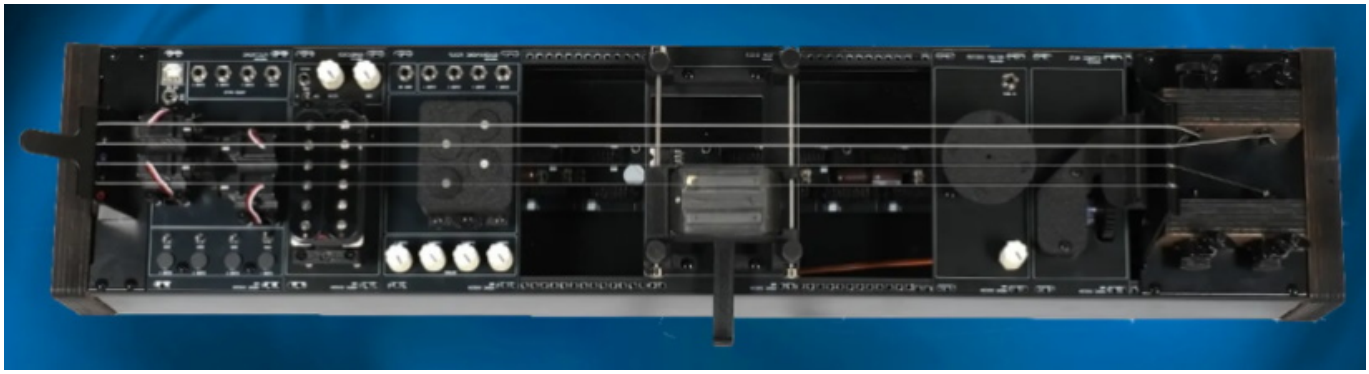
ADDAC System Four Strings Series



ADDAC System announces a 'string revolution' for Eurorack synthesis: The Four String Series. Consisting of an entirely new family of tactile modules, the Four String Series has been designed as an open canvas that inspires users to explore and engage with physical strings from various perspectives, promoting creative experimentation. The Four Strings Series will begin shipping in July.

The concept for the Four Strings Series originated from the desire to incorporate physical strings into Eurorack, similar to a lap steel guitar or dulcimer that can be seamlessly integrated into any Eurorack frame. There would be no fretboard however, allowing for the installation and use of other modules beneath the strings - albeit with some limitations.

The headstock and bridge were developed first so that the strings could clear underneath to host other modules. After that, the humbucker module was developed so it could capture the strings sounds just like an ordinary electric guitar. The limitations of standard humbuckers lead to the development of our own pickup, using a quadraphonic configuration with a discrete pickup for every string, allowing independent string volume control.

The development team then moved into exploring mechanical automation by developing a plectrum module that can pluck each string independently. In parallel, a Mute module was also developed, making it possible to dampen the strings natural vibration - similar to how a Fender mute or a palm mute works on a guitar, but allowing for mechanical automation. Soon, other modules were explored - including the Rotary Exciter, which generates a rotating magnetic field to excite strings that are in the same frequency of the motor rotation speed. Another new module, the Ebow slider, was then developed to create a harness and sliding mechanism making it possible to produce an Ebow effect on any string.

In addition to the journey of creating a family of new modules, a few other useful attachments were developed including a headstock arch that attaches to the headstock. This raises the two middle strings, allowing the use of a bow to reach all strings individually. Additionally, small plastic resonators were developed - these attach to the strings so they can create harmonics that closely resemble complex

Phoca PDF

bell type tones.

Finally, a brand new 122HP frame was created to accommodate all these modules, allowing the entire system to operate independently. The inclusion of a dedicated power supply within this frame helps prevent contamination from any residual noise that may be generated by the motors. The system can also be implemented in a DIY build project creating your own alternative to a frame.

Here's a brief description of the different elements that make up the Four Strings Series:

- ADDAC120 Headstock & Bridge: This is the base of the String modules, a Headstock & Bridge modules, allowing string gauges up to 0.055. Users can also make these holes larger to fit heavier strings. Both panels are 2mm stainless steel for strength. The headstock features 4 locking tuners for easier string installation. The ADDAC120 Headstock & Bridge is priced at €210,00.
- ADDAC121 Humbucker: This is the simple Humbucker pickup module. It features Tone and Volume controls as well as a LOW/HIGH gain switch for saturation. An integrated pre-amplifier brings the volume up to synth level. The height of the pickup can be adjusted using the mounting screws. The pickup can also be removed and used by hand. The ADDAC121 Humbucker is priced at €110,00.
- ADDAC122 Quadraphonic Pickup: This is the Quadraphonic pickup, four independent pickups each with their own pre-amplifier, independent Volume control and output jack. A Mono Mix output (post volumes) is also available. All outputs are synth level. The height of the pickup can be adjusted using the mounting screws. The ADDAC122 Quad Pickup is priced at €290,00.
- ADDAC124 Plectrums: This is the Plectrum module, featuring a servo per string allowing to pluck each string independently either from their dedicated push-buttons, incoming triggers or via MIDI. In Pluck mode the servo will move about 20 degrees efectivelly plucking the string. In Harmonic Mode the servo only moves about 10 degrees stopping at vertical position to lightly tap the string so that harmonics can be heard. The ADDAC124 Plectrums is priced at €280,00.
- ADDAC125 Strings Mute: This module is inspired by Fender’s Mute system found in some Jaguar and Bass VI guitars where a piece of foam can be engaged to press against the string dampening their natural vibration. For this module we use a servo motor that raises and lowers a piece of foam that when pressed against the strings lightly dampens their natural vibration. While not as effective as a standard palm mute it allows a different tone to be automated. The ADDAC125 Strings Mute is priced at €45,00.
- ADDAC126 Rotary Exciter: This module features a 7000 RPM brushless motor that rotates a surface with 4 magnets with opposed magnetic poles inducing a rotating magnetic field that will force the strings to vibrate whenever the rotational speed matches the frequency or harmonics of any

of the strings tuning. The ADDAC126 Rotary Exciter is priced at €85,00.

- ADDAC127 Ebow Slider: This module creates a harness and a sliding mechanism for a standard ebow. It allows the user to slide the ebow back and fourth below the strings. The ebow used features the “PianoBow” modification (see website below) where we sand off the Ebow’s feet so that it can get closer and avoid touching the strings when sliding it back and fourth. The height of the ebow can be raised or lowered using the four thumb screws. The ADDAC127 Ebow Slider is priced at €140,00.
  Bow Arch Attachment: This attachment raises the two middle strings allowing a bow to reach each string individually.
- Small Resonators: Although quite simple these are extremely efective adding harmonics to non-wounded strings. For every resonator attached to the string a new partial is added, placing more pieces adds more partials which makes the tone increasingly complex. The tuning of each harmonic is defined by the position of the resonator on the string - the resulting sound can be quite surprising as very much resembles a bell type sound.ADDAC120F Strings Frame: This is a custom-built frame designed specifically for the ADDAC12X String modules. The Strings Frame is priced at €360,00.

Technical Specifications:

- 90-240V AC Plug with fuse drawer (2 fuses: 1 installed, 1 spare)
- 122HP
- +12V 1.5A
- -12V 1.5A
- +5V 0.5A (from +12V)

All of the products within the Four Strings Series is available now - join the 'string revolution' in Eurorack synthesis.

www.ebow.com
www.addacsystem.com

Phoca PDF