

SYNCOPY

INSTRUCTION MANUAL



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Stone Deaf Effects and Amplification LTD. 35 Pennine Vale Shaw, Oldham OL2 8DH United Kingdom www.stonedeaffx.com For many musicians who are looking for a delay pedal, it's fair to say that an analog device tends to be the most sought after for blending in with your tone, giving that true analog warmth and texture. However, most analog units available today are just not as usable as they could be in a modern setting.

Meet **Syncopy Delay**, a 100% analog bucket-brigade delay unit, but with full digital control over tempo, subdivisions, repeats, modulations and much, much more. Syncopy is your perfect sonic centre, where echoes of the past meet and merge perfectly with technology of the future.

With 1 full second of gorgeous and textural fully analog delay, based on classic bucket brigade technology and a fully analog modulation section, combined with the added benefit of modern-day digital control, Syncopy allows you to create, control, save and recall a multitude of delay tones on the fly!

From short classic delays to long and lush, lo-fi modulated echoes and all the way to otherworldly special FX, such as Chorus and Vibe effects, Syncopy does it all without flinching, while providing the deep and ultra-precise control required by modern day musicians.

Syncopy Main Features

- Analog bucket-brigade delay pedal from 50mS to 1 second of delay time
- Built-in Analog Modulation adds lush movement or crazy special FX to trails
- Tap Tempo and 4 sub-divisions get your delays in sync or hold tap for wild self-oscillation ramping of the feedback
- 128 Presets first 4 readily available directly on the pedal, additional Presets available via MIDI
- Expression and MIDI control for on the fly parameter changes
- True-Bypass and Buffered-Bypass switching for trails and non-trails delay lines
- Handmade in the UK



Modulation: Secondary Functions

The Modulation and Delay tones are separate and use the same interface.

To activate Analog Modulation on the delay repeats, press the Time, Feedback or Mix control knobs. This Mode is indicated by a red dot around the control knob turning from GREEN to RED.

- FEEDBACK = MODULATION DEPTH
- MIX = MODULATION SHAPE (Square to Sine)
- TIME = MODULATION RATE

To re-select the Delay Time, Feedback or Mix functions, press the knobs again. This will allow you to move the green LED's.

To deactivate the Modulation, set the Modulation Depth to Zero when in Modulation Mode.

This can be done by rotating the Feedback knob anti-clockwise until the RED LED goes off.



Expression control:

Expression control is available using any Standard Expression Pedal.

You can use expression to control single or multiple parameters simultaneously.



- Press and hold again to deactivate the expression control on either TIME, FEEDBACK or MIX modes.
- Expression activation is Preset ASSIGNABLE!
- When the modulation is activated, press and hold. Expression control is applied to the modulation parameter.

Example: if you are adjusting the Modulation Depth using the control knob, you can press and hold, then the expression control will be assigned to Modulation Depth, not Feedback.

You can control both by pressing again (to select Feedback) and then pressing and holding to assign expression to the feedback.

This means both the modulation and delay parameters will be expression controlled at the same time.

You can apply the same method to the Time and Mix controls as well.

MIDI Control:

To access the MIDI settings, press and hold the bypass footswitch for 5 seconds while Syncopy is bypassed.

Press and hold the switch again to store MIDI settings. This allows you to change MIDI channel & activate MIDI clock.

Default Channel = 1 Default MIDI beat clock = OFF





When in MIDI setting mode, Press 'Mix' to turn MIDI Beat Clock ON/OFF GREEN/RED

- When MIDI beat clock is activated, any incoming clock messages will override the Rate Control
- Sending MIDI program changes allows you to access 128 Presets on the Syncopy. Foot-switch Preset selection is then arranged in to banks of 4. For example, if you select channel 9 using MIDI, you will now be able to cycle through channels 9-12 using the foot-switches. Selecting channel 7 with MIDI sets the current bank to 5 to 8, etc.
- All Syncopy parameters can be controlled using MIDI CC (continuous controller) messages.

The delay Preset number is selected using 'Program Change' MIDI messages:

```
MIDI Status = Program Change (+Channel) = 1100 cccc
MIDI Data Messages = Amplifier Channel = 0ppp pppp
```

Using MIDI, you also have the power to change any parameter of the currently selected Preset. For example, this could be used to add a MIDI Depth Expression pedal that overrides your Preset depth etc. All of these settings are accessible through control changes (sometimes referred to as continuous controllers / MIDI CC).

