# Digital

# *Wireless Portable Sound System*

GPA-580 Series

DIGITAL WIRELESS PORTABLE SOUND SYSTEM

[ **User Manual** ]

## Preface

Thank you for the purchase of Digital Wireless Portable Sound System, GPA-580. This manual provides comprehensive instructions and operations. Please read it over before your operation on the unit.

All peripheral and accessories are subject to order. Components in the package might be different by demand.
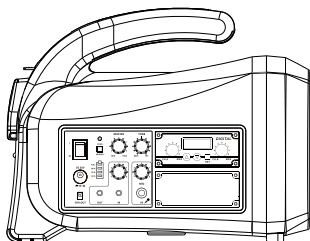
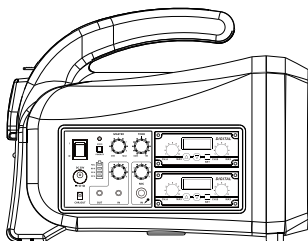## Contents

# Product Mix

## GPA-580D1

Wireless Portable Sound Systems,
1 receiver  built-in

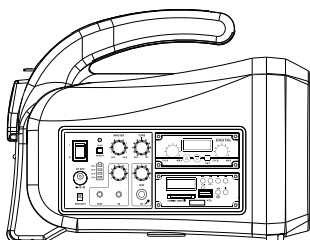## GPA-580D2

Wireless Portable Sound Systems,
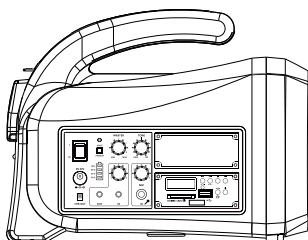2 receivers  built-in

## GPA-580DU

Wireless Portable Sound Systems,
1 receiver and 1 audio player built-in

## GPA-580U

Portable  Powered Speaker,
1 audio player built-in

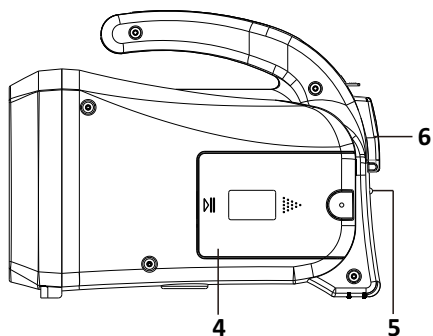## GPA-580DX1

Wireless Portable Sound Systems,
1 receiver and 1 bluetooth module built-in
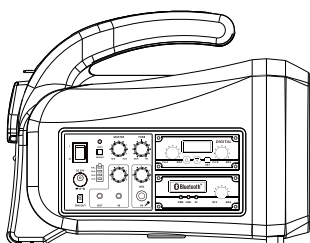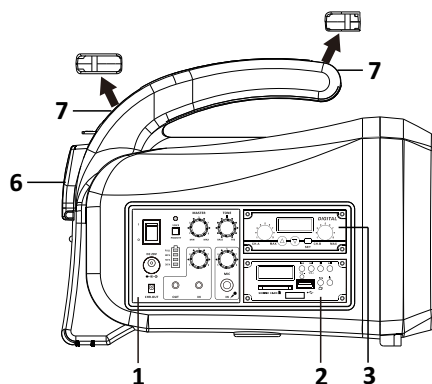
1. Controls, battery meter, mic in
2. Receiver DR-600
3. Digital audio player UM-502
4. Battery door

