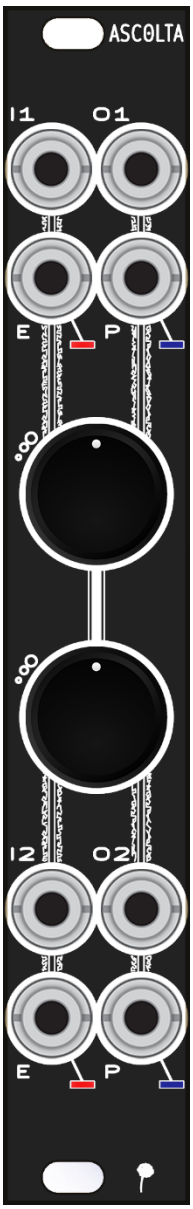
ASCOLTA

dual preamp follower

ASCOLTA is a dual high fidelity input preamp with envelope follower and peak detector output for each channel.



why

- To amplify stereo line level signals up to modular levels – 100x (40dB).
- To extract an envelope and a peak detector CV from any given signal.
- To integrate into your system two separate sources requiring dedicated gain compensation.
- To side-chain and compress using the two audio-follower CV out and an external VCA/LPG.

with

- Laptop / phone – plug a stereo cable directly from their output and integrate that to your modular.
- Dynamic microphones – amplify two of them individually and sing with a friend.
- External synths – take those weak signals and warm them up to modular levels.
- Passive instruments – sing and play the guitar while affecting them with your spaghetti monster[1].

how

Ascolta consist of two individual high quality preamp[2] connected to an envelope follower and a peak detector output. On the back of the module you can select the behaviour of its internal normalization when no cable is plugged into **I2**:

S: the first input **I1** will accept stereo 3.5mm standard cables from any source and split L and R to output **O1** and **O2** respectively. This way you can directly amplify stereo signals without the need of external splitters and regulate the gain of each channel individually.

G: the second amplifier will double the amplification of the first totalling a gain range of 80dB - 10.000x.

Envelope **E** and peak **P** outputs are strictly related to the gain level of their corresponding amplifier and will follow the dynamic of any input plugged.

features

- Two high quality 40dB amplifiers.
- Customizable internal normalization with selectable stereo or double gain mode.
- Envelope follower output and peak detector output for each of the two amplifiers.
- Audio graded potentiometers.
- "Whatever" power connector a.k.a. don't mind the polarity.

specs

- dimensions ⟹ width 4HP, depth 25mm
- current draw ⟹ +12V 50ma, -12V 30ma.

Demos and build documentation at *jolin.tech/ascolta*

[1] That's actually how *Ascolta* came to be. I was in need of a small module capable of amplifying two sources simultaneously while being able to extract their dynamics to control the rest of the system.
[2] Nerd stuff here: in the gain stage *Ascolta* uses two Texas Instruments LM4562 in a two pole inverting amplifier configuration. More info and detail about the chip can be found on its datasheet.