

## Hitchhike Drive

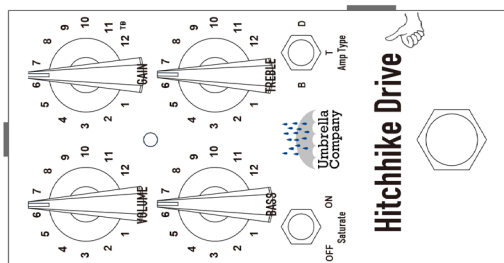
"Hitchhike Drive" by Umbrella Company is a Overdrive / Preamp box that inspired from American vintage Tweed Amps. You can select 3 amp modes (D/T/B).

With adjusting gain knob you will have variety of tone option from preamp-ish boost, mild crunch and crunched top boosted sound. In addition gain will perfectly cleans up when you down the volume on guitar, just like real tube amp.

The "Saturate" switch will active the "Dynamic Filter", it will apply mild compression to only high frequency bands.

You will enjoy the distinctive saturated tone that real tube amps and it perfectly follows to your strum and playing dynamics.

## Features



- Hybrid combination of "discrete designed gain section" and "op-amp designed tone shaping / active EQ".
- Gain section from 2N5088 silicon transistor.
- "Scoop Filter tone shaping" - emulates howling sound of cabinet and speaker units.
- TREBLE / BASS Active EQ
- 3 modes of amp type (D/T/B)
- "Saturate Switch (Dynamic Filter)" - emulates real tube amp tone
- The Optical Reduction Device that specially designed is used to Dynamic Filter.
- True Bypass with relay
- With internal power regulator, pedal works perfectly regardless of what power supply is used.
- DC9V negative center pin, current draw 25mA
- D127×W71×H60mm 290g

## Amp Type

### 1. D mode

We deeply investigated the tone of Fender Deluxe of Tweed era. With Topboosted setting (GAIN 12/TB) you can get trembling tone of cranked little amp, while it has organic feeling. While on high gain setting you can control the tone from mild crank to boosted sound with dynamics of picking and playing, and it cut through the mix.

### 2. T mode

This mode futures the presence and deep tone of that Fender Twin has . On high gain you will enjoy gorgeous drive sound that perfectly much to American Rock. On the other hand, with go down the Gain knob it will works as superb clean booster. With Saturate On, you will feel real and beautiful texture of tube amp. It will provide depth to chorded playing with retaining the clarity.

### 3. B mode

This mode futures more gain than T mode, has powerful and dynamic tone that more thick mid and punchy low end. On low gain setting it smoothly changes from natural clean to mild crunch, and has

## Saturate Switch

With Dynamic Filter, you will get compressed saturation tone that tube amps has.

This Dynamic Filter can be turned on with Saturate Switch, it adds little compression to only high frequency bands (2kHz-). To get optimal response, we specially designed The Optical Reduction Device. It react very quickly every time you strum, it emulates the distinctive compressed tone that real tube amp has. Also the tone will slightly change from Attack to Sustain, and apply different envelope between high and low frequency, so it become more organic sound.

A general limiting circuit is limiting the tone by averaged envelope, but this Dynamic Filter drives the Optical Reduction Device directly from signal's amplification. It follows to playing dynamics and nuance very smoothly because reduct the signal directly and quickly. It also respond to fast phrase by one note (and only to high frequency bands), this is totally different from general compressor pedals.

You will enjoy the perfect feeling of real tube amps has, with achieving the distinctive smooth tone on higher frequency and unique attack of strum.

## NOTE : Saturate Switch

Saturate Switch will add small change to tone. Sometime it's hard to notice this effect like already your amp is saturated or your volume is low, but you will find it useful while using the pedal for long term. With turning off the Dynamic Filter, it will change to more less compression and open tone. To realise the effect of Dynamic Filter, we recommend to play with clean tone amp like Jazz Chorus. Hitchhike Drive will add mild character and saturation that tube amps has.

## Approach of circuit design

### 1. Gain Section

In Hitchhike Drive, we used 2N5088 silicon transistor for discrete gain section. Also with combination of diode clipping, we created 3 modes of amp types (D/T/B). To eliminate the volume difference for each modes, we corrected the level difference due to switching the clipping diodes.

\*D mode: Symmetrical clipping, higher gain, inspired from tone of Tweed Deluxe Amp has.

\*T mode: Symmetrical clipping lowest gain, tone of American Twin Amp. Perfect for booster and crunch.

\*B mode: Asymmetrical clipping from combination of different diodes, more punchy low end and gain from T mode.

### 2. Tone Shaping

We apply two approach of tone shaping to Hitchhike Drive, "Scoop Filter" and "Active EQ".

The signal through gain section has reached to "Scoop Filter" and shape the signal to really amp-like tone. The EQ curve emulates sound of howling cabinet and speaker units, this is basis of sound of Hitchhike Drive.

\*\*"Scoop Filter" is a fixed filter in the circuit, so it can not be changed.

### 3. Active EQ

We pursuit natural controllability of two band active EQ circuit (TREBLE / BASS). A combination of elements, by careful selection of constant, has achieved the degree of effectiveness the ideal EQ curve sought.

### 4. True Bypass Switching

Hitchhike Drive has True Bypass Switching with relay. We designed the signal routing to minimum and no wiring material in the circuit to achieve no change in tone character.

### 5. Stable power supply circuit

With internal power regulator, pedal works in excellent condition regardless of what power supply is used.

