

DÉJÀ VU

Voltage Utility Module



BASTL INSTRUMENTS

DÉJÀ VU

Déjà vu adds fader control to your modular system and it stands out as a simple yet powerful utility module that can do voltage processing, mixing, attenuation, attenuversion, signal boosting, crossfading and mixing. All that in 4HP and with the possibility to chain several of them to mix even more signals.

It has two almost identical channels A and B. Each channel has the FADER input and the ADD input and an output with light indication. The FADER MODE switch alters the behaviour of the module, either attenuating or attenuverting the FADER input where the ADD input will be added to the processed FADER input. The last option is crossfading between the FADER Input and the ADD input which is great for creating performance oriented macro controls.

If the FADER input is not used the fader will act as a voltage source that can either stand on its own or it can offset the ADD input.

The FADER GAIN switch can boost signal processed by the fader and contains low noise pre-amp boosting up to 10x suitable for converting line level input to eurorack level.

If output of channel A is not plugged it will be mixed into channel B output turning it into a 4 channel mixer if all the inputs are used.

Déjà vu is suitable for both CV and Audio processing.

Déjà vu is especially useful for expanding the functionality of the Neo Trinity with more directly accessed controls.

Déjà vu setup scenarios

- Fader voltage source
- Attenuator
- Attenuverter
- Crossfader
- Stereo pre-amplifier (up to 10x)
- Stereo line level to eurorack level booster
- Distortion/Saturator with bias
- Panner
- Stereo mix / Stereo Widener / Mono Mix (up to 4 channels)
- External feedback mixer for effects
- Unipolar to bipolar voltage converter
- Bipolar to unipolar voltage converter
- Combining triggers
- Waveform Mixing for Oscillators
- Left Right Stereo to Mid Side conversion
- Mid side to left right conversion
- Crossfading Trigger Patterns
- Cascading Mixer (enabled via back jumpers and connector pins – mix up to 8 signals with 2 Déjà Vu modules)

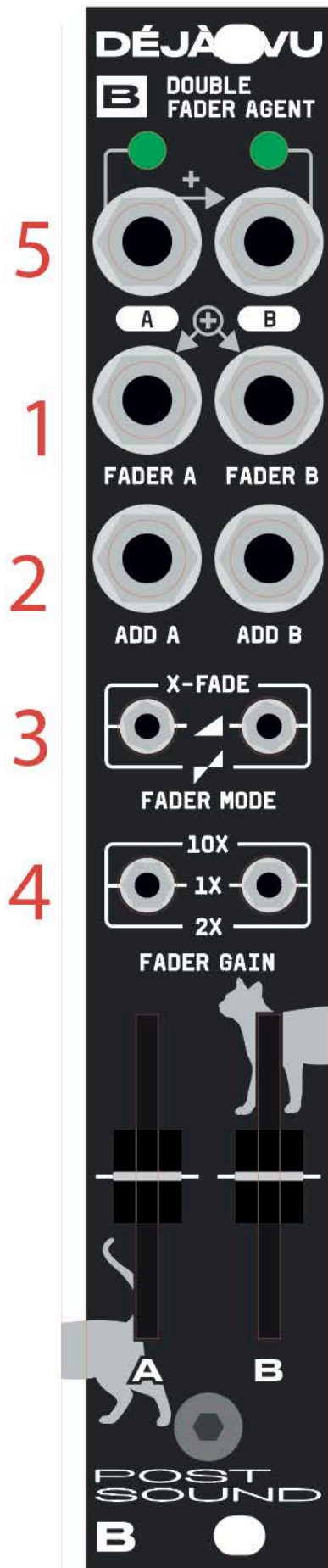
Features

- Two channels of fader control with voltage/audio processing
- FADER and ADD inputs per channel
- FADER input is normalized to voltage
- Fader Modes:
 - Attenuverter
 - Attenuator
 - Crossfader (between FADER and ADD)
- Fader gain: 1x, 2x or 10x (10x can be turned into 5X via back jumper)
- Fader per channel
- Green/Red light indication of channel polarity and voltage
- Cascading mixing of outputs (can be disabled via back jumper)
- Chainable via back jumpers

Technical details

- 4 HP
- PTC fuse and diode protected 10 pin power connector
- 30 mm deep (with power cable connected)
- current consumption: +12 V: <60 mA; -12 V: <60 mA

DÉJÀ VU MANUAL



Channels A and B are identical. The only difference is at the output mixing stage. The inputs, faders and switches will be referred to simply as FADER input instead of FADER A or FADER B input etc.

1 FADER input

The FADER input is the main signal input of the module. If you plug a signal into this input, it is then processed by the FADER based on the FADER MODE and applying the FADER GAIN.

If nothing is plugged into the FADER input, it is normalized to a voltage reference. This is useful for using the fader as a voltage source or for offsetting the ADD signal.

Use the GAIN switch to amplify the +1 V reference to +2 V or +10V (or +5V – see chapter: [Gain 10x or 5x](#)). In the attenuverter mode, you can double the range, going from –1 V to +1 V, –2 V to +2 V, or –10 V to +10 V.

2 ADD input

In Attenuverter and Attenuator modes, the ADD input is summed with the FADER input. The mixing of these signals happens right before the output, so the FADER GAIN and FADER MODE settings do not affect the ADD input (they affect only the FADER input).

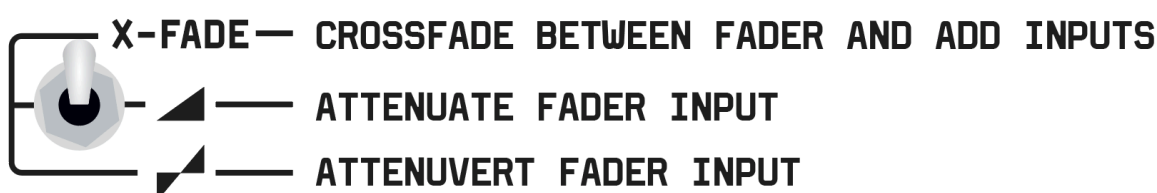
In X-FADE mode, the fader crossfades between the ADD and FADER inputs. The GAIN is applied after the fader, so it affects both inputs.

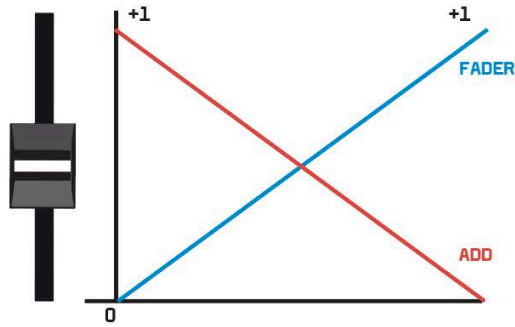
For more information, see the signal-flow block diagram and the FADER MODE description below.

