

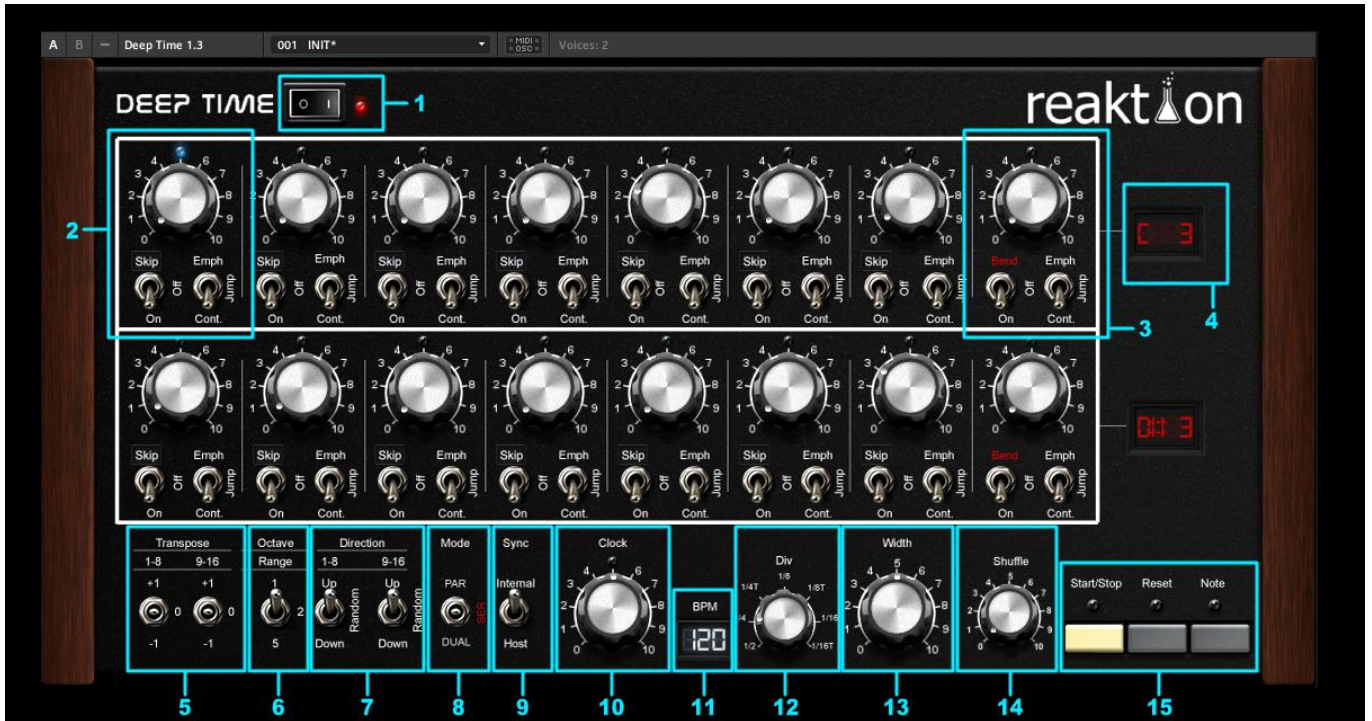
Deep Time

User Manual v.1.3

reakt  on

Deep Time is a 8x2 Steps Sequencer that can run in "serial" mode (one sequence of 16 steps), in "parallel" mode (two sequence of 8 steps at the same time) and in "dual" mode (with internal and MIDI modulation capabilities).

Panel A view:



Panel B view:



1- **On/Off switch:** it turns the entire instrument on/off

2- **Steps status:** you can set the note and functions for each step

- **ON:** the step is active
- **OFF:** the step is off (no trigger)
- **SKIP:** the step is skipped
- **CONT. :** the sequence continues
- **EMPH:** it emphasises or accents a note with MIDI Velocity messages according to settings on Panel B view
- **JUMP:** if only one of the steps is set to *Jump* position, it works like a reset (the sequence jumps back to the first step); if two steps are set to *Jump*, these become the new starting and ending points of the sequence. If a new *Jump* is set inside the range of the two previous *jump* position, it will have no effect; if it is set outside that range, it will become the new start or ending point.

3- **Special steps (8 and 16):** these change *Skip* function to *BEND* mode

- **BEND:** it sends a MIDI Pitchbend message and activates *Bend* on each step in *Skip* position on the corresponding row

NOTE:

- The *Bend* function is active only in *SER* (serial) mode
- The *Skip* function is not active for this step
- The Pitchbend amount is set on the Panel B view's Pitchbend settings
- When the *Bend* mode is active, the *Skip* function for the entire row is bypassed

4- **MIDI Display:** just click on each knob (Figure 1) to show the stored value for that step on the corresponding row's display (Figure 2)



Figure 1: the highlighted section indicates the mouse-click sensitive zone to show the note stored without turn the knob and change the current value



