

EarthQuaker Devices®

Towers

Stereo Reverberant Filter



Towers

Behold! Betwixt the mists of time and the digital depths comes forth the mighty Towers, a fantastical monument to experimental exploration that beckons the forces beyond earthly sonic sorcery. This mystical ambient soundscape generator transforms your humble signal via a prism of the past and creates vast tonal landscapes for the future. Prepare for your harmonic pilgrimage to ethereal auditory delights!

At the heart of Towers lies an architectural marvel of aural alchemy—your input signal is fed into an array of infinitely repeating micro-echoes, creating dynamic generative impulses which feed an immense cathedral style reverb where the Length control shapes the decay time and density of reflections. This reverberant foundation is then interwoven with a resonant low-pass filter that intersects the delay and reverb pathways at multiple points, crafting a massive, unearthly sound that transcends the limitations of traditional hardware. The result is not merely an effect, but an experiential journey into the expanse.

The filter frequency is your spectral guide through these hazy realms, offering three distinct modes of navigation. In Manual Mode, you are the commander of your own frequency. By turning the Frequency control, you can create opposing movements between left and right channels. Envelope Mode transforms playing dynamics into filter movement, where each strike of the strings becomes a catalyst for harmonic resonance while the Frequency control maintains proper sensitivity. LFO Mode surrenders control to a slow-moving oscillator that sweeps across the stereo field, and the Frequency adjusts the rate at which it sways.

The resonant low-pass filter, reminiscent of those found in many beloved vintage synthesizers, generates warm and ringy tones that impart layers of dark atmosphere into the reverberated echoes. Through the Filter control, you determine how intensely this harmonic disturbance intertwines with the reverb pathways, while the Mix control becomes your balance between the celestial realms above and the grounded reality below. Eight user-assignable presets await to capture and recall your most cherished settings with the turn of a knob and press of a switch.

Towers can be further pulled across space and time by initiating the extraordinary phenomenon known as Stretch. This spellbinding feature doubles the length of the reverb effect by slowing the processor speed, which generates a lo-fi effect that pulls apart the delay lines while smearing the filter and lowering the frequency responses. Pleasant surprises and delightful musical inaccuracies will emerge, creating unique atmospheres that serve as the ultimate vibe setter. Tap the Stretch footswitch for an instantaneous effect or hold it and marvel as the entire system of Towers descends into the abyss, spawning mesmerizing artifacts along the way.

Its buffered bypass preserves your signal integrity while allowing reverb tails to naturally decay, though full bypass mode can be engaged to offer up complete cut off from the otherworldly realms when desired.

Now go forth and begin your exploration with Towers—an instrument of transformation, a bridge between the conventional and the impossible, conjured to catapult you into unexplored wormholes of whimsical wonder.

Towers is built by the skilled tone technicians of EarthQuaker Devices on the banks of the prestigious Ohio and Erie Canal located in the heart of the heart of it all, Akron, Ohio.

Controls

- **Mix:** Use the Mix rotary knob to set the overall level of the effect, balancing the ethereal with the earthly.
- **Length:** Use the Length rotary knob to control the length of the reverb. Use lower settings for shorter reverbs and higher settings for longer reverbs. This control also has a secondary function to adjust the speed of the Stretch feature.
- **Filter:** Use the Filter rotary knob to control how much the resonant low-pass filter is mixed into the reverb pathways, determining the depth of harmonic resonance.
- **Frequency:** Use the Frequency rotary knob to control the filter frequency. The specific function of this control depends on the mode you select with the Mode toggle switch.
- **Mode:** Mode is a 3-position toggle switch that changes the mode of operation. Towers has three modes to operate in:
 1. **Manual:** In Manual Mode, the filter frequency is manually changed by adjusting the Frequency control. This works across the stereo field, with the left channel opposite the right.
 2. **Envelope:** In Envelope Mode, the filter frequency is changed with an envelope that is controlled by picking dynamics. In this mode, the Frequency rotary knob adjusts the envelope's sensitivity.
 3. **LFO:** In LFO Mode, the filter frequency is controlled by a slow-moving LFO, and the Frequency rotary knob adjusts the LFO rate. This mode also sweeps across the stereo field, creating a slow panning filter effect.
- **Preset:** Use the Preset rotary switch to select which user preset to use in Preset mode, allowing you to recall your favorite mystical configurations.
- **Activate Footswitch:** Use the Activate footswitch to turn the effect on and off.
- **Stretch Footswitch:** Use the Stretch footswitch to slow down the entire digital system of Towers. As a result, the reverb length is doubled, the spectrum of frequencies is altered, and a pitch-bending effect can be heard throughout the morphing process.

Tails or Full Bypass Switching

Towers can operate in two different bypass states: Tails or Full Bypass. It comes factory-set in Tails Mode, which allows the reverb effect to naturally decay after the effect is bypassed, and is indicated by a green Activate LED. Full Bypass will cut the reverb effect completely when the effect is bypassed and is indicated by a red Activate LED.

To select Full Bypass operation, follow these steps:

1. Unplug the power cable.
2. Hold down the Activate footswitch.
3. Insert the power cable.
4. Wait for the Activate LED to flash 3 times and then release the footswitch.
5. Towers will now be in Full Bypass Mode every time it is powered on, and the Activate LED will be Red.

Follow the same steps to return to Tails mode.

Towers is buffered bypass, which means that there will always be an active buffer present, and it requires power to pass a signal.

Most EarthQuaker Devices brand effect pedals feature Flexi-Switch® Technology. The Towers is NOT a Flexi-Switch enabled device. Holding the Activate footswitch does not enable momentary control. Instead, holding the Activate footswitch for more than 2 seconds will toggle between Live and Preset Modes. See the “Presets” section for more information.

Stretch Footswitch

Use the Stretch footswitch to slow down the entire digital system of Towers. As a result, the reverb length is doubled, the spectrum of frequencies is altered, and a pitch-bending effect can be heard throughout the morphing process.

- Tap the Stretch footswitch for an immediate change.
- Hold the Stretch footswitch for a morphing effect.

Adjusting Stretch Speed

The speed of the morphing effect created by holding the Stretch footswitch can be adjusted by following these steps:

1. Hold down the Stretch footswitch.
2. Turn the Length control clockwise for a longer pitch bend or counterclockwise for a shorter pitch bend.
3. Release the Stretch footswitch once you have selected your desired length.

4. The Stretch footswitch will now operate at the selected speed every time Towers is powered on.

Towers is factory-programmed with the Stretch speed corresponding to the center position of the Length rotary knob.

Expression Jack

Towers has a user-assignable expression control (EXP). Use any TRS expression pedal to take control over the Filter, Length, Frequency or Mix panel controls. Towers ships with the expression pedal mapped to the Filter control, but it can also be mapped to the Length, Frequency, or Mix controls. Follow these steps to reassign the EXP functionality:

1. Insert the expression pedal plug into the EXP jack.
2. Place the expression pedal in the toe down position and leave it there.
3. Turn the panel control on Towers you wish to assign to the EXP jack, then put the expression pedal in the heel-down position.
4. This control is now assigned to the expression pedal.

Leave the expression pedal plugged in and repeat steps 2-4 to reassign the EXP jack to another control at any time. If you turn the panel control that is assigned to the EXP jack while the expression pedal is plugged in, the panel control will override the expression pedal setting. The expression pedal will reassume control the next time it is used.

Different EXP assignments can be saved in each preset. You can also use Control Voltage with the EXP Jack. The CV range is 0 – 3.3v.

EXP Jack Internal Connections

- Tip = Wiper (CV)
- Ring = 3.3V
- Sleeve = Ground

Presets

Towers operates between two different modes: Live or Preset.

It comes with 8 empty preset slots that can be edited or completely overwritten at any time for your enjoyment. The settings for Length, Frequency, Filter and Mix as well as EXP assignment and Stretch length can all be stored and recalled in any of the slots.

Live Mode

Live Mode is the standard mode of operation that Towers ships in and is indicated by a green or red Activate LED depending on the bypass state. Towers will operate manually in this mode, and all controls will visually indicate the current settings.

Preset Mode

In Preset Mode, Towers will use one of the 8 presets selected by the Preset rotary switch. This mode is indicated by a yellow Activate LED. The panel controls will no longer operate as visually set, and instead, Towers will use the stored control settings for each selected preset position. If a control change is made while in Preset Mode, the Activate LED will begin to flash. You can easily save this change by holding down both footswitches until both LEDs flash 4 times, indicating that the change has been saved.

Presets can be stored and overwritten in both Live and Preset Modes. To edit an existing preset, you must first be in Preset Mode before making the desired changes. There is no undo for preset saving, so make sure you are not overwriting your favorite sound, especially when you are saving presets from Live Mode!

Accessing a Preset

1. Turn the Preset rotary switch to the desired selection.
2. Hold down the Activate footswitch for 2 seconds.
3. The Activate LED will turn yellow, indicating you are now in Preset Mode.
4. Once in Preset Mode, you can turn the Preset rotary switch to access any of the 8 stored presets.

Saving a Preset

1. In either Live or Preset Mode, turn the Preset rotary switch to the desired location you wish to save your preset.
2. Dial in the settings you want to save. EXP assignment and Stretch length can also be saved!
3. Hold down both footswitches until both LEDs flash 4 times, then release.
4. Your preset is now saved!

Editing and Overwriting a Preset

1. Once in Preset Mode, make the desired changes to any of the controls in the selected preset. Any controls that have not been changed will remain as previously saved.

2. The Activate LED will flash Yellow indicating a change has been made to the stored preset.
3. Hold down both footswitches until both LEDs flash 4 times, then release.
4. The Activate LED will return to static Yellow, and the previous preset has been overwritten.

Returning to Live Mode

1. While in Preset Mode, hold down the Activate footswitch for 2 seconds.
2. The Activate LED will flash then return to the color selected by the bypass state indicating you are now in Live Mode.
3. Once in Live Mode, Towers will return to where the panel controls are set.

Factory Reset

If you would like to erase all your saved settings and presets and return Towers back to its natural factory shipped state, you can do a Factory Reset. Please keep in mind that once the pedal has been reset, you will erase all your saved information, and it can no longer be recalled!

If you would like to return Towers to the factory settings, follow these steps:

1. Unplug the power cable.
2. Hold down both footswitches.
3. Insert the power cable.
4. Both LEDs will flash 3 times then release both footswitches.
5. Towers has now returned to the factory settings.

Stereo/Mono Operation

Towers can operate in full stereo mode using both left and right inputs and outputs. It can be used mono in and stereo out by plugging into the left input and running out of both left and right outputs. It can also be used as a classic mono effect by using only the left input and output.

Power Requirements

- **Current Draw:** 85 mA

This device takes a standard 9-volt DC power supply with a 2.1mm negative center barrel. We always recommend pedal-specific, transformer-isolated wall-wart power supplies or multiple isolated-output supplies. Pedals will make extra noise if there is ripple or unclean power. Switching-type power supplies, daisy chains and non-pedal specific power supplies do not filter dirty power as well and let through unwanted noise. **DO NOT RUN AT HIGHER VOLTAGES!**

Tech Specs

- **Input Impedance:** 500 k Ω
- **Output Impedance:** 100 Ω