

Forge**EFX** DL-1

DIGITAL MULTI-EFFECTS PROCESSOR

Owner's Manual

Install it, hear it, build a rig and make it yours. Everything you need to drive the DL-1 from the panel, your mouse, your keyboard and your MIDI controller, in standalone or inside your DAW.



STANDALONE · VST3 · WINDOWS · MACOS

VERSION 0.1.2

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Welcome to the DL-1

The ForgeEFX DL-1 is a rack-style guitar multi-effects processor that runs on your computer. It looks and works like a piece of hardware: a backlit LCD, two encoders, a navigation pad and a row of function buttons. Underneath is a six-row signal grid where you place effect blocks and wire them together any way you like.

WHAT YOU CAN DO WITH IT

- Build serial, parallel and split rigs on a 6-row grid with up to 16 blocks.
- Load amps, cabinets, drives, modulation, delays, reverbs, pitch, filters, synths and dynamics from installable block packages.
- Load your own Neural Amp Modeler (.nam) captures and impulse responses (.wav).
- Store presets, and capture four instant variations of a sound in states **A–D**.
- Control almost anything from a MIDI foot controller or expression pedal.
- Tune with strobe and polyphonic tuners, and patch outboard pedals in with the FX Loop.

TWO WAYS TO RUN IT

Standalone is its own application. It talks directly to your audio interface, so you can plug in and play without a DAW.

VST3 loads inside any VST3-compatible DAW on a guitar track, so your rig is saved with your project.

TWO EDITIONS

The **full edition** loads every official block. The **free edition** has the same interface and workflow with a selected set of effects; see [Appendix B](#). Both editions install under the same name, so installing one replaces the other.

How to read this manual

The chapters follow the order you'll actually need them: install, get sound, learn the panel, build a chain, shape it, save it, then control it with MIDI. If something doesn't work, jump to [Troubleshooting](#). The [quick-reference card](#) in Appendix A is worth printing.

WHEN YOU SEE	IT MEANS
 	A button on the DL-1's front panel. Click it with the mouse.
  + 	A key on your computer keyboard. On macOS,  shortcuts use  .
	Text exactly as it appears on the LCD.
Settings > Folders...	A menu path in the window menus above the panel.
PARAMETER, VALUE	The two encoders (knobs) in the panel's CONTROLS section.

PROTECT YOUR HEARING

Turn your monitors or headphones down before you first enable audio input, load a preset, or change routing. High-gain amps, feedback loops and fuzz can get very loud very quickly. The standalone app starts with its input **muted** for exactly this reason.

01



CHAPTER 01

Getting Started

Install the application and plugin, add the effect block packages, and point the DL-1 at your presets, NAM captures and impulse responses. Ten minutes here saves you an hour of head-scratching later.

What you need	01	Downloads and editions	02
Installing on Windows	03	Installing on macOS	04
Installing effect blocks	05	Setting your content folders	06
First launch checklist	07		

What you need

COMPUTER

- **Windows** 10 or 11, 64-bit (x64).
- **macOS** on Apple Silicon (M-series) Macs.

AUDIO

- An audio interface with an instrument (Hi-Z) input for your guitar.
- Headphones or studio monitors connected to the interface outputs.
- On Windows, the interface's own **ASIO** driver gives the lowest latency.

OPTIONAL

- A VST3-compatible DAW, if you want to use the plugin.
- A MIDI foot controller or expression pedal (USB-MIDI or 5-pin through your interface).
- Your own Neural Amp Modeler captures (**.nam**, mono, trained at 48 kHz).
- Cabinet impulse responses (**.wav**).

Downloads and editions

Your download contains two archives for your platform, plus a checksum file:

FILE	WHAT'S INSIDE
ForgeEFX-DL1-Standalone.zip	The standalone application (ForgeEFX DL-1.exe on Windows, ForgeEFX DL-1.app on macOS).
ForgeEFX-DL1-VST3.zip	The complete plugin bundle, ForgeEFX DL-1.vst3 .
SHA256SUMS	Checksums you can use to confirm the archives downloaded intact.

Effect blocks are **not** inside these archives. They come as a separate set of block packages (folders ending in **.fxblock**, organised by category) that you install once and share between the standalone app and the plugin. Without them, the DL-1 opens and routes audio, but only the built-in input, output and FX Loop blocks are available.

ONE EDITION AT A TIME

The full and free editions install with the same name and identity. Installing one replaces the other, and you should only use one edition at a time in a DAW.

Installing on Windows

- 1 Standalone.** Extract **ForgeEFX-DL1-Standalone.zip** to a permanent location, for example a **ForgeEFX** folder in **Program Files** or your Documents. Double-click **ForgeEFX DL-1.exe** to run it. You can pin it to Start or the taskbar.
- 2 VST3 plugin.** Extract **ForgeEFX-DL1-VST3.zip** and copy the whole **ForgeEFX DL-1.vst3** folder (not just the files inside it) into a folder your DAW scans. The standard Windows location is **C:\Program Files\Common Files\VST3**.

- 3 **Rescan.** Open your DAW and rescan plugins if it doesn't pick up the DL-1 automatically. It appears as **ForgeEFX DL-1**.

Installing on macOS

- 1 **Standalone.** Extract **ForgeEFX-DL1-Standalone.zip** and drag **ForgeEFX DL-1.app** into **Applications**.
- 2 **VST3 plugin.** Extract **ForgeEFX-DL1-VST3.zip** and copy the whole **ForgeEFX DL-1.vst3** bundle to **~/Library/Audio/Plug-Ins/VST3/**. (In Finder, hold **Option** and open the **Go** menu to reveal your user Library.)
- 3 **First launch.** The current Mac builds are not notarized by Apple, so macOS may block the first launch. Control-click the app and choose **Open**, or go to **System Settings › Privacy & Security** and click **Open Anyway**.
- 4 **Microphone access.** macOS asks to allow audio input: *"ForgeEFX DL-1 needs audio input access to process your guitar or audio interface."* Click **Allow**. If you declined, re-enable it under **Privacy & Security › Microphone**.
- 5 **Rescan** plugins in your DAW.

Installing effect blocks

Block packages live in one folder that every copy of the DL-1 on your computer shares, standalone and plugin, full and free. You choose that folder once.

- 1 Copy the block packages folder to a permanent place, for example **Documents\ForgeEFX DL-1\Blocks**. Keep its category subfolders and files exactly as supplied.
- 2 Open the DL-1 and choose **Settings › Folders...** from the menu above the panel. (On the panel itself: **GRID** then **X3 / SETUP › FOLDERS**.)
- 3 In the **Blocks folder** row click **Browse...** and select the folder that *contains* the packages, not an individual package.
- 4 Click **Save**. The DL-1 scans the folder immediately (audio mutes for a moment) and the new blocks appear in the block picker. No restart needed.

ADDING OR UPDATING BLOCKS LATER

Drop new packages into the same folder and click **Refresh** in the Blocks row. Subfolders at any depth are scanned, so you can organise packages however you like. If you *update* a block that is already loaded, restart the app or your DAW to load its new code.

Setting your content folders

The **Folders** window holds four locations. Each row has **Browse...** to choose a folder and **Refresh** to rescan it after you add or remove files. **Save** applies all changes together; **Cancel** leaves everything as it was. Existing files are never moved.

ROW	WHAT IT HOLDS
Blocks	Effect block packages (.fxblock).
Presets	Your User presets. Default: Documents/RetroEFX/Presets , created the first time you store a preset.
NAM	Neural Amp Modeler captures (*.nam), including subfolders.
IR	Impulse responses (*.wav), including subfolders. Default: Documents/ForgeEFX DL-1/IRs .

SET YOUR NAM FOLDER

There is no useful default NAM location, so choose one yourself before you load a NAM block, for example **Documents\ForgeEFX DL-1\NAM**. You can also jump straight here from any NAM or IR file list by pressing

F1 / HOME

Folder choices are saved in **folders.json** in %APPDATA%\ForgeEFX DL-1 (Windows) or ~/Library/Application Support/ForgeEFX DL-1 (macOS). They are shared by all instances and are not stored in presets or DAW projects.

First launch checklist

- ☐ Standalone app opens and shows the Home screen with a preset number and name.
- ☐ **Settings** > **Folders...** has your Blocks, Presets, NAM and IR folders saved.
- ☐ Pressing **GRID** then **ENTER** on an empty cell shows block categories such as **DRIVE**, **AMPLIFIER** and **REVERB**.
- ☐ Audio Setup is configured and the input is unmuted (next chapter).
- ☐ Your DAW lists **ForgeEFX DL-1** as a VST3 plugin.

02



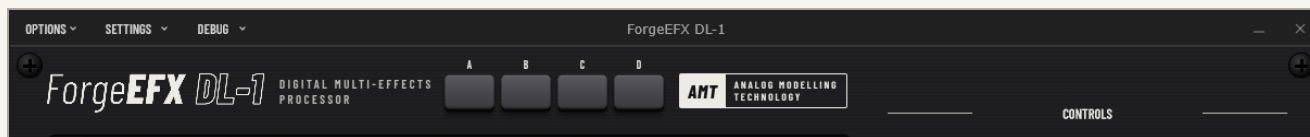
CHAPTER 02

Audio Setup

Connect the DL-1 to your interface in the standalone app, or drop it on a track in your DAW. By the end of this chapter you'll hear your guitar through it.

The standalone window	01	Standalone: choosing your interface	02
Recommended settings	03	Unmuting the input and first sound	04
Mono guitar, stereo outputs	05	Using the VST3 in your DAW	06
Auxiliary buses (Input 3-4 and Output 3-4)	07		

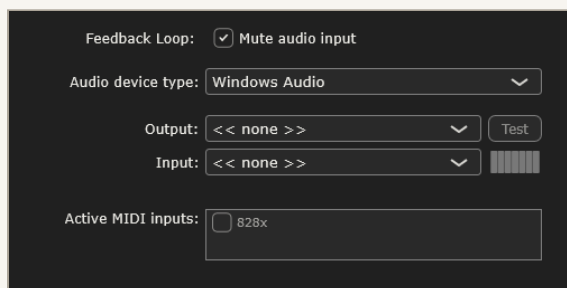
The standalone window



TITLE BAR OPTIONS, SETTINGS and DEBUG sit at the top left. Drag the title bar to move the window and drag its edges to resize.

MENU	ITEMS
OPTIONS	Save current state... and Load a saved state... write or read a complete session file (patch, states, MIDI mappings and more). Reset to default state starts from a clean session.
SETTINGS	Audio Setup... , Folders... , MIDI mappings... (Shift + M), Screen (LCD colour and condition) and UI Size (75–150%).
DEBUG	Audio debug panel... (F12): a test-tone generator and signal scopes. See Testing with the debug panel .

Standalone: choosing your interface



AUDIO SETUP The dialog lists the devices, channels, sample rates and MIDI inputs your system offers.

- 1 Choose **Settings** › **Audio Setup...**
- 2 **Audio device type.** On Windows choose **ASIO** if your interface has an ASIO driver. Otherwise use **Windows Audio (Low Latency Mode)**, **Windows Audio (Exclusive Mode)**, **Windows Audio** or **DirectSound**. On macOS choose **CoreAudio**.
- 3 **Device / Output / Input.** Select your interface. With ASIO you pick the driver once; the **Control Panel** button opens the driver's own settings.
- 4 **Active input and output channels.** Tick the inputs and outputs you need. Your guitar input must be ticked.
- 5 **Sample rate and Audio buffer size.** See the recommendations below.
- 6 **Active MIDI inputs.** Tick your MIDI controller if you have one.

HOW CHANNELS MAP

The DL-1's **MAIN** pair uses the **first two enabled** ports, in the order the driver lists them. If your guitar is plugged into input 2 and you only enable input 2, it becomes MAIN L. You can enable as many extra ports as your interface has; they become available to the FX Loop blocks. Your device and MIDI choices are remembered between sessions.

