



M-A-S Model 8101



The Overstayer M-A-S gives you the harmonic character and peak rounding of classic recording and mixing chains in a simple, highly controllable rack-mount unit.

The peak limiting nature of the M-A-S stages rounds and bends peaks resulting in increased apparent volume, without the timing artifacts associated with compressors. Its integrated pushbutton high and low EQ presets, high pass filter and emphasis circuits help further shape the harmonic content of source material.

The M-A-S can add consistency as peaks and harsh transients get smoothed and absorbed into the performance, making balancing tracks in the mix easier, and lessening the need for bus limiting down the line. Used on a full mix, the added harmonic content can energize, and add cohesiveness and detail. The Mix control allows the character to be balanced to taste.

Bring harmonics and tone to your bass, synths, drum machines and samplers with the integrated front panel high impedance input.

FEATURES

- **2 Multi Analog Stage Channels in a single space 19" rack-mount chassis**
- **Highly controllable, reactive analog chain that bends transient peaks and adds low order harmonics, brings analog character and vibe to any source**
- **Increase apparent loudness**
- **Integrated EQ, filter and emphasis curves to shape harmonic content**
- **Mix control to balance processed to unprocessed signal**
- **Select between 3 sets of inputs (2 balanced line and 1 high impedance instrument)**
- **2 sets of XLR outputs**
- **Power supply included with rugged 5 pin XLR connector and IEC cable**

SAFETY AND INSTALLATION

Installation

1. Before attaching the DC plug of an adaptor to equipment, please unplug the adaptor from the AC power and verify the unit is within the voltage and current rating on the equipment.
2. Keep the linkage between the adaptor and its power cord tightly as well as connecting the DC plug to equipment properly.
3. Protect the power cord from being trodden on or being squashed.
4. Use only an approved power cord, do not defeat the safety grounding pin which must be connected to earth at all times (do not use a ground lift).
5. Keep good ventilation for the unit in use to prevent it from overheating. Do not install near any heat source or device that produces heat.
6. An approved power cord should be greater or equal to SVT, 3G×18AWG or H03VV-F, 3G×0.75mm².
7. If the final equipment is not used for long period of time, disconnect the equipment from power supply to avoid being damaged by voltage peaks or lightning strike.

Warning / Caution !!

1. Risk of electrical shock and energy hazard. All failure should be examined by a qualified technician. Please do not remove the case of the adaptor by yourself!
2. Risk of fire or electrical shock. The openings should be protected from foreign objects or dripping liquids.
3. Using wrong DC plug or forcing a DC plug into an electronic device may damage the device or cause to malfunction.
4. Adaptors should be placed on a reliable surface. A drop or fall could cause damage.
5. Do not use or install in places with high moisture or near the water.
6. Do not use or install in places with high ambient temperature or near fire source.
7. Disconnect the unit from the AC power before cleaning. Do not use any liquid or aerosol.

Please contact your local qualified recyclers when you want to dispose this product.

GETTING STARTED

The MAS has 2 identical channels. Each channel of the MAS has 2 sets of balanced XLR line inputs on the rear panel, as well as a high impedance unbalanced ¼" instrument input on the front panel. The desired input is selected with the toggle switch above the ¼" jack, as follows:

Toggle up - LINE IN

Toggle middle - AUX B in (Channel 1), AUX D in (Channel 2)

Toggle down - ¼" Instrument in (front panel)

When selecting different inputs, we recommend turning the monitors down to a low level to avoid being blasted out by unexpected sources, and some clicking may be audible depending on the source material!

The Instrument input provides additional gain to accommodate things like passive basses, electric pianos, etc. We also recommend not leaving an unterminated ¼" cable plugged into the front jacks.

The unit also has 2 identical balanced XLR line outputs on the rear panel, labelled:

LINE OUT

AUX A (Channel 1), AUX C in (Channel 2)

Having multiple inputs and outputs allows the MAS be incorporated into different workflows while eliminating patching. For example, you can have a 'tracking' mode (LINE IN being fed from a mic preamp, with the LINE OUT routed to a DAW input), and 'mixdown' mode (AUX in being fed from a DAW output, and the AUX out routed to a summing mixer input).

IN USE

The MAS amp stages have a very wide range (sweet spot) from where they start to work to where they clip hard. The LED meter indicates this range, one LED indicates bending starting to happen, low order harmonic color is present even on signal levels below this point.

