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MIDI<->CLK

Thank you for purchasing Erica Synths MIDI <-> Clock module!

This is essential module, if you wish to sync your modular system to MIDI devices. What sets Erica Synths MIDI <-> Clock module apart form others is that it works BOTH WAYS – it derives analogue clock from MIDI messages AND, flip a switch, and you can turn incoming analogue clock to MIDI clock and sync your MIDI devices to your modular. For more versatility the module can be used with several incoming clock PPQs, plus, divisions and multiplications of incoming clock are available straight away.

FEATURES:

Bidirectional MIDI to clock conversion 1, 4 and 24 PPQ selection Division by 2, 4, 8 Multiplication by 4, 6, 16 Two simultaneous multiplied clock outputs Start/Stop button MIDI start/stop message implementation Incoming/outgoing clock LEDs

TECHNICAL SPECIFICATIONS:

Clock signal level	
CLK signal duty circle	
Power consumption	
25mA@+	-12V, 0mA@-12V
Module width	6HP
Module depth	20mm

This in input of the clock in MIDI OUT mode and output of the clock in MIDI IN mode. NB! Do not plug clock signal here in MIDI IN mode! It's clock output now!

Select division rate for DIV output! Note that division is done on BPM basis

This button activates outgoing clock, in case MIDI device doesn't send MIDI start/stop messages.

If the module is in MIDI IN mode: *The module will start to output clock signal automatically with MIDI STRAT message *Push the button promptly to stop the clock output to all outputs on the module, even if the MIDI controller is running *Push the button promptly to resume clock output instantly *Push the button for 1,5" to resume clock output in the moment, when MIDI sequence is on the first step of the sequence

If the module is in MIDI OUT mode:

*With a clock signal plugged in CLK IN/OUT, push the button promptly, and the module will send MIDI START message and start to output MIDI clock *When clock is running, push the button promptly and the module will send MIDI STOP message and a MIDI device (eg. sequencer) will stop on the current step *To resume the sequence, push the button promptly, and the module will send MIDI CONTINUE message

*To reset the sequence and start it from beginning, push and hold the button for 1,5", and the module will send MIDI START message.

In MIDI OUT mode we can't output correct 24PPQ MIDI clock starting form the first click, because we do not know the period of the incoming clock, yet. Therefore we need manual start.



LEDs indicate clock rate for each of clock outputs

This is output of the divided clock

These are outputs of multiplied clock. Multiplication rate is 2, 4, 8 for MULTI output and 4, 8, 16 for MULT2 output

> Select multiplication rate for both MULT1 and MULT2 outputs! Note that multiplication is done on BPM basis

Depending on direction, this switch select desired PPQ of the clock. If you convert MIDI clock to analogue clock, you can select PPQ of outgoing clock. To clock most of sequencers, select 4PPQ! If you convert analogue clock MIDI clock, you need to set incoming clock division in order to get correct 24PPQ MIDI clock. If you input clock that corresponds to BPM clicks, select 1, if you input clock from the sequencer, select 4.

This is MIDI activity LED

Connect your MIDI controller here!

Select clock conversion mode!

If you input MIDI CLOCK, set the switch to MIDI IN position, and you will get analogue clock on CLK IN/OUT jack and divided or multiplied clock on all other jacks. Clock will appear on the output only, if MIDI Start message will be present. If you input ANALOGUE CLOCK to CLK IN/OUT jack and want to output MIDI clock, set the switch to MIDI OUT position! DIV and MULT outputs will as incoming clock dividers or multipliers.

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SAFETY INSTRUCTIONS

Please follow the instructions for use of this Erica Synths module below, 'cause only this will guarantee proper operation of the module and ensure warranty from Erica Synths.



Water is lethal for most of the electric devices, unless they are made waterproof. Erica
Synths module is NOT intended for use in a humid or wet environment. No liquids or other conducting substances must get into the module. Should this happen, the module should be disconnected from mains power immediately, dried, examined and cleaned by a qualified technician.



Do not expose the module to temperatures above +50°C or below -20°C.



Transport the instrument with modules installed carefully, never let it drop or fall over. Warranty does not apply to modules with visual damages.



The module has to be shipped in the original packaging only. Any module shipped to us for return, exchange and/or warranty repair has to be in its original packaging. All other deliveries will be rejected and returned to you. Make sure you keep the original packaging and technical documentation. You will find Erica Synths terms of warranty at http://ericasynths.lv/en/terms/

Items for return, exchange and/or warranty repair have to be sent to: Erica Synths, Andrejostas Str.12, Riga, Latvia, LV-1045

DISPOSAL

This device complies to the EU guidelines and is manufactured RoHS conforming without use of led, mercury, cadmium and chrome. Nevertheless, this device is special waste and disposal in household waste is not recommended.

Designed and made in Latvia. User manual by Girts Ozolins@Erica Synths. Design by Baiba Stelle.

Copying, distribution or any commercial use in any way is prohibited and needs the written permission by Erica Synths.

Specifications are subject to change without notice.

In case of any questions feel free to contact us via e-mail info@ericasynths.lv

Check out other Erica Synths modules & devices at www.ericasynths.lv