PASGAO®
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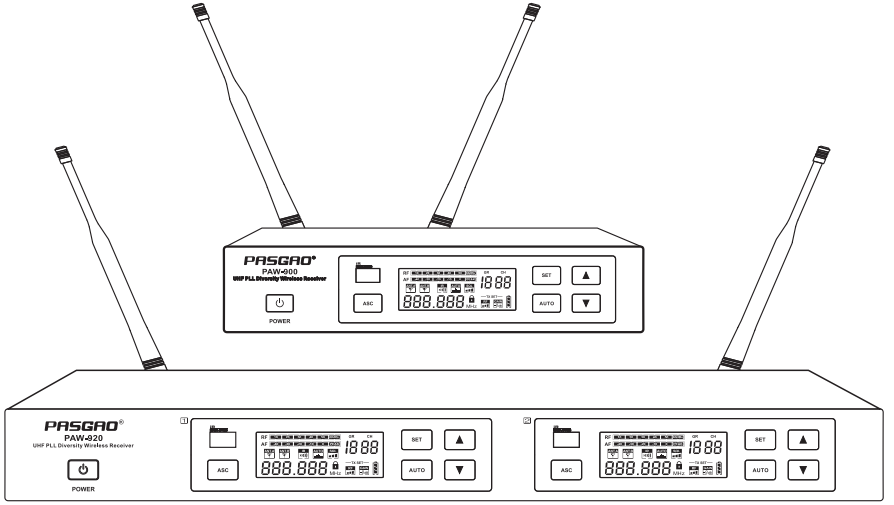
PAW-900/920

Wireless Microphone Systems
User Guide



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Specifications

System

Frequency range and transmitter output level

Frequency range Scope

655-679MHz

823-865MHz

The transmitter RF level

UA-13dBm

Work range on the typical understanding

80meter(240feet)

Notes: The actual scope and RF signal relate to absorption, reflection and interference

Audio frequency response (+/-3db)

60Hz～16KHz

THD (+/- 30khz excursion, 1khz audio)

<1%

Dynamic range

>90db (A wh)

The work temperature range

-10℃ to +50℃

Notes: Battery characteristics may affect the scope of the limits.

Handheld transmitter

Maximum audio input level

0dBV

SIZE (including a microphone head)

250mm*50mm diameter

Weight

360g(without battery)

Power requested

Two 1.5V “AA” charging battery

Battery life

>10 hours （alkalescence）

receiver

Audio output level (reference+/-30KHz，1KHz)

XLR adaptor (switch in 600Ω) : -12dBV

1/4 inch adaptor (switch in 3000Ω): -18dBv

Output impedance

XLR adaptor: 200Ω

1/4 inch adaptor : 1kΩ

XLR output

Balance impedance

Contact pin 1: GND

Contact pin 2: (+)

Contact pin 3: (-)

Sensitivity (intermediate frequency demodulator output SNR 30db)

<-90dBm

Image Rejection

>70dB

Size

44mm*212mm*160mm(PAW-900)

44mm*410mm*160mm(PAW-920)

Weight

880g(PAW-900)

1750g(PAW-920)

Power request

12 V DC, switching power supply 500 milliamperes from an external power.

bodypack transmitter

Max audio input level

6dBV

Size (include the head of microphone)

65mm*165mm*22mm

Weight

130g (without battery)

Power request

Two 1.5V “AA” charging battery

Battery life

>10 hours （alkalescence）

Catalog

System

Thank you for your purchase and use the PAW-900 wireless system. For the need to set up a high-level UHF band wireless system users, PAW-900/920 provides a good solution. PAW-900/920 have 192 frequency channel, that can be widely used in various PA occasions, such as live performances, radio, meeting or musical instrument etc. All PAW-900/920 components with feather-touch buttons and LCD screen to achieve fast and simple set.

Frequency band selection

Radio frequency used in the wireless communication in most countries have strict control. These regulations specify which devices can use what frequency. That helps limit in wireless communication (RF) interference degree.

