



Operation manual

AEROMIX1+1SR

Stereo Voice-over-Music Mixer



Fitness Audio Aeromix1+1SR Set-up Guide

Thank you for purchasing the Aeromix1+1SR Stereo 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 RX INPUT (13) 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

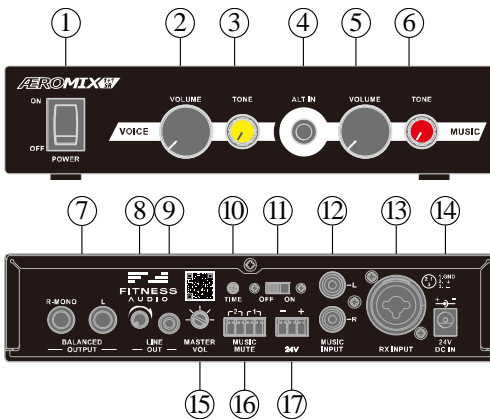
This mic socket will also accept an XLR or 6.35mm jack with a balanced line cable from an XLR or 6.35mm jack output sockets found on the majority of quality wireless receivers. Balanced line connections will always sound better, revealing more “body” in the voice, and are less susceptible to noise and interference.

2. Connecting the Music Sources – Audio Inputs

Connect the Line Out sockets of your Bluetooth Receiver or CD Player to the MUSIC INPUT (12) input sockets on the Aeromix using a 2 RCA to 2 RCA lead. Remember that “Red is Right and Left is White” (or bLack!). The volume is controlled by MUSIC (5)

2.1 Connecting an MP3 Player – front input.

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 IN (4) jack socket on the front panel of the Aeromix. When this lead is plugged in the MUSIC (5) the input is diverted from any player plugged into the rear panel MUSIC INPUT(12) RCA input sockets until the jack plug is removed (the front input overrides the rear input until the front source input is removed). Use a combination of your player’s output level control (usually it requires the highest volume output from the player), if it has one, and the MUSIC (5) volume control to achieve a strong, clean, clear sound.



Key To Illustration:

1. Power On/Off
2. Voice Input Volume
3. Voice Input Tone Control
4. Front Input 6.35mm Jack
5. Music Input Volume
6. Music Tone Control
7. Balanced Output
8. Line Output Volume
9. Line Output
10. LM Recovery Time Control
11. LM On Switch
12. Music Input
13. Mic Level Input
14. DC Input
15. Master Volume
16. Music Mute/LM Relay Input
17. 24V Output

3. Connecting to the Power Amplifier

Connect a dual 6.35mm jack lead (balanced or unbalanced) from the BALANCED OUTPUT (7) pair of sockets to your amplifier's input sockets. This pair of outputs can be used for driving an amplifier in either stereo or mono; or they could be used to connect directly to a pair of amplified (powered) loudspeakers.

They can also 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 tone settings.

4. Plug it in!

With the speakers connected to the power amplifier, connect the Aeromix 24VDC Power Pack 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, then set the MASTER (15) control to about 75%, that is, half way between the 50% click point and the turning right end stop.

5.1 Setting the microphone level.

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.

Put the microphone on, turn on the transmitter and start counting out loud while advancing the VOICE (2) Volume control on the front 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.

6. Setting the Tone Controls.

Depending on the quality of your microphone, the voice could do with a touch less bass and a touch more treble but not too much or it might sound too "edgy" (and create feedback hazards) so just add a little treble boost to help the voice cut through the music (with quality fitness microphones like the Aeromic, Cyclemic, and E-mic the standard 12 o'clock position starting point should be adequate).

Now for the music – using a test Playlist, start it playing. Set the volume so it's not too loud and adjust the tone by sweeping the control from left to right and back again.

Decide on a setting that gives a more subtle fullness to the music rather than an exaggerated bass or treble. Use the Voice Volume and Tone controls to reduce any microphone feedback.

7. Connecting to a Loudness Monitor

The Fitness Audio LM-30 Trigger™ is a sound pressure level (SPL) monitoring display that shows you when a pre-set sound level has been exceeded by illuminating 3 rows of red LEDs. The monitor should be positioned above head height on a side wall (approximately 1/3 of the way back from the front of the room), in a position that will catch the ambient or reflected sound, that is not directly facing the loudspeakers and importantly, has to be visible to the sound system operator. The default setting of the Aeromix1+1SR's Audio Slap™ Switch (11) is off for a normal hook up to a power amp. If you are connecting the mixer to a Trigger™ then set this switch to ON once it's wired in place.

Using Cat5/6 cable, connect the stripped back wires of one pair to the 4 pin green connector on side 1 for The Trigger™, the earth side to the inside contact of {1} and the signal side to the outside contact of

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{1}. Run the cable from the monitor back to the LM Relay Input (16). Using the detachable half of the green connector, connect the 3rd contact to the earth or sleeve of the mini jack and 4th to the tip or +. Now connect and play music with the SPL monitor set at 94dB. The Audio Slap™ circuit will be activated every time the sound level exceeds the recommended setting. A 15dB cut means the music level will be substantially reduced but still quite audible. The LM Recovery TIME screw pot (10) adjusts the amount of recovery time it takes to switch back on - from a couple of seconds up to a maximum of 30 seconds of reduced music level. Turn the Music and Voice control levels down a bit to avoid the Audio Slap™ occurring again. Keeping your eyes on the monitor lights while setting the sound levels could save your ears in the long term. One red LED lighting up is the target you should go for, 2 rows of red LEDs is living dangerously and 3 will trigger a slap.

8. Music Mute Relay Circuit


Building Approval Authorities require a music cut-out switch on powerful music systems 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 have opted to supply a music cut-out circuit rather than a total power cut system. We believe that Instructors should be trained to react to an alarm and lead their class members out to safety using the vocal power of their Fitness Audio wireless mic system through their studio's 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 green connector (16), pins 1 & 2, {Input 2} the music will cut out leaving the mic working so that people can be marshalled out to the Fire Drill Assembly points.

9. Streaming Sound Output

This Aeromix1+1SR has an independent volume controlled 3.5mm mini-jack output socket (9). It will take your Voice over Music mix and feed it to an outboard Analog to Digital USB Soundcard (optional extra - please consult your supplier). This then connects to a computer for Zoom or other types of streaming class sessions supplying a high quality soundtrack over the internet to accompany the visuals. Adjust for a balanced level.

10. Optional Extras: Rack Mount Kit and Output Cables

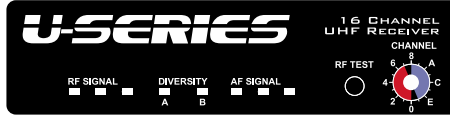
The Aeromix1+1SR can be rack mounted using the optional Rack Mount Kit talk to your supplier for the pricing. The kit can be used to mount it on its own or it can be paired with other half rack products from Fitness Audio and CHIAYO like their UHF Wireless Mic Receivers and the Fitness Audio AL 3.0 BlueTooth Receiver. Output cables from a 6.35mm TRS jack plug to a Male XLR3-M are also available from your supplier

 **WARNING:** This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**Illustrations may differ from actual production models*

FITNESS AUDIO PRODUCTS INCLUDE:

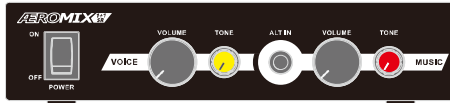
Fitness Audio U-Series UHF Wireless System



Fitness Audio Aerolink AL3.0 Bluetooth Receiver



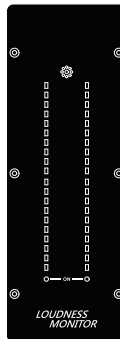
Fitness Audio Aeromix1+1SR Voice-over-Music Mixer



Fitness Audio Aeromix2+2SR Voice-over-Music Mixer



Fitness Audio LM-30 Loudness Monitor



Fitness Audio SPL2 Sound Pressure Limiter



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

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

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