Recommended settings

SETTING	START WITH	WHY
Sample rate	44100 or 48000 Hz	Use the rate you normally record at. Both are standard for guitar and work with any interface.
Buffer size	128 samples (about 2.7 ms)	A good balance of feel and stability. Try 64 for a tighter feel; go to 256 if you hear clicks or crackles.
Device type	ASIO (Windows) / CoreAudio (macOS)	Lowest latency and most stable timing.

Unmuting the input and first sound

• Audio input is muted to avoid feedback loop

SETTINGS

INPUT MUTED Until you unmute, this notice runs along the window. Its **SETTINGS** button opens Audio Setup.

The standalone app always starts with the audio input **muted**, so a microphone or a looped output can't howl the moment it opens.

- 1 Turn your monitors or headphones down.
- 2 In Audio Setup, clear **Mute audio input** (the **Feedback Loop** row). The notice disappears.
- 3 Close Audio Setup and play. The **MAIN IN** meters on the left of the panel should move.
- 4 Press **F2 / PRESETS**, choose a preset and press **ENTER**, or build your own chain (Chapter 04). Bring the volume up slowly.

READ THE HOME SCREEN

The top-right of the Home screen shows the incoming format, for example **44.1K MONO** or **48K STER**. **NONE** means no input channels are ticked. **--K --** means no audio device is open.

Mono guitar, stereo outputs

The input to every chain is a **HOST INPUT** block (shown as **IN** on the grid). Its **PORT** control chooses **STEREO**, **LEFT** or **RIGHT**. New input blocks and factory presets default to **LEFT**: a single guitar input on the left channel is copied to both sides of the chain, so stereo effects at the end of the chain still spread across both outputs.

If your guitar is on the right channel of the MAIN pair, select the **IN** block, press **EDIT**, and set **PORT** to **RIGHT**. The **HOST OUTPUT** block (**OUT**) has the same **PORT** control, so you can send a chain to just one output.

Using the VST3 in your DAW



PLUGIN MENUS In the plugin, the Settings and Debug menus sit in a strip above the panel. Your DAW draws the window frame.

- 1 Create an **audio track** and set its input to the interface input your guitar is plugged into. A **mono** track is simplest; a stereo track also works. (The DL-1's main input and output must match: mono in to mono out, or stereo in to stereo out.)
- 2 Insert **ForgeEFX DL-1** as an insert effect on that track.
- 3 Turn on the track's **input monitoring** (in many DAWs, arm the track for recording and enable monitoring) so you hear your guitar live through the plugin.
- 4 Set the sample rate and buffer size in your **DAW's** audio preferences. The same recommendations apply: 128 samples is a great start.
- 5 If your track uses MIDI control, route your controller's MIDI to the DL-1 (see [Chapter 07](#)).

The plugin's **Settings** menu has the same items as the standalone, minus Audio Setup: your DAW owns the audio device. On the LCD, **AUDIO SETUP** reads **AUDIO DEVICE MANAGED BY HOST**.

WHAT YOUR DAW PROJECT REMEMBERS

Saving your project stores the whole DL-1 instance: the grid, links and block settings, NAM and IR file paths, states A–D, MIDI mappings and setlist, screen theme, UI size, and master level. Folder locations and tuner settings are global preferences and are not saved in the project. The DL-1 reports its latency to your DAW so recorded tracks line up.

Auxiliary buses (Input 3-4 and Output 3-4)

Besides its main **Input 1-2** and **Output 1-2**, the plugin has optional stereo **Input 3-4** and **Output 3-4** buses, switched off by default. Enable them in your DAW (usually as a sidechain input and an extra plugin output) when you want a second independent chain, or an FX Loop through outboard gear.

Each HOST INPUT and HOST OUTPUT block has a **BUS** control: **MAIN 1-2** or **AUX 3-4**. For example, an AUX 3-4 input can feed its own chain to an AUX output while a separate main chain runs to the main output. An aux bus your DAW hasn't enabled is silent. The standalone app always uses its main pair for HOST INPUT and HOST OUTPUT; use FX Loop blocks to reach extra interface ports there.

STILL NO SOUND?

Work through [Chapter 09: Troubleshooting](#). It starts with a step-by-step “no sound” checklist for both standalone and DAW use.

03



CHAPTER 03

The Front Panel & Navigation

Every function of the DL-1 is reachable three ways: the panel's own buttons and encoders, your mouse directly on the screen, and your computer keyboard. Learn the panel first; the shortcuts will follow naturally.

Panel tour	01	The screens and how to reach them	02
Navigating with the panel	03	Using the mouse	04
Using the keyboard	05		

Panel tour



- 1 A B C D state buttons.** Click to recall one of four variations of the current preset. **Shift**+click captures. The active state lights red; an asterisk (B*) means it has changed since capture.
- 2 MAIN IN and MAIN OUT meters.** Left and right columns of five lights; the top light is red for clipping.
- 3 Status lights.** EDITED (unsaved changes), OUT CLIP (an output is clipping), TEMPO (follows your DAW's tempo while it plays), MIDI (MIDI is arriving).
- 4 LCD.** 160×110 pixel display. The top bar shows where you are; the bottom bar tells you what ENTER, CANCEL and the X keys do on that screen.
- 5 PARAMETER encoder.** Moves the selection: next parameter, next field, next column.
- 6 VALUE encoder.** Changes the selected value, scrolls lists, and opens the block picker from the grid.
- 7 Navigation pad.** Up, down, left and right move the cursor on the grid, in lists and between parameters.
- 8 X1 / Toggle, X2 / Menu, X3 / Setup, X4 / View.** Context keys. X1 toggles the selected block, X2 acts like ENTER, X3 opens OS settings, X4 switches grid and overview.
- 9 TUNER and I/O.** Open the strobe and polyphonic tuners, or the detailed input, output and gain-map meters. Each lights red while open.
- 10 GRID, EDIT, TOGGLE.** Open the signal grid (press again for the overview), edit the selected block, and bypass or enable it.
- 11 ENTER and CANCEL.** Confirm or open the highlighted item; go back one step.
- 12 PREV and NEXT.** Change pages in an editor or list. **Shift**+click steps to the previous or next effect type.
- 13 F1 / Home, F2 / Presets, F3 / Store, F4 / Bypass.** Home screen, preset browser, save a preset, and global effect bypass (lights red when on).

The screens and how to reach them

The LCD always shows one screen. The title in its top bar tells you which. **CANCEL** always takes you back a step, and **F1 / HOME** always takes you home.

SCREEN (TITLE)	OPEN WITH	WHAT IT'S FOR
PRESET Home	F1 / HOME F1	Shows the preset number and name. ENTER opens the grid; turning a knob opens the preset browser.
GRID	GRID G	Place blocks and wire your signal chain (Chapter 04).
GRID OVERVIEW	GRID twice, or X4 / VIEW	The whole grid at a glance. VALUE scrolls, ENTER zooms back in.
BLOCK menu	ENTER on a block	Edit, Replace, Move, Copy, Delete, Bypass, Add and Link.
Block editor	EDIT E	Adjust the selected block's parameters (Chapter 05).
FACTORY / USER	F2 / PRESETS F2	Browse and load presets (Chapter 06).
STORE PRESET	F3 / STORE F3	Name and save the current sound.
PRESET STATES	X1 on Home, S , Shift + F1	Capture and recall states A–D.
TUNER	TUNER T	Strobe and polyphonic tuners (Chapter 08).
I/O INPUTS	I/O I	Input meters, output meters and the block gain map.
OS SETTINGS	X3 / SETUP 3	Grid width, initialise preset, audio setup, screen, UI size, folders, MIDI mappings.
MIDI MAPPINGS	M , or X3 > MIDI Mappings	Map your controller from the LCD (Chapter 07).

Navigating with the panel

Three habits cover nearly everything:

- **Move** with the navigation pad or the **PARAMETER** encoder.
- **Change** with the **VALUE** encoder.
- **Confirm** with **ENTER** (or **X2 / MENU**), **back out** with **CANCEL**.

Read the bottom bar of the LCD: it always lists the actions available on the current screen, such as

ENTER/X2 MENU, **X1 DEFAULT** or **CANCEL BACK**.

USING THE ENCODERS WITH A MOUSE

- **Drag** up or down on an encoder to turn it, one step per detent.
- **Click** the left half to step down by one, the right half to step up by one.
- **Scroll** the mouse wheel over it to turn it.
- Hold **Shift** while dragging or scrolling for steps of 10.



FOOTER HINTS The Block menu: arrows move through two columns, **ENTER SELECT**, **CANCEL BACK**.

Using the mouse

The LCD is fully clickable. Everything you can do with the buttons you can also do directly on the screen.

DO THIS	WHERE	RESULT
Click	Grid cell	Select it.
Double-click	Grid cell	Edit the block; on an empty cell, open the effect menu to add one.
Drag a block	Grid	Move it. The drop outline is green for a valid cell, red for an invalid one. Drop it on a cable to insert it there.
Shift + drag from a block to another	Grid	Link them. Green arrow: adds a link. Amber: removes the existing link. Red: not allowed.
Ctrl + click (Cmd on Mac)	Grid blocks	Build a selection group; TOGGLE then switches them all at once.
Right-click	Grid block	Edit, Bypass/Enable, MIDI learn on/off, MIDI mappings, Delete, Link, Copy, Paste, and Replace effect by category.
Right-click	Empty cell or cable	Add effect by category, Paste, and Remove link for cables passing through.
Mouse wheel	Grid	Scroll the visible columns left and right.
Click a tile, then drag up/down	Block editor	Select the parameter and change its value (Shift for ×10).
Mouse wheel	Block editor tile	Change that value (Shift for ×10).
Double-click a tile	Block editor	Reset the parameter to its default.
Click or drag the ruler	Fine adjustment	Jump straight to any value across the range.
Click / double-click	Lists	Select / open. The wheel moves the highlight.
Right-click	Parameter, knob or button	MIDI learn that control. Shift + right-click a button learns its Shift action.
Esc while dragging	Grid	Cancel the drag.

Using the keyboard

With the DL-1 window focused, your keyboard mirrors the panel. Amber keys below have a DL-1 function. In the plugin, click the panel once so the plugin window has keyboard focus.



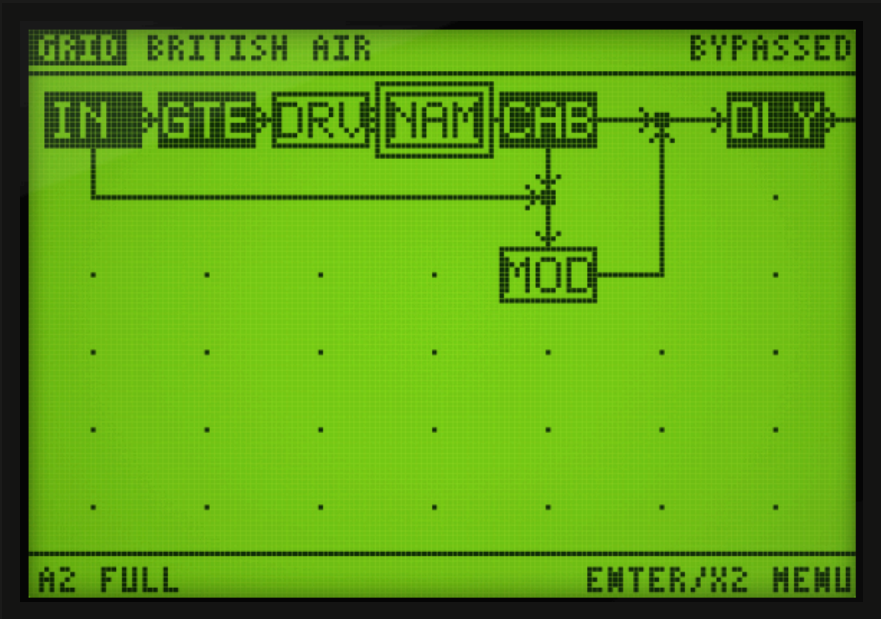
KEY	FUNCTION
   	Navigation pad
	ENTER
	CANCEL / back
	TOGGLE the selected block or group
 	GRID, EDIT
 	TUNER, I/O meters
 	X1–X4
 	HOME, PRESETS, STORE, BYPASS
 	PREV, NEXT page
  	Previous / next effect type
 	Selected parameter –1 / +1 (editor)
  	Selected parameter ±10 (editor)

KEY	FUNCTION
 	Recall state A–D
  	Capture state A–D
	Preset States page
	Start linking from the selected block
	Delete the selected block, or remove a link on a cable cell
  / 	Copy the selected block / paste onto an empty cell
 	Right-click menu for the selected cell
	LCD MIDI mappings editor
 	Desktop MIDI mappings window
 	MIDI-learn the selected parameter or block
	Audio debug panel

TYPING NAMES

On the **STORE PRESET** page, letter and number keys type the preset name instead of triggering shortcuts. See [Storing a preset](#).

