

ANTENNA LOCATION

The antenna consists of a small loop of wire which is attached to a length of cable (1.5 metres) which is terminated in a 2-way connector. Position the antenna loop wire around the area of the ignition switch behind the trim panel, securing the loop by means of cable ties. Care must be taken to ensure that any adjustment of the steering column by the customer will not affect the operational requirements of the unit nor will the installation affect the vehicle's operation. Route the cable back to the control unit and connect the two way plug to the **MI600**.

LED LOCATION

Wherever possible, position the LED in an area that will give the greatest visual deterrent to the would-be thief. An ideal position is in the centre of a blank switch space. Ensure that access can be gained to the area directly behind where you wish to mount the LED and ensure that there are no wiring looms, heater hoses etc. which may be affected by drilling. Drill a 7mm diameter hole in the desired location then insert the LED through the hole from behind, pushing it home into the LED bezel. Carefully press both parts together in the hole until they are fully home and the outer bezel is flush and tight against the mounting surface.

IMPORTANT NOTE

Ensure all the identification tags have been removed and all the **MI600** wiring looms are discrete and secured out of sight. Reconnect the vehicle's battery terminal and reset all the necessary electrical items. (i.e. radio etc.). The installation is now complete and ready for testing.

FAIL SAFE STATUS MEMORY

The **MI600** constantly monitors its circuits and memorises its condition at all times. Should the **MI600** experience a temporary supply failure, it will always revert back to its original state when the supply is reinstated. I.E. if the **MI600** was armed when the supply failed, it would revert to its armed state when the supply is reinstated.

In the unlikely event of the **MI600** losing permanent supply, ignition or both when the vehicle is in motion, the Fail Safe circuitry will allow the vehicle to continue to drive normally without loss of power.

TESTING

On introducing the power supply to the **MI600** for the first time, the system will commence its arming mode (LED Flashing rapidly). This is the factory setting (See section on Fail Safe)

To test the **MI600** remove all the transponder keys and ignition keys from the vehicle and close the doors. Then follow the steps below.

- a: Allow the **MI600** to arm (LED flashing slowly) and for the interior light of the vehicle to go out.
- b: Open the driver's door and leave it open for 60 seconds, then bring the transponder key within range of the antenna. The LED will stop flashing, allowing the vehicle to be started. Start and run the engine.
- c: Stop the engine and remove the transponder key from the area and with the door still open, wait for the system to become fully armed (slow flashing LED)
- d: Turn the ignition on and within 60 seconds, bring the transponder key within range of the antenna. The LED will be extinguished allowing the vehicle to be started. Start and run the engine.
- e: Allow the engine to run for at least 2 minutes.
- f: Remove all the ignition and transponder keys from the vehicle, close all the doors and allow the **MI600** to fully arm (slow flashing LED).
- g: Enter the vehicle as normal and WITHOUT bringing the transponder key within range of the antenna, try to start the vehicle. The vehicle SHOULD NOT start.

The installation is now complete and ready to hand back to the customer. It is advisable to make the customer aware of the general location of the antenna to assist with coding when and if required.

Thank you for choosing the MicroSCAN MI600. Should you experience any difficulties with the installation or operation please contact **PERFORMANCE PRODUCTS LTD on 01244 321700**.

MicroSCAN/SECURITY PRODUCTS MI600 IMMOBILISING SYSTEM Installation Guide

Contents

Please ensure that the following components are present within the box when opened. Should any parts be missing, please contact PERFORMANCE PRODUCTS LTD immediately on the phone number given below.

1. Immobiliser Unit
2. Antenna with connector
3. Two Transponder Keys (One RED Master, one BLACK Slave)
4. Metal Protection Cover
5. Two Anti-tamper Screws with Shakeproof Washers
6. MI600 User Guide
7. Certificate of Installation

The MicroSCAN MI600 Immobiliser can be installed into ALL 12 Volt NEGATIVE Earthed Vehicles (Petrol or Diesel)

Performance Products Ltd STRONGLY recommend that for reliability, ALL connections are soldered and heatshrink wrapped. Under no circumstances should scotchlock type connectors be used.

PERFORMANCE PRODUCTS

advanced TECHNOLOGY

Cleaver House, 8 Boughton, Chester, CH3 5AG. TEL 01244 321300.
Technical helpline only 01244 321700. FAX 01244 343370

M1600 Technical Specifications

Supply Voltages

Operating Voltages +9 Volts to + 15 Volts

Earth Requirements. Negative Earth Vehicles Only

Current Consumption's

System Armed. < 7.5mA

Armed Reading Tag (Door open) < 300mA

System Disarmed (Ignition Off) < 5mA

Disarmed (Ignition On) < 400mA

Relay Carrying Capacity

Maximum Constant Load. 18 Amps

Number of Immobilised Circuits 2

Transponder Keys

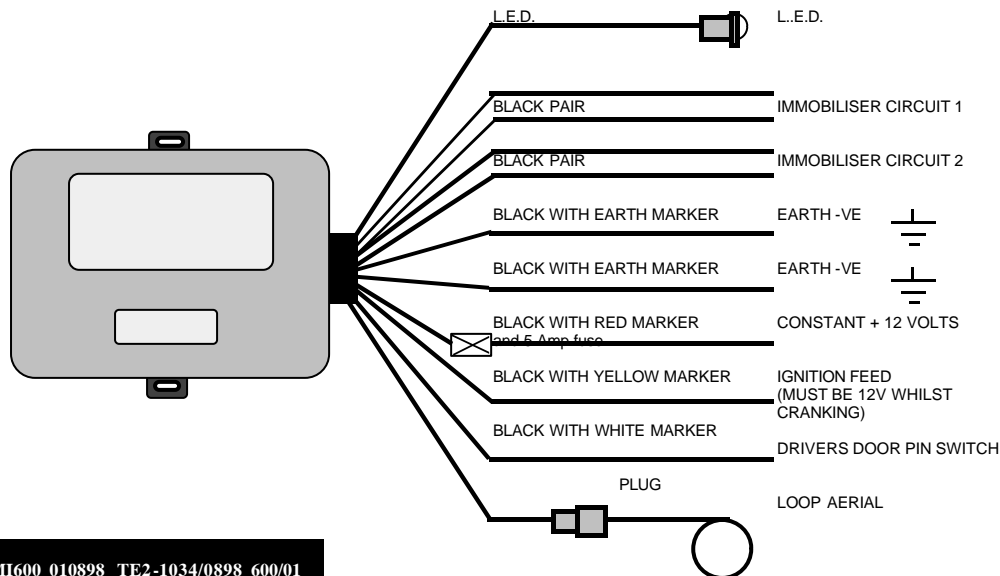
Moving Parts None

Maximum per Unit 5, One master (Red), four slaves (Black)

Keys supplied with Unit 2, one Master (Red) and one Slave (Black)

Operational Range of keys 13 - 15cms (5 - 6 inches)

INSTALLATION DIAGRAM



MI600 010898 TE2-1034/0898 600/01

GENERAL

The **MicroSCAN M1600** Immobiliser System has been designed to be located within the passenger compartment of the vehicle. Under NO circumstances should the **MI600** be installed within the engine compartment.

Before commencing the installation, ensure that you have read and understood fully both the user and installation instructions. Should you have any problems, please contact PERFORMANCE PRODUCTS LTD Technical Help desk on **01244 321700** for advice.

INSTALLATION INSTRUCTIONS

IMPORTANT NOTE: - Performance Products Ltd very strongly recommend that before the installation takes place, the negative terminal of the battery is disconnected and not replaced until the installation is completed. Care must be taken to ensure you have the resetting instructions and codes for such items as coded radios, engine management systems etc. that may require resetting after the battery is reconnected at the end of the installation.

The **MI600** must be positioned behind panels or trim parts requiring special tools for their removal. Mount the control unit, with the metal cover in place, securely to the body of the vehicle using the anti-tamper screws and washers supplied. Position the unit in an area that will offer it maximum protection against physical attack such as high up behind the dashboard.

There are nine black wires coming from the unit, two pairs of which are heat shrunk together for identification, plus a pre-wired LED and a short 2-wire cable terminating in a connecting socket. All the single wires have coloured tags with identification labels which must be removed once connected.

TAG COLOUR	IDENTIFICATION TABLE	CONNECTION POINT TO VEHICLE	ELECTRICAL REQUIREMENTS
Yellow	Ignition Switch Accessories	12 Volts with Ignition and when cranking	12 Volt Input
Red	Permanent Feed	Fusebox	12 volt input (See note 1)
White	Door circuit	Driver's door pin switch	Negative Input
Black X 2		To a good chassis earth	0 Volts (See note 2)
Heat shrink Pair 1		Immobilisation Circuit 1	Input/output (See note 3)
Heat shrink Pair 2		Immobilisation Circuit 2	Input/output (See note 3)

Note 1: The connection of the permanent 12 volt supply must be made to a permanent un-fused supply of the vehicle. This supply must NOT be taken directly from the battery terminal.

Note 2: The **MI600** has two separate ground wires which MUST be connected to two separate chassis earth points in the vehicle. Wherever possible, these should be at least one metre apart. These grounds MUST NOT be taken directly from the battery terminal and it is not recommended to use existing earth wires of the vehicle.

Note 3: Immobilisation circuits (pairs) can be used to immobilise any chosen circuit of the vehicle, i.e. starter, fuel pump, air flow meter etc. The **MI600** is capable of immobilising either negative or positive supplies as required. The chosen circuits MUST NOT give any positive voltage with the ignition in the off position.

IMPORTANT INFORMATION: Ensure that at least one of the chosen circuits for immobilisation will provide +12 volts when the engine is running.