Classic Tracker Ltd.

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Classic Tracker Installation

Thank you for purchasing a Classic Tracker!

We believe you've bought the most dedicated, effective and secure classic car & bike alerting, monitoring and live-vehicle tracking service. We hope it brings you many years of efficient service!

We recommend you read this entire document prior to getting started. Should you require any assistance, please feel free to contact us.

This document assumes you have some working knowledge of automotive electrics.

Four Simple Steps...

1. FIND YOUR TRACKER SERIAL NUMBER
2. INSTALLATION & WIRING TO YOUR CAR/BIKE
3. REGISTER THE TRACKER
4. ACCESS ON-LINE TRACKING

There are four simple steps to install, connect & power, register and confirm your tracker is successfully installed.

INSTALLERS: If you're installing for a client, once installed please register on behalf of your client using the serial number on the packaging and tracker:

https://www.classic-tracker.com/registration

1.

FIND YOUR TRACKER SERIAL NUMBER

Please make a note of the serial number, which is found on the tracker and packaging box. You will need this later when registering your tracker on our website.

Tracker Serial Number:

2.

INSTALLATION & WIRING TO YOUR VEHICLE

TRACKER-UNIT INSTALLATION:

Please consider 'test-mounting' the powered tracker prior to final fitment where you can see the two LEDs (light-emitting diodes) on the device. Ensure the vehicle is outside with an unobstructed view of the sky and that the vehicle ignition is on. Both GPS and GSM can take several minutes to acquire a signal.

The Standard-WIRED Classic Tracker has a separate, pluggable cable assembly. The tracker unit should be installed securely, ideally in a covert location with the Classic Tracker sticker oriented towards the sky.

COVERT LOCATION

For cars, we recommend two places; either within a bulkhead cavity hidden in the front dashboard, or alternatively in the rear of the vehicle hidden immediately beneath the rear-parcel shelf. In either case locate the tracker covertly, ensuring that the upper-side of the unit sits just beneath the underside of the dash-top/ parcel shelf.

You can, of course, locate the tracker wherever you wish to make it difficult for the would-be-thief to find. Ideally the tracker should have little, or no, metal *immediately* above it to prevent its ability to receive GPS signals. Note that the tracker will still operate within the steel/metal fabrication of your car.
When finding the ideal place for your vehicle, consider how you will route the cable assembly to Permanent LIVE, NEUTRAL and SWITCHED IGNITION and Remote IMMOBILISER.

CABLE WIRING

IMPORTANT! Disconnect the main battery from your vehicle whilst connecting the tracker's wiring loom to your vehicles power supply.

The wiring loom supplied with the Classic Tracker contains multiple cables. The tracker only requires three connections to provide full service. A fourth cable should be used when connecting the optional Remote IMMOBILISER.

Connection Scheme

Standard-WIRED	Connection Scheme
RED	This should be connected to +12V /permanent live
BLACK	This should be connected to 0V/Ground
YELLOW	This should be connected to +12V Switched Ignition.
WHITE with Orange tracer	Connects to optional Immobiliser relay. Please refer to Optional External Immobiliser section later in this document.

Battery Isolators

When installing the tracker where a battery isolator is present, simply connect the red tracker wire 'battery side' to maintain a permanent supply to the tracker. All our trackers deploy advanced power management which reduces the amount of current drawn by the tracker, which ensures we do not run your car battery flat (~10mA in sleep mode).

Don not connect the tracker into a vehicle which isolates the negative.

PLEASE SEE SEPARATE SECTION FOR WIRING INTO A POSITIVE-EARTH VEHICLE.

OPTIONAL EXTERNAL IMMOBILSER

It is possible to use the Classic Tracker to immobilise the vehicle via disconnection of either ignition or electric fuel pump. Alternatively, the digital control can be used to affect any powered device installed to the vehicle (e.g. sound the horn).
By connecting a supplied and approved relay, the Classic Tracker can be configured to operate as an engine immobiliser by remotely interrupting (cutting) the vehicle ignition circuit or the 12V supply to an electric fuel pump.

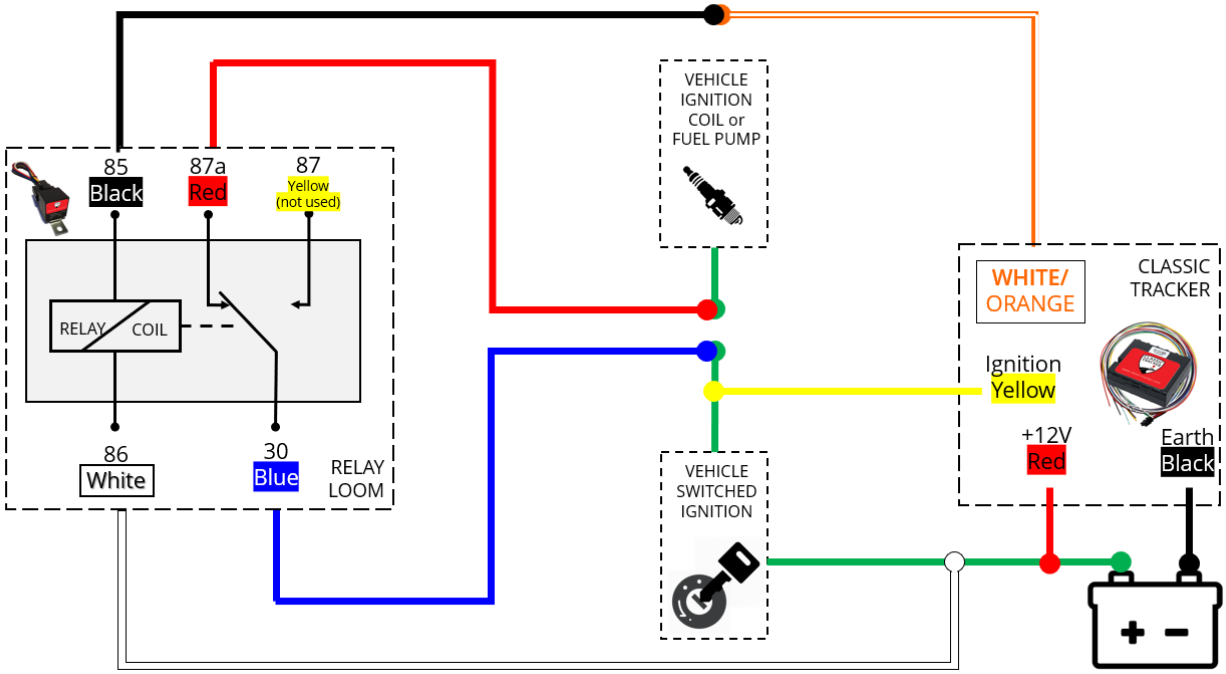
Worth knowing that the following wiring diagrams will maintain your vehicle's standard wiring scheme. When the remote immobiliser function is enabled (via the app or web portal), the circuit is 'opened' or 'broken'. Therefore, in the unlikely event of tracker or immobiliser failure, your vehicle is still entirely usable.

For the sake of clarity, the GREEN cables featured in the following diagrams refer to your vehicle wiring.

Upgrading an existing installation

If you are adding this to an existing Classic Tracker, we may need to reprogram the tracker over the air (remotely) to enable the digital output controls. If you feel this is the case, please do not hesitate to contact us.

Connection Scheme – Standard WIRED



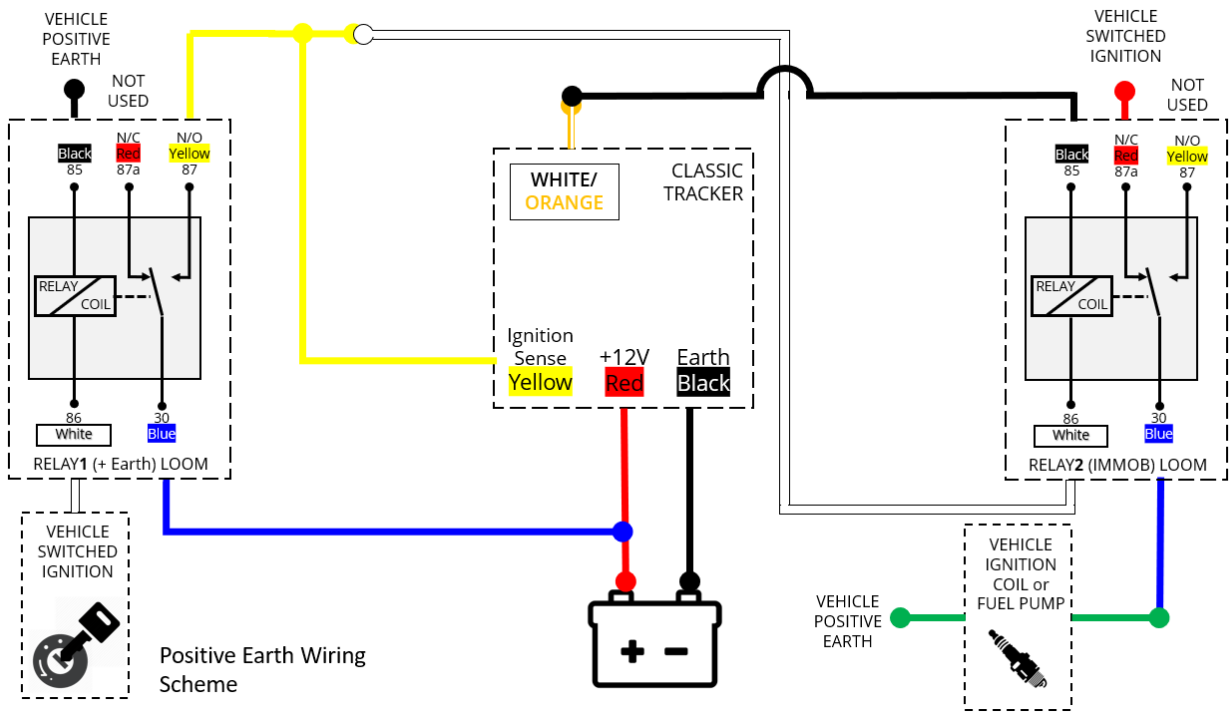
POSITIVE EARTH VEHICLES

All variants of Classic Tracker require connection to a negative earth wiring scheme i.e. +12V supply to the positive and 0V to negative connections. However, this does not mean that the tracker will not function in a positive earth vehicle.

An additional automotive grade relay will be required to install into a positive-earth vehicle; identical to the immobiliser relay supplied with your Classic Tracker bundle.

The principle of operation involves the creation of an ignition-switched +12V line using the second relay (RELAY1). When the vehicle ignition is switched on the yellow tracker cable needs a +12V to recognise when the ignition is switched on. This is provided by the yellow cable of RELAY1 wiring loom, as the RELAY1 coil is powered with the vehicle ignition switched on.

POSITIVE EARTH WIRING SCHEME - Standard WIRED or Tracker



RELAY2 is use as the immobiliser relay controlled by the Classic Tracker web/app login.

IMPORTANT: When installing a Classic Tracker into a POSITIVE EARTH vehicle, please run an entirely separate and electrically-isolated 'inverted' supply from the vehicle battery. i.e. From the vehicle battery, a red +12V and a black 'ground' cable to supply the negative connections.

PLEASE ENSURE THAT THIS CIRCUIT IS ENTIRELY ELECTRICALLY ISOLATED FROM YOUR POSITIVE EARTH CHASSIS AND ELECTRICAL SYSTEM.

CABLE WIRING CONT'

All remaining cables are for the connection of additional functions to the tracker and are presently disabled.

Once the wiring assembly has been installed, next plug the cable into the tracker unit ensuring the gas-fit connector 'snaps' closed.

You may now reconnect your vehicles' battery. Having now applied power to the Classic Tracker, you should see a pair of LEDs (light-emitting-diodes) gently flashing as the tracker locates both a GPS location and cellular connection.

3.

REGISTER THE TRACKER

Please visit our website to register the tracker with your vehicle:

`www.classic-tracker.com/registration`

Activation can take up to one business day. You will receive notification that the tracker has been successfully registered on our secure systems. Login credentials for web portal and mobile app will be provided.

4.

ACCESS ON-LINE TRACKING

After registration is complete, you will have received an email providing login and password for the Classic Tracker Portal and mobile app. The LOGIN link is available from our website.

Full instructions and help are provided once logged in the portal.

You may also download an Android or iOS App called X-GPS Monitor. Use the same login credentials to access when using the App. Please visit Google Play or App Store on your mobile device to download.

Remotely Operating the Immobiliser

Once fully connected and vehicle registered, the remote switching can be affected from either the web login or when logged into the mobile app as follows.

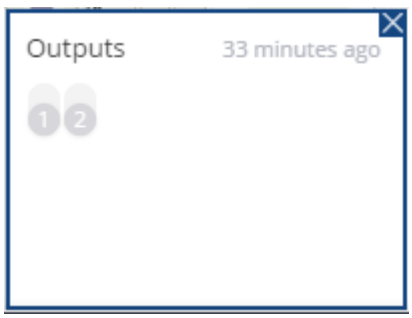
Note that tracker STATUS needs to be either Green or Blue to operate the switch. To preserve the vehicle battery which powers the tracker, the tracker enters a GPS sleep mode after 5 mins of switching off the vehicle ignition, and without any movement to the vehicle. The vehicle immediately comes out of GPS-sleep when ignition is sensed, or the vehicle is moved.

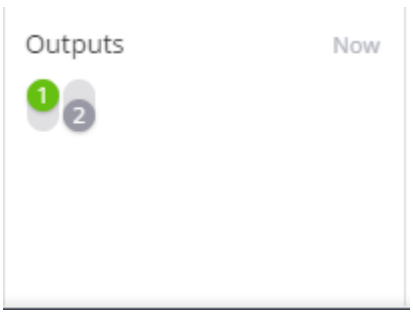
🟢	Location is fixed, device is online	Has GSM, Has GPS
🔵	Location is not fixed, out of date or device is online but entered into GPS sleep mode	Has GSM, No GPS
🟠	Device is offline having entered into battery preservation mode.	No GSM, No GPS

Please note the immediacy of the time to switch is very much subject to both the availability and quality of the GSM connection to the tracker.

WEB Portal

On the widget section on the lower portion of the screen, find the 'Outputs' section and simply slide the slide the switch number '1' to the on position:

Off = 

On = 

When switched to 'ON', the relay switched-circuit is open (vehicle immobilised).

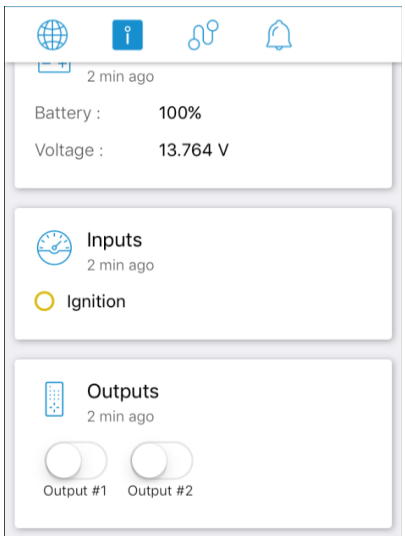
Mobile App (X-GPS-Monitor) – Remote Control

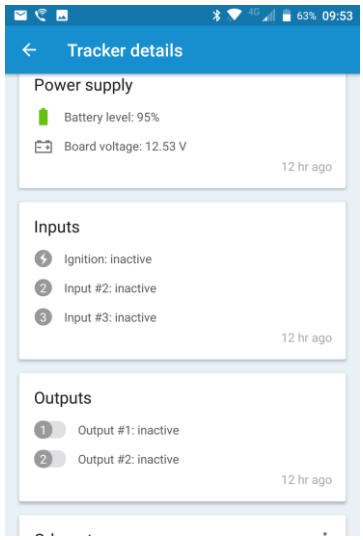
Similarly, for the mobile app, find the asset or vehicle you wish to control, hit the 'i' button at the top then scroll down to 'Outputs' section. Then simply slide the "Output #1" switch on or off to enable the relay switching:

Apple iOS

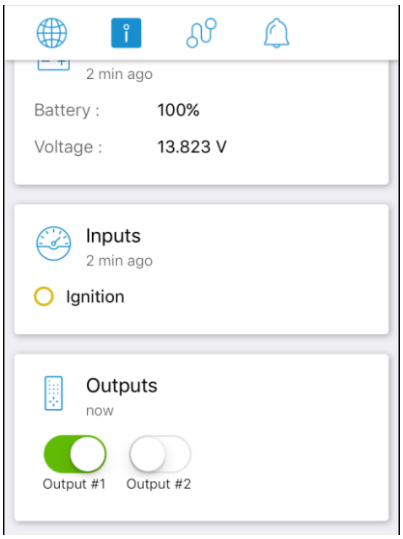
Google Android

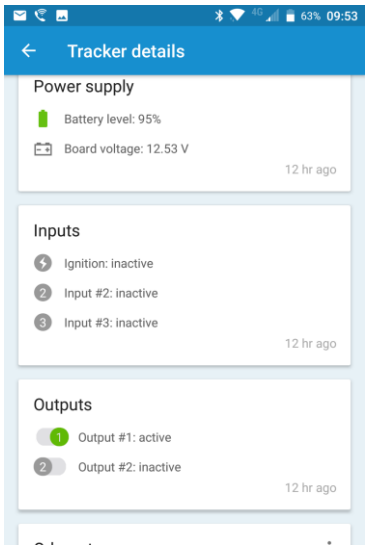
Off =





On =





When switched to 'ON', the relay switched-circuit is open (vehicle immobilised).

Further WIRING Recommendations

Wires should be connected while module is not plugged in/ or the vehicle battery is disconnected.

Wires should be fastened to the other wires or non-moving parts. Try to avoid heat emitting and moving objects near the wires. If factory isolation was removed while connecting wires into the loom, it should be re-applied when the fitting is finished and tested. If the wires are placed outside or in places where they can be damaged or exposed to heat, humidity, dirt, etc., additional isolation should be applied to the connections. Wires cannot be connected to the board of vehicle computers or control units.

Connecting Power Source
Be sure that the power to the tracker is a CONSTANT SOURCE Supply. i.e. ensure that when the vehicle is turned off, power stays permanently on the RED wire.
When module is connected, voltage should not drop below 9v. It is recommended to connect to the main power cable in the fuse box where possible. Please use an external 3A, 125V fuse.

Connecting Ignition Wire
Be sure to check that this connection is to a real ignition wire. i.e. power does not disappear while the engine is running.
Check this is not an ACC wire (when key is in the first position, most electronics of the vehicle are available).
Check if power is still available when you turn off any of vehicles devices.

Connecting Ground Wire – Negative Earth ONLY
Ground wire should be connected to the vehicle frame or metal parts that are fixed to the frame. If the wire is fixed using a bolt, the loop must be connected to the end of the wire. In some cases, consider removing paint to expose the metal of the vehicle where loop is connected.

NOTE: Connecting the power supply must be carried out using a very low impedance point on-board the vehicle. The best points in the vehicle are the battery terminals. Therefore, we recommend connecting the power of tracker directly to the battery terminals. If this is not possible, another option is to connect the tracker to the main fuse box.

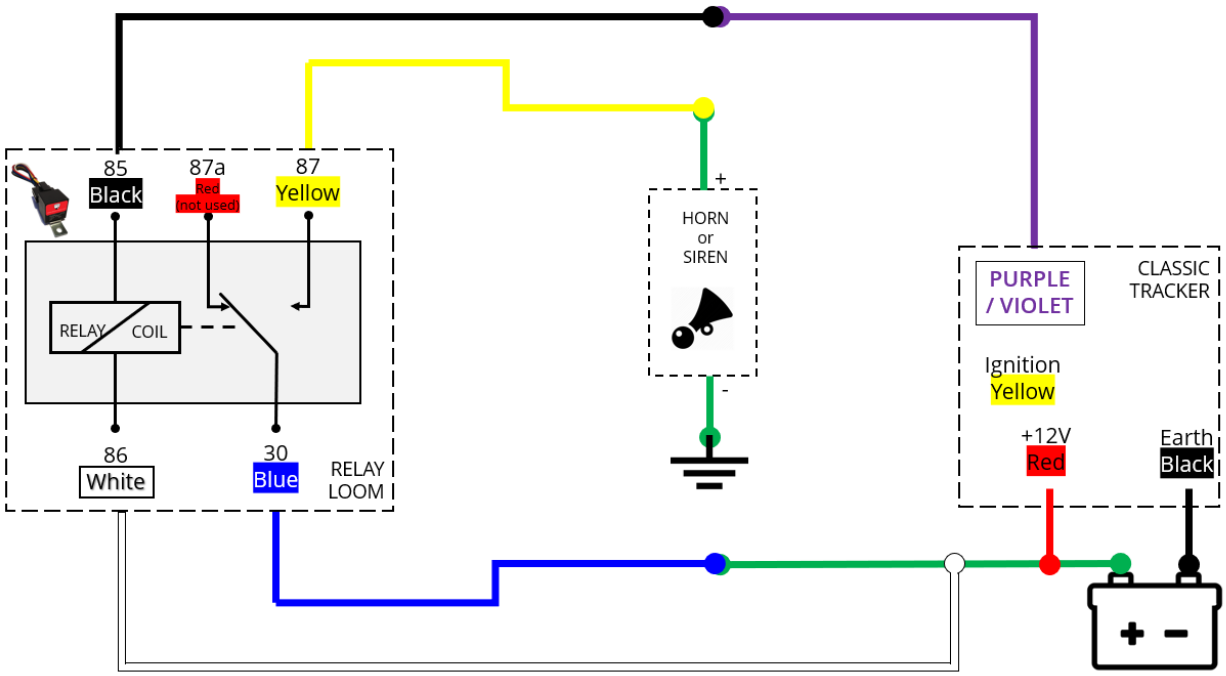
Connection of the GROUND cable must be made to a true vehicle-GND connection point. i.e. a zero-volt, low impedance path back to battery-GND. Connecting the GND at an arbitrary point to the mass of the car is unacceptable, as static and fluctuating voltages on the GROUND line can cause unpredictable tracker behaviour, or even lead to an unstable tracker installation; potentially even its failure.

Appendix A. Connection of External Anti-Jamming Relay

All our trackers feature Anti-Jamming Detection as standard. The function is implemented by using an available line on the tracker wiring-loom to drive an external relay (not supplied, available from our webstore) which powers either the car horn or a separate hidden siren within the car. Upon the tracker sensing a GSM jamming attack, the siren or car horn sounds, thereby attracting attention to the would-be thief. The moment the GSM jammer is moved away from the car a Jamming alert is dispatched to you.

Please let us know once installed so we can configure alerts.

Wiring Scheme – Standard WIRED



Appendix B. LED Status Indicators

Your Classic Tracker has two LEDs (Light-emitting diodes) to one end of the device. The one closer to the centre is the GPS/Navigation LED, the other the GPRS/Data/Status LED.

Having powered the tracker for several minutes, please ensure that both LEDs flash at intervals of approximately one second. The Status light may also flash in bursts as the device communicates with our systems (see table below). The Navigation LED will take several minutes from initial power-on to acquire a GPS satellite signal.

The Navigate LED indicates the status of the GPS receiver in the Tracker. The STATUS light indicates the GSM (Mobile Signal) status. If the Navigate LED is permanently on OR off then the Tracker is failing to receive a GPS signal and won't be able to track the movement of the vehicle and you should consider positioning it somewhere else.

NAVIGATE LED		
Behaviour	*Explanation*	*Possible Cause/Action*
Permanently Illuminated	Not receiving GPS signal	Ensure tracker is facing open sky, label face-upwards and not covered by metal obstructions
Blinking every second	Normal mode, GPS signal is received and working	
Permanently Off	GPS is turned off; potentially in sleep mode	Lightly move tracker or vehicle to wake tracker.
Permanently Off	Insufficient power to tracker	Ensure tracker is correctly wired and has >9V DC supply.

STATUS LED		
Behaviour	*Explanation*	*Possible Cause/Action*
Blinking every second	Normal Operation, GSM signal is received and working	
Blinking every two seconds	Tracker is in sleep mode	
Rapid blinking in bursts	Normal Operation. GSM is communicating.	
Rapid & continual blinking	Normal Operation. Tracker is booting.	
Permanently Off	Tracker not working; Insufficient power to tracker; Firmware being updated.	Ensure tracker is correctly wired and has >9V DC supply.