



FBTAC US-902D / MH-920

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Thank you for choosing the **FBT** wireless system. In order to obtain the best efficiency from the system, you are recommended to take few minutes to read this instruction manual carefully.

1. Important Cautions

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

2. Features

- * Operated in UHF band where there is less RF interference than the VHF band.
- * Due to the PLL-synthesized technology, the system offer 16 selectable channels for choosing.
- * The new diversity reception with 2 independent RF receivers ensure the stable transmission and reception.
- * Adjustable squelch control can effectively reduce the noise.
- * Tuned antennas can benefit the stable RF reception.
- * Built in Tone Key Squelch & Noise Mute detection are available to restrain the interference signal.
- * Equipped with balanced XLR and unbalanced output allows great convenience.
- * Body-pack transmitter provides phantom powering for compatibility with condenser lavaliere and headset microphones.

3. Specification

3.1 Overall system	
RF Frequency Range	600 MHz-900MHz
Oscillation Type	PLL Synthesized Carrier OSC
Channels	16 Channels
Audio Frequency Response	50 Hz - 16KHz
Band-width	24MHz
Operation Range	100 M

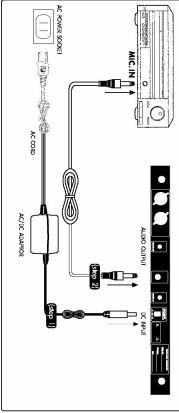
3.2 Receiver

Model No.	US-902D
Receiving Mode	Diversity
Frequency Stability	±1.005%
S/N Ratio	> 100dB
RF Sensitivity	-107dBm (120dB S/N, A/D)
Image Rejection	> 60dB
T.H.D.(1 KHz)	<0.066% 1 kHz
Display	LCD
Controls	Power On/OFF, Volume Control, Channel (F/D)Menu, Squelch level
Audio Output Level	-12dB
AF Output Impedance	2.2KΩ Output
Squelch	Three Tone & Noise Mute
Operation Voltage	DC 3.7VDC, 600mA
Output Connector	1. 2 Balanced XLR, 2. 1 Unbalanced 6.35mm Phone Jack
Dimension(mm)	48(Height)×74(Width)×22(Depth)

5. Preparing procedures & basic operation

5-1 Receiver

- (1.) Power output connector
Plug in one end of AC/DC adaptor cable to DC input so that in the rear panel of receiver, and plug another end into an AC outlet (Step 1 of Figure 1)
- (2.) Audio Output Connector
Connect one end of the AF output cable to the AF output socket in the rear panel, then plug another end to the "MFC IN" input socket of a mixer or amplifier.(Step 2 of Figure 1).
US-902D equipped with balanced XLR output and Unbalanced output, choose the proper way for use.



(Figure 1)

- (3.) Turn the receiver on by pressing the Power button in the front panel. (Figure 2)
- (4.) Adjust the AF output level control to select a proper AF signal level. (Figure 3)



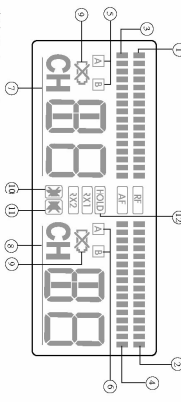
(Figure 2)



(Figure 3)

(5.) LCD PANEL

1. RF incoming signal level of RX1
2. RF incoming signal level of RX2
3. AF incoming signal level of RX1
4. AF incoming signal level of RX2
5. Diversity of RX1 (antenna A or B status)
6. Diversity of RX2 (antenna A or B status)
7. Channel display of RX1
8. Channel display of RX2
9. Low bat. status of transmitter
10. Main status of RX1
11. Main status of RX2
12. Setting lock-on mode



(6.) Basic operation

Press the ▲ Up or ▼ Down button till the [CH] starts flashing, and again press the ▲ Up / ▼ Down button to select a suitable channel from the pre-set 16 channels. Later the [CH] stop flashing, the receiver will store the channel automatically measurable presents the channel number. Repeat the action for [RX2].



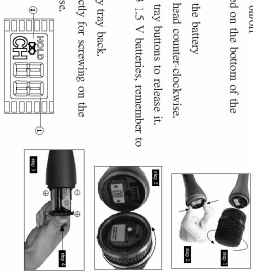
(Figure 6)

5-2 Handheld Transmitter

- (1) Turning the transmitter on/off
The on/off switch is located on the bottom of the microphone
- (2) Inserting and charging the battery
1. Loosen the microphone head counter-clockwise.
2. Hold on to both battery tray buttons to release it.
3. Insert 2 pieces of LM3 1.5 V batteries, remember to match correct polarity.
4. Directly push the battery tray back.
5. Aim the connectors exactly for screwing on the microphone head clock wise.
- (3) LCD panel
1. Main display
2. Battery Low indicator



Squelch level



Basic operation

Press the SET button to select between frequency and sensitivity.
1. Channel select
Press the UP or DOWN button to adjust the channel
Press UP or DOWN button "CH" will flash. Then re-press UP or DOWN button to select the channel from 1-16.
Hold UP to DOWN button 2 seconds, the channel will be increased or decreased.
In 5 seconds channel will be moved upon above procedure done.

(Figure 7)

6. System operation

- Be sure to mute the audio signal of mixer or amplifier before tuning 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 LCD lights on, meanwhile the RF signal and AF level indicate the transmission status, and receiver is ready for operating.
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 transmitter
1.1 Use the squelch semiconductor to select a desired channel for the receiver handheld transmitter. Both receiver and transmitter are preprogrammed with 16 channels. (Figure 10)
 - 1.2 Press the ▲ / ▼ button to select the channel for the receiver handheld transmitter. Both receiver and transmitter are preprogrammed with 16 channels. (Figure 11)



(Figure 10)



(Figure 11)

2. Then with the ▲ / ▼ button to select the channel of receiver the same as the transmitter, please 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 to another channel non-interference.

(Figure 12)

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