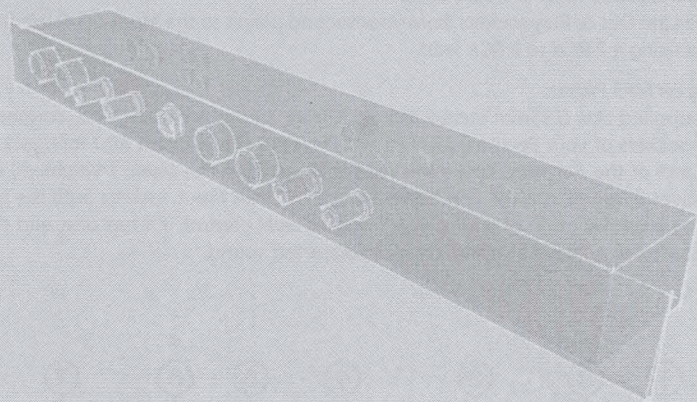


# AEROMIX

## AEROMIX 2+2DC Operating Manual



fitness<sup>®</sup>  
audio

# The Fitness Audio Aeromix 2+2DC Hook-up Guide

Thank you for purchasing the Aeromix 2+2DC Voice-over-Music Mixer by Fitness Audio—designed to make fitness instructors' lives easier. If your sound contractor is not installing your Aeromix for you, please follow these simple steps to connect it to your Group Fitness stereo sound system.

## 1. Connecting the Wireless Mic Receiver.

Connect the Line Out jack socket of your wireless microphone receiver to the *Mic 1(15)* socket on the back of the Aeromix using a standard mono 6.35mm (quarter inch) jack to jack lead which is usually supplied with wireless receivers.

### 1.1 Balanced Line Connection

These mic sockets will also accept a TRS (stereo) jack with a balanced line cable from an XLR Mic Level output socket found on the majority of quality wireless receivers. Balanced line connections will always sound better, revealing more "body" in the voice, and are less susceptible to noise and interference.

### 1.2 Connecting a second Wireless Mic Receiver

If a second wireless receiver has to be connected then repeat the connection procedure as before using the *Mic 2(15)* input socket.

## 2. Connecting the Music Sources - The Main CD Player

Connect the Line Out or Play sockets of your CD Player to the *Music 1(14)* input sockets on the Aeromix using a 2 RCA to 2 RCA lead. Remember that "Red is Right and Left is White" (or Black!).

### 2.1 Connecting a second Player or Radio Tuner

Connect the Line Out or Play sockets from your second player to the *Music 2(14)* input sockets of the Aeromix using a 2 RCA to 2 RCA lead.

### 2.2 Connecting an MP3 Player.

Using the supplied *iJax* 6.35mm stereo jack to 3.5mm stereo mini-jack lead, connect the Line Out or Play sockets of your Personal MP3 or MD Player to the 6.35mm *Alt.1 In(4)* jack socket on the front panel of the Aeromix. When this lead is plugged in the *Music 1 Volume(5)* is diverted from any player plugged into the rear panel *Music 1(14)* RCA input sockets until the jack plug is removed. Use a combination of your player's output level control, if it has one, and the *Music 2 Volume(6)* control to achieve a strong, clean, undistorted sound.

## 3. Connecting to the Power Amplifier

Connect a dual 6.35mm jack lead (balanced or unbalanced) from the *1V Output(10)* pair of sockets to your amplifier's input sockets. If the power amplifier is a U.S. made brand it may require more driving voltage – if this is so then connect it to the *1.5V High Output(9)* sockets. Most power amplifiers made in Asia and Australia are best suited to the standard 1V sockets.

### 3.1 Connecting to a second device

The unused pair of outputs can be used for driving another amplifier in either stereo or mono or the could be used to connect to a wireless transmitter or a recording system, providing they have input or record level controls and you don't use exaggerated treble & bass tone settings.

## 4. Plug it in!

With the speakers connected to the power amplifier, connect the Aeromix to your power point, turn it on and make sure the full system is fully powered up.

## 5. Setting the volume levels.

Start from the end! Firstly adjust the level controls of your power amplifier – set its volume controls up to maximum.

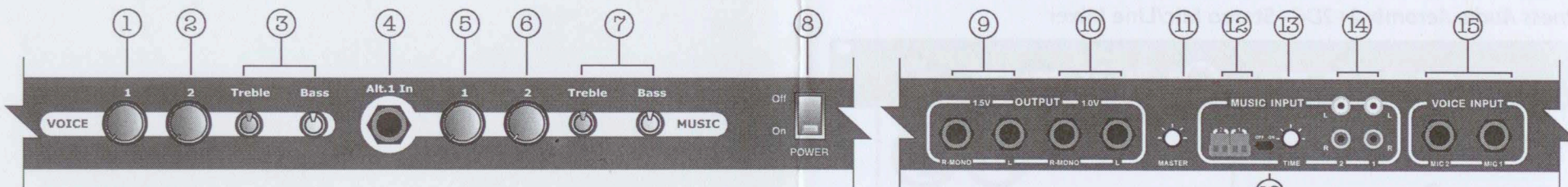
### 5.1 Setting the microphone level.

If you are using an Aeromic™ Headworn Microphone then make sure that the small gain control on the transmitter is turned all the way down to minimum gain or just on. Now check that the receiver's mic/line output selector (if there is one) is set to "mic" if you're using a balanced line cable connection, or to "line" if you're using an unbalanced cable connection, and turn the volume control of the receiver to the midway or 12 o'clock position.

Turn the *Voice(1,2)* control on the Aeromix up to the midway or 12 o'clock position. Put the microphone on, turn on the transmitter and start counting out loud while advancing the *Master Volume(11)* control on the back of the Aeromix until feedback (mic howling) starts; then edge it back a touch until the voice sounds dry with no hint of "ringing" or feedback. Fine tune by walking around the room talking and seeing how close you can get to the speakers – the better they are the closer you'll get – without the mic feeding back. This process is called setting the maximum "gain-before-feedback" position.

### 5.2 It's a Voice-Over-Music Mixer

Now play some music and adjust the music volume against your mic level while projecting your voice as you would teaching an Group Fitness or Dance Class. Remember, it's a *Voice over Music* Sound System – the audience wants to hear what's being said above the level of the music.



### Key To Illustration:

- |                              |                         |                                       |                                |
|------------------------------|-------------------------|---------------------------------------|--------------------------------|
| 1. Voice Input 1 Volume      | 5. Music Input 1 Volume | 9. 1.5V Line Output                   | 13. Mute Recovery Time Control |
| 2. Voice Input 2 Volume      | 6. Music Input 2 Volume | 10. 1Volt Line Output                 | 14. Music Inputs               |
| 3. Voice Input Tone Controls | 7. Music Tone Controls  | 11. Master Volume                     | 15. Mic Level Inputs           |
| 4. Alternate Input 1         | 8. Power On/Off         | 12. Music Mute/SoundEar® Relay Inputs | 16. SoundEar® Switch           |

## 6. Setting the Tone Controls.

As a general guide, the voice could do with a touch less bass and a touch more treble but not too much or it might sound too "edgy" so just add a little treble boost to help the voice cut through the music. Now for the music – get a test CD and start it playing. Set the volume so it's not too loud and adjust the bass and treble controls by sweeping from left to right and back again. Settle on a setting that gives a more subtle fullness to the music rather than an exaggerated bass and/or treble.

## 7. Music Mute Relay Circuit

Many responsible Building Approval Authorities around the world are now requesting that there be supplied a music cut out switch on any powerful music system installed in a public or community centre (ie city or council owned fitness centres). The circuit is closed by the fire alarm control system should an alarm be activated anywhere in the building. We believe that this will eventually be a compliance standard for private enterprise owned centres as well. We have opted to supply a music cut out circuit rather than a total power cut system, as we feel that Instructor should be trained to react to the alarm and lead their class members out to safety using the vocal power of their mic through the sound system. This connection should only be installed by a licensed contractor. To use the circuit a two-wire cable has to be run from the General Services Board connected to the building's alarm system and the two wires are connected to the screw terminals. Set the music playing and have someone on the mic just talking, then check by shorting a test cable screwed into the Euroconnector pins 1&2 and the music should cut out, leaving the mic working so that people can be marshalled out to the Fire Drill Assembly points.

## 8. Connecting to a SoundEar®

The SoundEar is a Sound Pressure Level (SPL) Monitoring Display that shows you when a pre-set sound level has been exceeded by illuminating a Red WARNING sign. The inner ear orange circle lights at 5dB less than the set level. The SoundEar should be positioned above head height on a side wall, or in a position that will catch the ambient or reflected sound - ie not directly facing the loudspeakers. The default setting of the Aeromix 2+2DC's SoundEar switch is Off for normal hook up to a power amp. If you are connecting the mixer to a SoundEar product then you have to set this switch to ON. Use a 2 wire speaker cable soldered to a standard mono mini (3.5mm) jack to plug into the socket on the base of the SoundEar, and run the cable from the SoundEar back to the 2+2DC. Using the detachable half of the green Euroconnector connect Pin 3 to the earth or sleeve of the mini jack and Pin 4 to the tip. Now when you are connected and playing some music with the SPL setting at 95dB, the Music Mute Relay will be activated every time the input exceeds the recommended level. Some people may think this is a good thing while others may find it disruptive but the whole point is to protect both employees and the paying audience from constant exposure to high noise levels that may be detrimental to their hearing. If you feel the cut-out is too severe then move the setting on the back of the SoundEar up one notch to 100dB and mix the voice and music up to the point where the inner orange circle is flashing in time with the beat and no more - that's the safe 95dB point and always keep the level below where the Red Warning sign and the cut-out is activated. The TIMER screw pot adjusts the amount of recovery time it takes to switch back on - from a couple of seconds to a maximum 60 seconds of music silence. Please remember you have to turn the Music and Voice control levels down a little bit if you want to avoid the cut-out occurring again. Keeping your eyes on the SoundEar while setting the levels could save your ears in the long term.

*\*Illustrations may differ from actual production models*

Fitness Audio products are distributed worldwide by Fitness Audio Network. They are manufactured to our specifications by Chiayo Electronics, Taiwan. Your Aeromix is covered against manufacturing defects by a 12 month warranty commencing from the date of purchase.

Your comments welcome:

FAN Fax : +61 (0)2 8399 3396

Email to: aeromix@fitnessaudio.net.au

Warranty Information for Service Claims.  
(Please retain for your records.)

This product was purchased by:

(Your business) .....


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


of (address) .....

Serial Number .....

Fitness Audio Network P/L  
PO Box 321  
Alexandria NSW 1435  
AUSTRALIA

**fitnessaudio**  
www.fitnessaudio.net.au

**WARNING**  

Do not remove lids  
No user serviceable parts inside  
Do not place liquid container on unit  
Do not expose to moisture or rain

# THE FITNESS AUDIO RANGE

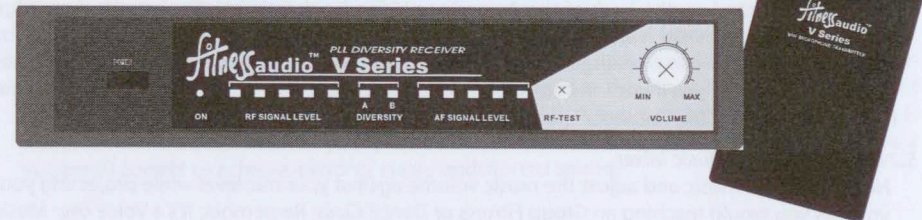
HRX32 Mini Mixer



Fitness Audio U-Series - UHF Wireless System



Fitness Audio V-Series - VHF Wireless System



Fitness Audio Aeromix 2+2DC - Stereo Mic/Line Mixer

