STEM MIX

SIDE CHAIN MIX

STEM COMPRESSION

7/8

MUTE

SIDE CHAIN HIGH PASS

SIDE CHAIN MIX "LISTEN"

+10

0

-10

-20

dB

1/2

3/4

5/6

7/8

0.8   1.6

0.5   3.2

         6

         10

         40

         60

ATTACK

0.5   0.75

0.35   1

0.2   1.2

         A1

         A2

         A3

RELEASE

GENTLY

COMPENSATION

The Circuit

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

Each channel is split into a side chain mix, which sums into the compression side chain. The control voltage is routed back through stem compression mixer, where you can adjust the amount of compression folding back to each stem.

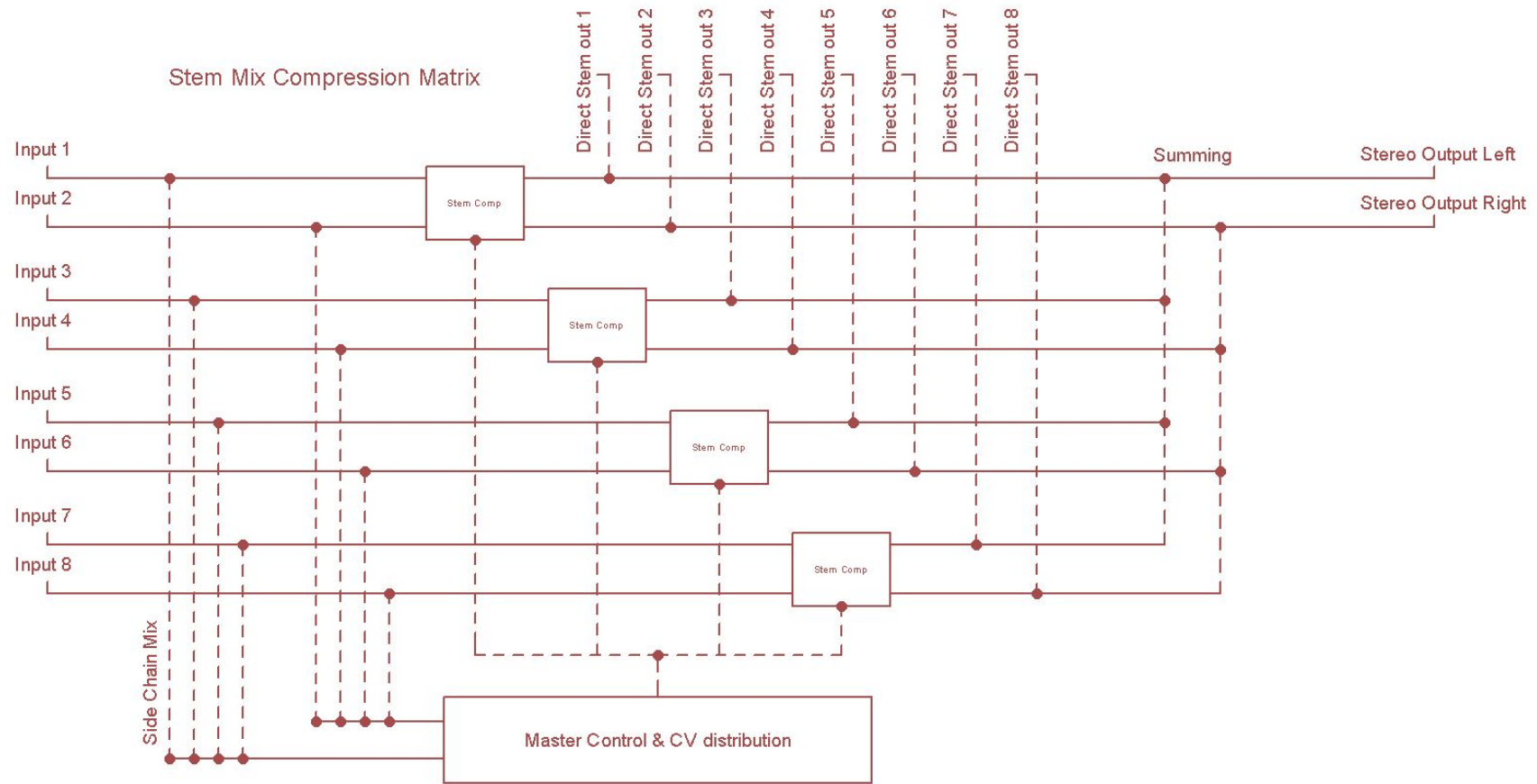In addition to that, there is a direct stem output, and a fully featured compression section.

