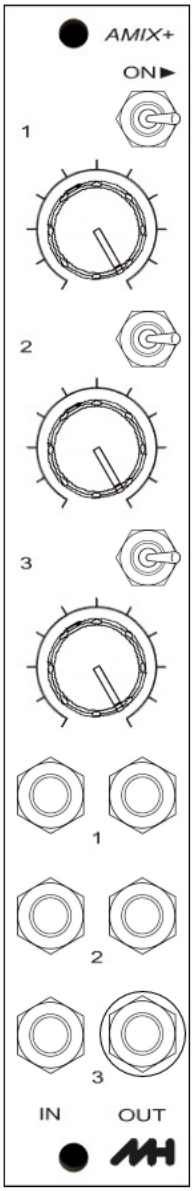
EURORACK




AMIX+ 2.1

User Manual

**AMIX+ 3-channel audio & CV mixer**

Thank you for purchasing this MH Eurorack AMIX+ module.

As with any Eurorack module please power off your rack before connecting.

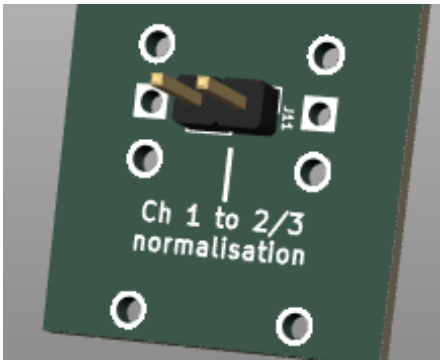
**Basic Structure**

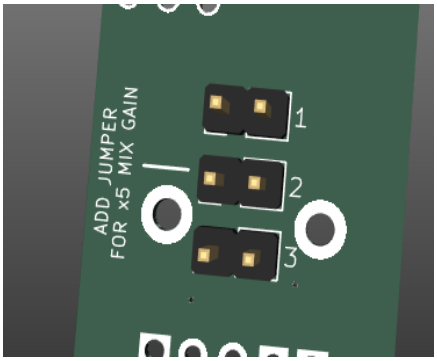
Each AMIX+ channel comprises a level control and a mute switch. The channels can be combined as a 3 channel mixer or they can be used as separate attenuators. Plugging a jack into the output of channel 1 or 2 will remove that channel from the mix and it then becomes a passive attenuator. Channel 3 can be used separately when channel 1 & 2 are removed from the mix but the channel 3 output (highlighted jack) is the mix output so if used separately it is effectively an active 'buffered' attenuator.

Moving the channel switch to the left on any channel mutes the channel whether it is being used as a separate attenuator or as part of the mix.

**Jumpers**

There are a couple of jumper options on the back of the module:




The normalisation jumper connects anything plugged in to Channel 1 to Channels 2 & 3 if there is nothing plugged in to their inputs. Insert the jumper for this option.

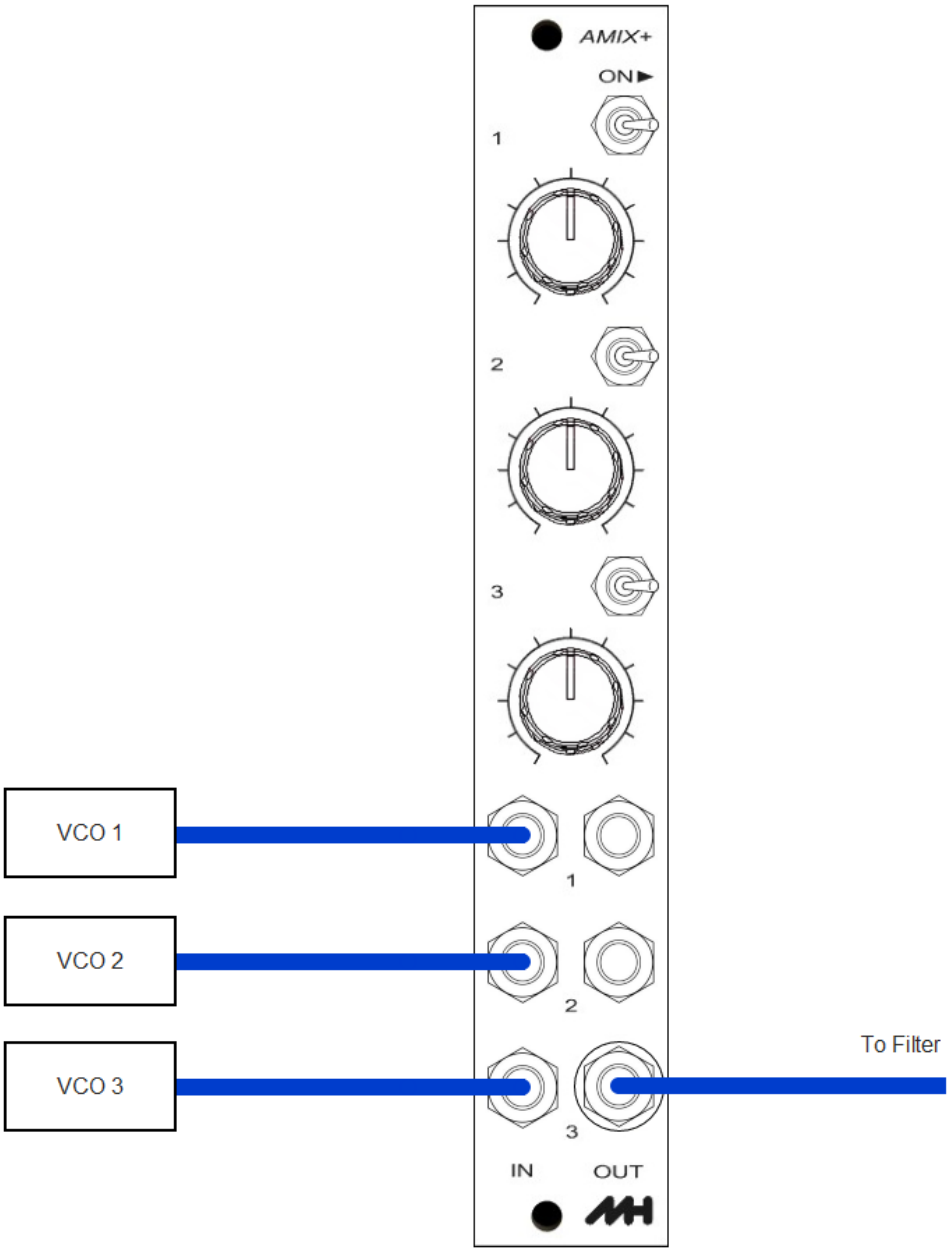
When jumpers are inserted for the channel gain options this boosts the mix signal for the relevant channel. Note that this gain boost is only present when the channel is connected to the mix signal. Gain Boost is not available for channel 1 or 2 when being used as a separate attenuator,

