Prime®

Mobile Voice WT01 Ver.3.1

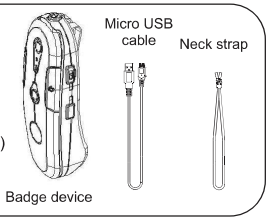
User's Manual

Thank you for purchasing Mobile Voice WT01.
To ensure safety, read this manual thoroughly before using this product. Keep this manual in a readily accessible place for future reference.

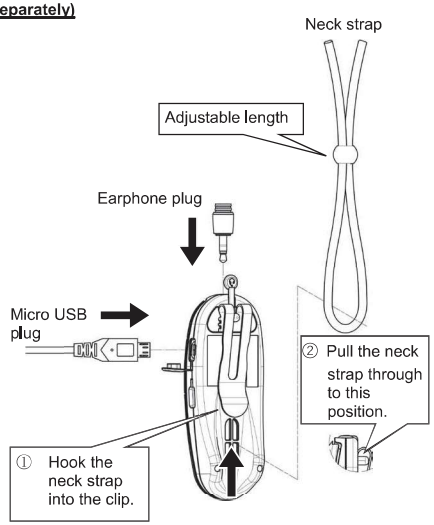
Package Contents

Confirm that your device comes with all of the items listed below:

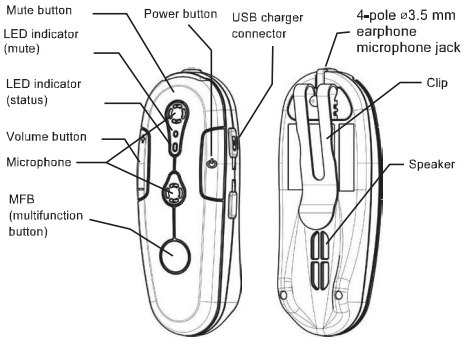
- Badge device..... 1 unit
- Micro USB cable.. 1 cable
- Neck strap ..... 1 strap
- User's Manual ... 2 sheets (4 pages)



How to attach accessories and ear phones (sold separately)



Part Names and Functions



MFB (multifunction button)	Used to receive/terminate calls and other functions
Power button	Turns the device ON/OFF or pairs with other devices
Volume button	Adjusts volume
Mute button	Mutes the microphone and speaker
LED indicator (status)	Red and green LED indicators indicate various device's status modes (power/pairing/music playback/charging)
LED indicator (mute)	Orange LED indicator for mute mode
Microphone	Directional microphone system consisting of two microphones
Speaker	Outputs telephone conversation or music
4-pole ⌀3.5 mm earphone microphone jack	Compatible with a 4-pole stereo mini-plug supporting CTIA standards • 3-pole stereo earphones may be used as well
USB charger connector	Connector for micro USB charging cable

How to Care

To clean the device, use a piece of dry cloth or tightly wrung cloth. If you wish to use an antiseptic solution, use ethanol or sodium hypochlorite solution (1.2%). Do not use chemicals such as thinners and detergents. They may cause discoloration or deformation.

How to Charge

Charge the device before use.

(1) Open the cover of the USB charger connector on the device and connect the micro USB cable.
(2) When charging begins, the LED indicator (status) will illuminate in red.
(3) When charging is complete, LED indicator (status) will illuminate in green.

- Depending on the remaining battery charge, it will normally take 2–3 hours to charge the device.
- This device may be used normally while charging. While charging, the LED indicator will indicate that the device is in charging mode. The LED indicator will revert to normal status when the charger cable is disconnected.

Caution

- Disconnect the charger cable when charging is complete. Disconnect the cable after three hours, even if the charging is not complete. Leaving the cable connected may result in overheating of the battery or charger, which may cause a fire.
- Charge the battery at ambient temperatures of 10C –40C. This device may be used normally while charging, though doing so may affect battery service life.

Main Functions

The main device functions are indicated below. Please see "List of Operations" for instructions on how to operate WT01.

▪ Voice input from microphone on the device
This is used for telephone conversations and speech recognition.

▪ Voice output from speaker
This is used for telephone conversations and music playback.

▪ Volume adjustment
This is used to adjust volume during telephone conversations or music playback. The volume for both the microphone and speaker can be set to 16 levels.

