MH

EURORACK

SMIX

1

A
B

5

2

A
B

6

3

A
B

7

4

A
B

8

IN 1   IN 2   IN 3   IN 4   OUT A

IN 5   IN 6   IN 7   IN 8   OUT B

MH

SMIX 1.0

User Manual

SMIX flexible routing 8 channel audio mixer

Thank you for purchasing this MH Eurorack SMIX module.

As with any Eurorack module please power off you rack before connecting it to a power cable. Also, to prevent damage to the front panel, always make sure it is secured in your rack using 4x M3 screws.

Basic Structure

The basis of the SMIX is straightforward: 8 channels each with a level control and a three-way switch. The switch allows routing to either the A or B outputs and, in the centre position, mutes the channel. A very simple structure but one which can be utilised in many different ways: mono/stereo mixing, FX routing, subgroups - see the patch examples on the following pages.

The only other routing in SMIX is normalisation of channels in pairs. So, for example, if nothing is plugged into channel 5, then whatever is plugged into channel 1 is fed to channel 5. This normalisation continues (left to right) down the rest of the channels – 2 to 6, 3 to 7, and 4 to 8.
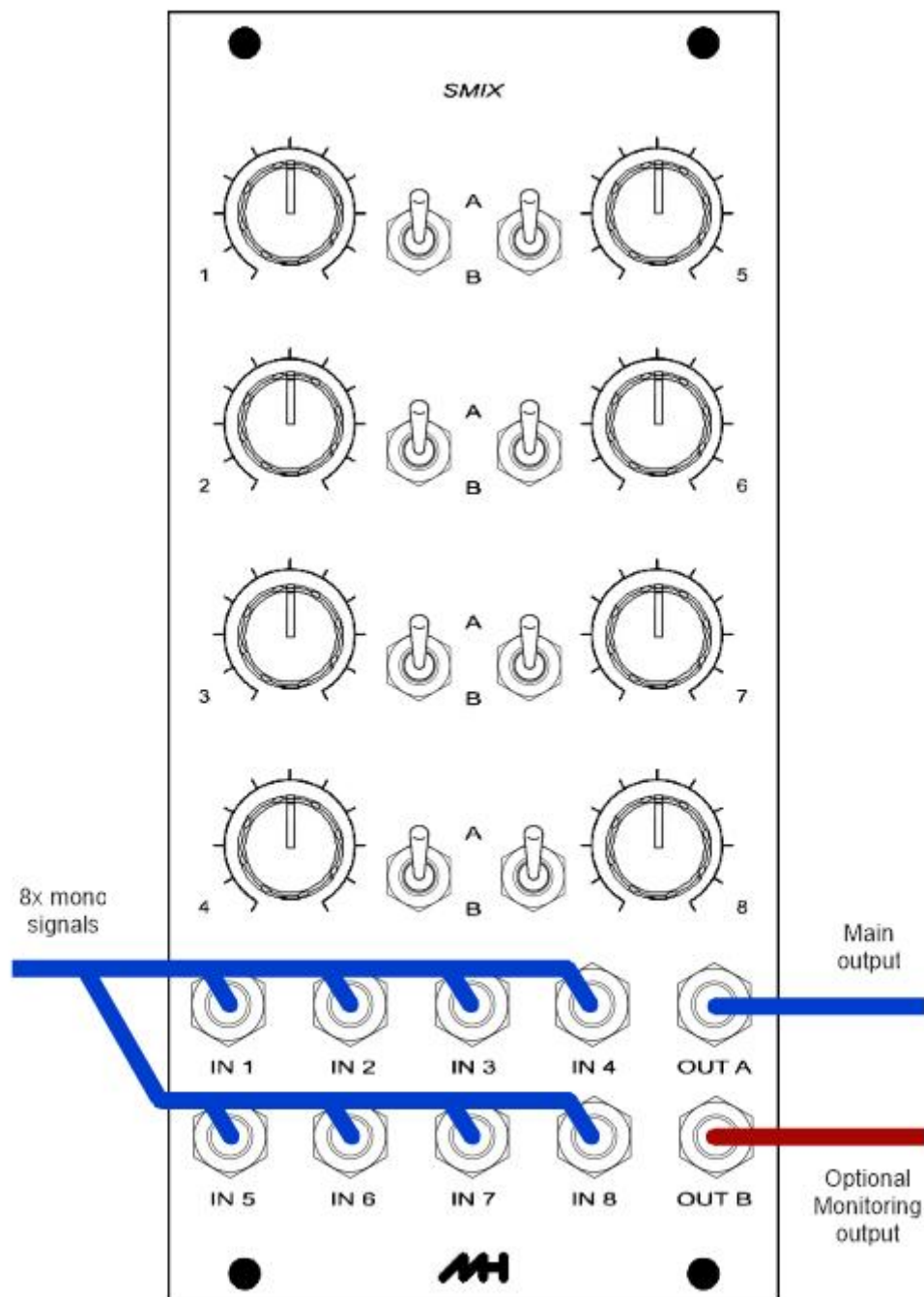
There are a few uses for this normalisation. For example, when using SMIX as a stereo mixer (see example 4 below) a mono signal can be connected to left and right input channels without using a multiple. Similarly, when SMIX is configured as a 4-channel mono mixer with FX sends (see example 5) a signal need only be connected to one input channel.

