GAINLAB AUDIO

GLA-OC1
GOVERNOR

PLEASE NOTE THAT THE GLA-OC1 GOVERNOR IS INTENDED FOR PROFESSIONAL USE. IT'S NOT A CONSUMER ELECTRONIC DEVICE. ITS INSTALLATION AND USE REQUIRE CERTAIN PROFESSIONAL SOUND ENGINEERING KNOWLEDGE AND SKILLS. LACK OF THIS KNOWLEDGE MAY RESULT IN MALFUNCTION, DAMAGE OR PERSONAL INJURY.

Op OPERATION AND SAFETY PRECAUTIONS

- Use only grounded electrical outlet!
- Do not open the device and don't do any modifications on it!
- Do not attempt to repair or replace any of the components unless specifically instructed to do so in this guide.
- Pay attention to not put any solid matter (flammable things, coin, nail etc) or liquid (water, alcohol etc.) inside device.
- Do not twist or break the power cord or place heavy objects on it. Doing so may damage the cable and cause a short circuit. Damaged cables can cause fire and electric shock!
- Protect the device from intesive external shock! (for example: falling down)

Never use the device in following conditions:

- Extreme temperature
- Moisture
- High humidity
- Rain
- Dust
- Heavy vibration

In the following cases, turn off the machine immediately, unplug the power cord, and contact us (support@gainlabaudio.com):

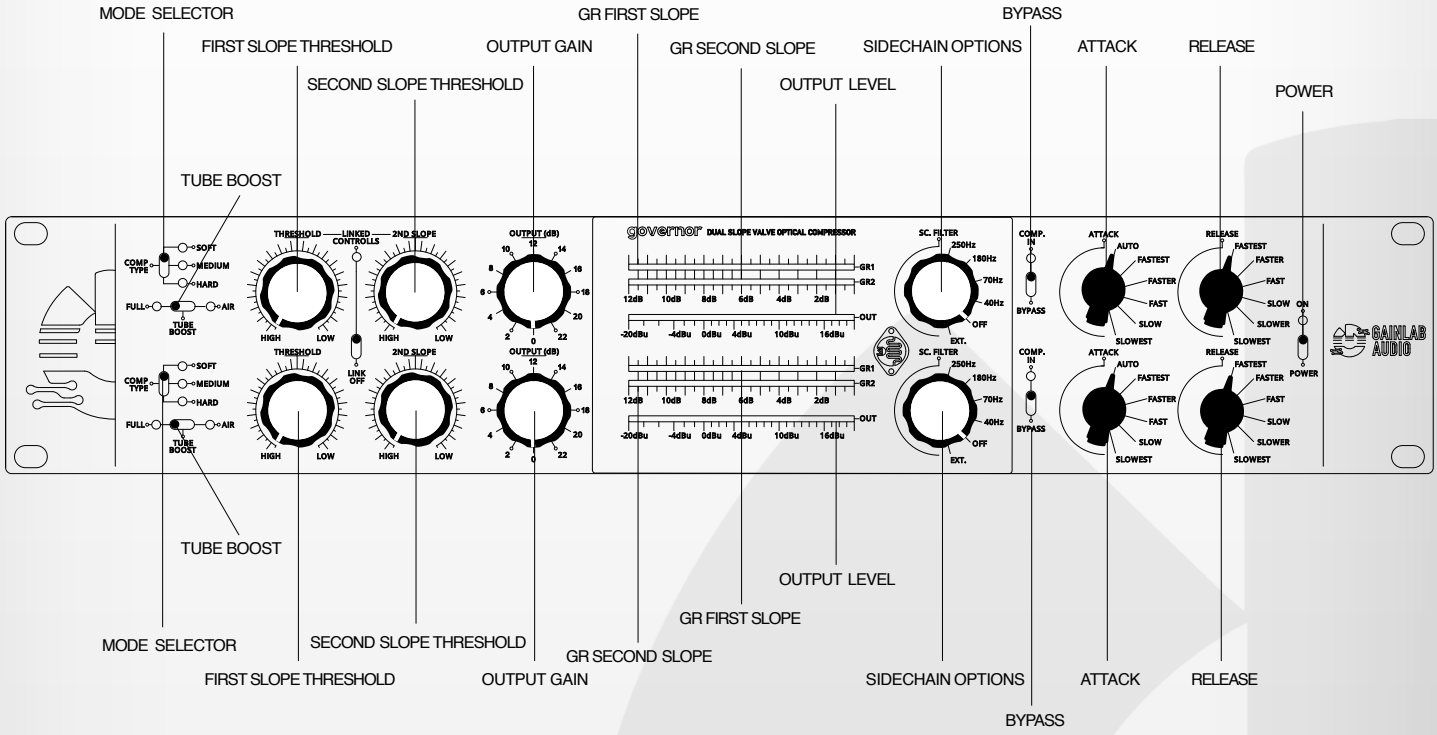
- If the mains plug of the appliance is damaged
- If you notice smoke or an unusual odor
- If any object or liquid gets inside the device,

