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NF03356-1.0

WIRELESS MICROPHONE SYSTEM

UEM-8DR/8T SERIES

WIRELESS MICROPHONE SYSTEM

User's Manual

IMPORTANT!

Please read this manual carefully before operating this unit for the first time.

SAFETY RELATED SYMBOLS

The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.

The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that documentation for safety reasons.

⏚ Protective grounding terminal.

~ Alternating current /voltage.

Hazardous live terminal .

ON: Denotes the apparatus turns on.

OFF: Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed your service.

WARNING: Describes precautions that should be observed to prevent the danger of injury or death to the user.

Disposing of this product should not be placed in municipal waste and should be separate collection.

CAUTION: Describes precautions that should be observed to prevent danger of the apparatus.

WARNING

- **Power Supply**

  Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.

  Unplug this apparatus during lightning storms or when unused for long periods of time.

- **External Connection**

  The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.

- **Do not Remove any Cover**

  There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected.

  The cover should be removed by the qualified personnel only.
  No user serviceable parts inside.

- **Fuse**

  To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.

  Before replacing the fuse, turn OFF the apparatus and disconnected the power source.

- **Protective Grounding**

  Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.

  Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

- **Operating Conditions**

  This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.
  To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
  Do not use this apparatus near water.
  Install in accordance with the manufacturer's

instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings.
No naked flame sources, such as lighted candles, should be placed on the apparatus.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Follow all instructions.
- Keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

- **Power Cord and Plug**

Do not defeat the safety purpose of the polarized or grounding type plug.

A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- **Cleaning**

When the apparatus needs a cleaning, you can blow off dust from the apparatus with a blower or clean with rag etc.

Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body. Clean only with dry cloth.

*This device normal operated more than □ body 5 cm

- **Servicing**

Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so .

Servicing is required when the apparatus has been damaged in any way ,such as power supply cord or plug is damaged , liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the □ FCC Rules. Operation is subject to the □ condition that this device does not cause □ harmful interference.

NOTE: This equipment has been tested and found □ to comply with the limits for a Class B digital □ device, pursuant to Part 15 of the FCC Rules. □ These limits are designed to provide reasonable □ protection against harmful interference in a □ residential installation. This equipment generates, □ uses and can radiate radio frequency energy and, □ if not installed and used in accordance with the □ instructions, may cause harmful interference to □ radio communications. However, there is no □ guarantee that interference will not occur in a □ particular installation. If this equipment does cause □ harmful interference to radio or television □ reception, which can be determined by turning the □ equipment off and on, the user is encouraged to try to correct the interference by one or more of the □ following measures:□
-- Reorient or relocate the receiving antenna. -- □ Increase the separation between the equipment □ and receiver. -- Connect the equipment into an □ outlet on a circuit different from that to which the □ receiver is connected.-- Consult the dealer or an □ experienced radio/TV technician for help.

6. ANNEX

The frequencies which corresponds to the channels are as follows.

CHANNEL / F5 702-731	1	2	3	4	5	6
	702.125	702.875	703.775	705.875	724.875	730.125
CHANNEL / F5 702-731	7	8	9	10	11	12
	702.500	703.250	704.150	706.250	725.250	730.500
CHANNEL / F5 702-731	13	14	15	16		
	714.725	714.925	725.475	730.725		

CHANNEL / F2 535-564	1	2	3	4	5	6
	535.125	535.875	536.775	538.875	557.875	563.125
CHANNEL / F2 535-564	7	8	9	10	11	12
	535.500	536.250	537.150	539.250	558.250	563.500
CHANNEL / F2 535-564	13	14	15	16		
	547.725	547.925	558.475	563.725		

Remark: FCC only for F2:535-564MHz

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1. INTRODUCTION

Thank you for purchasing UEM monitoring system. It has many advantages of in-ear monitoring including: better sound quality, more mobility, personal adjustment, etc. Better sound quality means high fidelity without risky feedback. More mobility means the mix is mobile with the owner together. Personal djustment means it forms a personal mix, and adjusts the personal levels.

