

The

AvonSynth User Guide

AVS-RING-1 Dual Ring Modulator



Thank you for purchasing from AvonSynth

Congratulations on your purchase of a brand new AvonSynth AVS-RING-1 Dual Ring Modulator Eurorack Module. We trust that it will both serve and inspire you as you create beautiful music with it for years to come.

In order to get the most out of your module, please ensure that you read this User Guide in its entirety so that you fully understand all of its functionality, and that you follow all necessary safety directions during use.

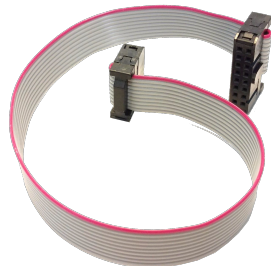
Included in the Box

1 x Dual Ring Mod Module

1 x 10 pin to 16 pin flat-cable power cord

4 x M3 Mounting Screws

4 x Nylon Washers

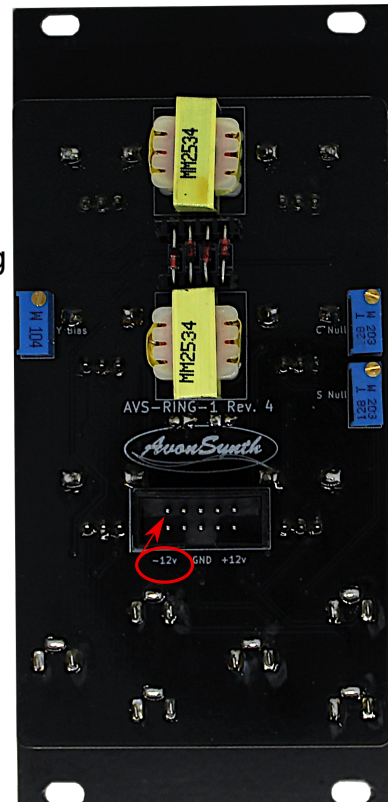


Installation

Step 1: Power your system off. Place the module in your Eurorack-compatible rack in any convenient position. Affix the module to your rails using the included mounting screws and nylon washers. Neglecting to use these washers may result in unnecessary marking of the unit.

Step 2: Triple check the polarity of the power connector before connecting the power cord to your power supply. Ensure that the -12v line marked on the back of the module connects to the same end of the flat-cable that also connects to the -12v line on your power supply. While AvonSynth modules use shrouded connectors that make this process safer and more reliable, some systems do not conform to this polarity standard, so careful checking is **always** necessary. Connecting the module with incorrect polarity can result in irreversable damage done to the module which cannot be covered by warranty.

Step 3: Power up your system and start patching!



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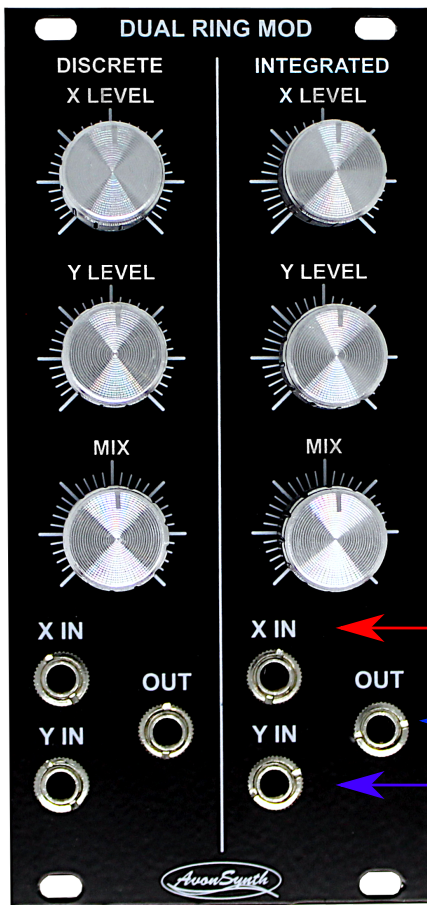
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Features & Specifications

- Two fully analogue Ring Modulators with radically different architectures and sounds
- 12 HP wide (60.6mm), 30mm deep, current consumption: +12V 30ma, -12V 30ma
- 'Discrete' original-style Ring Mod, with real transformers and diode ring
- 'Integrated' modern analogue Ring Mod, based on a high-end integrated circuit
- Creates a range of timbres from raw and aggressive, to smooth and silky
- Individual level controls for both the Carrier (X), and Modulator (Y) inputs
- 'Mix' knobs that control the balance between dry (carrier) and wet (modulated) material
- Discrete modulator features 4 replaceable diodes on the rear to customise its behaviour

Description of Functionality



Both sides' interfaces have identical behaviour

X & Y Level Attenuators

These two controls attenuate the volume of the corresponding 'X' (Carrier) and 'Y' (Modulator) inputs individually.

