



Bluetooth® Headset

User Manual

Rev.1.0 Sept 2003

Preface

Legal Statement	iii
Copyright	iv
Trademarks	iv
Safety Information	iv
Conventions	v
About this Manual	v

Chapter 1 Overview

Package Contents	1
Features	2
System Requirements	3
Product Views	3

Chapter 2 Preparing the *Bluetooth* Headset

Initial Battery Charge	5
Charging and Battery Time	6
Placing the Headset on Your Ear	7
Choose the Left Ear Wearing Style	8
Unique Glasses Ridge Design	8
Hanging the Headset on Your Neck	8

Chapter 3 Using the *Bluetooth* Headset

Getting Started	9
Turn On	9
Pairing the Headset to a <i>Bluetooth</i> Phone	10
General Pairing Instructions	10
Pairing with a Nokia <i>Bluetooth</i> Phone	10
Pairing with a Sony Ericsson/Ericsson <i>Bluetooth</i> Phone	11
Pairing Link to Additional Phone	12
Making, Receiving, Transferring and Ending Calls . . .	13
Making a Call from a <i>Bluetooth</i> Phone	13
Making a Call Using Voice Dialing	13
Receiving a Call with the Headset	13

Transferring a Call	14
Ending a Call from the Headset	14
Adjusting Volume	14
Adjusting the Speaker Volume	14
Adjusting the Indicator Sound Volume.	15
Muting/Turn off the Microphone	15
Turning Off	15
Audio and Visual Indications	16

Appendix

Product Specifications	17
Maintaining Your <i>Bluetooth</i> Headset.	17
General Care.	17
Storage	18
Cleaning	18
About the Battery	18
Charging the Battery.	18
Battery Information.	18
Troubleshooting	19
Service Information	22

Glossary

Useful Terms	23
------------------------	----

Preface

Legal Statement

FEDERAL COMMUNICATIONS COMMISSION

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. Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.



NOTE: *To assure continued FCC compliance, any changes or modifications not expressly granted by the manufacturer of this device could void the user's authority to operate the equipment.*

CE Notice (European Union)

The Notice indicates that this equipment has been tested and found to comply with the EMC Directive and the Low Voltage Directive of the European Union, including EN300328-2, EN301489-1/17, and EN60950.

Industry Canada

Industry Canada complies with Canada RSS-210.

Operation of the device is subject to following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Copyright

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means, in any form, without prior written permission of the Corporation.

Copyright© 2003, All Rights Reserved.

Trademarks

All the logos and trademarks, including the *Bluetooth* from SIG, are the properties of their respective owners. *Bluetooth* is a trademark of the *Bluetooth* SIG, Inc. (Special Interest Group). The *Bluetooth* trademarks are owned by *Bluetooth* SIG, Inc. USA.

Safety Information

Please read the following safety instructions, and keep the user manual for later reference.

- The storage temperature for the headset is between -20°C and +55°C.
- Do not expose it to direct sunshine or place the product near any source of heat or in an extremely cold environment.

- Do not expose the product to moisture. Never spill any liquid on the product.
- Do not move the product between cold and hot environments.
- Be sure to follow the legal restrictions and instructions when using the *Bluetooth* Headset on board an aircraft.

Conventions

The following conventions are followed throughout this manual.



NOTE *Text set off in this manner indicates key information that you should pay attention to.*



WARNING *Text set off in this manner indicates that failure to follow these directions could result in bodily harm or loss of life.*

About this Manual

This manual is designed to assist you in setting up and using your *Bluetooth* Headset, and provides information on the essential hardware required to use your headset. Read carefully before you begin to use the product kit. All materials and information in the manual are cautiously checked for accuracy at the time for print. However the corporation is not liable for any possible mistakes. Any specifications and accessories are subject to change without prior knowledge.

It's more than seeing. It's believing.

Chapter 1 Overview

Congratulations on your purchase of the *Bluetooth* Headset Kit. The *Bluetooth* Headset is a mobile voice interaction device that enables you to use your *Bluetooth* activated mobile phone without the constraint of wires or cords. This allows for greater convenience, as well as safety while operating a motor vehicle. The *Bluetooth* Headset is a compact device that is easy to store in a briefcase, handbag, or a shirt pocket. Using the *Bluetooth* Headset can help you make full use of the advanced features found in today's mobile phones, while allowing you to move about more freely.

