

Lindell Plugins

LINDELL 80 SERIES

Channel + Buss





Lindell 80 Channel (84 Mode Off)

Lindell 80 Channel Toolbar.

TOOLBAR

A / B

Gives access to two different settings, for quick comparison. The selected memory appears in blue. All the parameter changes or preset loads affect only the selected memory.

Copy Button (>)

When clicked, the current memory is copied to the other memory.

In / Out Gains

These parameters give a precise control on the gain staging of the plugin.

MENU

Common commands

« Set in all instances » copies the parameter value to all the instances of the plugin in the session.

« Save as default » sets the current parameter value as the default one when the plugin opens.

About

Shows the plugin version and credits information.

Calibration

You can chose the calibration level here (the mapping between the real digital dBFS level and the virtual dBu level in the simulated circuits).

The calibration level is often expressed as XX dBFS = 0 VU (or +4 dBu). Even if the plugin doesn't have a VU meter (but a meter showing dBu values), we chose to keep this notation.

Oversampling

You can select the oversampling mode here. Higher oversampling reduces aliasing problem but makes the processing n-times more CPU intensive.

UI Zoom

The Lindell 80 Channel UI size can be reduced using this menu options from 70% to 100% of its normal size.

Note that the plugins size will never get larger than 80% of the screen width/height, regardless of the UI Zoom setting. This means that the higher values (80%, 90%, 100%) will result in the same plugin size on a small notebook screen for instance.

Noise

The plugin adds a very low amount of noise that is usually inaudible (the noise floor). It can be turned off here.

Clipping

The hardware discrete op-amps do their best to deliver a clean undistorted signal. But they can't output more voltage than what the power supply provides, so they hard clip above a given level.

This clipping gives a nice saturation when you're just at the gain level where only the transients and loudest parts are clipped. But with more gain it can become unpleasing. That's why the plugin lets you chose between 3 different op-amps clipping modes :

- Hard : models the hardware clipping.
- Soft : more gentle and progressive clipping.
- Off : turns op-amps clipping off.

METERS

Level meter

Shows the dBu input level on the left side and the dBu output level on the right side.

Gain reduction meter

Show the compressor gain reduction on the left and the gate gain reduction on the right, in dB.



PREAMP

THD

Controls the amount of harmonic distortion of the circuits. The middle position corresponds to the normal behavior of the emulated circuit.

Gain

Input gain.

The silkscreen shows the level of the input signal. For example if the signal is -20 dBu, the knob will be positioned to the bottom and a gain of +20 dB will be applied to bring it to 0 dBu.

-20 dB Pad

Reduces the volume before the input.

Unity

Activates a unity gain mode: the input gain is compensated after the output of the plugin. If the -20 dB pad is active, it is also compensated by a 20 dB boost on the output.





FILTERS

High Frequency

+ / - 16 dB high shelf filter at 12 kHz or [10, 12, 16] kHz in 84 mode.

The frequency can be changed by clicking directly on the value labels on the GUI.

84 Mode

Activates the 84 version of the preamp featuring :

- selectable high filter frequency
- two Q values for the mid filter
- low pass filter

Mid Frequency

+ / - 18 dB or + / - 12 dB bell filter in 84 mode without "Hi Q", at [0.36, 0.7, 1.6, 3.2, 4.8, 7.2] kHz.

Low Frequency

+ / - 16 dB low shelf filter at [35, 60, 110, 220] Hz.

High Pass

18 dB / octave high pass filter at [45, 70, 160, 360] Hz.

Low Pass

18 dB / octave low pass filter at [6, 8, 10, 14, 18] kHz.

EQL

Enables the 3 band equalizer circuit.

FILTER

Enables the high pass (and low pass in 84 mode) filter(s).

COMPRESSOR



Mix

Controls the amount of unprocessed ("DRY") and processed ("WET") signals mixed together at the compressor output.

SC HPF

Controls the frequency of the compressor side chain high pass filters.

In the full anti-clockwise position, this filter is deactivated. When this filter is active, a label displays the filter frequency above the knob.

THRESHOLD

Compressor side chain level over which the plugin will start compressing the signal.

GAIN

Compressor make-up gain. It has no effect when the compression is "OFF".

RECOVERY

Compressor release timing.

An additional fast 100 mS release time was added to the original design.

IN

Activates the compressor.

FAST

Switches to a faster attack time.

NIVEAU

Activates a filter on the compressors side chains to compensate the natural 3 dB/oct slope of music. It helps to get a natural and transparent kind of mastering compression.

SMASH

SMASH is a creative overload function. Use this switch to create effect compression on drum room mic's, heavy rock vocals and other sources that you want to really squash.

