

## Windigo Products

Windigo Bluetooth(TM) Audio Gateway (Audio Only) User manual

Ver.1.1

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**windigo**  
S Y S T E M S

2210 O'Toole Ave #200  
San Jose, CA 95131

TEL : 408.576.1770  
FAX : 408.576.1790

[info@windigosys.com](mailto:info@windigosys.com)

<http://www.windigosys.com/>

**NOTE**

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. This equipment generates, uses and can radiated 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.

Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This statement will be placed in User Manual.

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.

## 1. Introduction

Bluetooth profile K-6 gives an implementation guideline for Bluetooth headset application, which includes two functions: Bluetooth headset and Bluetooth audio gateway. Generally headset profile will be implemented in headset, and audio gateway will be implemented in cellular phone, PBX or other communication devices. Windigo systems has developed a fully Bluetooth V1.1 compliant audio gateway module for these devices without embedded Bluetooth functionality.

This manual will explain the basic audio gateway operation instruction to our customers.

## 2. A glimpse at the headset

Figure 1 illustrates the reference audio gateway module design.



Figure 1. Windigo Bluetooth Audio Gateway Reference Design

The audio gateway (hereafter as AG) module includes a green LED, a red LED, a three-way button, an audio jack and one DC jack, these elements are illustrated in figure 2.

Both green LED and red LED are used to indicate various operation status for the AG module, such as pairing, connecting, talking...etc.

One push button is used to initialize various operations, such as activating the AG function, turning off the AG module, pairing, connecting, etc.

Audio jack is used to connect an external microphone and speaker.

Windigo Bluetooth AG module must be paired with Windigo Bluetooth headset before it is fully functional. Please refer to the Bluetooth headset user manual on how to initialize and operate the headset and its various functions.



Figure 2. Key elements on Windigo Bluetooth Headset

### 3. Getting start

Step 1:

Be sure the AG module is powered up properly, and headset battery is fully charged.

Step 2:

Be sure the AG module is in idle state; otherwise, follow bellow procedure to put the AG module into idle state.

- A. If blue LED flashing, press and hold the button for 3 seconds till the blue LED is off, this will put the AG module into idle mode.

Step 3:

Enter into pairing mode

While in this idle mode, both amber and blue LEDs are off. To enable the pairing mode, press and hold the talk button for about 3 seconds till both the blue and amber LED starts to flash alternatively, then release the button.

*Note:*

1. AG module can only be paired with Windigo headset
2. Pairing feature is used to establish the relationship between headset and audio gateway. Any given headset can only talk with the paired audio gateway after a successful pairing session.
3. Pairing mode can be cancelled by depressing the talk button for about 3 seconds, until both blue LED and amber LED are off. Then the audio gateway is put into idle mode again.

4. *Due to lack of display capability, so AG module will automatically paired with the first found headset. Make sure there is only one headset is in pairing mode.*

**Step 4:**

If AG module is paired with headset successfully, the AG module will connect to headset automatically whenever there is active incoming call or outgoing call. If the AG module connects to headset successfully, the blue LED will flash and amber LED will be off for normal operation. If battery runs low, then the amber LED will flash, and blue LED will be off.

**Step 5:**

If the AG module has been successfully paired with headset, then AG module is ready to use.

**4. Summary of the LED display**

No display

AG module is in idle mode

Flashing in blue at 3 seconds interval

AG module is in standby mode

Flashing in blue at 0.5 seconds interval while amber LED is off

AG module is in connecting mode (master mode)

Flashing alternatively for both amber and blue LED

AG module is in pairing mode

Flashing in blue at 1 seconds

AG module is in working mode. Voice connection is up

Note: When the battery runs low, all the LED indication will be displayed on amber color.

**5. Summary of button operation**

Press and hold for 3 seconds

When AG module is in idle mode, this will put AG module into pairing mode.

When AG module is in pairing mode, this will cancel the pairing mode and put AG into idle mode.

When AG module is in standby mode, this will put AG module into idle mode.

**6. Summary of status transition**

- ○ Both blue and amber LEDs are turned off
- ● Green LED and red LED flash alternatively
- ○ Red LED is turned off, and green LED flashes
- ● Red LED flashes, and green LED is turned on
- ○ Red LED is turned off, and green LED is turned on

Normally the AG module will stay in standby mode unless user initializes shutdown operation!