Package Contents

Your *Bluetooth* Headset is shipped in a standard package containing the following items as shown in the figure below:

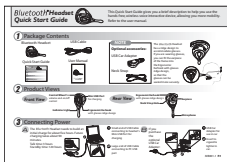
- *Bluetooth* Headset
- USB Cable for charging
- Quick Start Guide to set up your *Bluetooth* Headset
- User Manual



Bluetooth Headset



USB Cable



Quick Start Guide



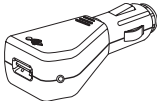
User Manual

1 - 1 Package Contents

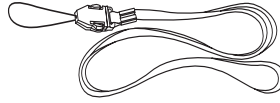


NOTE: While unpacking the package, please open it carefully and save the original packing materials in case you need to repack them.

You may optionally purchase a Neck Strap and a USB Car Adapter for use in a car. The accessories illustrated here and in this manual are for reference only. Accessories included with your headset may be different from the ones shown here.



USB Car Adapter



Neck Strap

1 - 2 Optional Accessories

Features

The *Bluetooth* Headset provides the following features:

Compact, comfortable design

The headset is lightweight, and can easily be adjusted for comfortable use on either the left or right ear. The earpiece is padded and the ergonomic earhook is shaped to accommodate eyeglasses.

Compatible

The headset is compatible with many *Bluetooth* 1.1-compliant mobile phones on the GSM and CDMA systems.

Long-life rechargeable battery

The headset contains a permanently mounted rechargeable battery. When fully charged, the battery can support up to 3 hours of use, and up to 120 hours in stand-by mode.

Pairing

The headset can be paired with up to two devices at one time. This allows the user to conveniently switch between phones without switching headsets.

Multi-functional

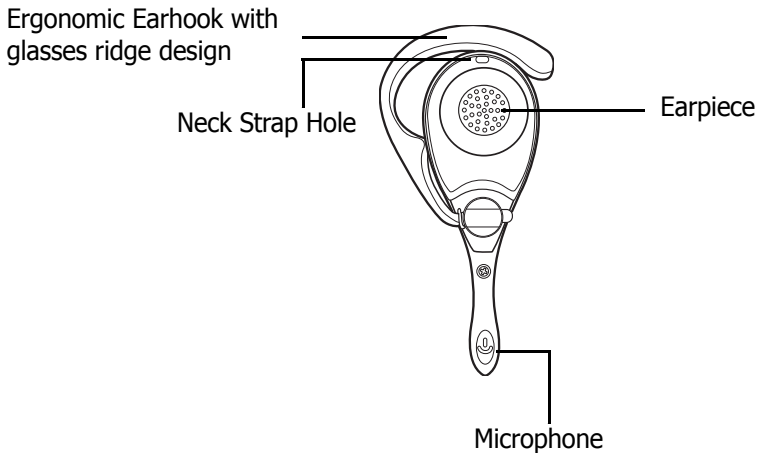
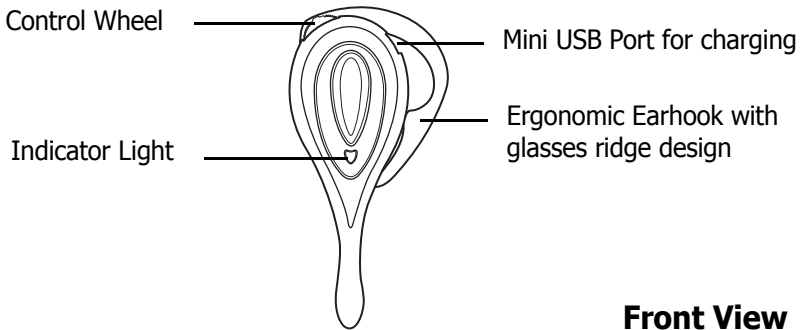
- The headset allows control over the volume and can be muted for privacy.
- Incoming calls can be answered and terminated from the headset.
- Outbound calls can be placed when used with phones that support voice dialing.

System Requirements

Your new *Bluetooth* Headset will work only with a *Bluetooth* 1.1-compliant mobile phones placed within 10 meters (33 feet) of the headset.

Product Views

Before you begin to use the headset with mobile phone, the section gives you a brief description to familiarize you with the product elements.



1 - 3 Headset Overview

Mini USB Port for charging: The USB port is reserved for plugging the supplied USB cable. Using the USB cable to connect to any devices with a USB port to recharge the headset whenever needed.

