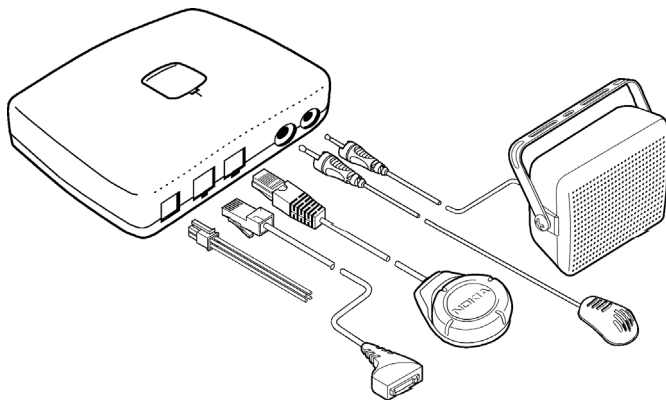


Advanced Car Kit CK-7W

User's Guide

Installation Guide



DECLARATION OF CONFORMITY

We, NOKIA CORPORATION, declare under our sole responsibility that the product HF-5 is in conformity with the provisions of the following Council Directive: 1999/5/EC. A copy of the Declaration of Conformity can be found at:

http://www.nokia.com/phones/declaration_of_conformity/.

CE 168

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For your safety

Read these simple guidelines. Breaking the rules may be dangerous or illegal. Further detailed information is given in this user's guide.

Keep all miniature SIM cards and accessories out of the reach of small children.



ROAD SAFETY COMES FIRST

Remember that the safety of operating a motor vehicle in traffic requires the full attention of all motorists. Only use your Advanced Car Kit if traffic conditions permit safe use and check if local laws/regulations restrict the use of mobile phones while driving.



INTERFERENCE

All wireless phones may get interference, which could affect performance.



QUALIFIED INSTALLATION AND SERVICE

Only a qualified professional may install or repair phone equipment.



CONNECTING TO OTHER DEVICES

When connecting to any other device, read the relevant user's guide for detailed safety instructions. Do not connect incompatible products.

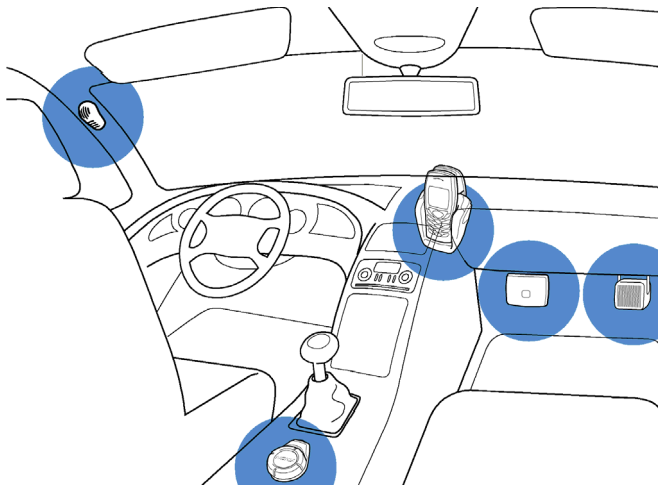


FUSE REPLACEMENT

Replace a blown fuse with a fuse of the same type and size. Never use a fuse with a higher rating!

Introduction

■ Your Nokia Advanced Car Kit CK-7W



Advanced Car Kit equipment installation in the cockpit

The Nokia Advanced Car Kit was developed for installation in motor vehicles to enable handsfree operation of mobile phones and use of individual phone features.

A special emphasis was placed on quick and easy installation. A mobile phone can be connected to the Advanced Car Kit in one of two ways: using an optional phone holder with a cable or over a Bluetooth wireless connection.

In some countries, use of the Advanced Car Kit may be restricted by law. Please observe the applicable rules/regulations.

■ Bluetooth wireless technology

Bluetooth wireless technology is an international standard for short-range wireless communication. It allows you to establish a wireless connection within a range of 10 metres between your Advanced Car Kit and a compatible device.

The Advanced Car Kit is intended for use with any mobile phone that supports the Bluetooth Handsfree Profile (Bluetooth HFP).

The wireless connection between the compatible devices established using Bluetooth technology is free of charge for the user. In some countries, there may be restrictions on using Bluetooth devices. Check with your local authorities.

