

## Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

[manuals.plus](#) /

› [Behringer](#) /

› [Behringer WASP DELUXE Analog Synthesizer User Manual](#)

## Behringer WASP DELUXE

# Behringer WASP DELUXE Analog Synthesizer User Manual

Model: WASP DELUXE

Brand: Behringer

## 1. INTRODUCTION

The Behringer WASP DELUXE is a legendary analog synthesizer designed for creating rich and dynamic soundscapes. This compact and versatile instrument features dual digital oscillators and a multi-mode VCF, offering extensive sound design capabilities in a Eurorack-compatible format. This manual provides essential information for setting up, operating, and maintaining your WASP DELUXE synthesizer.



Figure 1: Front view of the Behringer WASP DELUXE Analog Synthesizer, showcasing its control panel with various knobs and switches.

## 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 this manual.
- Do not use this apparatus near water or moisture.
- Clean only with a dry cloth.
- Ensure proper ventilation; do not block any ventilation openings.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Only use attachments/accessories specified by the manufacturer.
- 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 and Inspection

Carefully remove the WASP DELUXE from its packaging. Inspect the unit for any signs of damage during transit. Retain the original packaging for future shipping or storage.

### 3.2 Power Connection

Connect the supplied power adapter to the **DC In** port on the rear panel of the synthesizer. Plug the adapter into a suitable power outlet. Ensure the power switch is in the OFF position before connecting power.

### 3.3 Audio Connections

The WASP DELUXE features both **Main Out** (Low/High) and **Phones** outputs.

- **Main Out:** Connect the Main Out jacks to your mixer, audio interface, or amplifier using appropriate 1/4" TS cables. Use the **LOW/HIGH** switch to select the output level suitable for your receiving device.
- **Phones:** Connect stereo headphones to the 1/4" TRS **Phones** jack for private monitoring.

### 3.4 MIDI and USB Connections

The WASP DELUXE supports MIDI connectivity for integration with other MIDI devices and computers.

- **MIDI In:** Connect a MIDI cable from your MIDI controller or interface's MIDI Out to the WASP DELUXE's **MIDI In** port.
- **MIDI Thru:** Use the **MIDI Thru** port to pass incoming MIDI data to another MIDI device.
- **USB Type B:** Connect the USB Type B port to your computer for MIDI over USB functionality. This allows the WASP DELUXE to send and receive MIDI data from your Digital Audio Workstation (DAW).



Figure 2: Rear panel of the Behringer WASP DELUXE, showing the power input, audio outputs, and MIDI/USB ports.

## 4. OPERATING INSTRUCTIONS

The WASP DELUXE features a straightforward control layout, allowing for intuitive sound design. Familiarize yourself with the main sections:



Figure 3: Overhead view of the WASP DELUXE control panel, highlighting the arrangement of knobs and switches for sound shaping.

### 4.1 Keyboard Section

- **BEND:** Adjusts the pitch bend range.
- **TUNE:** Fine-tunes the overall pitch of the synthesizer.
- **GLIDE:** Controls the portamento (glide) time between notes.

### 4.2 Oscillators Section

The WASP DELUXE features two powerful digital oscillators for generating the core sound.



Figure 4: Detailed view of the Oscillators section, showing controls for frequency, width, and mix for OSC 1 and OSC 2.

- **FT (Footage):** Selects the octave range for each oscillator (16', 8', 4', 2').
- **WIDTH %:** Adjusts the pulse width of the square wave for OSC 1.
- **MIX:** Blends the output of OSC 1, OSC 2, and the external input.
- **OSC 1 / OSC 2 PITCH:** Fine-tunes the pitch of each oscillator.
- **EXT:** Controls the level of the external audio input.

### 4.3 Control OSC and Filter Section

These sections provide modulation and tonal shaping capabilities.



Figure 5: Detailed view of the Control OSC and Filter sections, including frequency, pitch modulation, noise signal, and filter cutoff/resonance controls.

- **Control OSC FREQ:** Sets the frequency of the Control Oscillator (LFO).
- **PITCH MOD:** Controls the amount of pitch modulation from the Control Oscillator.
- **NOISE SIGNAL:** Adjusts the level of the noise generator.
- **NOISE RND:** Introduces random modulation to the noise signal.
- **Filter FREQ:** Sets the cutoff frequency of the multi-mode filter.
- **'Q' (Resonance):** Controls the resonance of the filter.
- **BAND NOTCH LO HI:** Selects the filter mode (Low Pass, Band Pass, Notch, High Pass).
- **FILTER CONTROL:** Modulates the filter cutoff frequency.

## 4.4 Envelope Generators Section

The WASP DELUXE features two independent envelope generators for shaping the amplitude (VCA ENV) and other parameters (Control ENV).

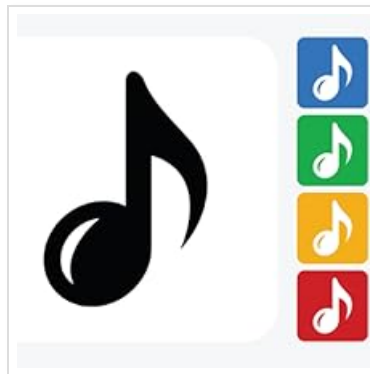


Figure 6: Detailed view of the Envelope Generators section, showing controls for Attack, Hold, Decay, Sustain Level, Repeat, and Delay for both VCA and Control envelopes.

