JTS PROFESSIONAL CO., LTD.

UHF PLL Wireless Expansion Active Speaker

WA-88 EXA

WA-88 EXP

Expansion Passive Speaker

Instruction Manual

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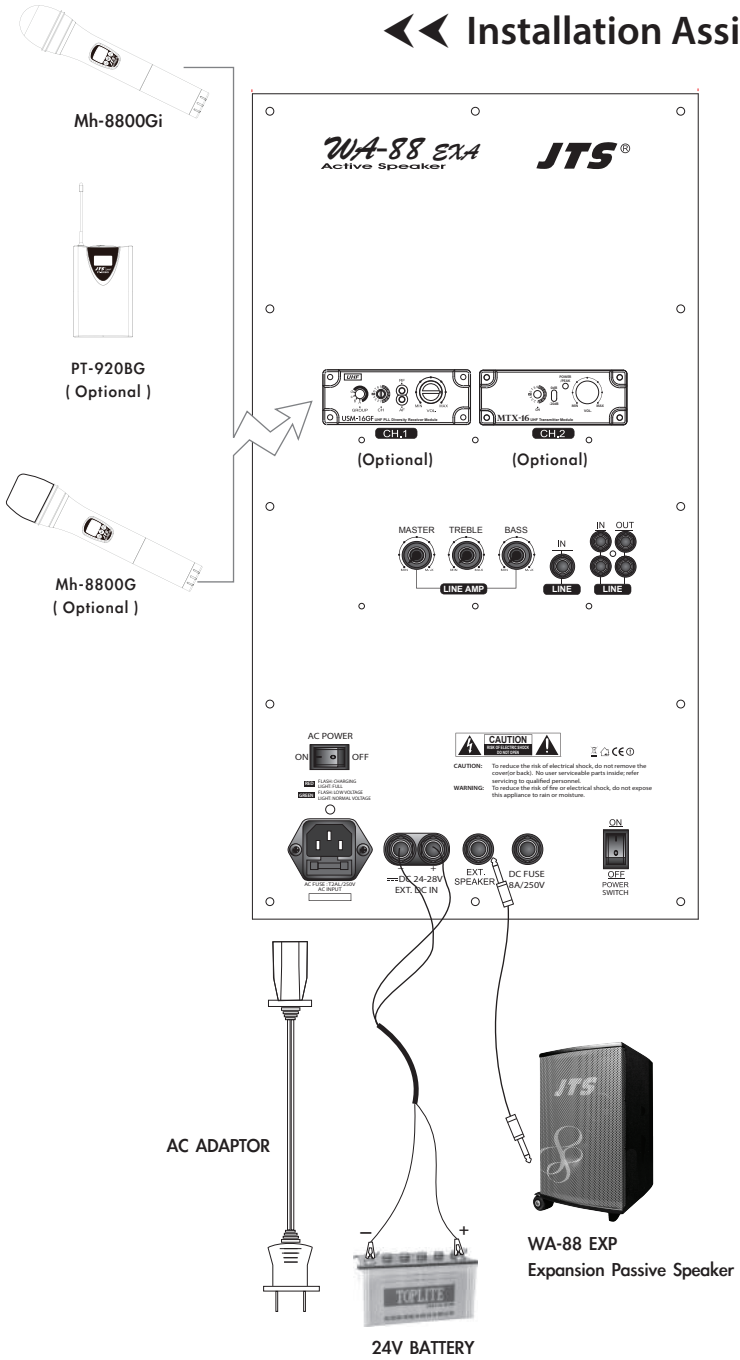
Thank you for choosing the JTS® portable speaker. In order to obtain the best efficiency from the systems, you are recommended to take a few minutes to read this instruction manual carefully.

Installation Assignment



Features

1. A portable active speaker with volume control,Treble/Bass control and AUX in/output with volume control, PLL wireless module and extending speaker output.
2. Using AC 220V or 110V power that contains RMS 75 Watts(4Ω) output.
3. Adopting bi-amp design with high quality active crossover, and 8-inch woofer that provide the best sound quality.
4. The power amplifier uses IC circuit design that not only provides high efficiency and better sound quality, but also protects overheat and short circuit.
5. Adopting high-quality, toroidal transformer design.
6. Using medium-density wood fiberboard as the speaker box.
7. Detachable wheels and trolley create the convenience for free moving.
8. Equipped with stand insert for heightening use.
9. PLL UHF wireless microphone system, which is able to reach over 80M without any interference.
10. Two sealed lead-acid batteries with automatic charging design.The charger will be activated immediately when AC power is plugged in,and AC power switch is in "ON" .
11. Two rechargeable batteries with 12V/5Ahr capacity each that could be used over 3.5 hours with in general volume & over 7.5 hours with normal volume.
12. Uninterrupted power supply (UPS) design that will automatically switch to DC battery without any effect when pulling out the AC power cable.
13. Two-steps LED charger indicator (Red and Green LED) with low voltage detection. It would flash red light when charging, light red when full charged, and would light green when the voltage is normal, and flash green light under the low voltage.

Notice:

1. Please charge the rechargeable batteries more than 8 hours for first time operation.
2. Please refresh the batteries every three months when not using. The batteries will be damaged if left unused for a long time. (over three months)
3. Refresh the rechargeable battery before operation each time to ensure the best performance.

Specification

WA-88 EXA

UHF PLL Wireless Expansion Active Speaker

AC Power :115V/230V
DC power :24V~30V
Lead-acid Battery :12V/5AH*2
Woofer :8” 6Ω/100W
Tweeter :piezoelectric
Sensitivity of AUX IN/GUITAR :-11dB/10K
AUX Output :-3dB/600Ω
Treble Control :±10dB at 10KHz
Bass Control :±10dB at 100Hz
Power Output(RMS) :75W at 4Ω loading (THD10%)
Power Consumption :180VA
T.H.D. :<0.5% at 1 Watt output
S/N ratio :>60dB at 50W output
Control Switcher : Power
Rotary switch :TREBLE, BASS, MASTER
Dimension :310mm(W)*515mm(H)*380mm(D)

WA-88 EXP

Expansion Passive Speaker

Woofer :8” 6Ω/100W
Tweeter :piezoelectric
Dimension :310mm(W)*515mm(H)*380mm(D)

Mh-8800Gi/Mh-8800G(Optional)

UHF PLL Handheld Microphone

Frequency preparation : PLL Synthesized Control
Carrier Frequency Range : 502~960 MHz
RF Outputs : 10mW
Stability : ±10KHz
Frequency Deviation : ±48kHz
LCD Display : Channel, Battery Fuel Gauge, Sensitivity
Controls : Power On/Off, Mode Setting, AF Level, Channel Up/Down, Lock-on Mode
Spurious Emissins : <-60 dBc
Audio Frequency Response : 50~16,000 Hz
Battery : UM3,AA 1.5V*2

➤➤ Specification

PT-920BG (Optional)

UHF PLL Body-Pack Transmitter

Frequency Preparation : PLL Synthesized Control
Carrier Frequency Range : 502~960MHz
RF Outputs : 10mW
Stability : ±10KHz
Frequency Deviation : ±48kHz
LCD Display :Channel, Battery Fuel Gauge
Controls : Power On/Off, AF Level,
Channel Up/Down, Lock-on Mode.
Spurious Emissins : <-50 dBC
Audio Frequency Response : 40~18,000 Hz
Battery : UM3,AA 1.5V*2

USM-16GF (Optional)

UHF PLL Diversity Receiver Module

Frequency : 502~960MHz
Frequency Stability : ±10KHz
S/N Ratio : >100dB
Receiving Mode : Antenna diversity
Mute : Noise and Pilot Tone Squelch
Operation Voltage : 12-18VDC
Output Connector : 0dB/4.7kΩ(40kHz Div)
Dimension(mm) : 60mm(W)*25mm(H)*123mm(D)

CM-501 (Optional)

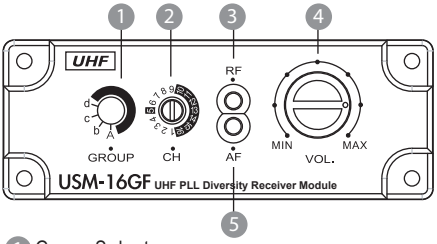
Condenser Lavaliere Microphone

Connector : 4P Mini XLR
Frequency Response : 100~15,000Hz
Polar Pattern : Cardioid
Sensitivity (at 1000Hz) : -60±3 dB* (1mV)*0dB=1V/μbar,1kHz
Impedance : 2.2kΩ
Max. SPL for 1% THD : 130dB
Dimension(mm) : Ø10.1mm(W)* 26.4mm(H)
Net Weight : 21.5g

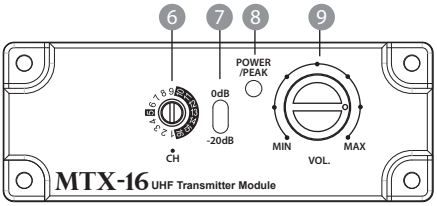
MTX-16 (Optional)

UHF PLL Transmitter Module

Frequency : 502~960MHz
Frequency Stability : ±10KHz
S/N Ratio : >100dB
Receiving Mode : Antenna diversity
Mute : Noise and Pilot Tone Squelch
Operation Voltage : 12-18VDC
Output Connector : 0dB/4.7kΩ(40kHz Div)
Dimension(mm) : 60mm(W)*25mm(H)*123mm(D)

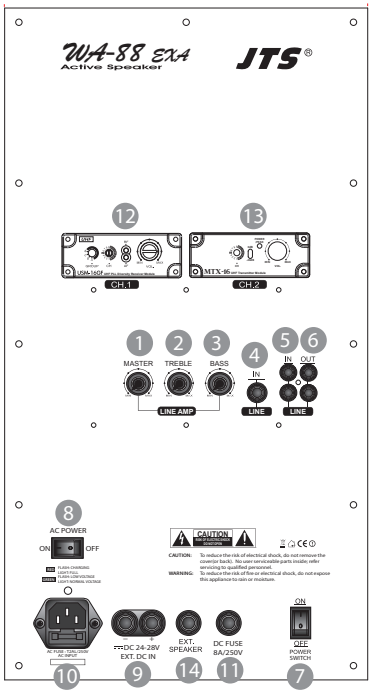


1 Group Selector
2 Channel Selector
3 RF LED
4 Wireless MIC Volume Control
5 AF LED



6 Group Selector
7 PAD
8 Power/Peak
9 Wireless MIC Volume Control

Panel Identification



WA-88 EXA BACK PANEL

■ **Volume and Effect Control**

1 Master volume control: for all sound except AUX input/output

2 Bass tone control: for all sound except AUX input/output

3 Treble tone control: for all sound except AUX input/output

■ **AUX input**

4 AUX input: ∅6.3 phone jack

5 AUX input: with RCA jack

■ **AUX output**

6 AUX output: with RCA jack

■ **Power & Battery Function**

7 Main Power Switch

8 AC Power Switch:Only when AC Power switch is in “ON”, the external AC power will connect to the system.

9 External 24V battery input: Outside DC input would not charge the batteries.

10 AC Fuse:T2AL/250V for AC input

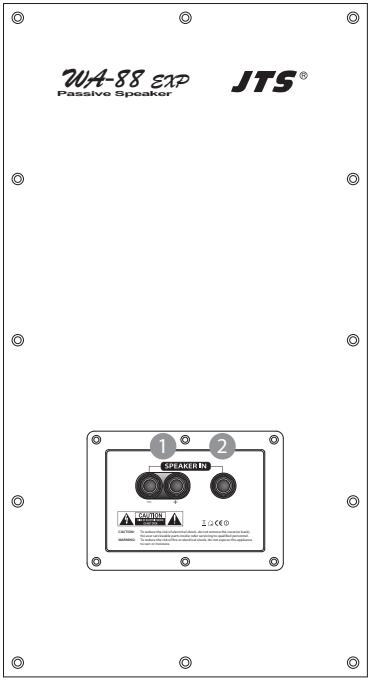
11 DC Fuse: 8A/250V for DC input

■ **Wireless Module and Control**

12 USM-16GF **(Optional)**: UHF PLL Diversity Receiver Module

13 MTX-16 **(Optional)**: UHF PLL Diversity Transmitter Module

14 Extended speaker terminal (∅6.3 phone jack): suggested using 8Ω external speaker since it will be parallelly connected with internal speaker.



WA-88 EXP BACK PANEL

1. Speaker jack
2. ∅6.3 Speaker input

While setting up and installing this machine

Do not wet the machine

Do not exposure to rain, or heavy humidity to prevent fire or electric shock.

Confirming the intensity of the place for setting the machine

Install the machine in a place that can bear one's own weight or steady shelf. It can prevent the machine from causing casualties or property loss while dropping.

Do not touch the loudspeaker terminal

High impendence of loudspeaker terminal can reach the voltage of 110V, please do not touch it, in order to avoid electric shock.

Do not involve the cable

While pulling out the plug, please don't involve the cable; the electric wire damage is apt to cause the fire. Be sure to hold the plug to pull out.

Do not damage the cable

Do not prune, twist, damage or change the cable definitely. Moreover avoid using it in the place close to electric heater and do not place a heavy object and machine itself on the cable which may cause electric shock and fire.

Do not use the voltage of power out of appointing

Limit the use of the voltage of the power stipulated in the machine, if use higher voltage will cause electric shock or fire.

Pay attention to the place to set up

Avoiding installing the machine on the moist and dust, airtight space, the directly sunlight penetrates or close to the electric heater, the place of soot or the vapor is apt to cause electric shock or fire.

While moving the machine, please pull out the plug

It may cause electric shock or fire if not pulling out the plug while moving the machine.

⮝ *While using this machine*

➤ **When in case there are unusual states to take place**

While using the machine that is stating any abnormal state, please get in touch with the distributor as quickly as possible after turn off the power and pulling out the plug at once, Please do not continue using the machine, it may cause electric shock or fire,

1. If find that the machine smolders or smells until strange smell.
2. When if there are water or object fall into the machine.
3. If at the time of the machine drops or outer housing damage.
4. If at the time of the electric cable or wire damage.
5. When the machine emits the unusual sound or has no sound.

➤ **When thunders & lightning occurring, do not touches the plug**

Do not touch the plug while the thunder & lightnign occurring, it may cause shock by electricity.

➤ **Do not put any object into the machine**

Do not put any object; it may cause the spark or electric shock.

➤ **Clean up the plug and socket**

If the dust is piled up on the plug and socket for a long time, it is apt to cause the fire, Please clean up regularly and insert the plug firmly on the socket.

➤ **When maintain and do not use this machine for a long time**

When maintain and do not use this machine for a long time, please must pull out the plug in order to consider safty and may cause shocking by electricity and fire.

➤ **Do not open the upper housing of machine or overhaul the inside by oneself**

In order to avoid shocking by electricity, should not open the upper housing of machine definitely, because it contains the high voltage of parts in the machine. The movements such as inside Overhauling, adjustment and repairing, etc., please trust the distributor to deal with it.

➤ **Before turn on the power of machine, please adjust volume to the lowest level**

➤ **Do not place any article on the machine**

Please do not place any article on the machine, it may drop and cause personnel's injury.

➤ **The sound is unstable for a long time (twist), please do not use it**

This is a sign of a trouble; it is apt to cause loudspeaker generating heat and fire to use continuously.

➤ **Clean up the inside regularly**

Notify your distributor to clean up the machine regularly. if the dust is piled up on the machine for a long time it is apt to cause damage & fire.

WA-88 EXA / WA-88 EXP

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