3 FADER MODE

The input mode switch selects one of 3 channel behaviours

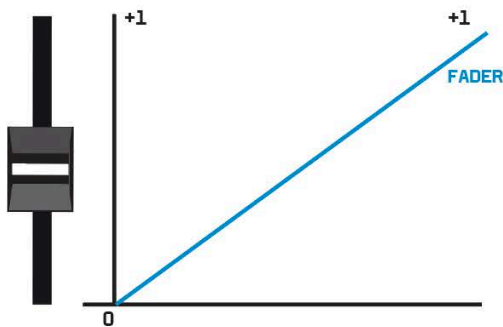
FADER MODE





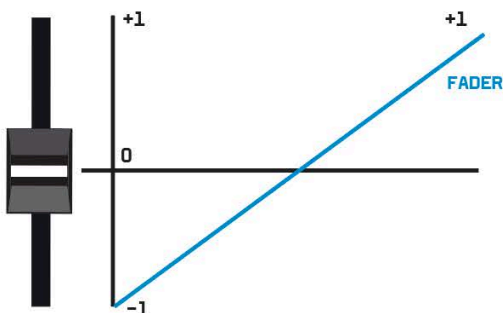
X-FADE mode (top switch position): fader crossfades between the FADER and ADD inputs

- at the top of the fader only the FADER input will be full amplitude and the ADD input will be silent.
- in the middle of the fader the both inputs will be mixed equally with half amplitude
- at the bottom of the fader the ADD input will be full amplitude and the FADER input will be silent



Attenuator mode (middle switch position): fader attenuates the FADER input

- at the top of the fader only the FADER input will be full amplitude
- in the middle of the fader the FADER input will be half amplitude
- at the bottom of the fader the the FADER input will be silent

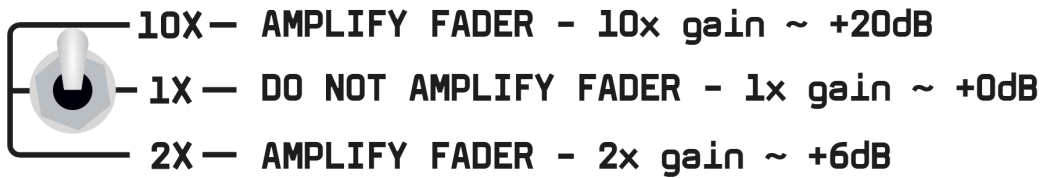


Attenuverter mode (bottom switch position): fader attenuates the FADER input

- at the top of the fader only the FADER input will be full amplitude
- in the middle of the fader the FADER input will be silent
- at the bottom of the fader the the FADER input will be full amplitude and inverted

4 FADER GAIN

FADER GAIN

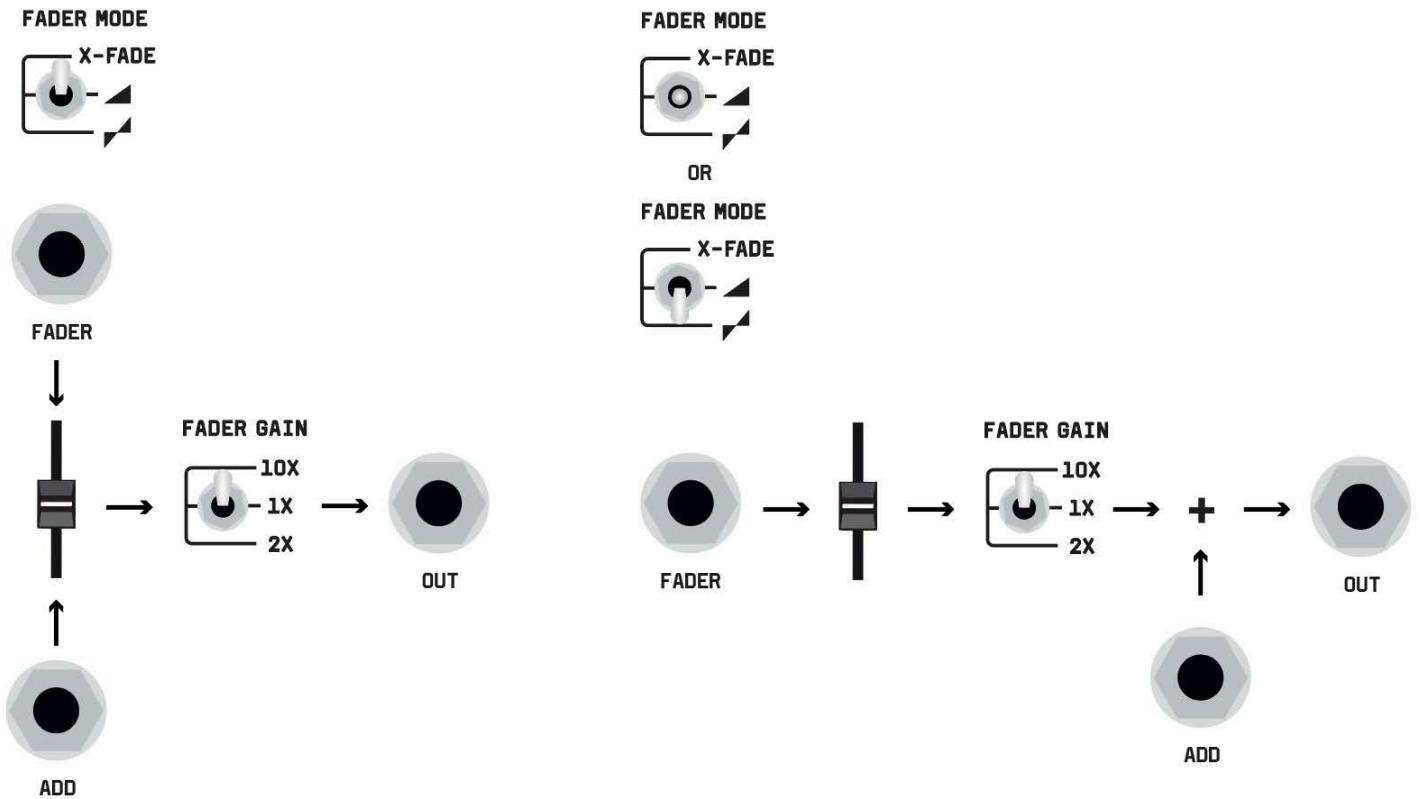


Note: 10x gain can be lowered to 5x via back jumper

The FADER GAIN is applied after the FADER and respecting the FADER MODE.

In X-FADE FADER MODE the FADER GAIN will affect both FADER and ADD inputs mixed with the fader.

In Attenuate and Attenuvert FADER MODE the FADER GAIN will only affect the FADER input processed with the fader. The ADD input will be added after the FADER GAIN.



Tip: The output stage has Zenner clipping, so boosting your signal will clip very nicely and we highly recommend you to try it.

5 Output

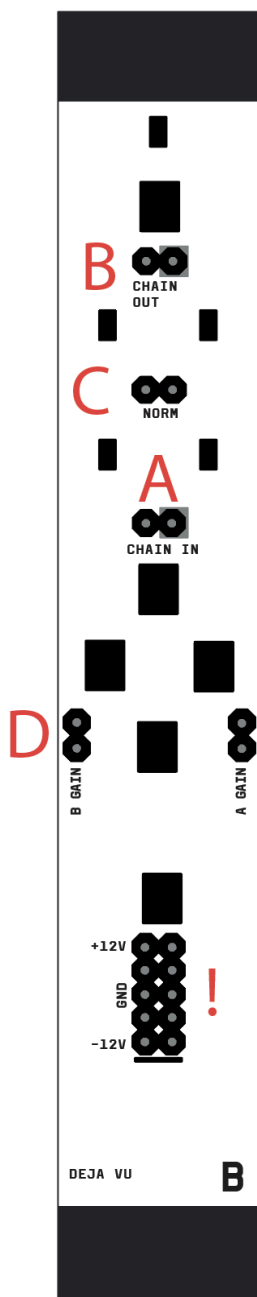
The channel output has a light indication:

- green color indicating positive voltage
- red color indicating negative voltage

When A output is not plugged in, the output of channel A will be mixed into the B output. (It can be disabled by a back jumper.)

Note: There are 10 V Zener diodes on the output. The signal will soft clip beautifully at approximately ± 10.6 V.

Back side jumpers



A Chain IN

Use this header to chain multiple Déjà vu modules or modules like AIKIDO or BUDDY. The CHAIN IN signal will be mixed into OUTPUT A.

