

elysia

karacter





Precautions



WARNING: High Voltage

- Risk of electric shock.
- Do not open chassis.
- Refer service to qualified service staff only.
- Before connecting the device to the main power supply, check if the right voltage is selected.
- Replace fuse with the same type and value only.
- This device must be connected to ground.
- Do not use a damaged power cord.
- Never place containers with liquid, e.g. beverages or a vase, on the unit.
- Do not expose this device to rain or moisture.
- Do not use this device near water, e.g. swimming pool, bathtub or wet basement.



CAUTION: Temperature

- Surfaces of the device may become hot during operation.
- Do not install this device near any heat source such as radiators, stoves or other heat sources.
- Always allow enough ventilation space around the unit for air circulation.
- Do not cover circulation vents.



CAUTION: Connecting & Mounting

- Never connect the output of a power amplifier to this device.
- Place the unit on a rigid board or place it in an appropriate rack.
- Use the device according to this manual only.



CAUTION: Humidity

- If this device is moved from a cold place to a warm room, condensation can occur inside the device. To avoid damaging the unit, please allow it to reach room temperature before switching it on.

And now for something completely different

The karakter is a box full of vibrant colors. It covers a complete spectrum including mastering-grade saturation, tube-inspired distortion and glorious destruction. Gone are the days when only racks full of outboard gear could achieve these elusive and highly desirable styles of tonal coloration...

This all-in-one solution offers two separate channels which can be set up for dual mono, linked stereo or linked and unlinked M/S operation. Integrated mix stages for parallel signal processing and the unique Color Control add to its remarkable flexibility.

The entire unit is designed with discrete class-A topology, so even the most lo-fi sounds will benefit from the karakter's high-end touch. Enhance your tracks or decimate everything – it's a matter of karakter.

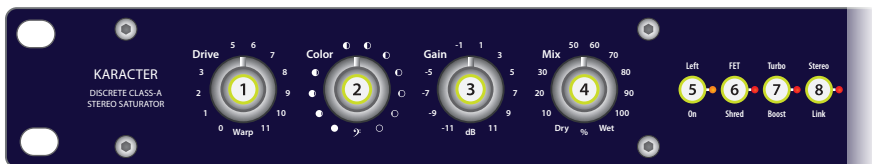
Enjoy countless hours of fun with this marvelous machine!

Index

Controls	4
Connectors	6
Control Voltage	7
Mastering-Grade Saturation	8
Tube-Inspired Distortion	9
Glorious Destruction	10
M/S Mode	11
Recall Sheet	12
Technical Details	13
CE Conformity	13
Warranty Info	14
Legal Info	15
 Deutsches Handbuch	16
 Manuel Français	30



Controls



① Drive

Determines the overall intensity of saturation/distortion/destruction. Clockwise means more.

② Color

Changes the harmonics-frequency relation. Middle is flat; turn left for more dub and right for more shred.

③ Gain

Sets the amount of output gain. This controller can both cut (turn left) and boost (turn right) the level. Middle is flat.

④ Mix

Blends the direct and the processed signal in any desired relation. Left = 100% dry, right = 100% wet.

⑤ Left/Right On

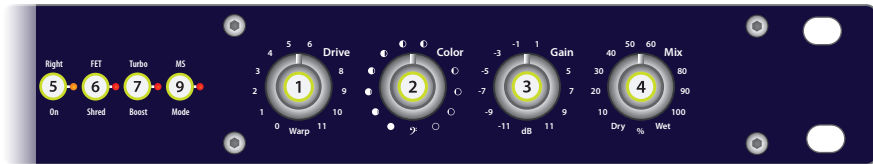
Activates a channel or switches to hardwire bypass.

⑥ FET Shred

Switches from mastering-grade saturation (LED off) to tube-inspired distortion (LED on).

⑦ Turbo Boost

Provides an additional kick for truly wild distortion (only available in FET Shred mode).



8 Stereo Link

Links both channels for processing stereo sources (left controllers and switches become the master for both channels). Linking the channels also works in M/S mode. It might seem a little odd, as the behavior seems to be exactly the same as in linked stereo mode. It can still have its benefits, though, as the inevitable divergences between left and right channel which are caused by natural component tolerances will be reduced in this mode, because here the side information of both channels is processed in a single audio path.

