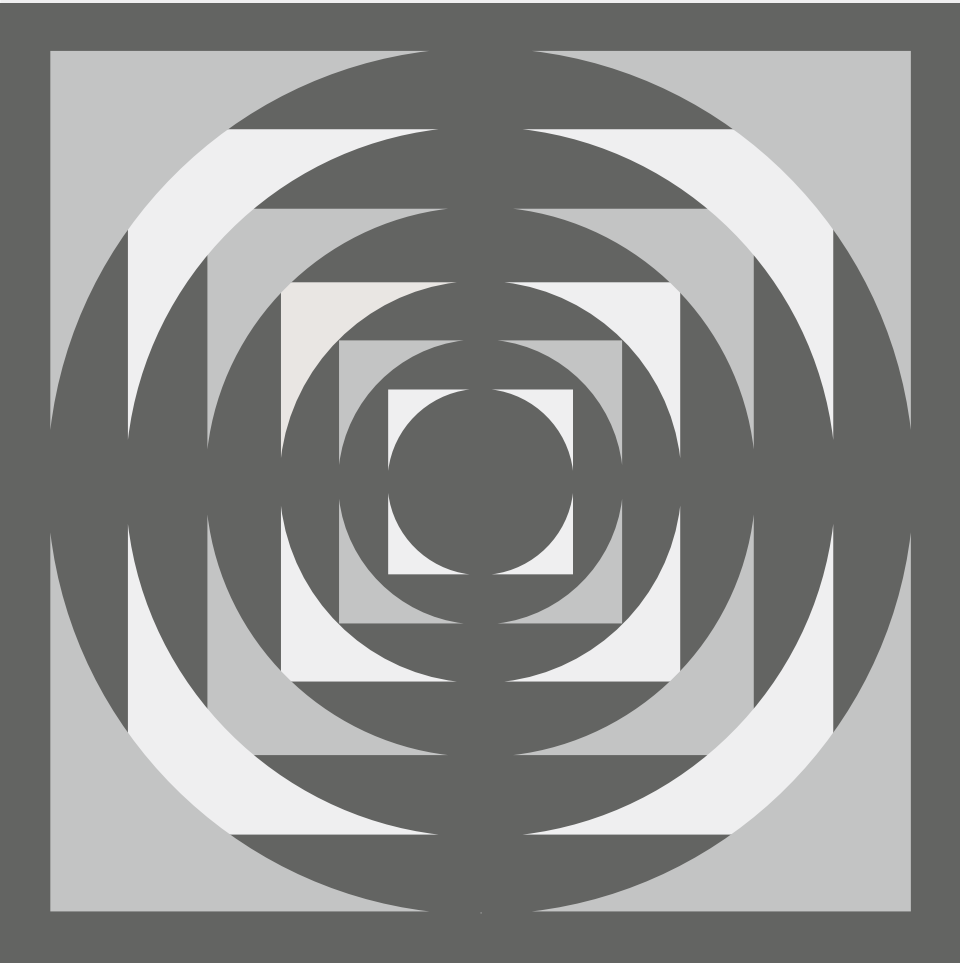
CBA+EAE ref 2026 – BT001

chase bliss

A field guide to

# Big Time



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# Foreword

Big Time is a strange entanglement of analog and digital circuit blocks. I don't think it could have come from either of us on our own.

The story begins in 2019. I met Knobs and we talked about digital delays — specifically the older ones that are a bit strange around the edges.

*The thesis goes like this*:
Until fairly recently, every medium that could hold onto a bit of audio had some limitation. Overcoming these limitations required techniques which in turn imparted their own character. More than the delay element itself, the sounds are shaped by how filtering, compression, and carefully tailored preamps evolve feedback loops over time.

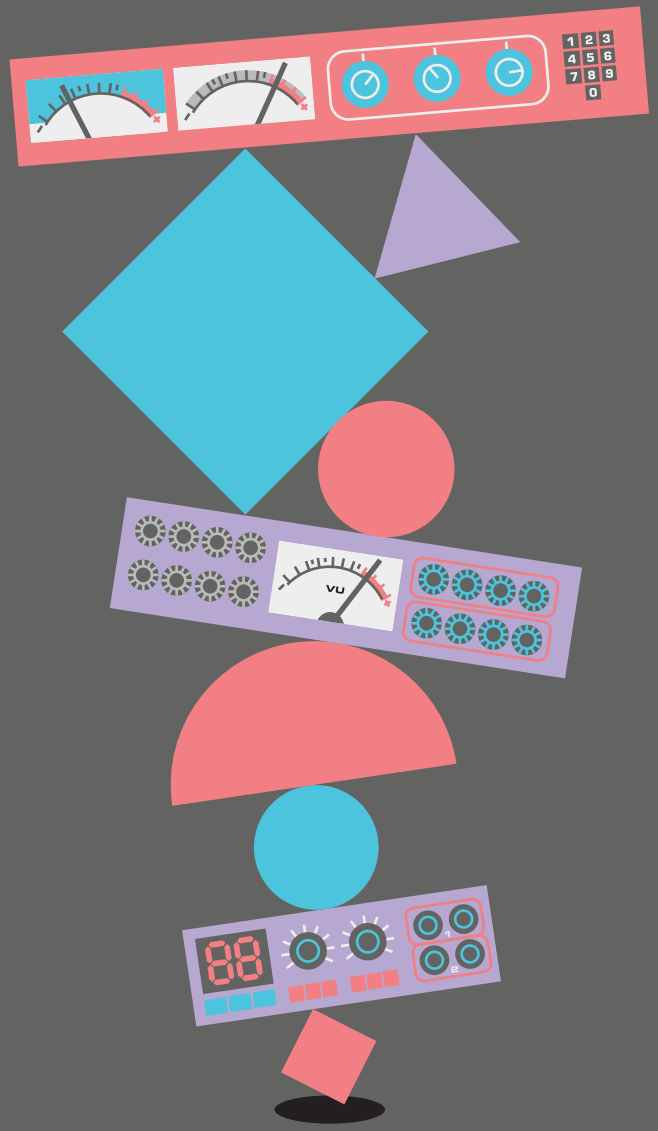
Some time later, I helped Joel and co with an esoteric, last-minute circuit problem. He's a very nice fella, so we kept in touch. Not long after that, my good friend Charlie joined Chase Bliss as an engineer. Collaboration started to feel inevitable.

Project ideas were kicked around casually at first, then as a series of increasingly ambitious What Ifs until Joel threw down the gauntlet by giving Charlie and me virtually endless creative freedom.

While making Big Time, we broke some rules. We took the long way around to see what new things would emerge in the process. Drawing from my previous work, I contributed saturation techniques that we wove in tightly with digitally-enhanced control. The processor in Big Time delays and diffuses audio while also dynamically adjusting the surrounding analog circuitry in response to that same audio. Where the digital brain and analog heart were previously detached, there's now a strange loop of causality. The outcome is something more expansive and ambitious than any EAE pedal, and more wild and dangerous than any Chase Bliss pedal.

Big Time is very hard to explain, but very easy to get lost in. You'll see what I mean. Thanks for being along for the ride.

-John Snyder
*founder of Electronic Audio Experiments*



## Overview

Welcome to your absolute whopper of a new pedal.

### Big Time is an exploration of the mixed-up circuitry found in rackmount delays from the early 80s.

A handful of highly coveted and mythical echoes emerged from this era, and what makes them so special is that they did everything the hard way. Digital technology was in its infancy and – while it made all kinds of new and *very fun* things possible – it was also kinda bad. It needed help. So analog circuitry made up the difference – instead of digital or analog, you got both.

Big Time arduously replicates the circuit design found in these early delays, but leans *allllll* the way into the hybrid possibilities, taking the digital/analog teamwork beyond a practical necessity and testing how far it can go.

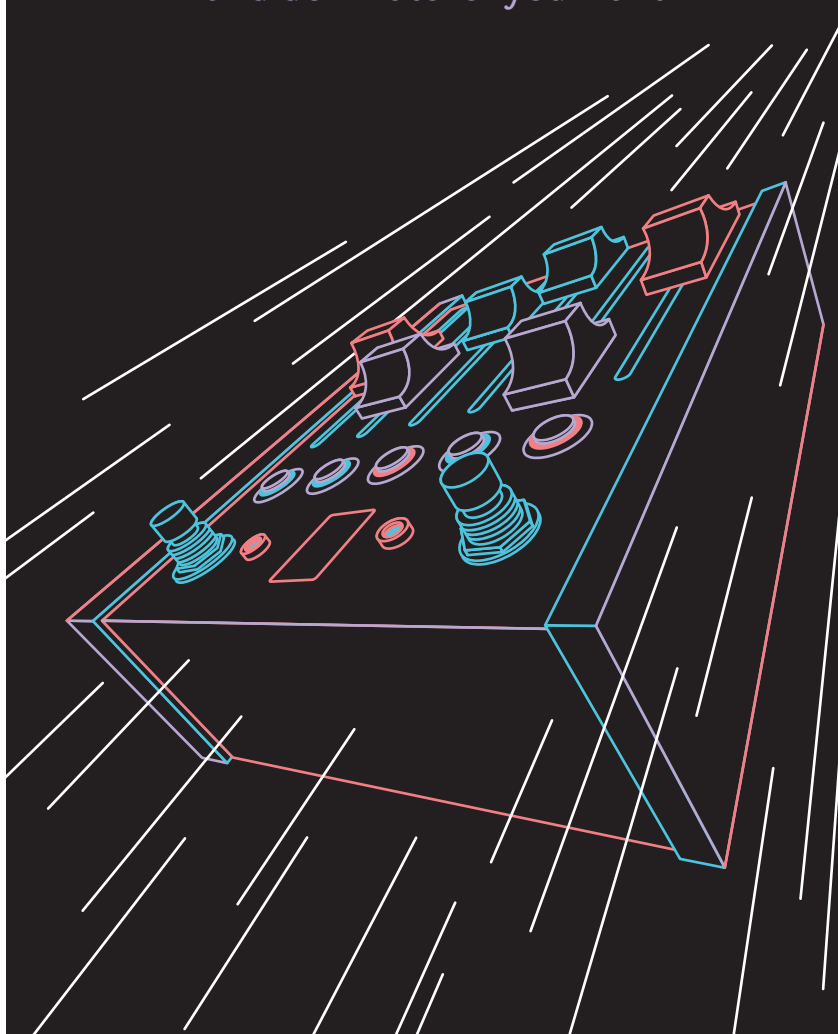
It has two separate sources of analog coloration: an analog preamp at the front of the circuit, and a clipping limiter within the feedback loop.

