



## APPLICATION NOTE

# Wiring the Bias D1+/Q1+/Q1.5+/Q2+ Patch Panel

Void Acoustics' Bias D1+/Q1+/Q1.5+/Q2+ uses a phoenix style connection for analog audio inputs and outputs. When in a touring environment where re-wiring an amplifier regularly may be needed, standard connections such as XLR and speakON are more desirable.

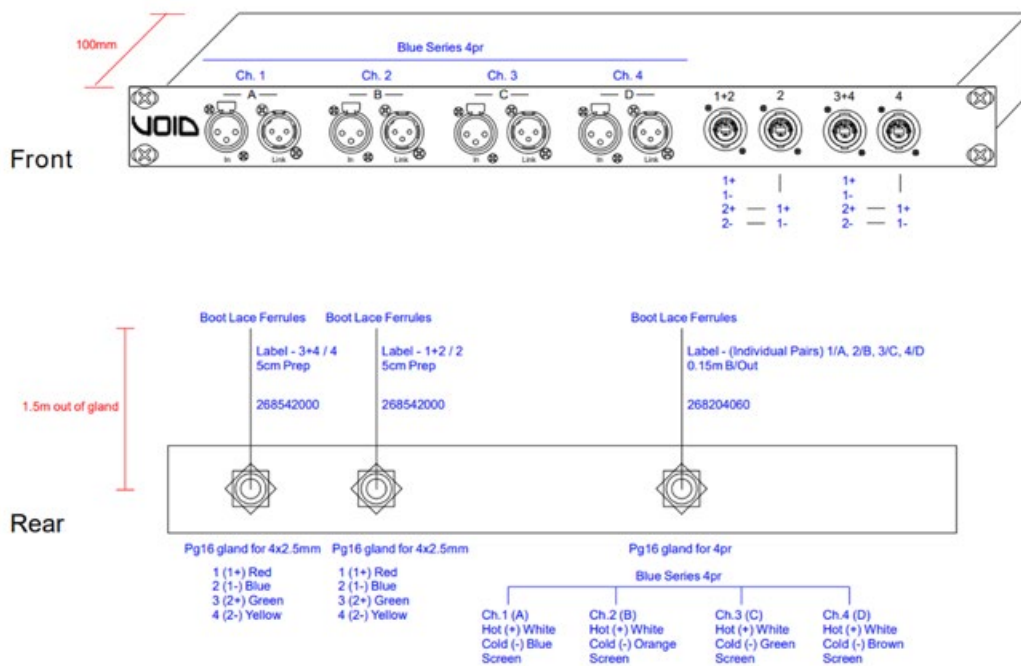


Figure 1: Bias Patch Panel Connections

The Bias Patch Panel shown in Figure 1 allows for the desired connectivity of XLR and speakON while using a Bias D1+/Q1+/Q1.5+/Q2+ amplifier. The wires are pre-terminated with bootlace ferrules for easy set up. The ground/shield wires for the Input signal connections have a green heat-shrink applied. This is a thicker wire than the green signal wire used for Ch3.

The following guide outlines how to wire the patch panel to the Bias+ amplifiers including the non-plus Bias versions.

## Wiring for Bias D1+

The Bias Patch Panel can be used to work with two Bias D1+ amplifiers. The following method puts one amplifier on Inputs/Outputs 1+2 and another on Inputs/Outputs 3+4. If wiring for one amplifier, skip the steps referring to a second amplifier.

### Input Signal

The Bias D1+ has two inputs, therefore the third and fourth inputs on the patch panel can be used for a second D1+ amplifier.

