

16-CHANNEL TRUE DIVERSITY UHF WIRELESS SYSTEM



OWNER'S MANUAL



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Important Safety Information



ATTENTION RISQUE D'ÉLECTROCUTION ! NE PAS OUVRIR !

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS IN-SIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD. DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE. TO PREVENT FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT AND FULLY INSERT.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES CLASS B. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MUST NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION. SUITABLE FOR HOME OR OFFICE USE.



If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic products in accordance with legislation that requires proper treatment, recovery and recycling.

Private household in the 25 member states of the EU, in Switzerland and Norway may return their used electronic products free of charge to designated collection facilities or to a retailer (if you purchase a similar new one).

For Countries not mentioned above, please contact your local authorities for a correct method of disposal.

By doing so you will ensure that your disposed product undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health.

Important Safety Information

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. 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.
- 10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

- 13. Unplug the apparatus during lightening storms, or when unused for long periods of time.
- 14. Refer all servicing to qualified personnel. Service 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 has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
- Caution-to prevent electrical shock, match wide blade plug wide slot fully insert.
- 17. Please keep a good ventilation environment around the entire unit.
- The direct plug-in adapter is used as disconnect device, the disconnect device shall remain readily operable.
- 19. Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.



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Introduction

Congratulations on purchasing the Samson Concert 88 wireless system. The Concert 88 is the ideal solution for the active performer who needs a reliable, great sounding system for wireless applications. Featuring simple operation, with 16 available channels and infrared set for the transmitter channel, the Concert 88 can quickly be up and running out of the box. The Concert 88 system ensures clear, interruption-free performance by combining tone-key with auto-mute. This configuration allows only the transmitter's audio to pass through the receiver, and mutes the output if there is any interference.

The Concert 88 comes in four configurations. The vocal handheld system includes the CH88 handheld transmitter and Q7 dynamic microphone capsule. The CB88 belt pack system can be configured with either the HS5 headset microphone, LM5 lavalier microphone, or a $\frac{1}{4}$ " instrument cable. For travel or permanent installation, the Concert 88 includes a standard 19" rackmount kit.

In these pages, you'll find a detailed description of the features of the Concert 88 wireless system, as well as a guided tour through its control panel, step-by-step instructions for its setup and use, and full specifications. If your wireless system was purchased in the United States, you'll also find a warranty card enclosed—don't forget to fill it out and mail it in so that you can receive online technical support and so that we can send you updated information about this and other Samson products in the future. Also, be sure to check out our website (www.samsontech.com) for complete information about our full product line.

We recommend you keep the following records for reference, as well as a copy of your sales receipt.

Receiver Serial number: _____

Transmitter Serial number: _____

Date of purchase: _____

Dealer name: _____

With proper care and maintenance, your Concert 88 wireless system will operate trouble-free for many years. Should your wireless system ever require servicing, a Return Authorization (RA) number must be obtained before shipping your unit to Samson. Without this number, the unit will not be accepted. Please call Samson at 1-800-3SAMSON (1-800-372-6766) for an RA number prior to shipping your unit. Please retain the original packing materials and, if possible, return the unit in its original carton. If your Concert 88 system was purchased outside of the United States, contact your local distributor for warranty details and service information.



System Features

- Professional wireless system for use in both live sound and sound contracting applications
- True diversity technology maximizes active range (up to 300 feet) and reduces potential interference
- 16 available channels operating in the UHF band designed for maximum system compatibility in the same location without interference
- The CR88 receiver is a half-rack unit that can be used freestanding or can be mounted in any standard 19" rack using the included rack kit, making it easy to integrate into any traveling or fixed installation audio system
- Tone-key and auto-mute ensures clear, interruption-free performance allowing only the transmitter's audio to pass through the receiver, and mutes the output if there is any interference
- Up to 300-foot range (line-of-sight)
- Up to eight hours of battery life, using two standard AA batteries

System Components

All systems

CR88 receiver Power Supply ¼" to ¼" audio cable Rack Accessories Long rack ear, short rack ear, two receiver adaptor Owner's Manual

