ECCOS DELAY LOOPER INSTRUCTION MANUAL

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The Keeley Eccos

Flange Modulated Tape Delay / Looper

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.

Keeley Electronics designs, delivers, and repeats with the ECCOS. PLUG IN AND PLAY YOUR GUITAR!

PRIMARY DELAY CONTROLS

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.

TIME - Adjusts delay time manually from 5ms to 1.5 seconds.

BLEND - Adjusts effect level, blend in delay with your clean guitar tone.

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 Zero to 15 Hz. 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.

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. Press and hold FDBK while using the MODE Toggle Switch to 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!

CAPTION: HOLD DOWN THE FDBK KNOB TO ACCESS SECONDARY CONTROLS

SECONDARY DELAY CONTROLS

Access four alternate tone and time shaping controls by pressing and holding the Feedback Control in the center of the pedal while you turn other controls.

MANUAL (FLANGER TIME) - Hold [FDBK] + Adjust [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.

VIBE (MODULATION STYLE) - Hold [FDBK] + Adjust [BLEND]

With the ECCOS pedal, flanged delay trails are created by producing two repeats that are blended together. You hear the repeat as only one echo. The VIBE knob controls the clean portion of your delays. Turn counter-clockwise for pitch vibrato, turn clockwise for flanging repeats. Set at max by default.

TONE CONTROL - Hold [FDBK] + Adjust [RATE]

This is the 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.

REGEN (FLANGER REGENERATION) - Hold [FDBK] + Adjust [DEPTH]

Controls the amount of flanger feedback. Increasing this control will give you deep flanging effects for your delays. Set at minimum by default.

SUBDIVISIONS - Hold [FDBK] + Toggle [MODE Switch]

Sets the 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.

CAPTION: IN LOOPER MODE, THE BYPASS AND TAP SWITCHES CHANGE FUNCTIONS

STARTING WITH THE LOOPER

To set up the ECCOS for looper recording, place the pedal in looper mode by

using the MODE toggle switch. The Looper LED will light. You can also double tap the FDBK knob with your foot to change back and forth between looper and delay modes!. Double tap FDBK again and it goes back to delay mode. RECORD/PLAY/STOP - To start recording a loop, press the BYPASS (Record) switch and begin playing. The BYPASS LED turns red. After say 8 bars of playing, press the BYPASS (Play) switch again and it will start playback, the BYPASS LED will turn blue.

To stop looper, double tap the BYPASS (Stop) switch. The STATUS light will remain blue letting you know you have a recording in memory ready for playback.

OVERDUB - To start an overdub from Play mode, simply tap the BYPASS switch again and you're recording another loop! The BYPASS LED will turn red to let you know you're recording.

When you're done recording the loop, press the START switch to go back to

playback mode, the BYPASS LED will turn blue.

UNDO/REDO - To undo your last recording, press and hold the FDBK knob for 1 second. If you are recording your very first loop, holding the FDBK down for one second will silently delete the track and you will be ready to tap the Bypass (Record) to start a new recording.

If you completely stop the loop, you cannot undo your last overdub as it has been saved in 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.

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 controls the tone of your delays - Blend, Feedback and Time work for the

delay effect as well.

DELETING LOOPS - If you want to delete your recording, press and hold down the REVERSE/HALF

SPEED switch for 1.5 seconds. You will hear a bit of your recording as it is being

deleted. This can not be helped as the REVERSE/HALF SPEED switch also

triggers the play-once feature. 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. You can also switch to Delay mode, then press and hold TAP for 1.5 seconds. The loop will erase

silently without playing back.

NOTE: If you are recording an overdub in loop mode and switch to delay mode, loop recording stops. Changing presets must be done will looper is stopped or in playback.

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.

LOOPER EFFECTS

HALF SPEED AND REVERSE

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!**

ADJUST ECCOS DELAY TONES AND MODULATIONS WHILE LOOPING

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.

