empress effects

nebulus

user manual

Introduction

Modulation effects are sort of like spices, used tastefully they can elevate a dish into flavour country. With the Nebulus you get it all, 9 different spices that will cater to just about any modulation meal you're after.

Along with the sonic versatility, we've included 8 presets for the most demanding live sets. A hybrid of analog and digital, the Nebulus harnesses the best of both domains. The Advanced Configuration mode lets you tailor the functionality to meet your needs in any situation.

It's musical, it's lush, it's Nebulus!

- Jason Fee

Quick Start

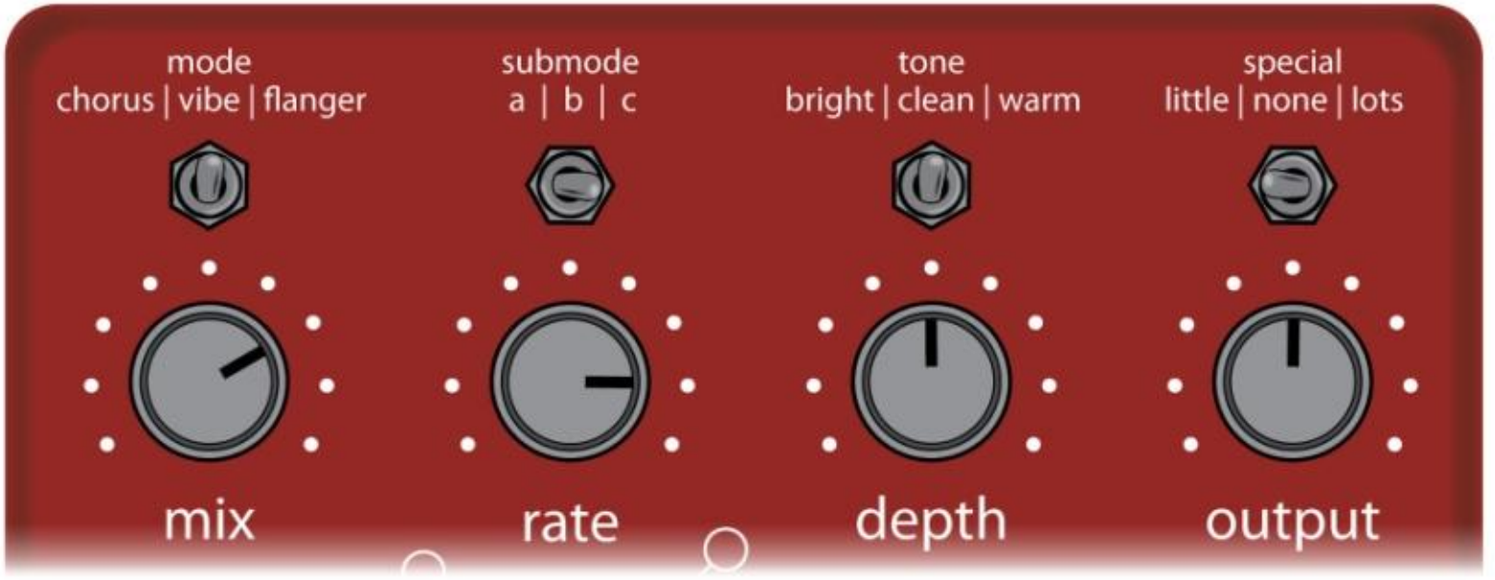
Basic chorus: a smooth swirling chorus

Tremolo chorus: chorus and tremolo, together at last...

Quick Start ...continued

Vibe: the classic vibe sound

Rotary: offers up the delicious warble of a rotary speaker



60s Flanger: a big sweeping flanger

Thru zero flanger : often misunderstood, but oh so musical!

The Modes

	chorus			vibe			flanger		
mode	a	b	c	a	b	c	a	b	c
	basic	multi	w/ trem	uni	vibrato	rotary	60s	70s	thru Ø
special	LF throb		depth	regen	comp	horn	regeneration		

Chorus A - Basic Chorus Mode: By basic we mean that this chorus is basically perfect sounding: lush, beautiful, deep, you get the idea. The special switch allows you to get rid of some of the low frequency throb that is often associated with chorus effects.

