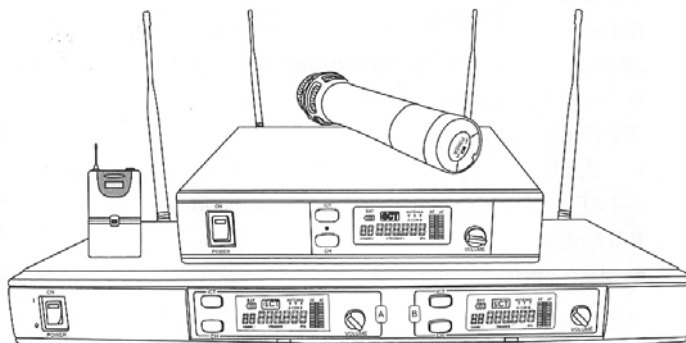


UHF MULTI-CHANNELS WIRELESS MICROPHONE SYSTEM



OPERATION INSTRUCTIONS

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Preface

Thanks for choosing the most advanced ICT series wireless microphone system.

INTRODUCTION

This is a state of art wireless microphone system incorporate noise reduction cardioids microphone and extra long usage on its AA batteries. The DIVERSITY WIRELESS SYSTEM also ensures stability of quality signal received. The Infrared activate locking system offers wide spectrum of frequencies this achieving optimal professional standard.

Please read this manual thoroughly before using it, to know the correct operation so as to gain the optimal performance.

The ICT series wireless microphone system can be supplied in four frequency ranges within the UHF band. Please note: Frequency usage is different for each country. Your ICT agent will have all the necessary details on the available legal

Innovations such as automatic frequency selection and automatic transmitter setup make wireless quicker and completely worry-free. The DBX noise reduction system can provide the crystal clear sound quality that pro audio engineers trust. The true diversity technology ensure interference-free transmission and minimize dropouts in the RF link. Color LCD may display several messages synchronously.

ICT series gives you several systems to choose for guitars, instruments, and vocal mics, it's the best-sounding from the leader in live performance sound.

User Note

Do not spill liquid on the appliance and avoid excessive vibration.

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliance (including amplifiers) that produce heat.

Avoid dusty and humid environment to achieve best performance

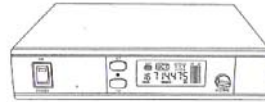
Avoid placing appliance near radio transmitting devices such as cell phone, remote control and wireless related equipments to avoid cross interference

Remove battery from transmitter if the system is not to be use for a prolong period to avoid damage caused by battery leakage.

3. System components

(1) ICT828A

Single channel, true diversity, 16 frequencies wireless receiver;



(2) ICT828B

Single channel, true diversity, 32 frequencies wireless receiver;



(3) ICT848A

Double channel, true diversity, 16 frequencies wireless receiver;



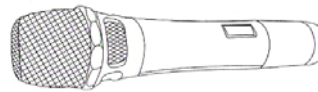
(4) ICT848B

Double channel, true diversity, 32 frequencies wireless receiver;



(5) T828

Adapt to ICT series high-end handheld wireless transmitter, there're several kinds of selectable cartridge to be matched with.



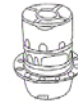
(6) DM101

Cardioid dynamic cartridge, it's ideal for karaoke and recreation performance.



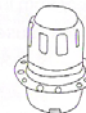
(7) DM102

Super-cardioid dynamic cartridge, provide excellent vocal or speech reproduction on lectures and professional stages.



(8) EM101

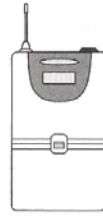
Condenser super-cardioid cartridge, high-fidelity and sensitivity, It's ideal for speech.