HOW TO CREATE

AND SAVE PRESETS

PRESET SELECT MODE - To enter Preset Select Mode, quickly double tap BYPASS or tap the FDBK knob once. Preset LEDs will begin to flash. TAP advances you through the presets. Tap BYPASS again to allow you to save or overwrite a current preset. Preset Select Mode times out after 2 seconds.

RECALL A PRESET - To recall a preset, enter Preset Select Mode as above, advance through the presets by using the TAP switch and then enable the preset by tapping the BYPASS switch once again. The preset LED will remain lit, indicating that the current preset has been successfully recalled and loaded. Any changes made to a parameter will turn OFF the preset LED and the changed value will correspond to the current potentiometer position. When all three LEDs are lit, this indicates that the unit will load all current potentiometer values.

SAVE A PRESET - To save a preset in location 1, 2, or 3, double tap BYPASS to enter Preset Selection Mode, advance the LED to a new preset location 1, 2, or 3. Then press and hold BYPASS switch for roughly two seconds. The preset LED will slowly flash three times, then remain lit to indicate that the preset was successfully saved. All primary, secondary, and expression settings are saved to the preset.

Note: 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 LEDs are blinking, then select it by pressing the BYPASS button. This is a great way to exit any of the three presets and go back to where the controls are set.

SWITCH PRESETS WHILE LOOPING - Switch to Delay mode, single tap [FDBK], cycle through presets by pressing [TAP], then engage new preset with [BYPASS].

TRAILS OR TRUE BYPASS

When bypassing the unit, 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].

Change Trails Mode by holding down BYPASS and TAP for roughly two seconds. The BYPASS and STATUS LEDs will flash two times to indicate the change was saved. The ECCOS default setting is with trails disengaged.

STATUS LIGHTS

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

Looper Light flashing = Loop is playing at half speed.

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

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

STEREO, PING PONG, ETC.

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.

SELF OSCILLATION

Press and hold TAP for maximum feedback.

Perfect for endless repeats whenever you want.

ADVANCED SETTINGS

(Power must be removed and reapplied)

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, then Hold [BYPASS] down and 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.

ELECTRICAL CONNECTIONS FOR REMOTE OPERATION

Use a TRS / stereo cable. Tip = TAP Ring = REMOTE BYPASS

You can also just 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 return to default settings.

HOW TO APPLY EXPRESSION PEDAL TO ANY CONTROL TO ASSIGN A PARAMETER

1. Hold [FDBK] for 2 seconds to enter Expression Mode.

2. Set your connected expression pedal to the heel-down position.

3. Turn an ECCOS control knob to the desired heel-down setting.

- 4. Set the expression pedal to the toe-down position.
- 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 the 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 into Expression Mode.
- 2. Set the expression pedal to heel down.

3. Turn each knob a small amount to let ECCOS know you don't want the control 'expression controlled'. Don't touch controls still assigned to foot controller.

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.

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: Expression pedal must be connected or removed with the power source disconnected.

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 Keeley Electronics, Inc. 2019

ECCOS QUICK START GUIDE

Toggle [MODE Switch] to select: Delay or Looper **DELAY MODE** Switch to Delay Mode - Toggle [MODE switch] or double tap [FDBK knob] Main Delay Controls - TIME, BLEND, FEEDBACK, RATE, DEPTH Alt Delay Controls - Press/Hold [FDBK knob] for MANUAL, VIBE, TONE, or REGEN. Tap Tempo - [TAP] - 2 taps to set tempo. Subdivisions - Press/Hold [FDBK knob] + Toggle [MODE switch] Feedback Oscillator-Infinite Repeat - Hold [TAP] 2 seconds+ Trails/True Bypass - Hold [BYPASS] + Hold [TAP] for 2 seconds LOOPER MODE Switch to Looper - Toggle [MODE switch] or double tap [FDBK knob] Start Recording Loop - Tap [BYPASS] Start Playback 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 - Hold [TAP] 2 seconds (Loop must be stopped) Trigger Play Once - Tap [TAP] (Loop must be stopped) Undo / Redo - Hold [FDBK] for one second