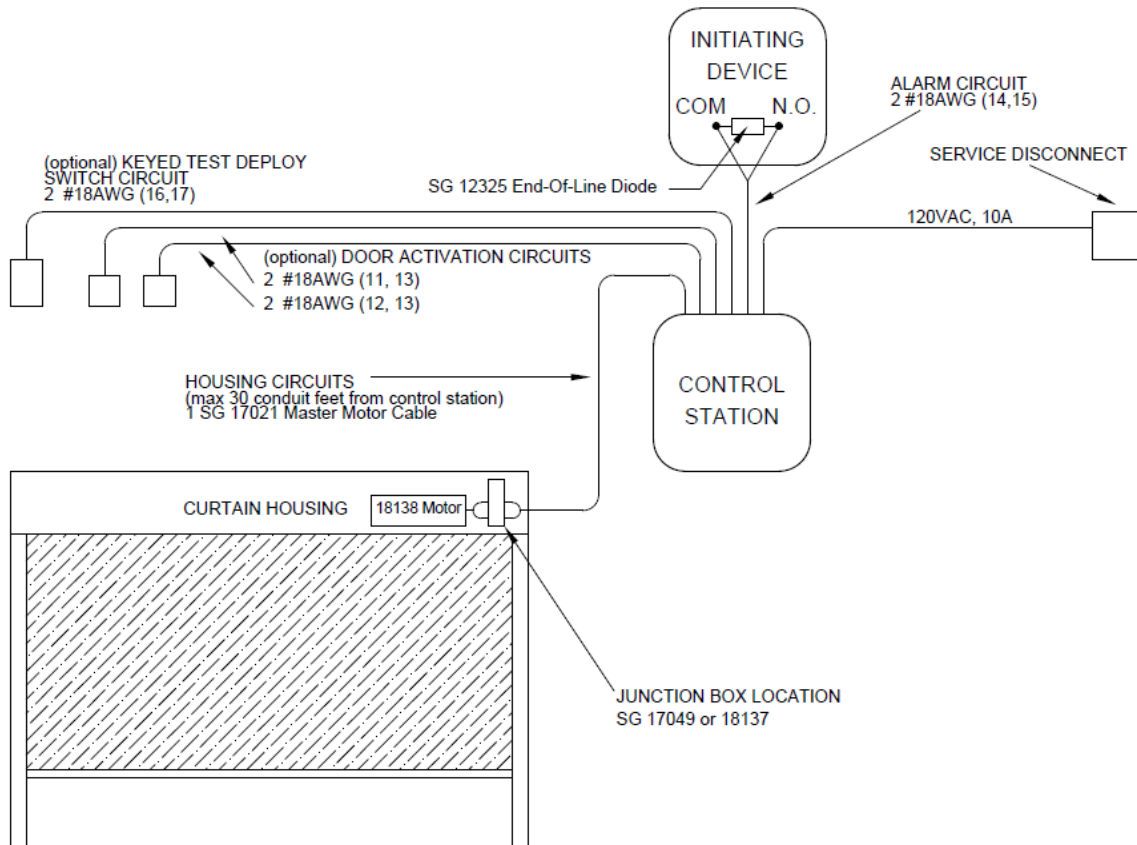




# Model 2500 Electrician's Guide

## Single Motor Configuration/14354 Controller

1. Install END-OF-LINE DIODE (furnished by Smoke Guard) at the INITIATING DEVICE.
2. Provide ALARM CIRCUIT from INITIATING DEVICE to CONTROL STATION.
3. Provide SERVICE DISCONNECT SWITCH and 120VAC to CONTROL STATION. (10A max)
4. Provide HOUSING CIRCUITS from CONTROL STATION to curtain HOUSING.
5. Provide optional KEYED TEST DEPLOY SWITCH, and DOOR ACTIVATION SWITCH circuits 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 ½" conduit into each control station high voltage compartment. Connect L, N and GND to terminal block.
- Provide service disconnect switch near control station.

## ***Housing circuits***

---

- Control station (18243/18275) must be within 30 conduit feet of junction box (17049/18137).
- Provide ¾" conduit between the master control station and the right side of housing to mate with housing junction box (17049/18137).
- At the control station, use the ¾" knockout at the low voltage compartment. Flexible conduit at the housing will ease installation.
- At housing junction box pull free end of Cable 17021 to control station. Mate cable P1 to junction box P2. Mate junction box P2 to motor P1. (Note: Do not connect cable 17021 directly to motor, always include junction box.)
- Butt splice up limit wires to master motor up limit cable, order does not matter. Secure wiring with cable mounts and ties.

## ***Optional keyed test deploy switch circuit***

---

- Provide junction box and ¾" conduit between the keyed test deploy switch and the control station.
- Provide two 18 or 20 AWG stranded wires labeled 16 and 17.

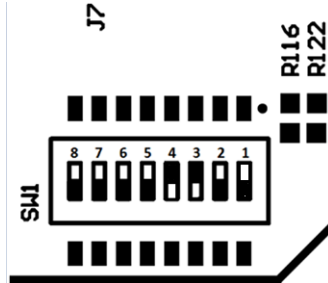
## ***Optional door activation switch circuit(s)***

---

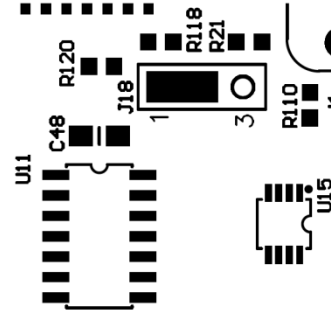
- Provide junction box and ¾" conduit between the door activation switch(es) and the control station.
- Provide two 18 or 20 AWG stranded wires for each switch
  - first switch: labeled 11 and 13 (ground)
  - second switch: labeled 12 and 13 (ground)

# Control Station (18243/18275 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 follows:



## Required terminal connections

Terminate cable 17021 and low voltage wiring at master terminal blocks as follows:

wire	terminal
1 (RED)	MOTOR +
2 (BLK)	MOTOR -
3 (RED)	+24V
4 (BLK)	COMMON
5 (WHT)	BRAKE

wire	terminal
6 (GRN)	SENSOR POWER
7 (ORG)	SENSOR SIGNAL
8 (BLU)	UP LIMIT
14	SMOKE DET/FIRE ALARM +
15	SMOKE DET/FIRE ALARM -

## Optional terminal connections

### Edge sensor

wire	terminal
9 (BRN)	EDGE SENSOR

### Down limit (FSCS control)

wire	terminal
10	DOWN LIMIT

### Key test deploy switch

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

### Door activation switches

wire	terminal description
11	DOOR ACTIVATION 1
12	DOOR ACTIVATION 2
13	GND
Wire the wall switch NORMALLY OPEN. Land the two wires from the wall switch at DOOR ACTIVATION1 and DOOR ACTIVATION 2.	

## Wiring at the Optional Switches

### ***Keyed test deploy switch (optional)***

---

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

### ***Door activation switch(es) (optional)***

---

At the door activation switch(es), 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