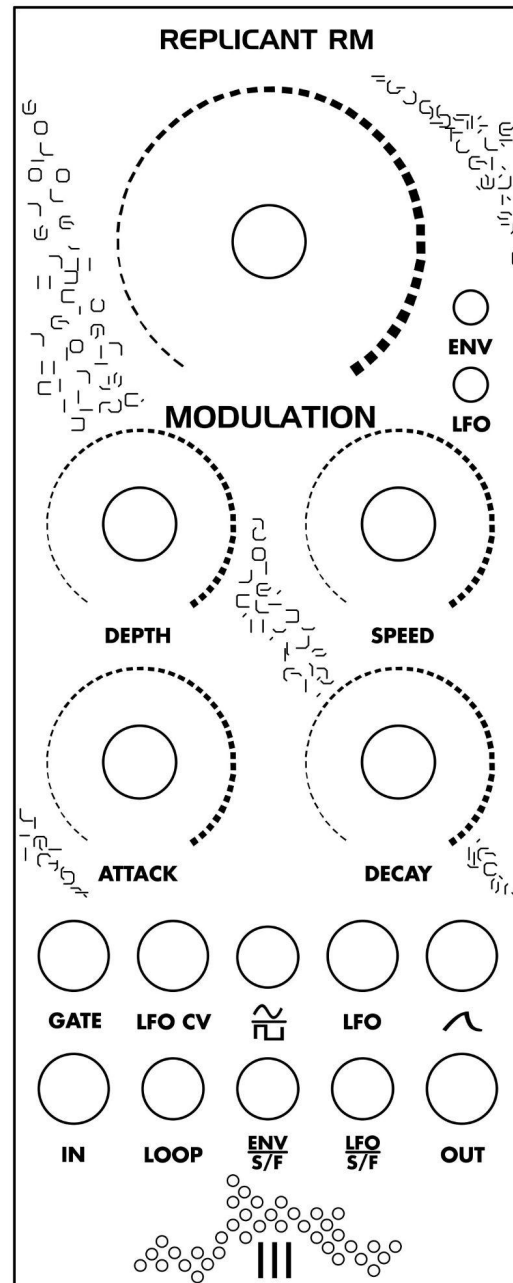


Tre Modular - Replicant RM

User Manual

Thank you for choosing Tre Modular - Replicant RM Eurorack module!

This guide will walk you through the features, and usage of this module.



Features:

- Ring modulator based on the same architecture as CS80`s.
- Built in sine/square VCO with external output
- Gated/Looping AD envelope with external output
- Compact 10 HP size.

Ring Modulator:

Replicant RM is faithful recreation of Ring modulator found in Yamaha CS80. At the core of the Replicant RM is a circuit design inspired by the CS-80, delivering that instantly recognizable, bright, and often chime-like sonic character.

For ring modulation Replicant RM uses MC1496 IC. It is a pin compatible modern alternative to the now obsolete uA796 used in CS80.

Dedicated VCO:

Like the original, the Replicant RM includes its own Voltage Controlled Oscillator to act as the carrier signal. It has two waveforms Sine and Square. Sine wave is crucial to the CS80`s distinct sound, providing a clean, pure tone for modulation.

But we didn`t stop there, we added an option for Square wave. Square wave adds grit and distortion to modulation.

It has two speed modes - Slow and Fast. In slow mode it ranges from to ,and in fast mode it ranges from to .

Integrated AD Envelope:

A key feature distinguishing the CS80 Ring Modulator was its dedicated Attack/Decay Envelope Generator. So of course we included it in Replicant RM.

It has two modes - Gated or Looped. In gated mode it is triggered with a gate signal. This allows for expressive, key-triggered sounds, from metallic bells and gongs to futuristic laser zaps. And in loop mode it continuously cycles.

It has two speed modes - Slow and Fast. In slow mode it ranges from to ,and in fast mode it ranges from to .

Specifications:

Module width: 10 HP

Module depth: 25mm

LFO speed:

Slow: 1Hz to 200Hz

Fast: 10Hz to 2Khz

Envelope:

Slow:

Attack: 20ms - 14sec

Decay: 8ms - 5sec

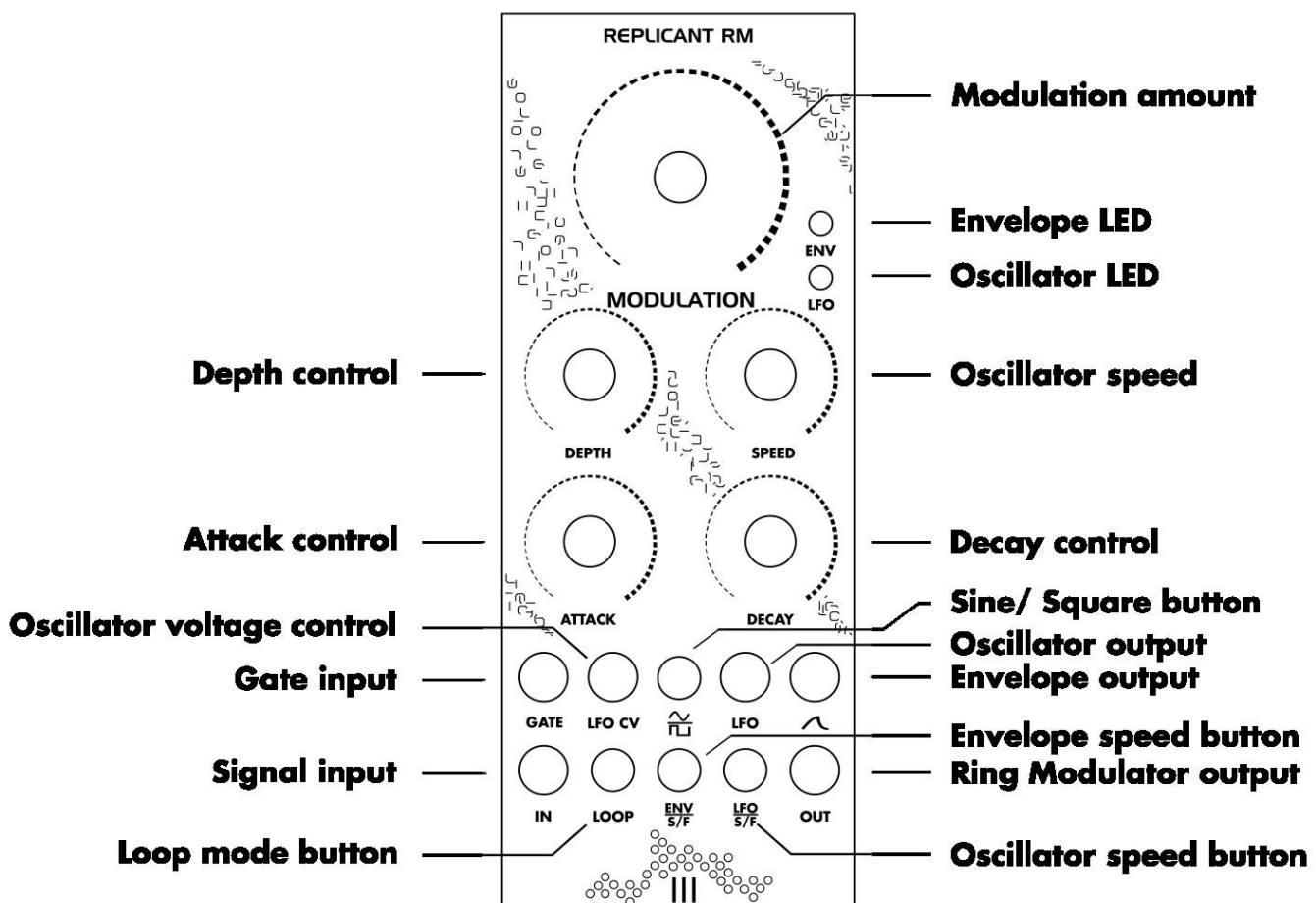
Fast:

Attack: 2ms - 1,4sec

Decay: 0.8ms - 500ms

Power Consumption: 39mA at +12V / 31mA at -12V

Reversed polarity protection



Controls:

Modulation amount: Controls the ratio between clean and modulated signal

Oscillator Speed: Controls the internal Oscillator's speed.

Depth control: Controls the amount of envelopes influence on Oscillators speed

Attack control: Sets the length of the attack stage.

Decay control: Sets the length of the decay stage.

Voltage-Controlled Features:

Oscillator voltage control: Voltage control over internal Oscillator.

Inputs:

Signal input: Audio signal input.

Gate input: Gate signal input.

Outputs:

Ring Modulator output: Outputs the modulated signal.

Oscillator output: Outputs the internal Oscillators signal.

Envelope output: Outputs the internal envelope generator.

Buttons:

Sine/Square button: Selects between sine and square waveforms.

Loop mode button: Turns loop mode on and off.

Envelope speed button: Selects between slow and fast envelope modes.

Oscillator speed button: Selects between slow and fast oscillator modes

LED:

Envelope LED: Visual representation of Internal Envelope generator.

Oscillator LED: Visual representation of internal oscillator.

Installation:

Power off your Eurorack system.

Insert the module into an available slot.

Connect the power cable, ensuring correct polarity.

Power on your Eurorack system.

Enjoy!

Additional Information:

For any additional questions or support, please contact Tre Modular at support@tremodular.com.

Happy patching!