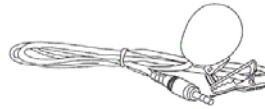
3. System components

(9)L828

An advanced bodypack wireless transmitter to matched with ICT series, you may select several kinds of lavalier, headmic, condenser cable or using guitar cable to match with electrical guitar



(10) WL101. Lavalier cable 1



(11) WL202. Lavalier cable 2



(12) WH101. Headmic cable



(12) WH102. Headmic cable



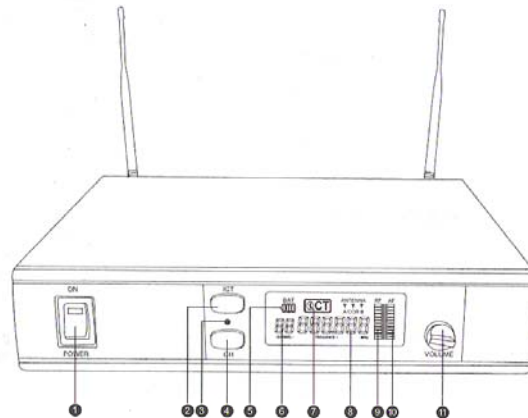
(13) WG101. Guitar cable



4. Receiver

4-1 ICT 828 Receiver components and function

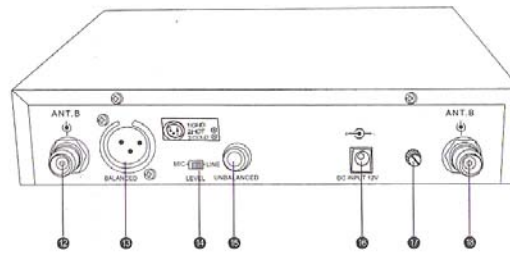
Front Panel



- ① Power Switch
- ② Infrared channel selection transmitter (ICT) Button
- ③ Infrared channel selection transmitter
- ④ Channel selection Button
- ⑤ Transmitter Battery level
- ⑥ Receiver channel Indicator
- ⑦ Transmitter channel selection Indicator
- ⑧ Receiver channel Frequency Display
- ⑨ Transmitter RF Signal Level Indicator
- ⑩ Transmitter Volume Level Indicator
- ⑪ Receiver Output Volume Control

4-1 ICT 828 Receiver components and function

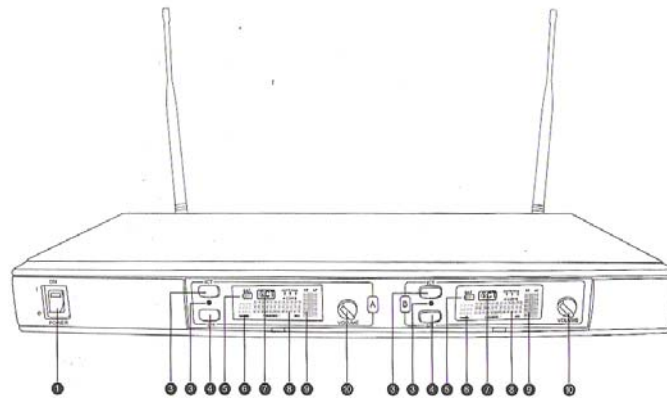
Back Panel



- 12 Channel B Antenna Input Connector
- 13 XLR Output Connector
- 14 AF mixe selection Switch
- 15 1/4 unbalanced AF output connector
- 16 Power Connector
- 17 Squelch level control
- 18 Channel A Antenna Input Connector

4-2 ICT-848 receiver component and functions

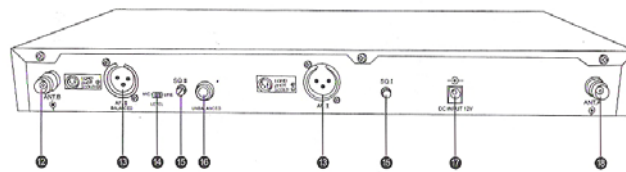
Front Panel



- ① Power Switch
- ② Infrared channel selection transmitter (ICT) Button
- ③ Infrared channel selection transmitter
- ④ Channel selection Button
- ⑤ Transmitter Battery level
- ⑥ Receiver channel Indicator
- ⑦ Transmitter channel selection Indicator
- ⑧ Receiver channel Frequency Display
- ⑨ Transmitter RF Signal Level Indicator
- ⑩ Transmitter Volume Level Indicator
- ⑪ Receiver Output Volume Control

