



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

SQ-216 / SQ-316 / SQ-816 / SQ-916

SM-216 / SM-316 / SM-816PLUS / SM-916

VHF/UHF PLL 16 CHANNEL WIRELESS SYSTEM

Operating Manual



DIN EN ISO 9001
Certificate NO:09 100 89126
通過 ISO 9001品質認證



CHIAYO

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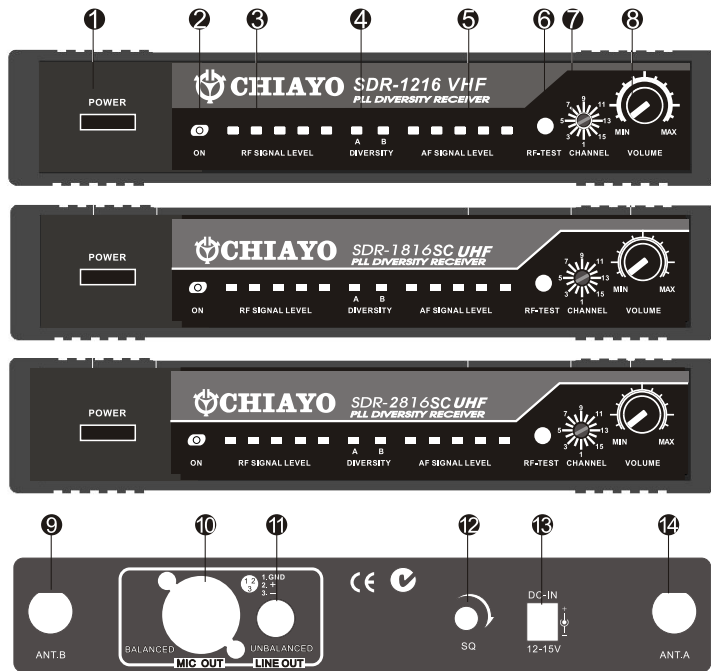
1. INTRODUCTION

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

The standard combinations are as follow:
SDR matches SQ, or SM

As this is a shared operating manual of SDR-1216/1826SC/2816SC, we suggest you to read this operating manual thoroughly in order to familiarize with each part of function before using.

2. FRONT AND REAR PANEL CONTROL



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

BELT-PACK TRANSMITTER (SM-216/SM-816PLUS/SM-316/SM-916)

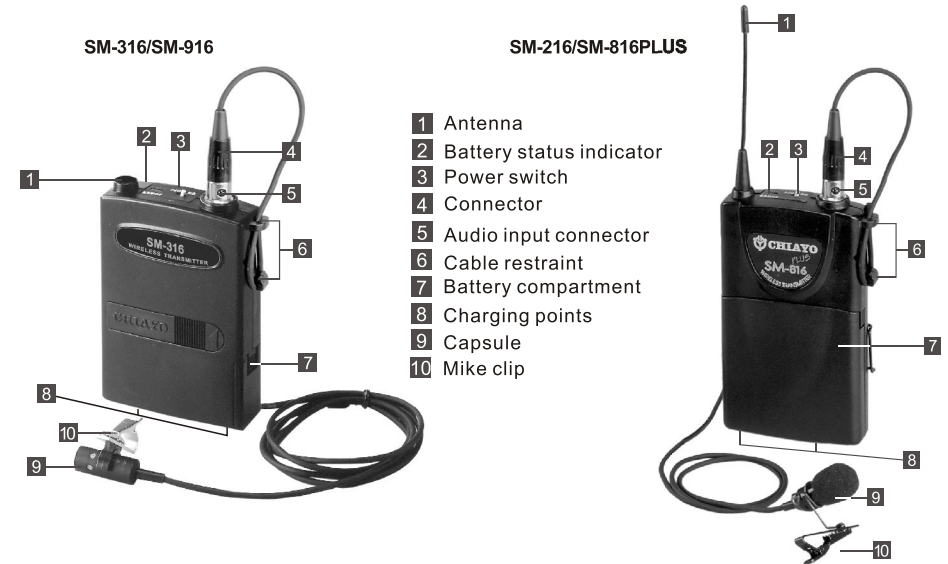


Fig.1

Fig.2

Fig.3

Fig.4

CHANNEL SELECTION AND GAIN

Channel selector and gain adjustment are hidden in the designated cover in the front as shown in picture.