however, as channel 3 uses the mix output, gain boost works at any time for this channel. The gain boost is x5 which is enough to bring most line level signals up to the level expected by Eurorack modules.

**Patch Examples**

The following pages show a few examples of how the AMIX+ can be used. It's not an exhaustive list as there will be many other applications for this module!

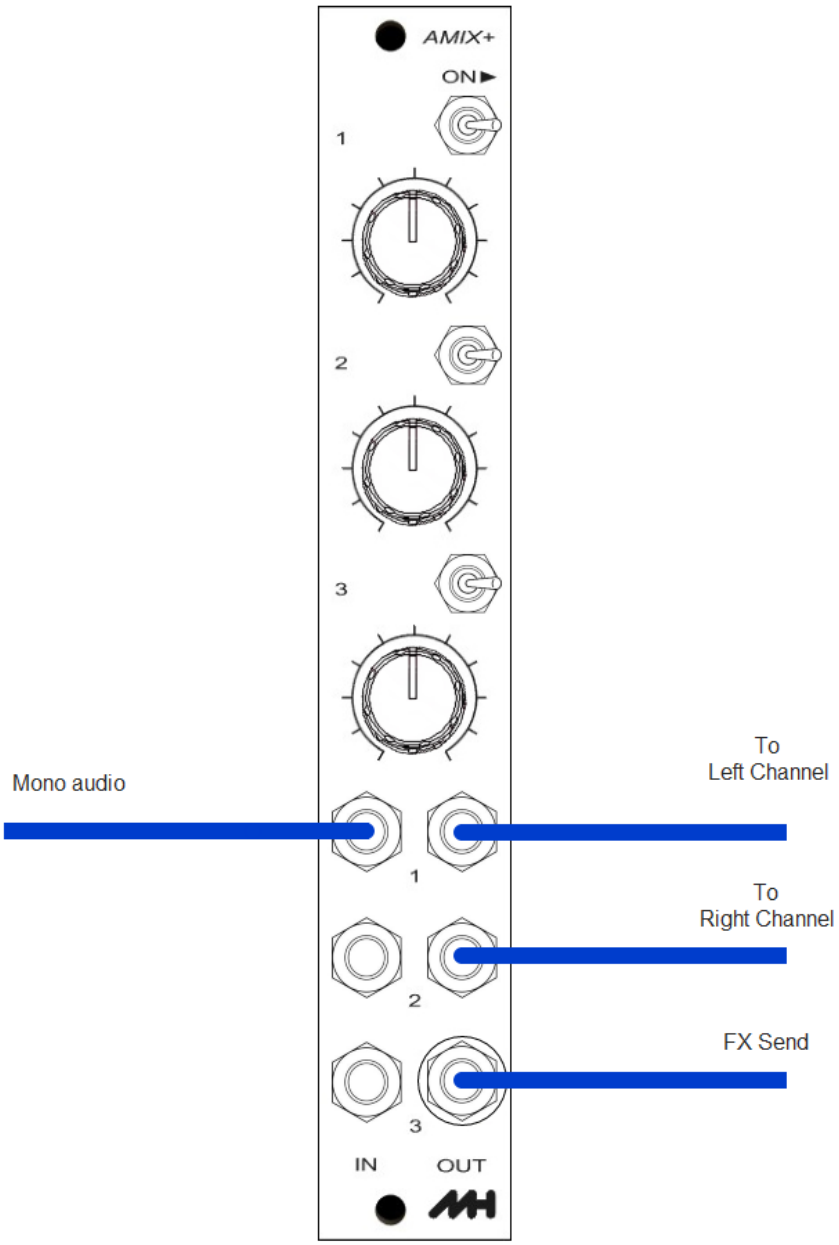
1. **VCO Mixer**




A straightforward VCO mixer with mute switches for each channel (very useful for tuning).