In our opinion, it's the best of everything:

- The *anything-is-possible* of digital
- The *everything-sounds-good* of analog



Big Time is our foolish return to doing things the hard way, so that you can sound very good, and do whatever you want.



# Setup

Let's get connected.

## POWER

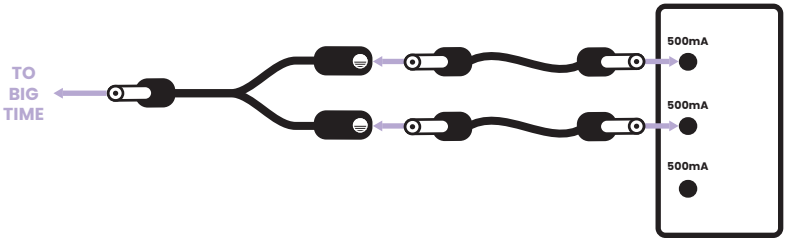
Big Time requires big power.

9V DC

It needs 9V DC, center negative power with 1A of current. Voltage higher than 9V risks damaging your pedal.

We recommend using one of the two included power solutions:

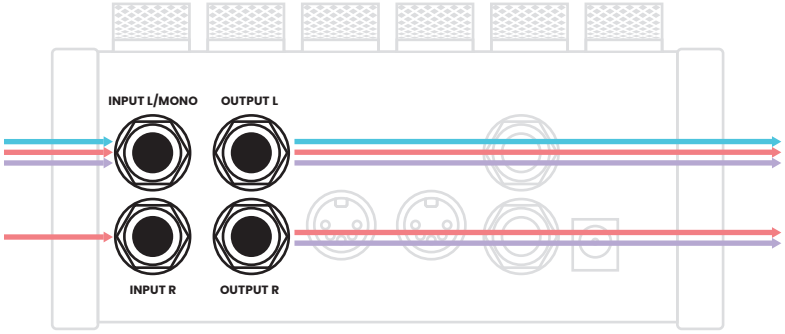
A simple high-amperage center negative 9 volt power brick – just plug it in.




A current-doubling merger cable so you can use Big Time with your existing power supply. Plug the single end into Big Time and each of the Y-plugs into a 500mA output on your power supply.

## I / O

Big Time can be used in mono, stereo, or mono to stereo, with either balanced or unbalanced signals (pg. 40).




- **MONO**
  Use the **IN L / MONO** input, and **OUT L** output.
- **STEREO**
  Use all four inputs and outputs.
- **MISO (Mono In, Stereo Out)**
  Use the **IN L / MONO** input, and both outputs (MISO will engage automatically).

Big Time is a true stereo device. You have three options for how stereo processing works, configured by **SPREAD** (pg. 19).

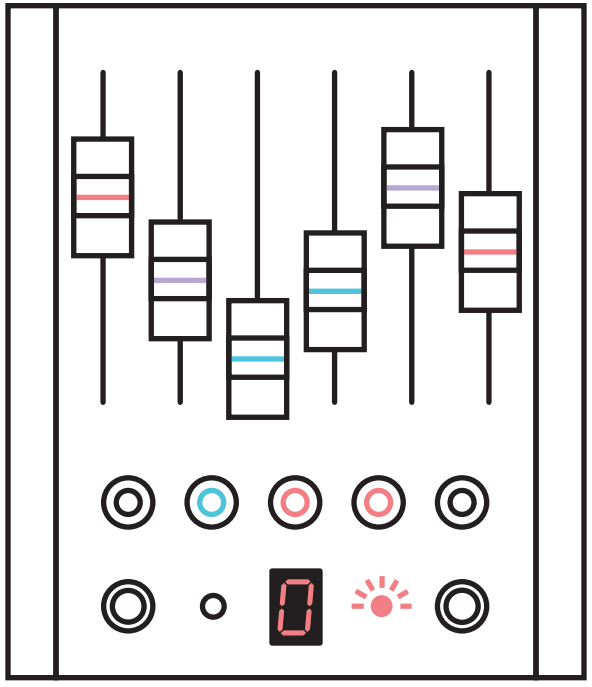
## OPTIONS

Big Time has a number of ways to customize your experience for different setups and creative preferences. It ships in a nice "default" state, but you can skip ahead to the Options Menu (pg. 40) if you need to go a little deeper.

*Okay, time to go.*

## Welcome to the Big Time.

When you first power up Big Time it will load preset 0. You will see this.



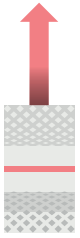
A nice starting point for some good ol' delay.

Each of Big Time's presets explores a different part of its personality, and wandering through them is a good way to get a sampling of what's possible, and how to do it.

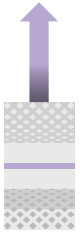
*But let's stay here and start to explore.*

Switch over to the %&#$ state to engage the limiter and misbias the repeats.

Turn up CLUSTER to introduce additional taps and spread out.



Max out COLOR to drive the preamp and saturate your instrument.



Max out FEEDBACK to make it last forever.

You should now have a big, sizzling wash of slow-moving atmosphere that reacts to your playing.

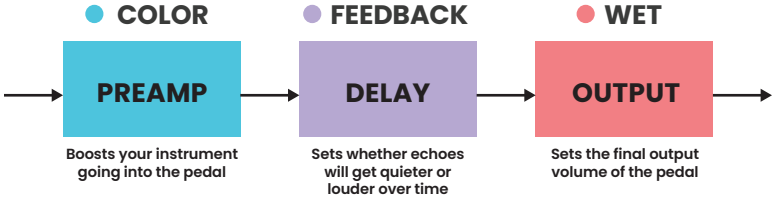
Let's talk about why that happened. →

# Big Time 101

Big Time replicates the hybrid signal flow of rackmount delays from the early 80s, where analog circuitry was used to make up for the shortcomings of crude digital systems.

It includes both an analog preamp at the input stage,
and an analog limiter within the delay's feedback loop.

It's all about loudness, which is controlled by three interconnected faders:



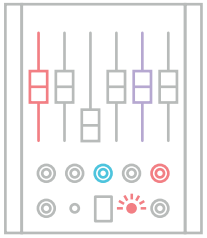

What makes Big Time unique is the limiter. It lives inside of Big Time's delay line, and it waits for something to get loud. When **COLOR** or **FEEDBACK** (or both) are turned up, your signal will begin to bump into it.


The higher the gain, the more influence the limiter will have.

With each repeat, your digital echoes take on a bit more analog character as they collide with the limiter. How this sounds – and what the limiter is set to do – depends on the **STATE** button.



Try this out to start putting these ideas to use and exploring the ways **FEEDBACK** and **COLOR** interact.




Listen to the difference between **FEEDBACK** halfway up, and then at max. If **FEEDBACK** is too high the echoes will crash violently into the limiter and become immediately distorted; too low and they won't come into contact with the limiter at all. **FEEDBACK** not only controls the number of repeats, but also how they change over time.

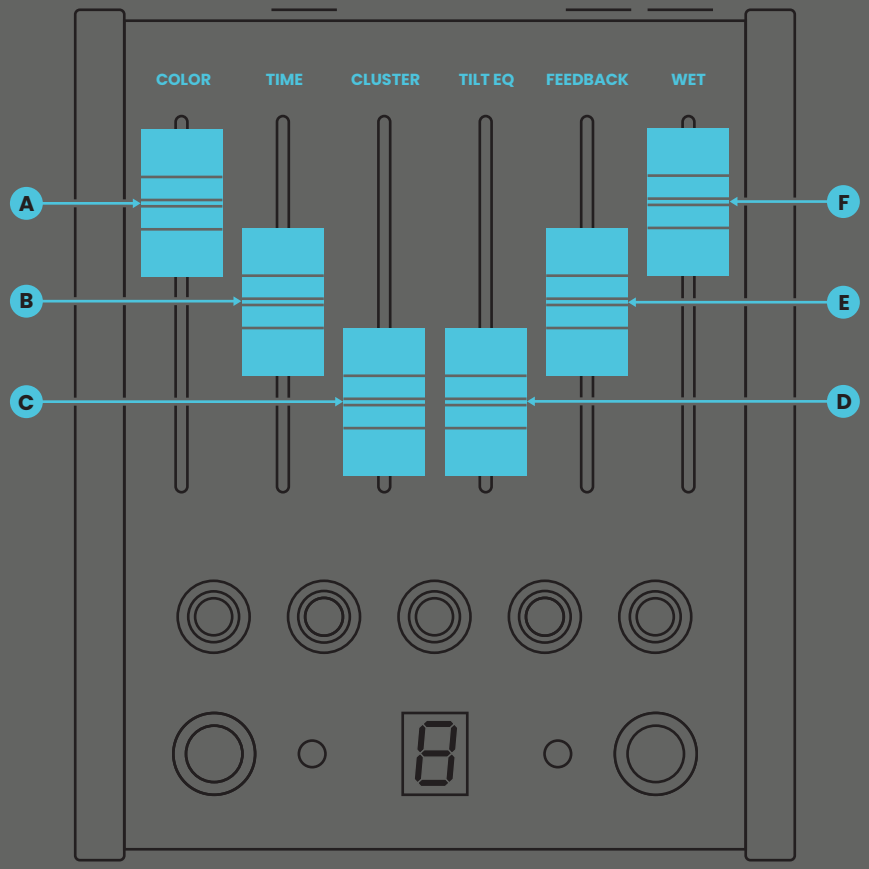

Now start to adjust **COLOR** and notice how this changes the balance. If **FEEDBACK** is higher than **COLOR** your echoes will grow over time and overpower the input – useful for big, evolving drones – but if **COLOR** is higher you can overwhelm even the wildest oscillations with your playing.

