sidechain.one

analog sidechain compressor

rockruepel

STUDIODMI

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WARNING: High Voltage – Risk of electric shock

Do not open chassis. If the device is damaged or does not work as expected, refer to qualified service staff only. Never use damaged power chords. Ensure sidechain.one is connected via grounded junction. Keep the device far away from water, moisture and other liquids.
Do not use sidechain.one near water or in wet surroundings.

CAUTION: Temperature – Chassis may become hot during operation

Do not place sidechain.one close to any heat sources such as radiators or stoves. Avoid exposing it to direct sunlight. Do not block the circulation vents − heat from the device must be allowed to dissipate. Allow free space around the unit in your rack to avoid overheating. Do not install power amps near the device.

WARNING: Incorrect installation – Connection may cause damage

Do not connect power amp-outputs to sidechain.one. Install the device on stable surfaces only or properly mount it in an appropriate rack.

WARNING: Condensation may cause damage

Condensation can form inside the device if you move it from cold temperature to warm temperature. To avoid damaging sidechain.one always wait until the device has reached room temperature before switching it on.

WARNING: High sound volume can damage your hearing

Set the output controls on zero position before monitoring the sound via headphones or loudspeakers. Increase the volume carefully. Pay attention to maximum input levels of connected devices.

The sidechain.one

sidechain.one is one of the only compressors build around a full bandwidth filter in the sidechain with the ability to precisely select which frequencies trigger the compressor. This manual will help you learn about sidechain.one, but as with all high-quality analog equipment, the more you use it, the more applications you will discover. We encourage you to be curious, daring and experimental as you explore sidechain.one. And we invite you to share your discoveries with us. Welcome to rockruepel!

An inspiration

sidechain.one takes a new approach to what a compressor can and should do. sidechain.one isn't colored and doesn't impart its own character on your sound sources – it precisely affects only what you need it to and leaves the rest of the frequency spectrum alone.

Using sidechain frequencies has become a standard technique in mixing and mastering. Most of the time, it is used in the digital domain with plug-ins that can offer this flexibilty and versatility thanks to the nature of digital audio. One of the trendsetters for this approach is Luca Pretolesi. His signature sound is characterized in part by his use of sidechain frequencies in the compressor for a variety of styles, in mono, stereo and specially in M/S applications.

Inspired by his workflow, we created a compressor that brings the discreet and pure processing of a digital plug-in into the analog realm. This is sidechain.one.

# Controls, Features & Some Suggestions for Use

FRONT PANEL
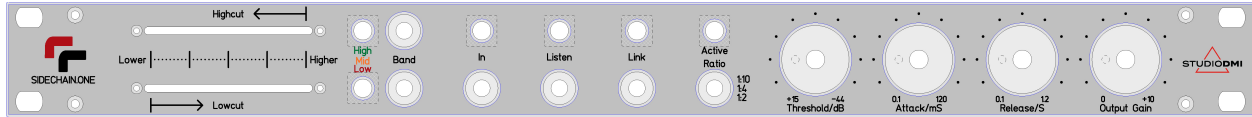
FREQUENCY FADER

The frequency in the sidechain is defined by two faders. Both faders span the entire
audible bandwidth from 20Hz to 20KHz. Using these faders, you can dial in the frequency range
that is sent to the detector of the compressor. We suggest using the top fader to set the highest
frequency the detector will receive and the bottom fader to set the lowest frequency the detector
will receive. Everything between these two frequencies is the trigger for the compressor to act
on. The arrows show you your start points and which direction to move the faders in.

BAND SELECTOR

The band selector restricts which frequencies trigger sidechain.one. Each fader is connected to
a selector switch that lets you choose which range of frequencies the fader can adjust between
High, Mid and Low. These are color coded as High = Green, Mid = Yellow and Low = Red.
Approximately values
can be seen here.

Frequency Bands
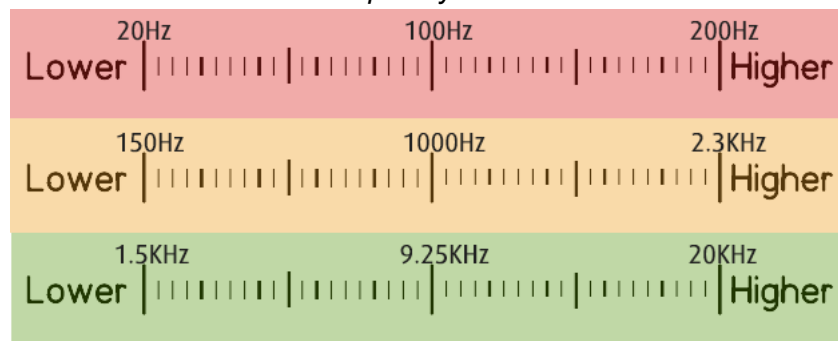
IN

Individual hard bypass switches sidechain.one on or off.

LISTEN

Preview what is being sent to the sidechain equalizer path. You can also use this feature without compression to use sidechain.one as a high-quality high pass or low pass filter.

LINK

Two sidechain.one units can be linked. When you link the channels, the unit will compress both channels identically based on whichever unit's threshold is triggered at any given moment. For this reason, it is typically a good idea to set the units identically when operating in LINK mode. However, there may be instances when allowing one unit to dominate the other is desired (for example, when doing Mid-Side processing). The equalizers are not linked and should be set the same.

ACTIVE RATIO

Determines the ratio of the compressor, here are some examples.

