

INSTALLATION INSTRUCTIONS

- Please follow the installation instruction carefully to avoid damaging the device or the vehicle.
- Only Autowatch trained and approved installers may install this device.
- DO NOT cut any vehicle wires during this installation unless instructed to do so in the VEHICLE SPECIFIC INFORMATION.
- Confirm that the serial number on the unit and the customer card are the same.

1 CONNECTIONS

1.0 GROUND/CHASSIS (BLACK)

A permanent connection to the vehicle chassis or a ground wire must be made with the BLACK wire and insulate the connection.

1.1 CAN-HIGH (BROWN)

Connect the BROWN wire to the CAN+ wire as indicated on the VSI and insulate the connection.

1.2 CAN-LOW (WHITE)

Connect the WHITE wire to the CAN- wire as indicated on the VSI and insulate the connection.

1.3 POWER (RED)

Finally, a permanent connection to the vehicle battery must be connected to the RED wire. Be sure to confirm that this voltage does not fall away when the vehicle is in motion. Do not insulate this connection yet as it will be used during programming.

1.4 LEARN (GREY)

Connect the GREY wire TEMPORARILY to the RED (+12V) wire. This connection will be removed later after the installer PIN learning process is completed.

1.5 to 1.7 ONLY WHEN NEEDED AS PER VSI

1.5 IGNITION (YELLOW)*

Connect the YELLOW wire to a positive when ignition is on.

1.6 EMERGENCY LOCK (BLUE)*

Connect the BLUE wire to as instructed by the VSI. This is either connected to a starter cut relay or to the CAN+ on some vehicles.

1.7 STATUS (ORANGE)

Negative output when disarmed (after PIN code has been entered). Can be used to connect to a normally open relay cut.

1.8 LIN (WHITE/RED)

Connect the WHITE/RED to the LIN bus as indicated on the VSI.

2.0 INSTALLER PIN CODE LEARNING

Once the RED wire has been connected and the GREY wire is still connected to the RED wire the Ghost-II will be in forced learn mode. The following procedure will learn in the installer PIN code. Autowatch suggests a simple, 4 button push, installer PIN code for testing. The USER must be shown how to change to a personalised PIN code on handover (see 3.3).

2.1 PIN CODE LEARN PROCESS

- Turn on the ignition but DO NOT start the engine. The SIGNAL INDICATION must be flashing once every 3 seconds to indicate that the Ghost-II is in learn mode.
- Enter the installer PIN code. Each press is confirmed by a single flash of the SIGNAL INDICATION. Each button press must happen within 2 seconds of the previous button press.
- Wait for 3 seconds, the SIGNAL INDICATION will flash 3 times to verify code has been learnt once.
- Repeat the SAME PIN code to verify the code entry.
- Wait for 3 seconds, the SIGNAL INDICATION will flash 2 times to indicate a successful PIN learn.
- You can now remove the GREY learn wire temporary connection and insulate.

NOTE: If the SIGNAL INDICATION flashes 4 times the PIN learn was NOT successful, turn ignition off and back on again to restart the process.

3.0 POST PIN LEARN

After the installer PIN codes has been learnt in the following test must be performed:

3.1 SERIAL NUMBER CONFIRMATION

The serial number on the unit and the card MUST be the same.

- Turn the ignition on - DO NOT START THE ENGINE.
- Press and hold the brake pedal.
- Fully press and then release the accelerator pedal a number of times corresponding to the first digit of the serial number and release the brake pedal.
- Repeat this for the remaining 4 digits.
- If this is the correct number the SIGNAL INDICATORS will flash twice
- See flow chart on reverse side of this document for more details

3.2 IMMOBILISATION CONFIRMATION

- Ensure that without the PIN code entered the vehicle does not start.
- Ensure that with the PIN code the vehicle does start correctly.

3.3 FINALISATION

- If the Ghost -II is functioning correctly, seal up the GREY wire end and the connection location to the RED wire and seal the unit in the desired location.
- After completely closing up all panels and wiring harnesses, retest the unit.
- Place the WINDOW STICKERS on the rear windows or other unobtrusive place.
- Show the user the PIN change process using the instructions on the user card.

4 DOCUMENTATION

Completion of the installation report is NOT NEGOTIABLE. Due to the size and functionality of the Ghost-II it is vital that this information is gathered to allow for after sales support.

