

# INSTRUCTION MANUAL



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Keeley Electronics, Inc. 2019

## THE KEELEY ECCOS - FLANGE MODULATED TAPE DELAY / LOOPER

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Tape-Flanged Delay Trails. That's what makes the ECCOS delay pedal unique; a new style of tone-modulation that isn't pitchy. It's the sound of just the echoes being flanged with vintage reel-to-reel tape decks. The shape and tone of your repeats are constantly changing, creating lush movement to your delay trails! Listen as your delay trails move with flanged tonalities that are beautifully filtered and sound tone-modulated, not just pitch modulated. Simply adjust the Rate and Modulation parameters to hear the flanged delay trails mixed with your pure analog blended guitar. Modulation without undue pitch bending.

The ECCOS is also a Looper. Record and playback loops while you play live. ECCOS features like Reverse, Half Speed, and Play-Once are easy to use creatively. Create guitar magic using the delay with its own tap tempo (up to 1.5 seconds); all while layering on endless loops of audio. The ECCOS offers loop times of up to 120 seconds in mono, and up to 60 seconds in stereo.

The Keeley ECCOS features true stereo processing with mono and stereo inputs and outputs. Uber-clean, all-analog audio for the pure guitar dry/blend. Experience next level audio DSP using the Dream quad 24/56-bit processor. There are nine adjustable controls for crafting the tone of the delay trails. Manual or remote operation of looper, bypass, presets, and tap tempo. Dynamically assign controls to be used with a foot expression pedal. Switch back and forth between the Delay and Looper to choose custom delay sounds and then record additional layers, hands-free, while looping.

**PLUG IN AND PLAY YOUR GUITAR!**



## TECHNICAL SPECIFICATIONS

9V Neg-Tip DC Supply  
115mA

Input Impedance, 1M / Output Impedance, 10K

True-Stereo Input and Output  
True Bypass or Buffered Trails  
Analog Dry-Thru Blend

## PRIMARY DELAY CONTROLS

- 1 TIME** - Adjusts delay time manually from 5ms to 1.5 seconds.
- 2 BLEND** - Adjusts effect level, blend in delay with your clean guitar tone.
- 3 RATE** - This controls the rate or speed of your modulated delay trails. Setting this slow will create slightly comb filtered delays. Fast rates can be used to get rotary speaker effects. The sine wave LFO modulation goes from 0 to 15 Hz.
- 4 DEPTH** - Depth of Delay Modulation, up to 13ms. Set high to achieve chorus-like modulations. Turning the depth to zero produces a clean delay tone.
- 5 FEEDBACK** - Adjusts the number of delays or repeats. FDBK is also a push button switch. Tap the FDBK knob once to enter preset selection mode. Press and hold FDBK to access secondary controls like TONE or REGEN, or use the MODE select new tempo subdivisions. Quickly double tap the FDBK knob to switch between Looper and Delay modes. You can even use your foot while playing live!



## SECONDARY DELAY CONTROLS

Access four alternate tone and time shaping controls by pressing and holding the FDBK control while turning other controls



Hold down the FDBK knob to access secondary controls.

- 1 MANUAL (Flanger Time)** - Subtly changes the delay time of the flange. Ranges -0 - 13ms. With longer times, the delays become more chorused. Set at minimum by default.
- 2 VIBE (Modulation Style)** - Flanged delay trails are created by producing two repeats that are blended together. The VIBE knob controls the clean portion of your delays. Turn CCW for pitch vibrato. Turn CW for flanging repeats. Set at max by default.
- 3 TONE** - Tone control for the repeats. Set it high for a sweet high-pass sheen. Set it lower for a warm, tape style high-end roll off. Set at noon by default.
- 4 REGEN (Flanger Regeneration)** - Controls the amount of flanger feedback. Increasing this control will give you deep flanging effect for your delays. Set at minimum by default.
- 5 SUBDIVISIONS** - Like all secondary controls, hold down the FDBK knob. While knob is held down, toggle the mode switch to set delay-time subdivisions: Quarter, Dotted Eighth, Eighth, or Triplet. The Status LED will blink the current subdivision while FDBK is held down. Set at quarter note by default.

