

# ST240

User Manual

A large, semi-circular graphic in a light pink color. Inside the semi-circle, the word "Suntech" is written in white. To the right of the semi-circle, there are several horizontal lines of varying lengths, also in light pink, creating a sense of motion or a stylized sunburst.

Suntech

Suntech International LTD.



**Suntech International Ltd.**

## ST240 Installation Guide

### 1. Decide the location of ST240 and GPS Antenna, and check the cable ways.

- Check whether the location of ST 240 is far away from other electric equipment.
- GPS Antenna must have a sky-view and must be far away from other antenna.

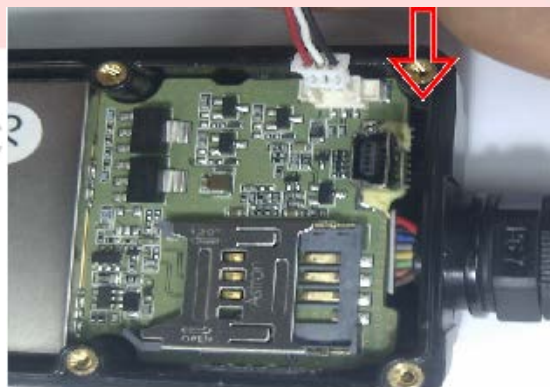
### 2. Insert SIM card

Steps :

- Open the battery cover, pick out the battery pack.



- Insert SIM into holder and lock it

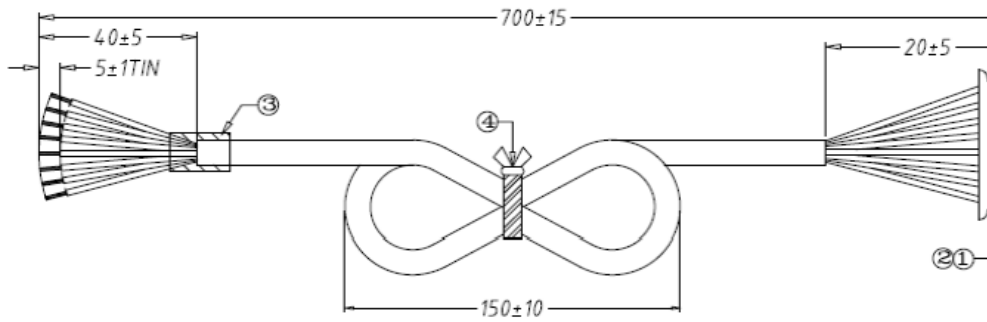


- Plug the battery connector as shown



- Tighten the six screws

### 3. Connect Event lines with relevant lines of vehicle.



接線方法  
connection method

P view	color
1	紅(red)
2	黑(black)
3	藍(blue)
4	白(white)
5	黃(yellow)
6	綠(green)
7	橙(orange)
8	棕(brown)

RED	pin 1	Car battery (Main power 8V ~ 30V)
BLACK	pin 2	GND
BLUE	pin 3	Ignition
GRAY	pin 4	Input 1
YELLOW	pin 5	Input 2
GREEN	pin 6	Input 3
ORANGE	pin 7	Output 1
BROWN	pin 8	Output 2

#### Event Cable Color pin Description

**Red:** VCC (8 - 30V)

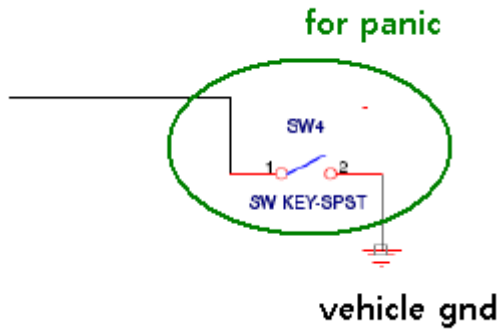
- Connect the red line to 12 VDC /24 VDC Constant power of vehicle

**Black:** Ground

- Connect the black line to Ground of vehicle
- **Blue:** Ignition (8V - 30V) Connect the blue line to an ignition wire of vehicle

