
LOW SHELVING
SEND
RETURN
SUPER SOFT
HIGH SHELVING
BYPASS ALL
GRAVITY 25

The Circuit

Gravity25 is a 4 band stereo EQ.

All bands feature a full, dynamic section, as well as a dynamic matrix.

High and low bands can switch between bell and shelving.

The side chain is split between the boundaries of the frequency domain of each band respectively, but to make it a little more flexible for the low end and high mid “vocal range”, the low and high mid bands have direct controls for the side chain filter cut-offs.

Frequency Selection

41 step control for frequency

Gain

+/-6B total gain per band.

Shelving/Bell

Switches the low and high band between peak bell/low shelving mode.

Super Soft

The default, dynamic ratio is a medium ratio with a slightly curved knee, while “Super Soft” is a low ratio with a soft knee.

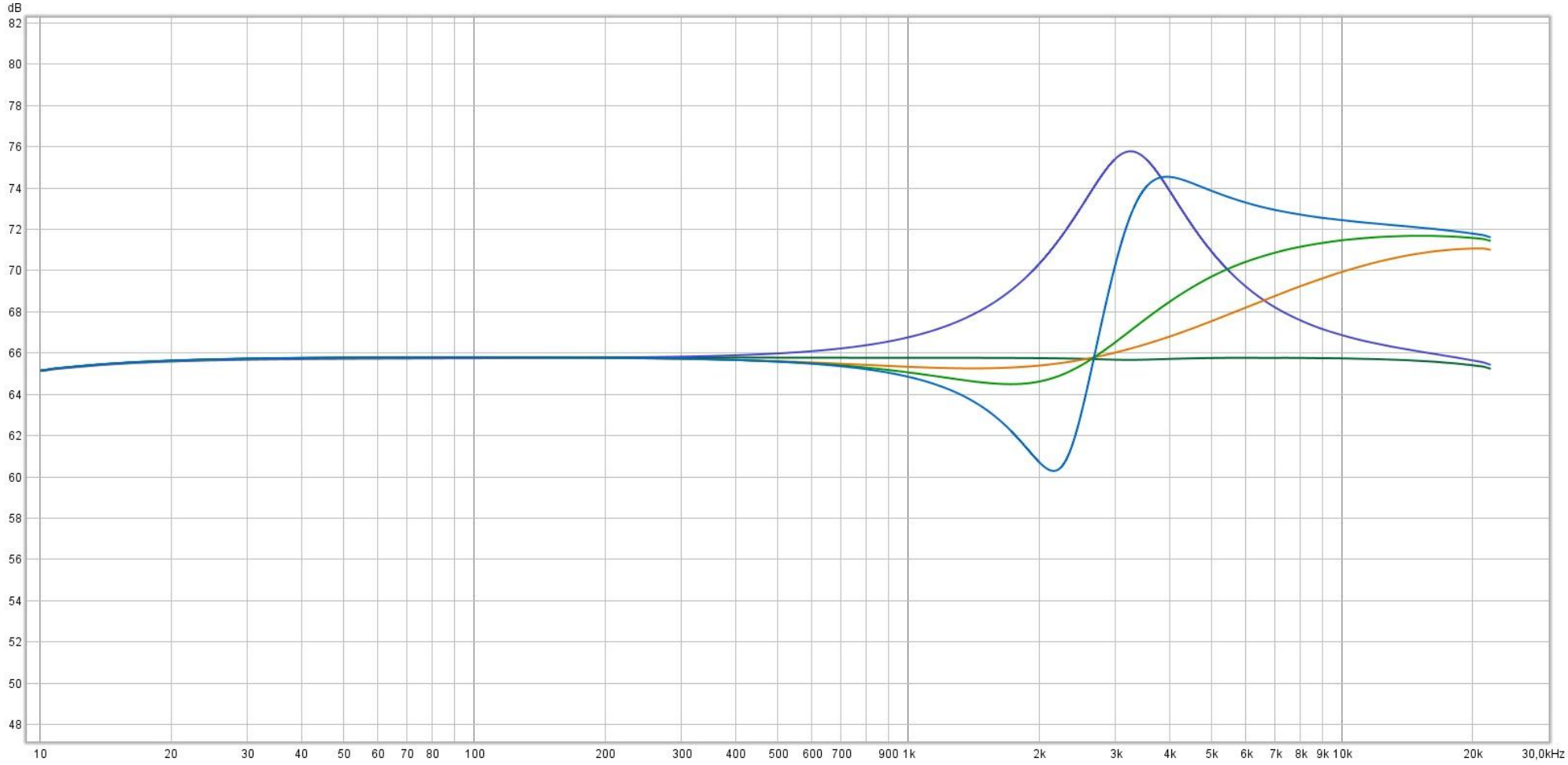
...beyond Q

Q ranges from extremely narrow to extremely wide, which means, you can practically use each band as a full spectrum processing device, or go beyond surgical settings, to where the resonance of the filters get pretty wild.

