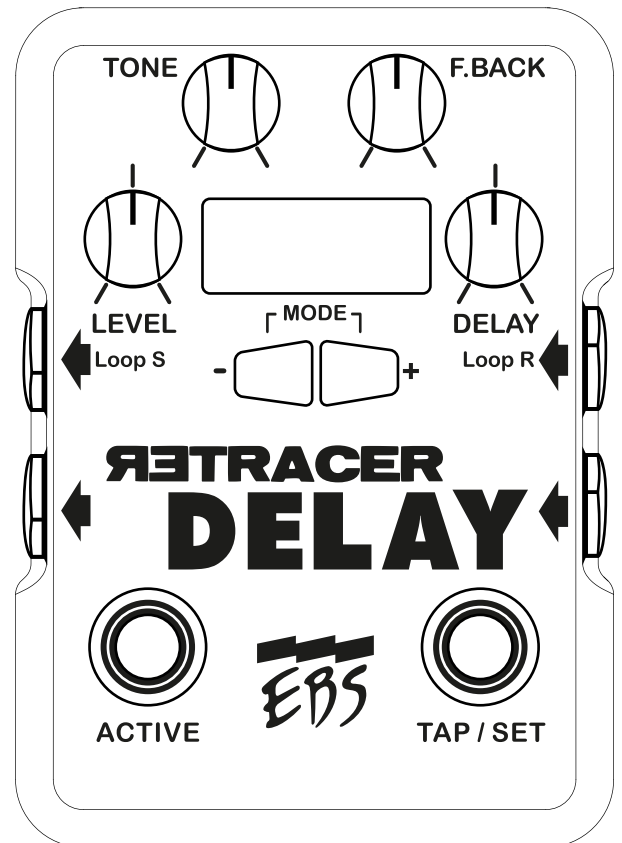


GETTING STARTED WITH THE EBS RETRACER

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BRIEF OVERVIEW OF EXPERT MODE:	5
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GETTING STARTED WITH THE EBS RETRACER

INTRODUCTION

The ReTracer has tons of options to change, create and organize delay effects. To get you started, let's begin with learning about the two main ways to operate the ReTracer, EASY MODE and EXPERT MODE.

Easy Mode is where you quickly navigate between presets, but with limited access to editing them. Easy Mode is probably what you will use when you are on stage.

Expert Mode unlocks more editing features and might be where you will operate when you build, fine-tune and organize your own presets.

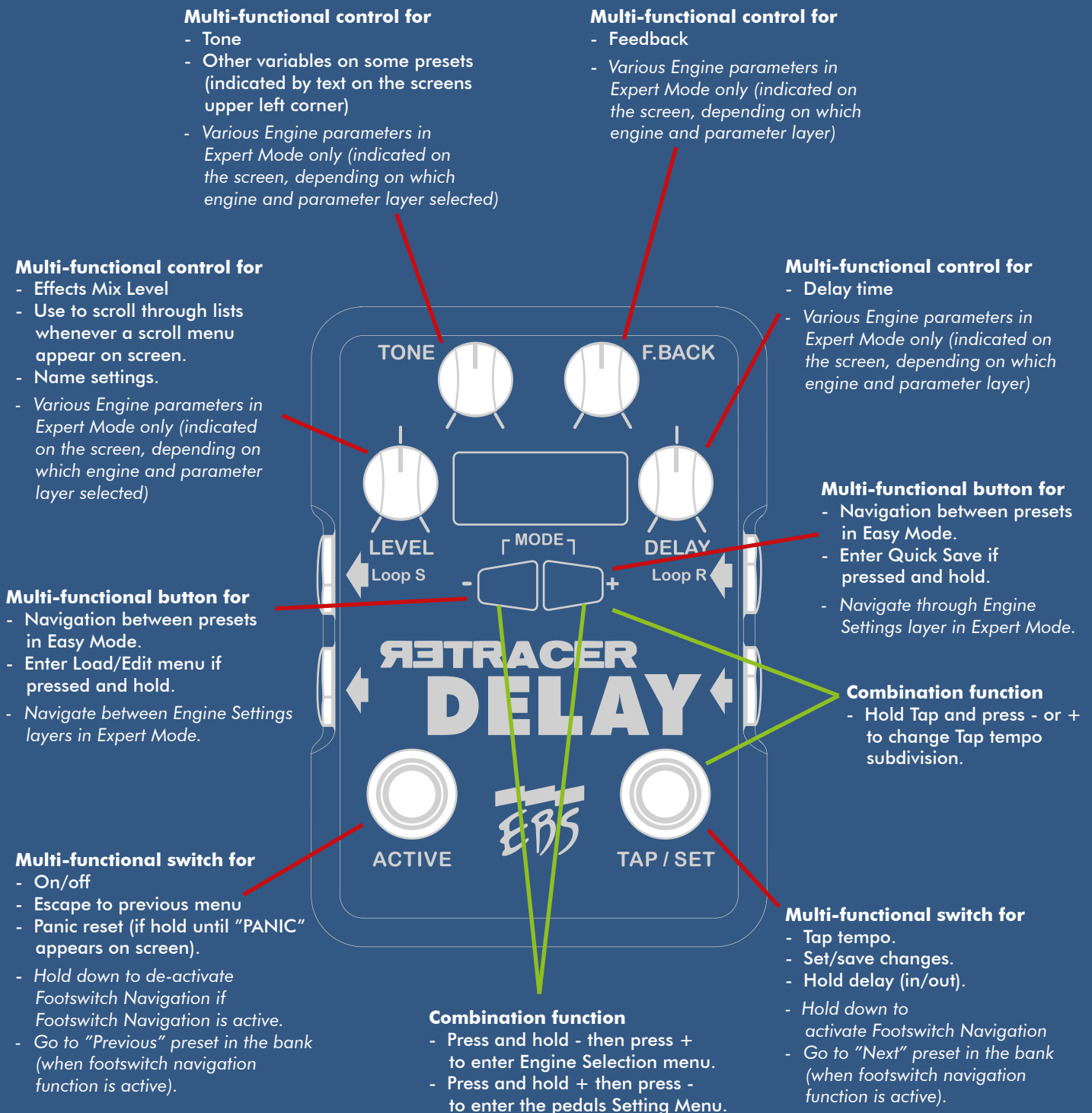
We recommend that you start with *Easy Mode*. Try some of the factory presets, turn the knobs and learn what the controls do in general use. Later, you will discover that each knob can get a new function when you enter a new editing layer.

