

# Model:Cycles

—  
User Manual

 **elektron**

### FCC compliance statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



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### Canada

This Class B digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe B est conforme à la norme NMB-003.

### European Union regulation compliance statement

This product has been tested to comply with the Low Voltage Directive 2014/35/EU and the Electromagnetic Compatibility Directive 2014/30/EU. The product meets the requirements of RoHS 2 Directive 2011/65/EU.



This symbol indicates that your product must be disposed of properly according to local laws and regulations.

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## IMPORTANT SAFETY AND MAINTENANCE INSTRUCTIONS

Please read these instructions carefully and adhere to the operating advice.

1. Do not use this unit near water.
2. Never use aggressive cleaners on the casing or on the screen. Remove dust, dirt and fingerprints with a soft, dry and non-abrasive cloth. More persistent dirt can be removed with a slightly damp cloth using only water. Disconnect all cables while doing this. Only reconnect them when the product is safely dry.
3. Install in accordance with the manufacturer's instructions. Make sure you place the unit on a stable surface before use. If you mount the unit in a rack, be sure to tighten all four screws in the rack mount holes.
4. Connect the unit to an easily accessible electrical outlet close to the unit.
5. When transporting the unit, use accessories recommended by the manufacturer or the original box and padding.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or any other equipment (including amplifiers) producing heat.
7. Do not put the PL-4 Protective Cover (Elektron accessory) on the unit while the unit is powered on.
8. This product, by itself or in combination with amplifiers, headphones or speakers, is capable of producing sound levels that may cause permanent hearing loss. Do not operate at a high volume level or at a level that is uncomfortable.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the unit.
10. Only use attachments/accessories specified by the manufacturer.
11. Unplug this unit during lightning storms or when it is not used for long periods of time.
12. To prolong the life span of the device and to save energy, do not leave the device switched on while unused for an extended period of time.
13. Refer all servicing to qualified service technicians. Servicing is required when the unit has been damaged in any way, liquid has been spilled or objects have fallen into the unit, the unit has been exposed to rain or moisture, does not operate normally, or has been dropped.

### WARNING

To reduce the risk of fire, electrical shock or product damage:

- Do not expose the unit to rain, moisture, dripping or splashing and also avoid placing objects filled with liquid, such as vases, on the unit.
- Do not expose the unit to direct sunlight, nor use it in ambient temperatures exceeding 40°C as this can lead to malfunction.
- Do not open the casing. There are no user repairable or adjustable parts inside. Leave service and repairs to trained service technicians only.
- Do not exceed the limitations specified in the Electrical specifications.

### SAFETY INSTRUCTIONS FOR THE POWER ADAPTER ELEKTRON PSU-4

- The adapter is not safety grounded and may only be used indoors.
- To ensure good ventilation for the adapter, do not place it in tight spaces. To prevent risk of electric shock and fire because of overheating, ensure that curtains and other objects do not prevent adapter ventilation.
- Do not expose the power adapter to direct sunlight, nor use it in ambient temperatures exceeding 40°C.
- Connect the adapter to an easily accessible electrical outlet close to the unit.
- The adapter is in standby mode when the power cord is connected. The primary circuit is always active when the cord is connected to the power outlet. Pull out the cord to completely disconnect the adapter.
- In the EU, only use CE approved power cords.

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# 1. INTRODUCTION

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Thank you for purchasing Model:Cycles. The Model:Cycles is an easy-to-use FM based groovebox. It features Elektrons world-renowned sequencer and pairs this with one function-per-knob sound mangling and a top of the line sound engine.

## 1.1 CONVENTIONS IN THIS MANUAL

We have used the following conventions throughout the manual:

- **KEY NAMES**  
Uppercase, bold style and within brackets. For instance, the key labeled “FUNC” on the main panel is called **[FUNC]**.
- **KNOBS**  
Uppercase, bold, italic letters. For instance, the knob “Level/Data” is called ***LEVEL/DATA***.
- **LED INDICATORS**  
Uppercase letters with angle brackets. For instance, the Pattern page LEDs are called: **<PATTERN PAGE>**.
- **MENU NAMES**  
Uppercase letters. The SETTINGS menu is an example of that.
- **PARAMETER NAMES, MENU OPTIONS**  
Uppercase bold letters for parameter names and specific menu options where you can make settings or perform actions. For example, **CUTOFF**.
- **PARAMETER SETTING ALTERNATIVES**  
Uppercase letters. For example, OFF.
- **SCREEN MESSAGES**  
Uppercase letters with quotation marks. For example, “QUANTIZE LIVE REC”.

You also find the following symbols throughout the manual:



Important information that requires your attention.



A tip that makes it easier for you to interact with the Model:Cycles.



The bird of awesomeness.

## 2. THE MODEL:CYCLES

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There is that one word that always comes back to us. It's running bright red through all our instruments and is undeniably fundamental to the Elektron ethos. It's a divisive word, yet one that concisely captures a firm belief of ours: that little boxes with knobs can be formidable instruments if you pay enough attention to function and detail. This word remains a cornerstone of our work and is very dear to our hearts.

Model:Cycles is a groovebox. In the full sense of the word.

The possibility to make a myriad of sounds is something that signifies a groovebox - so how do we accomplish that without using samples? We use the right method of synthesis, and the right synthesis, in this case, is FM. Not only because we have deep affection for it, but also because of how malleable it is.

Approaching synthesis in the Model format, with its one-knob-per-function control, was a daunting task. We wanted focused controls, yet maximum sound-shaping possibilities. The solution was to take the FM engine from the Digitone and then completely re-arrange it to form six different machines: Kick, Snare, Metal, Perc, Tone, and Chord.

Each machine is a unique mapping of the engine, and we have spent countless hours tweaking their four available macro controls – Color, Shape, Sweep, and Contour. Turning one of these knobs changes several, under-the-hood, parameters at once, allowing the machines to be tweaked both effortlessly and immensely. This is the way we have balanced simplicity with flexibility, and our vision is that you will explore this with an adventurous mindset.

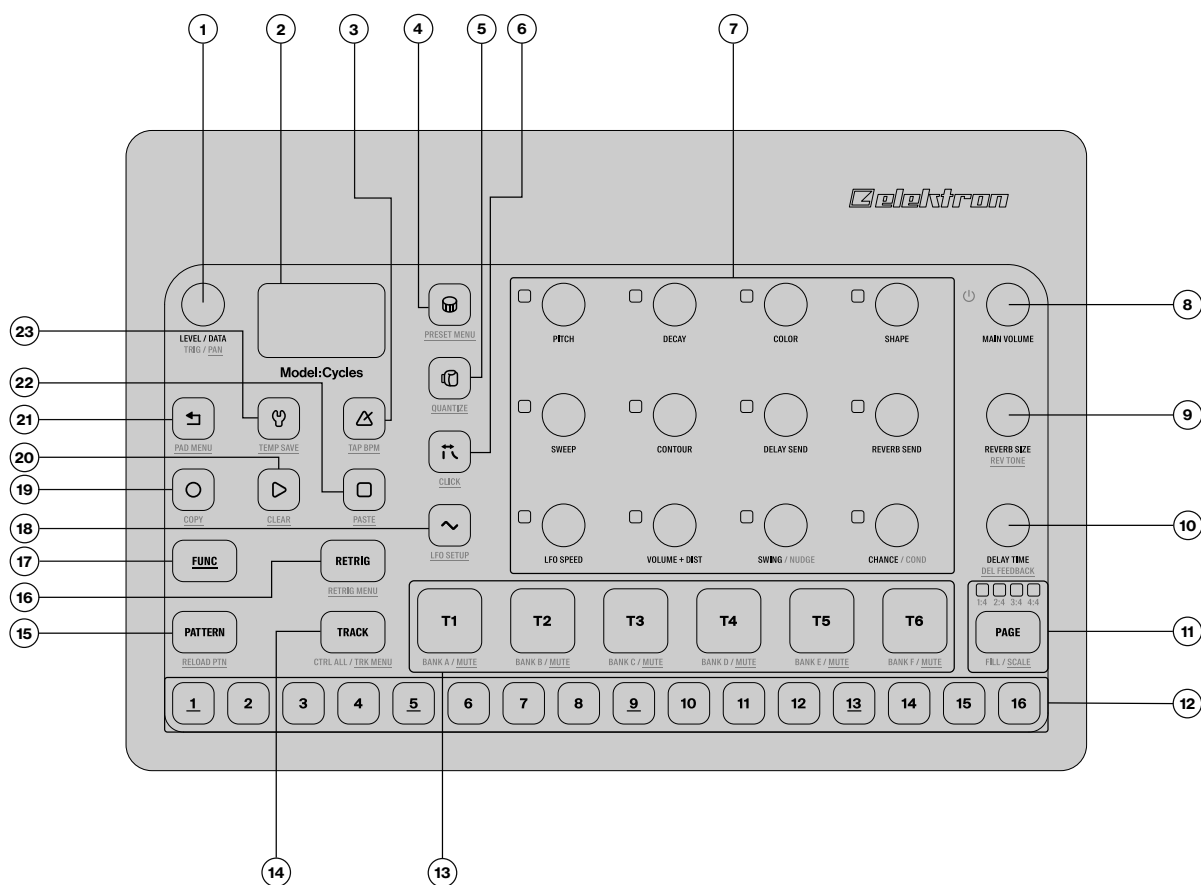
Model:Cycles is a love letter to both the groovebox paradigm and the FM sound. We hope that you will enjoy creating music with the Cycles as much as we enjoyed making it.