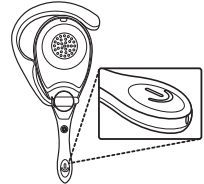
Ergonomic Earhook with glasses ridge design: The headset's earhook, designed with advanced ergonomics, rests over the top of the ear much better than eyeglasses do. A ridge in the top allows eyeglasses to be comfortably worn while using the headset.

Control Wheel: All of the functions of the *Bluetooth* Headset are performed from this wheel. These include adjusting the volume, muting, answering calls and terminating calls. See "Chapter 3 Using the *Bluetooth* Headset" for more information.

Indicator Light: Two lights indicate the status of the headset and its battery. The blue light indicates what operating mode the headset is in, and the red light reports a low battery condition. Both may operate in combination to notify you of multiple events. Refer to "Audio and Visual Indications" section for more information.

Earpiece: The earpiece is padded for comfort and produces clear sound.

Microphone: The microphone, at the end and side of the pole, is directional and sensitive enough to clearly register your voice when placed by your cheek.



NOTE: *Sound volume can also be adjusted by changing the volume setting on your mobile phone.*

Neck Strap Hole: Insert neck strap to hang for easy use.

Chapter 2

Preparing the *Bluetooth* Headset

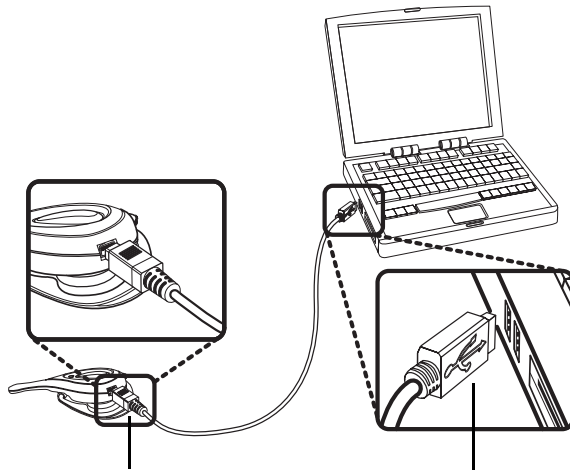
Before you familiarize yourself with the newly purchased *Bluetooth* Headset, you must prepare the following procedures to use the headset. This chapter describes how to do the initial battery charge and how to wear the headset on your ear. Read the following sections carefully before attempting to utilize your new headset.

Initial Battery Charge

The supplied USB cable is used for charging. You will need to allow extra time for the built-in battery to build an initial charge before it can be used. The first charge takes approximately five hours. Future charges take approximately 90 minutes.

Follow these steps to do an initial battery charge:

- 1 Insert the small end of the USB cable into the headset's USB connector.**



Small end of the USB cable connected to the headset's mini USB port for charging

Large end of the USB cable connected to computer's USB port

2 - 1 Connecting Power

- 2** Insert the large end of the USB cable to the USB port of any device you want to connect (such as a personal computer, printer, or PDA).
- 3** Press the control wheel. The red indicator stays on during the recharging process.
- 4** When the indicator turns to blue and flashes slowly, the battery is fully charged. The headset is ready for normal operation.

Charging and Battery Time

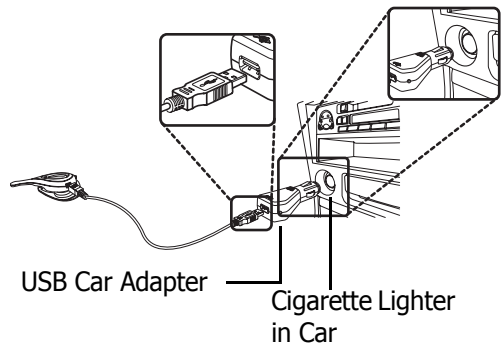
When the *Bluetooth* Headset is in low battery level, the headset gives a battery low warning. The indicator lights pink and as the battery goes lower it turns red to remind you of recharging. Follow the described steps to charge the battery. During charging, you can still use the headset to receive incoming calls and place phone calls. Charging may result in an interruption of telephone session.

When the headset is fully recharged, the indicator flashes blue showing the headset can operate normally again. With full battery charge, the headset's talk time can be up to three hours; while the standby time lasts up to 120 hours.



NOTE: *If you have purchased an optional USB Car Adapter, you can also charge the headset in car or when you are driving. See detailed description as follows.*

If you purchase the optional USB car adapter for use in car, you can also recharge your headset when you are driving. Even when charging, you still can use the *Bluetooth* Headset to receive incoming calls as usual. Connect the small end of the USB cable to the headset and the large end of the cable to the USB car adapter (refer to the following figure). Then insert the USB car adapter to the cigarette lighter on your car.



