

## Behringer 0718-ABM

# Behringer Edge Semi-modular Analog Percussion Synthesizer

Model: 0718-ABM

## 1. INTRODUCTION

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The Behringer Edge is a powerful semi-modular analog percussion synthesizer designed to deliver a wide range of percussive and rhythmic sounds. It combines classic analog synthesis with modern sequencing capabilities, offering extensive sound design possibilities through its dual VCO architecture, multimode filter, and comprehensive patch matrix.

This manual provides detailed instructions for setting up, operating, maintaining, and troubleshooting your Behringer Edge. Please read it thoroughly to ensure proper use and to maximize your experience with this instrument.

### Key Features:

- Analog Semi-modular Percussion Synthesizer with 15 x 10 I/O Patch Matrix
- Dual VCO architecture with PWM and triangle waves
- White/Pink Noise generation
- Multimode 24dB ladder filter
- 2 x 8-step Sequencer with velocity controls
- MIDI Channel Voice Priority Selection
- Three decay envelopes for precise control

## 2. IMPORTANT SAFETY INSTRUCTIONS

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To reduce the risk of electric shock, fire, and/or injury, always follow the basic safety precautions listed below:

- **Power Source:** Connect the unit only to the specified power adapter. Ensure the voltage matches the requirements of the unit.
- **Ventilation:** Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- **Water and Moisture:** Do not use this apparatus near water or expose it to dripping or splashing. Do not place objects filled with liquids on the apparatus.
- **Heat:** Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- **Cleaning:** Clean only with a dry cloth.
- **Servicing:** 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 Behringer Edge and check for any signs of damage. Retain the packaging materials for future transport or storage.

### 3.2 Power Connection

Connect the included power adapter to the DC input on the rear panel of the Edge, then plug the adapter into a suitable power outlet.

### 3.3 Audio Connections

The Edge features a 1/4" TS audio output. Connect this output to your mixer, audio interface, or amplifier using a standard instrument cable.

### 3.4 MIDI Connections

Use standard 5-pin DIN MIDI cables to connect the Edge to other MIDI devices. The MIDI IN port receives MIDI data, while the MIDI OUT/THRU port can send MIDI data or pass through incoming MIDI data.

### 3.5 USB Connection

Connect the USB Type B port on the Edge to your computer using a USB cable for MIDI over USB functionality and firmware updates.

### 3.6 Initial Power-On

Once all connections are made, power on the Behringer Edge. The unit will perform a brief startup sequence.

## 4. OPERATION

The Behringer Edge features a clearly laid out control panel. Below is an overview of the main sections and their functions.



Figure 4.1: Front Panel Layout of the Behringer Edge.

This image displays the entire front panel of the Behringer Edge synthesizer. It is organized into several distinct sections: MIDI and Patch Matrix at the top, Oscillator sections (VCO 1 and VCO 2) on the left, EG (VCO 1 & 2), Noise, Filter (VCF), and Output (VCA) sections on the right, and the Sequencer section at the bottom. Each section contains various knobs, switches, and patch points for sound shaping and control.

## 4.1 Top Panel: MIDI and Patch Matrix

The top section provides MIDI connectivity and a comprehensive 15x10 patch matrix for routing control voltages and audio signals.

- **MIDI IN:** 5-pin DIN input for receiving MIDI data.
- **MIDI OUT/THRU:** 5-pin DIN output for sending MIDI data or passing through incoming MIDI data.
- **Patch Points (Top Row - Inputs):** OSC1CV, OSC2CV, OSC DECAY, ADV/CLOCK, TRIGGER, VELOCITY, NOISE LEVEL, OSC1, OSC2, OSCEG, TRIGGER, VELOCITY, PHONES IN, PHONES OUT. These are control voltage (CV) inputs for modulating various parameters.
- **Patch Points (Bottom Row - Outputs):** 1-2 FM AMT, EXT AUDIO, TEMPO, PLAY/STOP, VCF MOD, VCF DECAY, VCA CV, VCA DECAY, PITCH, VCF EG, VCA, VCA EG. These are CV outputs or audio outputs for routing signals to other modules or inputs.

## 4.2 Oscillator Sections (VCO 1 & VCO 2)

The Edge features two Voltage Controlled Oscillators (VCOs) that generate the primary sound sources.

- **FREQUENCY:** Adjusts the pitch of the oscillator.
- **SHAPE:** Selects the waveform (e.g., triangle, pulse).
- **ENVELOPE:** Controls the amount of envelope modulation applied to the oscillator's pitch.
- **SEQ PITCH MOD (OSC 1):** Modulates the pitch of OSC 1 based on the sequencer.
- **HARD SYNC (OSC 2):** Synchronizes OSC 2 to OSC 1, creating complex timbres.

## 4.3 EG (VCO 1 & 2)

This section controls the Envelope Generator for the VCOs.

- **DECAY:** Sets the decay time of the envelope.
- **LEVEL:** Adjusts the overall level of the envelope.
- **1-2 FM AMT:** Controls the amount of frequency modulation from VCO 1 to VCO 2.

## 4.4 Noise

Generates noise for percussive sounds or texture.

- **COLOR:** Selects between Pink and White noise.
- **NOISE/EXT:** Adjusts the level of the internal noise generator or an external audio input.

## 4.5 Filter (VCF)

The Voltage Controlled Filter shapes the timbre of the sound.

- **VCF (HP/LP):** Selects between High-Pass and Low-Pass filter modes.
- **CUTOFF:** Sets the filter's cutoff frequency.
- **RESONANCE:** Boosts frequencies around the cutoff point.
- **DECAY:** Controls the decay time of the filter envelope.
- **ENVELOPE:** Adjusts the amount of envelope modulation applied to the filter cutoff.
- **NOISE/VCF MOD:** Controls the amount of noise or VCF modulation.

