

Behringer XENYX 502S

Behringer XENYX 502S Premium Analog 5-Input Mixer with USB Streaming Interface User Manual

Model: XENYX 502S

1. INTRODUCTION

The Behringer XENYX 502S is a compact, premium analog 5-input mixer designed for streaming, podcasting, and recording applications. It features an award-winning XENYX microphone preamp and a stereo USB audio interface, allowing direct connection to a computer or mobile device. This manual provides detailed instructions for setting up, operating, and maintaining your XENYX 502S mixer to ensure optimal performance and longevity.

2. SAFETY INSTRUCTIONS

- **Power Supply:** Use only the power adapter specified for this device. Ensure the voltage matches your local power supply.
- **Water and Moisture:** Do not expose this appliance to rain or moisture. Do not place objects filled with liquids on the appliance.
- **Ventilation:** Ensure adequate ventilation. Do not block ventilation openings.
- **Heat:** Do not place near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **Cleaning:** Clean only with a dry cloth. Disconnect from power before cleaning.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- **Cables:** Protect power cords from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

3. PACKAGE CONTENTS

Please check the contents of your package immediately upon receipt to ensure all items are present and in good condition.

- Behringer XENYX 502S Mixer Unit
- External Power Supply Unit

- User Manual (this document)

4. CONTROLS AND CONNECTORS

This section details the various controls and connectors on your XENYX 502S mixer.



Figure 4.1: Front Panel Overview

This image displays the top-down view of the Behringer XENYX 502S mixer, highlighting all input/output jacks and control knobs. Key features visible include the MIC 1 input, LINE IN 2/3 and 4/5, MAIN OUT, PHONES output, and the STREAM USB/RCA section. Control knobs for GAIN, EQ (HIGH, LOW), PAN, LEVEL, and MAIN MIX are also clearly shown, along with the LED level meters.



Figure 4.2: Angled Front View

An angled perspective of the Behringer XENYX 502S mixer, providing a clearer view of the three-dimensional layout of the control knobs and the various input/output jacks on the top panel. This view helps in understanding the physical arrangement of the mixer's components.



Figure 4.3: Input/Output Focus View

This image offers another angled view of the mixer, specifically focusing on the input and output sections. It highlights the MIC 1 XLR input, the 1/4-inch LINE IN and MAIN OUT jacks, and the RCA STREAM USB/RCA connections, providing a detailed look at the connectivity options.



Figure 4.4: Rear Panel Connections

A view of the rear panel of the Behringer XENYX 502S mixer, clearly showing the POWER ON/OFF switch, the DC INPUT jack for the external power supply, and the USB Type-B port for connecting to a computer or mobile device for streaming and recording.

4.1. Input Section

- **MIC 1 (XLR):** Balanced input for microphones. Features an award-winning XENYX preamp.
- **LINE IN 1 (1/4" TRS):** Balanced/unbalanced line-level input for instruments or other audio sources.
- **LINE IN 2/3 (1/4" TRS):** Stereo line-level input for devices like keyboards or media players. Can also be used as two mono inputs.
- **LINE IN 4/5 (1/4" TRS):** Stereo line-level input, similar to 2/3.
- **STREAM USB/RCA IN:** RCA inputs for receiving audio from a computer or other playback device via USB or direct RCA connection.

4.2. Output Section

- **MAIN OUT (1/4" TRS):** Stereo balanced/unbalanced outputs for connecting to main speakers or an amplifier.
- **PHONES (1/4" TRS):** Stereo output for connecting headphones for monitoring.
- **STREAM USB/RCA OUT:** RCA outputs for sending the main mix to a computer for recording or streaming, or to an external recording device.

4.3. Controls

- **GAIN (MIC 1):** Adjusts the input sensitivity for the microphone channel.
- **EQ (HIGH, LOW):** Two-band equalizer for adjusting the treble (12 kHz) and bass (80 Hz) frequencies of the input signal.
- **PAN (MIC 1):** Adjusts the position of the mono signal within the stereo sound field.
- **BAL (LINE 2/3, 4/5):** Adjusts the balance between the left and right channels for stereo inputs.
- **LEVEL (MIC 1, LINE 2/3, 4/5):** Adjusts the output level of individual channels to the main mix.
- **PHONES (MAX):** Controls the volume of the headphone output.
- **MAIN MIX (MAIN):** Controls the overall output level of the main stereo mix.
- **STREAM TO PHONES:** Routes the USB/RCA input signal to the headphone output for monitoring.
- **STREAM TO MIX:** Routes the USB/RCA input signal to the main mix.
- **POWER Switch:** Turns the mixer on or off. Located on the rear panel.
- **LED Meters:** Provide visual indication of signal levels, including CLIP, -6, -0, -20 dB, and POWER.

5. SETUP

Follow these steps to set up your XENYX 502S mixer.

1. **Power Connection:** Connect the external power supply unit to the DC INPUT jack on the rear panel of the mixer. Plug the power adapter into a suitable power outlet. Ensure the mixer's POWER switch is in the OFF position before connecting.
2. **Main Output Connection:** Connect your main speakers, amplifier, or recording device to the MAIN OUT (L/R) jacks using 1/4" TRS or TS cables.
3. **Headphone Connection:** Connect your headphones to the PHONES jack for monitoring.
4. **Microphone Connection:** For a microphone, connect an XLR cable to the MIC 1 input.
5. **Line-Level Device Connection:** For line-level instruments or playback devices, connect them to the LINE IN 1, LINE IN 2/3, or LINE IN 4/5 jacks using 1/4" TRS or TS cables.
6. **USB Connection (Optional):** To use the mixer as a USB audio interface, connect a USB cable from the USB Type-B port on the rear panel to your computer or mobile device.
7. **Power On:** Once all connections are made, switch the POWER button on the rear panel to the ON position. The POWER LED on the front panel should illuminate.

