



CROSS COMPRESSION & STEM MIX MATRIX

The Circuit

The Cross Compression & Stem Mix Matrix is an odd animal, and hence, it can be a little hard to get the full picture, unless you have some real “hands on” experience with the unit.

The basic circuit consists of 8 channels, grouped into stereo, and a master compression section, that feeds back to each channel/stem.

What really sets it apart is the split of each channel into a side chain mix, which sums into the compression side chain. This signal is fanned back out, and comes back through a cross comp return, which determines the amount of compression folding back to each stem.

In addition to that, there is a fully balanced insert point, a direct stem output, and a fully featured compression section.

The Philosophy

The aim was to create a flexible, channel-split mix-bus compressor for modern, hybrid and hardware mixing. With the side chain mix and cross compression return, you can easily expand your possibilities in an integrated, hands on manner.

In extreme examples, it can be used it as a drum sub mixer, with only the snare attacking the compression circuit, or you can simply set all SC mix controls flat on all subgroups, summing to stereo.

The stem outputs are useful in terms of delivering stems for further processing or stem mastering. The idea is, you can get 95% of the way rolling your hybrid set-up, and with the stems back itb, you can do minor tweaks for mix polishing or mastering applications.

STEM MIX

This is your standard, signal path gain controls.

When I was working on the earlier prototypes, I quickly discovered, test-drivers never used full gain spread on this section. Coming from the box, the rough mix balance is already there.

This gain section comes into play when adjusting levels relative to the offset in balance brought on by outboard processing, and also depends on how well the mix elements blend/mix during hybrid operation.

We found that +/-5dB is a perfect range.

SC MIX

This lets you can dial in a “trigger mix”, completely independent from your main mix, at full gain range.

You can do odd things, like bring up elements further than they are in the signal path to push harder, back off bass elements to inject less low end, or just set them all flat, so everything goes into the side chain as per usual.

In the master section, you’ll find a “SC LISTEN” function, which routes the SC MIX to the output for auditioning.

Cross Compression

On a standard compressor, your compression/threshold sets the amount of compression. This is no different, apart from the fact, that you can set it “per channel”.

To put it into context

- When you adjust the SC MIX levels, you dial in the trigger mix.
- When you adjust the Cross Compression, it determines how much compression folds back to each stem.

There is a compression dial in the master section for global nudges, as well as a global gain compensation.

Attack

The attack time of the dynamic processing.

Note that the fastest times are marked red on front, since these can cause distortion on some program material.

Note that we left in those fast settings, because the mentioned distortion was often extremely pleasing and used on most mixes.

Release

The release time of the dynamic processing, featuring 3 auto settings, markedly different from each other.

1.5:1

Default ratio is a little above 2:1, and you can push this function for a softer grab/smooth knee.

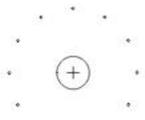
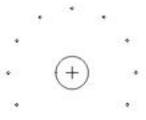
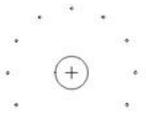
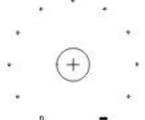
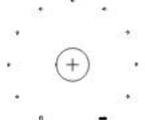
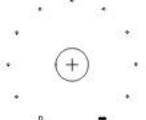
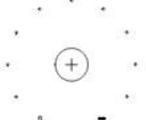
Appendix

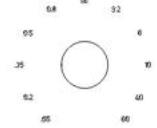
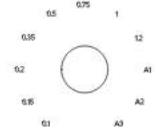
Recall Sheet

RECALL SHEET

(download full size on website)

GOLLY
 ANALOG COLORING DEVICES

 STEM MIX 1/2	 STEM MIX 3/4	 STEM MIX 5/6	 STEM MIX 7/8
 SC MIX 1/2	 SC MIX 3/4	 SC MIX 5/6	 SC MIX 7/8
 CROSS COMPRESSION 1-2	 CROSS COMPRESSION 3-4	 CROSS COMPRESSION 5-6	 CROSS COMPRESSION 7-8
 INSERT 1/2	 INSERT 3/4	 INSERT 5/6	 INSERT 7/8

 1/2	 3/4	 5/6	 7/8
 SC HIGH PASS	 ATTACK	 L51	 GAIN COMPENSATION
 SC MIX LISTEN	 RELEASE	 BYPASS	 COMPRESSION

CROSS COMPRESSION & STEM MIX MATRIX

Info

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

In the event of a problem with your Cross Compression & Stem Mix Matrix,, 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.