

# COOPER FX



This is the sound of nostalgia. The Generation Loss brings together all aspects of tape degradation and uses a combination of effects to hone in on that sound we're all familiar with. Generation Loss refers to the decrease in sound quality and introduction of noise and sound artifacts each time a copy is made on magnetic media such as tape. Random pitch fluctuations, filters to cut down on the signal's bandwidth, sample rate reduction, and noise are all brought together in this pedal to mimic that sound without the need for a broken VHS player.

9v center tip ground, 150mA  
 EXP: accepts a 1/4" TRS Jack for expression  
 MIDI: 1/8" jack, follows midi TRS type A spec  
 MIDI details on back of manual

## WOW

This control refers to the lower frequency pitch fluctuation that can affect audio played back on tape machines. Turning the control clockwise will increase the depth and speed of the random pitch fluctuations allowing for random vibrato and chorus sounds.

## FLUTTER

While WOW describes the slow gentle pitch fluctuations, Flutter refers to the relatively fast, random pitch fluctuations that are in large part responsible for "that" tape sound. Instead of sounding like vibrato, flutter causes more of a timbral change to the incoming audio. **\*\*NOTE! If you have the footswitch assigned to spectral freeze/drone mode, then the flutter controls the speed of the random vibrato\*\***

## LP

Sets the cutoff frequency for a resonant low pass filter. The sweep is the opposite of the high pass filter, in that more of the audio is filtered as you turn the knob counter clockwise. Used in conjunction with the HP knob, the user can really narrow in on the high and low frequency signal attenuation to get that tape sound

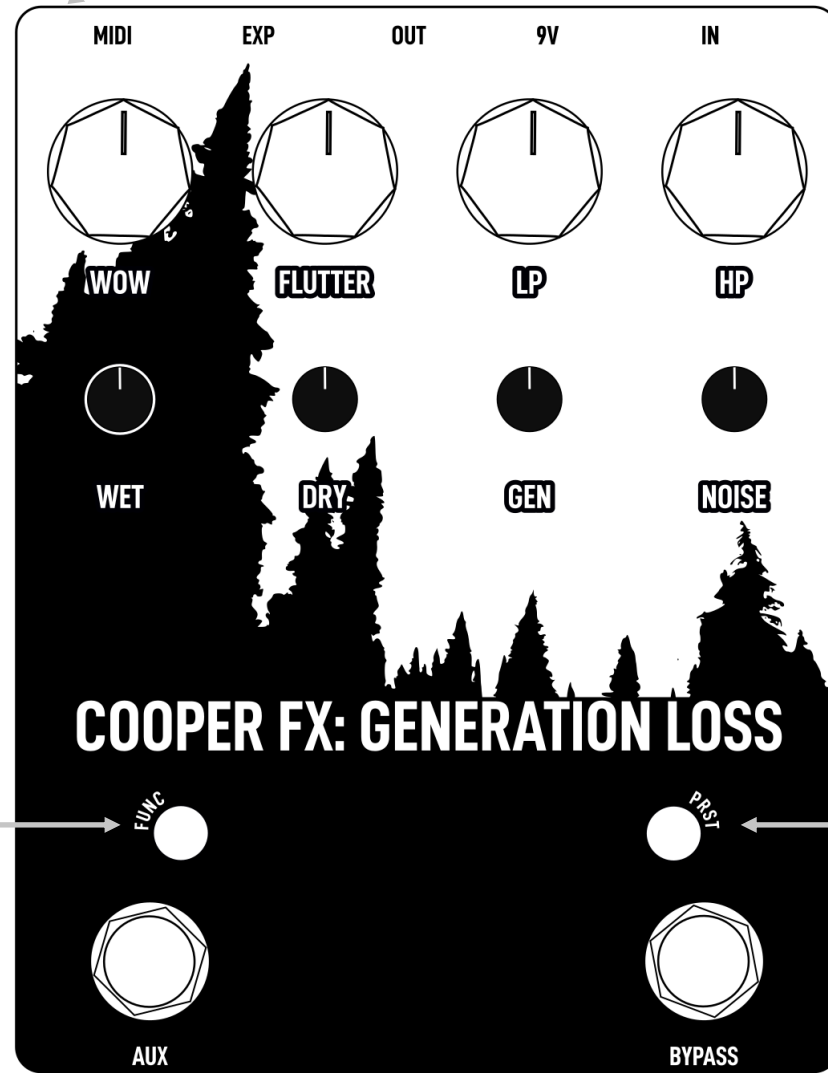
## HP

Sets the cutoff frequency for a resonant high-pass filter. Turn clockwise to sweep from no hi pass filtering, to heavy filtering. This has a "brightening" effect on the audio.