See the illustration on the next page for a reference overview of all the controls and their possible functions.



IMPORTANT!

Visit www.ebssweden.com/content2/ebs-retracer-delay-workstation and click on the "Register for updates" tab to register for the Retracer email list to get instant news about firmware and software updates, tutorials and other useful info related to your pedal. Make sure to have the latest firmware installed.









GETTING STARTED WITH THE EBS RETRACER


BRIEF OVERVIEW OF EASY MODE:




Easy Mode is the default mode when you turn on the pedal for the first time.







- In "EASY MODE" Use  or  to choose next or previous preset.*
- Use LEVEL, TONE, F.BACK and DELAY to modify the sound.
- To SAVE changes to the preset, press and hold  until Save pops up on screen, then press "TAP/SET" to save and exit the menu. NOTE: Default presets need to be saved as a new preset if you want to keep any changes you have made.
- To change any of the global settings for the pedal:
 1. Press and hold  and press  to access the Settings Menu
 2. Use the "LEVEL" control to scroll through the menu, press  to open up a labels sub-menu, and use the "DELAY" knob to change the parameter values that show up in the right column.
 3. Then press "TAP/SET" to save the changes or "ACTIVE" to escape.

Changes in global settings will be the default settings when creating a new preset from scratch. You can change the corresponding values to follow a specific preset in *Expert Mode* (see next page, as well as bullet 10-12 in the following guide).

* To fast-scroll to a preset further down the list or in a different bank, press and hold  to access the LOAD menu, then select bank using "Tone" and preset using the "F.Back" knob. Press "TAP/SET" to load selected preset and "ACTIVE" to escape the menu.

BRIEF OVERVIEW OF EXPERT MODE:

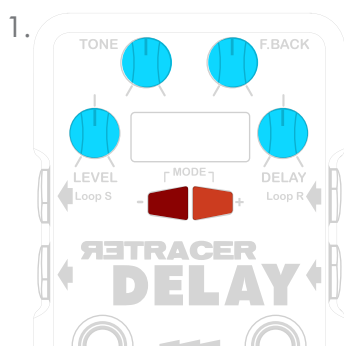
To activate *Expert Mode*, go to the global *Settings Menu*, scroll to *GENERAL* using the LEVEL knob, press  and then scroll to *EXPERT*. Change the value in the right column to "ON" by turning the DELAY knob. Press *Tap/Set* to save and exit. The pedal is now operating in *Expert Mode*.

- To navigate between presets in Expert Mode you need to press and hold  until "Load" appears on screen. Then select bank and preset using the "Tone" and "F.Back" knobs. Press "TAP/SET" to load a selected preset and bank, or "ACTIVE" to escape.
- "Expert Mode" unlocks engine-specific parameters that you can change and save with your preset. To enter the first layer of engine parameters, simply press  or . You will now see the name of the engine that your preset is based on. Indicators in the corners of the screen shows what kind of parameters you can change with each knob.
NOTE: Most engines have more than one layer of engine parameters, if so, the corner indicators will change when you press  or  from the first engine parameter settings layer.
- Once you have changed parameters you want and decided to save them, press and hold  to enter SAVE and press TAP/SET to save and exit to your preset.

The following pages features step-by-step instructions to some of the most common operations, as well as more details about the various settings options.



GETTING STARTED WITH THE EBS RETRACER

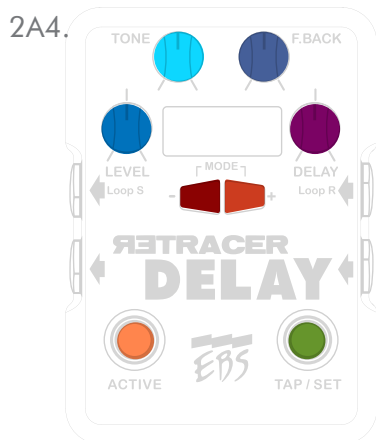


GETTING STARTED IN EASY MODE:

1. SELECT A PRESET

Press or to select a factory preset (indexed from Z00 to Z31). You can change basic parameters to a preset on the fly with the **FOUR CONTROL KNOBS**.