## LOOPER CONTROLS

In looper mode, the BYPASS and TAP switches change functions

### ENTERING LOOP MODE:

Place the ECCOS in looper mode by using the MODE toggle switch or by double tapping the FDBK knob with your foot. The Looper LED will light to indicate which mode is active.

**RECORD/PLAY/STOP** - To start recording a loop, press the BYPASS (Record) switch and begin playing. The BYPASS LED turns red. After playing, press the BYPASS (Play) switch again and playback will start. The BYPASS LED will turn blue. To stop the looper, double tap the BYPASS (Stop) switch. The STATUS light will remain blue indicating that there is a stored recording ready for playback.

**OVERDUB** - To start an overdub from Play mode, simply tab the BYPASS switch again. The BYPASS LED will turn red to indicate recording. When you're done recording, press the START switch to go back to playback mode. The LED will once again turn blue.

**UNDO/REDO** - To undo your last recording, press and hold the FDBK knob for 1 second. If you are recording your first loop, this will silently delete the track. If you completely stop the loop, you cannot undo your last overdub as it has been saved to memory at that point.

**LEVELS** - Adjust the volume level of playback with the Looper Level (DEPTH Control). If no ECCOS delay effect is desired while looping, simply turn down the BLEND knob.

Note: The ECCOS delay side can also be turned off independently.

The STATUS LED turns blue and will flash once at the beginning of your loop. This lets you know where your loop starts.

Note: The Eccos delay sounds work in looper mode! The TONE control adjusts the tone of your delays. Blend, Feedback, and Time work for the delay effect as well.



**DELETING LOOPS** - To delete a loop, switch to Loop Mode (you must be in loop mode to delete loops). Double tap & hold BYPASS to delete the loop. The STATUS and BYPASS lights will flash twice and then turn off indicating you have cleared the memory and recording. Silent Erase - If it is your first recording in loop mode, and you are still recording, you can undo it by holding down the FDBK knob, giving you a way to silently delete that first track.

## LOOPER EFFECTS

Half Speed and Reverse

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To hear your loop in half speed, double tap the REVERSE/HALF SPEED switch. If you are in playback you will hear your recording an octave down and at half speed. The LOOPER LED will rapidly flash letting you know that you're in half speed mode. You can enter this mode during playback or recording for creative effect. Record while in half speed, then double tap, and anything you have recorded will now sound an octave up and in double-time!

To hear your loop in reverse, press and hold down the REVERSE/HALF SPEED switch while you are playing or recording a loop.

If you are recording an overdub and then you press and hold the REVERSE/HALF SPEED switch (for Reverse), playback will sound in reverse and anything you record with your guitar will playback in reverse when you let go of the REVERSE/HALF SPEED switch!

## DELAY TONES AND MODULATIONS

Adjustments while looping

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What makes the ECCOS an effective Delay / Looper is that you can go back and forth between the Delay and Looper modes while looping. To go between modes simply use the MODE toggle switch, or Double Tap the FDBK knob with your foot. Either operation will change between Looper and Delay modes. Now, while looping, you can go back to Delay mode to tap in a new delay tempo or even change delay presets!

For example, you can start a loop with Preset 1. Then, while playing back a loop, you can double tap the FDBK switch and go back into Delay mode and select a new preset. Double tap FDBK and go back into Looper mode. Now when you record an overdub, you will have your preset delay and modulation tone carry over to looper recording.

## EXTENDED RECORD MODE

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Extended Record Mode - The Eccos comes from our factory with Undo/Redo enabled and with 60 seconds mono recording time. To get 120 seconds of looping time simply remove power and then press and hold down the FDBK knob while applying power again. This will remove the Undo/Redo feature and give you the maximum recording time.

This also engages Sound on Sound Mode (See pg. 10)



## CREATING AND SAVING PRESETS

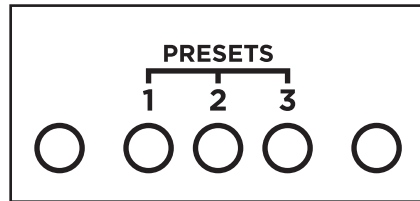
**PRESET SELECT MODE** - To enter Preset Select Mode (while in delay mode), quickly double tap BYPASS or tap the FDBK knob once. Preset LEDs will begin to flash. The TAP switch or MODE select switch advances through the presets. Tap BYPASS again to select the preset currently flashing. Hold BYPASS to overwrite the selected preset.