TMT

TMT technology is provided by Brainworx. It models the real life electronic components value variations from the theoretical schematics value.

Previous / Next

Switches to the previous or next virtual channel of the console.

When used in stereo multi channel tracks, consecutive TMT channel are used.

Link

Affects the same virtual channel to left and right, so they are processed exactly the same way and the stereo isn't affected.

Random ONE

Choses random TMT channels.

Random ALL

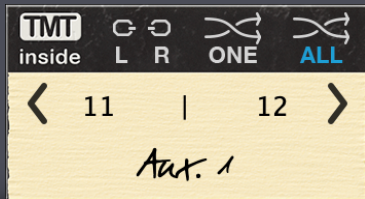
Choses random TMT channels for all the plugin instances in the session.

Channel Number(s)

Displays the TMT channel number(s). On this picture the stereo track will use TMT channels 11 (Left) and 12 (Right).

Track Name

Displays the track name in the DAW. This feature is compatible with : ProTools, Logic Pro, Cubase, Reaper (VST3), Ableton Live, Studio One (AU).



NOISE GATE



Hysteresis

The gate will open when the levels reaches $\text{THRESHOLD} + 0.5 * \text{HYSTERESIS}$, and close again when the level gets below $\text{THRESHOLD} - 0.5 * \text{HYSTERESIS}$.

Threshold

Necessary input level to open the gate and let audio pass through. Everything below the THRESHOLD is reduced by RANGE dBs.

Range

Amount of gain reduction when the signal level is below the THRESHOLD.

Recovery

Time it take to close the gate.

In

Activates the noise gate.

Fast

Switches the attack time to fast (50 us) or slower (500 us)

Exp

Switches to expander mode, with a 2:1 ratio (in gate mode, the ratio is 100:1).

Inv

Inverted mode : the gate is open only when the signal level is below the THRESHOLD.

Can be useful for ducking effect in conjunction wit the Gate External SideChain (see the toolbar menu).



MASTER

Cut

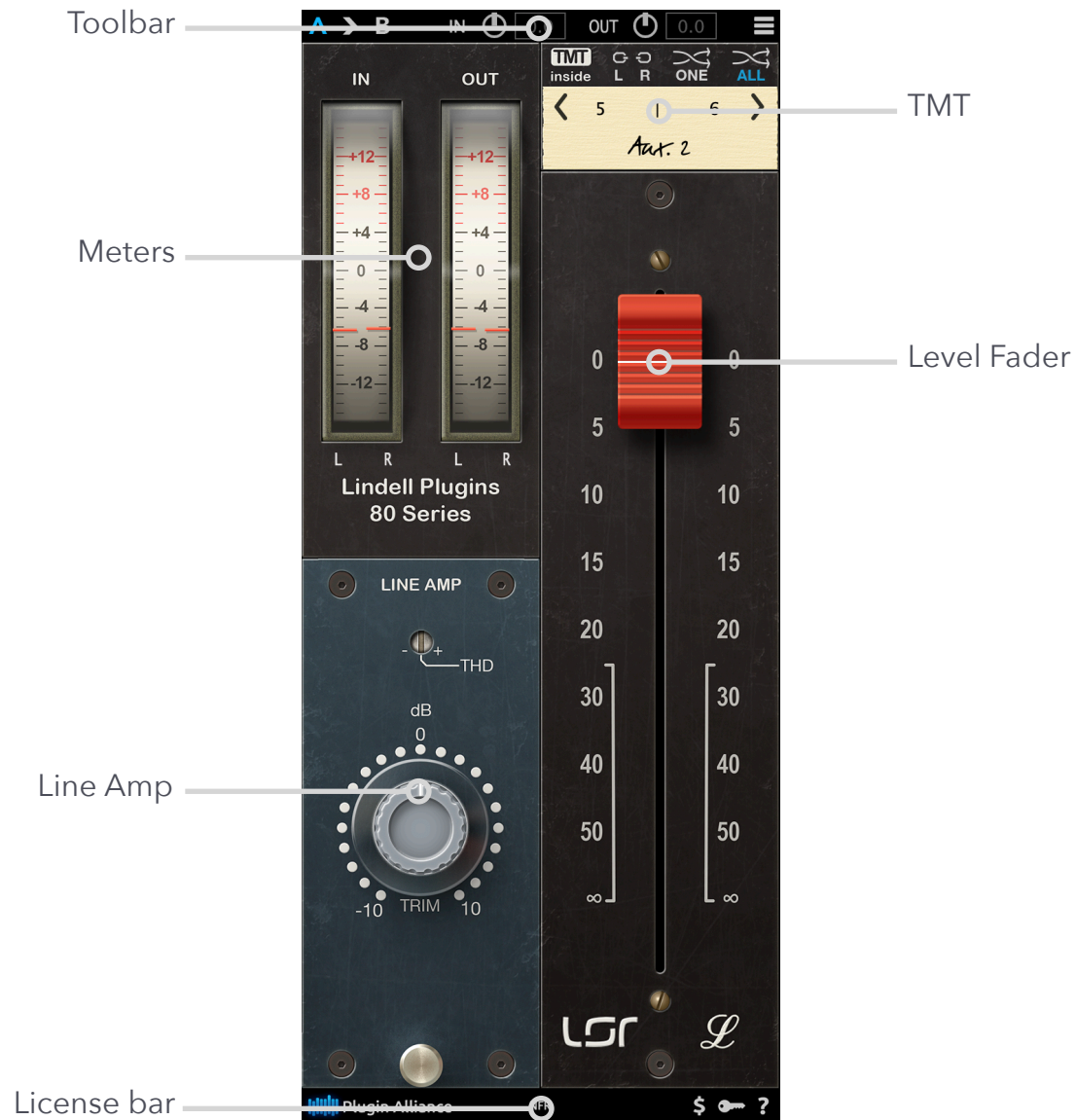
Mutes the plugin output.