After the both ends are well connected, press the control wheel shortly, the red indicator light is on. Wait until it turns to flashing blue, the charging process is completed.



WARNING: Use only the USB cable included in the package and the purchased USB car adapter. Damage may occur if you use any other cable with your headset or use the cable to power other electrical devices. If there is smoke, burning smell, or extreme heat coming from the adapter, please turn off power and seek service.

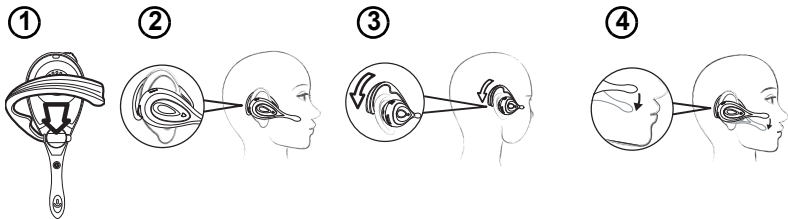


NOTE: No matter if you use the headset or not, you must charge the headset at least once a month.

Placing the Headset on Your Ear

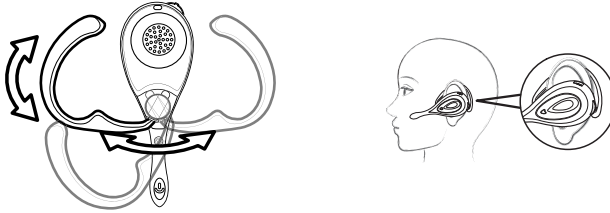
The design of the *Bluetooth* Headset is very flexible and convenient. The factory default and the instruction in this manual is for wearing on the right ear. Follow these steps to put your headset on the right ear.

- 1 Open the ergonomic earhook with glasses ridge design perpendicular to the headset.
- 2 Loop the ergonomic earhook with glasses ridge design behind your ear.
- 3 Press the headset to your ear.
- 4 Point the boom toward your mouth.



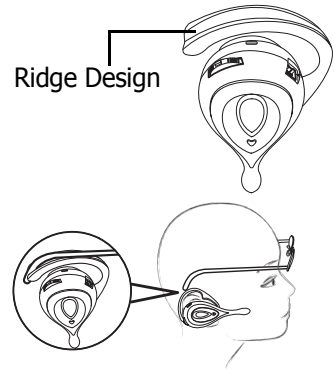
Choose the Left Ear Wearing Style

If you are used to wearing on the left ear, you can easily adjust the earhook to the other side of the headset for wearing on the left ear. Refer to the figure below for adjustment.



Unique Glasses Ridge Design

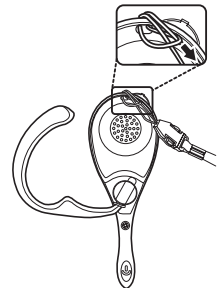
The headset's ergonomic earhook has a ridge design to accommodate glasses. If you are wearing glasses, you can fit the earpiece of the frame into the ergonomic earhook's ridge, so that the glasses can be seated more securely.



Hanging the Headset on Your Neck

If you purchase an optional neck strap, you can hang the headset on your neck for handy use. Follow these steps to attach the neck strap:

- 1** Thread the shorter end of your optional neck strap through the neck strap hole.
- 2** Insert the longer end through the shorter loop and pull it tight.



Chapter 3

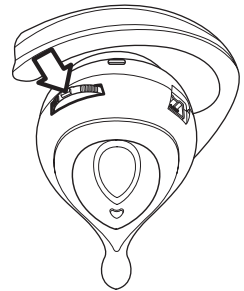
Using the *Bluetooth* Headset

Getting Started

The *Bluetooth* Headset allows for quick and easy configuration with a variety of *Bluetooth* 1.1-compatible mobile phones and other devices. Once configured, the headset should operate with no additional intervention, apart from periodic charging. This chapter describes how to set up and use your *Bluetooth* Headset. Read the following sections carefully before attempting to use your new headset.

Turn On

Press and hold the control wheel for five seconds to turn on the headset. The indicator lights pink for two seconds and then turns to blue. Keep on pressing the control wheel until the blue light stays on indicating the headset is ready to pair with wireless devices.