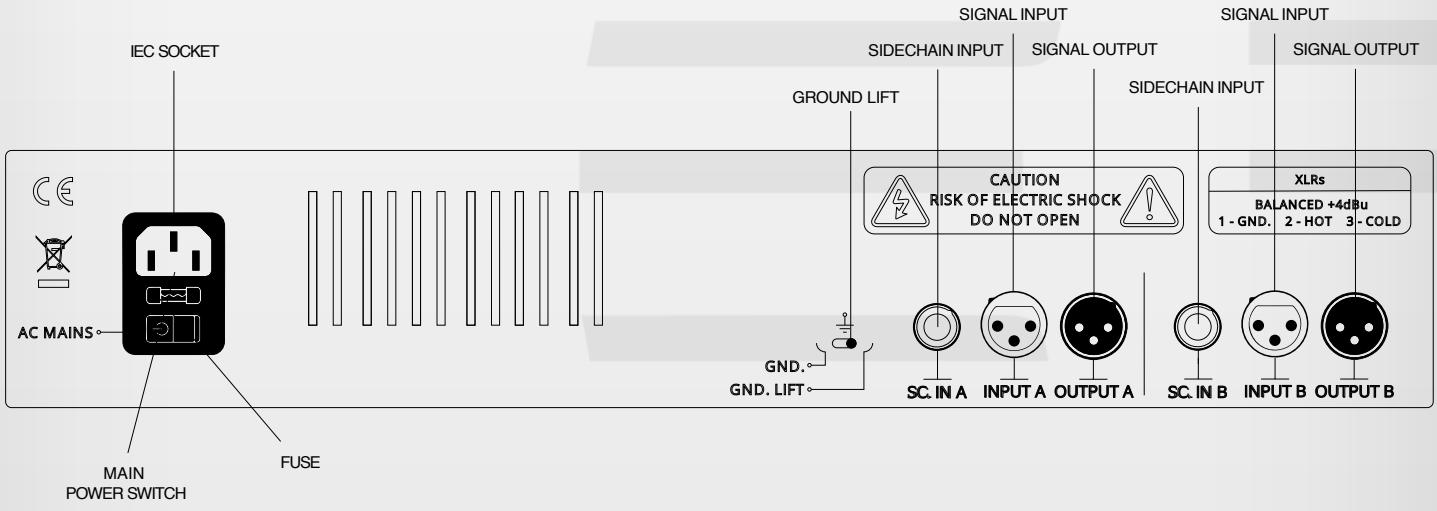
- If the device has been exposed to rain or other moisture,
- If the device does not operate normally
- Do not connect the appliance to a mains socket to which an electrical appliance controlled by an inverter, switching power supply (eg. refrigerator, washing machine, microwave, air conditioner) or a appliance with a motor is connected.
- Depending on the use of the electrical devices, power supply noises may cause a malfunction or audible noise on this unit. If a separate electrical outlet cannot be used, connect a noise filter between this and the other electrical appliance.
- The unit heats up during several hours of continuous operation. This is normal and not a cause for concern.
- Turn off all devices before connecting the device to other devices. This will prevent damage to speakers and other equipment.
- Use of the unit near amplifiers or other equipment that contains a transformer may cause noise. To resolve this issue, relocate the device or move it away from the interfering device.
- Noise may be caused by using a wireless communication device near the device, such as a mobile phone. Such noise can occur when making, receiving, and diverting a call. If you experience this problem, move the wireless device away from the device or turn it off.
- This unit may interfere with radio and television operation, so do not use near such receivers.
- If the device is transported to a location with a very different temperature and / or humidity, moisture may condense inside. Using the device in this condition may result in damage or malfunction. Therefore, wait a few hours for the moisture to completely evaporate before using the appliance.

CL CLEANING AND MAINTENANCE

Clean the appliance daily with a soft, dry or slightly damp cloth. Use a soft, abrasion-free cloth to remove stubborn dirt. Then wipe the device with a dry cloth. Never use benzine, thinner, alcohol or other solvents, strong alkaline or acidic cleaners as they may cause discoloration and deformation.

Ow OVERVIEW

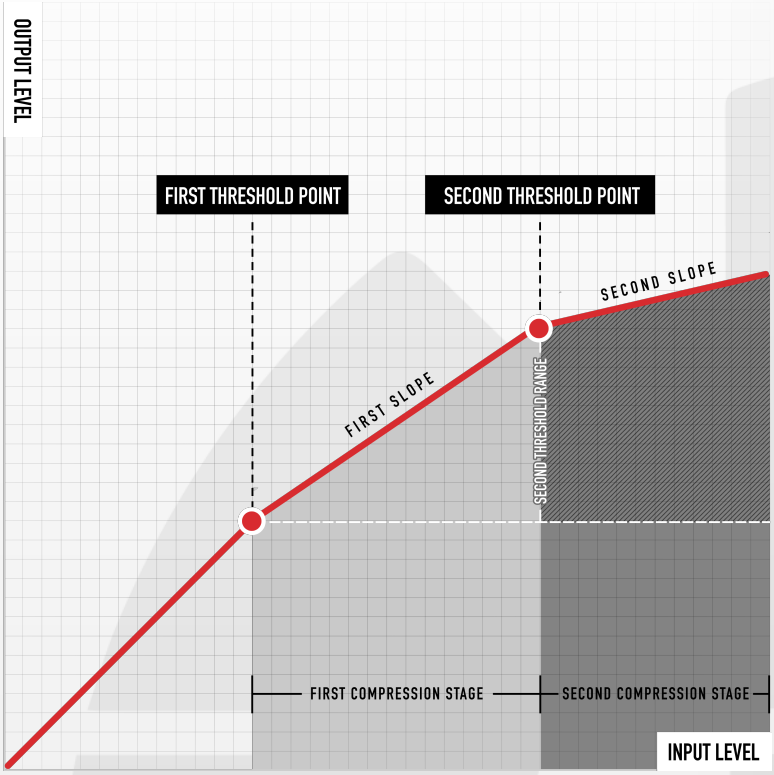




Ds WHAT IS A DUAL SLOPE COMPRESSOR?

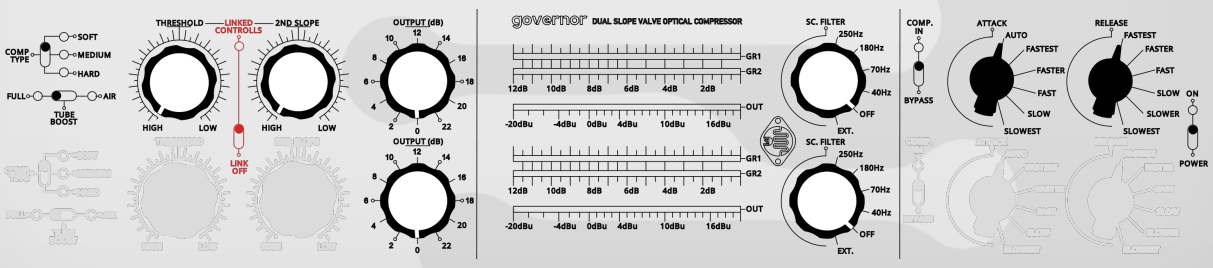
In the case of The Governor, dual slope design means that after the compressor's threshold point, another threshold point can be set. Beyond this point, the compressor's transmission curve becomes much

steeper, and the compressor starts operating with a much higher compression ratio. In practice, it's like applying multi-stage dynamic control. The first threshold would set a smaller ratio, softer knee compressor, and the second threshold would set a larger ratio, harder knee compressor. All of this within a single device, causing the timing of the two compression phases to interact with each other. As a result, the sound of The Governor can be very flexibly shaped and it can remains enjoyable even with extreme settings, ranging from classic levelers to the sound of modern optical compressors and even to the aggressiveness not heard before from an optical compressors.

