

# CITRONIC

## MPI6UHF 16-CHANNEL UHF SYNTHESIZED WIRELESS MICROPHONE DIVERSITY SYSTEM

171.329



# UHF PLL MULTI CHANNELS WIRELESS MICROPHONE SYSTEM

Thank you for selecting our UHF PLL Synthesised Wireless System. Before operation please read this instruction manual carefully in order to attain the correct operating procedures and achieve the best results.

This UHF wireless receiver is with advanced PLL synthesised circuit which can eliminate the random noise interference effectively when the receiver is at standby state. The receiver has both balanced and unbalanced outputs suitable for all amplifiers input.

This system includes the following accessories:

1. Audio Output Cable x 1
2. Instruction Manual x 1
3. Antenna x 2
4. AC/DC Adapter x 1

## 1. RECEIVER PARTS DESCRIPTION

### A. Front Panel

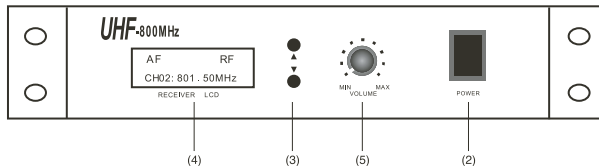


Fig.1

### B. Rear Panel

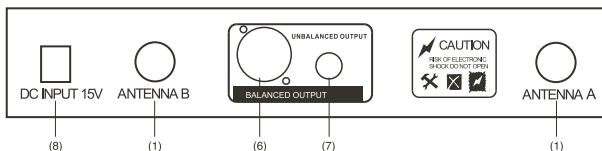


Fig.2

- (1) Antenna Input Connector.
- (2) Power switch: When switch is turned on, LCD panel will light to indicate normal power status.
- (3) Channel selector.
- (4) LCD panel: it displays channel no., frequency.
- (5) Volume control.
- (6) Balanced Audio Output Jack.
- (7) Unbalanced Audio Output Jack.
- (8) DC 15V Input Jack: To connect 15V DC from the AC/DC adapter.

## 2. INSTALLATION OF THE RECEIVER

1.Install antenna in rear (1). Extend antenna to the fullest position.

2.Power Input Connection:

Connect input connector of AC/DC adapter to power source. Connect output connector to receiver rear panel DC input jack (8). Pay attention to the power source voltage.

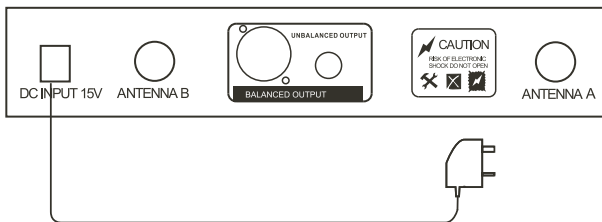


Fig.3

3.Audio Output Connection

(a) Unbalanced Output: Use attached audio cable to connect one end to the unbalanced output jack (7) of the receiver. Connect the other end to the "LINE-IN" input jack of amplifier.

(B) Balanced Output: Use "XLR" or "Canon" type audio cable(not provided) to connect one end to the balanced output jack (8)of the receiver. Connect the other end to the "MIC IN" input jack of the mixer or amplifier.

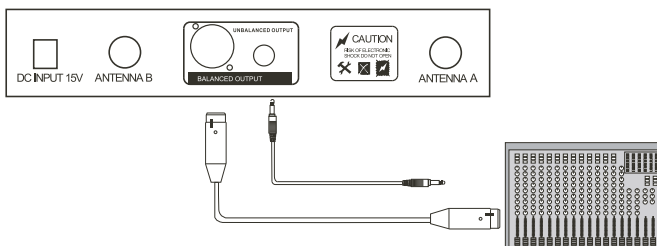


Fig 4

### 3. OPERATION OF THE RECEIVER

1. Pull out antenna A & B. Make them to be perpendicular with the machine.
2. Connect input connector of AC/DC adapter to power source. Connect output connector to receiver rear panel DC input jack (8).

***Make sure the power source voltage is same as marked voltage on the rear panel***

3. Connect one end of attached audio cable to the unbalanced output jack(7) of the receiver. Connect the other end of the cable to "line in" input jack of amplifier.
4. Turn on power switch, LCD panel will light.
5. Press UP or down button to set the receiver frequency same as transmitter frequency.
6. Turn on transmitter power switch, "RF" indicator of the receiver will display  
Volume of the receiver can be controlled by adjusting the volume knob.

#### Attention

When installing the receiver, locate the receiver at least 1m above the ground and 1m beyond the wall. Antennae should be extended fully to get the the reception signal.

### 4. TRANSMITTER PARTS DESCRIPTION

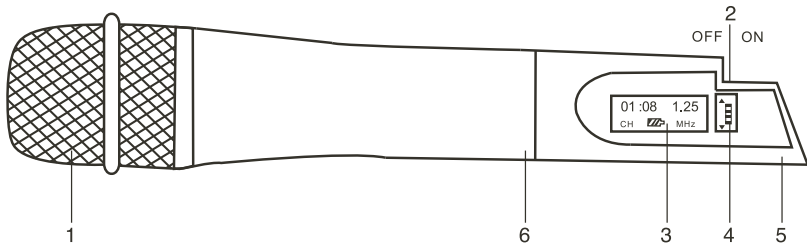


Fig. 5

1. MIC head: capsule inside.
2. Power switch
3. LCD Display: display channel no., Frequency and battery life.
4. Channel Selector
5. Colorful ring. It is for distinguishing different microphones.
6. Battery compartment.

