

Behringer SYSTEM 55

Behringer SYSTEM 55 Modular Synthesizer User Manual

Model: SYSTEM 55

1. INTRODUCTION

Welcome to the Behringer SYSTEM 55 Modular Synthesizer user manual. This document provides essential information for the proper setup, operation, and maintenance of your new modular synthesizer system. The SYSTEM 55 is a pre-assembled modular synthesizer featuring 38 vintage-sounding modules from the 1970s, designed to offer unparalleled sonic exploration and creative freedom.

Please read this manual thoroughly before operating your SYSTEM 55 to ensure safe and optimal performance.

2. PRODUCT OVERVIEW

The Behringer SYSTEM 55 is a comprehensive modular synthesis solution, housed in two EURORACK GO cases. It includes a wide array of modules for sound generation, filtering, modulation, and control. Key components include:

- **914 FIXED FILTER BANK:** Features 12 active bandpass filters ranging from 125 Hz - 5.6 kHz, plus low-pass and high-pass filters for precise tonal shaping.
- **923 FILTERS:** Provides 6 dB low and high pass filters, along with white and pink noise sources for adding texture and percussive elements.
- **904B VOLTAGE CONTROLLED HIGH PASS FILTER & 904A VOLTAGE CONTROLLED LOW PASS FILTER:** Essential modules for dynamic frequency manipulation.
- **992 CONTROL VOLTAGES:** Allows for CV mixing and switching with an inverting attenuator, crucial for complex modulation routing.
- Multiple Voltage Controlled Oscillators (VCOs), Envelope Generators, and other utility modules.



Figure 2.1: Front view of the Behringer SYSTEM 55 Modular Synthesizer, showcasing its extensive array of modules and patch points.



Figure 2.2: Angled view of the SYSTEM 55, highlighting its ergonomic design and the included EURORACK GO cases.



Figure 2.3: Rear view of the SYSTEM 55, showing the power input and other connectivity options.



Figure 2.4: Close-up detail of various modules within the SYSTEM 55, including Voltage Controlled Oscillators and Envelope Generators.

3. SETUP

The Behringer SYSTEM 55 comes pre-assembled within its EURORACK GO cases, simplifying initial setup. Follow these steps to get started:

1. **Unpacking:** Carefully remove the synthesizer from its packaging. Retain all packaging materials for future transport or storage.
2. **Placement:** Place the SYSTEM 55 on a stable, flat surface. Ensure adequate ventilation around the unit.
3. **Power Connection:** Connect the provided power adapter to the DC input on the rear of the unit. Plug the adapter into a suitable power outlet. Ensure the power switch is in the OFF position before connecting.
4. **Audio Output:** Connect the main audio output(s) of the SYSTEM 55 to your audio interface, mixer, or amplifier using appropriate cables (e.g., 1/4-inch TS cables).
5. **MIDI Connection (Optional):** If using the MIDI-to-CV converter, connect your MIDI controller or computer's MIDI output to the MIDI input on the converter module.
6. **Initial Patching:** For first use, you may want to create a simple patch (e.g., VCO output to VCF input, VCF output to VCA input, VCA output to main mixer, and an Envelope Generator to VCA CV input) to confirm basic functionality.

4. OPERATING THE SYSTEM 55

Operating the SYSTEM 55 involves understanding the function of each module and how they interact through patching. Modular synthesis is an experimental process, so feel free to explore and deviate from standard practices.

4.1 Basic Signal Flow

A typical basic signal flow in a modular synthesizer involves:

1. **Oscillation:** Voltage Controlled Oscillators (VCOs) generate the raw sound waves (e.g., sine, saw, square).
2. **Filtering:** Voltage Controlled Filters (VCFs) shape the timbre of the sound by removing or emphasizing certain frequencies.
3. **Amplification:** Voltage Controlled Amplifiers (VCAs) control the volume of the sound, often modulated by an Envelope Generator.
4. **Modulation:** Envelope Generators (EGs) and Low-Frequency Oscillators (LFOs) provide control voltages (CV) to dynamically change parameters of other modules (e.g., VCF cutoff, VCA level).

4.2 Patching

Patching involves connecting modules using patch cables. The SYSTEM 55 uses standard 3.5mm (1/8-inch) patch cables. Always ensure cables are securely connected but do not force them. Experiment with different connections to discover new sounds.

4.3 MIDI-to-CV Conversion

The integrated MIDI-to-CV converter allows you to control the SYSTEM 55 using a MIDI keyboard or sequencer. This module translates MIDI note and control change messages into analog control voltages (CV) and gate signals, which can then be patched to control VCO pitch, VCA gates, and other parameters.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Behringer SYSTEM 55.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. For stubborn dirt, a slightly damp cloth with mild soap can be used, ensuring no liquid enters the modules or connections. Avoid abrasive cleaners.
- **Dust Protection:** When not in use, cover the synthesizer to prevent dust accumulation, which can affect module performance and longevity.
- **Storage:** Store the unit in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity.
- **Cable Management:** Keep patch cables organized and avoid excessive bending or tangling to prevent damage.

