Avalanche Run™

Hey buddy! Welcome to your new Avalanche Run™ Stereo Reverb and Delay with Tap Tempo! The Avalanche Run was developed with one goal in mind: to take the floating ambient tones of our Dispatch Master to the next level while still keeping it user friendly and refined. Taking you into the aural exploratorium without having to break open the user manual every time you want to open up your inner eye and get free is no easy task. We are using a high powered proprietary DSP platform to recreate all the characteristics of all our old favorite delay and reverb machines while still retaining a simple, yet flexible workspace. It has been a long time coming but well worth the wait! Enough bullshit, let's talk about the damn pedal!

The Avalanche Run is a dreamy sonic discovery device with up to 2 seconds of delay time and a lush stereo reverb. It features complete control over delay time, repeats, mix and voice (with the tone control), as well as control over the reverb length and mix. It can run in one of 3 different modes: Normal, Reverse and Swell. In "Normal" mode, the Avalanche Run functions as a straightforward delay and reverb. In "Reverse" mode, the delay line is in reverse and the reverb remains in normal mode. In "Swell" mode, the Avalanche Run reacts to your picking dynamics and adds a volume swell to the entire signal path much like manually raising and lowering the volume of your guitar.

The Avalanche Run features an expression jack that can be assigned to one of six different controls using the "EXP" selector switch. It also features Tap Tempo with six different ratios accessed via the "Ratio" selector switch. The Avalanche Run can also be run in "True Bypass" mode or "Buffered Bypass" mode for trails and features 5 different tail lengths including "Infinite" for lo-fi and continuously degrading pseudo-looping.

The Activate switch features our Flexi-Switch™ Technology! This relay-based, true bypass switching style allows you to simultaneously use momentary and latching style switching.

• For standard latching operation, tap the footswitch once to activate the effect and then tap again to bypass.

• For momentary operation, hold the footswitch down for as long as you'd like to use the effect. Once you release the switch the effect will be bypassed.

The Tap switch also has a few other cool secondary functions. While in Normal and Swell mode, you can send the Avalanche Run into self-oscillation by holding down the "Tap" foot switch. In Reverse, mode holding down the Tap switch will flip the delay back into Normal mode and return to Reverse mode once released!

Controls

Top Row
Time- This controls the delay time and goes from 0ms to just under 2000ms.

Repeats- Controls the regeneration of the delay, from zero repeats to near infinite.

Tone- Controls the tone for the delay line only. Roll off highs to the left, roll off lows to the right and get a flat response in the middle.

Mix- The is the volume control for the delay line. This blends in the wet with dry until 1 o'clock, 1 o'clock to 3 o'clock boosts the wet signal over the dry and 3 o'clock up brings down dry until it is fully wet when all the way up.

Bottom Row
Expression Jack Assign Switch- Use this switch to map the expression jack to one of the assigned controls.

- **Decay-** Controls the reverb decay length
- **R Mix-** Controls the reverb mix
- **Time-** This takes over for the delay time control and is DRASTICALLY different than the interface control. Using the expression pedal to control the time will give you all kinds of wild effects that can not be achieved by turning the knob.
- **Repeats-** Controls the delay repeats
- **D Mix-** Controls the delay mix
- **Toggle-** This takes over for the toggle switch and will cross fade from forward delay in heel down position to reverse delay in toe down position.

Decay- Controls the decay length of the reverb, short decay counterclockwise, long cavernous decay clockwise.

Mix- This is the volume control for the reverb. Blends in the wet with dry until 1 O'clock, 1 O'clock to 3 O'clock boosts the wet signal over the dry and 3 O'clock up brings down dry until it is fully wet when all the way up.

Ratio Selector Switch- Selects delay subdivisions when time is set by the "Tap" switch.

- **1/1-** Quarter Note
- **3/4-** Dotted 8th
- **2/3-** Quarter Note Triplet
- **1/2-** 8th Note
- **1/3-** 8th Note Triplet
- **1/4-** 16th Note

Toggle Switch (Mode Selector)
Both- This is the "standard" delay and reverb mode
Reverse- This is reverse delay mode with "standard" reverb
Swell- This is the volume swell mode

Effect Mode Features
Both
• Both delay and reverb in standard forward mode

• Reverb is fully stereo and follows delay in the signal path

• All controls work as displayed

• When using tap tempo to set the delay time, the repeats are cleared once new time is tapped in.