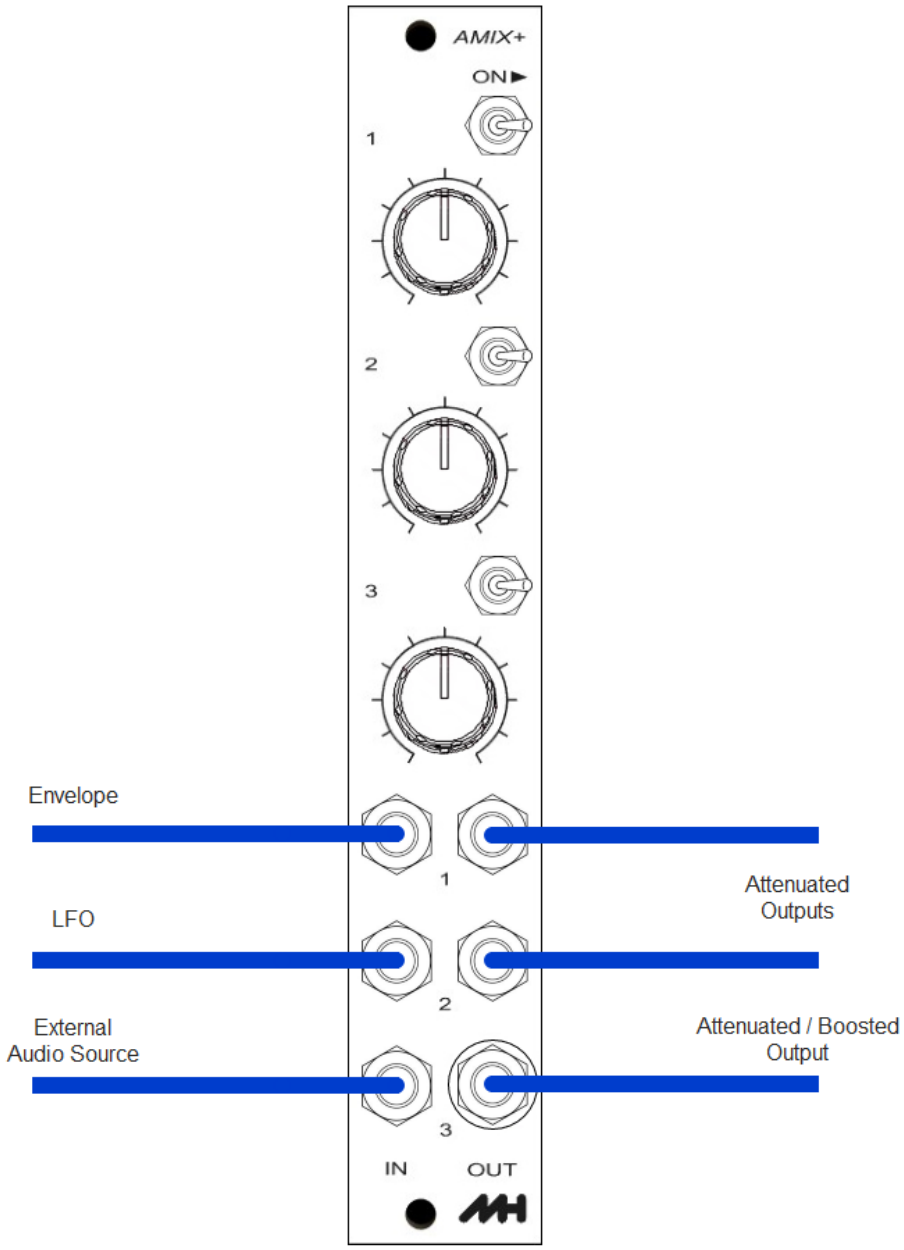
## 2. CV / Audio distribution

*Requires the normalisation jumper to be inserted*




The above diagram shows an example of how a single audio source can be distributed, but this set up can be used for CV signals. For instance, sending an LFO signal to three different destinations at different levels.

