

Behringer ZB320

Behringer XENYX 802 Small Format Mixer User Manual

Model: ZB320

INTRODUCTION

The Behringer XENYX 802 is a compact, 8-input, 2-bus mixer designed for a wide range of audio applications, from home studios to live sound reinforcement. It features premium XENYX Mic Preamps, a British-style 3-band EQ on each channel, and a dedicated FX Send control for external effects processing. Its intuitive layout and robust construction make it an ideal choice for users seeking high-quality audio mixing in a small footprint.

IMPORTANT SAFETY INSTRUCTIONS

Please read and follow all safety instructions before operating the XENYX 802 mixer. Retain these instructions for future reference.

- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

KEY FEATURES

- Ultra-low noise, high headroom analog mixer.
- 2 state-of-the-art XENYX Mic Preamps comparable to stand-alone boutique preamps.

- Neo-classic "British" 3-band EQs for warm and musical sound.
- 1 Post fader FX send per channel for external FX devices.
- 1 Stereo Aux Return for FX applications or as a separate stereo input.
- Main mix outputs plus separate control room, phones and 2-track outputs.
- CD/Tape inputs assignable to main mix or control room/phones outputs.
- High-quality components and exceptionally rugged construction for long life.

CONTROLS AND CONNECTORS

This section provides an overview of the XENYX 802's controls and connection points.

Top Panel Overview



Figure 1: Behringer XENYX 802 Top Panel Layout. This image displays the mixer's top surface, including microphone inputs, line inputs, equalization controls, FX send knobs, pan/balance controls, channel level faders, and the main section with master controls and output jacks.

The top panel of the XENYX 802 features all primary controls and input/output connections for channels and the main mix. Key areas include:

- **MIC Inputs (1-2):** XLR connectors for microphones, featuring XENYX preamps.
- **LINE IN (1-6):** 1/4" TRS/TS jacks for line-level instruments or audio devices. Channels 3/4 and 5/6 are stereo pairs.
- **GAIN:** Adjusts the input sensitivity for microphone channels.
- **EQ (HIGH, MID, LOW):** 3-band equalization controls for shaping the tone of each channel.

- **FX:** Sends a portion of the channel signal to the internal FX processor or external effects unit via the FX SEND output.
- **PAN/BAL:** Adjusts the stereo position of mono channels (PAN) or the balance of stereo channels (BAL).
- **LEVEL:** Controls the output level of each channel to the main mix.
- **MAIN SECTION:** Contains master controls for the main mix, AUX RETURN, PHONES/CTRL ROOM, and 2-TRACK IN/OUT.
- **MAIN OUT:** 1/4" TRS jacks for connecting to power amplifiers or active speakers.
- **CTRL ROOM OUT:** 1/4" TRS jacks for connecting to control room monitors.
- **PHONES:** 1/4" TRS jack for connecting headphones.
- **2-TRACK IN/OUT:** RCA connectors for connecting external recording/playback devices (e.g., CD players, tape decks).

Rear Panel Overview



Figure 2: Behringer XENYX 802 Rear Panel. This image shows the back of the mixer, highlighting the dedicated AC power input connector and the label area for serial number and manufacturing details.

The rear panel of the XENYX 802 is straightforward, primarily housing the power input and product identification information.

- **AC POWER IN:** Dedicated input for connecting the Behringer power supply unit. Ensure to use only the power supply provided with the unit.
- **SERIAL NUMBER:** Area displaying the unique serial number of your mixer.

SETUP GUIDE

Follow these steps to set up your Behringer XENYX 802 mixer.

1. Unpacking

1. Carefully unpack the mixer and its accessories.
2. Inspect the unit for any signs of damage during transit. If damage is found, contact your dealer immediately.
3. Retain the original packaging for future transport or storage.

2. Power Connection

1. Ensure the mixer and all connected audio devices are powered off before making connections.
2. Connect the supplied Behringer power supply unit to the "AC POWER IN" jack on the rear panel of the mixer.
3. Plug the power supply into a suitable AC outlet.

3. Connecting Inputs

1. **Microphones:** Connect XLR cables from your microphones to the "MIC" inputs (1-2).
2. **Line-Level Devices:** Connect instruments (keyboards, guitars with preamps), CD players, or other line-level audio sources to the "LINE IN" jacks (1-6) using 1/4" TS or TRS cables. Use channels 3/4 and 5/6 for stereo sources.
3. **2-Track Input:** For connecting a stereo playback device like a CD player or tape deck, use RCA cables to the "2-TRACK IN" jacks.

4. Connecting Outputs

1. **Main Mix Output:** Connect the "MAIN OUT" 1/4" TRS jacks to your power amplifier, active speakers, or recording interface.
2. **Control Room Output:** Connect the "CTRL ROOM OUT" 1/4" TRS jacks to your studio monitor speakers.
3. **Headphones:** Plug your headphones into the "PHONES" 1/4" TRS jack.
4. **2-Track Output:** For recording, connect the "2-TRACK OUT" RCA jacks to the input of your recording device.
5. **FX Send:** Connect the "FX SEND" 1/4" TS jack to the input of an external effects processor. The output of the effects processor should be connected to the "AUX RETURN" jacks.

