

# OVERLOUD GEMS

## USER MANUAL



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### MENU BAR

All **OVERLOUD GEMS** have a menu bar at the top. The menu bar is identical across all Gems, and implements the same set of functions. Here is the description of this global menu bar.



**POWER** - Turns the “power” on or off for the Gem. This control actually works as a bypass: when it is set to off, the plugin transfers the input channel signal unaltered to the output.

**PRESETS** - The presets area includes four controls: left and right scroll buttons, the preset name box, and the drop-down list button. Each Gem can store an infinite number of presets. You can scroll through them sequentially with the left/right (previous/next) buttons, or by clicking the drop down list button which will list the presets, allowing you to scroll the list interactively and load a preset with a mouse click.

**SAVE/SAVE AS** - When you have edited the current preset, you can store it in the preset database with the SAVE button. If, instead, you want to duplicate it you can press SAVE AS and type a new name for the copy of the preset.

*When you load a preset, its name appears in the preset name box. As soon as you change a preset after loading, you will see a dot next to the preset name; this dot indicates that the preset has changed. If you try to load a new preset after editing the current one, you will be prompted for confirmation that your real intention is to load the new preset and lose your changes.*

**A/B COMPARISON** - The A and B buttons allow you to compare two sets of settings for the Gem. The version you are currently editing is the one highlighted in red, and you can switch to the counterpart by clicking the other button. You can copy the selected setting to the other one with the arrow button in between.

**UNDO/REDO** - Each user action done inside the Gem is stored into an internal list. You can reverse these actions one step at a time to restore a previous setting. And even to redo the undone steps if you feel you went too far backwards.

## OTD-2

**OTD-2:** can be better seen as a modulation effect rather than as a traditional delay unit. By using short delay times, you can achieve the effect of widening the source sound by duplicating it with some inharmonic delays. This technique also can be used to add weight and body to your flanged sound, as flanger units usually tend to make the processed sound lighter.

When longer delay times are set, making a shrewd usage of programmable tap echoes, you can improve the depth and width of the input signal, and thanks to the internal feedback path, the resulting sound will be amazingly textured with musical harmonics. Additionally you can modulate the delay lines in order to achieve chorusing and sound widening effects.



**INPUT LEVEL** - Controls the level of the **INPUT** signal.

**INPUT MONO/STEREO** - Selects how the **OTD-2** works when it gets inserted on a STEREO track. When set to STEREO, the input pair of signals is kept and processed as is, while when set to MONO, the input channels are merged together (as it happens on the real hardware) before being processed. When the **OTD-2** is instantiated on a MONO track, this selector has not alternatives to select.

**OUTPUT DRY L/R** - Controls the separate (left / right) levels of the DRY (unprocessed) signal.

**OUTPUT WET L/R** - Controls the separate (left / right) levels of the WET (processed) signal.

**OUTPUT LEVEL** - the level of the **OUTPUT** signal.

**OUTPUT AGE** - The original circuit was based on a so called "bucket-brigade" device, an electrical component which created delay in the analog domain. Bucket-brigades add a lot of color to the sound and are responsible for the distinct tone of this processor. With the **AGE** knob you can control the amount of coloration: the middle position corresponds to the original device amount. You can even increase more, or just decrease it and let the effect sound closer to modern a digital delay processor, while still keeping the creative delay tapping and modulation features.

**TAP ASSIGN** - The **TAP ASSIGN** section has been greatly improved from the original one. There are 6 taps for each channel of the stereo pair. Every tap switch can be used to route the corresponding tap on the left or right side of the resulting stereo image. And the squared lit buttons close to them, turn the taps on or off. The original device only works with mono input signals while **OTD-2** is able to even process stereo ones. So the stereo version of the TAP ASSIGN section has twice the original controls.

Tap delay times, in milliseconds, are as follows (ranges depend on the FIXED knob value):

*The input meter is calibrated such that the 0dB indicates that the bucket-brigade circuit is starting to saturate.*

*If you press alt-cmd (alt-ctrl on Windows) while you move the INPUT LEVEL or OUTPUT LEVEL controls, these two knobs will move coupled so that the resulting signal will stay at the same level.*

TAP	STANDARD RANGE (ms)	WIDE RANGE (ms)
1	2 - 8	46 - 226
2	3 - 14	82 - 408
3	5 - 23	136 - 678
4	6 - 32	190 - 948
5	9 - 46	279 - 1393
6	11 - 55	333 - 1665

As in the original unit, tap delay times have inharmonic intervals between each other. This is useful when you are searching for a reverb like kind of delay effect. The **OTD-2** processor allows to control the amount of inharmonicity with the **QUANTIZE** knob. The **ORIGINAL** position corresponds to the original device settings, while the **EVEN** position is where the taps are equidistant one from each other with the result of having a more digital kind of delay effect. You can continuously range between these two settings to find the sound that fits your need.

*As for other Gems, the LINK option allows to keep two controls connected together, and to move one to set them both. In the TAP assign section, controls are grouped in rows, and activating the LINK option, when you move a switch on one column, the corresponding switch on the other column will follow the same move accordingly. And the same happens with the lit tap power buttons.*

**REGENERATION IN/OUT** - When ON, the signal of one or more taps, depending on the status of **STEREO MODE**, is fed back to the input stage.

**REGENERATION LEVEL** - Controls the amount of signal fed back to the input.

**REGENERATION HI CUT** - Filters away some high frequency content from the signal fed back to the input.

**REGENERATION TAP** - Selects the tap as source for the regeneration signal. This is meaningful when the **STEREO MODE** is set to **MONO** which is how the original unit works.

**REGENERATION STEREO MODE** - Selects how the regeneration works.

**MONO** is the way the original unit works, letting a single tap signal to be fed back to the input. The tap to feed is selected by the **REGENERATION TAP** control.

**CROSS** is a new mode, and works almost the same. In addition it swaps the stereo channels while feeding them back to the input. This will make the processed sound more mixed by also balancing the stereo image.

**VERB** is a special new mode, where all active taps are fed back to the input at same time. The point of this mode is to overlap the taps to obtain a very dense reverb like delay effect (**QUANTIZE** set to **ORIGINAL**), or even to emphasize the distinct tap individual echoes to have rhythmic patterns (**QUANTIZE** set to **EVEN**).

**DELAY MODE** - Selects the way the delay manages time.

**STANDARD** is the original setting, with standard 1x to 5x range for tap delays.

**WIDE** makes the whole time base wider by multiplying the times by a 30x factor. This lets you completely reinterpret the usage of the **OTD-2** bringing it closer to a traditional delay unit, by still keeping other cool features available.

**SYNC** allows you to synchronize the delay time with the host tempo. Very useful when you want

the tap regenerated beats to play in time with the song you are processing. Or even if you basically just need to let the effect follow song's tempo changes. Once you selected SYNC, you can choose the tempo division clicking the current notation.

**DELAY FIXED** - Adjusts the fixed portion (excluding modulations) of the delay time for the taps. When the knob is fully CCW, time is the longest possible. When the knob is fully CW, time is shortest. The time set by this parameter is also influenced by the state of **DELAY MODE**.

**DELAY MIX** - Adjusts the amount of LFO modulation (called **SWEEP**) to the delay times.

**DELAY SWEEP** - Sets the speed of the oscillating **SWEEP** signal which modulates the **FIXED** delay time. You can range from slower speeds to have chorus like effects, to faster speeds to have Leslie or vibrato effects.

**DELAY SWEEP MOD** - When turned on, the **SWEEP MOD** modulates the SWEEP signal with an oscillator running at a slightly higher frequency, to obtain kind of random sweeps which turn into very rich and fat chorus effect. When the knob is all the way left, this modulation is disabled.