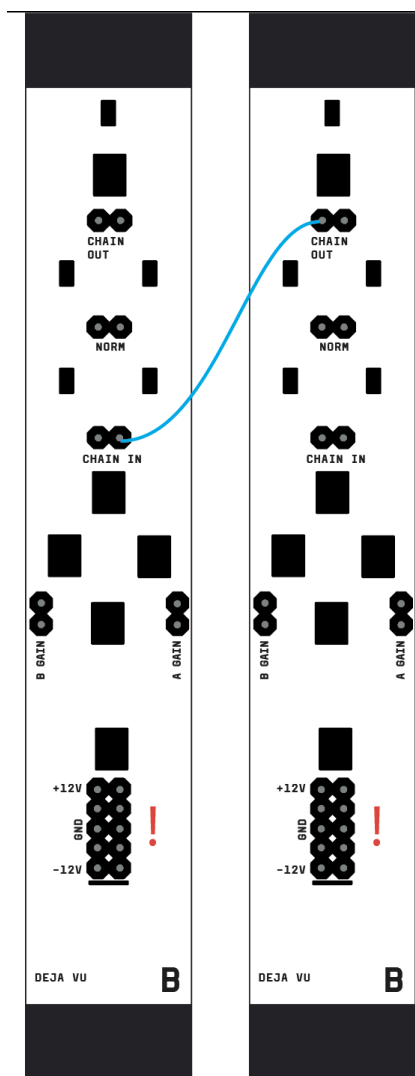
Both left and right pins are the signal pins so you can use either one of them.

B Chain OUT

Use this header to chain multiple Déjà vu modules or modules like AIKIDO or BUDDY.

The CHAIN OUT signal is a copy of B output unless you plug a cable into B output. Then it disconnects. That is how cascading mixing of outputs can be achieved across modules.

Both left and right pins are the signal pins so you can use either one of them.



C Normalization

By default when output A is not plugged the output of channel A is mixed to the output of channel B. You can disable this behaviour by unplugging this jumper.

D Gain 10x or 5x

The 10x position on the FADER GAIN switch can be changed to be 5x ~ +13.9 dB by unplugging this jumper.

! POWER !

Before connecting the ribbon cable to this module, disconnect your system from power! Double check the polarity of the ribbon cable and that it is not shifted in any direction. The red cable should match the -12V rail, both on the module and on the bus board.

! please make sure of the following

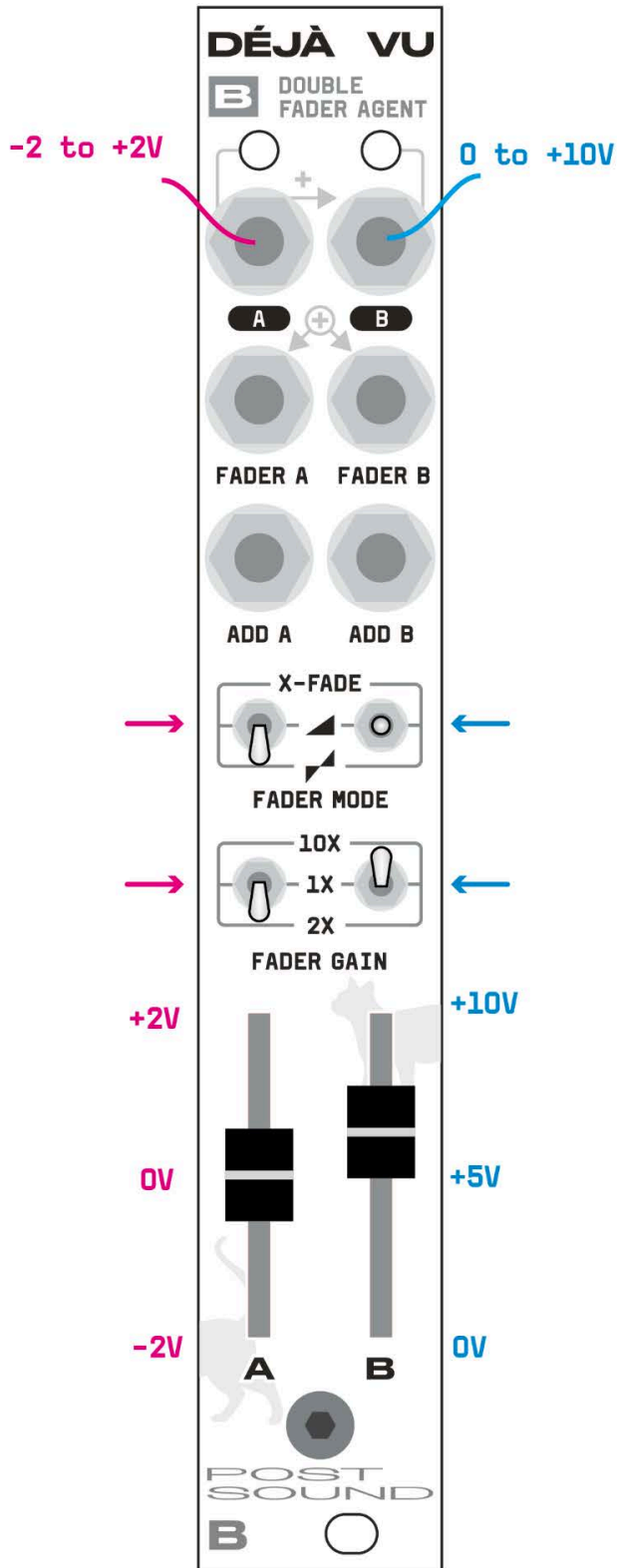
- you have a standard pinout eurorack bus board
- you have +12V and -12V rails on that bus board
- the power rails are not overloaded by current

Although there are protection circuits in this device, we do not take any responsibility for damages caused by the wrong power supply connection.

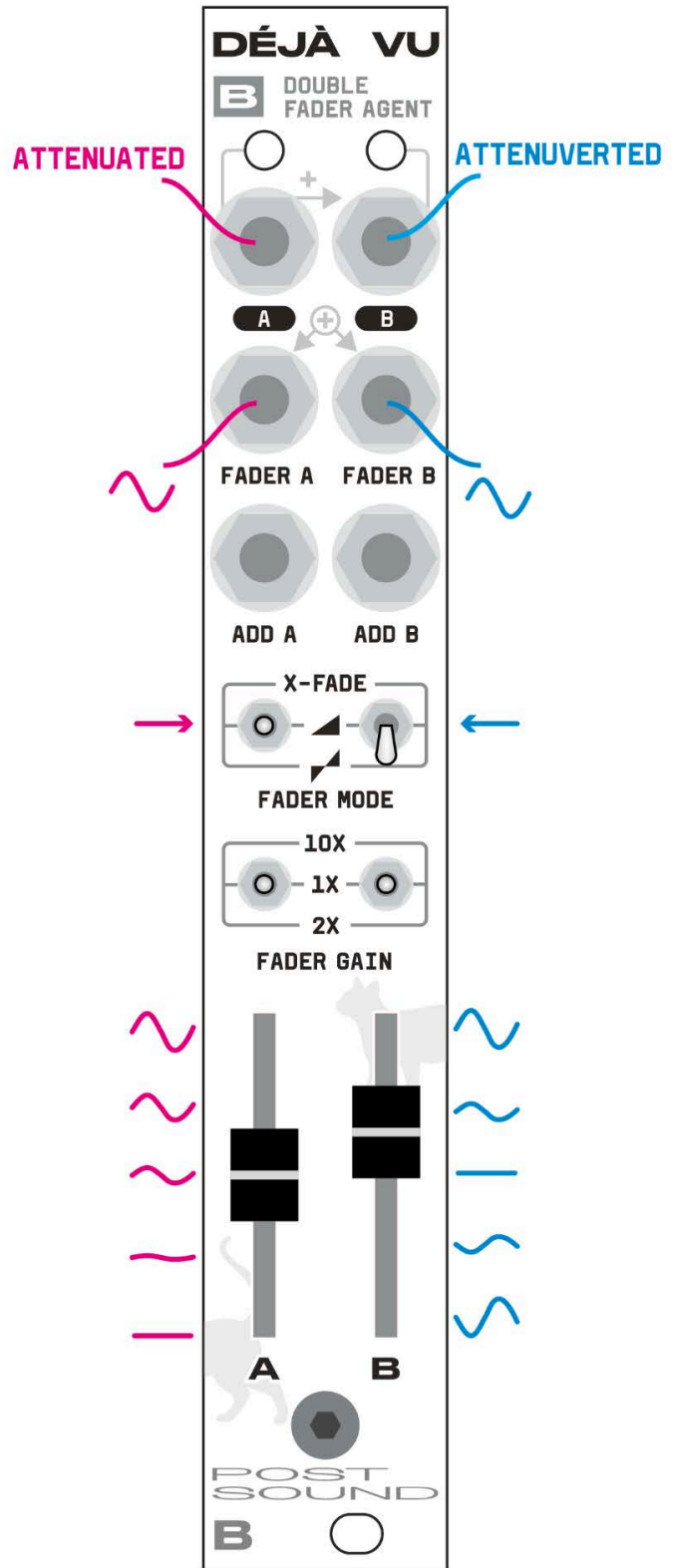
After you connected everything, double-checked it and closed your system, so no power lines can be touched by hand, turn on your system and test the module.

How to use Déjà vu

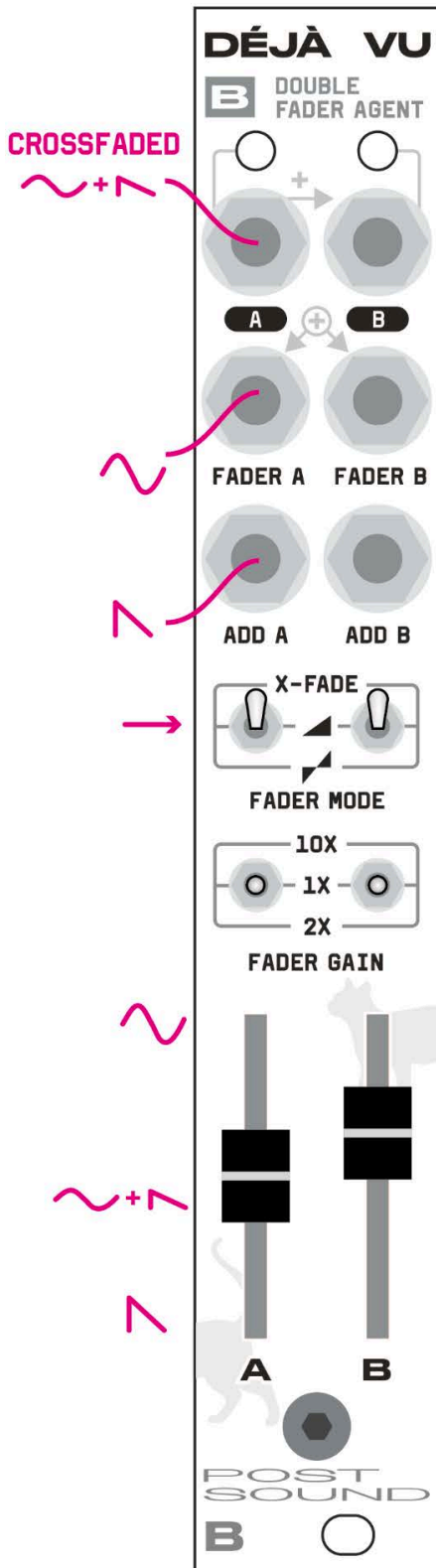
FADER SET VOLTAGE
GREAT FOR PERFORMANCE CONTROL
OF DIGITAL MODULES



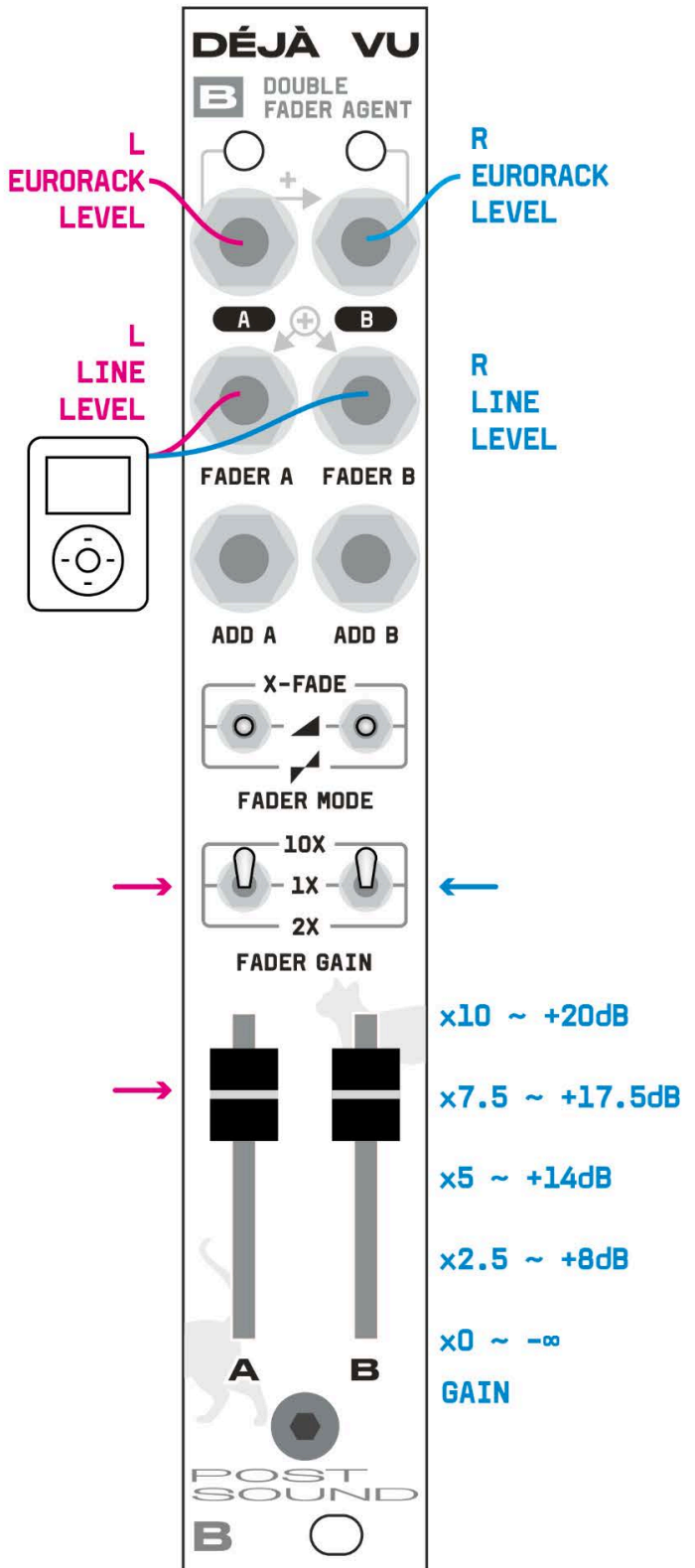
ATTENUATOR OR ATTENUVERTER
GREAT FOR MODULATIONS