## FUNC

This button determines what the AUX footswitch does. Tap to select the function of footswitch. The LEDs will blink in a way to indicate the selected function.

Tape stop effect      Garbled tape effect      Spectral Freeze / Drone



## WET

Wet adjusts the volume of the wet signal

## DRY

Dry controls the level of the dry signal, and keeps your dry signal path analog. Some crackling noise is to be expected when adjusting.

## GEN

Gen controls the sample rate of the wet signal. At its max, the audio quality is as pristine as it gets, but as you turn the knob counterclockwise, the audio becomes increasingly lower quality. While not truly an aspect of analog tape degradation, this control is useful to have in any lo-fi effect.

## NOISE

There are two noise options available. With the NOISE knob at noon, you have the noise disabled. Turning the knob counterclockwise will increase the level of a static white noise, positioned before the filters. Turning the knob clockwise from noon will increase the volume of a different flavor of noise, known in the previous version of the generation loss as the "noise mod".

## AUX

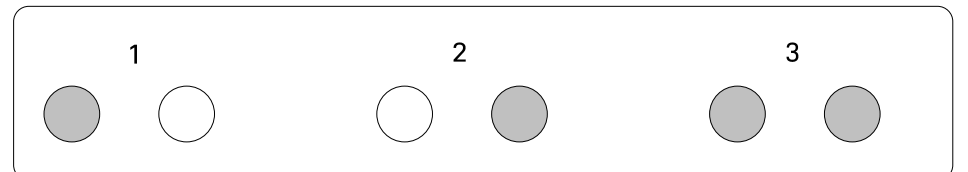
Performs effect determined by the FUNC button

## BYPASS

Turns effect on and off: true bypass

## PRST

This button handles all preset functions. Tap to enter preset mode. Hold to exit preset mode. When in preset mode, a quick tap will let you cycle through the three available onboard presets (more available with MIDI). The LEDs will illuminate in such a way to indicate the preset number being accessed.



\*Both footswitches can be used as momentary or latching. A quick tap will cause the switch to latch, while a long hold of 0.5 seconds and longer will function as momentary

## MIDI CCs

14: BYPASS

15: AUX FOOTSWITCH

20: WOW

21: FLUTTER

22: LP

23: HP

24: WET

25: DRY

26: GEN

27: NOISE

40: WOW EXPRESSION

41: FLUTTER EXPRESSION

42: LP EXPRESSION

43: HP EXPRESSION

44: WET EXPRESSION

45: DRY EXPRESSION

46: GEN EXPRESSION

47: NOISE EXPRESSION

## MIDI CHANNEL SELECTION

Hold both footswitches down until the LEDs are alternating being on/off. This indicates you are in midi channel search mode. On your midi device, send a midi command on your desired channel. If the pedal detects a change in the midi channel, then it will automatically exit the midi channel search mode. If it does not exit the midi channel search mode, then that means you have not changed the midi channel from what it was previously set to.

## EXPRESSION ASSIGNMENT

To assign expression to a knob: Hold the BYPASS footswitch and turn desired knob to desired TOE position. Release BYPASS footswitch and you can turn the knob to its desired HEEL position.

To remove expression from a knob, hold BYPASS and turn the knob all the way down, CCW.



### Warranty information:

Lifetime warranty for all manufacturer errors. If it is my fault, I will fix it. This can be voided by doing things such as but not limited to: plugging in 18v, inserting more than +5v on the expression/cv jack, using a mono cable in the exp/cv jack, etc. Otherwise I will likely fix it for free. Questions, comments, concerns: [tom@cooperfx.com](mailto:tom@cooperfx.com)