

The System80 880 is an analog drum machine for the Eurorack modular synthesizer format. Its drum voice circuits are based on the TR-808, the classic drum machine made by Roland Corporation between 1980 and 1983. Wherever possible, the 880 uses the exact same semiconductors specified in the original circuits. The sound very closely matches the sound and character of the two vintage TR-808s that were used as references during the 880's design. Variation in component tolerances as well as component aging may contribute to some perceptible differences in sound between the 880 and a vintage TR-808. However, the same holds true for sound comparisons between original TR-808s and other 808 clones.

The 880 features all 16 of the original TR-808's analog drum voices with one important difference: the five switchable voices are controlled with electronic rather than mechanical switches. The automatic switching between the paired drum voices allows them to be played on *different* steps of the *same* pattern. For example, the Low Tom can be played on Step 1 and Step 3 of a pattern and the Low Conga can be played on Step 2 of the same pattern; the sequencer will automatically switch between the sounds as the pattern plays.

The 880's sequencer features a familiar interface that allows for Rhythm Pattern creation using programmed or real-time step entry. Manual Mode can be used for arrangement and improvisation during live performance. There is also a Rhythm Compose mode that allows patterns to be chained together into longer compositions.

The sequencer has been updated with 12 banks of 16 Rhythm Patterns, shuffle, mutes, performance rolls, a pair of fully assignable trigger outputs, and multiple options for syncing to external devices.

The Eurorack modular synthesizer format invites experimentation and improvisation. The 880 features 11 individual instrument outputs for separate mixing and processing of the sounds, either within a Eurorack system or through other devices, such as filters, reverb, compression, distortion, digital multi-effects, etc.

A planned Trigger Expander module will allow the 880's drum voices to be triggered externally.

## Version

This manual is a dynamic document that is edited and updated to make it current with the latest 880 firmware. For the latest version of the the firmware and corresponding manual please visit:

<http://system80.net/product/880/>

This edition is for firmware version **0.9.7**

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