Sincerely,

The Elektron Team

## 3. PANEL LAYOUT AND CONNECTORS

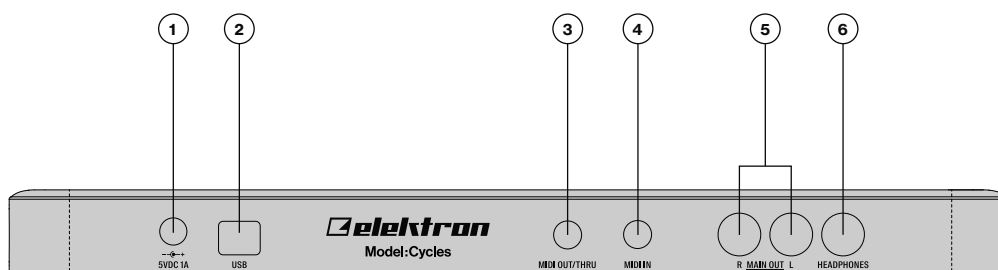
### 3.1 FRONT PANEL



1. **LEVEL/DATA** sets the overall volume level of the active track. You also use it to set parameters and navigating menus. The secondary function sets the track pan.
2. Screen.
3. **[TEMPO]** opens the TEMPO menu, where you can adjust the tempo. The secondary function makes it possible to tap the tempo.
4. **[MACHINES]** opens the MACHINES menu. The secondary function opens the PRESET menu.
5. **[PUNCH]** adds fixed pseudo-compression and distortion to the active track. The secondary function opens the QUANTIZE menu.
6. **[GATE]** activates gate mode for the trigs on the active track. The secondary function opens the CLICK menu.
7. **TRACK PARAMETER** knobs are used for setting parameter values. Press and hold **[FUNC]**, and then turn the knobs to change values in larger increments.
8. **MAIN VOLUME** sets the volume for the main outputs and the headphones output. Press and hold **MAIN VOLUME** to turn the unit on. Press and hold **MAIN VOLUME** until the countdown on the screen finishes to turn the unit off. The unit will not turn off if you let go of the **MAIN VOLUME** during the countdown. This is to prevent that you turn the unit off accidentally.
9. **REVERB SIZE** sets the size of the global reverb effect. The secondary function sets the reverb tone.
10. **DELAY TIME** sets the delay time of the global delay effect. The secondary function sets the delay feedback.
11. **[PAGE]** selects the active pattern page, if the pattern is made up of more than 16 steps. The <PATTERN PAGE> LEDs indicate how many pattern pages the active pattern consists of, or which pattern page is currently active. The LED flashes on the pattern page currently playing. The secondary function accesses the SCALE menu. This key also activates Fill mode (when GRID RECORDING mode is not active).

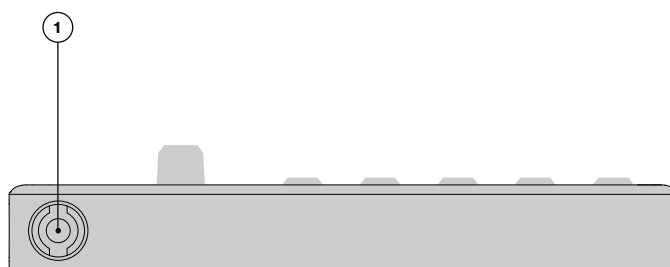
12. **[TRIG]** keys. Used for entering or removing sequencer trigs and parameter locks, in combination with the **TRACK PARAMETER** knobs. They are also used to select patterns, in combination with the **[TRACK]** and **[PATTERN]** and **[T1-T6]** pads. The **[TRIG]** keys are also used as a keyboard in CHROMATIC mode. The **[TRIG]** keys lights indicate trigs on the sequencer by lit red keys, while flashing red keys indicates parameter locks, in GRID RECORDING mode. When a pattern is playing, or when LIVE RECORDING is enabled, a light “runs” along the 16 steps of the sequencer across all (up to four) pages at the set tempo.
13. **[T1-T6]** (Track 1–6) pads. Triggers the track’s preset and at the same time sets the track to active. The secondary function mutes the track. **[PATTERN]** + **[T1-T6]** selects Bank A–F.
14. **[TRACK]** key. Press **[TRACK]** + **[T1-T6]** to select a track to be active for editing without triggering the track’s preset. The secondary function opens the TRACK SETUP menu.
15. **[PATTERN]** + **[TRIG 1-16]** selects pattern 1-16. **[PATTERN]** + **[T1-T6]** selects Bank A–F. The secondary function reloads the active pattern.
16. **[RETRIG]** Press and hold **[RETRIG]** + **[T1-T6]** to retrigger the track’s preset. The secondary function opens the RETRIG SETUP menu. **[TRIG]** + **[RETRIG]** opens the TRIG REPEAT menu.
17. **[FUNC]** key. Press and hold **[FUNC]**, and then press another key to access the secondary function of that key. The secondary functions are written in underlined text on the Model:Cycles front panel.
18. **[LFO]**  opens the LFO menu. The secondary function opens the LFO SETUP menu.
19. **[RECORD]**  activates/deactivates GRID RECORDING mode. Keep **[RECORD]** pressed, then press **[PLAY]**, to activate LIVE RECORDING mode. Activate/deactivate QUANTIZATION of LIVE RECORDING by keeping **[RECORD]** pressed, then tapping **[PLAY]** twice. The secondary function is the copy operation.
20. **[PLAY]**  starts the sequencer playback. The secondary function is the clear operation.
21. **[BACK]**  Used for navigating one or more steps up in the menu structure and to revert parameter changes to their previous settings. The secondary function opens the PAD CONFIGURATION menu.
22. **[STOP]**  stops playback. The secondary function is the paste operation.
23. **[SETTINGS]**  Opens the CONFIG menu and contains the management of patterns, projects, MIDI and device configuration, and OS updates. The secondary function saves the active pattern.

#### 3.2 REAR CONNECTORS



1. **DC IN**, Input for power supply. Use the included PSU-4 power adapter, connected to a power outlet.
2. **USB**, For connecting the unit to a computer. Use the included USB A to Micro B connector cable to connect to a computer host.
3. **MIDI OUT/THRU**, Use the included 3.5 mm (Tip/Ring/Sleeve) to female 5 pin DIN cable to connect – via a standard MIDI cable – to MIDI IN of an external MIDI device or to another MIDI device in the chain.
4. **MIDI IN**, MIDI data input. Use the included 3.5 mm (Tip/Ring/Sleeve) to female 5 pin DIN cable to connect – via a standard MIDI cable – to MIDI Out of an external MIDI device.
5. **MAIN OUT R/L**, Main audio outputs. Use either 1/4" mono phone plug (unbalanced connection) or 1/4" (Tip/Ring/Sleeve) phone plug (balanced connection).
6. **HEADPHONES**, Audio output for stereo headphones. Use 1/4" (Tip/Ring/Sleeve) phone plug.

#### 3.3 SIDE CONNECTOR



1. **BATTERY DC In**, Input for accessory battery power supply.

#### 3.4 SETTING UP AND STARTING THE MODEL:CYCLES

Make sure you place the Model:Cycles on a stable support, such as a sturdy table, with sufficient space for the cables. Make sure to switch off all devices before you connect the Model:Cycles to other devices.

1. Plug the supplied DC adapter to a power outlet and connect the small plug to DC IN on the Model:Cycles.
2. Connect MAIN OUT R/L from the Model:Cycles to your mixer/amplifier or connect your headphones to the Model:Cycles HEADPHONES jack.
3. To control the Model:Cycles from a computer, connect a USB cable between the computer and the USB connector of the Model:Cycles.
4. If you want to use MIDI to control the Model:Cycles, connect the MIDI OUT port of the device you wish to send data from to the MIDI IN port of the Model:Cycles. If the MIDI OUT/THRU port is set to function as THRU, it duplicates the data arriving at the MIDI IN port, so it can be used for chaining MIDI units together. Connect the MIDI OUT/THRU port of the Model:Cycles to the MIDI IN port of the of the device you want to control if you want to use Model:Cycles to control other devices. (Set the port to function as OUT.)
5. Switch on all units. Press and hold **MAIN VOLUME** for a second to switch on the Model:Cycles.

## 4. QUICK START

This quick start guides you through some of the basic operations to start using the Model:Cycles right away. First, connect it as described in section “3.4 SETTING UP AND STARTING THE MODEL:CYCLES” on page 12.

### 4.1 PLAYING THE FACTORY PATTERNS

You can find several factory patterns in the Model:Cycles. Follow the instructions below to get started exploring your new instrument.

1. Press **[PATTERN]** and then press **[T1]** pad to select bank A.
2. Press **[TRIG 1]** to select the first pattern of bank A.
3. Press **[PLAY]** to listen to pattern A01.
4. Press **[PATTERN]** and then press **[TRIG 2]** key to select pattern A02. It will start once pattern A01 is finished. Select pattern A03 by pressing **[PATTERN]** and then press **[TRIG 3]** key, and so on.
5. Press **[STOP]** to stop playback.

### 4.2 PLAYING A PRESET CHROMATICALLY

You can use the **[TRIG]** keys to play any track's preset chromatically. For more information, please see “7.6 CHROMATIC MODE” on page 20.

1. Make sure you are not in GRID RECORDING or LIVE RECORDING mode. For more information, please see “9.3.2 GRID RECORDING MODE” on page 25 and “9.3.3 LIVE RECORDING MODE” on page 25.
2. Press **[TRACK]** + one of the **[T1–6]** pads to select the audio track to play chromatically.
3. Play the **[TRIG]** keys. The active track preset is pitched differently for each of the playable keys.



Playing a preset chromatically is an effective way to add musical variety to your beats. The timbre, tonality, and impact of playing a preset chromatically depend on the character of the preset.

