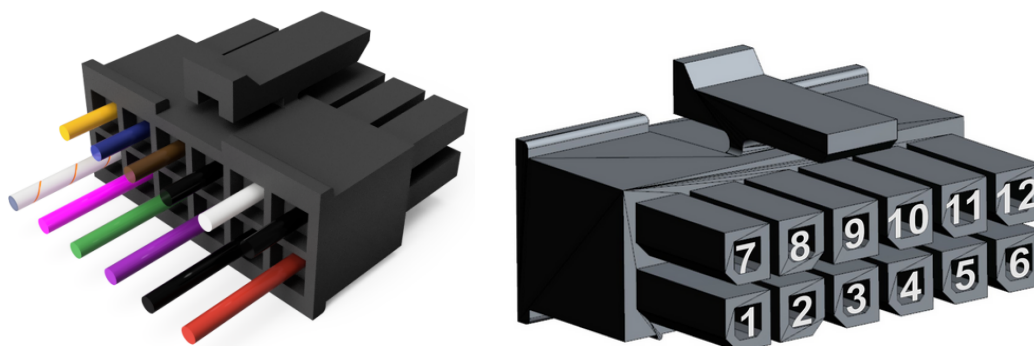


## GPS Hard Wired Installation Guide

The GPS Hard Wired is supplied with a 12-wire harness and contains pins for various I/Os. For many installs, where we simply are looking for 'standard' vehicle tracking, we only need to connect 3-wires. For quick plug-and-play installs, there are additional GPS Hard Wired harness options (OBD plug or Cigarette Lighter adapter). The benefit of a 3-wire 'hard-wired' install is that the device can't be easily dislodged/removed.

- The GPS Hard Wired comes with a 12 wire, 650mm long harness
- 15mm is pre-stripped on the input (red), ground (black), and the ignition (white) wires.
- Wire gauge is 0.35mm<sup>2</sup>



Pin	Colour	Function
1	Red	+VIN / BATT (8-36V)
2	Black	GROUND
3*	Purple	VOUT
4*	Green	Driver ID 2 TTL RX / Wiegand D0 / Digital Input 3
5	Pink	DIGITAL INPUT 1 (48V max)
6	Orange	ANALOGUE INPUT (0-30V)
7	Black	GROUND
8	White	IGNITION INPUT (0-48V) 'on' at >2.2V
9*	Black	GROUND
10*	Brown	Driver ID 1 TTL TX / Wiegand Data 1, iButton
11	Blue	DIGITAL INPUT 2 (48V max)
12	Yellow	SW GROUND

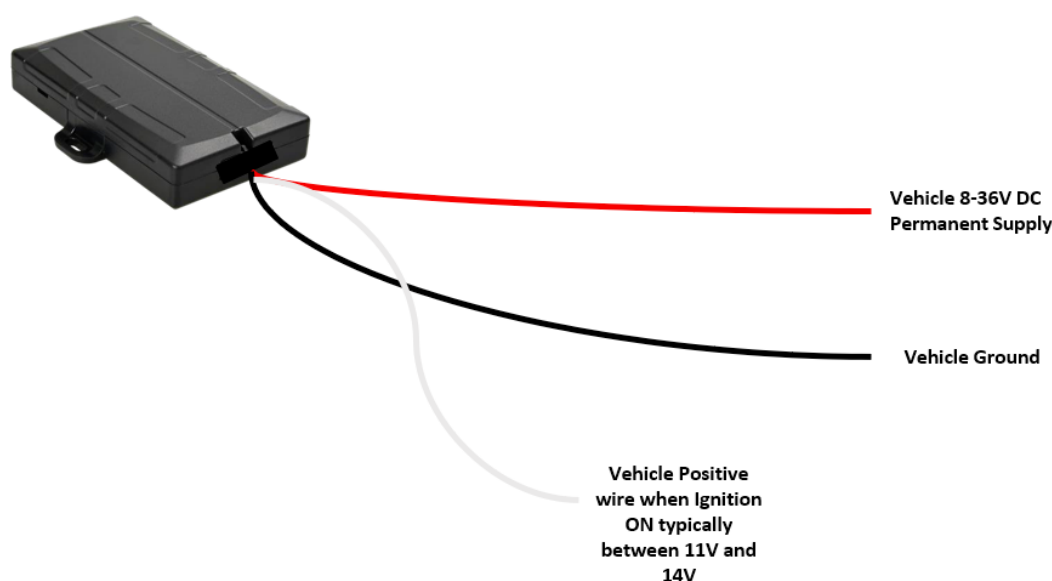
## Wiring Description:

- Connect Red (Pin 1) on the GPS Hard Wired harness to the vehicle battery (8-36V).
- Connect Black (Pin 2) to chassis ground
- Optional - Connect White (Pin 8) to an ignition source

## Notes:

- The White ignition input will register as 'on' when  $> 2.2V$  is applied to this line.
- Ensure the Red wire is connected to a constant source. Sometimes it may be wired to a point which only provides power when the ignition is on (ie power isolated on parked assets).

## Standard Three Wire Install Wiring Diagram



Once the device is connected, please check your ANYTRACK GPS Tracking Access to ensure you have External Power (12 or 24V) & Battery Level (around 4V) showing up on the asset.