The UEM Monitor System

The UEM monitor system is a frequency-sensitive system with in-ear monitor, which is used in a wide range of applications. The product is suitable for school speech, meeting speech, teachers and performer on stage.The features aid to solve the problems from stage monitoring.

The UEM-8DR is new bodypack receiver which works as a wired receiver, a wireless receiver, or both at the same time. The UEM-8T is another unique design for in-ear monitoring.

Connect the two line-level or MIC level inputs directly into the transmitter and then the two signals can be mixed together. Connect microphones or instruments directly with the inputs or with UEM-8T, and use line outputs from a mixing console. In a word, no matter what kind of output device you use, it can be plugged into The whole UEM monitor series include the EB earphones and it has a dynamic driver to produces crisp, full-spectrum sound. They have various sleeve options for the best fit and isolation for ears. The EB earphone can operate wellwith CD players, MP3 players, and anything else with a 1/5 inch (3-5mm) stereo output.

UEM-8T

UEM-8DR Receiver

5. Specifications

MODEL	UEM-8DR
Frequency range	470~870 MHz (FCC only for F2:535-564MHz)
Frequency response	50Hz TO 15KHz
Total harmonic distortion	＜1.5%
Signal to noise ratio	80dB
Maximum output level	20mW
Audio output connector	3.5mm stereo
Power requirements	9V alkaline battery
Current drain	＜75mA
Dimensions	106(L) x 23(W) x 66(H) mm
	4.2L x 0.9Wx 2.6 H inch
Net weight	80g (0.177bs)

MODEL	UEM-8T
Frequency range	470-870MHz(FCC only for F2:535-564MHz)
Frequency stability	±0.005% at 25℃
Antenna output	TNC socket 50Ω
RF output power	0=30mW
	1=100mW
Maxiumum Deviation	60K
AF frequency response	50-15KHz
Modulation	Stereo FM working on the "pilot tone" principle
Spurious emission	＞55dBc (type)
Power supply extend DC	12-15V 550 mA AC/DC adaptor
Headphone output	1/4 (6.3mm)ϕ stereo jack
AF inputs	XLR/6.3mmϕ, RCA line
THD at 1kHz	≦1.2%
Dimensions	210(W) X 232(D) X 44(H)mm
	8.27" x 9.13" x 1.73"
Weight	1.45Kg (3.21lb)

mode of selecting channel. Use UP or DOWN key to select the channel you want. When one channel is selected, the corresponding frequency is presented. If one channel is selected, press MEM key to save it. If one channel is selected from the transmitter, select the corresponding channel from receiver.

Notes: For frequencies of channels in detail, please refer to the Annex.

4.2.3 RF output power

Press SET key three times and RF power could be then set. Use UP and DOWN key to adjust the audio output power. The output power has two choices, 0 stands for 10mV, 1 stands for 100mV. When the RF power has been set, please press MEM key to save it.

4.3 UEM-8DR RECEIVER

4.3.1 Turn on the power switch

4.3.2 Select the channel which corresponds to that of the transmitter.

4.3.3 Put the ear phone plug into stereo socket for listening.

4.3.4 Adjust the volume control Adjust the volume by turning the volume control.

4.3.5 Battery Replacing & Installation

The double colour LED turns red, this indicates the battery low. Please replace them with new batteries.

Please pay attention to that battery positive/negative should exactly correspond to that of the receiver before the battery replacement. There is explosion danger if the battery is incorrectly replaced. Replace the battery only with the same or equivalent type.

Note:

① After operation the unit should be switched off as well. Otherwise the batteries will soon be exhausted. If LED of receiver lights up green, this indicates that the receiver works well. If LED lights up red, this indicates that the wireless receiver do not work. Please check if the channel is the right one which corresponds to that of the transmitter. .

CAUTION

① Battery use DC9V.

② Do not drop the ear phone body on the floor.

③ Protect the unit from humidity and heat.

④ If the units don't work, bring them to technical engineer for disposal.

⑤ Volume level should not be too loud in case ears are hurt.