It's all interconnected, and the preamp will also impart its own saturation at the input stage when **COLOR** is turned up. **The result is a big, swirling, ever-changing mass of saturated space.**

**Consider this a starting point as you explore the pedal and this guide:**

**If ever you are getting too much or not enough, adjust the gain and Big Time will spark to life (or settle down).**

# Controls - Faders




**A** **COLOR**

Controls the gain of the preamp. As **COLOR** is turned up, two things will happen:

1. The preamp will start to saturate.
2. The limiter's effects will intensify (instantly).

**B** **TIME**

Adjusts the delay time. **TIME** is a clock control that interacts with both **MODE** and **SCALE**. **MODE** sets the overall range, and **SCALE** decides whether the time changes smoothly or in musical steps.

**TIME** will snap to the middle position when tap tempo is used or a loop is deleted. This lets you speed up or slow down by equal amounts, and find the original speed easily.

**C** **CLUSTER**

Gradually blends in additional delay taps and diffusion.

**D** **TILT EQ**

Splits the frequency spectrum in half and lets you cut either side: push up to cut lows, bring down to cut highs. Use the **CROSSOVER** alt control to set the middle point. At noon the **TILT EQ** will have no effect.

**E** **FEEDBACK**

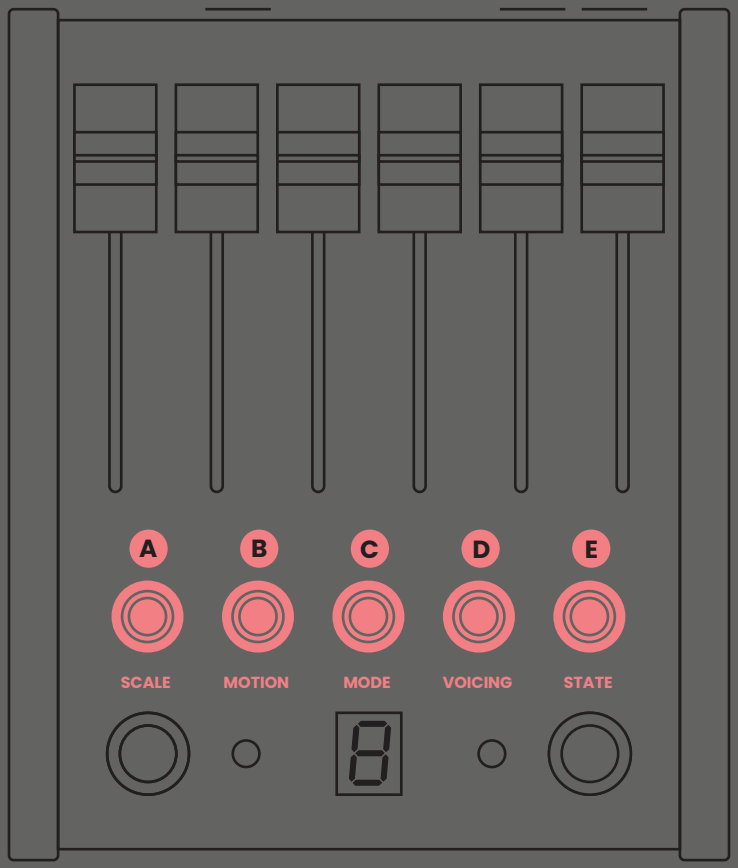
Controls the gain of the feedback loop. As **FEEDBACK** is turned up, two things will happen:

1. You will get more repeats.
2. The limiter's effects will intensify (over time).

**F** **WET**

Sets the output loudness of the effect.

## Controls - Buttons




**A** **SCALE**

Sets how both **TIME** and **MOTION** respond – either smoothly or in tuned steps.

**MOTION** can be set to ignore **SCALE** in the Options Menu (pg. 41).

**B** **MOTION**

Turns on modulation and selects the type. The movement can be adjusted using the **DEPTH** and **RATE** alt controls. To automatically reset the movement to a nice starting point, hold **MOTION** for two seconds.

**C** **MODE**

Selects the range of the delay and behavior of the footswitches.

You can also use **MODE** to quickly clear your settings and start fresh. Hold **MODE** for two seconds to reset to a simple delay.

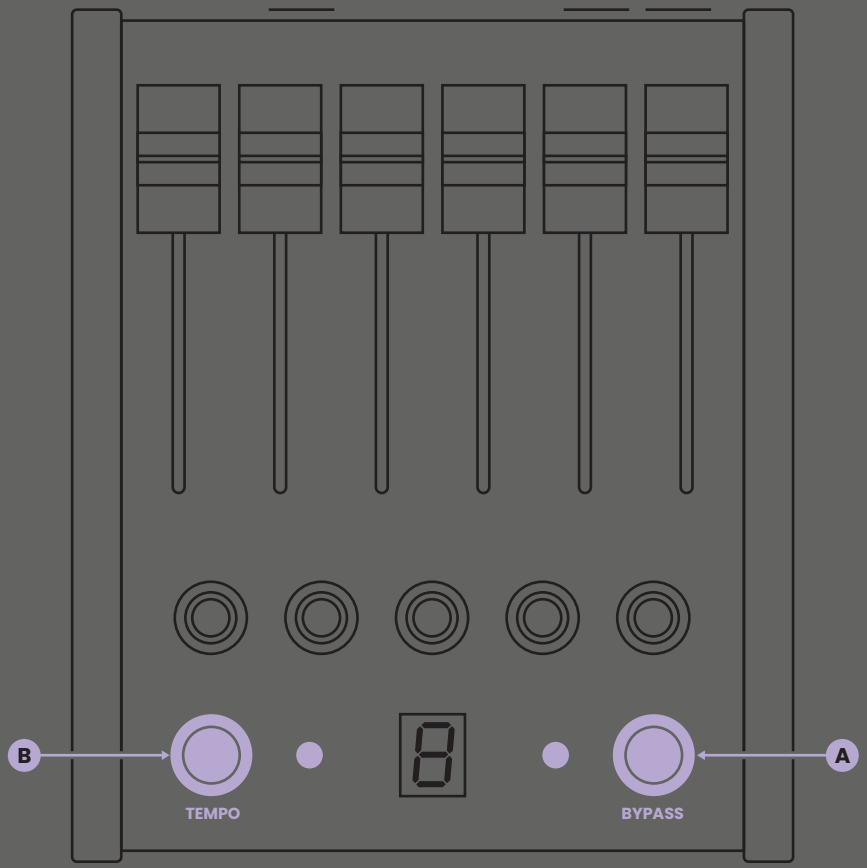
**D** **VOICING**

Selects the core tone of the device. **VOICING** is independent of the **TILT EQ** and instead cycles through different fixed filter arrangements to give Big Time its base character.

**E** **STATE**

Sets the role of the limiter, and as a result the overall sound and response of Big Time. Each state has its own unique parameter adjusted by the **TEXTURE** alt control.

# Controls – Footswitches




The behavior of Big Time's footswitches varies by **MODE**.

**A** TAP

## TAP RIGHT

**BYPASS** – Turns the effect on/off.

**STOP** – Stops and resets the loop.
A second tap will resume playback.

**A** HOLD

## HOLD RIGHT

**HOLD** – Loops and preserves the current sound infinitely. You can play overtop without being recorded.

**DELETE** – Erases the current loop.

**OVERLOAD** – Ramps both **COLOR** and **FEEDBACK** up to the max (beware volume levels!).

**B** TAP

## TAP LEFT

**TAP TEMPO** – Tap twice to manually set the delay time and range.

**RECORD/PLAY** – Controls recording and playback of loops; alternates between overdub and playback once a loop is recorded.

