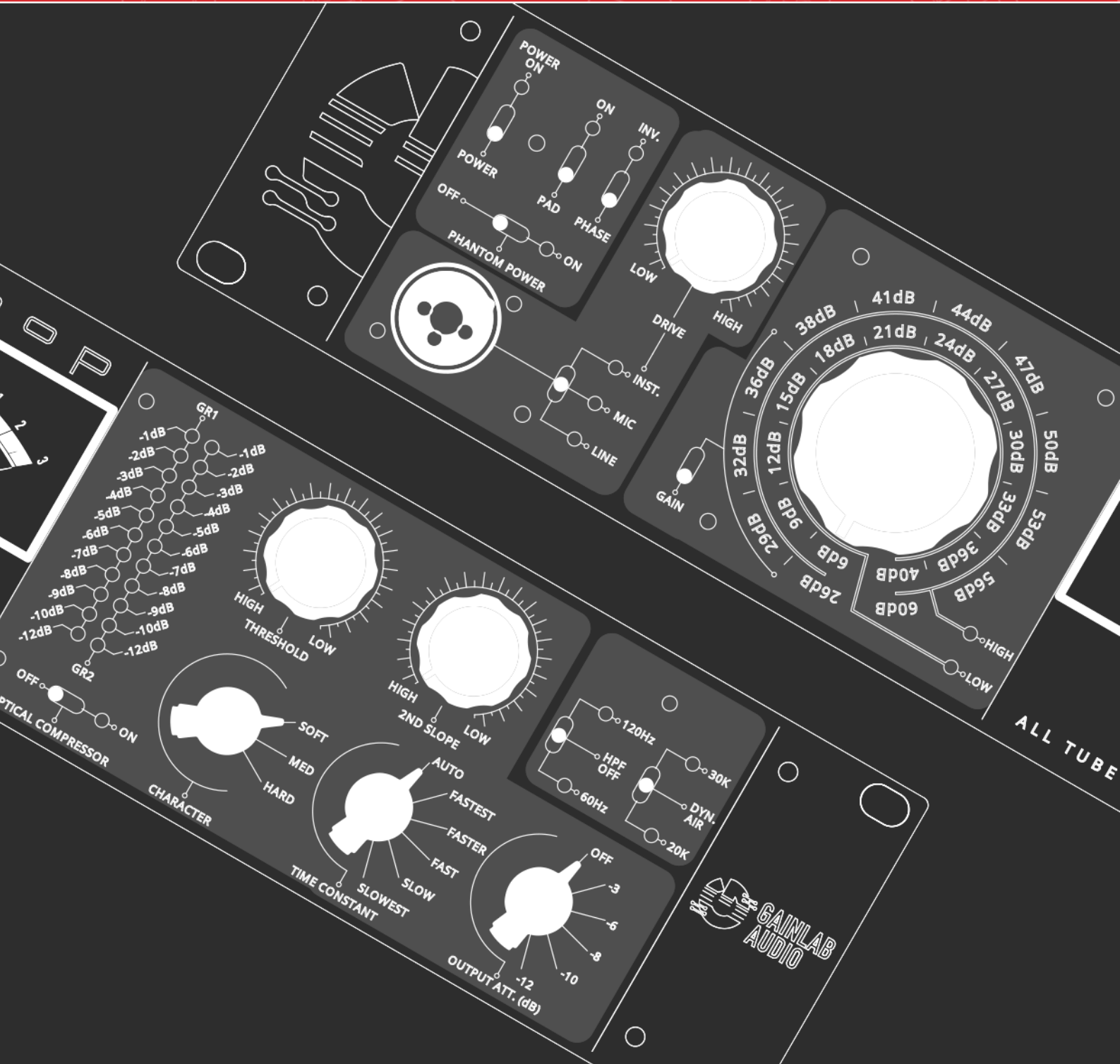




b i s h o p

QUICKSTART GUIDE



PLEASE NOTE THAT THE GLA-MP1 BISHOP 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 intensive 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.



