

RECHARGEABLE PORTABLE WIRELESS PA SYSTEM



Hisonic HS-321

Please read this first:

1. Before using this wireless microphone, please ensure that you read and understand the safety precautions below. Always ensure that the wireless PA System/microphone and receiver are operated correctly.
2. The safety precautions noted on the following pages are intended to instruct you in the safe and correct operation of the system to prevent injuries or damage to yourself, other persons and the equipment.
3. If you have any questions, please do not send the system back to the dealer where you bought (Unless you bought extended service), call the number 1-866 524 8676 for service before you send them back to Hisonic International Inc.
4. If you have a problem with the reception, it might not be the system's fault, you might have a local interference on the frequency which this system uses, so you can ask for an exchange for another frequency to replace the one in your hand to solve this problem, or upgrade to a 16 -channel system to resolve the problem.
5. In the next few pages, the term "system" refers primarily to the handheld microphone and its receiver (Amplifier Speaker), including the other accessories.

The HS-321 is a rechargeable and AC powered public address system amplifier / speaker with a built in VHF wireless microphone receiver. This heavy duty 50W(Max) PA system is built inside a strong aluminum case to give you loud and clear sound. It is excellent for classrooms, show events, auctions, seminars, church use, indoor/outdoor functions.

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.

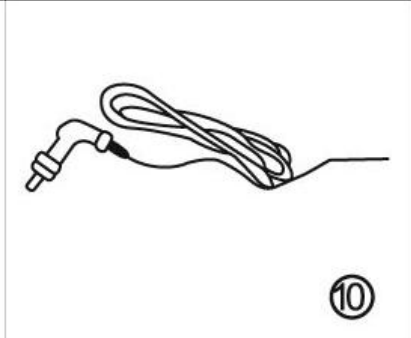
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1. Packing List:

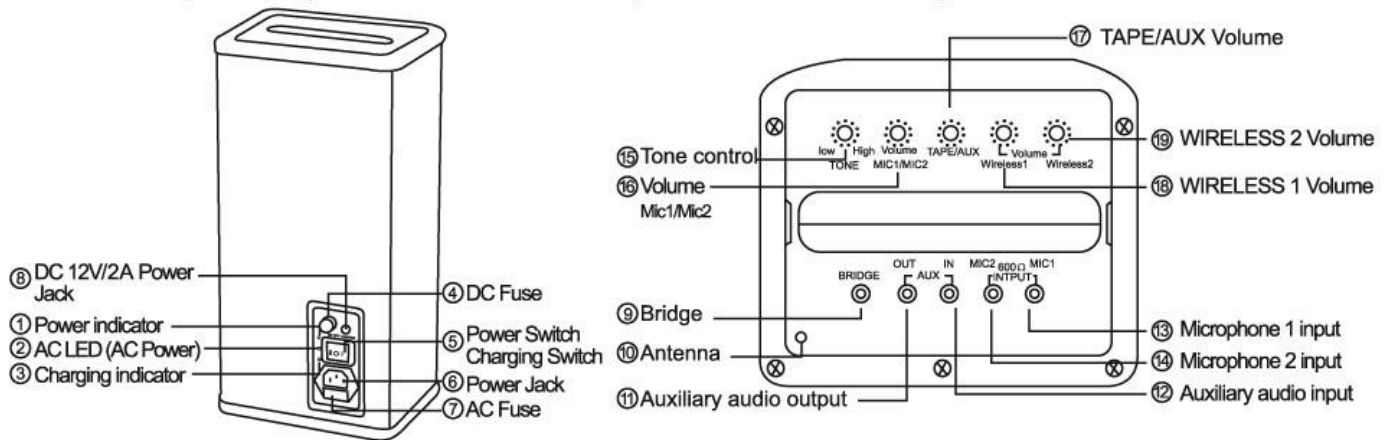
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1. PA Speaker
2. Wireless Handheld microphone
3. Wireless Belt pack transmitter
4. Lapel Microphone
5. Headset Microphone
6. Manual Book
7. Power Cord
8. 9V battery
9. Back pack bag
10. Car cigaretter lighter cable



2. Components Guide

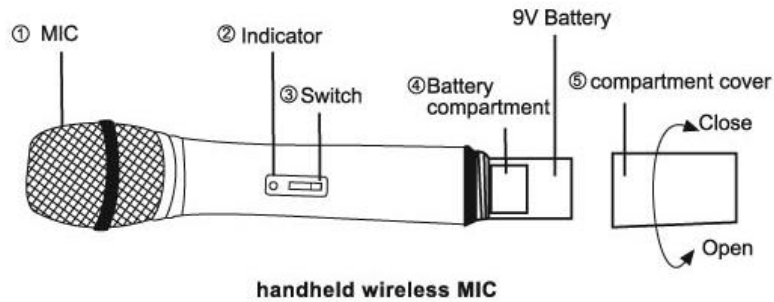
A.PA Amplifier(Wireless microphone receiver)