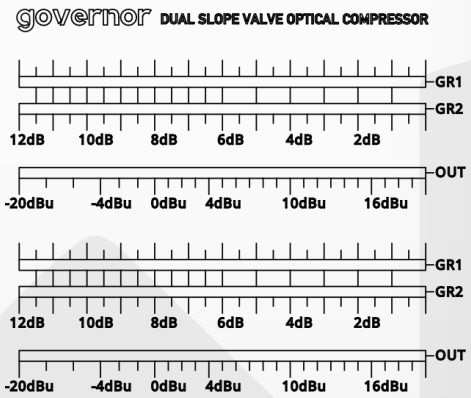


Op STEREO AND DUAL MONO MODES

The Governor is capable of stereo and dual mono operation. With the LINKED CONTROLS switch, you can switch between the two modes. By default, you can adjust channels A and B with the lower and upper switch rows. If you toggle the LINKED CONTROLS switch to the upper position, channel B will also inherit the settings of channel A. However, there is an exception. The OUTPUT and SIDECHAIN parameters need to be configured for channel B as well when the LINKED CONTROLS switch is in the upper position.

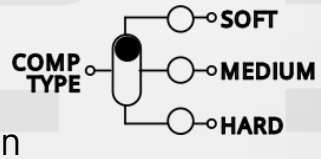


Ms METER SECTION



The METER section is different from the usual. Each channel has two gain reduction meters. GR1 shows the first slope gain reduction, while GR2 displays the second slope gain reduction. Additionally, each channel has an output meter. To provide users with a clearer understanding of the compressor's operation, all meters in the section are equipped with a peak hold function. In terms of the movement of the output meter, it emulates the speed of an analog VU meter and the hold indicator displays the true peak level.

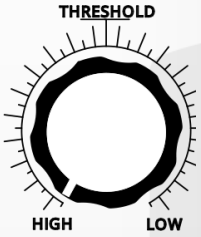
Mt COMPRESSOR MODES AND TYPES



Regarding compressor modes, three types are distinguished. The SOFT mode's ratio and knee resemble what you would expect from an optical compressor. When using only the first slope, we can achieve a classic leveler sound with it. When used with the second slope, it's capable of producing rougher sounds. The MEDIUM mode produces a much higher compression ratio than the previous one. Here, even using the first slope alone, we can achieve a significantly more aggressive sound. By also using the second slope, we can complexly influence the transient response of the signal over time. The HARD mode works exceptionally well for sound design purposes, allowing for incredibly intricate shaping of the transient and decay of the signal. We can select the appropriate mode for us using the COMP TYPE switch.

When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row.

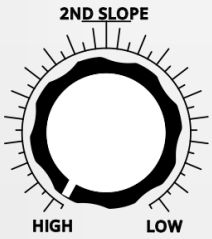
1s THE FIRST SLOPE



You can adjust the threshold point of the first slope with the THRESHOLD potentiometer. Remember, the first slope produces a gentle compression curve. Set the threshold parameter clockwise to reach the desired threshold point. You can read the gain reduction value from the GR1 meter.

When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row.

2s THE SECOND SLOPE

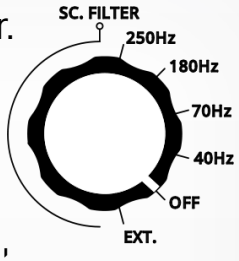


You can adjust the threshold point of the second slope with the 2ND SLOPE potentiometer. Remember, the second slope produces a rougher compression curve. Set the 2nd Slope parameter clockwise to reach the desired threshold point. You can read the gain reduction value from the GR2 meter. As you may notice, adjusting the 2nd Slope parameter decreases the reduction value read from the GR1 meter. This is because as you approach the threshold point of the second slope as part the first slope. So a portion of the gain reduction from the first slope begins to occur on the second slope. If you reach or go below the threshold value of the first slope, then no gain reduction is measured on the first slope; all gain reduction occurs on the second slope.

When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row.

Sc SIDE-CHAIN SECTION

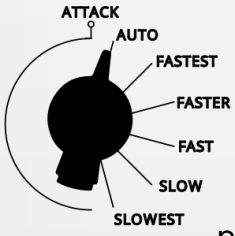
You can find the side-chain settings directly to the right of the meter section, labeled as SC.FILTER. By rotating the switch counterclockwise,



you can select the frequency of the side-chain filter. Signals below these frequencies will not be included in the control signal for the compressor. Therefore, the compressor will not, or only minimally, react to these frequencies. If you rotate the SC.FILTER switch clockwise, all the way to the lowest position, the compressor will expect the control signal from the external side-chain input. When you choose this EXT. option, the line-level audio signal arriving at the rear TS Jack connectors will become the only control signal for the compressor.

When the LINKED CONTROLS switch is in the upper position, it is still necessary to parameterize the settings on both channels.

At TIME CONSTANT, ATTACK

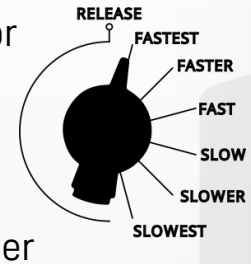


The sound we hear during compression is basically determined by the speed of the time constants, which in most cases will result from the nature of the program signal. The Governor compressor is capable of automatically setting the time constant based on the program signal. To do this, switch the ATTACK switch to the top position. The time constant marked ATTACK can be used to determine how long it takes for the compressor to reach the maximum of its intervention range when approaching the set intervention threshold level. To change the speed at which the procedure rises, turn the switch labeled ATTACK counterclockwise to set a slower procedure, or turn it clockwise to set a faster procedure. The following table helps to determine the approximate time of the parameter:

AUTO	Automatic by singnal
FASTEST	6ms
FASTER	8ms
FAST	10ms
SLOW	15ms
SLOWEST	40ms

When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row.

Re TIME CONSTANT, RELEASE

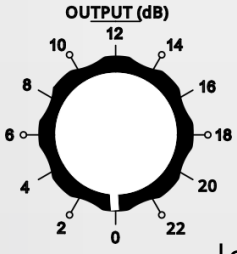


The RELEASE parameter determines how long it takes for the compressor to complete the intervention if the input signal level falls below the set intervention threshold level. To change the speed of the procedure, turn the switch labeled RELEASE counterclockwise to set a slower procedure, or turn it clockwise to set a faster procedure. he following table helps to determine the approximate time of the parameter:

FASTEST	80ms
FASTER	100ms
FAST	200ms
SLOW	450ms
SLOWER	600ms
SLOWEST	750ms

When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row.

Op OUTPUT LEVEL

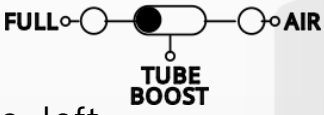


As a result of the dynamics control, the level of the output signal of the device suffers a certain level decrease, this is the case with most dynamics control devices, this is a normal phenomenon. The output signal level controller provides an opportunity to compensate for this signal level loss. To compensate for the output signal level, turn the output signal level control clockwise until the mark on the control knob points in the direction of the desired compensation value.

When the LINKED CONTROLS switch is in the upper position, it is still necessary to parameterize the settings on both channels.

Tb TUBE BOOST

By using this function, the gain of the output tube amplifier can be increased, and the device adding more harmonic distortion to the signal. This can makes the resulting sound warmer and more powerful. In the case of the Governor, the TUBE BOOST switch has three positions. In the middle position, the function is turned off. In the left position, it applies the effect across the entire audio frequency spectrum. In the right position, it only applies the effect to the high frequencies of the audio frequency spectrum.



When the LINKED CONTROLS switch is in the upper position, it configures both channels using the controls located in the upper row

Sp SPECIFICATIONS

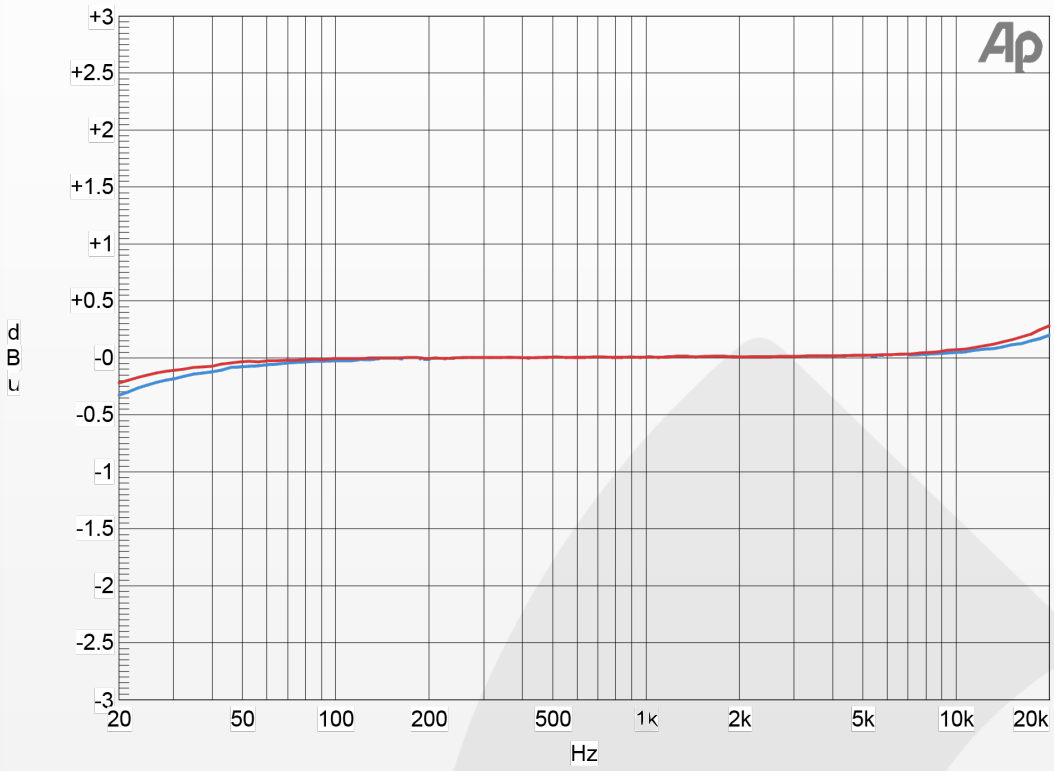
FREQUENCY RESPONSE
20Hz-20Khz +-0.5dB

THD	0dBu	+20dBu	+23dBu
1KHz	0.04%	0.32%	1%

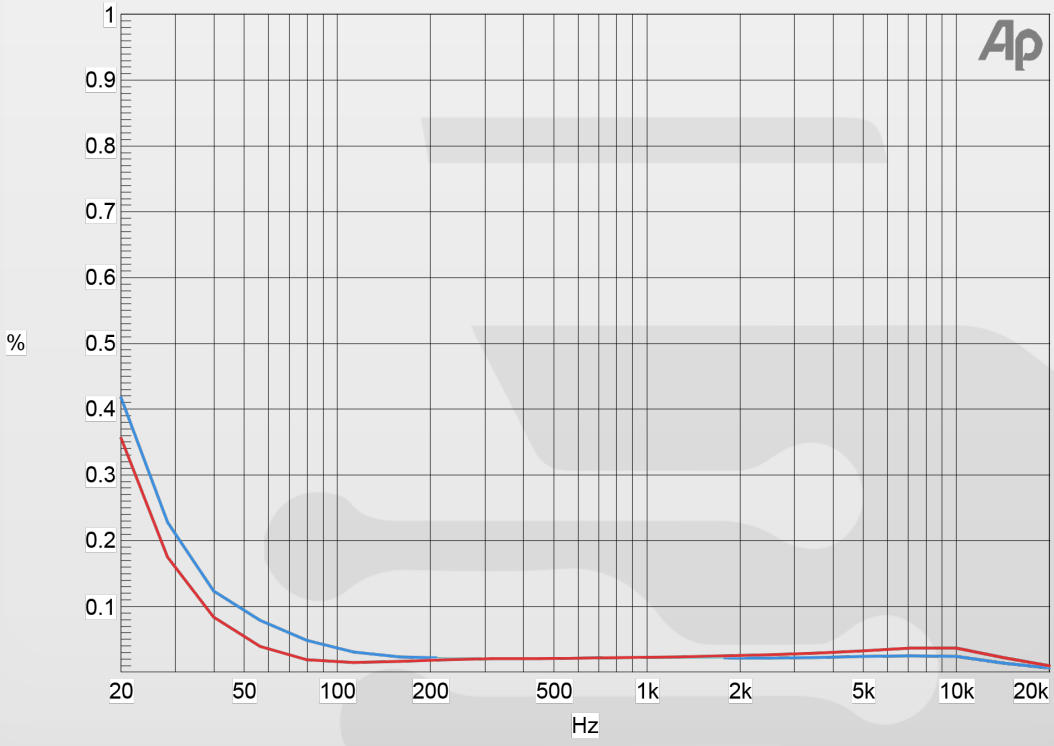
OUTPUT IMPEDANCE	<150 Ohm			
MAX OUTPUT LEVEL	+28dBu			
MAX INPUT LEVEL	+26dBu			
NOISE FLOOR	< -70 dBu Unweighted			
SNR.	105 dB	no filter	+23dBu	< 1% THD

INPUT:	2x Balanced XLR
SIDE CHAIN INPUT:	2x TS Jack
OUTPUT:	2x Balanced XLR
DIMENSIONS:	483mm x 280mm x 89mm
WEIGHT:	5,1 Kg
MAINS VOLTAGE:	230V AC (EU version) 110V AC (US version)

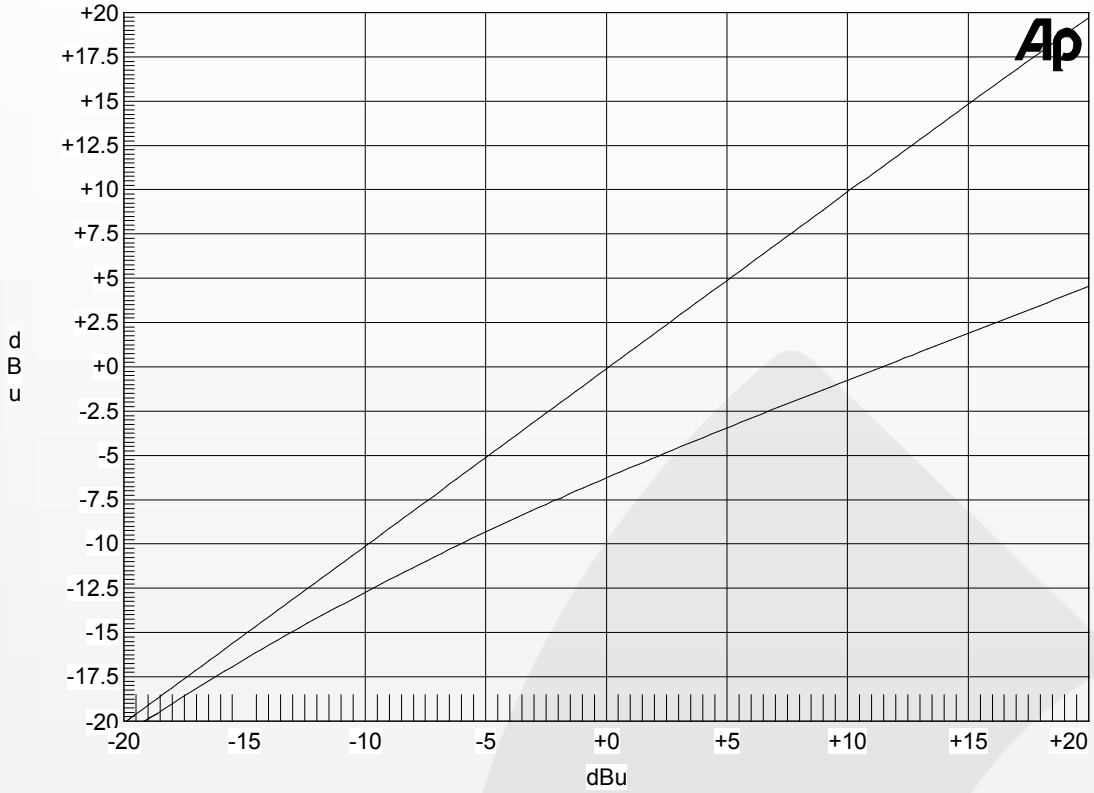
Fr FREQUENCY RESPONSE



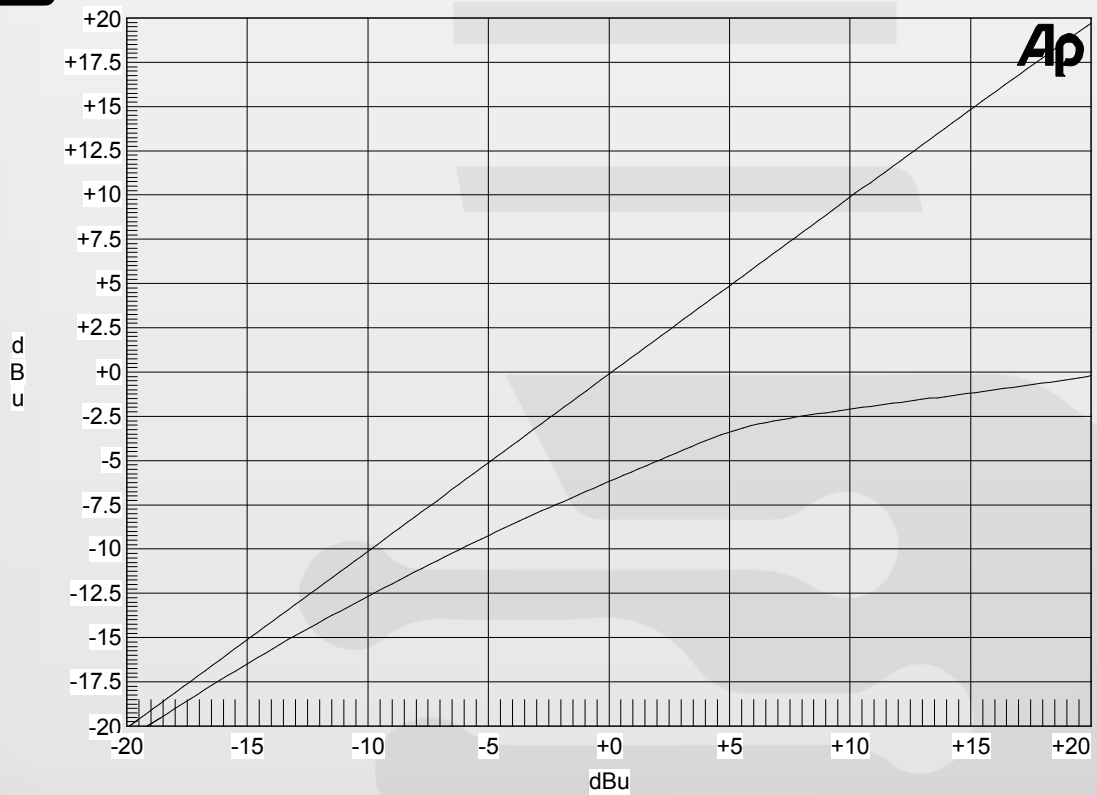
Th THD BY FREQUENCY



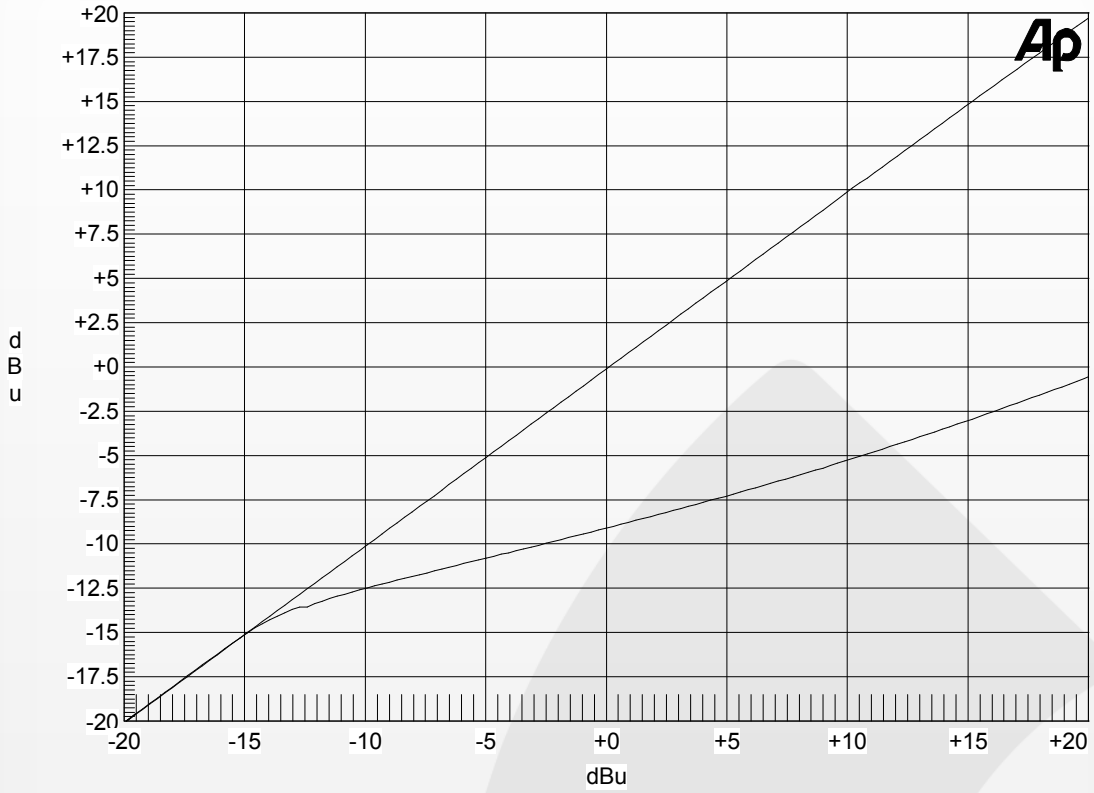
CC COMPRESSOR CURVE, SOFT MODE 1ST SLOPE