04



CHAPTER 04

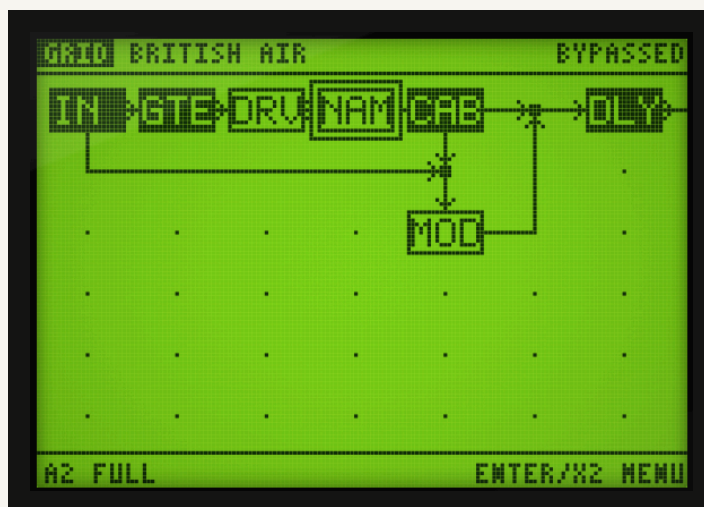
Building Your Signal Chain

The grid is where your rig lives. Drop blocks into cells, run cables between them, split the signal and bring it back together. This chapter covers adding, linking, moving and removing blocks.

How the grid works	01	Adding a block	02
Linking blocks together	03	Building parallel paths	04
Moving and copying blocks	05	Removing blocks	06
Removing links	07	Bypassing blocks	08
Grid width and starting over	09		

How the grid works

- **6 rows** and **7 to 14 columns**. Seven columns are visible at once; the view scrolls as you move.
- Up to **16 blocks** per preset, counting the IN and OUT blocks.
- Cables are **one-way**. An arrow shows which way the signal flows.
- **Audio follows the cables**, not the position of the blocks. A block on row 5 can sit between two blocks on row 1.
- A block can feed several blocks (a **split**), and several blocks can feed one (a **merge**; the signals are summed).
- A new, empty preset (**INIT**) has just **IN** linked straight to **OUT**.



A REAL RIG Gate, drive, NAM amp and cab in series. The input also splits down to a modulation block, which rejoins before the delay.

READING THE GRID

LABEL	BLOCK CATEGORY
IN OUT	Host input / host output
GTE DYN	Noise gate / dynamics
FLT PIT	Filter / pitch
SYN DRV	Synth / drive
AMP NAM	Amplifier / neural amp (NAM)
CAB MOD	Cabinet / modulation
DLY REV	Delay / reverb
FXO FXI	FX Loop send / return

The top-right corner of the grid shows the state of the selected cell:

ON	The block is switched on.
BYPASSED	The block is switched off; signal passes through it unchanged.
MUTED	An IN or OUT block is switched off; no audio passes.
EMPTY	Nothing in this cell.
ALL BYPASS	Global bypass (F4) is on.

The bottom bar names the selected block and shows the action available, such as **ENTER/X2 MENU** or **ENTER/X2 ADD**.

Adding a block

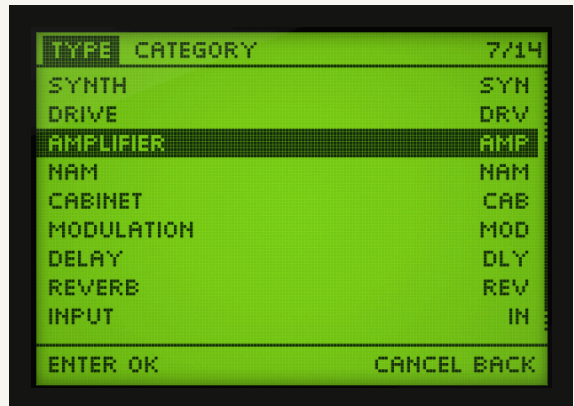
WITH THE PANEL

- 1 Press **GRID** and move the cursor to an empty cell with the navigation pad.
- 2 Press **ENTER** (or **X2 / MENU**, or **EDIT**, or turn **VALUE**). The category list opens.
- 3 Choose a category such as **DRIVE** and press **ENTER**.
- 4 Choose the effect type and press **ENTER**. The block appears and is wired in automatically.

CANCEL steps back from types to categories, then out without adding anything. Browsing changes nothing until you press **ENTER**.

WITH THE MOUSE

Double-click an empty cell, or right-click it and pick from **Add effect > category > type**.



CATEGORY PICKER Each row shows the category and its grid label. **7/14** is your position in the list.

WHERE DOES THE CABLE GO?

Add onto a cable and the block is spliced into it: the cable now runs into the new block and out to wherever it went before. **Add in an empty area** and the block is linked between its nearest neighbours on the same row. You can always re-wire it afterwards.

The quickest way to build a classic chain: start from **IN** → **OUT** on one row and add each block onto the cable between them, left to right: gate, drive, amp, cab, modulation, delay, reverb.

Linking blocks together

A **link** is a one-way cable from a source block to a target block. There are three ways to make one.



LINK MODE The title shows the source block. **ENTER LINK / UNLINK** toggles a cable to the block under the cursor.

PANEL: LINK MODE

- 1 Select the source block and press **ENTER**. Choose **LINK** in the Block menu (or press **L**).
- 2 The top bar reads **LINK FROM** plus the block name. Move the cursor to the target block.
- 3 Press **ENTER** to connect. Pressing **ENTER** on a block that is already linked disconnects it.
- 4 Link more targets if you want a split, then press **CANCEL** (**CANCEL DONE**).

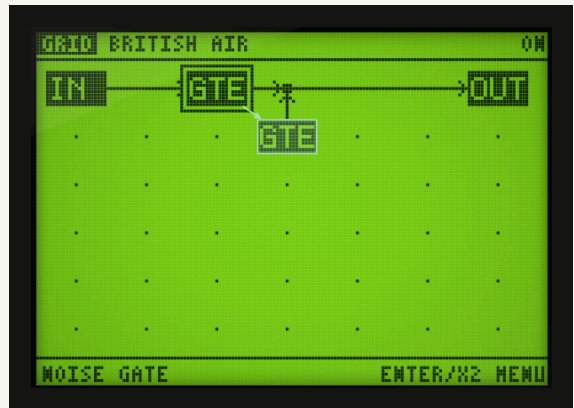
MOUSE: SHIFT+DRAG

Hold **Shift** and drag from the source block to the target block. While you drag, the arrow is **green** to add a link, **amber** to remove an existing one, or **red** if the link isn't allowed. The LCD confirms with **Blocks linked** or **Link removed**.

LINKS THAT AREN'T ALLOWED

- A block linked to itself.
- A loop (cycle), where the signal would come back to an earlier block.
- A link *into* an input block, or *out of* an output block.

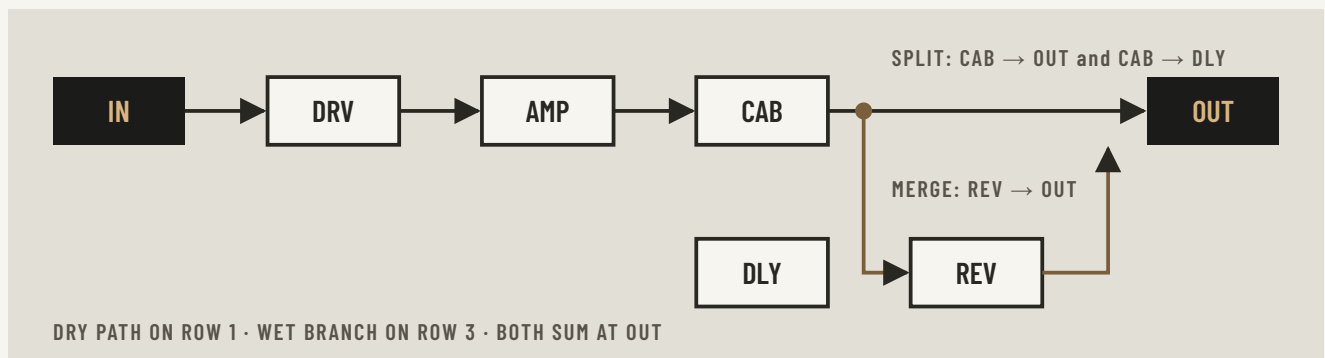
The DL-1 rejects these with **INVALID LINK / CYCLE**, so your audio can never feed back on itself inside the grid.



SHIFT+DRAG Dragging a link from GTE to a second GTE: the preview arrow shows where the cable will go.

Building parallel paths

Parallel routing is just links: link one block to two targets to split, and link two blocks to the same target to merge. A classic use is a wet/dry rig: the amp and cab feed the output directly and also feed a delay-and-reverb branch on a lower row, which rejoins at the output.



- 1 Build the main chain on one row: **IN** → DRV → AMP → CAB → **OUT**.
- 2 Add a delay and a reverb in empty cells on a lower row. If they auto-link to each other, keep that; otherwise link DLY to REV.
- 3 Select CAB, press **L**, move to DLY and press **ENTER**: CAB now splits to OUT and DLY.
- 4 Select REV, press **L**, move to OUT and press **ENTER**. The branch merges back at the output.
- 5 Set the delay and reverb **MIX** (where available) to 100% wet, since the dry signal already reaches OUT by itself.

MERGES ADD UP

Signals arriving at the same block are summed, so a merge is louder than either branch on its own. Lower levels inside the branches if the merged signal lights the red meter or OUT CLIP.

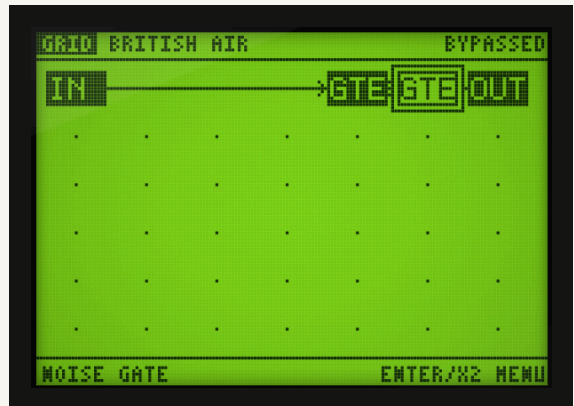
Moving and copying blocks

Mouse: drag a block to another cell. The outline is green on valid cells and red on invalid ones. Drop it on an empty area to just tidy the layout (the cables follow and the sound doesn't change). Drop it onto a cable to move it to that point in the chain: its old neighbours are joined together and it is inserted into the new cable.

Panel: select the block, press **ENTER**, choose **MOVE** or **COPY**, move to the destination and press **ENTER** (**ENTER DROP / CANCEL**). An occupied cell shows **CELL OCCUPIED**.

Keyboard: **Ctrl** + **C** copies the selected block; select an empty cell and press **Ctrl** + **V**.

A copy is a new, independent block with the same settings. It starts **unlinked**, so wire it in afterwards. A moved block keeps its settings and its sound.



DROPPED ON A CABLE The second gate now sits between the first gate and OUT.

Removing blocks

- 1 Select the block on the grid (or open its editor).
- 2 Press **Delete**, or press **ENTER** and choose **DELETE**, or right-click it and choose **Delete...**
- 3 The LCD asks **DELETE BLOCK?** — **LEAVES AN EMPTY CELL.** Press **ENTER** to delete, or **CANCEL** to keep it.