1. Power indicator To show the Power is on or not.
2. Ac indicator, connect the power cord to power source, switch to "NO" or "CHARGE" position, the AC LED lights up, switch to "OFF" position, the AC LED goes off.
3. Charging indicator Shows the system is in charging.
4. DC Fuse Protection from DC overload.
5. Power Switch .To turn on/off the main power.
6. Power Jack.
7. AC Fuse Protection from AC overload.
8. DC 12V/2A power Jack.
9. Bridge Connect to another PA system.
10. Antenna For a better reception. Extended antenna.
11. Auxiliary audio output. Output to any other compatible devices.
12. Auxiliary audio input. Input from other sound sources.
13. Microphone 1 input. Connect optional microphone system.
14. Microphone 2 input. Connect a secondary optional microphone system.
15. Tone control Control the tone of the speaker.
16. Wireless Mic Volume To control the wireless microphone volume for the built in receiver.
17. AUX Volume To control the auxiliary input volume.

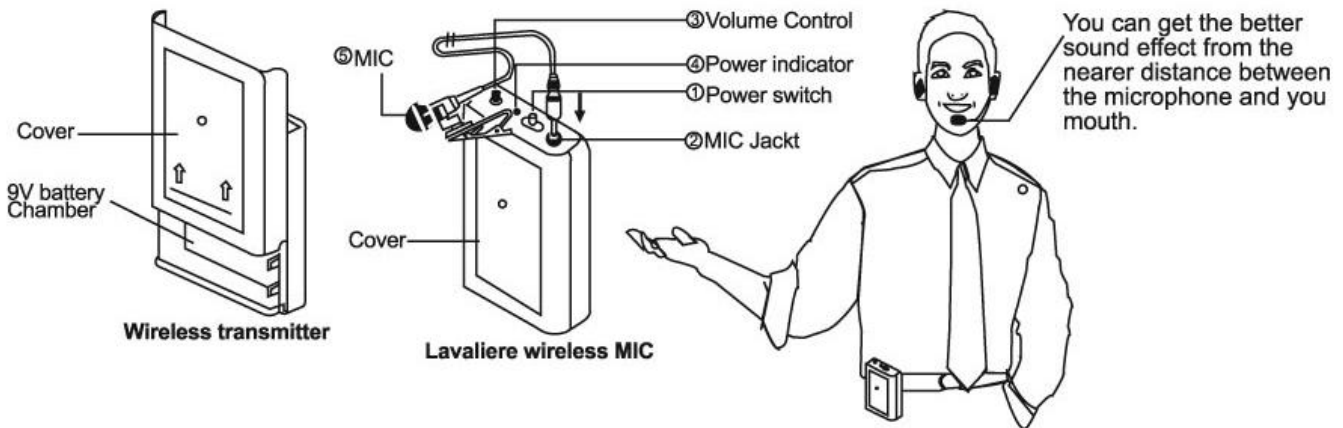
18. Microphone 1 volume control for an optional microphone system.
19. Microphone 2 volume control for a secondary microphone system (The optional microphones are not included.)

B. Handheld Microphone



- | | |
|----------------------------|------------------------|
| 1. Dynamic receiver Screen | 2. Power indicator |
| 3. Switch | 4. Battery compartment |
| 5. Compartment cover | |

C. Transmitter



- | | |
|---|--------------------|
| 1. Power Switch | 2. Microphone Jack |
| 3. Volume Control | 4. Power indicator |
| 5. Microphone, This microphone could be either lapel or headset type. | |

3. Basic Operation

How system works?

This HS321 PA system is a well built unit that can deliver great sound with high quality, the specially made speaker gives a full range response from low to high up to 16 KHz. It is a portable system that can run on both AC or DC, with the lead acid rechargeable battery built in, this system can last as long as up to 8 continuous hours (the battery capacity gets low with time eclipsed, so the working time may get shorter.)

The included VHF wireless handheld microphone OR the included VHF belt pack transmitter transmits the audio to the wireless receiver inside the HS321 amplifier. An audio sound source such as a CD player, tape player or DVD player can be used as an additional input source by plugging it into the 1 /4' cable to the auxiliary input jack on the top.

This system can be directly powered by DC from a battery pack or car cigarette lighter output. (12VDC)

An over discharge protection circuit is built in, when the battery voltage drops to or below $9.0 \pm 0.5V$, the system enters protection mode and the power is cut off completely, the system shuts down. At this point, you have to use AC as power or charge the battery to full before you can use it again.

Warning: The system has to be charged within 10 days after it enters protection mode, otherwise the battery could be irrevocably damaged.

How to use the system?

Plug the included power cord into the rear AC jack, and plug the other end into a standard 110V AC wall jack.

The system can used fully portable if the internal rechargeable battery has been charged up to a capacity with an overnight charge from an AC power outlet.

1. Using the Handheld Microphone.
Put the 9V battery into the battery compartment and make sure you have the right polarity, then plug in the either the headset mic or lapel mic, you can talk into the mic and you will hear audio from the PA amplifier speaker.
2. Using the belt pack transmitter.
Put the 9V battery into the belt pack transmitter, and turn on the power switch. You then should hear audio from the PA amplifier speaker.