4-2 ICT-848 receiver component and functions

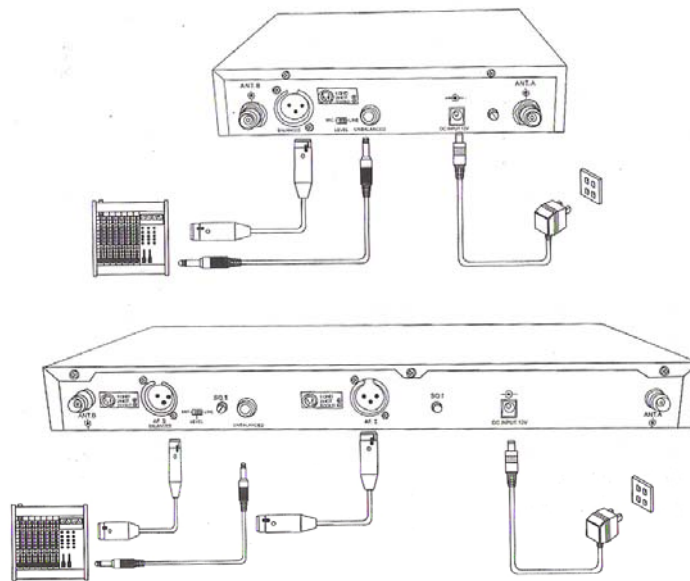
Back Panel



- 12 Channel B Antenna Input Connector
- 13 XLR Output Connector
- 14 AF mixe selection Switch
- 15 1/4 unbalanced AF output connector
- 16 Power Connector
- 17 Squelch level control
- 18 Channel A Antenna Input Connector

Receiver

4-3 Receiver setting up



1. Connect the telescopic antennas to BNC socket A and B at rear of the receiver .Pull the antennas out and align them upwards in a V-shape
2. Insert the AC/DC adaptor on the power supply output cable into socket at the rear of the receiver ,connect another end into the AC power socket (please note the power voltage must be fit to the local power voltage)
3. AF output connection
 - (1). Unbalanced level switch
 - a. (AF Mixer Selection Switch) position on "LINE" for connection to mixer/amplifier electrical guitar specifying "LINE INPUT" jack.

Receiver

4-3 Receiver setting up

Overload distortion may occur if it is on "MIC". Wireless microphone or electrical guitar will lower the capsule sensitivity if the switch turn to a wrong position)

b. (AF Mixer Selection Switch) position on "MIC" if receiver is connected to a mixer/amplifier specifying "MIC INPUT" jack. Overload distortion may occur if it is on "LINE"

c. While using electric guitar ,do not switch the button to the "MIC" ($\frac{1}{4}$)position otherwise it may generate insufficient volume level.

(2). Unbalanced of output connection:

(1/4 unbalanced AF output connector) for linkage between receiver unit to the unbalanced input of a mixer/amplifier using audio cables supplied.

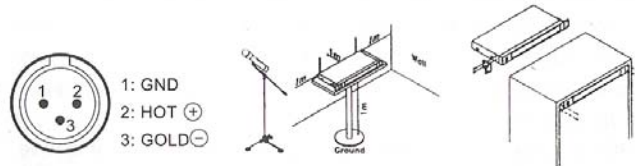
(3) Balanced output connection:

(XLR Output Connector) for linkages between receiver unit to the balanced input of a mixer/amplifier, cable optional.

For optimal performance the receiver should be installed at least 1 meter above ground, transmitter should be at least 1 meter from receiver

(4) Electrical guitar output method:

Using the attached audio cable-one end to connect the unbalanced output jack of a receiver , another end to connect 'electrical guitar' input jack of an amplifier, and switch AF mixer selection switch (14) to the right side-"LINE" position.



4. For optimal performance the receiver should be installed at least 1 meter aboveground; and the distance between transmitter and receiver should be at least 1 meter, from receiver and try to get away from noise source.

Receiver

5. When using the machinery cupboard to fix the receiver (with rack), you may put the receiver into the EIA standard cupboard. You may purchase from your agent the antenna that can fix on the receiver's front panel so to enhance the antenna's receiving efficiency.