5. LED indicator (EJ-601TM)
6. Drop in charger (EJ-601TM)
7. Strap buckle

## Battery replacement



Lithium battery

Get screws off

Take battery out

Get connection right –
RED for Anode;
BLACK for Cathode
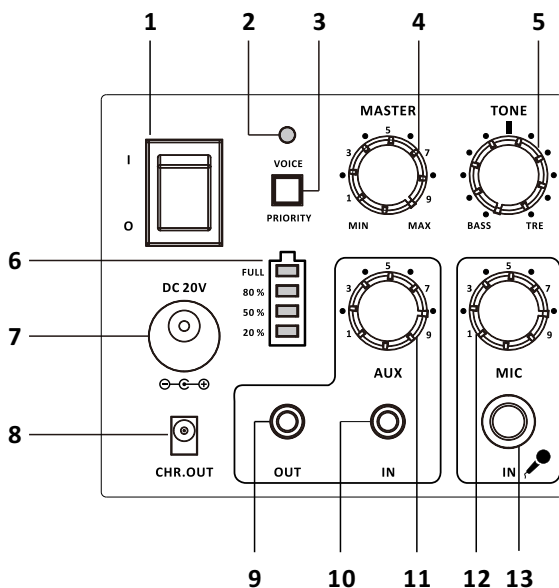
**1. Power switch**
**2. Voice priority indicator**
**3. Voice priority:** when it is activated, an indicator (2) will light up.
**4. Master**
**5. Tone**
**6. Battery meter**
**7. DC IN**
**8. 5V charger (for EJ-5T)**
**9. Aux out, ∅ 3.5mm**
**10. Aux in, ∅ 3.5 mm**
**11. Aux in control**
**12. Mic (wired) in control**
**13. Wired mic input**

1. LCD display
   (channel number/
     signal strength/
     A channel battery meter)
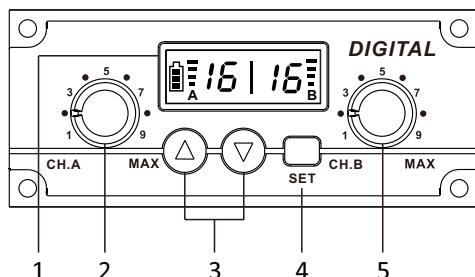2. A channel volume
3. Channel selection
4. Set key
5. B channel volume

## ▉ Operation

### Power on and Off

1. Receiver module powers on along with the PA, LCD displays On, and after 1 to 2 seconds, screen displays channel number.

2. Receiver module powers off along with the PA, LCD displays Off, after 2 to 3 seconds the display shuts off.

### Channel changing

1. Hold on SET key to enter channel changing mode, once the channel number on the display starts to flash, you may use the up and down key to select channel.

2. After confirm the channel, press SET key again, or it also auto confirms without pressing any keys for less than 10 seconds.

### Operating range Hi/Low setting

1. In off mode, press SET key and power on the PA to enter the setting mode.

2. Now the screen flashes Hi or Lo, press up and down key to switch in between.

3. Press SET key again to confirm, or it also auto confirms without pressing any keys for less than 5 seconds.

**Setting channel synchronization**

a. When both microphones are set as Master:
  1. First powered on microphone will be set as channel A, and the second is channel B.
  2. When channel A microphone is shut off or out of signal for more than 5 seconds, B channel microphone auto switches to channel A.
  3. Both channels A and B need to be within the range of 15 meters when power on.

b. When the microphones are assigned as Master and Slave:
  1. Preset Master microphone will be identifying as channel A, and the slave will be channel B.
  2. When channel A microphone is shut off or out of signal for more than 5 seconds, B channel microphone auto shuts off.
  3. Only when microphone is set to salve and push to talk mode, the synchronization is at full range. The other modes are set within 15 meters.
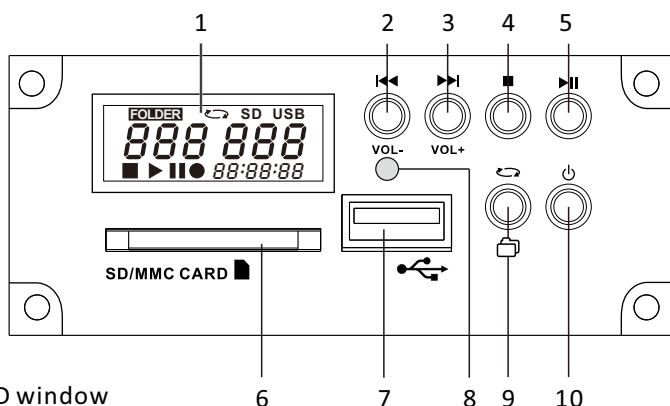
1. LCD window
2. Previous track / volume down
   (works during playback)
3. Next track / volume up
   (works during playback)
4. Stop
5. Play / Pause
6. SD/MMC port
7. USB port
8. Sensor
9. Repeat / Folder select
10. Power
11. Volume down (MUTE when in minimum level)
13. Volume up
13. Mute
14. Folder select
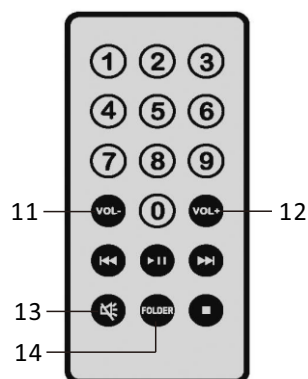
## ■ Operation

1. Press and hold (10) for 1 second to turn this player on. Press and hold (10) for 1 second to turn it off.
2. Press (2) to play previous audio track; press (3) to play next audio track. Press (4) to stop any playback.
3. Press (5) to Play or to Pause any audio track.
4. When both SD card and USB are installed, USB has higher priority to be readout.
5. Do not pull SD card out directly or it might be damaged. Just push it a bit forward and it will be ejected.