Either the handheld microphone Or the belt pack transmitter can be used, but not at the same time, otherwise you will hear nothing or noise only.

4.Charging the battery

This system comes with a lead acid rechargeable battery, like the one you use in a computer backup battery. . Plug the power cord into the system, and the other end of the power cord is connected to a power outlet from wall. Turn on the power switch to charging side; you will see the charging LED will light up. When the battery is charged up full, the LED will go out.

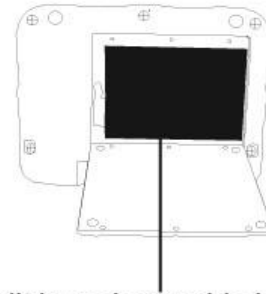
The way to charge the built-in maintenance-free battery

1. One time full charge will supply 6-8 hours operation, but it need 6 hours or more to charge.(If the power switch is set at POWER ON ,it is a slow charge which will take over 30 hours to charge it full)
2. Connect the power cord to power source, switch to CHARGE ON position.
3. The LED CHARGE ON lights up, it shows the charging is on,when the indicator goes off,it shows the battery is fully charged,then you can stop charging.
4. If the Charge On LED is not on or Not off,it shows the battery is dead or the charging circuit is malfunctioning.
5. The over charge protection mode guarantees there is no over charge on the battery .The circuit shuts off when the battery is fully charged.

6. If the operation time is less than 5 hours for a full charge, the battery might be damaged or aging.

The way to change the battery

To change the battery: Open the battery compartment and take the battery out, make sure the polarity is correct. After the installation of the battery, please charge the battery immediately for over 6 hours.



Built in rechargeable battery

Caution: Make sure the polarity of the battery is connected correctly, any mistake may damage the battery permanently, and charge the battery as soon as possible.

Warning:

1. In the charging processing, the charging LED goes on and off sometimes, it is normal to see so because the circuit tries to complete the charging intermittently.
2. The charging procedure is fully automatically controlled, the charging stops when the battery is fully charged and the charge LED turns off. No worry about the charging.

Important Notice:

You have to charge the internal battery every 3 months, even if you do not use it. If it is not charged at least one time every 3 months, the capacity will get lower and lower.

Warning:

1. When the system enters protection mode, the system shuts down completely, all the indicators are disabled. You have to plug it to AC power or charge it to full before you can use it.
2. After the system enters protection mode, you have to charge the system within 10 days, otherwise the battery will be damaged for good.
3. The charging procedure is fully automatically controlled, the

charging stops when the battery is fully charged and charge LED turns off. No worry about the charging.

4. The system must be recharged over 8 hours every 3 months if you are not using it for a long time, or the battery life is shorten.
5. The built-in battery is NOT a warranted item due to its consumable.

5. Specifications

- RF carrier frequency range.
(Available frequencies depend on applicable regulations in the country where the system is used.)
- Operating range: 100 Meters (Approximate 300 feet) under ideal conditions. It might vary with the terrace condition and barrier between the transmitter and receiver.
- Audio frequency response: 50 Hz to 15,000 Hz, at ± 3 dB, THD < 1%
- Audio output level: 0 - ± 300 mV
- S/N ratio: > 85dB
- Crystal control
- Receiving sensitivity: -105dB
- Image & spurious rejection: > 70 dB
- Board upon channel rejection > 70 dB
- Power source: 110V /60 Hz
- Speaker power : 50W MAX
- Speaker size: 16 CM (7 Inches)
- Operation temperature range:-20°C to 74°C (-4 °F to 172 °F).
Note : The battery life may vary at extreme low or high temperature.
- Dimensions: 180 mmX145mmX300mm
- Receiver Weight: Net 5Kg.

Important Notice:

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6.Troubleshooting

Please contact Hisonic International Inc by email or phone for any questions.Please check details from www.hisonic.net.

Problem	Indicator status	Solution
No sound and receiving LED does not light up	Wireless mic or PA speaker does not turn on	Check the power switch on Mic and PA speaker
	9V battery is installed with wrong polarity	Check the battery and make sure the polarity is correct.
	9V battery is low in voltage	Change the battery
	The PA speaker has low battery	Use AC instead of the battery, and charge it.
No Sound but the LED on PA speaker is on	PA speaker/ Microphone volume control is set to minimum	Increase the volume on PA system and microphone
	Lapel microphone wire is broken	Change the wire.
	Wireless microphone is set to standby mode.	Switch to on position
Noise or cut off	9V battery is low in voltage	Change the battery
	PA speaker built in battery is low	Charge the battery immediately.
	Lapel microphone wire is broken or bad	Change to a new one.
	Wireless microphone is too far from the PA speaker	Get closer
	External interference from other equipments	Change to another frequency
Screaming	Main PA speaker is too close to the microphones	Try to use it 5 meters away from the each other.
	Facing the PA speaker with the microphone	Change the direction
	Tone is set to high	Adjust the tone control
Main PA speaker no power source	Battery maybe damaged or CD/AC fuse is broken	Change a new Battery or fuse