

700 Channel UHF Band True Diversity Wireless Microphone System **Operating Instructions**



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INTRODUCTION

Introduction

Thank you for purchasing our product. This PLL synthesized wireless microphone system operates in UHF band frequency with 700 selectable channels. Please read this instruction manual carefully before operating the system. This manual covers the function and operation of the wireless microphone system.

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1)This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

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

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

Safety

- > Do not spill liquid on the appliance and do not drop it on a hard concrete floor.
- > Do not place the equipment near heat sources such as radiators, heating ducts, amplifier, etc.
- Do not expose the equipment to direct sunlight, extremely dust, excessive moisture, rain, mechanical vibrations, or shock.
- Take out the battery from transmitter, if the appliance has been not used for a longer period. This will avoid the damage resulting from a defective leaking battery.
- If the equipment is not going to be used for a long time, disconnect the AC adapter from the power outlet. Please note that if you turn the equipment off while leaving the AC adapter plugged in, it is not fully isolated from the power supply.
- WARNING: To reduce the risk of fire or electric shock, do not use the products near water and do not expose them to rain or moisture.
- No guarantee claims for the equipment and no liability for any resulting personal damage or material damage will be accepted if the equipment is used for other purpose than originally intended, if the equipment is not correctly connected or operated, or if the equipment is not repaired in an expert way.

Environment

- Do not throw used batteries into a fire or garbage bin with domestic rubbish. Be sure to dispose of used batteries in accordance with local waste disposal rules.
- When disposing the equipment, remove the batteries, separate the case, circuit boards, and cables, and dispose of all components in accordance with local waste disposal rules.

Quick Start Guide

1. Connected Receiver Power Cable



2. Connect Mixer or Amplifier



4. Charging



PRODUCT DESCRIPTION

WIRELESS

C 8890D Receiver

Front :



- 1. Power Button.
- 2. VA LCD Display: Display group, channel, RF and AF levels, frequency and settings.
- 3. Button $\blacktriangle \forall$: Tap the channel forward / backward.
- 4. SYNC Button: Press the button to actuate the synchronization with transmitter.
- 5. SET Button: Press button to activate the scan or preset mode or manual mode.
- 6. Volume Controller: Adjust the receiver output level.

PRODUCT DESCRIPTION

VA LCD Display :



- 1. PRESET : Use this mode to set multiple constructions by preset group.
- 2. MANUAL : Use this mode to select free channel by manually.
- 3. SCAN : Use this mode to set free channel by scan function.
- 4. SYNC : The synchronization process is actuated.
- 5. GR : Display selected preset group.
- 6. CH : In "PRESET" mode, display selected preset channel.
- 7. CH : In "SCAN" mode or "MANUAL" mode, display selected channel number.
- 8. FREQ : Display selected frequency.
- 9. RF Bar : Display the reception status of RF signal.
- 10. AF Bar : Display the reception status of AF signal.

Rear :



- 1. Antenna.
- 2. Balanced XLR Audio Output.
- 3. Unbalanced 6.3mm Audio Output.
- 4. Mic/Line Switch: Use this switch to adjust audio output level for mic level (-20dB) or line level (0dB).
- 5. Squelch: Turn the knob to adjust or decrease the noise floor level.
- 6. Power Adapter Connector.

• CL8892D Handheld Microphone



- 1. Grille: Protects the microphone capsule and helps reduce breath sounds and wind noise.
- 2. SYNC Button: Press to actuate the synchronization process with the receiver.
- 3. Talk Button: Push the button up to talk. Push the button down for mute.
- 4. Power Button: Press for 2 seconds to power the microphone on or off.
- 5. LCD Display: Display group, channel and battery power level.
- 6. Power LED: Indicate the power / low battery level status.

LED Indicator	Status
Green	Power on
Flashing Green	The synchronization process is actuated.
Flashing Red	Low battery power when less than 10 minutes operation

7. Type-C socket: Connect the Type-C cable or the charging pod (optional) for charging.

• C 8892D / C 8893D Handheld Microphone



- 1. Power ON/OFF/Mute Switch.
- 2. Power/MUTE LED: Indicate the power / low battery level status.
- 3. SYNC Button: Press to actuate the synchronization process with the receiver.
- 4. LCD Display: Display group, channel and battery power level.