CROSSFADER
GREAT FOR AUDIO AND MODULATIONS

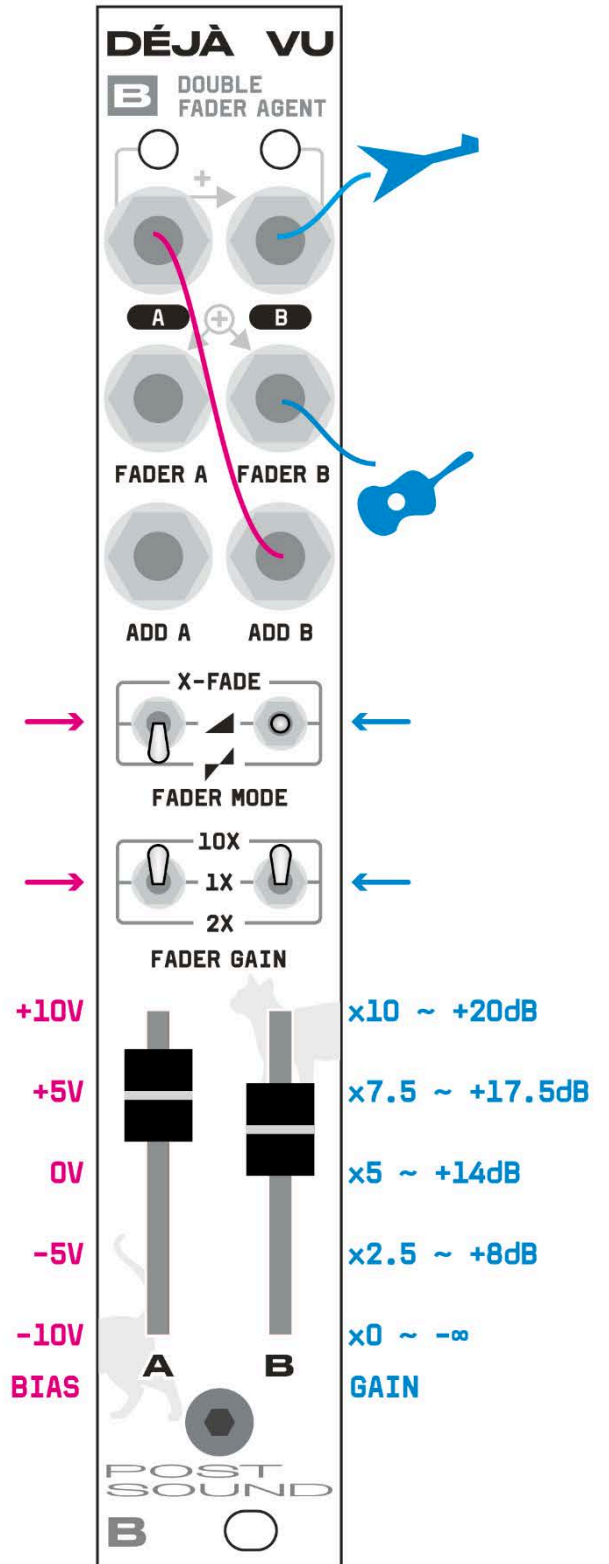
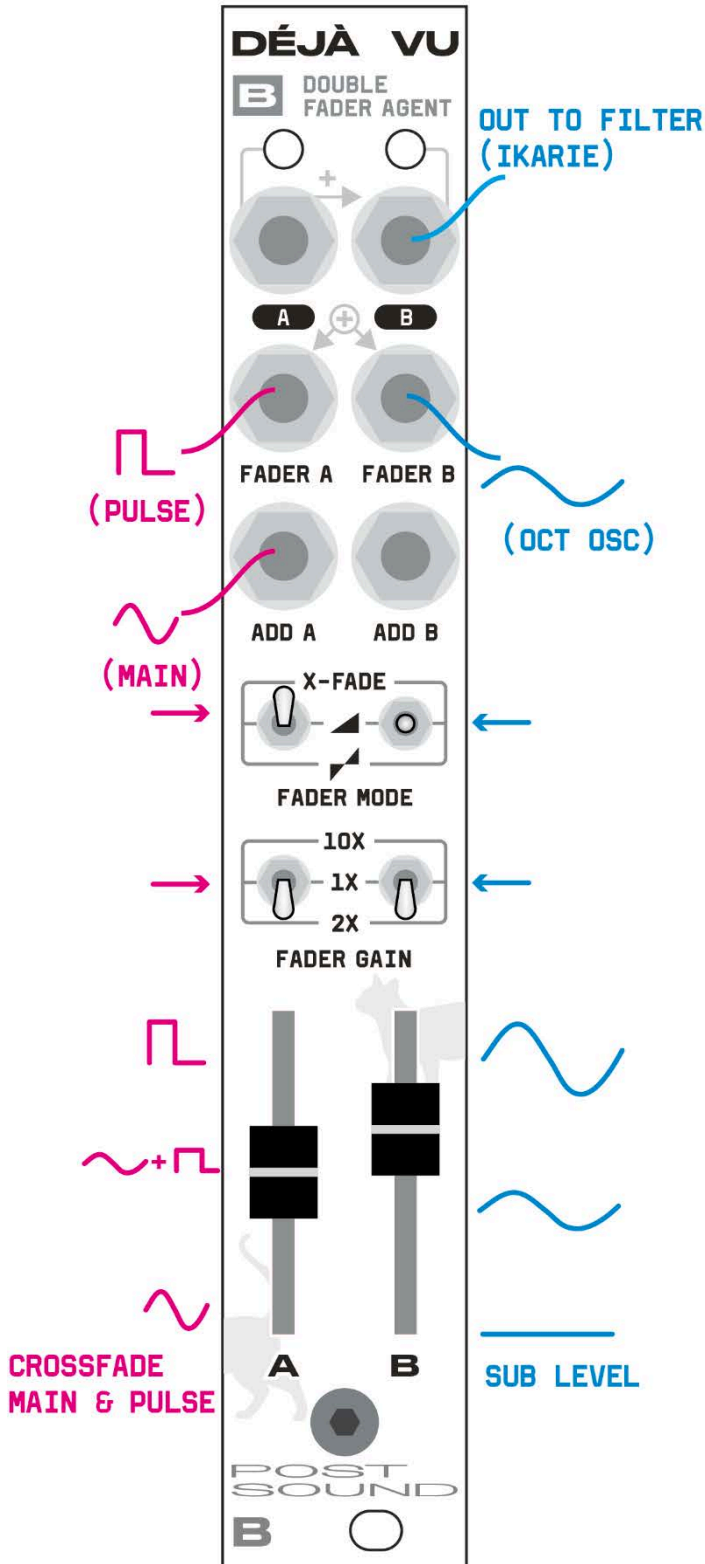


