VAPOR TRAIL
DELUXE
ANALOG DELAY

SeymourDuncan

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VAPOR TRAIL
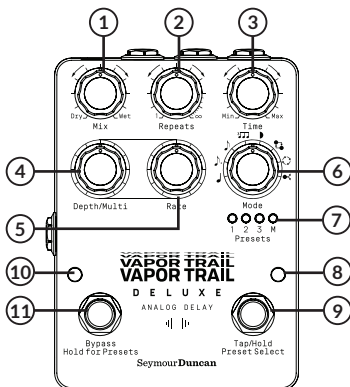
D E L U X E

A N A L O G   D E L A Y

Takes the best-in-class analog delay sounds of Vapor Trail and adds Tap-Tempo, Expression Control, Presets, and unique and exciting special delay modes, making for an analog delay pedal unlike any other on the market.

The Vapor Trail Deluxe uses an all analog signal path, with bucket brigade-based delay circuitry, tap tempo and delay divisions of quarter note, dotted eighth, eighth, and eighth note-triplet. There are also modes for micro delay, pitch sequence, runaway and pitch bender.
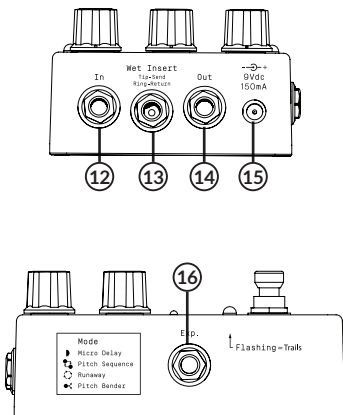
You should always start with the REPEATS setting below 12:00 to make sure that excessive feedback doesn't occur when switching to different mode types. You can then adjust the Repeats where you want for the desired effect.

Top Panel

1. Mix
2. Repeats
3. Time
4. Depth/Multi
5. Rate
6. Mode

7. Preset Indicators
8. Left LED Indicator
9. Left Footswitch
10. Right LED Indicator
11. Right Footswitch

Rear/Side Panel

Wet Insert
Tip=Send
Ring=Return

In

Out

9Vdc
150mA

⑫ ⑬ ⑭ ⑮

⑯

Exp.

Flashing=Trails

Mode
▶ Micro Delay
↕ Pitch Sequence
↻ Runaway
◗ Pitch Bender

12. Input Jack
13. Wet/Insert Jack
14. Output Jack
15. Power Jack
16. TRS Expression
Control Jack

Mix

Sets the mix level of the delay effect. Mix pot will control Wet signal only, not Dry. Fully clockwise will result in an overbalance of Wet level

Repeat

Sets the regeneration of the delay effect. Fully counter-clockwise will result in a single repeat, fully clockwise will create infinite repeats that oscillate into feedback

Time

Sets the tempo of the delay, from 37 mS to 1200 mS. Turning the knob clockwise increases the delay time resulting in longer delays

Depth/Multi

Sets the depth of the modulation effect and will change in special delay modes

Rate

Sets the rate of the modulation effect

Mode

Selects between the 4 tap divisions (1/4 note, dotted 1/8 note, 1/8 note, 1/8 note triplet) or one of four special delay modes (micro delay, pitch sequence, runaway, pitch bender)

Preset Indicators

- 1, 2 or 3 solidly lit – indicates which preset is active
- 1, 2 or 3 slow blinking – indicates a parameter has been changed. You can save the new settings by pressing both Left and Right footswitches for 1 second (see Saving Presets)
- 1, 2, or 3 fast blinking – indicates you are in SAVE Preset mode
- No presets lit – indicates MANUAL mode is active and the pedal will operate where all the knobs are set
- M solidly lit – indicates PRESET mode is active and you can select presets 1-3 or M by tapping the right momentary footswitch. Turns off after 4 seconds

Left LED Indicator

- Off indicates Bypass is active, ON indicates effect is engaged
- Flashing 3 times indicates Trails is active.

