Pre-Installation
Please refer to the Getting Started Guide to understand basic device functionality and comprehensive device installation instructions.

Enabling external door sensing
Email the list of Serial Numbers for the devices you are installing to support@flex-iat.zendesk.com to enable external door sensing on the units.

Recommended Tools and Supplies

**Tools**
- Electric Drill
- Digital Multi Meter (DMM)
- Wire Strippers
- Crimping Tool
- 7mm Nut Driver Bit
- ¾" Step Drill Bit

**Supplies**
- Drill and drill bit:
  - 3/32 or 2mm drill bit for pre-drilling for sheet metal screws (pre-drilling optional)
  - 5/32 or 4mm drill bit when using included bolts
- Weatherproof silicone such as GE Silicone II (clear) or Loctite 207 (clear) with at least -40°C to 85°C (-40°F to 185°F) temperature range
- Cable Zip-Ties
- Isopropyl Alcohol
- Clean rag
- 4 sheet metal screws or 4 bolts and nuts or 4 rivets (not included)

Mounting the Solar Powered Trailer and Asset Tracker
The recommended mounting location for the TT603 is high on the nose of the trailer, away from the corner, and just below the top rail with the GPS antenna pointing up. Install the device per the instructions included in the box for the TT603.

Connecting 12/24 Volt Power

**Power Connection Cable**
Unscrew the protective cover from the din cable connection on the TT603 and connect the Power cable. Make sure to seat the din cable securely in the TT603 and screw it in completely. Making sure not to bend in sharp angles, route the cable away from the TT603 towards the trailer power. Secure the cable with metal cable clamps.

**Spec and wire color definition**

<table>
<thead>
<tr>
<th>Connector and wire color</th>
<th>STT Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1-Black</td>
<td>Ground</td>
</tr>
<tr>
<td>P2-Red</td>
<td>6-24VDC In</td>
</tr>
<tr>
<td>P3-Orange</td>
<td>RS-232 Tx</td>
</tr>
<tr>
<td>P4-Pink</td>
<td>RS-232 Rx</td>
</tr>
<tr>
<td>P6-Blue</td>
<td>CAN H</td>
</tr>
<tr>
<td>P6-Gray</td>
<td>CAN L</td>
</tr>
<tr>
<td>P7-Black</td>
<td>1-Wire* (5V)</td>
</tr>
<tr>
<td>P8-Purple</td>
<td>12VDC out (100mA max)</td>
</tr>
</tbody>
</table>

* 1-Wire is a registered trademark of Maxim Integrated Products, Inc.

**Power Connection**
You will need to connect the TT603 cable to the trailer power through TT603’s Pink (6-24VDC In) and Black (Ground) wires. Wire the red wire with the corresponding power joint and black wire with the corresponding ground joint from the trailer.

Door Sensor Mounting
Mount the part with the magnet inside the trailer on the primary door and the other one with wire on the ceiling of the trailer using appropriate hardware.

Wiring Door Sensors to TT603
The final step to complete the installation of your TT603 is the connection of the door sensor wires. It is important that you secure the wires with cable zip-ties making sure to keep away from any moving parts.
With the wires along with the mounting pad on the ceiling of the trailer combine Yellow and Black wires and then connect either one wire (no polarity on 2 wires) to the TT603’s Pink (RS232 Rx) wire and the other wire to the TT603’s Purple (12 VDC out) wire through the following steps.

1. Strip 2 wires jacket to 7mm.

![Image 1](image1.png)

2. Insert the whole stripped wire into splice and crimp it with tools (suggest using Crimp Hand Fixer KY-8161 as following image shows).

![Image 2](image2.png)

3. Insert crimped splice into heat tube as follows.

![Image 3](image3.png)

4. Do the same for the TT603’s Pink (RS232-Rx) wire (Refer to Figure 1).

5. Move the heat tube to cover the whole splice.

![Image 4](image4.png)

6. Heat the tube using a blower or lighter until the tube is shrunk, suggested temperature is about 350 °C (662 °F).

![Image 5](image5.png)

7. Repeat the above steps for combining the other wire and connecting them to the TT603’s Purple (12 VDC out) wire. (Refer to Figure 1).