▪ Mute
Sound may be muted during telephone conversations or music playback. WT01 has 2 mute modes:
- ▪ Mute only microphone
- ▪ Mute both microphone and speaker

▪ Automatic power off
WT01 switches off automatically if pairing is not established within 2 minutes after initiating pairing mode or if the connection to the device is interrupted for more than 5 minutes during use.

▪ Display of remaining battery charge (Battery service)
If WT01 is connected to a device that supports BLE, the battery charge remaining for WT01 will appear on the connected device.

▪ Mode switching
The device features five modes, each with distinct functions. Please see "List of Operations" for descriptions of and procedures specific to each mode.

▪ Exchanging information with paired devices.
Use GATT/SPP (Bluetooth) communications to change the device's microphone or speaker volume from the connected devices.

● When paired with smartphones

▪ Telephone calls
This is used for various functions related to telephone calls. Calls can be accepted/terminated/canceled/declined.

▪ Voice dial
Use this to launch speech recognition applications. This feature may be unavailable, depending on the connected devices.

● When paired with PCs

▪ Use as an IP phone
The device can be used as a speaker microphone in combination with an IP phone. How the device is set for such use will depend on the connected PC and the software. Please refer to the user's manual for the connected device to adjust the settings required to use the device.

Pairing with Other Devices

Device name as displayed on connected device: [WT01-******]
(****** is a unique six-digit Bluetooth device address.)
PIN code (only when requested): [0000]

(1) If power is OFF, then long-press on the power button. The device will turn ON approximately in 1 second thereafter. Continue pressing for another 4 seconds to enter pairing mode. The LED indicator (status) will illuminate, alternating between red and green. (On shipment from factory or if the pairing history is cleared, the device will enter pairing mode immediately after it is turned ON.)

(2) Follow the instructions given in the user manual for the connected device (e.g., PC or smartphone) to carry out the pairing process.

(3) You will hear a beep when pairing is completed successfully, and the LED indicator (status) will blink once every two seconds in green. This signals the completion of the pairing process.

- If pairing fails to complete within two minutes after entering the pairing mode, the device will automatically exit pairing mode and power OFF.
- If a pairing attempt fails, turn power OFF and repeat the steps starting from (1).
- If you are connecting to devices that support Bluetooth 2.1 or later, you may skip the step for entering the PIN code (pass key) in some cases.

Auto Pairing
After the initial pairing, the device will connect automatically on startup based on the pairing history. The device will reconnect when pairing is enabled (please see unpaired state of "List of Operations" for more information), so there is no need to set to a pairing mode.

- The auto-pairing function will connect WT01 to the two most recently paired devices. To reconnect to a device paired before this, repeat the pairing process.

Caution

- Place the device near the device you wish to connect to. Make sure there are no intervening obstacles while pairing.
- Make sure no other Bluetooth devices are nearby while pairing.

Features

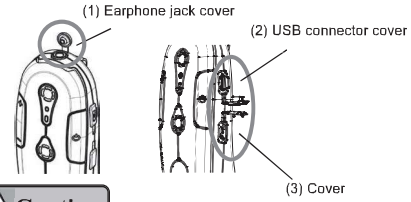
Directional microphone
The signal input through the microphone will be transmitted by Bluetooth to the connected device. WT01 microphone is directional and is more sensitive to sounds coming from the direction indicated by the arrow shown in the picture on the right. When using the device for making telephone calls, position it so that your mouth is in the direction shown.

- If an earphone microphone supporting CTIA standards is connected to the device, the voice signals from the earphone microphone will be the input. The microphone on the main unit will be disabled.

Caution

- While using the microphone, be careful to avoid blocking the two holes of the microphone with your hands or clothes. Blocking these holes will prevent the device from achieving optimal performance and adversely impact clarity and noise canceling effects.

Water Resistance
The device is splash-proof (to IPX4 standards). It can be used outdoors in very light rain.
The device incorporates three seals. To ensure optimal water resistance, make sure all are firmly seated and that there is no space between the seals and the main unit.



Caution

- Do not pour water directly onto the device or immerse the device in water.

List of Operations (Common to All Modes)

These operations are common to all modes.
Refer to the pages on the respective modes for operations not included on this list. For operations involving beeps and LED indicators, see the list of audio notifications and LED indicator messages.

In Mode 3, the MFB function is allocated to the mute button.
In Mode 5, the MFB function is also allocated to the mute button.