Left Momentary Footswitch

- Tap to Engage/Bypass the effect
- Press/Hold to engage Preset Select mode.
- Press/Hold during power up: Turn on/off Trails Feature

Right LED Indicator

Indicates the delay tempo with a blinking indicator

Right Momentary Footswitch

• Tap 2 or more times to select the delay tempo
• In Preset Select mode, tap to scroll and select one of the 3 Presets or Manual (M)mode

Input Jack

Plug a musical instrument in here or the signal from a preceding pedal

WET/INSERT Jack

There are many creative ways you can use the wet/ insert jack.

Output

Mix

Insert

Delay

Input

1. Connect othe pedals to just the repeats. Send a wet signal to any other FX pedal or chain of pedals for additional modulation of the repeats. Use a stereo Y adaptor with a "tip-send/ring-return (TRS) connector on one end. Plug the TRS male plug into the Wet Insert Jack on the Vapor Trail. Plug the other ends into your In and Out jacks on your other pedal. Have fun coming up with new tones!
2. Activate the wet signal from a volume type foot pedal. Again, use a patch cable with a "tip-send/ring-return' connector.
3. Separate wet and dry outputs for stereo, or special
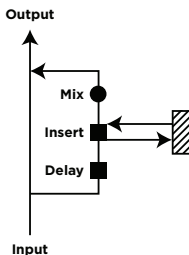
recordings. Your wet signal will come from the rear Wet Insert Jack, again with a TRS connector. The standard Output Jack on the end of the Vapor Trail will be the Dry send. Note in this setup, the Mix knob has no effect on the dry signal going to the Insert Jack or Output jack. It only controls the wet signal at the main output jack. Blending will be controlled by the level of your stereo amps or channel faders.

Output Jack
Run a cable from here to your amplifier or the next pedal on your board

Power Jack
Apply 9 -18V, 150mA minimum, Use a plug with 2.1mm internal diameter, center negative.

TRS Expression Control Jack
The expression pedal can control all the knob parameters except for mode.   When the expression pedal is at either extreme, any pot moved will be recorded as the value for that extreme (low or high).

NOTE: For best results if the expression pedal has an adjustment pot, we recommend that it be set to the lowest setting.

Initial Setup

Power the Vapor Trail Deluxe with a 9-18Vdc (center negative) power supply capable of providing at least 150 milliamps. Connect your instrument to the input jack and send the output to your amplifier, mixer, or interface.

The Vapor Trail Deluxe comes with 3 presets saved in locations 1-3 that you can use to preview the pedal. You can start with one of these and modify them to your liking. You can also go to Manual Mode M (no preset LEDs lit) which reads the current physical knob settings.

When creating your own effect, we suggest starting by setting the MIX knob at 12:00 o'clock, the REPEATS knob at 9:00, the DEPTH/MULTI and RATE knobs fully counterclockwise. The MODE control can be set to whichever delay setting you would like, but mode 1 (1/4 note) is always a good place to start with. You can then use the Depth/Multi and Rate knobs to add modulation to the delay.

Controls

ON/BYPASS

The primary function of the left footswitch is to engage or bypass the circuitry. When the effect is engaged the left LED will be lit.

SELECTING A PRESET (PRESET MODE)

• To select a stored preset press and hold the left

footswitch for 1 second to enter preset mode. The M LED will turn on to indicate the footswitch is now in in Preset mode. The right footswitch (Tap/Hold) is used to select the preset.

- Tap the RIGHT footswitch to cycle through each of the 3 presets and M mode (Manual Mode). After selecting the desired preset let the pedal sit for 3 seconds and pedal will load the preset and return to normal operation.

SET DELAY TIME (TEMPO)

The primary function of the right footswitch is to set the delay time by tapping the footswitch 2 or more times.

