



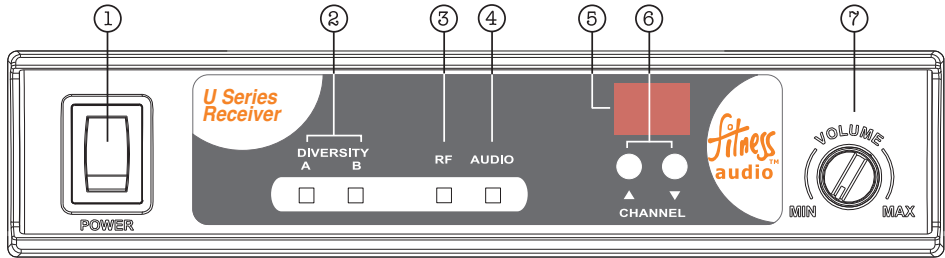
OPERATING MANUAL
FITNESS AUDIO
U Series Wireless Mic System
SDR-5716 Receiver
SM-716 / MT-U8 Transmitter



1. INTRODUCTION

Congratulations on your purchase of the state-of-the-art Fitness Audio PLL Synthesized 16 channel frequency agile UHF high band professional wireless system. Please read this operating manual thoroughly in order to familiarize yourself with the controls before using them.

2. FRONT AND REAR PANEL CONTROLS



- | | |
|-------------------------|-------------------------------------------|
| 1. Power Switch | 8. Antenna B Socket |
| 2. Diversity Indicator | 9. Fixed Mic-level Balanced output |
| 3. RF Signal Indicator | 10. Unbalanced Variable Line-level output |
| 4. AF Signal Indicator | 11. Squelch Control |
| 5. Channel LED | 12. DC IN Jack |
| 6. Channel Selectors ▼▲ | 13. Antenna A socket |
| 7. Volume Control | |

Channel Selection

The first thing you see when you turn on the receiver is 3 pairs of numbers that signify the frequency of the pre-set channel 00 (63.03.50 = 630.350MHz in the 630 Group). The channel changing buttons are software locked. To release the lock so that you can change it to use another channel just press and hold both Channel buttons in at the same time. After 3 seconds the Channel display will flash and you can change and check the channels using the ▼ and ▲ buttons. Once you have chosen a new channel, leave it flashing for 15 seconds before it locks on as indicated by a solid channel number. Don't forget to set your transmitter channel to match.

Auto Scanning

While the channel buttons are software locked, the system will scan all channels and stop at the first clear one by pressing ▼ for 3 seconds.

Group selection

The group selection mode can be activated by pressing ▲ for 3 seconds. The LEDs then flash either “FS”, “FA” or “Fb”, which can be chosen with the ▼ and ▲ buttons. (FS: Standard 16 channels, FA: Standard channel 0-7 repeats, Fb: Standard channel 8-0F repeats) After 15 seconds idling the group setting is automatically saved.

3. RECEIVER INSTALLATION

Audio output connection

There are two audio outputs on the back of the U-Series SDR5716 Receiver, a Mic-level balanced XLR-M and Line-level unbalanced 6.35mm jack. We have supplied you with a balanced cable that goes from the XLR output into a TRS 6.35mm jack plug as used on the Fitness Audio Aeromix mixers.

This cable is a perfect match for an Aeromic/Cyclemic or E•Mic/V•Mic, the balanced cable connection will deliver the highest sound quality possible with any microphone, with more “body” in the voice being the main audible difference. This audio connection is shown in figure 2.

However, if your mixer has an XLR input socket, then it’s best to purchase a balanced XLR-F to XLR-M cable to connect the receiver to the Mic Input. Some mixers will also accept an unbalanced jack to jack lead mic connection with the receiver’s output volume control adjusted down to suit as an alternative connection, but a balanced cable connection is the better one to use.