The normalisation also allows signal boosting. So, if both channel 1 and 5 are switched to the same output channel and nothing is plugged into channel 5 then the signal is presented to the mix via 2 channels, so effectively twice the gain is available. If this boosting function is not required switching channel 5 to the centre 'mute' position will disable it.
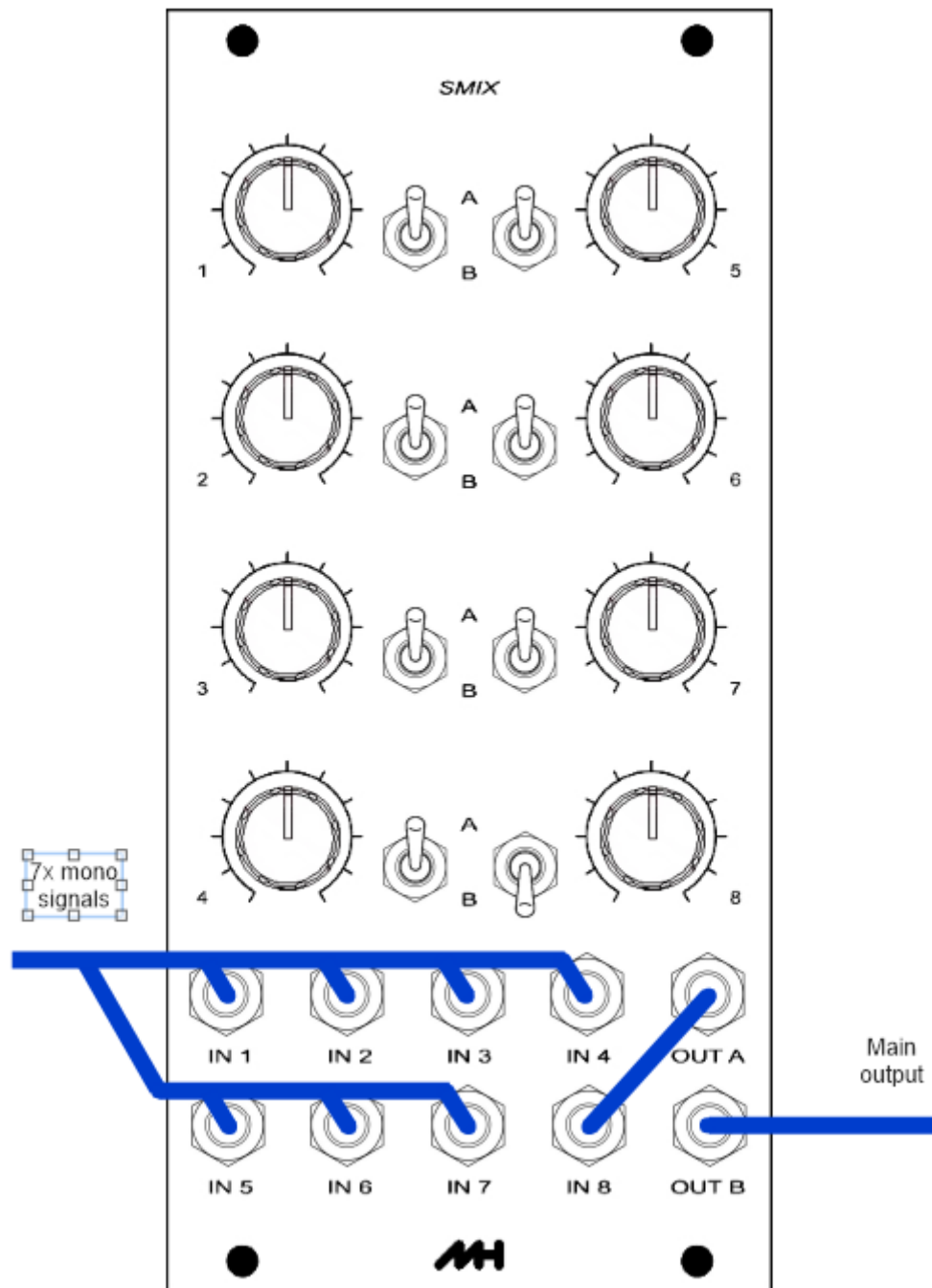
Patch Examples

