



## **OPERATING MANUAL**

### **FITNESS AUDIO**

#### **U Series Wireless Mic System**

##### **SDR-5616 Receiver**

##### **SM-716 / MT-U8 Transmitter**

#### **V Series Wireless Mic System**

##### **SDR-1204 Receiver**

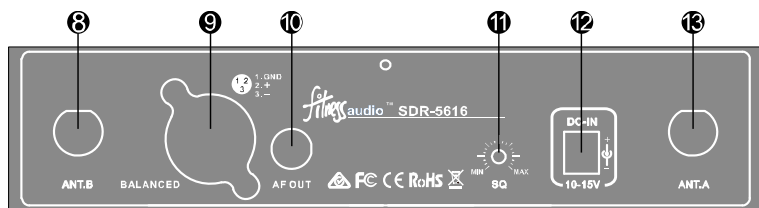
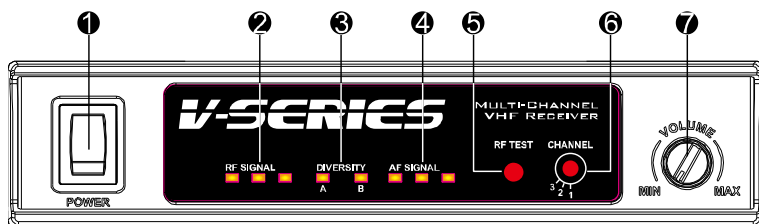
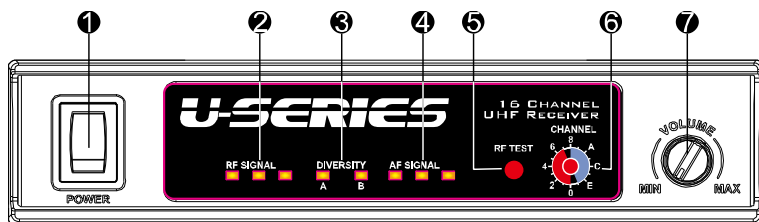
##### **M-209C Transmitter**



## 1. INTRODUCTION

Congratulations on your purchase of the latest Fitness Audio PLL Synthesised 16 channel frequency agile UHF high band or VHF professional wireless system. Please read this operating manual thoroughly in order to familiarise yourself with the controls before using.

## 2. FRONT AND REAR PANEL CONTROLS



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

### RF Test

To find the best channel for transmission, ensure the receiver is connected to a mixer and amplifier and press the RF Test button (5). If interference is heard select the next channel in order using switch (6) and repeat the test until a clean channel is found. Then select the matching channel number on the Belt-Pack Transmitter and test for voice level.

### 3. RECEIVER INSTALLATION

#### Audio output connection

There are two audio output sockets on the rear panel of the receiver. A 6.35mm Jack to Jack cable is supplied as standard and will connect into most Mic/Line Mixers including our Fitness Audio Aeromix line as per Fig 2. When connected with a jack to jack cable the volume control on the front of the receiver works as a "turn down" control should you need to adjust the mic volume for a signal processor. The 12 o'clock position is approximately the same level as using a balanced XLR cable.

When you connect using an XLR balanced cable the signal level is fixed. It is the same level as plugging a cabled microphone to the same input and it by-passes the front panel volume control.

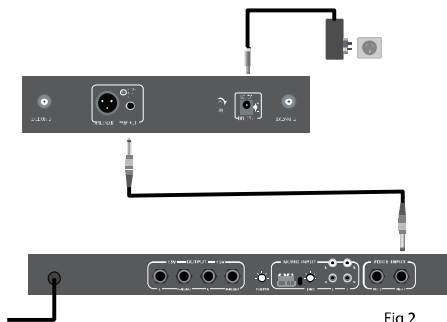


Fig.2

#### Rack Mounting the Receiver

The Fitness Audio U & V Series Receivers are a 19" half-rack mount design and is supplied with a specially designed 19" rack mount "wings" that 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.

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 minimise RF reflections.

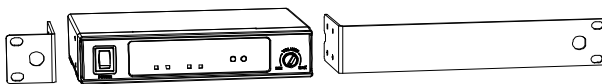


Fig.3

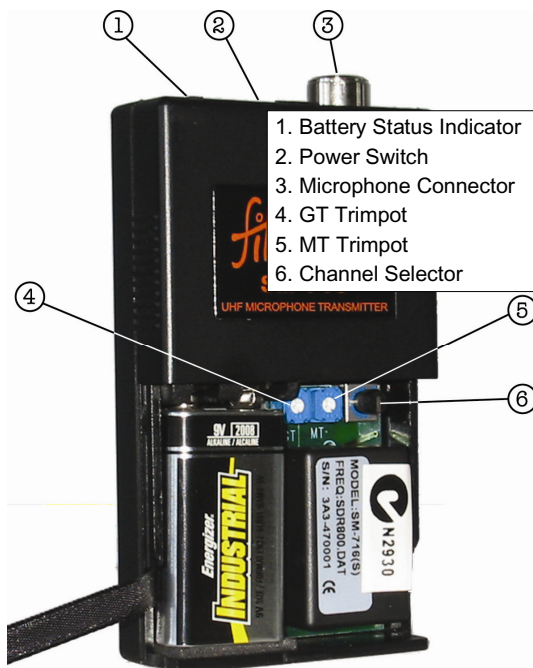


Fig.4

## 4. THE BELT-PACK TRANSMITTER

### Channel Selection and Gain

Insert the battery bottom first. The channel selector and gain adjustment are located under the battery cover as shown in the picture below. To make channel selection (U-Series only) 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. When you turn the transmitter ON (1) you will see a single flash(2) if the battery is charged and ready to use. Should you see a continuous red light then the battery is about to fail so please change it for a new one. If you're using the transmitter with the latest Aeromic, Cyclemic or E\*Mic then make sure the MT trimpot is turned up to the maximum.