6. TROUBLESHOOTING

If you encounter issues with your SYSTEM 55, refer to the following common troubleshooting steps:

- **No Sound:**

- Check all power connections and ensure the unit is powered on.
- Verify audio output cables are correctly connected to your mixer/interface and that volume levels are up.
- Review your patch cables. Ensure a complete signal path from sound source (VCO) through VCF and VCA to the main output.
- Confirm that VCA and VCF modules are receiving appropriate CV/gate signals to open them.

• **Module Not Responding:**

- Check if the module is properly seated in its rack.
- Ensure all patch cables connected to the module are secure.
- Test the module with a known working patch or by swapping it with another similar module if possible.

• **Unwanted Noise/Hum:**

- Ensure all power cables are properly grounded.
- Try connecting the unit to a different power outlet.
- Check for ground loops in your audio setup.

If problems persist, consult the Behringer support website or contact their customer service.

7. SPECIFICATIONS



Feature	Specification
Model Name	SYSTEM 55
Item Weight	13 Kilograms (28.6 pounds)
Product Dimensions (L x W x H)	34.13 x 14.06 x 15.59 inches
Included Components	Case
Material Type	Metal
Color	White, Black, Grey
Number of Keyboard Keys	38 (referring to modules, not a physical keyboard)
Manufacturer	Music Tribe US
Country of Origin	China

8. WARRANTY AND SUPPORT

Behringer products are designed with quality and reliability in mind. For detailed warranty information, please refer to the warranty card included with your product or visit the official Behringer website. The website also provides access to product registration, FAQs, and technical support resources. For any inquiries or assistance, please contact Behringer customer support through their official channels.

Related Documents - SYSTEM 55

<div><div>Quick Start Guide</div><div></div><div>SYSTEM 55 Complete System 55 Kit of Modular Synthesizer with 38 Modules, MIDI-to-CV Converter and 2 EURO RACK GO Cases</div><div><div>EN</div><div>ES</div><div>FR</div><div>DE</div><div>PT</div><div>IT</div><div>NL</div><div>SE</div><div>PL</div></div></div>	<p>Behringer System 55 Quick Start Guide</p> <p>Get started with the Behringer System 55 Modular Synthesizer. This guide provides essential setup, safety, and patch information for your System 55, featuring 38 modules and MIDI-to-CV conversion.</p>
<div><div>Quick Start Guide</div><div></div><div>SYSTEM 55 Complete System 55 Kit of Modular Synthesizer with 38 Modules, MIDI-to-CV Converter and 2 EURO RACK GO Cases</div><div><div>EN</div><div>ES</div><div>FR</div><div>DE</div><div>PT</div><div>IT</div><div>NL</div><div>SE</div><div>PL</div></div></div>	<p>Behringer SYSTEM 55 Quick Start Guide: Modular Synthesizer</p> <p>Get started quickly with the Behringer SYSTEM 55, a comprehensive modular synthesizer with 38 modules, MIDI-to-CV converter, and EURO RACK GO cases. This guide provides essential setup and patch information.</p>
<div><div>Quick Start Guide</div><div></div><div>CM1A MIDI-to-CV Converter Module for Eurorack</div><div><div>EN</div><div>ES</div><div>FR</div><div>DE</div><div>PT</div><div>IT</div><div>NL</div><div>SE</div><div>PL</div></div></div>	<p>Behringer CM1A MIDI to CV Converter Module Quick Start Guide</p> <p>This guide provides essential information for setting up and using the Behringer CM1A MIDI to CV Converter Module for Eurorack systems, covering controls, mode selection, and installation.</p>
<div><div>Quick Start Guide</div><div></div><div>PERFECT PITCH PP1 Guitar and Audio to MIDI, USB and CV Converter Module for Eurorack</div><div><div>EN</div><div>ES</div><div>FR</div><div>DE</div><div>PT</div><div>IT</div><div>NL</div><div>SE</div><div>PL</div><div>JP</div><div>CN</div></div></div>	<p>Behringer PERFECT PITCH PP1 Quick Start Guide</p> <p>Quick Start Guide for the Behringer PERFECT PITCH PP1, a Guitar and Audio to MIDI, USB and CV Converter Module for Eurorack. Learn about safety instructions, controls, power connection, and installation.</p>
<div><div>Quick Start Guide</div><div></div><div>992 CONTROL VOLTAGES Legendary Analog CV Routing Module for Eurorack</div><div><div>EN</div><div>ES</div><div>FR</div><div>DE</div><div>PT</div><div>IT</div><div>NL</div><div>SE</div><div>PL</div><div>JP</div><div>CN</div></div></div>	<p>Behringer 992 CONTROL VOLTAGES Quick Start Guide</p> <p>Get started quickly with the Behringer 992 CONTROL VOLTAGES, a legendary analog CV routing module for Eurorack. This guide provides essential setup and usage information for your modular synthesizer.</p>

<div><div>Quick Start Guide</div><div></div><div>SYSTEM 15 Combinable Synthesizer 157 Modular Synthesizer with 15 Modules with 15 VCOs, 15 Oscillators and 15 LFOs (15 Oscillators)</div><div></div></div>	<div><div>Behringer System 15 Modular Synthesizer Quick Start Guide</div><div>A comprehensive quick start guide for the Behringer System 15 modular synthesizer, covering essential safety information, hardware setup, module descriptions, and detailed patch examples for creating various sounds.</div></div>
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