Bluetooth® Headset

VIM

a User's Guide

MODEL : VSH411

The headset described in this guide is approved to be compliant with the Bluetooth® Specification and its profiles.

Bluetooth™ is a trademark owned by Bluetooth SIG.

All brand names are the property of their respective owners.

FCC ID RPRVSH411

* Section 15.19 Labelling requirements

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.

* Section 15.21 Information to user

 The changes or modifications not expressly approved by

 the party responsible for compliance could void the user's

 authority to operate the equipment.

* IMPORTANT NOTE:
To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

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I. Introduction

The VSH411 headset is a wireless headset based on Bluetooth® technology.

Bluetooth® technology is a standard for short range radio communications. Your Bluetooth® phone and headset do not need to be in a line of sight. The two devices only need to be within a maximum of 10 meters of each other, although the connection can be subject to interference from obstacles, such as walls, or from other electronic devices.

The VSH411 is a Bluetooth® headset that supports two profiles: The Headset and the Hands-Free profile. It can be used with any compatible Bluetooth devices, such as mobile phones, PDAs, that support the Headset or Hands-Free profile. (Here, "Profile" means a set of Bluetooth commands that a Bluetooth device uses for controlling another Bluetooth devices.)
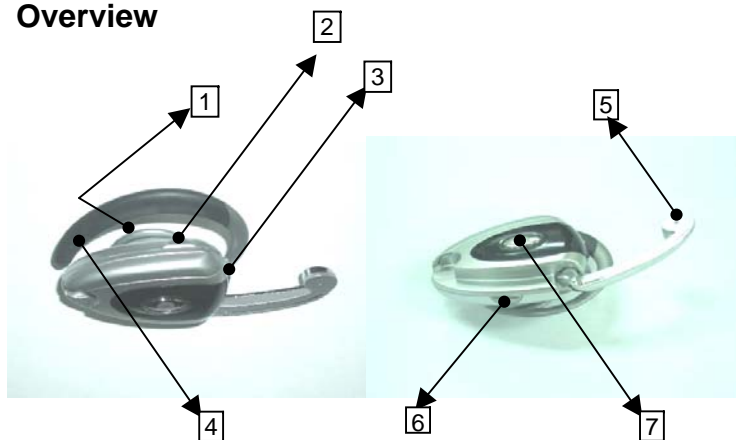
Your VSH411 will allow you to receive, make a call,

adjust volume, without touching your mobile device.

II. Getting started

In the package

The VSH411 Bluetooth® headset package contains :
the headset,
a charging cable,
two changeable upper deco housings in different colors
and this manual.

Overview

Earphone
Volume down button
Charger connector
Ear hook
Microphone
Volume up button
Talk / Power button and the LED indicator

Charging the battery

To charge the battery, simply connect the charger cable to the headset. And then, connect the charger to an AC wall outlet.
While charging, the LED indicator light is shown.

When the battery gets to a significantly low level, it starts to beep a low-battery tone periodically. Eventually the headset is turned off unless you charge the battery.

> *Notice : Right after you bought the headset, the battery charge would be low. Before using the headset for the first time, it is recommended for you to charge the battery.*

Wearing the headset

You can put on the VSH411 Bluetooth® headset on either ear.

To change the orientation of the earhook, detach the earhook from the body part. To detach it, hold the headset firmly and pull the earhook away from the post around the earphone. Turn it over and replace on that post.

To wear the headset, extend the earhook, then slide it over the top of your ear. Put the earphone bumper gently into your ear hole. Adjust your headset to your ear carefully so that you feel comfortable.

Switching the headset on and off

To switch on : press and hold the **talk/power** button for 2 or 3 seconds. The headset plays its booting melody and the green indicator light starts blinking

> *Notice : If battery level is too low to power on when you switched the headset on, it plays four tones in a row and will not be switched on. You should charge the headset and then, you can switch it on.*

To switch off : Press and hold the **talk/power** button for 5 seconds. The headset plays and the indicator light gone.

Taking the headset into use for the first time

Before you use Bluetooth® devices, both devices you are going to use should have datas such as Bluetooth® address, pass code. In other words, you must register devices to each other. This process is called **pairing**. Once you have paired two devices, you don't need to do this again until you want to use the headset with another device.

Switch on the headset

Press the **volume up** and **volume down** buttons simultaneously.

You can hear the headset plays its pairing tone. The LED indicator light blinks rapidly. Now, the headset is in the discoverable mode (This mode is also referred to as "pair-able" or "pairing" mode)

Make sure that your phone is switched on.

Enter your phone's Bluetooth menu and make sure that the Bluetooth feature is activated (Please refer to your phone's user guide).

Start to search for Bluetooth devices with your phone (Please refer to your phone's user guide).

The phone searches for all Bluetooth devices *within about 10 meters* and displays them as a list.

Select the VIM headset from the list.

Enter the **passkey of 0000** to associate("pair") and connect the phone to your headset.

Congraturations! The VSH411 Bluetooth® headset is now ready to use with your mobile device.

III. Using the headset

Making a call

Make a call using your mobile phone.