FOR A LIST OF THESE PLEASE TURNOVER TO THE NEXT PAGE ...

Function	Status Byte Value	Date Byt
Change Preset	1100nnnn (Program change on channel nnnn	0 -
Control Delay Time	1011nnnn (Control Change on Channel nnnn)	СС
Control Feedback	1011nnnn (Control Change on Channel nnnn)	сс

e Value 1	Data Byte Value 2	Description
127	-	Sending a "MIDI Program Change" on channel "n" will set the current- ly active Preset to the number sent in Data Byte 1. Allows Preset numbers between 0-127 to be accessed.
- 20	0 -127	Control Number 20 - Delay Time. Value of Databyte 2 sets the Delay Time between its mini- mum and maximum value. Where: 127 = Max Delay Time, 0 - Min Delay Time.
- 21	0 -127	Control Number 21 - Feedback: 127 = Max Feedback, 0 = Min Feed- back

Function	Status Byte Value	Date Byt
Control Mix	1011nnnn (Control Change on Channel nnnn)	сс
Modulation ON / OFF	1011nnnn (Control Change on Channel nnnn)	СС
Modulation Time	1011nnnn (Control Change on Channel nnnn)	СС
Modulation Depth	1011nnnn (Control Change on Channel nnnn)	СС

e Value 1	Data Byte Value 2	Description
-22	0 - 127	Control Number 22 - Mix: 127 = Wet, 63 = 50/50, 0 = Dry.
-23	0 - 127	Control Number 20 - Delay Time. Value of Databyte 2 sets the Delay Time between its mini- mum and maximum value. Where: 127 = Max Delay Time, 0 - Min Delay Time.
-24	0 - 127	Control Number 24 - Modulation Time: 127 = Max Time, 0 = Min Time.
-25	0 - 127	Control Number 25 - Modulation Depth: 127 = Max Mod Depth, 0 = Min Mod Depth.

Function	Status Byte Value	Date Byt
Select Modulation Shape	1011nnnn (Control Change on Channel nnnn)	C-
Select Tap Division	1011nnnn (Control Change on Channel nnnn)	СС

e Value 1	Data Byte Value 2	Description
26	0 - 127	Control Number 26 - Modulation Shape: Mod Shape 1 = $0 - 14$ Mod Shape 2 = $15 - 28$ Mod Shape 3 = $29 - 42$ Mod Shape 4 = $43 - 56$ Mod Shape 5 = $57 - 70$ Mod Shape 6 = $71 - 84$ Mod Shape 7 = $85 - 98$ Mod Shape 8 = $99 - 112$ Mod Shape 9 = $113 - 127$
-27	0 - 127	Control Number 27 - Tap Division: Crotchet = 0 - 24 Dotted Quaver = 25 - 49 Quaver = 50 - 74 Triplet = 75 - 99 Semi Quaver = 100 - 127

Function	Status Byte Value	Date Byt
Bypass ON/OFF	1011nnnn (Control Change on Channel nnnn)	C.
MIDI BEAT CLOCK ON/ OFF	1011nnnn (Control Change on Channel nnnn)	СС
REMOTE TAP	1011nnnn (Control Change on Channel nnnn)	СС

e Value 1	Data Byte Value 2	Description
29	0 - 127	Contol Number 29 - By- pass ON/OFF. Any value below 64 will BYPASS Syncopy. Any value above 63 will turn Syncopy OFF .
-30	0 - 127	Control Number 30 - MIDI BEAT CLOCK ON/ OFF. Any value below 64 will turn BEAT CLOCK OFF. Any value above 63 will turn BEAT CLOCK ON.
-93	0 - 127	Any value sent on CC- 93 is registered as a tap tempo button press.

Factory Preset 1: Basic Slap Back Delay



Factory Preset 2: Warble Long Delay



Factory Preset 3: 350ms - 500ms (Floydish)



Factory Preset 4: Vibe Chorus



Specifications:

Model	Syncopy
Current mA:	300 mA
Dimensions:	L 132mm x W 84mm x H 62mm (including knobs)
Weight:	0.65Kg
Enclosure:	Aluminium
Power Supply:	2.1mm - centre negative
Voltage:	9v DC Supply Only (Internally Regulated)

Warranty...

