# 542 Tape Emulator Plug-in

*User Guide*


Rupert Neve Designs®

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# Introduction

Originally released in 2013, the 542 Tape Emulator comes from a long lineage of Tape Emulators designed by Rupert, starting at AMEK and carrying over to Rupert Neve Designs. The 542 is anything but subtle, and has slowly become the most popular 500 series module we make. It has found a home in mixing & mastering studios, at FOH & MON in Live Sound engineer's rigs, and in music production studios. Our varied 542 clients enjoy using it to beef up, sweeten or even mangle source material. There are several processing stages in the 542, each one offering a chance to introduce gentle or extreme harmonics with a focus on different frequency ranges, depending on the desired effect.

We recommend diving in to the 542 by trying it on a bass guitar or vocal. Remember, the BLEND control is your friend when using the 542. It also works wonders on an electronic drum loop once you move to the 2-channel instance. With any luck you're sure to uncover new ways to use it - ways we never even thought of...

# Plug-in Interface

There are 2 different user interfaces included with the 542 plug-in. One for mono sources and another for 2-channel/ stereo sources. Controls for the 542 are identical on both versions. The 2-channel version has additional controls, including linking and 3 different processing modes, DUAL MONO, STEREO & M/S (mid/side).


**Mono**


**2-Channel**

Resize by clicking and dragging here

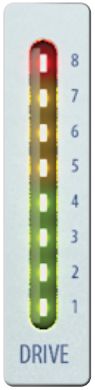
# 542 Controls


## INPUT TRIM

Control of the Input level ‘pre tape effect’ within a range of +/- 12dB.


## TAPE EFFECT IN

Switch that engages the ‘tape effect’ section.




## DRIVE METER

8-segment meter that indicates the level sent to the tape ‘record head’ emulation. At higher levels the built-in soft clip effect will kick in, taming sharp transients in a useful and pleasing way.

*** The Soft Clip effect will become active once the ‘Drive’ level has exceeded 5 ****


## SATURATION

Continuously variable control of the level being sent to the ‘tape effect’ section. As Saturation level is increased, saturation on the ‘record head’ rises and the ‘replay’ amplifier gain reduces so the output signal remains at a consistent level.

Saturation also controls a low frequency compensation effect that boosts low frequencies a little more at lower saturation levels and tapers off at higher levels. This function can be useful searching for a balance between a cleaner, boosted low end (low saturation) and a denser, more saturated low end (high saturation).

# 542 Controls (continued)


## 15/30 IPS

Switch that toggles between two different ‘tape’ speed frequency responses.  The 15 IPS mode has a significant “head bump” in the low frequencies centered around 60Hz and a more pronounced roll off in the high frequencies. The 30 IPS mode is generally a flatter response altogether with a “head bump” around 120Hz.


## BLEND

Controls the dry (0%) and wet (100%) mix of pre and post tape effect signals. This allows for precise control over the amount of saturation, tone and soft clipping produced. As the signal gets more saturated, reducing the blend can be an effective way to impart the sound of ‘tape’ while maintaining detail and transparency.

*** Please Note: The blend control does not affect the amount of Silk Texture applied. ***



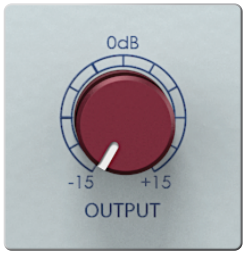
## SILK

Controls the exact amount of musical harmonics added.  This section is modeled after the custom transformers found in the 542 hardware.  The SILK Red/Blue switch has 3 states, RED, BLUE & OFF.  Red SILK focuses the harmonics in the upper mids and highs while Blue SILK focuses the harmonics in the low mids and lows. The TEXTURE control allows you to fine-tune the ideal amount of harmonics added to the signal, with/without the ‘Tape Effect’ engaged.

# 542 Controls (continued)


## VU METERS

Level Meters that can display either the input level or output level of the signal. The red indicator light illuminates when the selected stage is reaching the plug-in's clipping point.




## OUTPUT TRIM

Output level control within a range of +/- 15dB. On the 2-channel instance you will have independent Output Trim controls for CH A and CH B.


## LINK

Activates control linking function on the 2-channel plug-in instance. Engaging this links all the 542's controls to each other. This can be used in DUAL MONO, STEREO or M/S processing modes. It's important to note that engaging LINK will maintain the relative offsets of each channel's controls when in DUAL MONO or M/S mode.

*** Please make sure to engage link first if you want the controls to stay matched as you adjust one channel ***


## 2-CHANNEL Processing Modes

This section increases the flexibility of potential processing techniques. Once a 'stereo' or 'multi-channel' instance of the plug-in is opened, you will see these 3 modes available. DUAL MONO mode allows you to process each channel individually, STEREO mode assigns CH A controls to both CH A & B, and M/S mode assigns the mid channel to CH A and the side channel to CH B.

# Technical & Support Information

You can demo any Rupert Neve Designs plug-in for a period of 14 days.

To start a demo of any RND plug-in, simply download and install the desired plug-in(s). Upon launching your DAW, you can start a demo by clicking the “Try” button for any RND plug-in. You will be asked to log into your iLok account, and the demo authorization period will begin.

Downloads for each Rupert Neve Designs Plug-in Installer can be found here:

https://plugins.rupertneve.com/downloads

For additional information, including Plug-in User Guides, FAQs, System Requirements or to contact our support team, please visit this link:

https://plugins.rupertneve.com/support/