### 3. Separate attenuation / Boost channels

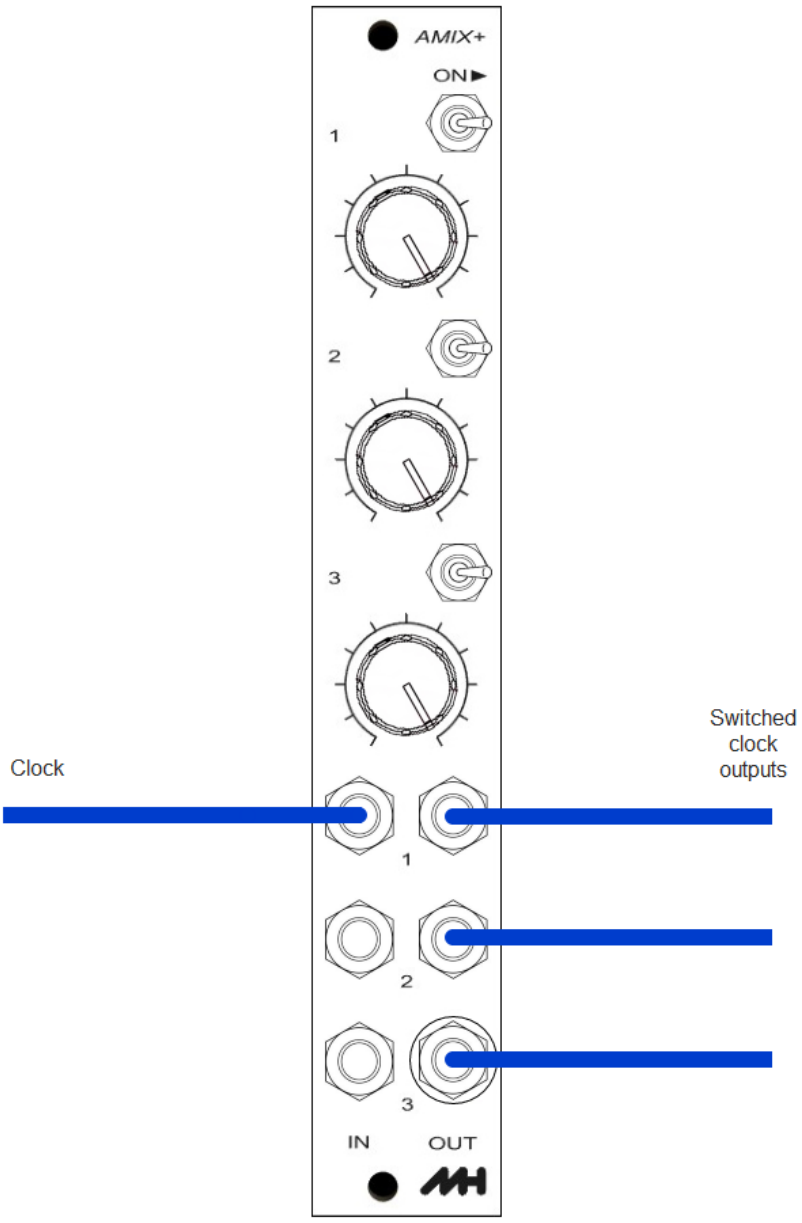



Here we show the AMIX+ being used for three separate signal paths. Note that channel 3 still has a boost option in this mode, so, for example, an external audio signal can be boosted if the channel 3 ‘x 5 Mix Gain’ jumper is in place.

4. **Switched clock distributer**

   *Requires the normalisation jumper to be inserted*

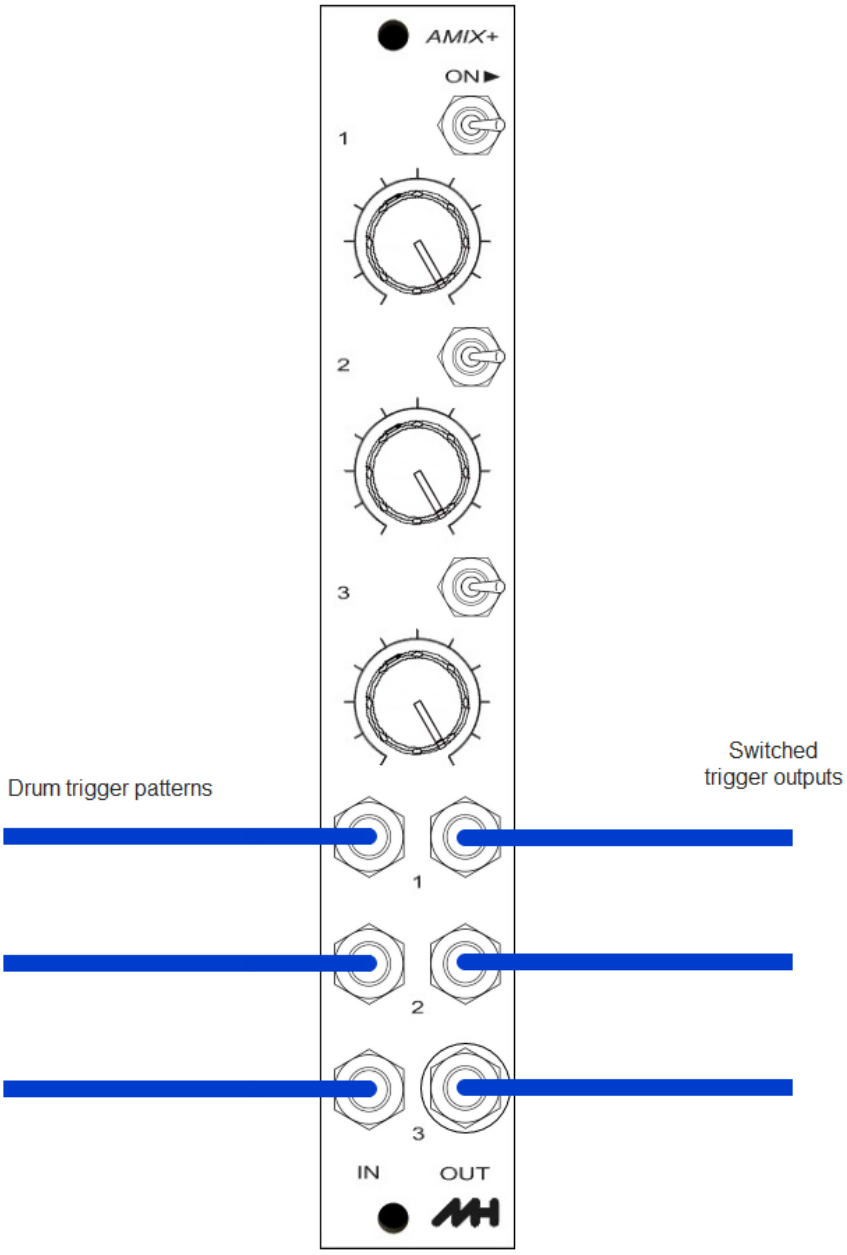
   *Level controls should be turned fully clockwise*