The following are a few examples of how the SMIX can be used. Its not an exhaustive list as there will be many other applications for this module!
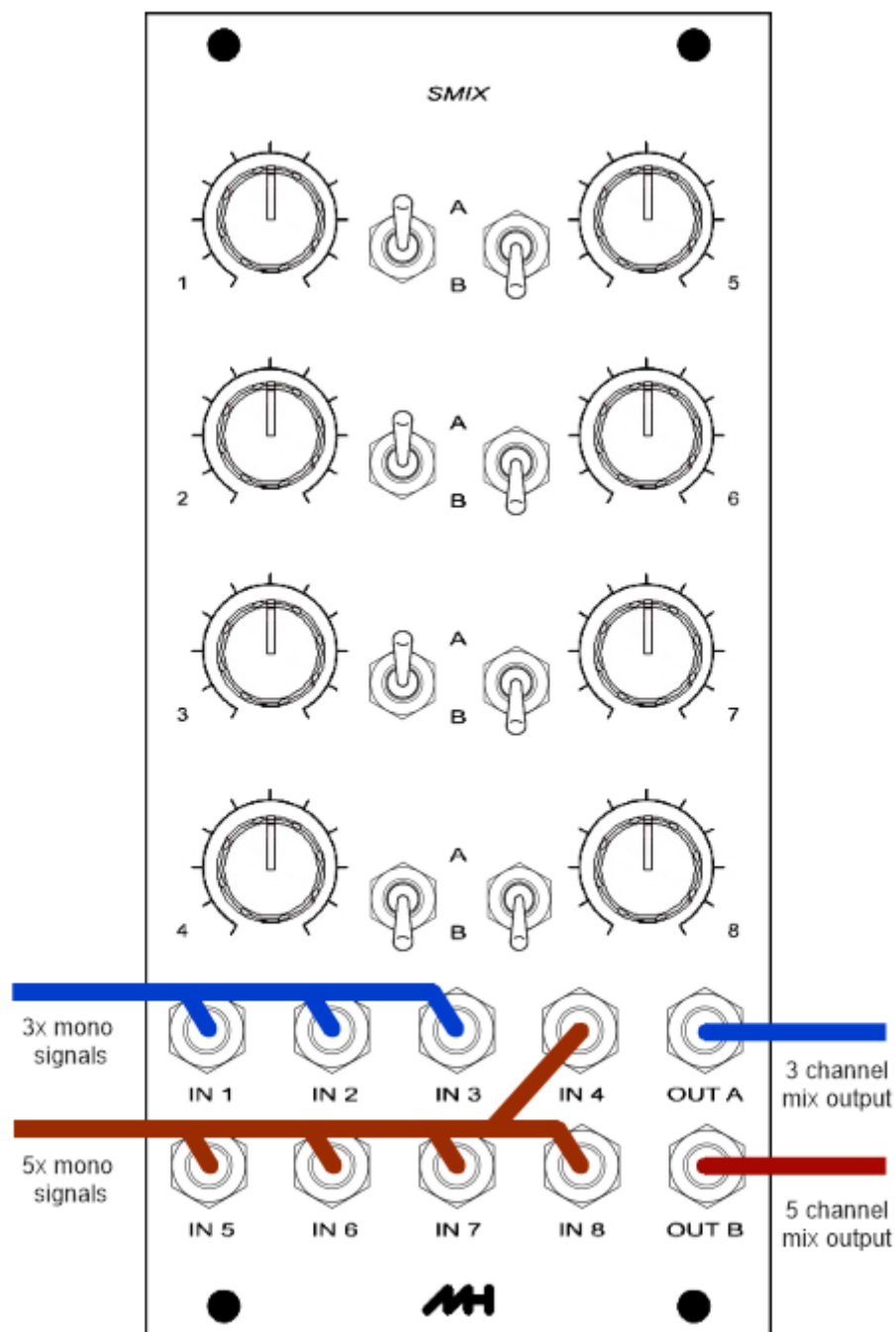
1. 8 channel mixer / Performance mixer

