

The **POLY SEQUENCER** is a MIDI based polyphonic step sequencer that records up to **128 steps** and stores up to **5 notes per step**. The Poly Sequencer works by recording a sequence utilizing a MIDI controller, and outputting the recorded sequence via an external MIDI enabled device. The Poly Sequencer increments through the recorded sequence by MIDI/ external clock with the appropriate clock division set as desired. Additional functionality include saving, auto generate blank sequences, as well as step override/ interrupt during playback. The device stores (1) velocity reading per step and can also store one (1) CC message per step, if desired.

**GATE IN Jack:** 3.5 mm jack used to synchronize Poly Sequencer with external gate source.  
Min. Voltage: 3V    Max. Voltage: 12V

**GATE OUT Jack:** 3.5 mm jack used to synchronize external gear with Poly Sequencer. Duplicates voltage and tempo of GATE IN Jack.

**MIDI Clock:** MIDI clock may be used to sync Poly Sequencer to other devices. The device will begin playback when it reads a Start/ Continue message. In this mode, the play button is disabled.

**REC | REST Button:**

**REC:** Starts Record Mode when pressed.

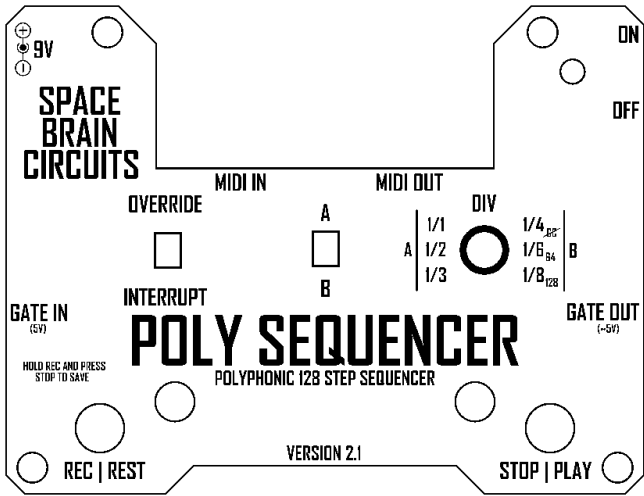
**REST:** Creates rest while in Override/ Interrupt Mode.

After connecting MIDI Controller and external MIDI Device to the appropriate MIDI jacks. Press the REC | REST button to initiate Record Mode (as indicated by the Red LED). Play the note(s) you would like associated to the first step of sequence. The sequence will automatically increment to the next step when all notes are released (as indicated by the Green LED). While note(s) are held, you may also send 1 CC message. Continue adding notes to the sequence as desired. The REC | REST button may be used to add a **rest** to the sequence. When finished, press STOP | PLAY button. The RED LED will blink twice indicating sequence has been stored.

**Saving a Sequence:** Save the sequence by holding the REC | REST button and pressing the STOP | PLAY button. Both Red and Green LEDs will flash indicating the Save was successful. This sequence will now be available for playback after the Poly Sequencer is powered off.

**MIDI IN Jack:** Connect MIDI Controller/ keyboard MIDI OUT to the Poly Sequencer MIDI IN (**Channel 1**).    **MIDI OUT Jack:** Connect the external MIDI device MIDI IN to the Poly Sequencer MIDI OUT (**Channel 1**).

*Midi Channel In and Out may be individually assigned to Channels 1-16 through SysEx messages. Files are available for upload on [www.github.com/spacebraincircuits./polysequencer](http://www.github.com/spacebraincircuits./polysequencer)*



The REC | REST button may also be used to replace an associated note with a **rest**. The CC value may also be replaced.

**Interrupt:** At any point during a sequence, any key press/ rest will mute the sequence and instead play the notes pressed. When all notes are released, the sequence will continue playing at the appropriate step.

**Shift Functions:** Hold the REC | REST button for more than 3 seconds to access Shift Functions on DIV switch (subscript)

66—Clears CC data on existing sequence.

64/ 128—Auto creates blank sequence of desired length.

**9V DC Jack:** DC power supply not included.  
2.1 mm barrel plug (**Center Positive**)

**DIV Switch:** Determines tempo division from GATE IN Jack. A DIV set at 1/4 will increment to the next step in sequence after 4 pulses from GATE IN. Options selectable by first choosing which column the DIV will access, as assigned by the **A | B** switch.

**STOP | PLAY Button:**

**STOP:** Ends Record Mode/ Play Mode.

**PLAY:** Starts Play Mode.

Press STOP | PLAY to initiate Play Mode (start playback). Poly Sequencer will increment through sequence at the tempo provided by the external clock, and increment per the tempo division set on the DIV switch. When syncing with **MIDI clock**, Play Mode is initiated with Start/ Continue messages. The **A | B** switch and DIV switch may be changed at any point during Play Mode.

Step Override and Step Interrupt are selectable during playback. This changes how the device behaves while playing notes while sequence is in Play Mode.

**Override:** At any point during a sequence, notes associated to a step may be replaced by simply playing over the existing sequence (as indicated by the Green LED).

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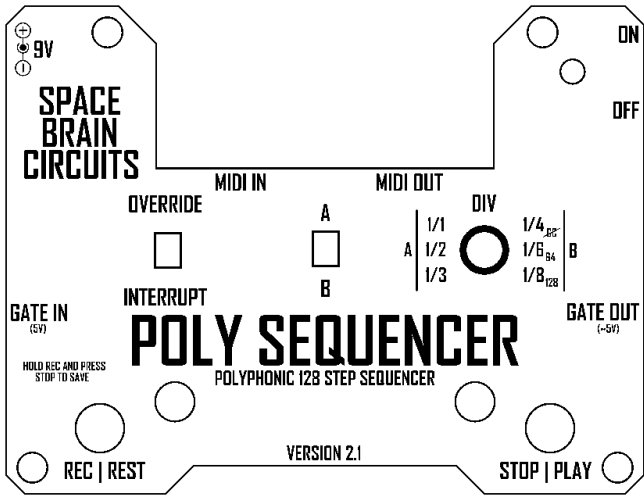
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USER MANUAL

# POLY SEQUENCER

SPACE BRAIN CIRCUITS

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