Clock signal can be distributed to different parts of your patch (eg: sequencers, drum pattern generators) and switch on and off as required.

## 5. Trigger pattern switching

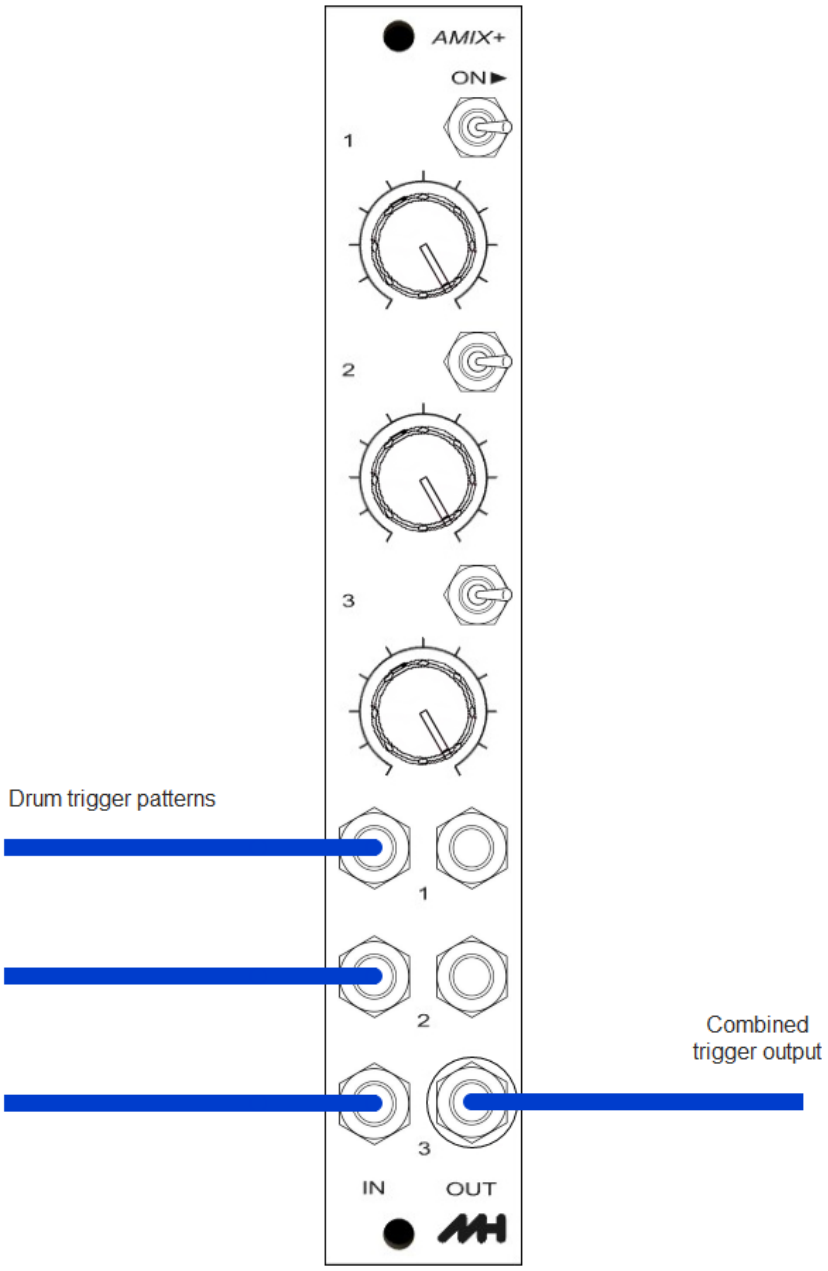
*Level controls should be turned fully clockwise*




Three different trigger patterns can be switched on or muted as required.