SAVING PRESETS

When you've found a sound you like you have two options to store your settings:

1. Save to current location:

- Press & Hold both footswitches at the same time. The "M" LED will light, indicating you are in Preset Save Mode.
- Press & Hold both footswitches again. The 2 LEDs next to the Preset you are saving to will flash indicating the new settings have been saved. The preset will go solid.

2. Save to new preset location:

- Press & Hold both footswitches at the same time to enter PRESET SAVE mode. The 'M" LED will light and the currently loaded preset LED will blink rapidly.

- Press the Right footswitch to desired Preset location.
- To save, Press & Hold both footswitches for 1 second. The 2 LEDs next to the Preset will flash indicating the new settings have been saved.

NOTE: When you are in PRESET SAVE mode and you want to exit without saving press the Left footswitch. Or after 5 seconds the pedal will exit PRESET SAVE mode.

TRAILS MODE (ON/OFF)

This is set by pressing and holding the Left footswitch while powering up the pedal.

1. Tails Mode OFF:
- Press and hold the Left footswitch while powering up the pedal. If the left LED turns on and off, then trails mode is off.

2. Tails Mode ON:
- Press and hold the Left footswitch while powering up the pedal. If the LED flashes 3-times, then trails mode is on.

NOTE: When the pedal is set to trails ON mode, the bypass LED will do a fast fade only when you bypass the effect. If the pedal is set to trails OFF mode, the light will turn on and off with no fade.

Special Delay Modes

MICRO DELAY (MODE POSITION 5)
- Delay Time Range: 6ms – 300ms
- This mode is great for slap back or double track guitar sound.

- Use with the Depth/Multi and Rate knobs to create unique chorus type sounds or Leslie effect.

PITCH SEQUENCE (MODE POSITION 6)

- Depth/Multi selects how many steps occur in the sequence
- Rate selects the length of each step, based on the tap tempo or time setting.

SPECIAL SEQUENCE MODES

With the power off, rotate the MODE switch to the desired position [1-8]. Press/Hold the Right footswitch down while powering up the pedal.

PATTERNS

1. Pattern 1
   [-U-D-U-D-U-D-U-D-U-D-U-D-U-D]
2. Pattern 2
   [-UDU-DUD-UDU-DUD-UDU-DUD-UDU-DUD]
3. Pattern 3
   [--UU--DD-U-D-U-D--UU--DD-U-D-U-D]
4. Pattern 4
   [--DD--UU-D-U-D-U--DD--UU-D-U-D-U]
5. Pattern 5
   [UUDDUDUDUUDDUDUDUUDDUDUDUUD-DUDUD]
6. Pattern 6
   [DDUUDUDUDDUUDUDUDDUUDUDUDDUUDU-DU]
7. Random 1
   [-U-DRRRRRRRRRRRR-U-DRRRRRRRRRRRR]

8. Random 2
  [RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR]
Legend:
'-' No change
'U' Pitch shift Up
'D' Pitch shift Down
'R' Random (Up, down or none)

RUNAWAY (MODE POSITION 7)

Be careful not to set the REPEATS too high or keep your foot on the footswitch too long or you can damage your speakers. This mode will ramp down as soon as you take your foot off the footswitch.

- Press/Hold Right footswitch to engage the runaway mode.
- Once engaged it will ramp feedback for as long as your foot is holding down the footswitch.
- When the footswitch is released the feedback will return to where the control was set.
- The ramp and release time are preprogramed.
- Release the footswitch to terminate the runaway before getting to an undesirable state.
- Depth/Multi, rate, tap work normally (quarter note delay)

PITCH BENDER (MODE POSITION 8)

- Press/Hold Right footswitch to engage the bender.
- Depth / Multi control selects which direction the pitch will go

  o Depth/Multi set below noon will drop the pitch

down first then return to normal

  o Depth/Multi set above noon the pitch will go up

    first then return to normal.