LINE STEREO PREAMP
AMPLIFY FROM LINE LEVEL TO EURORACK

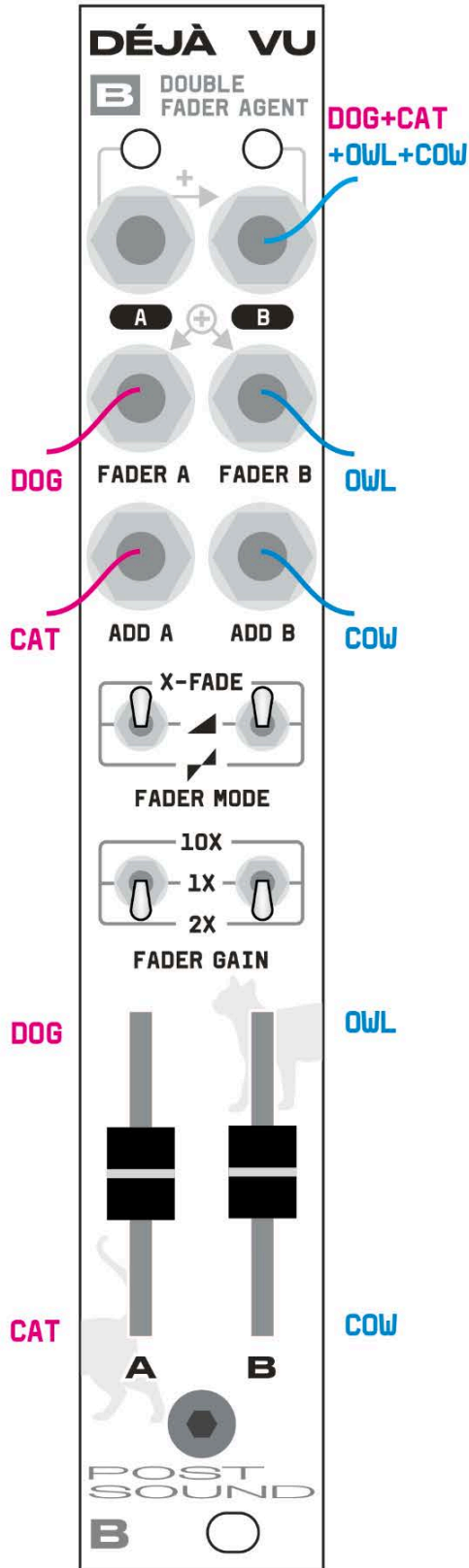


**WAVEFORM MIXING FOR OSCILLATORS
(FOR PIZZA OSC)**

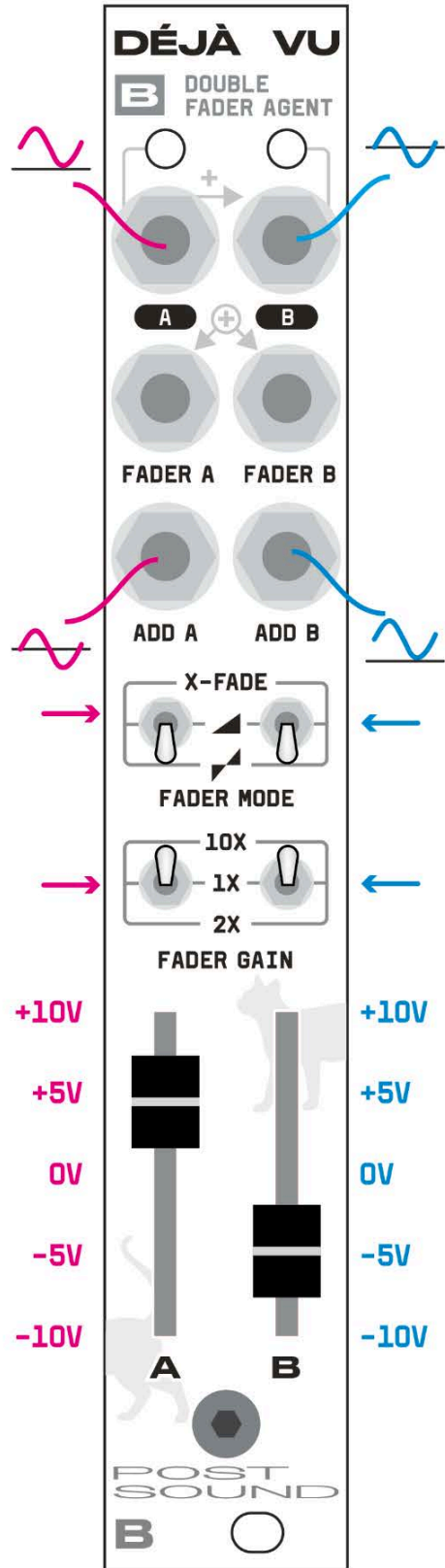
**BIAS DISTORTION CLIPPER
(FOR EURORACK SIGNAL)**