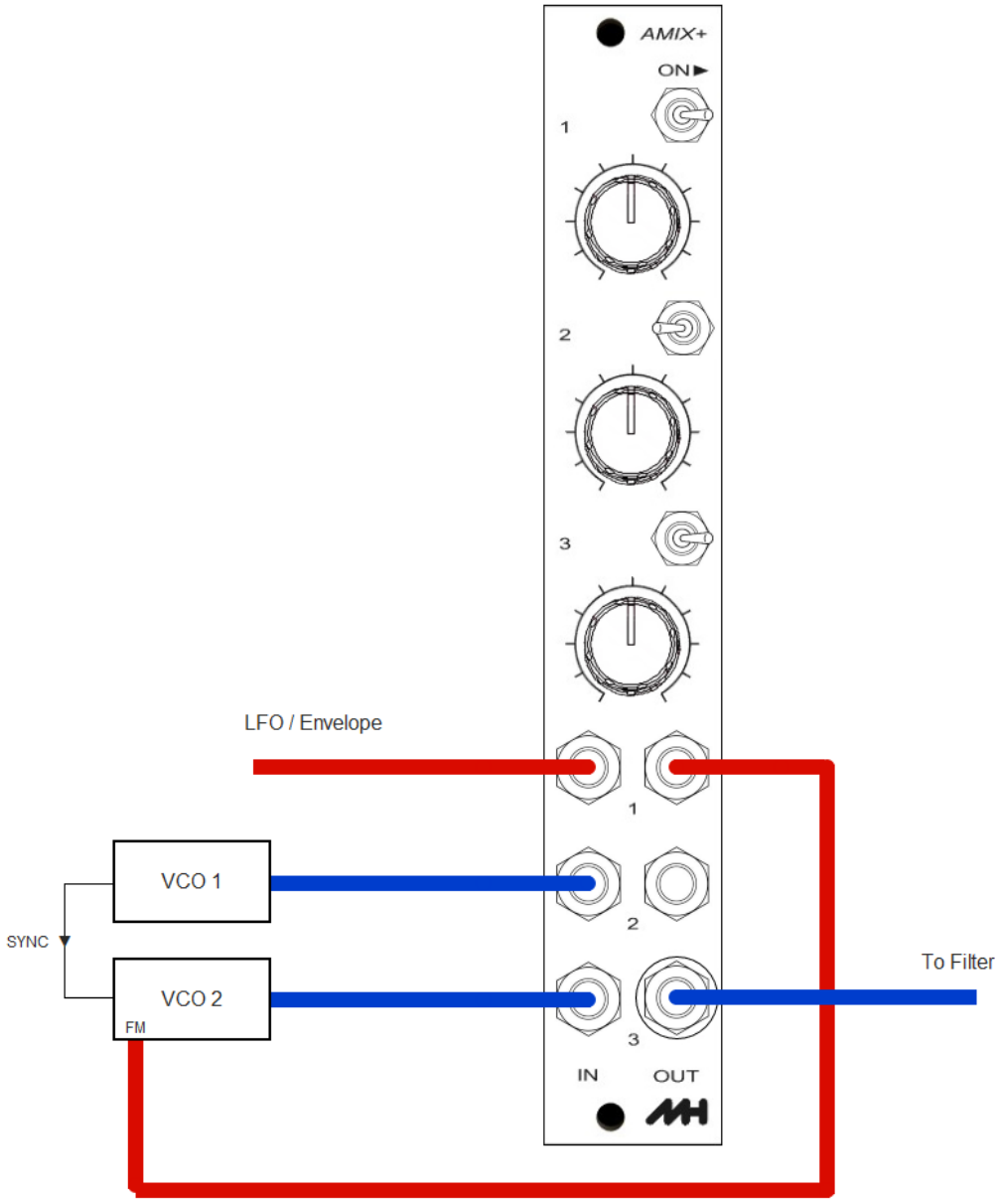
## 6. Trigger pattern combining

*Level controls should be turned fully clockwise*




Three different trigger sources can be combined to create polyrythmic patterns.