The voice is transferred to the headset by pressing on the **talk** button of your headset.

Redialing the last dialed number

While there is no active call, press the **talk** button briefly.

Voice Dialing

Check if your phone supports this function.

Voice tags must have been recorded in your phone.

When no call is in progress, press and hold the **talk** button for about one second until you hear the second beep (the first beep is played as soon as you press on the **talk** button).

Your phone's voice dialing function will be activated. You may hear some beeps which is played by your mobile

phone through the earphone of the headset. Say the desired name(voice tag) to the headset's microphone.

The device will dial the number associated with the voice tag.

Ending a call

To end a call, press the Talk button while there is an ongoing call.

Answering a call

Once you hear an incoming call ring in the headset, press on the **talk** button shortly.

Adjusting the earphone volume

Press the **volume up** or **volume down** button to increase or decrease the volume, respectively. A beep will be generated for each step.

> *Please note that this adjusts only the headset's earphone volume level, not the mobile phone's volume level.*

Transferring the call from the headset to the phone

Please refer to your mobile's user manual.

Transferring the call from the phone to the headset

While an ongoing call is in progress with your phone, press the **talk** button on your headset.

Be careful, pressing the **talk** button could end the call unless the call is on your mobile's side.

IV. For advanced users

Headset connection states

There is several states in the headset in accordance with its connection status to the phone.

In the "*waiting*" state, any paired device can connect to the headset. In this state, you can use "redial the last number" and "transfer the call to your headset" function with your headset.
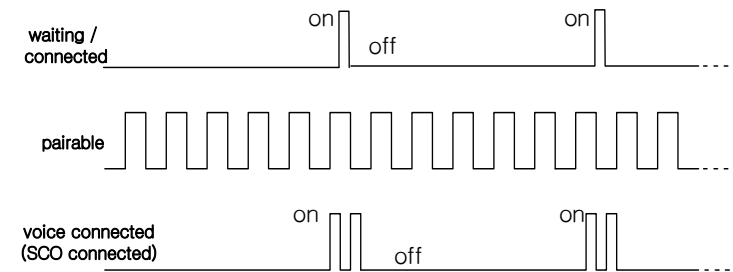
The "*connected*" state. This means the two devices are connected using the Bluetooth wireless technology. You can hear the ring tone, you can answer the call, you can make a call, voice dial. You can use full functions of the headset in this state. Basically, the headset functions were made up asuming that the headset is in this state.

The "*pairable*" state. With your mobile phone, you can search the VSH411 headset, pair with it.

The "*voice connected*" state is also called "*SCO connected*". This means an additional connection, which is a voice channel, is established. The phone's audio is redirected to your headset through the voice channel("SCO" channel of the Bluetooth).

The LED indicating light reflects the headset's connection state.

The first timing diagram is about both *waiting* and *connected* state. In this state, the LED will flash once every five seconds.

The second diagram, the *pairable* state. The LED will blink rapidly.

The last one, the *voice connected* state, the LED will flash twice every three seconds as depicted in the figure.

Connecting and disconnecting two devices

First, connecting. This can be done by using the respective function in your phone. Also, the headset can connect to its "default device" by pressing the **talk** button. But please keep this in your mind : in the latter case, the headset will try to redial the last dialed number after the connection is established.

So, it is strongly recommended that you should initiate the connection with your phone.

Now to the disconnecting method. You can simply switch off the headset. You can also disconnect the headset in your phone's menu. Of course, taking the headset out of phone's Bluetooth radiation range, 10 meters, can disconnect the Bluetooth link.

You can also get the headset to enter the pairable mode. Then the Bluetooth connection is closed and the headset entering the pairable mode.

More about pairing procedure

Before the headset can be used with your phone, the phone has to be paired with the headset. The headset can be paired with up to 3 phones. It can be ***connected to only one phone at a time***, however.

The phone which is last paired with the headset or connected to the headset is called the "default device". The headset acts as if it knows only one phone, the default device. So, user actions such as pressing on the button makes the headset connect to the default device.

To change the default device, you can pair the headset with another phone you want to make the default device. If the phone has already been paired with the headset, you simply need to connect to the headset from the phone. That will change the default device.

Removing all paired information from your headset

Push the **volume up** and **volume down** button

simultaneously while the headset is in its *pairable* mode. This will erase all the information about paired devices. You need to pair the headset with your phones again to use it with your mobiles.

V. Specification

item	value
Operating Temperature	0 ~ 60
Storage Temperature	-20 ~ 80
Power Consumption	Max 42mA
Operating Voltage	3.5Vdc ~ 4.2Vdc, 3.7Vdc normal
Standby Time	200 hours
Talking Time	3.3 hours
Carrier Frequency	2402MHz to 2480MHz(USA, Europe)
Modulation Method	GFSK, 1Mbps, 0.5BT Gaussian
Transmission Power	Typical 1.0 dBm
Frequency Hopping	1600hops/sec, 1MHz channel space
Bluetooth Core Spec	1.1
Supporte Bluetooth Profile	Headset, Handsfree