




## *Bluetooth Car Kit Hands-free System User Guide*

Compatible with all current mobile phones  
on the market containing Bluetooth Hands  
Free Profile or Bluetooth Headset Profile

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## Description (on the packaging)

Bluetooth professional installation hands-free car kit for maximum flexibility  
Digital Signal Processor (DSP) for full duplex clear audio with noise reduction and echo cancellation  
Voice recognition (VR) dialing, up to 30 user dependent trained names and numbers.

This equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly.



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## Safety and General Information

**IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR PHONE.**

Users are not permitted to make changes or modify the device in any way. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. See 47 CFR Sec. 15.21.

This device complies with part 15 of the FCC rules and with RSS-210 / RSS-139 of the Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. See 47 CFR Sec. 15.19(3).

In order to comply with FCC RF Exposure requirements, a minimum separation distance of 20 cm must always be maintained between the transmitter antenna and all persons during normal operation.

### Canada Compliance (Industry Canada)

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment that is installed outdoors is subject to licensing.

**In French:** Pour empêcher un brouillage radioélectrique au service faisant l'objet d'une licence, cet appareil doit être utilisé à l'intérieur et loin des fenêtres afin de fournir un écran de blindage maximal. Au cas où une installation en plein air, le matériel doit faire l'objet d'une licence.

### European Union (EU) and EFTA



This equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly.

## Electromagnetic Interference/Compatibility

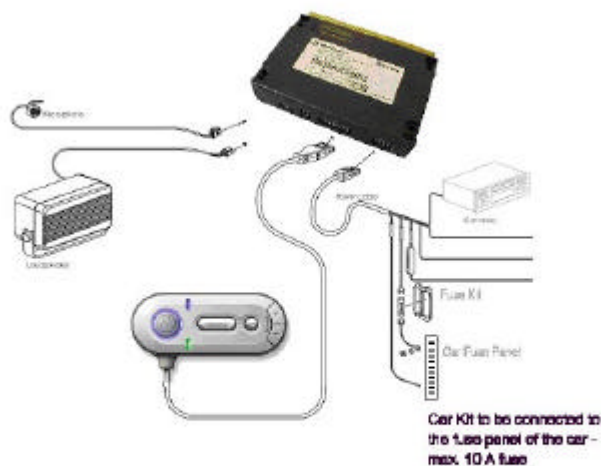
Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

## Installation

The Bluetooth Car Kit is a professional install kit, and should only be installed by a professional. **The Car Kit must be connected to a max. 10 A fuse in the car fuse panel to prevent fire or other damages if a short circuit should occur somewhere in the Core Box.**

## Installation (refer to figure 1)

**Note:** The Bluetooth Car Kit is a professional install kit, and should only be installed by a professional.



**Figure 1:** Bluetooth Car Kit. The devices not printed in solid black are additional equipment not delivered with the kit.

The Core Box provides a digital audio interface to the Portable Digital Cellular Telephone via the Bluetooth link.

Its main purpose is to allow safer driving while performing a telephone call at the same time.

The Core Box contains the following features:

- Digital audio interface with full duplex “Hands Free” function.
- Voice recognition.
- Voice user interface.
- Acoustic echo cancellation.
- Noise reduction.
- Comfort noise insertion
- Optional automatic volume control

The Core Box has the following operation limits:

Voltage supply: +9V to +16V

Operating temperatures: -20°C to +65°C

The Core Box has the following connectors:

- A power supply connector.
- A connector for the Control Panel (including “line out”).
- An output for the loudspeaker.
- An input for the microphone.
- Music mute output
- Ignition sense.



The unit provides "Hands Free" operation for a Portable Digital Cellular Telephone through a Bluetooth radio communication interface.

2. *Control Panel*

The Control Panel is made as the user interface to the Car Kit and thereby to the phone that the user might have stored in his pocket or briefcase. The telephone and the Core Box exchange data digitally via the Bluetooth link. The Control Panel buttons is used for Bluetooth link connection, training of voice recognition and volume control.

3. *Loudspeaker*

The loudspeaker is a small one-way speaker using an ordinary dynamic speaker unit. It connects to the Core Box through a Molex "Microfit" plug. As an option the car stereo speakers can be used with music mute as control signal.

4. *Microphone*

The microphone is uni-directional and of the "electret" type. It connects to the Core Box through a Molex "Microfit" plug. It is fitted with a small bracket for permanent mounting with a screw. It is also supplied with a "clip" for easy mounting in the car environment. The microphone should be positioned at least 30 cm away from the speaker. Mount the microphone in line with your mouth to the sun visor, dashboard or lapel. The microphone should not be exposed to direct air flow from the window or fan. Dress the microphone cable appropriately around vehicle trim.

5. *Power cable*

The power cable is terminated with a Molex "Microfit" connector in one end. The other end is not terminated. The cable contains six conductors.

6. *Fuse kit*

The fuse kit contains: 2 fuses, 2 fuse holders, wires and other mounting hardware. **The Car Kit must be connected to a max. 10 A fuse in the car fuse panel to prevent fire or other damages if a short circuit should occur somewhere in the Core Box.** Ratings of the fuse kit is 250V 4A.

