

Patrick DSP's Analog Rytm MKII Cheat Sheet

Elektron Analog Rytm MKII · OS 1.74 · 28 Oct 2026

1.70 - **1.74** mark features added in that OS version

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Start Here: The Big Picture

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Read this first. It explains how tracks, voices, machines, samples, kits, patterns and songs fit together.

What it is

Analog RytM MKII (MKII means mark 2) is a hybrid analog and digital drum machine. It has 8 analog voice circuits, a sample player on every voice, an Elektron step sequencer, 2 send effects (delay and reverb) and 2 master effects (distortion and compressor)

12 drum tracks plus 1 effects (FX) track. Only 8 voices can sound at once

BD (bass drum), SD (snare drum), BT (bass tom) and LT (low tom) each have their own voice

RS and CP, MT and HT, CH and OH, CY and CB share one voice per pair. If both tracks of a pair trigger together, the right-hand track wins: CP mutes RS, HT mutes MT, OH mutes CH, CB mutes CY

Each drum track layers an analog percussion sound (the MACHINE) with a sample, then overdrive, a multimode filter, an amp envelope and its own low-frequency oscillator (LFO)

Signal flow

MACHINE (analog sound generator) and sample playback > overdrive > multimode filter > amp > pan > individual track output and the mixer

Delay and reverb are send effects. Each drum track sends to them with the DEL and REV knobs on its AMP page. Their own settings live on the FX track

Distortion and compressor are master effects that act on the whole mix. The delay and reverb returns can enter before (PRE) or after (POST) them, set on the DIST page

EXT IN L/R (external input) goes into the mixer. Main out L/R carries the mix. Every track also keeps its own individual output

How the data is organized

Project: 128 patterns, 128 kits, 16 songs, 4 global slots, 127 sample slots and a Sound pool of up to 128 Sounds. The loaded project is the working state

+Drive: permanent storage for 128 projects, a Sound library of 4096 Sounds and the sample bank. All projects can use the library and the samples

Kit: 12 drum track Sounds, the FX track settings, track levels, retrigger settings, general Sound settings, scenes and performance macros

Sound: a sample plus the parameter settings of the SRC, SMPL, FLTR, AMP and LFO pages for one drum track

Sample: up to 64 MB (about 11 minutes) per project in at most 127 sample slots

Pattern: 8 banks (A to H) of 16 patterns, 128 in all. Each pattern links to one kit

Song: 16 per project, built from patterns and chains. 64 chains share 256 pattern entries

Core ideas

Select a drum track: hold **TRK** and press a **PAD**.

Select the FX track: press **FX**

Edit the active track with the five **PARAMETER** keys and DATA ENTRY knobs A to H

FUNC is the second function key. Secondary functions are printed underlined on the panel

Edits to a track change the active kit. Patterns save by themselves. Kits do not: save with **YES** +

PLAY MODE

At power off only the active kit keeps its edits, so save every kit you worked on

Project changes are not written to the +Drive until you save the project

Terms and abbreviations used in this sheet

BD: bass drum (track 1)

BPM: beats per minute (tempo)

BT: bass tom (track 5)

CB: cowbell (track 12)

CC: continuous controller (a type of MIDI message)

CH: closed hi-hat (track 9)

CP: hand clap (track 4)

CV: control voltage, an analog control signal

CY: cymbal (track 11)

DIN sync: a timing signal for older gear, sent as pulses. The Deutsches Institut fuer Normung (DIN) is the German standards body

EXP: expression pedal

EXT IN: external input

FX: effects

HT: high tom (track 8)

LFO: low-frequency oscillator, a slow wave used to modulate a parameter

LT: low tom (track 6)

MIDI: Musical Instrument Digital Interface

MKII: mark 2

MT: mid tom (track 7)

NRPN: non-registered parameter number (a type of MIDI message)

OH: open hi-hat (track 10)

OS: operating system (the firmware)

PSU: power supply unit

RAM: random access memory, the working memory that holds the loaded samples

RS: rim shot (track 3)

SD: snare drum (track 2)

SysEx: system exclusive, a MIDI message type used for dumping data

USB: universal serial bus

VCO: voltage controlled oscillator

Panel and Connections

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Read when you want to know what every key, knob and connector does, or how to start the unit.

Front panel keys

Key	Press	With FUNC
AMP	AMP page. On the FX track: COMPRESSOR page	
ARROW keys	Move in menus. Called UP , DOWN , LEFT , RIGHT there	LEFT / RIGHT : move all triggers one step
BANK A to BANK H	Select a bank (then a TRIG key for the pattern)	BANK A to BANK D : pattern mode. BANK E : trigger mute. BANK F : accent. BANK G : swing. BANK H : parameter slide
CHAIN MODE	Chain mode on or off	New chain (scratch pad row)
CHRO	Chromatic mode	TRACK menu
FILL	Fill mode (when grid recording is off)	Cue fill
FIX	Fixed velocity on or off	FIXED VELOCITY menu
FLTR	FILTER page. On the FX track: DISTORTION page	SOUND SETTINGS menu
FX	Select the FX track	MIDI CONFIG menu
GLOBAL SETTINGS	GLOBAL SETTINGS menu. Long press: LOAD PROJECT	SAVE PROJECT menu
LFO	LFO page	
MUTE	Mute mode	SOUND menu
NO	Exit, step back, negate. With	

Key	Press	With FUNC
	PLAY MODE , MUTE , CHRO , SCNE or PERF : reload kit, Sound, track, pattern or song	
PAGE	Select the pattern page	SCALE menu
PERF	Performance mode	SONG menu
PLAY	Start. Press again to pause	Clear
PLAY MODE	Play mode	KIT menu
QPER	With pads: choose macros for QUICK PERF AMOUNT	Mute the performance macros
RECORD	Grid recording. + PLAY : live recording. + STOP : step recording	Copy
RTRG	With a pad: retrig. Shows the retrig side menu	CLICK TRACK menu
SAMPLING	SAMPLING menu	Direct Sampling
SCNE	Scene mode	PATTERN menu
SMPL	SMPL pages. On the FX track: REVERB page	SAMPLE selection
SONG MODE	Song mode	Song edit
SRC	SRC page. On the FX track: DELAY page. Double- press: MACHINE selection	MACHINE selection
STOP	Stop	Paste
TEMPO	TEMPO menu	Tap tempo
TRIG	TRIG settings for the active track	TRIGS SETUP menu

Key	Press	With FUNC
TRK	With a PAD : select a drum track. Double-press: SOUND BROWSER	
YES	Enter, select, confirm. With PLAY MODE , MUTE , CHRO , SCNE or PERF : save kit, Sound, track, pattern or song	

Front panel knobs

MAIN VOLUME: level of the main outputs and the headphones. An absolute knob of about 320 degrees

QUICK PERF AMOUNT: amount of the performance macros chosen with **QPER**. An absolute knob

TRACK LEVEL: level of the active track. Also scrolls menus and sets values. A relative knob, so it turns any number of turns

DATA ENTRY A to H: set the parameters shown on the screen. Press and turn for larger steps

Pads and trigger keys

12 velocity and pressure sensitive rubber **PADS**. They play the track Sounds and change function with the mode. Pad colours show the mode and state

A pad flashes white when it plays, by hand or from the sequencer. A **red** pad is the active drum track

16 **TRIG** keys place triggers and parameter locks, and pick a pattern after a **BANK** key. **TRIG** keys 1 to 12 also play tracks 1 to 12 at the VEL set on the TRIG page

FUNC + **PAD** plays that Sound at the VEL set on the TRIG page

Rear connectors

POWER: on and off switch. Wait 2 seconds after the screen goes dark before switching on again

DC IN: Elektron PSU-3 series adapter, 12 V DC, 2 A

USB: USB 2.0, A to B cable to a computer. Class compliant for audio and MIDI

EXP/CV IN (control input 1 and 2): expression pedal or CV. Use 1/4 inch mono plugs for CV

MIDI THRU/SYNC B: forwards MIDI IN. Can send DIN sync

MIDI OUT/SYNC A: MIDI output. Can send DIN sync

MIDI IN: MIDI input

AUDIO IN L/R: sampling and sound card input. 1/4 inch mono plugs, balanced

TRACK OUT: individual drum voice outputs. 1/4 inch mono (unbalanced) or tip, ring, sleeve (balanced)

EXT IN L/R: external audio into the mixer. 1/4 inch mono, unbalanced

MAIN OUT L/R: main outputs. 1/4 inch mono or tip, ring, sleeve

HEADPHONES OUT: 1/4 inch stereo plug

Starting up

Place the unit on a stable support. A rack must carry 3 kg

Switch off all units before connecting. Connect main out L/R to your mixer or amp

MIDI: connect the MIDI OUT of the sending device to MIDI IN here. MIDI THRU repeats the data at MIDI IN

Specifications

Main outputs: 2 balanced 1/4 inch jacks, +15 dBu, 440 ohm output impedance (unbalanced)

Individual outputs: 8 balanced 1/4 inch jacks, +15 dBu, 440 ohm

Headphones: +15 dBu, 55 ohm

Unbalanced external inputs: +15 dBu maximum, 9 kilohm. Balanced audio inputs: +15 dBu maximum, 19 kilohm

Control inputs: -5 V to +5 V on the tip, +5 V supplied on the ring. Accept CV and expression pedals

Converters: 48 kHz, 24 bit. Digital signal to noise ratio 110 dB (20 Hz to 20 kHz)

Screen: 128 by 64 pixel OLED (organic light-emitting diode)

Size: 385 by 225 by 82 mm. Weight about 2.4 kg

Power: 14 W typical, 20 W maximum

Navigation, Editing and Shortcuts

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Read when you want to know how the screen, menus, copy and paste, naming and quick save work.

