

NC3G Install Documentation



Installation

1 Connect GPS/GSM Antennas



Connect the GSM antenna to the SMA connector which is 'GSM' text labelled. The GSM antenna is non-directional, so you can hide it in any place of vehicle.

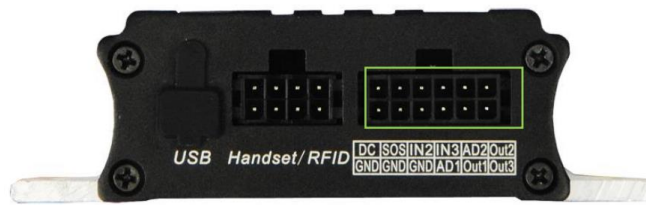
Connect GPS antenna to the GPS connector which is 'GPS' labelled. The optimum location for the GPS antenna is on the roof of the vehicle. The covert and GPS antenna are directional, make sure they are facing up and lying as flat as possible. Secure them in place with glue or zip ties.

Note: Do not shield or cover the GPS antenna with any objects containing metal.

2 Install I/O Cable

2.1 The Definition of I/O Cable

The I/O cable is a 12-pin cable, including the power, analogue input, digital temperature sensor input, and negative/positive input



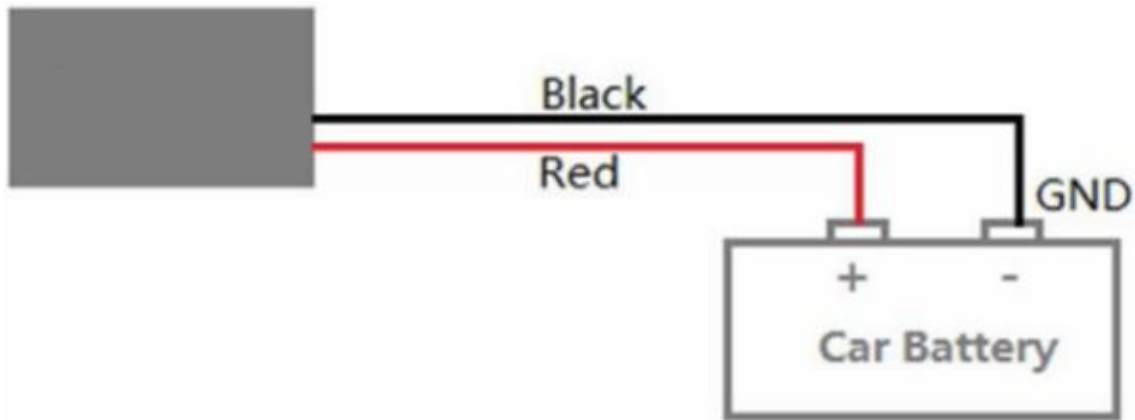
1 Power (+)	3 Input 1	5 Input 2	7 Input 3	9 Fuel sensor	11 Output 2
2 GND (-)	4 GND (-)	6 GND (-)	8 AD input 1	10 Output 1	12 Digital Temperature Sensor

Pin Number	Color	Description
1 (Power +)	Red	Positive electrode of the power input, connected to the positive electrode of the vehicle storage battery. Input voltage: 11 V to 36 V. 12 V is recommended.
2 (GND)	Black	Ground wire, connected to the negative electrode of the vehicle storage battery or to the negative terminal.
3 (Input 1)	White	Digital input 1, negative triggering (SOS button by default)
4 (GND)	Black	Ground wire, connected to input 1 (SOS button)
5 (Input 2)	White	Digital input 2 (negative triggering) Connects to a door triggering signal cable to detect vehicle door status. (Most Chinese, Korean, and Japanese cars are negative edge-triggered.)
6 (GND)	Black	Ground wire It can be used as a ground wire connected to an analog sensor.
7 (Input 3)	White	Digital input 3 (positive triggering) Detect the vehicle ACC status by default.
8 (AD Input 1)	Blue	Analog input 1 with 12-bit resolution and valid voltage 0–6.6 V Connects to an external sensor, such as the fuel sensor.
9 (Fuel sensor input)	Blue	Analog input 2 with 12-bit resolution and valid voltage 0–6.6 V The AD cable is connected to the white plug. The cable is connected to the A53 fuel sensor by default.
10 (Output 1)	Yellow	Output 1 Valid: low level (0 V) Invalid: open collector Maximum voltage for output open collector (invalid): 40 V Maximum current for output low voltage (valid): 400 mA Connects to an external relay to remotely cut off the vehicle fuel cable or engine power supply.
11 (Output 2)	Yellow	Output 2 Valid: low level (0 V) Invalid: open collector