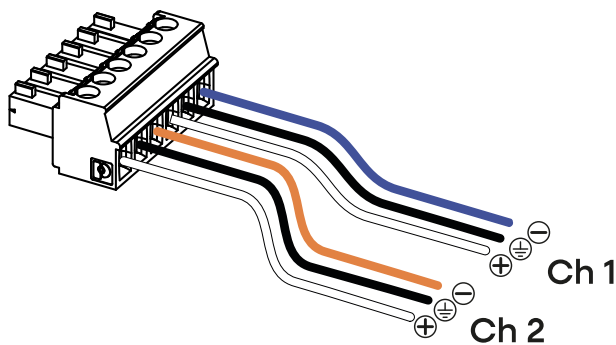


Figure 2: Bias 2-Channel Input Phoenix

When wiring up a second Bias D1+ to the Bias Patch panel, the input phoenix is wired as in Figure 3.

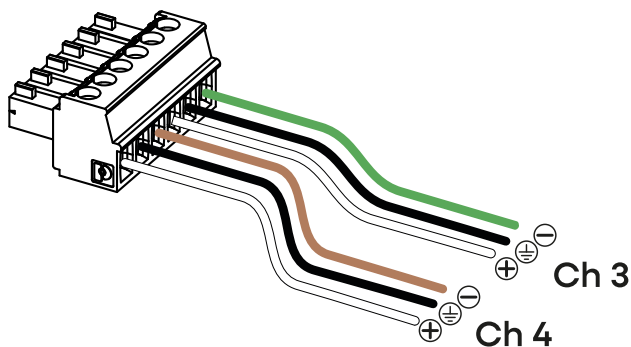


Figure 3: Bias 2-Channel Input Phoenix (For second amp)

## Output Signal

There are two glands on the rear of the patch panel which have a 4x2.5mm cable. This cable is wired to the output phoenix connector. The labels on the cables will show 1+2/2 and 3+4/4.

If wiring two Bias D1+ amplifiers to the patch panel, wire both connectors as in Figure 4 with Ch3 in place of Ch1 and Ch4 in place of Ch2.

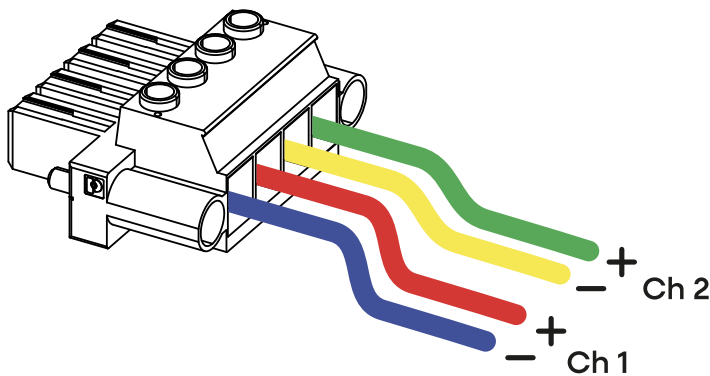


Figure 4: Bias 2-Channel Output Pheonix



When plugging the output phoenix block into the Bias D1+, it will be inverted screw side down and plugged into the Output Phoenix.

## Wiring for Bias Q1+/Q1.5+/Q2+

### Input Signal

The Gland on the right-hand side of the patch panel when looking at the rear, has 4 balanced cables within a multicore. The cables are individually labeled 1/A, 2/B, 3/C, 4/D. They are respectively Ch1, Ch2, Ch3, Ch4. They are wired as in Figure 5.

