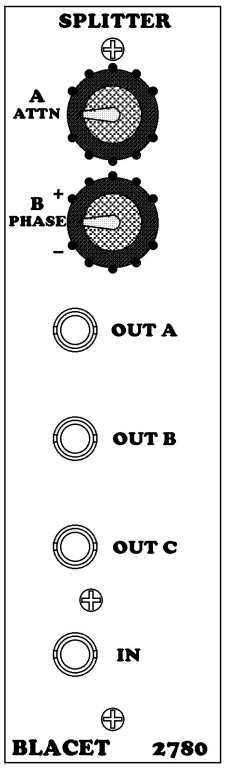
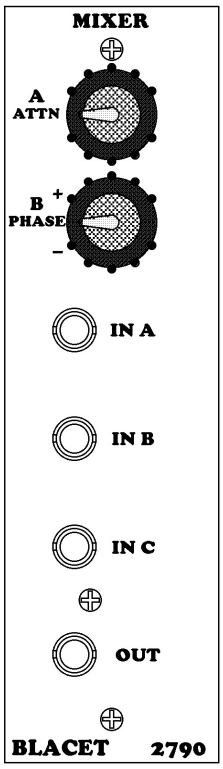
Buffered Splitter / Mixer

BLACET RESEARCH MODEL SB2780 Splitter
BLACET RESEARCH MODEL SB2790 Mixer

User Manual





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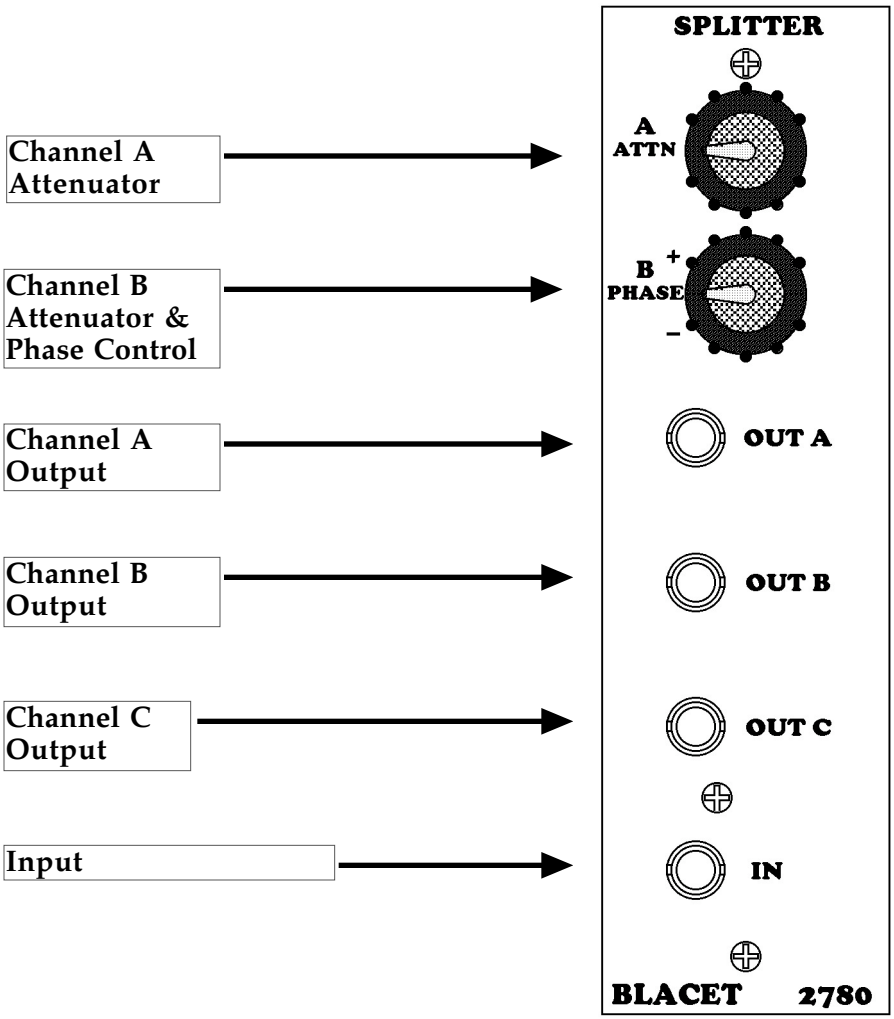
Introduction

The Blacet SB2780 Splitter and SB2790 Mixer are fully buffered precision modules designed for processing control voltages and audio signals.

The **Splitter** is a "One to Three" module, taking one input and splitting it into three outputs. Channel A features an attenuator. Channel B has a phase reversing attenuator, which will change the polarity of a CV or the phase of an audio signal. Channel C is "straight thru" with no controls.

The **Mixer** is a "Three to One" module, mixing up to three input signals and providing one output. Channel A features an attenuator. Channel B has a phase reversing attenuator, which will change the polarity of a CV or the phase of an audio signal. Channel C is "straight thru" with no controls, although a trimmer on the PCB allows setting the level from 50% to 100%. The factory setting is midpoint (75%.).