In order to facilitate the use of this product in the world, the PAW-900/920 system provides frequency band, the user can choose according to the radio regulations over the available frequency band, including: U:584-865MHz

For the convenience of system settings and to prevent RF interference, each having a plurality of preset frequency group and channel.

The use of a single system, the working frequency generally do not need to change. Using a loading multiple receiver / transmitter system, each system must use different channels. Grouping and channel in te use of multiple transmitter / receiver system can provide the best frequency distribution.

Each assembly can use up to 16 transmitter /receiver system.

Important safty instructions

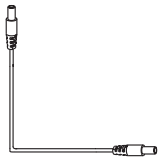
- The transmitter and antenna should remain relatively position line accessibility
- Don't put the receiver placed in close proximity to the metal surface or near any digital device (such as a CD player, computer etc.);
- The receiver should leave 1m above the ground, try not to close to the wall, in order to fully ventilated, the minimum clearance is not around the device is less than 20cm;
- Ventilation holes should not cover such as newspapers, tablecloths and curtains special items and hindering ventilation;
- Cellular phones and two-way radio emission in place can interfere with the audio transmission, should make the transmitter and receiver are far from these devices and their potential sources of interference;
- The receiver should avoid direct sunlight or water, water splash and should not be placed such as vases filled with liquid on it;
- Do not disassemble;
- The receiver should not be placed naked flame sources, such as a lighted candle;
- Don't litter waste when the battery, please put in the designated bins;
- In order to make the system work normally, the ambient temperature at -5 ℃～+50℃。

Troubleshooting

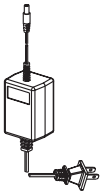
Problem	Indicator (lamp) state	solution
No sound or faint sound	Transmitter power light off.	Turn on the main power； confirm the + / - mark on the battery and the transmitter terminal of the phase matching.
	Receiver power indicator off.	Confirmation of a head of the AC power adapter is plugged into a power jack, the other end is inserted into the receiver backboard straight direct input jack; confirm the AC power supply is normal, and confirm the power supply voltage is normal.
	Receiver RF indicator glows.	adjustable high receiver volume control; adjustable high transmitter gain switch setting； Check the receiver and amplifier or mixer cable connections.
	Receiver power indicator off. Receiver RF indicator glows.	The receiver side away from metal objects.Check in between the transmitter and the receiver are obstacles to closer receiver transmitter.Check whether the receiver and transmitter using the same frequency.
	Transmitter low-voltage indicator lights	The transmitter battery replacement.
Distortion or excess noise	Receiver for RF signal lights	Radio frequency interference source removal nearby (such as CD, computer, digital devices, earplugs monitoring system); the receiver and transmitter to different frequency; reduce the transmitter; transmitter battery replacement; if the use of multiple system, can increase the frequency interval between various systems.
Distortion level gradually increased	Low Battery indicator glows.	The transmitter battery replacement.
Sound level and electric guitar or microphone, or use a different guitar sound different level		According to the need to adjust the transmitter and receiver volume

Machine cabinet installation and connection diagram

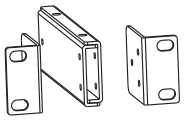
❶ TNT/BNC dualhead connecting line (Optional accessories)