NOTE: changes will be lost when you move on to the next preset. You can make changes and save to a preset following the instructions in bullet 4.



EASY & EXPERT MODE OPERATIONS:

2. SET DELAY TIME

TAP the tempo for desired delay time or use the **DELAY** knob to dial in a time from 50ms to 1.5s.

3. SET TEMPO SUBDIVISION

You can change the tempo subdivisions from, for example, quarter notes to 8th note triplets. To do that, hold down **TAP** and press or repeatedly until you find the desired subdivision. Use Quick Save as described below to save the changes to your preset.

4. PROGRAM (PRESET) QUICK SAVE

Use the Quick Save function to save changes to a preset. Press and hold to enter the *program save menu*. Then push **TAP/SET** to save.



If you started from a factory preset you need to save it with changes as a new preset. The Retracer will suggest the first available slot to save your new preset on. Use **TONE** to select bank (from A to G) and **F.BACK** to select entry (from 0 to 31). When done, press **TAP/SET** to save and continue. You will now be prompted to Label your new preset. Turn the **LEVEL** knob to select a character, use to move to the *next character* position and to go back to the *previous character*. Push **TAP/SET** when done to save and exit (or **ACTIVE** to exit without saving).


Quick Save works in both Easy and Expert Mode.

IMPORTANT!

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5. SETTINGS MENU

To access and change the global default settings for the Retracer, *press and hold down*  and press  to enter the [SETTINGS] Menu.

Scroll to desired subject in the menu with the **LEVEL** control, then press  to enter its sub menu.



In the same way, scroll through the sub menu using the **LEVEL** control, and use the **DELAY** knob to change value.

Press **SET** to save changes and then **ACTIVE** to exit the SETTINGS MENU.


NOTE: Many of the settings in this menu can have individual values attached to a specific preset. See bullet 10-12 for details on how to attach individual values to a preset.

6. PROGRAM (PRESET) LOAD/EDIT MENU

Press and hold down  to enter the program load/edit menu.

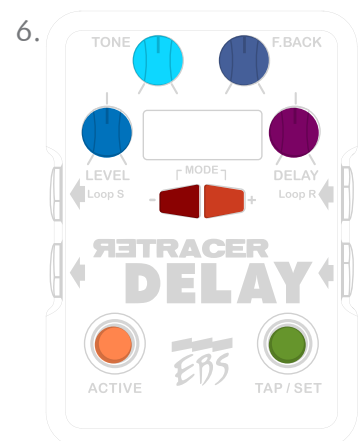
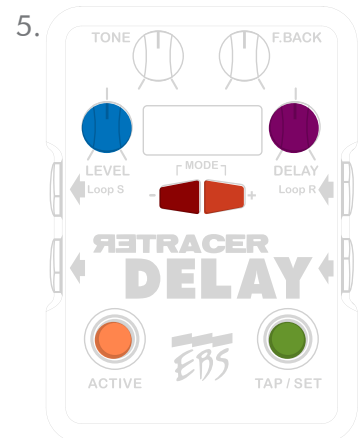
Use the two upper controls (**TONE** and **F.BACK**) to select *Bank* and *Program* entry. Then use  or  for desired operation (*Load, Save, Erase, Copy, Move, Swap, or Label*). Execute or unfold selected operation by pressing **TAP/SET**.

When *Label* operation is selected and unfolded:

- Turn the **LEVEL** control to choose character.
- Use  to move to the next character position.
- If you want to rename the preset, erase the entire label by holding **ACTIVE** for approx. 2s and write a new label.
- Confirm the label and exit the menu by pressing **TAP/SET**.

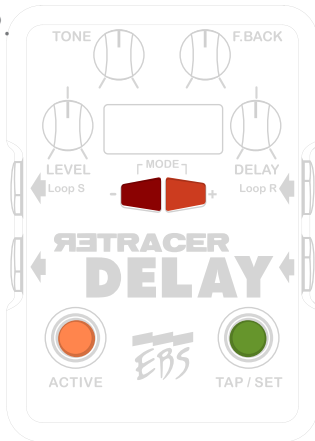
When ready with your changes, press **ACTIVE** to exit the PROGRAM LOAD/EDIT MENU.

NOTE: All factory presets are marked with a lock symbol and can only be saved with changes as a new preset. You can lock/unlock any of your own presets by turning the **DELAY** knob until a lock appear/disappear on screen when in PROGRAM LOAD/EDIT MENU.



GETTING STARTED WITH THE EBS RETRACER

7A9.



7. SELECT ENGINE

Hold down **-** and press **+**. You will now enter *SELECT ENGINE* menu. Use the **+** and **-** switches to change engine and **TAP/SET** to load selected engine or escape the *SELECT ENGINE* menu with **ACTIVE**.

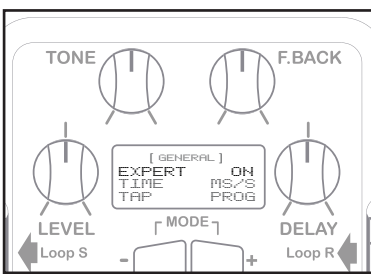
NOTE: When a new engine is loaded, it will always start with the setting parameters that you have made in the [DEFAULTS] menu under the global SETTINGS MENU (see bullet 5).

8. HOLD DELAY MODE

Press and hold **TAP/SET** to activate *Hold Delay (H)* mode:
 a) **TAP/SET** foot switch now holds the delay effect until you release your foot from it (in default setting, you can change to toggle deactivation in settings, if preferred).
 b) Push **ACTIVE** once to cancel *Hold Delay* mode.

9. "PANIC KILL" OF EFFECTS

Press and hold down **ACTIVE** until *PANIC* appears on screen in order to "panic kill" the Retracer effects. This is useful if an engine goes into stall because of excessive feedback.



EXTENDED EDITING IN EXPERT MODE:

10. CHANGE TO EXPERT MODE

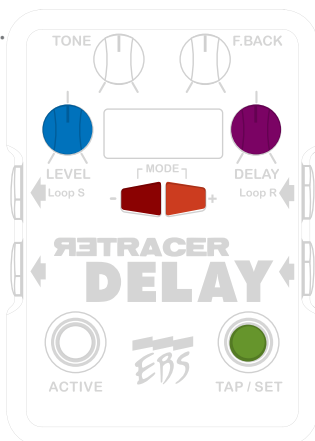
The Expert mode unlocks all features available in the Retracer. Enter the [SETTINGS] menu (as described above under bullet 5) Select *GENERAL* menu, locate *EXPERT* and change the value *OFF* to *ON*. Press **TAP/SET** to save and exit. The pedal now operates in *EXPERT MODE*.

IMPORTANT! In Expert Mode **+** and **-** gives access to the *parameter layers* connected to each individual engine instead of offering navigation between presets. Values can be changed with the four knobs. Indicators on the screen show what value is attached to each knob in the layer.


11. ACCESS PROGRAM SETTINGS MENU


After the last parameter layer for an engine, repeat pressing **+** to access the *PROGRAM SETTINGS* attached to your current preset (see reference on next page). When the name of the engine appears within a pair of clamps you can use **LEVEL** to scroll down the list and **DELAY** to change the values in the right column.

10A12.



12. SAVE CHANGES TO A PROGRAM

When done with your changes enter *Quick Save* by holding down  until "Save" appear on screen and then press **TAP/SET** to save.


NOTE: To navigate between presets in Expert Mode, you need to press and hold  to access Load menu, then select bank and preset using the "Tone" and "F.Back" knobs. Press "TAP/SET" to load selected preset and bank, or "ACTIVE" to escape.

Available PROGRAM SETTINGS reference guide (in order of appearance):

TONE:	SOFT	6dB/oct
	SHARP	12dB/oct
MIX (level):	MIX	0-100% FX MIX, fully cw DRY OFF
	ADD	Wet signal only added to dry
	XFADE	Cross fade between dry and wet signal
DUCKER:	POST	Ducker placed post engine
	FBCK	Ducker placed pre feedback loop and stops feedback tail when used.
BYPASS:	TB	True bypass (relay)
	TAIL	Tail mode, buffered bypass
	BUF	Buffered bypass, no tail
SMOOTH:	OFF	Disabled
	ON	Allows smooth transitions(tails) between program and engine change when applicable.
G.TAP	OFF	Disabled
	ON	Enables GLOBAL TAP in program.
MODE:	MONO	Mono/Direct out
	STEREO	Mono engine, stereo mix
	DUAL	Stereo (dual mono)
	LOOP	Mono, 2nd channel loop
LOOP:	OFF	Disable
	DELAY	Loop inserted in delay Path
	F.BACK	Loop inserted in feedback loop
CLRBUF:	OFF	Disabled
	ON	Clears the audio buffers in bypass, in True Bypass and Buffered bypass modes.
HOLD:	PRESS	Delay Hold function active when Tap is pressed (momentarily)
	TAP	Delay Hold function is toggled active/inactive for every Tap.

NOTE: Some engines have more program settings available than listed above. If so, they will appear first in the PROGRAM SETTINGS menu, above a dotted line.

GETTING STARTED WITH THE EBS RETRACER

NOTE: When you are in the Settings Menu, scroll down with LEVEL and press  to access the chosen categories submenu.

```
[SETTINGS]
GENERAL
DEFAULTS
MIDI
DISPLAY
INPUTS
SYSTEM
HELP
```

```
[SETTINGS]
GENERAL
DEFAULTS
MIDI
DISPLAY
INPUTS
SYSTEM
HELP
```

REFERENCE GUIDE FOR THE (GLOBAL) SETTINGS MENU & SUB MENUS

Below you will find a reference guide for the values you can change in the global *Settings Menu* and its sub categories. *Go back to bullet 5 to refresh your mind on how to access the settings and perform changes.*

[GENERAL] SETTINGS:

EXPERT:	ON/OFF	Accesses extended functionality.
TIME:	AUTO / MS/S /BPM	Shows delay time in bpm or ms/s. Auto mode displays bpm when tapped and time when adjusted with knob.
TAP:	PRG/GLOBAL	Sets Tap mode. If set to Global, global tap/time info will override program tap.
SW.PRG:	ON/OFF	Enables program change with foot switches. When this option is enabled, press and hold TAP until two arrows appear. Escape from this mode while HOLDING Active.
PRGSTEP:	ALL/BANK	Sets program step within bank rather than within all entries.

[DEFAULTS] SETTINGS (these will be the default value for all engines when creating a new program/preset or when you switch the engine in an existing program/preset):

TONE:	SOFT SHARP	6dB/oct 12dB/oct
MIX (level):	MIX ADD XFADE	0-100% FX MIX, fully cw DRY OFF Wet signal only added to dry Cross fade between dry and wet signal
BYPASS:	TB TAIL BUF	True bypass (relay) Tail mode, buffered bypass Buffered bypass, no tail
MODE :	MONO STEREO DUAL LOOP	Mono/Direct out Mono engine, stereo mix Stereo (dual mono) Mono, 2nd channel loop
LOOP:	OFF DELAY FBACK	Disable Loop inserted in delay Path Loop inserted in feedback loop

IMPORTANT!

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[MIDI] SETTINGS:

CHAN: 1A16, OMNI MIDI in channel select
 BANK: CC0, CC32, CC0/32 Bank control command
 REMAP: ON/OFF Remaps program change command
 CLOCK: ON/OFF Enables or disables MIDI clock

[SETTINGS]
 GENERAL
 DEFAULTS
 MIDI
 DISPLAY
 INPUTS
 SYSTEM

BANK: CC0 Listens to Control Change 0 only MIDI: Bank Select (MSB)
 CC32 Listens to Control Change 32 only MIDI: Bank Select (LSB)
 CC0/32 Listens to Control Change 0 and 32 MIDI: Bank Select (MSB/LSB)

REMAP:

OFF: No remapping, internal banks follow incoming MIDI bank info.

	A	B	C	D	E	F	G	Z	
0	0:0	1:0	2:0	3:0	4:0	5:0	6:0	7:0	(Midi Bank: Program Change)
-	-	-	-	-	-	-	-	-	
31	0:31	1:31	2:31	3:31	4:31	5:31	6:31	7:31	

ON: Remaps internal banks to fit into first two MIDI banks

	A	B	C	D	E	F	G	Z	
0	0:0	0:32	0:64	0:96	1:0	1:32	1:64	1:96	(Midi Bank: Program Change)
-	-	-	-	-	-	-	-	-	
31	0:31	0:63	0:95	0:127	1:31	1:63	1:95	1:127	

[DISPLAY] SETTINGS:

BRIGHT: Sets display intensity.
 STANDBY: Sets display intensity in bypass mode.
 CTRAST: Sets display contrast.

[SETTINGS]
 GENERAL
 DEFAULTS
 MIDI
 DISPLAY
 INPUTS

[INPUTS] SETTINGS:

EXP: Configures and enables Expression and CV pedals in program level.
 AUTOCAL EXP: Automatic Expression calibration
 MANCAL EXP: Manual Expression calibration
 SET EXP MID: Set Expression midpoint calibration

[SETTINGS]
 GENERAL
 DEFAULTS
 MIDI
 DISPLAY
 INPUTS
 SYSTEM

[SYSTEM] SETTINGS:

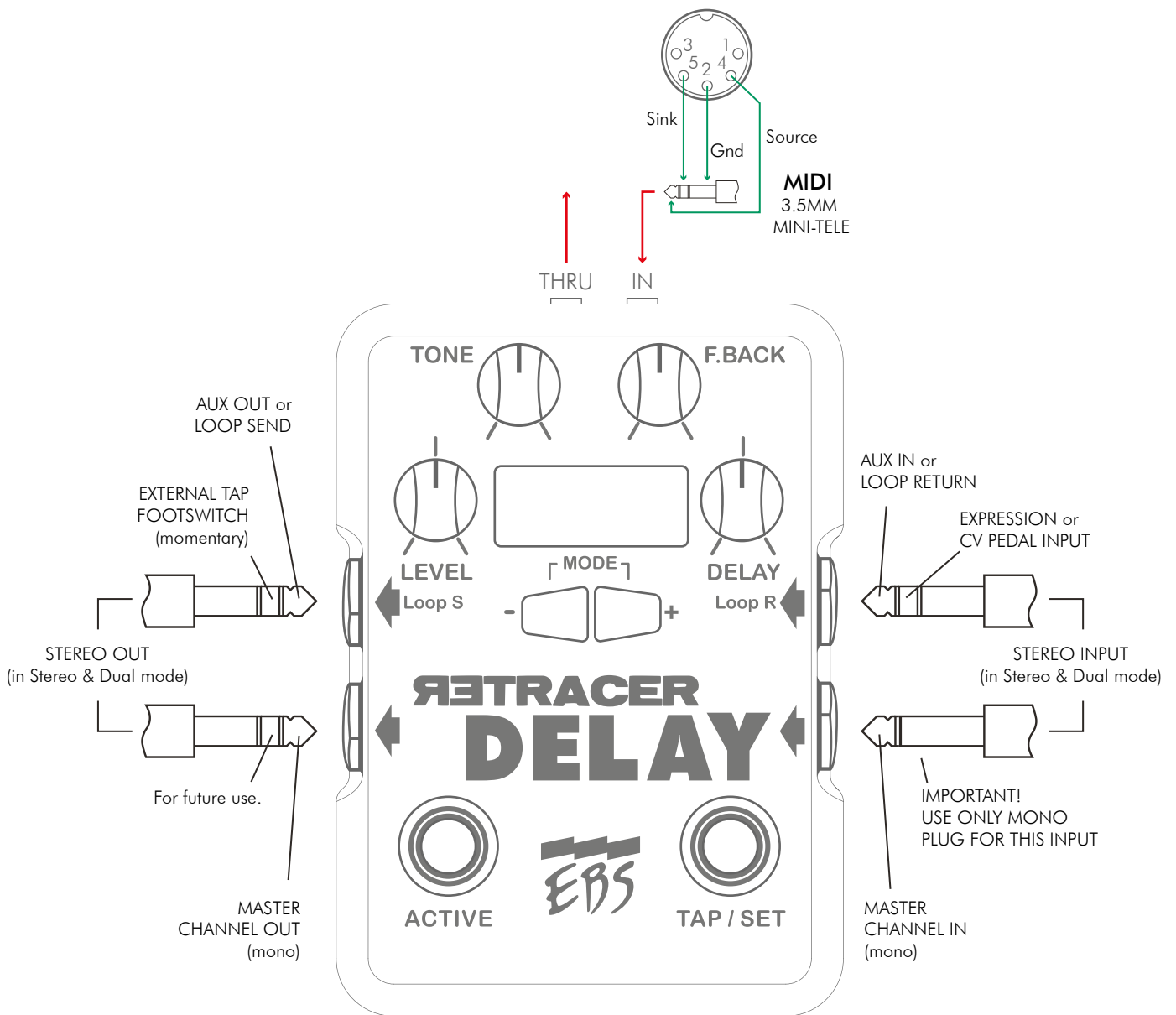
RESET: Factory Reset
 PRG RESET: Clears all user programs
 PRG SCAN: Scans memory for programs

[SETTINGS]
 GENERAL
 DEFAULTS
 MIDI
 DISPLAY
 INPUTS
 SYSTEM

GETTING STARTED WITH THE EBS RETRACER



HOW TO CONNECT THE RETRACER WITH OTHER DEVICES

See the illustration below on all the connection options you have with the EBS Retracer.

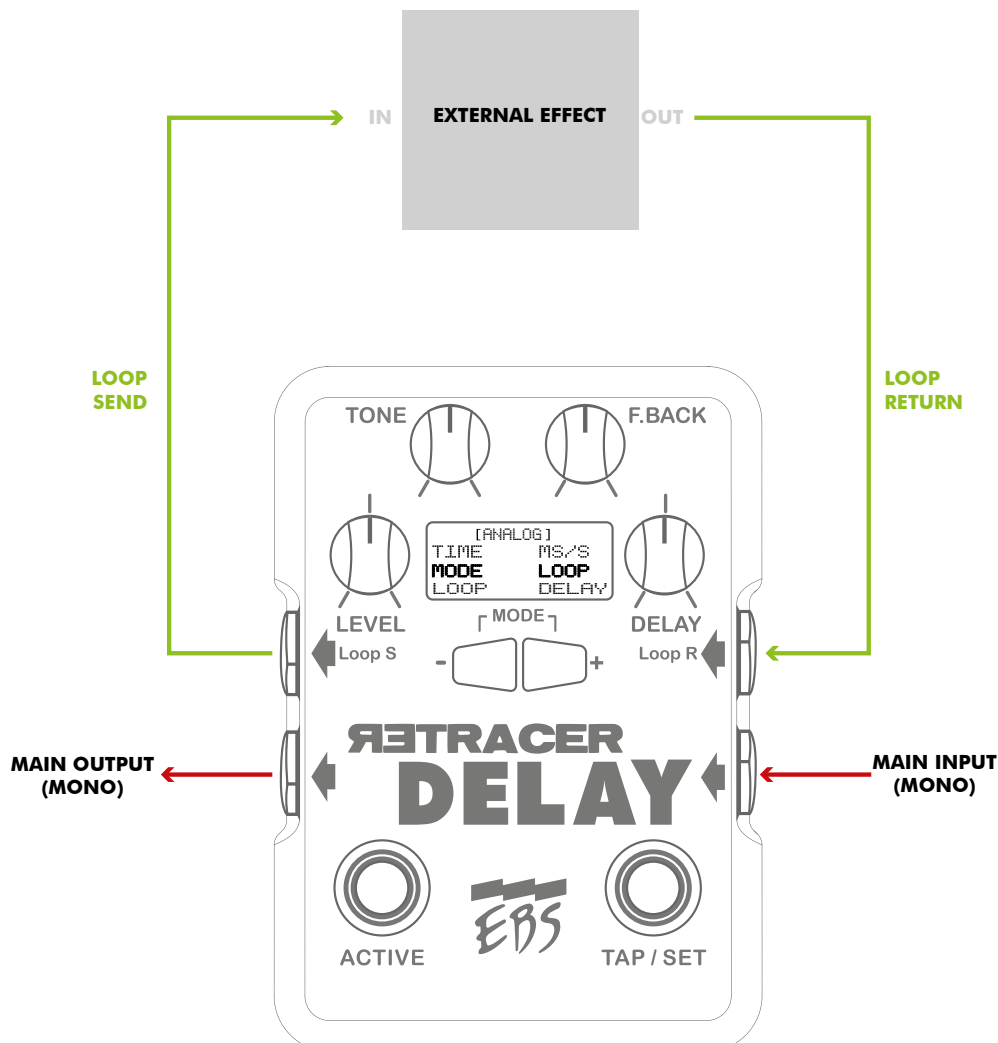


HOW TO SET UP AND USE THE LOOP MODE

How to setup LOOP MODE for a preset (in Expert Mode only)

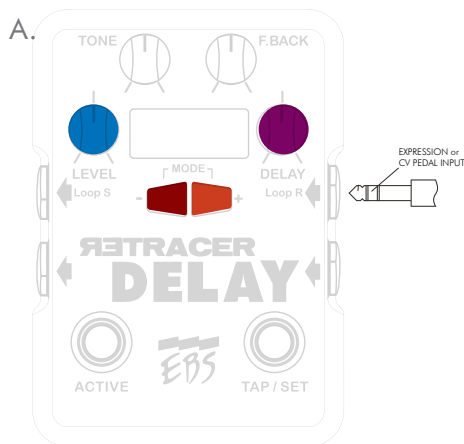
1. Choose the preset that you would like to use in LOOP MODE.
2. Then press  to go directly to the menu for the specific Program settings.
The menu appears as the name of the current engine within a pair of clamps (for example [ANALOG]), followed by a list of menu items.
You can also reach the menu by pressing  repeatedly until you reach the menu.
The difference is you will then walk through all the available parameter settings layer for the selected engine before you reach the desired menu.
3. Turn Level* to scroll down to MODE and then turn the Delay knob until LOOP appear in the right column.
4. Then scroll to menu label LOOP and choose DELAY or FBACK, depending on where you want the loop inserted. You can also set LOOP to "off".

* TIPS: start by turning the Level knob counter-clockwise as far as possible, and then turn clockwise to be able to scroll to the end of the submenu.



GETTING STARTED WITH THE EBS RETRACER

HOW TO USE AND CALIBRATE AN EXPRESSION PEDAL WITH RETRACER



A. ACTIVATE/DEACTIVATE EXP

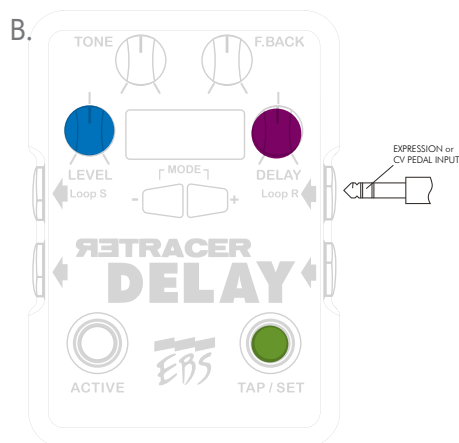
Press and hold down and press to enter *Settings Menu*.

Scroll to sub menu "Inputs" with the **LEVEL** control knob.

Press to enter sub menu and use **LEVEL** to scroll to "EXP". Then use **DELAY** to change value.

If your expression pedal is using external power, choose "ACTIVE", if it is not powered, choose "PASSIVE". Now proceed to **B**.

The "OFF" option deactivates the expression pedal input feature.



B. CALIBRATE EXP

After you have chosen ACTIVE or PASSIVE, scroll down in the same sub menu using **LEVEL** to either "AUTOLOCAL EXP", "MANCAL EXP" or "SET EXP MID" and use **DELAY** to activate calibration sequence.

AUTOLOCAL EXP (auto calibration)

Move the pedal all the way back and fourth until the resolution ("res") no longer increases on the screen. The maximum resolution is now reached.

Press **TAP/SET** to end calibration sequence.

Press **TAP/SET** once again to save settings and exit.

MANCAL EXP (manual calibration)

With MANCAL option it is possible to restrain the modulation action between two points of the expression pedals physical range.

Move the pedal to the desired position where the action should *start*, hit **TAP/SET**.

Move the pedal to the desired position where the action should *end*, hit **TAP/SET**.

Now proceed to SET MID.

IMPORTANT!

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SET MID

With SET MID option it is possible to tune the modulation amount over the calibrated range.

If you want a smooth modulation (and your expression pedal is somewhat linear) somewhere in the middle of the calibrated range would be a good point to start from. But if you, for example, want to have more action in the last ten percent of the expression pedals range, just set “mid” more towards the toes down position.

Move the pedal to the desired mid position and hit **TAP/SET**

When calibration sequence is finished, press **TAP/SET** to save and exit.

C. ACTIVTE EXP PARAMETER(S)

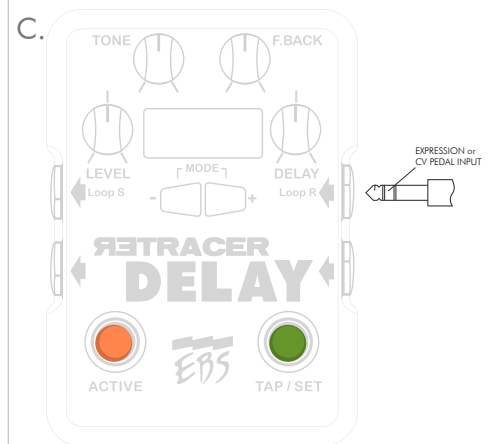
Choose a sound on the Retracer to start from with the expression pedal positioned at heel down.

Hold **TAP/SET** and press **ACTIVE**. A blinking “E” will appear on the screen to indicate that the delay pedal now is in “exp record mode”.

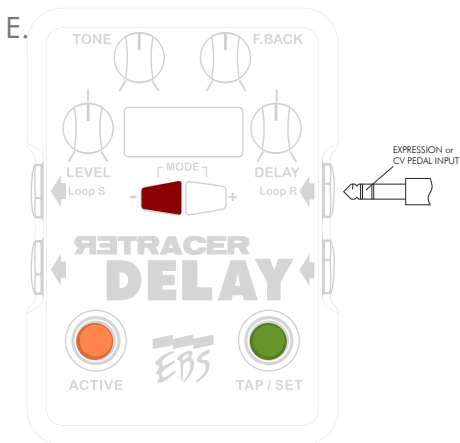
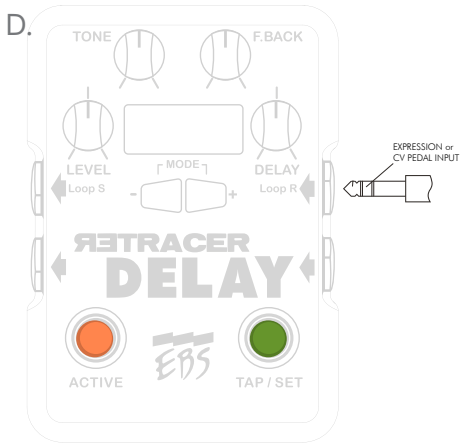
Modify the desired parameters to the sound you would like to modulate to.

Again, Hold **TAP** and press **ACTIVE**. This will end “exp record mode” and the blinking “E” will now be fixed to indicate that this program is using the expression pedal.

You are now ready to get blown away. Put your pedal to the metal and the parameters will move toward the sound you decided to modulate to.



GETTING STARTED WITH THE EBS RETRACER




D. DEACTIVATE EXP PARAMETER(S)

If your intentions are to remove *ALL* parameters, proceed to **E**. If you want to change *SOME* parameters, follow the steps below.

1. Put the chosen parameters knob to zero (all way to the left).
2. Hold **TAP** and press **ACTIVE** to enter "exp record mode".
3. Put the same knob to the middle (12 o'clock) and then back to zero.
4. Again, Hold **TAP** and press **ACTIVE** to escape from "exp record mode".

E. RESET EXP

Hold **TAP** and hold **ACTIVE** for about 1 second.

A prompt will appear. Use  to select "YES" option, and press **SET** once to confirm and exit prompt.

All the expression parameters are now reset and expression pedal is deactivated for the active program.

A. TIPS & TRICKS

If you forgot to add a parameter, don't worry, just enter "exp record mode" again and do the add-ons, the already saved exp parameters wont change (as long as you don't modify them). Don't forget to exit "exp record mode" when done.

To modify the starting position (heel down) of an expression parameter, just modify the parameter to the desired value.

When calibrating the expression pedal using AUTOCAL EXP, the mid position will be set automatically (in the middle).

EBS ReTracer Delay Workstation

THE EBS RETRACER WAS PREVIEWED AT NAMM 2018 AND WILL BE AVAILABLE SOON...
THE EBS TEAM

General Tutorials & Samples Photos Downloads

THE NEW *EBS RETRACER DELAY* IS A COMPLETE WORKSTATION PACKED WITH FEATURES INTO A COMPACT PEDAL TO SAVE SPACE FOR MORE EFFECTS ON YOUR PEDALBOARD WITHOUT COMPROMISE ON YOUR DELAY EFFECTS CAPABILITIES.

FEATURES

- High Grade, 115 dB dynamics range,
- 24-bit audio with sample rates up to 96 kHz
- A dozen distinctive engines with adjustable parameters
- Engine modulation (varies between engines)
- More than 200 slots to save your presets

IMPORTANT!

Visit www.ebssweden.com/content2/ebs-retracer-delay-workstation and click on the "Download" tab to register for the Retracer email list for instant news about firmware and software updates, tutorials and other useful info related to your pedal. Make sure to have the latest firmware installed.

GETTING STARTED WITH THE EBS RETRACER

Technical Specifications EBS Retracer:

Nominal Levels:	- 8 dBv
Maxium Input and Output Levels:	+12 dBv
Input Impedance:	900 kohms stereo / 450 kohms mono
Output Impedance:	< 100 ohms
Bandwidth:	+0/-3 dB 20 - 20k Hz
Sampling Frequency:	48 kHz
Dynamic Range:	typ 115 dB (A-weighted)
Power Requirements:	9 - 18 V DC Regulated,
Current Consumption:	200 mA max. @ 9V / 100mA max @18V (DC power in has no other effect on headroom or performance)
Dimensions (with xternals) W x H x D:	3.3" x 4.5" x 1.9" (83 x 115 x 48 mm)
Weight:	414 gr (0.92 lb.)

Subject to change without notice.

FIRMWARE UPDATES & EXTENDED SUPPORT DOCUMENTS



Find and install the FIRMWARE UTILITY software for your computer and download the latest FIRMWARE EDITION according to instructions at <http://ebssweden.com/content2/category/retracerhelp/>

The latest support documentation and software will be found there as well.
For quick access on your smartphone or Pad, scan the QR code.