To make channel selection and gain adjustment, please press the designated cover and flip it open. Channel selection can be made by rotating the selector with a small screw driver.

Gain adjustment 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.



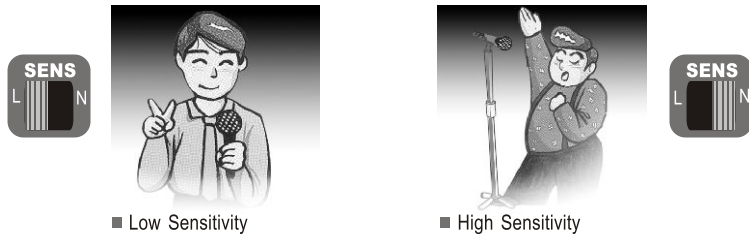
CHANGING OF CAPSULE (SQ-316/SQ-916)

These microphones have a module design. To change or replace a capsule, Please open the grill to pull out and plug in the capsule as shown in the following figure.



SENSITIVITY SWITCH

These microphone have a sensitiving switch. For close mouth singing or normal speech please put the switch to L position. For tripod-mount speech, please put the switch to N position.



OPERATING INSTRUCTIONS

- Before operation, please check and make sure that transmitter & receiver are of matching frequency or frequency group (for PLL version). For PLL version, further verify that the channel selected at both ends are of the same.
- To switch on the microphone, put the switch to "ON" position. The green LED indicator will light on indicates that battery is fresh. When RED LED light on indicates that battery is weak, thus a replacement is necessary.
- For best result, alkaline battery is recommended. Please remove the battery if the transmitter is not to be used for a longer period.
- When necessary, SQ-316/SQ-916 mic capsule could be replaced by pulling out and plugging in the new one, either dynamic or condenser.
- For close mouth singing or speaking, put the sensitivity switch to L and for tripod mouth application, where the speaker stands at a distance away, put the sensitivity switch to N. Be careful to put back the sensitivity switch to L for close mouth singing as N sensitivity for close mouth application might cause distortion.
- When holding the handheld mic, please do not hold the antenna part of it as this might severely affect the efficiency of the transmission range.

3. 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 reflections. The transmitter should also be at least 1m away from a wall or metal surface to minimize reflections. The transmitter should also be at least 1m away from the receiver, as shown in Fig. 5

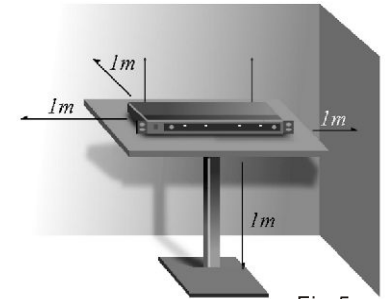


Fig.5

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

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.6 , 7 & 8 below.