**CHANGES TO A PRESET** - Any changes made to a parameter will turn OFF the preset LED. Double tap the BYPASS switch again to once again enter preset select mode, then hold the BYPASS switch to enter save mode, cycle through the presets by using the TAP or MODE switch, then hold the BYPASS switch again to save the changes made to the selected preset.

The ECCOS features 3 preset locations. In addition, you can access a What You See Is What You Get (WYSIWYG) mode by entering Preset Select Mode, then scrolling through the preset locations until all 3 Preset LEDs are blinking, then select it by tapping the BYPASS switch. This is a great way to exit any of the three preset settings and go back to where the controls are currently set.

**SWITCH PRESETS WHILE LOOPING** - Switch to Delay mode, single tap the FDBK knob, cycle through the presets by pressing TAP, then engage the new preset by tapping the BYPASS switch.

Note: When the WYSIWYG preset is selected, it will recall all of the previous (non-preset) secondary and expression control positions. All of the main controls are set to the pots current positions. Similar to a preset but only for the secondary and expression controls, the pots are read at their current positions.



The three lights in the middle of the ECCOS are preset indicators, which will correspond with the currently engaged preset. In WYSIWYG mode, all three are constantly lit.



## SOUND ON SOUND MODE

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The ECCOS now features Sound on Sound Mode! Sound on sound mode lets you record without erasing the original loop. The volume of the loops degrade over time, recreating a vintage reel to reel recording technique. To set the decay of the loops, hold down the FDBK knob and adjust the Depth control. This alt control comes in handy when using Sound on Sound Mode.

To Enable:  
Hold down the FDBK knob while applying power. Repeat to return to stock looper mode.

## INDEPENDENT SWITCHING

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The ECCOS features advanced independent switching. The Delay or the Looper can be turned on and off independently. You can start the Looper with our without a Delay Setting.

## TRAILS OR TRUE BYPASS

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When bypassing the unit, the ECCOS can be set to let delay trails repeat or to stop them immediately. No trails is equivalent to true bypass; trails requires and uses a top shelf, Keeley Electronics approved output buffer.

**TRAILS** - Hold BYPASS + Hold TAP for 2 seconds.

The BYPASS And STATUS LEDs will flash two times to show the change was saved. Default setting is true bypass.

## STATUS LIGHTS

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Status Light steady = A loop is in memory. Blinks once at the start of a loop.

Looper Light flashing = Loop is playing at half speed.

Bypass and Status Lights flash twice = Loop has been successfully deleted.

Bypass and Status Lights flash twice = Expression controls have been cleared.

Status Light constant blink = You are in expression pedal assign / unassign mode.

## STEREO, PING PONG, ETC.

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A slight stereo field is created when simultaneously using both outputs. The Stereo Out is slightly modulated to give a stereo impression. True stereo ping pong only occurs when using two amplifiers. Stereo ping pong only works in subdivisions.

Note: In stereo mode, the quarter note is on the stereo output and the subdivision is on the mono output.

## RUNAWAY FEEDBACK OSCILLATOR

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Press and hold TAP to engage maximum feedback - Perfect for endless repeats at the press of a button!  
To adjust the volume of the runaway feedback oscillator, hold TAP and adjust the FDBK knob while in delay mode.

Note: This can only be set with the FDBK knob, and not with an expression pedal.

## ADVANCED SETTINGS

Power must be removed and reapplied for the following settings

### REMOTE/LOCAL OPERATION

For Remote Bypass/Tap Tempo

### FOR MOMENTARY SWITCHES

Hold TAP - Apply Power

If you are using momentary switches for turning on and off the pedal, then hold TAP while applying power to the DC jack. The pedal is in REMOTE MOMENTARY MODE. The BYPASS LED is red in Effect Mode.

### FOR LATCHING SWITCHES

Hold BYPASS - Apply Power

If you are using a latching (relay) system or foot switch, hold BYPASS then apply power to the 9 volt DC jack. The pedal is in REMOTE LATCHING MODE. The Bypass LED is red in effect mode. The BYPASS switch on the ECCOS still functions for selecting presets.