9 M/S Mode

Switches from Stereo to M/S processing. The left controllers and switches control the Mid, the right controllers and switches process the Side.



Connectors



- ① Audio inputs (XLR and 1/4" phone jack)
- ② Audio outputs (XLR and 1/4" phone jack)
- ③ Control Voltage inputs (1/4" phone jack)
- ④ Mains connector/power switch/fuse holder
- ⑤ Voltage selector

Mono operation: Connect either input and output 1 or 2 - both will work identically.

Stereo operation: Connect both inputs and outputs 1 and 2 - the choice which channel is left and which is right is up to you.

Audio inputs (+4 dBu)

XLR balanced:	Pin 1: ground	Pin 2: hot (+)	Pin 3: cold (-)
XLR unbalanced:	Pin 1: ground	Pin 2: hot (+)	Pin 3: ground
Jack balanced:	Sleeve: ground	Tip: hot (+)	Ring: cold (-)
Jack unbalanced:	Sleeve: ground	Tip: hot (+)	Ring: ground

Audio outputs (+4 dBu)

XLR balanced:	Pin 1: ground	Pin 2: hot (+)	Pin 3: ground
XLR unbalanced:	Pin 1: ground	Pin 2: hot (+)	Pin 3: idle
Jack balanced:	Sleeve: ground	Tip: hot (+)	Ring: ground
Jack unbalanced:	Sleeve: ground	Tip: hot (+)	Ring: idle

Fuses (2 pieces)

230V operation: 100mA slo-blo

115V operation: 200mA slo-blo

Control Voltage



The *Drive* and *Mix* parameters can be modulated or automated with an external Control Voltage (abbreviated CV). The special signals needed for this are typically provided by analog synthesizers or specialized products for generating control voltages.

The CV can only cover the complete range of the Drive and Mix parameters if the corresponding knobs are set to their fully counter-clockwise position (see above). Now you are able to control the parameters as follows:

Drive:

0 Volt (DC) = Warp 0

5 Volt (DC) = Warp 11

Mix:

0 Volt (DC) = 100% Dry

5 Volt (DC) = 100% Wet

The control voltages are fed into the karacter through the rearward EXT1 and EXT2 connectors. If the karacter operates in Link mode, both of its channels will be controlled by the signals present at EXT1.

The assignment of the jack connector is like this:

Tip = Drive (0 ... 5 Volt DC)

Ring = Mix (0 ... 5 Volt DC)

Sleeve = Ground



Therefore, a common insert cable (1 x TRS > 2 x TS) will be the best solution to employ the CV functionality of the karacter in most cases.

Note: When using oscillators, the control voltage will become noticeable in the audio path when higher frequencies are being used.



Stereo Link

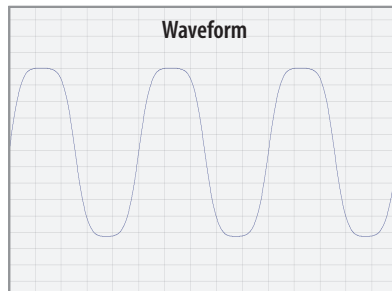
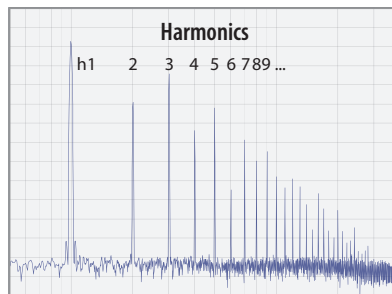


Dual Mono

Mastering-Grade Saturation



In this mode, the karacter generates gentle Total Harmonic Distortion (THD) with a soft characteristic curve, resulting in symmetrical clipping. Your sound gets fatter but stays intact – the perfect color for busses, stems and complete mixes.