### 4.3 MUTING THE TRACKS

You can mute the sequencer data for any track.

1. Make sure a pattern is playing.
2. Press the **[FUNC]** + **[T1–6]** to mute and unmute the corresponding tracks.



- The tracks are muted globally. If you mute a track, it is still muted if you change to another pattern.
- A muted track is displayed in the screen with a grayed out volume bar.

### 4.4 SETTING THE TEMPO

1. Press the **[TEMPO]** key to open the TEMPO menu
2. Use the **LEVEL/DATA** knob to change tempo. Pressing the knob while turning it changes the tempo eight BPM at a time. **[FUNC]** + turn **LEVEL/DATA** changes the tempo in decimal steps.

You can also manually tap a tempo setting. Press and hold **[FUNC]** key and then tap the **[TEMPO]** key in a steady rhythm. After four consecutive taps the average tempo of the taps are calculated. By continuing tapping, the average tempo keeps on updating.



### 4.5 LOADING A PRESET TO A TRACK

You can load any preset from the +Drive to any of the tracks.

1. Press **[TRACK]** + **[T1-6]** to select the track to which you want to load a preset.
2. Press **[FUNC]** + **[MACHINES]** to open the PRESET menu.
3. Use the **LEVEL/DATA** knob to navigate the folder structure to the preset you want to load. Press **[BACK]** to navigate up one level in the folder hierarchy if needed. Press the **[T1-6]** pad of the active track while browsing to listen to the preset currently highlighted. You can also press and hold the **[T1-6]** pad to let the sequencer play the highlighted preset.
4. Press **LEVEL/DATA** to select a preset. Press **[BACK]** to exit the list without selecting a preset.

You can now play the preset either by the sequencer or manually by pressing the **[T1-6]** pad or the **[TRIG]** keys.



You can also load up to six presets at the same time.

In the PRESET FOLDER menu, highlight a folder and then press and hold **LEVEL/DATA** for a second. A popup appears. Select “LOAD FOLDER” Press “YES” to load up to six presets from that folder to Model:Cycles six tracks. For more information, please see “8.4.2 PRESET FOLDER MENU” on page 22.

It checks all files in the directory for a suffix of 1-6 and loads the files matching this criteria to the respective track. If no matching file is found for a track, it fills the blank tracks with the first other not-yet-loaded presets in the folder. So if you have the presets BD01, SD03, MYPRESET999, CHORDY and HIHAT6 in a directory, it would load T1=BD01, T2=CHORDY, T3=SD03, T4=MYPRESET999 and T6=HIHAT6. T5 will be blank (if it did not previously contain a preset).

### 4.6 EDITING PARAMETERS

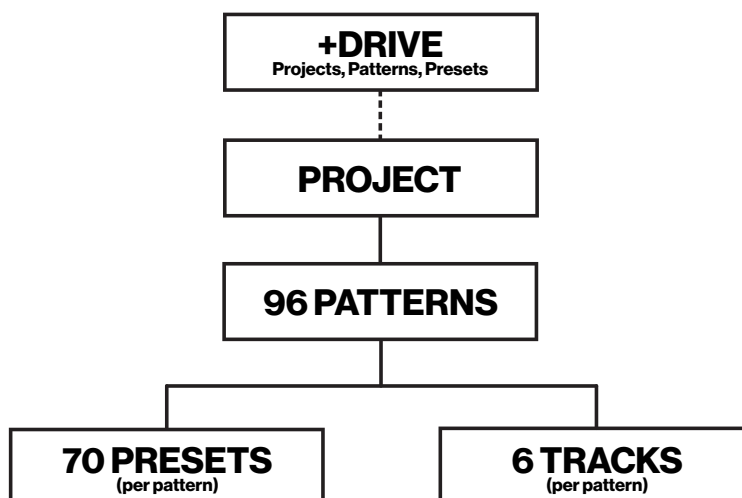
The Model:Cycles parameters affect the sound and signal in various ways.

1. Make sure a pattern is playing.
2. Press **[TRACK]** + **[T1-6]** pads to select one of the six tracks.
3. Turn a **TRACK PARAMETER** knob to affect its corresponding parameter.  
To change, for example, the presets tune, turn the knob labeled **PITCH** to change the parameter value, and listen to how the sound changes.

Try out the rest of the parameters to explore a wide variety of sound shaping possibilities. For more information, please see “10.1 PARAMETER EDITING” on page 35.

## 5. OVERVIEW OF THE MODEL:CYCLES

The image below outlines the data structure of the Model:Cycles.



### 5.1 DATA STRUCTURE

#### 5.1.1 +DRIVE

The +Drive is a non-volatile storage. It keeps up to 96 projects stored internally, and it also contains the patterns and the presets. Presets are loaded to a pattern from the +Drive Sound library to the active project. +Drive Sound library can hold a virtually unlimited amount of presets, available to all projects.

#### 5.1.2 PROJECT

A project contains 96 patterns. General settings and states are also stored in the project. When a project is loaded it becomes the active working state of the Model:Cycles. From here it is possible to edit the patterns and presets of the project. Every time the Model:Cycles is switched on, it boots to the active working state, the active project. Projects are saved, loaded and managed in the CONFIG menu. For more information, please see “12.2 PROJECT” on page 42.

#### 5.1.3 PATTERNS

The patterns are the primary data container for the Model:Cycles. 16 patterns are available for each of the 6 banks, which means that 96 patterns are available for each project. A pattern contains up to 70 presets (one for each of the six tracks and then additionally 64 more for preset locks), sequencer data like trigs and parameter locks. It also contains BPM, length, swing and time signature settings. For more information, please see “9. THE SEQUENCER” on page 24.

#### 5.1.4 PRESETS

A preset is a collection of track parameter settings that can be saved and recalled. Presets are stored in the +Drive Sound library. You use the PRESET menu to manage presets. For more information, please see “8. PRESETS” on page 21. and “10. TRACK RELATED PARAMETERS” on page 35



A preset imported to a pattern, becomes an independent copy of the preset on the +Drive and is not linked to the original preset on the +Drive. Instead, it becomes a part of the pattern.

### 5.2 ABOUT THE SEQUENCER TRACKS

To select a sequencer track for editing, press [T1–6]. Press [TRACK] + [T1–T6] to select a track without triggering the track’s preset.

#### 5.2.1 TRIGGER PRESETS

The Model:Cycles’s six sequencer tracks are mainly used to trigger and control presets. Each track contains one preset (plus additional preset locked presets) together with all the track related parameter settings. For more information, please see “10. TRACK RELATED PARAMETERS” on page 35.

### 5.2.2 SEND MIDI

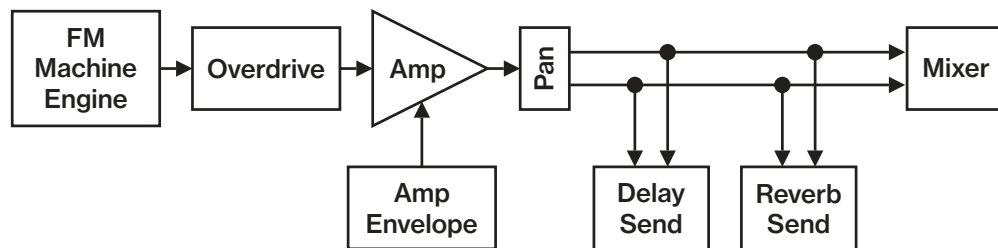
All sequencer tracks on the Model:Cycles can also be set to send its sequencer data through the MIDI OUT or USB ports to control external, MIDI equipped, gear. Each track sends note, note length and velocity data over MIDI. For more information, please see “9.4.2 MOUT” on page 26.

Any MIDI channel can be assigned to a track and several tracks can share the same channel. If several tracks are assigned to the same MIDI channel the track with the lowest number has priority regarding parameter conflicts.

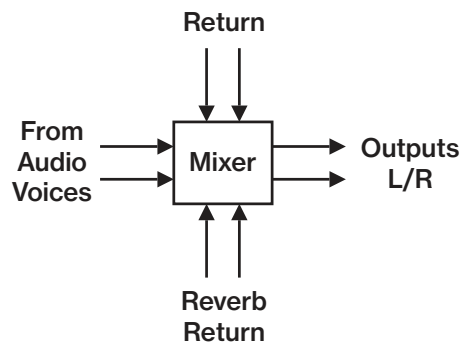
## 5.3 SOUND ARCHITECTURE

The illustrations below show the Model:Cycles sound architecture, with its six audio voices and two send effects (delay and reverb).

### 5.3.1 AUDIO VOICES



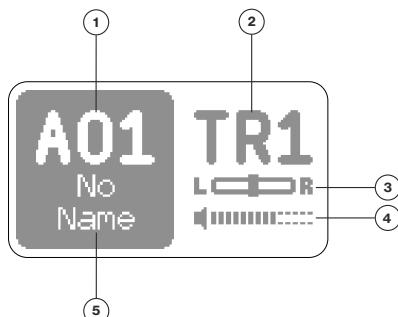
### 5.3.2 EFFECTS



## 6. THE USER INTERFACE

### 6.1 MAIN SCREEN

The screen shows the information used for real-time interaction and editing the Model:Cycles. The illustration below shows the Main screen.



1. Current bank and pattern
2. Active track
3. Track Pan
4. Track Level
5. Pattern name

### 6.2 NAVIGATION

Use the **LEVEL/DATA** knob to navigate menus and folders. Turn the knob to browse menus, lists, folders, and files. Press the knob to select menu/list items or files, or to open folders.

Press **[BACK]**  to back one step up in the menu structure. In the preset browser you can press and hold **[BACK]**  to back up to the top of the menu structure.