Here we are mixing up to 8 mono channels. All the selector switches are set to 'A' so the full mix is available at OUT A. If any channel is switched to 'B' that channel will appear at OUT B, so this can be used as a 'preview' facility. Typically, OUT B might feed a headphone amplifier so that sounds can be checked / adjusted before being added back to the mix by switching the relevant channel to 'A'.
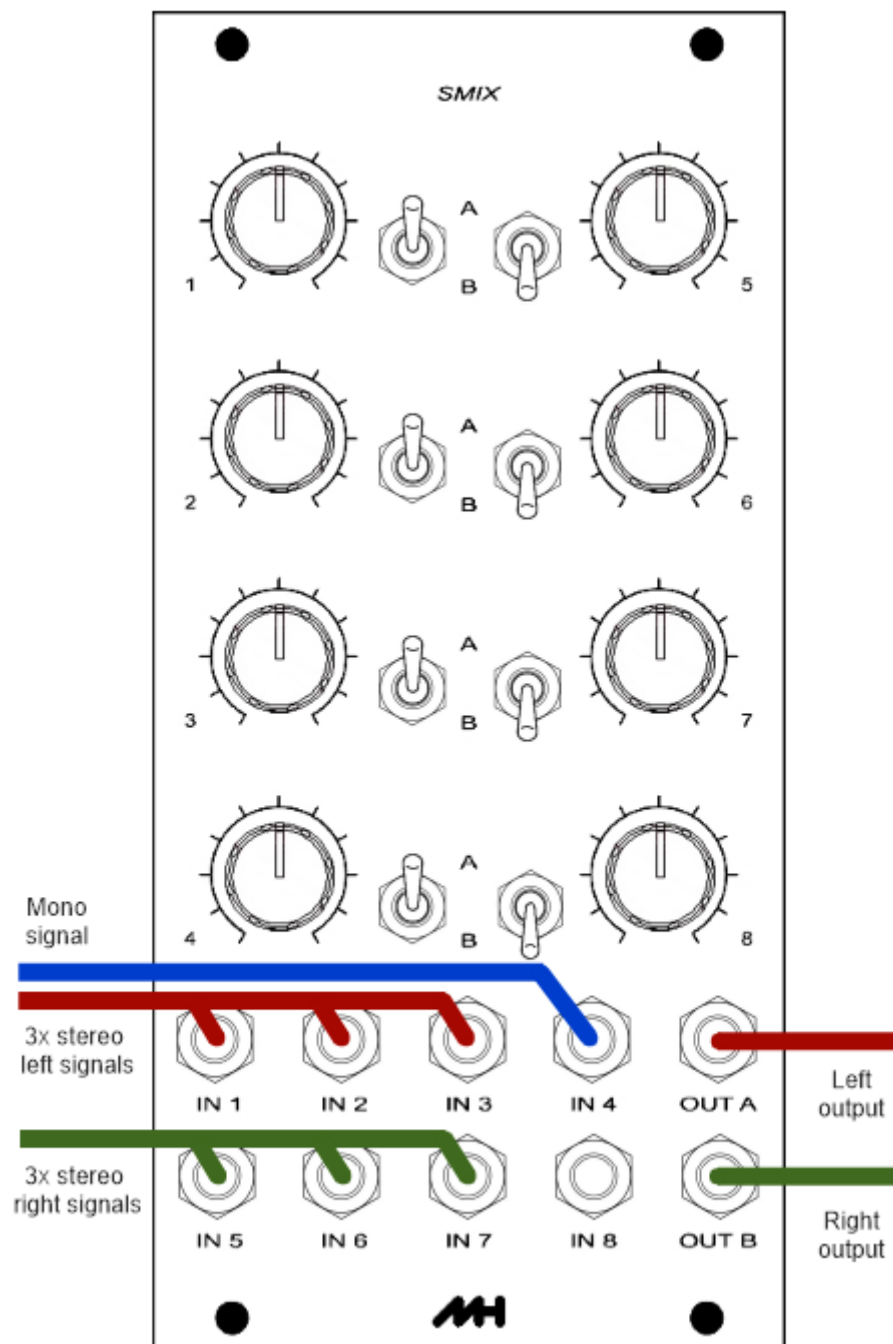
2. 7 channel mixer with master volume