Due to minor variations in the casing sizes of many brands of 9V batteries, the transmitter battery compartment of the SM-716 is designed to accommodate the preferred 9V size battery made by Eveready - the Energiser 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.

We recommend the use of an Aeromic Pouchbelt to hold the transmitter around your waist or arm to protect your investment. A range of transmitter pouchbelts in different styles and colours are available. For more details please consult your FA System supplier.



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

## 5. MINI TRANSMITTER

If your system has been supplied with a Mini Transmitter then it will already be wired for 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 selected on the receiver.

Please note that the MT-U8 is an 8 channel transmitter and will normally be supplied lining up with channels 0-7, the RED segment on the receiver. In some countries a "B" group of channels may also be available (Ch. 8-F) in the BLUE segment.

### ***Using Multiple Transmitters At One Location***

You can use up to eight MT-U8/SM716 systems under the one roof without interference from each other. There will be different, non-conflicting channels in all frequency groups supplied around the world so please check with your dealer or national supplier for this information. 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 a quality AAA battery into the battery compartment, re-fit the lid and push the sealed on/off button. A blue LED illuminates to let you know it's on. When the LED starts flashing, the power is running low and it's time to change the battery. One quality Alkaline AAA battery should supply over 4 hours of air time. Re-chargeable AAA batteries can also be used but expect less airtime depending on the battery rating. Frequent re-charging will be necessary. Coloured lids are also available as an optional extra in yellow, orange, red, and blue to match all of our microphones so they can be paired up to colour code a studio or a combination.

The Yoga Wrap is a measured neoprene wrap around with velcro fixing that offers you the first sweat barrier to us if you are teaching cycling or hot yoga or any class that generates a lot of sweat through your hair or skin of your head - contact your supplier for the cost of this handy accessory - like pouchbelts and windscreens for the E•Mic, every instructor should have one.



## 6. REMARKS

### ***The V Series Receiver***

Your receiver comes with 3 VHF channels to choose from. In the USA these are the travelling frequencies around 169MHz and 4 channels elsewhere in the world ie UK 175MHz.

The single frequency transmitter supplied will match one of these channels. If it does not work well on the frequency supplied then please contact your supplier to exchange for a different channel transmitter.

### ***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 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***

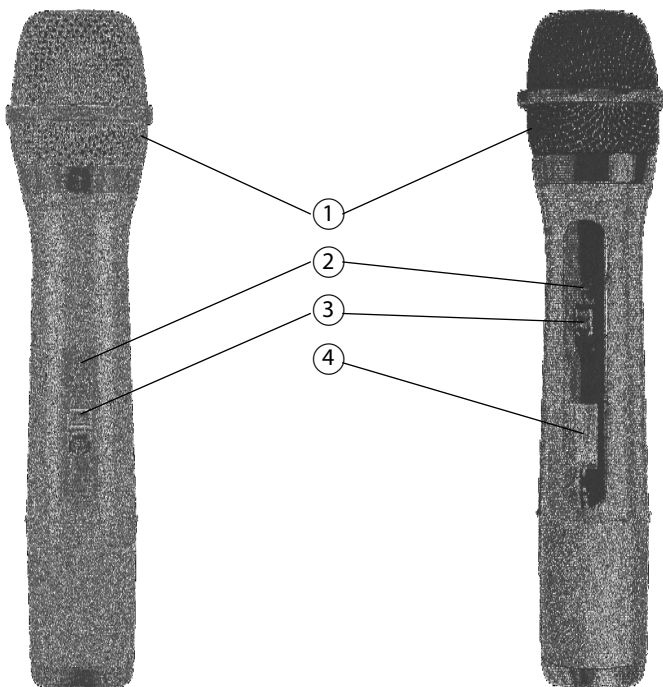
Many batteries are known to leak conductive and/or corrosive liquid when not used for a period of time. Please remove the batteries from the transmitter if it is not to be used for a period of a few days or more.

### ***Multiple Transmitters***

Please note that you can only use one mic transmitter at a time with the FA Series Receivers so make sure that all other transmitters on the same frequency are turned off.

## 7. THE OPTIONAL HANDMIC

Handheld mics are available for both Fitness Audio U and V Series Receivers, contact your supplier for pricing. Please note that you can only use one mic transmitter at a time with the FA Series Receivers so make sure any other transmitter is turned off before using a hand transmitter.



### **Q-215** (V-Series compatible)

1. Capsule with metal grille
2. Battery Good Indicator (green)  
Battery Low Indicator (red)
3. Power on/off switch

### **SQ-5016/SQ-1016V/SQ-1016** (U-Series only)

1. Capsule with metal grille
2. Battery Good Indicator (green)  
Battery Low Indicator (red)
3. Power on/off switch
4. LCD display (SQ-5016 only)

The Fitness Audio SDR-5616 / SDR-1204 Receiver, SM-716 / M-209C 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.

### 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 15 & Part 74 of the FCC Rules and Canada licence-exempt RSS-210 & RSS-310 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### Fitness Audio

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