• Hold Tap switch down to send delay into infinite repeats. On shorter Time settings, they will quickly go into oscillation and on longer Time settings, they will slowly build.

Reverse

• Reverse delay, normal reverb.

• Ratio is always in 1/1 position no matter where the ratio switch is set.

Pro Tip: The other ratios will still work for standard delay, if you set the ratio for anything other than 1/1 when you are in Reverse mode, you will get really cool rhythmic patterns when using the Tap switch or expression pedal to switch between reverse and "normal" modes.

• Hold down the Tap switch to temporarily send the delay back to forward mode and release the Tap switch to go back to Reverse.

Pro Tip: Use the expression pedal in the "Toggle" position to go back and forth from reverse to standard. This allows you to still use the Tap switch to send the delay into self-oscillation.

Swell

• Adds an auto swell to the entire signal path, much like slowly turning up the volume control on your guitar.

• Reverb Mix controls the length of the swell, swell length becomes longer as you turn the control clockwise.

• Swells are triggered by the input, regardless of input strength. To get the most from this effect, adjust your playing to a more staccato style and mute the strings after every note or chord.

• This mode sums both left and right inputs on both the wet and dry paths to mono.

• Hold Tap switch down to send delay into infinite repeats. On shorter Time settings, they will quickly go into oscillation and on longer Time settings, they will slowly build.

Tails Mode

The Avalanche Run also has a "Tails" mode. Tails mode allows the wet signal to naturally fade out after the effect is switched off. It has 5 Tail length settings that are selected by the Ratio switch during power up.

How to engage Tails mode:

• Unplug the power cable

• Set the Ratio switch to the desired Tail length:
  - **1/4-** True Bypass (See "Return to True Bypass" below)
  - **1/3-** Short Tails
  - **1/2-** Medium Tails
  - **2/3-** Long Tails
  - **3/4-** User Defined- Tail length is determined by where the repeat control is set. Tails can go into oscillation by holding the Tap switch down or stopped by double clicking the Tap switch.
  - **1/1-** "Sound on Sound"- Tail length goes into infinite repeats once the effect is switched off. Tails can go into oscillation by holding the Tap switch down or stopped by double clicking the Tap switch.

• Once you have selected the Tail length, hold down the Activate switch and plug in the power. The Activate LED will light up Green after 2 seconds then release the Activate switch and you'll be in your desired Tails mode.

• The signal is in buffered bypass mode when the LED is green.

• The ratio switch will go back to selecting your desired Ratio after this process is complete.

Return to True Bypass mode

• Unplug the power cable

• Set the Ratio switch to 1/4

• Hold Activate switch and plug in the power. The Activate LED will light up Red after 2 seconds and you'll be back in True Bypass mode.

Jacks & Signal Path

The audio jacks are located on the north side of the pedal, along with the 9v 425ma power jack.

• The Avalanche Run has a stereo analog dry path, a dual mono delay path and a stereo reverb.

• To run mono; use the left input and output only.

• To run stereo; through use both left and right inputs and outputs.

• To run mono in and stereo out; use the left input and both left and right outputs.

Cool Trick: Plugging into the right input and using the left and right outputs will give you an all-wet left channel and a standard mixed right channel while the effect is engaged. You can create dramatic stereo effects by keeping the Mix set low and turning up the amplifier source connected to the left output. The left output will not pass dry signal when the effect is turned off in true bypass mode but trails mode it will still produce the effected signal as long as it is set to decay.

The expression jack is located on the west side of the pedal. It is a TRS jack with the tip acting as the wiper.

• We recommend using a Moog expression pedal with the output adjustment knob all the way up.

• We cannot guarantee any other expression pedal to work with the Avalanche Run.

Power Requirements

• 425mA current draw

• Please use the included 9V center negative 1 Amp DC power supply for best results

Tech Specs

• 24-bit 96kHz A/D & D/A converters

• 115dB Typical signal to noise

• Input impedance: 1M Ohm

• Output impedance: 100 Ohm

• All analog dry signal path

• All digital wet signal path with 20hz-20kHz Frequency response

• Selectable relay-based true bypass or buffered analog tails modes

• PCB's populated by a combination of artificial and human intelligence in the Akron, Ohio of America.

• Each and every Avalanche Run is completely assembled, wired and tested by total human beans in the tiny tundra town of Akron, Ohio.

This device has a lifetime transferable warranty, if it breaks we will fix it. Should you encounter any issues please send an email to info@earthquakerdevices.com.