



SH-737

PORTABLE WIRELESS PA SYSTEM SMD

MANUAL



B R I G H T
BOBA
DYNAMIC BOMBA SOUND SYSTEM

CD AM/FM

ISO 9001:2000



We thank you for your purchasing this PA Amplifier. Before start to use this amplifier system, please read the manual book thoroughly and carefully. Please keep this instruction book in a safe place after reading for future reference.

Basic Features of the amplifier

1. The PA amplifier comes with a VHF wireless receiver on a 98 groups of frequency set up from 165-265MHz for your multi selection.
2. Built-in antenna.
3. Multi source power supply AC 240V and DC 12V.
4. DC 12V with two 10 AH built-in rechargeable batteries serve as stand by power supply in case of sudden AC power failure or in the case without AC power for the time over 8 hours. They can be replaced or repaired easily.
5. With Car CD player, shockproof CD playing in 45 seconds. With AM/FM radio, 12 broadcasting stations memory, with LCD display the functions situation.
6. Quartz oscillating circuit with stable frequency and strong anti-interference.
7. With automatic power off protection function to protect the two 10 AH built-in rechargeable batteries in the main PA amplifier when the built-in two 10 AH built-in rechargeable batteries' voltage is less than 9V.
8. With wired/wireless microphones for amplifying.
9. Adopted the SMD electronic parts and SMT technologies to achieve good quality.
10. Digital ECHO, BASS and Treble control.
11. The PA amplifier comes with a plastic body shockproof, waterproof and durable. It also with moving wheels and handle lengthen and shorten for your convenient.
12. 9V common battery or 8.4V rechargeable battery can be used in the wireless handheld microphone and the wireless transmitter.



Aerobrics

The usage of the PA amplifier

1. Used as an lecturing amplifier indoor or outdoor at school.
2. Used as an interpreting amplifier for indoor or outdoor activity and suburb tour.
3. Used as an amplifier for temporary indoor or outdoor assembly.
4. Used as an amplifier for interpretation of exhibition, temporary instruction of traffic communication, products sales promotion in shopping mall.
5. Used as an amplifier for vote activities and indoor or outdoor parties etc.