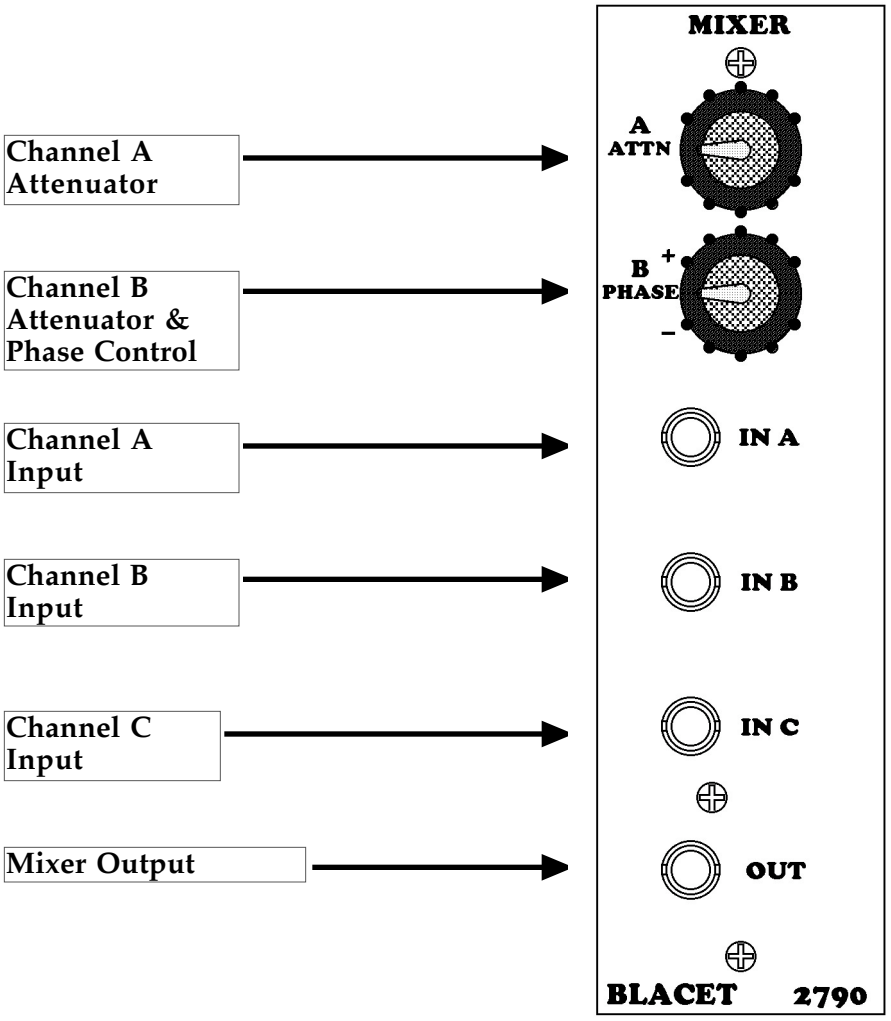
Operation Tips

A Splitter is similar to a "Multi" but with more control options.

For example, if you have only one EG1 (ADSR), you can split the EG output to drive both a filter and a VCA. Use the "C" out to control the VCA.

Use the "B"out for the filter frequency as this allows you to fine tune the sound as well as reversing the sweep with the "B" pot phase control.

You can also use the "A" out to control the VCO octave, filter Q, etc.



Operation Tips

Use this mixer to spot mix CVs and audio in your patches.

It may be helpful to assign the softest sound or smallest CV to the "C" input as the other larger inputs can be attenuated by the pots.

Note that the "C" level can also be adjusted from 50 to 100% by the on board trimmer if "full on" is not the best setting for your typical use.

One typical application is to mix several CV sources and apply them to a VCO or filter frequency input.

For example, a mixture of noise and LFO triangle sent to the VCO octave input can be adjusted for an octave jump with some uncertainty.

Power Input Connector JPWR: This PCB connector requires a source of regulated +15Vdc and -15Vdc power to run the module. Use a Blacet PS500 supply or the equivalent.

Connections to this connector should be made only when the power supply is OFF and the connector must be positioned correctly on the pins. As using the wrong supply can cause damage to the unit, please contact us if you have any questions! Do not attempt to use "wall warts" to power the module.

Calibration: Both PCBs have a "Null" trimmer for the "B" Channel (RT1). Adjust this with the B channel front panel control at center detent position for minimum output, using an audio signal input ("IN" Splitter or "IN B Mixer).

The Mixer also has a "C Level" trimmer (RT2) which can be adjusted from 50% to 100%. The center position is 75%.

Specifications

Front Panel Size: 5.25″ H x 1.5" W
Module Depth (Splitter): 2.3″
Module Depth (Mixer): 2.7″
Input/Output Jacks: 3.5 mm (1/8″)
Input/Output Range: +/-13.5V
Power (Splitter): +/-15 Vdc @+9/-9mA
Power (Mixer): +/-15 Vdc @+13/-13mA