It is important to note that there are essentially 2 different operating ranges, one with EMPHASIS in, and one with EMPHASIS out. With EMPHASIS in the circuitry will require higher settings of INPUT to achieve comparable amounts of saturation.

The circuitry can be very forgiving, and fast transients can be rounded with little perceived distortion. We find it useful to experiment with transient and steady signals to get a feel for how far it can be pushed in either scenario.

To get to know the unit, you can start with all switches 'out', INPUT at '5', MIX at '10', and OUTPUT at '7'. Adjust the INPUT control to get a feel for how the circuit reacts, adjusting the OUTPUT control accordingly to match the peak level of the bypassed signal. This will give a feel of how far it can be pushed without becoming overtly distorted, and give a feel for the increased average volume.

The EQ and filter boosts are before the MAS stages, and they affect the harmonics, so experiment with engaging them at different levels of INPUT drive. The high pass filter cuts out subs but adds a resonant peak at 50Hz.

Depending on the source material, the DUAL and 2nd modes can be subtle or more apparent. Experimenting with individual instruments here can reveal the character these provide. Also depending on the source material, EMPHASIS can radically affect the amount of harmonics and drive. Push the INPUT up to '8', and adjust the OUTPUT accordingly to get a feel for this mode, as the power of the low fundamentals can remain pure, and the harmonics shifted to the upper ranges.

Another way to get a sense of what the MAS does is to play through it, and feel how it pushes back a bit, and can be very amp like. This brings us to the high impedance instrument input on the front panel, engaged with the input toggle in the down position. Plug in a bass or synth and adjust the INPUT for a couple of LEDs of movement to get a feel here.



REAR PANEL

DC Power

5 pin XLR +12VDC @1.5 amps

Channel 1 (Right side when looking from the rear)

IN L - Line Input XLR pin 2 hot (engaged with INPUT toggle in the up position)

OUT L - Line Output XLR pin 2 hot

AUX A - Auxiliary Output (a mult of the Line Output) XLR pin 2 hot

AUX B - Auxiliary Input XLR pin 2 hot (engaged with INPUT toggle in the middle position)

Channel 2 (Left side when looking from the rear)

IN L - Line Input XLR pin 2 hot (engaged with INPUT toggle in the up position)

OUT L - Line Output XLR pin 2 hot

AUX C - Auxiliary Output (a mult of the Line Output) XLR pin 2 hot

AUX D - Auxiliary Input XLR pin 2 hot (engaged with INPUT toggle in the middle position)



FRONT PANEL

Input Select Toggle

Up - Line Input

Middle - Aux Input (AUX B on CH.1, AUX D on CH. 2)

Down - Instrument Input

Instrument Input

1/4" Tip/Sleeve (engaged with INPUT toggle in the down position).

In order to accommodate a wide range of instruments from synths to passive basses, the instrument input amp provides an additional 12.75dB of gain, allowing low level instruments to still 'drive' the circuitry. This puts the 'DRY' signal at a higher gain vs 'WET' than when using the balanced line inputs, some balancing of MIX and OUTPUT may be necessary to achieve the desired mix.

High Frequency EQ Switch

Fixed +2 dB high shelf boost at 12KHz.

Low Frequency EQ Switch

Fixed +2 dB low shelf boost at 100Hz.

High Pass Filter Switch

Fixed 2 pole high pass filter with a resonant peak at 50Hz.

INPUT Control

Sets the input gain, and determines how hard the channel is driven.

On the stepped version, the range of this control -17.5dB to +21.5dB, unity is '3'.

MIX Control

Controls the balance of processed to unprocessed signal.

OUTPUT Control

Sets the final output level, post MIX control.

On the stepped version, the range of this control -14dB to +8.4dB, unity is '7'. On the stepped version, to maintain the full 12 steps of resolution available with the switch, the final position is '11' (actually between the 'T' and 'P' on the label OUTPUT), or pointing straight down (6 o'clock).

DUAL Switch

Adds a second discrete stage in series to the signal path spreading the load amongst both stages, creating a more complex harmonic character.

2ND Switch

Shifts the response of the circuitry to to have stronger second harmonic content.

EMPHASIS Switch

Sets the curve of the harmonic content, shifting the focus to the middle and upper ranges, and allowing fundamental frequencies to remain un-clipped.

CH. 1/CH. 2 Switches

Engages each respective channel, relay based.

PWR

Turns on the audio power.



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