Tap Tempo always requires momentary switching.

You cannot use a latching switch for tap tempo.

Note: Deleting of Loops must be done using the BYPASS switch on the unit when using Remote Latching Mode.

### ELECTRICAL CONNECTIONS FOR REMOTE OPERATION

Use a TRS / stereo cable.

Tip = TAP Ring = REMOTE BYPASS

You can also use a mono guitar cable for tap tempo and the BYPASS will work as normal on the pedal. This way you can use a remote tap tempo box and keep your ECCOS at the top of your pedalboard. Tap tempo via the jack is always active.

### ALL WET MODE

Hold FDBK + Hold BYPASS while applying power to the unit. The ECCOS can be made all wet for use with an amplifier with a parallel effect loop.

### FACTORY RESET

Hold FDBK + Hold BYPASS + Hold TAP while applying power to the unit.

All LEDs will flash in succession and all controls, secondary controls, modes, memory and presets will return to default settings.

You will see all of the lights on the ECCOS cycle, indicating that the Factory Reset is complete.

Note: When making these adjustments, it helps to place the ECCOS on a flat surface, such as a pedalboard or a table top.

## EXPRESSION PEDAL USE

### TO ASSIGN A PARAMETER

1. Hold FDBK for 2 seconds to enter Expression Mode.
2. Set connected expression pedal to heel-down.
3. Turn an ECCOS control knob to the desired heel down setting.
4. Set the expression pedal to toe-down.
5. Turn the same control knob to the desired toe-down position.
6. Hold FDBK for 2 seconds to save your settings.

Note: You can set multiple parameters at once to be controlled with your expression pedal. You can set partial ranges, reassign ranges, or even reverse heel/toe positions in this mode. The sky is the limit!

### TO UNASSIGN A PARAMETER

1. Hold FDBK for 2 seconds to enter Expression Mode.
2. Set connected expression pedal to heel-down.
3. Turn each knob a small amount to let the ECCOS knob you don't want the control to be 'expression controlled'. Don't touch controls still assigned to the expression pedal.
4. Set the expression pedal to toe-down.
5. Hold FDBK for 2 seconds to unassign and save.

Note: Any parameters that were not moved will maintain their previous expression status.

Note: You can save expression pedal setting to any of the 3 ECCOS preset locations.

### EXPRESSION PEDAL INPUT

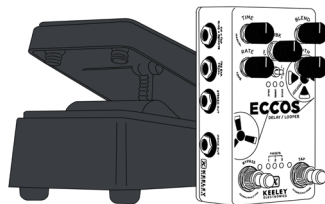
You must use a TRS (stereo) expression pedal with the ECCOS. If you use a mono cable (or volume pedal), the ECCOS will not power on.

When a TRS (stereo) expression pedal is inserted, the expression pedal defaults to controlling the BLEND control of the delay.

Note: Plugging a mono cable into the TRS EXP. PEDAL jack will allow the control of the FDBK switch with a momentary switch.

### CLEAR ALL EXPRESSION SETTINGS

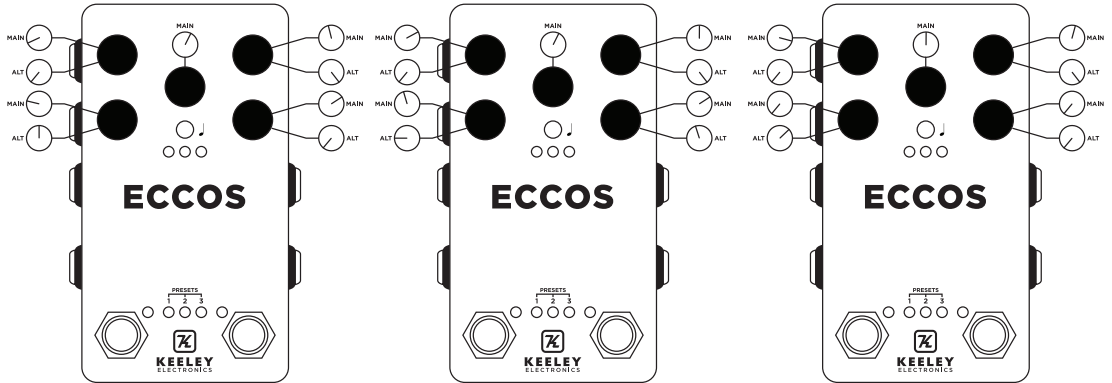
To clear ALL expression pedal settings, enter Expression Pedal Mode by holding FDBK for 2 seconds. Once in Expression Pedal Mode, hold BYPASS for 2 seconds to clear ALL expression pedal settings and reset them to default. Once finished, exit Expression Pedal Mode by holding FDBK for 2 seconds.