**MOTION TOGGLE** – Turns the selected **MOTION** mode on/off.

**B** HOLD

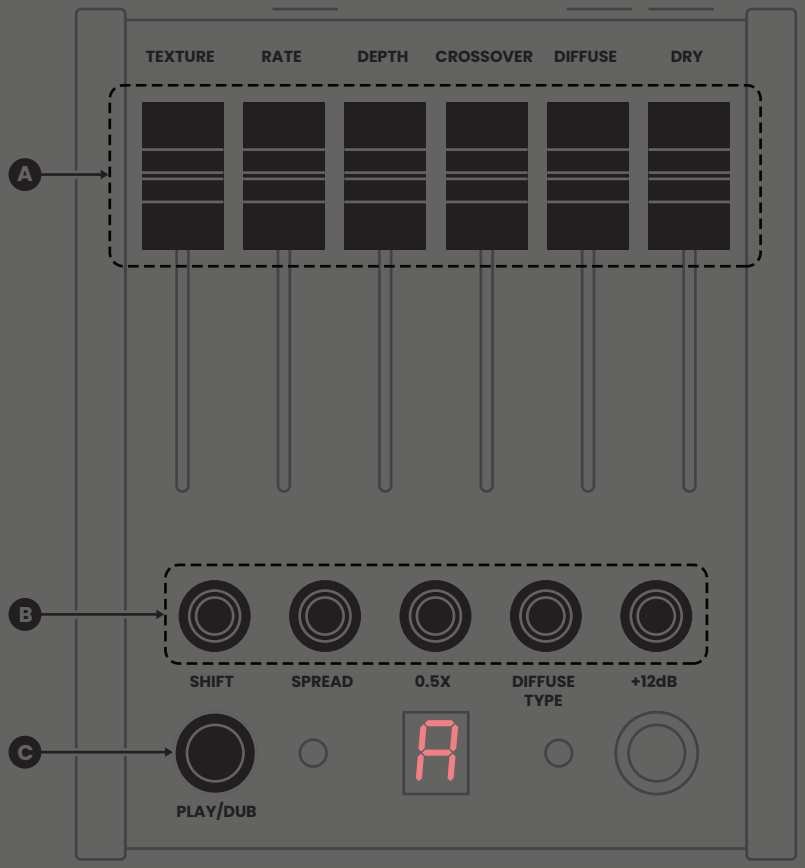
## HOLD LEFT

**PRESETS** – Enters/exits the preset menu.

Tap tempo is like a variant of the **SHORT/LONG** delay modes with its own unique range. The **TIME** fader will snap to the center position when tap tempo is used so you can adjust the speed freely and easily return to the tapped tempo. You will also notice the **MODE** button go dim – press it to turn tap tempo off.

# Alt Controls

Hold the **SHIFT** button to access the Alt Menu. The faders will jump to their alt settings.




The display will blink "**A**" to indicate that you are in the Alt Menu.



## A ALT CONTROLS - FADERS

### TEXTURE
Controls a unique characteristic for each **STATE**.

### RATE
Sets the speed of **MOTION**. When **ENV** or **STEP** is selected, **RATE** will control the **GLIDE** time.

### DEPTH
Sets the range of **MOTION**. When a scale is selected **DEPTH** selects the harmonic interval.

### CROSSOVER
Selects where the frequency spectrum is split on the **TILT EQ**.

### DIFFUSE
Gradually introduces diffusion, causing echoes to smear and dissolve.

### DRY
Sets the output loudness of the dry signal.

## B ALT CONTROLS - BUTTONS

### SHIFT
Hold to enter the Alt Menu.

### SPREAD
Engages stereo processing.

- Offsets both **CLUSTER** and **MOTION** for subtle widening.
- Engages ping-pong delay for wide, panning echoes.

### 0.5X
Lowers the bit depth from 32 to 12 and cuts the sample rate in half, replicating the digital sound quality of early 80s rackmount delays.

### DIFFUSE TYPE
Doubles the strength of the **DIFFUSE** alt control.

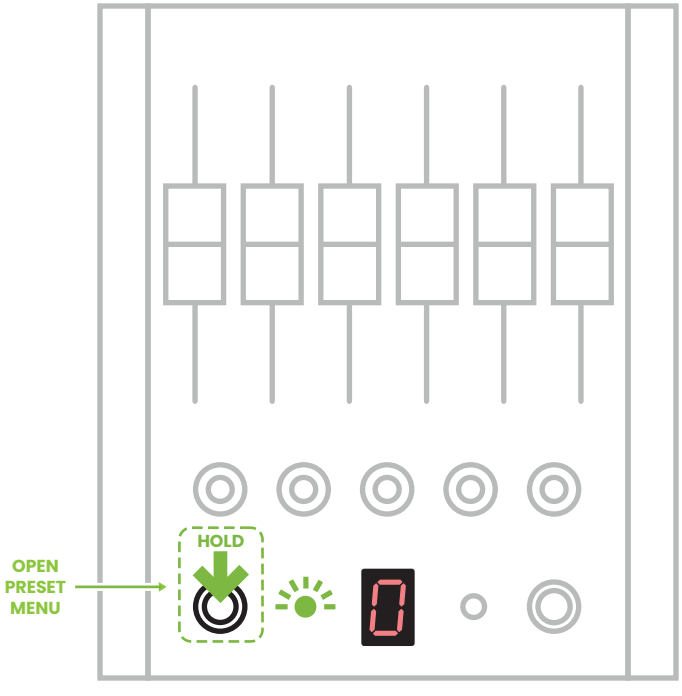
### +12dB
Bumps up the preamp gain, useful for quieter input signals or if you want more blown-out effects.

## C ALT CONTROLS - FOOTSWITCH

### PLAY/DUB
In Loop Mode, decides what Big Time will do once you've recorded the initial loop.

- Go into playback.
- Go straight to overdubbing.

# Presets

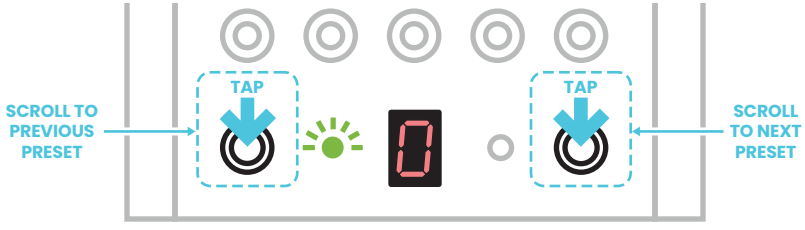



Big Time lets you store and recall ten internal presets.

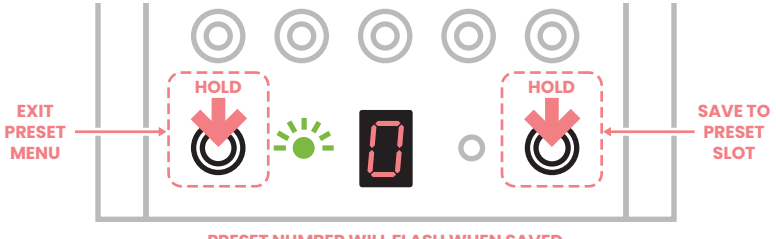
To access the Preset Menu, hold the left footswitch. The LED will turn green to let you know you're there.

You can also use MIDI to save up to 127 presets.

This is how you get around:




Big Time will automatically and instantly load your presets as you scroll through the various slots.

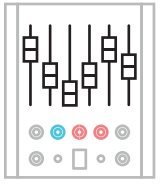



PRESET NUMBER WILL FLASH WHEN SAVED,
AND BIG TIME WILL EXIT THE PRESET MENU.

You can access the Preset Menu in all of Big Time's modes via the same footswitch gesture. Try using it as a performance tool to warp between different settings.

**SAVE TO -** If you want to save your current settings to a different slot, hold the **SHIFT** button and then scroll to your preferred slot. With **SHIFT** held down you can scroll freely without auto-loading the other presets. Release shift and hold the right footswitch as usual to save.

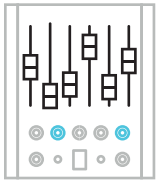
# Factory Presets



### 0. NICE DELAY

A good ol' echo with a bit of modulation, long trails, and the preamp set on the edge of breakup.

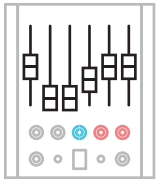
*Use this as a starter for making simple delays.*



### 1. COMPRESSED CHORUS

Smooth modulation with a dreamy character, compressed to bring out the details.

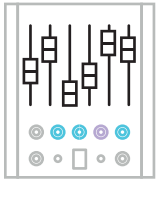
*Use this as a starter for making classic modulation.*



### 2. SLAP/DOUBLE

A big, burly expander with two stages of clipping and room-like ambience.

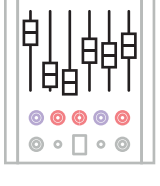
*Use this as a starter for doubling and almost-real-time textures.*



### 3. SAGGING ECHOES

Immersive echoes with long, compressed trails that react to your playing.

*Use this as a starter for dynamic delays.*

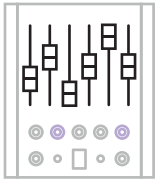


### 4. BOUNCY THERMAE

An upbeat echo sequencer reminiscent of an old friend.

*Use this as a starter for exploring sequencing.*

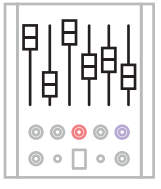




### 5. BROKEN DYNAFLANGE

A starved flanger that fills the gaps between your notes with dynamic oscillations that react to your instrument's loudness.

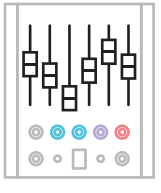
*Use this as a starter for making unorthodox modulation.*



### 6. CLUSTER$%&!

A misbiased wash of swirling clusters – start with sparse playing and see where it takes you.

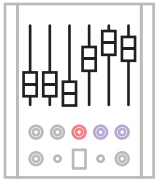
*Use this as a starter for exploring strange ambience.*



### 7. CRUSHED ANALOG

A murky, modulated, and saturated delay.

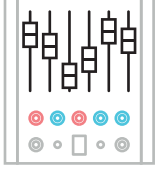
*Use this as a starter for making vintage echoes.*



### 8. NOSTALGIC REPEATER

A cozy looping delay that crumbles and quivers, with no dry signal.