4-4 Receiver operating procedures

1. Do not turn on the transmitter before receiver switching on. Adjust the volume of mixing amplifier to the minimum position, then turn on the receiver, the power indicator lamp lights to show that the receiver is switch on a normal status.
2. Under normal circumstances, the RF indicator lights up when corresponding microphone or transmitter close to the receiver; adjust the volume of the amplifier to a suitable level, then pronounce towards the microphone, the AF signal indicator on the receiver will light up according to corresponding microphone level; if there's no sound output from the amplifier or the indicator do not glow, it means that the system is not running properly and it must be checked and repaired.
3. In the course of using wireless microphone, the volume can be adjusted to a suitable level so to reduce the distortion.

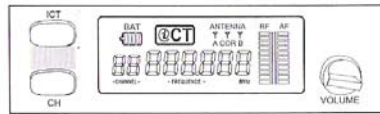
4-5 NOTES

1. The antenna's setting is an important cause to the reception effect. So please pay attention to its correct fixing, the most important principle is the distance between transmitter and antenna, the farther the better;
2. Please use our company's standard antenna to ensure the sensitivity of the receiver;
3. When adopting a DC adapter, it should be above 1A /12V, otherwise it can not be used normally; but the volts should not be exceed 15V, for fear to damage the parts inside electrical components.

Receiver

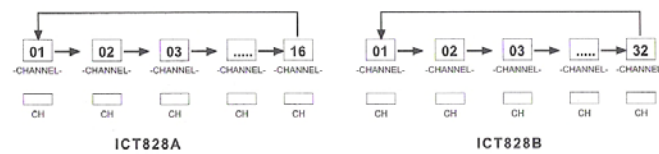
4-6 Receiver LCD display operation

1. LCD full screen display diagram and button position



2. CH button operation

- (1) Press the CH button, the channel value will increase one, for each time
- (2) If the next channel is in interference or has occupied by other wireless microphone; the receiver will keep on changing to the next the channel automatically, it only stops moving till it can find a clean channel.
- (3) Keep on pressing the "CH" button till you can get the one you choose.



3. "ICT" button operation

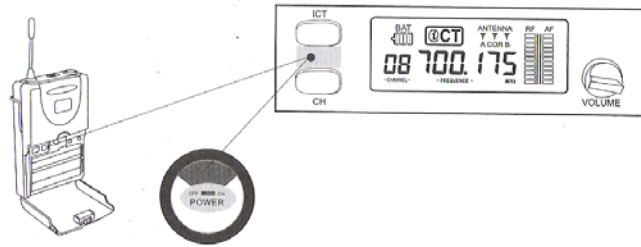
- (1) Press the ICT button, @CT starts flashing, the receiver is sending the current channel status data from the infrared sending window to outside; press the ICT button again, @CT will stop flashing, and stop sending data to outside.



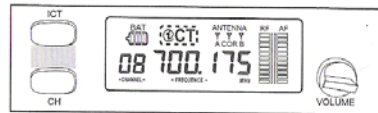
Receiver

4-6 Receiver LCD display operation

- (2) Put the tail-end of the handheld transmitter T828, or open the lavalier transmitter (L828) battery. Compartment, then aim at the receiver's infrared sending window as below.



- (3) After the wireless transmitter receiving the infrared channel data, it will change the working channel automatically to synchronize with the receiver. Then close the lavalier L828 battery compartment when this result is out.
- (4) After the transmitter synchronizing with the receiver, the receiver will receive the RF signal from the transmitter, then the button on the LCD will stop flashing, meanwhile, the strength of incoming RF level will be indicated on the LCD.

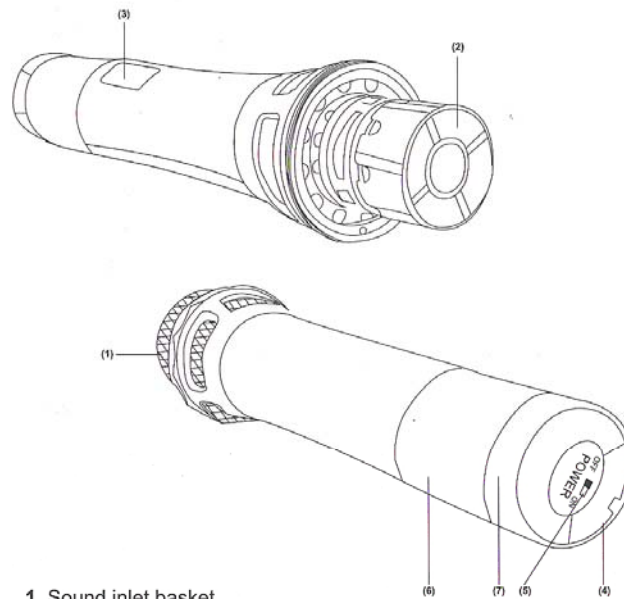


4. Volume Knob

Adjust the volume knob, to make the output volume of the receiver to a suitable status, so to reduce the volume distortion of the microphone.