LED Indicator	Status
Red	Power on
Flashing red	Low battery (approx 10min operation left)
Blue	Muting on
Flashing blue	Muting on & Low battery (approx 10min operation left)

- 5. Battery Compartment
- 6. Grille: Protects the microphone capsule and helps reduce breath sounds and wind noise.



- 1. Power Button: Press for 2 seconds to power the microphone on or off.
- 2. Power LED: Indicate the power / low battery level status.

LED Indicator	Status	
Green	Power on	
Flashing Green	Green The synchronization process is actuated.	
Flashing Red Low battery power when less than 10 minutes operation		

- 3. SYNC Button: Press to actuate the synchronization process with the receiver.
- 4. LCD Display: Display group, channel and battery power level.
- 5. Mini XLR Connector: Connect to the lapel microphone or headset microphone.
- 6. Gain Switch: The switch sets the audio input to -10dB, 0dB, 10dB.
- 7. Type-C socket: Connect the Type-C cable or the charging pod (optional) for charging.

	PRODUCT DESCRIPTION	BATTERY
•	C 8893D Beltpack Transmitter	



- 1. Power Button: Press for 4 seconds to power the microphone on or off. Short press to mute/unmute.
- 2. Power LED: Indicate the power / low battery level status.

LED Indicator	Status
Red	Power on
Flashing red	Low battery (approx 10min operation left)
Blue	Muting on
Flashing blue	Muting on & Low battery (approx 10min operation left)

- 3. SYNC Button: Press to actuate the synchronization process with the receiver.
- 4. LCD Display: Displays channel and battery power level.
- 5. Battery Compartment
- 6. Mini XLR Connector: For micropphone or guitar pick-up.
- 7. Gain Switch: The switch sets the audio input to -10dB, 0dB, 10dB.

WIRELESS

Connecting the receiver

Prior to setting up, please check that the transmitter and receiver are tuned to the same frequency or channel. Two or more transmitters operating in the same frequency can not be used at the same time and area.

1



• Setting up channel on receiver

Notice: Do not put two or more transmitters operating nearby when setting up the frequency channel. Please keep transmitter at least one meter away from receiver.

Manual Mode

Setting interference-free channel by manual operation.



NOTE: If user needs to set up multi-receiver system, please keep your previous receiver-microphone pair power on. Then go on to next scanning procedure.

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WIRELESS
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≻Scan Mode

Set interference-free channel by frequency scan function.



NOTE: If user needs to set up multi-receiver system, please keep your previous receiver-microphone pair power on. Then go on to next scanning procedure.

➢Preset Mode

Set multiple constructions by using preset channels. Excluding the interference from external, up to 12 system can be operated simultaneously in each group (Region dependent).



NOTE: When there is any outside interference on the current preset group, please switch to use next preset group. If 8 preset groups are all under interference, please use scan mode to set up system.

WIRELESS

Charging the handheld microphone / bodypack transmitter

- Use the USB Type-C cable (not included) and a USB AC adaptor (not included)
 - Connect the Type-C cable to a USB AC adaptor and the handheld microphone / bodypack transmitter.
 - During charging, the handheld microphone / bodypack transmitter will be turned off.
 - Charging status (show on the LCD display)

While charging	ing The battery indicator is flashing when charging.	
Full charge	The three indicators light when it is fully charged.	

- Disconnect the Type-C cable from the handheld microphone / bodypack transmitter when the charging is completed.
- > Use the charging pod (optional) and a Type-C AC adaptor (not included)
 - Connect the Type-C cable to a Type-C AD adaptor
 - Put the handheld microphone / bodypack transmitter to the charging pod directly.Please make sure the Type-C plug and socket are connected properly.
 - During charging, the handheld microphone / bodypack transmitter will be turned off.
 - Disconnect the devices from the charging pod when the charging is completed.
 - Charging status (show on the LCD display)

While charging	The battery indicator is flashing when charging.		
Full charge	The three indicators light when it is fully charged.	BATT	BATT

> Charging pod LED indicator status

Lights off	The power is off.	
Green	The power is on.	
Red The device is charging.		
Green The device is fully charged.		



Note:

- The required time for fully charging is about 1.5 hours and the devices can be operated for 8 hours when the power is full.
- Charging time depends on USB AC adaptor type and the USB Type-C cable. The output power of 5.0V (3.0A/15.0W) or more for the USB AC / Type-C AC adaptor is suggested to use.



