7-Channel Amplifier-Attenuator Board

Low-noise AC-coupled attenuation or amplification up to 40dB

Introduction

Congratulations on your purchase of this SynQuaNon product! It is our belief that our products will enable you to find new and interesting ways to create custom sounds with your synthesizer and other SynQuaNon modules. Check out our full line at www.synquanon.com.

Overview

The 7-Channel Amplifier-Attenuator Board can be ordered with one of three gain options: 20 dB, 30 dB, 40 dB.

In order to change the gain range of an existing 7-Channel Amplifier-Attenuator Module, 13-Pin Input Breakout Module, or 13-Pin Output Breakout Module, it is necessary to exchange the Amplifier-Attenuator Board of that module with one of the desired gain.
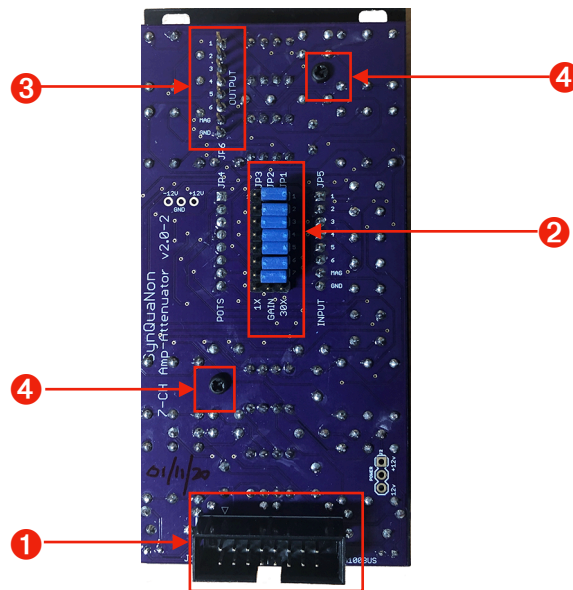
Instructions

- Referring to the board rear view, remove the two standoff screws and set them aside.

- Grasp the amplifier board at the edges and carefully pull it off the pots & jacks board with a slight wiggling action; pull the board off vertically to avoid damaging the header pins!

- Line up the header sockets on the replacement board with the pins on the pots & jacks board and gently press into place; do not force them together, check for misalignment!

Instructions (continued)

- Once in place, replace the two standoff screws and hand tighten - do not over-tighten the screws!

- The procedure is the same for 13-Pin Output Breakout and 7-Channel Amplifier - Attenuator Modules. The 13-Pin Input Breakout Module requires soldering a board-board cable for the 7V power supply - please contact the factory for assistance with this replacement.

Board rear panel overview

❶ A100 Bus   Keyed power connection with reverse polarity protection. Red stripe is on the left.

❷ Gain Select Header   Use the shorting plugs to select the amplifier gain range - unity gain is on the left (for attenuation use) and either 10x, 30x, or 100x is on the right.

❸ Output Header   Signals from output jacks are available on this header for patch cable-free connections to other SynQuaNon modules.

❹ Board Standoff Screw   The Amplifier-Attenuator Board is attached by two screws in these locations

Features

- Replacement amplifier board for 7-Channel Amplifier-Attenuator, 13-Pin Input Breakout, 13-Pin Output Breakout Module

- Precision metal-film resistors for close channel gain matching.

- Low-noise audio op-amps for optimal AC performance.

- Selectable gain range (1x or 10x, 30x, 100x) for output on back of the module.

- Adjustable gain or attenuation to zero within each selected gain range.

Technical Specifications + Downloads

Width	n/a	Gain	0 dB (1x range)
Depth	n/a		0 - 20 dB (10x range)
Power	15 mA @ +12V		0 - 30 dB (30x range) optional
	15 mA @ -12V		0 - 40 dB (100x range) optional
	0 mA @ +5V	ModularGrid	7-Channel Amplifier-Attenuator

Reverse power protection, resettable fuses, extensive power supply filtering.

Support

In case of difficulty:

1. Make sure power is available to the Eurorack and that it is turned ON.
2. Check the rear module power connection (turn OFF Eurorack power first)
3. Check patch cables for continuity or shorts.
4. Check level settings on front panel. Check gain select header on rear of module for proper gain range selection (turn OFF Eurorack power first).

For additional information please feel free to contact us at support@synquanon.com