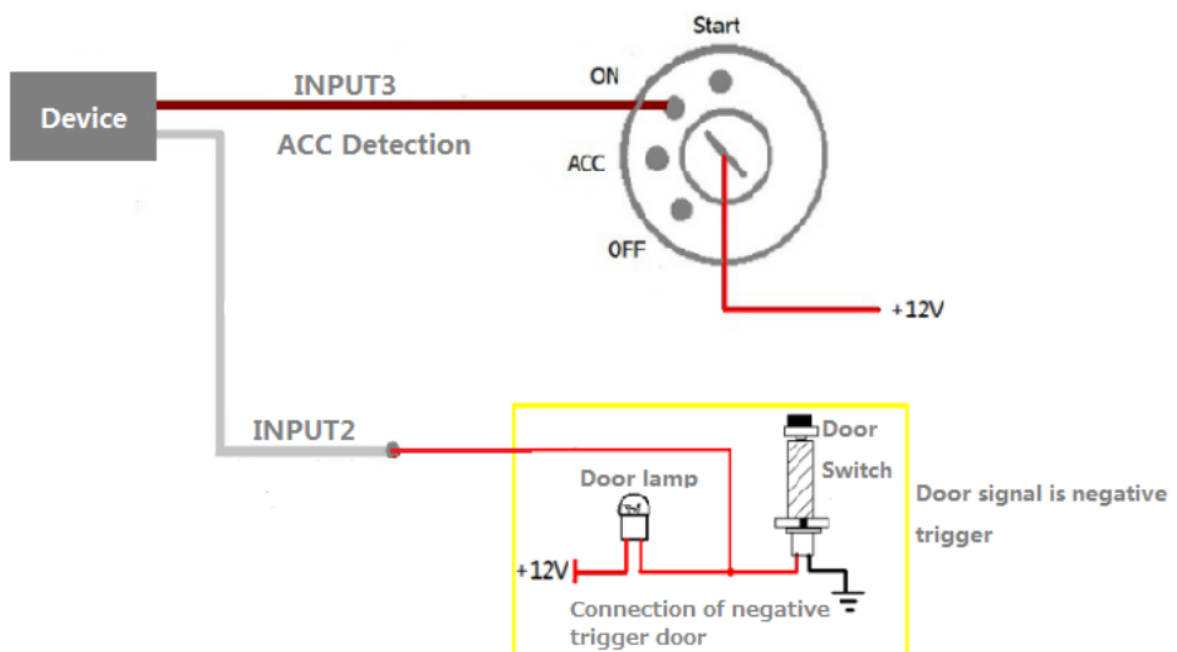
		<p>Maximum voltage for output open collector (invalid): 40 V</p> <p>Maximum current for output low voltage (valid): 400 mA</p> <p>Connects to an external relay to remotely cut off the vehicle fuel cable or engine power supply.</p>
12 (Digital temperature sensor input)	Yellow	<p>TTL3.3V level</p> <p>Connects to the A52 digital temperature sensor by default by using the A61 sensor box.</p> <p>Note: The DC or AC voltage that is greater than 3.3 V is allowed. Otherwise, the device may be damaged.</p>

2.2 Power Cable/Ground Wire

Connect GND (-Black) and Power (+Red) wires to the battery of vehicle.



2.4 ACC and Door Detection



2.5 Sensor Input

For the PIN8 analogue input 1, a sensor whose output voltage ranges from 0 V to 6.6 V can be installed. The analogue voltage calculation formula is as follows:

$$\text{Voltage} = (\text{AD} \times 3.3 \times 2) / 4096$$

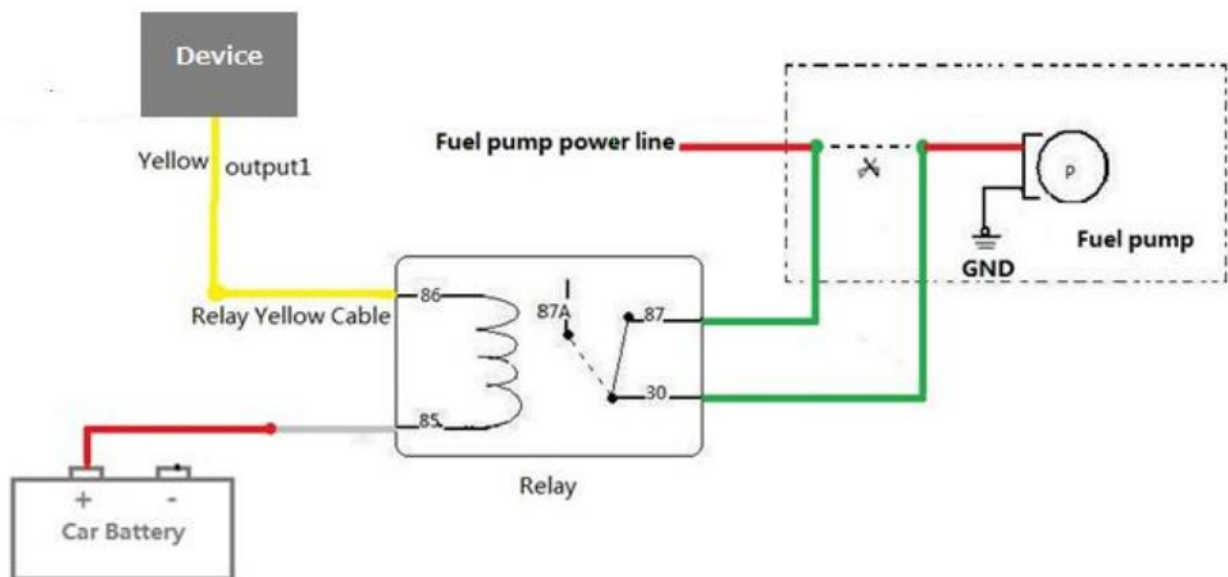
PIN10 is connected to the A53 fuel sensor by default. In this way, the formula does not need to be added on the platform.

PIN12 is connected to the A61+52 temperature sensor.

Note:

- The white plug on the NC3G harness consist of the power cable (red), ground wire (black), AD2 cable (blue), and SEN cable (blue).
- The T333 can connect to a maximum of two A61 sensor boxes. You can install a maximum of eight A52 temperature sensor ports.

2.6 Output (PIN10/PIN11)



Note: To implement remote fuel and power cut-off, connect the relay to the fuel pump cable or the engine cable in series.