With one less channel we can have a master level control. All the selector switches are set to 'A' with the exception of channel 8 which is set to 'B'. OUT A is patched to IN 8 and the mix is available and OUT B with the level control for channel 8 acting as a master level control for the entire mix.

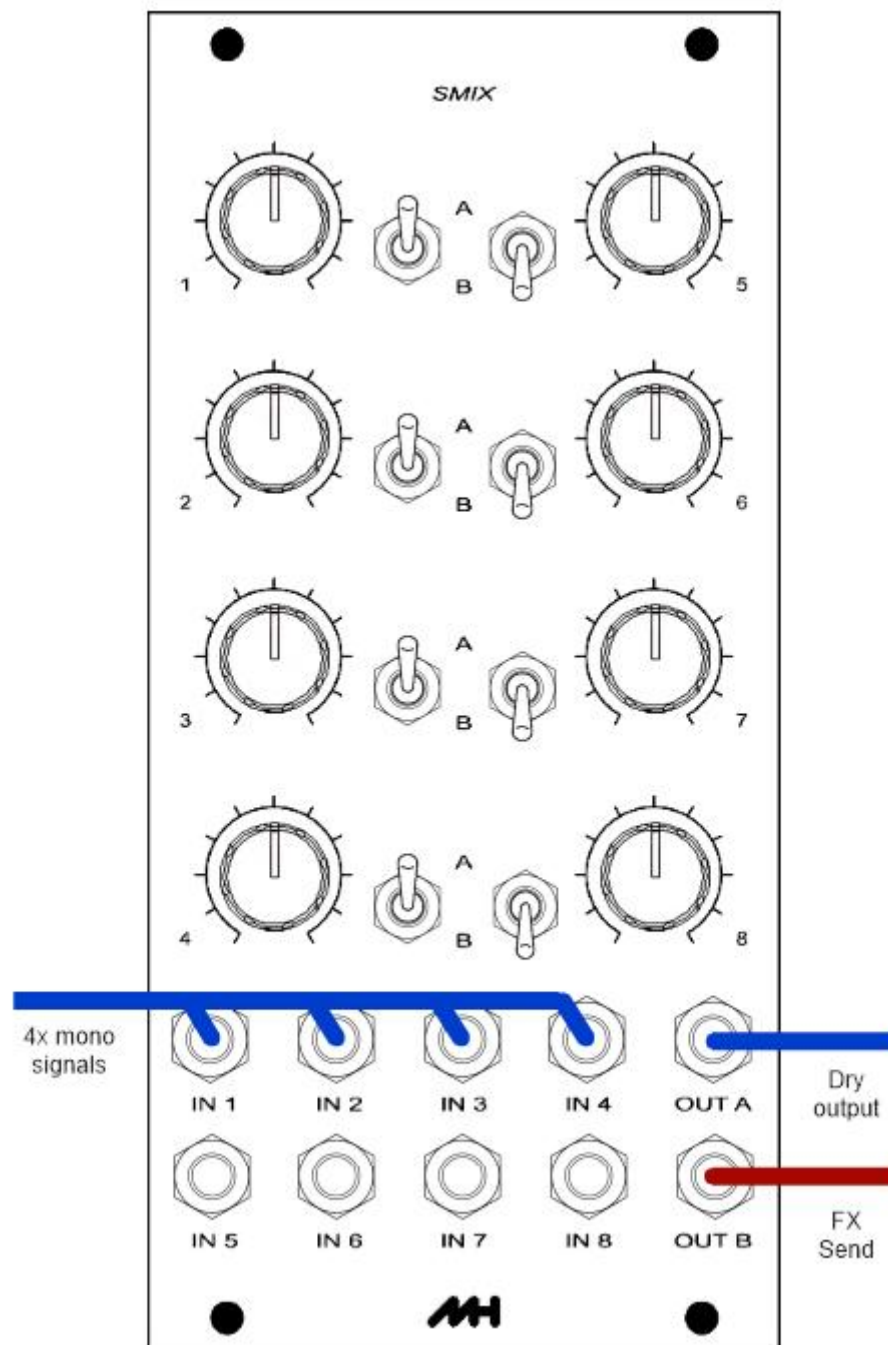### 3. 2x independent mono mixers

SMIX can be configured as two separate mono mixers. The above diagram shows a 5-3 channel split, but 6-2 and 4-4 splits are also