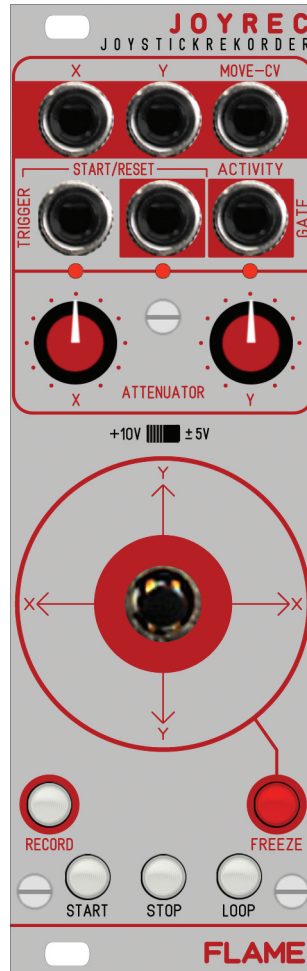


FLAME

JOYREC JOYSTICK REKORDER



MANUAL

Version 1.00

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1. Short description

The JOYREC is a small compact joystick module with recording function. The module can record the joystick movement to a length of about one minute. The sequence remains stored in the battery-backed RAM after switching off. When playing back the sequence, the playback speed can be manipulated.

There is a FREEZE function to hold the current joystick position. Also there are an external reset input. In addition, when moving outside the center position, a GATE is set and an additional positive CV voltage (summation of X and Y) is output in dependence. A GATE / START input is used for resetting or recording in sync.

The ranges of the X / Y output voltages are bipolar adjustable from approx. +/- 5v or unipolar from approx. 0 to + 10v. Both channels X and Y have a passive attenuator potentiometer, so that the voltage range can also be set lower.

