Behringer TD-3

Behringer TD-3 Analog Bass Line Synthesizer User Manual

MODEL: TD-3

1. Introduction

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your Behringer TD-3 Analog Bass Line Synthesizer. Please read this manual thoroughly to ensure proper use and to maximize the performance of your instrument.

The Behringer TD-3 is an analog bass line synthesizer designed to produce classic electronic music sounds. It features an all-analog signal path, a 16-step sequencer, and a resonant low-pass filter.

2. Setup

2.1 Unpacking

Carefully remove the TD-3 from its packaging. Retain the packaging materials for future transport or storage.

2.2 Power Connection

Connect the included DC power adapter to the 'DC IN' port on the rear panel of the TD-3. Plug the adapter into a suitable power outlet. Ensure the power switch is in the 'OFF' position before connecting power.

2.3 Audio Connections

- **Main Output:** Connect the 'OUTPUT' jack (1/4" TS) on the rear panel to your mixer, audio interface, or amplifier.
- **Headphones:** Connect headphones to the 'PHONES' jack (1/4" TRS) on the front panel for private monitoring. Adjust the 'VOLUME' knob to a comfortable listening level.

2.4 MIDI/USB Connections

- **MIDI In/Out:** Use standard 5-pin DIN MIDI cables to connect the 'MIDI IN' and 'MIDI OUT' ports to other MIDI devices for synchronization or control.
- **USB:** Connect the USB port to a computer for MIDI control and firmware updates.

2.5 CV/Gate Connections

The TD-3 features 'CV OUT' and 'GATE OUT' jacks (3.5mm TS) for integration with modular synthesizers and other analog control voltage equipment. These outputs transmit pitch and gate information from the sequencer.

Image 1: Front panel and rear connections of the Behringer TD-3. This image displays the various knobs, buttons, and input/output jacks, including the power input, audio output, headphone jack, MIDI ports, USB port, and CV/Gate connections, all essential for setting up the device.

3. Operating the TD-3

3.1 Powering On

After all connections are made, switch the 'POWER' button on the rear panel to the 'ON' position. The unit will power up.

3.2 Controls Overview

The TD-3's front panel is divided into several sections:

- **VCO (Voltage Controlled Oscillator):** Controls the basic sound waveform and pitch.
- **VCF (Voltage Controlled Filter):** Shapes the timbre of the sound.
- **Envelope:** Controls the decay of the filter.
- **Sequencer:** Programs and plays musical patterns.
- **Distortion:** Adds overdrive to the sound.
- **Volume:** Adjusts the overall output level.

3.3 VCO Section

- **TUNE:** Adjusts the overall pitch of the oscillator.
- **WAVEFORM:** Selects between Sawtooth (bright, rich harmonics) and Square (hollow, reedy) waveforms.

3.4 VCF Section

- **CUTOFF:** Sets the frequency at which the filter begins to attenuate higher frequencies.
- **RESONANCE:** Emphasizes frequencies around the cutoff point, creating a 'wah' effect at higher

settings.

- **ENVELOPE:** Controls the amount of filter envelope modulation applied to the cutoff frequency.
- **DECAY:** Determines the length of the filter envelope's decay phase.
- **ACCENT:** Controls the intensity of the accent effect on notes.

3.5 Sequencer Operation

The TD-3 features a powerful 16-step sequencer for creating bass lines.

- **MODE Switch:** Selects between 'WRITE' (for programming patterns) and 'PLAY' (for playing patterns or tracks).
- **TRACK/PATTERN Selector:** In 'PLAY' mode, choose between playing a single 'PATTERN' or a 'TRACK' (a chain of patterns). In 'WRITE' mode, select 'TRACK' to edit a track or 'PATTERN' to edit a pattern.
- **PATTERN GROUP:** Selects one of four groups (I, II, III, IV), each containing 8 patterns (1-8).
- **TEMPO:** Adjusts the playback speed of the sequencer.
- **START/STOP:** Initiates or halts sequencer playback.
- **WRITE/NEXT:** Used to confirm steps during pattern writing or to advance to the next step.
- **PITCH MODE:** Selects the input source for pitch information (INT for internal keyboard, MIDI, USB, TRIG for external trigger).
- **TIME MODE:** Sets the clock resolution for external synchronization (1PPS, 2PPQ, 24PPQ, 48PPQ).
- **FUNCTION Buttons:** These buttons (DEL, INS, CH, COPY, PASTE, TRANSPOSE, ACCENT, SLIDE) perform various editing functions within the sequencer.
- **STEP Buttons (1-8, 9, 0, 100, 200):** Used for entering notes, selecting steps, and other functions depending on the mode.

3.6 Distortion Section

- **ON/OFF Switch:** Engages or bypasses the built-in distortion effect.
- **DISTORTION:** Adjusts the amount of overdrive.
- **TONE:** Shapes the frequency content of the distorted sound.
- **LEVEL:** Controls the output level of the distortion effect.

3.7 Volume Control

The 'VOLUME' knob adjusts the overall output level of the TD-3. Use this to balance the TD-3's output with other instruments in your setup.