possible. For this example, channels 1 to 3 are switch to 'A' with their mix available at OUT A. Channels 4-8 are switch to 'B' with their mix available at OUT B.
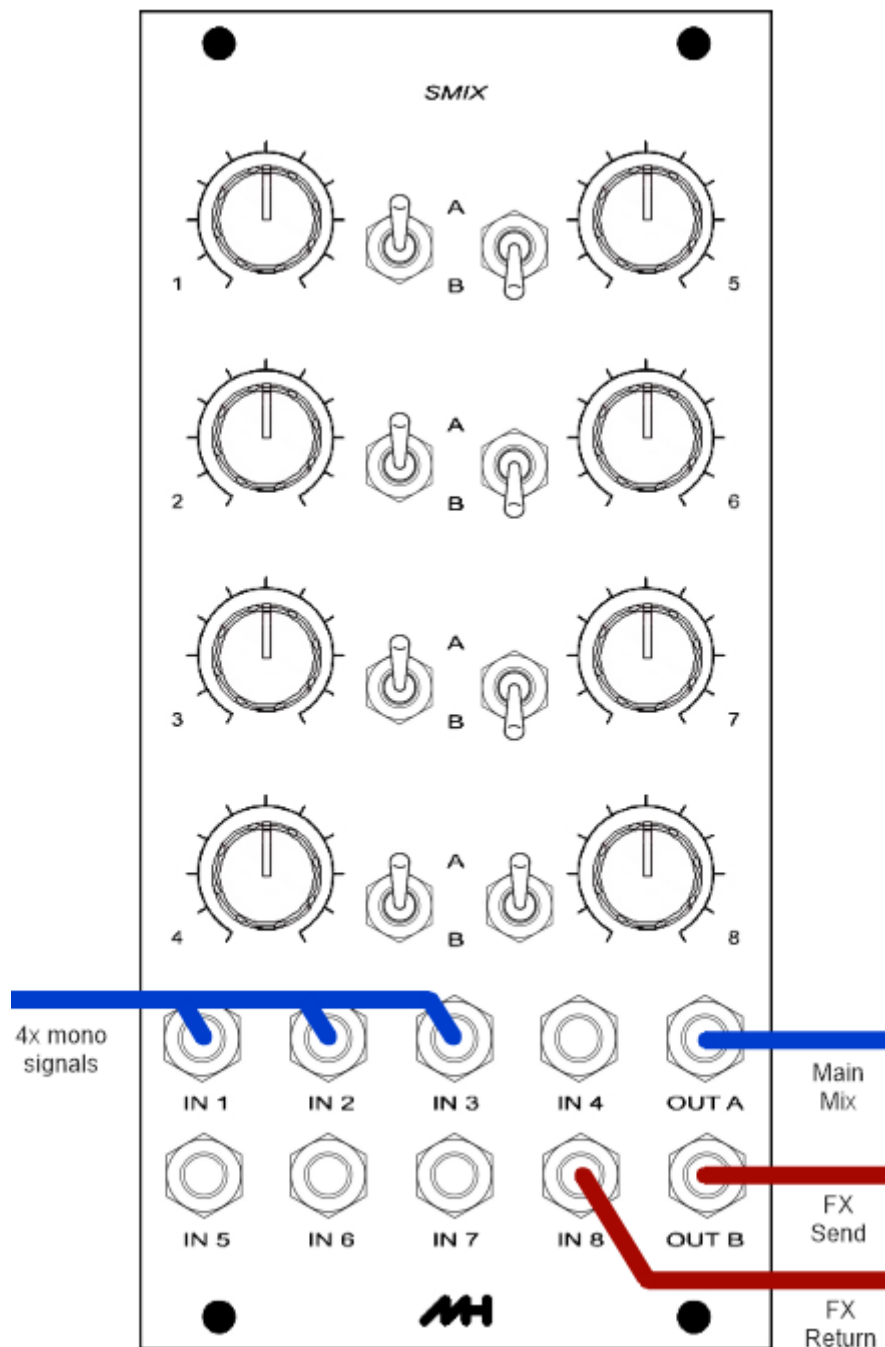
4. 4 channel Stereo mixer

For stereo mixing select 'A' on channels 1 to 4 and 'B' on channels 5 to 8. Left or mono signals can be routed to channels 1 to 4, with right signals going to on channels 5 to 8. With the SMIX input normalisation, mono channels will appear on both left and right outputs.

