SAMSUNG

Bluetooth
Handsfree Car Kit

For Use With
SAMSUNG Mobile Phone

SAMSUNG

ELECTRONICS

Table of Contents

Introduction

The HKT100BDE is a handsfree car kit developed based on Bluetooth technology. The HKT100BDE has a built-in remote controller to provide the user with the Car Kit status and sender's information on its display. This manual provides descriptions on installing and using the Bluetooth Car Kit. To ensure proper use of the product, please refer to your mobile phone user's manual along with this manual.

1. Products that can be used with the HKT100BDE

The product can be used with Samsung Bluetooth mobile phones, or other mobile phones that have a Bluetooth headset profile and a Bluetooth handsfree profile. The HKT100BDE is intended for the handsfree feature of Samsung Bluetooth mobile phones and may not support certain features when it is used with other Bluetooth mobile phones.
The HKT100BDE supports the following features, some of which may not be available if they are not supported by your mobile phone.

· Reject an incoming voice call
· Redial or last number dial
· Call hold
 (Allows you to keep a caller on the line while you
 take a second call)
· Caller ID
· Call log searching
· Call mode switching
· Supports up to 8 languages
 (only with Samsung mobile phones)

Installing the Car Handsfree Kit

1. Installation

Before installing the Handsfree Car Kit in a vehicle, please read this guide thoroughly and keep it for future reference. Installation by a professional is recommended.

1) Features

This Handsfree Car Kit is designed to allow you to use your Samsung Bluetooth phone in your vehicle.

• Gives you unlimited talk time using an external DC supply.
• Automatically mutes the car stereo during a call
• Automatically turns on and off with the ignition switch

2) Cautions

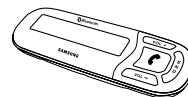Before beginning installation, please read the following notes.

• Do not install the Handsfree Car Kit in an environment where there are extremes of temperature or humidity
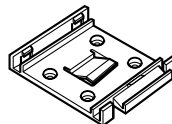• Use the Handsfree Car Kit with a 12/24 V battery only

2. Unpacking

Make sure you have the components listed below. If there is anything missing, please contact the retailer from whom it was originally purchased.

Control unit with speaker

Remote controller

Mounting Bracket
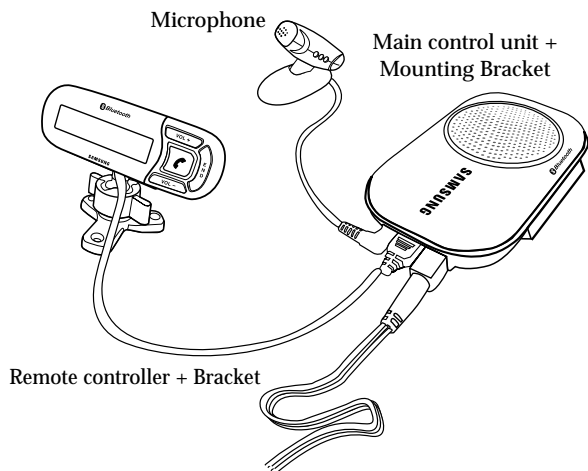(for Main control unit)

Bracket
(for Remote controller)