Chorus B - Multi Chorus Mode: This mode offers a rich and thick multi-tap chorus sound. Again, the special switch allows you to roll out some of that low frequency throb.

Chorus C - Tremolo Chorus: A blend of chorus & tremolo together. It's a unique effect that has a great feel. The depth knob controls the tremolo depth and the special switch controls the chorus.

Vibe A - Single Vibe: This is reminiscent of some of those classic vibe sounds with some added versatility. In this mode the special switch controls the resonance intensity.

Vibe B - Classic Vibrato: This is a full featured vibrato that will give you more warble than you'll ever need. The special switch adds compression to the vibrato sound which is a match made in heaven. Hint, if you just want to use the compressor, turn the width to 0. Now you've got a 10th mode....but who's counting.

Vibe C - Rotary: This mode gives you the Doppler spin and amplitude modulation of a rotating speaker cab. The special switch pumps up the horn volume to give you a bit more of that driving whirl.

Flanger A - 60's Tape Flange: Smooth, wide, and deep. Try it with the warm tone, and with your favourite overdrive in front of it. The special switch brings up the regeneration.

Flanger B - 70's Flanger: It inverts the phase of the feedback for a more aggressive sound. Again, the special switch brings up the regeneration.

Flanger C - Thru-Zero Flanger: The delayed signal actually passes right through the dry signal and goes back in time, defying the laws of physics, and giving you a really cool flange sound. Again, the special switch brings up the regeneration.

Controls a

Submode: Select the type of effect from the chart below.

	chorus			vibe			flanger		
mode	a	b	c	a	b	c	a	b	c
	basic	multi	w/ trem	uni	vibrato	rotary	60s	70s	thru Ø
special	LF throb		depth	regen	comp	horn	regeneration		

Power: +—(●)— - 9V
tip 2.1mm jack. 280

Mode: Select between chorus, vibrato and flanger.

Chorus has a smooth, rich shimmering quality adding dimension to your sound.

Vibe is a pitch modulation effect that adds a warbly feel.

Flanger is a wide sweeping phase effect that adds a sense of air and movement.

Mix: Controls the level between the dry signal and the wet signal. Counterclockwise is 100% dry, and turning clockwise will increase the amount of effect in the signal.

Rate: Adjusts how quickly the effect will modulate.

Preset Stompswitch: Press to scroll through presets. Each LED color represents a different preset. When the LED is white, the Nebulus will use the settings currently indicated by knobs and switches.

at a Glance

V - 12V DC negative
mA or greater

Tone: Changes the tonal character of the effect.

Bright will add some high end.

Clean will leave the signal unaffected.

Warm will darken the sound.

Special: Modifies the effect. Performs a different function for each mode. See the chart at the upper left to reference the functionality in each mode.

Output: Sets the overall output level (volume) of the pedal.

Depth: Adjusts the width of the modulation.

Bypass Stompswitch: When the LED is shining, the effect is applied to the signal. When off, the pedal is being bypassed.
When scrolling through presets, the bypass LED will blink indicating the preset is ready to load. Press the bypass switch to engage the new preset.

Advanced Configuration

Entering the advanced configuration: Unplug the power from the Nebulus. Plug the power back in while holding down both the preset and bypass stompswitches. The bypass LED should blink twice to confirm that you are in the advanced configuration.

Modifying the advanced configuration: Each toggle controls a configuration parameter. When a parameter is modified, the preset LED will blink to confirm that a change has been made.

Exiting the advanced configuration: Hold down both the preset and bypass stompswitches. The bypass LED will blink twice to confirm that the Nebulus has exited the advanced configuration.

Factory reset: While in the advanced configuration, press the following stompswitches in order: preset, bypass, preset, bypass. The LEDs will do a little dance to confirm that the Nebulus has been reset to its factory settings. **Please note** that this overwrites the current presets with the factory presets.