2. Features

UEM monitor system

-16 channels /frequencies selectable (Each channel corresponds to a frequency)

-EB dynamic driver earphones included

-Mono mix

UEM-8T

-2 mic/line XLR 1/4 inch combo inputs

- Input level adjustment

UEM-8DR Receiver

-Gain switch adjusting line input sensitivity

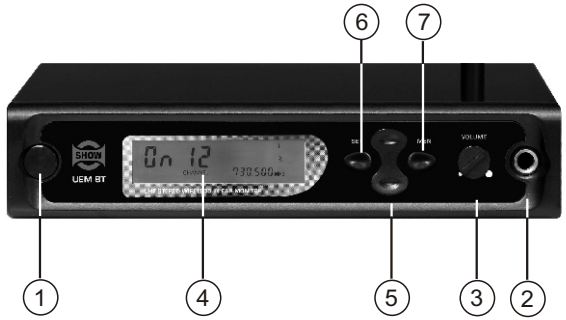
-1/4 inch line-level input jack for the connection with monitor mix, click tracks effects

-Cable management groove protects cables connected with bodypack

3. CONTROL ELEMENTS

3.1 UEM-8T

THE FRONT PANEL



① Power switch

It switches on/off the main power of UEM-8T.

② Headphone output

This is a 6.3mm phone jack for headphone monitoring.

③ Headphone volume control

It controls volume level for headphone.

④ LCD display

The LCD shows RF signal, group value, channel value, audio level and the selected frequency.

⑤ UP/DOWN key

In this menu mode, you can choose the right value via these two keys.

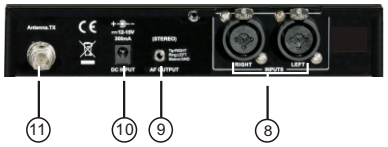
⑥. SET key

Via this key, you can choose the right function you want.

⑦. MEM key

This key is used to save the exact function you select.

THE REAR PANEL



⑧.MIC input

This is a jack for inputting MIC signal.

⑨.Input mode

There are totally four input modes here. They are 1-MIXER/CD PLAYER, 2-CASSETTE PLAYER, 3-RADIO TUNER, 4-AUX INPUT respectively.

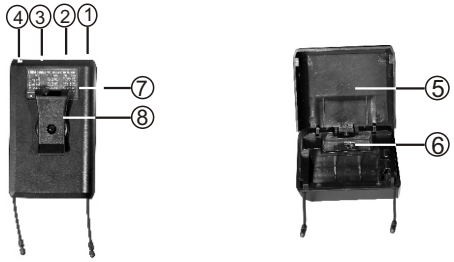
⑩.DC input socket

It is used to connect an attached adapter.

⑪.Antenna

This antenna transmits signal for receiver. To get effective transmission, never cover the antenna with hand, clothes, etc during the operation, and always position the transmitter nearby the receiver.

3.2 UEM-8DR



① Stereo socket

This is a 3.5 jack for listening stereo signal or mono signal.

② Volume control

It controls the volume of receiver.

③ Power switch

When power switch is set in the position OFF, the receiver is switched off. When the power switch is set in the middle, the receiver is switched on and it receives stereo signal. When the power switch is set in the position ON which the silkscreen shows, it receives mono signal.

④LED indicator

When LED lights up red, it means battery power is insufficient. When the LED lights up green, it means the receiver is in normal operation.

⑤Battery cover

⑥Channel selector control

It is used to select the channels 1~16 for the receiver.

⑦Label

⑧Belt clip

It is the detachable belt clip for easy carry during the live applications.

4. OPERATION

4.1 Make the right connection for the system

4.1.1. Please make sure first the voltage is correct, and then plug the power supply cord into DC INPUT jack.

4.1.2. Install the antenna for UEM-8T.

4.2 UEM-8T TRANSMITTER

4.2.1 Turning on/off RF signal

Press SET key once and use UP and DOWN key to switch ON/OFF RF signal. If "ON" remains flashing, it means the RF signal is turned on. If "OFF" remains flashing, it means the RF signal is turned off. Then press MEM key to save it.

4.2.2 Selecting channel

Press SET key twice, and "channel" keeps flashing. It means the unit is in the