- **VCA ENV (Attack, Hold, Decay, Sustain Level):** Shapes the volume contour of the sound.
- **Control ENV (Attack, Decay, Repeat, Delay):** Modulates various parameters, often assigned to the filter.

## 4.5 Output Section

Controls for the final audio output.



Figure 7: Detailed view of the Output section, including the main volume knob and headphone jack.

## 5. MAINTENANCE

### 5.1 Cleaning

To clean the unit, use a soft, dry cloth. Do not use abrasive cleaners, waxes, or solvents as they may damage the finish and controls. Avoid spraying liquids directly onto the unit.

### 5.2 Storage

When not in use for extended periods, store the WASP DELUXE in a cool, dry place, away from direct sunlight and extreme temperatures. It is recommended to use the original packaging or a suitable protective case to prevent dust accumulation and physical damage.

## 6. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
No sound output	Power not connected, volume low, cables incorrect, external input selected without signal.	Check power connection and switch. Increase VOLUME knob. Verify audio cable connections. Ensure MIX knob is not set entirely to EXT if no external signal is present.
MIDI not responding	Incorrect MIDI channel, loose MIDI cable, USB driver issue.	Verify MIDI channel settings on both devices. Check MIDI cable connections. For USB MIDI, ensure drivers are installed (if required) and the device is recognized by your computer/DAW.
Unexpected sound or no sound from oscillators	Oscillator levels low, filter cutoff too low, envelope settings.	Adjust OSC 1/OSC 2 levels and MIX knob. Increase Filter FREQ. Check VCA ENV Attack and Decay settings.

If the problem persists after trying these solutions, please contact Behringer customer support or a qualified service technician.

## 7. SPECIFICATIONS

Feature	Detail
Product Type	Keyboard Instruments (Synthesizer)
Model Name	WASP DELUXE

Feature	Detail
Item Weight	1100 Grams (2.43 pounds)
Product Dimensions (L x W x H)	19.29 x 7.48 x 5.12 inches
Body Material	Metal
Material Type	Carbon Fiber
Color	Black
Connector Type	USB Type B
Included Components	Bag
Manufacturer	Music Tribe US
UPC	653341344434

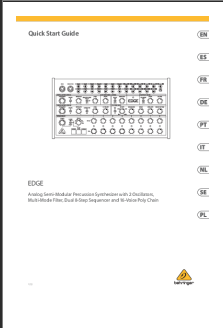
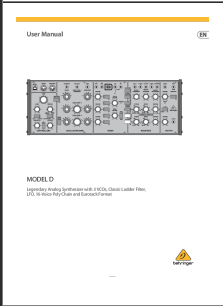
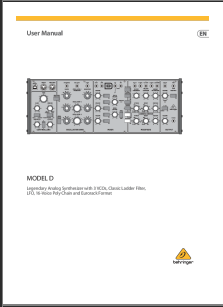
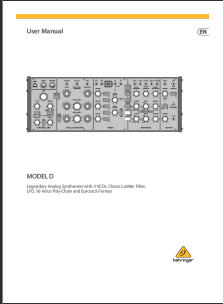
## 8. WARRANTY AND SUPPORT

For detailed warranty information, product registration, and technical support, please refer to the official Behringer website or contact their customer service department. Keep your proof of purchase for warranty claims.

### Related Documents - WASP DELUXE

	<p><a href="#">Behringer WASP DELUXE Quick Start Guide</a></p> <p>A quick start guide for the Behringer WASP DELUXE, a legendary analog synthesizer with dual OSCs, VCF, multi-mode VCF, 16-voice poly chain, and Eurorack format.</p>
	<p><a href="#">Behringer PRO-1 Analog Synthesizer Quick Start Guide</a></p> <p>Get started quickly with the Behringer PRO-1 Analog Synthesizer. This guide covers hook-up, controls, and basic operation for your Dual VCOs, 3 Simultaneous Waveforms, 4-Pole VCF, extensive Modulation Matrix, 16-Voice Poly Chain, and Eurorack Format.</p>



	<p><a href="#">Behringer EDGE Analog Semi-Modular Percussion Synthesizer Quick Start Guide</a></p> <p>Comprehensive quick start guide for the Behringer EDGE Analog Semi-Modular Percussion Synthesizer, featuring 2 Oscillators, Multi-Mode Filter, Dual 8-Step Sequencer, and 16-Voice Poly Chain. Learn setup, controls, and initial sound creation.</p>
	<p><a href="#">BEHRINGER MODEL D User Manual: Legendary Analog Synthesizer Guide</a></p> <p>Explore the BEHRINGER MODEL D, a legendary analog synthesizer. This user manual provides detailed information on its features, controls, setup, calibration, and specifications for creating fat music with its pure analog signal path, 3 VCOs, and classic ladder filter.</p>
	<p><a href="#">Behringer MODEL D Analog Synthesizer User Manual</a></p> <p>Comprehensive user manual for the Behringer MODEL D analog synthesizer, detailing its features, controls, specifications, and operation for creating legendary analog sounds.</p>
	<p><a href="#">Behringer MODEL D User Manual: Legendary Analog Synthesizer Guide</a></p> <p>Explore the features, controls, and specifications of the Behringer MODEL D analog synthesizer. This user manual provides detailed guidance on setup, operation, calibration, and Eurorack integration for this iconic instrument.</p>