## 4.6 Output (VCA)

The Voltage Controlled Amplifier controls the overall volume and dynamics.

- **VCA MODE (FAST/SLOW):** Selects between fast and slow VCA response times.
- **DECAY:** Sets the decay time of the VCA envelope.
- **VOLUME:** Adjusts the master output volume.

## 4.7 Sequencer

The built-in 8-step sequencer allows for rhythmic pattern creation.

- **TEMPO:** Adjusts the playback speed of the sequencer.
- **CLOCK (MIDI/USB/INT/EXT):** Selects the clock source for the sequencer.
- **SCALE:** Sets the quantization scale for pitch steps.
- **PITCH:** Adjusts the pitch for each sequencer step.
- **PLAY/STOP/ADVANCE:** Transport controls for the sequencer.
- **VEL (Velocity):** Adjusts the velocity for each sequencer step.

# 5. MAINTENANCE

## 5.1 Cleaning

To clean the Behringer Edge, use a soft, dry cloth. Do not use abrasive cleaners, waxes, or solvents, as these can damage the finish and controls.

## 5.2 Storage

When not in use for extended periods, store the unit in a cool, dry place, away from direct sunlight and extreme temperatures. It is recommended to keep the original packaging for safe storage and transport.

## 5.3 Firmware Updates

Periodically check the Behringer website for available firmware updates. Firmware updates can provide new features, improvements, and bug fixes. Follow the instructions provided with the firmware update package carefully.

# 6. TROUBLESHOOTING

If you encounter issues with your Behringer Edge, refer to the following common problems and solutions:

| Problem                   | Possible Cause   | Solution   |
|---------------------------|--|--|
| No sound output           | Incorrect audio connections, low volume, VCA settings.             | Check audio cables, ensure VOLUME knob is turned up, verify VCA DECAY and VCA MODE settings.                         |
| Sequencer not playing     | Sequencer not started, incorrect clock source, tempo too low.      | Press PLAY, check CLOCK source (MIDI, USB, INT, EXT), increase TEMPO.  |
| Unexpected sound behavior | Complex patch routing, extreme parameter settings.                 | Reset parameters to default (if possible, or manually), simplify patch connections, adjust knobs to moderate levels. |
| MIDI not responding       | Incorrect MIDI connections, wrong MIDI channel, USB driver issues. | Verify MIDI IN/OUT connections, ensure MIDI channels match, reinstall USB drivers if using USB MIDI.                 |

## 7. SPECIFICATIONS

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| Feature                        | Detail   |
|--------------------------------|--|
| Model Name                     | Edge   |
| Item Model Number              | 0718-ABM                                       |
| UPC                            | 787790550259                                   |
| Item Weight                    | 4.25 pounds (1.93 kg)                          |
| Product Dimensions (L x W x H) | 16.7 x 8.3 x 3.6 inches (42.4 x 21.1 x 9.1 cm) |
| Body Material                  | Plastic  |
| Connector Type                 | USB Type B                                     |
| Color                          | Pink   |

## 8. WARRANTY AND SUPPORT

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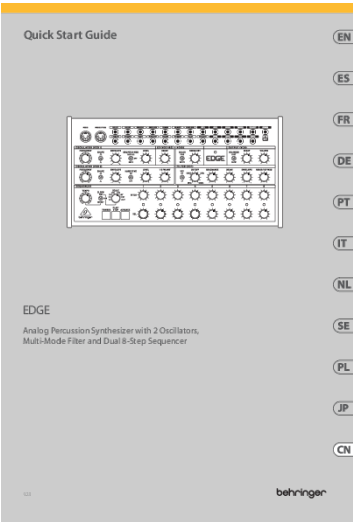
### 8.1 Warranty Information

Behringer products are covered by a limited warranty. For detailed information regarding warranty terms and conditions, please refer to the warranty card included with your product or visit the official Behringer website.

### 8.2 Technical Support

If you require technical assistance or have questions not covered in this manual, please contact Behringer customer support. Support contact information can typically be found on the official Behringer website or in the product packaging.

Before contacting support, please have your product model number (0718-ABM) and serial number ready, along with a clear description of the issue.



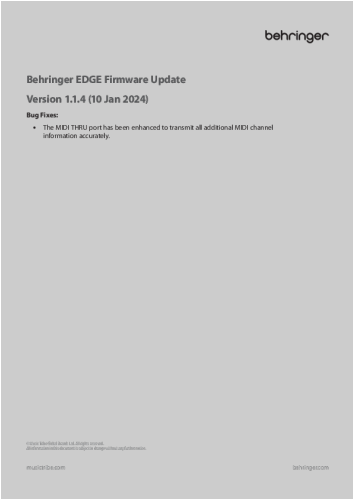
[pdf] Quick Start Guide Instructions Guide

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Quick Start Guide EDGE Analog Percussion Synthesizer with 2 Oscillators, Multi-Mode Filter and Dual 8-Step Sequencer V 2.0 2 EDGE Important Safety Instructions  
Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-qu...

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[pdf] Release Notes

Release Notes BE 0718 ABM EDGE v1 1 4 mediadl musictribe media PLM data docs P0EAM |||

Behringer EDGE Firmware Update Version 1.1.4 10 Jan 2024 Bug Fixes: The MIDI THRU port has been enhanced to transmit all additional MIDI channel information accurately. Music Tribe Global Brands Ltd. All rights reserved. All information in this document is subject to change without any further ...

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