5. 4 channel Mono mixer with FX send

Here we utilise the channel normalisation to copy the signals plugged into channels 1 to 4 over to channels 5 to 8. Channels 1 to 4 are switch to 'A' and the dry mix is available at OUT A. Channels 5 to 8 are switch to 'B' feeding the FX send mix at OUT B.
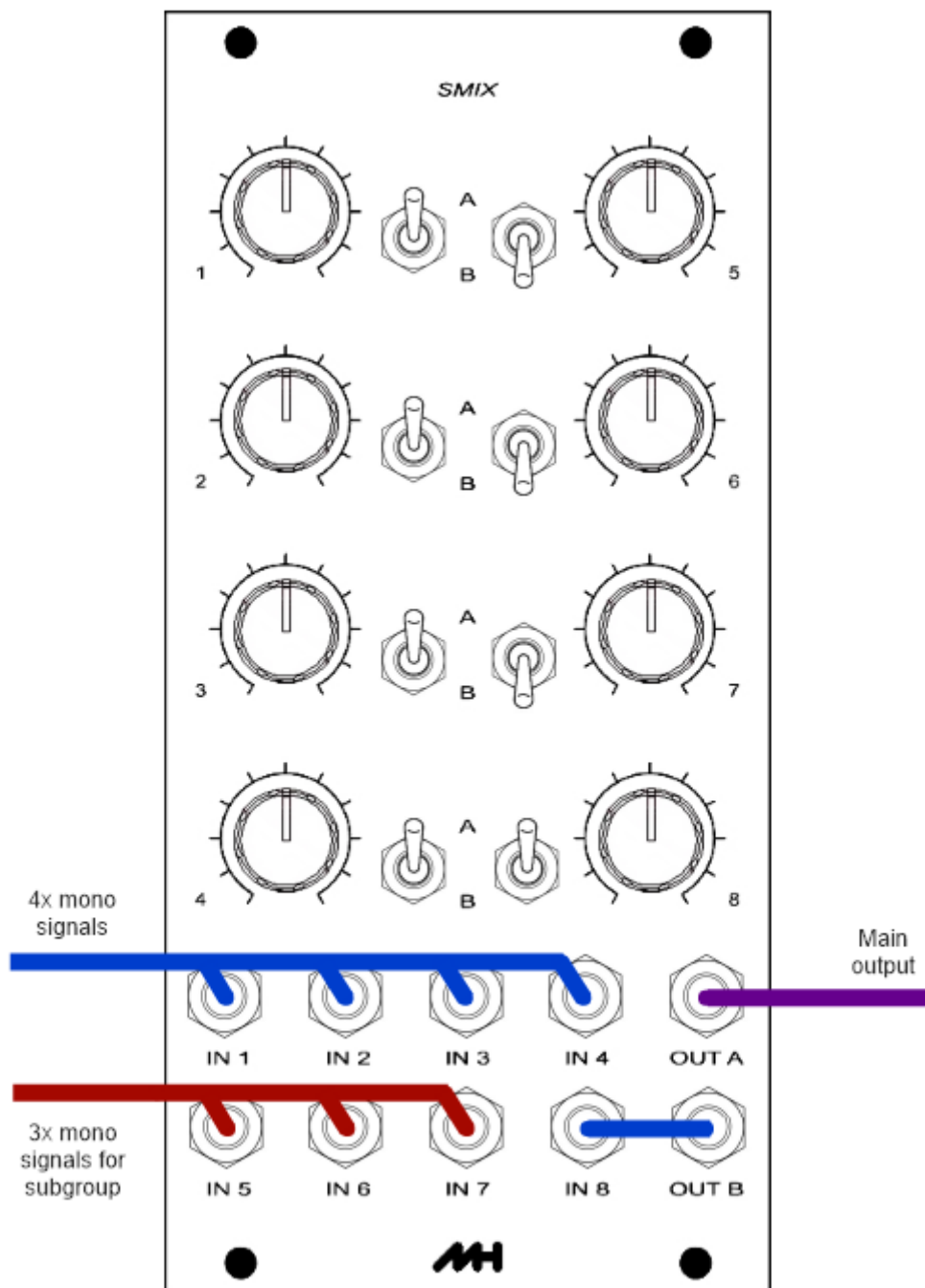
6. 3/4 channel Mono mixer with FX send and return

This is a variation of the previous example which brings back the FX return into channel 8. The channel 8 switch is now set to 'A' and the level control for this channel is now the FX return level. Channel 4 no longer has an associated FX send but can still be used as either a 100% dry input (switch to 'A') or 100% wet input (switched to 'B').

7. Subgroups

Sometimes it's useful to control the level of a number of channels simultaneously. For example: the level of all the drums/percussion in a mix. In this example we have the inputs 5 to 7 grouped together. They are all switched to 'B' and OUT B is patched to IN 8 which allows the level of all 3 channels in the sub group to be altered by the channel 8 level control.

Support

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

QR Code for website: