BT3080 User Manual

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1. GENERAL DESCRIPTION

BT-3080 Bluetooth universal headphone supports 4 Bluetooth profiles and they are:

- ④ BT-3080 supports headset and hand-free profiles to work as a wireless headset with mobile phones or VOIP to manage phone call.
- ④ BT-3080 supports advanced audio distribution profile (A2DP) to work as a wireless headphone with MP3 phones, MP3 players or computers.
- ④ BT-3080 supports audio video remote control profile (AVRCP) to work as a wireless remote control.

BT-3080 is an light weighted dynamic supra-aural wireless ear loop type mini headphone. Its 27 mm speakers are tuned to emphasis bass to provide better listening experiences for pop and rock music. BT-3080 is extremely portable and one of the smaller of its kind. Tecom's BT-3080 Bluetooth universal headphone mini is an all-in-one mobile accessory that come in an miniature package.

2. TYPICAL APPLICATIONS

- ④ Wireless headphone
- ④ Wireless mobile phone headset
- ④ Wireless VOIP headset

3. General Specifications

| Bluetooth Standard: | Bluetooth V2.0 Qualified |
|---------------------|--|
| Range: | Up to 10 meters (66 feet) in open space |
| Listen Time: | Continuous music play time (A2DP) up to 10 hours |
| Talk Time: | Continuous talk time (hand-free, headset) up to 12 hours |
| Stand-by Time: | Up to 250 hours |
| Speaker: | 27 mm Neodymium |
| Battery type: | 250 mAh Lithium Polymer |
| Charge | 2.5 hours |
| Others: | ④ Noise reduction with DSP technology |
| | ④ Remember last 5 paired devices |
| | USB charging capability |
| Dimension | Diameter: 40 mm |
| | Thickness: 18 mm w/o ear cap, 23 mm w/ ear cap |

4. USER INTERFACE



Figure 4.1 Left Ear User Interface

- 1. Play/Pause/Call Multiple Function Button
- 2. Bluetooth Status Blue LED
- 3. Next/Previous button
- 4. Microphone Boom





Figure 4.2 Right Ear User Interface

- 1. On/Off switch
- 2. Mini USB port for charging and firmware upgrade
- 3. Charging indicator LED

| TABLE 4.1 | BT3080 | USER | INTERFA | CE |
|-----------|--------|------|---------|----|
|-----------|--------|------|---------|----|

| Placement | Description | Abbreviation | |
|-----------|---|--------------|--|
| | Button | | |
| Right ear | Power On/Off Button | Power | |
| | Forward Button | Next | |
| | Backward Button | Prev | |
| | Multi-functions :Pairing/ Play/ Pause/ Stop/ Call | ME | |
| | Answer/ Call End | IVIE | |
| | Vol+ Button | Vol+ | |
| | Vol- Button | Vol- | |
| | LED | | |
| Right ear | Charging Indicator | O (Orange) | |
| Left ear | Red LED: Mute/ Low battery/ Pairing | R (Red) | |
| | Blue LED: Power on/ Mono or Stereo active | B (Blue) | |

TABLE 4.2 BT-3080 LED STATUS

| State | LED on | LED Repetition | I ED Mapping |
|----------------------------------|------------|---------------------|----------------|
| outo | (ms) | Cycle Time (ms) | |
| Turn off | 0 | 0 | All LED go off |
| Turn on/ Connectable | 100 | 10000 | Blue |
| Pairing/ Incoming/ Outgoing call | 100 | 600 | Red & Blue |
| Stereo active | 100 | 6000 | Blue |
| Connected to phone | 200 Note 1 | 10000 | Blue |
| Mono active | 100 | 3000 | Blue |
| Microphone Mute | 100/100 | 6000 | Red |
| Low battery warning | 300 Note 2 | 10000 | Red |
| Charging | Steady ON | OFF | Orange |
| Charging | Sidduy ON | (when fully Charge) | Crange |

- % Note 1: Flash 2 times every 10 seconds
- % Note 2: Flash 3 times every 10 seconds

| Function | Action | Button |
|-----------------------------|---------------|---------------|
| Turn on HS | Switch to ON | Power |
| Turn off HS | Switch to Off | Power |
| Activate pairing | 5s Hold | MF |
| Call answer | One press | MF |
| Call reject | 1s Hold | MF |
| Call end | One press | MF |
| Outgoing call cancel | 1s Hold | MF |
| Volume up | One press | Vol+ |
| Volume down | One press | Vol- |
| Mute – microphone | 2s Hold | Vol+ and Vol- |
| Initiate last dialed call | 1s Hold | Next |
| Initiate last received call | 1s Hold | Pre |

TABLE 4.3 BT3080 PHONE CALL MMI

TABLE 4.4 BT-3080 REMOTE CONTROL MMI

| Function | Action | Button |
|----------|-------------|--------|
| Play | Press once | MF |
| Pause | Press once | MF |
| Stop | Press twice | MF |
| Forward | Press once | Next |
| Backward | Press once | Pre |

5. ELECTRICAL SPECIFICATIONS

TABLE 5.1 BT3080 POWER CONSUMPTION

| Mode | Average | Unit |
|--|---------|------|
| Standby | 0.8 | mA |
| Inquire scan, 1.28 sec. interval | 18 | mA |
| Page scan, 1.28 sec. interval | 20 | mA |
| ACL connection, sniff mode, 40 ms interval | 0.8 | mA |
| SCO connection (Mono) | 22 | mA |
| Streaming music @ 44.1KHz sample rate (Stereo) | 25 | mA |

TABLE 5.2 BT3080 BATTERY LIFE

| MODE | LIFE |
|-------------------------------|-----------------|
| Battery Type | Lithium Polymer |
| Battery Capacity | 250 mAh |
| Charging Current | 125 mAh |
| Charging Time | 2.5 hours |
| Stand-By Time | Up to 270 hours |
| Stereo Mode (Audio Streaming) | Up to 10 hours |
| Mono Mode | Up to 12 hours |

TABLE 5.3 BT3080 RF Specifications

| Description | Min. | Тур | Max. | Unit |
|--|------|-----|------|------|
| Frequency specification | | | | |
| Frequency range | 2402 | | 2480 | MHz |
| Modulation characteristics | | | | |
| Δf1 (ave) | 140 | 155 | 175 | MHz |
| $\Delta f2 (max)$ | 115 | | | MHz |
| ∆f1 (ave)/ ∆f2 (ave) | 0.8 | | | |
| Initial carrier frequency accuracy | -75 | | +75 | KHz |
| Carrier frequency drift | | | | |
| One slot packet | -25 | | +25 | KHz |
| Five slot packet | -40 | | +40 | KHz |
| Max drift rate (KHz/ 50us) | | | 20 | |
| Transmit specification | | | | |
| Tx power (for Class 2) | -2 | 0 | +2 | dBm |
| Tx power (for Class 1) | 15 | 17 | 19 | dBm |
| 20dBc occupied bandwidth | | | 1 | MHz |
| In-band spurious emission | | | | |
| 2MHz offset | | | -40 | dBm |
| >3MHz offset | | | -60 | dBm |
| Out-band spurious emission | | | | |
| 30MHz to 1GHz operating mode | | | -55 | dBm |
| 1GHz to 12.75GHz operating mode | | | -47 | dBm |
| 1.8GHz to 1.9GHz | | | -60 | dBm |
| 5.15GHz to 5.3GHz | | | -47 | dBm |
| Receive specification | | | | |
| Receiver sensitivity (BER < 0.1%) | | -79 | | dBm |
| Max usable signal level | -10 | | | dBm |
| Co-channel interference | | 8 | 10 | dB |
| Adjacent channel interference | | -4 | -3 | dB |
| Adjacent channel interference (2MHz) | | -38 | -35 | dB |
| Adjacent channel interference (\geq 3MHz) | | -43 | -40 | dB |
| Intermodulation | -39 | -36 | | dBm |
| Receiver spurious emission | | | | |
| 30MHz to 1GHz | | | -57 | dBm |
| 1GHz to 12.75GHz | | | -47 | dBm |

6. ACOUSTICS SPECIFICATIONS

| SPEAKER TYPE | | |
|----------------------------|---|--|
| Size | 27 mm Neodymium | |
| SPEAKER FREQUENCY RESPONSE | | |
| Telephony | 300 Hz to 4 kHz (CVSD u-Law) | |
| Stereo Audio | 20 Hz to 20 kHz (16 bit 48kHz SBC Coding) | |
| Distortion | <3% | |

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.

Notice : 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.