Tour

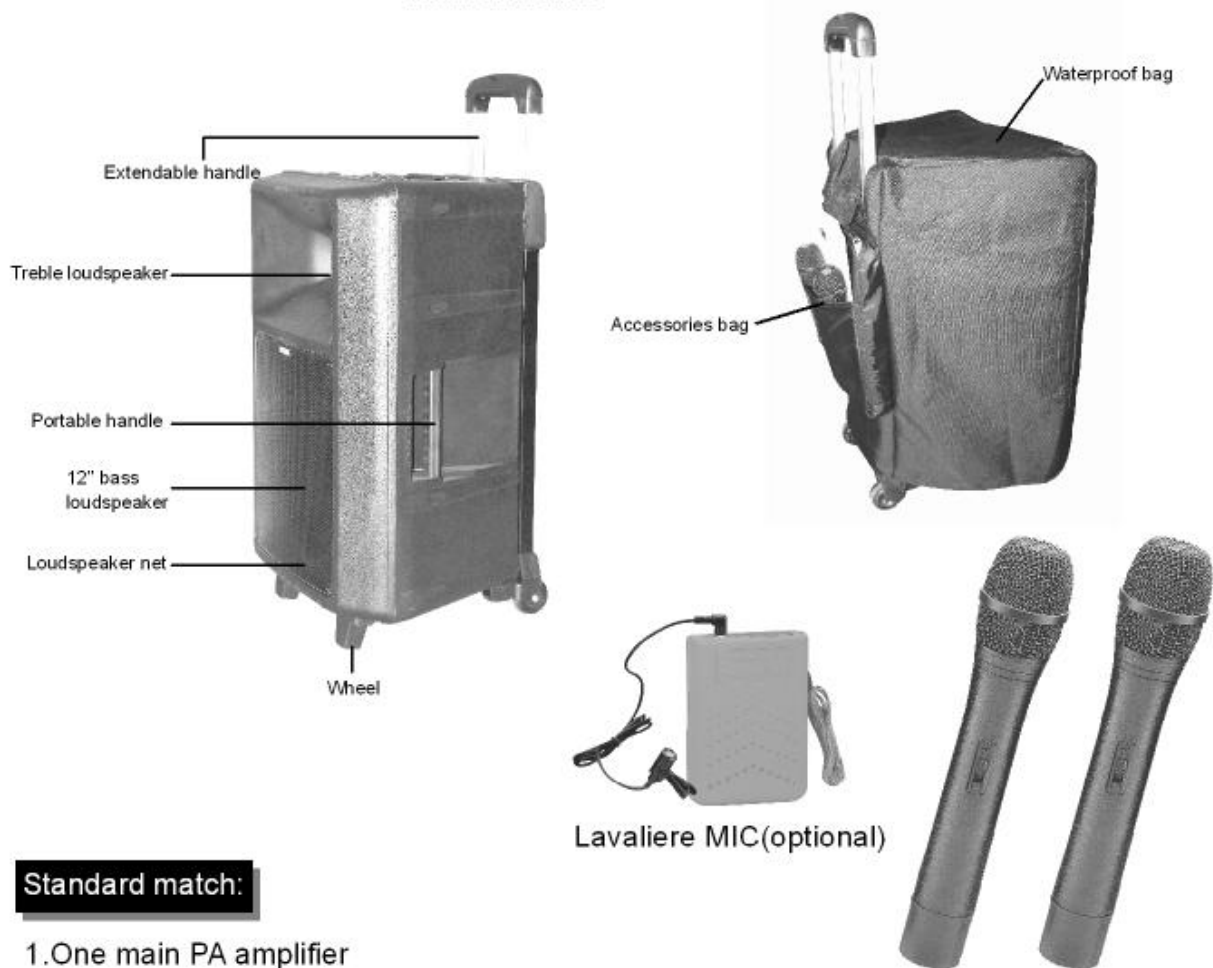
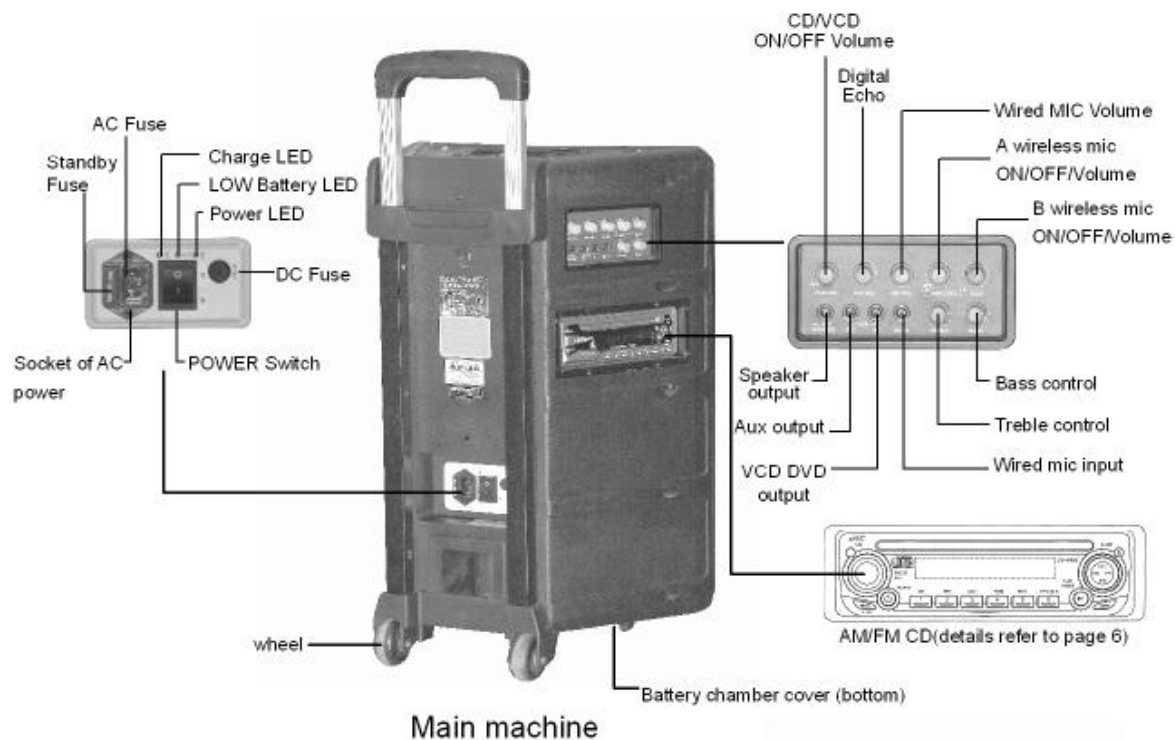


Outdoor activities



Classroom

The system descriptions:



Standard match:

1. One main PA amplifier
2. Two wireless handheld microphones
3. One waterproof bag and one bag for accessories

Operation of the PA amplifier

The receiving antenna of the unit is built-in.