Advanced Configuration at a Glance

Presets Write-Protect: Choose if presets are write protected or adjust on the fly.

left(default): Presets rewritable
center: Presets are write-protected. Any changes made while in a preset will not be saved.
right: "Locked" Control adjustments are disabled in all presets except the manual preset (white LED).

Preset System: Choose how to scroll and recall presets.

left(default): Standard Presets. Scroll with the preset switch then use the bypass switch to activate the new preset.
right: Instant Presets. Press the preset switch to instantly load the next preset in line.

Manual Mode Preset: This controls if the manual preset appears when scrolling through the presets.

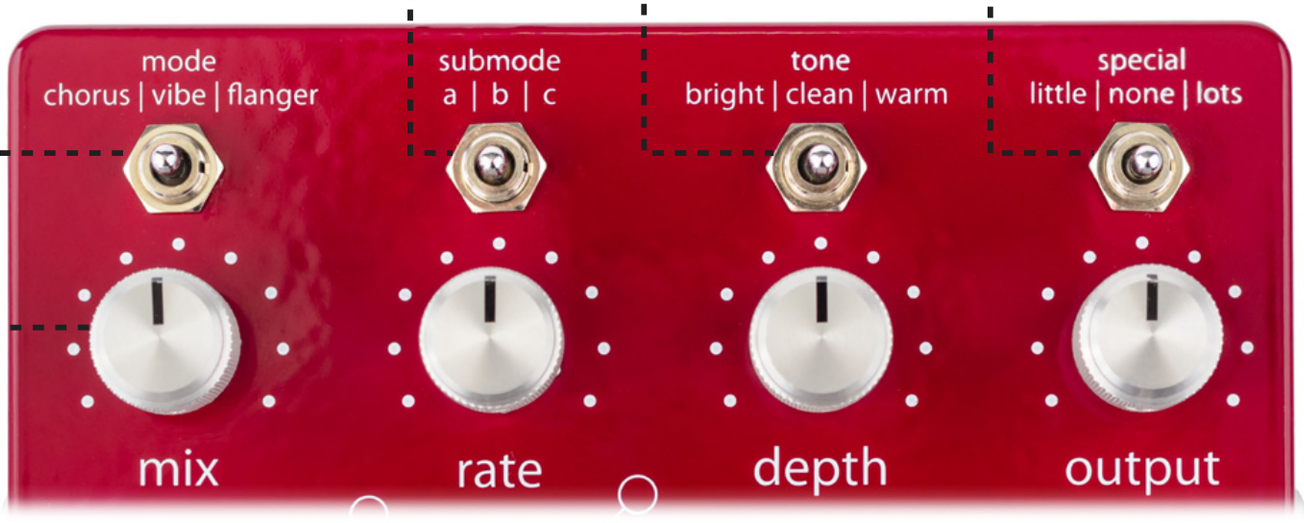
left(default): Manual mode appears.
right: No manual mode.

Bypass Mode: Set the Nebulus to operate in true bypass or soft bypass.

left(default): True bypass.
right: Soft bypass.

Presets: Choose how many presets are used.

0: white
1: orange
2: green
3: blue
4: pink
5: yellow
6: aqua
7: lime green
8: purple



Using Presets

The Nebulus allows you to save and recall presets. All pedal settings are saved in a preset and each preset is represented by a different color of the preset LED.