*Use this as a starter for malfunctioning echoes and Frippertronics looping.*



### 9. LOOP DIFFUSER

A slowly dissolving delay with infinite feedback – play a few notes, sit back, and see what happens.

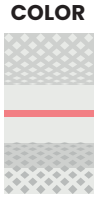
*Use this as a starter for musical drones and slow-building atmosphere.*

You can return to the factory preset for any slot by holding the **MOTION** and **VOICING** buttons while in the Preset Menu. This will work even if you've already saved over the preset.

## Color and Preamp

The first stage of Big Time is a stereo, analog preamp.

Both the wet and dry signals are amplified by default, but the dry signal can bypass the preamp if you prefer (pg. 41).




The gain of the preamp is set by the **COLOR** fader.


And there's a **12dB+** boost in the alt controls if you need to go further.

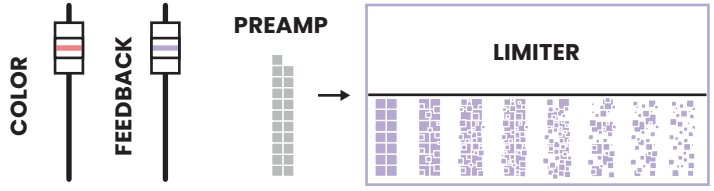
The **COLOR** fader does two important things at the same time:

1. **It overdrives the input signal**
2. **It sets the input gain to the delay line**

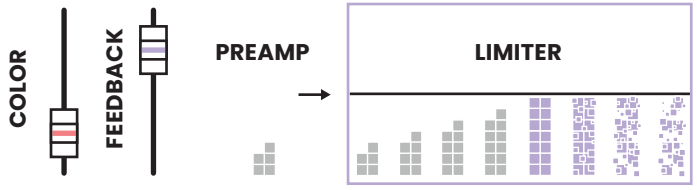
**PREAMP MODE** - To isolate the preamp and use it on its own, without any echoes or spatial effects, simply turn the **WET** slider all the way down. You have a stereo, analog preamp now. Note that only the **COLOR**, **DRY**, and **+12db** controls will do anything in this state.

Let's talk about why the input gain to the delay matters.

**COLOR** sets the loudness of the signal ***before*** it enters the delay line, **FEEDBACK** sets the loudness of the signal ***within*** the delay line. You can get a whole bunch of different results depending on how you balance these forces.




If **COLOR** starts high, your echoes will bonk into the limiter immediately. The loudness of your first echo and the "maximum loudness" are similar, because the signal was boosted at the start.




But if **COLOR** is low – and **FEEDBACK** is high – your echoes will instead gradually climb towards that point. With each repeat things get a bit louder, until eventually the echoes encounter the limiter and begin to transform and settle into a "maximum loudness."

The second scenario above can be great because it's where you find the most change over time – echoes that slowly saturate, oscillate, and crumble. *It can also be real loud and scary if you're not expecting it.* There's a huge gap between the input loudness, and the point where the limiter wrangles the echoes.

Be mindful of this as you set the **WET** level, and enjoy the ride.

# Modes

This is where you decide what you want to do.

The **MODE** button sets both the range of the delay and the role of the footswitches, priming Big Time for different possibilities.

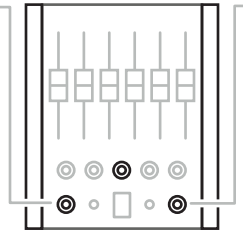
## MOD (3 – 46 ms)

Mod gives you fine control over a narrow range of very short delay times. It's useful for creating modulation, resonators, and doubling effects.

Turn on MOTION

Crank FEEDBACK

Footswitch gestures:



**TAP LEFT**
Tapping the left footswitch in Mod toggles your selected **MOTION** on/off, useful for turning the movement into a performative effect.

**HOLD RIGHT**
Ramps both **COLOR** and **FEEDBACK** up to the max (beware volume levels!).

Load up Preset 1 to get some nice starter settings for creating modulation on Big Time.



**SHORT + LONG**
Both of these modes share the same footswitch gestures, the only difference is the range of their delay times.

## SHORT (46 – 736 ms)

This is where you'll find what you typically expect from a delay pedal, a nice balanced range of delay times for everything from slapback to multi-tap.

Turn up CLUSTER

Set TIME very low

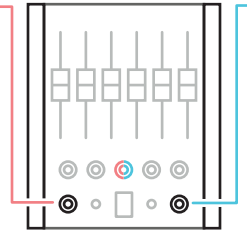
Max out **TIME** to underclock Big Time and introduce just a touch of crispy aliasing.

## LONG (736ms – 12.2 s)

Long is a playground for ambience and composition, useful for slow-building performances and atmosphere.

Turn up **DIFFUSION** and **CLUSTER** to explore some long-form ambient haze (changing **STATE** to Saturated won't hurt either).

Footswitch gestures:



**TAP LEFT**
Tap twice to manually set the delay time. The **TIME** knob will snap to the center position so you can speed up or slow down, and easily return to the tapped tempo. Press **MODE** to turn tap tempo off.

**HOLD RIGHT**
Loops and preserves the current sound infinitely. You can play overtop without being recorded.

## LOOP (VARIABLE LENGTH)

**Loop mode turns Big Time into a phrase looper with a distinct set of footswitch gestures.** All of the buttons and faders otherwise work the same, the only difference is that you can use the footswitches to decide how and when sound is recorded.

**Big Time will automatically carry over the audio from Long mode when you first enter Loop mode, so that you can turn your echoes into loops and move freely between modes without suddenly encountering silence.**

So let's start by clearing that out. Hold the right footswitch to delete the loop and start fresh.



Tap the left footswitch once to start recording, and a second time to set the end point.

At this point your recording will start looping. Now, tap the left footswitch to alternate between overdubbing and playback.

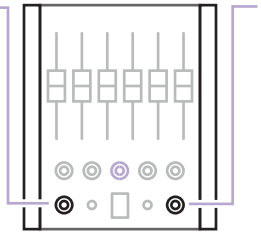
When overdubbing, all of the pedal's controls are active and will influence the loop – if **CLUSTER** is turned up, your loops will gradually scatter; if **FEEDBACK** is turned down, your loops will fade away.

When in playback, the loop will be "frozen" and will not change or deteriorate, regardless of how you change the controls – you will still hear the influence of these changes, but they won't be recorded.

To ensure the loop doesn't degrade or change while in playback, Big Time switches over to digital feedback behind the scenes. This means changing **STATE** or adjusting **TEXTURE** will not be heard until you start overdubbing again.

Footswitch gestures:

**TAP LEFT**
Tap once to start recording, and again to begin looping. Once looping, tap to alternate between overdub and playback; from stopped, tap to resume playback.



**TAP RIGHT**
Stops and resets the loop. A second tap resumes playback.

**HOLD RIGHT**
Deletes your loop and starts fresh.

Max loop length will vary depending on the position of the **TIME** fader. After clearing a loop **TIME** will snap to the middle position, which gives you 48 seconds of loop time at roughly 44kHz. You can push the fader up to lower the resolution and record longer loops (a max of 3.2 minutes at roughly 11kHz) or lower it to increase the resolution at the expense of loop length (a max length of 12 seconds at roughly 172kHz with **TIME** at minimum).

For stable, "traditional" looping use the Digital state. Every other state is designed to change and disintegrate over time.

When first recording a loop, Big Time can either go into playback (default) or directly into overdubbing. Set this up in the Alt Menu (pg. 19).

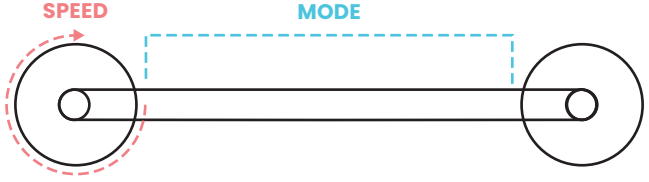
# Time and Scales

**TIME** is a clock control.

It adjusts the delay time of your echoes, but also lets you tap into some interesting abilities when combined with **SCALE**.

To understand the relationship between **MODE** and **TIME**, think of a tape loop:

- **MODE** sets the length of the tape.
- **TIME** sets the speed of the motor.

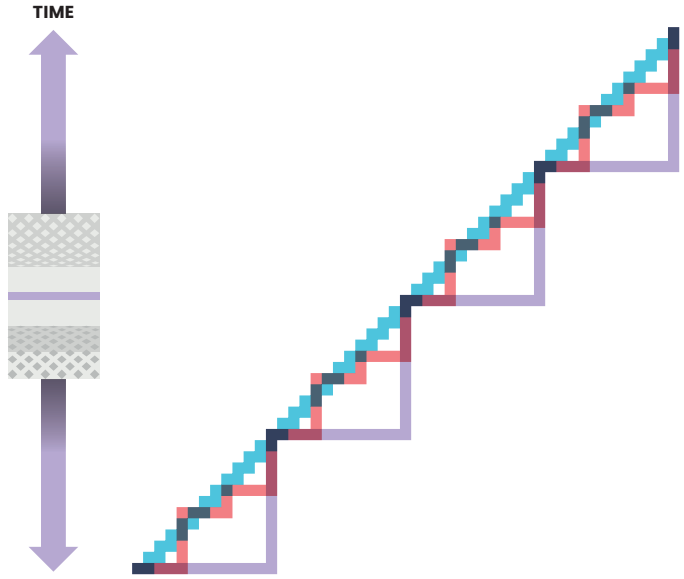



SCALE

**TIME** works just like any other delay when **SCALE** is off. It smoothly adjusts the playback speed, changing the delay time and detuning your echoes.