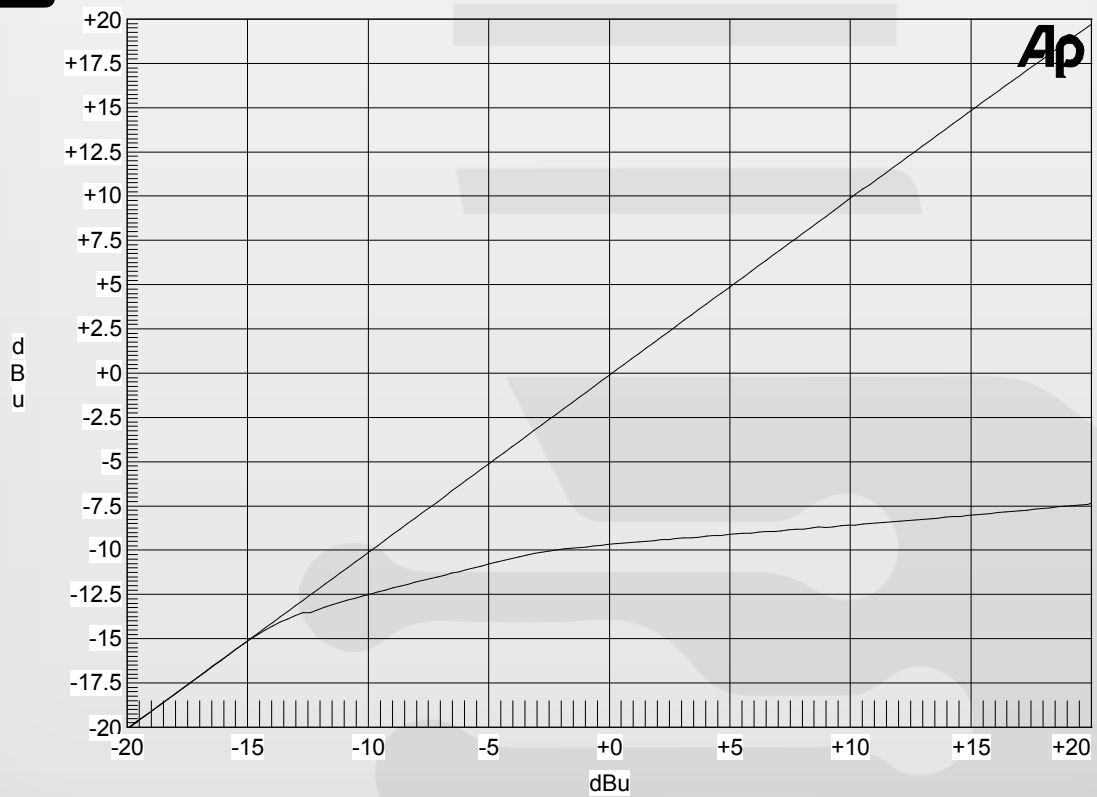
CC COMPRESSOR CURVE, SOFT MODE 2ND SLOPE



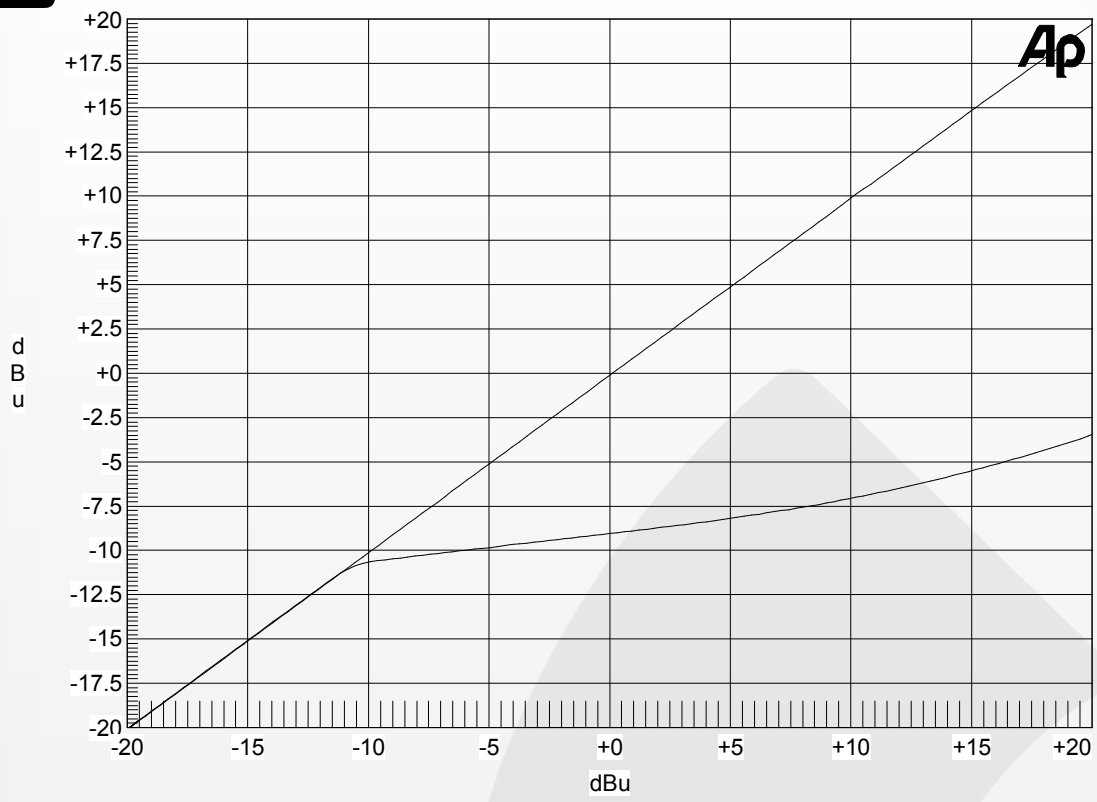
CC COMPRESSOR CURVE, MEDIUM MODE 1ST SLOPE