- Mod Rate control sets the amount of glide (time it takes to reach the new pitch)
- Time sets the delay time when not engaged (quarter note)

Using an Expression Pedal

For best results if the expression pedal has an adjustment pot, we recommend that it be set to the lowest setting.

To use the expression pedal you must first store the same sound in both "toe down" and "heel down" positions.

1. Push expression pedal all the way down (toe down).
2. Create a sound you like.
3. Move each knob slightly so the positions will be recorded.
4. Lift expression pedal all the way up (heel down).
5. Move each knob slightly so the exact same positions will be recorded

NOTE: You now have the same sound programed at both toe and heel positions. The expression pedal has no effect.

Next you will need to program the specific settings you want to change with the expression pedal.

1. Decide which parameter you want to change.

2. Program the toe down position
- Push expression pedal all the way down (toe down).
- Turn the chosen parameter knob to the value you want for down.
3. Program the heel down position
- Lift the expression pedal all the way up (heel down)
- Turn the chosen parameter knob to the value you want for up.
4. Press/Hold both Bypass & Tap switch to save

To add more complexity you can stack effects. Just repeat steps 1-4 to add parameters to you preset.

Factory Reset

Press/Hold both footswitches while powering up the pedal. This will reset the pedal to the original factory settings and presets.

Tech Specs

Type of circuitry: All-analog signal path using Bucket-Brigade Devices with digital control of functions.
Bypass: True hard-wire bypass with selectable active-bypass trailing repeats mode

Control functionality:
Mix – Wet signal 0% to 200% (Dry fixed at 100%)
Repeats – Continuous adjustment from one echo to full runaway
Time – Normal: 37ms to 1200 ms; Micro: 6ms to 300ms
Depth – Modulation from off to Insane
Rate – 10 seconds per cycle to 10 cycles per second
Mode – Four fractional beat settings plus four exotic modes (see user manual)

Auxiliary Functions: Expression pedal sweeps smoothly between two user-selected control settings. Insert jack provides and wet channel insert loop and wet-only output.

Input Impedance: 1 Megohm
Output Impedance: 1000 ohms
Gain Range: Dry Channel: unity gain.
Wet Channel: off to +6dB maximum.
Note: The Wet Channel has different specifications below due to its use of analog Bucket Brigades.

THD: Dry channel: 0.003% @ 1Vrms output

Wet Channel: 1% @ 100mVrms output,
3.5% @ 1Vrms output
Noise referred to input: Dry Channel: <-102dBV,
400Hz to 20kHz
Wet Channel: <-96dBV, 400Hz to 20kHz
Frequency response: Dry Channel: 2Hz – 150kHz
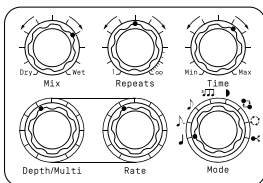Wet Channel: 30Hz to 2kHz
Power: External 9V to 18V regulated DC adapter
(center pin negative)
Current consumption: 150mA Maximum

Dimensions: 3.57" x 4.80" x 1.60", exclusive of knobs
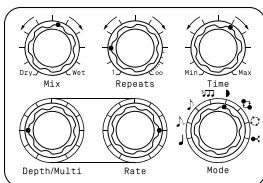and connectors
Weight: 0.9lbs

Sample Settings

Ambient Wash

Lush, present delay tones

Pair this preset with a large Hall Reverb, and prepare for the ethereal magic

Slow modulation creates space and dimension

Chicken Slap

Slapback delay that's perfect for chicken pickin'

Micro delay with few repeats creates depth, but stays out of the way during those fast Tele runs

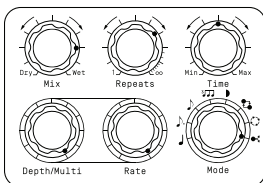Subtle modulation creates a tape-like delay effect

