

ST215

User Manual



Suntech International LTD.



Suntech International Ltd.

ST215 Installation Guide

1. Configure ST 215 in the Lab by using Setting Tool.

- Setting MUST be done with back up battery or external power. (12V)
- For the details of configuration, refer to the other document.



2. Decide the location of ST215 and GPS Antenna, and check the cable ways.

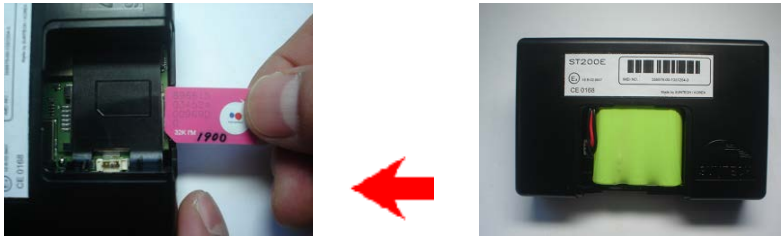
- Check whether the location of ST 210 is far away from other electric equipments.
- GPS Antenna must have a sky-view and must be far away from other antenna.

3. Insert SIM card (Can be done at the time of configuration)

Steps :

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





2. Insert the SIM card into the holder in the direction as shown above.

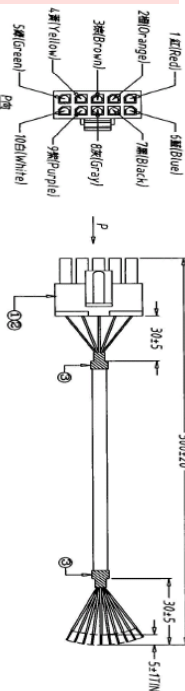
**Caution: when inserting, make sure that the unit is in the disconnected from main power.*

4. Connect GPS Antenna

- For avoiding ESD, installer must wear gloves



5. Connect Event Lines with relevant lines of vehicle.

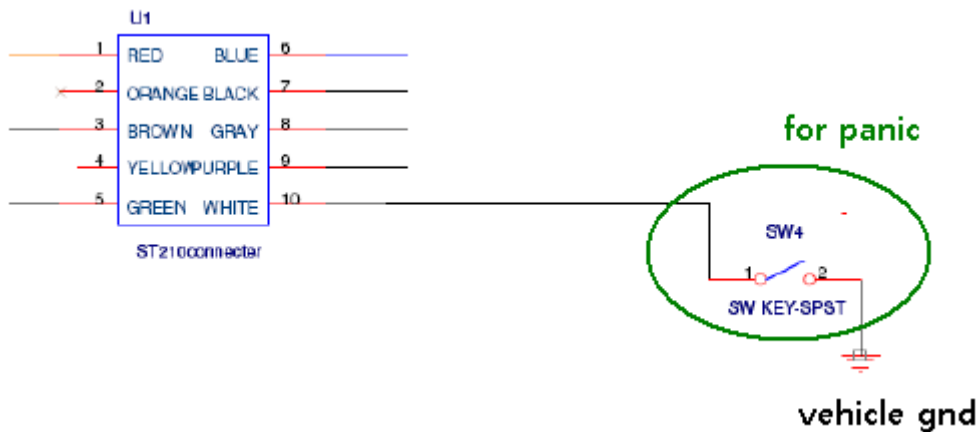


Red	pin 1	Car battery (Main power 8V ~ 30V)	FIX wire
Yellow	pin 2	Output 1	FIX wire
Brown	pin 3	Output 2	FIX wire
Green	pin 4	Input 2	FIX wire
Blue	pin 5	Input 3 (Default= Input3, Option = ADC)	option
Black	pin 6	Ignition	FIX wire
Grey	pin 7	GND	FIX wire
White	pin 8	option 2 (Default = NC)	option
Purple	pin 9	option 1 (Default = NC)	option
Orange	pin 10	Input 1	FIX wire

Type 1	UART	pin 8	UART TX
		pin 9	UART RX
Type 3	CAN	pin 8	CAN_H
		pin 9	CAN_L
Type 4	Input	pin 8	Input4
		pin 9	Input5
Type 5	Output	pin 8	Output4
		pin 9	Output3
Type 6	In/Out	pin 8	Input4
		pin 9	Output3