If you wear the headset and turn it on, you will hear two different tones from the headset to know that it turned on and entered a pairing-ready state. For turning on, the headset sounds in a 1-3-5 (Do-Mi-So) scale; for pairing-ready, it sounds in a 1-3-1 (Do-Mi-Do) scale; and for turning off it sounds in a 5-3-1 (So-Mi-Do) scale. Now you may follow the *Bluetooth* configuration instructions for your phone. The following examples can be used as a guide for models other than those represented here. Once you have successfully set up the headset on your mobile phone, the blue light will flash steadily and slowly and the headset will be ready for use.

Pairing the Headset to a *Bluetooth* Phone

Before the headset can be used with your mobile phone, it must first be paired. This process registers the headset and your mobile phone with each other. Pairing is important and essential, because it establishes connection between the headset and the mobile phone. Your headset will only need to be paired once with each mobile phone that you use; however its unique design enables you to pair it with up to two mobile phones. After pairing, you can use the headset without further configuration.

General Pairing Instructions

Pairing with a Nokia *Bluetooth* Phone

Follow the steps below to configure your mobile phone so that it can recognize the *Bluetooth* Headset and receive incoming phone calls with the headset.

- 1 Turn on your *Bluetooth* Headset and mobile phone. Set the headset to pairing-ready status; the blue indicator stays on.
- 2 Select “*Bluetooth*” on your mobile phone.
- 3 Select “Search for audio accessories”.
- 4 Select “*Bluetooth* Headset” from the option list and then select “Enter Passcode”.
- 5 Enter “0000” (default passcode for *Bluetooth* Headset), and then press “OK”. A message “Paired with Blueto...” appears on the mobile phone screen. The blue LED on the *Bluetooth* Headset flashes five times within four seconds to show that the pairing process is finished.



NOTE: *These instructions are for a Nokia 8910 mobile phone. The procedures for operating your phone may be different. Consult your mobile phone user manual for more information. If you are using a Nokia 3650, you must first set the headset to “Hands-free Mode” by pressing shortly the control wheel under pairing-ready status, then begin the mobile phone’s searching function to perform the pairing.*

Pairing with a Sony Ericsson/Ericsson *Bluetooth* Phone

Follow the steps below to configure your mobile phone, so that it can recognize the *Bluetooth* Headset and receive coming phone calls with the headset.

- 1 Turn on your *Bluetooth* Headset and mobile phone. Set the headset to pairing-ready status; the blue indicator stays on.
- 2 Select “Connect” and “Yes”.
- 3 Select “*Bluetooth*” and “Yes”.
- 4 Select “Discover” and “Yes”, “Searching...” appears on the screen. When the mobile phone finds the headset, it shows the headset name. Select the headset and select “Add to paired”. Select “Yes”.



NOTE: *If a message “No devices found” appears, the headset may be too far apart from the mobile phone. Move the headset closer to the mobile phone and try the above steps again.*

- 5 You are asked to enter Passkey. Enter Passkey “0000” and “Yes” to start pairing.
- 6 Give your desired Name tag or use the default “*Bluetooth* Headset”.
- 7 Select “*Bluetooth* Headset” from “Add device” under “Paired device” and then press “Yes”.
- 8 You can edit, delete, or rename your headset as you like and then press “Yes”.
- 9 The blue LED on the *Bluetooth* Headset flashes steadily and slowly to show that the pairing process is finished.
- 10 Before you receive incoming calls with the headset, activate the “Discover” function on your mobile phone.



NOTE:

- *These instructions are for a Ericsson T68 mobile phone. The procedures to operate your phone may be different. Consult your mobile phone user manual for more information. The Bluetooth Headset has passed the compatibility test and can be used with mobile phones from Nokia, Sony Ericsson, Siemens, Motorola and Philips.*

- **DISCONNECTING THE PAIRED LINK** *If you do not want to use the headset to receive incoming calls, to disconnect the link by selecting “Off” under “Operation Mode”. The flashing blue indicator and Bluetooth icon on the mobile phone disappear, indicating the link is cancelled. You can use the mobile phone to receive incoming calls as usual.*
- If the *Bluetooth* Headset is out of the distance of receiving range, it beeps two times to indicate weak signal. If the headset loses the signal it beeps four times and disconnects.

Pairing Link to Additional Phone

One of the *Bluetooth* Headset’s unique features is that the headset can pair with two mobile phones at the same time without disconnecting from either mobile phone.

