Stream Adder

Audio Signal Modification Unit
User Manual And Technical Reference

ACOUSTIC RESEARCH

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I wish you the greatest success in your research

James Chaffinch

James Chaffinch, CEO

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This product's connections follow the Coordinated Universal Interworking Standard (CUIS) and as such can be used with any other product from any manufacturer that also adheres to this standard.

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Description

The Stream Adder audio signal modification unit allows a user to mix together two audio streams based on a simple mathematical function:

$$\text{output} = (\text{mix} \times \text{input A}) + ((1 - \text{mix}) \times \text{input B})$$

The two audio streams are summed together proportionally, such that it is not possible for the resulting signal to exceed the highest value of either stream. From the equation above, one can see that a ‘mix’ value is used to control the relative strength of each signal. This ‘mix’ value is limited to between 0 and 1.

The device also comes with a method of controlling this ‘mix’ value by external voltage control or audio signal.

Interface

1. Audio Signal Output
   The audio signal output connection

   CUIS type: Orange

2. Control Select
   This switch is used to select between using the dial/voltage input pair (3 and 4), or Audio Signal Mix input (5)

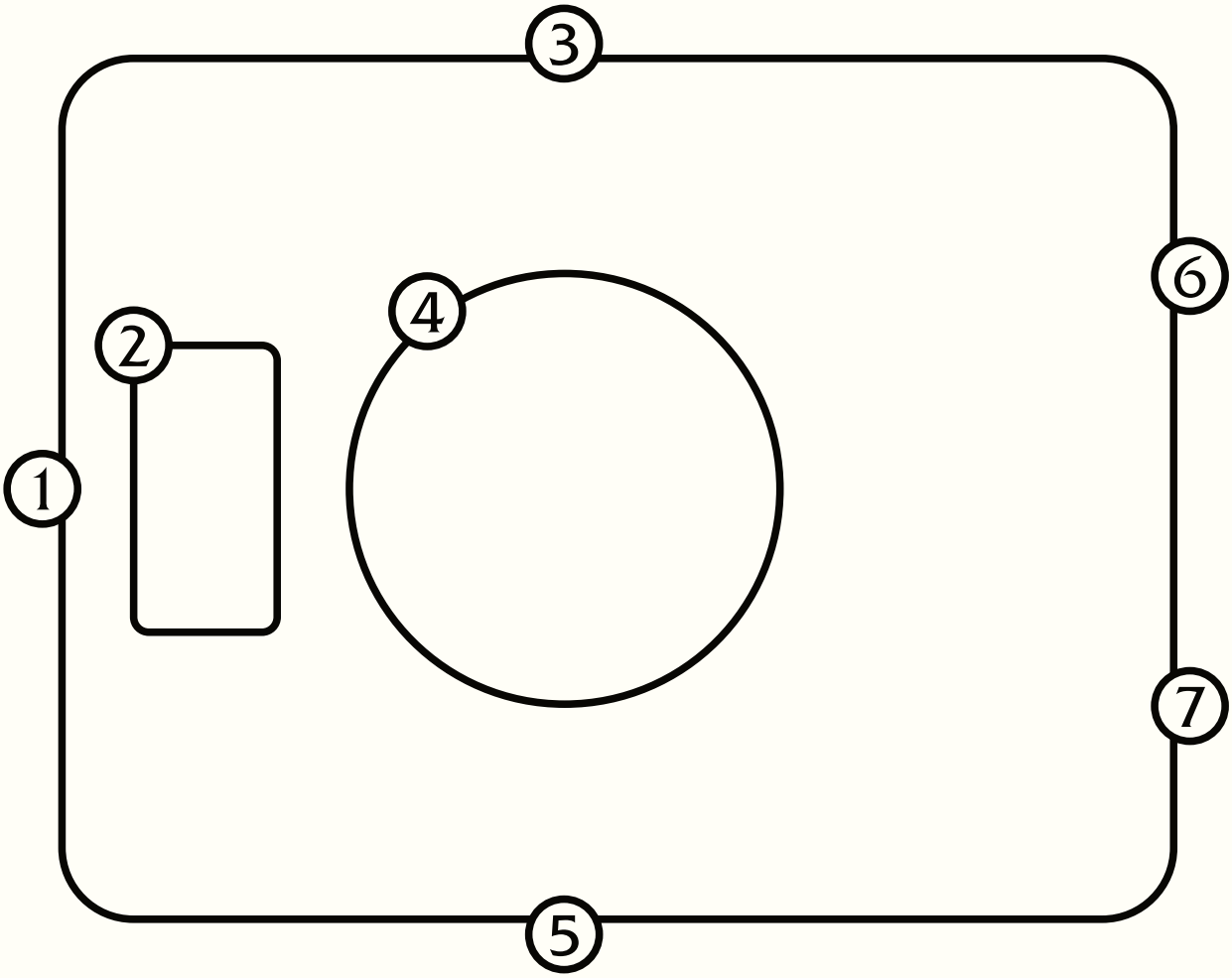
3. Voltage Mix Control

   CUIS type: Green

4. Mix Dial
   Used for manually selecting the mix value

5. Audio Signal Mix Control

   CUIS type: Orange



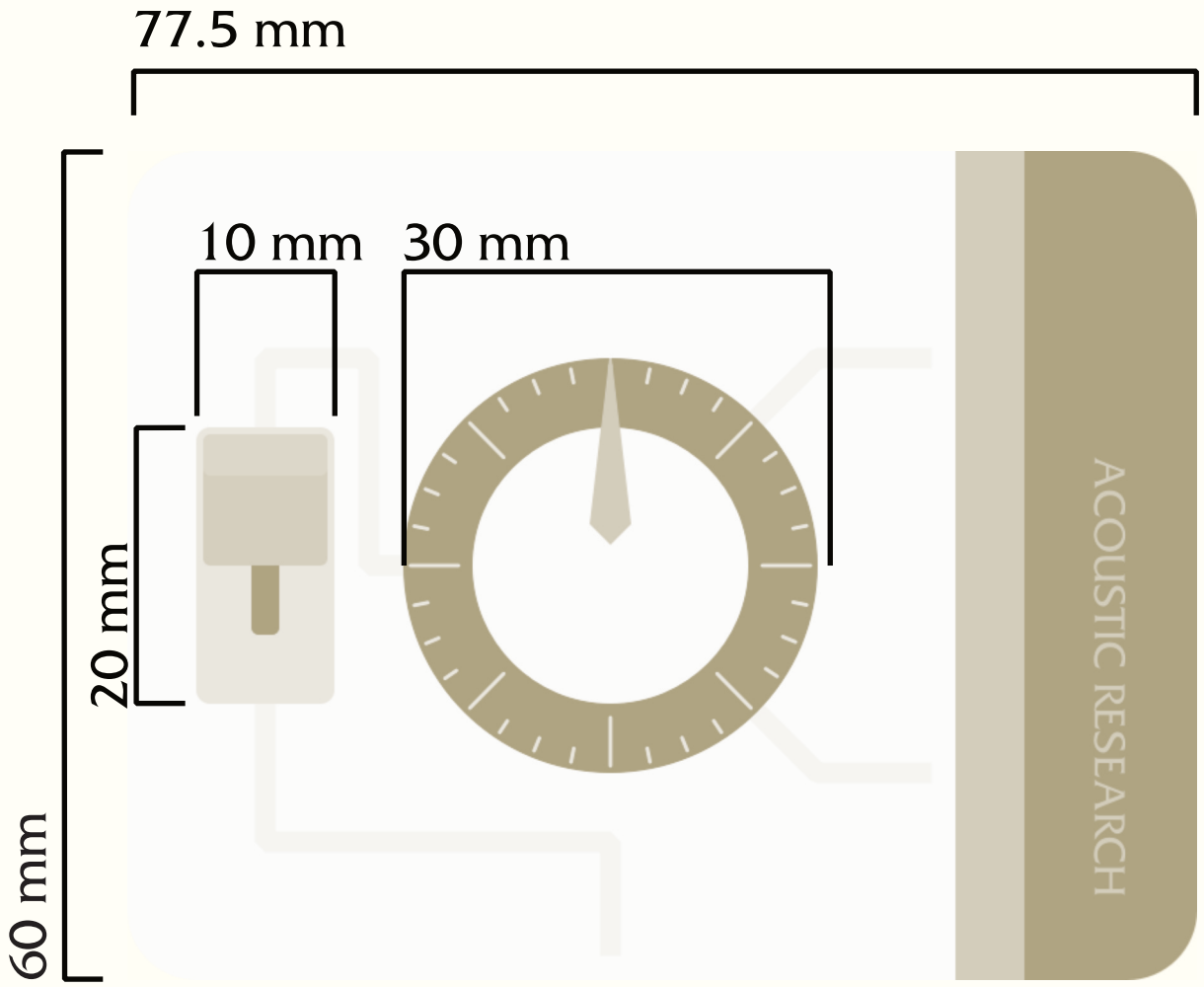
6. Audio Signal Input A
   The audio signal output connection for stream A

   CUIS type: Orange

7. Audio Signal Input B
   The audio signal output connection for stream B

   CUIS type: Orange

Unit Specifications



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