Screen and menus

Screen: active kit (and the full parameter name while you turn a knob), tempo, play, pause, stop and record status, the track parameters (in the same positions as the knobs), active pattern, track level and track name. The song row is left of the pattern. "_ _:" means the scratch pad row is active

Menus: **UP**, **DOWN**, **LEFT** and **RIGHT** move. **TRACK** **LEVEL** scrolls quickly. **YES** enters, selects and ticks boxes. **NO** goes back one step

FUNC + **UP** or **DOWN**: move one menu page at a time

Editing parameters

Hold a **PARAMETER** key to see every value on that page

Press a knob while turning it for larger steps. This sweeps a whole range fast

FUNC while turning some knobs makes values jump to useful positions. Delay time jumps between 16, 32, 64 and 128. Oscillator tuning jumps whole octaves

PARAMETER key + **YES**: randomize every parameter on that page. The result is new every time. The **TRIG** page cannot be randomized

PARAMETER key + **NO**: reload that page to its last saved state

FX + **NO**: reload all FX track pages. **NO** + **MUTE**: reload the track Sound. **NO** + **PLAY MODE**: reload the whole kit

Copy, clear and paste

FUNC + **RECORD**: copy. **FUNC** + **STOP**: paste. **FUNC** + **PLAY**: clear. Repeat the combination to undo a paste or clear

Works on patterns, tracks, track pages, triggers, scenes, performance macros, song rows, projects, kits and in naming

Copy a Sound to another track: **TRK** + **RECORD**, choose the target with **TRK** + a **PAD**, then **TRK** + **STOP**. Only compatible tracks accept it

Clear the active track in grid recording: **FUNC** + **PLAY**. Clear the pattern with no mode or in live recording: **FUNC** + **PLAY**

Naming screen

LEFT and **RIGHT** move between characters. **TRACK LEVEL** or **UP**/**DOWN** cycles through characters

FUNC + **NO** erases a letter. **GLOBAL SETTINGS** makes a random name **1.70**

Pop-up naming: hold **FUNC**, choose with the arrow keys, release **FUNC** to insert. The same screen is used for text search

Quick save and reload

Kit: **YES** + **PLAY MODE** saves. **NO** + **PLAY MODE** reloads

Track Sound: **YES** + **MUTE** saves. **NO** + **MUTE** reloads

Track: **YES** + **CHRO** saves. **NO** + **CHRO** reloads

Pattern: **YES** + **SCNE** saves. **NO** + **SCNE** reloads

Song: **YES** + **PERF** saves. **NO** + **PERF** reloads

Sound of one trigger with its parameter locks (grid recording): **TRIG** + **MUTE** **1.70**

YES + **PLAY MODE** saves to the same slot with the same name. Save a pattern before live tweaking to give yourself a restore point

Other useful combinations

Double-press **SRC**: choose a MACHINE. **FUNC** + **SMPL**: choose a sample. In the sample list, **FUNC** + **YES** reaches +Drive samples

Double-press **TRK**: open the Sound browser

FUNC + **TEMPO**: tap tempo. **FUNC** + **RTRG**: click track settings. **FUNC** + **TRIG**: TRIGS SETUP menu. **FUNC** + **PAGE**: scale

FUNC + **LEFT**/**RIGHT** (grid recording): move all triggers one step. **TRIG** + **LEFT**/**RIGHT**: nudge one trigger a fraction of a step. **TRIG** + **UP**/**DOWN**: retrigger on and rate

FUNC + **YES**: preview the highlighted sample or Sound. **TRIG** + **YES** (grid or step recording): preview a trigger with its locks

FUNC + **RIGHT** / **FUNC** + **LEFT** (SAMPLES menu): open or leave a directory

RECORD + **PLAY**: live recording. **RECORD** + double-press **PLAY**: switch live quantize on or off

Projects, Kits and Sounds

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Read when you need to save, load or manage projects, kits and Sounds, or back up your data.

Projects

Menu: **GLOBAL SETTINGS** > PROJECT. Hold **GLOBAL SETTINGS** for LOAD PROJECT. **FUNC** + **GLOBAL SETTINGS** for SAVE PROJECT AS

Changes inside the active project are remembered by themselves, even through power off. They are not written to a +Drive slot until you save the project. LOAD PROJECT does not save the active project first. CREATE NEW at the bottom of the list makes a blank project

Project manager (**RIGHT** on a project): CLEAR, DELETE, INIT NEW (empty slots only), LOAD FROM (overwrites the active project), PURGE ALL, RENAME, SAVE TO, TOGGLE write protection

PURGE ALL (loaded project only) removes unused Sounds from the Sound pool and samples not used in any pattern from RAM. The +Drive copies stay

A small arrow marks the slot the active project came from. A padlock marks a write-protected project, which cannot be overwritten, renamed or erased

Kits

128 kits per project. A pattern always links to one kit. Editing a kit changes every pattern that uses it

New pattern on an existing kit: save and rename the kit first, unless you want the changes shared

Kit menu (**FUNC** + **PLAY MODE**): RELOAD KIT (active kit or all kits), LOAD KIT, SAVE KIT, CLEAR KIT, TRACK ROUTING KIT, CONTROL IN 1 MOD, CONTROL IN 2 MOD

LOAD KIT links the loaded kit to the active pattern. A star after a kit name means no pattern uses it

SAVE KIT: choose a slot, then name it. CLEAR KIT initializes the kit. Nothing is lost until you save over the same slot

Selecting an empty pattern keeps the last kit and its number flashes until you edit the pattern or save the kit

TRACK ROUTING KIT: untick USE GLOBAL SETTING to give this kit its own ROUTE TO MAIN (**green** pads) and SEND TO FX (**yellow** pads). Every track still goes to its individual output

CONTROL IN 1 MOD and 2 MOD: a performance style macro driven by CV or an expression pedal. Up to 4 parameters from any track. Press knobs A to D to pick a track, turn to pick the parameter, confirm with a knob click or **YES**. Knobs E to H set the depth, from -128 to 127. 0 changes nothing

KIT RELOAD ON CHG in the global sequencer config reloads a kit to its saved state whenever another kit takes over

Sound pool and +Drive library

Sound pool: 128 slots in the project. Sounds in the pool can be Sound locked

+Drive Sound library: 4096 Sounds in 16 banks (A to P) of 256, shared by all projects. These cannot be Sound locked

Sound menu (**FUNC** + **MUTE**): SOUND BROWSER, SOUND MANAGER, CLEAR TRACK SOUND, RENAME TRACK SOUND, SOUND SETTINGS

Sound browser

Lists only Sounds that the active track can load. Empty slots are hidden. Load with **YES**

Preview: tap the active track pad

LEFT opens sorting: VIEW POOL, VIEW +DRIVE, SORT ABC, SORT 123, FILTER (by tag), SEARCH (text)

Sound manager

Lists all Sounds. A violet active pad means the highlighted Sound fits the active track. Dim **red** pads show the other tracks that can take it

RIGHT opens SOUND OPERATIONS: LOAD TO TRACK, COPY TO (POOL, +DRIVE or a +BANK A to P), STORE TRACK SOUND, RENAME, EDIT TAGS, DELETE, SELECT ALL, SELECT UNUSED, DESELECT ALL, TOGGLE write protection, SEND SYSEX
SELECT UNUSED works in the Sound pool only. Then use DELETE. Library Sounds stay

Tags: any number per Sound, but only the first two show in the list

TRIG keys show only one +Drive bank. **FUNC** + **UP**/**DOWN** scrolls faster

Save the active track Sound: **YES** + **MUTE**. **LEFT** switches between Sound pool and +Drive. Pick a slot, name it and choose tags

CLEAR TRACK SOUND resets the page parameters of the active track to defaults. Nothing is lost until you save the kit over the same slot

Sound settings

*Stored with the kit. Open with **FUNC** + **FLTR**.
UP/**DOWN** or TRACK LEVEL scrolls, **LEFT**/**RIGHT** changes*

MACHINE: the sound generator mode of the active track

CHROMATIC: which part chromatic mode and the NOT trigger value pitch. OFF, SYNTH, SAMPLE or SYN+SMP

ENV RESET: OFF lets the filter envelope continue where it is. FILTER (default) restarts it on every trigger

VELOCITY TO VOL: OFF, or ON for volume that follows velocity linearly

VELOCITY MOD: up to 4 parameters from any page follow velocity. Knobs A to D pick, **YES** confirms, E to H set depth. TRACK LEVEL sets the velocity range

AFTERTOUCH: same setup for pad or MIDI aftertouch

SMP: shows the full name of the sample on the track

LEGACY FX SEND: when ticked, lowers the FX send levels slightly so Sounds made on an earlier OS sound as intended

Backup and transfer

Use the free Elektron Transfer app (Windows and macOS) over USB. Select the USB MIDI ports on the CONNECTION page, click CONNECT, open EXPLORE and drag and drop

Transfer also moves samples and converts them to 16 bit, 48 kHz, mono

SysEx dumps (see Global Settings) cover kits, Sounds, patterns, songs and globals, not samples

Global Settings

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Read when you want to change how the Rytm behaves: samples, MIDI, audio routing, control inputs, system and calibration.