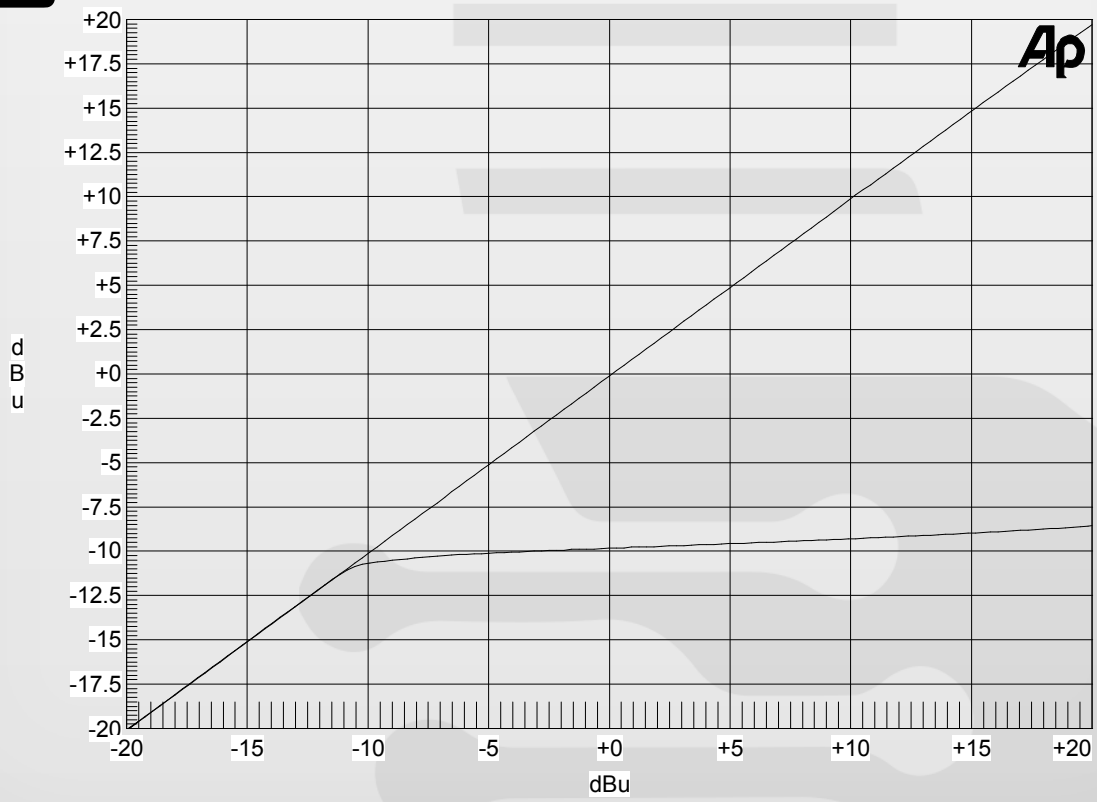
CC COMPRESSOR CURVE, MEDIUM MODE 2ND SLOPE

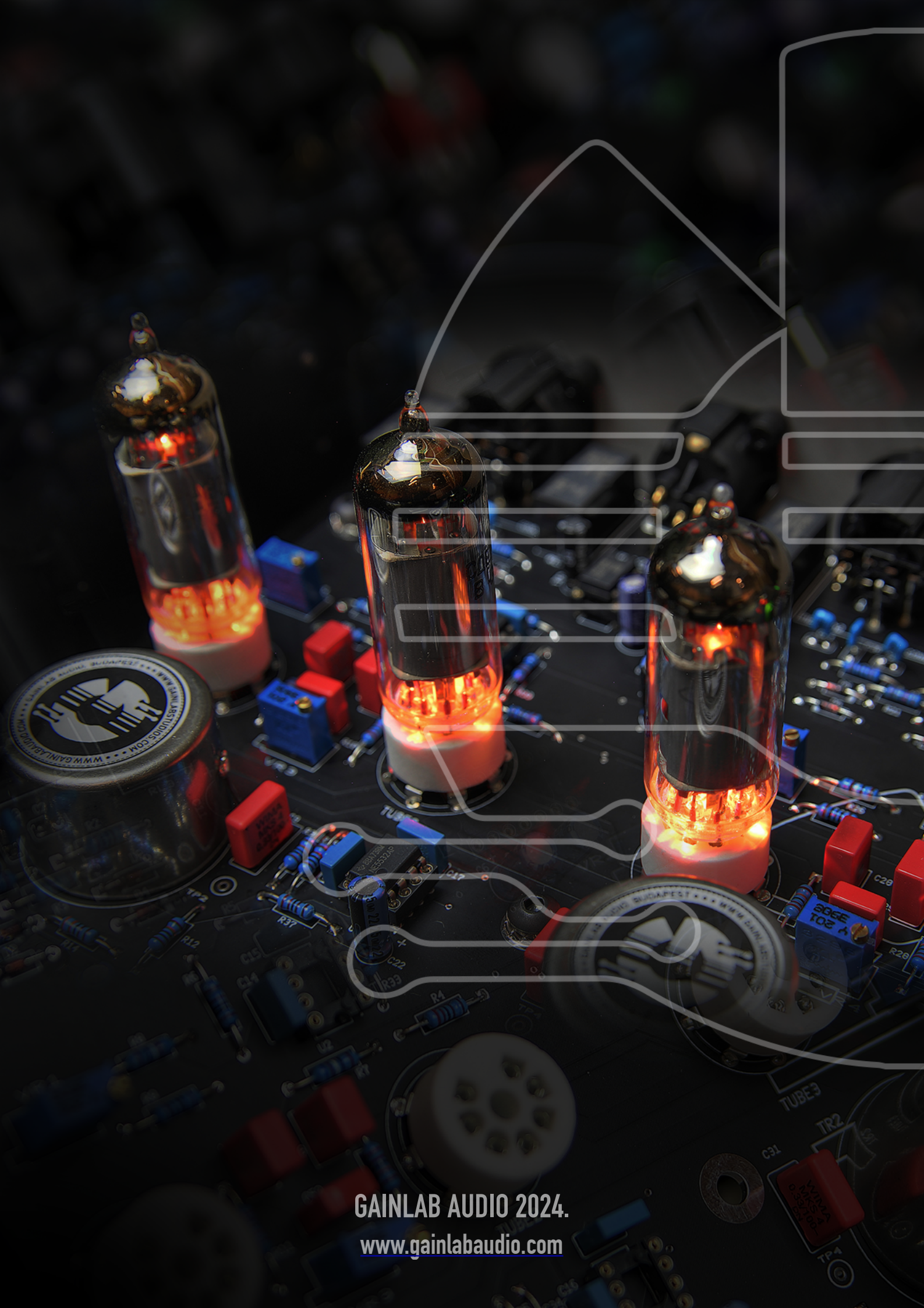


CC COMPRESSOR CURVE, HARD MODE 1ST SLOPE



CC COMPRESSOR CURVE, HARD MODE 2ND SLOPE





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