PA amplifier operation on AC power

1. Plug in the AC power to the AC power outlet from AC power source. Make sure you're using the correct voltage when you plug in the PA amplifier to AC power.
2. Switch ON the PA amplifier main power. Power LED lights indicating the normal function of the PA amplifier. Power switch must be in OFF position after use.
3. Power is supplied by the built-in DC 12V 10AH x 2 pieces rechargeable batteries in case of power cut down or in the no AC power case.

NOTE: AC POWER PLUG MUST BE PULLED OFF AFTER FINISHING CHARGED OR IF YOU ARE NOT GOING TO USE IT FOR A PERIOD OF TIME.



THE POWER SOURCE SWITCH OF THE PA AMPLIFIER MUST BE IN "OFF" POSITION AFTER USE, OR THE BUILT-IN DC 12V 10AH X 2 PIECES WOULD CONTINUE ITS POWER RELEASE AND RESULT IN DAMAGE OF THE BUILT-IN BATTERIES. THEY ARE DAMAGED IN THIS CASE IS ON THE USER'S OWN ACCOUNT DUE TO ITS CONSUMABLE.

The PA amplifier works on DC power

Switch power to "ON", the light of power LED indicates the normal function of DC built-in batteries and the PA amplifier is on operation. Turn off the power after operation so as not to shorten the use life span of DC built-in batteries.

- NOTE:**
- (1) The replacement of AC power and recharged is needed in case of weak built-in batteries power and occurrence of noises and interruption of voice while using DC built-in batteries power.
 - (2) The LOW BATT LED lights up indicating the weak power, the PA amplifier will switch off the main machine power automatically by its Auto Switch Off Protection Function. The built-in batteries can't supply power to the machine at this moment and you can use AC power source directly and recharged should be needed, or the life span of the built-in batteries will be shortened.

How to charge and maintain the built-in rechargeable batteries

1. Switch power to "charge" after connecting AC power source. The "CHARGE LED" lights up indicating normal function of the charge.
2. The PA amplifier use constant-current and constant-voltage complete automatic charge, it will stop automatically when it is full charged. The recommended charge time is over 8 hours. A full charged can be used 10 hours normally.

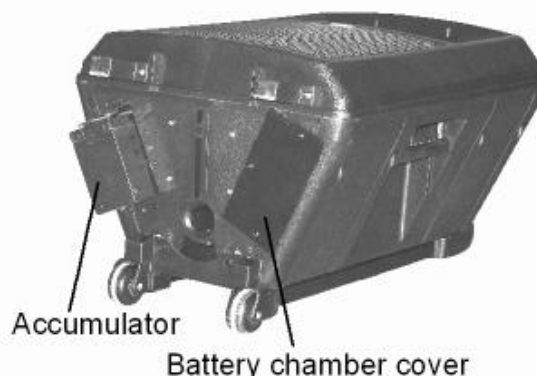
- NOTE:** (1) The LOW BATT lights up when the built-in batteries are weak of power and the main machine will stop the power source automatically and recharged is needed at time or the life span of them will be shorten.
- (2) Power charge be needed every 3 months to avoid damage of the built-in batteries or the life span of them will be shorten.



THE POWER SOURCE SWITCH OF THE PA AMPLIFIER MUST BE IN "OFF" POSITION AFTER USE, OR THE BUILT-IN DC 12V 10AH X 2 PIECES WOULD CONTINUE ITS POWER RELEASE AND RESULT IN DAMAGE OF THE BUILT-IN BATTERIES. THEY ARE DAMAGED IN THIS CASE IS ON THE USER'S OWN ACCOUNT DUE TO THEIR CONSUMABLE.

