

Track view

Sequence editing basics

- change the colour of a track: shift + turn ▼▲
- brightness of LEDs: shift & learn + turn ▼▲

Synth & kit presets

- cycles through synth or kit presets: turn select knob
- create a new, blank synth or kit preset: shift + synth or shift + kit

Kit tracks

- turn a track into a kit track: kit button
- “longer” note: adding a “note” + press one of the 16 main pads on its row
- mute line: pad-row’s mute pad (*2nd from right; green, turn yellow when muted*)
- colour of an individual row: shift + audition + turn ▼▲
- re-ordered the sounds / rows: audition + down ▼▲ + turn

Sound parameters

- select a sound: audition pad
- select a sound muted: shift button + audition pad
- changing parameters: 8 functions & gold knobs
- additional function: press down the knob
 - Cutoff: LPF, HPF, or treble & bass (“EQ”)
 - Res: Toggles 24dB & 12dB
 - Delay time: ping-pong ON / OFF
 - Delay amount: analog simulation ON / OFF
 - Sidechain: sidechain speed
 - Reverb: presets -small / medium / large”
 - Mod rate: chorus / flanger / phaser (“affect entire” only)
 - Mod depth: depth / feedback / offset (“affect entire” only)
 - Stutter: ON / OFF (+ turn > stutter speed)

Scrolling & zooming

- vertical scrolling: turn ▼▲
- zoom level display: press down ◀▶
- zoom in: hold down ▶ + turn clockwise
- zoom out: hold down ▶ + turn anti-clockwise
- horizontal scrolling: turn ▶▶

Editing track

- track length: shift + turn ▶▶
- multiply existing track: shift + press down ▶▶
- shift all notes & automation: hold down ▼▲ + turn ▶▶

Scales

- exit scale mode entirely: scale
- change to a different scale: shift + scale

- change the root note: scale + audition pad
- sharpen or flatten a note: shift + audition pad + select & turn
- transpose a track up or down: hold down ▼ ▲ & turn
- transpose a track by semitone: shift + hold down ▼ ▲ & turn

Notes of different length

- longer note: note's pad + press further pad right
- shorten a note, delete portion: press pads
- longer note + continues back: note's pad + press down ◀▶ + press further pad left
- never ending note: create note on entire track's length

Editing note velocity

- manual velocity: note's pad + turn ◀▶

Note probability and iteration dependence

- Percentage: note's pad + turn select anticlockwise
- Iteration: note's pad + turn select clockwise

Triplets view

- Triplets view: triplets view

Recording notes

- record & playback: record
- metronome: shift + tap tempo

Copying and pasting notes

- copy zoom level notes: learn + press down ◀▶
- paste notes: learn + shift + press down ◀▶

Parameter automation & recording

- record & playback automation: record
- overwrite automation: turn parameter knob again
- step by step automation: note's pad & turn parameter knob
- delete automation for a parameter: shift + press down parameter knob
- delete MIDI automation for a parameter: record mode + shift + turn knob on MIDI controller

Copying and pasting parameter automation

- copy zoom level automation: learn + press down parameter knob
- paste zoom level automation: learn + shift + press down parameter knob

Undo / redo

- undo: back
- redo: shift + back

Clear track

- **clear track:** hold down ◀▶ + back

Cross-screen edit mode

- **cross-screen:** cross-screen

MIDI & CV tracks

- **MIDI or CV track:** MIDI or CV button in track view
- **MIDI channel:** turn select knob

MIDI CC control & sequencing

- **select CC number:** hold down parameter knob + turn select

Song view

- **enter song view:** song
- **create a new track:** any of the 16 main pads on a free row
- **enter track view:** any of its 16 main pads

Stopping & launching tracks via arming

- **mute line:** pad-row's launch pad (*2nd from right: green, turn yellow when muted*)
- **increase loop before launch:** turn select
- **cancel launch:** press down select

Soloing tracks

- **soloing a track:** hold down ◀▶ + launch pad (several eventually)
- **immediate solo:** hold down ◀▶ + shift + launch pad (several eventually)
- **un-solo:** launch pad

Deleting, cloning & re-ordering tracks

- **delete track:** any 16 main pads + save / delete
- **move track up or down:** any 16 main pads + turn ▼▲
- **clone track:** any 16 main pads + press pad on a different row

Parameter knobs in Song View

- **change track's parameters:** any 16 main pads & turn parameter knob
- **affect entire song:** affect entire