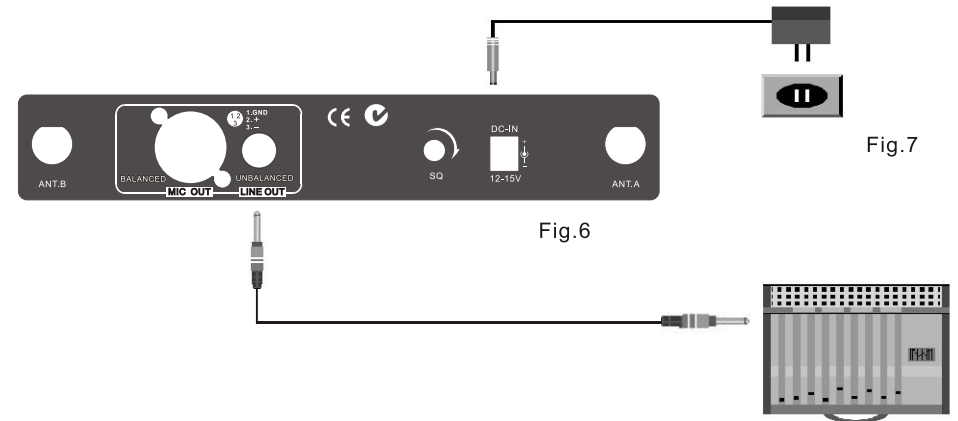


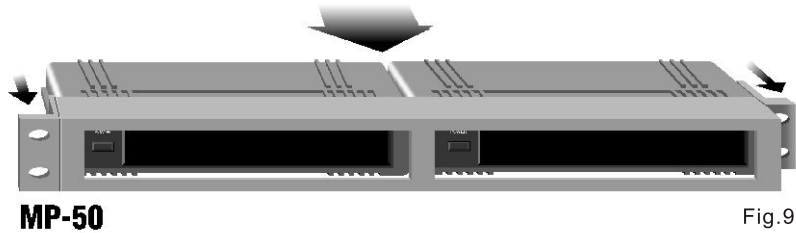
Fig.7

Fig.6

Fig.8

4. RACK MOUNTING

SDR series are 1/2 19" casing design 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. 9.



5. REMARKS

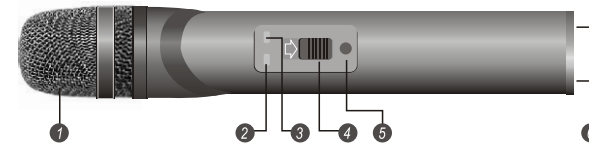
1. RF Interference

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 from 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

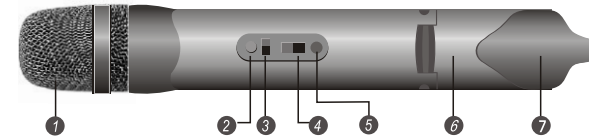
The squelch control on the back panel of the receiver is preset at the factory, but can be adjusted if you must use the system in a high RF interference area. If there is audio output from the receiver when your transmitter is OFF, adjust the squelch control so the system will receive the signal from 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.

HAND-HELD MICROPHONE (SQ-216/SQ-816/SQ-316/SQ-916)



SQ-216/SQ-816

1. Capsule with metal grill
2. Battery Good indicator (Green)
3. Battery Low indicator (Red)
4. Power on / off switch
5. Channel Switch
6. Charging contacts



SQ-316/SQ-916

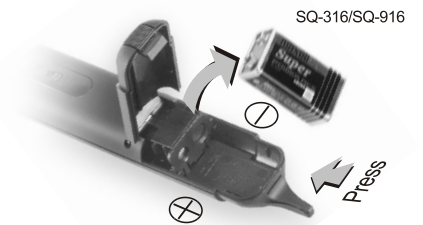
1. Capsule with metal grill
2. Battery indicator
3. Sensitivity switch
4. Power on / off switch
5. Channel Switch
6. Battery cover
7. Color cap

BATTERY

SQ-216/SQ-816 These two microphones require 3 pieces of "AA" size batteries to operate. Please insert the batteries according to the correct polarity indication. To open the battery movement will remove the cover.



SQ-316/SQ-916 These two microphones use a 9V battery for power. To change or replace the battery, please remove the color cap first, and then press the bottom of battery compartment to release the cover as shown in right figure.



CAUTION

Many batteries are known to have leakage problem of conductive and corrosive liquid. Please observe the rule to remove the batteries if they are not to be used for a period of a few days.

Due to various unstandardized sizes (diameters) of " AA " batteries, this battery compartment is designed to accommodate the most common Alkaline batteries only.