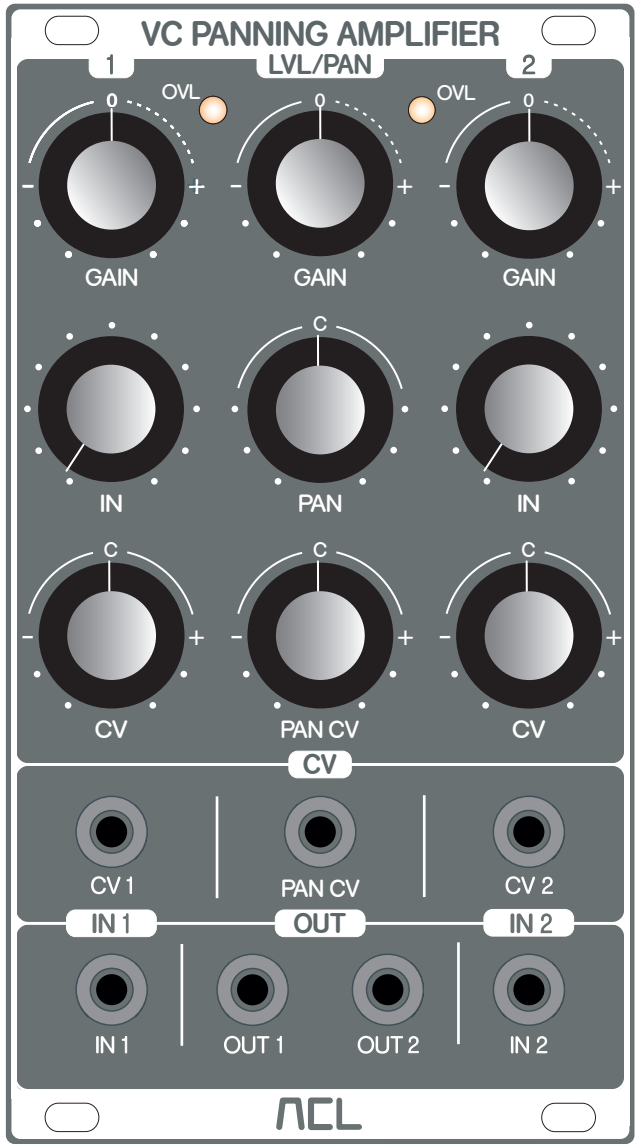
Audiophile Circuits League
Musical Instruments Manufacture

# VC PANNING AMPLIFIER

## User´s Manual

Eurorack Synthesizer Modules




14 HP

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# 1. INTRODUCTION

Audiophile Circuits League. -VC PANNING AMPLIFIER is especially designed to process audio signals, dynamically positioning them in a stereo feld. If mono signals are processed, the unit can be also operated as two standalone VCAs.

The Circuit is designed for low distortion, low CV feed-trough and low noise. The module has two exponential response VCAs with voltage and manually controlled gains, input level attenuators and overload indicators. When no jack is connected to IN 2 and CV 2 inputs, they are normalized to IN 1 and CV 1 inputs respectively. Some of the possible confgurations with this arrangement allow the gain of both channels to be controlled together with one CV, while processing different audio signals, or both channels to be operated individually, if needed. The gain balance between both VCAs and hence the panorama position of a stereo signal is manually and voltage controllable. The common gain of the two channels is also manually adjustable with a single pot.
(For details about normalization, see section 5. CHARACTERISTICS)

# 2. WARRANTY

In the event of a fault in use, we will repair or replace it free of charge under the warranty terms stated below. The warranty period is valid for one year from the day of purchase. If repair is necessary, please ask the dealer you purchased it from.

We can not guarantee the incidental damage caused by the breakdown or damage that occurred during use of this product. In addition, warranty will expire in the following cases:

· Failure / damage caused by use of unspecified power supply / accessories.
· Failure / damage caused by incorrect connection or use of power cable.
· Failure / damage caused by improper handling method.
· Failure / damage caused by natural disasters (fire, flooding etc.) and pollution.
· When the cause of breakdown or damage lies in equipment other than this product.
· Failure / damage caused by improper modification, adjustment, parts replacement.
· Failure / damage when used under particularly severe conditions, when loaned/rental/hired out to 3rd party.

## Is it a malfunction?

Please read the user's manual carefully and check again. If you think that there is still a problem, please consult the dealer you purchased from or contact us (English) .

support@audiophilecircuitsleague.com

# 3. INSTALLATION

⚠WARNING

*Always turn the Eurorack unit off and unplug the power cord before pluging the Eurorack power cable.

*When attaching the Eurorack power cable, please be careful not to touch the terminal part.

Connect to the Eurorack's system power supply (+ 12V) using the supplied Eurorack power cable.

Connect the 16-pin connector to the Eurorack power connector. Connect the red mark on the power cable so that it matches the pin on the (- 12 V) side of the power connector.