Status: Parked at 1D Sydney Steel Road,  
Battery Voltage: 4.1 V  
External Voltage: 24.9 V  
Cellular Signal Strength: Good  
Ignition: Off

For any questions or issues, please contact ANYTRACK GPS on [info@anytrack.com.au](mailto:info@anytrack.com.au)

## Remote Immobilisation Installation

### Notes

- The GPS Hard Wired has a switched ground output, this is Pin 12, the YELLOW wire
- The SW GND can be wired to a relay, to control the relay
- The relay is also wired to cut/close the starter motor circuit for a vehicle, meaning that whether a vehicle is able to start or not can be controlled by the GPS Hard Wired
- Immobilisation can be turned on/off by the GPS Hard-Wired based on Driver ID Tag scans, or remotely through ANYTRACK LIVE Web Dashboard or App

### Wiring Configurations

There are different ways to wire in a relay and configure the device settings to achieve a similar result. However, the aim is to try to avoid having the relay coil energized for an extended period - so as to not drain the vehicle battery if it is not driven for some time.

Automotive relays will have 2 contacts:

- **Normally Open**
  - The 'default' state, when the relay is not energised is open (break in circuit)
- **Normally Closed**
  - The 'default' state, when the relay is not energized is closed (closed loop)

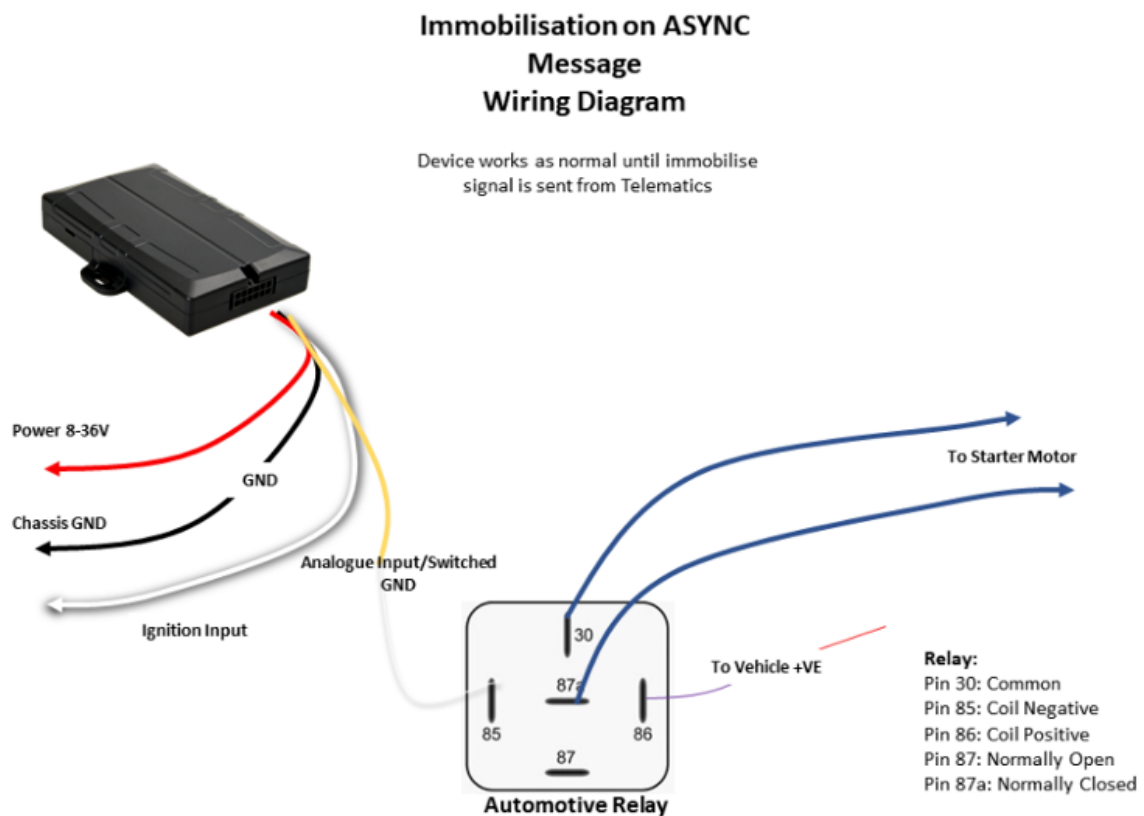
There are 2 common use cases (**this guide covers case 2 in bold below**)

1. The vehicle cannot be started until the right driver ID tag is scanned.
  - a. In this case when the relay is not energized we want there to be a break in the start motor circuit. So we wire to the Normally Open contact.
  - b. With this config, we can still additionally send a command from the server to immobilize the asset and prevent anyone from starting it, even if they have a valid ID. If one form of immobilization (ANYTRACK LIVE or Driver ID) **OR** the other is active, the asset can't start.
2. **DEFAULT STATE is that the vehicle can always be started - unless via ANYTRACK LIVE or another software platform an 'immobilize' command is sent.**
  - a. **In this case we want the relay when not energized to be closed, allowing the vehicle to start. So we wired to the Normally Closed contact. Sending the command will energize the relay.**

## Wiring and Installation

- Connect pin 86 (relay positive) to the Vehicle Positive
- Pins 30 and 87A (normally closed) are wired to form the break in the start motor
- Connect the switched ground (Pin 12 - Yellow Wire) to the relay negative, pin 85.

Your asset can be started as per normal until the immobilize command is sent from ANYTRACK.



Once connected – ANYTRACK Support will need to configure Digital Output 1 for the Function to be Immobiliser to Active High = YES for this device

Please contact ANYTRACK GPS on [info@anytrack.com.au](mailto:info@anytrack.com.au) for activation of this setting providing SERIAL number of the device.