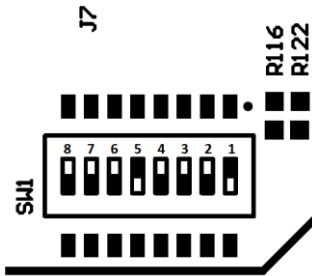
- Mount master (18249/18280) and slave (18250) control stations within 3" – 12" of each other. Provide 3/4" conduit between station low voltage compartments.
- Provide 3/4" conduit between the master control station and the FOOT BOX.
- At the master control station, use a 3/4" knockout at the low voltage compartment. Flexible conduit at the housing will ease installation.
- At FOOT BOX, pull free end of SG 17470/22691 to master control station.
- At FOOT BOX, pull free end of SG 17472/22693 to master control station and then on to the slave control station.
- Provide 3/4" conduit between the master control station and the HEAD BOX.
- At the master control station, use a 3/4" knockout at the low voltage compartment. Flexible conduit at the housing will ease installation.
- At HEAD BOX, pull free end of SG 17469/22690 to master control station.
- At HEAD BOX, pull free end of SG 17471/22692 to master control station and then on to the slave control station.

Optional keyed test deploy switch circuit

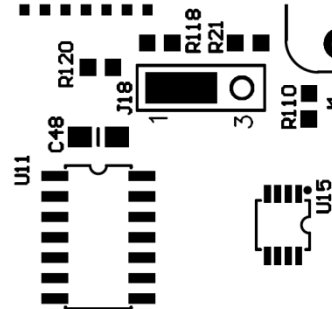
- Provide junction box and 1/2" conduit between the keyed test deploy switch and the master control station.
- Provide two 18 or 20 AWG stranded wires labeled 16 and 17.

Master Control Station (18249/18280 Configurations)

Verify that the configuration switches SW1 are set as illustrated:



Verify that the current limit trip jumper J18 is set for 25A power supply as illustrated:



Required terminal connections

Terminate low voltage wiring from cables 17469 and 17470 at master terminal blocks as follows:

wire	terminal	wire	terminal
1 (RED)	1) MOTOR1 +	8 (RED)	8) UP LIMIT
2 (BLK)	2) MOTOR1 -	9 (GRN) X 2	13) GROUND (BLOCK)
3 (BLK) X 2	3) +24V (BLOCK)	10 (RED)	10) DOWN LIMIT
4 (BLU)	4) COMMON	14	14) SMOKE DET/FIRE ALARM +
5 (WHT) X 2	5) BRAKE (BLOCK)	15	15) SMOKE DET/FIRE ALARM -
6 (ORG)	6) SENSOR POWER	19 (RED)	19) MOTOR2 +
7 (BRN)	7) SENSOR SIGNAL	20 (BLK)	20) MOTOR2 -

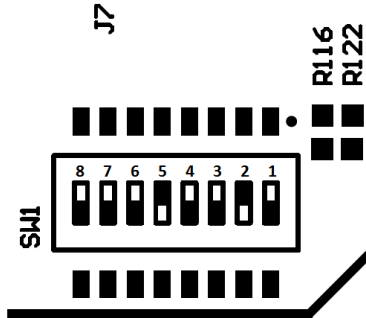
Note: Shorting blocks are used to connect multiple wires at terminals "3) +24V", "5) BRAKE" and "13) GROUND".

Optional terminal connections

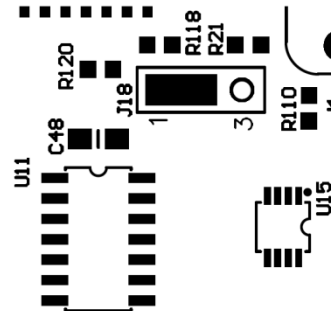
wire	terminal
16	16) WALL SWITCH +
17	17) WALL SWITCH -
Wire the wall switch NORMALLY OPEN. Land the two wires from the wall switch at WALL SWITCH+ and WALL SWITCH-	

Slave Control Station (18250 Configuration)

Verify that the configuration switches are set as illustrated:



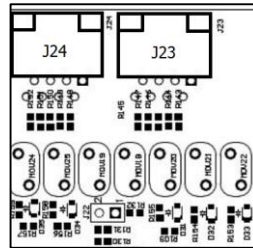
Verify that the current limit trip jumper J18 is set for 25A power supply as illustrated:



Required terminal connections

Run cables 17471/22692 and 17472/22693 through the master before terminating at the slave terminal blocks as follows:

wire	terminal
21	1) MOTOR1 +
22	2) MOTOR1 -
23	19) MOTOR2 +
24	20) MOTOR2 -



Feed master/slave cable (part number 17016) through the conduit between master and slave housings. At master connect cable to J23; at slave connect cable to J24. Ensure jumper J22 is installed at both master and slave.

Keyed test deploy switch (optional)

At the keyed wall switch, connect the wires between the normally open contacts. Order of wires does not matter.

Install Batteries in Control Stations (required final step)

Perform just prior to initial power on and calibration:

- Connect battery cable positive terminal to the positive terminal of the first battery.
- Connect battery cable negative terminal to the negative terminal of the second battery.
- Connect battery jumper cable between the negative terminal of first battery and the positive terminal of the second battery