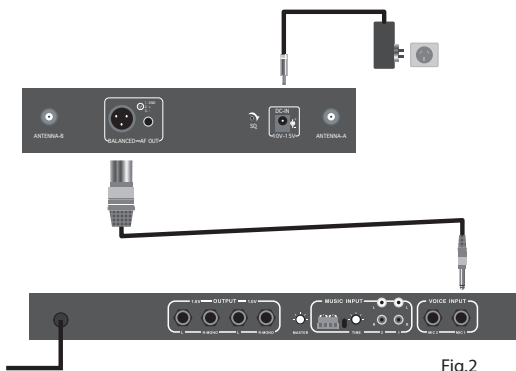


Fig.2

Rack Mounting the Receiver

The Fitness Audio SDR5716 Receiver is a 19” half-rack mount design and is supplied with a specially designed 19” rack mount adapter so can be bolted into equipment cabinets. Assemble as shown in Fig 3. We have also supplied you with a pair of antenna extension cables so that the two antennas can be mounted into the holes on the rack ears out front in the air and not trapped inside a steel box. Use the star washer and the nut on the inside of the rack ears to get a firm non-slipping mount.

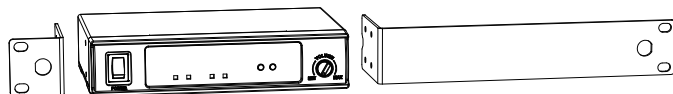


Fig.3

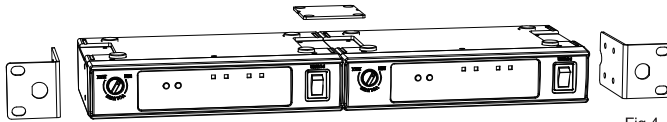


Fig.4

A double receiver rack mount kit is available as an optional extra if required (Fig. 4).

Positioning the Receiver

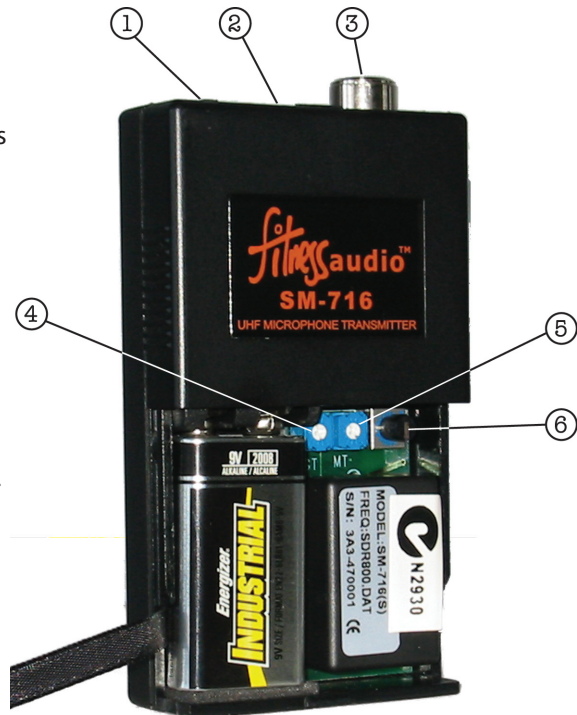
For best operation, the receiver should be at least 1m above the ground and at least 1m away from a wall or metal surface to minimize RF reflections.

4. THE BELT-PACK TRANSMITTER (SM716)

Channel Selection and Gain

The channel selector and gain adjustment are located under the battery cover as shown in the picture below. To make channel selection remove the cover and select a channel by turning the Channel Selector(6) with a small screwdriver. Gain adjustment for Lavalier and Headset microphones can be done by adjusting the MT trimpot(5), whereas GT trimpot(4) is for the gain adjustment of an Electric Guitar or other high impedance line level inputs. If you're using the Transmitter with an Aeromic then turn down the MT trimpot to minimum. If using an E-Mic or V-Mic then leave the MT trimpot at full and turn down only if distortion is evident.

Due to minor variations in the casing sizes of many brands of 9V batteries, the transmitter battery compartment is designed to accommodate the preferred 9V size battery made by Eveready - the Energizer 9V Alkaline – but other brands may also work well. Re-chargeable Ni MH batteries @ 170-190mAH ratings may need to be re-charged after about 1.5 – 2.0 hours of continuous use, whereas Alkaline 9V Batteries will generally be suitable for about 6 – 8 hours of airtime with the Aeromic or E-Mic/ V-Mic wireless microphones.