Connect the 10 pin connector to the shrouded header on the back of the module. The header is protected against reverse-plugging.

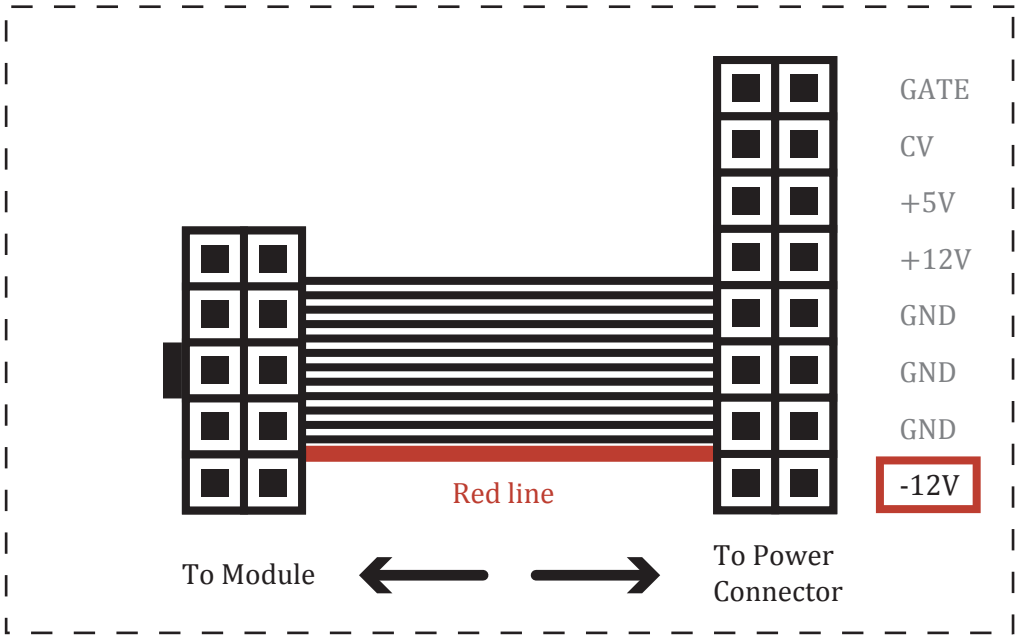


FIG.1：Eurorack power cable

# 4. FUNCTION OF PANEL COMPONENTS

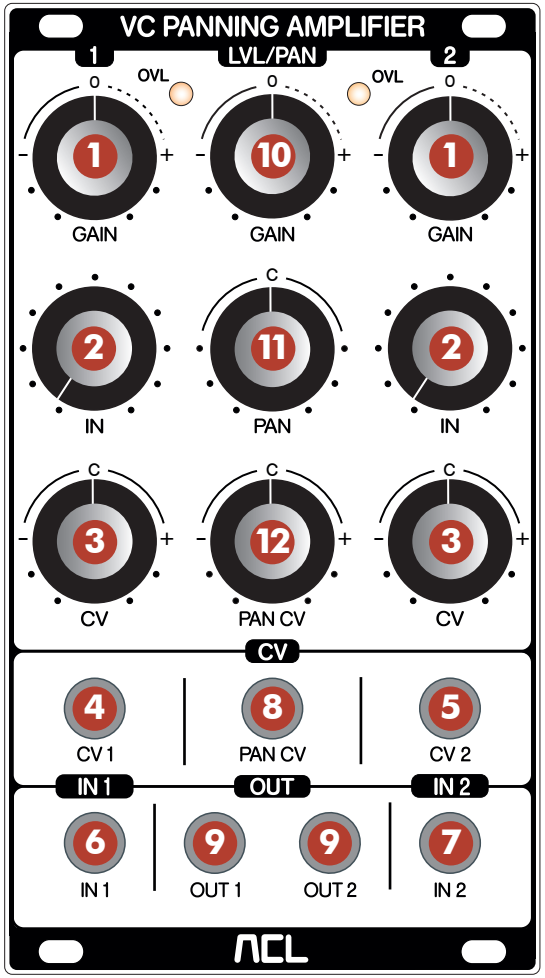


FIG.2：Front Panel

① "GAIN" knob

Gain Attenuverters for the output jacks ⑨"OUT 1" and "OUT 2".

② "IN" knob

Attenuators for adjusting the input levels from jacks ⑥ "IN 1" and ⑦ "IN 2".

③ "CV" knob

Attenuverters for adjusting the input CV signals from ④ "CV1" input jack and ⑤ "CV2" input jack.

④ "CV1" input jack

Input the CV signal of channel 1.

⑤ "CV2" input jack

Input the CV signal of channel 2. When no cable is plugged into this jack, the signal of "CV 1" will be normalized to channel 2. (For details, see section 5. CHARACTERISTIC)

⑥ "IN 1" input jack

Input the audio signal of channel 1.

