

## b:13

quick mutes

**b:13** is a dual-channel muting module designed for live Eurorack performance. Each of the two independent channels features an signal input, a ON button, a CV input, a status LED, and a signal output. The muting circuit is VCA-based and engineered to be completely click- and pop-free during both mute and unmute transitions.

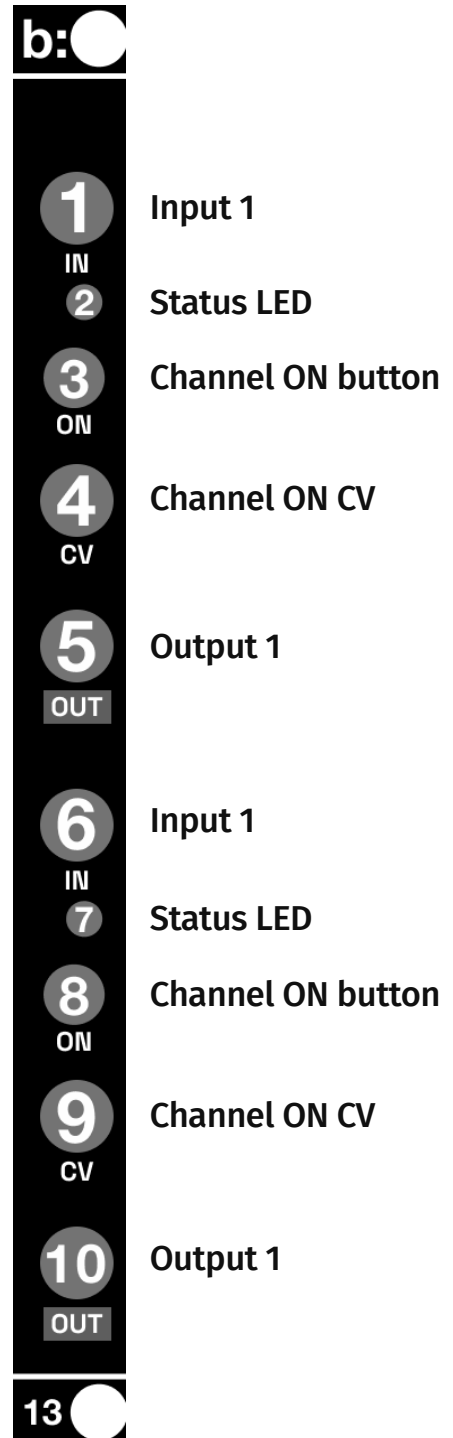
### Technical specifications:

<b>Operating voltages:</b>	-12V / +12V
<b>Power draw:</b>	25 mA -12V / 25 mA + 12V
<b>Width:</b>	2 HP
<b>Depth:</b>	27 mm
<b>Output impedance:</b>	100Ω
<b>Input impedance:</b>	100kΩ



This product was tested and found compliant with the following standards:  
EN 55032:2015/A11:2020, EN 55035:2017,  
EN IEC 63000:2018.

For details, please visit:  
[bartinstruments.com/conformity](http://bartinstruments.com/conformity)



## Operation

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Each channel operates independently. Patch a signal into IN and take the processed signal from OUT. The channel is muted by default when neither the ON button is pressed nor a CV signal is applied.

Press the ON button to turn on the channel. The LED will turn on to confirm the ON state. Press again to mute - the LED will turn off.

The CV input accepts voltages between 0V and 10V. The ON threshold voltage is 2V. The CV input and the ON button work together additively - the channel turns on when either the button is pressed or the CV is high enough, and mutes when both are inactive.

The VCA-based muting circuit applies a shaped gain ramp on every mute and unmute transition, eliminating the clicks and pops that occur with relay- or switch-based muting designs. This makes the module safe to use at any point in a live performance without risk of audible artifacts.

The inputs are DC coupled, so the module can also mute CV signals, gates, and modulation sources — not just audio.

## Safety and Installation Guide

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Ensure your modular system is powered on before installing the module. Only power on the system once every module is connected and properly installed in your system using the provided screws.

Do not expose the module to moisture or extreme temperatures.

Do not operate the module in environments with severe amount of dust in the air.

The module's inputs are protected against electrostatic discharge, but be careful when handling the module itself.

Only one row of power connectors is present on the module, and it doesn't matter which row of the 10-pin power header is connected to it. Please follow the markings on the back of the module to ensure correct power cable orientation. The module is protected against reverse power connection.