Figure 2: display showing the stored note

5- **Transpose**: it selects the transpose amount applied to rows 1 and 2

- **+1**: one octave higher
- **0**: no transposition
- **-1**: one octave lower

6- **Octave Range**: it selects the operating range of steps values

- **1**: one octave from C3 to C4
- **2**: two octaves from C2 to C4
- **5**: five octaves from C0 to C5

7- **Direction**: it selects the running direction of the two rows (up, down or random)

- **UP**: the sequence runs forward
- **DOWN**: the sequence runs backward
- **RANDOM**: the sequence runs randomly

8- **Mode**: it sets the main sequencer operating mode (parallel, serial or dual)

- **PAR**: both rows run in parallel
- **SER**: two rows of 8 steps are connected in series
- **DUAL**: the lower row now controls the gate length of the corresponding step in the upper row or sends a MIDI Control Change message (according to "*Dual Mode settings*" on Panel B view)

9- **Sync**: it selects the clock source

- **INTERNAL**: internal clock controlled by *Clock* and *Div* knobs
- **HOST**: the clock is synchronized to the Host clock (the panel *Clock* control will have no effect; the *Div* control also affects the Host clock)

NOTE: when *Sync* is set to Host, the panel *Start/Stop* button will have no effect. This function will be controlled by Reaktor main transport bar.

10- **Clock**: it selects the speed of the internal clock source in BPM from 30 to 210

11- **BMP Display**: it shows the speed value of both the internal and host clock source in BPM

12- **Division:** it selects the division factor of both the internal and external clock source speed. It also changes the division factor independently for the two rows when running in parallel (*PAR*) mode (Figure 3)

- **1/2:** Half note
- **1/4:** Quarter note
- **1/4T:** Quarter note Triplets
- **1/8:** Eighth note
- **1/8T:** Eighth note Triplets
- **1/16:** Sixteenth note
- **1/16T:** Sixteenth note Triplets



Figure 3: the switch in the red box appears when the Mode is set to *PAR*. From there, you can select a different Division factor for the rows 1 and 2

13- **Width:** it controls the overall gate length of the steps (it is affected also by *Clock/Div* settings and it is modulated by the lower row when the sequencer runs in *DUAL* mode)

14- **Shuffle:** it selects the amount of shuffle time (or "swing") applied to the sequence

NOTE: the maximum shuffle time is set equal to the exact gate length so, when turned fully clockwise, it will completely skips the "swinged" steps (you have instantly halved the total active steps).

15- **Main transport bar:**

- **Start/Stop:** it runs or stops the sequence
- **Reset:** it forces the sequence to start from the first active step
- **Note:** press to program a new sequence. This activates an internal tone generator: click in the center of each knob to listen to the note stored on each step (the note value is also showed in each row display); turn the knob to store a new value for each step. Turn the Note button off to stop the tone generator.

NOTE: when *Sync* is set to Host, the panel *Start/Stop* button will have no effect. This function will be controlled by Reaktor main transport bar.

16- **Velocity**: it sets the MIDI Velocity values sent from steps to the MIDI output. The values are showed on the corresponding display

- **Low**: it sets the lower velocity value (active for each step that is NOT in *Emph* mode)
- **High**: it sets the higher velocity value (active for each step that is in *Emph* mode)

17- **Pitch Bend**: it sets the amount of Pitch Bend in semitones applied to each step in *Bend* position (when *Bend* mode is activated from steps 8 and 16) and active only in *SER* (serial) mode. The values are showed on the corresponding display

18- **Random**: it randomizes the position of all controls

- **Amount**: it sets the amount of randomizing applied to all panel elements (except for *Mode*, *Sync*, *Clock*, *Start*, *Reset*, *Note* and *On/Off*)
- **Trigger** button: it applies the randomize function

19- **Key Transpose**: it sets which of the incoming MIDI note is used as Transpose for the row 1 (only active in *PAR* mode)

- **High**: the highest received note is used (then the lowest is used for row 2)
- **Last**: the last received note is used for both row 1 and 2
- **Low**: the lowest received note is used (then the highest is used for row 2)

NOTE: the sequence transposing works by counting the range in semitones between the MIDI note you play and the middle C (MIDI note 60) and applying it as transpose amount, i.e. :

- MIDI Note 60 (middle C): the sequence will run without transpose
- MIDI Note 61 (C#): the sequence will run with a transpose of one semitone up
- MIDI Note 72 (C one octave above): the sequence will run with a transpose of one octave up and so on

20- **Dual Mode Settings**:

ROW 2 output: it sets the output mode for the row 2 when the sequencer runs in *DUAL* mode

- **PWM**: the lower row modulates the Pulse Width of the upper row
- **MIDI CC**: the lower row sends a value for the MIDI Control Change number specified by "Set MIDI CC" knob. The MIDI Control Change message is sent to the MIDI out port of the Instrument

Set MIDI CC: it sets the MIDI Control Change number sent to the Instrument MIDI out (0/127)

NOTE: in this way it is possible to use the upper row for melodic sequence and the lower one to control a MIDI parameter to change timbre like filter cutoff and so on.

