Behringer K450FX

Behringer K450FX Ultratone Keyboard/PA Amplifier Instruction Manual

Model: K450FX

[Introduction](#)   [Safety Instructions](#)   [Setup](#)   [Operating](#)   [Maintenance](#)   [Troubleshooting](#)   [Specifications](#)   [Warranty & Support](#)

1. INTRODUCTION

The Behringer K450FX Ultratone is an ultra-flexible 45-Watt, 3-channel PA system and keyboard amplifier. It features built-in effects and FBQ Feedback Detection, designed for versatile sound reinforcement for keyboards and other instruments.

2. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions thoroughly before operating the unit.

- Keep these instructions for future reference.

- Heed all warnings on the product and in the operating instructions.

- Do not use this apparatus near water or moisture.

- 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.

3. SETUP

3.1 Unpacking

Carefully unpack your K450FX amplifier. Inspect the unit for any signs of damage that may have occurred during transit. Retain the packing materials for future shipping if needed.

3.2 Placement

Place the amplifier on a stable, flat surface. Ensure adequate ventilation around the unit to prevent overheating. Avoid placing it in direct sunlight or near heat sources.

Figure 1: Behringer K450FX Ultratone Amplifier. Dimensions are approximately 17.36 inches (width) x 11.77 inches (depth) x 16.5 inches (height).

3.3 Power Connection

Connect the supplied power cord to the AC inlet on the rear panel of the amplifier and then to a suitable grounded electrical outlet. Ensure the power switch is in the OFF position before connecting to power.

3.4 Connecting Instruments and Microphones

The K450FX features 3 independent channels. Each channel typically includes a combination XLR/TRS input for microphones or line-level instruments (like keyboards). Use appropriate cables for your devices.

- **Channel 1, 2, 3:** Connect your keyboards, synthesizers, or other line-level instruments. Microphones can also be connected using XLR cables.
- **CD Input:** For connecting external audio sources like CD players or media players.
- **Subwoofer Output:** Connect an external powered subwoofer for extended low-frequency response.

4. OPERATING INSTRUCTIONS

4.1 Powering On/Off

After all connections are made, switch the power button to the ON position. It is recommended to turn on the amplifier last and turn it off first to prevent pops and thumps through your speakers.

4.2 Channel Controls

Each of the three channels has dedicated controls:

- **Volume:** Adjusts the input level for the respective channel. Start with this control at its minimum setting and gradually increase to a comfortable listening level.
- **FX Send:** Controls the amount of signal from that channel sent to the internal effects processor.

4.3 Equalization (EQ)

The K450FX features a dedicated 5-band graphic equalizer. Use these sliders to shape the overall tone of your sound:

- Adjust the sliders to boost or cut specific frequency ranges (e.g., bass, mid-range, treble) to suit your instrument and acoustic environment.

4.4 Effects (FX) and FBQ Feedback Detection

The amplifier includes an internal effects processor and Behringer's FBQ Feedback Detection system.

- **FX Program:** Select from various built-in effects (e.g., reverb, delay) using the program selector.
- **FX Level:** Controls the overall wet/dry mix of the selected effect.
- **FBQ Feedback Detection:** This system helps identify and eliminate feedback frequencies. When feedback occurs, specific LEDs on the graphic EQ will illuminate, indicating which frequency band needs to be cut to reduce feedback.

4.5 Master Volume

The Master Volume control adjusts the overall output level of the amplifier. Use this to set the final loudness of your mix.

5. MAINTENANCE

5.1 Cleaning

To clean the amplifier, use a soft, dry cloth. Do not use abrasive cleaners, solvents, or waxes, as these can damage the finish and internal components. Ensure the unit is unplugged from the power source before cleaning.

5.2 Storage

When not in use for extended periods, store the amplifier in a cool, dry place, away from extreme temperatures and humidity. It is recommended to cover the unit to protect it from dust.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound output	Power cord not connected or outlet faulty. Volume controls (channel or master) set too low. Instrument/microphone cable faulty or incorrectly connected. Instrument/microphone not powered on or faulty.	Check power connection and outlet. Increase channel and master volume levels. Verify all cables are securely connected and functional. Ensure instrument/microphone is working correctly.
Distorted sound	Input level too high (clipping). Faulty cable or instrument. EQ settings are extreme.	Reduce channel volume or instrument output level. Test with different cables and instruments. Adjust EQ sliders to a more neutral position.
Feedback (howling sound)	Microphone too close to the speaker. High gain settings. Specific frequencies are resonating.	Reposition microphone or speaker. Reduce channel volume or gain. Use the FBQ Feedback Detection system to identify and cut problematic frequencies on the graphic EQ.

If the problem persists after attempting these solutions, please contact qualified service personnel.

7. TECHNICAL SPECIFICATIONS

Model: K450FX

Output Wattage: 45 Watts

Speaker Count: 1 (10" BUGERA speaker)

Channels: 3

Equalizer: 5-band graphic EQ

Effects: Integrated digital effects processor

Feedback Detection: FBQ Feedback Detection System

Compatible Devices: Keyboard, Microphones, Line-level instruments

Connector Type: XLR (combination inputs)

Material Type: Metal (chassis), Carpet covering

Power Source: Corded Electric

Item Weight: 34.8 pounds (15.78 kg)

Product Dimensions (W x D x H): 17.36 x 11.77 x 16.5 inches (44.09 x 29.89 x 41.91 cm)

8. WARRANTY & SUPPORT

8.1 Warranty Information

For detailed warranty terms and conditions, please refer to the warranty card included with your product or visit the official Behringer website. Keep your proof of purchase for any warranty claims.

8.2 Technical Support

Should you encounter any issues not covered in this manual or require further assistance, please contact Behringer customer support. Contact information can typically be found on the official Behringer website or in the product packaging.