Handsfree microphone

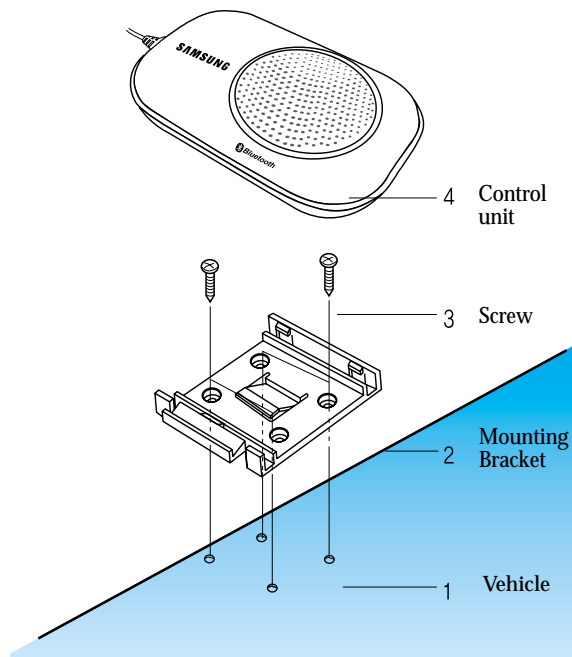Power cable

3. Connection Diagram

Microphone

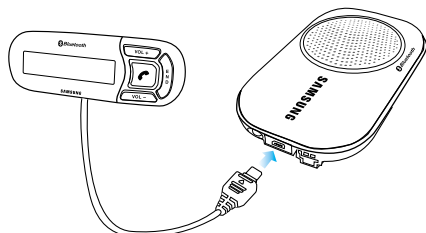Main control unit +
Mounting Bracket

Remote controller + Bracket

1) Control unit
- Choose a suitable location for mounting the control unit
- Drill the holes and install the mounting bracket in the car using the self-tapping screws supplied. Tighten the screws firmly to avoid vibration when driving
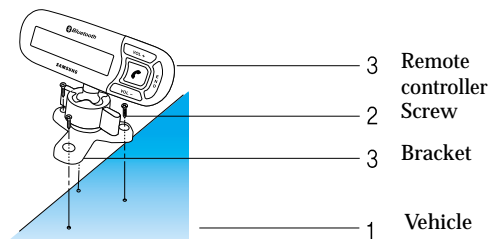- Attach the control unit to the mounting bracket. The control unit simply snaps onto the mounting bracket.

4   Control unit

3   Screw

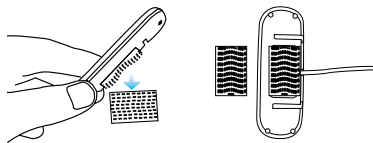2   Mounting Bracket

1   Vehicle

2) Remote controller
• Connect the remote control cable to the control unit.

• Choose a suitable location for mounting the remote control unit.
• Drill the holes and install the mounting bracket in the car using the self-tapping screws supplied. Tighten the screws firmly to avoid vibration when driving
• Attach the remote controller to the mounting bracket.
• Use the Velcro tape if you do not want to install the mounting bracket.

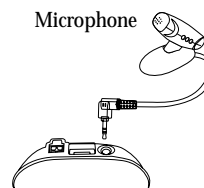3 Remote
   controller
2 Screw

3 Bracket

1 Vehicle

• You can use Velcro tape instead of the bracket if you want.
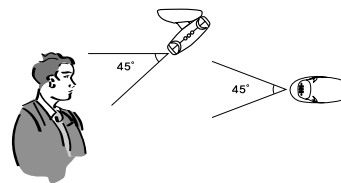

3) Handsfree Microphone
Connect the microphone's connector jack to the terminal on the Control unit.

Microphone

Install the microphone in the correct location.
The Handsfree microphone should be installed within 12 inches (30cm) of the driver's normal speaking position.
The microphone should be attached to the center of the driver's sun visor for optimum performance.

Microphone

Please remember that the microphone should be placed in the position that is least susceptible to interference from external noise sources, adjacent windows, radio speakers and so on.
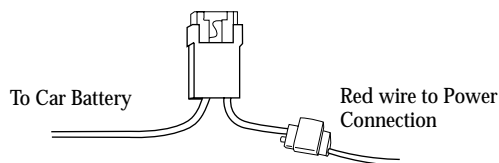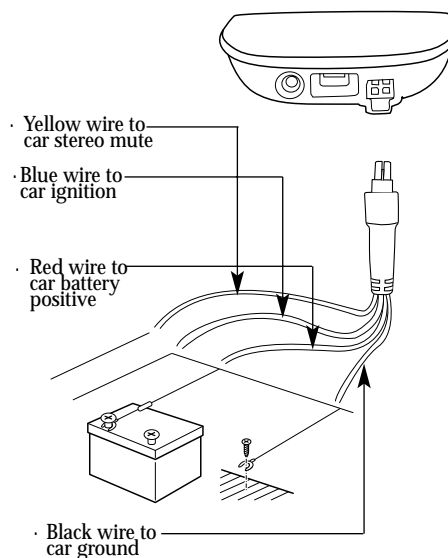
45°   45°

4) Power cable

Connect the four loose wires to the car to ensure correct operation of the Handsfree Car Kit.
When connecting the wires from the control unit, be sure to avoid any sharp edges or moving parts.

- I The red wire must be connected to the vehicle battery.
  Depending on the type of vehicle, an auxiliary power connection may be found under the dashboard or near the fuse box. Consult your car owner's manual.
  The red wire has an in-line fuse holder.
  Be sure to use a 32V/3A fuse.
- The black wire must be connected to the vehicle ground (GND).
- I The yellow wire is the wire for stereo muting. Connect this wire to the stereo mute wire from your car stereo (check your car stereo owner's manual, or if the stereo is factory-installed, check the car owner's manual).

To Car Battery   Red wire to Power Connection

- The blue wire is the ignition sensor wire.
- If the ignition sensing wire is correctly installed, this feature means that:

▶ Handsfree mode is turned off when the car's ignition is switched off, but you can still use the phone in handset mode. Lift the phone and speak.
▶ If the car's ignition is switched off while making a call in handsfree mode, handsfree mode will be maintained till the end of the call.
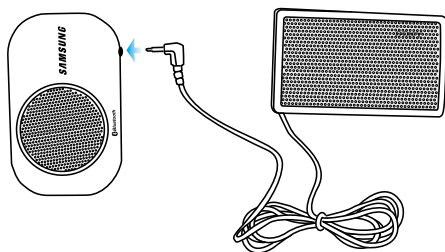
· Yellow wire to car stereo mute
· Blue wire to car ignition
· Red wire to car battery positive
· Black wire to car ground

5) External speaker

To use an external speaker, connect the product to the external speaker jack.
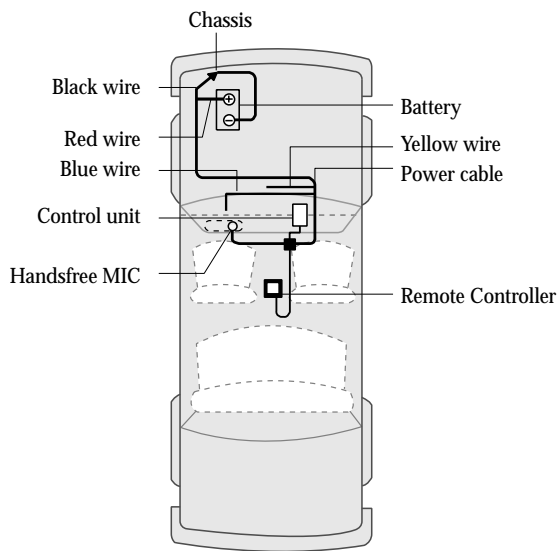· External speakers should be 5 W (4 – 8 _) or above and the speaker jack must be 3.5 .
· A speaker of less than 5 W may get dam-

aged if it is used with the product.

· To ensure proper operation of the Car Kit, please refrain from using an amp or other amplification device.
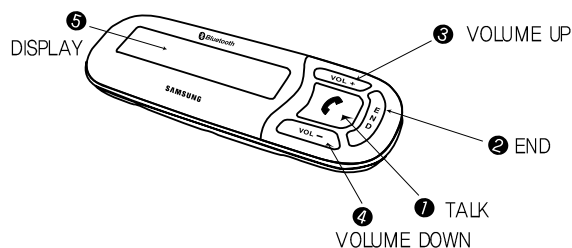
6) Installation diagram

Chassis

Black wire

Red wire

Blue wire

Control unit

Handsfree MIC

Battery

Yellow wire

Power cable

Remote Controller

Getting Started

1. Overview

The remote controller is a device that allows button operation of the Car Kit and displays information on the display. For more information on button operation, please refer to the description of each feature.

DISPLAY ❺

❸ VOLUME UP

❷ END

❼ TALK

❹ VOLUME DOWN

1) TALK: Used for making a Bluetooth connection, connecting a call, searching call log or redialing. Also switches between your mobile phone and the Car Kit during a call.

2) END: Used for terminating a Bluetooth connection, disconnecting a call or enabling/disabling microphone mute.

3) VOLUME UP: Increases the volume level of the Car Kit headset or searches call log information upwards.

4) VOLUME DOWN: Decreases the volume level of the Car Kit headset or searches call log information downwards.

5) DISPLAY: Displays the status of the Car Kit, sender's information and call log information.

2. Initial Setup (Pairing)

The HKT100BDE must exchange and register information with your mobile phone to enable it to be used.

When you use the Car Kit for the first time, or change your mobile phone, you should go through the device registration process as described in the following:

1) Switch on the engine to supply power to the Car Kit.
2) The "Pairing" message is displayed on the remote controller indicating that it is ready for registration.
3) Perform device search and registration in the Bluetooth setup on your mobile phone.
4) If your mobile phone prompts you for a passkey during registration, enter "0000".
5) When device registration is complete, the Car Kit is automatically connected to your mobile phone, displaying "Samsung" on the remote controller.

Caution : The connection between the Car Kit and your phone may not be made automatically depending on the type of your phone. If the connection cannot be made automatically, the Car Kit displays "Connect, pls" on the remote controller.

⟨When registering a third party mobile phone⟩

1) If the Car Kit is connected, press the END button for 3 seconds to disconnect it.
2) Press the @ and @ buttons at the same time for 3 seconds to initialize the Car Kit.
   The Car Kit returns to its initial ready state, displaying "Pairing".

3) Follow steps 3 through 5 above.

3. Connect

Connecting your mobile phone and the Car Kit.

1) Manual Connection
① If "Connect, pls" is displayed on the remote controller, press the ⊡ button to make a connection.
② The "Connecting" message is displayed on the remote controller, indicating that it is connecting. To cancel the connection, press the 🌙 button.
③ If a connection is successfully made, "Samsung" is displayed on the remote controller, and the connection tone is generated.

2) Automatic Connection
① Switch on the engine to supply power to the Car Kit. Connection is made automatically.
② The Car Kit attempts automatic connection if it is forced to disconnect.
   However, it does not attempt automatic connection when disconnected by pressing the 🌙 button on the remote controller for 3 seconds.
③ The automatic connection attempt is aborted when connection is cancelled by pressing the 🌙 button on the remote controller, or when your mobile phone rejects a connection request from the Car Kit.

Caution : If you cannot make a connection, please make sure that the Car Kit has been properly registered.

4 Disconnect

Disconnecting the connection between your mobile phone and the Car Kit.

1) If the Car Kit is being used for a call, end your call.
   You can only disconnect it in the call-ready state.
2) Press the ☽ button for 3 seconds to disconnect it.
3) If it is successfully disconnected, "Disconnect" is displayed on the remote controller and the disconnection tone is generated.
   The Car Kit returns to the connection-ready state, displaying "Connect, pls".

Using the remote control buttons

Before using the Car Kit, please observe the following:

- Switch on the engine to supply power to the Car Kit.
- The following features are available only when the Car Kit is connected to your mobile phone. If it isn☐ connected, please connect it to your mobile phone.
- The HKT100BDE only operates within a 10m range from your mobile phone, and if used beyond this range, its connection to your phone may be lost or it may not function properly.
- Depending on the type of your mobile phone, it may function differently or may not support some features.

1. To accept an incoming voice call.

Answer for an incoming call.

1) If the Car Kit is ringing, press the ▱ button to connect the call.
2) When the call is connected, "Talking"is displayed on the Remote Controller.
3) If the mute function is available for your car stereo, enable it.

2. To terminate a call

Terminate an existing call.

1) If you terminate an existing call by press-
ing the 🕻 button on the remote controller,
it displays "Call Ended"
2) If the mute function for your car stereo has
been enabled, disable it.