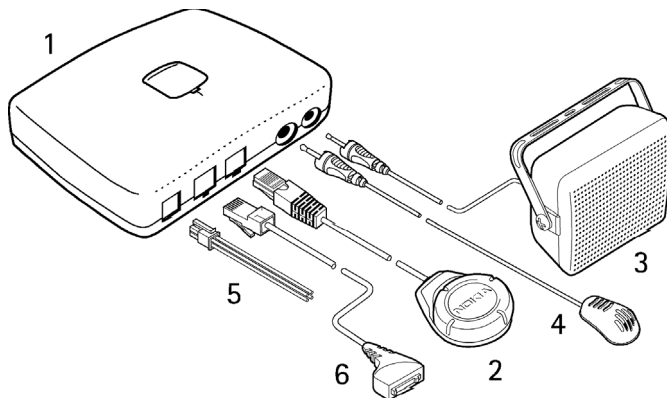
■ Bluetooth passcode

The first time you wish to establish a wireless connection to a compatible device using Bluetooth technology, you will need to input a passcode to pair the devices.

The passcode is 0000.

1. Getting started

■ Overview



The Advanced Car Kit includes the components shown above.

- 1 Handsfree unit HF-5 with mounting plate MK-2
- 2 Remote control button CU-7
- 3 Loudspeaker HFS-12

- 4 Microphone MP-2
- 5 Cable set PCU-4
- 6 Data cable CA-27

■ Use of enhancements

Depending on the setup, a variety of optional enhancements are available to extend your Advanced Car Kit. Before any installation work is started, ask for professional advice on the enhancements that would best suit your needs. Use only approved enhancements. Ensure that only compatible products are connected to your Advanced Car Kit.

Phone holder

You will need a phone holder designed for a compatible mobile phone if the mobile phone is to be connected direct to the handsfree unit using the data cable.

Antenna coupler

An antenna coupler is required to connect an external antenna. A range of antenna couplers are commercially available for the mobile phones and phone holders on the market. An antenna coupler improves in-vehicle reception of the mobile phone.

GSM antenna

A compatible GSM antenna enables optimised wireless connections.

If you have installed an external antenna, remember that in order to comply with RF exposure requirements for mobile transmitting devices, a minimum distance of 20 cm must be maintained between the antenna and all persons.

2. Installation

■ Safety information

The basic safety guidelines set out below are to be observed when installing the Advanced Car Kit .



Note:

- Only qualified personnel should service the Advanced Car Kit or install it in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty which may apply to the unit.
- The Advanced Car Kit may only be installed by a qualified service technician using the approved original Nokia parts supplied in the sales package. End users should remember that the Advanced Car Kit comprises complex technical equipment that requires professional installation using special tools and expert know-how.
- Note that the instructions contained in this installation guide are general guidelines which apply for the installation of the Advanced Car Kit in an automobile. However, due to the wide variety of car types and models available on the market, this guide cannot consider the individual technical requirements relevant for any particular vehicle. Contact the vehicle manufacturer for further detailed information about the vehicle in question.

- The Advanced Car Kit is suitable for use only in vehicles with a 12 volts negative grounding. Use on other supply voltages all alternative polarity will damage the equipment.
- Remember that modern automotive systems include on-board computers where key vehicle parameters are stored. Improper disconnection of the car battery may cause loss of data, necessitating extensive effort for re-initialisation of the system. If you have any concerns, contact your car dealer before any installation work is done.
- Do not wire Advanced Car Kit equipment to the high-voltage lines of the ignition system.
- All equipment must be mounted so that it does not interfere with the operation of the vehicle.
- Your service technician may be able to provide you with information on alternatives for mounting the equipment suitably in your vehicle without requiring boreholes.
- The mount for the phone holder is to be fixed to the dashboard or to any other location in the cockpit area where the display is clearly visible for the user but does not impair control or operation of the vehicle. The keypad should be within easy reach of the driver.
- Make sure not to impact the steering or braking systems or other key systems essential for proper operation of the car when installing Advanced Car Kit equipment. Check to make sure that deployment of the airbag is not blocked or impaired in any way.

- Do not smoke when working on the car. Make sure that there is no source of fire or flame nearby.
- Take care not to cause damage to electrical cables, fuel or brake lines or safety equipment during installation work.
- RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles (e.g. electronic fuel injection systems, electronic anti-skid braking systems, electronic speed control systems, airbag systems). Should you note a fault or change in the operation of such a system, contact your car dealer.
- Ensure that cables are placed so that they will not be subjected to mechanical wear and tear (e.g. not laid under car seats or over sharp edges).

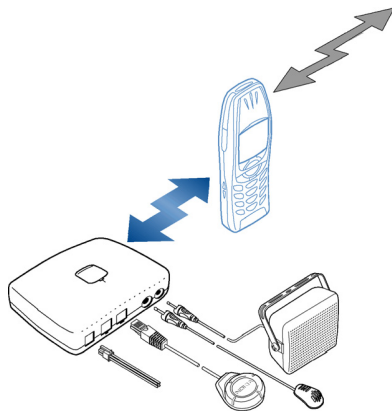
■ Configuration

In principle, the Advanced Car Kit offers two different basic configurations for installation:

Connecting a mobile phone using Bluetooth wireless technology

To be able to establish a connection from a compatible mobile phone to the handsfree unit, both devices first have to be paired.

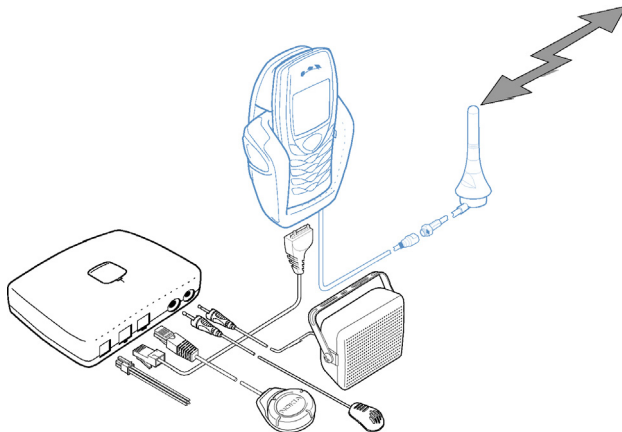
A compatible mobile phone supporting Bluetooth wireless technology is required for this setup.



Connecting a mobile phone using the data cable and a phone holder

When connected via the data cable, the compatible mobile phone is ready for operation with the Advanced Car Kit when placed into the phone holder.

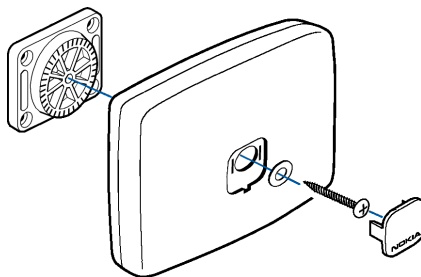
Depending on your mobile phone and your vehicle equipment, enhancements such as a phone holder, antenna coupler or external antenna may be required.



■ Installing the Advanced Car Kit

See "Introduction" on page 6 for an example of a suitable installation of the Advanced Car Kit equipment.

Handsfree unit



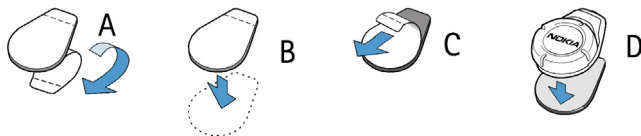
When installing the handsfree unit, ensure that the cables for the microphone and loudspeaker will reach the places you intend to mount these components.

Take care not to mount the handsfree unit inside a closed metal housing or in a place in the car where it would be shielded from radio waves as this may impair the use of the Bluetooth feature.

To mount the unit, first attach the mounting plate supplied with the Advanced Car Kit and then secure the handsfree unit using the screw that goes through the unit. Finally, insert the cover imprinted with the Nokia logo into the recess and press it into place.

Remote control button

The remote control button should be located so that it is within easy reach of the user. However, ensure that it is placed so that the cable for connection to the handsfree unit can be mounted. A suitable mounting position for the remote control button may be on the console between the front seats.



To mount the remote control button, use the hook and loop tape provided. First detach the two parts of the pads from each other. Attach the pad with the loops first: peel off the protective sheet from the adhesive side (A) and attach the pad to the desired location in your car (B). Make sure that the surface where you intend to attach the pad is dry and free from dirt and dust.

Attach the pad with the hooks next: peel off the protective sheet from the adhesive side (C) and attach the pad to the underside of the remote control button.

Press the remote control button (D) firmly onto the loop pad mounted in the car.

Loudspeaker

To ensure good acoustic quality, mount the loudspeaker so that it is pointed in the user's direction. We recommend that you mount the loudspeaker a minimum distance of 1 metre away from the microphone to avoid feedback.

The Advanced Car Kit also supports connection to a compatible car radio system. If you wish to use the car radio installed in your vehicle with the Advanced Car Kit for audio output, ask your service technician for professional advice.

Connect the loudspeaker or a compatible car radio system to the "SPEAKER" output.

Microphone

Careful selection of the mounting location of the microphone can increase the quality of voice transmission.

Mount the microphone approx. 30 cm from the driver's head, and position it so that it points towards the driver's mouth. Experience has shown that the best locations are near the rearview mirror or the sun visor. We recommend that you keep the microphone a minimum distance of 1 metre away from the Advanced Car Kit phone loudspeaker to avoid feedback.

Take care to mount the microphone so that it is not exposed to air streams from the vents. Do not lay the microphone cable in the heating, ventilation or AC system. Use the double-sided adhesive tape supplied to fix the microphone as this will prevent noise from the car body being transmitted into the interior.

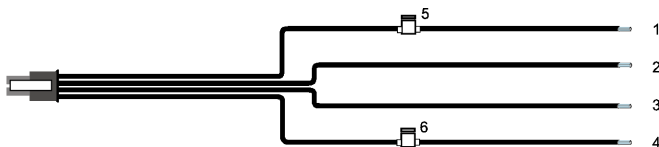
Insert the plug into the "MIC" socket in the handsfree unit and turn it clockwise to lock it firmly.



Note: Use of any other microphone than the microphone MP-2 supplied with the Advanced Car Kit may impact the transmission quality.

Cable set

The wires making up the cable harness are to be connected as per the wiring diagram.



- Connect the black wire to the vehicle ground (GND).
- Connect the yellow wire to the MUTE connection of the car radio.

If your car radio does not have a mute connection, this line may remain unconnected. In this case, your car radio will not be muted automatically during a call.

An additional relay can be used to enable the car radio to be muted. When a call is accepted, the Advanced Car Kit switches the yellow line (MUTE) to ground, muting the car radio. When the call is ended, the yellow line is separated from ground and the car radio is unmuted.

- Connect the blue wire to the IGNS line of the car using the 1A fuse supplied.
Some vehicles do not come with an IGNS connection. This line is not necessary for operation of the Advanced Car Kit; the blue wire can be left unconnected. However, in this case, the Advanced Car Kit does not switch off automatically when the ignition is turned off. To prevent accidental draining of the car battery, the Advanced Car Kit automatically switches off after two minutes unless a mobile phone is connected over Bluetooth wireless technology or the data cable.
- Connect the red wire to the positive terminal of the 12V car battery using the 2A fuse supplied.

The four-pin plug of the cable set is plugged into the "DC" port of the handsfree unit.

Data cable

The data cable connects the handsfree unit with a compatible mobile phone, i.e. via the phone holder.

Plug one end of the cable into the "PHONE" socket in the handsfree unit and the other into the phone holder.

If the Advanced Car Kit is to be used only with Bluetooth wireless technology, the data cable does not need to be connected.

■ Function test

After your Advanced Car Kit has been installed, it needs to be checked to ensure that it is working properly. When testing the operation of the equipment, also check that it has been mounted so that it in no way impairs the driver during operation of the vehicle.

3. Putting the Advanced Car Kit into service

A compatible mobile phone can be connected to the Advanced Car Kit in one of two ways: over a Bluetooth wireless connection or using a compatible phone holder with a cable.

■ Connecting a mobile phone using Bluetooth wireless technology

The first time you establish a wireless link from your Advanced Car Kit using Bluetooth technology, you will have to pair the handsfree unit with the compatible mobile phone that you are using. This only needs to be done once: after this the devices will automatically recognise each other and establish the link.



Note: If you wish to establish a connection using Bluetooth wireless technology, make sure that there is no mobile phone inserted in the phone holder.

■ Pairing using a Bluetooth passcode

1. Make sure that the mobile phone is switched on and the battery is charged.
2. Switch on the Advanced Car Kit. For further information, see "Switching the Advanced Car Kit on/off" on page 26.
3. Open the Bluetooth menu in the mobile phone and activate the Bluetooth function.
4. Make the required settings on the mobile phone to activate a search for Bluetooth devices within range. For further information on the settings required on your mobile phone, see the relevant user's guide.
5. Select Advanced Car Kit from the list of Bluetooth devices found.
6. When prompted, key in the Bluetooth passcode 0000.
7. The mobile phone has now been paired with the Advanced Car Kit and is ready for operation.



Note: The Advanced Car Kit can only establish a Bluetooth wireless connection to one compatible mobile phone. Therefore, you may need to end or break an existing Bluetooth wireless connection.

■ Automatic pairing with a compatible mobile phone

1. Make the appropriate settings in the mobile phone so that it will pair with your Advanced Car Kit without requiring separate acceptance or authorisation. For further information on the settings required on your mobile phone, see the relevant user's guide.
2. Switch on the Advanced Car Kit.
3. The Advanced Car Kit now starts an automatic 30-second search for mobile phones that have previously been paired with it using the Bluetooth passcode. The Advanced Car Kit pairs with the mobile phone that it has last paired with. The active Bluetooth search is indicated by the flashing light on the remote control button.

■ Connecting a mobile phone over the data cable

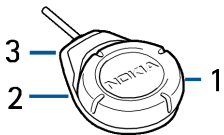
If you are using this form of connection, the mobile phone is ready for use with the Advanced Car Kit when placed into the phone holder; you do not need to pair the devices.

If a mobile phone is inserted into a phone holder connected to the Advanced Car Kit via the data cable, this phone is the active device and you will not be able to establish a connection to any device via Bluetooth wireless technology. Inserting a mobile phone that is currently involved in an active Bluetooth wireless connection into a phone holder connected to the Advanced Car Kit will cause the Bluetooth wireless connection to be terminated automatically.

4. Operation

The Advanced Car Kit can be controlled with the remote control button or operated using the keypad of a compatible mobile phone.

■ Remote control button



1 The button can be used as follows:

- Press
- Press and hold (approx. 1 second)
- Press twice briefly
- Press and hold for a long time (longer than 10 seconds)

2 The ring can be used as follows:

- Turn to the left
- Turn to the right

3 The indicator light has three states:

- On
- Flashing
- Off

■ Switching the Advanced Car Kit on/off

When you turn on the ignition of your car, you automatically switch on the Advanced Car Kit. The indicator light goes on to show that the Advanced Car Kit is activated.

When you turn off the car ignition, you deactivate the Advanced Car Kit and the indicator light goes off.

If the Advanced Car Kit has been installed without connecting the ignition sense cable (IGNS), to switch the Advanced Car Kit on, either press the button briefly or insert a compatible mobile phone in the phone holder, if one has been installed.



Note: If the Advanced Car Kit has been installed without using the IGNS cable, when switched on, it will stay in service as long as a compatible mobile phone remains in the phone holder.

If there is currently no connection to a mobile phone, the Advanced Car Kit will switch itself off after 2 minutes.

■ Operating the Advanced Car Kit

You can use the remote control button to access the following phone features:

Accepting a call

To accept an incoming call, press the button.

Ending a call

To end an active call, press the button.

Rejecting a call

If you do not wish to accept a call, press and hold the button.

Making a call

Select the desired entry from the phonebook of the mobile phone or key in the desired number on your mobile phone.

Redialling

To redial a number that you have recently called, press the button twice briefly.

Voice dialling

You can use voice tags that you have saved in your mobile phone:

1. To start voice dialling, press and hold the button until you hear a tone.
2. Say the voice tag.
3. The mobile phone plays the voice tag and dials the corresponding phone number.

For details on using voice dialling, see the user's guide of your mobile phone.



Note: Some mobile phones may not support all the functions described in this user's guide.

Adjusting the volume

To adjust the loudspeaker volume, turn the ring.

Manual search for Bluetooth devices

If you have not established a connection to a mobile phone, you can start a manual search for a mobile phone that supports Bluetooth wireless technology.

To activate the Bluetooth search feature in the Advanced Car Kit, press and hold the button.

If the search for Bluetooth devices is active, the indicator light will begin flashing.

Resetting paired Bluetooth devices

The Advanced Car Kit saves the last 7 Bluetooth devices that it has been paired with.

The list of paired Bluetooth devices can be erased. To erase the list, the Advanced Car Kit must be switched off (indicator light goes off):

Press and hold the button until a signal tone indicates that the list has been erased.

Switching from handsfree mode to the mobile phone

- If you have connected a compatible mobile phone to the Advanced Car Kit using the data cable, take the phone out of the holder to switch operation from handsfree mode over to the mobile phone.
- To change back to handsfree mode, replace the mobile phone in the holder. The mobile phone is now used in handsfree mode via the Advanced Car Kit.
- If you have connected a compatible mobile phone to the Advanced Car Kit using Bluetooth technology, you can switch the active call between the Advanced Car Kit and the mobile phone or vice versa. Press and hold the button or use the corresponding function in your mobile phone.

Care and maintenance

Your Advanced Car Kit is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfil any warranty obligations and to enjoy this product for many years.

- Keep all enhancements out of the reach of small children.
- Keep the Advanced Car Kit dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.
- Do not use or store the Advanced Car Kit in dusty, dirty areas. Its moving parts can be damaged.
- Do not attempt to open the Advanced Car Kit. Non-expert handling may damage it.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the Advanced Car Kit or the remote control button.
- Do not paint the Advanced Car Kit or the remote control button. Paint can clog the moving parts and prevent proper operation.

If the Advanced Car Kit or the remote control button is not working properly, take the defective part to your nearest qualified service facility. The personnel there will assist you and, if necessary, arrange for service.