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.

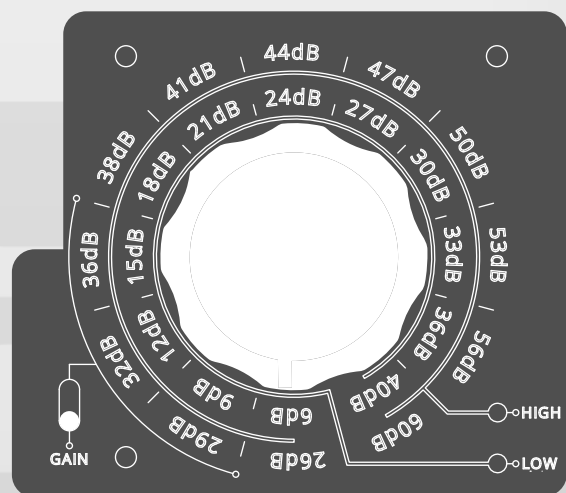


In INTRODUCTION

The **BISHOP All Tube Channel Strip** is a fully symmetrically designed recording channel with an All Tube system, featuring a **two-stage amplification**, **dynamic processing**, and **tone control** options. Symmetrical in nature, it does not asymmetrically alter the received balanced signal. All Tube implies that only electronic tubes are involved in the amplification process. It's two-stage because it can engage a secondary stage alongside the main amplification stage for greater gain if desired. It is equipped with a **dual slope optical compressor**, each with individually adjustable threshold points. It features a **two-position AIR band** switch capable of emphasizing high frequencies. When combined with the dynamics control, it can achieve all of this within the context of the audio material. As the gain reduction on the compressor increases, a corresponding boost occurs in the high frequencies.

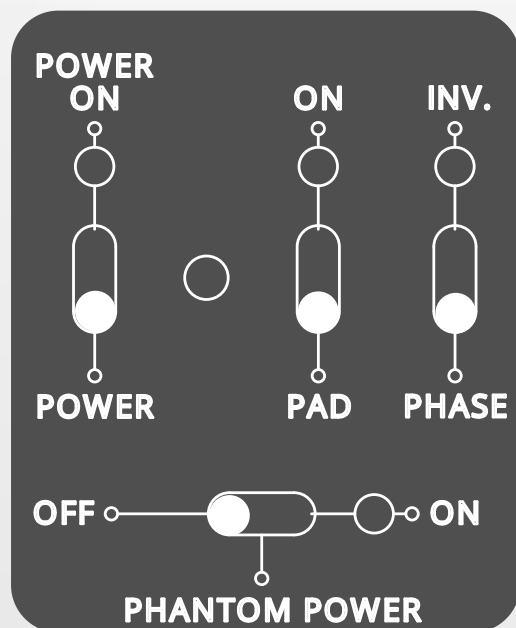
Ps PREAMP SECTION

The main control element of the preamp section is the dual gain selector knob located on the left side of the VU meter. This knob regulates the preamp gain and facilitates switching between the different preamp stages. The internal scale, which we refer to as the **Low**



Gain scale, handles amplification ranging from +6dB to +40dB and can be accessed by setting the Gain switch to the lower position. The external scale, known as the High Gain scale, manages amplification between +26dB and +60dB and is accessible by toggling the Gain switch to the upper position. In High Gain mode, alongside the primary preamp stage, a secondary stage capable of +20dB gain is activated. The illuminated scale indicator clearly shows which mode is currently active. The Low Gain mode boasts significantly better signal-to-noise ratio and distortion values compared to the High Gain mode. The choice of mode depends on the required level of amplification for the given situation. For amplification needs maximum of +40dB, the use of Low Gain mode is recommended, as it suffices for most recording scenarios.

Px PREAMP AUXILIARY FUNCTIONS



The additional functions of the preamp are situated around the Power switch on the left side of the front panel. The PAD switch engages a -20dB attenuator to handle potentially excessive input signals that the Bishop might encounter. The Phase switch inverts the polarity of the incoming signal, which can effectively address intermodulation issues arising from variations in microphone placement, especially in multi-microphone recording setups.

The Phantom Power switch activates the power supply of +48V required for microphones that rely on it. Most

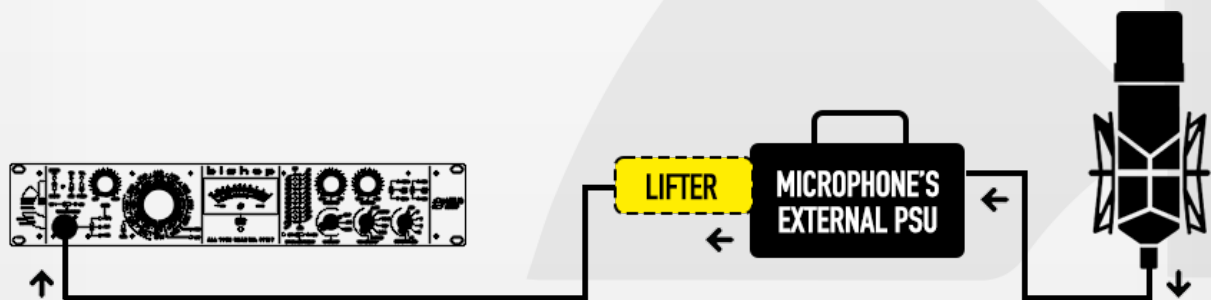
condenser microphones necessitate this type of power supply, while the majority of dynamic microphones do not.

PRIOR TO ENABLING PHANTOM POWER, PLEASE VERIFY WHETHER THE CONNECTED MICROPHONE REQUIRES THIS KIND OF SUPPLY. CONNECTING PHANTOM POWER TO A MICROPHONE THAT DOESN'T NEED IT CAN LEAD TO DAMAGE.

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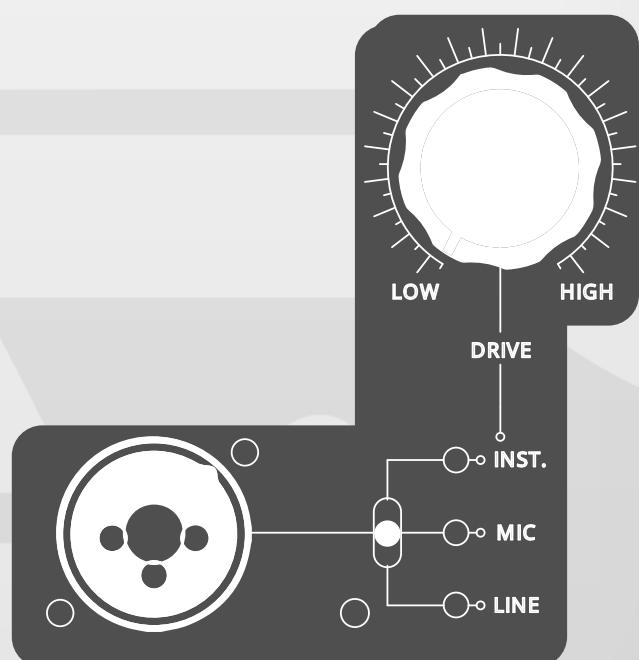
NOTE: GROUND THE RECEIVING SIDE

If the Bishop has a microphone connected to it with an external power supply, there is a possibility that a so-called **ground loop** may form between the Bishop's power supply and the external microphone's power supply, which can have an **undesirable impact on the signal-to-noise ratio**. In such a case, the **"always ground the receiving side"** rule comes into play. Therefore, on the sending side, which is the side of the microphone's power supply, the **ground lift switch must be used**, or a **cable should be used that breaks the grounding on the microphone's power supply side**. Additionally, there is the option to use a **ground lift adapter connector** as well.

