CHIAYO

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CHIAYO

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GREEN PRODUCT
It has been RoHS Compliant

SDR-1216/SDR-2216
SDR-1816SC/SDR-2816SC

SQ-216/SQ-316/SQ-816/SQ-916/SQ-5016
SM-216/SM-316/SM-816+/SM-916/SM-5016

VHF/UHF PLL 16 CHANNEL WIRELESS SYSTEM

OPERATION MANUAL

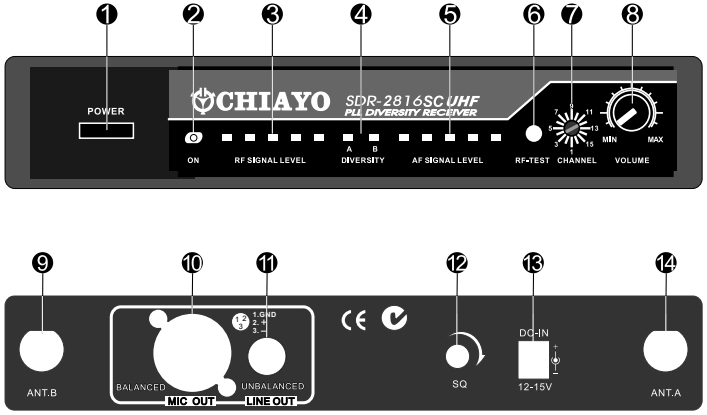
Introduction

Congratulation in owning one of these state-of-the-art PLL Synthesized 16-channel frequency-agile VHF / UHF high band (SDR-1216 / 2216 / 1816SC / 2816SC) professional wireless receivers. According to their frequency range, these receivers are designed to be matched with Chiayo VHF/UHF high band PLL Synthesized transmitters (handheld or beltpack).

The standard combinations are as follow:
SDR-receiver and SQ or SM-transmitter

As this is a shared operating manual of SDR-1216 / 2216 / 1816SC / 2816SC, we suggest you to read this operation manual thoroughly to be familiarized with each part of function before using.

Parts and functions of SDR-series receivers



1. Power switch
2. Power on indicator
3. RF signal indicator
4. Diversity indicator
5. AF signal indicator
6. RF test button
7. Channel selector
8. Volume control
9. Antenna B socket
10. XLR (balanced) audio output
11. Unbalanced audio output
12. Squelch (SQ) control.
13. DC IN jack
14. Antenna A socket

Making changes to various settings in SM-5016

1.Making changes to CHANNEL / FREQUENCY:
Use UP or DOWN button to go to the CHANNEL /FREQUENCY page.

The cursor will flash to allow changes to be made. Pressing UP or DOWN button will increase or decrease the channel number. The corresponding frequency will change accordingly. When a desired channel(frequency) is being selected, it will be automatically saved and stored in the memory.

Remark : When changing transmitter frequencies, user should take care not to cause interference to other channels / users.

2.Making changes to Battery selection:
Use UP or DOWN button to go to the Battery selection page.

Press SET for about 2 seconds to activate the cursor. Press UP or DOWN button to move the cursor to either NiMH (rechargeable battery) or AKLN (Alkaline battery) position.

When the desired option has been selected, press SET for about 2 seconds to save and store the data in the memory.

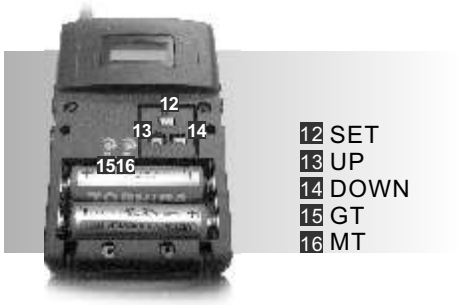
Remark : "NiMH" must be selected when rechargeable battery is being used. Never select "AKLN" (Alkaline) when transmitter is intended for charging as Alkaline battery can not be charged ! Wrong selection of battery will cause battery sensing electronics to display wrong information and mislead charging status.

3.Input Level Gain Control Adjustment
Low impedance (Lo-Z) " MT" & high impedance (Hi-Z) " GT" gain controls are situated inside the transmitter. Gain controls are adjustment ports that enable you to use microphones of differing output levels and Guitar or instruments with Hi-Z output. To adjust microphone (Lo-Z) input levels, turn the "MT" control and to adjust the Guitar or instrument (Hi-Z) input, adjust the "GT" gain control to set the transmitter's desired audio input level.

UHF Beltpack transmitter **SM-5016**

Parts and functions

1 Antenna
2 Battery weak indicator
3 Audio mute switch
4 Mini-XLR connector
5 Power ON / OFF switch
6 LCD display
7 Charging port
8 Cover release button
9 Charging contacts
10 Lavalier microphone
11 Mic clip



12 SET
13 UP
14 DOWN
15 GT
16 MT

Battery Installation

SM-5016 uses 2 pieces of " AA " size batteries (Alkaline battery is recommended). To install or remove the batteries, press the release buttons at the edges of the transmitter to open or close the cover as illustrated below.

GAIN setting (GT/MT)

Gain control is an adjustable design that enables user to set different output levels. GT is for the use of instrument with high impedance, such as guitar while MT is for the use of low impedance such as lavalier or headset microphone.

Receiver installation

For best operation, the receiver should be at least 1m above the ground and at least 1m away from a wall or metal surface to minimize reflection. The transmitter should also be at least 1m away from a wall or metal surface to minimize reflection. The transmitter should also be at least 1m away from the receiver, as shown in Fig. 1.

Keep antennas away from noise source such as motors, automobiles, neon light as well as large metal objects.