OPERATING INSTRUCTIONS

This section details the basic operation of the XENYX 802 mixer.

Channel Controls

- **GAIN:** For microphone channels, adjust this knob to achieve an optimal input level. The CLIP LED will illuminate if the signal is too hot; reduce gain until it no longer lights up.
- **EQ (HIGH, MID, LOW):** Use these knobs to adjust the treble, midrange, and bass frequencies of each channel. Turn clockwise to boost, counter-clockwise to cut.
- **FX:** Turn this knob clockwise to send more of the channel's signal to the FX SEND output. This signal is typically used for reverb, delay, or other time-based effects.
- **PAN (Mono Channels) / BAL (Stereo Channels):** Adjust PAN to position the mono signal within the stereo field (left to right). Adjust BAL to control the balance between the left and right signals of a stereo input.
- **LEVEL:** This is the main volume control for each channel. Adjust it to set the individual channel's contribution to the main mix.

Main Section Controls

- **AUX RETURN:** Controls the overall level of the signal returning from an external effects processor connected to the AUX RETURN jacks.
- **2-TR TO CTRL ROOM:** Routes the signal from the 2-TRACK IN to the Control Room and Phones outputs, allowing you to monitor external playback devices without sending them to the main mix.
- **2-TR TO MIX:** Routes the signal from the 2-TRACK IN directly to the main mix. Use this for playing background music or pre-recorded tracks.
- **PHONES/CTRL ROOM:** Controls the overall volume level for both the headphone output and the control room monitor outputs.
- **MAIN MIX:** This is the master volume control for the main stereo output. Adjust this to set the overall

output level of your mix.

- **LEVEL METER:** The LED meter displays the output level of the main mix. Aim for levels that peak around 0 dB to avoid clipping (red CLIP LED).

MAINTENANCE

Proper care and maintenance will ensure the longevity of your Behringer XENYX 802 mixer.

- **Cleaning:** Disconnect the power supply before cleaning. Use a soft, dry cloth to wipe down the exterior of the mixer. Do not use liquid cleaners, aerosols, or harsh chemicals.
- **Environment:** Operate and store the mixer in a clean, dry environment, away from direct sunlight, excessive dust, moisture, and extreme temperatures.
- **Ventilation:** Ensure that the ventilation openings are not blocked to prevent overheating.
- **Cables:** Regularly check all cables for damage and ensure connections are secure.

TROUBLESHOOTING

If you encounter issues with your XENYX 802, refer to the following table for common problems and solutions.

Problem	Possible Cause / Solution
No sound output from Main Mix.	<ul style="list-style-type: none">◦ Check if the mixer is powered on (POWER LED).◦ Ensure the MAIN MIX level knob is turned up.◦ Verify that individual channel LEVEL knobs are turned up.◦ Check connections to your amplifier/active speakers.◦ Ensure amplifier/active speakers are powered on and their volume is up.
No sound from a specific channel.	<ul style="list-style-type: none">◦ Check the input source (microphone, instrument) is working.◦ Ensure the channel's GAIN (if applicable) and LEVEL knobs are turned up.◦ Verify the input cable is securely connected to the correct jack.◦ Check the PAN/BAL knob is not set fully to one side if expecting stereo output.
Distorted sound.	<ul style="list-style-type: none">◦ Reduce the GAIN knob for the input channel if the CLIP LED is frequently lighting up.◦ Lower the channel LEVEL or MAIN MIX level.◦ Check the input level from the source device; it might be too high.
Hum or noise.	<ul style="list-style-type: none">◦ Ensure all cables are properly shielded and in good condition.◦ Check for ground loops; try plugging all audio equipment into the same power strip.◦ Keep audio cables away from power cables.◦ Reduce GAIN on channels if not in use.

TECHNICAL SPECIFICATIONS

Below are the key technical specifications for the Behringer XENYX 802 mixer.

Feature	Value
Model Number	ZB320
ASIN	B00897FW2W
Number of Channels	8
Item Weight	4 pounds (1.81 kg)
Package Dimensions	12 x 10 x 4 inches (30.48 x 25.4 x 10.16 cm)
Power Source	Corded Electric (External Power Supply)
Connectivity Technology	Auxiliary
Frequency Response	10Hz to 20kHz (as per product title)

WARRANTY AND SUPPORT

Behringer products are designed for reliability and performance. For detailed warranty information and technical support, please refer to the official Behringer website or contact your local distributor. Keep your purchase receipt as proof of purchase for any warranty claims.

For the most up-to-date information, visit the official Behringer website:www.behringer.com