5. T828 handheld wireless transmitter

5-1 parts name and function



1. Sound inlet basket

To protect the cartridge set and eliminate "POP" noise, prevent the microphone from rolling while it is put on the desk

2. Cartridge set

It is used to transmit sound into audio signal

3. LED display section

To show the T828 transmitter working frequency and battery status indication

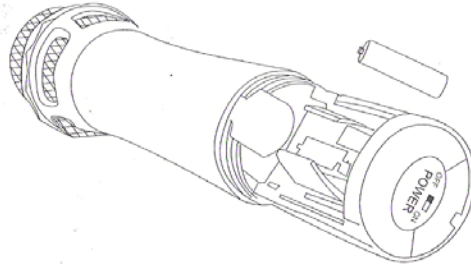
4. The infrared signal receiving window of the wireless microphone

5. Power switch (on /off button)

6. Battery compartment

7. Colour-coded identification ring for microphone modules

5-2 Inserting and changing the battery



- (1) Unscrew the bottom cap by turning it counter-clockwise
- (2) Slide back the bottom cap until the battery compartment becomes fully accessible;
- (3) Insert 2 AA battery. Please observe correct polarity when inserting the battery.
- (4) Screw the bottom cap tight, by turning it clockwise.
- (5) To change the battery, press out the battery from below.

5-3 Operation

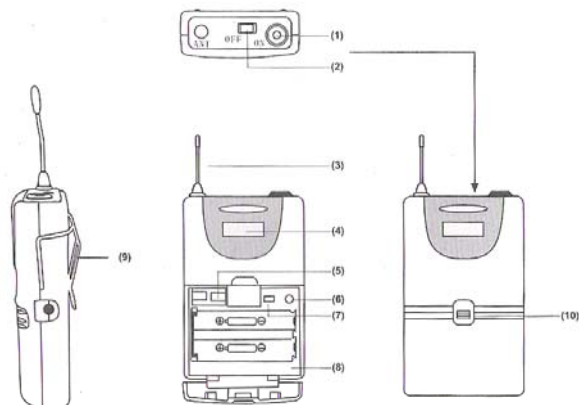
1. Press the ON/OFF button to switch the transmitter on. The LED lights up and the current frequency & battery status are showed on the display, if the battery is not so sufficient or do not show on the LCD, then you should immediately replace the battery.
2. In the course of using the handheld transmitter, the AF signal indicator on the receiver will flash according to the incoming sound strength, the high volume it has, the more lamps light;
3. Turn off the handheld transmitter (switch to the "OFF" position) when you do not use it, so to avoid battery exhausted. If you do not use it for a long time, please take out the battery so to avoid damage the inner compartment; when using the rechargeable battery, you should take them out and charge them.

5-4 NOTE

ICT series wireless microphone can be supplied in five frequency ranges within the UHF band. The receiver and wireless transmitter must be in the same factory-preprogrammed frequency range, otherwise they can not be used together.

6. L828 lavalier wireless transmitter

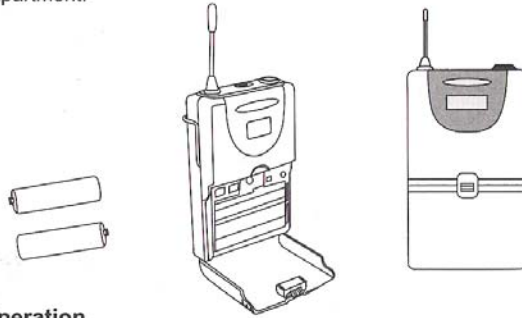
6-1 Parts name and function



1. AF input jack-can connect varies microphone (please see the 6-4 for connection method).
2. Power switch (ON/OFF)
3. Transmitter antenna
4. LCD-may display the transmitter's working frequency and battery status
5. Infrared signal receiving window
6. Gain knob-to adjust the input volume
7. MIC/LINE switch key, switch to 'LINE' when using electronic guitar or 'LINE IN'; switch to 'MIC' when connect to normal condenser microphone; the preset key is on 'MIC' by the factory.
8. Battery compartment-insert 2 AA battery according to its correct polarity.
9. Detachable belt clip
10. Battery cap lock