### 6.3 PARAMETER EDITING

The **TRACK PARAMETER** knobs are used to change the values of the track parameters.

### 6.4 [FUNC] KEY PRESS COMBINATIONS

The standard way to use the **[FUNC]** key in combination with other keys, is to press and hold **[FUNC]** and then make a short press on the second key in the combination.

### 6.5 COPY, CLEAR, AND PASTE

Copy, clear and paste commands are available in many contexts. Press **[FUNC]** + **[RECORD]** to copy. Press **[FUNC]** + **[STOP]** to paste. Press **[FUNC]** + **[PLAY]** to clear. Paste and clear operations is undone by repeating the key press combination. Please see the different sections in the manual for more information on when these commands are available. For more information, please see “9.12.6 COPY, PASTE, AND CLEAR OPERATIONS” on page 32.



The copy clipboard can only hold one item at a time. When you perform a copy command, the item copied replaces any earlier copied items. For example, you can not have both a trig and a pattern copied at the same time.

### 6.6 NAMING MENU

The naming method is identical for the various naming situations that appear when you save projects and patterns et cetera.



## 6. THE USER INTERFACE

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In the NAMING menu, turn the **LEVEL/DATA** knob to navigate between the character positions. Press and hold **[FUNC]**, and then turn the **LEVEL/DATA** knob to select a character for the highlighted position.

**[FUNC]** + **[BACK]** deletes the character before the highlighted position.

Press and hold **[FUNC]**, and then press **LEVEL/DATA** to toggle between upper and lower case character.

Once you are done editing the name, press **LEVEL/DATA** and then Press **“YES”** to save, **“ABORT”** to cancel, or **“EDIT”** to keep editing.



Copy, paste, and clear commands are available on the NAMING menu. You can undo Paste and Clear commands by repeating the command.

## 7. MODEL:CYCLES CONTROLS

### 7.1 TRIG KEYS

The **[TRIG]** keys have several uses, including for example, placing trigs in GRID RECORDING mode and playing a preset chromatically. When pressed in combination with the **[PATTERN]** they select patterns. The **[TRIG]** keys light up to indicate the position of placed trigs and to indicate the selected bank and track.

### 7.2 ROTARY ENCODERS

The **LEVEL/DATA**, **MAIN VOLUME** and **PARAMETER** knobs (with which you set various parameter values), are relative encoders which may be spun any number of turns.

### 7.3 PADS

The Model:Cycles can be played using the **[T1-6]** pads. The responsive pads are made of sturdy synthetic rubber and are velocity sensitive. Pressing a pad triggers its track preset and also sets the pads track to active.

#### 7.3.1 PAD MENU

Here you can set several parameters related to the **[T1-6]** pads. Press **[FUNC]** + **[BACK]** to access the PAD menu. Use the **LEVEL/DATA** knob to navigate the menu and change the parameter settings.



**FIX** Pad velocity set the pads to trig with a fixed velocity, and sets the value of the fixed velocity. OFF sets the pads to respond to dynamic velocity. (1-127, OFF)

**VDEP** Volume depth sets the depth of the velocity modulation of the volume (amplifier). (0-127)

**DST** Destination selects the modulation destination for the velocity. Preview how the velocity modulation affects the sound by highlighting a destination.

**DDEP** Destination depth sets the depth and polarity of the velocity modulation. Both negative (inverted) and positive modulation depth is possible. A setting of 0, equals no modulation depth. (-64.0-63.0)



Press and hold **[FUNC]** + **[BACK]** for a second to toggle the fixed velocity on/off.

### 7.4 KEY BEHAVIOR

As a group, the track selection keys (**[T1-6]** pads) have radio button functionality, i.e., when a new track is set to be active, the previous one is simultaneously deactivated. You can only select one track at a time.

The **[FUNC]**, **[TRACK]**, **[PATTERN]**, and **[RETRIG]** keys are almost always used in combination with other keys.

### 7.5 EXTERNAL MIDI

You can use an external MIDI device (a MIDI keyboard or a computer, for example) to send MIDI note values to trig several functions on the Model:Cycles.

Of the 128 notes in the standard MIDI range, Note numbers 0-5 correspond to notes C0 through to F0, the leftmost octave (which is sometimes called C-2-F-2 in some applications). These notes trigger the preset of track 1 through track 6, respectively (provided they are set to their default channels 1-6). These note values map to each of the six tracks, regardless of which track is active.

MIDI note numbers 12-60 (corresponding to notes C1-C5, the second through to fifth octaves in the MIDI range) trigger the preset of the active track in any of its 49 chromatic variations (as if played by the **[TRIG]** keys in CHROMATIC mode, see section below), from lowest to highest pitch.

MIDI program change messages 0–95 selects pattern 1–96 (A01–F16) on the Model:Cycles. Additionally, MIDI CC messages can be sent to control various aspects of the Model:Cycles. For more information, please see “APPENDIX A: MIDI SPECIFICATIONS” on page 51.

### 7.6 CHROMATIC MODE

In CHROMATIC mode, you can play the preset of the active track chromatically. The CHROMATIC mode is the Model:Cycles default mode.

1. Make sure you are not in GRID RECORDING or LIVE RECORDING mode. For more information, please see “9.3.2 GRID RECORDING MODE” on page 25 and “9.3.3 LIVE RECORDING MODE” on page 25.
2. Press **[TRACK]** + **[T1–6]** pads to select the track you want to play chromatically.
3. Press the **[TRIG]** keys to play the preset chromatically with a varying pitch. The range from **[TRIG 1]** key to **[TRIG 16]** key is 16 semi-tones. The **[TRIG 9]** key trigs the presets’s root note (If **KBT** is set to 0, see below).
4. You can also transpose the note range that the **[TRIG]** keys cover. Press **[FUNC]** + **[TRACK]** to open the TRACK SETUP menu and use the **LEVEL/DATA** knob to change the **KBT** settings. The actual transpose range is -24–24 semi-tones.

Notes triggered chromatically can be recorded by the sequencer in LIVE RECORDING mode. For more information, please see “9.3.3 LIVE RECORDING MODE” on page 25.



You can also use an external keyboard or controller to play the active tracks preset chromatically. Connect the keyboard to the Model:Cycles and configure the external keyboard and the Model:Cycles MIDI Auto Channel (**SETTINGS > MIDI > CHANNELS**) to the same MIDI channel. Then play the keys on the external keyboard to play the preset chromatically. You can play the preset chromatically from an external source even when you are not in CHROMATIC mode.

## 8. PRESETS

A preset is a collection of track parameter settings that can be saved and recalled.

Each of the tracks contains one preset. A preset that is imported from the +Drive to a pattern becomes part of the active pattern. Any changes made to a preset in a pattern will therefore not affect the stored preset. It only affects the preset in the active pattern.

### 8.1 PLAYING A PRESET

Press the [T1-T6] pads to play the presets of the six tracks of the active pattern. The [T1-T6] pads briefly lights up when pressed. You can also press the [TRIG] keys to play the preset chromatically. For more information, please see “7.6 CHROMATIC MODE” on page 20.

#### 8.1.1 PLAYING A PRESET WITH AN EXTERNAL MIDI UNIT

The presets can also be played using an external MIDI device connected to Model:Cycles. The MIDI channels for of each of the synth tracks can be assigned in the MIDI menu, covered in the section “12.3.2 IN CHAN” on page 43. You can also use an external MIDI unit to play the preset chromatically.

### 8.2 EDITING A PRESET

You edit a preset by adjusting the track parameters.

1. Press [TRACK] + [T1-6] to select the track which preset you wish to edit. Any changes made to a preset are stored as part of the active pattern.
2. Turn a **TRACK PARAMETER** knob to affect its corresponding parameter.  
To change, for example, the presets tune, turn the knob labeled **PITCH** to change the parameter value, and listen to how the sound changes. For more information, please see “10.3 TRACK PARAMETERS” on page 37.

If you want to save a preset with all its current parameter settings, use the PRESET SAVE menu. For more information, please see “8.4.3 PRESET SAVE MENU” on page 22.

### 8.3 COPYING A PRESET

The complete preset, with all its parameter settings, can be copied to another track.

1. Press [TRACK] + [T1-6] to select the track which preset you wish to copy.
2. Press [TRACK] + [RECORD] to copy the preset.
3. Press [TRACK] + [T1-6] to select the track to which you want to paste the preset.
4. Press [TRACK] + [STOP] to paste the preset to the selected track.

### 8.4 THE PRESET MENU

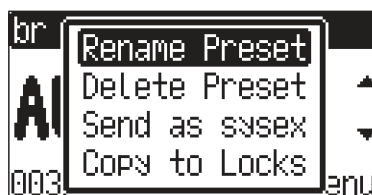
In this menu you can see and navigate all the folders and presets in your Model:Cycles. Here you can perform a number of actions on the presets and folder Press [FUNC] + [MACHINES] to open the PRESET menu.

Use the **LEVEL/DATA** knob to navigate the folder structure in the PRESET menu. Press [BACK] (⏮) to navigate up one level in the folder hierarchy if needed.



#### 8.4.1 PRESET FILE MENU

In this menu you can perform a number of actions on the preset files in the +Drive. Use the **LEVEL/DATA** knob to navigate the folder structure to the preset you wish to interact with, and then, press and hold **LEVEL/DATA** for a second to open the PRESET FILE menu.



**RENAME PRESET** Here you can rename the selected preset. Opens a NAMING menu.

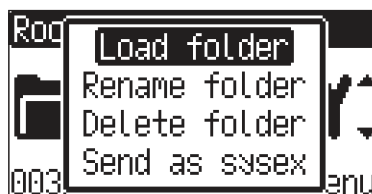
**DELETE PRESET** Deletes the selected preset. Opens a confirmation window.