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## System operation

### Switching between hands-free and private modes

To switch from hands-free to private (or vice-versa), connect/disconnect the Bluetooth link using the blue Bluetooth button on the car kit control panel whilst in a call. Connection/disconnection can also be made from the phone Bluetooth menu.

### Hands-free speaker volume adjustment

Operate the volume button(s) on the car kit control panel when in hands-free mode while in a call or in stand by.

### Entering and leaving the vehicle

Most phone models will maintain a call after connection/disconnection from the car kit.

## Voice recognition dialing operations

### **VR functionality**

The VR is user dependent and tags a voice command to a key word or phone numbers. The key word and the names and numbers must be previously recorded or cancelled using specific keypad commands. The various operations are voice guided by the car kit using prompts in the selected language. The recorded phone book and all information for the VR reside in the car kit and these features cannot be accessed once the phone is disconnected from the car kit.

### **Set-up**

#### ***Set the car kit in pairing mode (For phones using the headset profile):***

Press and Hold both the BT button and the VR Button until the blue and red LED starts to flash (app. 3 seconds). You then have two minutes to create the connection. If you want to leave pairing mode before it times out, press the BT button until the LED's stops flashing (app. 3 seconds.).

#### ***Set the car kit in pairing mode (For phones using the handsfree profile):***

Press and Hold both the BT button until the blue and green LED starts to flash (app. 3 seconds). You then have two minutes to create the connection. If you want to leave pairing mode before it times out, press the BT button until the LED's stops flashing (app. 3 seconds.).

#### ***Set the car kit in paging mode:***

Press the BT button in less than 3 seconds. The blue LED should start flashing, and for 10 seconds, the car kit will try to connect to the last paired unit. If an ACL link is created to the device, the blue LED will be solid.

#### ***Disconnecting the car kit from the phone:***

If you want to release the BT link to the phone, you press the BT button for more than 3 seconds.

#### ***Mute uplink audio direction:***

Done by pressing the mute button when in a call. To un-mute the microphone, press the mute button once again.

#### ***Local/Remote Volume Control:***

By pressing the vol. button it is possible to turn the volume up and down. The volume is divided up in 16 steps. If one of the volume buttons are pressed and hold the volume will automatically increase/decrease. If the phone supports remote volume control the volume in the car kit can also be changed by changing the volume on the phone.

#### ***Voice recognition (VR):***

The Motorola BT car kit supports 2 kinds of voice recognition: The VR embedded in the car kit and activation of the VR in the phone.

By default the internal VR is disabled. That means that a short press on the VR button will activate the phones VR if the phone supports this command. You must always have a connection to the phone before either the internal or the phone VR can be enabled.

If you want to use the car kit internal VR you must first enable the VR in VR training mode using the #x# command listed table in the Section VR Training. After that you press the VR button for less than 3 seconds, after which you will hear "say a name" in the speakers and the green LED will be solid. When the car kit have recognized the name, it will send an ATDddd....ddd where ddd...ddd signifies an up to 20 digit long phone number.

#### ***VR training:***

Before entering the VR Training Mode ensure that the car kit is connected to the phone. After that you press the VR button for more than 3 seconds, or until the green LED starts to flash. When the LED flashes, you can start training the car kit, by using the commands below on the phone keypad. A short press on the VR button can exit the training mode.



Press	Function
<b>#2# (#A#)</b>	<b>A</b> ctivation word Train activation word. Say the desired activation word.
<b>#3# (#D#)</b>	<b>D</b> efine a name. Say the name you wish to delete or use the arrow keys to navigate. Press <b>9</b> to delete the selected name.
<b>#4# (#G#)</b>	<b>G</b> ain Control. Enables/disables the automatic gain control of the Motorola BT Car kit.
<b>#5# (#L#)</b>	<b>L</b> anguage. Select language. Use arrow keys to navigate. Press <b>1</b> to select.
<b>#6# (#M#)</b>	<b>M</b> odify activation. Voice activation on/off.
<b>#8# (#T#)</b>	<b>T</b> rain mode. Add a name to the list. Say the name you want to add. Enter the phone number. Press <b>*</b> to enter the number.
<b>#9#</b>	Delete all. Clear entire memory. Press <b>9</b> to clear memory.

***Answering a call:***

When the phone receives a call, it must create a connection to the car kit and send a RING command. When the connection is present, the blue LED will be solid, and you answer the call by pressing the BT button.

***Answering a call by voice:***

An incoming call can also be answered by voice. To do this an activation word must be trained using the #2# in VR Training mode.

***Ending a call:***

You end the call from the car kit by pressing the BT button.

***Rejecting a call:***

Pressing and holding the BT button for more than 3 seconds can reject an incoming call.

***Transfer a call:***

Pressing and holding the BT button for more than 3 seconds when being in a call can transfer the ongoing call to the phone. Normally you will have to accept the transfer on the phone.

***Canceling an outgoing call:***

A short press on the Bluetooth button will abort the outgoing call establishment.