6. Repeat / Folder Select:

    a. There are 3 modes for repeat during audio playback.

- ↻ ：To repeat a track.

- ↻↻ ：To repeat all tracks in all album.

- ↻ ：To repeat all tracks in a single album.

    b. When not in playback, press (9) to select a desired folder/album with NEXT, PREV buttons. Finally press PLAY to end the setting.

7. During playback, press VOL+ to increase volume; press VOL- to decrease volume.

## Illustration

1. Power indicator
2. Bluetooth connectivity indicator
3. Audio frequency indicator
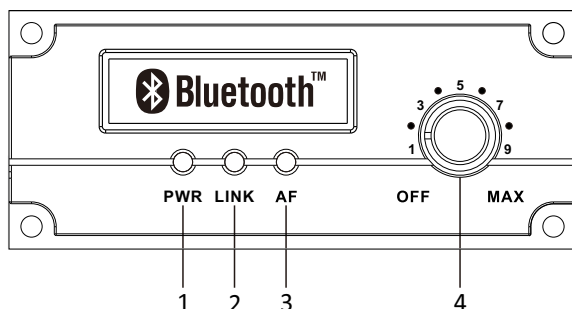4. On/Off/Volume switch

## Operation

1. Switch it on clockwise to activate Bluetooth function.
2. A prompt tone will come out and the PWR indicator will light blue. LINK indicator will flash blue as a sign of pairing in action.
3. When in pairing mode, activate Bluetooth connection on your smartphone or any target device you want to do so. Find a device name of "okayo GPA" on pairing list and get your smartphone connected.
4. When the pairing is done successfully, it will come out with a prompt tone again. The button will light steady blue.
5. You are ready to stream the audio via Bluetooth from your smartphone . You can adjust the audio volume on smartphone or through the volume switch of Bluetooth receiver.
6. AF indicator will light green when audio signal is received by Bluetooth receiver.
7. During Bluetooth connection, it will stop audio playback when a call is made to your smartphone . When the call is finished, Bluetooth will be relinked automatically and audio files will be played.
8. When Bluetooth connection is out of range between this Portable PA and smartphone, it could be relinked automatically if users get back to service range shortly. However, it depends on applied OS platform of the smartphone. In some cases, you get to manually connect Bluetooth again.
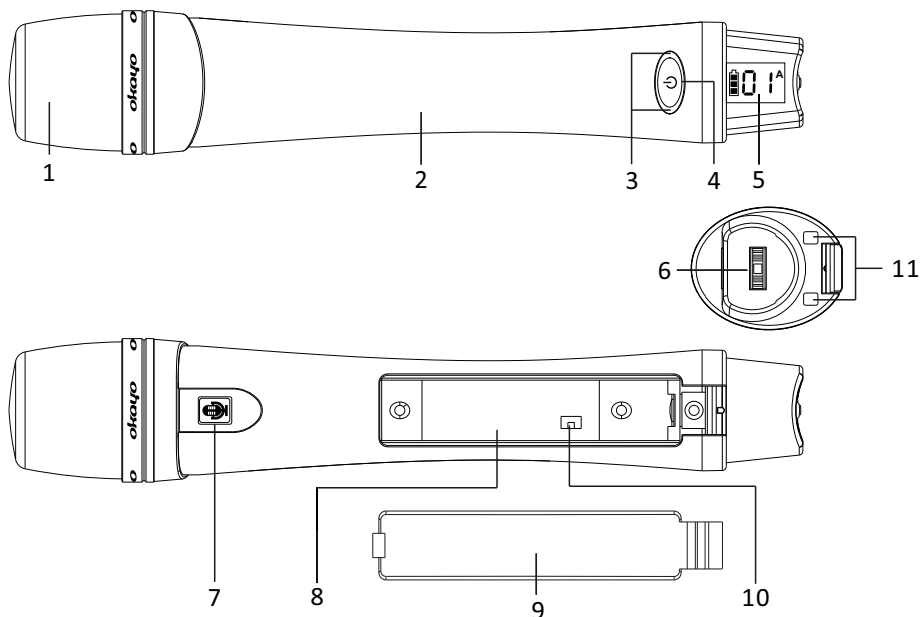
1. Mesh head
2. Handheld tube
3. Power indicator
4. Power button
5. LCD display
6. setup wheel
   (Press to set, scroll up and down to adjust)