Event Cable Description

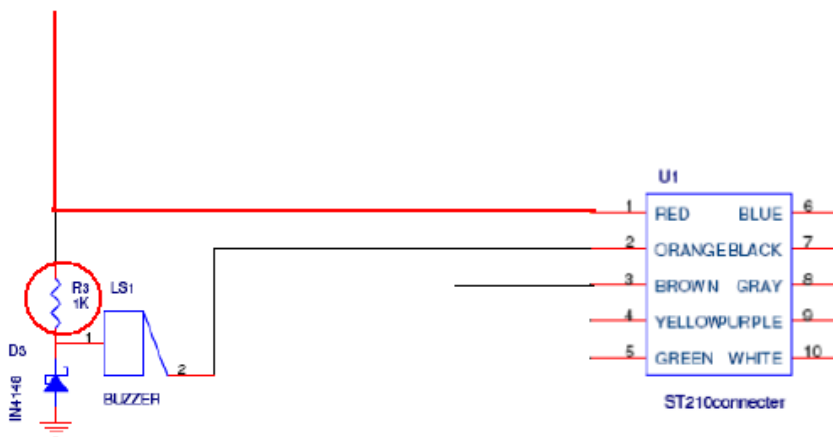
- 'red' line of Event cable
 - Connect the red line to 12 VDC /24 VDC Constant power of vehicle
 - 'black' line of Event cable
 - Connect the black line to Ground of vehicle
 - 'blue' line of Event cable
 - Connect the blue line to an ignition wire of vehicle
- Caution : Never connect the red & blue lines together to a constant power source**
- "Yellow , green, white" lines of Event cable
 - For digital input lines
 - *Green line is use for digital input or ADC input according to your order option.



- For ADC Input
The voltage range of ADC input is from DC 0.5 to 30V

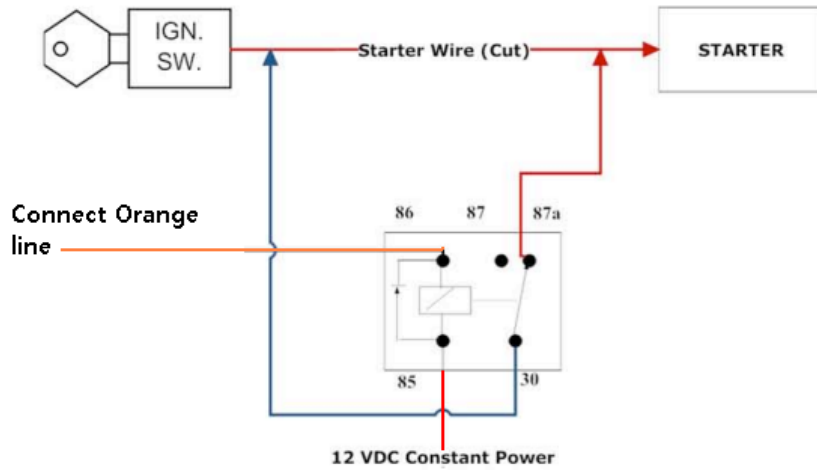
- "Orange , brown " lines of Event cable
 - Output line For siren or buzzer