How to replace the built-in rechargeable batteries

1. The PA amplifier use same specifications of two DC 12V 10AH rechargeable batteries at the bottom of the machine. Please refer to the correct method to use and maintain the batteries. The two DC 12V 10AH rechargeable batteries can be recycled use for more than 500 times in the correct method.
2. Please flat place the machine in 90°. Take off the screws and cover of the batteries and then take out the batteries refer to the diagram below.
3. The two DC 12V 10AH rechargeable batteries must be replaced at the same time, the red (+) and black (-) polarities of the new ones must be correct connected, then put in the screws and cover back and tighten.
4. To assure the built-in rechargeable batteries in full charged situation in normal times. No need to take out or replace the built-in rechargeable batteries unless being damaged.



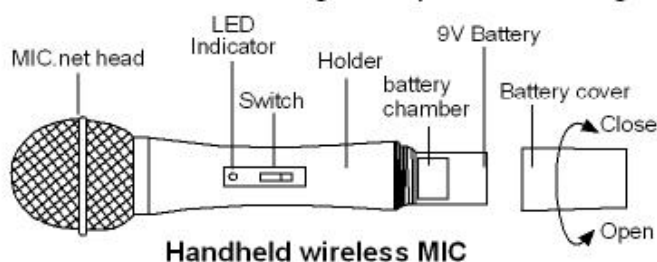
How to use the wireless microphones

1. The PA amplifier is made with double channels with double wireless microphones. A and B controlled knob is to control the **Power source** and **Volume** of the two wireless microphones independently.
2. Switch ON the wireless receiving and transmitting **Power source** and **Volume** control knob, the **Yellow** light displays. Switch ON the ON/OFF button of the microphone and the **Green** light displays indicating the wireless microphone works in normal function.
3. When you don't need the wireless microphone operation, please switch off the **Power source** and **Volume** control knob of them to protect the interference of the other wireless electric wave and lengthen the life span of the two DC 12V 10AH rechargeable batteries.

How to use the wireless handheld microphones

1. Open the battery cover, insert 9V battery to the compartment and make sure the right polarity before you use it, then close the cover.
2. Press the switch to "ON" position, the MIC is in normal function.

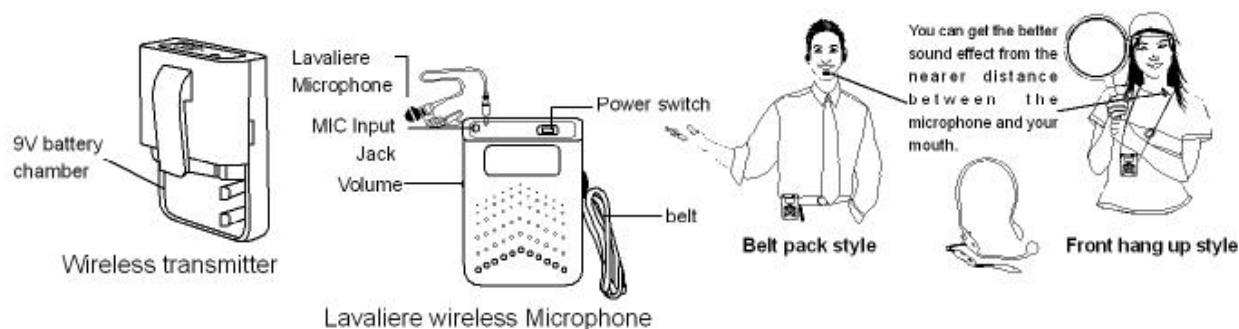
- NOTE:**
- 1). A new battery should be replaced in case of noises, voice interruption and voice mutation indicating the low battery power while in operation.
 - 2). Press the switch to "OFF" position after use to save the battery power and extend the life span of the batteries.
 - 3). Remove the 9V common battery or 8.4V rechargeable battery to avoid the leakage and acidification of the battery to damage the battery when not in use for a period of time.
 - 4). When pressing the switch upward:
 - ①A flash of the LED indicates normal power of the battery.
 - ②The long-lasting light of the LED indicates the weak power of the battery , and a new one should be replaced.
 - ③No flash or light of the LED indicates no power of the battery or the wrong connecting of the positive and negative poles. Adjustment should be needed.



How to use the lavalier wireless microphone

1. Push the cover of the transmitter, insert a 9V battery according to the + - pole, then close the cover.
2. Put the $\Phi 3.5$ mm lavalier plug into the jack of the transmitter (MIC position).
3. Push the transmitter to "ON" power LED lights indicating normal function of MIC.
4. It's better to adjust the main volume to 2/3 position, then adjust the transmitter volume to what you require. The better position for the microphone is nearer your mouth (the distance between your mouth and the microphone is around 2-3cm.) to avoid the sound screaming feedback.