7. Talk/Mute button
8. Battery holder
9. Battery door
10. Maser/Slave mode switch
11. Charging contacts

## Insert battery

Open battery door and insert 2 AA 1.2 V (Ni-MH 1600mAh) or 2 AA 1.5 V Alkaline batteries. Make sure the batteries are allocated in correct direction.

## ■ Handheld method

Do not block bottom signal source.



## ■ Operation and Setup

### Power On
Insert battery and press power button to turn on, power indicator (3) lights on.
Blue light means battery power is efficient and red means insufficient.

### Volume adjustment
Press setup wheel (6) then scroll up and down to adjust volume.

### Master/Slave mode setup
After battery is taken off, you can see master/slave mode switch(10).

- When set to Master mode, the default channel will be A CH, when A CH is occupied, the channel will switch to B CH
- When set to Slave mode, the default channel will be B CH, and it will always stay in B CH.

### Under "Talk" mode:
Green microphone icon - Talk; Red  microphone  icon - Mute

### Under "Push" mode:
Green microphone icon - Talk; Flashing  red  microphone  icon - Mute

### Push Talk mode
1. Press mute (7) to talk.
2. Let go mute (7) to mute.
3. It does not support more than 3 microphones.

### Channel synchronization

- The microphone will automatically sync when powered on.
- When syncing successfully, mute key lights in blue and channel number shows. If syncing failed, then mute key lights in red and no channel number display.
- When microphone is set to slave mode:
  1. B CH only functions when A CH exists.
  2. When A CH is in use, you will not be able to talk.
  3. When A CH gets shut down, B CH also automatically shuts down.
- Requires within 15 meters.
- If idle more than 30mins, then microphones shuts off.

### Power Off

Hold on to power key (4) for more than 2 seconds to shut off.

### Charging

You may charge the microphone with rechargeable batteries by HDC-502/503(purchase separately).
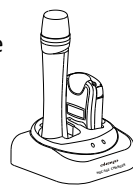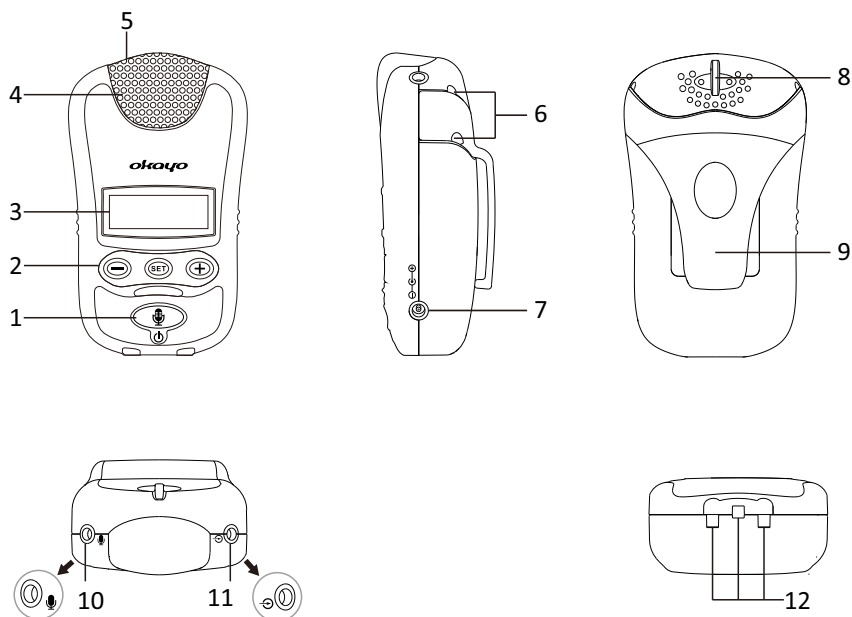
HDC-502      HDC-503

