Riworal 4 Channel Audio Interface

Riworal 4 Channel Audio Mixer with DSP Effects and USB Interface User Manual

Model: 4 Channel Audio Interface

1. INTRODUCTION

This manual provides detailed instructions for the Riworal 4 Channel Audio Mixer. This device is designed for various audio applications, including recording, livestreaming, karaoke, and music playback. It features 4 input channels, 88 DSP effects, a USB audio interface, Bluetooth connectivity, and 48V phantom power. Please read this manual thoroughly to ensure proper setup and operation of your audio mixer.

Image 1.1: Top-down view of the Riworal 4 Channel Audio Mixer, showcasing its compact design and control layout.

2. PRODUCT OVERVIEW: CONTROLS AND FEATURES

Familiarize yourself with the various controls and connection points on your Riworal audio mixer. Understanding each component is crucial for effective operation.
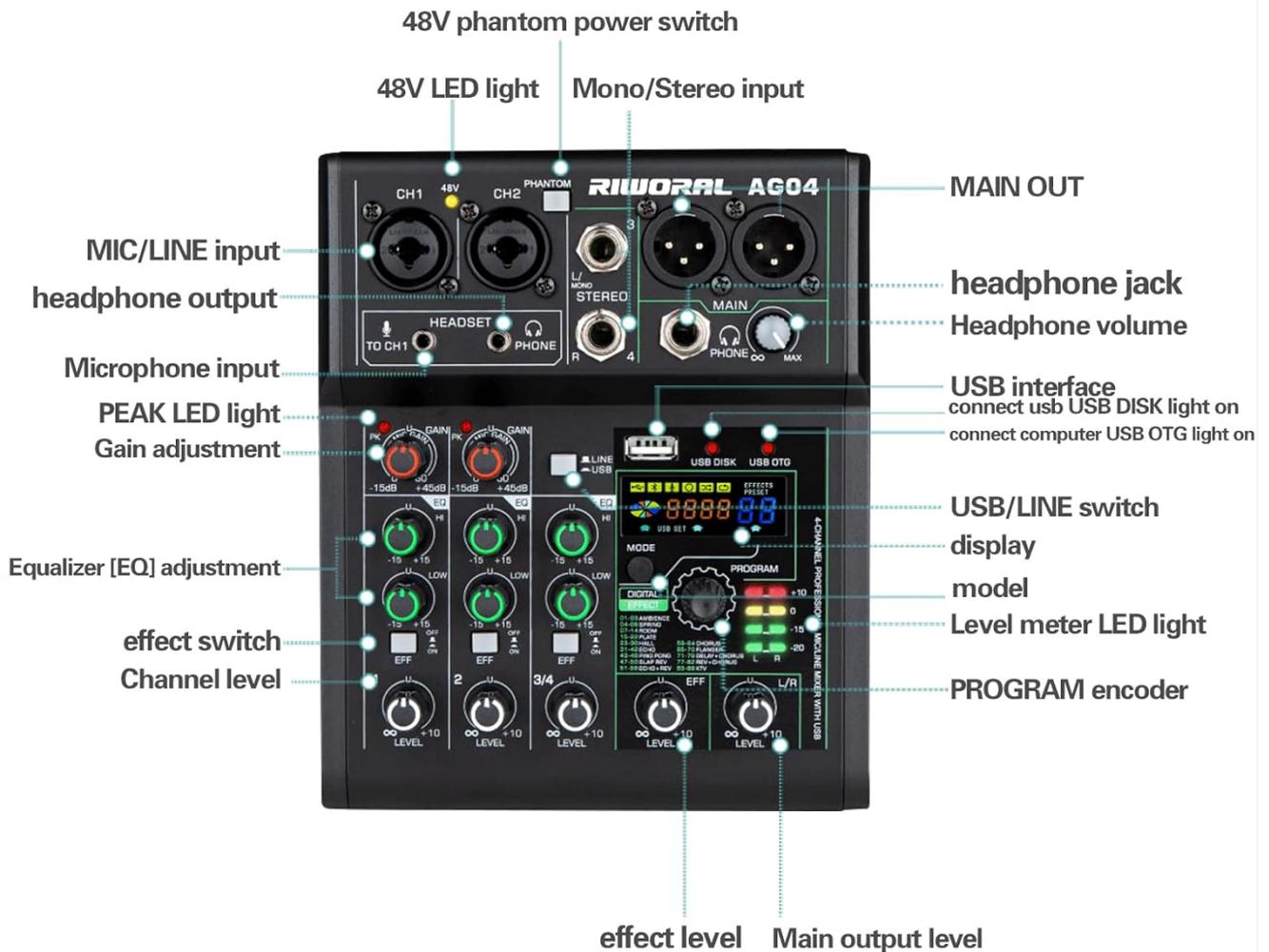
INTRODUCTION TO MIXER PANEL

Image 2.1: Detailed diagram of the mixer's front panel, indicating the location and function of each control and input/output.