⑦ "IN 2" input jack

Input the audio signal of channel 2.

### ⑧ "PAN CV" input jack

Input the CV signal for controlling PAN.

### ⑨ "OUT 1" "OUT 2" output jacks

Outputs for each of channels 1 and 2.

### ⑩ "GAIN" knob

Attenuverter for adjusting the gain of channels 1 and 2.

### ⑪ "PAN" knob

Adjust the pan between channels 1 and 2.

### ⑫ "PAN CV" knob

Attenuverter for controlling the gain balance of channels 1 and 2 with CV signal from ⑧ "PAN CV" input jack.

# 5. CHARACTERISTIC

CV input 1 is normalized (internally connected) to CV 2. "Normalization" means that if you are not using CV 2 , the input to CV 1 will be automatically duplicated to CV 2 . In other words, you can control two CV from one cable input(See FIG. 3). This feature economizes the need to duplicate signals using external multiple modules. This normalization function works similarly for ⑥ "IN 1" input. When the plug is not plugged in ⑦ "IN 2", the input from "IN 1" is copied to channel 2.

Conversely, when inputs of CV 1and 2 are individually plugged in, it is possible to control CV 1 and 2 by an independent CV signal (See FIG. 4).

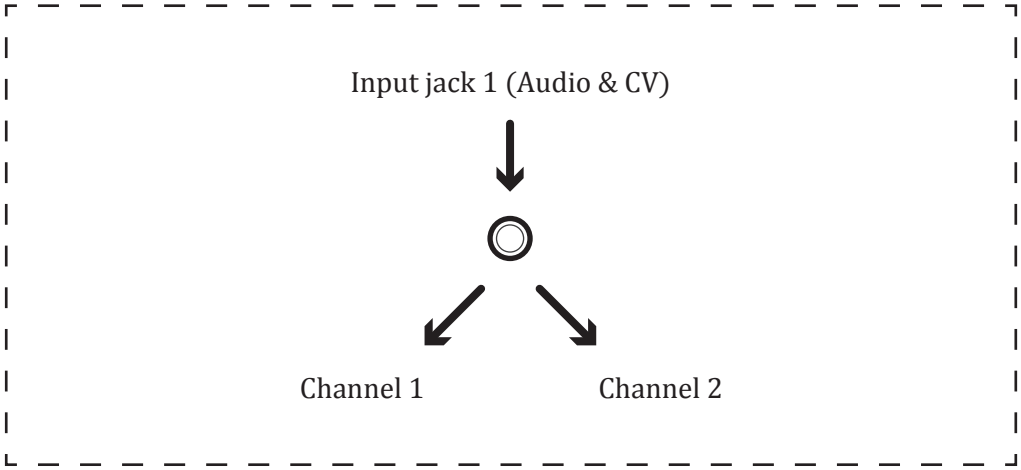


FIG.3: When using only CV 1 input (Normalized)

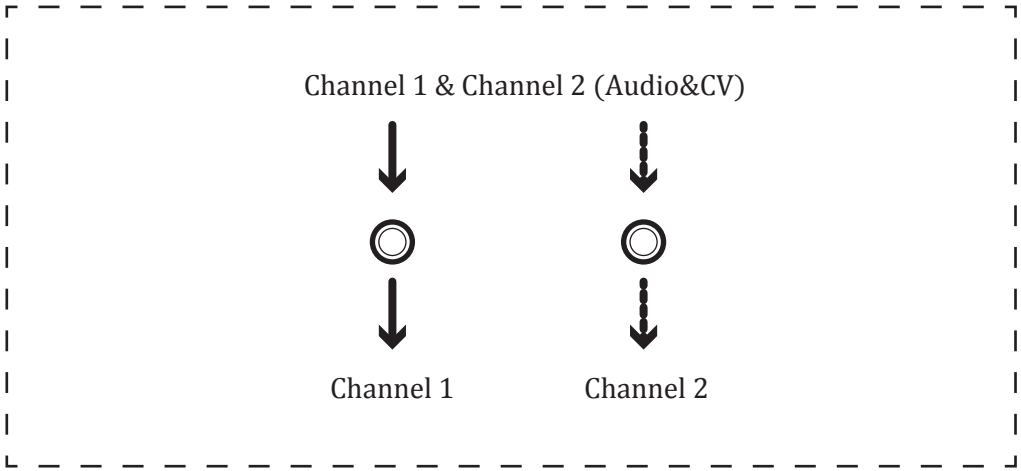


FIG.4: When using CV 1,2, inputs (not Normalized)

# 6. SPECIFICATIONS

## Power

Eurorack system power supply

## Width

14 HP

## Depth

22 mm

## Power consumption

38 – 46mA on +12V / 32 – 42mA on -12V

## Accessories

· Eurorack power cable x1

· Mounting screws x4