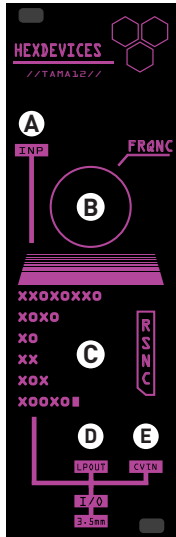




**HEXDEVICES**  
HANDCRAFTED AUDIO EQUIPMENT



# User Manual Tama 12

Thank you and congratulations for your purchase of the Hexdevices Tama12 Module! That was a smart move. You are now the owner of a 12db pure analog lowpass filter, with crazy resonance harmonics.

## The brain inside the shell

This filter is based on transconductance amplifiers and it's a pure analog second order lowpass filter.

## How to use (Check modular pic.)

- A. INP:** Stands for the line input of the module. With the use of a 3.5mm TS mono jack, you can plug any of your audio sources into the module. Input impedance is 200k $\Omega$ .
- B. FRQNC:** The frqnc is the cutoff frequency knob. By doing changes to this knob you actually change the cutoff frequency.
- C. RSNC:** This knob sets the resonance level of your sound. As you increase that, you increase the sound level of your cut-off frequency. And by turn it to maximum you force the filter to self- oscillate.
- D. LPOUT:** This is the line out of your lowpass filter. With the use of a 3.5mm TS mono jack you can take your out-pro-cessed signal.

**E. CVIN:** Is the control input for the cutoff frequency. By using a 3.5mm TS mono jack you can insert a signal (5Vp-p) from an external.

### **Extra info**

As a 12db filter the slope is pretty gentl. Also keep in mind that OTAs are temperature sensitive components so, the behave of your filter may varies as the time pass.

In the back side of the module can be found 4 different trimmers and their names are lockated on the board. The first called "INLVL" is to control the input signal level, in order to avoid overdriving the filter and achieve minimum distortion. Or overdrive it, to unlock the secret harmonics of the most aggressive filter you ever had. The second is called "EndPoint" it controls the amount of frequencies that can pass with the cut-off knob completely closed and customise your cutoff knob behaviour (3.3k $\Omega$  - suggested value).

The Third is called "CVCTL" and is used in order to control the high – low frequency limits of the filter when you control it from an external source. Last but not least the fourth trimmer is to control the output signal level for i/o leveling matching or more aggressiveness and distortion (OUTLVL).

### **Specifications:**

- Dual OTA 12db second order lowpass filter
- Output stage amplifier
- 4 trimmers to customise your sound
- Input impedance 200k $\Omega$
- Power, +-12VDC Eurorack.
- Dimensions in mm, 128,5x40,64x26
- Weight, 94g

### **Warranty**

This module comes with 5 years warranty for the electronic part only, not for the casing. For more informations please check our website: [www.hexdevices.com/policy/](http://www.hexdevices.com/policy/)

## **Recycling guidelines**

First of all why to throw a masterpiece like this?! Anyway if you want to do so, please mind that our planet is already full of waste. So please throw this device only in special electronic recycling places.

## **Contact with us**

**[info@hexdevices.com](mailto:info@hexdevices.com)**