Handheld system

CH88 handheld transmitter with Q7 dynamic microphone capsule

Headset system

CB88 belt pack transmitter HS5 headset microphone with mini-XLR connector

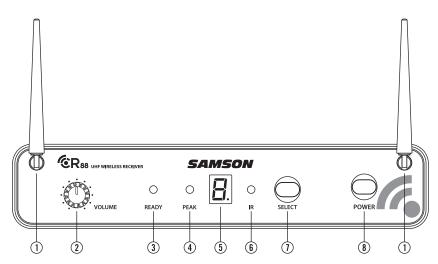
Lavalier System

CB88 belt pack transmitter LM5 lavalier microphone with mini-XLR connector Tie clip

Instrument System

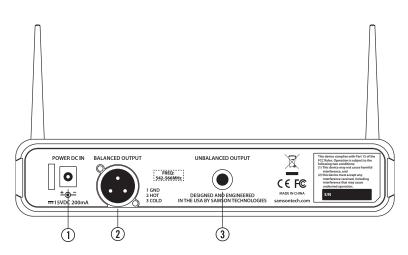
CB88 belt pack transmitter 1/4" to mini-XLR instrument cable

Guided Tour - CR88 Receiver



- 1. Antennas The antenna mountings allow full rotation for optimum placement. In normal operation, both antennas should be placed in a vertical position. Both antennas can be folded inward for convenience when transporting the CR88.
- VOLUME Control This knob sets the level of the audio signal being output through both the balanced and unbalanced output jacks on the rear panel. Reference level is obtained when the knob is turned fully clockwise (to its "10" setting).
- **3. READY Indicator** This indicator lights green when the CR88 is receiving RF signal and the system is ready to use.
- 4. **PEAK Indicator** This indicator lights red when the transmitted audio signal is overloaded.
- **5. LED Display -** The 7-segment LED display shows the receiver's current operating channel. The CR88 channels are indicated by 0-9 and A-F.
- **6. IR Transmitter** During "IR SET" an infrared light is used to set the transmitter channel.
- SELECT Button Press this button to cycle through the receiver's operating channels. Press and hold this button to send the channel information to the transmitter via infrared transmission.
- 8. **POWER Switch** Use this to turn the CR88 power on and off.

Guided Tour - CR88 Receiver

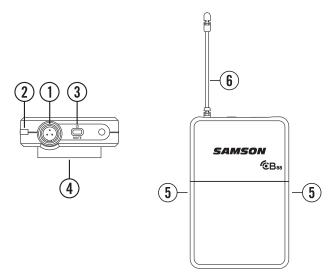


- 1. **DC Input** Connect the supplied power adapter here, using the strain relief as shown in the illustration below. WARNING: Do not substitute any other kind of power adapter. Doing so can cause severe damage to the CR88 and will void your warranty.
- BALANCED OUTPUT Use this electronically balanced low impedance (600 Ohm) XLR jack when connecting the CR88 to professional (+4dBu) audio equipment. Pin wiring is as follows: Pin 1 ground, Pin 2 high (hot), and Pin 3 low (cold).
- **3. UNBALANCED OUTPUT** Use this unbalanced high impedance (5K Ohm) ¹/₄" jack when connecting the CR88 to consumer (-10dBV) audio equipment. Wiring is as follows: tip hot, sleeve ground.



Using the strain relief: Gather up a loop of wire and pass it through the strain relief, then pass the adapter plug through the loop in order to create a knot.

Guided Tour - CB88 Belt Pack Transmitter

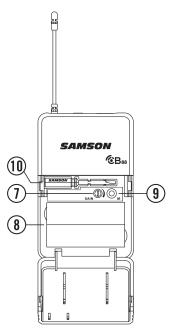


- 1. **Input Connector** Connect the input device via the mini-XLR connector. The CB88 is supplied with either a lavalier, headset microphone or ¹/₄" instrument cable.
- 2. Status Indicator This LED displays the operation mode:

GREEN	Normal Operation
RED	Mute
Flashing GREEN	Low Battery

- **3. Power/Mute Switch** Press and hold to turn the unit on or off. Press and release to mute or unmute the transmitter.
- 4. Belt Clip Use this clip to fasten the CB88 transmitter to a belt or guitar strap.
- 5. Battery Cover Release Push in both sides and pull back to open the CB88 battery cover.
- **6. Antenna -** This permanently attached transmitter antenna should be fully extended during normal operation.