Phase

Inverts the signal phase.

Level fader

Output level of the plugin. The fader is inserted before the last amplification stage and output transformer so it has an impact on the amount of harmonic distortion.



Lindell 80 Buss



Lindell 80 Bus Toolbar.

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METERS

In Level meter

Shows the dBu input level.

Out Level meter

Show the dBu output level of the plugin.



LINE AMP

THD

Controls the amount of harmonic distortion of the circuits. The middle position corresponds to the normal behavior of the emulated circuit.

Trim

+ / - 10 dB gain.



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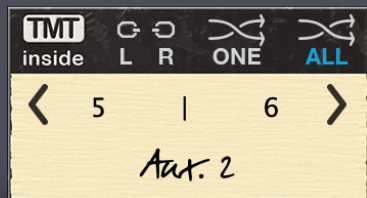
Choses random TMT channels for all the plugin instances in the session.

Channel Number(s)

Displays the TMT channel number(s). On this picture the stereo track will use TMT channels 5 (Left) and 6 (Right).

Track Name

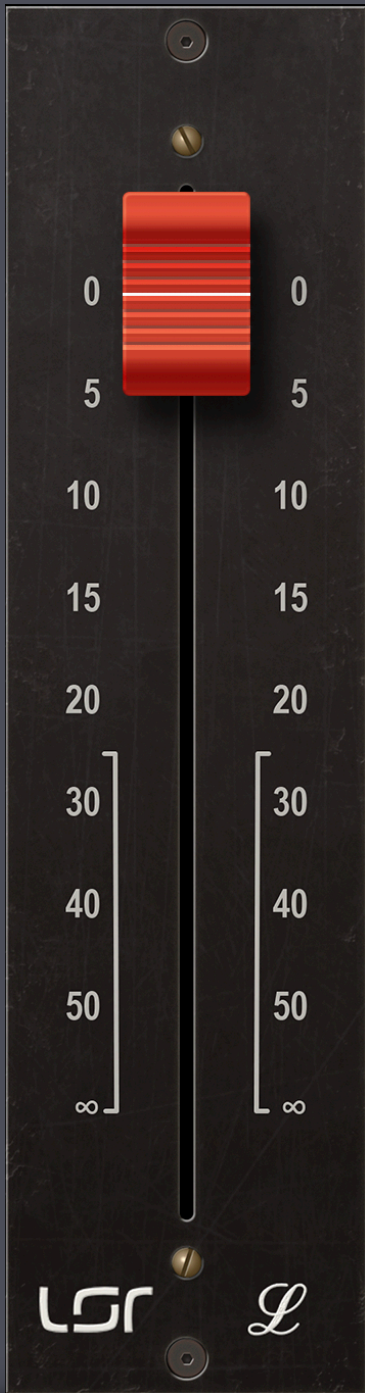
Displays the track name in the DAW (with compatible DAWs such as ProTools, Logic Pro, Cubase).



MASTER

Level fader

Output level of the plugin. The fader is inserted before the last amplification stage and output transformer so it has an impact on the amount of harmonic distortion.



CREDITS

Emmanuel Dubecq - LSR audio

Programming

Graphics

Circuit modeling

Tobias Lindell - Lindell Audio

Concept

Tests and tuning

Presets

Brainworx

TMT Technology licensed from Brainworx