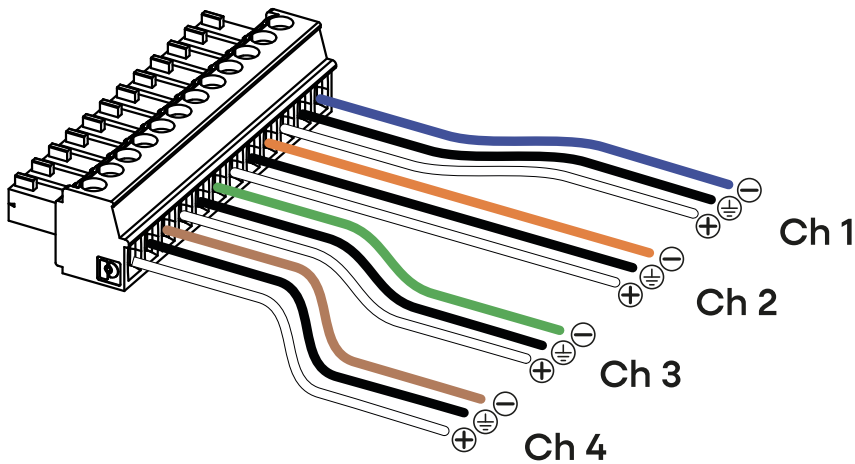


Figure 5: 4-Channel Input Signal

When plugging into the amplifier ensure that you are using the bottom Input Phoenix connection as highlighted in Figure 6.

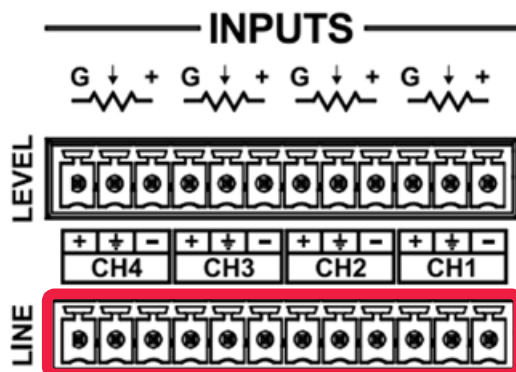


Figure 6: Bias 4-Channel Input Connection

## Output Signal

There are two glands on the rear of the patch panel which each have a 4x2.5mm cable. This cable is wired to the output phoenix connector. The labels on the cables will show 1+2/2 and 3+4/4. They are wired as in Figure 7. It is important to note the orientation of the phoenix block.

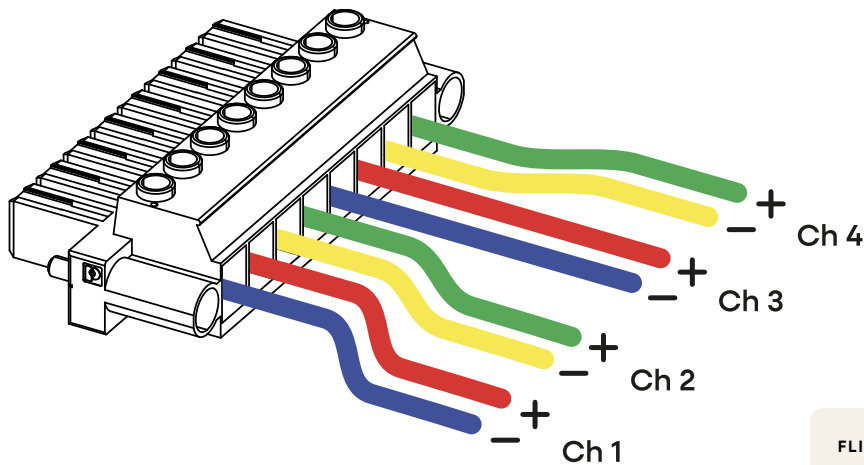


Figure 7: 4-Channel Output Signal

FLIP TO FIT



When plugging the output phoenix block into the Bias Q1+/Q1.5+/Q2+, it will be inverted screw side down and plugged into the Output Phoenix shown in Figure 8.

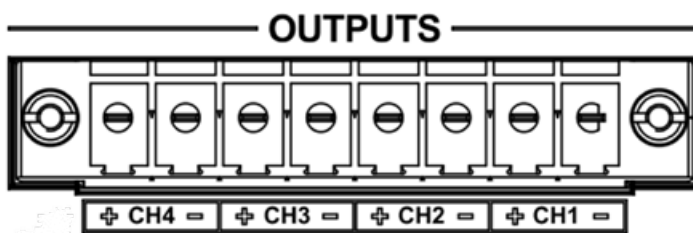


Figure 8: Bias 4-Channel Output Phoenix