If you want the headset to pair with two mobile phones, choose the first mobile phone, under the pairing-ready status turn the control wheel to the left for two seconds; the indicator flashes blue two times within five seconds. Now you can perform pairing following the described steps in *General Pairing Instructions* section. After successfully pairing with the first mobile phone, turn off the headset and then turn it on again to pair with the second mobile phone. Under the pairing-ready status turn the control wheel to the right for two seconds until the indicator flashes two times within five seconds. After the pairing is completed, whenever one of the paired mobile phone is ringing, the incoming call will be automatically transferred to the headset.



NOTE: *The Bluetooth Headset can also be linked with other devices, for example Bluetooth wireless technology-enabled printer, PC, PDA, cordless PSTN phone, VoIP phone system, laptop PC, and walkie-talkie. Follow the instructions in user manuals that came with various devices to finish pairing process.*

Making, Receiving, Transferring and Ending Calls

Making a Call from a *Bluetooth* Phone

You can place a phone call with your headset linked to your mobile phone. Use your mobile phone to dial the desired number, and then talk freely with the *Bluetooth* Headset.

Making a Call Using Voice Dialing

If your mobile phone supports the voice command function, you can also make a voice call through the headset. Say a name or voice command to place a phone call. This function is especially convenient and safe when you are driving or busy doing something manually. However, it depends on your mobile phone's supporting function. Refer to the mobile phone's user manual to see if this function is available for you.



NOTE: *If you are using Nokia mobile phones, you must turn off the headset and turn it on again to switch to “Hands-free Mode” (refer to the note on page 10) before you can use the voice dialing function.*

Receiving a Call with the Headset

When you have finished pairing the *Bluetooth* Headset with your mobile phone and have set up the link properly, you can use the headset to receive incoming phone calls. Generally you must press the control wheel on the headset to receive the incoming call (such as for Ericsson/Sony Ericsson mobile phone). But some mobile phones (such as Nokia) can transfer the incoming calls to the headset directly. You do not need to press the control wheel to receive calls. Refer to the user manual that came with your mobile phone for further information on operation.

During a telephone session, if the *Bluetooth* Headset exceeds the range of the operational distance, the signal is interrupted. Now the mobile phone inquires if you want to resume the conversation using the headset. If yes, you need to turn on the headset again, and then press and release the control wheel shortly.

Your mobile phone shows a message to inquire if you want to reconnect, select “Yes” option to resume the phone call. When the headset is on and the pairing is completed, you can automatically receive incoming calls with the headset. If the pairing is completed but the headset is off, you can either receive phone calls with your mobile phone or turn on the headset first to receive phone calls with your *Bluetooth* Headset.

Transferring a Call

The *Bluetooth* Headset is embedded with double directions of sound transferring. After the successful pairing process, the mobile phone can recognize the *Bluetooth* Headset. When the phone rings, it automatically transfers the call to the headset. See “Receiving a Call with the Headset” on page 13. The headset can transfer the sound back to the mobile phone if you disconnect the paired link (see the Note on page 11) between the headset and the mobile phone.

Ending a Call from the Headset

Generally when your telephone session is ended, if the caller hangs up, the headset ends the call automatically. You do not need to press any button.

Adjusting Volume

Adjusting the Speaker Volume

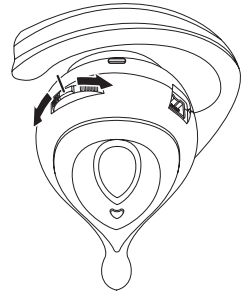
(During a call)

The control wheel is also used to adjust the volume. When you wear the headset on your right ear, you can turn the wheel clockwise or counterclockwise respectively to decrease or increase the volume according to need and the ambient environment. Up to 16 volume levels are available.

Adjusting the Indicator Sound Volume

(When waiting to pairing)

Follow the same process to adjust the indicator sound volume. When you wear the headset on your right ear, after you press and hold the control wheel to turn on the headset, you can hear the indicator sound. At this time you can turn clockwise or counterclockwise respectively to decrease or increase the volume as needed.



Muting/Turn off the Microphone

Press the control wheel for two seconds to turn off the microphone, avoiding the other party to hear you talking to other people. This function is practical for keeping privacy. If you press and hold the control wheel for two seconds, the muting function is turned off.