Overview

Press **GLOBAL SETTINGS**. Scroll with **UP**/**DOWN** or TRACK LEVEL, open with **YES**

Up to four Global slots, each with its own sequencer, MIDI and track routing settings. Pick the slot with **LEFT**/**RIGHT** and **YES**. Changes to a slot save automatically

Shortcuts: hold **GLOBAL SETTINGS** for LOAD PROJECT. **FUNC** + **GLOBAL SETTINGS** opens SAVE PROJECT AS

Samples manager

Three main directories: FACTORY (ten subdirectories of preset samples, write-protected), INCOMING (default destination for samples sent with the C6 utility) and RECORDED (default destination for samples you record)

Open a directory with **YES** or **FUNC** + **RIGHT**. Go up one level with "." or **FUNC** + **LEFT**. Directories end in (D)

Preview a sample with **FUNC** + **YES** (about ten seconds, played by the active track's voice)

Load: tick samples with **YES**, press **RIGHT**, choose LOAD TO PROJ. They fill the first free slots of the 127

View RAM: press **LEFT** twice, choose VIEW RAM. A circle at the end of a row means the sample is unused in the project

Unload: tick slots (or SELECT ALL in the right-hand menu), then UNLOAD

Replace: highlight a slot, open the right-hand menu, choose REPLACE, then pick a sample from the +Drive

Remove unused samples from RAM: VIEW RAM, **RIGHT**, SELECT UNUSED, then UNLOAD and confirm. They stay on the +Drive

Transfer from a computer: Elektron Transfer converts audio files to 16 bit, 48 kHz, mono, the native format. Drag them into the EXPLORE page Directories (not FACTORY) can be renamed, deleted or set as the destination directory

Transfer to a computer: connect USB, open Elektron Transfer, set the MIDI IN and OUT ports, open EXPLORE, drag samples out of the ANALOG RYTM list

If MIDI+USB is chosen in INPUT FROM or OUTPUT TO, MIDI limits the USB speed. Use USB only for large transfers

MIDI config: SYNC

CLOCK RECEIVE and CLOCK SEND: follow or send MIDI clock

TRANSPORT RECEIVE and TRANSPORT SEND: play, stop, continue and song position pointer

PRG CH RECEIVE and PRG CH SEND: respond to or send program change when patterns change. Channels are set in the CHANNELS menu

With CLOCK RECEIVE and TRANSPORT RECEIVE both on, the Rytm waits up to 16 seconds for clock after start or continue before it considers sync lost (allows preroll). With only TRANSPORT RECEIVE it starts as soon as possible

MIDI config: PORT CONFIG

TURBO SPEED: ☐ **YES** starts negotiation. Needs an interface that supports Turbo-MIDI

OUT PORT FUNCTIONALITY and THRU PORT FUNCTIONALITY: MIDI, DIN 24 or DIN 48 sync pulses. With DIN 24 or DIN 48 no MIDI data is sent on that port

INPUT FROM: DISABLED, MIDI, USB or MIDI+USB

OUTPUT TO: DISABLED, MIDI, USB or MIDI+USB

OUTPUT CH: whether the pads and knobs send on the auto channel or the track channel

PARAM OUTPUT: whether the DATA ENTRY knobs send NRPN or CC

ENCODER DEST, PAD DEST, PRESSURE DEST, MUTE DEST: INT (nothing sent), INT + EXT (internal and external) or EXT (external only, not offered for encoders)

RECEIVE NOTES: play from an external keyboard.

RECEIVE CC/NRPN: control parameters externally

MIDI config: CHANNELS

TRACK 1 to 12 and FX: channel per track. OFF ignores incoming MIDI

PERF CHANNEL: channel the knobs send on in performance mode

AUTO CHANNEL: gives access to the active track, so a keyboard on this channel plays whichever track is active

PROGRAM CH IN CH and PROGRAM CH OUT CH: channel for incoming and outgoing program change. AUTO uses the auto channel

SysEx dump

Send and receive kits, Sounds, patterns, songs and global slots. Samples cannot be sent this way. Use the Samples manager and Elektron Transfer

Free utility: C6

Send, ALL: WHOLE PROJECT (kits, Sounds without samples, patterns, songs, globals and settings), ALL SOUNDS, ALL KITS, ALL PATTERNS, ALL SONGS, ALL GLOBALS, ALL SETTINGS

Send, single items: KIT, SOUND, PATTERN, PATTERN + KIT, SONG, GLOBAL. An asterisk after a kit name means it is not linked to a pattern

Receive: ANYTHING, KIT (ACTIVE KIT or KIT 01 to 128), SOUND POOL, +DRIVE SOUND (ANYWHERE uses the first free slot), PATTERN, SONG, GLOBAL
Start listening on the RytM first with ☐ YES (☐ NO stops), then send from the other device

Data arrives where it was saved from, or in the first free slot. When you receive to a list position, following data goes to the next positions

The RytM can receive SysEx at any time, whatever menu is open

Audio routing

ROUTE TO MAIN: pads show which of the 12 tracks go to the main out. **Green** sends, unlit does not. Each track still reaches its own individual output

SEND TO FX: pads show which tracks go through the FX. **Yellow** routes, unlit does not

USB IN (only with USB AUDIO/MIDI): PRE-FX (before the effects), POST-FX (after the effects), TRACK 1 to 12 (summed to mono, or two tracks for left and right, shaped by the track's filter and envelope) or SAMPLER ONLY. All options except SAMPLER ONLY feed the sampler too

A track that processes incoming audio needs a note trigger and a running sequencer to open its envelope. Set the trigger LEN to INF for continuous processing

USB OUT (only with USB AUDIO/MIDI): MAIN OUT, TRACK 1 to 12 (one track, or two for left and right), AUDIO IN or OFF

USB TO MAIN **dB**: gain of the USB audio streamed to the main out, 0 to +18 dB

Tracks 3/4, 7/8, 9/10 and 11/12 share a voice, so you cannot use them as separate left and right inputs or outputs

Take care: USB IN, USB OUT and the settings in the computer can cause a feedback loop with extreme levels

Insert effect on track 1: TO MAIN off for track 1, TO FX off for track 1, USB IN POST-FX, USB OUT TRACK 1. Process the audio on the computer and send it back to the Rytm

Control inputs

Settings for Control Input 1 and 2 (EXP/CV IN 1 and 2 on the back). The destinations are set in the kit's CONTROL IN 1 MOD and CONTROL IN 2 MOD menus

MODE: CV, EXPR (expression pedal) or OFF

CV ZERO LEVEL: voltage where modulation is zero, -5.50 V to +5.50 V

CV MAX LEVEL: voltage where modulation is at maximum, -5.50 V to +5.50 V

EXPRESSION LEARN: connect the pedal, press **YES**, move it to maximum then minimum, press **YES** to save

REVERSE DIRECTION: flips the pedal direction

Sequencer config

QUANTIZE LIVE REC: when ticked, live recorded notes snap to full steps. When off, micro timing is kept

KIT RELOAD ON CHG: kits reload to their saved state whenever a new kit becomes active

AUTO TRK SWITCH: the active track follows the last **PAD** or **TRIG** key you pressed, without **FUNC**

SAMPLE POS RES: STA and END on the SMPL page in high or low resolution. High resolution gives finer control. Low resolution suits sample chains and slices

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System

LED INTENSITY: LOW, MID or MAX (keys and screen)

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USB CONFIG: OVERBRIDGE, USB MIDI or USB AUDIO/MIDI. Choosing one switches the other two off

OS UPGRADE: send the .syx file with Elektron Transfer over USB, then press **YES** on the Rytm to confirm. The unit reboots when done. The Rytm does not appear as a drive on the computer

FORMAT +DRIVE: PROJECTS+SOUNDS and SAMPLES can be ticked separately. A prompt asks you to confirm

STORAGE: used and free RAM and +Drive, number of projects, Sounds and samples, and sample time used and remaining

Calibration

Loud and unpleasant sounds may come out of the individual outputs. Disconnect them first. The routine takes a long time

RUN CALIBRATION: tunes the oscillators of the BD, SD and RS/CP voices at the current temperature. Meant for rooms outside the normal 20 to 25 degrees C. Leave the unit on for a few hours first

FACTORY RESTORE: puts the calibration data back to its state from production

WARMUP CALIBRATION **1.70**: calibrates the oscillators and filters. Switch the unit off for at least 20 minutes first so it reaches room temperature. It takes several hours and keeps running when the screen saver starts

Startup Menu and Care

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Read when something is wrong, or you need to reset the unit or look after it.

Startup menu

Hold **FUNC** while powering on. Choose with the **TRIG** keys

TRIG 1 TEST MODE: self-test with a short loud 3 kHz beep from all outputs. Turn down speakers and headphones first. No errors should be reported.