- **CH1/CH2 Inputs:** Mono channels with Mic/Line inputs (XLR/TRS combo jacks) and 2-band EQ.
- **48V Phantom Power Switch:** Activates +48V power for condenser microphones. An LED light indicates activation.
- **Headset Input:** Connects a headset with a microphone. The microphone function synchronizes with Channel 1.
- **Stereo Input (L/MONO, R):** Can function as a stereo input for channels 3/4 or as a mono input for channel 3.
- **MAIN OUT:** XLR outputs for connecting to active speakers or other main output devices.
- **Headphone Jack & Volume:** 3.5mm headphone output with dedicated volume control.
- **Gain Adjustment:** Controls the input sensitivity for each channel.
- **EQ Adjustment:** 2-band equalizer (High and Low) for tone shaping on each channel.
- **Effect Switch (EFX):** Activates the digital effects send for each channel.
- **Channel Level:** Adjusts the output level for individual channels.
- **USB Interface:** Connects to U disk for MP3 playback/recording, or to PC/smartphone for recording/livestreaming.
- **USB/LINE Switch:** Selects input source between USB and line input.

- **Digital Effect Display & Program Encoder:** Shows the selected DSP effect and allows selection via the PROGRAM knob.
- **Level Meter LED Light:** Visual indicator for output signal levels.
- **Effect Level:** Adjusts the overall level of the digital effects.
- **Main Output Level (L/R):** Controls the overall volume of the main stereo output.

3. SETUP AND CONNECTIONS

Proper connection of your audio sources and output devices is essential for optimal performance.
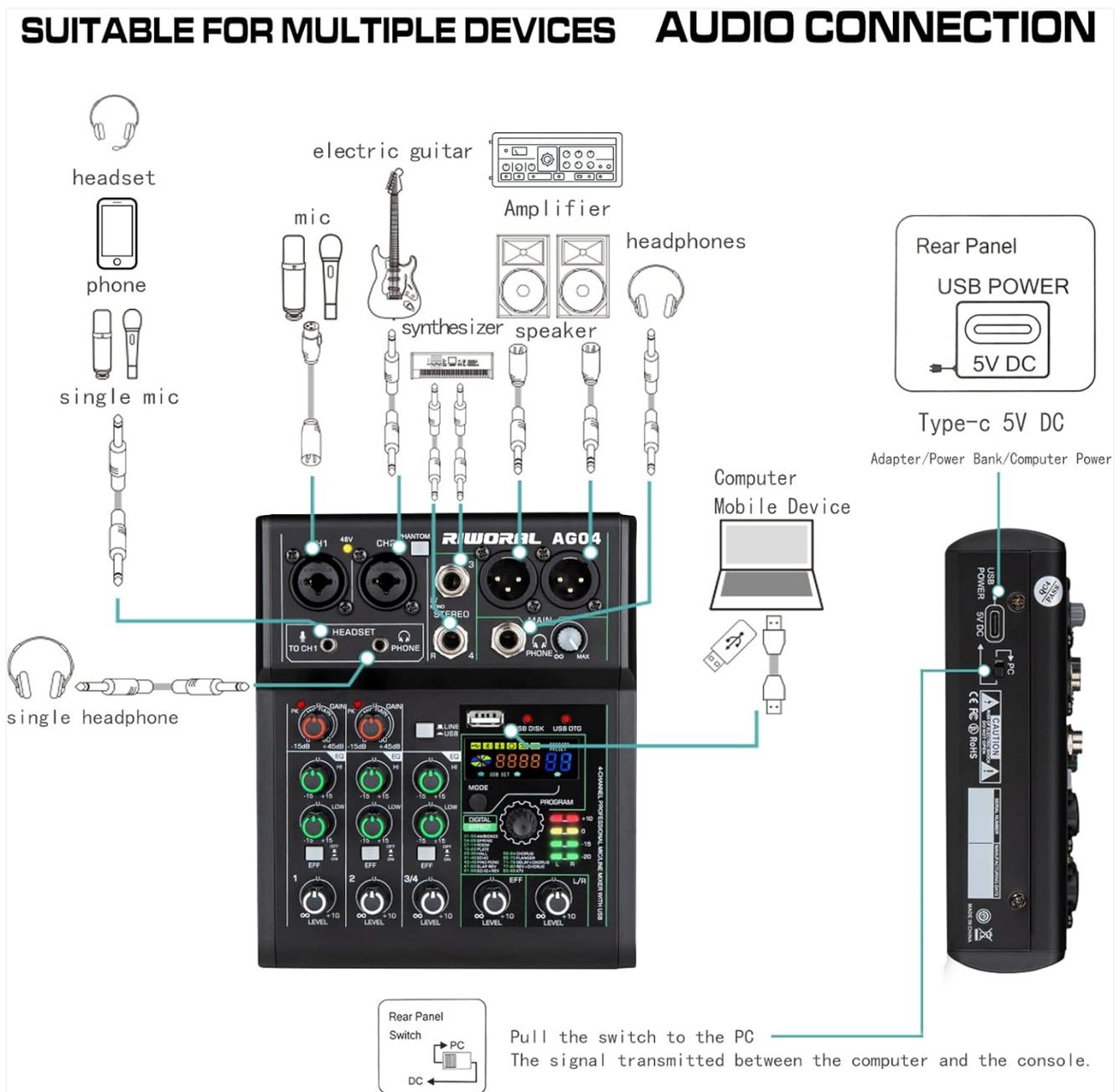

Image 3.1: Visual guide for connecting microphones, instruments, headphones, and output devices to the mixer.

3.1 Power Connection

Connect the provided USB Type-C cable to the 5V DC input on the rear panel of the mixer. Connect the other end to a USB power adapter (included) or a compatible USB power source. The mixer operates on 5 Volts DC.

Image 3.2: Illustration of connecting the USB Type-C power cable to the mixer.

3.2 Input Connections

- **Microphones:** Connect XLR microphones to CH1 or CH2 combo jacks. For condenser microphones, press the **+48V Phantom Power** switch.
- **Line-Level Devices:** Connect instruments or other line-level devices using 1/4-inch TRS cables to CH1 or CH2.
- **Stereo Devices:** Use the L/MONO and R inputs for stereo sources on channels 3/4.
- **Headset:** Plug a headset with a microphone into the dedicated HEADSET jack. The headset microphone will be routed to Channel 1.
- **Guitar (Hi-Z):** If using a guitar on Channel 1, press the **Hi-Z** switch (if available on your model) for proper impedance matching.

3.3 Output Connections

- **Main Output:** Connect active speakers or a power amplifier to the MAIN XLR outputs.
- **Headphones:** Connect monitoring headphones to the 3.5mm PHONE jack.

4. OPERATION

4.1 Channel Adjustment

- **Gain:** Adjust the GAIN knob for each channel to achieve an optimal input level without clipping (indicated by the PEAK LED).
- **Equalization (EQ):** Use the HIGH and LOW EQ knobs to adjust the treble and bass frequencies for each channel.
- **Level:** Use the LEVEL knob for each channel to control its individual volume in the mix.

4.2 Main Output and Monitoring

- **Main Output Level:** Adjust the L/R LEVEL knob to control the overall volume sent to your main speakers.
- **Headphone Volume:** Use the PHONE volume knob to adjust the monitoring level for your headphones.

5. CONNECTIVITY FEATURES

5.1 USB Interface

The USB port offers multiple functionalities:

- **Power Supply:** Powers the mixer via a USB connection.

- **U Disk MP3 Playback:** Insert a USB flash drive (U Disk) for direct MP3 music playback. The "USB DISK" light will illuminate.
- **PC/Smartphone Connection:** Connect to a computer or smartphone for recording, livestreaming, or music playback. The "USB OTG" light will illuminate. For smartphones, a USB to Lightning or Type-C adapter may be required.

Image 5.1: Illustration of connecting various devices via the USB interface for different functions.

Image 5.2: The mixer functioning as a USB audio interface with a computer.

5.2 Bluetooth Connectivity

The mixer supports Bluetooth for wireless audio input from compatible devices.

- To activate Bluetooth, press the **MODE** button. The display will show "BLUE" when in Bluetooth mode.
- On your device (e.g., smartphone, tablet), search for and connect to the mixer's Bluetooth signal.
- The effective Bluetooth range is approximately 5 meters (16.4 feet).

Image 5.3: The mixer wirelessly connected to various Bluetooth-enabled devices for audio playback.

6. DIGITAL EFFECTS (DSP)

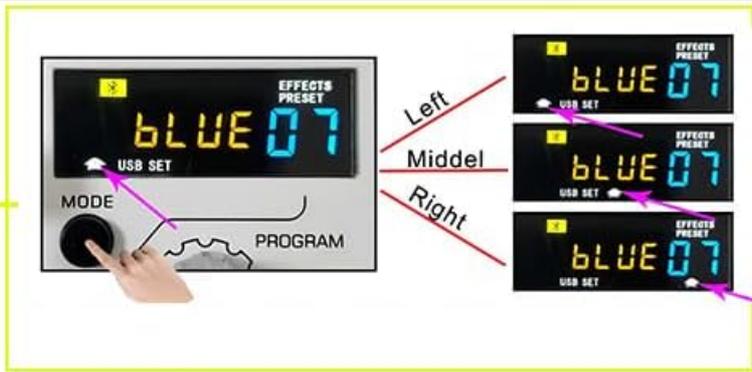The mixer includes 88 built-in Digital Signal Processing (DSP) effects to enhance your audio.

Image 6.1: A comprehensive list of the 88 digital effects, categorized by type, available on the mixer.

- To select an effect, press the **MODE** button (right position) and rotate the **PROGRAM** knob to choose from effects 01-88. Press the **PROGRAM** knob to confirm your selection.
- Activate the EFX switch on individual channels to send their signal to the effects processor.
- Adjust the global effect level using the dedicated EFX LEVEL knob.

Available effects include Ambience, Spring, Room, Plate, Hall, Echo, Ping Pong, Slap Rev, Echo+Rev, Chorus, Flanger, Delay+Chorus, Rev+Chorus, and KTV.

7. RECORDING AND PLAYBACK

The mixer supports recording to and playback from USB devices, computers, and smartphones.
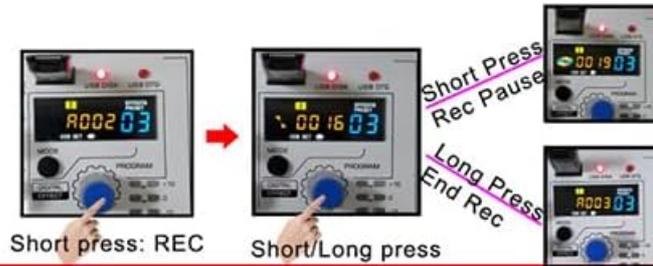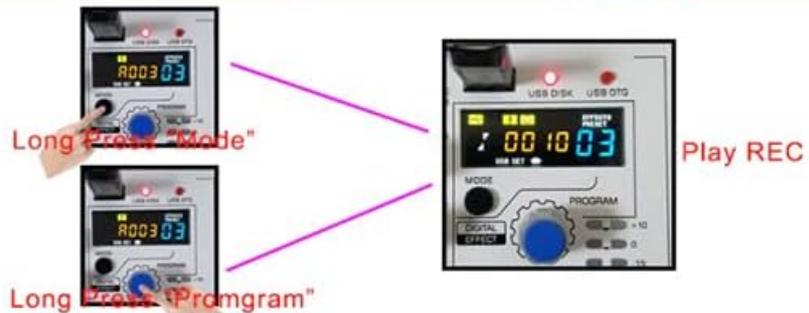
Image 7.1: Step-by-step guide for initiating and stopping recording, and playing back recorded audio using the mixer's USB functions.

7.1 Recording

- **Via USB Disk:** Insert a USB flash drive. Press the **MODE** button (middle position) to enter USB/Bluetooth/Record mode. Rotate the **PROGRAM** knob to select the recording function. Press the **PROGRAM** knob to confirm. Short press the **REC** button to start recording.
- **Via PC/Smartphone:** Connect the mixer to your computer or smartphone via USB. Ensure the "USB OTG" light is on. Use appropriate recording software on your device.

7.2 Playback

- **From USB Disk:** In USB/Bluetooth/Record mode, rotate the **PROGRAM** knob to select playback. Press the **PROGRAM** knob to confirm. Use short/long presses of the **REC** button for pause/play and track navigation.
- **From PC/Smartphone:** Play audio directly from your connected computer or smartphone.

8. TROUBLESHOOTING

- **No Sound Output:**
    - Check all cable connections (inputs, outputs, power).
    - Ensure all channel LEVEL knobs and the main L/R LEVEL knob are turned up.

- Verify that input sources are active and sending a signal.
- If using phantom power, ensure the +48V switch is engaged for condenser microphones.

- **Distorted Sound:**

  - Reduce the GAIN knob for the affected channel to prevent clipping (PEAK LED should not illuminate constantly).
  - Check if the input source itself is distorted.

- **Bluetooth Connection Issues:**

  - Ensure the mixer is in Bluetooth mode (press MODE button until "BLUE" appears).
  - Check that your device's Bluetooth is enabled and within the 5-meter range.
  - Disconnect and reconnect the Bluetooth device.

- **USB Recording/Playback Not Working:**

  - Ensure the USB device (U disk, PC, smartphone) is properly connected and recognized (USB DISK or USB OTG light).
  - Verify the correct mode is selected using the MODE button and PROGRAM knob for recording/playback.
  - For PC/smartphone, check device settings and recording software.

9. SPECIFICATIONS

Feature	Detail
Brand	Riworal
Model Number	4 Channel Audio Interface
Number of Channels	4
Item Weight	2.57 pounds (1.17 Kilograms)
Product Dimensions	9.45 x 8.86 x 3.35 inches
Material Type	Metal (Steel body)
Power Source	Corded Electric (USB Type-C DC 5V)
Connectivity Technology	Bluetooth, USB
Hardware Interface	1/4-inch Audio, 3.5mm Audio, Headphone, USB
Compatible Devices	Laptop, Computer, Power amplifier, effector, recording equipment, Smartphone, Tablet, XLR Condenser Microphone, Musical Instrument
Operating System	Mac OS, Windows 7/8/10/11/XP, iOS, Android

10. PACKAGE CONTENTS

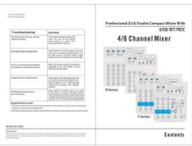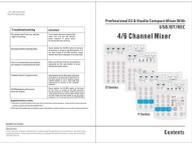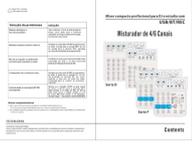The Riworal 4 Channel Audio Mixer package includes the following items:

- Riworal 4 Channel Audio Mixer (x1)
- USB Charge Cable (x1)
- USB Adapter Plug (x1)

Image 10.1: The Riworal 4 Channel Audio Mixer and its included accessories: USB cable, power adapter, and user manual.

Related Documents - 4 Channel Audio Interface

	Riworal UX04/06/08-BT Audio Mixer Owner's Manual Owner's manual for the Riworal UX04/06/08-BT 4/6/8-Channel Bluetooth Audio Mixer Sound Board System, detailing its features, specifications, and operation.
	BOMGE 4/6 Channel DJ and Studio Mixer User Manual Comprehensive user guide for the BOMGE 4/6 channel DJ and studio mixer, covering features, operation, troubleshooting, and specifications. Includes USB, Bluetooth, and DSP effects for professional audio applications.
	BOMGE 4/6 Channel Professional DJ and Studio Mixer User Manual User manual for the BOMGE 4/6 channel professional DJ and studio mixer. Covers features, operation, troubleshooting, specifications, and connectivity for DJing, studio recording, and live streaming.

	[BOMGE 4/6 Channel DJ & Studio Compact Mixer with USB/BT/REC - User Manual](#)
	User manual for the BOMGE 4/6 Channel DJ & Studio Compact Mixer, detailing its features, operation, troubleshooting, and specifications. Includes information on USB/BT playback, recording, DSP effects, and connectivity.
	[BOMGE 4/6 Channel DJ & Studio Compact Mixer User Manual](#)
	Comprehensive user manual for the BOMGE 4/6 Channel DJ & Studio Compact Mixer, detailing features, operation, troubleshooting, and specifications for home music production, broadcasting, and live streaming.
	[BOMGE Professional 4/6 Channel DJ and Studio Mixer User Manual](#)
	Comprehensive user manual for the BOMGE Professional 4/6 Channel DJ and Studio Mixer, detailing its features, setup, troubleshooting, specifications, and usage instructions for DJing, studio recording, and live streaming. Includes USB, Bluetooth, and recording capabilities.