6-2 Inserting and changing the battery

1. Press down the battery cap lock and lift it towards outside to open the battery compartment.
2. Insert 2 AA batteries into the battery compartment according to the correct polarity, then push down the cover to close the battery compartment.

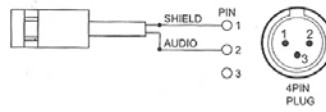


6-3 Operation

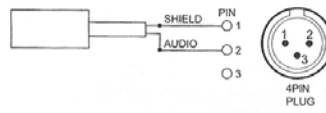
1. Open the battery compartment, if you use electronic guitar or LINE IN, switch the key to 'LINE' position, the 'GAIN' knob can be adjusted a little at this time; if you use normal condenser wireless microphone or wire microphone, switch the key to 'MIC' position, and adjust the 'GAIN' knob to a suitable position;
2. Insert the cartridge connector into the cartridge input socket;
3. Press the ON/OFF button to switch the transmitter on. The LED lights up and the current frequency & battery status are showed on the display, if the battery is not so sufficient or do not show on the LCD, then you should immediately replace the battery.
4. Turn off the transmitter (switch to the "OFF" position) when you do not use it, so to avoid battery exhausted. If you do not use it for a long time, please take out the battery so to avoid damage the inner compartment; if the battery is rechargeable, you should take them out and charge them.

6-4 AF input socket connectiont

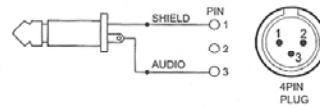
1. connect to condenser cartridge:



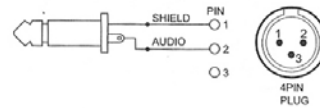
2. Connect to dynamic wireless microphone;



3. connect to electrical guitar



4. connect to LINE IN



6-5 NOTE

ICT series wireless microphone can be supplied in five frequency ranges within the UHF band. The receiver and wireless transmitter must be in the same factory-preprogrammed frequency range, otherwise they can not be used together.

System performance index

General Features:

RF Specifications

Oscillation mode	PLL Synthesized
Carrier Frequency Range	UHF 701-805MHz

AF Specifications

Squelch	Innovative"Pilo Tone & NoiseLock" dual-squelch circuit
Frequency Response	50Hz-18KHz 3dB, with high-pass filter
S/N Ratio	>105dB(1KHz-A)
T.H.D	<0.5% @ 1KHz

Receiver:

RF Specifications

Receiving Mode	True-diversity receiving
Sensitivity	S/N>80dB @ 6dBuV & 40KHz
Frequency Interval	N x 25KHz
Swiathable Frequencies	16/32/64/99
Frequency Adjustment	Manual Operation

AF Specifications

Output Level	Balanced 2.2V rms open(THD $\leq$ 1%) Unbalanced:MIC-LEVEL: -20Dbv/100 Ω LINE-LEVEL:-4dBV/5k Ω
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Handheld Transmitter

RF Specifications

RF Output Power	30mW(or dependent on applicable country regulations)
Spurious Emissions	<-55dBc.
Frequency Adjustment	ICT function provides rapid automatic channel setting

AF Specifications

Max.Deviation Range	$\pm$ 68KHz, with compandor and level limiting.
Max.Input Level	0 dB

Lavaliere Transmitter

RF Specifications

RF Output Power	30mW(or dependent on applicable country regulations)
Spurious Emissions	<-55dBc.
Frequency Adjustment	ICT function provides rapid automatic channel setting

AF Specifications

Max.Deviation Range	$\pm$ 68KHz, with compandor and level limiting.
Max.Input Level	0 dB