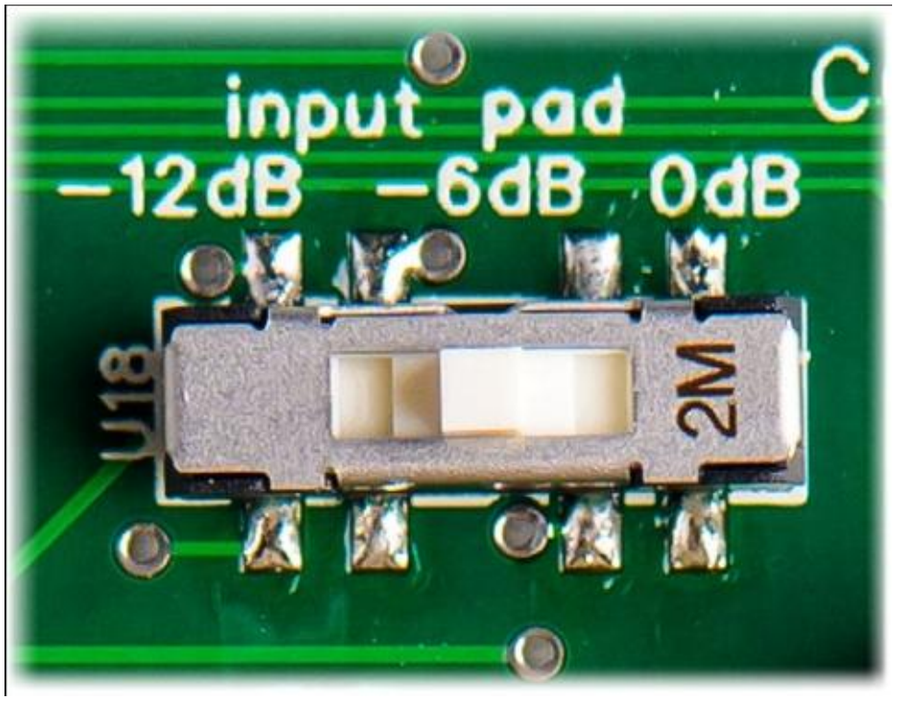
To load a preset, use the preset stompswitch to scroll through presets. The LEDs will blink, indicating that the preset of that color is ready to load. Press the bypass stompswitch while the LEDs are blinking to engage the new preset.

To modify a preset, just move a control. The new setting for that control is instantly stored in the preset. Presets can be locked to prevent changes from overwriting the preset. See Advanced Configuration for steps on locking presets.

The manual preset is represented by a white LED. It does not store settings. Instead, it will always use the current settings on the knobs and switches.

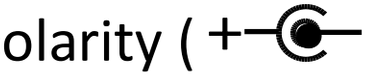
Adjusting the Headroom

The Nebulus has an internal switch which allows for the adjustment of the input headroom. This switch is accessed by removing the back plate. The pedal ships with the switch in the -6dB position, which allows for an input level of +5.1dBu. If the input to the Nebulus is especially loud, and you are noticing distortion under normal conditions, you can increase the headroom by moving the switch to the -12dB position. If the input is low, and you'd like to increase the signal-to-noise ratio, you can move the switch to the 0dB position.



Powering the Nebulus

Go to www.empresseffects.com/power.html for a full list of compatible power supplies.

Please Note: The Empress Nebulus requires at least 280mA of current to function properly. Any power supply rated at 9V DC, supplying negative tip polarity () and at least 280mA of current should work.

Popular options are the Boss PSA-120S or PSA-240 (not the PSA-120T because it only supplies 200mA). When powering with the Voodoo Lab Pedal Power 2+, you will need to use output 5 or 6 and the dip switch should be set away from the normal position.

If your Nebulus is underpowered, symptoms could include: powering off, bypass turning on/off quickly, weird sounds and functions not working properly. If you have any questions on powering your Nebulus, please call us at 888-676-1853 or email us at support@empresseffects.com.

Legal Stuff

FCC Compliance

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules

Specifications

Input Impedance:	1MΩ
Output Impedance:	1KΩ
Frequency Response (-3dB):	8Hz – 18.5kHz
Input Headroom with -6dB pad:	+5.1dBu
Input Headroom with -0dB pad:	+0.2dBu
Input Headroom with -12dB pad:	+10.8dBu
Output Headroom:	+10.2dBu
Distortion:	0.40%
Signal to Noise:	102.7dB
Input Voltage:	9VDC 
Required Current:	280mA
Power Input Connector:	2.1mm Barrel Connector
Height (enclosure only):	1.5”
Height (including controls):	2”
Length:	3.5”
Width:	4.5”
Weight:	12.5oz

www.empresseffects.com