## SUGGESTED ECCOS SETTINGS

Getting Started with the ECCOS Delay / Looper

TIP: HOLD DOWN THE FDBK KNOB TO ADJUST THE ALT CONTROLS



**SWEET SLAPBACK**

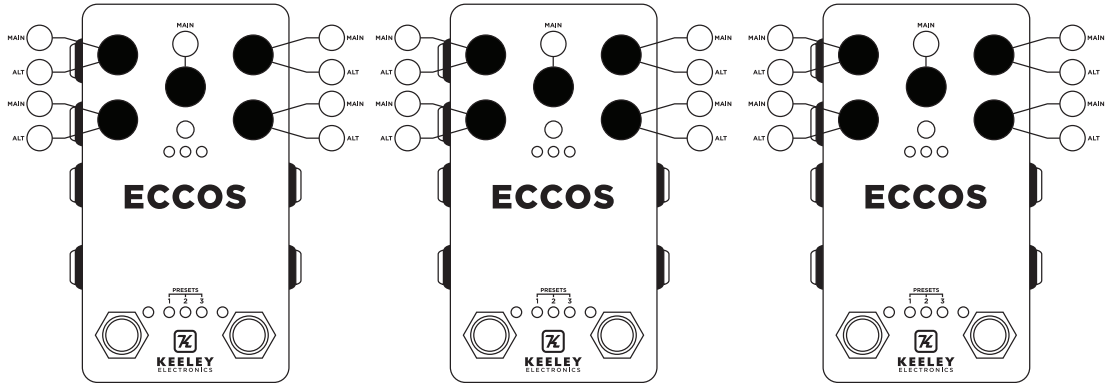
**DREAR PUDENCE**

**CLEAN 'N' EDGY**

# YOUR ECCOS SETTINGS

Your favorite settings for the ECCOS Delay / Looper

TIP: HOLD DOWN THE FDBK KNOB TO ADJUST THE ALT CONTROLS



# ECCOS QUICK START GUIDE

Jump right in to the ECCOS Delay / Looper

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## TOGGLE THE MODE SWITCH OR DOUBLE TAP THE FDBK KNOB TO SELECT DELAY OR LOOPER

### DELAY MODE

Switch to Delay Mode - Toggle MODE switch with your hand or double tap FDBK knob. You can use your foot on the FDBK knob when playing live!

Main Delay Controls - TIME, BLEND, FDBK, RATE, DEPTH  
ALT DELAY CONTROLS - Press and hold FDBK knob while turning other knobs to adjust MANUAL, VIBE, TONE, or REGEN.

Tap Tempo - Press the TAP switch at least 2 times to set the tempo.

Subdivisions - Press and hold FDBK knob + toggle MODE switch.

Runaway Feedback Oscillator - Hold TAP for 2+ seconds.

Trails / True Bypass - Hold BYPASS + Hold TAP for 2 seconds.

### LOOPER MODE

Switch to Looper Mode - Toggle MODE switch with your hand or double tap FDBK knob. You can use your foot on the FDBK knob when playing live!

Start Recording Loop - Tap BYPASS

Start Playback of Loop - Tap BYPASS

Stop Loop - Double tap BYPASS  
Play Loop in Reverse - Hold TAP

Play Loop at Half Speed / Normal Speed -  
Double tap TAP

Erase Loop - Double tap and hold BYPASS for 1 second while in Loop Mode.

Trigger Play Once - Tap TAP (Loop must be stopped)  
Undo / Redo - Hold FDBK for 1 second

**FOR MORE INFORMATION, VISIT [RKFX.COM](http://RKFX.COM)**