## 7. Mixed use example



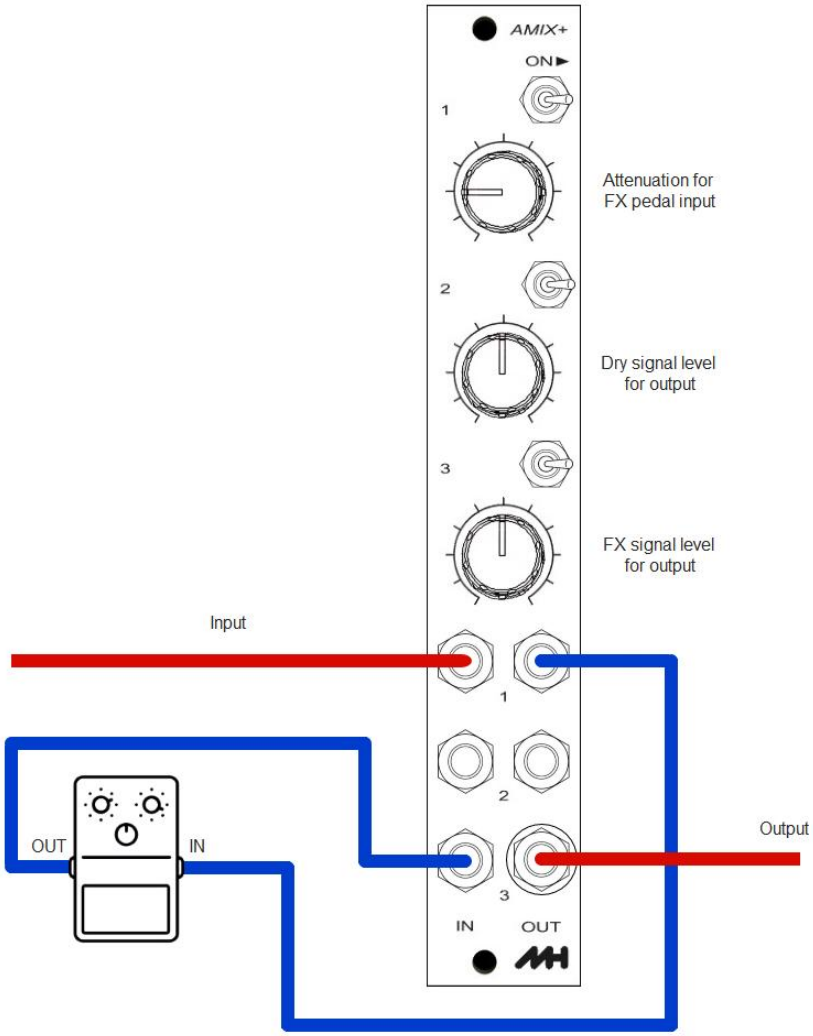

Here is just one example of combining two different functions with the AMIX+. Channels 2 & 3 act as a VCO mixer and channel 1 is an attenuator for VCO 2 FM.

The channel switches can be quite useful when switching oscillator sync on and off. (When Osc sync is off, switch off FM modulation and switch VCO 1 back into the mix)