4 CHANNEL MIXER
GREAT FOR AUDIO AND MODULATIONS

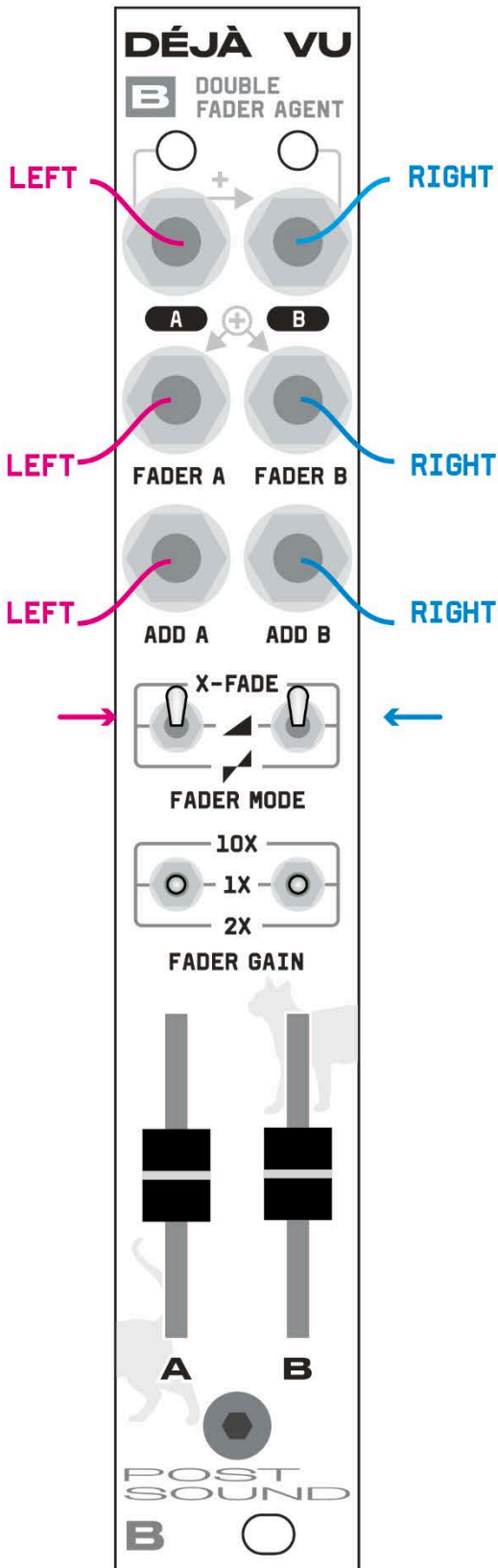


VOLTAGE PROCESSOR
UNIPOLAR TO BIPOLAR BIPOLAR TO UNIPOLAR

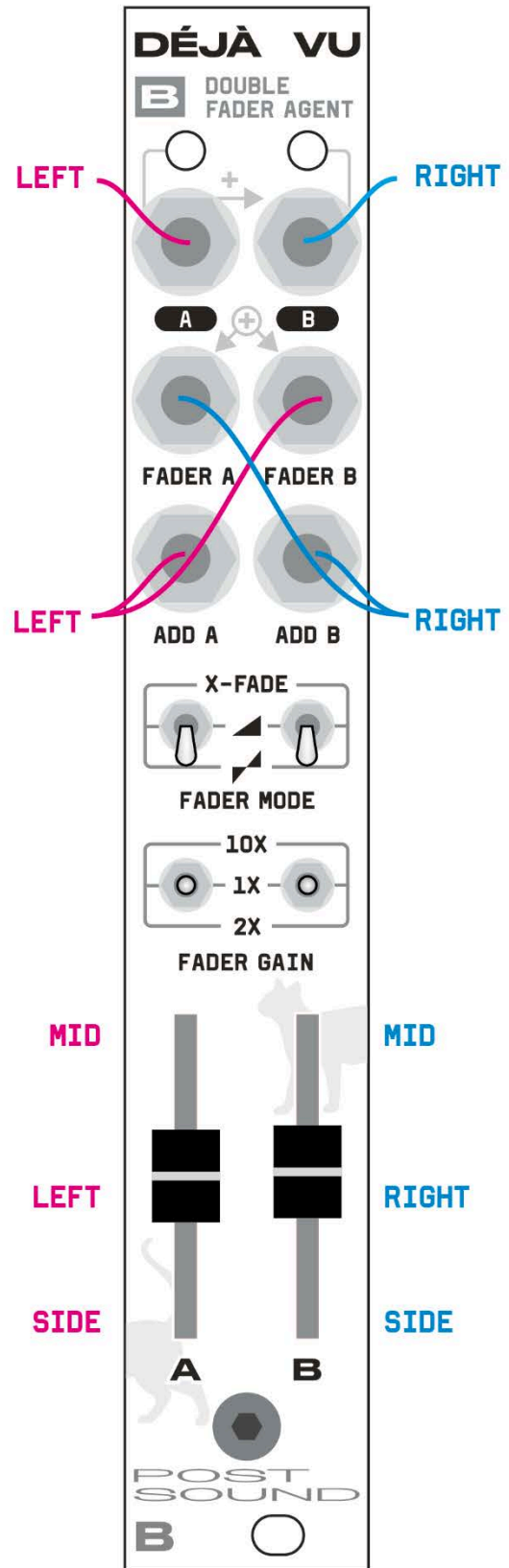


IF FADER INPUT IS NOT USED
THE FADER OFFSETS THE ADD INPUT

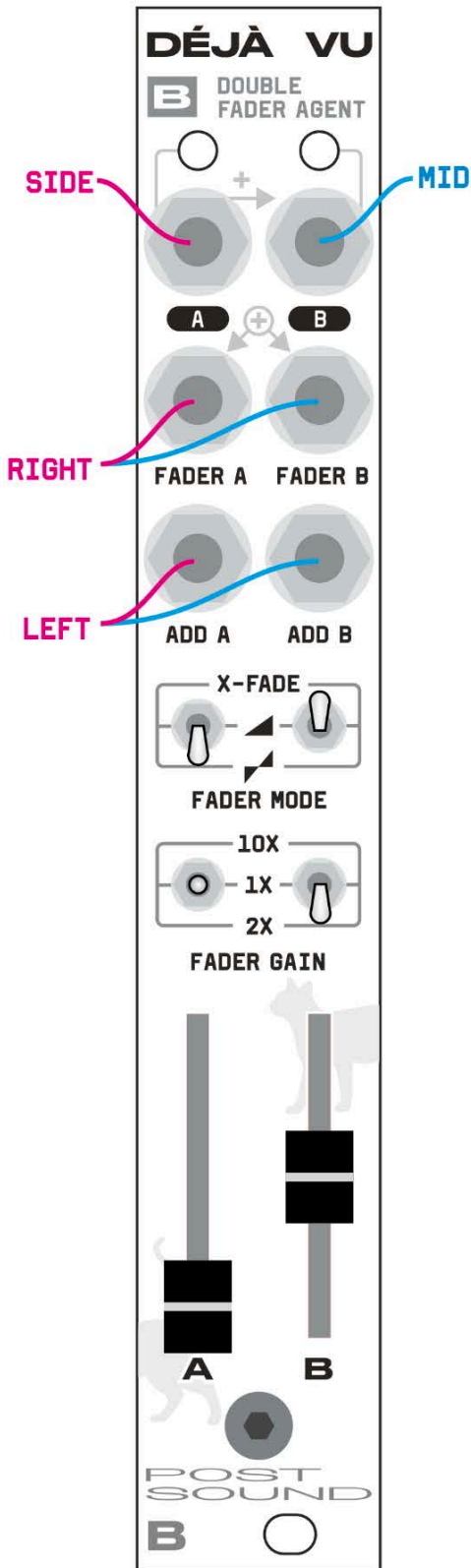
STEREO MIX
CROSSFADE BETWEEN 2 STEREO SIGNALS



STEREO MANGLER
MORPHING FROM STEREO TO MID OR SIDE

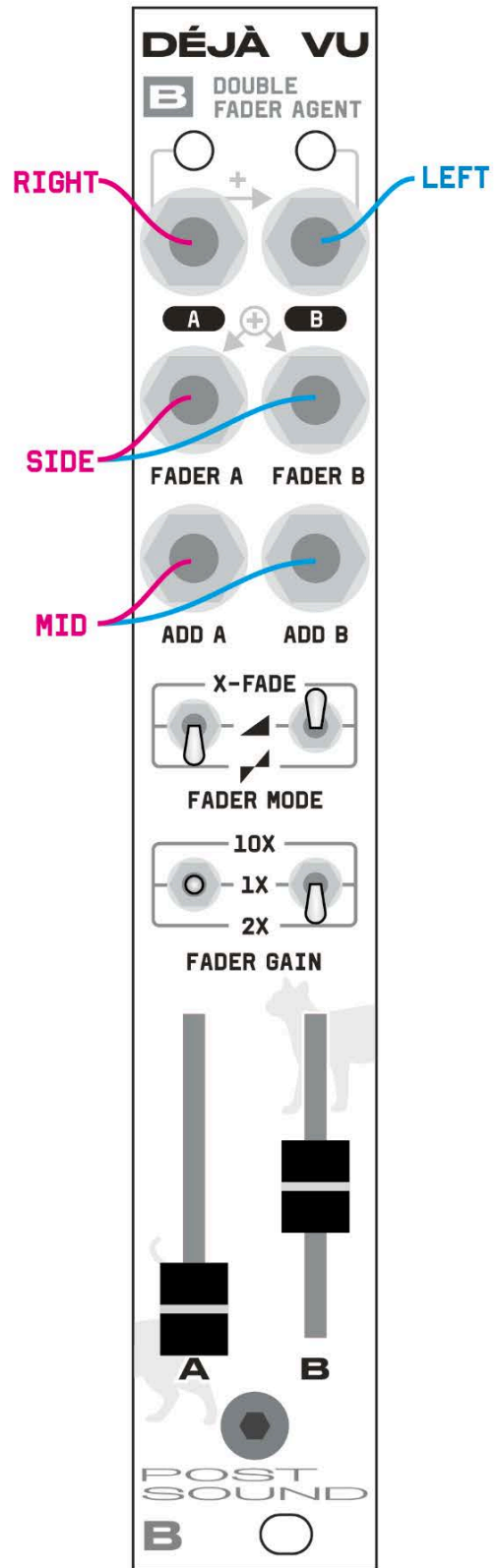


**LEFT RIGHT STEREO
TO MID SIDE
CONVERSION**



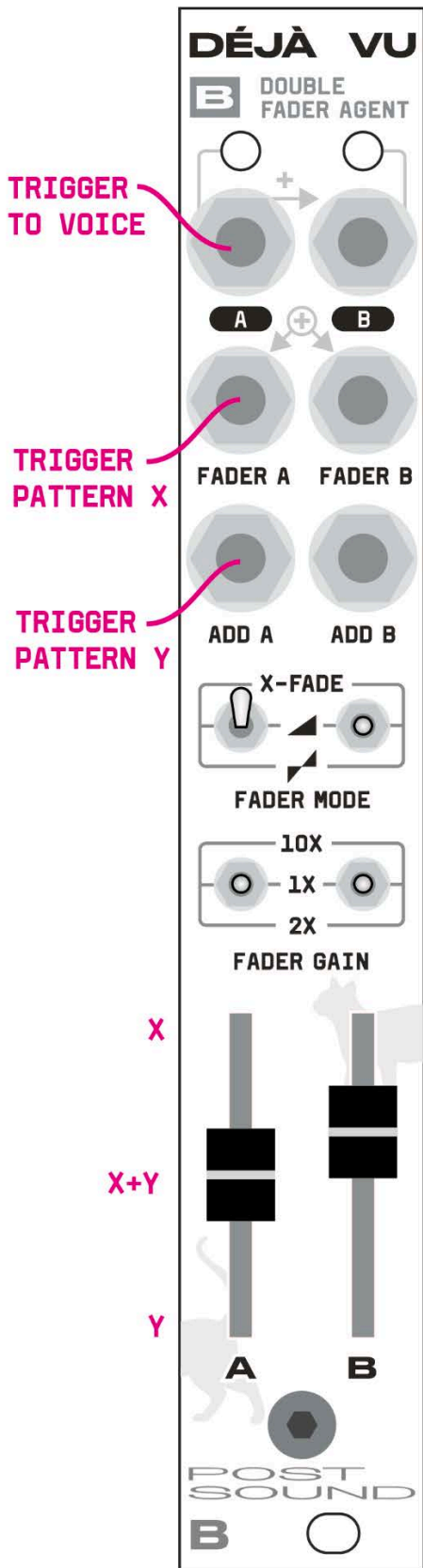
**SIDE = LEFT - RIGHT
MID = LEFT + RIGHT**