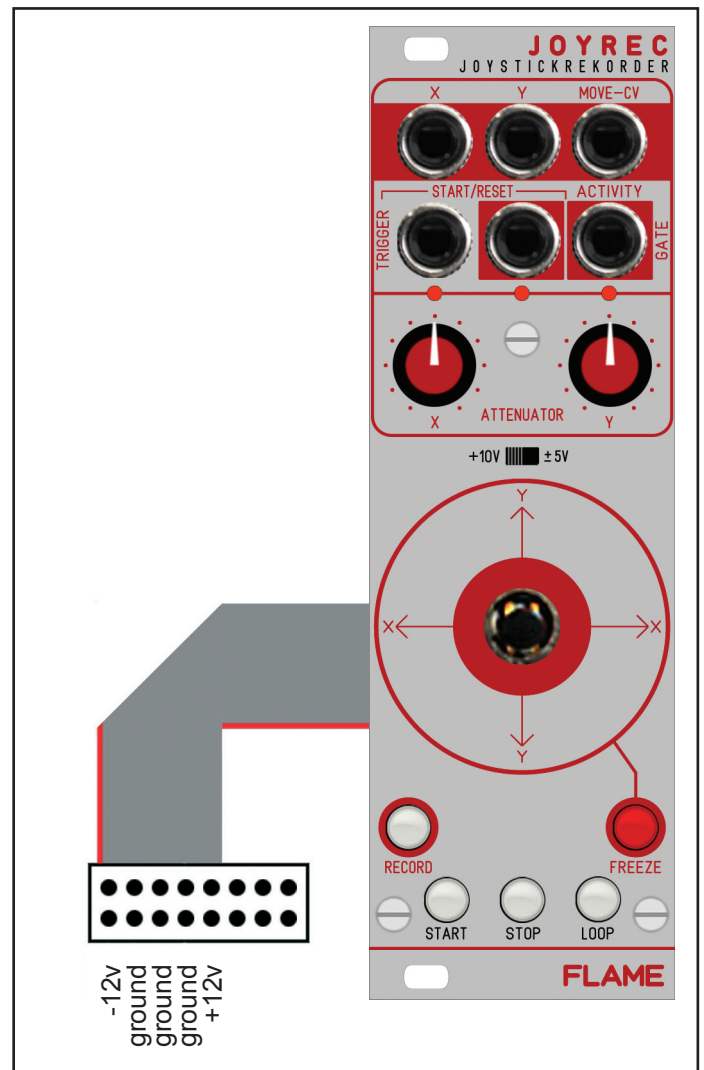
2. Hardware / Connections

2.1 Connection to the modular system (Doepfer bus)

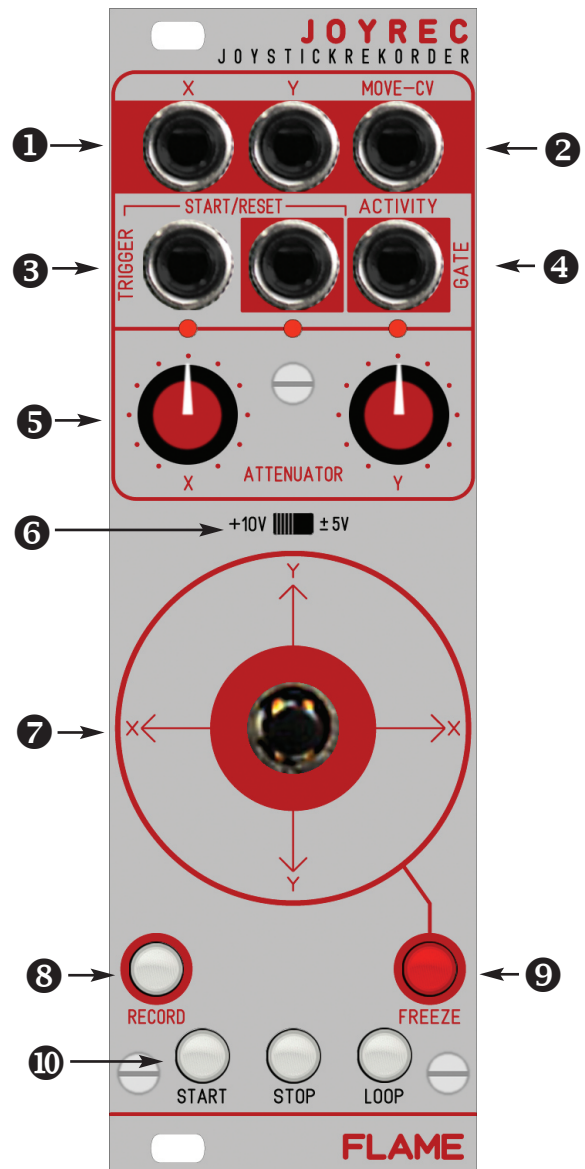
The module is delivered with a connected ribbon cable for the Doepfer bus. The red lead marks -12 volt.

Connecting the module please note the right polarity! If the module is poled accidentally wrong safety diodes avoid the immediate destruction of the module but further damages cannot be expected.

So please pay attention: Check the connection various times before switching on!



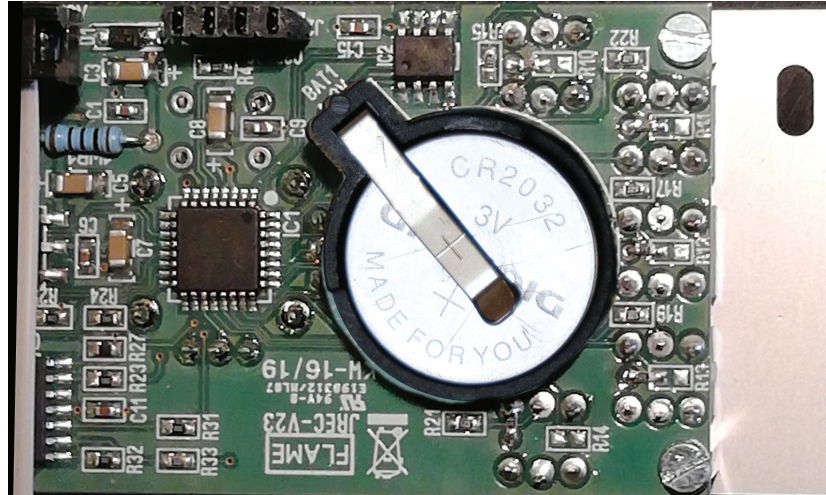
2.2 Modul overview



- ① CV outputs X / Y (unipolar or bipolar)
- ② CV output MOVE (unipolar)
- ③ START / RESET Trigger input and output
- ④ GATE output “Activity”
- ⑤ Attenuaters of the X / Y outputs
- ⑥ Switch bipolar/unipolar for X / Y outputs
- ⑦ Joystick
- ⑧ RECORD button for Recording stand by
- ⑨ FREEZE button Holding the joystick position
- ⑩ Play buttons: START, STOP and LOOP on/off

2.3 Module backside (Polarity, Backup Battery)

At the bottom of the module is the socket for the backup battery of the memory. Please note the information below!

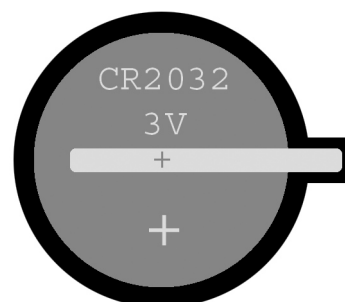
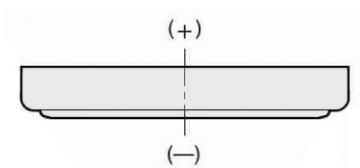


↑
Backup battery
3V Typ CR2032

Insert the backup battery before connecting the unit to your modular rack.