Deleting a block in the middle of a chain **keeps the chain connected**: everything that fed the block is linked to everything it fed. Delete the drive from IN → DRV → AMP and you get IN → AMP. A block linked on only one side (like an IN or OUT) simply loses its cables.

JUST WANT TO HEAR WITHOUT IT?

Bypass the block instead with **TOGGLE** or **Space**. It keeps its settings and its place in the chain.

Removing links



REMOVE LINK Shows the link's start and end cells (row:column) and block names.

From a cable cell: move the cursor to an empty cell that a cable passes through. The bottom bar shows **X1/DEL UNLINK**. Press **X1 / TOGGLE** or **Delete**. If several cables pass through, turn **VALUE** to choose one (**LINK 1/2: TURN TO CHOOSE**), then press **ENTER**.

From link mode: start linking from the source block and press **ENTER** on the target it's already linked to.

With the mouse: right-click the cable and choose **Remove link**, or **Shift**+drag between two linked blocks (amber arrow).

SILENCE CHECK

Audio only reaches the output if there is an unbroken path of links from **IN** to **OUT**. If you remove the last link on that path, the preset goes silent until you link it again.

Bypassing blocks

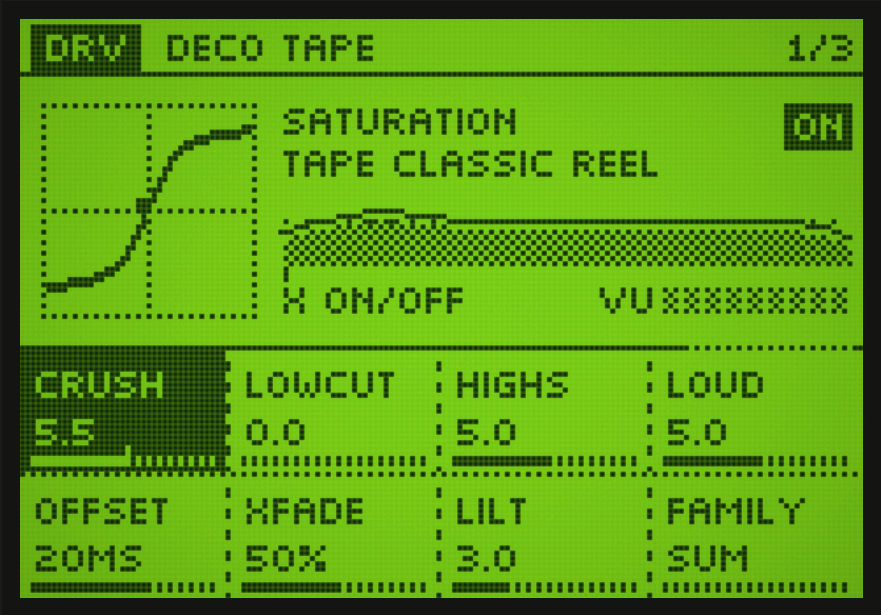
- **One block:** select it and press **TOGGLE**, **X1 / TOGGLE** or **Space**. Or choose **BYPASS** / **ENABLE** in the Block menu.
- **A group:** **Ctrl**+click several blocks (the bottom bar shows **3 SELECTED**), then press **Space** to switch them together.
- **Everything:** **F4 / BYPASS** bypasses all effects at once and lights F4 red. Your routing, IN and OUT blocks stay active, so you hear your dry signal.
- Switching an **IN** or **OUT** block off **mutes** it.

Grid width and starting over

Press **X3 / SETUP** to open **OS SETTINGS**.

- **GRID WIDTH**: turn **VALUE** to choose 7–14 columns, then press **ENTER** to apply. A column that still holds blocks can't be removed; you'll see **MOVE BLOCKS BEFORE SHRINKING**.
- **INITIALIZE PRESET**: clears the grid back to IN → OUT after asking **INITIALIZE PRESET?** Stored preset files are not touched.

05



CHAPTER 05

Configuring Blocks

Every block has its own editor: animated artwork on top, parameter tiles underneath. Here's how to dial them in, swap effect types, load NAM captures and impulse responses, and set up inputs, outputs and the FX Loop.

The block editor	01	Changing values	02
Fine adjustment	03	Replacing the effect type	04
Loading NAM captures	05	Loading impulse responses	06
Input and output blocks	07	FX Loop: using outboard gear	08

The block editor

Open a block's editor by selecting it and pressing **EDIT** (**E**), by double-clicking it, or by choosing **EDIT** in its Block menu.

- **Header:** category badge, effect name, and the page number, for example **1/3**.
- **Artwork:** each effect's display reacts to what you play: meters, curves and animations follow the block's actual input.
- **Parameter tiles:** eight per page in two rows of four. Each shows the name, the value and a travel bar. The selected tile is inverted.

Status overlays: **BYPASSED** when the block is off, **PREPARING** while a large effect or model is loading, and **MEMORY FULL** if there isn't enough memory to prepare it.



EDITOR A drive block on page 1 of 3, with **CRUSH** selected. The VU meter and curve follow your playing.

Changing values

T0	PANEL	MOUSE / KEYBOARD
Select a parameter	Turn PARAMETER , or use the navigation pad	Click a tile, or use the arrow keys
Change its value	Turn VALUE	Drag up/down on the tile, scroll the wheel over it, or , .
Change in big steps	—	Shift + drag, wheel, or ↑ ↓ for ×10
Reset to default	ENTER then X1	Double-click the tile
Change page	PREV NEXT	[]
Bypass the block	X1 / TOGGLE or TOGGLE	Space
Back to the grid	CANCEL	Esc

Moving around: left and right step through tiles and continue onto the next or previous page on the same row. Up and down jump between the two rows without changing page. PARAMETER walks through every parameter in order, across all pages.

Step size: VALUE normally moves one unit per detent. On parameters with very wide ranges it moves faster (5 or 100 units), so use fine adjustment for precise settings.



PAGE 2 OF 3 Moving right past the last tile of page 1 lands on this page, same row.

Fine adjustment

Press **ENTER** on a selected parameter to open its **FINE** view: a large readout, the step size (**STEP 1** or **STEP 0.1**), and a ruler from minimum to maximum. A dot on the ruler marks the default.

- Both encoders, or the arrow keys, change the value one step at a time.
- Click or drag the ruler to jump to any value.
- **X1** restores the default.
- **ENTER** or **CANCEL** returns to the editor.



FINE VIEW A pitch block's correction parameter at its default, 0 cents, range -50 to +50.

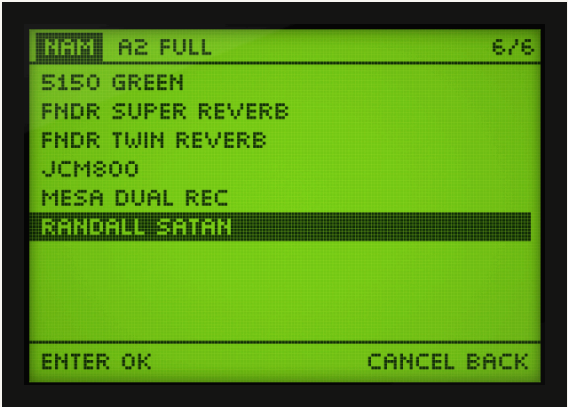
Replacing the effect type

To swap a block for a different effect without re-wiring:

- **Step through the category:** in the editor, **Shift**+click **PREV** / **NEXT** (or **Shift**+**[** / **]**). This audition-friendly shortcut wraps around at either end.
- **Pick from the list:** press **EDIT** inside the editor, or choose **REPLACE** in the Block menu, and choose a category and type.
- **Mouse:** right-click the block on the grid and choose from **Replace effect**.

The new effect starts at its default settings. Its cell, its links and its on/off state are kept.

Loading NAM captures



MODEL LIST Captures from your NAM folder, sorted by name. Press ENTER to load the highlighted one.

The NAM category has two types: **A2 Full** (largest model profile, highest detail) and **A2 Lite** (smallest profile, lighter on CPU).

- 1 Add a **NAM** block and open its editor.
- 2 Select **MODEL** (the first parameter) and press **ENTER**, or turn **VALUE**.
- 3 Choose a capture and press **ENTER**. The editor shows **LOADING**, then the model name.

- If the list says **NO MODELS INSTALLED**, press **F1** to open Folders with the NAM row ready, choose your folder and Save.
- Captures must be **mono** and trained at **48 kHz**. Other captures are rejected with an **ERROR:** message, and a missing or invalid model passes your dry signal through.
- NAM captures model an amp (or a pedal, or a full rig). If yours is amp-only, follow it with a **CAB** block or an IR.
- Presets store the model's file path. If you move your captures, re-select them.

Loading impulse responses

The **IR Loader** block (full edition) plays cabinet or room impulse responses from your IR folder. Add it from the **IR** category, select **MODEL** and press **ENTER**, then choose a **.wav** file. **NO IRS INSTALLED** means the IR folder is empty or not set; press **F1** to choose it. The first 128 files found are listed.

Input and output blocks

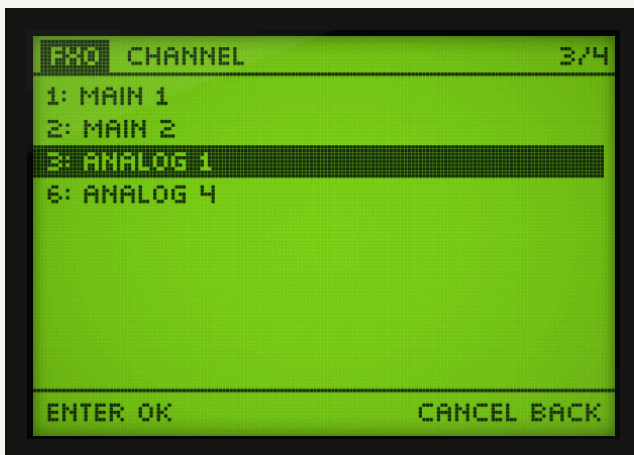
CONTROL	OPTIONS	USE IT TO
PORT	STEREO, LEFT, RIGHT	Take both channels, or one channel copied to both sides of the chain. On an output, send to both channels or just one. New inputs default to LEFT.
BUS	MAIN 1-2, AUX 3-4	In the VST3, choose the main buses or the optional auxiliary buses (see Auxiliary buses).

You can have more than one IN or OUT block. Add them from the **INPUT** and **OUTPUT** categories, for example to run two separate chains in one preset.

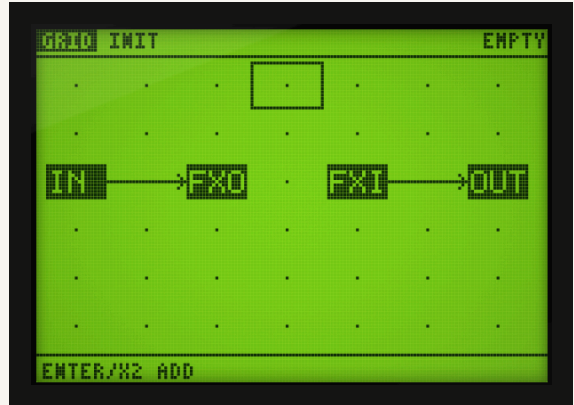
FX Loop: using outboard gear

The **FX Loop** category has two blocks. **FX Out** (**FXO**) sends whatever feeds it to an interface output. **FX In** (**FXI**) starts a chain from an interface input. Your pedal or rack unit sits between them, outside the computer. There is no internal cable between FXO and FXI.

- 1 In Audio Setup, enable the extra output and input ports you'll use (for example Analog Out 3 and Analog In 4).
- 2 Patch: interface output → pedal input; pedal output → interface input.
- 3 On the grid, link the first part of your chain into **FXO**, and link **FXI** to the rest of the chain and **OUT**.
- 4 In each block set **PORT** (STEREO, LEFT or RIGHT). Then select **CHANNEL** and press **ENTER** to pick the named port from your interface.



CHANNEL PICKER Ports are listed by the names your interface driver uses.



FX LOOP IN → FXO, then FXI → OUT. The pedal completes the circuit outside the DL-1.