**SEND AS SYSEX** Sends the selected preset as sysex data.

**COPY TO LOCKS** Copies the selected preset to the LOCKS folder from where it can be preset locked. For more information, please see “9.12.2 PRESET LOCKS” on page 30.

#### 8.4.2 PRESET FOLDER MENU

In this menu you can perform a number of actions on the folders in the +Drive. Use the **LEVEL/DATA** knob to navigate the folder structure to the folder you wish to interact with, and then press and hold **LEVEL/DATA** for a second to open the PRESET FOLDER menu.



**LOAD FOLDER** Loads six presets from the selected folder to the pattern's six tracks.



This function checks all files in the folder for a suffix of 1-6 and loads the files matching this criteria to the respective track. If no matching file is found for a track, it fills the blank tracks with the first other not-yet-loaded presets in the folder. So if you have the presets BD01, SD03, MYPRESET999, CHORDY and HIHAT6 in a directory, it would load T1=BD01, T2=CHORDY, T3=SD03, T4=MYPRESET999 and T6=HIHAT6. T5 will be blank (if it did not previously contain a preset).

**RENAME FOLDER** Here you can rename the selected folder. Opens a NAMING menu.

**DELETE FOLDER** Deletes the selected preset. Opens a confirmation window.

**SEND AS SYSEX** Sends the presets in the selected folder as sysex data.

#### 8.4.3 PRESET SAVE MENU

In this menu you can save presets and kits, and here you can also create folders. Use the **LEVEL/DATA** knob to navigate the folder structure to where you want to save the preset or create the folder, and then, press **[FUNC]** to open the SAVE PRESET menu.



**SAVE PRESET** Saves the preset from the active track. Opens a NAMING menu.

**SAVE KIT** Saves all the six presets from the current pattern in a separate folder. Opens a NAMING menu.

**CREATE FOLDER** Creates a folder at the current position in the folder hierarchy. Opens a NAMING menu.

#### 8.4.4 LOADING A PRESET TO A TRACK FROM THE +DRIVE

You can load a any preset from the +Drive to any of the tracks.

1. Press **[TRACK]** + **[T1-6]** to select the track to which you want to load a preset.
2. Press **[FUNC]** + **[MACHINES]** to open the PRESET menu.

3. Use the **LEVEL/DATA** knob to navigate the folder structure to the preset you want to load. Press **[BACK]** to navigate up one level in the folder hierarchy if needed. Press the **[TRIG]** key of the active track while browsing to listen to the preset currently highlighted. You can also press and hold the **[TRIG]** key to let the sequencer play the highlighted preset.

4. Press **LEVEL/DATA** to select a preset. Press **[BACK]** to exit the list without selecting a preset.

You can now play the preset either by the sequencer or manually by pressing the **[T1-6]** pad or the **[TRIG]** keys.

#### 8.4.5 SAVING A PRESET TO THE +DRIVE

You can save a preset after you have edited on one of the tracks.

1. Press **[TRACK]** + **[T1-6]** to select the track to which you want to load a preset.
2. Press **[FUNC]** + **[MACHINES]** to open the PRESET menu.
3. Use the **LEVEL/DATA** knob to navigate the folder structure to the folder to where you want to save the preset. Press **[BACK]** to navigate up one level in the folder hierarchy if needed.
4. Press **[FUNC]** to open the SAVE PRESET menu.
5. Select "SAVE PRESET", and then press **LEVEL/DATA** to save the preset. Name the preset in the NAMING menu. Press **[BACK]** to exit the list without selecting a preset.

### 8.5 THE LOCKS FOLDER

In the of the root the PRESET menu there is a folder called LOCKS. This folder shows a list of all the presets currently loaded into the RAM memory. This folder has 64 slots for each pattern. The presets are not actually located in the LOCKS folder but the folder is there to give an overview of which presets that currently used by preset locking. For more information, please see "9.12.2 PRESET LOCKS" on page 30.



- Every presets that you preset lock to a track is automatically added to the LOCKS folder.
- If you load a preset that is already in the LOCKS folder, it does not take up an additional slot.

## 9. THE SEQUENCER

### 9.1 ABOUT PATTERNS

The sequencer of the Model:Cycles stores information in patterns. The patterns are the primary data container for the Model:Cycles. A pattern controls the playback of the six tracks and various pattern-specific aspects of the tracks and contains up to six presets (one for each track). Each of the six banks, A to F, contains 16 patterns, which means 96 patterns are available for each project.

A pattern contains:

- Six presets
- General trig settings such as default note pitch, retrig and velocity
- The parameter settings
- The FX settings for the delay and the reverb
- Swing settings
- Quantization settings
- Note trigs for all tracks
- Lock trigs for all tracks
- Conditional locks
- Preset locks
- Machine locks
- Length and time signature for the tracks
- BPM
- Track MIDI ON/OFF
- Keyboard transpose

### 9.2 BASIC PATTERN OPERATIONS

Model:Cycles can seamlessly switch between patterns. This functionality, and the ability to chain patterns, is a handy feature when improvising live. For more information, please see “9.13 CHAINS” on page 33.

#### 9.2.1 SELECTING BANK AND PATTERN

Press **[PATTERN]** and then press **[T1-T6]** to select a bank. Then press **[TRIG 1-16]** to select a pattern. Press **[PATTERN]** and then press **[TRIG 1-16]** to select a new pattern in the current bank. When you press **[PATTERN]** you must choose a bank or pattern within four seconds for the change to take effect. A message on the screen indicates the four-second timeout. Press **[PATTERN]** again to exit pattern or bank select.

When a pattern is playing, and a new pattern is selected, the new pattern position is shown flashing on the screen. Once the pattern is finished, the new pattern starts, and the pattern position ceases to flash.

When you press **[PATTERN]**, lit **[TRIG]** keys indicate pattern positions that contain data. **[TRIG]** keys of empty patterns are unlit. The **[TRIG]** key of the current pattern blinks.



- Patterns can be changed while the sequencer is running.
- Patterns can be changed and queued by sending program change messages.
- It is possible to copy a pattern, and then paste it to one or several locations without leaving the active pattern. You can also clear one or several non-active patterns.
  - To copy, press and hold **[PATTERN]** + **[TRIG]** key to select the pattern you wish to copy. Then press **[RECORD]**. Let go of the **[TRIG]** key and then press and hold the **[TRIG]** key(s) to where you want to paste the pattern. Finally, press and hold **[STOP]** to paste the pattern(s).
  - To clear, press and hold **[PATTERN]** + **[TRIG]** key(s) to select the pattern(s) you wish to clear. Then press and hold **[PLAY]** to clear the pattern(s).

#### 9.2.2 PATTERN CONTROL

Press **[PLAY]** to start the playback of a pattern. Press **[STOP]** to stop the playback of all tracks. The sound will stop, but effects like Delay continues to be audible until the delay repeats have faded out. Quickly press **[STOP]** twice to stop playback of all tracks and get just a short fade out the send effects.

When a pattern is playing and **[PLAY]** is pressed, playback pauses. Press **[PLAY]** again to resume the playback.

If a pattern contains more than 16 sequencer steps, the <PATTERN PAGE> LEDs indicates this. When a pattern is playing, the currently active pattern page is shown with a flashing, <PATTERN PAGE> LED.

### 9.2.3 PATTERN TEMPO

The tempo is set in the TEMPO menu. Press **[TEMPO]** to open this menu. For more information, please see “4.4 SETTING THE TEMPO” on page 13.

## 9.3 EDITING A PATTERN

Model:Cycles offers two main modes of input when editing or creating a pattern, GRID RECORDING mode and LIVE RECORDING mode. In these modes, you can add two types of trigs: note trigs and lock trigs.

### 9.3.1 TRIG TYPES

A trig is a sequencer event that you can place when you want the sequencer to perform an action on the Model:Cycles. There are two types of trigs that you can use, note trigs and lock trigs.

- **NOTE TRIGS** trigger notes on the tracks.
- **LOCK TRIGS** trigger parameter locks (but does not trigger notes). For more information, please see “9.12.1 PARAMETER LOCKS” on page 29.

A red **[TRIG]** key indicates that a note trig is placed on the sequencer step. A slowly blinking red **[TRIG]** key indicates a lock trig. Unlit **[TRIG]** keys indicate steps that do not contain any trigs. Trigs are added differently in the sequencer, depending on whether GRID RECORDING or LIVE RECORDING mode is active.

### 9.3.2 GRID RECORDING MODE

GRID RECORDING is a method of composing where you use the **[TRIG]** keys to add trigs.

1. Enter GRID RECORDING mode by pressing the **[RECORD]** key. The **[RECORD]** key lights up red to indicate that GRID RECORDING mode is active.
2. Press **[TRACK] + [T1-6]** to select the track to which you want to add trigs. A red **[T1-6]** pad indicates the active track.
3. Place note trigs on the sequencer using the 16 **[TRIG]** keys. To add a lock trig, press **[FUNC]** and **[TRIG]**. Press the **[TRIG]** key of any of the previously entered trigs if you wish to remove the trig. Press the **[TRIG]** key of a lock trig to convert it to a note trig. Press a **[TRIG]** key of a trig and hold it slightly longer to prepare the trig for editing, rather than removing it.
4. Select another track, and add note trigs. Repeat the procedure for all the tracks you want to use.
5. Press **[PLAY]** to listen to the sequence.

Press one or more **[TRIG]** keys + **[RETRIG]** to open the RETRIG SETUP menu to change the retrig settings for the note trig. Use **LEVEL/DATA** to navigate and change the settings.

For more information, please see “9.6 RETRIG SETUP MENU” on page 27.

