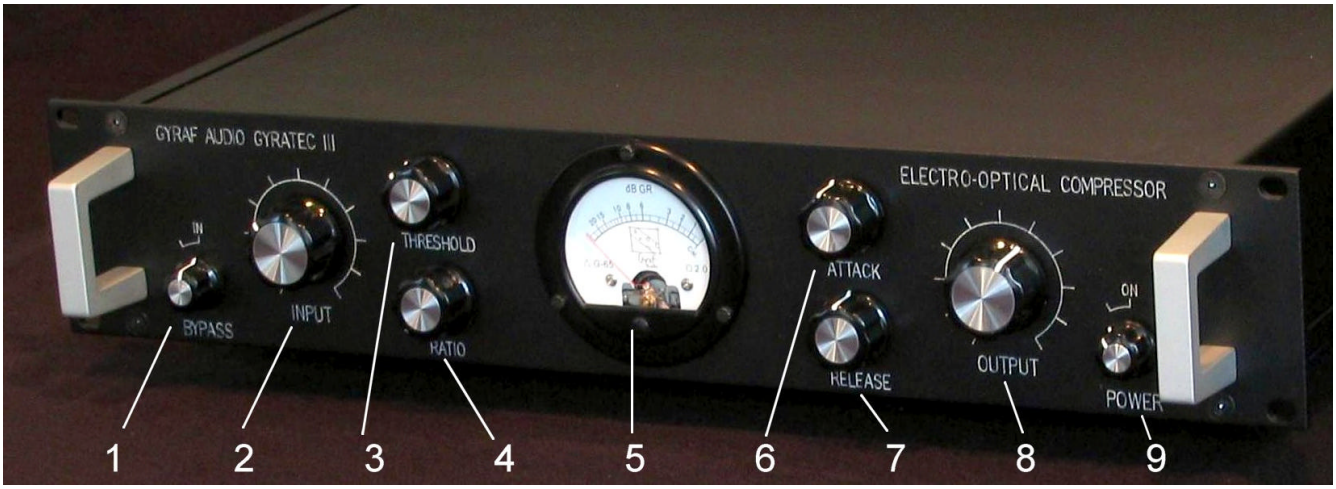
Gyraf Audio Gyratec-III Electro-optical Stereo Compressor



Gyraf Audio Gyratec III

Electro-optical stereo tube compressor.

Preliminary user manual, 23. January 2004.

The Gyratec III is a true tube stereo compressor based on the electro-optical VCA principle. This method - controlling the gain by the means of a light dependent resistor - is not as fast as the vari-mu method, but much more subtle sonically. This principle is known from e.g. the classic Universal audio LA2, LA3 and LA4 compressors, although we use a considerably faster opto, giving you a wider range of control, as well as a better stereo tracking.

In use:

First of all, when turning on the compressor, allow five to ten minutes to heat up the tubes. The sound and levels will change slightly within this period.

The controls on the Gyratec III are as follows:

The inputs are transformer balanced, 10K Ohm "bridging" type, so we don’t load the output of the previous stage too much. The input connectors are standard XLR jacks, pin 2 hot.

The "bypass" function switch (1) bypasses the unit completely for reference. The hard way. - A relay simply takes out the active electronics and shorts the input to the output XLR's. If you wish to use the unit as a straight line preamp, but with bypassed compression, the compression can be fully disabled by turning the “Ratio” knob (3) fully counter-clockwise, or turning the “Threshold” pot (4) fully clockwise.

The input level control (2) is positioned right after the input transformers, allowing you to control the input level for the first gain stage, the "drive" for the compressor.

The Threshold pot (4) controls at what level the compression will set in. Turning counter-clockwise will select a lower start point, resulting in more compression. When turned fully clockwise, the compression is deactivated.

The Ratio pot (3) controls the amount of compression in relation to changes in the input level, that is, for the part of the signal that exceeds the threshold value that is set. Setting Ratio fully counter-clockwise will deactivate compression.

The Attack pot (6) controls the time the compressor takes to react to a rising input level.

The Release pot (7) controls the amount of time it takes from the input signal falling below threshold, to the gain reduction being returned to unity.

The Output level pot (8) controls the signal level to the output driver stage and the output. The output impedance is less than 1K Ohm, and is - like the input - floating transformer balanced.

The VU-meter (5) is always monitoring the ongoing gain reduction, allowing you to check the state of things at a quick glance.

This compressor is based on two sets of SRPP gain stages with no feedback, using selected 5814 dual triodes for both input and output stages. These tubes can be substituted with standard ECC82 or 12AU7A types, that are still fairly easily available today, so don’t worry

too much about availability for the future. These preamp tubes should at least last for a couple of years - and often much more than that.

Although semiconductors and opamps are used in this unit, they're confined to power supply and sidechain functions. At no time will your audio pass through anything but transformers, tubes and passives. So - as with the rest of our product range - we're talking REAL tube audio here..

Important notice:

Do not open this unit, as there are really high – potentially lethal - voltages present inside. Refer servicing to qualified personnel.

You can safely remove the four rubber feet if you wish to mount this unit in a tight rack - please save the feet for future use. NOTE: The feet are the ONLY part that can safely be removed. Do not loosen any other screws!

This unit operates from 220-230V AC, consumes about 25W, and the mains fuse is a 630mA slow-blow type.

For further questions, comments and wishes, please contact Gyraf Audio:

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Jakob Erland
Gyraf Audio
14. November 2002.

EU-overensstemmelseserklæring

Undertegnede erklærer herved, at følgende apparat overholder beskyttelseskravene i Rådets direktiv 89/336/EØF om elektromagnetisk kompabilitet (EMC) samt Lavspændingsdirektivet LVD.

Identifikation af apparat

Kategori:	Audio Compressor/Limiter
Fabrikat:	Gyraf Audio
Model/type:	Gyratec III Electro-optical tube compressor

Navn og adresse påunderskriveren:

Jakob Erland
Gyraf Audio
Feedback Recording
Haraldsgade 27
DK8260 Viby J.

Standarder anvendt til grundlag for erklæringen:

EN 55013, EN 55020, EN 61000-3-2, EN 61000-4-2 og EN 60065.

Bemærkninger:

CE-mærket angiver kun overensstemmelse med EMC-direktiv 89/336/EØS samt Lavspændingsdirektivet LVD.

Århus, Juni 2002

CE

Declaration of EU-accordance

I, the undersigned, hereby declare that the following device observes the protectional demands stated in the Council's directive 89/336/EEC about electromagnetic compatibility (EMC) and the Low Voltage Directive (LVD).

Identification of device

Category:	Audio Compressor/Limiter
Make:	Gyraf Audio
Model/type:	Gyratec III Electro-optical tube compressor

Name and address of the undersigned:

Jakob Erland
Gyraf Audio
Feedback Recording
Haraldsgade 27
DK8260 Viby J.

Standards founding this declaration:

EN 55013, EN 55020, EN 61000-3-2, EN 61000-4-2 and EN 60065.

Remarks:

The CE-mark only states accordance with the EMC-directive 89/336/EEC and the Low Voltage Directive, LVD.

Aarhus, June 2002