The original intention was to lock the shelving into a constant Q, but it was still variable in the early days of doing listening tests. The engineers did not take my advice to “set the Q around 0.7 in shelving mode”, and it turned out, the variable Q with high and low bands in shelving was extremely useful.

In general, you will want to keep it around 0.7, but you can carve out some really helpful and unusual shapes by going below, and get a smooth filter around 3 and above.

You can also use it to manipulate how the respective shelving filters shape the curves coming into the audible frequency spectrum. This is typically what higher-than-audible-range and boost/silk EQ type designs aim to do, drawing a standard bell EQ boost out of range (like a 40K band), and essentially sculpting the slope coming back into the audible spectrum.



Graphs to exemplify how the resonance varies with Q on the shelving filters (This is from the CompEQ, but GR25 works the same way)
High band@3k2Hz+10dB Purple = Bell mode/Q1, Orange = Shelving mode/Q3, Green = Shelving mode/Q1, Blue = Shelving mode/Q 0.1

Dynamic Controls

Standard compression, standard attack and a release, with 2 auto-modes.

This is not a generic consumer unit, and I don't believe in restricting the ranges to "fool proof". I'm trusting you with the added range, even though it can make the unit sound unflattering in some instances, because going a little off road is sometimes extremely pleasing. If you want play it safe, avoid the yellow and red settings!

Dynamic Matrix

The matrix is set up so you can send the dynamic processing being done on the band to bus A or B.

Selecting the return return (A or B) routes the trigger signal to that band, and you can adjust the control for the desires amount of dynamic injecting, either upwards or downwards, to a factor of 2.

The crossdynamic processing "musical" in a meaningful way, since it bounces off the program material. One of the more obvious uses is setting it up a as a tilt EQ that operates dynamically.

Tip:If you bypass a band, you can still activate the crossdynamics In this scenario, you use the controls for ratio/attack/release exclusively for that.

Master Gain

Master gain to adjust for unity gain, relative to processing being done.

In

Switches in the respective bands.

Bypass

Hard bypass of the unit.

Dynamic Controls

Standard compression, standard attack and a release, with 2 auto-modes. This is not a generic consumer unit, and I don't believe in restricting the ranges to "fool proof". I'm trusting you with the added range, even though it can make the unit sound unflattering in some instances, because going a little off road is sometimes extremely pleasing. If you want play it safe, avoid the yellow and red settings!

Dynamic Matrix

The matrix is set up so you can send the dynamic processing being done on the band to bus A or B.

Selecting the return return (A or B) routes the trigger signal to that band, and you can adjust the control for the desires amount of dynamic injecting, either upwards or downwards, to a factor of 2.

The resulting processing is "musical" in a meaningful way, since it bounces off the program material. One of the more obvious uses is setting it up a as a tilt EQ that operates dynamically.

Tip:If you bypass a band, you can still activate the matrix In this scenario, you use the controls for ratio/attack/release exclusively to trigger the selected return.

Calibration

CV

Adjust +/-5V referring to the test pads on PSU PCB on the side of the case, using the respective trimmers.

For each band

Gain

- With filter out, adjust meter bias to 0 meter reading.
- Set frequency to middle of frequency selector with Q around 3
- Send 0dBU test tone at the frequency selected 0dBU (confirm 0dBU at output)
- Set filter in, and trim band gain to max
- Trim gain for a relative output reading of 6dBU
- Trim meter range for a meter reading of 6dBU

Threshold

- Adjust test tone reference level to maximum, desired operating level +1dBU (i.e +18+1 = 19dBU)
- Initialize “Super Soft”
- Set Compression dial fully CCW
- Adjust for a compression readout of 0.5dB

Info

Units are hand built by Gustav Goly in Odense, Denmark.

In the event of a problem with your CompEQ, unplug it, and contact your dealer, or GOLY direct for repairs.

Contact

Mail Info@goly.dk
Web www.goly.dk

Phone +45 53161601

I do not answer unscheduled calls, so please book a call by mail in advance, if you need to talk.

Your unit is serial #

Gustav Goly

Declaration of CE Conformity

The construction of this unit is in compliance with the standards and regulations of the European Community.