Guided Tour - CB88 Belt Pack Transmitter



- 7. Input GAIN Control This control adjusts the transmitter input sensitivity to work with microphone and instruments inputs. For optimal performance, using the included screwdriver, set the input GAIN control to where you see the CR88 PEAK indicator start to light under high levels, then turn down slowly until the PEAK light stops lighting.
- 8. Battery Holder Insert two standard AA (LR6) batteries here, being sure to observe the plus and minus polarity markings shown. Although rechargeable Ni-Cad batteries can be used, they do not supply adequate current for more than four hours. WARNING: Do not insert the batteries backwards; doing so can cause severe damage to the CB88 and will void your warranty.
- **9. IR Lens -** This window is used to capture the infrared signal sent from the CR88 during the IR SET to channelize the transmitter.
- **10. Plastic Screwdriver** Designed for use in adjusting the CB88 input GAIN control (See #7 Input GAIN Control).

Guided Tour - CH88 Handheld Transmitter

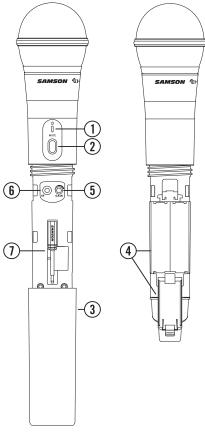
1. **Status Indicator** - This LED displays the operation mode:

GREEN	Normal Operation
RED	Mute
Flashing GREEN	Low Battery

- 2. **Power/Mute Switch** Press and hold to turn the unit on or off. Press and release to mute or unmute the transmitter.
- 3. Battery Cover Unscrew the battery cover and slide down to open the CH88 battery compartment.
- 4. Battery Holder Open the battery holder by pressing the tab and lifting the cover. Insert two standard AA (LR6) batteries here, being sure to observe the plus and minus polarity markings shown. Although rechargeable Ni-Cad batteries can be used, they do not supply adequate current for more than four hours. WARNING: Do not insert the batteries backwards; doing so can cause severe damage to the CH88 and will void your warranty.
- Input GAIN Control This control adjusts the transmitter input sensitivity. For optimal performance, using the included coroudriver, set the input CAIN control to

screwdriver, set the input GAIN control to where you see the CR88 PEAK indicator start to light under high levels, then turn down until the PEAK light stops lighting.

- 6. **IR Lens -** This window is used to capture the infrared signal sent from the CR88 during the IR SET to channelize the transmitter. The battery cover must be open and the IR Lens facing towards the receiver to load the selected channel.
- 7. Plastic Screwdriver Designed for use in adjusting the CB88 input GAIN control (See #5 Input GAIN Control HH).



Quick Start - Single System Setup

In order for your wireless system to work correctly, both the receiver and transmitter must be set to the same channel.

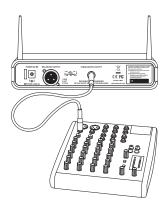
Follow this basic procedure for setting up and using your Concert 88 wireless system:

Physically place the CR88 receiver where it will be used, and extend the antennas vertically. The general rule of thumb is to maintain "line of sight" between the receiver and transmitter so that the person using or wearing the transmitter can see the receiver.

With the Power switch on and the CR88 power off, connect the included power adapter. Turn the CR88 on momentarily to confirm that the unit is receiving power. You'll see the LED display light up. Then turn the CR88 power off.

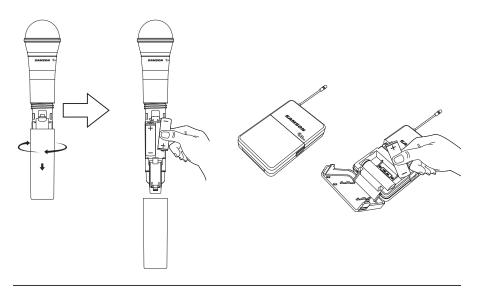


With your amplifier or mixer off and volume control all the way down, connect the CR88 receiver output jack to the mic or line level input of a mixer or amplifier using the balanced XLR output or unbalanced 1/4" line level output. Turn the Level knob on the CR88 completely counterclockwise, then turn its power on.



Quick Start - Single System Setup

With the transmitter powered off, install two fresh AA batteries into the CB88 belt pack or CH88 handheld transmitter. Leave the battery compartment open.



Turn on the power to the transmitter by pressing and holding Power switch; the indicator LED will light green.