- A mono FXI feeds its input to both sides of the chain; a mono FXO sends the left or right side of the chain.
- Remove any direct cable that bypasses the loop, unless you want a dry signal running in parallel.
- Switching FXO or FXI off mutes that send or return. Global bypass keeps the loop routing active.
- A saved port that isn't available shows **MISSING**; pick an enabled port to restore it. The picker shows **NO ACTIVE CHANNELS** if no extra ports are enabled.
- In a DAW, FX Loop blocks use the plugin's optional Output 3-4 and Input 3-4 buses; route those to your hardware with your DAW's I/O or sidechain routing.
- Outboard gear adds latency that is not compensated automatically.

06



CHAPTER 06

Presets & States

Load a factory rig, save your own, and capture up to four instant variations of the same sound. A rhythm tone, a lead boost, an ambient swell: one preset, four states.

Browsing and loading presets	01	Storing a preset	02
Preset states A-D	03	Saving whole sessions	04

Browsing and loading presets

- 1 Press **F2 / PRESETS** (**F2**). The browser shows two tabs, **FACTORY** and **USER**, and the number of files.
- 2 Press **X1** or click a tab to switch between Factory and User.
- 3 Highlight a preset with the arrows, either encoder, **PREV** / **NEXT** or the mouse wheel.
- 4 Press **ENTER** (or **X2**, or double-click) to load it.



PRESET BROWSER The Factory tab with 10 files. Footer:

X1 CATEGORY, **ENTER LOAD**, **F3 STORE**.

From the Home screen, just turn either encoder to open the browser. Each tab remembers where you were. Press **F2** again to refresh the User list after adding or renaming files outside the DL-1.

- **Factory** presets are built into the DL-1 and are read-only. Store a copy to change one.
- **User** presets are the **.json** files (and legacy **.retroefx** files) directly inside your Presets folder, sorted by filename. Subfolders aren't listed.
- An empty User tab shows **NO PRESETS IN FOLDER**. Store a preset or set the folder in **Settings > Folders...**
- If a preset can't be loaded you'll see **Invalid or unavailable preset** and your current sound stays as it was.

THE FACTORY ROCK COLLECTION

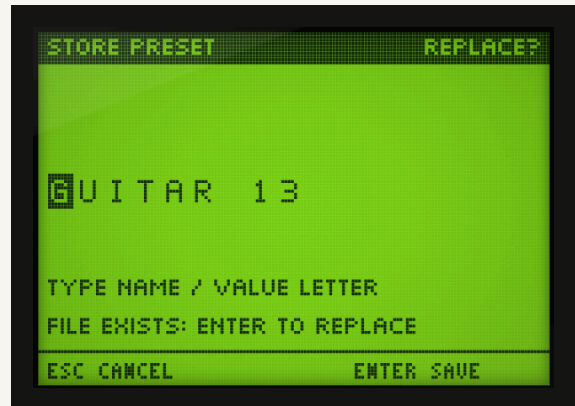
Ten complete rigs built from the official amp, cabinet and effect blocks. No NAM captures or IR files needed. They require the full edition and the block packages installed.

PRESET	SOUND AND CHAIN
Backline Crunch	Open classic-rock crunch: gate, jumpered Plexi-style amp, Greenback 4x12, short room.
Tight Trousers	Focused hard-rock riffs: gate, Mid Scream boost, JCM800-style amp, 1960 4x12, subtle room.
Chime Riot	Bright indie chords: gentle gate, AC30 top-boost-style amp, Blue 2x12, 115 ms tape slap, room.
Punk Downstroke	Immediate, nearly dry punk rhythm with a firm low cut for fast downstrokes.
Seattle Grit	Ragged alternative-rock distortion: Filthy Rodent into a moderately driven amp and 2x12.
Desert Fuzz	Thick stoner-rock sustain from Big Fluffy into a 50 W amp and a darker 2x12.
Modern Hammer	Tight modern heavy rhythm: boost into a modern high-gain channel and a 4x12. Dry.
Arena Fire	Broad melodic lead with subtle modulation, 380 ms digital delay and plate.
Brown Swirl	Moving vintage hard rock: slow phaser before a cranked amp, 285 ms tape echo.
Liquid Horizon	Smooth sustaining lead: high-gain lead channel, 440 ms tape echo and plate.

Storing a preset

- 1 Press **F3 / STORE** (**F3**). The **STORE PRESET** page shows a 16-character name.
- 2 **Type** the name on your keyboard (A–Z, 0–9 and space). **Backspace** erases; **Ctrl** + **A** clears the whole name.
Or use the panel: **PARAMETER** (or left/right) moves the cursor, **VALUE** (or up/down) changes the letter.
- 3 Press **ENTER** to save. The file is written to your Presets folder as **NAME.json** and the LCD confirms **PRESET STORED**.
- 4 If a preset with that name exists, the header asks **REPLACE?** Press **ENTER** again to overwrite, or change the name.

CANCEL (**Esc**) leaves without saving. **Save failed: check folder** means the Presets folder can't be written; choose another in Folders.

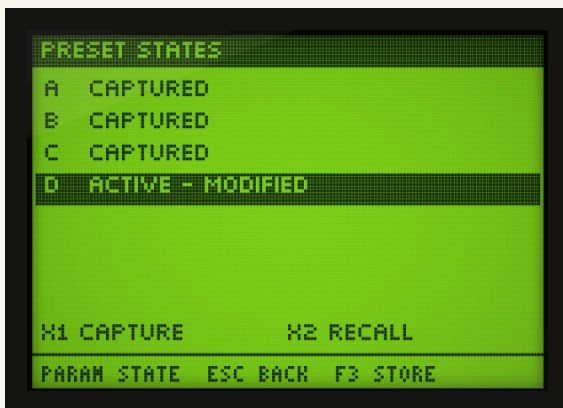


STORE A name that already exists asks before replacing the file.

THE EDITED LIGHT

The amber **EDITED** light on the panel means the current sound has changes you haven't stored. It goes out after you store.

Preset states A-D



PRESET STATES A–C captured; D is active and has been modified since capture.

A **state** is a snapshot of the whole sound (blocks, settings, routing and on/off switches) that you can recall instantly. Use them like scenes: one preset, four versions.

- **Capture:** **Shift** + click a state button **A**–**D**, or press **Shift** + **A**–**D**.
- **Recall:** click the state button, or press **A**–**D**.
- The active state's button lights red. An asterisk (**B***) means you've changed the sound since capturing it.

The **PRESET STATES** page (**X1** on Home, **S**, or **Shift** + **F1**) lists each state as **EMPTY**, **CAPTURED**, **ACTIVE** or **ACTIVE - MODIFIED**. Select one with the arrows, press **X1** to capture or **ENTER** to recall. You'll see **STATE B CAPTURED - F3 TO STORE** as a reminder.

STORE TO KEEP YOUR STATES

States belong to the preset. Capture them, then press **F3 / STORE** to write them into the preset file. In a DAW they're also saved with your project.

A typical setup: capture your rhythm tone in **A**; turn on a boost and raise the delay mix and capture **B**; bypass the drive for a clean tone in **C**; add a long reverb in **D**. Store. Then map states A–D to four footswitches (Chapter 07).

Saving whole sessions

In the standalone app, **Options › Save current state...** writes everything (the current patch, states, MIDI mappings, setlist, screen settings and master level) to a file you choose; **Options › Load a saved state...** brings it back. The standalone app also restores your last session automatically when it opens. In a DAW, your project does this for you.

07



CHAPTER 07

MIDI Mapping

Put the DL-1 under your feet. Map footswitches to block on/off, states and presets, map an expression pedal to wah, volume or any parameter, and switch whole effect categories with a single press.

Connecting your controller	01	Quick learn: right-click anything	02
The MIDI mappings window	03	Mapping a footswitch or pedal, step by step	04
Choosing a response	05	Ranges and expression pedals	06
What you can control	07	Switching whole categories	08
Presets, setlists and scope	09	The LCD MIDI editor	10
Removing, backing up and limits	11		

Connecting your controller

- **Standalone:** open **Settings** › **Audio Setup...** and tick your controller under **Active MIDI inputs**. The DL-1 remembers it, even if you unplug and reconnect.
- **VST3:** route your controller to the DL-1 in your DAW, typically by creating a MIDI track whose input is the controller and whose output is the DL-1 plugin, and enabling monitoring on that track.
- The green **MIDI** light on the panel flashes whenever MIDI arrives, mapped or not. If it doesn't flash when you press a switch, the DL-1 isn't receiving anything; check the connection and routing first.

Quick learn: right-click anything

The fastest way to map a single control:

RIGHT-CLICK	THEN MOVE OR PRESS THE CONTROL ON YOUR CONTROLLER TO MAP...
A parameter tile in a block editor	That parameter (pedals respond continuously).
A block on the grid › MIDI learn on / off...	That block's on/off switch.
A state button 	Recall that state.  +right-click maps <i>capture</i> .
Any panel button	That button.  +right-click maps its Shift action.
The VALUE encoder	Encoder steps.

Or select a parameter (in an editor) or a block (on the grid) and press +. For anything more, use the MIDI mappings window.

The MIDI mappings window

Open it with **Settings** › **MIDI mappings...** or +. The list on the left shows every mapping (up to 256); the right side edits the selected one.

The screenshot shows the 'MIDI mappings' window. On the left, a list of mappings includes 'Recall state A' (CC 1 / any channel). The main area shows the configuration for this mapping. At the top, there are buttons for 'Preset order', 'Import profile', 'Export profile', and 'Undo'. Below these, the 'Mapping name' is 'Optional: Switch 1, Drive, Expression...' and 'Applies to' is 'All presets'. The 'Do' section has a dropdown for 'Recall state A' and an 'Enabled' checkbox. The 'MIDI message' section has dropdowns for 'Control change (CC)', 'Any channel', and 'Number (0-based)' set to '1'. The 'When' section has a dropdown for 'Follow response' and input fields for 'Value / minimum' (0) and 'Maximum' (127). The 'Response' section has a dropdown for 'Trigger action' and input fields for 'Range start' (0 %) and 'Range end' (100 %), with a 'Reverse' button. At the bottom, there are buttons for 'Advanced settings' and 'Override in this preset'. A 'Stop learning' button is also present, with a note that 1 signal(s) were observed but learning did not activate. Below this, a 'Signal to learn' section shows 'CC ch 1 #34 = 0 / Repeated fixed value' and buttons for 'Use selected signal' and 'Cancel'. At the very bottom, a 'MIDI activity' log shows 'CC ch 1 #34 = 0 / Learning'.

MIDI MAPPINGS Learning a switch for **RECALL STATE A** . The candidate list shows the signal received; **USE SELECTED SIGNAL** fills in the fields above.

FIELD	WHAT IT SETS
Mapping name	Optional label, such as “Switch 1” or “Expression”.
Applies to	All presets (your controller layout stays the same whichever sound you load) or This preset (saved inside the current preset).
Do	The target: what this mapping controls. Enabled switches the mapping on or off.
MIDI message, Channel, Number	Which incoming message triggers it: CC, Note, Program change, Pitch bend and more; any channel or 1–16; the CC/note/program number.
When	Which messages qualify (the trigger). See the table on the next page.
Value / minimum, Maximum	The value or value range used by Exact value and Value range triggers.
Response	What a qualifying message does: continuous control, toggle, momentary and so on.
Range start / end	The portion of the target's range the controller covers. Reverse swaps them.

Below the fields, **MIDI activity** logs incoming messages and what happened to each (**Applied**, **No active mapping**, **Ignored by trigger, pickup or target...**). It's the first place to look when a mapping doesn't respond.

Mapping a footswitch or pedal, step by step

- 1 Click **Add mapping**.
- 2 In **Do**, choose the target, for example **Slot 3 / Mid Scream / On / off**, **Recall state A** or **Next preset**.
- 3 Leave **Applies to** on **All presets** unless this mapping should only exist in the current preset.