- NOTE:**
1. A new battery should be replaced in case of noises, voice interruption and voice mutation indicating the low battery power while in operation.
 2. Press the switch to "OFF" position after use to save the battery power and extend the life span of the batteries.
 3. Remove the 9V battery avoid the leakage and acidification of the battery to damage the battery when not in use for a period of time.
 4. Push the switch to ON of the transmitter, power LED lights indicating normal function of MIC. No flash or light of the LED indicates no power of the battery or the wrong connecting of the positive and negative poles. Adjustment should be needed or the transmitter can not be used.



How to use the wired microphone

Put the plug of $\Phi 6.3$ mm wired microphone into the jack of the wired microphone input (MIC), adjust the volume to require perfect sound effect.

How to use the Tone control

Adjust the TONE control knob to require perfect sound effect.

How to use the digital ECHO

Adjust digital echo volume to achieve perfect sound effect.

How to use the AUX control

Adjust the AUX control button to control the AUX input e.g. CD/Tape recorder etc.

How to use the multiplying volume

In order to multiply volume, a or two wireless microphones with several wireless amplifiers of the same frequency can be applied to receive simultaneously in circumstances of large hall or stadium for hundreds or thousands of persons.

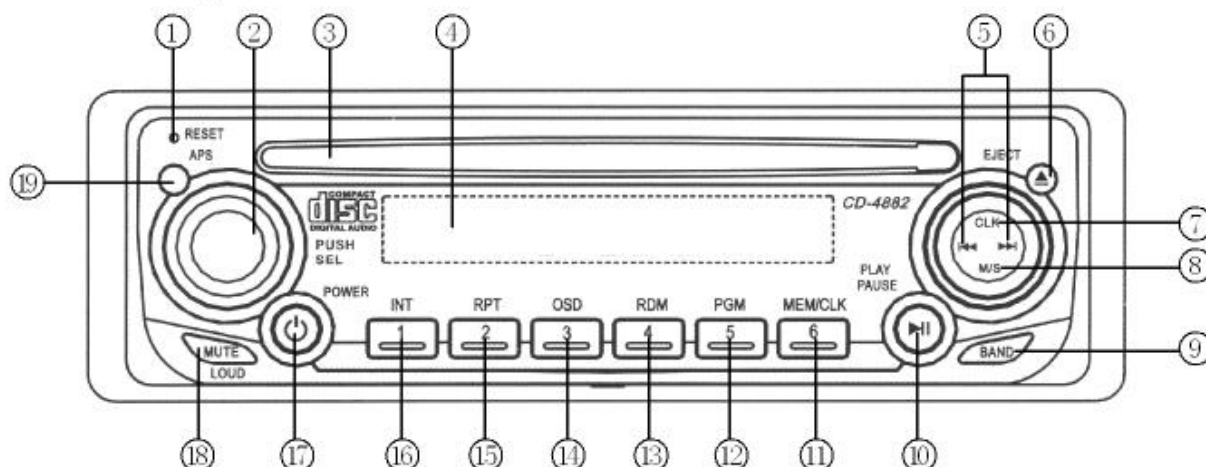


How to connect to the external loudspeaker output

1. When connect to the external loudspeaker, the built-in loudspeaker will switch off automatically.
2. The external loudspeaker is used 4-8 Ω /150W, the two cables of the loudspeaker can not short-circuit or contact the metal part of the machine or the amplifying function will be burned out.

How to use the CD/AM/FM radio

1. CD control panel functions instructions:



2. Switch ON the CD player's ON/OFF/VOLUME control knob, the CD player is at the situation of operation before switch off. If the CD player displays the time, you should switch on the Power button of the CD player.
3. In the normal circumstance, the Power ON/OFF/VOLUME/BASS/TREBLE buttons of the CD player is set and no need to reset again. The standard setting is as Power -- ON, VOLUME --25, TREBLE-7, BASS-5.
4. When you want to switch off the CD, just switch off the ON/OFF/VOLUME control knob of the control panel directly to switch off the CD player. (No need to switch off the POWER ON/OFF button of the CD player itself.)

