Lindell Plugins

LINDELL
69
SERIES

Channel + Buss

db
Input

db
Gain Reduction

PRE-EQ 69

COMP-EXP 760

TMT inside

1

HIGH

kHz 10 6

MID

kHz 2 2.8 3.5
1.4 4.5
1 -6
.7

BOOST
CUT

BASS

+at 300
200
100 Hz
60
0
3
6
9 -dB
15 12 50Hz

6 10 15
3
0

LINDELL PLUGINS
PASSIVE 69

THD

12 18 24
6 -30
0 -36
-6 -42
-12 48
GAIN

-20dB   IN   UNITY
OUT
METER

PRE

IN   POST   80
PRE   40
FILTER   0

EQ

Off   100 %

SC HPF   MIX

LIMIT

3:1 5:1
2:1 10:1
1:1 20:1

RATIO

.2 .4 .8
.1 1.6
.05 -3.2
.025 Auto
RELEASE   ATTACK

F
M
S

-12
-16 -8
-20 -4
0
THRESHOLD

2 3
1 4
0 5
INPUT

IN   NIVEAU   SMASH

COMP

REL

OUT

GAT
OFF
EX

EX

Toolbar

Meters

Filters

Preamp

License bar

PRE-EQ
69

COMP-EXP
760

HIGH

kHz

MID

kHz

BASS

LINDELL PLUGINS
PASSIVE 69

THD

GAIN

PRE

EQ

COMP

EXP

Off

SC HPF

100 %

MIX

LIMIT

EXP.

RATIO

RELEASE

ATTACK

RANGE

RELEASE

ATTACK

THRESHOLD

THRESHOLD

INPUT

OUTPUT

NIVEAU SMASH

GATE

OFF

EXP.

HOLD

INV.

TMT
inside

L   R   ONE   ALL

Drum Buss

CUT

TMT

Compressor

Expander / Gate

Master section

Lindell 69 Channel

Lindell 69 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 69 Channel UI size can be reduced using this menu options from 80% to 150% 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 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.

Lim. Sensitivity

The hardware compressor/limiter sensitivity can be too high for modern mixing. The user can lower the input and increase the output to lower the sensitivity, but the output gain range is limited.

This plugin adds a sensitivity setting in the menu to chose between :

- Normal (the same as the original circuit)

- Mid (-7dB)

- Low (-15dB)

METERS

Level meter
Shows the dBu input or output level, depending on the preamp module corresponding switch position.

Gain reduction meter
Show the compressor / expander gain reduction 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.

-20 dB Pad
Reduces the volume before the input, and before the input meter.

Meter
Controls what is measured in the level meter, input (signal coming into the plugin, after -20dB pad) or output (signal going out of the plugin).

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
+ / - 10 dB high shelf filter, at [6, 10, 14] kHz.

Mid
+ / - 16 dB continuous peaking filter, at [0.7, 1, 1.4, 2, 2.8, 3.5, 4.5, 6] kHz.

Bass
0 to +16 dB peaking filter at [60, 100, 200, 300] Hz.

-15 to 0 dB shelving filter at 50Hz in 3 dB steps.

In
Enables the 3 band equalizer circuit.

Pre / Post
Controls if the equalizer is inserted before or after the compressor / expander.

Filter
High pass filter operating at [40, 80] Hz. The low position turns the filter off.

COMPRESSOR - EXPANDER

SC HPF
Controls the frequency of the compressor side chain high pass filters.
In the full anti-clockwise position, these filter is deactivated. When this filter is active, a label displays the filter frequency above the knob.

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

Limit
Activates The limiter. The limiter threshold is fixed but the compressor / limiter sensitivity can be adjusted in the menu.

Ratio
Compression ratio when the signal is above the compression threshold.

Release
Controls the time it takes to recover after compression.
The « auto » setting has a different release time for fast or long audio peaks.

Attack
3 position attack timing [Fast: 0.025ms, Mid: 2.5ms, Slow: 25ms].

Threshold
Compressor side chain level over which the plugin will start compressing the signal.
The threshold is relative to the fixed limiter threshold.

Input - Output

Adjust the limiter threshold with the input gain, and use the output gain as a makeup gain.

In

Activates the compressor and the expander/noise gate.

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

Boosts the input by 20db and compensates the output gain to unity gain. Use this feature for bombastic drums and hard pumping vocals.

Suggested operation

Switch the limiter on and compression threshold at 0dB.

Adjust the Input knob until the limiter flashes on all the signal peaks.

Adjust the output knob to get the desired peak level on the plugin output level meter.

Lower the compression threshold until the limiter flashes only for the highest peaks.

Range
Amount of gain reduction when the expander/gate is active.

Release
Release timing [Fast: 25ms … Slow: 1.6s].

Attack
Attack timing [Fast: 0.02ms, Mid: 2.5ms, Slow: 40ms].

Threshold
Below this level, the expander / noise gate will close.

Mode
In the middle position, the expander / noise gate is off. It can be switched to operate in expander (down) or noise gate (up) modes.
The expander operates in feed forward mode and the noise gate in feed back mode.

Hold
Holds the expander/gate open a little moment after it opened, even if the signal level has already dropped below the threshold.

Inv.
Inverts the Expander/Gate operation. The signal is reduced when its level is above the threshold.

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).
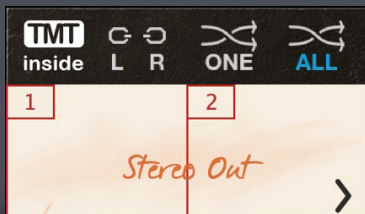
MASTER

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.

Toolbar

Meters

TMT

Level Fader

Line Amp

License bar

Lindell 69 Buss

Lindell 69 Bus Toolbar.

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UI Zoom
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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.

Gain
+ / - 15 dB gain.

Cut
Mutes the plugin output.

Phase
Inverts the signal phase.

Unity
Activates a unity gain mode: the input gain is compensated after the output of the plugin.

TMT

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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
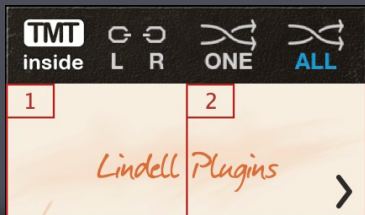Choses random TMT channels.

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 5 (Left) and 6 (Right).
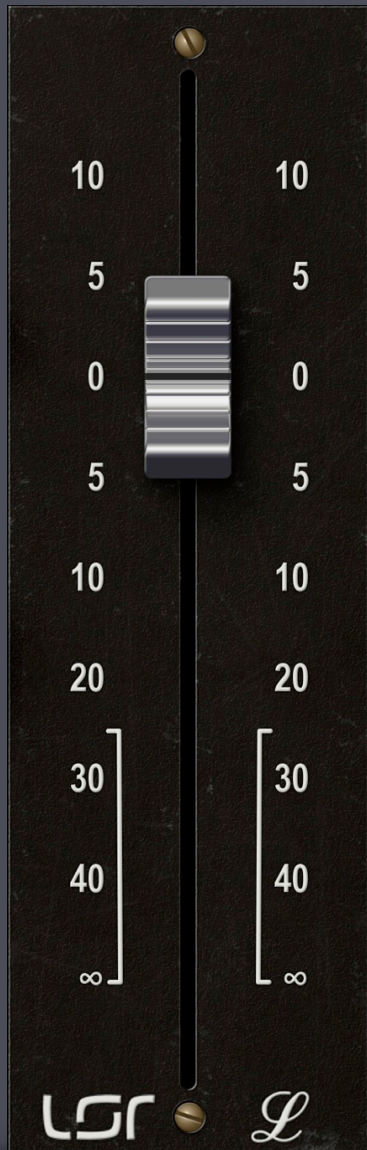
Track Name
Displays the track name in the DAW (with compatible DAWs such as ProTools, Logic Pro, Cubase).

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