Song sections

- **change a track's section:** hold down shift + press section pad repeatedly
- **arm a section for launch:** press + release section pad on any of the tracks that have that section

- **number of repeats + next:** section pad for *half a second* & **turn select**
- **change number of repeats:** *turn select*
- **cancel switching:** *press down select*
- **“share” option:** section pad + **turn select** far-anticlockwise

Keyboard view

- **entering keyboard view:** keyboard icon
- **change the root note:** scale + audition pad

Saving & loading songs

- **entering song mode:** save once
- **exiting save mode:** back
- **select slot:** *turn select (already used = full-stop displayed after their number)*
- **save song:** save again

- **entering load mode:** load once
- **exiting load mode:** back
- **select song:** *turn select*
- **skip sub-slots:** shift + *turn select*
- **load song:** load again

- **delete a song:**
 - enter load song
 - select slot number
 - **shift + save**
 - **save again** (or **back** to cancel)

- **new empty song:** shift + load, load again (or **back** to cancel)

Switching song during playback

- **switch songs while playing:** load a song
- **specifying launch-time:**
 - select the song
 - *hold down load*
 - “DONE” when load is completed
 - *release to arm*
- **increase loop before launch:** *turn select*
- **maintain tempo of previous song:** tempo + load

The file browser & loading samples

- **navigate:** *turn select*
- **load sample:** *press down select*
- **enter folder:** *press down select*
- **parent folder:** **back** (or *exit browser if at root level*)

Adding samples to an existing kit

- **load sample into existing kit:** audition pad + load

Loading a sample for use as a melodic “synth” instrument

- make new synth
- any of the audition **pads + load**
- select a sample

Slicer (basic)

- **kit with evenly-sized slices of 1 sample:**
 - create a blank kit
 - browse to the sample
 - **shift + down select** knob
 - “SLIC” will blink
 - select the number of slices
 - press *down select*

Recording samples

- **record sample in a new kit:** **record** at browser stage
- **stop recording:** **record** again
- **record sample into existing kit:** **audition pad + record**

Resampling / recording the Deluge’s output

- **recording instantly:** **shift + record**
- **recording at the same instant than playback:** **record + play**
- **recording at the same instant than a voice:** **record + press a pad**
- **stop recording:** **record** again
- **stop at the exact instant that a loop finishes:** **record + play** (again)

The sound editor

- **Edit sound’s parameter:**
 - **access by shortcuts:** **shift + shortcut pad**
 - **access by nested menu:** **press down select** knob

Sound editor nested menu parameters

- **OSC1** (oscillator 1) - called CAR1 (carrier 1) for *FM* synths
 - **VOLU**me
 - **TRAN**spose - in semitones (with cent adjustment)
 - **TYPE** - the wave type; basic wave types (SINE, SAW, SQUAre, or TRIangle), or SAMPlE, or IN (& INL, INR, or INLR)
 - **PULS**e width - for square waves only
 - **FEED**back - for *FM* synths only
 - **RETR**igger - phase (in degrees) that the oscillator will be reset to on note-on.

If TYPE is set to SAMPlE:

- **FILE** - file browser, select the audio file
- **REC** - sound recorder, to record a new sample
- **REVE**rse - reverses the sample
- **MODE** - can be set to:

- ONCE - sample plays once, whole way through
 - CUT - sample plays once, may be cut short at the end of the “note”
 - REPEAT - the sample loops until the “note” ends
 - STRETch - the sample is time-stretched to the length of the note
 - **START** time of sample, in seconds, with millisecond adjustment
 - **END** time of sample
 - **PITI** (pitch & time) -
 - LINKed (changing pitch affects length) or
 - INDEpendent (changing pitch does not affect length)
 - **SPEED** - time-stretches a sample without changing pitch
- **OSC2** (oscillator 2) - called CAR2 (carrier 2) for *FM* synths. Same as OSC1, plus...
 - **SYNC** (oscillator sync) - if switched ON, oscillator 2 resets (to its retrigger phase) whenever oscillator 1 does
- **MOD1** (modulator 1) - only available for *FM* synths
 - **TRAN**spose - in semitones (with cent adjustment)
 - **AMOU**nt - extent to which this modulator modulates the frequency of both carriers
 - **FEED**back
 - **RETR**igger phase - same as for OSC1
- **MOD2** (modulator 2) - only available for *FM* synths. Same as MOD1, plus...
 - **DEST**ination - frequency to CARS (both carriers), or MOD1 (modulator 1)
- **NOISE** amount - for *subtractive* synths only
- **TRAN**spose - the overall transpose for this synth, in semitones
- **VIBR**ato - the depth of modulation between LFO1 & pitch
- **LPF** - for *subtractive* synths only
 - **FRE**quency - the cutoff frequency
 - **RESO**nance
 - **MODE** - toggles the LPF's slope between 12dB per octave & 24dB per octave
- **HPF** - for *subtractive* synths only
 - **FRE**quency - the cutoff frequency
 - **RESO**nance
- **MODE** - mode of the synth - SUBTractive, RING modulation, or FM. (Ring modulation mode still technically is *subtractive*)
- **ENV1** (envelope 1) - this envelope controls volume / amplitude, & may be patched to anything else too
 - **ATT**ack
 - **DECA**y
 - **SUST**ain
 - **RELE**ase
- **ENV2** (envelope 2) - this envelope may be patched to anything. Same as ENV1
- **LFO1** - this exists for all voices together & does not retrigger
 - **TYPE** - wave type; SINE, SAW, SQUAre, or TRIangle
 - **RATE**
 - **SYNC** - sets a time interval (or OFF) to sync the LFO to
- **LFO2** - exists separately for each voice, & retriggers upon a note-on. Same as LFO1, minus SYNC.
- **VOICE**
 - **POLY**phony - POLYphonic, MONOphonic, AUTO (monophonic but won't stop you playing chords), & LEGAto. Also has a CHOKE setting - any sound set to CHOKE will stop all other CHOKE sounds within its kit when it starts
 - **UNIS**on
 - **NUM** - number of voices to play in unison
 - **DETU**ne - how detuned these voices are to be from each other
 - **PORT**amento
 - **ARPE**ggiator
 - **MODE** - OFF, UP, DOWN, BOTH, or RANDom
 - **SYNC** - time interval (or OFF) to sync the arpeggiator to
 - **OCTA**ves
 - **GATE** - % of the available time-division which each arpeggiated note fills
 - **RATE**
 - **PRI**ority - LOW, MED or HIGH (if the Deluge's CPU becomes overloaded)
- **FX**
 - **DIST**ortion

- **MODU**lation fx
 - **TYPE** - FLANger, CHORus, PHASer, or OFF
 - **RATE**
 - **FEED**back (flanger & phaser)
 - **DEPT**h (chorus & phaser)
 - **OFFS**et (chorus)
- **EQ**
 - **BASS**
 - **TREB**le
 - **BFRQ** - bass frequency
 - **TFRQ** - treble frequency
- **DELA**y
 - **AMOU**nt - effect level & feedback
 - **RATE**
 - **PING**pong - stereo effect, ON or OFF
 - **TYPE** - DIGItal or ANAlog
 - **SYNC** - time interval (or OFF) to sync the delay rate to
- **REVE**rb - all reverb settings (except AMOUnt) apply to the whole song
 - **AMOU**nt
 - **SIZE** - the “room size”
 - **DAMP**ening
 - **WIDTh** - stereo-ness
 - **PAN** - allows you to pan the reverb, e.g. to output to one channel only
 - **SIDE**chain compressor - eparate sidechain compressor. “AUTO” or OFF
- **DECI**mation (sample rate reduction)
- **CRUS** (bitcrushing)
- **SIDE**chain compressor
 - **VOLU**me - how much the sidechain compressor affects this sound's volume
 - **SYNC** - time interval (or OFF) to sync sidechain compressor's attack & release
 - **ATTACK**
 - **RELE**ase
 - **SHAPE** - more or less punchy
 - **SEND** - for sounds that are part of a kit. Level at which this sound shall trigger all other sounds' sidechain compressors
- **VOLU**me
- **PAN**

Decimal values

- move “cursor” left / right to edit a different digit: turn ◀▶

Patching

- to set up patching for a parameter:
 - display the value via its **shift + button shortcut**, or the nested menu.
 - **shift + shortcut pad** on the right-most column to edit the depth of the relationship
- OR
 - display the value via its **shift + shortcut pad**, or the nested menu.
 - press **down select** knob (a new, deeper menu is entered)
 - press **down select** knob again to select the modulation source.

modulation sources are:

- **LFO1**
- **LFO2**
- **ENV1** (envelope 1)
- **ENV2** (envelope 2)
- **SIDE**chain - sidechain compressor can be patched to anything
- **VELO**city - note velocity, which you can edit in track view
- **AFT**ertouch - MIDI aftertouch messages