**CAUTION!!**

※ *DO NOT attempt to charge Alkaline battery. It will lead to battery leakage or even explosion!*
※ *Take out batteries when the devices won't be operated in a long time.*

1. Power/Mute switch
2. Volume control
3. LCD window
4. Mesh Head

5. Charging indicator
6. Neck strap hole
7. DC input
8. Strap hole

9. Belt clip.
10. Mic in
11. AUX in
12. Charging terminal

## Operation and Setup

### Power ON

1. Press power key (1) to power on.
2. Once powered on, the channel selection blinks and standby for pairing. Once paired successfully, battery meter, channel number and Ch. A or Ch. B display on the screen.
3. When the device idle more than 30 minutes without paring, the device shuts off.

### Power OFF
1. Press and hold for two seconds to turn the device off.
2. OFF display on screen and all indicators turned off.

### Mute / Talk switch
1. Press Mute switch (1) to switch between mute and talk mode.
2. Talk mode lights in blue and mute mode lights in red.

### Channel synchronization
- The pendant microphone will automatically sync when powered on.
- When syncing successfully, mute key lights in blue and channel number shows. If syncing failed, then mute key lights in red and no channel number display.
- When microphone is set to slave mode:
    1. B CH only functions when A CH exists.
    2. When A CH is in use, you will not be able to talk.
    3. When A CH gets shut down, B CH also automatically shuts down.
- Requires within 15 meters
- If idle more than 30mins, then microphones shut off.

### Charging mode
1. LED lights red when charging.
2. LED lights green when battery is fully charged.
3. When device is slot into a charger stand, will off the power.
4. Battery error: LED status lights red and flashes when charging, LCD battery symbol lights flashes, and it caused by:
    (1)The battery charge temperature is exceeded 60 °C.
    (2)The duration of charging time for charger stand is exceeded seven hours.
    (3)The battery is defected.

### Master/Slave mode
1. When the device is turned off, press SET key (2) then power key (1) to enter set up mode.
2. When the screen blinks with "Master" or "Slave", press $\oplus$ or $\ominus$ (2) to switch mode.
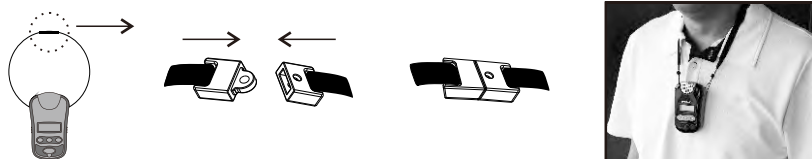3. Press SET (2) to confirm and exit or it auto confirms within 5 seconds.

**Volume switch**

● LCD screen will display current used volume level when press ⊕ or ⊖ (VOL. 1 ~ 3).

**Reset**

● Press ⊕ and ⊖ (2) then press power key (1) to power on to enter RESET mode. The default value is Volume 2, and Master/Slave does not affect by RESET mode.

**Method to install neck strap**



※ **The best distance is 10 CM between pendant microphone and user's chin.**

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**CAUTION!!**

※ *To maintain battery life, please charge fully after use every time, or every 3 months.*

※ *If battery require replacement, please pass to professional technician to do so.*

## Caution

- DON'T operate the device in the rain or in humid circumstance to prevent failure.
- Prevent the device from dropping.
- Apply factory recommended power supply to this system only. It is dangerous and risky when employing a not qualified power.

## Troubleshooting

### Failed to Power On
- Be sure batteries are allocated and put in correct direction.
- Be sure power adapter is plugged well.

### No Sound Output
- Be sure transmitter and receiver stay at same channel.
- Be sure volume control on transmitter and receiver are turned properly.
- Be sure Master is turned properly.
- Be sure Mute button is not on.
- Check if transmitter and receiver stay at same frequency band.
- Check if there is huge air interference nearby.

## Maintenance

### ▢ Avoid heat, humidity

DO NOT put the unit in the sunshine for a long time, or any other hot, humid environments or places with flame. Stay away from any occasions where situation mentioned above might occur. Store the unit in general indoor temperature or in cool circumstance.

### ▢ Charge BEFORE you start using for the fist time

After unpacking the unit for the first time, please charge the unit for about 8 hours. This is absolutely necessary as the built-in rechargeable battery might have been discharged naturally due to long transportation and storage time, even though it has been fully charged in the factory prior to shipment. To secure a longer life for battery, please MUST execute this IMPORTANT process.