All Stone Deaf products are supplied with a 2 year limited warranty. This covers any defects in manufacturing or faulty components. In the unlikely event of having any issues with your Stone Deaf product, please contact the dealer you purchased it from in the first instance. Alternatively get in touch via our website:

www.stonedeaffx.com

The Syncopy complies with the following regulations:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device complies with the Canadian Interference regulations CAN ICES-3(B)/NMB-3(B)

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Do us a favour...

If you enjoy this product and feel inspired to create, please share your experiences on our <u>Facebook page</u>, via a comment, picture or review.

Alternatively follow us, like us or subscribe via <u>Instagram</u>, <u>YouTube</u> or <u>Twitter</u>.

Please use the hashtags: #stonedeaffx, #stonedeaf

If you can take some time out of your busy schedule to spread the word to fellow guitarists around the globe, it will help us focus our efforts on making even more exquisite equipment for you to enjoy.

Thanks!

IF YOU HAVE ANY PROBLEMS AT ALL WITH THIS PRODUCT, PLEASE FEEL FREE TO E-MAIL US HERE: info@stonedeaffx.com

Advanced settings:

How to change the input gain to better match your instrument output/pick-ups level:

On the rear of the product, there is a hole that allows access to the internal input gain pot.

This is set at 50% and allows you to increase the amount of input signal going into the delay.

From the factory, Syncopy has been calibrated using standard single-coil pickups.

For example more input gain may be required for lower output single-coils and less input gain may be required for humbucking pickups or synths etc.

Note!

Only a trim pot tool or a small screwdriver (with a stubby head) should be used to turn the trim pot.

Clockwise gives More gain. Anti-Clockwise gives Less gain.

How to set the feedback oscillation threshold:

Being able to set Syncopy's feedback threshold, allows you to set the amount of feedback that's attainable before the feedback goes into self oscillation. Some people like this to come in earlier than others do, note that this can also depend on the signal strength going into the product.

To set the feedback oscillation threshold, follow this procedure:

Step 1: Set the "**Feedback knob**" to the LED position you want self oscillation to come in at (for example LED 7) and save the setting. Adjust the Tone knob to 50%.

Step 2: Put the pedal in bypass mode.

Step 3: Once in bypass mode press and hold down both the **TAP** and **Bypass Foot-switches** for 5 seconds until the interface changes.

Step 4: Adjust the **Time Knob** to increase or decrease the feedback oscillation threshold. This means for the self oscillation to come in earlier or later or not at all.

Clockwise: will make the feedback oscillation come in earlier **Counter Clockwise:** will make the feedback oscillation come in earlier or not at all.

Step 5: Press and Hold both **TAP** and **Bypass Foot-switches** for 5 seconds to save settings.

How to use the self-oscillation ramp function:

The self oscillation ramp function allows you to ramp up the delay feedback to maximum and at a fixed speed using the Tap Tempo foot-switch.

You can go from zero feedback to self-oscillation in a matter of mS/ seconds depending on how sensitive you have set the feedback oscillation threshold.

Example:

Step 1: Follow the steps on page 25 to set the feedback oscillation threshold.

Step 2: While playing, press and hold the TAP foots-witch. This will ramp the feedback control knob LEDs to full, sending the pedal into self-oscillation. When you take your foot off the foot-switch, the feedback LEDs will spring back into the Preset position.

If you are unhappy with how the ramp comes in, then repeat step 1 to adjust the oscillation threshold.

How to change from True Bypass to Buffered modes:

Depending on your rig/pedal-board configuration and preferences, you may want to switch between Buffered and Non-Buffered (True Bypass) switching modes and even assign these to a Preset. But what does this mean when using the Syncopy in these modes?

Buffered Bypass: allows you to play your delay lines with trails. For example, you may have a long delay line with a lot of feedback and repeats, but may want those repeats to carry on and fade out after you have bypassed the Syncopy.

True Bypass: allows you to turn off the whole delay line with no delay trails at all, bleeding over into the exact tone you have when you bypass the delay.

How to switch between buffered and True bypass:

When the pedal is in its "on mode", select the Preset you want to assign the bypass mode to.

To change the bypass type, press and hold the bypass foot switch for 5 seconds while the pedal is un-bypassed (on). You should see a green or red flashing of LEDs:

```
Green = True Bypass
Red = Buffered
```

Once you have done that, remember to save the Preset to store the mode.





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