- **NOTE** - the actual note being played (i.e. how high or low the note is)
- **RANDom** - a random number
- set the depth of the patched modulation by *turn select* (can go negative)

Patching to control the depth of another patch “cable”

- **to modulate depth with another modulation source**: same as above

Assigning knobs to parameters

- **reassign parameter knob to other parameter**: display parameter's value > **learn + turn** one of the parameter knobs
- **assign connected MIDI knob**: display parameter's value > **learn + turn** the **MIDI hardware knob** (relative & absolute MIDI CC messages are supported)
- **unassign MIDI knob from a parameter**: display parameter's value > **shift + learn** button
- **unassign Deluge's own parameter knobs**: assign them to something else

Saving sound presets

- **save sound as a preset**: press **save** (in sound editor) > choose slot + **save**

Sound editor for MIDI & CV tracks

- **BANK** - sent as a MIDI bank select message (CC 0)
- **SUB** - sent as a MIDI sub-bank (sometimes known as bank LSB) message (CC 32)
- **PGM** - sent as a MIDI PGM change message
- **ARPEggiator** (same as others)

Time stretching & pitch shifting

- **shorter / longer without affecting pitch**: “SPEED” parameter = “INDEpendent”
- **adjusting pitch without affecting speed**: “SPEED” parameter = “INDEpendent”
- **sample time-stretched in-sync with tempo**: “MODE” parameter = “STREtch”
- **pitch & time linked**: “PITI” parameter = “LINKed”

Live audio input

- **audio input as a sound source**: **shift + synth** > “TYPE” OSC 1 = IN or INL

Tempo & syncing

Setting tempo

- **tempo change**: *turn tempo*
- **display the current BPM**: press *down tempo*
- **change by 1BPM increments**: hold *down tempo* + *turn*
- **tempo tap**: *tap tap tempo* button

Swing

- **adjusts the amount of swing**: **shift + turn tempo knob**

Syncing

- **“nudge” sync forward / backward:** hold down ◀▶ knob + turn **tempo** knob

Tempo magnitude matching

- **manually halved or doubled Deluge’s BPM (if slave):** hold down **learn** + turn **tempo**
- **manually halved or doubled slave’s BPM (if master):** hold down **learn** + turn **tempo**

Sync-scaling

- **enable / disable sync-scaling:** enter track view > press **sync-scaling**

Controlling functions via MIDI

- **assigning external control:**
 - **learn + button** or **pad** that you wish to assign MIDI control to
 - while holding these two buttons / pads, **press button** or **key** on your MIDI controller
- **unassign MIDI control from button or pad:** press it + **learn**
- **setting up a MIDI keyboard:** **learn** + hold any **audition** pad > **press** a **key** on the MIDI keyboard

Settings menu

- **enter settings menu:** shift + down select
 - **CV**
 - **OUT1 & OUT2**
 - **VOLTs** per octave
 - **TRAN**spose - pitch adjustment in semitones, with cent adjustment
 - **GATE**
 - **OUT1** to **OUT4** - gate output (VTRlg or STRlg). 3 & 4 additional option of RUN & CLOCK respectively.
 - **OFF**Time - minimum amount of time, that a gate output will switch off between consecutive notes.
 - **TCLO** (trigger clock)
 - **IN**put
 - **PPQN** - pulses per quarter-note
 - **AUTO**-start - trigger clock signal start & stop playback automatically
 - **OUT**put
 - **PPQN** - pulses per quarter-note
 - **MIDI**
 - **CLOCK**
 - **OUT** (MIDI beat clock output) - ON or OFF
 - **MAGN** (tempo magnitude matching) - ON or OFF
 - **THRU** - MIDI thru, ON or OFF
 - **CMD** - global MIDI commands
 - **PLAY** / stop playback
 - **RESt**art playback, if already playing
 - **REC**ord
 - **TAP** tempo
 - **SWINg** interval
 - **QUAN**tization - interval, OFF or “ZOOM”
 - **CURS**or - FAST (short & sharp blinks), SLOW (solid white squares), or OFF
 - **MON**itoring - monitoring mode for recording samples: ON, OFF, or SMART
 - **FIRM**ware - firmware’s version number

KITS

0	TR-808
1	DDD-1
2	SDS-5
3	TR-909
4	R-50
5	R-100
6	LD
7	HR-16B
8	SCDT
9	RX-5
10	XV-5080
11	KR-55
12	HR-II
13	AT Rhythm
14	CR-78

V1.4 functions