Stereo Link

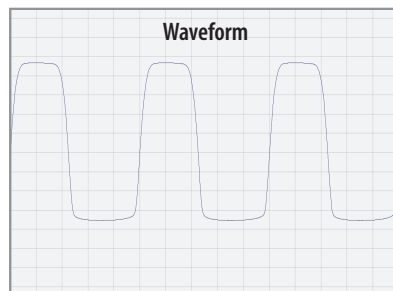
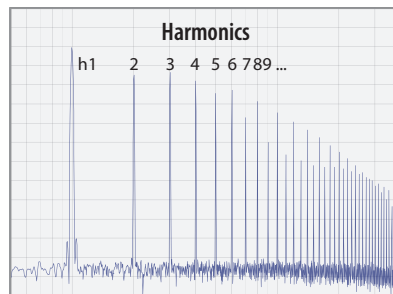


Dual Mono

Tube-Inspired Distortion



In FET Shred mode, the behavior of the karakter changes drastically. The sound instantly reminds of tube amplifiers, with a wide range of asymmetrical distortion. It's a good idea to make extensive use of the Color controller – there are so many nuances to discover...





Stereo Link

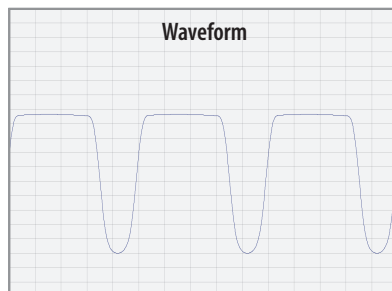
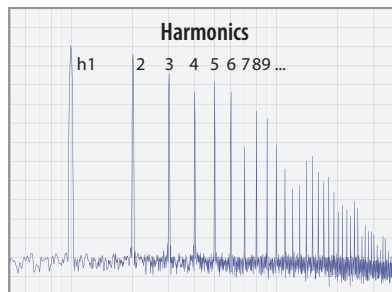


Dual Mono

Glorious Destruction



Now, this is pushing the envelope. The Turbo Boost option is only available in FET Shred mode and works best at high Drive levels. It shifts the operating point of the distortion circuit and generates even more asymmetrical wave forms. Hit your samples hard!





Linked M/S



Unlinked M/S

M/S Mode



The integration of an M/S encoder and decoder into an audio processor generates new potentials that classic stereo devices can hardly offer. One of the main advantages is the possibility to process the middle and side signals separately. This way you can make the center sound more solid without corrupting the original stereo spectrum, for example.

The most interesting option here is the unlinked M/S mode, as it gives you the possibility to process the mid and the side signals completely independent from each other (remember left becomes mid channel and right becomes side channel).

You can apply a high amount of saturation to the mid and leave the sides completely untouched, or the other way round, or anything in between... Different settings of the gain controllers can be used to create subtle or significant changes within the stereo spectrum.

The Left On button always switches both channels when the karakter is operating in linked or unlinked M/S mode.

Technical Details

Frequency response:

- 100 % Dry <10 Hz - 400 kHz (-3 dB)
- 100 % Wet <10 Hz - 27 kHz (-3 dB)

THD+N (100 % Dry):

- @ 0 dBu 0.013 %
- @ +10 dBu 0.024 %

THD+N (100 % Wet in Saturation Mode):

- @ 0 dBu Min Drive 0.47 %
- @ 0 dBu Max Drive 35.1 %

Noise floor 20 Hz - 20 kHz (A-weighted):

- 100% Dry -91 dBu
- 100% Wet (depending on Drive and Gain) -81 to -91 dBu

Dynamic range, 20 Hz - 22 kHz:

112 dB

Maximum input/output level:

+21 dBu/+21 dBu

Input/output impedance:

10 kOhm/68 Ohm

CE Conformity



The conformity of this device to the EU directives is confirmed by the CE mark on the device.

This declaration becomes invalid by any unapproved modification of the device.

Nettetal, 01.04.2016 - Ruben Tilgner



Warranty Info

The karakter is covered by a limited warranty for a period of 2 years against defects in parts and labor from the date of purchase. Natural wear is not covered by this warranty. Repairs or replacements will not extend the warranty period.

The warranty is given to the original purchaser only and is not transferable. elysia will only give warranty on products purchased through authorized elysia dealers. The warranty will only be valid in the country of the original purchase unless otherwise pre-authorized by elysia.

All warranties become void when the product has been damaged by misuse, accident, neglect, modification, tampering or unauthorized alteration by anyone other than elysia authorized service personnel.

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The product has been manufactured in compliance with the RoHS directive. The purpose of this directive of the European Union is the Restriction of Hazardous Substances (RoHS) in electronic equipment in order to protect health and nature. Dispose separately!

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