(Please refer to respective modes of "The Modes" for more information.)

Function/Status	Buttons used	Operations	Actions
Power ON	Power button	Long-press for approximately 1 second.	An audible notification will sound. Power will switch ON.
Power OFF	Power button	Long-press for approximately 1 second.	An audible notification will sound. Power will switch OFF.
Pairing mode	Power button	Long-press for approximately 5 seconds when power is OFF.	If you continue to press the button after the power is turned ON, a beep will sound, and the device will enter pairing mode.
Connection-enabled state (unpaired state)	-	-	A connection will be reestablished with the most recently connected device. A beep will sound once the connection is reestablished.
Adjust speaker volume	Volume button "+" or "–"	Short-press (continue pressing).	A beep will sound for each volume change. Continue pressing the button until it reaches a desired volume level. A different beep will sound when it reaches the maximum or minimum setting.
Adjust microphone volume	MFB and volume button "+" or "–"	Press simultaneously (continue pressing).	An audible notification will sound for each volume change. The notification will indicate the new microphone volume level.
Accept call	MFB (mute button in Mode 3)	Short-press on receiving a call.	A beep will sound. The call is initiated.
Terminate call	MFB (mute button in Mode 3)	Short-press for ending a call.	A beep will sound. The call is terminated.
Decline call	MFB (mute button in Mode 3)	Long-press for approximately 1 second on receiving a call.	A beep will sound. The call is declined.
Cancel call	MFB (mute button in Mode 3)	Short-press after dialing.	A beep will sound. The call is canceled.
Use voice dial	Volume button "+" and "–" (MFB also permitted in Mode 4)	Short-press simultaneously.	A beep will sound and the speech recognition application is launched. (This feature is disabled while in conversation or while receiving or making a call.)
Switch modes	MFB and mute button	Long-press simultaneously for approximately 5 seconds.	Initiating long-press will sound the notification for the current mode number. Continue pressing the button to switch modes and sound the notification for the next mode number.
Clear pairing history	Volume button "+" and "–"	Long-press simultaneously for approximately 5 seconds.	A beep will sound and the pairing history of the device will be cleared. Release the button to turn power OFF. (Note that the pairing history stored on the connected device side is not cleared.)

The Modes

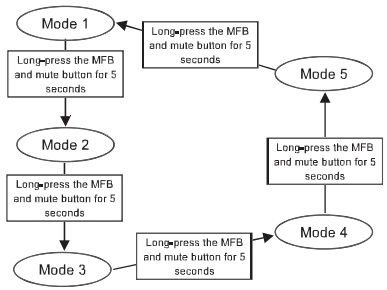
The device has five modes.

- Mode 1: GATT/SPP (Bluetooth) mode
- Mode 2: AVRCP (Audio/Video Remote Control) mode
- Mode 3: Push to Talk mode
- Mode 4: Voice Dial mode
- Mode 5: 2 button (MFB) mode

How to Switch Between Modes

(1) Long-press both the MFB and mute button simultaneously for 5 seconds.
(2) Approximately 1 second after pressing the buttons, a notification for the current mode number will sound.
(3) After you press the buttons for 5 seconds, a notification for the next mode number will sound.
(4) The mode switching process is complete when you hear the notification for the next mode number.

The mode will successively switch to the next mode.
If you wish to switch to a mode more than two modes apart — for example, from Mode 1 to Mode 3 — press the MFB and mute buttons simultaneously once again.



Mode transition diagram

Mode 1: GATT/SPP (Bluetooth) Mode

Mode 1: GATT/SPP mode is used to communicate between the device and connected devices using GATT or SPP.

Function/Status	Buttons used	Operations	Actions
Mute the microphone	Mute button	Short-press while using the microphone.	An audible notification will sound. Microphone input is muted.
Mute both the speaker and the microphone	Mute button	Long-press for approximately 1 second.	An audible notification will sound. Both the microphone and speaker are muted.
Unmute	Mute button	Short-press while in muted mode.	An audible notification will sound. Both the microphone and speaker are unmuted.

Mode 2: AVRCP (Audio/Video Remote Control) Mode

Mode 2: AVRCP mode is used to communicate using AVRCP.
This mode allows control during music playback, such as play and pause.