Vehicle costant power

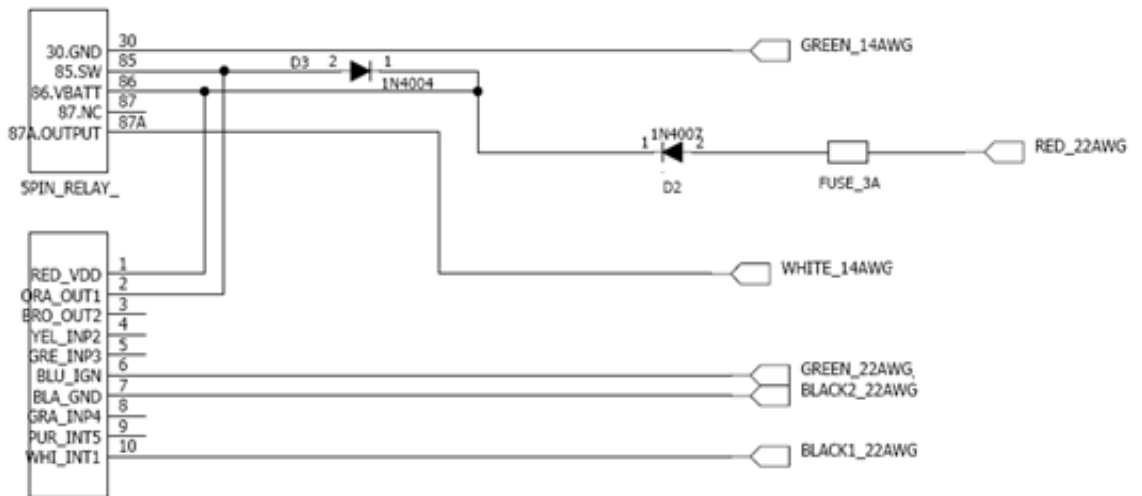


* Set the value of R3(0 ohm or any value) in accordance with the specification of Buzzer or Siren

- Output line For immobilizer



Block Diagram for Immobilizer



ST215 Event connector

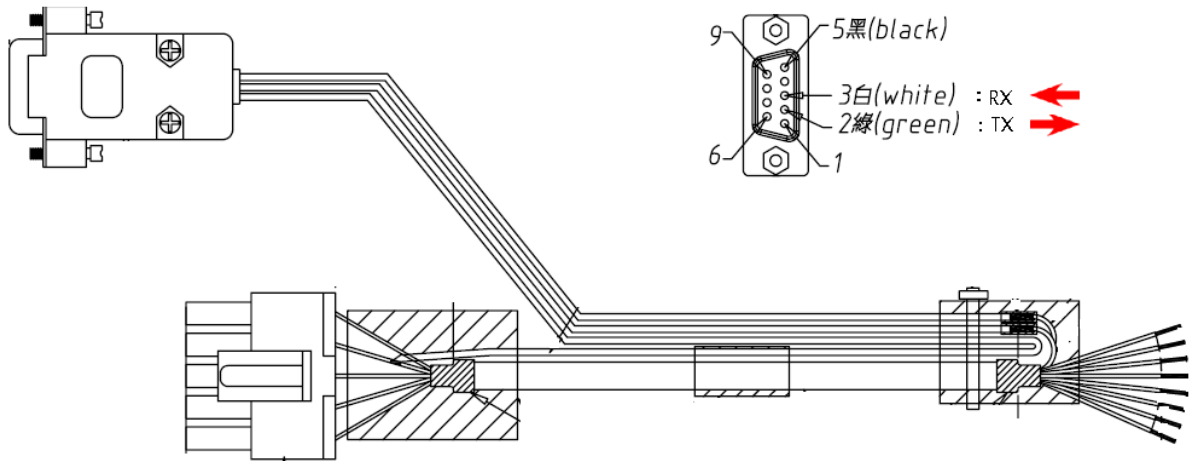
Application Circuit for Immobilizer

- "Gray , purple " lines of Event cable
 - These two lines are for optional function which is one of RS232, CAN, Input or Output as below

Type 1	UART	pin 8	UART TX	RS232
		pin 9	UART RX	
Type 3	CAN	pin 8	CAN_H	CAN
		pin 9	CAN_L	
Type 4	Input	pin 8	Input4	Digital Input
		pin 9	Input5	
Type 5	Output	pin 8	Output4	Output
		pin 9	Output3	
Type 6	In/Out	pin 8	Input4	In/Output
		pin 9	Output3	

*Check if which function is selected.

For RS232 Interface, Refer to the below



6. Check operation

This device has 2 LEDs on the front that indicates proper operation

- LED blinking

For ST210,

Green LED- indicates GPS status

RED LED- indicates GPRS status

*Caution: ST215 device has different LED color



For ST215,

RED LED- indicates GPS status

BLUE LED- indicates GPRS status

Refer to separate document for detail operation status.

- Communicate with control center for checking each Event Lines

7. Confirm start of commercial operation with financial department

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 interface 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.