But once a scale is selected we get something a little different. Now, **TIME** moves in steps that are tuned to precise musical intervals – any audio in the feedback loop will be sped up or slowed down just right to create harmonized pitch-shifting.

This is how the scales break down:




**CHROMATIC**

Moves in half steps to give you access to the full spectrum of possibilities. This means it can be dissonant, but useful for sound effects and precise transposition.

**OCT+4+5**

Sits in the middle, moving between selected intervals that are generally harmonious but can introduce a bit of tension as well, giving you movement similar to a chord progression.

**OCTAVE**

Moves in big jumps that let you instantly double or half the delay time. Simple, quick, and always musical.

You can use the scales to transpose your loops, subdivide tap tempo, and create bursts of pitch-shifting.

Or pair them with **MOTION** to create sequences.

# Motion

Movement can play a variety of roles within Big Time.

*You can build classic modulation from scratch,*
*or dynamically warp your echoes,*
*or create melodic sequences.*

**MOTION**

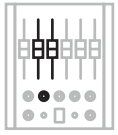
Use the **MOTION** button to turn it on and select the movement type.

The behavior of the movement is interactive with the **SCALE** setting.

**MOTION** can be set to ignore the selected scale if you prefer (pg. 41). This makes it possible to use scales on the **TIME** fader while retaining classic, smooth modulation.

**SCALE**

When **SCALE** is off you will get classic, bendy pitch modulation, useful for creating chorusing, flanging, and tape-style warble.



Use **DEPTH** to set the range.

Use **RATE** to set the speed.

- **SINE** - Smooth, classic modulation
- **SQUARE** - Choppy, atonal modulation
- **ENV** - Envelope-controlled time bends

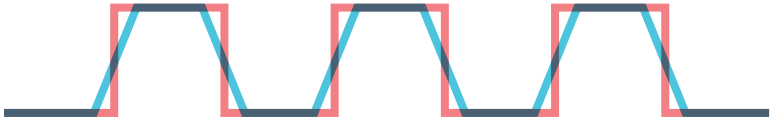
We designed **MOTION** to be quick and easy, so you don't have to spend all of your time in the Alt Menu. You can reset it to a nice, pleasing "default sound" at any time by simply holding the **MOTION** button for two seconds.

**SCALE**

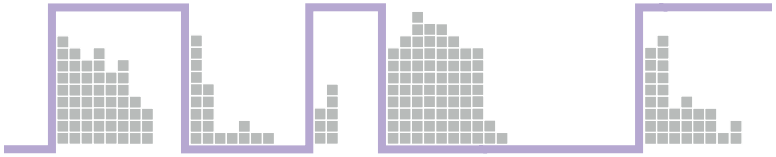
When **SCALE** is on, the movement will jump between harmonically-related delay times to create pitch-shifting.

**TIME** sets the starting delay time and **DEPTH** sets the shifted delay time. Big Time will then move back and forth between those spots.

- **SINE** - Step sequencing with adjustable glide.
  **RATE** - Glide time
- **SQUARE** - Step sequencing with adjustable rate.
  **RATE** - Sequence speed
- **ENV** - Envelope-controlled step sequencing.
  **RATE** - Glide time



Env is a bit unique. Instead of constantly responding to your signal, it instead waits for a transient or a distinct note, then moves the sequence forward. You can think of it like a version of Step (pg. 41) that is controlled by your playing.



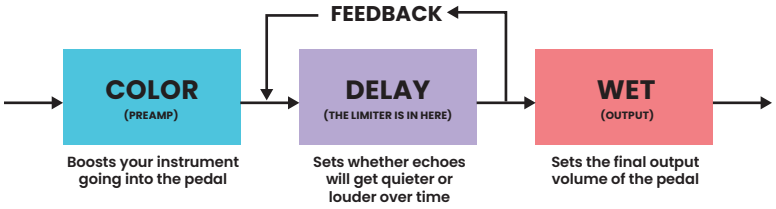
**FEEDBACK** **COLOR**

The envelope detection follows both the input and delay line. Turning up **COLOR** and/or **FEEDBACK** will make the envelope more sensitive, because the envelope also responds to your echoes.

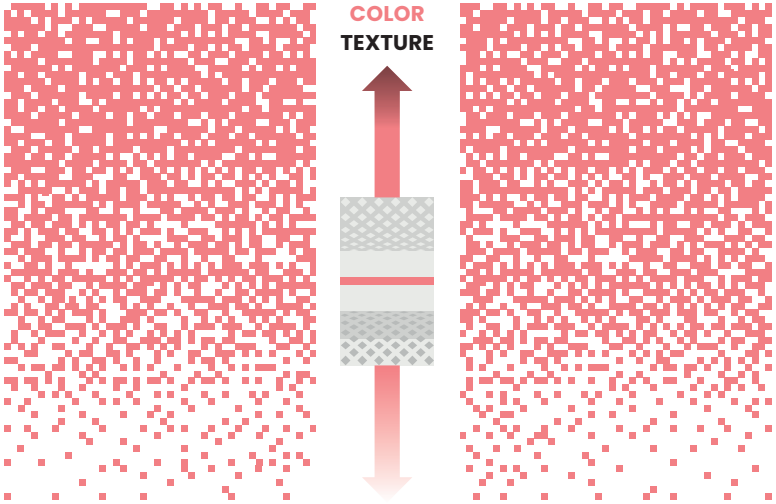
## State and Limiter

We covered the basics of Big Time's limiter back in 101 (pg. 10), so now let's talk about all the things it can do.

*A quick refresher:*
Big Time's limiter is inside of the delay line – each time an echo repeats it passes by the limiter, and if it's loud enough it will collide with it. The higher **FEEDBACK** and **COLOR** are set, the more impactful the collision and the more intense the effect.




You have four different states to choose from, and each one accesses a different part of the limiter's abilities. The **TEXTURE** alt control is how you adjust the character of each state.




**DIGITAL** - *No limiter.*

The Digital state removes the limiter from the circuit and uses a completely digital feedback path, useful when you want cleaner textures and stable, steady feedback (when looping, for example).

***TEXTURE** introduces aliasing and lowers the bit depth.*

**COMPRESSED** - *Clean compression and sag.*

The Compressed state is useful for echoes that change over time and react dynamically, while always remaining clean. Create snappy repeats with extra punch, or glitchy modulation that sags and falters, or endless trails that duck out of the way when you play.

***TEXTURE** sets the amount of compression, from a subtle squeeze to ducking sag.*

**SATURATED** - *Distortion and deterioration.*

You can think of Saturated as Big Time's default state. These were the sounds that started us on this journey: echoes that slowly disintegrate and expand into a big harmonic mass. Use it for colorful degradation, churning oscillation, and cutting ambience.

***TEXTURE** controls the symmetry of the clipping, becoming more ragged as it's turned up.*

**#!&%** - *Starving and mangling.*

The **&!$#** state sabotages and misbiases the limiter to see what it can do wrong. It has a raw, electric character that's useful for broken and obliterated sounds, lively soundscapes, and textural sound design.

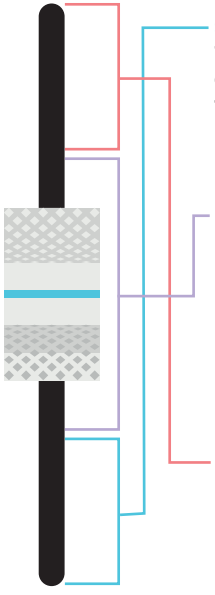
***TEXTURE** sets the sensitivity of the misbiasing.*

# Cluster

The **CLUSTER** fader gradually blends in additional delay taps that are subtly modulated. The function of these clusters and how they sound is a little different in each mode.

They can be used for spatial widening,
rhythmic multi-tap,
echo clouds, and more.

**CLUSTER**



**SYNCED MULTITAP**
The first 25% of the journey fades in one additional echo (two in stereo) that's synced to the delay time. This range of the sweep is useful for rhythmic multi-tap patterns and widening.

**SCATTERED AMBIENCE**
The middle of the sweep fades in a second echo, and then a third (for a total of six in stereo), that are disconnected from the delay time. Turn up **FEEDBACK** while in this range to replicate the behavior of early reverb units that would create ambience by recirculating echoes until they dissolved.

**DRIFTING DIFFUSION**
The final 25% of the sweep introduces a layer of modulated diffusion on top of the echo clusters. This range is useful for more immediate and hazy ambience.

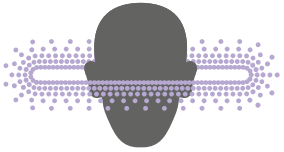
**CLUSTER** is also one of the ways Big Time generates a stereo image. Bump it up if your stereo field is feeling a little narrow (see pg. 19 for more on **SPREAD**).

**CLUSTER + MODE**

The way the clusters manifest depends on the **MODE** and **TIME** settings. The longer the delay time, the more spaced out the clusters become.

In MOD mode – due to the extremely short delay times – the clusters clump together into a modulated mass. In this range, **CLUSTER** acts like a thickener, stereo widener, and secondary modulation.

In SHORT mode the clusters appear as dense clouds of scattering ambience, while in LONG mode you'll experience more distinct multi-tap effects that function like rhythmic patterns at lower **CLUSTER** levels, and orbiting ambience as the fader is turned up.



In LOOP mode it all depends on the length of your loop – the longer the loop, the more spread out and distinct each voice in the cluster becomes.