BATT

BATT



SYSTEM OPERATION



NOTE: When you don't use this device for a long term period, please switch the power switch to "off" mode to save more electric power.

• Beltpack Transmitter

1. Slide open the battery compartment.

2. Insert two AA Size 1.5V batteries into the battery holder according to polarity (+) and (-) indicators marked on the battery housing. The transmitter accepts dry cell batteries or recharge-able batteries.

3. Replace battery cover.

4. To switch on, push the power switch for 4 seconds (or until the LCD illuminates). The LCD shows channel number and battery status.

5. To change channel/frequency, press the SYNC button and synchronise the receiver and transmitter frequency. See "SYNC mode" for detailed instructions on how this function operates. 6. Adjust gain switch to optimum level to prevent overdriving (-10dB, 0dB, 10dB).

7. To switch off, press and hold the power button for 4 seconds or until the LCD displays 'OFF'.

8. Remove the batteries from the unit if it is not to be used for a long time. This will prevent damage to the unit that a defective leaking battery may cause

• Handheld Microphone

1. Unscrew to open the battery compartment.

2. Insert two AA Size 1.5V batteries into the battery holder according to polarity (+) and (-) indicators marked on the battery housing. The transmitter accepts dry cell batteries or rechargeable batteries.

3. Replace battery cover.

4. Slide the power switch into the on position. The LCD shows channel number and battery status.

5. To change channel/frequency, press the SYNC button and synchronise the receiver and transmitter frequency. See "SYNC mode" for detailed instructions on how this function operates.

6. To switch off, slide the power switch into the off position. The LCD displays 'OFF'.

7. Remove the batteries from the unit if it is not to be used for a long time. This will prevent damage to the unit that a defective leaking battery may cause.

WIRELESS

• Synchronizing a transmitter with a receiver

Automatic frequency synchronization via remote channel for easy setup.

First, switch the transmitter and the receiver on. Press and hold the SYNC button on your transmitter. The SYNC flashes on the receiver display panel.

At the same time, press the SYNC button of the receiver to transfer the selected frequency to the transmitter.



• Color Label Identification

You can also stick the color label on the receiver and transmitter for quickly identify the pair multiple systems.



WIRELESS

Basic Connections

To install a receiver in a 19" standard rack by using L type metal racks.



To mount a receiver in a 19" standard rack by using 2 long L type metal racks. (L type long metal racks is an optional product, so please purchase extra in local shops.)



By using the antenna holder to install the UHF antenna in high place for better reception quality.



• Trouble Shooting

Problem	Solution
No sound	Check the power supply of the microphone and receiver.
	Check that the transmitter and receiver are tuned to the same frequency.
	Check whether the hi-fi appliance is switched on and the receiver output is connected to audio mixer or amplifier input.
	Check whether transmitter is too far away from receiver or SQUELCH control set too high.
	Check whether receiver is located too near metal object or there are obstructions between transmitter and receiver.
Sound interference	Check the antenna location.
	When using 2 or above microphone sets simultaneously, make sure that the chosen frequencies are not interfered.
	Check whether the interference comes from other wireless microphones, TV, radio and etc.
Distortion	> Check the receiver volume level whether is set too high or too low.
	Check whether the interference comes from other wireless microphones, TV, radio and etc.

• System Performance

Receiver

>	Frequency Range	: UHF510 ~ 937.5MHz (Regionally Selected)
>	> Case	: UXD-100: Half 19" EIA Rack Metal Case UXD-200: 19" EIA Rack Metal Case
5	 Oscillator 	: PLL Synthesized
>	 Modulation 	: FM
>	S/N Ratio	: $>$ 100dB, at 20KHz deviation and 60dB μ V antenna input
>	Image & Spurious Rejection	: 70dB minimum
>	 Receiving Sensitivity 	: At 5µV over 70dB S/N ratio
>	 AF Response 	: 50Hz to 18KHz
۶	T.H.D.	: <1% (at 1KHz)
≻	IF Frequency	: 1st: 243.95MHz 2nd: 10.7MHz
۶	Dynamic Range	:>100dB
\geq	Tone Signal	: 32.768KHz
\succ	Audio Output	: Balanced & Unbalanced
\succ	Power Supply	: DC12V
≻	Current Consumption	: UXD-100: 260±10mA
		UXD-200: 520±10mA
	Dimension(MM) WxHxD	: UXD-100: 200x42x183 UXD-200: 400x42x183
۶	Weight	: UXD-100: 975g UXD-200: 1740g

Handheld/Beltpack Transmitter

 Channel Select : SYNC with Receiver Display : LCD displays status of group, channel and battery st RF Power Output : 10mW (max.) Frequency Stability : ±0.005% Spurious Emission : >60dB below carrier frequency Gain Setting Beltpack : -10dB, 0dB, +10dB (3 settings) Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery : Built-in 800mAh Li-ion battery Current Consumption : 90±10mA/4V Dimension(mm) WxHxD : Handheld : 278.5x51Φ Beltpack : 65x97x25 Weight : Handheld : 274.5g Beltpack : 107g 	≻	Frequency Range	: UHF510 ~ 937.5MHz (Regionally Selected)	
 Display LCD displays status of group, channel and battery s	≻	Channel Select	: SYNC with Receiver	
 > RF Power Output : 10mW (max.) > Frequency Stability : ±0.005% > Spurious Emission : >60dB below carrier frequency > Gain Setting Beltpack : -10dB, 0dB, +10dB (3 settings) > Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic > Battery : Built-in 800mAh Li-ion battery > Current Consumption : 90±10mA/4V > Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 > Weight : Handheld : 274.5g Beltpack : 107g 	۶	Display	: LCD displays status of group, channel and battery status.	
 Frequency Stability : ±0.005% Spurious Emission :>60dB below carrier frequency Gain Setting Beltpack : -10dB, 0dB, +10dB (3 settings) Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery : Built-in 800mAh Li-ion battery Current Consumption : 90±10mA/4V Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 Weight : Handheld : 274.5g Beltpack : 107g 	≻	RF Power Output	: 10mW (max.)	
 Spurious Emission : >60dB below carrier frequency Gain Setting Beltpack : -10dB, 0dB, +10dB (3 settings) Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery : Built-in 800mAh Li-ion battery Current Consumption : 90±10mA/4V Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 Weight : Handheld : 274.5g Beltpack : 107g 	≻	Frequency Stability	: ±0.005%	
 Gain Setting Beltpack : -10dB, 0dB, +10dB (3 settings) Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery Built-in 800mAh Li-ion battery Current Consumption : 90±10mA/4V Dimension(mm) WxHxD Handheld : 258.5x51Φ Beltpack : 65x97x25 Weight Handheld : 274.5g Beltpack : 107g 	≻	Spurious Emission	: >60dB below carrier frequency	
 Mic Unit Handheld : Uni-Direction dynamic unit or Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery Built-in 800mAh Li-ion battery Current Consumption 90±10mA/4V Dimension(mm) WxHxD Handheld : 258.5x51Φ Beltpack : 65x97x25 Weight Handheld : 274.5g Beltpack : 107g 	۶	Gain Setting	Beltpack : -10dB, 0dB, +10dB (3 settings)	
Uni-Direction electret condenser unit Beltpack : Lavalier Mic / Headset Mic Battery : Built-in 800mAh Li-ion battery Current Consumption : 90±10mA/4V Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 Weight : Handheld : 274.5g	۶	Mic Unit	Handheld : Uni-Direction dynamic unit or	
 > Battery : Built-in 800mAh Li-ion battery > Current Consumption : 90±10mA/4V > Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 > Weight : Handheld : 274.5g Beltpack : 107g 			Uni-Directio Beltpack : Lavalier Mi	on electret condenser unit c / Headset Mic
> Current Consumption : 90±10mA/4V > Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 > Weight : Handheld : 274.5g	≻	Battery	: Built-in 800mAh Li-ion battery	
 ➢ Dimension(mm) WxHxD : Handheld : 258.5x51Φ Beltpack : 65x97x25 ➢ Weight : Handheld : 274.5g Beltpack : 107g 	≻	Current Consumption	: 90±10mA/4V	
Weight : Handheld : 274.5g Beltpack : 107g	۶	Dimension(mm) WxHxD	: Handheld : 258.5x51Φ Beltpack : 65x97x25	
	۶	Weight	: Handheld : 274.5g	Beltpack : 107g

*The specifications are subject to change without notice.