Function/Status	Buttons used	Operations	Actions
Play/pause music	MFB	Short-press while playing/pausing.	Starts/pauses music.
Fast forward	MFB	Continue pressing while playing.	Continue pressing on MFB to fast-forward music.
Skip to next track	MFB	Short-press twice consecutively.	Skip to the beginning of the next track.
Back to start	Power button	Short-press.	Back to the beginning of the track being played or to the previous track.
Mute the microphone.	Mute button	Short-press while using the microphone.	An audible notification will sound. Microphone input is muted.
Mute both the speaker and the microphone.	Mute button	Long-press for approximately 1 second.	An audible notification will sound. Both the microphone and speaker are muted.
Unmute	Mute button	Short-press while in muted mode.	An audible notification will sound. Both the microphone and speaker are unmuted.

Mode 3: Push to Talk Mode

Mode 3: In Push to Talk mode, the microphone mute setting will be set to default. You must press the MFB to unmute the microphone and allow voice input. Use the mute button to make calls or issue other commands. The speaker cannot be muted.

Function/Status	Buttons used	Operations	Actions
Unmute	MFB	Long-press.	The microphone is unmuted while the button is pressed down. You will not hear a notification.
Mute the microphone.	MFB	Release long-press.	The microphone reverts to the muted state. You will not hear a notification.
Accept call	Mute button	Short-press on receiving a call.	A beep will sound. The call is initiated.
Terminate call	Mute button	Short-press for ending a call.	A beep will sound. The call is terminated.
Decline call	Mute button	Long-press for approximately 1 second on receiving a call.	A beep will sound. The call is declined.
Cancel call	Mute button	Short-press after dialing.	A beep will sound. The call is canceled.

Mode 4: Voice Dial Mode

Mode 4: Voice Dial mode is used to launch the voice dial application with a single touch.

Function/Status	Buttons used	Operations	Actions
Voice dial	MFB	Short-press.	A beep will sound, and the speech recognition application will be launched. (This feature is disabled while in conversation or while receiving/making a call.)
	Volume button "+" and "–"	Short-press simultaneously.	
Mute the microphone.	Mute button	Short-press while using the microphone.	An audible notification will sound. Microphone input is muted.
Mute both the speaker and the microphone.	Mute button	Long-press for approximately 1 second.	An audible notification will sound. Both the microphone and speaker are muted.
Unmute	Mute button	Short-press while in muted mode.	An audible notification will sound. Both the microphone and speaker are unmuted.

Mode 5: 2 button (MFB) Mode

Mode 5: 2 button (MFB) mode is used to communicate between the device and connected devices using GATT or SPP.
The same functions are allocated to the MFB and mute button. Use either button to operate the device as a telephone. Different commands have been allocated to each button.

The muted mode is unavailable.

Function/Status	Buttons used	Operations	Actions
Accept call	MFB or mute button	Short-press on receiving a call.	A beep will sound. The call is initiated.
Terminate call	MFB or mute button	Short-press for ending a call.	A beep will sound. The call is terminated.
Decline call	MFB or mute button	Long-press for approximately 1 second on receiving a call.	A beep will sound. The call is declined.
Cancel call	MFB or mute button	Short-press after dialing.	A beep will sound. The call is canceled.

List of LED Indicator and Audio Notification Messages

Status	LED	Audio Notification
Power ON operation	Red and green LED indicators illuminate simultaneously.	Power ON, present mode (e.g., "One")
Power OFF operation	Red and green LED indicators illuminate simultaneously.	Power OFF
Unpaired state	Green LED indicator blinks once every half-second. (Blinking continues until the status changes.)	-
Pairing mode	Red and green LED indicators blink, alternating between each other. (Blinking continues until the status changes.)	Two tones (Up: E5 -> A5)
Pairing completed	Green LED indicator blinks once every 2 seconds. (Blinking continues until the status changes.)	Short tone (C5)
Connection established	-	Short tone (G5)
Receiving/making calls	Green LED indicator blinks once every 2 seconds. (Blinking continues until the status changes.)	Audible notification heard when receiving/making phone calls
Accepting calls	-	Two tones (Up: E5 -> A5)
Call in progress (an SCO link)	Green LED indicator blinks once every 4 seconds. (Blinking continues until the status changes.)	-
Call in progress (not an SCO link)	Green LED indicator blinks twice every 2 seconds. (Blinking continues until the status changes.)	-
Terminating calls	-	Two tones (Down: A5 -> E5)
Music play in progress (A2DP connection)	Green LED indicator blinks twice every 2 seconds. (Blinking continues until the status changes.)	-
Microphone mute ON	Orange LED indicator illuminates.	Mute
Speaker and microphone mute ON	Orange LED indicator blinks once every 2 seconds. (Blinking continues until the status changes.)	Speaker Mute
Mute OFF	Orange LED indicator is turned off.	Mute Off
Mode 1	-	One
Mode 2	-	Two
Mode 3	-	Three
Mode 4	-	Four
Mode 5	-	Five
Microphone volume	-	One to sixteen
Speaker volume	-	Short tone (minimum G4, maximum G#6, others G5)
Link interrupted (connection lost)	Orange LED indicator blinks twice every 2 seconds. (Blinking continues until the status changes.)	Disconnected
Low battery charge	The illuminated or blinking mode will remain the same, but the color will change to red.	Battery low
Charging	Red LED indicator illuminates.	-
Charging completed	Green LED indicator illuminates.	-
Clear pairing history	Red and green LED indicators illuminate twice simultaneously.	Two, low and long tone (G4) → Power OFF

Troubleshooting

- **Unable to turn power on**
  Is the battery charged adequately? The device will not turn on if the battery is empty. Charge the battery before use.

- **Unable to pair with Bluetooth devices**

(1) Is the Bluetooth function on the device to be connected activated?
(2) The pairing mode may have been terminated due to a time out. If so, repeat the pairing attempt.
(3) Is the profile of the device to be connected compatible with this product? (See the "Specifications" section.) If the profile is incompatible, the device cannot be paired with this product.
(4) Retry pairing after clearing the pairing history. (See the "List of Operations" section.)
(5) Clear the registration information on this product stored on the pairing list of the device to be connected, then retry pairing.

- **Unable to accept calls even after pressing MFB**
  For certain connected devices, you must press the MFB multiple times to initiate a call. Press MFB multiple times if you cannot take a call.

- **Obtrusive echoes (i.e. you can hear yourself while talking on the phone)**
  To minimize echoes, lower the volume of the speaker and microphone.

  Use earphones to reduce echoes.

- **Unable to adjust volume**
  Depending on the application running on the connected device, the volume adjustment feature may be unavailable.

- **Unable to input voice from the microphone**
  (1) Is the microphone in muted mode? If so, voice input is disabled. Unmute the microphone.
  (2) For certain connected devices, the microphone settings must be made manually. If so, activate microphone input according to the user's manual for the connected device.
  (3) Adjust the orientation and distance of the microphone as well as the microphone volume setting. Direct the microphone toward your mouth and position closer to your mouth if it is too far away.

- **Obtrusive noise/interrupted calls**
  (1) Are there any devices nearby like microwave ovens or devices that use the 2.4 GHz band and may generate electromagnetic disturbances?
  (2) Check to see if the connection between the device and the connected device was interrupted or dropped. If so, an audible notification indicating the disconnected status will sound at regular intervals. Connections will tend to drop more often if the device and the connected device are too far apart. If so, move the devices closer together.
  (3) Obstacles between the device and the connected device may generate noise. Place them at positions where obstacles will not affect the connection.

Specifications

Bluetooth specifications

Bluetooth version	Ver. 4.0
RF characteristics	Class 2
Compatible profiles	HSPv1.2/HFPv1.6/A2DPv1.2/ AVRCPv1.5/ GATT/SPPv1.0
Carrier frequency	2.4 GHz band
Spread-spectrum method	FHSS

Acoustic specifications

Microphone specifications

System	Dual directional microphone array
Directional characteristics	Hypercardioid
Sensitivity	-13 dB FS (94 dB SPL, at microphone volume of 10) Can be changed on 16 levels
Band frequency	Compatible with wideband speech
Maximum input SPL (sound pressure level)	110 dB SPL (1 kHz)

Speaker specifications

Maximum output SPL	89 dB SPL (at 10 cm, 1 kHz)

Electrical specifications

Battery	lithium-ion polymer battery
Duration of continuous operation	8 or more hours
Duration of continuous standby	100 or more hours
Time required for charging	2–3 hours
Voltage/current required for charging	5 V/150 mA
Operating temperature	–20°C to 50°C
Storage temperature	–20°C to 60°C
Dimensions (W/D/H)	38 mm × 100 mm × 26.3 mm
Weight	52 g (main unit only)
Water resistance	IPX4 equivalent

- Product specifications and design are subject to change without notice.
- This does not constitute a guarantee that this product will connect to and function with all Bluetooth devices. Its performance may be affected by connected device.

Safety Instructions

This manual contains information to ensure safe use of this product and minimize potential injury or damage.

⚠Warning Failure to observe the precautions indicated by this icon during handling and use of the product may result in mild to moderate injury to the operator or third parties.

⚠Caution Failure to observe the precautions indicated by this icon during handling and use of the product may result in product malfunctions or impaired performance.

⚠Warning

- Keep water and foreign materials out of the product.
- Do not modify or disassemble the product or remove or replace the internal battery.
- Keep the product and all accessory parts out of reach of children and pets.
- Do not use with any batteries other than the internal battery. Failure to observe this precaution may result in explosions or fire or generate smoke or gas.
- Store the product in a dry place away from direct sunlight. Large temperature fluctuations in the storage area may result in condensation, which may lead to malfunctions.
- Maintain a distance of at least 10 cm from pacemakers and implanted defibrillators.
- To prevent hearing damage, avoid using the product at loud volume settings for prolonged periods.
- Check volume settings before putting on earphones. Failure to check the settings may result in sudden exposure to loud sound volumes that may damage your ears.
  Avoid using the product for prolonged periods. Doing so may cause unexpected hearing damage.
- Discontinue use immediately if you detect odor, smoke, or other abnormalities.
- Observe all local laws and regulations regarding use of the product while driving. Wearing earphones on both ears will muffle sound from the surroundings. Riding bicycles or driving a motorized vehicle in this condition may lead to major accidents. Wearing earphones on both ears while driving is prohibited by law in many countries and regions.
- Do not use the product in areas where use of radio equipment is prohibited.

⚠Caution

- Do not drop the product or expose it to strong impact.
- Charge the battery at ambient temperatures of 10°C–40°C. We recommend against using the device as it charges; doing so may affect battery service life.
- To prevent battery degradation, recharge the battery regularly, even when the product will not be used for extended periods of time. Recharge the battery at least once every three months.
- All countries apply different safety standards. The product is not intended for use outside Japan or United States of America.
- Follow the regulations established in each region when disposing of the product. The product contains a lithium-ion polymer battery.
- Do not use while in motion in outdoor settings.

Warranty

In the event of a defect in materials or workmanship during the warranty period, we will repair or replace the product, based on the following warranty provisions:

Warranty Terms

1. The warranty period is 1 year from the date of purchase.
2. If a product defect emerges within the warranty period and under conditions of correct use in compliance with the User's Manual, our company, at our discretion, will either repair or replace the product.
3. The warranty shall not apply in the following cases even during the warranty period:
   (1) Defects arising from improper use or inappropriate handling
   (2) Defect or damage attributable to dropping or transporting of the product after purchase
   (3) Defect arising from natural disasters, abnormal voltage, or immersion in water
   (4) Defect arising from disassembly or modification

On registered trademarks

Rights to the Bluetooth® term and logo are owned by Bluetooth SIG, Inc.

Bluetooth®

Precautions Regarding Radio Waves and FCC Rules

This product uses radio waves in the 2.4 GHz band. The 2.4 GHz band is used by wireless communication devices such as wireless LANs, industrial devices such as microwave ovens, scientific devices, and medical devices, as well as by local area wireless base stations to identify mobile equipment used in manufacturing lines that require licenses to operate, and by other wireless base stations that do not require licenses, such as specified low-power wireless base stations and amateur radio stations.

- Before using the product, confirm that there are no local area wireless base stations used to identify mobile equipment or specified low-power wireless base stations operating in the vicinity.
- If you happen to experience interference from local area wireless base stations used to identify mobile equipment, immediately move beyond the range of the station or turn the product off.
- Never disassemble or remodel this product.
- Contact us if you encounter radio interference from specified low-power wireless base stations used to identify mobile equipment during the use of the product or other difficulties.

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.

FC

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 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.

Primo MICROPHONES INC

Mobile Voice WT01

Responsible party name：Primo Microphones Inc.
Address：1805 Couch Drive, McKinney, Texas 75069, USA
Phone：972-548-9807 FAX：972-548-1351

Manufactured by Advanced Media, Inc.