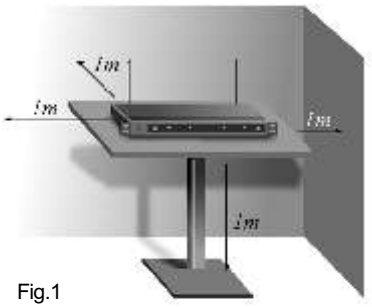


Fig.1

Audio output connection

There are two audio outputs on the back of the Diversity SDR receivers. Mic-level balanced and Line-level unbalanced. Use shielded audio cable for the connection between the receiver and the mixer. If the mixer / amp is a 1/4" phone jack, connect a cable from the 1/4" unbalanced audio output from the receiver to the mixer / amp. If the mixer has an XLR input, connect a cable from the balanced XLR audio output from the receiver to the mixer input. Audio output connection is as Fig.2.

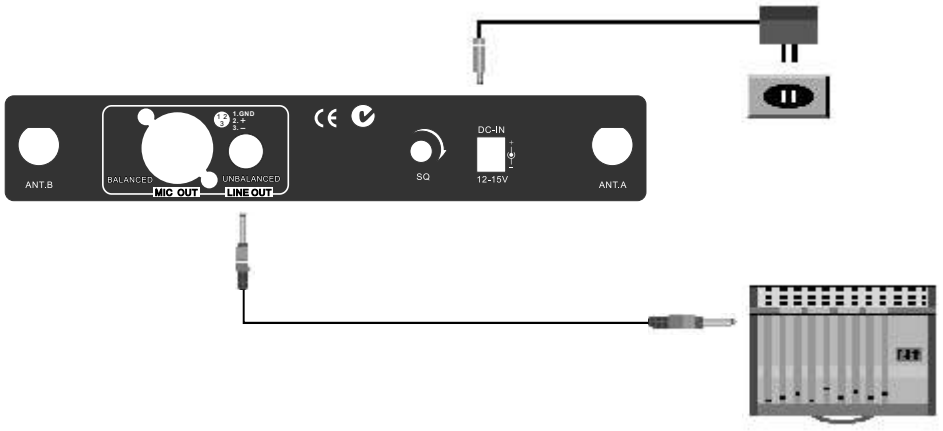


Fig.2

Rack mounting

SDR series has a half-19" casing and the specially designed 19" rack mount adapter (MP-50) is available as optional purchase for customers' installation request. The installation instructions are shown as Fig. 3.

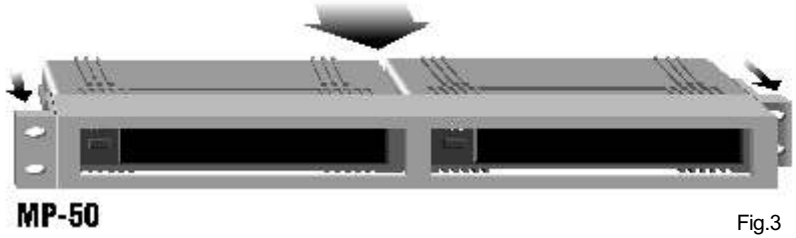


Fig.3

5.Remarks

1. RF Interference
If you encounter receiving interference (from other than an operating TV station), often it can be overcome by adjusting the receiver's squelch control, as described on 5.2 (below).Please note that wireless frequencies are shared with other radio services. According to FCC regulations, wireless microphone operations are unprotected from interference of other licensed operations in the band. If any interference is received by any Government or non-Government operation, the wireless microphone must cease operation. The above statement is valid in the U.S.A.

2. Receiver Squelch control
The squelch control on the back panel of the receiver is preset at the factory, but can be adjusted if you must use the system in a high RF interference area. If there is audio output from the receiver when your transmitter is OFF, adjust the squelch control so the system will receive the signal from your transmitter but squelch or eliminate the unwanted background RF noise. This adjustment can cause a reduction in usable range of the wireless transmitter, so set the control to the lowest position which reliably mutes the unwanted RF signal.

Beltpack transmitter SM-216 / 816+ / 316 / 916

SM-316/SM-916

1 Antenna
2 Battery status indicator
3 Power switch
4 Connector
5 Audio input connector
6 Cable restraint
7 Battery compartment
8 Charging points
9 Capsule
10 Mike clip

SM-216/SM-816PLUS

Channel selection and gain adjust

Channel selector and gain adjust are hidden in the designated cover of the front as illustrated. To make channel selection and gain adjust, please press the designated cover and flip it open as illustrated. Channel selection can be made by rotating the selector with a small screw driver.

Gain adjust for Lavalier and Headset microphones can be done by adjusting the MT switch, whereas GT switch is for the gain adjust of electric Guitar and other high-impedance line level inputs.

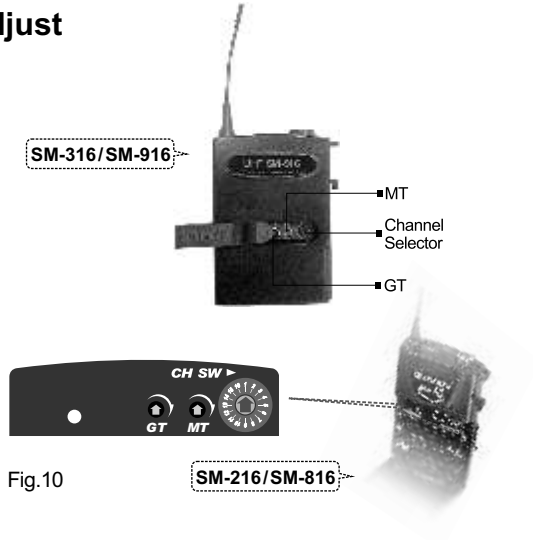


Fig.10