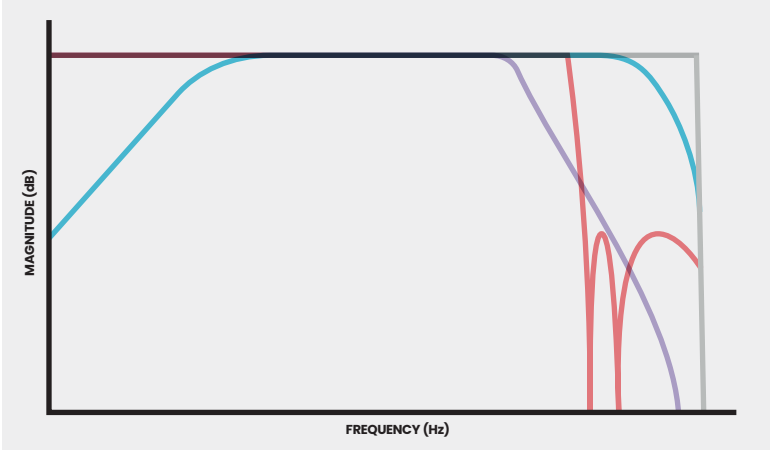
Because **CLUSTER** is creating additional echoes, it will also increase the gain in the delay line. As you turn **CLUSTER** up you may wish to decrease **FEEDBACK** to compensate.

# Voicing and Tilt EQ

Big Time includes two independent stages of tone-shaping:

- A **VOICING** button to select the core character
- A **TILT EQ** to shape and adjust the frequency spectrum

**VOICING**
Think of **VOICING** like the character of a piece of hardware – the unique aspects of a circuit that give something its signature sound. Each voice is a different starting point inspired by our favorite devices and past work, a distinct stage of fixed filters independent from the **TILT EQ**.




**HIFI**
Clear and pure, useful for modulation, looping, and wide open textures.

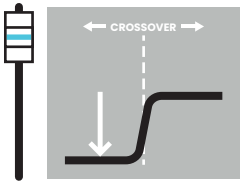
**FOCUS**
Subtle filtering that reveals itself over time, gradually shaving away both highs and lows to create focused, floating repeats.

**WARM**
Emulates the filtering techniques used by primitive digital rack delays, with their signature elliptical ripple.

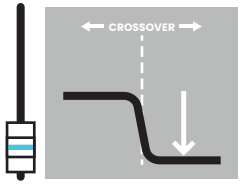
**ANALOG**
The dark and rich sound of a BBD-based analog delay.



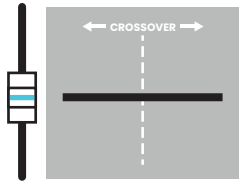
**TILT EQ**
The **TILT EQ** is where you can get more hands-on. It's a flexible, studio-style EQ that splits the frequency spectrum in half at a point of your choosing, and cuts either the highs or lows. The **CROSSOVER** alt control sets the middle point.




Push the fader up to cut the lows...



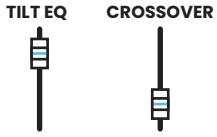

...and down to cut the highs.



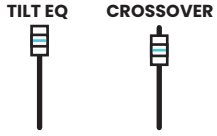

In the middle position, the EQ will be neutral.

In many cases setting **CROSSOVER** right to the middle will be ideal and keep things nice and simple, but it depends on your instrument and needs.

Maybe you want to cut the mud from your bass.



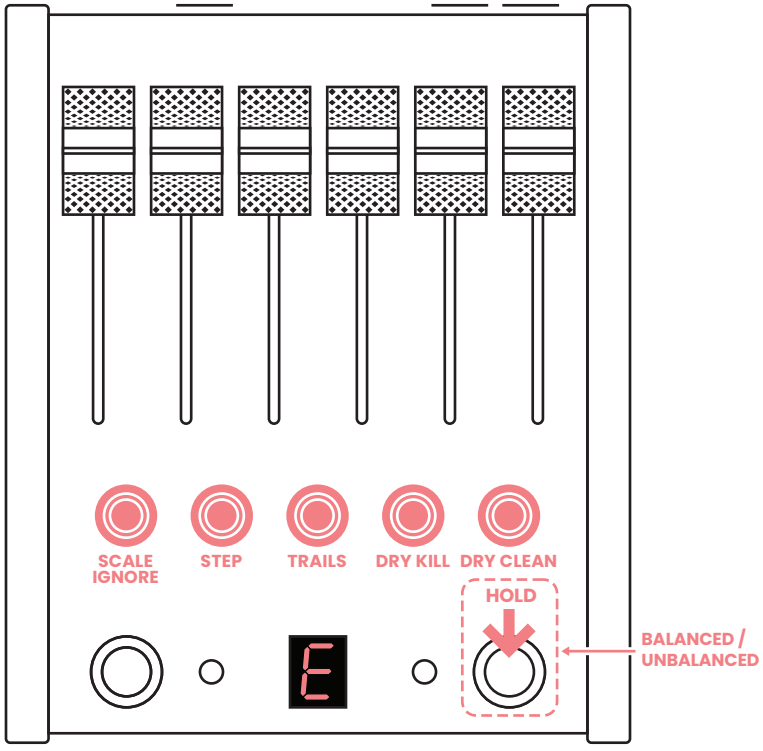

Or have echoes that float overtop of the vocals.




Test out different ways to combine **VOICING** and **TILT EQ**. For example, set **VOICING** to Analog and push up the **TILT EQ** to create narrow but characterful echoes that slice right through the middle.

# Options Menu

This is where you can set up external control and your preferences.




To access the Options Menu tap both footswitches simultaneously.

**SCALE IGNORE (SCALE BUTTON)**
**MOTION** will ignore all scales and always be smooth. This makes it possible to use the **TIME** slider to transpose loops while retaining classic, smooth pitch modulation.

**STEP (MOTION BUTTON)**
Changes the tap function of the **TEMPO** footswitch. When engaged, each tap will create a momentary wave of movement. With a scale selected, this will advance to the next step in the sequence.

**STEP** does not work in the Loop mode and Mod mode.

**TRAILS (MODE BUTTON)**
Allows the echoes to naturally fade out after the pedal is bypassed.

**DRY KILL (VOICING BUTTON)**
Removes the dry signal from the pedal's output.

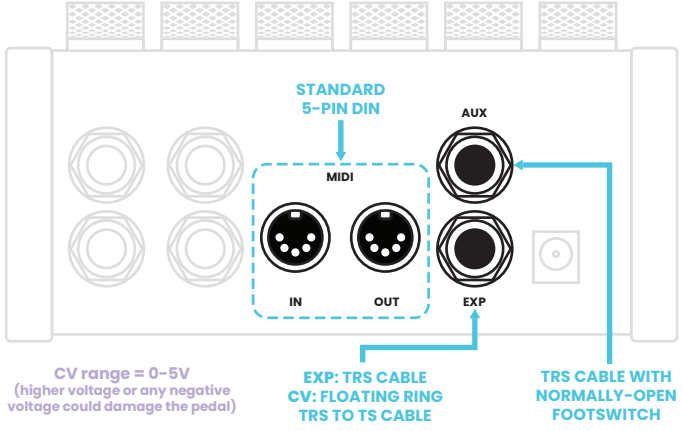
**DRY CLEAN (STATE BUTTON)**
Your dry signal will now bypass Big Time's preamp.

By default both the dry and wet signal will be processed by the preamp.

**BALANCED/UNBALANCED (HOLD RIGHT FOOTSWITCH)**
Big Time can either accept unbalanced, or ultra-low-noise balanced inputs and outputs. Unbalanced I/O is the default. Hold the right footswitch for two seconds to engage balanced I/O, indicated by the LED turning green. Hold again to revert back to unbalanced, indicated by a red LED.

# External Control

Big Time can be controlled with MIDI, CV, expression, and external footswitches.




## MIDI

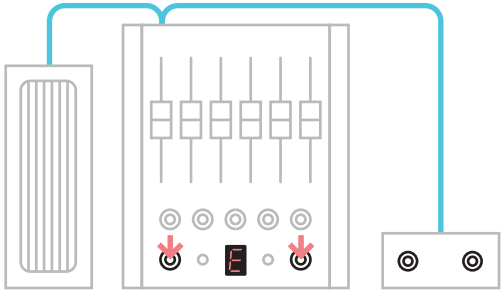
Every aspect of Big Time can be controlled via MIDI, including syncing to an external clock. You also have the option to output Big Time's own clock, letting you sync other devices to your loops and echoes.

Refer to the dedicated MIDI guide for details.

## EXPRESSION / CV

Either CV or an expression pedal can be used to control any or all of Big Time's faders, with a range and direction of your choosing.

Enter the Options Menu to set up expression / CV, as well as external footswitches.




The first page of the Options Menu is where you choose which faders you wish to control. Move a fader up to its maximum position to assign expression or CV control to that parameter.


Tap the right footswitch to enter the "toe" page. Here you decide where the fader(s) will stop once you reach the toe (or maximum) position.


Tap the left footswitch to enter the "heel" page. Here you decide where the fader(s) will stop once you reach the heel (or minimum) position.

Exit the Options Menu and you're all set.

## AUX

An external footswitch can be used to control Big Time's gestures remotely, which can be handy for tabletop setups and expanding performance possibilities.

To begin, simply plug any normally-open momentary footswitch (e.g. Boss FS-6) into the **AUX** jack.

There are three available modes. To cycle through them, press the **AUX** footswitch while in the Options Menu.