If the pattern contains more than 16 steps, select the pattern page you want to edit by pressing the **[PAGE]** key. A lit <PATTERN PAGE> LED shows the active pattern page.

Press **[RECORD]** to exit the GRID RECORDING mode.



- You can use an external MIDI controller such as a keyboard to input NOTE and TRIG VELOCITY data when you are in GRID RECORDING mode. Just press and hold a **[TRIG]** key, and then play a note on the external keyboard.
- If you use an external MIDI controller to record to the Model:Cycles MIDI tracks, the sequencer receives data on the Auto MIDI channel and records on the active track. For more information, please see “12.3.2 IN CHAN” on page 43.
- All trigs of a track can be shifted forwards or backward on the sequencer. While in GRID RECORDING mode, hold down **[TRACK]** while turning **LEVEL/DATA**

### 9.3.3 LIVE RECORDING MODE

LIVE RECORDING mode is the second method of adding trigs to the tracks. In this recording mode, the **[T1-6]** pads, **[TRIG]** keys, or external MIDI devices are played in real time to input trigs to the tracks. It is also possible to enter parameter locks in real time. Trigs input in LIVE RECORDING mode can be automatically quantized or not. Non-quantized trigs can be quantized after they are recorded, by using the QUANTIZE menu that is accessed by pressing **[FUNC] + [PUNCH]**. For more information, please see “9.9 QUANTIZE MENU” on page 28.

1. Press and hold **[RECORD]**, then press **[PLAY]** to enter LIVE RECORDING mode. Quickly pressing **[PLAY]** twice while keeping the **[RECORD]** key pressed will activate/deactivate automatic quanti-

- zation of LIVE RECORDING. The sequencer starts to play, and the **[RECORD]** key starts to flash red.
2. Enter trigs in real time by pressing the **[T1-6]** pads. You can also use the **[TRIG]** keys to add note trigs chromatically to the active track. Any changes to **PARAMETER** page settings, using the **PARAMETER** knobs, will be recorded as parameter locks and add lock trigs where needed.
  3. Press **[PLAY]** to exit LIVE RECORDING mode while keeping the sequencer playing. If LIVE RECORDING mode is active and **[RECORD]** is pressed, GRID RECORDING mode will be activated.
  4. Press **[STOP]** to stop both recording and playback of the sequencer.



You can use an external MIDI controller such as a keyboard to input **NOTE** and **VELOCITY** data in LIVE RECORDING mode. Just play the notes on the external keyboard and they will be recorded by the sequencer.

## 9.4 TRACK SETUP MENU

Use the TRACK SETUP menu for track-related settings. Press **[FUNC]** + **[TRACK]** to access the TRACK SETUP menu. Press **[TRACK]** + **[T1-6]** to select the track to which you want to change the settings. Use the **LEVEL/DATA** knob to navigate and change the parameter settings.



### 9.4.1 KBT

Keyboard Transpose sets the transpose value of the note range that the **[TRIG]** keys cover when you use them to play the presers chromatically. The transpose range is -24–24 semi-tones.

### 9.4.2 MOUT

Will, when checked, send the tracks **NOTE**, **VELOCITY**, and **TRIG LENGTH** sequencer data to the Model:Cycles MIDI OUT for control of external MIDI devices. The data are sent on the track's MIDI channel set in the **CHANNELS** menu. For more information, please see “12.3.3 OUT CHAN” on page 43.



If MOUT is checked the following functions also sends MIDI data:

- **PADS** The **[T1-6]** pads sends MIDI note data.
- **TRIG KEYS** The **[TRIG]** keys sends MIDI note data in **CHROMATIC** mode.
- **MUTE**, activating/deactivating mutes sends MIDI.
- **TRACK PARAMETER** and **FX** knobs sends MIDI data on their set channels.



- If MOUT is checked, the track sends the sequencer data both externally over MIDI and internally to the tracks preset.
- Only the sequencer data for the **NOTE**, **VEL**, and **LEN** parameters are sent over MIDI. For more information, please see “9.8 TRIG NOTE MENU” on page 28.

### 9.4.3 PAD

Defines the default note value of the trigs when pressing a pad. If the track is configured to send MIDI, this is also the note value the pad sends via MIDI.

## 9.5 TRIG NUDGE MENU

Here you can add micro timing to a note trig, and nudge it ahead or behind the beat. Nudge can be customized on any of the sequencer steps on the tracks.



1. In GRID RECORDING mode, press and hold one or several **[TRIG]** keys and then turn **SWING** to access the TRIG NUDGE menu that shows the time offset for the chosen sequencer trig(s) on the active track.
2. Turn SWING to set the **NUDGE** value
3. Release the **[TRIG]** key(s) to exit the NUDGE menu.

## 9.6 RETRIG SETUP MENU

In this menu you can setup and activate retrigs (additional trigs) that will occur when you play the **[T1-6]** pads, or the **[TRIG]** keys to trigger the track's sound. The retrigs are recorded as separate trigs. If the retrig speed is greater than the duration of a sequencer step, trigs are created with additional internal steps (i.e., steps with retrig enabled). Each of the six tracks can have its own set of retrig settings. The retrig settings are stored to the active pattern. Press **[FUNC] + [RETRIG]** to access the RETRIG SETUP menu. Use **LEVEL/DATA** to change the settings.



**RTE** Sets the 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 or 1/80). 1/16 is the nominal retrig rate, one trig per step. 1/32 corresponds to two trigs per step and so on. To trig triplets, for example, set the retrig rate to 1/12 (or 1/24).

**LEN** Sets the duration of the retrig velocity curve in fractions of, or rational or integer multiples of, a step (0,125-INF). 1/16 is the nominal length of one step. This setting affects the behavior of the velocity curve by defining the boundaries of its envelope.

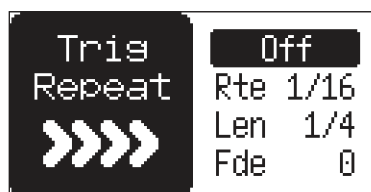
**A.ON** Always On sets toggles the retrig function ON/OFF. When on, the retrig activates whenever the pad of the active track is pressed, and there is no need to press **[RETRIG]** first.



If you press and hold **[RETRIG]** and then press a pad, it activates the retrig function and play back the preset with the current retrig settings.

## 9.7 TRIG REPEAT MENU

The TRIG REPEAT menu is very similar to the RETRIG SETUP menu. The difference is that this menu is used when you want to set up retrig for a specific trig. In GRID RECORDING mode, press and hold one or several **[TRIG]** keys and then press **[RETRIG]** to access the TRIG REPEAT menu. Use **LEVEL/DATA** to change the settings. For more information, please see "9.6 RETRIG SETUP MENU" on page 27.



**ON/OFF** Toggles the retrig function ON/OFF for the chosen trig.

**RTE** Same as for RETRIG SETUP menu.

**LEN** Same as for RETRIG SETUP menu.

**FAD** Sets the velocity curve fade out/fade in of the retrig (-128-127). -128 corresponds to a complete fade out during the set length, -64 fades out to half the velocity during the set length, 0 equals a flat velocity curve with no fade, 64 fades into half velocity during the set length, and 127 fades in completely to full velocity during the set length.



While in TRIG REPEAT menu, press **[RETRIG]** to toggle retrig ON/OFF.

### 9.7.1 PLACING A RETRIG ON AN INDIVIDUAL SEQUENCER STEP

1. In GRID RECORDING mode, press and hold one or several **[TRIG]** keys and then press **[RETRIG]** to access the TRIG REPEAT menu that shows the retrigger actions for the chosen sequencer step(s) on the active track.
2. Use the **LEVEL/DATA** knob to navigate the menu and change the retrigger parameter settings. Set retrigger to ON.
3. Release the **[TRIG]** key(s) to exit the TRIG REPEAT menu. The retrigger settings are stored together with the active pattern.

## 9.8 TRIG NOTE MENU

IN GRID RECORDING mode, Press and hold one or more **[TRIG]** keys to access the TRIG NOTE menu. Use **LEVEL/DATA** to change the settings. Press **LEVEL/DATA** to toggle between **NOTE**, **VEL**, and **LEN**.

**NOTE** sets the pitch of the note when triggered. (C0–G10)

**VEL** sets the velocity of the sequencer's note trigs. (0–127)

**LEN** Trig Length sets the duration of the notes. When a note has finished playing a NOTE OFF command is sent. The INF setting equals infinite note length. This parameter only applies if **GATE** is set to ON or when sending trig length data over MIDI. (0.125–128, INF)



## 9.9 QUANTIZE MENU

Press **[FUNC]** + **[PUNCH]** to access this menu. Use **LEVEL/DATA** to browse and change the settings.



### 9.9.1 GLOBAL

Affects all unquantized trigs of all tracks in real time. The higher the parameter value, the more all unquantized trigs are corrected towards the grid.

### 9.9.2 TRACK 1–6

Affects all unquantized trigs of the active track in real time. The higher the parameter value, the more all unquantized trigs are corrected towards the grid. Press **[T1–6]** to select the track to quantize.

### 9.9.3 APPLY

Permanently applies the settings made in the **GLOBAL** and **TRACK 1–6** parameters and resets the **GLOBAL** and **TRACK 1–6** settings to 0. Press “YES” to apply the quantization operation, or “CANCEL” to cancel.

### 9.9.4 LIVE-REC

Applies quantization to the trigs that you record in LIVE RECORDING mode. (ON, OFF).



Press and hold **[RECORD]**, and then quickly press **[PLAY]** twice to toggle the LIVE RECORDING quantization on and off.