Turning Off

When the headset is fully charged, paired and linked, but you do not want to use the headset, you can turn off the headset. Press and hold the control wheel to turn it off. If the headset is forced to be turned off because of low power, use the mobile phone to receive incoming calls and charge the headset immediately. See “Charging and Battery Time” on page 6.

Audio and Visual Indications

The *Bluetooth* Headset provides audio and visual signs to help you understand the device status. For audio signs, refer to “Turn On” on page 9 for detailed description. The following tables give you an overview of various indicator lights and the represented meanings.

Table 1: Indication During Charging

<i>Headset Indicator</i>	<i>Color</i>	<i>Meaning</i>
On	Red	Battery low, the charging is in progress
On	Flashing blue	Fully charged

Table 2: Indication Under Normal Operation

<i>Headset Indicator</i>	<i>Color</i>	<i>Audio Signal</i>	<i>Meaning</i>
Off	---	5-3-1 (So-Mi-Do)	The headset is turned off.
On	Pink	1-3-5 (Do-Mi-So)	The headset is turned on.
On	Steady blue	1-3-1 (Do-Mi-Do)	Ready for pairing; pairing is in progress.
On	Flashing blue steadily and slowly	---	The headset is activated for receiving.
On	Long flashing blue with the same interval	---	Connected to an incoming call

Appendix

Product Specifications

Table 1: Headset Specification

<i>Bluetooth</i> Compliance	<i>Bluetooth</i> 1.1
Core ASIC	Motorola MC72000
Profile Support	Headset/Hands-free
Frequency Band	2.45 GHz ISM band 79 channels frequency hopping
TX Output Power	Class 3 (0dBm)
Receiver Sensitivity	<-82dBm typical
Operating Range	Up to 10 meters
Security	Encrypted link
Typical Talk Time	Up to 3 hours
Typical Standby Time	Up to 120 hours
Typical Charging Time	1.5 hours
Charging Interface	USB, 5Vdc
Dimension (LxWxH, mm)	100 x 49 x 16
Weight (gram)	22.8
Regulation	FCC, CE, IC RSS-210

Maintaining Your *Bluetooth* Headset

General Care

The *Bluetooth* Headset is of user-friendly and lightweight design. The material and workmanship is guaranteed for steady and clear wireless communication. However, you should pay attention to the proper storage and cleaning process. This will extend the headset's use time and enhance stable and superior performance. The following sections describe general notices for your headset maintenance.

Storage

You must not use the headset in extreme temperature and humidity environment. The storage temperature is between -20°C~55°C. If you want to transport it, ensure not to fold it improperly, drop it on the ground, or scratch with a hard and sharp object.

The supplied USB cable should be stored in a secure and handy place for frequent use. Use the cable to connect to suitable USB connector. Do not force in to other types of connectors. When connecting the headset to any other devices with a USB port, make sure the connecting end is correct.

Cleaning

The *Bluetooth* Headset needs little maintenance. If the headset is occasionally stained or greasy, you can use a soft dry cloth to wipe it clean. If necessary, use a soft cloth with a small amount of neutral cleaning agent to get rid of the dirt. Do not use any acid or alkaline cleaning agent. Do not soak in water or flush it with running water. Avoiding dusty places and keeping the product clean can eliminate unnecessary cleaning.

About the Battery

The headset is constructed with a built-in battery. Direct contact with water may result in short circuit, product damage, or malfunction. Ensure to fully charge the battery before you use the headset for the first time. See “Initial Battery Charge” on page 5.

Charging the Battery

With normal use the headset’s talk time is up to three hours and standby time up to 120 hours. When the indicator lights pink, recharging is necessary. Pay attention to indicator color change to ensure the headset’s stable performance.

Battery Information

Do not expose the battery to extreme temperature exceeding +55°C (+131°F). Charge the battery only in an environment between +10°C (+50°F) and +45°C (+113°F). It is strongly recommended to charge the battery once a month even when the headset is not used.

Troubleshooting

If you incur any problem with your *Bluetooth* Headset, you may want to solve the problem yourself, before consulting your service representative. The following section describes some frequent problems encountered while operating the headset. If you don't find the answer to your problem in these pages, make sure you have followed the instructions carefully and observed the safety precautions. If all else fails, contact your service representative. You should also make a record of what happened and what remedies you tried.

Refer to the *Tips and Hints* section before trying to resolve your problem.