## 5. OPTIONAL TRANSMITTER/HEADSET MIC (171.335)

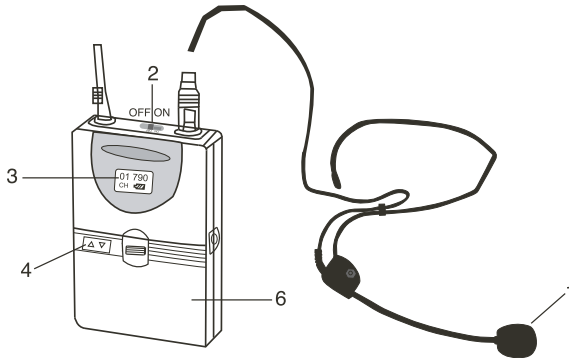


Fig. 6

## 6. OPERATION OF THE TRANSMITTER

1. Unscrew the battery compartment then put in a 9V battery.  
Attention: The polarity should be right.
2. Turn on the transmitter. LCD panel will light. If LCD panel does not light, check the battery to see if the voltage is low or the battery is not installed correctly.
3. Press Up or Down to adjust frequency.

## FREQUENCY & CHANNEL LISTING

Channel 01 = 863.350MHz  
Channel 02 = 863.450MHz  
Channel 03 = 863.550MHz  
Channel 04 = 863.650MHz  
Channel 05 = 863.750MHz  
Channel 06 = 863.850MHz  
Channel 07 = 863.950MHz  
Channel 08 = 864.150MHz

Channel 09 = 864.250MHz  
Channel 10 = 864.350MHz  
Channel 11 = 864.450MHz  
Channel 12 = 864.550MHz  
Channel 13 = 864.650MHz  
Channel 14 = 864.750MHz  
Channel 15 = 864.850MHz  
Channel 16 = 864.950MHz

## 6. TROUBLESHOOTING

1. Turn on the receiver, but the indicator does not light.
    - Make sure the power cable is well fixed and the socket is in good condition.
    - Check if the fuse is blown.
  2. When you speak, the "AF" light twinkles but no sound output.
    - Check if the volume is in lowest place or the audio cable is not fixed well.
  3. The effective signal-receiving distance becomes close. And signal-receiving is not well. Sound quality is bad.
    - Check if the battery power is low. Change new battery.
    - Check if there are same frequency signals in your surroundings.
- \* Do not use two units with the same frequency at the same time in a place.  
(Separate them at least 120m.)
- \* Do not open and repair it when some serious breakdown happens.
- \* Please contact your local distributor for repair.

## 7.SPECIFICATION

### 1.COMPREHENSIVE PERFORMANCE

|                            |  |
|----------------------------|--|
| CARRIER FREQUENCY:         | UHF 863-865MHz   |
| FREQUENCY STABILISATION:   | $< \pm 30\text{ppm}$   |
| DYNAMIC RANGE:             | MORE THAN 90dB   |
| TOTAL HARMONIC DISTORTION: | LESS THAN 0.5%   |
| FREQUENCY RESPONSE:        | 40HZ-15KHZ $\pm 3\text{dB}$  |
| AUDIO OUTPUT LEVEL:        | UNBALANCED OUT: 0-- $\pm 400\text{mV}$<br>BALANCED OUT: 0-- $\pm 200\text{mV}$ |

### 2.RECEIVER

|                                |                               |
|--------------------------------|-------------------------------|
| POWER SUPPLY:                  | DC15V                         |
| CONSUME POWER:                 | 5 WATERS                      |
| SIGNAL/NOISE RATIO:            | MORE THAN 90dB                |
| IMAGE & SPURIOUS REJECTION:    | MORE THAN 80dB                |
| BORDER UPON CHANNEL REJECTION: | MORE THAN 80dB                |
| RECEIVING SENSITIVITY:         | LESS THAN 10dBu V(SINAD=30dB) |
| DE-EMPHASIS:                   | 50 $\mu\text{s}$              |

### 3. TRANSMITTER

|                     |                                       |
|---------------------|---------------------------------------|
| TRANSMITTING POWER: | 8.5mW                                 |
| MODULATION TYPE:    | FM, F3F                               |
| MAX DEVIATION:      | $\pm 25\text{kHz}$                    |
| SPURIOUS EMISSION:  | $>40\text{dB}$ (WITH CARRIER)         |
| POWER SUPPLY:       | 9V battery                            |
| BATTERY LIFE:       | 6 hours (GP) 1604s 9V battery         |
| NOISE CONTROL:      | perfect circuit for eliminating noise |

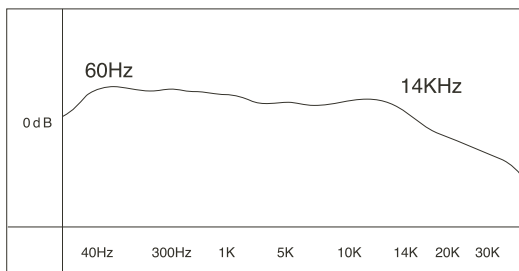


Diagram of AF Frequency Response

## 8. IMPORTANT SAFEGUARDS

1. Avoid putting the main machine in a blind angle when it is used. This is to keep signal reception in good condition.
2. Don't throw, fall, toss, cast the handheld microphone so as not to damage it seriously.
3. Please keep the machine from direct sunshine or rains. Place it in a place far away from the magnetic field.
4. Don't open it yourself because there is high voltage in it.

## 9. CAUTION

1. The installation of receiver antenna influences the operating efficiency of the receiver. Place receiver and microphone as short as possible for better reception and performance.
2. The external DC power supply should not be below 12V. Otherwise it would not work properly. If it is over 15V, some components of the receiver will be damaged due to higher current. Use minimum 1A power supply.