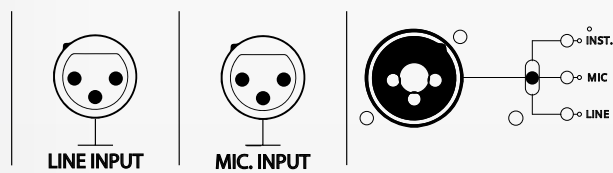
**So**

SIGNAL SOURCE SELECTION

The signal source selector can be found to the left of the Gain Mode selector switch. In **its center position**, which is the default setting, the Bishop expects a **microphone-level balanced signal at its input**. In the **lower position**, it anticipates a **symmetrical or asymmetrical line-level signal for the preamp**. The **upper position**, on the other hand, is intended for **instrument input**. The instrument input is



designed for high-impedance asymmetrical signals, which are further linked to the preamp via a matching buffer. **The gain of the input buffer can be adjusted using the Drive potentiometer.** The appropriate Drive parameter will vary based on the internal structure of the connected instrument. **It is strongly recommended to utilize the instrument input in Low Gain mode,** alongside an appropriate Drive setting, as this approach maintains the signal-to-noise ratio at a manageable level due to the asymmetrical signal and high impedance.



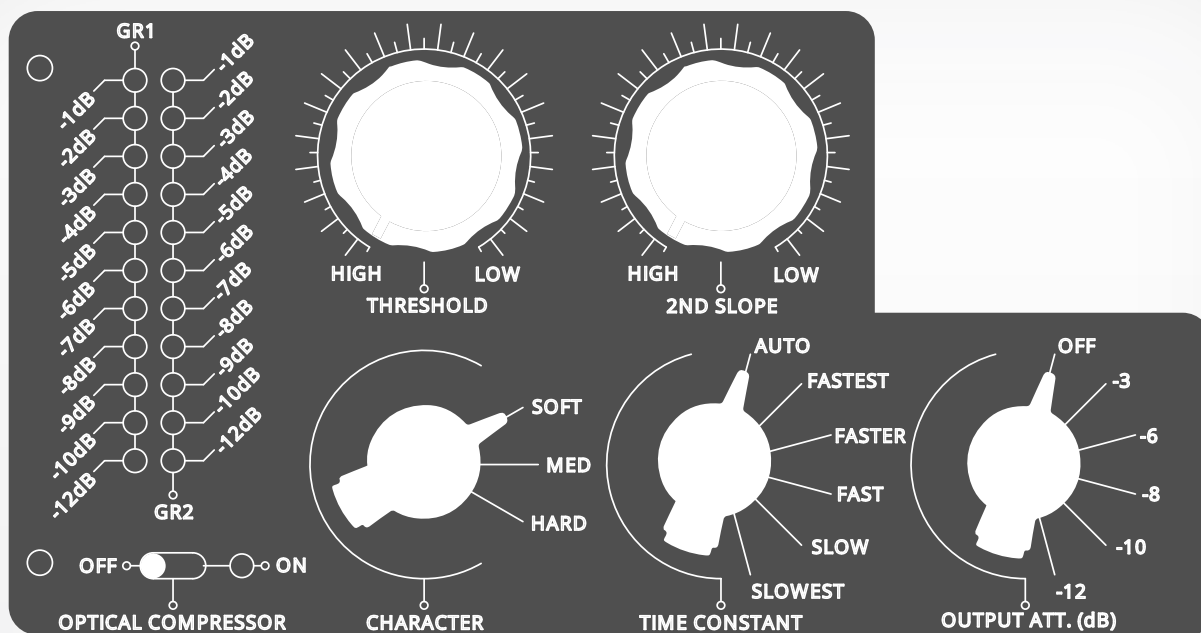
When it comes to connecting input sources, it's possible to connect microphone and line signals to both the front and rear panel connectors, while the instrument input is only available via the combined front panel connector. Generally, devices connected to the front panel always take priority. For instance, if microphones are connected to both the front and rear panel inputs, the microphone connected to the rear panel input will remain inactive until the microphone connected to the front panel input is disconnected.