3. To reject an incoming voice call.

Don't answer an incoming call by rejecting it.
If the Car Kit is ringing, press the 🕻 button to reject the
call and the Car Kit displays "Call Rejected".

4. Call Log Searching

Search for and display the recent call log for your mobile
phone and make a call using the information.

1) Press the ▣ button on the Remote
Controller to search the logs of your recent
calls.
2) Press the ▭,or ▭ button on the Remote
Controller to go to a desired call log.
3) To make a call using the search result,
press the ▣ button.
4) Display the search result on the remote
controller.
5) If there is no recent call log available, the
Car Kit displays "No Entry" on the Remote
Controller.
6) 6) If there is no outgoing or incoming call
information available, the Car Kit displays
"No Number" on the remote controller.

7) If you do not perform another search with-
in 8 seconds, call log searching is termi-
nated.

Caution : The above feature is available only with Samsung
mobile phones, and works as a re-dialing facility for
3rd party mobile phones.

5. Re-Dial & Last Number Dial

Make a call using the last call log.

1) If you press the ▣ button on the remote
controller to make a call using the last call
log, it displays "Last Dialed Call".
2) If the Call Log window is displayed on your
mobile phone after re-dialing, press the ▣
button again to make the call.

6. Call Mode Switching

Switch to your mobile phone or the Car Kit during call.

1) Press the ▣ button on the remote con-
troller for 2 seconds to switch the call
mode.
2) In Car Kit mode, the call is made via your
mobile phone and the kit displays "Priva-
cy" on the remote controller. Alternatively,
in mobile phone mode, the call is made
via the Car Kit and the kit displays "Talk-
ing" on the remote controller.

7. Call Hold

When you receive another call during your call, you can switch between the calls.

1) If you press the ▣ button on the remote controller to switch to another call, it displays "Call Hold".
2) If you receive a second call, switch the line to the second call and keep the first call on hold.
3) To switch back to the first call, press the ▣ button on the remote controller.

8 Microphone mute

Enable or disable microphone muting for the Car Kit during a call.

1) If you press the ☽ button on the remote controller for 2 seconds, the Car Kit enables microphone mute and displays "Mute".
If microphone mute is enabled, the mute tone is generated via the speaker.

2) If you press the ☽ button on the remote controller again for 2 seconds, the Car Kit disables microphone mute and displays "Talking".

9. Remote Volume Control

Adjust the headset volume level for the Car Kit.

1) Press the ⊂⊃ button on the remote controller to increase the volume level.
2) Press the ⊂⊃ button on the remote controller to decrease the volume level.
3) 8 different volume levels are available with the Car Kit, each of which is indicated on the remote controller.

12. Change backlight color.

Change the backlight color of the remote controller.

1) Press the ☽ button on the remote controller for one second to change the backlight color.
2) It changes to one of seven colors in the following order : green, sky blue, red, violet, yellow, grey and blue

Caution : You cannot change the backlight color while the Car Kit is connected to your mobile phone.

Input Voltage	
DC 11 ~ 30 V	

Input Current	
Dormant Current	<= 10 Ma when ignition is on, <= 1 Ma when ignition is off.
Max. Current	Max. 2 A

Bluetooth	
Specification	Supports Bluetooth 1.1
Frequency	2,402 ~ 2,483.5 MHz (ISM Band)
Spread Modulation	Frequency Hopping Spread Spectrum (FHSS)
Hopping Channel	79 channels with 1 MHz-spacing ((2,402~2,480 MHz)
Hopping Rate	1,600 hops/second
Signal Modulation	Gaussian Frequency Shift Keying (GFSK)
Transfer Rate	1Mbps
Transmit Power	0 ~ 4 dBm (Class 2)

Microphone	
Microphone Sensitivity	−52dB < Mic Sensitivity Db//Volt Pa <−48dB
Two Microphone System	

Speaker	
Speaker Audio Level	90 dB <Max. SPL//0.0002 Uber@0.5M<95dB

Temperature Range	
Operating Temperature	−20 ~ 60 (±5℃)
Storage Temperature	−30 ~ 85 (±5℃)

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. 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.
CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.