- 4 Click **Learn MIDI**. Press and release the **same switch twice**, or sweep the pedal from heel to toe. Learning never changes your sound.
- 5 Check the **Signal to learn** list. A single press can send several messages; pick the one that identifies this switch, then click **Use selected signal**. The message type, channel and number are filled in. Switches that send the same fixed value every press automatically get an **Exact value** trigger.
- 6 Choose the **Response** (below), then test it. Watch the MIDI activity log for **Applied**.

DEFAULTS THAT JUST WORK

Choosing a block's **On / off** or **Global bypass** sets the response to **Toggle on press**. Choosing a parameter sets it to **Continuous**. Change it only if your controller behaves differently.

Choosing a response

RESPONSE	USE IT FOR
Continuous	Expression pedals and knobs: the target follows the controller's position.
Toggle on press	Switches that send a press <i>and</i> a release message (e.g. 127 then 0). Each press flips on/off.
Momentary / gate	Hold-to-enable: on while held, off when released.
Toggle on each message	Switches that send one fixed message per press, including value 0. On the LCD: TOGGLE MESSAGE .
Set on / Set off	Dedicated switches that always turn something on, or always off.
Increment / Decrement	Step a value up or down with each press.
Relative (three formats)	Endless encoders: two's complement, offset 64, or sign magnitude.

Matching your controller (the When field)

YOUR CONTROLLER SENDS	WHEN	RESPONSE
The same CC value (even 0) on every press	Exact value	Toggle on each message, or a recall action
CC 127 on press, CC 0 on release	Press / rising edge	Toggle on press
Alternating 0 and 127 on each press	Every matching message	Continuous or Momentary / gate
An expression pedal sweep	Follow response	Continuous
A Program Change per switch	Every matching message	Select preset, or a recall action

TWO SWITCHES, ONE CC NUMBER

Some controllers send the same CC from different switches with different values (e.g. CC 34 value 1 and CC 34 value 0). Learn each switch separately: each mapping gets its own **Exact value**, so they don't trigger each other.

Ranges and expression pedals

- **Range start / end** are percentages of the target's own range. Use **0% / 100%** for full travel, **100% / 0%** to reverse direction, or **30% / 74%** to keep the pedal within a useful window.
- **Advanced settings** add: **Pedal takeover** (**Immediate**; **Pickup**, which waits until the pedal passes the current value, so nothing jumps; or **Preserve pedal position**), **Curve** (linear, logarithmic, exponential), input calibration for pedals that don't reach 0 or 127, press threshold and hysteresis, bank filters, and a specific input device.
- For a volume pedal, map **Master level** (–60 to +6 dB). It affects all outputs and stays put when you change presets or states.

What you can control

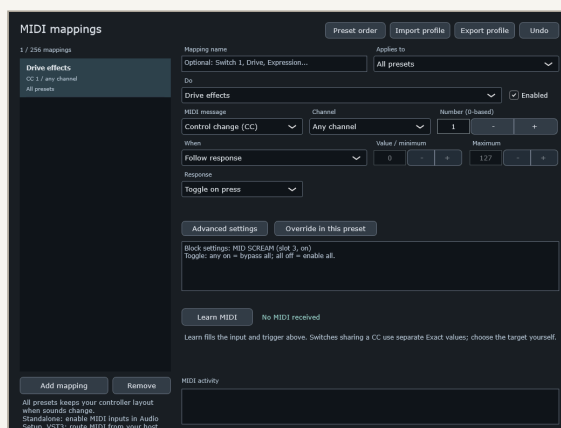
- **Any block parameter** (**Slot / Effect / Parameter**), including a NAM block's MODEL (value 0 unloads; 1–64 pick captures in folder order).
- **Any block's on/off** (**Slot / Effect / On / off**).
- **Effect categories**: Drive, Delay, Reverb, Modulation, Dynamics, Filter, Pitch, Synth, Gate, Amp, Cabinet and Neural amp effects.
- **Global bypass** and **Master level**.
- **Tuner on / off**.
- **Recall state A–D, Capture state A–D**, and the Preset states page.
- **Next preset, Previous preset, Select preset**.
- **Every panel button** and its Shift action, and encoder steps (these act on whatever is selected and need the DL-1 window open).
- Eight renameable **custom controls** (in Advanced settings) that drive up to 16 destinations each, for one-pedal morphs.

Mappings follow the block, not the cell: moving a block on the grid keeps its mapping. If a mapped block is deleted or replaced, the activity log reports **Mapped block unavailable**; choose a different target, then the intended block again, to reconnect it.

Switching whole categories

Map a switch to **Drive effects** (or Delay, Reverb, Modulation...) and it controls every block of that category in whatever preset is loaded. No per-preset setup: swap your drive for another and the switch follows.

Toggle on press	If any matching block is on, bypass them all; if all are off, enable them all.
Toggle on each message	The same, for fixed-value switches.
Bypass / Enable all	Separate dedicated off and on switches.
Momentary bypass	Bypass while held; release restores each block's own setting.



CATEGORY TARGET The editor lists the matching blocks in the current preset.

RECIPE: FOUR SWITCHES AND A PEDAL

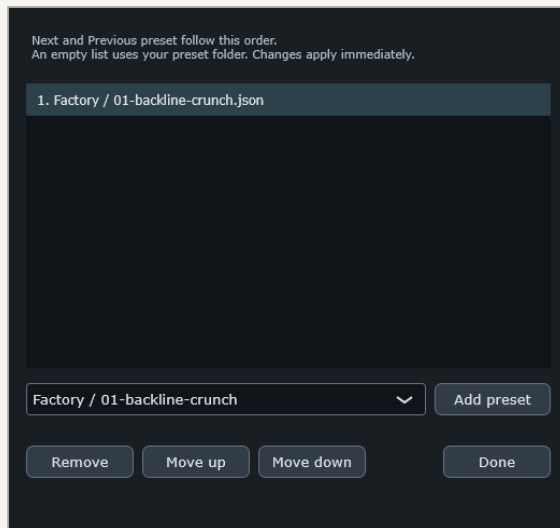
Map switches 1–4 to **Recall state A–D** (All presets). Map switch 5 to **Drive effects** with **Toggle on press**. Map the expression pedal to the wah's position parameter, or to **Master level** for volume, with **Pickup takeover**. Map up/down switches to **Next preset** and **Previous preset**. Export the profile so you can restore it any time.

Presets, setlists and scope

Next preset and **Previous preset** step through your User presets in filename order. To play a set in a specific order, click **Preset order** and build a setlist: add presets (Factory or User, repeats allowed), and arrange them with **Move up** / **Move down**. At either end the DL-1 stops rather than wrapping around.

Select preset jumps straight to one preset, ideal for Program Change messages.

All presets mappings belong to the DL-1 itself and survive preset changes. **This preset** mappings are saved in the preset. **Override in this preset** replaces a global mapping in the current preset only; delete the override to go back to the global one.



PRESET ORDER A setlist for Next and Previous preset.

The LCD MIDI editor



ON THE LCD Every mapping field is editable from the panel.

Press **M**, or **X3 / SETUP**, **MIDI MAPPINGS**.

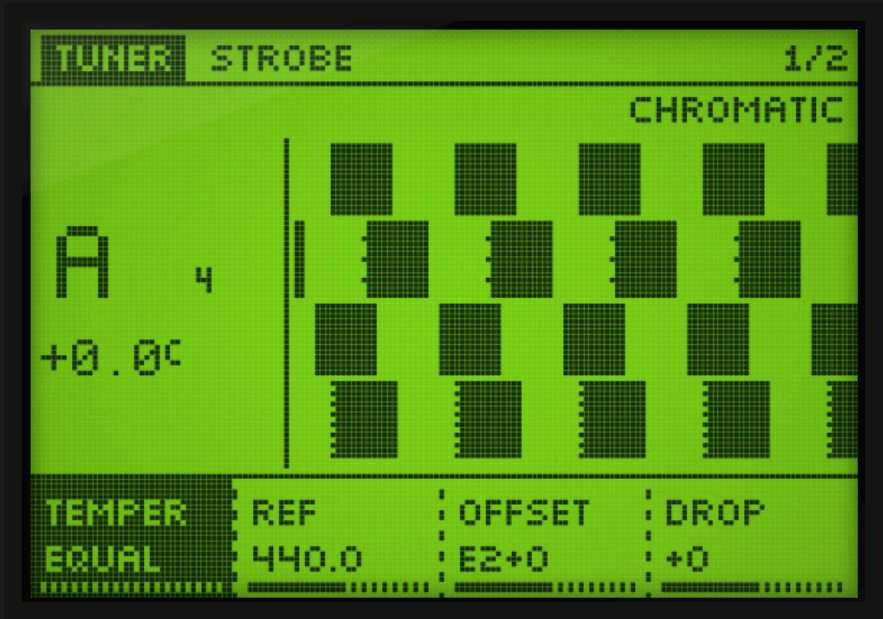
- **PARAMETER** or up/down selects a field; **VALUE** or left/right changes it.
- **X1** adds a mapping, **X2** (or **ENTER**) learns, **X3** deletes, **X4** opens the desktop window.
- While learning, left/right picks a candidate signal and **ENTER** accepts it.

Removing, backing up and limits

- **Remove a mapping:** select it and click **Remove** (or **X3** on the LCD). **Undo** reverses configuration changes.
- **Back up:** **Export profile** saves your global mappings, custom control names and setlist to a JSON file (default **ForgeEFX MIDI.json** in Documents). **Import profile** replaces your global mappings with a saved profile; preset-local mappings are kept.
- Mappings are saved with the standalone session and the DAW project.

- **Supported:** MIDI 1.0 CC, Note on/off, pitch bend, channel and poly pressure, Program Change with bank select, 14-bit CC pairs, NRPN and RPN.
- **Not supported:** MIDI output and LED feedback to your controller, MIDI clock sync, SysEx, and MIDI 2.0.

08



CHAPTER 08

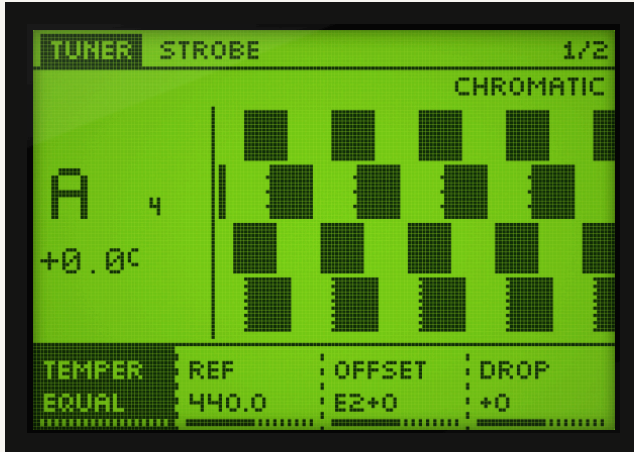
Tuner, Meters & Utilities

A strobe tuner for precision and a polyphonic tuner for a quick strum check. Detailed meters for every input, output and block. Plus screen themes, window sizing and a built-in test-tone generator.

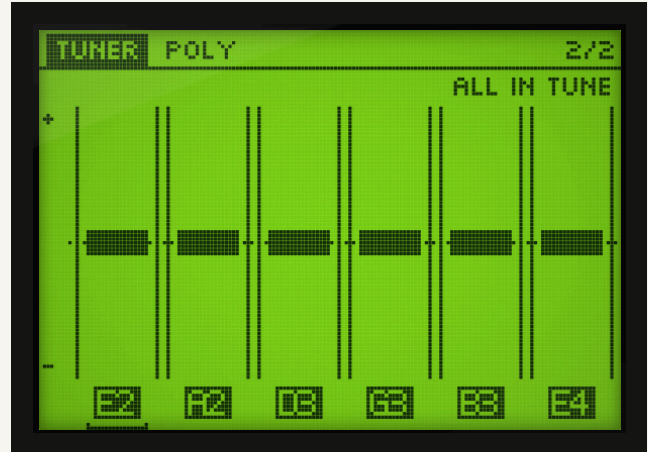
Tuner	01	I/O meters and the gain map	02
Screen colour and window size	03	Testing with the debug panel	04

Tuner

Press **TUNER** (**T**). The button lights red. Use **PREV** / **NEXT** (or **[** **1**), or **X4**) to switch between **STROBE 1/2** and **POLY 2/2**. Press **TUNER**, **T** or **Esc** to close. Your effects keep running while the tuner is open; press **F4 / BYPASS** if you want to hear your dry signal instead.



STROBE Play one note. The moving bands slow down as you approach pitch and stand still when you are in tune.



POLY Strum all open strings. Solid centre blocks mean in tune; **ALL IN TUNE** confirms it.

STROBE SETTINGS

Select with **PARAMETER** or left/right; change with **VALUE** or up/down.

- **TEMPER:** **EQUAL** or **ACOUS** (acoustic) temperament.
- **REF:** A4 reference, 400.0–480.0 Hz (440.0 standard).
- **OFFSET:** a per-string offset of ± 50 cents. **ENTER** chooses which string you're editing.
- **DROP:** drop or capo transposition, ± 12 semitones. At -2 , a sounding D displays as E.

GOOD TO KNOW

- The tuner listens to your **dry left input**, before any effects.
- With no signal the strobe shows **PLAY ONE NOTE**; the poly page shows **STRUM**.
- In the poly view, left/right selects a string and up/down changes its target note. Readings marked **HOLD** are older measurements.
- For a stubborn string, switch to strobe and tune it alone.
- Tuner settings last for the session; they aren't saved in presets.

I/O meters and the gain map

Press **I/O** (**I**). Three pages, switched with **PREV** / **NEXT** or by pressing I/O again:

- **I/O INPUTS 1/3** and **I/O OUTPUTS 2/3** show MAIN L/R and AUX L/R from -60 to 0 dBFS. **USE** marks a channel your preset uses; **IDLE** one that's available but unused; **OFF** unavailable; **MISS** a channel your preset needs but can't find. **CLIP** means full scale.
- **GAIN MAP** shows the level of every block, one grid row at a time. Use the arrows to move; **ENTER** opens that block's editor.



Clip indicators (the red meter lights, OUT CLIP and output CLIP readings) hold for half a second, so you can't miss a brief overload.

INPUT METERS Here MAIN L is **MISS**: the preset uses it but no input is enabled.

GAIN STAGING

Aim for MAIN IN peaks in the green-to-yellow range while you play hard, with your interface's input gain doing the work. Use the gain map to find the block that's pushing the level up before OUT CLIP lights.

Screen colour and window size



CLASSIC



EMERALD



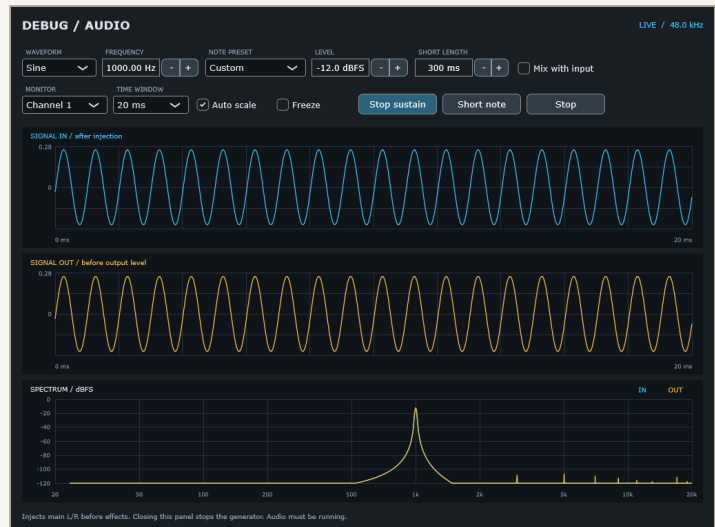
NEGATIVE

- **Settings** > **Screen** chooses the LCD colour, **Classic**, **Emerald** or **Negative**, and its condition, **Fresh**, **Faded** or **Dying**, for a well-worn vintage look. Also on the panel at **X3** > **SCREEN**.
- **Settings** > **UI Size** scales the whole panel to **75%**, **100%**, **125%** or **150%**. In standalone you can also drag the window edges.
- Both are saved with your session or DAW project.

Testing with the debug panel

Open **Debug > Audio debug panel...** (**F12**). It's a built-in test bench:

- **Generator:** a sine, triangle, square or saw tone at a chosen frequency or note (E2 to E4, or 1 kHz) and level. **Sustain** plays continuously, **Short note** plays a burst, **Stop** stops. Tick **Mix with input** to add it to your guitar.
- **Monitor:** scopes for the signal going into and coming out of the DL-1, plus a spectrum, for channels 1–4.
- **Block report:** lists how many blocks loaded and any package errors, and copies the report to your clipboard, ready to paste into a support request.

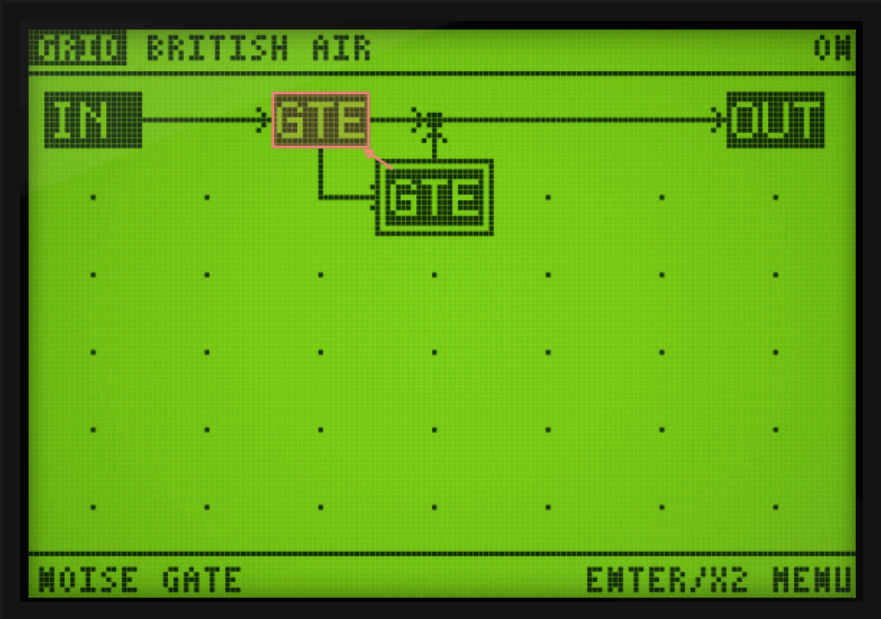


DEBBUG / AUDIO A 1 kHz sine in, processed signal out, and its spectrum.

START QUIET

Test tones are steady and can be **fatiguing or loud** through high-gain chains. Turn your monitors down and start at a low generator level.

09



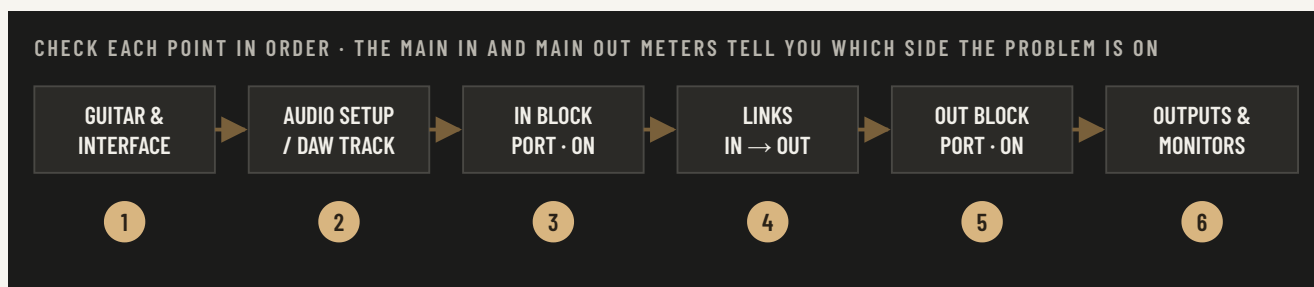
CHAPTER 09

Troubleshooting

Most problems come down to one broken link in the signal path. Follow the signal from your guitar to your speakers and check each point in order. The fix is usually one click away.

Follow the signal	01	No sound in standalone	02
No sound in a DAW	03	Common problems and fixes	04
Getting help	05		

Follow the signal



No sound in standalone

- 1 Interface.** Guitar plugged into an instrument input with its gain up; headphones or monitors connected and turned up a little. The interface's own input meter moves when you play.
- 2 Input muted?** If the **Audio input is muted to avoid feedback loop** notice is showing, open **Settings > Audio Setup...** and clear **Mute audio input**.
- 3 Audio Setup.** The right device is selected, your guitar's input channel is ticked under **Active input channels**, and your outputs are ticked under **Active output channels**. Click **Test** to play a tone through the outputs. The Home screen should not read **NONE** or **--K--**.
- 4 MAIN IN meters.** They move when you play? If not, the DL-1 isn't receiving your guitar: recheck steps 1–3, then the IN block's **PORT**. A guitar on the right channel needs **PORT** set to **RIGHT** (or enable only that input so it becomes **MAIN L**).
- 5 The grid.** Press **GRID**. There must be an unbroken chain of links from **IN** to **OUT**. An **IN** or **OUT** reading **MUTED** is switched off; select it and press **TOGGLE**. Try **X3 > INITIALIZE PRESET** for a clean IN → OUT test (store your work first).
- 6 MAIN OUT meters.** If they move but you hear nothing, check that the outputs you're listening to are the **first two enabled** output channels, and that your interface's monitor mix and volume are up.

No sound in a DAW

- 1** The track's input is set to the interface input your guitar is plugged into, and the track's meter moves when you play.
- 2 Input monitoring** is on for the track (many DAWs also need the track armed).
- 3** The DL-1 is on that track, not bypassed by the DAW, and the track isn't muted.
- 4** The track is mono-in/mono-out or stereo-in/stereo-out; mismatched layouts may not be accepted.
- 5** If a preset uses **AUX 3-4** on an IN or OUT block, enable the plugin's Input 3-4 / Output 3-4 buses in your DAW, or set **BUS** back to **MAIN 1-2**.
- 6** Then follow steps 4–6 of the standalone checklist inside the plugin.

Common problems and fixes

► Clicks, pops or crackles

- Increase the buffer size one step at a time (128 → 256) in Audio Setup or your DAW.
- On Windows, use your interface's ASIO driver rather than DirectSound or Windows Audio.
- Try a lighter chain: A2 Lite instead of A2 Full, fewer heavy reverbs, and close other audio applications.

► Playing feels late (latency)

- Lower the buffer size (64 or 128 samples) and use ASIO on Windows or CoreAudio on macOS.
- Hardware in an FX Loop adds the interface's round-trip latency, which isn't compensated.
- In a DAW, monitor through the DL-1 only (turn off any direct/hardware monitoring of the dry guitar to avoid hearing it twice).

► Feedback, howling or a loud loop

- Mute your monitors, then enable **Mute audio input** in Audio Setup.
- Check you haven't selected a microphone or loopback input as the audio input, and that outputs aren't routed back into inputs (for example through an interface's loopback or an FX Loop patched to itself).

► Sound only in one ear, or thin and phasey

- Set the **IN** block's PORT to LEFT or RIGHT (the side your guitar is on) instead of STEREO when you have one guitar input.
- Check the **OUT** block's PORT is STEREO.
- Look for an extra cable that bypasses a block, or a DAW monitoring path that mixes the dry guitar back in.

► Distorted output or OUT CLIP lights

- Lower the level inside the chain (amp master, block output levels) or reduce **Master level** if you've mapped it.
- Merged branches sum together; lower each branch.
- Use the **I/O** gain map to find the block where the level jumps.

► The plugin doesn't appear in my DAW

- Confirm the whole **ForgeEFX DL-1.vst3** folder/bundle is in a VST3 folder your DAW scans, then force a plugin rescan.
- Check the DAW's blocked or failed plugin list and re-enable it if listed.
- The DL-1 is VST3 only. DAWs that don't support VST3 can't load it.

► macOS won't open the app or plugin

- Control-click the app and choose **Open**, or use **System Settings › Privacy & Security › Open Anyway**.
- No input signal? Allow microphone access for the DL-1 (or your DAW) in **Privacy & Security › Microphone**.

► Only Input, Output and FX Loop appear in the block picker

- The Blocks folder isn't set or is empty. Open **Settings › Folders...**, select the folder *containing* the block packages, click **Save**, then **Refresh**.
- Run **Block report** in the debug panel (**F12**) to see why individual packages didn't load.

► A preset shows MISSING BLOCK

- The preset uses a block that isn't installed (or isn't in the free edition). The block is kept as a silent placeholder, with its settings saved, and its editor reads **CHOOSE BLOCKS FOLDER**.
- Install the package and refresh the Blocks folder, or replace the block with an available one.

► Block report messages

configured blocks folder is unavailable	The saved folder was moved or deleted. Choose it again.
duplicate effect ID	Two copies of the same package exist. Remove one; both are rejected until you do.
effect is outside the trial allowlist	The block isn't part of the free edition.
could not find / load platform binary	The package is incomplete or for another platform. Reinstall it.
block requires host >= X	The block needs a newer DL-1. Update the app and plugin.
restart to update this block's code	You updated a loaded block. Restart the app or DAW.

► A NAM capture won't load

- **NO MODELS INSTALLED**: set the NAM folder (press **F1** in the model list).
- **ERROR:** ... usually means the capture isn't mono or wasn't trained at 48 kHz. Use a 48 kHz mono capture.
- A preset that can't find its capture passes the dry signal. Re-select the model if you moved your files.

► A preset won't load

- **Invalid or unavailable preset**: the file is damaged, from an unsupported version, or needs blocks you don't have. Your current sound is left unchanged.
- In the free edition, presets that use full-edition effects (including the factory rock collection) can't load.
- Keep a copy of the original file before experimenting with it.

► Store fails or User presets are missing

- **Save failed: check folder:** choose a Presets folder you can write to in **Settings › Folders...**
- Presets in subfolders aren't listed; keep them directly in the Presets folder. Press **F2** again to refresh.

► MIDI doesn't do anything

- Watch the **MIDI** light. No flash: in standalone, tick the controller in **Active MIDI inputs**; in a DAW, route the controller's MIDI to the plugin.
- Light flashes but nothing happens: open the MIDI mappings window and read **MIDI activity**. **No active mapping** means the message doesn't match: check channel, message type and number, or learn it again.
- **Panel action requires an open editor:** panel-button targets only work while the DL-1 window is open; use a direct target instead.

► A switch toggles twice, or only works every other press

- Your switch sends press and release messages: use **Toggle on press**, not **Toggle on each message**.
- Your switch sends one fixed value each press: use **Exact value** with **Toggle on each message**.

► Expression pedal jumps or doesn't reach full range

- Set **Pedal takeover** to **Pickup** so the value only moves once the pedal reaches it.
- Calibrate **Input minimum / maximum** in Advanced settings to your pedal's actual travel.

► FX Loop is silent or shows MISSING

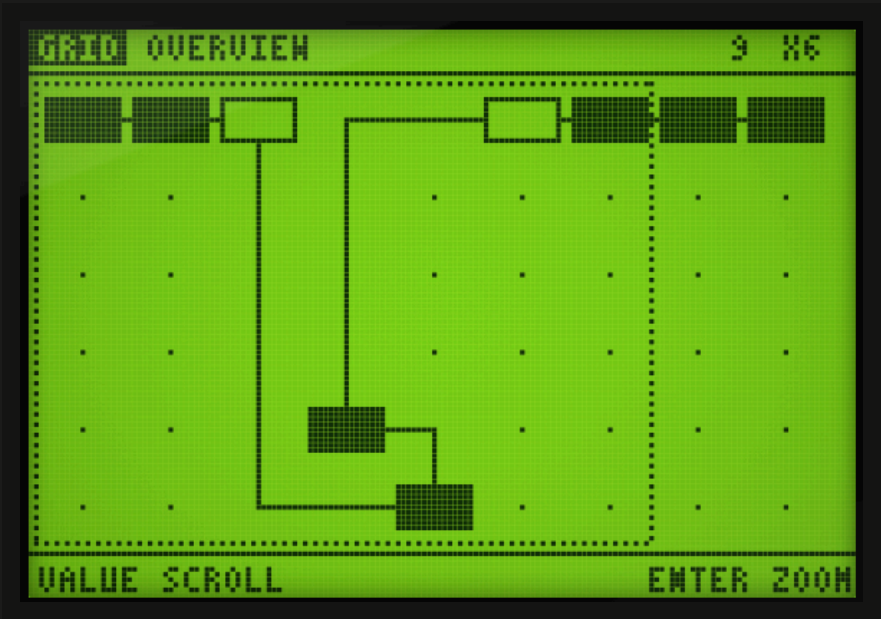
- Enable the loop's output and input ports in Audio Setup, then re-pick **CHANNEL** in FXO and FXI. Saved routing follows the order of enabled channels, so check the port names after changing devices.
- Check your cables and the pedal's power and bypass state. FXO and FXI must both be on.

Getting help

If you're still stuck, contact ForgeEFX support (see www.forgeefx.com) and include:

- ☐ Your operating system, DL-1 version (0.1.2) and edition, and whether you use standalone or VST3 (and which DAW).
- ☐ Your audio interface, driver type, sample rate and buffer size.
- ☐ The **Block report** from the debug panel (it's already on your clipboard after you open it).
- ☐ Any message shown on the LCD, and the steps that cause the problem.
- ☐ For NAM problems, the capture's sample rate and format (please don't send other people's captures).

REF



APPENDICES

Reference

A one-page quick-reference card to print and keep by your rig, the block categories and free-edition contents, where the DL-1 keeps its files, and a glossary of terms.

A. Quick-reference card	01	B. Block categories and editions	02
C. Files and folders	03	D. Glossary	04

A. Quick-reference card

PANEL	
GRID	Grid / overview
EDIT	Edit block; add on empty cell
TOGGLE	Bypass / enable block
ENTER X2	Open, confirm, Block menu
CANCEL	Back one step
PREV NEXT	Page; +Shift: effect type
X1	Toggle / unlink / default
X3	OS Settings
X4	Grid ↔ overview
TUNER I/O	Tuners / meters
F1	Home (folders in file lists)
F2	Presets (again: refresh)
F3	Store preset
F4	Global bypass
A D	Recall; Shift+click capture
PARAMETER	Select
VALUE	Change / browse

KEYBOARD	
Arrows	Navigation pad
Enter Esc	Enter / Cancel
Space	Toggle
G E T I	Grid, Edit, Tuner, I/O
1 4	X1–X4
F1 F4	Home, Presets, Store, Bypass
[]	Prev / Next
, .	Value –1 / +1
Shift + ↑↓	Value ±10
A D	Recall state (+Shift capture)
S	Preset States
L	Link from selected block
Del	Delete block / unlink
Ctrl + C V	Copy / paste block
M / Shift + M	MIDI: LCD / window
Ctrl + M	MIDI-learn selection
F12	Audio debug panel

MOUSE	
Double-click cell	Edit / add block
Drag block	Move; drop on cable to insert
Shift+drag	Link / unlink blocks
Ctrl+click	Group-select blocks
Right-click block	Block context menu
Right-click cable	Remove link
Wheel on grid	Scroll columns
Drag / wheel tile	Change value (+Shift ×10)
Double-click tile	Reset to default
Right-click control	MIDI learn

HOW DO I...	
Add a block	Empty cell › Enter › category › type
Link blocks	Select › L › target › Enter
Remove a block	Select › Del › Enter
Remove a link	Cable cell › X1 › Enter
Save a preset	F3 › name › Enter
Load NAM	MODEL › Enter › file › Enter

B. Block categories and editions

Blocks are installed as packages (see [Installing effect blocks](#)). The block picker groups them by category:

CATEGORY	LABEL	WHAT IT DOES
Noise Gate	GTE	Cuts hiss and hum between notes. Put it first, before drives and amps.
Dynamics	DYN	Compressors, limiters and other level shapers.
Filter	FLT	Wahs, EQs, envelope and step filters.
Pitch	PIT	Octaves, harmony, detune and pitch shifting.
Synth	SYN	Guitar-driven synth and organ voices.
Drive	DRV	Boosts, overdrives, distortions and fuzzes.
Amplifier	AMP	Amp models. Follow with a cabinet.
NAM	NAM	A2 Full and A2 Lite: load your own Neural Amp Modeler captures.
Cabinet	CAB	Speaker cabinet models.
Modulation	MOD	Chorus, flanger, phaser, tremolo, vibrato and more.
Delay	DLY	Digital, tape, analogue-style and creative delays.
Reverb	REV	Rooms, plates, springs, halls and ambient spaces.
IR	—	IR Loader for your own impulse responses (full edition).
Input / Output	IN OUT	Host input and output endpoints. Built in.
FX Loop	FX0 FXI	Send to and return from outboard gear. Built in.

Included in the free edition

CATEGORY	BLOCKS
Noise Gate	Shut Your Trap
Drive	Blue Bruiser, Filthy Rodent
Filter	Tear Jerker, Ten Band
Pitch	Downshift, OCT Five
Synth	Organ Nine
Modulation	Little Pebble, BBD Chorus
Delay	Tape Capstan, DIGI 200
Reverb	Holy Moly, Spring Fling, Hot Plate
NAM	A2 Full, A2 Lite
Built in	Host Input, Host Output, FX Out, FX In

The free edition has no time limit and the same interface, routing, presets, states, MIDI and tuner features. Amp and cabinet models, the IR Loader and the remaining effects need the full edition; with the NAM blocks you can still play through your own amp captures. Presets that use full-edition blocks can't be loaded in the free edition.

C. Files and folders

WHAT	WHERE
User presets	Your Presets folder. Default Documents/RetroEFX/Presets . Files are NAME.json .
Block packages	Your Blocks folder. Default %APPDATA%\ForgeEFX DL-1\Blocks on Windows.
NAM captures	Your NAM folder (*.nam, subfolders included). Set it yourself.
Impulse responses	Your IR folder (*.wav). Default Documents/ForgeEFX DL-1/IRs .
Folder settings	folders.json in %APPDATA%\ForgeEFX DL-1 (Windows) or ~/Library/Application Support/ForgeEFX DL-1 (macOS).
Standalone settings	Audio device, MIDI inputs and last session: RetroEFX DL+.settings in %APPDATA%\RetroEFX DL+ (Windows) or ~/Library/Application Support (macOS).
MIDI profiles	Wherever you export them. Default Documents/ForgeEFX MIDI.json .
Session files	Wherever you save them with Options › Save current state...

The RetroEFX folder and settings names are kept from earlier releases, so existing presets, sessions and device settings carry straight over.

Backing up your rig: copy your Presets folder, your NAM and IR folders, and an exported MIDI profile. Those four things, plus the block packages, recreate your setup on another computer.

D. Glossary

Block

One effect, amp, cab or endpoint placed in a grid cell.

Block package

An installable **.fxblock** folder containing one block's code and description.

Buffer size

How many samples the audio driver processes at a time. Smaller is lower latency but needs more CPU.

Bypass

A block switched off so the signal passes through unchanged. Global bypass (F4) does this for every effect.

Capture

Saving the current sound into one of states A–D. (A NAM file is also called a capture.)

Endpoint

An IN, OUT, FXO or FXI block, where audio enters or leaves the grid.

Grid

The 6-row workspace where blocks are placed and linked.

IR

Impulse response: a recording of how a cabinet or space responds, used by the IR Loader.

Link

A one-way cable from one block to another.

Merge / split

Several links into one block (summed) / one block linked out to several.

NAM

Neural Amp Modeler, an open format for machine-learned captures of amps and pedals.

Pickup

Pedal takeover mode that waits for the pedal to reach the current value before taking control.

Preset

A stored sound: grid, links, settings, states and preset-local MIDI mappings.

Scope

Whether a MIDI mapping applies to **All presets** or **This preset**.

State

One of four instant variations (A–D) of a preset.

Forge**EFX** DL-1

MODERN POWER. CLASSIC RACK FEEL.