## 9.10 CLICK MENU

The CLICK menu controls the internal metronome. Press **[FUNC]** + **[GATE]** to open the CLICK menu. Use **LEVEL/DATA** to browse and change the settings.



**ON/OFF** activates/deactivates the metronome.

**PRE** activates a one bar preroll that the metronome sounds before the sequencer starts playing. This setting is only relevant when you are in LIVE RECORDING mode.

**SIG** controls the note and beat measure of the metronome time signature.

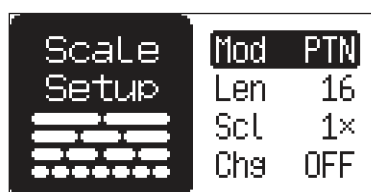
**VOL** controls the volume of the click.



Press and hold [FUNC] + [GATE] for a second to toggle click ON/OFF.

## 9.11 SCALE MENU

In this menu you can set the length and timing of the pattern and tracks. Press [FUNC] + [PAGE] to access the SCALE menu. Use **LEVEL/DATA** to browse and change the settings.



**MOD** Mode can be set to either PATTERN or TRACK. In PATTERN mode all tracks share the same SCALE and LENGTH settings. In TRACK mode, all tracks can have individual SCALE and LENGTH settings. Press [T1-6] to select the track to set the scale for.

**LEN** Length sets the step length (amount of steps) of the pattern/track.

**SCL** Scale controls the speed the playback in multiples of the current tempo. It offers seven possible settings, 1/8X, 1/4X, 1/2X, 3/4X, 1X, 3/2X and 2X. A setting of 1/8X plays back the pattern at one-eighth of the set tempo. 3/4X plays the pattern back at three-quarters of the tempo; 3/2X plays back the pattern twice as fast as the 3/4X setting. 2X makes the pattern play at twice the BPM.

**CHG** Change controls for how long the active pattern plays before it loops or a cued (the next selected) pattern begins to play. If **CHG** is set to 64, the pattern behaves like a pattern consisting of 64 steps regarding cueing and chaining. If **CHG** is set to OFF, the default change length is INF (infinite) in TRACK mode and the same value as **LEN** in PATTERN mode.

Trigs are automatically copied when extending the length of a pattern. If a pattern consists of, for example, two pages and the pattern length is increased to four pages, and the two additional pattern pages are copies of the first two pattern pages.



- Press the [PAGE] key and [TRIG] keys to change the number of steps of the pattern quickly.
- A 2X SCL setting is useful for increasing the base resolution of the step sequencer to 32nd notes. A 3/4X setting is useful when Model:Cycles is playing alongside other instruments set to the same BPM, and you want Model:Cycles to play triplets.

## 9.12 SEQUENCER FEATURES

### 9.12.1 PARAMETER LOCKS

Parameter locks make it possible to set every trig to have its unique parameter values. The trigs can, for example, have a different pitch, FX send, or filter settings. It is possible to parameter lock the parameters that are controlled by the **PARAMETER** knobs, and the **NOTE**, **VEL** and **LEN** settings. You can also parameter lock the parameters on the LFO menu and the PUNCH and the GATE settings. For a complete overview of all parameters on the PARAMETER pages, please see "10. TRACK RELATED PARAMETERS" on page 35.

**Adding parameter locks in GRID RECORDING mode:**

1. Press **[RECORD]** to enter GRID RECORDING mode.
2. Press **[TRIG]** or **[FUNC] + [TRIG]** key to add a note trig or a lock trig and to where you want to perform a parameter lock.
3. Press and hold the **[TRIG]** key of a previously placed trig (note trig or a lock trig) and then use the **PARAMETER** knobs to adjust the parameters you want to lock.  
The graphics become inverted for the locked parameter, and the locked parameter values are displayed. The **[TRIG]** key starts to quickly flash red to indicate that the trig now contains a parameter lock. Also, the LED next to the **PARAMETER** knobs lights up red to indicate the parameter now has a parameter lock assigned to it on that trig
4. Press and hold the **[TRIG]** key of a trig and then press **[PUNCH]** or **[GATE]** to parameter lock these functions on a trig.
5. Press and hold the **[TRIG]** key of a trig and then turn **LEVEL/DATA** to open the TRIG NOTE menu. Use **LEVEL/DATA** to change the **NOTE**, **VEL**, and **LEN** settings.

**Removing a specific parameter lock on a trig in GRID RECORDING mode:**

1. Press and hold the **[TRIG]** key that contains a parameter lock.
2. Turn the **PARAMETER** knob corresponding to the parameter from which you want to remove the parameter lock.
3. Press **[PLAY]** to clear the parameter lock.
4. Press and hold the **[TRIG]** key that contains a **PUNCH** or **GATE** parameter lock, and then press **[PUNCH]** or **[GATE]** to remove these parameter locks.
5. Press and hold the **[TRIG]** key that contains a **NOTE**, **VEL**, or **LEN** parameter lock, to open the TRIG NOTE menu. Press **[PLAY]** to clear the parameter lock for these parameters.

**Removing all parameter locks on a trig in GRID RECORDING mode:**

1. Remove the note trig and then enter it again.

**Adding parameter locks in LIVE RECORDING mode:**

1. Press and hold **[RECORD]**, then press **[PLAY]** to enter LIVE RECORDING mode.
2. Turn a **PARAMETER** knob or play the **[TRIG]** keys, to input parameter locks to the active track.  
Note trigs are locked accordingly, and lock trigs that contains the locks are placed on the sequencer steps.

**Removing a specific parameter lock on a trig in LIVE RECORDING mode:**

1. Press and hold **[NO]**, and then turn the knob related to the parameter you want to remove.



Up to 80 different parameters can be locked in a pattern. A parameter counts as one (1) locked parameter no matter how many trigs that lock it. If for example the cutoff parameter of the filter is locked on every sequencer step, there are still 79 other parameters that can be locked.

**9.12.2 PRESET LOCKS**

Preset locks are a specific type of parameter locks that lets you assign a specific preset to any step of the sequencer. This powerful feature makes it possible to use several presets on the same sequencer track. On Model:Cycles you can preset lock up to 64 different presets in each pattern.

The locked presets are added to the LOCKS folder in the root of the PRESET menu. For more information, please see “8.5 THE LOCKS FOLDER” on page 23.

**Adding preset locks:**

1. Press **[RECORD]** to enter GRID RECORDING mode.
2. Press and hold a **[TRIG]** key, and then press **[MACHINES]** to open the PRESET menu.

3. Use the **LEVEL/DATA** knob to navigate the folder structure to the preset you want to lock to the trig. Press **[BACK]** to navigate up one level in the folder hierarchy if needed. Press the pad of the active track while browsing to listen to the preset currently highlighted.
4. Press **LEVEL/DATA** to select the preset.

#### Removing a preset lock:

1. Press **[RECORD]** to enter GRID RECORDING mode.
2. Press and hold a **[TRIG]** key that contains a preset lock (the **[MACHINES]** key lights up), and then press **[MACHINES]**. You now see the locked preset highlighted on the screen.
3. Press **LEVEL/DATA** to remove the preset lock.



Preset locks lets you use up to 64 different presets in each pattern (plus the six track presets).

### 9.12.3 MACHINE LOCKS

Machine locks are a specific type of parameter locks that lets you change machine on any step of the sequencer. This powerful feature makes it possible to use several machines on the same sequencer track. For more information, please see “10.2 MACHINES” on page 35.

#### Adding machine locks:

1. Press **[RECORD]** to enter GRID RECORDING mode.
2. Press **[MACHINES]** to open the MACHINES menu.
3. Press and hold a **[TRIG]** key, and then turn the **LEVEL/DATA** knob to select machine

#### Removing a machine lock:

1. Press **[RECORD]** to enter GRID RECORDING mode.
2. Press **[MACHINES]** to open the MACHINES menu.
3. Press and hold a **[TRIG]** key, and then press the **LEVEL/DATA** knob to remove the machine lock

### 9.12.4 CONDITIONAL LOCKS

In GRID RECORDING mode, press and hold a **[TRIG]** key, and then turn **CHANCE** to open the TRIG CONDITION menu.



Conditional locks are a specific kind of Parameter locks. Conditional locks give you the possibility to set a number of conditional rules for any trig. These conditional rules are called Trig conditions. They are logical conditions that determines whether a trig set in the sequencer is triggered or not. If the condition is true, then the trig becomes active and affects the track.

You must first place a trig on the sequencer step to where you want to apply a conditional lock.

You can use the **TRIG COND** parameter to set the following trig conditions:

**FILL** is true (activates the trig) when FILL mode is active.

**$\overline{\text{FILL}}$**  is true when FILL is false. A trig with this trig condition is active when you are not in FILL mode.

**PRE** is true if the most recently evaluated trig condition on the same track was true. (**PRE** and  **$\overline{\text{PRE}}$**  conditions are ignored and not evaluated.)

**$\overline{\text{PRE}}$**  is true when **PRE** is false. A trig with this trig condition is active if the most recently evaluated trig condition on the same track was false. (**PRE** and  **$\overline{\text{PRE}}$**  conditions are ignored and not evaluated.)

Example 1: Trig 1, 50% = **True** > Trig 2,  **$\overline{\text{PRE}}$**  = **False** > Trig 3,  **$\overline{\text{PRE}}$**  = **False** > Trig 4, **PRE** = **True**

Example 2: Trig 1, 50% = **False** > Trig 2,  **$\overline{\text{PRE}}$**  = **True** > Trig 3,  **$\overline{\text{PRE}}$**  = **True** > Trig 4, **PRE** = **False**

**NEI** is true if the most recently evaluated trig condition on the neighbor track was true. (**PRE** and **PRE** conditions on the neighbor track are ignored and not evaluated.) The neighbor track is the track before the active track. For example, track 3 is the neighbor track of track 4. **NEI** and **NEI** conditional trigs on track 4 evaluate the conditional trigs placed on track 3. The **NEI** condition is false if no conditional trigs exist on the neighbor track.