DYNAMICS CONTROL SECTION

Moving to the right of the VU meter, you will find the instruments and controls of the optical compressor directly. The compressor can be activated or deactivated using the switch located below the reduction meters. The compressor in the **Bishop utilizes optical compression,** employing Light Dependent Resistors (LDRs) for dynamic control, similar to units like the LA2A or CL1B. While most dynamics processors allow for setting a single threshold point, the **Bishop's compressor enables the setup of two threshold points,** which is why we refer to it as a Dual Slope optical compressor.

A typical use of this compressor involves applying the majority of dynamic control on the first knee of the curve, followed by a much steeper second knee to handle sudden and abrupt amplitudes. This approach allows the compressor's sound to remain manageable and

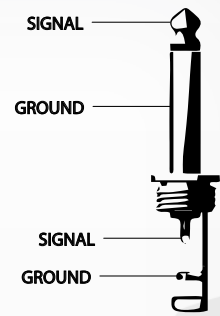


natural even under extreme operating parameters and level changes. In terms of controls, the adjustment of the first threshold point is achieved through the **Threshold knob**, with the corresponding gain reduction value indicated by the **meter labeled GR1**. The setting of the second threshold point is accomplished using the **2ND Slope knob**, with the gain reduction value for this indicated by **the GR2 meter**.

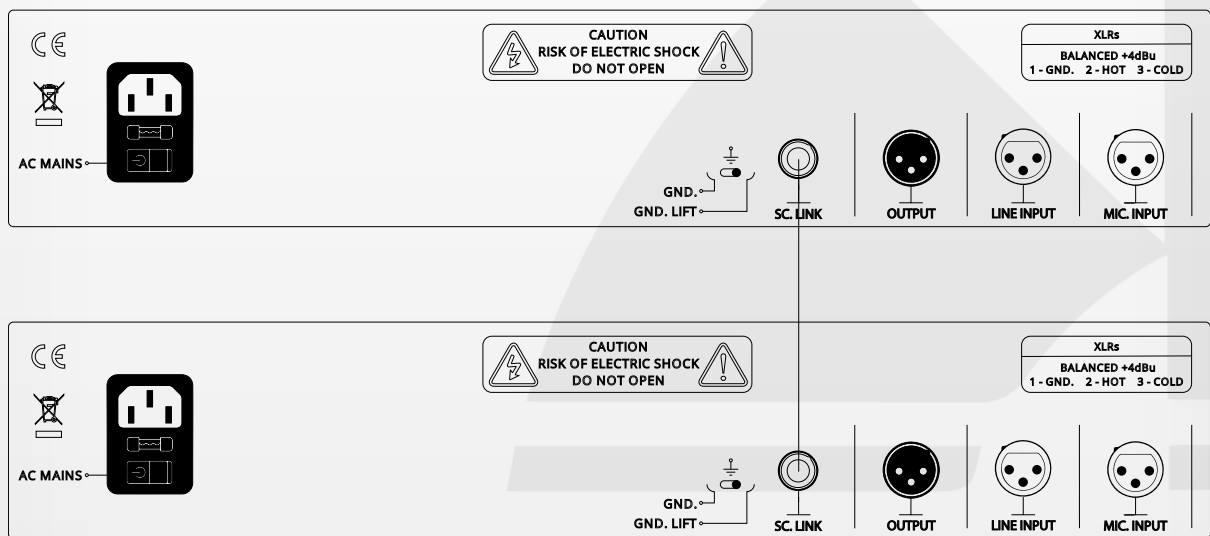
As this isn't two separate compressors but rather a single extensively parameterizable dynamics processor, the gain reduction for each slope can change depending on the level distance between the individual threshold points and how the audio material fills this range. Therefore, it's advisable to review the first threshold point setting after adjusting the 2ND Slope.