In order to extend the life span of the two built-in rechargeable batteries, switch off the CD player Power ON/OFF/VOLUME button of the control panel when you are not going to use the CD player.

The functions instruction of the control panel

① RESET BUTTON

Use a sharp pin article to push the button to release the clock or other memories already had in the memory function. When the complete machine is out of control, you also can use a sharp pin article to reset the machine.

② Mode selection button /Volume control knob

Push the button and select VOLUME/BASS/TREBLE/LEFT OR RIGHT SOUND CHANNEL/FRONT OR BACK SOUND CHANNEL BALANCE adjusting mode. When you push the button each time, it will recycle display the selected items. When the selected items are displaying, turn the VOLUME knob to adjust the suitable audio.

NOTE: The VOLUME button is a default mode, in the normal case, you do not need to push the VOLUME button but just turn the VOLUME control knob to adjust the volume. If you push this VOLUME button (in selection mode) to adjust the other audio functions but not turn the VOLUME control knob within 5 seconds, the system will automatically return back to the default mode VOL(VOLUME MODE).

Except the VOL (VOLUME BUTTON), when you want to select the other BASS/TREBLE/LEFT OR RIGHT SOUND CHANNEL/FRONT OR BACK SOUND CHANNEL BALANCE function, you had better firstly push the AUDIO MODE SELECTION BUTTON to adjust.

Push and release to slowly adjust the level. Push and keep pushing to fast adjust the level. The display screen will display the level increasing range progression.

VOL (VOLUME)

Turn the VOL button in right direction to increase the sound level; Turn the VOL button in left direction to decrease the sound level.

BAS (BASS)

When the display screen display the BAS, turn the VOL button in the right direction to increase the Bass level; turn the VOL button in the left direction to decrease the Bass level.

TRE (TREBLE)

When the display screen display the TRE, turn the VOL button in the right direction to increase the Treble level; turn the VOL button in the left direction to decrease the Treble level.

BAL(Left and Right sound channel balance)

When the display screen display the BAL, turn the VOL button in right/left direction to adjust the right/left side speaker's volume balance.

③ CD disk entrance

Insert the CD disk into its entrance, the system will automatically turn the situation from FM to CD play.

④ LCD DISPLAY SCREEN.

⑤ Fast forward/Fast backward & Upward/Downward select the music song / Select radio station button

When in the AM/FM radio situation, short push this button upward/downward to select the radio station to step forward, long push this button (2 seconds) upward/downward to auto select radio station.

When in the CD operating mode, short push this button to select the upward/downward music song; long push this button (2 seconds) to fast forward/fast backward situation.

⑥ EJECT BUTTON

Push this button to exit the CD disk and push this button again to insert the CD disk automatically but not in play situation.

⑦ CLK (Operating Situation and Time Display)

When the machine is in operation in the CD or FM radio situation, push this button to enter the Time Display situation, display "Hour" "Minute"

Push this button again, the display screen displays the return back original situation.

⑧ Single sound channel/Stereo sound channel select button(M/S)

Push this button to select the Single sound channel/Stereo sound channel.

⑨ BAND BUTTON (BAND)

In the Radio situation, push this button to adjust your required wave band. In the CD play situation, push this button to return back to Radio situation.

⑩ PLAY/PAUSE

In radio situation, push this button to turn to CD play situation.

In CD play situation, push this button to PLAY/PAUSE.

⑪ 6/MEN/CLR

In Radio mode, this button is for the radio preset unit. Push this button in 2 seconds around, the present radio memory can be set to this button and release the before radio memories at the same time.

In the CD play mode, when the CD is playing and this button is pushed at this moment, the present music song is memorized. If the music song is memorized, this button is not effective when you push it. In the Menu play situation, push this button to exit the Menu play. Long push this button to delete the latest music song memory. If no music song will be memorized, push this button and it is not effective. In Menu situation, push this button to delete the present playing music song memory.

⑫ 5/PGM

In Radio mode, push this button to preset unit. Push this button in 2 seconds around, to memorize the present radio station to this button and delete the before radio station memories at the same time.

In CD mode, when the CD is normally playing, if you want to memorize the music song, push this button to enter the Menu situation, if no music song will be memorized, this button is not effective when you push it. In the Menu setting situation, push this button to exit the Menu Play situation.

