

*Fitness*audio®

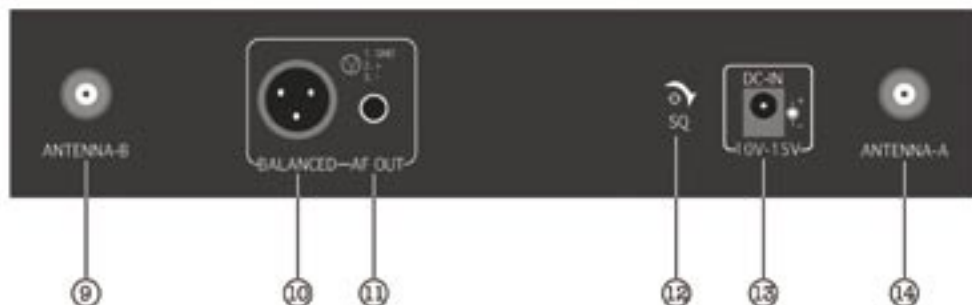
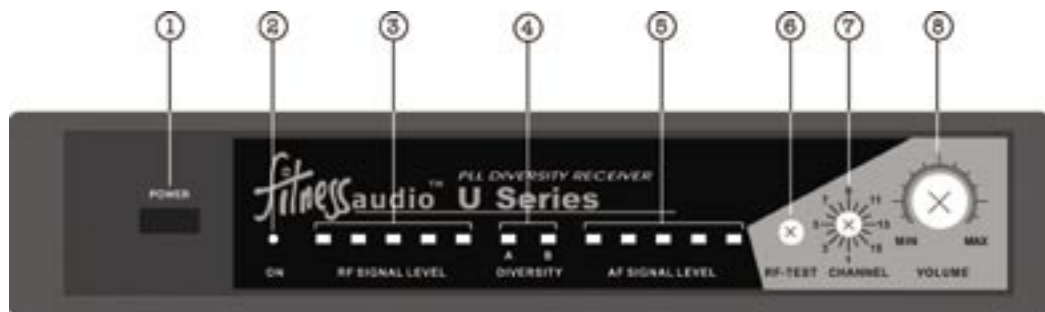
**OPERATING MANUAL**  
**FITNESS AUDIO WIRELESS MIC SYSTEM**  
**V & U Series**  
**SDR-1716/DR-204 Receivers**  
**SM-716/M-209C Transmitters**



## 1. INTRODUCTION

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

## 2. FRONT AND REAR PANEL CONTROLS



- |                                     |                                 |
|-------------------------------------|---------------------------------|
| 1. Power Switch                     | 8. Volume Control               |
| 2. Power On Indicator               | 9. Antenna B Socket             |
| 3. RF Signal Indicator              | 10. Fixed Mic Level 20mV        |
| 4. Diversity indicator              | 11. Adjustable Line Level 600mV |
| 5. AF Signal Indicator              | 12. Squelch (SQ) Control        |
| 6. RF test button                   | 13. DC IN Jack                  |
| 7. Channel Selector (U-Series only) | 14. Antenna A socket            |

### ***RF Test***

To find the best channel for transmission (U-Series only), ensure the receiver is connected to a mixer and amplifier and press the RF Test button (6). If interference is heard select the next channel in order using switch (7) 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. BELT-PACK TRANSMITTER

#### 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 (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. 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 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.



1. Battery Status Indicator
2. Power Switch
3. Microphone Connector
4. GT Trimpot
5. MT Trimpot
6. Channel Selector (U-Series only)

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 after visiting the two pouchbelt pages at our website: <http://www.fitnessaudio.com.au/>



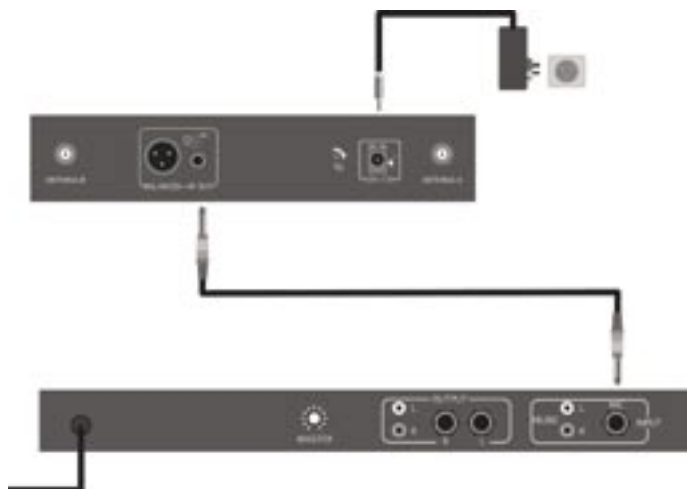
*Pouchbelts shown L - R: Standard, Hipster, Zipster, Grey Zipster, Beige Theater belt.*