The Bishop's compressor primarily serves as a supplementary component to the preamp. The setting of compression ratio and knee value is done simultaneously using the **Character switch**, which offers three levels (Soft/Medium/Hard). As you progress through the levels, the compression ratio increases and the knee curve becomes sharper. Adjusting the compressor's timing is achieved via the **Time Constant rotary switch**, which offers six positions as presets. The first **automatic mode attempts to determine the timings based on the nature of the incoming audio material**. The remaining five positions offer attack and release values from fastest to slowest. If you wish to use two Bishops simultaneously while having both compressors engaged, it may be necessary to link the compressors of the two units. This can be achieved using the **SC.Link connector** located on the back of the Bishop, using an asymmetric Jack-Jack cable. In terms of practical implementation, it's advisable to proceed as follows:

1. Connect the two Bishops using the Jack-Jack cable.
2. Set the Character and Time Constant rotary switches to the same position on both units.
3. On one unit, leave the Threshold and 2ND Slope knobs in their default positions, while on the other unit, adjust the desired reduction values for both slopes.

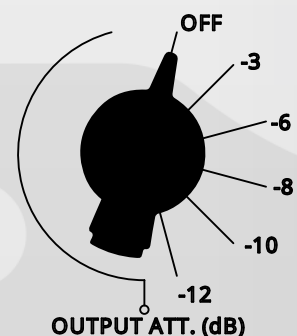


As a result, both Bishops will display similar reduction values, depending on the signal entering the compressors, of course.



Oa OUTPUT ATTENUATOR

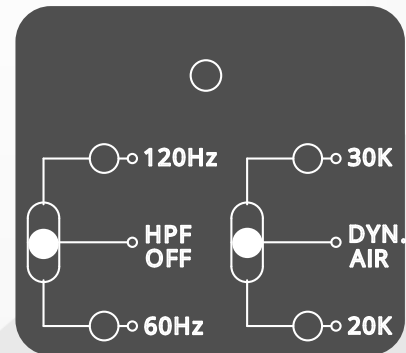
Located below the tone control section is the rotary switch for the output attenuator. This allows us to create a -12dB attenuation in 5 steps on the Bishop's output. This can often be useful, for instance, to compensate for the gain reduction caused by the compressor. By adjusting the preamp's Gain control upwards while using the output attenuator, and then depending on the compressor's gain reduction, turning down the output attenuator, we can achieve the output level before compression.





TC TONE CONTROL SECTION

On the top right side of the Bishop, you'll find the controls for the filter section, which determine the tonal characteristics of the sound processed by the Bishop. The **HPF switch** activates a simple **high-pass filter** designed to eliminate potential muddiness in the low-frequency range. One common issue this can address is the proximity effect often seen with large-diaphragm condenser microphones. We recommend starting with lower frequency values when experimenting with this. In this case, **begin with a 60Hz low-cut filter**, and if that doesn't resolve the issue, then switch to 120Hz.



The **DynAir switch** engages the **AIR band in two positions**. This results in a gently rising shelving filter with a very natural sound. When using the Air function, it's a good idea to begin by adjusting higher frequencies. **Start with 30kHz first**, and if you're not satisfied with the result, then try experimenting with 20kHz.

When using the **Air function in conjunction with the built-in compressor**, you'll notice that the effect produced by the Air function isn't constant; rather, it depends on the current gain reduction value of the compressor. **The relationship is such that as the gain reduction increases, the Air band boosts more.**

YOU CAN FIND DETAILED INFORMATION ABOUT THE PRODUCT IN [THE BISHOP USER MANUAL](#). IF YOU HAVE ANY QUESTIONS, FEEL FREE TO REACH OUT TO US [ON THIS PAGE](#).

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