⑬ 4/RDM

In radio mode, this button preset the radio station. Push this button in 2 seconds around, to memorize the present radio station to this button.

In CD mode, push this button to enter Random Play, push again to delete the Random Play.

⑭ 3/OSD

In Radio Mode, push this button to preset the radio. Push this button in 2 seconds around, to memorize the present radio station to this button and delete the before memory of the radio station at the same time.

In CD mode, recycle push this button to display the playing time of the music song, the playing situation of this music song, the rest time of the playing music song.

⑮ 2/RPT

In Radio Mode, push this button to preset the radio station. Push this button in 2 seconds around, to memorize the present radio station to this button and delete the before memory of the radio station at the same time.

In CD mode, push this button to repeat play the music song, push again to delete the repeat function.

⑯ 1 INT

In Radio Mode, push this button to preset the radio. Push this button in 2 seconds around, to memorize the present radio station to this button and delete the before memory of the radio station at the same time.

In CD mode, push this button to play each music song in 10 seconds. Push this button

again to delete the PLAY BROWSING function.

⑰ POWER

Push this button to switch on/off the power sources.

⑱ MUTE/LOUD

Short push this button, the machine enter the MUTE situation and push again to delete it.

Long push this button (over 2 seconds), the machine enter the LOUD situation, push again to delete this function. When the machine is in the LOUD situation, please increase the Treble and Bass to make the sound in minimum volume to get better sound result.

⑲ APS

Short push this button to auto scan radio station from 1-6.

Long push this button (2 seconds above) to enter the radio station auto selection memory situation.

Radio Broadcasting operation

1. Turn the "PLAY VOL" button in a clockwise direction to switch on the main power source switch of the CD player.
2. Push "Power" button, then release and switch on the Power source.
3. Push "BAND" button to select your required radio station wave frequency.
4. Push "◀◀" or "▶▶" select the required radio station. Push from 1-6 any number again (2 seconds) to settle the radio station memory. Or push "APS" button to auto select the radio station and push 1-6 number button again to select your required radio station.
5. Turn the VOL button to adjust the required level of the Volume, Tone, Right/Left sound channel, Front/Back sound channel balance.

CD PLAYER OPERATION INSTRUCTIONS

1. Push the "Power" button, then release, to switch on the power source.
2. Insert the CD disk to the CD player's entrance, CD player start to play automatically.
3. When the CD player is playing, its LCD display screen displays the "Disk type", Music song number, "Play time".
4. When the CD player is playing, push the button "Play/Pause" button to pause or stop the playing and push this button again to restart the playing.
5. When the CD player is playing, if you want to change the play mode, e.g. Repeat play, Random Play, Menu play. You can operate it refer to the front explanations of the buttons.
6. Push "EJECT" to stop the playing and exit the disk and push again to enter the CD playing situation.

NOTE: When you push the "EJECT" button to exit the disk and you don't take out the disk within 10 seconds and it will insert the disk back to the CD player again automatically but not in playing situation.

Time Adjusting

1. When the machine is in Radio and CD mode, push once "CLOCK", the display screen will display the Time. (The original mode is keeping but just change the display mode).
2. When the Time is displaying, push "CLOCK" button for 2 seconds above to enter the Time Adjusting mode.
3. When in the time adjusting mode, twinkling "Time" is for the item to be adjusted, at this moment, you can turn the VOL control knob to adjust the "Time", push the "CLOCK" button, the "Minute" is flashing, at this moment to turn the VOL control knob to adjust the "Minute".
4. In the Time adjusting mode, short push the "CLOCK" to stop the time adjusting.
5. In the "CLOCK" adjusting mode, long push the "CLOCK" button to select the 12 hours style or the 24 hours style displaying.

Normal Malfunctions and Trouble Shooting

Phenomenon	Malfunctions	Trouble shooting
CD player LED indicator not light	Power source ON/OFF switch is in OFF position	Turn power source switch to ON position.
No sound	In Mute situation	Push the Mute button again.
The sound is not clear	CD disk is dirty or damaged.	Clean the CD disk or replace a new CD disk.
In release mode not in operation	Disk is not in the correct place	Check the CD disk and make sure the correct side is in upward position.
CD disk can not be read	1. CD disk is dirty or damaged 2. The laser head is dirty.	1. Replace the CD disk. 2. Clean the laser head.