## 8. FX Pedal Send / Return

*Requires the normalisation jumper to be inserted*

*Requires the channel 3 x5 gain jumper to be inserted*

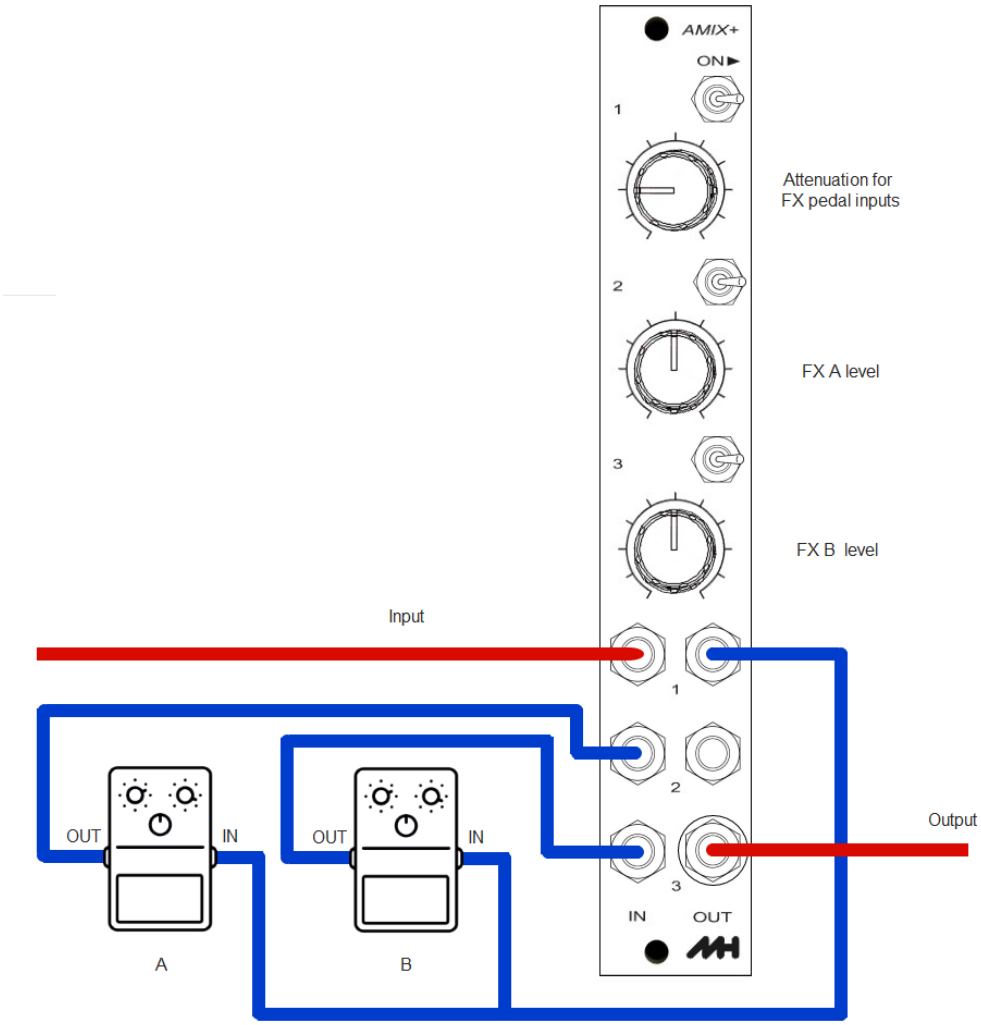



AMIX+ can act as a send / return interface for an FX pedal or other external audio processor. Note that any such external device must have a line level output.

In this example, channel 1 attenuates the signal going to the pedal (knob at 9 o'clock is usually about right). Channel 3, with the gain boost, is the  FX return level and, with the normalisation, Channel 2 controls the level of dry signal going to the mix (channel 3) output.

## 9. Dual FX Pedal Send / Return

*Requires channels 2 & 3 x5 gain jumpers to be inserted*



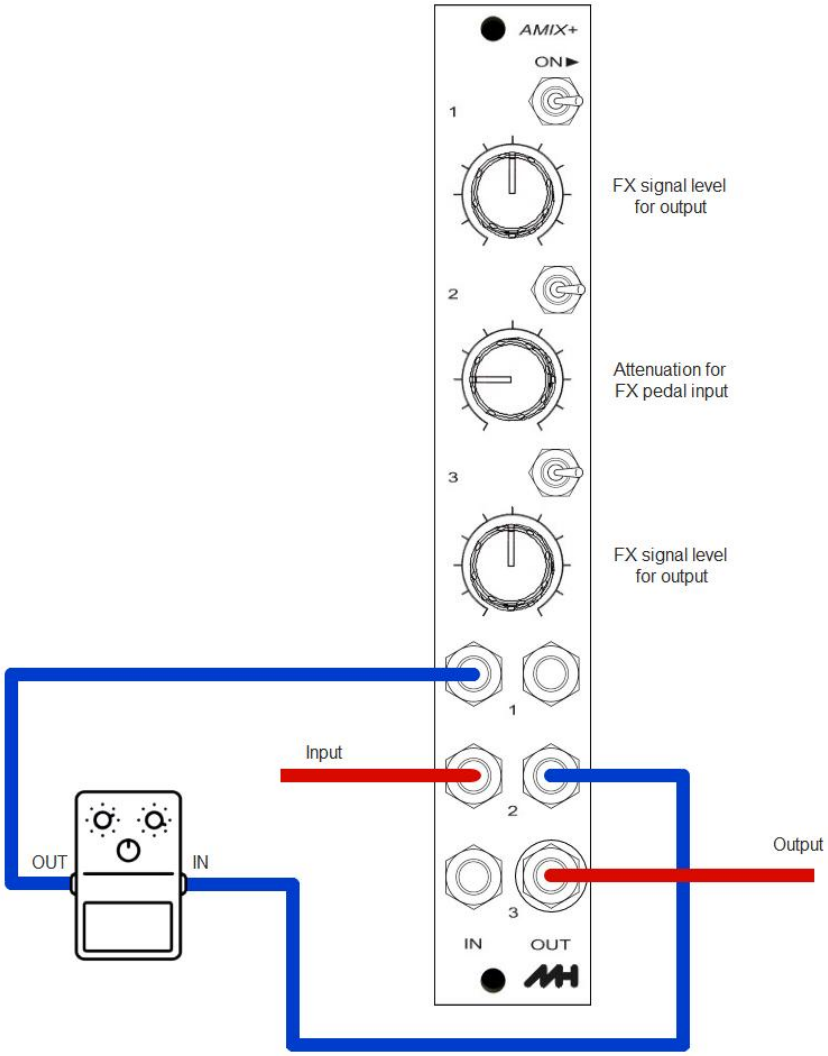

Here again we have channel 1 attenuating the signal going to the pedals. The signal is then split to go to both pedal inputs.

The FX pedal return outputs are boosted and mixed together by channels 2 & 3

## 10. FX Pedal Send / Return with additional gain

*Requires the normalisation jumper to be inserted*

*Requires channels 1 & 3 x5 gain jumpers to be inserted*




The AMIX+ gain boost works best when used in conjunction with line level signals. However, if you need to boost a lower level signal you can use more channels

Here we use channel 2 to attenuate the signal going to the pedal. The pedal output return is fed to channel 1. With the normalisation, the return signal is also available to channel 3. Turning both channels 1 and 3 up gives additional boost gain.

**Support**

Any problems? Feedback? Please use the contact form on the MH Eurorack website

QR Code for website:

Instagram: @mheurorack