UP/**DOWN** scroll the log. Contact Elektron support or the retailer if errors appear

TRIG 2 EMPTY RESET: erases all kits, patterns, Sounds and songs. The +Drive stays

TRIG 3 FACTORY RESET: re-initializes the active RAM project and overwrites +Drive project slot 1 and Sound bank A with factory content. Save your project to a +Drive slot above 1 first

TRIG 4 OS UPGRADE: for when the standard update in the SYSTEM menu is not possible. Connect the computer MIDI OUT to the Rytm MIDI IN. USB MIDI transfer does not work here

TRIG 5 EXIT

Care

OS 1.73 added a file system check for the samples on the +Drive **1.73**. If it reports a problem, back up your samples and projects, then reformat the +Drive samples

Do not expose the unit to rain, moisture, dripping or splashing, or to direct sunlight. Do not use it above 30 degrees C ambient

Do not open the casing. There are no user repairable parts

The power adapter is for indoor use only. Give it good ventilation and keep it below 40 degrees C

Recommended power supply: PSU-3/b/c, 12 V DC, 2 A. Power use is 14 W typical, 20 W maximum

Sequencer Basics

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Read when you want to select, play, record and time patterns.

Patterns

8 banks (A to H) of 16 patterns. Every project has 128 ready to use. Changes save automatically

A pattern holds: TRIG page settings, quantize settings, note triggers, lock triggers, parameter locks, Sound locks, trigger mutes, accent triggers, slide triggers, swing triggers and amount, the linked kit, and track lengths and time signature

Every track can also send its sequence to MIDI OUT or USB (note on and off and velocity) to play outside gear. See TRIGS SETUP

Selecting a pattern

BANK A to **BANK H**, then **TRIG 1** to **TRIG 16**.

Example: **BANK B** + **TRIG 5** is pattern B05

Half-bright **red** **TRIG** keys hold data. The active pattern is full-bright **red**

Choosing an empty pattern keeps the last kit and flashes its number until you edit or save

While a pattern plays, the new one is queued. Its position flashes at the lower left and it starts at the end of the current one (Sequential mode). Program change messages queue patterns too

After picking a pattern and before releasing keys, **RECORD**, **PLAY** and **STOP** copy, clear and paste patterns. Several patterns can be cleared or pasted at once

Transport

PLAY starts. **PLAY** while playing pauses, and again resumes

STOP stops all tracks. Send effects like delay keep ringing

STOP twice: stop and fade out the send effects. Also sends All Sound Off over MIDI

If a pattern has more than 16 steps, the pattern page LEDs show it. The playing page flashes

Page playback

Hold **PAGE**: **TRIG 1** to **TRIG 4** pick the pages that play and loop. Example: pages 2 and 4 skip 1 and 3

1.70

While holding **PAGE**, **PADS** include or exclude tracks. Unlit pads play all their steps. **FX** does the same for the FX track

Release **PAGE** to stay in page playback. Hold **PAGE** and press **NO** to return to normal

In grid recording: **PAGE** + **NO**, then hold **PAGE** and use **TRIG 1** to **TRIG 4** 1.72

Tempo

TEMPO opens the tempo screen. **TRACK LEVEL** changes it by 1 BPM (press the knob for 8). **UP**/**DOWN** change 0.1 BPM

FUNC + **YES**: switch between PROJECT tempo (one for all patterns) and PATTERN tempo

Tap tempo: hold **FUNC** and tap **TEMPO**. The average is calculated after 4 taps and keeps updating

Nudge: **LEFT** or **RIGHT** shifts the tempo by 10 percent while held, then it returns. Works outside the tempo menu. Handy for syncing to a turntable or other source

In the tempo menu, hold **FUNC** while turning **TRACK LEVEL**: "PREP." flashes and the new tempo starts when you release **FUNC**

Pattern modes

Set with **FUNC** + **BANK A** to **BANK D**. The pattern mode LEDs show the active mode

SEQUENTIAL (default): the new pattern starts after the current one ends

DIRECT START: switches at once and starts from the beginning

DIRECT JUMP: switches at once and continues from the position of the old pattern

TEMP JUMP: press **FUNC** + **BANK D** to arm it (LED flashes if running). Choose a pattern: it starts at once from the old position, plays once to the end, then returns to the old pattern. In chain mode, it replaces the current pattern in the chain, then the chain carries on

Trigger types and recording modes

Note triggers (**red** keys) play notes. Lock triggers (**yellow** keys) only apply parameter locks. Unlit keys have no trigger

Grid recording: press **RECORD** (key lit **red**). Select a track, then place triggers with **TRIG** 1 to 16. Press a placed trigger to remove it

Grid: lock trigger with **FUNC** + **TRIG**. In chromatic mode the pitch of the pad you used is recorded. Use **PAGE** to switch pages

Grid: hold a **TRIG** and press **LEFT**/**RIGHT** for micro timing (a pop-up shows the offset). Hold **TRIG** + **FUNC** and press **LEFT**/**RIGHT** to micro time every trigger on the track

Grid: hold a **TRIG** and press **UP**/**DOWN** for retrigger settings. **TRIG** + **YES** previews a trigger with its locks

Live recording: hold **RECORD** and press **PLAY**. The **RECORD** key flashes. Play the **PADS**. Velocity and length are recorded, and chromatic pitch too

Live: knob moves are recorded as parameter locks. Steps without note triggers get lock triggers

Live: **RECORD** then double-press **PLAY** switches quantize on or off. **NO** + **PADS** erase the triggers of those tracks as the sequencer passes. **FUNC** + **NO** clears the active track's parameter locks as it passes (Sound locks stay). **NO** + a knob press removes one parameter's locks

Live: **PLAY** leaves live recording and keeps playing. **STOP** stops both. **RECORD** switches to grid recording

Step recording: **RECORD** + **STOP**. Standard and Jump modes (press **STOP** twice while holding **RECORD** to toggle)

Step standard: pick a start step with a **TRIG** key (**green**, double-blinking), or move with **LEFT**/**RIGHT**. Press pads (several at once is fine) and the step moves on by itself. **CHRO** records chromatic notes on the active track

Step standard: **NO** on the active step removes the trigger or adds a rest. Hold a **TRIG** and turn a knob for a parameter lock. **RECORD** exits

Step jump: the LEN parameter sets the note length and how far the step advances. 1/16 moves one step, 1/8 two, 1/4 four. LEN is locked on every trigger you place. With several tracks, the first track played sets the move

Step: external MIDI keyboards must send on the AUTO CHANNEL. MIDI velocity is locked on triggers that already hold velocity data. Hold **FUNC** to use the fixed VEL setting instead. Hold **YES** to lock trigger length to the time you hold the note

Step: a new trigger on an old one keeps its parameter locks

Trigger Settings, Retriggers and Euclidean

[↑ Contents](#)

Read when you want to shape single triggers: note, velocity, length, probability, retriggers and Euclidean rhythms.

TRIG page 1 (press [TRIG] once)

*Settings for note triggers. Stored with the pattern, not the kit. Hold a **TRIG** key and change a value to lock it to one step*

NOT: pitch of the note, -24 to +24. Chromatic live pad pitch overrides it

VEL: velocity, 1 to 127. Used by **FUNC** + **PADS**, **TRIG** keys and fixed velocity AUTO. Live pad velocity overrides it

LEN: note length. Live pad hold time overrides it

PRB: trigger probability, 0 to 100 percent. Default 100 percent. Re-evaluated at every trigger

TRC: trigger condition. Replaces PRB while you hold a trigger. A condition overrides PRB

SYN: whether the synth part sounds. SMP: whether the sample part sounds. ENV: whether the filter envelope triggers. LFO: whether the LFO triggers
SYN and SMP at zero turns a note trigger into a lock trigger

TRIG page 2: Euclidean sequencer 1.70

*Two pulse generators spread triggers as evenly as possible over the track. When on, the **RECORD** key turns purple. Earlier triggers are hidden, and return when you switch it off*

FUNC while turning Euclidean mode off converts the Euclidean pattern into regular triggers (earlier hand placed triggers are removed)

You cannot place note triggers by hand in Euclidean mode, but you can parameter lock the generated triggers

Randomizing the Euclidean page follows the track length and leaves LEN unchanged 1.71

PL1, PL2: number of pulses from generator 1 and 2

LEN: track length in steps. Only in ADVANCED scale mode

EUC: Euclidean mode on or off

R01, R02: rotation of generator 1 and 2

TRO: track rotation of both generators together

OP: Boolean operator for combining both generators

OR: all triggers from both. XOR: all triggers unless both land on the same step. AND: only steps where both land. SUB: generator 1 triggers unless generator 2 lands on the same step

Retrig menu (hold [RTRG])

*Each of the 12 drum tracks has its own settings, saved in the kit. Use **UP**/**DOWN** to pick, **LEFT**/**RIGHT** or TRACK LEVEL to change*

RETRIG: rate. 1/1, 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/12, 1/16, 1/20, 1/24, 1/32, 1/40, 1/48, 1/64, 1/80. 1/16 is one trigger per step, 1/32 is two per step. Triplets: 1/12 or 1/24

LENGTH: duration of the velocity curve, from 0.125 to INF, in fractions or multiples of a step

VEL. CUR: velocity curve, -128 to 127. -128 fades fully out over the length, 0 is flat, 127 fades fully in

ALWAYS ON: retrig locks on, so holding a pad retriggers without **RTRG**

Hold **RTRG**, then hold a **PAD**: roll for as long as held. Pressure sets retrig velocity. Aftertouch is off during retrig

Per step: hold a **TRIG**, then press **RTRG** or **UP**/**DOWN**. Knob A: retrig on or off. Knob E: rate. Knob D: length. Knob H: velocity curve. Step settings override the track settings

Retriggers record in grid and live recording

TRIGS SETUP menu ([FUNC] + [TRIG])

GLOBAL QUANTIZE: quantizes micro timed triggers on all tracks, 0 to 127

TRK QUANTIZE: same for the active track, 0 to 127

TRK SEND MIDI: when ticked, the track sends note on and off (NOT, LEN) and VEL out of MIDI OUT on its channel, and also plays its own Sound

Fixed velocity

FIX switches the pads to a fixed velocity. **FUNC** +

FIX opens the amount: 1 to 127 or AUTO. Default 100. AUTO uses the VEL value on the TRIG page

Click track ([FUNC] + [RTRG])

Hold **FUNC** + **RTRG** for a second to switch the click on and off

ACTIVE, TIME SIG. NUM (numerator), TIME SIG. DEN (denominator), PREROLL (bars of click before recording starts, live recording only), VOLUME

Track menu ([FUNC] + [CHRO])

TRIGS SETUP: opens TRIGS SETUP for the active track

PAD SCALE: sets which notes the pads play in chromatic mode. PAD 1 is the lowest note of the octave, root and scale. The rest climb through the scale. Scales with fewer than 8 notes repeat on the rows above **1.70**

ROOT NOTE: root of the scale. PER PATTERN: apply the pad scale to all tracks in the pattern or only the active track

RELOAD TRACK (**NO** + **CHRO**): back to the auto-saved or last SAVE TRACK state

SAVE TRACK (**YES** + **CHRO**): saves a restore point for one track

Pad scales

Aeolian (minor), Blues, Chromatic, Combo minor, Dorian, Dorian b2, Double harmonic major, Half-whole diminished, Harmonic minor, Hirajoshi, Hungarian minor, In-sen, Ionian (major), Ionian #2 #5, Iwato, Locrian, Locrian bb3 bb7, Lydian, Lydian #2 #6, Lydian augmented, Lydian dominant, Major Locrian, Melodic minor, Mixolydian, Oriental, Pelog, Pentatonic major, Pentatonic minor, Persian, Phrygian, Phrygian dominant, Spanish, Super Locrian, Ultraphrygian, Whole tone, Whole-half diminished

Pattern Length and Scale

[↑ Contents](#)

Read when you want patterns of different lengths, speeds or time signatures.

Normal mode

Open the scale menu with **FUNC** + **PAGE**.

LEFT / **RIGHT** choose a setting, **UP** / **DOWN** change it

All tracks share length and time signature. Left number: steps in the pattern. Right of it: total length, 16, 32, 48 or 64 steps

Scale (playback speed as a multiple of the tempo): 1/8X, 1/4X, 1/2X, 3/4X, 1X, 3/2X, 2X

Longer than 16 steps: use **PAGE** to switch pages in grid recording. **PAGE** quickly changes total length.

TRIG keys quickly change the step count

Extending a pattern copies its triggers into the new pages

2X doubles the base resolution to 32nd notes. 3/4X suits triplets against other instruments at the same BPM

Advanced mode

Select ADVANCED in the SCALE column. Two columns: TRACK and MASTER

TRACK: length and scale for the active track only.

Choose the track with **TRK** + a **PAD**

MASTER LEN: steps played before all tracks restart. INF loops without restarting, which also stops a chained pattern from starting unless CHNG is set

MASTER CHNG: how long the pattern plays before a cued or chained pattern begins. OFF (default) changes at the end of the pattern

MASTER SCALE: the general time signature

With INF and Sequential pattern mode, you cannot change patterns

FUNC + **UP**/**DOWN**: set lengths in steps of 16

Sequencer Features

[↑ Contents](#)

Read when you want parameter locks, Sound locks, conditions, fills, swing, accents, slides or copy and paste.

Parameter locks

Every PARAMETER page parameter and every TRIG page setting can be locked per trigger, on all track types

Grid recording: hold a **TRIG**, turn a knob. The value shows inverted and the key flashes quickly. **TRIG** + press the knob removes one lock. Removing the trigger and placing it again removes all its locks

Hold a locked trigger: the **PARAMETER** keys light for pages that hold locks

Up to 72 different parameters can be locked in a pattern. Locking one parameter on every step still counts as one

Live recording: knob turns and chromatic pad notes record as locks. Lock triggers fill steps without note triggers

Scenes and performance macros cannot be parameter locked while recording

Sound locks

Pick a Sound from the Sound pool for one step. Hold a note trigger and turn TRACK LEVEL for the pool list, choose, release the **TRIG** key. The key flashes

Hold the trigger to see its Sound. The first list entry, TRACK SOUND, plays the kit Sound

Incompatible Sounds and empty slots show a flashing (!)

Conditional locks (TRC)

*Hold a trigger and set TRC, which replaces PRB.
Place a note or lock trigger first. FILL conditions need FILL mode*

X%: a probability. Chance the trigger plays

FILL: plays only in FILL mode. Not FILL: plays only when not in FILL mode

PRE: plays if the last evaluated condition on the same track was true. Not PRE: plays if it was false. (PRE conditions are ignored in the check)

NEI: plays if the last evaluated condition on the neighbor track (the track before) was true. Not NEI: if it was false. False if the neighbor has no conditions

1ST: plays on the first run of a looped pattern. Not 1ST: every run except the first

A:B: true on run A of every B runs. Examples: 1:2 plays on runs 1, 3, 5. 2:2 on 2, 4, 6. 2:4 on 2, 6, 10. 4:7 on 4, 11, 18. Uses track runs if the track is shorter than the pattern

A condition on a trigger overrides PRB. Example: PRB 70 percent plus FILL plays only, and always, in FILL mode

Fill mode

FUNC + **FILL**: cue fill for one pattern cycle. **FILL** flashes, then glows as the pattern loops

Hold **FILL** while playing: fill active as long as it is held (not in grid recording)

Hold **FUNC** and double-press **FILL**: latch fill (key is blue). Press **FILL** to unlatch

Trigger mute, accent, swing and slide

*Each opens from **FUNC** + a bank key. The **TRIG** keys show note triggers in a light colour and set steps in a darker one. Press **TRIG** keys to place or remove. A step property on a step with a note trigger applies to it. Hold **FUNC** while entering to set the step on all tracks. Shortcut: hold a note or lock trigger and press the bank key. Press a trigger to see if the bank key lights*

TRIG MUTE (**FUNC** + **BANK E**, green): mutes the note trigger on that step. Good for building suspense live

ACCENT (**FUNC** + **BANK F**, magenta): accents the step. Level set with TRACK LEVEL. Accent level is also a modulation destination

SWING (**FUNC** + **BANK G**, yellow): ratio 51 to 80 percent with TRACK LEVEL or **UP**/**DOWN**. Default 50 percent is equal spacing. The lit **TRIG** keys pick which steps swing

PARAMETER SLIDE (**FUNC** + **BANK H**, blue): values slide between two triggers of a track. One of them must hold the lock. The slide runs to the next trigger, at a speed set by the tempo. Several parameters can slide together

Quick pick: which feature for which job

A normal hit: note trigger

A value change without a new hit: lock trigger with a parameter lock

A hit that only sometimes plays: PRB (probability) or a TRC condition

A hit that only plays in fills: FILL condition

A step that stays in the pattern but stays quiet: trigger mute

A louder step: accent

A different Sound on one step: Sound lock

A glide between two values on a track: parameter slide

A roll or flam: retrig, set per track in the retrig menu or per step with **TRIG** + **UP**/**DOWN**

Even spacing of a number of hits over the pattern: Euclidean mode

Loose, human timing: micro timing with **TRIG** + **LEFT**/**RIGHT**, and swing

A pattern that changes on every pass: A:B conditions with probability

Copy, paste and clear

Pattern: **FUNC** + **RECORD** (grid recording off), pick the target, **FUNC** + **STOP**. **FUNC** + **PLAY** clears. Repeat to undo

Track (grid recording on): same keys. Track page:

PAGE + **RECORD**, **PAGE** + **STOP**, **PAGE** + **PLAY**

Triggers with all their locks (grid recording): hold one or more triggers, press **RECORD**. Hold the target **TRIG**, press **STOP**. Several triggers keep their spacing. Hold triggers and press **PLAY** to clear locks

Pattern menu ([FUNC] + [SCNE])

RELOAD PATTERN (**NO** + **SCNE**): back to the auto-saved or last saved state. Handy for undoing live changes while the pattern is active

SAVE PATTERN (**YES** + **SCNE**): manual restore point for the pattern

Chains and Songs

[↑ Contents](#)

Read when you want to play patterns in order or build a song.

Chains

A chain is one or more patterns that play in order and loop. 64 chains share 256 pattern entries. One song is always active

A song has rows and a scratch pad row. The scratch pad row sits after all song rows by default. It lets you try chains and patterns without touching programmed rows

Press **CHAIN MODE** to play the chain of the active row. Press again for the active pattern to loop

Detailed mode (chain mode on): **CHAIN MODE** + **LEFT** / **RIGHT** move the chain cursor before, on or after a pattern. **BANK** + **TRIG** inserts a pattern before the cursor, or replaces a highlighted one. **CHAIN MODE** + **NO** erases the pattern before the cursor or the highlighted one

Quick mode: **BANK** + the first **TRIG**, then keep holding it and press more **TRIG** keys. Same bank only. This erases the previous chain. Pattern mode must be SEQUENTIAL

FUNC + **CHAIN MODE**: new blank scratch pad row. The old one becomes the last song row. Good for improvised songs

Songs

SONG MODE plays the active song row by row. A scratch pad row at the bottom plays its chain once and stops. The playing row shows at the lower left

FUNC + **SONG MODE**: song edit. Arrow keys move the cursor. The play position is shown inverted. BPM and played bars and beats show at top right

Start from the top: double-press **STOP**. Start from anywhere: move the cursor to a pattern, **YES**, **PLAY**

FUNC + **YES**: add a row below the cursor (pattern A01). Change its pattern with **BANK** + **TRIG** on the highlighted number

Add a chain to a row: **RIGHT** to place the thin cursor, then **BANK** + **TRIG**. Remove a pattern: highlight, **FUNC** + **NO** (repeat to erase a row). Rearrange: **FUNC** + **LEFT** / **RIGHT**. Move a row: **FUNC** + **UP** / **DOWN**

Repeat a row: move to the left end of the row, turn knob A

Song mutes: with MUTE on, put the cursor on a pattern, **YES**, then hold **SONG MODE** and press pads to mute tracks. Muted tracks show as (-). Song mutes belong to that pattern position only

Song mutes outside song edit: with MUTE on, hold **SONG MODE** and tap pads

When a song holds mutes, **MUTE**, **SONG MODE** and **CHAIN MODE** glow dimly

Song menu (**FUNC** + **PERF**): RELOAD (**NO** + **PERF**), LOAD, SAVE to one of 16 slots (**YES** + **PERF**), CLEAR, EDIT, RENAME

Copy, paste and clear work on song rows

Machines

[↑ Contents](#)

Read when you want to choose what a track synthesizes and know what each SRC parameter does.

How machines work

A MACHINE is a set of synthesis parameters that makes a track's analog sound generator act like a certain drum model. It changes only the SRC page. The SMPL, FLTR, AMP and LFO pages are the same on every drum track

Choose one: double-press **SRC** or **FUNC** + **SRC**.

UP/**DOWN** browses, tap the pad of the active track to hear the highlighted one, **YES** selects, **NO** leaves without changing

What a track can use depends on its physical sound generator

DISABLE removes all SRC parameters. Select it and save to make a sample only Sound available for loading and Sound locking on any of the 12 tracks

Sound generator types

BD, SD, RS, CP: dual-oscillator synthesis. BD and SD cover a wide range of sounds. RS and CP add rim shot shaping

BT, LT, MT, HT: single-oscillator synthesis (bass tom customized for BT, XT CLASSIC for the others)

CH, OH, CY, CB: multi-oscillator synthesis for hi-hats, cymbals and cowbells

Machines per track

1 BD: BD ACOUSTIC, BD CLASSIC, BD FM, BD HARD, BD PLASTIC, BD SHARP, BD SILKY, SY CHIP, SY DUAL VCO, SY RAW, plus all SD machines

2 SD: SD ACOUSTIC, SD CLASSIC, SD FM, SD HARD, SD NATURAL, SY CHIP, SY DUAL VCO, SY RAW, plus all BD machines

3 RS: RS CLASSIC, RS HARD, SY CHIP, SY DUAL VCO, SY RAW, plus all BD, SD and CP machines

4 CP: CP CLASSIC, SY CHIP, SY DUAL VCO, SY RAW, plus all BD, SD and RS machines

5 BT: BT CLASSIC

6 LT, 7 MT, 8 HT: XT CLASSIC

9 CH: CH CLASSIC, CH METALLIC, HH BASIC, HH LAB, plus all OH machines

10 OH: OH CLASSIC, OH METALLIC, HH BASIC, HH LAB, plus all CH machines

11 CY: CY CLASSIC, CY METALLIC, CY RIDE, plus all CB machines

12 CB: CB CLASSIC, CB METALLIC, plus all CY machines

General machines for all 12 tracks: DISABLE, UT IMPULSE, UT NOISE

SRC page parameters per machine

Machine	SRC page parameters (in the order of the manual)
BD ACOUSTIC	TUN, SWT, SWD, DEC, HLD, IMP, WAV, LEV
BD CLASSIC	TUN, SWT, SWD, DEC, WAV, HLD, TRA, LEV
BD FM	TUN, SWT, FMD, DEC, FMT, FMS, FMA, LEV
BD HARD	TUN, SWT, SNP, DEC, WAV, HLD, TIC, LEV
BD PLASTIC	TUN, SWT, SWD, DEC, TYP, MOD, TIC, LEV
BD SHARP	TUN, SWT, SWD, DEC, HLD, TIC, WAV, LEV
BD SILKY	TUN, SWT, SWD, DEC, HLD, DUS, CLK, LEV
BT CLASSIC	TUN, SWD, DEC, SNP, NOL, LEV
CB CLASSIC	TUN, DEC, DET, PW1, PW2, LEV
CB METALLIC	TUN, DEC, DET, PW1, PW2, LEV
CH CLASSIC	TUN, DEC, COL, LEV
CH METALLIC	TUN, DEC, LEV
CP CLASSIC	RAT, NUM, RND, CPD, TON, NOD, NOL, LEV
CY CLASSIC	TUN, TON, DEC, COL, LEV
CY METALLIC	TUN, TON, TRD, DEC, LEV
CY RIDE	TUN, TYP, HIT, DEC, C1, C2, C3, LEV
DISABLE	No SRC parameters
HH BASIC	TUN, TON, TRD, DEC, RST, LEV
HH LAB	OSC 1-6, DEC, LEV
OH CLASSIC	TUN, DEC, COL, LEV
OH METALLIC	TUN, DEC, LEV
RS CLASSIC	T1, T2, BAL, DEC, SYM, TIC, NOL, LEV
RS HARD	TUN, SWT, SWD, DEC, SYM, TIC, NOL, LEV
SD ACOUSTIC	TUN, NOD, NOL, BDY, HLD, IMP, SWD, LEV

Machine	SRC page parameters (in the order of the manual)
SD CLASSIC	TUN, DET, BAL, DEC, SNP, NOD, NOL, LEV
SD FM	TUN, FMT, FMD, DEC, FMA, NOD, NOL, LEV
SD HARD	TUN, SWT, SWD, DEC, TIC, NOD, NOL, LEV
SD NATURAL	TUN, DEC, BAL, BDY, HPF, LPF, RES, LEV
SY CHIP	TUNE, WAV, SPD, DEC, LEV
SY DUAL VCO	TUN, DET, DEC (osc 1), DEC (osc 2), CFG, BND, BAL, LEV
SY RAW	TUNE, DET, BAL, DEC2, WAV1, WAV2, NLEV, LEV
UT IMPULSE	ATK, DEC, POL, LEV
UT NOISE	LPF, LPQ, ATK, DEC, HPF, SWD, SWT, LEV
XT CLASSIC	TUN, SWT, SWD, DEC, TON, NOD, NOL, LEV

SRC page abbreviations

ATK: attack, length of the attack phase

BAL: balance between two oscillators, or between noise and oscillator (SD NATURAL)

BDY: decay time of the oscillator (SD NATURAL, SD ACOUSTIC)

BND: depth of a fixed time pitch envelope, 24 units per octave (SY DUAL VCO)

C1, C2, C3: level of components 1 to 3 (CY RIDE)

CFG: oscillator configuration. Waveforms and how the two oscillators interact (SY DUAL VCO). + mixes, R is ring modulation, F is linear frequency modulation with oscillator 1 as carrier, FR is both, _ resets the oscillators on trigger

CLK: soft oscillator click level (BD SILKY)

COL: noise colour, the virtual hardness of the metal

CPD: clap decay (CP CLASSIC)

DEC: decay, length of the decay phase

DET: detune of the second oscillator, relative to the first

DUS: level of subtle tape-like static (BD SILKY)

FMA: FM amount, how much the second oscillator modulates the first

FMD: FM decay, decay of the modulating oscillator

FMS: FM sweep time of the modulating oscillator (BD FM)

FMT: FM tune, pitch of the modulating oscillator

HIT: hit decay, the top decay (CY RIDE)

HLD: hold time before the decay starts

HPF: high-pass filter cutoff

IMP: impact, level of a digital transient that mixes PCM and noise (BD ACOUSTIC, SD ACOUSTIC)

LEV: level, overall volume of the machine

LPF: low-pass filter cutoff

LPQ: low-pass resonance. 0 removes it (UT NOISE)

MOD: modulation level (BD PLASTIC)

NLEV: noise level (SY RAW)

NOD: noise decay

NOL: noise level

NUM: number of hand claps (CP CLASSIC)

OF2, OF3, OF4: note offsets from TUNE. 0 restarts the arpeggiator, or stops a single shot one (SY CHIP)

OSC 1 to 6: pitch of each of the six hi-hat oscillators (HH LAB)

POL: polarity, POS or NEG (UT IMPULSE)

PW1, PW2: pulse width of oscillators 1 and 2 (CB machines)

RAT: clap rate (CP CLASSIC)

RES: noise resonance. 0 removes it (SD NATURAL)

RND: random timing of claps

RST: oscillator reset on each trigger, or free running (HH BASIC)

SNP: snap transient level

SPD: speed of the internal arpeggiator. Note divisions of the BPM first, then fixed Hz values, then single shot settings (SY CHIP)

SWD: sweep depth of the pitch sweep. Negative and positive for UT NOISE

SWT: sweep time of the pitch sweep

SYM: symmetry, nonlinearity of the special rim shot circuit

T1, T2: pitch of oscillator 1 and 2 (RS CLASSIC)

TIC: tick level of the transient

TON: tone, or noise tone (pitch of the noise)

TRA: transient, tick or noise sound and its level (BD CLASSIC)

TRD: transient decay

TUN, TUNE: pitch in semitones

TYP: modulation type A (linear FM) or B (FM with ring modulation) on BD PLASTIC. Cymbal type on CY RIDE

WAV, WAV1, WAV2: waveform. BD HARD and BD CLASSIC: sine, asymmetric sine or triangle. BD SHARP and BD ACOUSTIC: sine, asymmetric sine, triangle, sinetooth, sawtooth or square, free running or reset on trigger. SY CHIP, SY DUAL VCO and SY RAW have their own lists

Machine notes

Added in OS 1.70: SY CHIP, SY RAW, BD ACOUSTIC, SD ACOUSTIC and HH LAB **1.70**

Also added in OS 1.70: a square waveform for BD SHARP WAV, a pitch envelope parameter for BT CLASSIC, and two pulse width parameters for CB CLASSIC and CB METALLIC **1.70**

In OS 1.70 DUAL VCO, IMPULSE and NOISE GEN were renamed SY DUAL VCO, UT IMPULSE and UT NOISE

1.70

BD FM: two oscillators. The second (modulating) one frequency modulates the first

BD PLASTIC: two interacting oscillators with FM (A) or FM plus ring modulation (B)

SY CHIP: inspired by 80s home computers. An internal arpeggiator switches between the root note and up to 3 offset notes to suggest a chord. Waveforms include analog, SID-style noise, animated, table and pulse (1 to 99 percent)

SY DUAL VCO: tune 0 is note C-2 and 24 units are one octave. Detune: 48 units per octave

SY RAW: oscillator 1 has 7 waveforms (including a ring modulator). Oscillator 2 has sine or sinesaw

HH LAB: tune six oscillators freely

UT IMPULSE: positive or negative impulse

UT NOISE: white noise with low-pass and high-pass filters and a filter sweep

Sample, Filter, Amp and LFO Pages

[↑ Contents](#)

Read when you want to shape a track with sample playback, filter, amp envelope and LFO.

SMPL page (press [SMPL] to toggle page 1 and page 2)

Page 2 shows the same parameters with a graphic and the sample waveform. A project has 127 sample slots

TUN: sample pitch in semitones, -24 to +24 (four octaves)

FIN: fine tune, -64 to +63. Spans one semitone down and up

BR: bit reduction. Higher values lower the resolution for a gritty sound

SMP (knob D): sample slot list of up to 127 samples. OFF plays no sample

STA: start point, 0 to 120. Pair with END. **FUNC** + knob snaps to whole numbers, knob press steps by eight **1.70**

END: end point, 0 to 120. If END is lower than STA the sample plays backward

LOP: loop. ON loops for the length of the trigger (LEN) within the AMP HLD and DEC limits

LEV: sample volume

Choosing a sample

Turn knob D (or **FUNC** + **SMPL**) for the list. Tap the active track pad to hear the highlighted one. **YES** or a knob D press selects, **NO** leaves

FUNC + **YES** in the list replaces a slot with a sample from any +Drive directory

On an empty sample slot, **YES** opens the +Drive sample list **1.70**

SAMPLE POS RES (global sequencer config):

highres for fine STA and END control, lowres for sample chains and slices **1.72**

FLTR page

ATK, DEC, SUS, REL: filter envelope attack, decay, sustain level and release

FRQ (knob E): cutoff frequency

RES: resonance. A peak at the cutoff, or a notch with the bandstop type (widest at the lowest setting)

TYP: filter type. 2-pole lowpass, 1-pole lowpass, bandpass, 1-pole highpass, 2-pole highpass, bandstop, peak. All are resonant 2-pole filters. The 1-pole types have a flatter spectrum and suit equalizer jobs

ENV: envelope depth. Bipolar, so negative and positive depth

AMP page

ATK: attack of the amp envelope

HLD: hold before the decay. AUTO follows how long the pad is held. 1 to 127 fixes it

DEC: decay of the amp envelope

OVR: overdrive (gain boost), placed before the multimode filter

DEL: delay send amount

REV: reverb send amount

PAN: pan, -64 (left) to +63 (right), 0 is centre

VOL: volume of the Sound. Independent of the track level

LFO page

SPD: speed. Bipolar, negative runs the wave backward. Try 8, 16 or 32 for straight beat sync

MUL: multiplies SPD. 24 settings: 12 tempo synced and 12 free. (x) multiplies the tempo, (dot) syncs to 120 BPM whatever the tempo

FAD: fade. Positive fades the modulation out, negative fades it in, 0 is none

DST: destination. Turn for a list of parameters from any page and hear the effect while highlighting. **YES** confirms

WAV: waveform. Triangle, sine, square, sawtooth, exponential, ramp, random

SPH: start phase, 0 to 127 (64 is the middle). With random (RND) it adds slew to the steps instead **1.70**

MOD: trigger mode. FREE runs continuously. TRIG restarts on a note. HOLD runs freely but latches its level on each note. ONE runs one cycle then stops (like an envelope). HALF runs half a cycle then stops

DEP: depth and polarity. Positive starts toward the crest, negative toward the trough, 0 is no modulation

Read when you want to set delay, reverb, distortion and compressor.

Basics

Press **FX** to edit the FX track. The five **PARAMETER** keys open DELAY (**SRC**), REVERB (**SMPL**), DIST (**FLTR**), COMP (**AMP**) and LFO (**LFO**)

Delay and reverb are send effects fed by the DEL and REV knobs of each drum track. Distortion and compressor are master effects

TRACK LEVEL on the FX track sets the master return level of delay and reverb. Each also has its own volume

FX settings are saved with the kit

FX + **NO** reloads all FX pages to their last saved state

DELAY page

TIM: delay time, in 128th notes relative to the BPM. 32 is one beat (four sixteenth notes)

X: ping-pong. 0 is off (position the delay with WID). 1 alternates the delay between left and right

WID: stereo width of the delay. Bipolar

FDB: feedback. High values give endless or swelling delays and can get very loud. DOV on the DIST page adds harshness

HPF: high-pass filter on the delay

LPF: low-pass filter on the delay

REV: amount of delay output sent to the reverb

VOL: delay output volume. Routed before or after distortion and compressor, set by DEL on the DIST page

REVERB page

PRE: pre-delay

DEC: decay, sets the size of the space

FRQ: shelving filter frequency

GAI: shelving gain. Maximum keeps the treble, lower values damp it above FRQ

HPF: high-pass filter on the reverb

LPF: low-pass filter on the reverb

VOL: reverb output volume. Routed before or after distortion and compressor, set by REV on the DIST page

DIST page

AMT: distortion amount

SYM: symmetry. Offsets the whole signal up or down before distorting, for asymmetric distortion

DOV: delay overdrive. A warm, dynamic distortion of the delay. Works with FDB on the DELAY page

DEL: delay return before (PRE, default) or after (POST) distortion and compression

REV: reverb return before or after (POST, default) distortion and compression

COMP page

THR: threshold. Lower means more of the signal is compressed

ATK: attack time, 0.03 to 30 ms

REL: release time, 0.1 to 2 s, or A1 or A2 (auto release, A2 slightly longer)

MUP: makeup gain

RAT: ratio. 1:2, 1:4, 1:8 or MAX

SEQ: sidechain EQ (equalizer). OFF is unchanged. LPF reacts mostly to the bass for pumping. HPF reacts less to the bass to avoid pumping. HIT is a balanced setting

MIX: dry and wet mix, 0 to 127. Left is uncompressed, right is compressed only. In between is parallel compression

VOL: output volume

Incoming external audio can be compressed here: start the source, press **FX**, then **AMP**

LFO page (FX track)

Same parameters and modes as the drum track LFO (SPD, MUL, FAD, DST, WAV, SPH, MOD, DEP), but it modulates FX track parameters

Sampling

[↑ Contents](#)

Read when you want to record audio into the Rytm.

Sampling menu ([SAMPLING])

Use the DATA ENTRY knobs. Maximum sampling time is 33 seconds. Sources: external audio through AUDIO IN, or internal audio

REC: **FUNC** + **YES** starts. **YES** stops

ARM: **YES** arms. Sampling starts when the signal passes THR. **SAMPLING** + **NO** cancels

RLEN: record length, 1 to 128 steps (time at the current BPM) or MAX (up to 33 seconds or **YES**). Under about 59 BPM the full 128 steps do not fit. Two exclamation marks warn of it **1.70**

THR: threshold. High enough to skip noise, low enough to catch the sound

SRC: AUD L+R (summed to mono), AUD L, AUD R, BD, SD, RS/CP, BT, LT, MT/HT, CH/OH, CY/CB (internal tracks), MAIN (summed to mono), USB L+R (summed to mono), USB L, USB R

MON: monitor the input or not. Not available for internal tracks or MAIN, except for a track not routed to the main out

Step by step

Connect the source. **SAMPLING**, knob G sets SRC. Watch the input meter. Level as loud as possible, no clipping. MON YES to hear it

Knob F sets THR just above the background noise.