**P = PRESET**
1. Preset Up
2. Preset Down

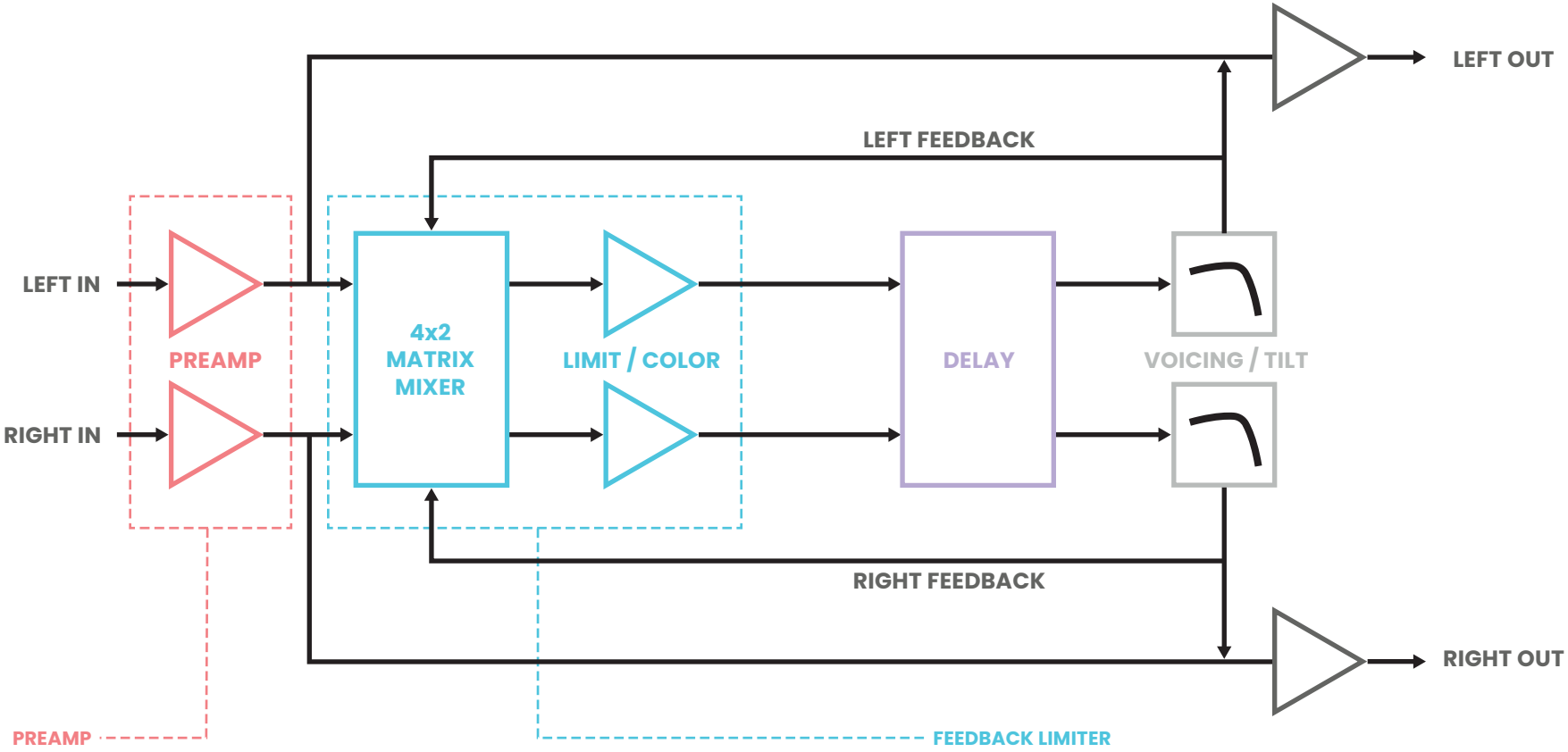
**F = FUN**
1. 0.5x
2. Buffer Clear

**D = DESKTOP**
1. Tap / Record
2. Bypass / Stop

If you're using a footswitch with only a single button, you will have access to the first function of each mode (e.g. Preset Up). Exit the Options Menu once you've made your selection.

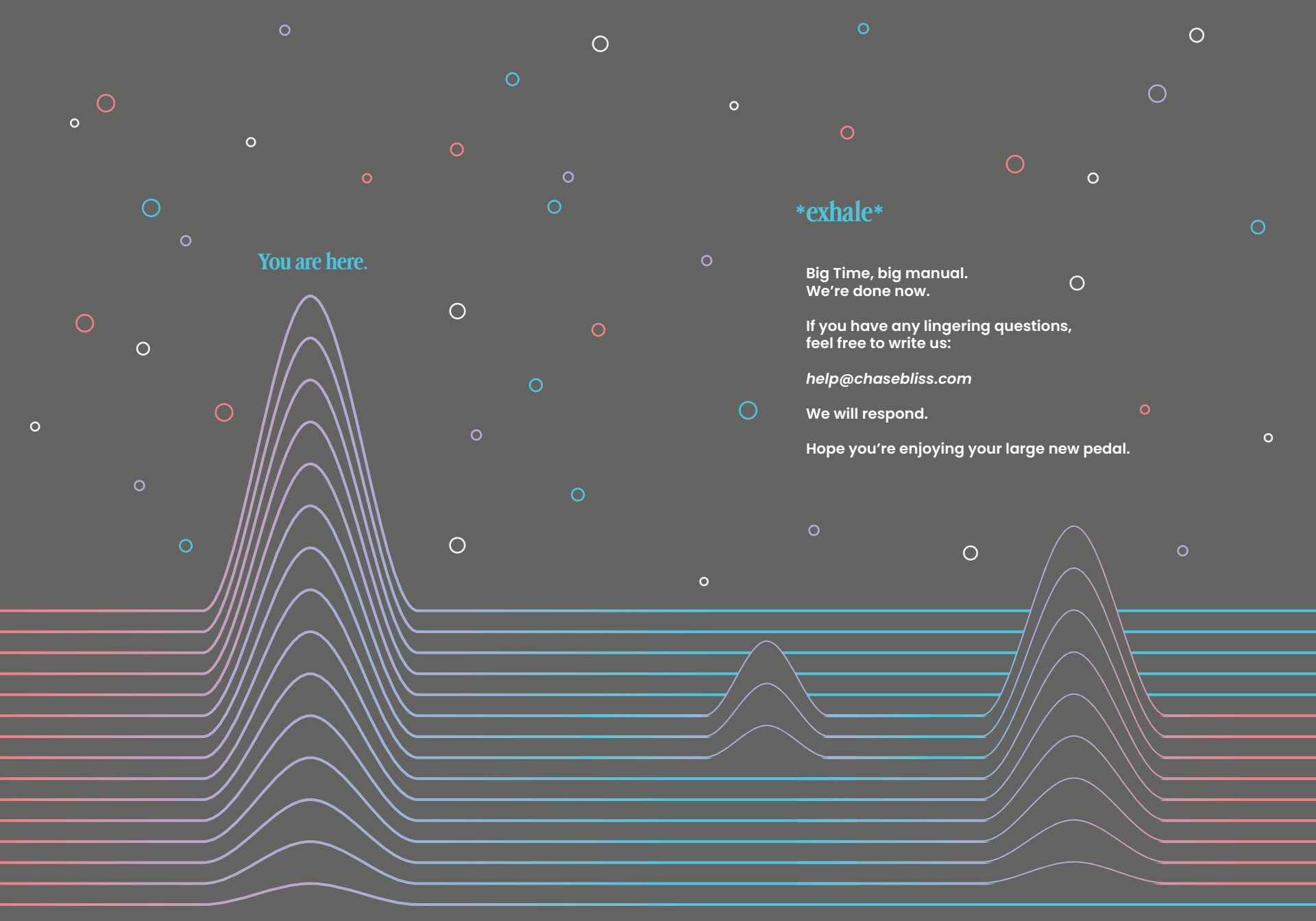
See the MIDI Manual for more details on **AUX** functionality.

# Signal Flow




**Big Time's preamp is a combination of a voltage-controlled amplifier and a unique clipping diode arrangement that provides extremely high dynamic range and a smooth transition into clipping. This circuit block is wrapped in a matched emphasis/de-emphasis network to provide additional high harmonic lift while maintaining a flat frequency response. It's designed to be colorful, but respectful of a variety of instruments and input signals.**

**A hybrid limiter made up of two distinct parts:**
**1. A voltage-controlled matrix mixer with sidechain compression.**
**2. A nonlinear waveshaper with voltage-controlled bias shift.**
**The matrix mixer handles compression and sag, while the waveshaper clips and mangles. By shifting the bias into a highly asymmetrical state, we achieve texturally broken sounds, reminiscent of a ripped speaker or failing console channel.**




## *exhale*

Big Time, big manual.
We're done now.

If you have any lingering questions,
feel free to write us:

*help@chasebliss.com*

We will respond.

Hope you're enjoying your large new pedal.

**SPEC SHEET**

| | |
|---|---|
| **POWER** | 9V in, over-voltage and reverse polarity protected up to + / -20V. 400mA nominal, 1A required for startup surge currents and large slider movements. |
| **I/O** | Stereo, selectable TRS balanced/unbalanced operation |
| **INPUT IMPEDANCE** | 1MΩ (single-ended) 20KΩ (balanced, common-mode) |
| **OUTPUT IMPEDANCE** | 50Ω |
| **NOISE** (RMS, 20Hz to 20kHz, A weighted) | Dry Path: -100dBV<br>Delay Path: -94dBV |
| **PREAMP GAIN** (**NOMINAL**) | 0dB to +20dB, or +12dB to +32dB (+12dB mode active) |
| **A/D CONVERSION** | 32 bit, 48kHz |