The JOYSTICK REKORDER uses a standard 3v lithium backup battery, type CR2032. Insert the provided battery or a comparable battery into the battery compartment as shown below. The battery is needed to keep recordings and settings stored when the Eurorack case is turned off.

Make sure the anode (+) points outwards ! Otherwise you destroy the SRAM !



3. Handling

3.1 Manually mode (play joystick)

Play manually with the joystick when recording is stopped (START button does not light up). The FREEZE key is used to permanently hold the current position of the joystick (key lit). With the two potentiometers the output voltage is attenuated. Outside the center of the joystick, the GATE output "Activity" is switched on (+ 10v), the LED lights up. In addition, a unipolar voltage, generated from the sum of X and Y, is output at the MOVE-CV output (approximately 0 to + 6v).

3.2 Recording

RECORD STANDBY

Press the RECORD button for recording standby. The LED flashes. (This works even while the track is playing!)

START RECORD

Only when the START button is pressed or when a positive trigger pulse is received via the START / RESET input socket does recording begin. Now the REC and START buttons light up permanently. The movement of the joystick is now recorded. The maximum recording time is about 1 minute.

STOP RECORD AND START PLAY BACK

The recording ends when the START button is pressed again or ends with a positive trigger pulse via the input socket START / RESET or when the maximum recording time is reached. The recording then starts automatically and is played looped if LOOP is switched on.

STOP RECORD AND STOP PLAY BACK

If the STOP button stops recording, the playback will not start but the joystick will be in manual mode again. However, the recording can be started by pressing the START button or by a positive trigger pulse via the input socket START / RESET.

LOOP

Press the button LOOP to switch the function on / off.

PLAY LOOP - The recording is played repeatedly when the LED is lit.

ONE SHOT - The recording will only be played once when the LED is off.

3.3 Play back

Pressing the START button or a positive trigger pulse via the input socket START / RESET will start the playback.

RESET

If the track is currently being played (START button lit), it can be restarted by pressing the START button or by a positive trigger pulse via the input socket START / RESET (Reset).

TRIGGER OUTPUT

At each start or loop end, a trigger pulse of approx. 10 ms length is output at the TRIGGER output socket.

3.4 Speed

While playing back the recording, the joystick of the X-axis can be used to change the playback speed: left is played slower and right faster.

Note that the SPEED function has no effect when the One Shot sequence is finished!

3.5 Saved data

If a backup battery is used, the following data remains permanently stored after the module is switched off:

- The recorded sequence
- The length of the sequence
- LOOP setting
- FREEZE setting

4. Appendix

4.1. Technical details

Connections:

Ribbon cable adapter for Doepfer bus +/-12Volt

Inputs: 1x Trigger , 1/8th inch mono jacks

Outputs: 2x Trigger/Gate, 3x CV, 1/8th inch mono jacks

Control elements:

5 push buttons

2 Potentiometer

3 LED's

Resolution: AD/DA converter: 12Bit, Sample rate: ca. 300Hz, CV Range: 0..+10V, +/-5V

Current consumption:: +30mA / -5mA

Size: Euro rack format 3U / 6HP 40,3x128,5x33 mm

4.2 Warrenty

Beginning from the date of purchase a 2-year warranty is guaranteed for this device in case of any manufacturing errors or other functional deficiencies during runtime. The warranty does not apply in case of:

- damage caused by misuse
- mechanical damage arising from careless treatment (dropping, vigorous shaking, mishandling, etc)
- damage caused by liquids penetrating the device
- heat damage caused by overexposure to sunlight or heating
- electric damage caused by improper connecting
(wrong power supply/ jacks/ MIDI connections/ voltage problems).

If you have any complaints please contact your dealer or send an e-mail to:
service@flame-instruments.de

4.3 Terms of production

conformity: CE, RoHS, UL

4.4 Disposal

The device is produced with RoHS-conformity (subject to the regulations of the European Union) and is free of hazardous substances (like mercury, plumb, cadmium and hexavalent chrome). But electronical scrap is hazardous waste. Please don't add this to consumer waste. For an environment friendly disposal of waste please contact your distributor or specialist dealer.

4.5 Support

Updated and additional informations, updates, downloads and more see:
<http://www.flame-instruments.de>

4.6 Acknowledgment

For help and assistance big thanks to:

Schneiders Büro Berlin, Shawn Cleary (Analogue haven, Los Angeles), Thomas Wagner, Robert Junge, Anne-Kathrin Metzler, Lena Bünger and Alex Wolter.