1. Battery Status Indicator
2. Power Switch
3. Microphone Connector
4. GT Trimpot
5. MT Trimpot
6. Channel Selector

A range of transmitter Pouchbelts in different styles and colours which can be worn under or over your clothes are available for many different users, including fitness instructors, actors, musicians and professional presenters. For more details please consult your FA System supplier or visit our website www.fitnessaudio.com.au.



Pouchbelts shown L - R: Standard, Hipster, Zipster, Grey Zipster, Beige Theater belt.

5. MINI TRANSMITTER (MT-U8)

If your system has been supplied with a Mini Transmitter then it will already be wired to an Aeromic or Cyclemic, E•Mic or V•Mic either attached to the frame or with an Arm Pouch or Waist Pouchbelt to suit.

To select the matching channel to the receiver remove the battery cover and with the small screwdriver supplied change the channel to match the one shown on the receiver LED display.

Please note that the MT-U8 is an 8 channel transmitter and will normally be supplied lining up with channels 00-07 on the receiver. In some countries a "B" group of channels may also be available (Ch. 08-0F). In both cases the channels line up with the same number on the receiver and then repeat so that channel 00 is also channel 08.

Using Multiple Transmitters At One Location

You can use up to four MT-U8/SM716 systems under the one roof without interference from each other. In the case of the 630-650MHz range it is channels 00, 03, 04 or 07 in Group A, and, if you are also using a belt-pack transmitter or a Group B Mini Tx in the same room, then it can be set to a channel in the 08-0F group of which channels 09, 0B, 0D or 0F will work best with the above Group A channels. There will be different, non-conflicting channels in other frequency groups supplied around the world so please check with your dealer or national supplier for this information.



Fit an Alkaline AAA battery into the battery compartment, re-fit the lid and push the sealed on/off button. A tiny blue LED illuminates to let you know it's on. When that LED starts flashing then the power is running low and it's time to change the battery. One AAA battery should supply over 5 hours of air time. Re-chargeable AAA batteries can also be used.



6. REMARKS

RF Interference

If you encounter receiving interference (from other than an operating TV station), it can often be overcome by adjusting the receiver's squelch control, as described below. Please note that wireless frequencies are shared with other radio services, and according to FCC regulations wireless microphone operations are unprotected from interference from 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 for the U.S.A.)

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.

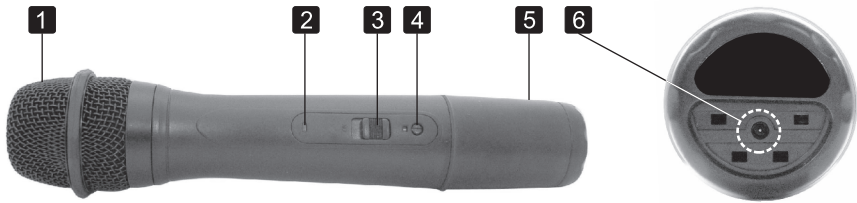
Batteries

Many batteries are known to leak conductive and/or corrosive liquid when not used for a period of time. Please remove the batteries from the transmitter if it is not to be used for a period of a few days or more.

7. THE OPTIONAL HANDMIC

The Fitness Audio SDR5716 Receiver is compatible with certain models of Chiayo handheld microphones such as the SQ-1016 pictured below. For more information please consult your Fitness Audio supplier. Please note that you can only use one mic transmitter at a time with the FA Series Receivers so make sure your other transmitter is turned off before using a handmic transmitter.

1. Mic capsule module
2. Battery low indicator
3. Power on/off
4. Channel selector
5. Battery compartment
6. Charging port



The Fitness Audio SDR5716 Receiver, SM716 and MT-U8 Transmitters are covered by a minimum 12 month parts and labour warranty against manufacturer's defects from the date of purchase by the first owner. Longer warranties may apply to the SM716 in some countries.

Warranty Information

(Please retain for your records)

This product was purchased by:

(Your Business).....

on (date) .. / .. / .. from (Company)

of (address).....

Model Number(s).....

Serial Number(s).....

FCC & IC Caution:

This device complies with Part 74 of the FCC Rules and Canada licence-exempt RSS-123 standard. Operation is subject to the following conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

Fitness Audio® Wireless Systems, Aeromic®, E•Mic™ & V•Mic™ Headmics and Aeromix® Audio Mixers are distributed worldwide exclusively by:

Fitness Audio Distributors

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