'Mix' Knob

This knob controls the balance at the unit's output between the Carrier signal (X In) and the modulated output (X * Y).

Carrier ('X') Input

The sound to be modulated is input here

Ring Modulated Output

Modulator ('Y') Input

The modulating sound is input here

Replaceable Diodes

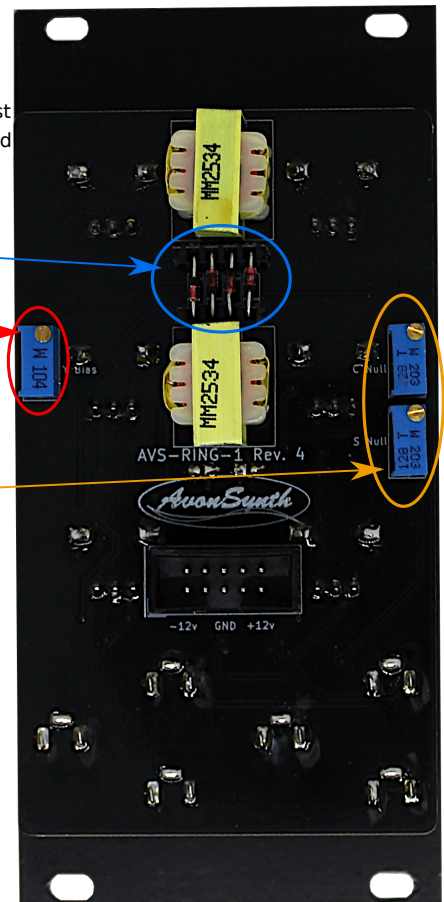
Feel free to replace these diodes with other flavours such as Germanium, or even LEDs to adjust the timbre of the Discrete Ring Mod to taste. Ensure that the diodes' cathode sides match the thicker lines shown on the printed silkscreen beneath them.

Bias Trimmer

Adjust this to reduce bleed in the Integrated Ring Mod if necessary

C Null and S Null

Adjust these to reduce bleed in the Discrete Ring Mod if necessary



Note: Integrated Ring Mod can be configured to have minimal bleed, but Discrete Ring Mod will naturally contain much more bleed, even at optimal trimmer positions

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Safety Precautions

Please use this module in accordance with the following safety guidelines in order to maximize the life of the module and ensure warranty from AvonSynth.



Keep water and other conductive liquids and materials away from this module. It is not water proof, or even water resistant. Exposure to these can cause short-circuits that can render the equipment unusable.



Be sure to keep this equipment in an environment with an ambient temperature above -20°C and below $+50^{\circ}\text{C}$. Excessively hot or cold temperatures can be damaging to the electronic circuits used.



Modules with exposed circuit-boards are delicate. Take the utmost care when handling and transporting this equipment, making sure not to subject it to excessive forces. Ensure that the module is installed correctly while being transported and that the original packing materials are used when sending the module anywhere by post.

Warranty & Support

This product is covered by AvonSynth's warranty for one year from the manufacturing date. Within this timeframe, any manufacturing defect will be repaired or replaced by AvonSynth. Damage caused to the product due to not following the safety precautions above, unauthorized modification of the hardware, or misuse such as subjecting the unit to reverse or excessive voltages will void this warranty.

If you have any concerns about your AvonSynth hardware, please get in touch via **info@AvonSynth.com** to discuss any issues. We will do our best to assist you in getting your hardware operating correctly, and if necessary, we will provide an RMA (Return Merchandise Authorization) to send back the unit for inspection. Any postal costs incurred in this process will be the responsibility of the customer. Please do not send back merchandise before receiving this authorization.