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 stem mix 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 on all channels 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 outputs deliver the isolated tracks, with the master processing applied, as if the channel was still "part of the whole" in terms of buss processing.

Stem Mix Compression Matrix

Direct Stem out 1
Direct Stem out 2
Direct Stem out 3
Direct Stem out 4
Direct Stem out 5
Direct Stem out 6
Direct Stem out 7
Direct Stem out 8

Input 1
Input 2

Summing
Stereo Output Left
Stereo Output Right

Stem Comp

Input 3
Input 4

Stem Comp

Input 5
Input 6

Stem Comp

Input 7
Input 8

Stem Comp

Side Chain Mix

Master Control & CV distribution

Stem Mix

This is your standard, signal path gain controls.

The channel gain controls gain section come 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.

Range is +/-5dB

Side Chain Mix

The Side Chain mixer adjust the levels going into the engine room of the master compression section. In essense, this lets you adjust what the compressor sees, and triggers off of.

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.

What really matters is, how the SC Mix makes your compression react, but in the master section, you'll find a "SC LISTEN" function, which routes the Side Chain Mix to the output for auditioning. (Please note the fidelity of the Side Chain Mix is lower than the fidelity of the actual signal path, if you want to use it creatively for processing).

Stem Compression

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

To put it into context

- When you adjust the Side Chain Mix levels, you dial in the stereo mix the compression side chain sees.
- When you adjust the StemCompression, it determines how much compression folds back to each stereo pair.

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

The faster settings can almost make the unit sound "exhausted" in some instances, which is bad, but they can also apply an extremely pleasant tone, or even a hint of distortion, which is extremely pleasing and helpful on some program material, which is good. I didn't want to limit the range, just to make sure there was no risk of anyone geting into trouble, so instead, I marked the danger-zones.

Release

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

Gently

Default ratio is around 2:1, and you can activate this function for a softer grab/smoother knee.
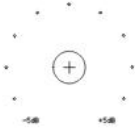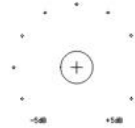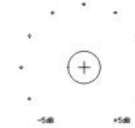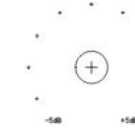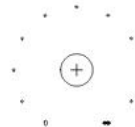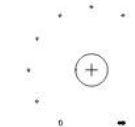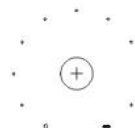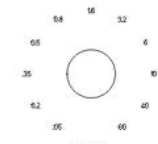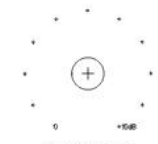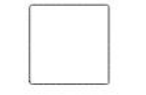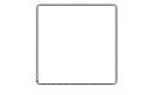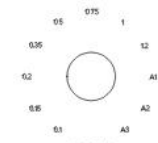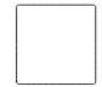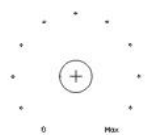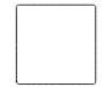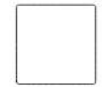
Appendix

Recall Sheet

RECALL SHEET
(download full size on website)

STEM MIX

SIDE CHAIN MIX

STEM COMPRESSION

1/2   3/4   5/6   7/8   MUTE

COMPRESSION MATRIX

1/2   3/4   5/6   7/8

SIDE CHAIN HIGH PASS   ATTACK   GENTLY   GAIN COMPENSATION

SIDE CHAIN MIX "LISTEN"   RELEASE   BYPASS   COMPRESSION

GOLY
COMPRESSION MATRIX

Info

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

In the event of a problem with your Stem Mix Compression 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.