Return this documentation to Autowatch within 24 hours on completing the installation.

5 ADDITIONAL NOTES

During installation and setup these notes may be helpful.

5.1 CHANGING BMW SIGNAL INDICATION

When installing in some new BMW's the SIGNAL INDICATION may flash erratically. Should this happen use option 20 to change to the CHECK ENGINE lamp. Option 21 will revert back to the left and right indicator lamps on the instrument panel.

5.2 CHANGING THE RANGE ROVER SIGNAL INDICATION

As with the BMW it is possible to change the SIGNAL INDICATION. This is done in the same way using option 20 to activate the HIGH BEAM lamp and option 21 reverts back to the left and right indicator lamps on the instrument panel.

5.3 DISABLE STOP/START ECO TECH ON MERCEDES

On most Mercedes models it is possible to disable the STOP/START mode. Select option 20 to disable STOP/START and option 21 to allow STOP/START

5.4 REARMING TIME ON VAG VEHICLES

All the VAG group cars have a 15 to 30 second automatic rearm time. This is different from the other cars that have a 3 second rearm time.

5.5 DISABLE STOP/START ECO TECH ON RANGE ROVER

On most Range Rover models it is possible to disable the STOP/START mode. Select option 10 to disable STOP/START and option 11 to allow STOP/START

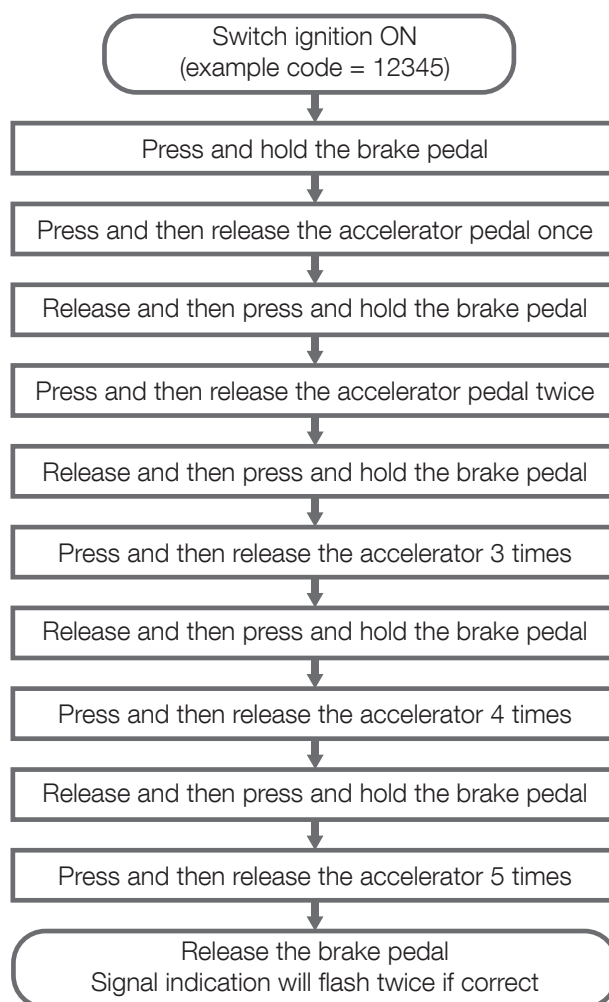
5.6 PORSCHE UNIQUE INFORMATION

Due to a CAN difference it is not possible to retrieve the accelerator position data. Because of this the EMERGENCY CODE, SERIAL NUMBER and FEATURE SELECTION must be done with the HAZARD LIGHT button instead of the accelerator. Where the instructions say ACCELERATOR FULL that will be HAZARD ON when installed on a Porsche.

5.7 UPDATE FIRMWARE IN VEHICLE

A firmware update can be done without using the grey wire activating disarm sequence change mode. Ignition -> disarm sequence -> hold accelerator (or alternative) -> disarm sequence again. Once the indication signal starts to flash the Ghost-II should show up on the PC flashing application.

SERIAL NUMBER CONFIRMATION FLOW CHART



6.0 EMERGENCY LOCK RELAY CONFIGURATION

On certain vehicles it is necessary to connect an additional relay. This relay will never be used unless there is a problem with the vehicle CAN bus. And the ignition wire goes high. The relay must be a normal closed relay ("5-pin"). Connect the relay as described below:

