



FBT Audio Contractor

UHF

PLL WIRELESS SYSTEMS



In order to obtain the best efficiency from the system, you are recommended to take few minutes to read this instruction manual carefully.

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1. Important Cautions

1. Always make all connections before plugging the unit into an AC power outlet.
2. Do not leave the devices in a place neither with high temperature nor high humid.
3. Always do not handle the power cord with wet hands!
4. Keep the devices away from fire, and heat sources.

2. Features:

- * Operated in UHF band where there is less RF interference than the UHF band.
- * Equipped with a SAW filter can benefit to reducing spurious RF content.
- * Pre-set 16 UHF selectable-channels.
- * Including balanced XLR output and unbalanced 1/4" output.
- * Integrated antenna of the handheld transmitter benefits less hindrance for performer.
- * Built-in noise mute and squelch circuit mode can validly resist extraneous noise.
- * Body-pack transmitter is available to work together with a lavalier mic. or headset mic.
- * Space-saving half-rack housing design.

3. Specification

3-1 Overall system

RF Frequency Range	600 ~ 960MHz
Oscillation Type	PLL Synthesized Control OSC
Channels	16 Channels
Audio Frequency Response	50 ~ 18KHz \pm 3dB
Bandwidth	24MHz
Operation Range	100 M

3-2 Receiver

Model No.	US-8001D
Receiving Mode	Diversity
Frequency Stability	$\pm 0.005\%$
S/N Ratio	> 100dB
RF Sensitivity	-107dBm(12dB S/N AD)
Image Rejection	> 60dB
T.H.D.(1 KHz)	< 0.6% @ 1 KHz
Display	LED
Display Contents	RF/AF Status, Channel, Antenna A/B.
Controls	Power On/Off, Volume Control, Channel selector
Audio Output Level	-12dB
AF Output Impedance	600 Ω Unbalance
Squelch	Pilot Tone & Noise Mute
Operation Voltage	12-18VDC, 600mA
Output Connector	1 Balanced XLR socket 1 Φ 6.3mm Phone Jack
Dimension(m/m)	221mm(W)*40mm(H)*152mm(D)

3-3. Transmitter

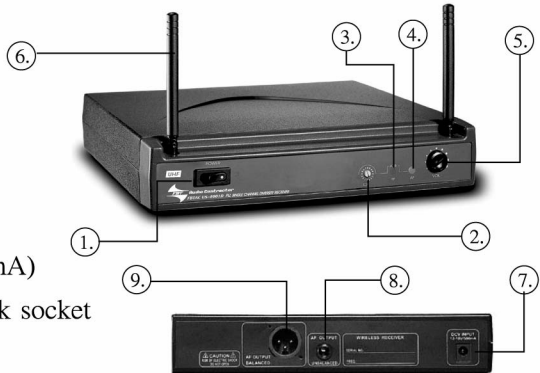
Model No.	Mh-750
Type	Handheld
Ball grille shape	Round
Spurious Rejection	< -60dBc
Stability	$\pm 0.005\%$
Frequency Deviation	± 48 KHz
S/N Ratio	> 100dB (1KHz-A)
Current Consumption	100mA
LED Indicates	Power On/Off, Low batt.
Battery	UM3,AA 1.5V * 2

4. Parts Identification & Accessories

4-1 Receiver

US-8001D UHF Single Channel PLL Diversity Receiver

- ① Power On/Off
- ② Channel Selector
- ③ RF indicator
- ④ AF indicator
- ⑤ Volume control
- ⑥ Antenna
- ⑦ DCV Input (12-18V/600mA)
- ⑧ Unbalanced Φ 6.3mm jack socket
- ⑨ Balanced XLR socket



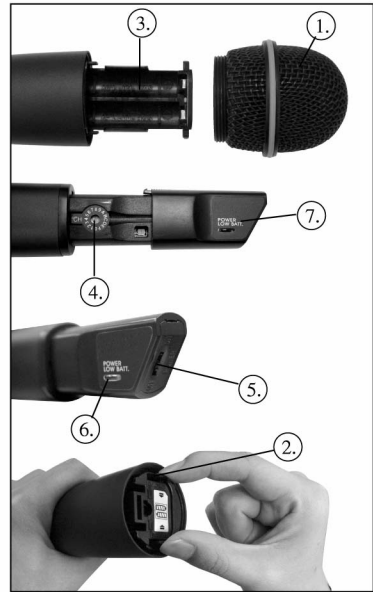
Accessories

- ⑩ AF output cable
(With unbalanced Φ 6.3 plug)
- ⑪ AC/DC adaptor
- ⑫ Screwdriver



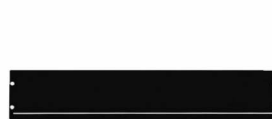
Mh-750

- ① Interchangeable element(Round grille)
- ② Battery tray release
- ③ Battery tray
- ④ Channel selector
- ⑤ Power On/Off switch
- ⑥ LED Indicator
- ⑦ ID housing



4-4 Optional accessory

- ① DR-900 Dual Rack Adaptor
- ② RP-900 Panel Cover



5. Installation Assignment

5-1. Installation of the receiver

(1.) Power Output Connector

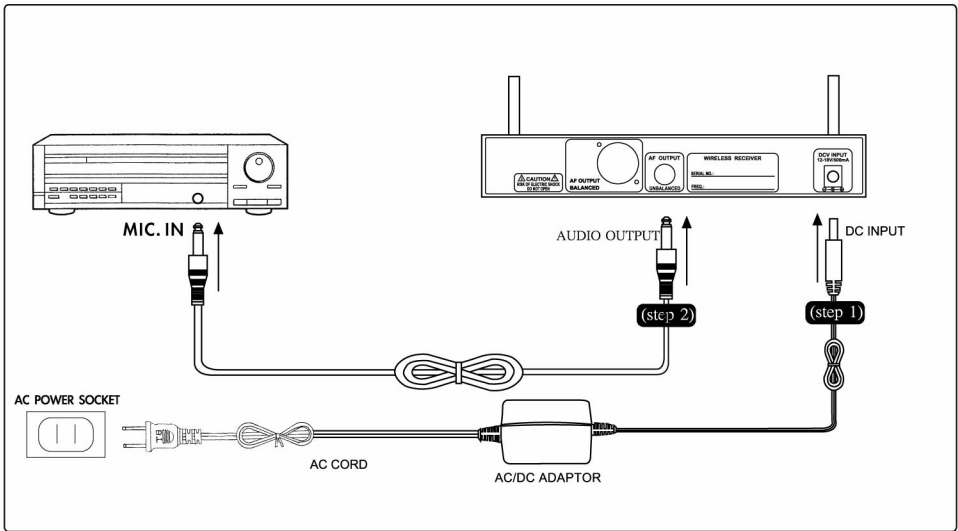
Connect one end of AC/DC adaptor cable to DC input socket in the rear panel of receiver, and plug another end into an AC outlet.

(Step 1 of Figure 1)

(2.) Audio Output Connector

The receiver equipped with both balanced XRL output and Unbalanced Φ 6.3mm jack output, you can choose the proper way for using.

1. Connect one end of AF output cable to the AF output socket in the rear panel of receiver and plug another end to the "Mic. In " input socket of the mixer or amplifier. (Step 2 of Figure 1).



(Figure 1)

5-2. Battery Insertion of the transmitter

(1.) Mh-850 & Mh-750 Handheld Transmitter

1. Loosen the microphone element counter-clockwise (step 1 of Figure 2), press both release knobs inside to remove the battery tray from the mic. housing (step 2 of Figure 2).



(Figure 2)

2. Insert two 1.5V batteries according the correct polarity, and return the battery tray back to housing (step 3 of figure 3). Aim the connecting pins exactly toward the cavities on the bottom side of detachable mic. element (step 4 of figure 3) , and tight it clockwise !



(Figure 3)

5-3. Rack Mounting

- (1.) Before mount receivers onto DR-900 rack adaptor, please release any cables from the rear of the receiver.
- (2.) Turn over receiver and DR-900 rack adaptor simultaneously, there are 4 threaded holes each in the bottom of receiver and rack adaptor for inserting screws.

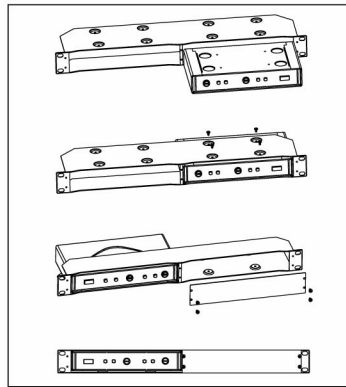
- (3.) Single receiver

Insert in a receiver through the front of DR-900 until it is firmly attached to the rack , then screw on a RP-900 to another side of the rack.

(Figure 5)

- (4.) Dual receivers

The same way as above, put one receiver to each rack space.



(Figure 5)

6. System operation

Be sure to mute the audio signal of mixer or amplifier before turning on the receiver or transmitter.

(1.) Power on

Turn AF level on the receiver completely counter-clockwise to the minimum level, and press the power On/Off switch on the front panel of receiver. As soon as you turn power on of receiver, the power LED lights red, meanwhile the RF signal and AF LED light up to indicate the receiver is ready for operating. (Figure 8)



(Figure 8)

Always it's a good idea to keep "open space" between transmitter and receiver, that is able to improve RF reception.

(2.) Selecting channel for the receiver and transmitter

1. Use the supplied screwdriver to select a desired channel for the receiver and transmitter. Both receiver and transmitter are preprogrammed with 16 channels. Please use the plastic stick to switch the channel selector on receiver, and handheld transmitter.(Figure 9)



(Figure 9)

2. Make sure the receiver channel matches that of the transmitter.
3. When 2 or more transmitters and receivers are being use in the same location, they must be set up to use different channels. If existing channel is being interfered, please change another channel non-interference.

7. Recommendation

1. In order to achieve the optimum reception condition and also extend the operating distance, please leave a "open space " between the receiver and transmitter.
2. Keep the devices away from the metal objects or any interference sources, at least 50 cm.
3. To avoid the feed-back effect, don't leave the mic. to aim at the speakers directly.
4. For best pick-up pattern, please hold the middle of the mic. body.
5. Remove batteries from the battery compartment when the transmitter will not be used for a long time.
6. When you need to replace the batteries, please replace both batteries at the same time with new ones.