YES arms. Play the source

YES stops. The sample is normalized by itself

Knobs A and C set TRIM START and TRIM END.

Knobs B and D zoom. **FUNC** + **YES** previews. **YES** trims. **NO** untrims

YES saves. Name it and **YES** again. Press a pad to assign it to that track, or **NO** to skip

FUNC + **NO** discards the sample. **NO** closes the menu

Direct sampling

SAMPLING + **YES**: arm (key **yellow**). Or **FUNC** +

SAMPLING: start by hand

Sampling runs (**red** key). **FUNC** + **SAMPLING** stops.

The key is dim **red** while normalizing, then **green**

Uses the last SRC and THR. **SAMPLING** + **NO** cancels at any stage

Performance Modes

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Read when you want to play live: mutes, chromatic play, scenes and performance macros.

Mode keys

PLAY MODE, **MUTE**, **CHRO**, **SCNE** and **PERF** each switch on and off. Only one can be on at a time.

SONG MODE and **CHAIN MODE** behave the same way

Play mode

Pads play the Sounds of the active kit. They respond to velocity and pressure

FUNC + pad plays at the TRIG page VEL. **FIX** sets fixed velocity

RTRG + pad: retrig while held

Mute mode ([MUTE])

Press a pad to mute a track, again to unmute. Until pads are muted, **green** pads are audible

Hold **FUNC** and press pads to preselect several mutes. They take effect when **FUNC** is released (blue pads show preselected)

Solo: **RTRG** + pad. Hold **RTRG** for several. Solo pads are turquoise

Mutes stay when you change pattern or load a kit. They are not stored in a kit or pattern

Mutes made here are master mutes. They override trigger mutes and song mutes

The **MUTE** key stays half-bright after you leave the mode if any track is muted

Chromatic mode ([CHRO])

Select the track with **TRK** + a **PAD**, then **CHRO**. The 12 pads play the track Sound across 4 octaves: middle (blue), one up (yellow), two down (violet and dark blue)

UP/**DOWN** move one row at a time. Pitch climbs left to right and bottom to top

Pad scale sets which notes the pads play (track menu). The Sound must have chromatic enabled in Sound settings (synth, sample or both)

Recorded in grid and live recording. The visible portion is not stored per kit or pattern

Scene mode ([SCNE])

A scene is a set of fixed parameter values from any track, applied with one pad. 12 scenes, one per pad. One active at a time

Pad colours: bright blue active, half-bright blue holds a scene, unlit empty, violet is the active track pad with a scene

Scene edit: choose a pad, hold **SCNE** a moment (or **FUNC** + pad). Screen list: scene number, lock count, clear, clear all

While holding the scene pad, turn knobs to lock parameters. Choose tracks with **TRK** + **PADS** and **FX**
48 locked parameters in total per kit across the 12 scenes

Copy, paste and clear a scene with **FUNC** + **RECORD**,
STOP, **PLAY**

Scenes save with the kit. **SCNE** stays lit if any scene is active

Performance mode ([PERF])

A performance macro changes several parameters from any track at once. The effect follows how hard you press the pad. 12 macros, one per pad. **Green** pads hold a macro

Macro locks are depth settings relative to the track value. Example: TUN +24 and full pressure adds 24, half pressure adds 12. If TUN is 30, full pressure gives +54. A -24 depth lowers it the same way

Performance edit: choose a pad, hold **PERF** a moment. List: macro number, lock count, clear, clear all

While holding the pad, turn knobs to set depth. 48 parameters in total per kit across the 12 macros

FUNC + **QPER** mutes all macros. Press again to restore. **QPER** is **green** when active

Macros save with the kit. They cannot be recorded as parameter locks

Quick performance

Hold **QPER** and press pads or **TRIG 1** to **TRIG 12** to pick macros, then release. Each time replaces the earlier choice

QUICK PERF AMOUNT then controls how much they act, without being in performance mode

Read when you want to connect the Rytm to other gear or a computer.

Monophonic bass machine on DIN sync

Connect the bass machine output and the Rytm outputs to the mixer

Connect the Rytm MIDI OUT to the SYNC IN of the bass machine

GLOBAL SETTINGS > MIDI CONFIG > PORT CONFIG:
set OUT PORT FUNCTIONALITY to DIN 24

The Rytm starts, stops and sets the tempo of the bass machine

Stereo drum machine through the Rytm

Connect the drum machine's stereo outputs to the Rytm inputs with a mono to stereo split cable

Connect the Rytm MIDI OUT to the SYNC of the drum machine and set OUT PORT FUNCTIONALITY to DIN 24

Start the drum machine, press **FX** then **AMP** and set the compressor to taste

With other Elektron gear

Example: the Rytm for beats, an Analog Four MKII for bass and synths, an Octatrack MKII for loops and sampling

Rytm main outs go to the Analog Four inputs, its main outs to the Octatrack, and the Octatrack to the PA
MIDI slave the analog machines to the Octatrack with two MIDI cables

On the Rytm: SYNC > CLOCK RECEIVE and PRG CH RECEIVE on, and PORT CONFIG > INPUT FROM set to MIDI or MIDI+USB

Class compliant device

Works with computers, phones and tablets over USB

USB CONFIG: USB AUDIO/MIDI

Insert effect on track 1: see Audio routing for the settings. Play track 1, and only the processed audio reaches the main out

Overbridge and Outbox 8

Overbridge: set USB CONFIG to OVERBRIDGE. The Rytm shows up as a plug-in window in your DAW, with total recall and parameter automation

Outbox 8: configuration support **1.73**. In OS 1.74 the main outputs can also be routed through the Outbox 8, and **FUNC** + **UP**/**DOWN** moves between channels in its channel configuration menus **1.74**

Outbox 8: an eight-channel audio and CV breakout box and USB host. Adds analog outputs for Overbridge units, and converts MIDI to CV (pitch, gate, trigger, linear, clock) for modular gear

Notes and program change

Note	Function
C0-B0 (0-11)	Trigger the Sound of track 1 to 12
C1-B4 (12-59)	Play the active track chromatically (48 variations)
Program change 0-127	Select pattern A01 to H16

Tracks must be on their default channels 1 to 12 for C0 to B0. The Sound must be enabled for chromatic play in its Sound settings. NRPN is shown as MSB:LSB. Machine specific parameters use CC 16 to 23 and NRPN 1:0 to 1:7 in the machine's own order.

Control change and NRPN (send and receive)

Trigger	CC	NRPN
Note	3	3:0
Velocity	4	3:1
Length	5	3:2
Synth trigger	11	3:3
Sample trigger	12	3:4
ENV trigger	13	3:5
LFO trigger	14	3:6

Euclidean	CC	NRPN
Pulse generator 1	86	3:8
Pulse generator 2	87	3:9
Boolean operator	88	3:10
Rotation generator 1	89	3:11
Rotation generator 2	90	3:12
Track rotation	91	3:13
Euclidean on/off	117	3:14

Kit (common)	CC	NRPN
Track level	95	1:100
Track mute (seq. mute)	94	1:101
Track solo (seq. mute)	93	1:102
Track machine type	15	1:103
Active scene	92	1:104

Performance	CC	NRPN
Parameters 1 to 12	35-37, 39-47	0:0-0:11

Synth (SRC page)	CC	NRPN
Parameters 1 to 8	16-23	1:0-1:7
Sample	CC	NRPN
Tune	24	1:8
Fine tune	25	1:9
Bit reduction	26	1:10
Slot	27	1:11
Start	28	1:12
End	29	1:13
Loop	30	1:14
Level	31	1:15
Filter	CC	NRPN
Attack time	70	1:16
Decay time	71	1:17
Sustain level	72	1:18
Release time	73	1:19
Frequency	74	1:20
Resonance	75	1:21
Mode	76	1:22
Env depth	77	1:23
Amp	CC	NRPN
Attack time	78	1:24
Hold time	79	1:25
Decay time	80	1:26
Overdrive	81	1:27
Delay send	82	1:28
Reverb send	83	1:29
Pan	10	1:30
Volume	7	1:31

LFO	CC	NRPN
Speed	102	1:32
Multiplier	103	1:33
Fade in/out	104	1:34
Destination	105	1:35
Waveform	106	1:36
Start phase	107	1:37
Trig mode	108	1:38
Depth (LSB: CC 118)	109	1:39

Delay	CC	NRPN
Time	16	2:0
Pingpong	17	2:1
Stereo width	18	2:2
Feedback	19	2:3
Highpass filter	20	2:4
Lowpass filter	21	2:5
Reverb send	22	2:6
Mix volume	23	2:7

Reverb	CC	NRPN
Predelay	24	2:8
Decay time	25	2:9
Shelving freq	26	2:10
Shelving gain	27	2:11
Highpass filter	28	2:12
Lowpass filter	29	2:13
Mix volume	31	2:15

Distortion	CC	NRPN
Amount	70	2:16
Symmetry	71	2:17
Delay overdrive	72	2:18
Delay routing (pre/post)	76	2:22
Reverb routing (pre/post)	77	2:23

Compressor	CC	NRPN
Threshold	78	2:24
Attack time	79	2:25
Release time	80	2:26
Makeup gain	81	2:27
Ratio	82	2:28
Sidechain EQ	83	2:29
Dry/wet mix	84	2:30
Output volume	85	2:31

Delay, reverb, distortion and compressor numbers are for the FX track.