Table 2: Troubleshooting

<i>Problem</i>	<i>Possible Cause</i>	<i>Tips and Hints</i>
No indicator	Power off	Press and hold the control wheel to turn on the headset. See "Turn On" on page 9.
No sound	<ul style="list-style-type: none"> • Power off • Not yet pairing 	<ul style="list-style-type: none"> • Turn the power on. • Not yet pairing: <ul style="list-style-type: none"> – Press and hold the control wheel to turn on the headset. See "Turn On" on page 9. – Perform the pairing operation before using the headset. See "Pairing the Headset to a Bluetooth Phone" on page 10.

Table 2: Troubleshooting (Continued)

<i>Problem</i>	<i>Possible Cause</i>	<i>Tips and Hints</i>
Cannot pair with mobile phone	<ul style="list-style-type: none"> Your mobile phone does not support (built-in) <i>Bluetooth</i> function. Power too low 	<ul style="list-style-type: none"> Use a mobile phone with <i>Bluetooth</i> supporting function. If your mobile phone does not have built-in <i>Bluetooth</i> support, use the attached <i>Bluetooth</i> support device. See “Pairing the Headset to a Bluetooth Phone” on page 10. Charge the headset immediately.
Unclear sound	<ul style="list-style-type: none"> Battery low Frequency interruption 	<ul style="list-style-type: none"> Recharge your headset. See “Initial Battery Charge” on page 5. Consult your telecommunication carrier or headset distributor for further information and help.
The headset is automatically turned off.	<ul style="list-style-type: none"> The battery is too low. The headset is placed under extreme temperature. 	<ul style="list-style-type: none"> Charge the battery immediately for at least one hour to build up the necessary power. See “About the Battery” on page 18. Place the headset in a cool place to return it to the normal operational state. See “Storage” on page 18.
Voice command does not work properly.	The mobile phone cannot recognize your voice command through the headset.	Refer to the user manual of your mobile phone to set up the voice command again through the <i>Bluetooth</i> Headset.

Table 2: Troubleshooting (Continued)

<i>Problem</i>	<i>Possible Cause</i>	<i>Tips and Hints</i>
Telephone call is interrupted.	<ul style="list-style-type: none"> • Charging during a phone call. • The headset is out of the receiving range. 	<ul style="list-style-type: none"> • You should not charge during talking. The telephone session is disconnected. Refer to “Charging and Battery Time” on page 6 for a full charge first, then you can resume your phone call. • Move within the range of the effective operational distance (up to 10 meters). See “Receiving a Call with the Headset” on page 13.
No charging indicator is on.	<ul style="list-style-type: none"> • The battery is too low. • You did not use the headset for a long time. 	For both of the possible causes, charge the headset immediately and wait for 30 minutes until the headset build up enough power to light the indicator. See “Charging and Battery Time” on page 6.
Red indicator stays on	Battery low	Recharge the headset immediately. See “Initial Battery Charge” on page 5.

Service Information

Glossary

Useful Terms

Bluetooth

A mobile personal area network (PAN) technology from the *Bluetooth* Special Interest Group founded in 1998 by 3M, Ericsson, IBM, Intel, Motorola, Nokia, and Toshiba. *Bluetooth* is an open standard for short-range transmission of digital voice and data between mobile devices and desktop devices. It provides up to 720 Kbps data transfer within a range of 10 meters and up to 100 meters with a power boost. *Bluetooth* uses omnidirectional radio waves that can transmit through walls and other non-metal barriers; transmits in the unlicensed 2.4GHz ISM band and uses a frequency hopping spread spectrum technique that changes its signal 1600 times per second. The name *Bluetooth* comes from King Harald Blatand (*Bluetooth*) of Denmark.

BQB

(*Bluetooth* Qualification Body) An individual person recognized by the *Bluetooth* Qualification Review Board (BQRB) to be responsible for checking declarations and documents against requirements, verifying the authenticity of product test reports, and listing products on the official *Bluetooth* Qualified Products List.

Headset

A device that is equivalent to a telephone handset in functionality, but is designed to fit around the person's head for more comfort by leaving both hands free. Like a handset, the headset contains a microphone and one or two speakers (for one or both ears).

Pairing

An identification and matching process between your target devices and the *Bluetooth* devices. Before you first use a *Bluetooth* Headset, you must set up your mobile phone's supporting function, so that your mobile phone can identify and search for the *Bluetooth* Headset and transfer incoming calls to the headset.

Wireless

Radio transmission via the airwaves. Various communications techniques are used to provide wireless transmission including infrared line of sight, cellular, microwave, satellite, packet radio and spread spectrum.

