

**P ▲ R ▲ G ▲ D ▲ O ▲ X™**  
**TM70 (7") / TM50 (5") Touchscreen Keypads**  
**Installation Manual**

**TM70**



**TM50**



## Installation

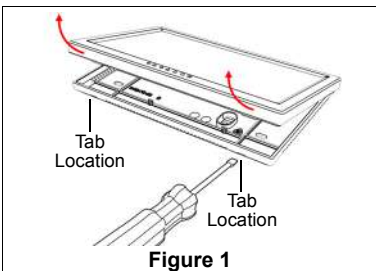
**WIRING:** For the TM70 it is recommended to use 18 gauge wire unless wire feed one keypad and distance is less than 100ft./30m.

TM50 we recommend 18 gauge as well, however, 22 gauge can be used up to 150ft. Feeding wire (bus) should not have more than 1.0V drop, each TM70 represents 0.3A max current, and TM50 150mA, wire resistance calculator can be found on the web. Resistance per: 100ft 22 gauge wire = 1.6 Ohm, 18 gauge 0.64 Ohm. **Voltage drop formula:**

$V = 2R \times 0.3N$  (TM70),  $V = 2R \times 0.15N$  (TM50)

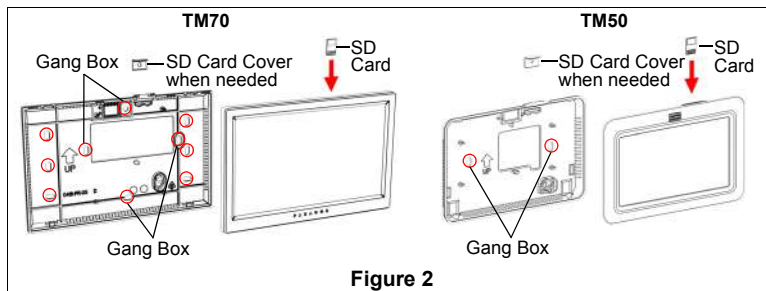
R = Wire resistance, N= Number of TM70s fed by the wire, use lower gauge wire if necessary.

1. Separate the top assembly from the back plate. Insert a flathead screwdriver into the tab located, as shown in Figure 1.
2. Mount the back plate to the wall or to a gang box using appropriate screws. Ensure that the **UP** arrow on the back plate is in the up position.



**Figure 1**

**Note: We recommend to feed the TM70 with 18 gauge wire.**



**Figure 2**

3. Make sure the SD card is installed properly and locked with text facing backward to wall/connections facing to the front, as shown in Figure 2.
4. Secure the wire plug to the PCB socket the wires as per the color code to match the Paradox keypad bus code. The blue wire is keypad zone input.
5. Attach the SD card cover if needed, then attach top to back top hooks first then lock the bottom as per Figure 1. The SD card can be removed if necessary with a flat screw from the top if the metal cover is not attached or by opening the keypad for loading pictures.
6. Power up the bus and verify that the voltage is higher than 11.5V (displayed at the bottom right of the main screen as well as the boot sequence screen).

### Technical Specifications

	TM70	TM50
<b>Power Input</b>	9 to 15 VDC	
<b>Consumption</b>	250mA at max brightness + 80mA sounder	150mA at max brightness + 80mA sounder
<b>Wire Connection</b>	18 Gauge	18 Gauge recommended, 22 Gauge
<b>Display</b>	7" 800 x 480	5" 480 x 272
<b>Dimensions</b>	17.7 x 11.4 x 1.5 cm (7 x 4.5 x 0.6 in.)	14.2 x 9.5 x 1.4 cm (5.6 x 3.75 x 0.56 in.)
<b>Humidity</b>	5-90%	
<b>Indoor Temp.</b>	Yes	
<b>SD Card</b>	4GB; 2GB free	
<b>Input</b>	Zone	
<b>Tamper</b>	Built-in, Cover and Wall	
<b>Compatibility</b>	Swan, EVO, Spectra, Magellan	
<b>Remote Upgrade</b>	Swan only	
<b>Jpeg Download</b>	Swan via Bus, EVO/Spectra SD Card	
<b>Auto Dim</b>	Yes	
<b>Chime</b>	Yes	

**Warranty:** For complete warranty information on this product, please refer to [www.paradox.com/terms](http://www.paradox.com/terms). Specifications may change without prior notice.

