MS-1 MKII

Generic MS-1 MKII RD Analog Synthesizer User Manual

Model: MS-1 MKII RD

1. INTRODUCTION

The Generic MS-1 MKII RD Analog Synthesizer is a powerful and versatile instrument designed to deliver authentic analog sound. This compact synthesizer features a classic 2-oscillator design with a sub-oscillator for rich, fat bass tones. The built-in 24dB low-pass filter with resonance control allows for precise sculpting of your sound. The MS-1 MKII RD boasts a 32-step control sequencer for creating complex patterns and melodies. With its easy-to-use interface, this synth is suitable for live performances, studio recordings, or exploring analog synthesis.

2. SETUP

2.1 Unpacking

Carefully remove all components from the packaging. Ensure the following items are present:

- MS-1 MKII RD Analog Synthesizer
- USB cable
- MIDI cable
- 1/4" audio cables
- Power Adapter (not explicitly listed in 'whats_in_the_box' but implied for operation)

2.2 Power Connection

Connect the power adapter to the DC IN port on the rear panel of the synthesizer and then to a suitable power outlet. Press the POWER button on the front panel to turn on the unit.

2.3 Audio Connection

Connect the 1/4" audio output of the MS-1 MKII RD to your mixer, audio interface, or amplifier using the provided 1/4" audio cables.

2.4 MIDI/USB Connection

For MIDI control, connect the MIDI IN/OUT/THRU ports to your MIDI devices using the provided MIDI cable. For computer connectivity, use the provided USB cable to connect the USB port to your computer.

3. OPERATING INSTRUCTIONS

3.1 Basic Sound Generation

The MS-1 MKII RD features a monophonic architecture with a Voltage Controlled Oscillator (VCO) offering 4 waveforms. Use the VCO section controls to select and shape your initial tone.

3.2 Filter and Envelope

Sculpt your sound further with the 12dB/oct multimode filter. Adjust the cutoff and resonance controls to modify the timbre. The adjustable ADSR (Attack, Decay, Sustain, Release) envelopes allow for dynamic control over the sound's evolution.

3.3 Sequencer

The built-in 32-step control sequencer enables the creation of complex patterns and melodies. Refer to the detailed manual for programming sequences.

4. FEATURES

- **Authentic Analog Synthesizer:** Experience the warmth and character of true analog synthesis with this powerful instrument.
- **Monophonic Architecture:** Craft expressive leads, basses, and more with its monophonic voice structure.
- **Oscillator Section:** Shape your tone with a VCO (Voltage Controlled Oscillator) featuring 4 waveforms and a wide range.
- **Filter and Envelope:** Sculpt your sound with a 12dB/oct multimode filter and adjustable ADSR envelopes.
- **Connectivity:** Features USB/MIDI, CV/Gate inputs, and 1/4" audio outputs for seamless integration.

5. CONTROLS OVERVIEW

Figure 1: Front Panel Overview. This image displays the top-down view of the Behringer MS-1 MKII RD Analog Synthesizer. Key controls visible include the Modulator section on the far left with LFO Rate and Wave Form knobs, the VCO section with Range and Pulse Width controls, the Source Mixer with sliders for various sound sources (Sub Osc, Noise, Ext Audio), the VCF (Voltage Controlled Filter) section with Cutoff and Resonance, the VCA (Voltage Controlled Amplifier), and the ADSR Envelope section on the far right. The 32-key keyboard is prominently featured at the bottom.

Figure 2: Front Panel with Left Side Controls. This image provides a slightly different angle of the synthesizer's front panel, highlighting the left-side controls. The Volume knob, Glide switch, LFO Mod sliders, and the Bender control (pitch bend/modulation lever) are clearly visible. The overall layout of the main control sections (Modulator, VCO, Source Mixer, VCF, VCA, Envelope) and the keyboard remains consistent with Figure 1.

Figure 3: Rear Panel Connectivity. This image shows the rear panel of the Behringer MS-1 MKII RD Analog Synthesizer, detailing its various input and output ports. From left to right, visible connections include DC IN for power, OUTPUT,

PHONES, EXT AUDIO IN, HOLD, VCF CV IN, EXT CLK IN, CV IN, GATE IN, GATE OUT, CV OUT, VELOCITY OUT, MIDI IN/OUT/THRU, and USB. These ports facilitate integration with other audio equipment and computers.

Figure 4: Synthesizer with Shoulder Strap. This image illustrates the Behringer MS-1 MKII RD Analog Synthesizer equipped with its detachable shoulder strap and handle. This configuration allows the synthesizer to be worn and played like a keytar, enhancing portability and performance flexibility. The strap attaches to points on the synthesizer's body, and the handle provides a grip for playing.

6. CONNECTIVITY

The MS-1 MKII RD offers extensive connectivity options for integration into various setups:

- **Audio Outputs:** 1/4" TS jack for connecting to mixers, audio interfaces, or amplifiers.
- **Headphones:** 1/4" TRS jack for private monitoring.
- **MIDI:** Standard 5-pin DIN MIDI IN, OUT, and THRU ports for connecting to external MIDI controllers or sound modules.
- **USB:** USB-B port for MIDI over USB connectivity with computers.
- **CV/Gate:** Multiple 3.5mm CV (Control Voltage) and Gate inputs/outputs for integration with modular synthesizers and other CV-compatible gear. This includes CV IN, GATE IN, GATE OUT, CV OUT, VCF CV IN, and EXT CLK IN.
- **External Audio Input:** 1/4" TS jack to process external audio signals through the MS-1's filter.

7. MAINTENANCE

To ensure the longevity and optimal performance of your MS-1 MKII RD, follow these maintenance guidelines:

- Keep the unit clean by wiping it with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- Protect the synthesizer from dust, moisture, and extreme temperatures.
- Avoid placing heavy objects on the unit.
- Disconnect power when not in use for extended periods.

8. TROUBLESHOOTING

If you encounter any issues, consider the following basic troubleshooting steps:

- **No Sound:** Check all audio connections, ensure volume levels are up on both the synthesizer and your audio system, and verify power is supplied.
- **MIDI Not Responding:** Confirm MIDI cables are correctly connected (IN to OUT, OUT to IN), check MIDI channel settings on both devices, and ensure USB drivers are installed if using USB MIDI.
- **Unexpected Behavior:** Try resetting the unit to factory defaults (refer to the full manual for instructions).

For persistent issues, contact customer support or consult the full product manual.

9. SPECIFICATIONS

Specification	Value
Brand	Generic (Manufacturer: Behringer)
Model Name	MS-1
Item Model Number	0722-ABK86-US1
ASIN	B0DD81DGVV
UPC	644216629800
Color	Red
Material	Metal
Body Material	Bass Wood
Number of Keyboard Keys	32
Connector Type	USB
Proficiency Level	All
Date First Available	August 3, 2024

10. WHAT'S IN THE BOX

The product package includes:

- USB cable
- MIDI cable
- 1/4" audio cables

11. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation provided with your product or visit the manufacturer's official website. Keep your proof of purchase for warranty claims.