



USER MANUAL

PowerWorks R902BT-USB 8-Channel Analogue Mixer – User Manual

Compact Mixer with USB, Bluetooth & DSP Effects

Welcome and Congratulations!

Thank you for choosing the PowerWorks R902BT-USB, a versatile 8-channel analogue mixer designed for live performances, studio recording, and professional audio applications.

With USB MP3 playback, Bluetooth connectivity, 16 DSP effects, and precise 3-band EQ per channel, the R902BT-USB delivers professional-quality sound in a portable and intuitive format. Whether you're performing live, recording, or streaming, this mixer provides the tools to shape your sound confidently.

This manual will guide you through setup, operation, and best practices. We recommend reading through it to fully understand the capabilities of your mixer.

Let's get started — and experience great sound with PowerWorks.

www.powerworks-audio.com

PowerWorks R902BT USB Mixer – User Manual

1. Introduction & Features

The PowerWorks R902BT-USB is an 8-channel analogue mixer built for flexibility and professional use. Key features include:

- 8 line channels for multiple audio sources
- 4 microphone inputs with +48V phantom power for condenser microphones
- 3-band EQ on each channel for precise sound shaping
- 1 stereo group bus for efficient signal routing
- 16 built-in DSP effects (reverb, delay, chorus, etc.)
- 1 auxiliary send for monitors or external processors
- Bluetooth wireless streaming for flexible audio sources
- Digital display MP3 playback from USB drives with recording support
- Karaoke delay function for enhanced vocal performances
- Dual 7-band EQ for advanced frequency shaping
- Dual 6-band level display for main output monitoring
- REC output for recording and headphone monitor output for private listening
- Compact and durable design for portable use

2. Panel Layout

Channel Controls:

Each channel includes:

- Gain control (input level adjustment)
- 3-band EQ (Low, Mid, High)
- AUX send control
- Mute switch
- Pan / Balance (stereo channel)
- Volume fader

Master Section:

- Main output level control
- Dual 7-band EQ
- DSP effects selector (16 presets)
- Dual 6-band level displays for accurate monitoring
- Headphone monitor output
- REC output
- USB/Bluetooth playback controls

Inputs and Outputs:

- 8 line inputs
- 4 microphone inputs (XLR/TRS combo)
- 1 stereo group bus
- 1 AUX send output
- Headphone monitor output
- REC output
- USB port for MP3 playback and recording
- Bluetooth connectivity

3. Quick Setup & Operation

1. Connect microphones, instruments, or other audio sources to the input channels.
2. Enable phantom power (+48V) only if using condenser microphones.
3. Set channel gain levels to avoid distortion.
4. Adjust 3-band EQ on each channel to shape your sound.
5. Use AUX send for monitors or external processing.
6. Apply DSP effects using the onboard controls.
7. Adjust channel faders and main output for final mix levels.
8. Connect a Bluetooth device or USB drive for playback or recording.

4. Recording via USB & Playback

USB Recording:

- Connect a USB drive to record your session directly.
- Press record to start/stop recording.

Playback:

- Play MP3 audio directly from USB drives.
- Use onboard controls to navigate and adjust playback.

Bluetooth Streaming:

- Pair your device with the mixer via Bluetooth.
- Stream audio wirelessly into your mix.

5. DSP Effects

- Choose from 16 built-in effects including reverb, delay, and chorus.
- Apply effects to individual channels or the main mix using the DSP controls.
- Adjust effect levels to achieve the desired sound quality.

6. Tips & Best Practices

- Monitor levels carefully to prevent distortion.
- Use mute switches to remove unwanted noise.
- Apply EQ and effects subtly for a natural, professional sound.
- Use AUX send for external processors or monitor mixes.
- Use headphones to check your mix before outputting live.
- Ensure USB drives and Bluetooth devices are properly connected for stable operation.

7. Specifications

- **Channels:** 8 line channels
- **Mic Inputs:** 4
- **EQ:** 3-band per channel
- **Group Buses:** 1 stereo group bus
- **DSP Effects:** 16 presets
- **Aux Send:** 1
- **Connectivity:** Bluetooth
- **Playback:** Digital display MP3 (USB U-DISK); MP3 with recording support
- **Phantom Power:** +48V
- **Karaoke Function:** Karaoke delay
- **EQ:** Dual 7-band EQ for master output
- **Level Display:** Dual 6-band level display for main output
- **Outputs:** REC output, headphone monitor output