❷ Power connecting line

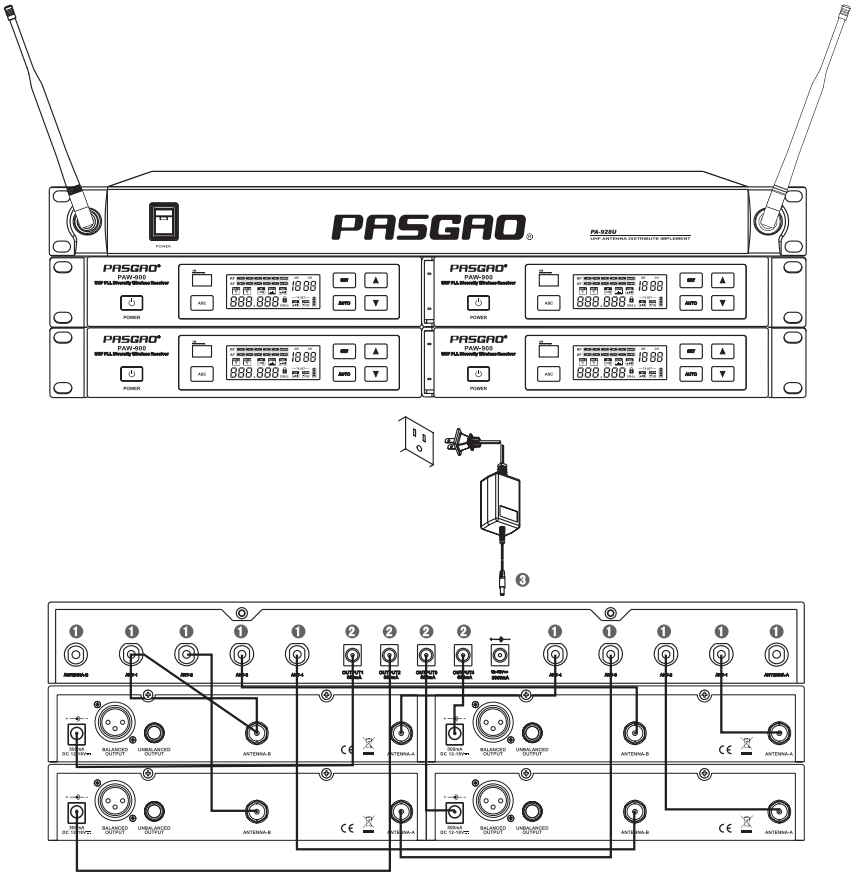


❸ Direct power adapter socket



❹ PA-D60 panel (Optional accessories)

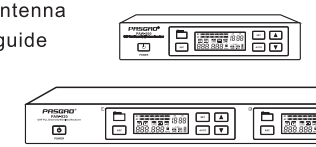
❺ PA-928U Antenna Distribute Implement (Optional accessories)



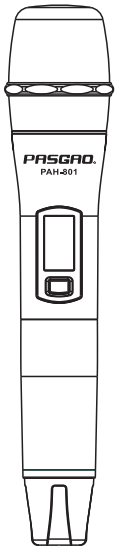
system components

all system including:

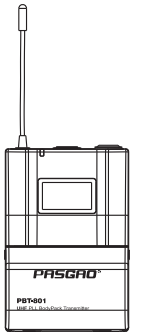
PAW-900 receiver	PAW-920 receiver
Two 1.5V “AA” charging battery	four 1.5V “AA” battery
One piece of '1/4' Audio tie line	One piece of '1/4' Audio tie line
Power adapter	Power adapter
PA-D40 rack panel	PA-D10 rack panel
Two antenna	Two antenna
User guide	User guide

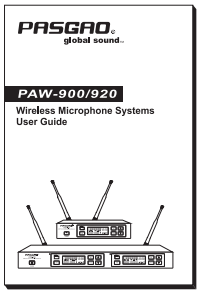


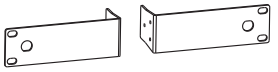
PAH-801 handheld transmitter



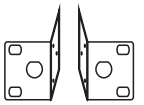
PBT-801 bodypack transmitter



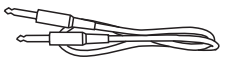


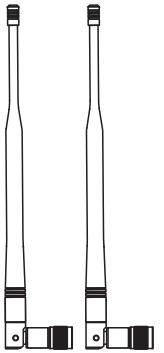


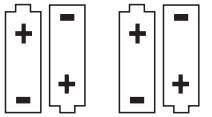
PA-D40 rack panel



PA-D10 rack panel

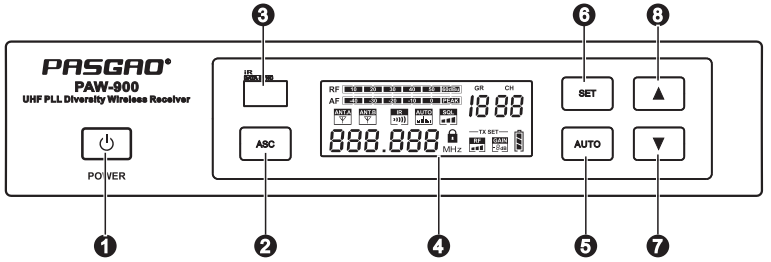






PAW-900 receiver function:

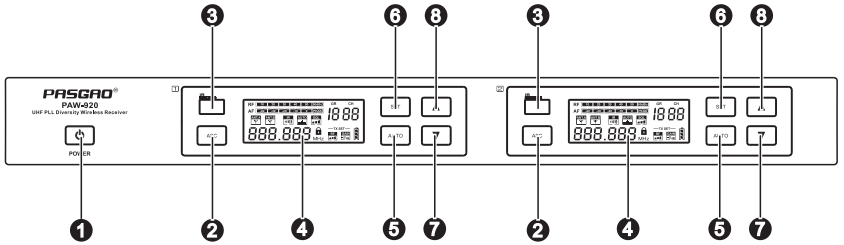
front panel



1. The power switch, touch a seconds can be open or closed
2. "ASC" infrared frequency key light, press this key, the screen IR flashing, flashing duration of 10 seconds in the microphone infrared frequency window at the IR window of frequency.
3. Infrared frequency "IR" window.
4. LCD display.
5. The menu button "AUTO", fast frequency sweep
6. Set up all the funcitons show on the LED screen.
7. 8 Fast channel setting up and down keys

PAW-920 receiver function:

front panel



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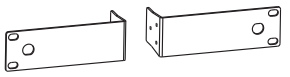
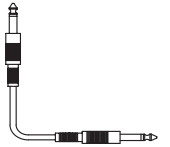
Single cabinet installation and connection diagram



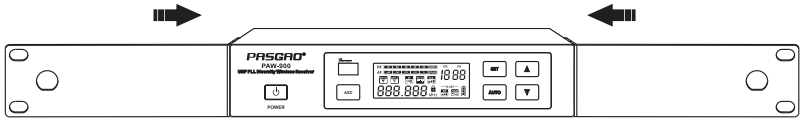
PA-D40 panel

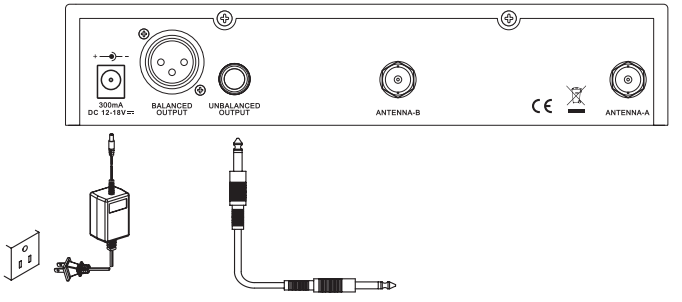
Direct power adapter socket

TNT/BNC double-head connector (optional accessories)



1/4″ audio connecting cable



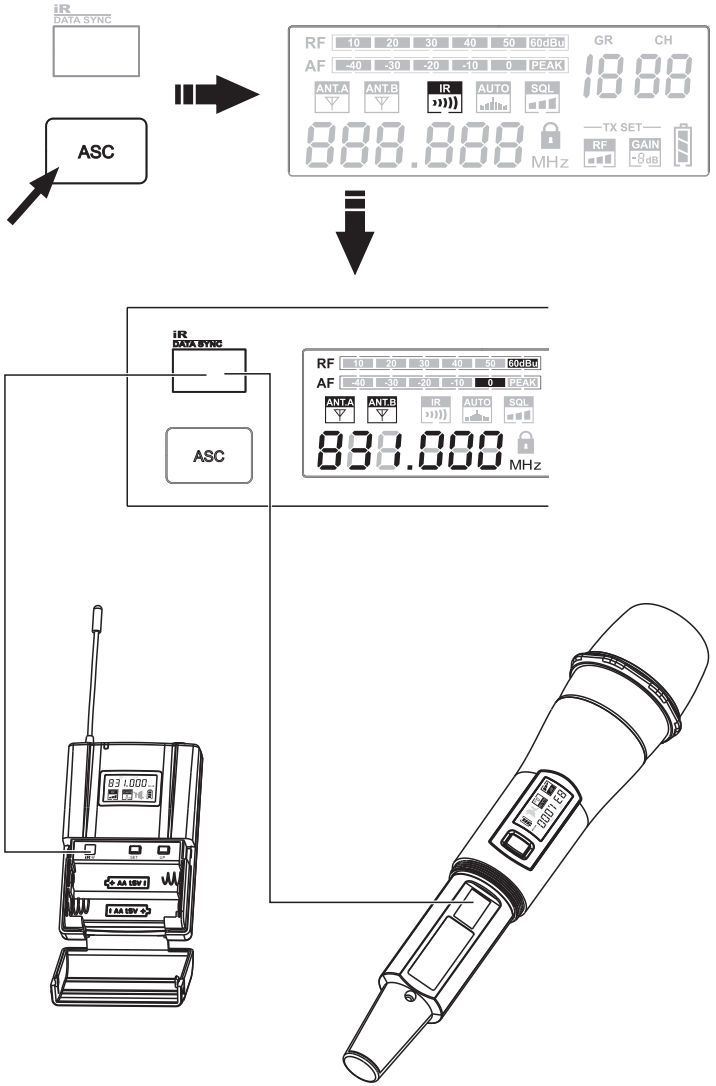


General rooms or short distance can choose 1/4 inch connection function; such as long distance connections, suggestion choice XRL output function.

Then main function of instructions

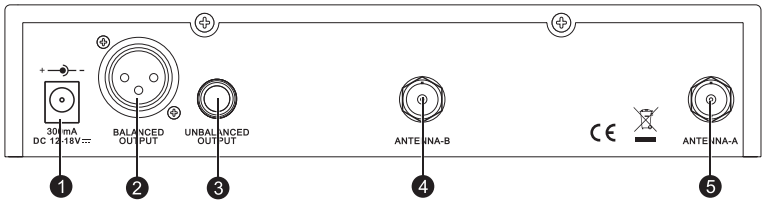
frequency setting

press the ASC button, IR flashing the host screen, IR flashing at the same time, the transmitter infrared window at the host infrared window, automatic frequency can be completed,))) disappear automatically, emission Machine display light from dark to light, Display the normal.



PAW-900 receiver function:

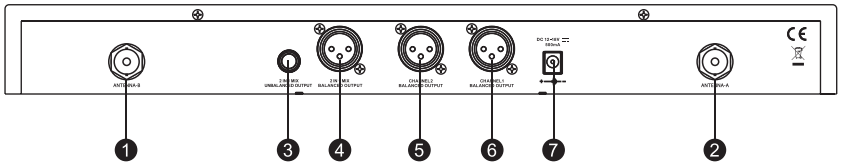
Back panel



1. DC power adapter socket
2. XLR output socket
3. 1/4 inch output socket
4. Antenna jack B 50 ohm
5. Antenna jack B 50 ohm

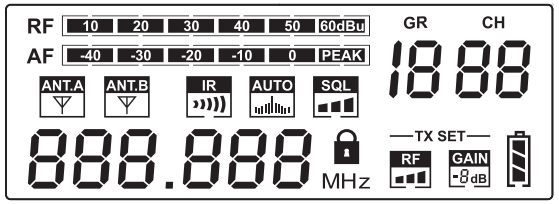
PAW-920 receiver function:

Back panel



1. Antenna jack A 50 ohm
2. Antenna jack B 50 ohm
3. 1/4 inch Mix output socket
4. XLR Mix output socket
5. Channel 2XLR output socket
6. Channel 1XLR output socket
7. DC power adapter socket

The receiver display function



Icon	Function
IR	The frequency indicator
RF	Adjust the transmitter power RF
GAIN -8dB	The transmitter Microphone gain adjustment
SQL	Noise gate threshold
ANT.A ANT.B	The receiver RF lamp
GR	Current group
CH	Current channel
RF	Receiver signal strength
AF	Audio level

bodypack transmitter setting

The transmitter display state:

❶ 

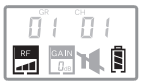
open and mute: ⏻ MUTE

press and hold ⏻ MUTE button to open, press and hold ⏻ MUTE button to close.

❷ 

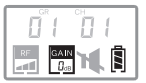
click ⏻ MUTE Open the mute state, click ⏻ MUTE Cancel mute function,

Manually selecting a frequency or channel: SET

❸ 

Long press SET button the display “GR” ❶ , press "UP" to change the frequency of the number of the group.

Press the SET button can display in “CH” ❷, press "UP" to change the frequency of the use of the channel group.

❹ 

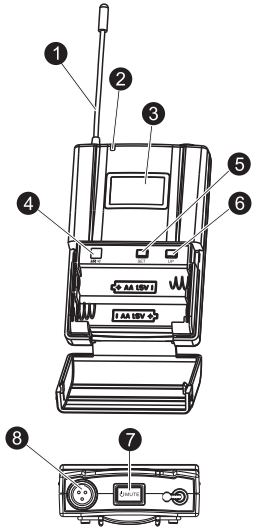
Press the SET button, can display in “RF” ❸, press "UP" to adjust the transmitter power RF.

Press the SET button can display in “GAIN” ❹, press the "UP" transmitter microphone gain adjustment.

❺ 

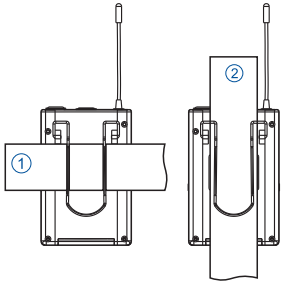
Press the SET button can display the current frequency.

PBT-801 feature:



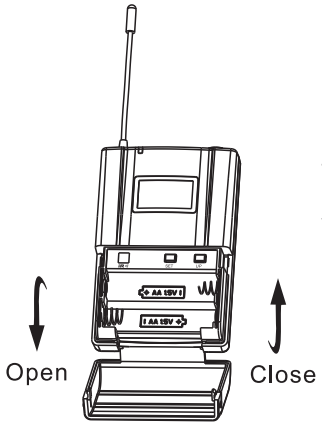
Function:

1. Antenna
2. Power Indicator Light
3. LED screen (please refer to the transmitter eleventh page11 settings)
4. Infrared frequency (IR) window
   Receives the infrared signal, the frequency synchronization.
5. Press the "SET" switch, set by the liquid crystal screen display function.
6. "UP" switch, press the "SET" switch, value is set by the liquid crystal screen display function.
7. Power /mute switch
   Press and hold can be opened or closed, press release can be mute or unmute.
8. 3-pin microphone input.



Wearing the bodypack transmitter:

The transmitter is clamped in the belt①, can also be through the transmitter with the guitar②, such as the left diagram shown in。
To achieve the best effect, the transmitter to push down, the base until belt tightly transmitter clip①.



Changing batteries:

Two alkaline batteries are expected to use time is about 10 hours.
When the battery is low voltage indicator is flashing, the battery should be replaced immediately (as shown below).

Receiver set up:

Frequency number and channel selection: press "SET" button, press two seconds unlock "🔒" and press the "SET", "GR" flashing, press ▲ or▼ to select the appropriate channel, as shown in Figure❶;

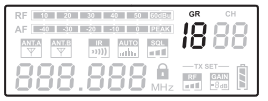
Then press "SET", "CH" flashing, press ▲or▼ to select the appropriate channel, such as shown in Figure❷;

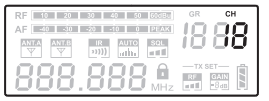
Then click "SET", "SQL" flashing, press ▲ or▼ to select a SQL squelch start end, three stall regulation , such as shown in Figure❸;

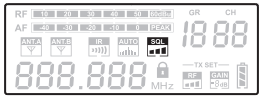
Then click "SET", "TX SET" and RF flashing, press ▲ or▼ to select a transmit power adjustment, as shown in figure❹;

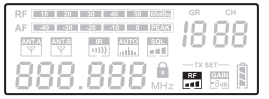
Then click "SET", "TX SET" and GAIN flashing, press ▲ or▼ to select the microphone gain adjustment is shown in Figure❺;

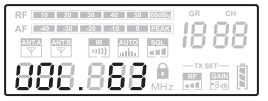
Receiver volume control:
This machine has the electronic volume control system, according to the "SET" key ", two seconds "🔒" release, press ▲ or▼ key control receiver. The output volume (total 64) as shown in Figure❻.

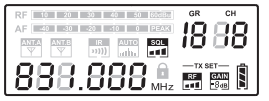
❶ 

❷ 

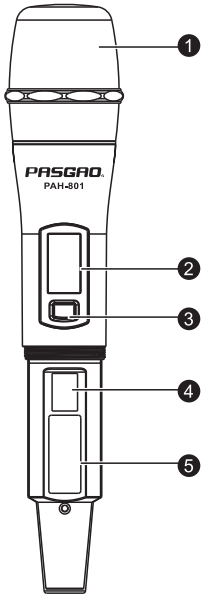
❸ 

❹ 

❺ 

❻ 

PAH-801 features:

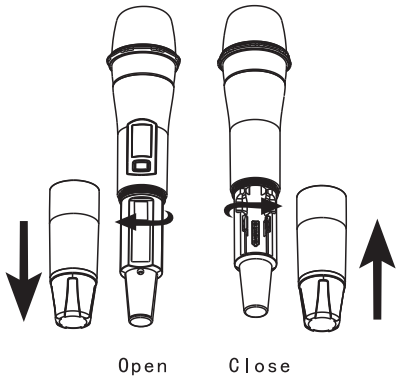


Function:

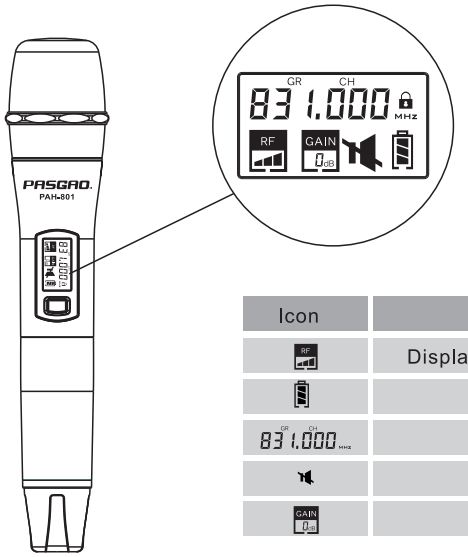
1. Microphone head
2. LED liquid crystal display
3. The power switch, touch a seconds can be open or closed (including mute seting).
4. Infrared frequency (IR) porf
5. Battery cover

Changing batteries:

Two alkaline batteries expected about 10 hours time. When the display power indicator and flashing, the battery should be replaced immediately (as shown below).



The transmitter display function:

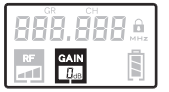


Icon	Function
	Display power of transmitter intensity
	Battery power display
	The frequency of useing
	Mute symbol
	Microphone gain value

Mute: tap again to open the key, hand-held transmitter is muted, display the icon display,Tap again to clear the mute.

The main function of the transmitter

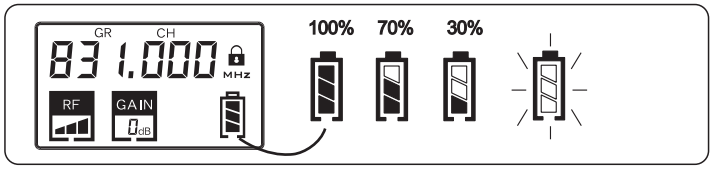
(1) The microphone gain adjustment: display GAIN 0dB gain number.



(2) The transmit power adjustment: display RF power number.

(3) Frequency of use confirmation: display GR CH 831.000 frequency.

(4)Low power tips: when the battery power is less than 1.8V, such as forced open the launcher, an icon display , three seconds after the microphone off automatically, should the battery icon shows 30% to replace the battery.



Note :(1) (2) feature in the receiver set, through the infrared frequency can be achieved.