Dry — Wet
Mix · Repeats · Min — Max · Time
Depth/Multi · Rate · Mode
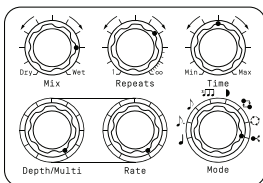
Fender Bender

Long, in-your-face delay tones with 8+ repeats

Pitch Bender mode adds a unique upper and lower octave jump to your wet signal

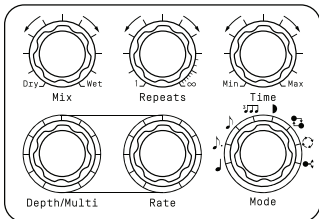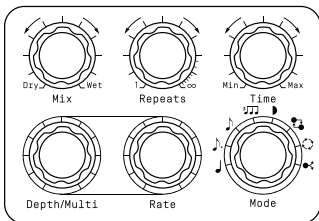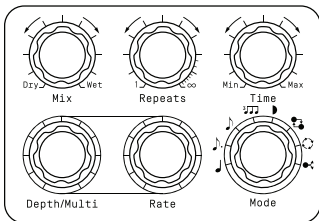Provides an interesting otherworldly character to your lead lines

Dry — Wet
Mix · Repeats · Min — Max · Time
Depth/Multi · Rate · Mode

Warbling Robo-Delay

Quick delay tones with 5+ repeats

Pitch Sequence mode adds an oscillating pitch shifter that creates an expressive wobbling effect

Engage this effect to get in touch with your inner Trent Reznor

Favorite Settings

Disposal Guidelines

In the unlikely event that you ever need to dispose of this product, it must be disposed of properly by handing it over to a designated collection point for the recycling of waste electronic equipment. Please contact your local household waste disposal service or the shop where you purchased this product for those locations. Thanks for helping us conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

Limited Warranty

Seymour Duncan offers the original purchaser a one-year limited warranty on both labor and materials from the day this product is purchased. We will repair or replace this product at our option if it fails due to faulty workmanship or materials during this period. Defective products can be returned to your USA dealer, international distributor, or sent direct to our factory postage prepaid along with dated proof of purchase (e.g., original store receipt) and RMA number. Call or email our factory for an RMA number which must be written on the outside of the box. We reserve the right to refuse boxes without an RMA written on the outside. As you might expect this warranty does not apply if you've modified the unit or treated it unkindly. We can assume no liability for any incidental or consequential damages which may result from the use of this product. Any warranties implied in fact or by law are limited to the duration of this express limited warranty.

Notes

WHAT WE STAND FOR

WE STAND FOR GREAT MUSIC.
AND THE PEOPLE WHO MAKE IT.

WE'RE AN ☆ American ☆ Original.

WE LIVE FOR THESE MOMENTS.

WE LIVE FOR THESE TONES.

WE WORK WITH HEART AND SOUL AND GRIT AND LOVE.
WE LIVE FOR THE MUSIC. AND THE MUSICIANS WHO MAKE IT.
WE'RE ALWAYS ON TOUR OR IN THE STUDIO. WITH THE BANDS.

because TONE MATTERS.
MUSIC MATTERS,
>MUSICIANS MATTER<

OUR EXPERIENCE. OUR PASSION. OUR HISTORY

IT'S IN Everything WE BUILD.
AND WE'LL NEVER STOP BACKING OUR MUSICIANS.

Every NOTE. EVERY DAY.
Every GIG. EVERY ENCORE. | EVERYONE |.

YOU CARRY US WITH YOU! WHEN YOU PICK UP A
AND WE'LL NEVER LET YOU DOWN. SEYMOUR DUNCAN.

THAT'S WHO WE ARE. THAT'S WHAT WE DO.

THIS IS **Seymour Duncan** REAL SOUL. GENUINE TONE.

Commitment to Quality and Community

Seymour Duncan takes pride in designing and crafting our products to create the most amazing sound possible. With everything we create, our passion and obsession for amazing sound is reflected in its quality and reliability.

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