6. OPERATING INSTRUCTIONS

This section covers basic operation of your XENYX 502S mixer.

6.1. Adjusting Input Levels

1. Set all GAIN and LEVEL knobs to their minimum position (fully counter-clockwise).
2. For the MIC 1 channel, speak or sing into the microphone at your normal performance level. Slowly increase the GAIN knob until the CLIP LED briefly flashes during the loudest peaks. Then, slightly reduce the GAIN until the CLIP LED no longer flashes.
3. For line-level inputs (LINE IN 1, 2/3, 4/5), play your audio source at its normal output level. Slowly increase the corresponding LEVEL knob until the signal is present on the main mix meters without clipping.

6.2. Equalization (EQ)

Use the HIGH and LOW EQ knobs to shape the tone of your microphone signal. Turning a knob clockwise boosts the frequency, while turning it counter-clockwise cuts it. Start with both knobs at the 0 position (center detent) for a flat response.

6.3. Panning and Balance

- **PAN (MIC 1):** Adjust this knob to position the mono microphone signal anywhere from the left to the right side of the stereo image.
- **BAL (LINE 2/3, 4/5):** For stereo line inputs, this knob adjusts the balance between the left and right channels.

6.4. Main Mix and Monitoring

1. Adjust the individual channel LEVEL knobs to create your desired mix.
2. Use the MAIN MIX knob to control the overall output volume of your mix to the MAIN OUTs.
3. Adjust the PHONES knob to set your headphone monitoring volume.
4. The LED meters provide visual feedback on your main mix level. Aim for the '0' dB LED to light up occasionally, avoiding consistent 'CLIP' indications.

7. CONNECTING TO A COMPUTER (USB STREAMING)

The XENYX 502S features a built-in stereo USB audio interface for direct connection to your computer for recording and streaming.

1. **Connect USB:** Use a standard USB Type-A to Type-B cable to connect the mixer's rear USB port to an available USB port on your computer.
2. **Driver Installation:** For most modern operating systems (e.g., Windows 10/11), the mixer should be recognized automatically as a generic USB audio device without requiring specific drivers. If prompted, follow your operating system's instructions for new hardware detection.
3. **Select as Audio Device:** In your computer's sound settings or your Digital Audio Workstation (DAW) software, select the 'XENYX 502S' or 'USB Audio CODEC' (or similar) as your input and output audio device.
4. **Streaming Audio from Computer:** To play audio from your computer through the mixer, ensure the XENYX 502S is selected as the output device on your computer. The audio will be received via the STREAM USB/RCA IN. Use the 'STREAM TO PHONES' and 'STREAM TO MIX' buttons to route this audio to your headphones or the main mix, respectively.
5. **Streaming Audio to Computer:** The main mix of the XENYX 502S is sent to your computer via USB. In your recording or streaming software, select the XENYX 502S as the input device to capture the mixer's output.

8. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your mixer.

- **Cleaning:** Disconnect the mixer from power before cleaning. Use a soft, dry, lint-free cloth to wipe the exterior. Avoid abrasive cleaners, solvents, or waxes.
- **Storage:** When not in use, store the mixer in a cool, dry place away from direct sunlight and extreme temperatures. If possible, cover the unit to protect it from dust.
- **Cable Care:** Handle all cables with care. Avoid bending or crimping cables, especially at the connectors.

9. TROUBLESHOOTING

If you encounter issues with your XENYX 502S, refer to the following common problems and solutions.

- **No Power:**
 - Ensure the power adapter is securely connected to both the mixer and a working power outlet.
 - Check that the POWER switch on the rear panel is in the ON position.
- **No Sound Output:**
 - Verify that all input sources are connected correctly and producing sound.
 - Check that the GAIN and LEVEL knobs for active channels are turned up.
 - Ensure the MAIN MIX knob is turned up.
 - Check the PHONES volume knob if monitoring with headphones.
 - Confirm that your speakers or monitoring system are powered on and connected correctly.
- **Distorted Sound:**
 - Reduce the GAIN and LEVEL knobs if the CLIP LED is constantly lit.
 - Check the input level of your source device to ensure it's not overdriving the mixer.
 - Ensure all cables are in good condition and properly connected.
- **USB Not Recognized by Computer:**
 - Try a different USB port on your computer.

- Use a different USB cable.
- Restart your computer and the mixer.
- Verify that the mixer is selected as the audio input/output device in your computer's sound settings or DAW.

10. SPECIFICATIONS

Feature	Specification
Brand	Behringer
Model Number	XENYX 502S
Number of Channels	5
Connectivity Technology	USB
Hardware Interface	USB
Compatible Devices	Personal Computer
Operating System	Windows
Power Source	Corded Electric
Item Weight	1.21 pounds (0.55 Kilograms)
Product Dimensions	19.69 x 19.69 x 11.02 inches

11. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Behringer website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

Note: No official product videos were available in the provided data for embedding in this manual.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question