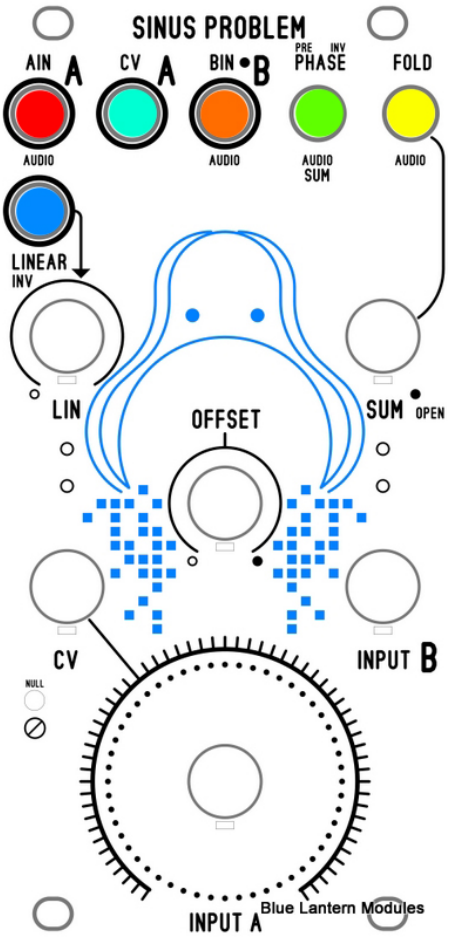


Red Jack: Input jack for Input VCA channel. The big bottom knob is the Level parameter for the Audio input A.

Yellow Jack: Wave Folder Output jack. The knob below it 'SUM' is another VCA knob parameter. Most of the time the knob is set to fully clockwise, 'open' position. This yellow output jack is where you will hear the wave folding effect. Linear knob and Blue Linear Inverted CV input jack is also used with the output portion of the wave folder.

Aqua Jack: VCA A CV input jack. CV knob next to the big knob on the bottom is a CV level parameter for this jack.

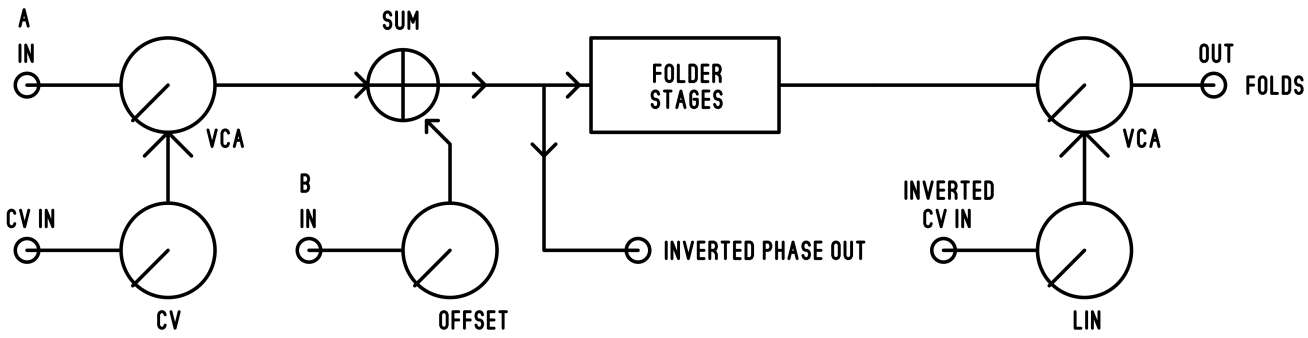
Orange B IN jack. This is another audio input that gets summed right before the wave folder. The offset knob parameter sends positive or negative voltage to this sum, to offset the signal (if any) on the sum location. If makes more sense to look at the diagram at the end of this manual.

Green Jack. This is an output jack that lets you hear an inverted sum of channel A and channel B.

How to quickly hear the wave folder effect:

FM Sinus Problem

1. SUM knob is set fully clockwise.
2. Offset is set to middle position. Linear CV is not used
3. Input B knob and channel is not used, have it fully counter clockwise.
4. Patch a Sine Wave input AIN A
5. Use the Bottom Big knob to slowly sweep from counter clockwise to clockwise.
6. Use FOLD output to hear the wave folding stages.
7. Once you hear the effect, use Offset knob to hear that parameter. It will distort the phase of the fold(s).
8. Input B can be used to 'CV' the offset effect and allow Phase Distortion.
9. Linear CV is hardly ever used, this is used to fade or mute the output. If Negative voltage is applied, it does the opposite effect.
10. CV A is the most used CV input. This will CV control that big black knob.



The last VCA (VCA#2) on the signal chain in the diagram (with label 'VCA') is called 'SUM' knob on the actual panel. I did not want to put the label VCA on this product to further confuse first time users.

It is recommended to use the Trippy Dual VCA for VCA duties, not this module.

Calibration: Have nothing patched into the inputs of this product. Use the output Fold to monitor the signal. Patch an audible sine wave into 'A' CV input jack, turn up CV knob. Have SUM set to Open.

You can also use the PHASE output to monitor, for better scope resolution.

Have the big black knob set clockwise. If you see a lump on an oscilloscope, use the NULL trimmer on the left side to get rid of any signal bleed for the first VCA section.

The goal is to calibrate VCA#1, so that there is very little CV signal bleed.

FM Sinus Problem

IC Chips used in this product:

NJM13700

RC4558

LF353

SUPER MATCHED PNP/NPN

EURO FORMAT SPECS:

CURRENT: +38mA, -38mA

WIDTH: 12HP

PCB STACK LEVEL: ONE, SKIFF COMPATIBLE.

RIBBON POWER: -12V GND GND +12V, NO 5V REQUIREMENT NEEDED.

ALL BLM PRODUCTS USE RED STRIPE FOR NEGATIVE POWER INDICATION.