### ▢ Charge fully

Ensure battery is fully charged BEFORE you store the unit. To remain a longer battery life and better performance, make sure you charge the battery regularly every month.

☞ **When you need to use the unit again after a long period of stogare,make sure you charge if fully for at least 8 hours BEFORE any operation.**

☞ **Please also charge this unit every time right after operation to secure a longer battery life.**

▢ This unit has DOD (depth of discharge) protection design. When Power Switch LED flashes red - which means there isn't enough electricity (when operating via the battery's power - this unit will turn off automatically in a short time secure battery from deep-discharging damage. At this moment please immediately recharge your unit, do not continue with operation.

▢ This unit has protection circuit against overcharge. The circuit will stop charging when battery is fully charged even power cord is plugged.
**Useful hint: You can still operate during charging.**

### ▢ Replacing battery

Make sure the substitute battery is in compliance with qualified specifications. Using incorrect battery may lead to explosion or malfunction.

## Remove battery from handheld microphone when you won't use it for a long while.

## Charging contacts

Clean charging contacts regularly to ensure good connection with charger. When any corrosion occurs, contact your dealer to change it if you can't repair it.

## Digital Wireless Portable Sound System  GPA-580

| | |
|---|---|
| Output power | 40 W (RMS) @ 4 Ω |
| Speaker | 5" Neo driver |
| Digital audio player | supports USB disk and SD card (optional) |
| Receiver | plug-in receiver with ACS (Auto Channel Synchronization), supports 2 receivers maximum. |
| Audio input | mic in (6.3mm); aux in (stereo mixed, 3.5 mm) |
| Audio output | aux out (stereo mixed, 3.5 mm) |
| Controls | Receiver, Master, Tone, Mic, Aux in |
| Power supply | AC switching power adapter 100 ～ 240 V, 20 V / 3.25 A |
| Battery | Lithium rechargeable battery |
| Charging time | 8 ～ 12 hours (battery dependant) |
| Running time | 3 ～ 6 hours (battery dependant) |
| Battery meter | FULL, 80%, 50%, 20% |
| Dimensions (DxWxH) | 333 x 153 x 246 mm |
| Weight | 3.1 kg (Lithium battery included) |

## Digital Wireless Receiver Module DR-600

| | |
|---|---|
| Carrier frequency | 2.4 ～ 2.5 GHz |
| Channels | 16 |
| LCD window | channel, frequency |
| Channel adjustment | Set up key, up and down key |
| Ambient temperature | -10 °C ～ +50 °C |
| T.H.D. | < 1 % |
| Pre-emphasis | 50 $\mu$ s |
| Frequency response | 70 Hz ～ 18 kHz |
| Wireless coverage | < 30 meters |

※ Specifications are subject to change

## Digital Audio Player UM-502

| | |
|---|---|
| Frequency response | 20 Hz ∼ 20 kHz |
| Power requirement | DC 12 V |
| Display | backlit LCD |
| Output level | 600 mV |
| Format supported | MPEG Layer 3 |
| S/N ratio | > 60 dB |
| T.H.D. | < 1 % |
| Remote range | > 3 m |
| Controls | Play, Stop, Repeat, Next, Prev. |
| External audio supported | USB disk, SD card |

## Digital Pendant/Bodypack Transmitter EJ-6T

| | |
|---|---|
| Microphone capsule | condenser |
| Antenna | internal |
| RF output power | Max 10 dBm |
| Audio input | Mic in, Aux in |
| Mic in jack | 3.5 mm |
| Audio control | Mute, Hi/Mid/Low sensitivity |
| Battery | Lithium (1200 mAh) |
| Running time | 24 hours |
| Dimensions (DxWxH) | 32 x 52 x 88 mm |
| Weight | 77 g (battery included) |

## Digital  Handheld Microphone EJ-601TM

| | |
|---|---|
| Microphone capsule | condenser |
| Antenna | internal |
| RF output power | Max 10 dBm |
| Audio control | Talk / Mute button |
| Battery | 2 AA 1.2 V (Ni-MH, 1600 mAh); or 2 AA 1.5 V (Alkaline) |
| Running time | 17 ∼ 18 (Ni-MH) / 15 ∼ 20 (Alkaline) hours, typical |
| Dimensions (ΦxL) | 37 (dia.)  x 200 mm |
| Weight | 91 g (battery included) |

# Memo

# Memo

The sound option

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