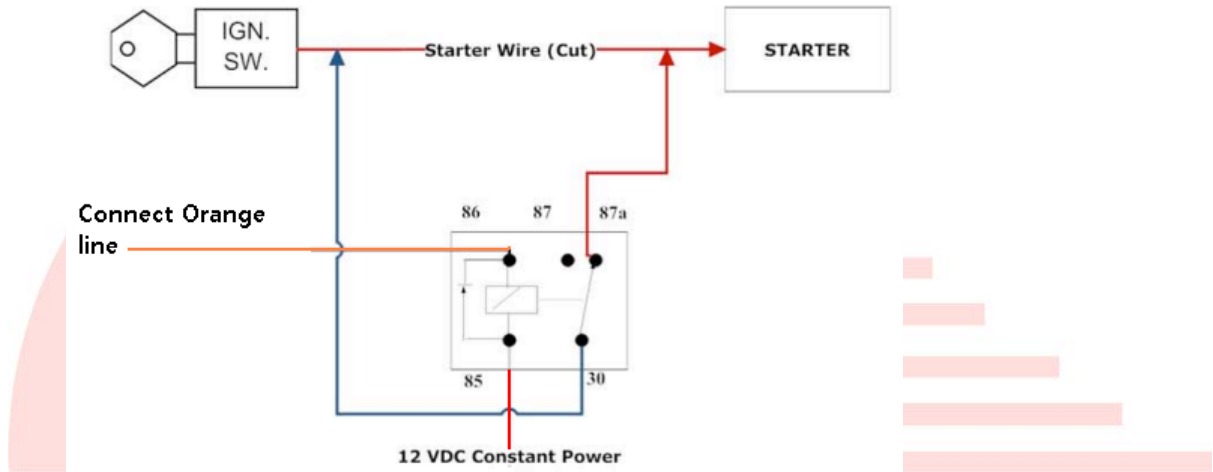
**Caution :** Never connect the red & blue lines together to a constant power source

**Yellow, Green, White “lines of event cable”**



**Orange, Brown “lines of event cable”**

- Output line For siren or buzzer
- Immobilizer



# Suntech International LTD.

**4. Check GPS/GPRS operation and operation with LEDs.**

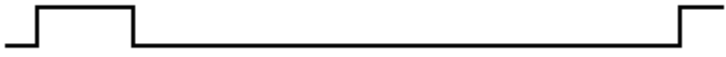

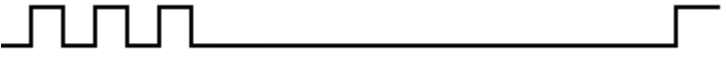

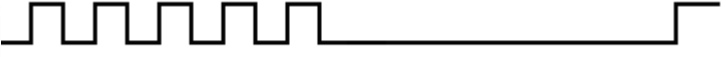


It takes 3~10 minutes for GPS connected.

- Green LED- indicates GPS status
- RED LED- indicates GPRS status

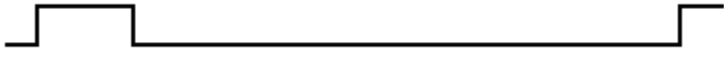
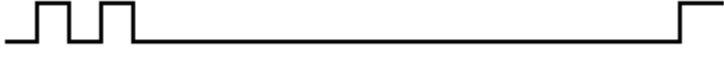

**Caution:** Direction of ST240 is very important when installed in the vehicle. Make sure that top side of ST240

## 5. Trouble Shooting (LED Indicator)

- **Blue LED: Indicates GPRS status.**

GPRS	Blink Count	Remarks
Normal	1	
Server Com. Error	2	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. Server or network parameter is wrong.</li> <li>2. Server is closed.</li> <li>3. Temporary network barrier</li> </ol>
GPRS Com. Error	3	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. Network parameter is wrong.</li> <li>2. SIM is blocked about GPRS using.</li> <li>3. Temporary network barrier</li> <li>4. Weak GPRS signal</li> <li>5. GPRS antenna connection is not firm.</li> </ol>
No Network	4	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. GPRS antenna is disconnected.</li> <li>2. GPRS antenna or socket of GPRS antenna is broken.</li> <li>3. Device is broken.</li> </ol>
SIM PIN Locked	5	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. SIM PIN is enabled.</li> </ol>
Cannot Attach NW	6	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. Weak GPRS signal.</li> <li>2. GPRS antenna connection is not firm.</li> </ol>
No SIM	7	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. There is no SIM or SIM is not inserted properly.</li> <li>2. SIM or SIM socket is broken.</li> </ol>

**- RED LED: Indicates GPS status.**

GPS	Blink Count	Remarks
Normal	1	
No Fix	2	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. If power on, GPS chipset is trying to find position during some minutes.</li> <li>2. GPS antenna lays on weak or no GPS signal position</li> <li>3. GPS antenna connection is not firm.</li> </ol>
GPS Chipset Error GPS Antenna Error	4	 <p>&lt;Possible Cause&gt;</p> <ol style="list-style-type: none"> <li>1. GPS antenna is disconnected.</li> <li>2. GPS antenna or socket of GPS antenna is broken.</li> <li>3. Unit is broken.</li> </ol>

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

**Cautions**

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital



device, pursuant to Part 15 of the FCC Rules. These limits are frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Suntech International LTD.