- **1:10** — HARD— typically this setting provides most audible compression

- **1:4** — MEDIUM — good to start here

- **1:2** — SOFT— very smooth operation
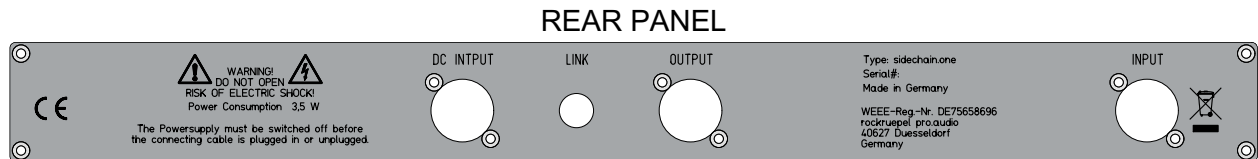
THRESHOLD

Can be set from +15dB to – 44dB

ATTACK

Can be set from 0.1 ms to 120ms

RELEASE

Can be set from 0.1 to 1.2s

OUTPUT GAIN

Can be set from 0dB to 10dB

REAR PANEL

INPUT XLR

XLR Balanced Connection

OUTPUT XLR

XLR Balanced Connection

LINK

TS Connection

DC INPUT

External Power supply for use from 110V – 240V.
A standard IEC power cord is used.

Workflows and Techniques Using the sidechain.one

As we've seen above, the sidechain.one is a new approach of compression that can achieve a wide variety of detailed work in mixing and mastering. How you choose to use the sidechain.one on any given project is up to you. We offer the suggestions below in order to help you find your own workflows and techniques, yet we strongly encourage curiosity and experimentation on your own.

Start here :
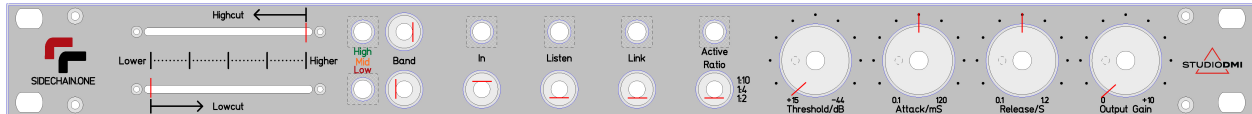
Mid/Side enhancement :
Link two units , use the Output Gain to increase or reduce your stereo width.

De-Sharpen Hiss
Dial in high frequencies and use very fast Attack and Release times. Ratio 1:2

Tighten or Loosen a Kick Drum
Dial in low frequencies and use very fast Attack and Release times. Ratio 1:10

Bandpass Sound
Dial in the bandpass you like to hear

Keep Experimenting

Please look out for videos from Studio DMI on how to use sidechain.one. Again these are just a few ideas to help you get started. We know firsthand that working for years with a high-quality analog unit like sidechain.one will continuously reveal new and unexpected uses, sounds and ideas. We hope that you will share those discoveries with us in the years to come.

Enjoy!

Most importantly, we'll hope you'll enjoy discovering all the ways you can use your sidechain.one.

Tech Specs :

Frequency Response

40Hz – 15 kHz	± 0,09 dB
20Hz – 20 kHz	± 0,22 dB

Amplification	0 to +10 dB
Max Output level (40Hz k_3 -50dB)	+22dBu
Voltage Unit	+/- 15V DC
Powersupply	100-240V AC
Power usage	3,5W
Dimensions B/H/T 483 mm (19") 44,2 mm (1HE)	135mm
Weight	1,15 kg
Input	symmetric
Input resistance	≧ 22kOhm
Input damping at 15KHz	≧ -45dB
Output	symmetric
Output resistance	≧ 80Ohm
Output damping at 15KHz	≧ -42dB

Harmonics k_3:
at +4dBu

40Hz	1kHz	6,3 kHz
-61dB	-60B	-60dB

Noise floor:

(at + 4dBu Output at +10dB)
p_{Ger} ≧ -79 dBqs (CCIR 486)
p_{Fr} ≧ -84 dBq   (Bandwidth 10Hz – 30 kHz)

About rockruepel, Mastering Works and Studio DMI:

rockruepel launched with the successful tube compressor series, comprising comp.one and its successor, comp.two along with the analog limiter, limit.one. These boutique audio tools are insider's secret tools for recording, mixing and mastering and are used by engineers such as Russell Elevado, Luca Pretolesi, Max Dingel, Paul Stacey and Fab Dupont. The pristine sound and build quality that the users have grown to trust can now be found in the company's latest product, sidchain.one.

Mastering Works GmbH is the European distributor for select high-end audio solutions. In 2004, CEO Stefan Heger introduced the Dangerous 2 Bus to different studios and engineers and founded Mastering Works GmbH, a company with an exquisite product portfolio and exceptional relationships with end users. Besides the brands Dangerous Music, Sterling Modular, rockruepel and Guzauski Swist, it also offers training and individual studio solutions.

Studio DMI The Studio of Digital Music Innovation (Studio DMI) is the embodiment of GRAMMY® nominated Mixing and Mastering engineer, Luca Pretolesi. Logging more than 30,000 hours of studio time and over 25 years of experience, Luca has established himself, the Studio DMI brand and the world-class Studio DMI facility in Las Vegas, NV USA as an unrivaled movement in sound engineering with a signature style that is coveted by some of the biggest names in music.

Warranty:

2 years with registration : www.masteringworks.com

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