4. Maintenance

4.1 Cleaning

Clean the TD-3 with a soft, dry cloth. Do not use abrasive cleaners or solvents, as these can damage the finish and internal components.

4.2 Storage

When not in use, store the TD-3 in a cool, dry place away from direct sunlight and extreme temperatures. If transporting, use the original packaging or a suitable protective case.

4.3 Firmware Updates

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

5. Troubleshooting

5.1 No Sound Output

- Ensure the power adapter is correctly connected and the unit is powered on.
- Check all audio cables for proper connection and integrity.
- Verify the 'VOLUME' knob is turned up.
- If using headphones, ensure they are fully plugged in and the volume is adjusted.
- Confirm that a pattern is playing and the 'MODE' switch is set to 'PLAY'.

5.2 Sequencer Not Playing

- Press the 'START/STOP' button to initiate playback.
- Ensure the 'MODE' switch is set to 'PLAY'.
- Check the 'TEMPO' knob setting; it might be set to a very slow speed.
- If synchronized externally, verify the external clock source is active and the 'TIME MODE' is correctly set.

5.3 MIDI Control Issues

- Ensure MIDI cables are connected correctly (MIDI OUT of controller to MIDI IN of TD-3).
- Verify that the TD-3 and your MIDI controller are on the same MIDI channel.
- Check the 'PITCH MODE' setting on the TD-3 to ensure it is set to 'MIDI' or 'USB' as appropriate.
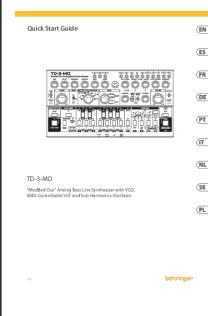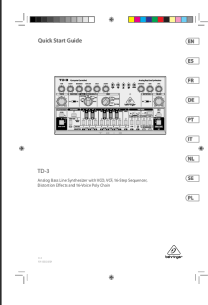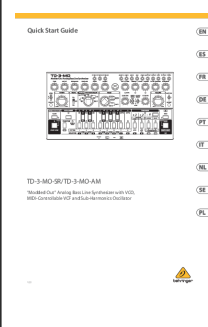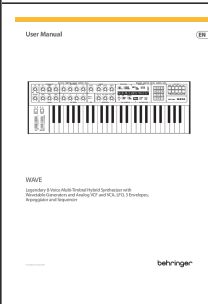
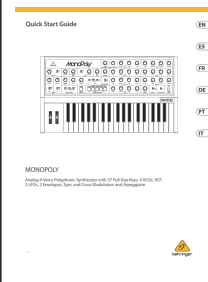# 6. Specifications

Feature	Specification
Model	TD-3
Type	Analog Bass Line Synthesizer
Dimensions (L x W x H)	17.3 x 8.9 x 3.9 inches (43.9 x 22.6 x 9.9 cm)
Weight	2.8 pounds (1.27 kg)
Power Supply	DC Power Adapter (included)
Audio Output	1/4" TS, unbalanced
Headphone Output	1/4" TRS, stereo
MIDI	MIDI In, MIDI Out (5-pin DIN)
USB	USB Type B
CV/Gate Outputs	3.5mm TS

7. Warranty and Support

Behringer products are designed and manufactured to high standards. For detailed warranty information and technical support, please refer to the official Behringer website or contact your local distributor. Keep your purchase receipt as proof of purchase for warranty claims.

Related Documents - TD-3

	[Behringer TD-3-MO "Modded Out" Analog Bass Line Synthesizer Quick Start Guide](#) A quick start guide for the Behringer TD-3-MO "Modded Out" Analog Bass Line Synthesizer, covering setup, connections, software and hardware configuration, tuning, sync and clock type settings, signal flow, and basic operation.
	[Behringer TD-3 Quick Start Guide](#) This guide provides essential safety instructions and setup information for the Behringer TD-3 Analog Bass Line Synthesizer.
	[Behringer TD-3-MO Quick Start Guide](#) A quick start guide for the Behringer TD-3-MO "Modded Out" Analog Bass Line Synthesizer, covering setup, connections, software and hardware configuration, tuning, sync and clock type settings, and basic operation.
	[Behringer WAVE User Manual: Legendary 8-Voice Multi-Timbral Hybrid Synthesizer](#) Comprehensive user manual for the Behringer WAVE, detailing its features as a legendary 8-voice multi-timbral hybrid synthesizer with wavetable generators, analog VCF and VCA, LFO, 3 envelopes, arpeggiator, and sequencer. Includes safety instructions, operational guidance, and warranty information.
	[Behringer MonoPoly Analog Synthesizer: Quick Start Guide](#) Get started with the Behringer MonoPoly, an analog 4-voice polyphonic synthesizer featuring 37 full-size keys, 4 VCOs, VCF, 2 LFOs, 2 Envelopes, Sync and Cross Modulation, and an Arpeggiator. This guide covers setup, controls, hook-up, and basic operation.

[Behringer DeepMind 12XD Quick Start Guide - Analog Synthesizer](#)

Get started with the Behringer DeepMind 12XD, a 12-voice analog polyphonic desktop synthesizer. This quick start guide covers essential setup, controls, and features for creating music.