Cautions of CD disk operation

1. Try the best not to scrape the disk or put paper stickers on it. Keep the CD disk as clean as possible.
2. Do not play the damaged CD disk and try to play the CD disk in correct method.
3. Do not put the CD disk under the sun or near the high temperature.
4. Put the CD disk into its bag after use.
5. The fingerprint and the other dirty will influence the sound quality of the CD disk. Use a soft fabric to clean the surface of the CD disk and you can use some neutral solution to clean it. But don't use the cleaning solution of the tape recorder or the static electricity proof solvent to clean the CD disk. Don't use gas solution to clean the CD disk either.
6. When you are cleaning the CD disk, please clean it slightly from inside to outside. Don't clean it in circular direction.

Specifications and technical data

Frequency adjustment

Tuning range: 87.5-108MHz
Medium frequency: 10.7MHz
Noise limited sensitivity: less than 5 μ V
Intermediate frequency rejection: superior 50dB

Amplitude modulation

Tuning range: 522-1620KHz
Medium frequency: 450KHz
Noise limited sensitivity: less than 100 μ V
Intermediate frequency rejection: superior 50dB

CD PLAY

Noise to Signal: >55dB
Frequency response: 20-20000Hz
A/D transform filter: 16BIT
Electronic shockproof: 45 seconds

Technical Data:

Power source:	AC 240V	DC \pm 12V 10AHx2pcs
Output power:	120W	
Loudspeaker:	12"	
Channel:	Double channels and double wireless microphones	
Frequency range:	VHF 165-265MHz (98 groups of frequency for set-up)	
Sensitivity:	10dB μ V (S/N is over 60dB)	
Oscillating mode:	\pm 0.005% quartz oscillating locked	
Wireless effective range:	35 meters	
Product size:	(LXWXH) 430X600X360mm	
Weight:	26kgs	

*We reserve the right of changing technology and specification of our products without notice in advance.

Standard: Q/EBH013-2003

Cautions and Trouble shooting

Please go through this manual carefully before operation, if you notice any abnormality regarding the amplifier, contact the dealer for services or you have a simple check as follows:

1. Switch off the power of the PA Amplifier and transmitter and pull off the AC power plug.

2. Insert the 9V battery according to correct positive and negative pole.

3. Adjust the volume to proper position when echoes and scream occur:

- 1) Adjust the PA amplifier volume.
- 2) Adjust the transmitter volume.
- 3) Adjust the direction and distance between the PA amplifier and microphone. The distance between the PA amplifier and the transmitter is the farther the better. Don't put the transmitter towards the loudspeaker of the PA amplifier.
- 4) Lower the voice tune.

4. If noises and voice interruption occur:

- 1) Weak power of the 9V battery in the wireless microphone. A new one should be replaced the old one.
- 2) AC power should be applied in case of weak power of battery when using battery in the PA amplifier.
- 3) A new microphone wire should be replaced when the microphone wire is wearing out.
- 4) A change of frequency should be replaced after contacting the sales dealer when a strong signal interference with same frequency from outside occurs.

5. No Sound

- 1) The power of the microphone and the PA amplifier is still off, so turn on the power source.
- 2) Make sure the volume of the PA amplifier and the transmitter is well adjusted.
- 3) Make sure if the microphone is damaged, if so, new one should be replaced.

6. Remove the 9V battery to avoid the leakage of acid and damaging the components.

FCC NOTE:

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED

BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

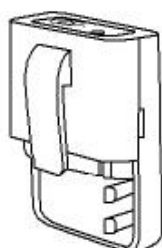
Optional accessories



Lavalier Microphone



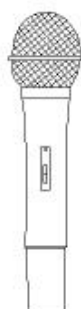
Headset Microphone



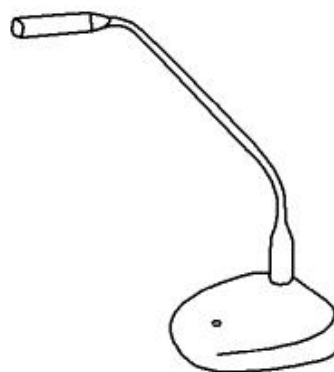
Wireless transmitter



Lavalier wireless
Microphone



Handheld wireless MIC



Meeting wireless MIC



8.4V/150MAH
Rechargeable Battery
(Recycled use over 500 times)



12V/10AH
Accumulator