#### **4. RECEIVER INSTALLATION**

##### ***Audio output connection***

There are two audio outputs on the back of the V- & U-Series receivers, a Mic-level balanced XLR-M and Line-level unbalanced 6.35mm jack. Use shielded audio cable for the connection between the receiver and the mixer.

If the mixer/amp has a 6.35mm jack input socket, connect the supplied cable from the 6.35mm unbalanced output on the FA receiver into this socket. If connecting to an Aeromix 1+1EU Mixer use the unbalanced Jack to Jack cable for perfect matching. This audio connection is shown below.



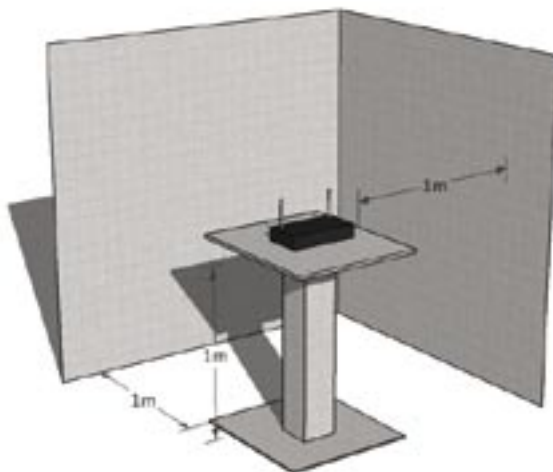
However, if the mixer has an XLR input socket, then purchase a balanced XLR-F to XLR-M cable to connect the receiver to the Mic Input. When connecting to an Aeromix 2+2EU Mixer or 2+2PM Powered Mixer, purchase a balanced cable XLR Female to TRS(stereo) 6.35mm Jack Plug for a perfect match and the best sound quality from an Aeromic or E•Mic/V•Mic. Both the 2+2 models will also accept an unbalanced jack to jack lead connection with the Receiver's Output Volume Control adjusted down to suit. A balanced cable connection will give the highest sound quality possible from any microphone with more "body" in the voice being the main audible difference.

## 5. RACK MOUNTING

Fitness Audio V- & U-series are a 1/2 19" rack mount design and the specially designed 19" rack mount adapter (MP-50) is available as an optional extra. A blank filler panel MP-12 is also available if you use just one receiver and, if you need to bring the antennas forward for technical reasons, the MP-12A panel has Antenna extensions fitted.



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 as shown below. Keep antennas away from RF noise sources such as motors, automobiles, neon lights, as well as large metal objects.



The wireless mic user should also keep at least 1m away from a wall or metal surface to minimize reflections.

## 6. REMARKS

### **1. 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.)

### **2. Receiver Squelch control**

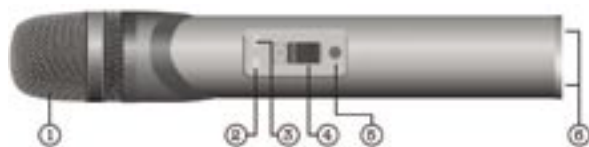
The squelch control on the back panel of the receiver is preset at the factory, but can be adjusted if you must use the system in a high RF interference area. If there is audio output from the receiver when your transmitter is OFF, adjust the squelch control so the system will receive the signal from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

### **3. 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.

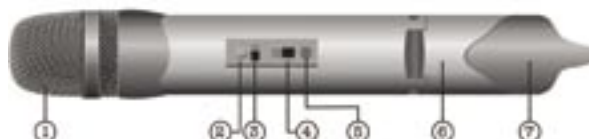
## 7. HANDMICS

The Fitness Audio V- and U-series Receivers are compatible with certain models of Chiayo handheld microphones. 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 the Beltpack Transmitter is turned off before using a handmic transmitter.



**Q-209 (V-Series compatible)  
SQ-816 (U-Series compatible)**

1. Capsule with metal grille
2. Battery Good Indicator (green)
3. Battery Low Indicator (red)
4. Power on/off switch
5. Channel Switch
6. Charging Contacts



**SQ-916 (U-Series only)**

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

## 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).....

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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