**MID SIDE
TO LEFT RIGHT
CONVERSION**

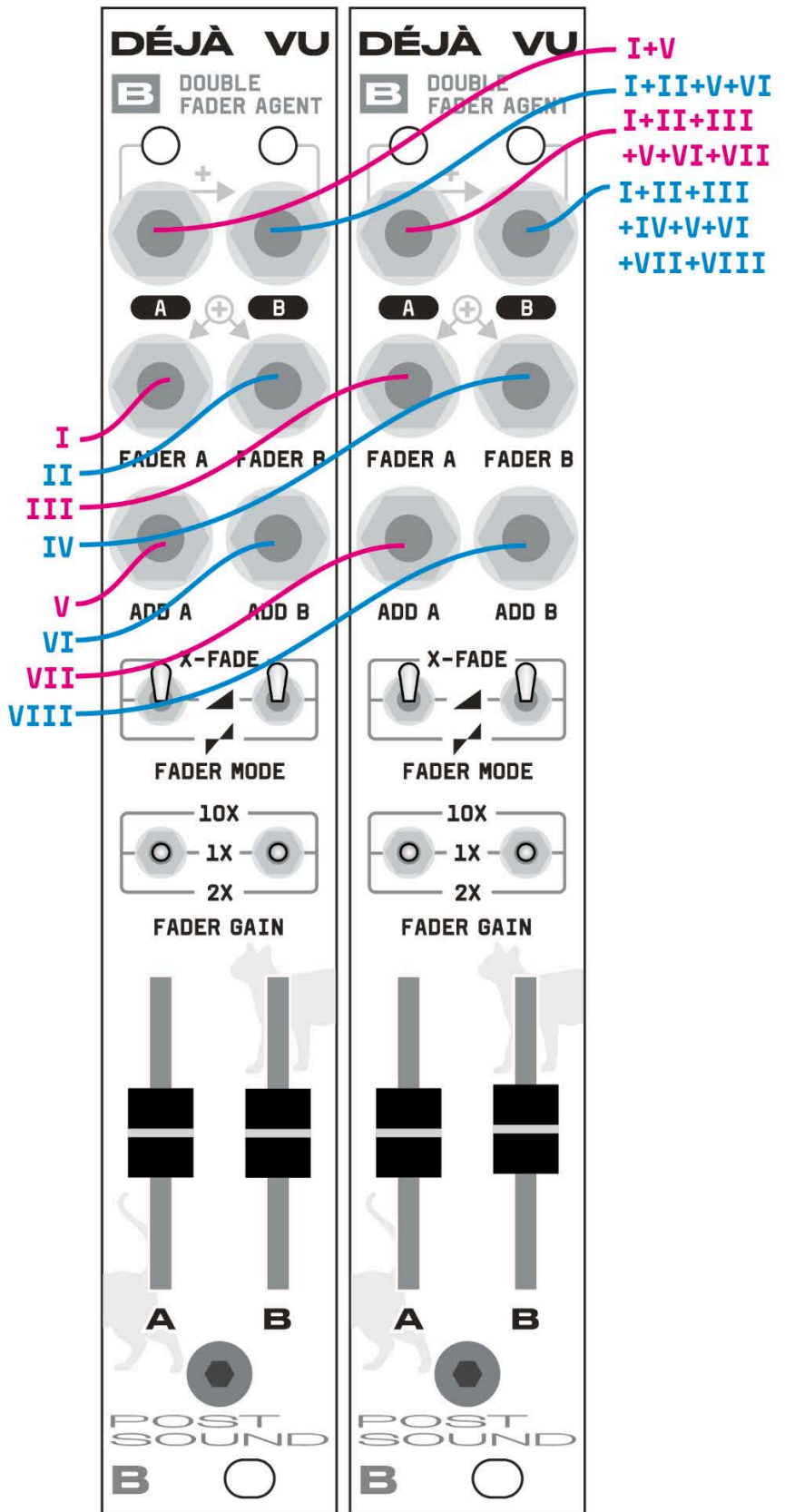


**LEFT = MID + SIDE
RIGHT = MID - SIDE**

**CROSSFADING TRIGGER PATTERNS
GREAT FOR PERFORMATIVE VARIATION**



**CASCADING MIXER (WHEN CHAINED FROM THE BACK)
MIX UP TO 8 SIGNALS WITH 2x DÉJÀ VU**



EXTERNAL FEEDBACK

GET THAT EXTRA OOMPH FROM DISTORTED MIXER FEEDBACKS CAN BE USED WITH ANY EFFECT

DÉJÀ VU

B DOUBLE FADER AGENT

FADER A FADER B

ADD A ADD B

X-FADE

FADER MODE

10X 1X 2X

FADER GAIN

A B

POST SOUND B

FX WIZARD

MULTI EFFECTS PROCESSOR AND BEYOND

CLK		PATTERN				LFO		AUDIO	
IN	RESET	C IN	G IN	RESET	MOD	L IN	R IN		
OUT	ENV	CV	GATE	TL	^	L OUT	R OUT		
MIDI IN	TRIG	MODE	FREE	STEP	FBK	AMOUNT			
			TIME						

TIME MOD INPUT

AMOUNT MOD

TIME VOLUME

FBK MOD STEREO

PATTERN

RND INV CV

RND INV GATE

FEEDBACK FILTER

LFO MOD RHYTHM

SHIFT

FX TAP MODE

SYNC | FREE

LFO TEMPO

BASTL CITADEL

LEFT
RIGHT

LEFT
RIGHT

POSITIVE
FEEDBACK

NEGATIVE
FEEDBACK

CREDITS

DEVELOPMENT TEAM: Martin Klecl, Pavlo Shelemba

SUPERVISED BY: Václav Peloušek

MAIN TESTER: John Hornak

BETA TESTERS: David Žáček, Jiří Březina, Michal Synovec, John Dinger, Václav Mach, Martin Klecl, Michal Křipač, Wes Langill, Peter Edwards

MANAGEMENT: John Dinger

MANUAL: Václav Peloušek, Kevin Mold, Martin Vondřejc

RELEASE VIDEO: Václav Peloušek, Michal Synovec

GRAPHIC DESIGN: Anymade

**The idea turned into reality
thanks to everyone at Bastl Instruments
and thanks to the immense support
of our fans.**



BASTL

more info and Video Tutorials



www.bastl-instruments.com

A large, bold, white letter 'B' centered within a solid black rectangular background. The 'B' has a thick, rounded font style with a slight curve at the top and bottom of its right side.

**WISHING YOU THE BEST OF LUCK
ON YOUR SONIC ADVENTURES!**