


Installation

Simple instructions for fitting and wiring the
TC200 into your vehicle.

Installation

Before You Start

Installation of the TC200 requires a moderate level of mechanical ability and a basic understanding of electrical systems. If you do not have experience in these areas, we recommend that you employ the services of a qualified automotive technician.

If you do decide to install the unit yourself, please ensure that you read all the instructions carefully before starting.



Warning

Monit Limited accepts no liability for any damage to property or persons, whether direct or consequential, as a result of the incorrect installation of the product.

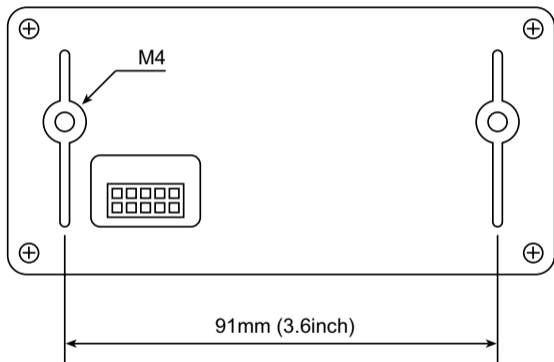
Fitting to the Vehicle

The small size and weight of the TC200 make it easy to mount almost anywhere inside your vehicle. Wherever you put it, ensure that your co-driver can comfortably reach all the buttons while seated, and that the unit cannot come free of its mountings in the event of an accident. If your vehicle has airbags fitted, it is very important that the device is not placed over the covers from which they are deployed. Doing so could result in serious injury.

To simplify attachment to your vehicle, the device has two metal bosses molded into the back part of the case. These accept standard M4 bolts. When mounting, also remember to leave space behind the unit for its electrical connector.

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*Mounting
Boss Positions
(not to scale)*



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Electrical Connections

All electrical connections to the device are made through a single connector located on the back of the unit. Included with your TC200 is a pre-wired loom that attaches to this connector, and provides colour coded wires for each signal. The functions associated with each of the wires on this loom are shown in the table on the right.

In its most basic configuration, the unit require only three wires to be attached: the two connections to the battery, and a vehicle speed signal. More complex setups might also use one or more of the auxiliary inputs, a fuel sender signal, or the regulated 5V power supply for active type speed sensors. Whether these are required or not will depend on your vehicle type and setup preferences.

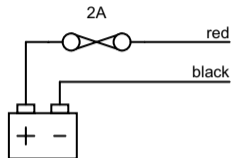
Colour	Description
Red	Battery +12V
Black	Battery Ground
White	Auxiliary A Input
Brown	Auxiliary B Input
Green	Fuel Signal Input
Orange	Sensor +5V Supply
Blue	Speed Signal Input
Yellow	Sensor Ground

When connecting the unit up, ensure that any unused wires on the loom cannot short against each other or the vehicle's chassis.

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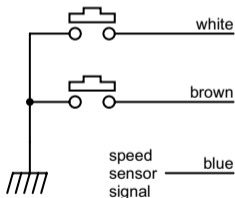
Power Supply

The device should be connected to the vehicle's battery through a 2A fuse as shown on the right. Make sure it is attached to a point in the system where power is always available, even when the ignition is turned off. An external power switch is not required.



Auxiliary Inputs

The unit includes two auxiliary inputs that can provide short-cuts to common tasks, such as resetting the counters or controlling the stop-watch. If used, these should be connected to user supplied switches as shown on the right. For more information on the setup and operation of this feature, see page C-6.



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Vehicle Speed Signal

The most important input to the rally computer is the vehicle's speed signal. If your vehicle has a factory fitted speed sensor, chances are you will be able to connect this directly to the unit. Otherwise, you will have to purchase and install an after-market sensor solution. For more information, contact a monit sales representative to discuss the options for your vehicle.

The type of speed signal accepted by the device is a digital pulse that switches between 0-5V or 0-12V and with a frequency of less than 1kHz. Sensors that produce this type of signal can be connected directly to the unit's blue wire. For sensors that require external power, a regulated 5V power source is available from the orange coloured wire.

Fuel Sender Signal

To use the fuel measurement feature, connect the signal output from your vehicle's fuel sender directly to the green wire on the loom. This input measures the voltage (0-12V) generated by the sender, and will work with signals that either increase or decrease with increasing fuel level. For best results, use a sender that has a output voltage swing of at least 6V between empty and full.

The presence of the TC200 should not significantly affect the operation of an existing fuel gauge. However, if you remove the factory fuel gauge from your vehicle, you will need to fit an equivalent resistor in its place to ensure the fuel sender continues to work properly.

Tidying Up

Before you power the unit up for the first time, check that all your electrical connections are correct and securely made. Also make sure that any exposed wires in the circuit are covered with insulation tape or heat-shrink.