**NEI** is true when **NEI** is false. A trig with this trig condition is active if the most recently evaluated trig condition on the neighbor track was false. (**PRE** and **PRE** conditions on the neighbor track are ignored and not evaluated.)

**1ST** is true the first time the pattern plays (when looped).

**1ST** is true when **1ST** is false. A trig with this trig condition is always active apart from the first time the pattern plays (when looped).

**X%** is a probability condition. There is an **X%** chance that the trig will be active.

**A:B** **A** sets how many times the pattern (or track, if the track length is shorter than the pattern length) plays before the trig condition is true. **B** sets how many times the pattern (or track, if the track length is shorter than the pattern length) plays before the count is reset and starts over again. This cycle then repeats until you stop the sequencer.

For example:

With the setting 1:2, the trig condition is true the first time the pattern plays and then the third, the fifth, and so on.

With the setting 2:2, the trig condition is true the second time the pattern plays and then the fourth, the sixth, and so on.

With the setting 2:4, the trig condition is true the second time the pattern plays and then the sixth, the tenth, and so on.

With the setting 4:7 the trig condition is true the fourth time the pattern plays and then the eleventh, the eighteenth, and so on.



- The sequencer needs to be in **FILL** mode to activate the conditional lock called **FILL**. For more information, please see “9.12.5 FILL MODE” on page 32.
- Conditional parameter locks are a great way to add variety to a pattern. To set up a grid of mutually exclusive or conclusive note trigs across any of the synth tracks, and throwing some probability locks in there as well (perhaps, in turn, also sporting an array of logically conditioned trigs), is a neat way to make the most minimal of compositions come alive with randomness.
- Note that random or arbitrary variety, is not the only way of using conditional trigs. They may also be used, for example, to have two different melodic or percussive sequences on the same track, one of which is activated only when **FILL** mode is active.

### 9.12.5 FILL MODE

**FILL** mode is a trig condition that can be used to create a temporary variation, such as a drum fill, in your pattern.

You activate **FILL** mode at any time, and for any duration, by pressing and holding the **[PAGE]** key when the pattern is playing (**GRID RECORDING** mode cannot be active). The **FILL** mode is active for as long as you hold the key.

Press **[TRACK] + [PAGE]** to latch **FILL** mode. The **[PAGE]** key flashes when you are in **FILL** mode. Press **[TRACK] + [PAGE]** again to unlatch **FILL** mode.

### 9.12.6 COPY, PASTE, AND CLEAR OPERATIONS

Patterns, tracks, track pages, and trigs can be copied, pasted and cleared.

The active pattern can be copied to another location in the same bank or in another bank. You must deactivate **GRID RECORDING** mode to perform a pattern copy operation. Press **[FUNC] + [RECORD]** to copy the pattern. Select another pattern, and then press **[FUNC] + [STOP]** to paste the copied pattern to this location. Please note that you can only paste to the currently active pattern. Press **[FUNC] + [PLAY]** to clear a pattern. This clear function will only clear the patterns sequencer data. For more information about totally clearing a pattern, please see “12.1.4 CLEAR” on page 41.



You can also press and hold **[PATTERN] + [TRIG 1-16] + [PLAY]** to clear all pattern data.

Individual sequencer tracks can be copied, pasted and cleared in the same way as patterns but GRID RECORDING mode must be active.

Trigs, complete with all parameter lock settings, can be copied, pasted and cleared as well. GRID RECORDING mode needs to be active to access this functionality.

1. Press and hold one or several trigs and press **[RECORD]** to perform the copy operation.
2. Press and hold the **[TRIG]** key to where you want to paste your trig(s), and then press **[STOP]** to paste the trig(s). When pasting several trigs, the trigs are placed in relation to the selected target trig.
3. Clear trig locks by holding one or more trigs and press **[PLAY]**.



- You can undo most copy, paste, and clear operations by repeating the key presses.
- It is possible to copy, clear and paste one or several patterns without leaving the active pattern. To copy, press and hold **[PATTERN] + [TRIG]** key to select the pattern you wish to copy. Then press **[RECORD]**. Let go of the **[TRIG]** key and then press and hold the **[TRIG]** key(s) to where you want to paste the pattern. Finally, press and hold **[STOP]** until the countdown finishes to paste the pattern(s). To clear, press and hold **[PATTERN] + [TRIG]** key(s) to select the pattern(s) you wish to clear. Then press and hold **[PLAY]** to clear the pattern(s).

### 9.12.7 TEMPORARY SAVE AND RELOAD PATTERN COMMANDS

Patterns can instantly be saved to a temporary memory space and then reloaded again from this space.

- To perform a temporary save of the active pattern, press **[FUNC] + [SETTINGS]**. This function is useful to create a restore point when you are live tweaking, but without permanently save your changes.
- To perform a temporary reload of the active pattern, press **[FUNC] + [PATTERN]**. It will reload the pattern from when you last used the temporary save command. If you have not done any temporary save, then the pattern reloads from the permanently saved state.



The **TEMPORARY SAVE PATTERN** and **TEMPORARY RELOAD PATTERN** commands are great when improvising live. Any changes made to the active pattern, like adding bass line notes or using **CONTROL ALL**, can immediately be undone. At the same time, the saves and reloads will not affect the pattern in a permanent way.



The **TEMPORARY SAVE PATTERN** command does not save the pattern permanently, and any changes are lost if you load another project. If you wish to save your changes permanently, you should use **SAVE PATTERN** in the **CONFIG** menu. For more information, please see “12.1.2 SAVE” on page 41.

## 9.13 CHAINS

Chains are sequences that consist of more than one pattern. You can use chains to preselect and automate in what order you want your patterns to play.



You can create one chain, and it can contain any pattern in bank A–H. The chain can consist of up to 64 patterns.

1. Press and hold **[PATTERN]** and then press **[T1–T6]** to select a bank.
2. While holding **[PATTERN]** press and hold a **[TRIG 1–16]** key to select the first pattern in the chain.
3. Press **[TRIG 1–16]** keys in the same order as you want the chained patterns to play. Keep a previous **[TRIG]** key pressed while you press the next one, the one after that and so on. You can press the same **[TRIG]** key again if you wish to add the pattern multiple times in a row. If you want to add a pattern from another bank, press **[T1–T6]** to select a bank, and then press **[TRIG 1–16]** to select a pattern.
4. Press **[PLAY]** to start the sequencer and play the chain. The chain is looped and starts to play from the beginning again after the final pattern of the chain has played.



- Chains can be created while the sequencer is running.
- You can also use MIDI program change messages from an external device to change patterns on the Model:Cycles. For more information, please see “12.3.1 SYNC” on page 42.



Please note that the chain are lost when you create a new chain or when you select a new bank/pattern. Also, chains cannot be saved and are lost when you switch the Model:Cycles off.

## 10. TRACK RELATED PARAMETERS

Here follows a description of all the parameters you can use to change the character and behavior of the track's sound.

### 10.1 PARAMETER EDITING

The **TRACK PARAMETER** knobs are used to change the values of the track parameters.

#### 10.1.1 PARAMETER VALUE JUMP

Pressing **[FUNC]** while editing specific parameters makes the parameter values jump to appropriate positions. For example, **PITCH** jumps in semitones.

#### 10.1.2 PARAMETER REVERT FUNCTION

If you have changed a parameter setting, you can press **[BACK]** to revert that change to the parameters previous setting. This function has a time-out function, meaning that, after you adjusted the parameter, you have roughly three seconds to perform the revert operation before the change is permanent. Changes made by setting parameter locks are revertible as long as you keep the **[TRIG]** key pressed.

#### 10.1.3 CONTROL ALL

If you press and hold **[TRACK]** and use the **TRACK PARAMETER** knobs to change a parameter setting, this change affects this parameter in all the tracks in the pattern. You can also use the Parameter Revert function on Control All operations.

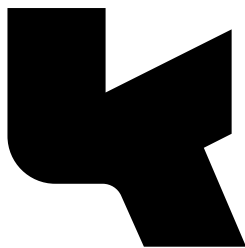


The Control All operation is also available for the track **LEVEL/PAN** and also for the **PUNCH** and **GATE** settings.

### 10.2 MACHINES

Model:Cycles has six different FM-based machines that each focus on a specific type of sound. Any machine can be assigned to any track and can be parameter locked. Press **[MACHINES]**  to open the MACHINES menu. Here you can browse the list of the different machines and assign them to the tracks. Use the **LEVEL/DATA** knob to navigate and select the machine you want to assign. There are four machine specific parameters, **COLOR**, **SHAPE**, **SWEEP**, and **CONTOUR**, that affects the sound in different ways depending on what machine you have selected.

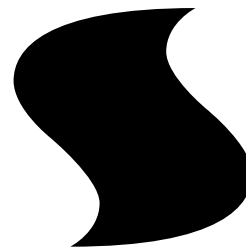
## KICK



A solid all-round kick that you can rely on, inspired by classics and shaped for the future. Try combining a high amount of shape with a lot of Contour for a noisy and punchy sound.

- Color**  • Soft square-like modulation
- Shape**  • Triangle-like modulation and feedback
- Sweep**  • Pitch sweep depth and time
- Contour**  • Modulation envelope depth

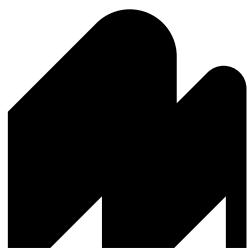
## SNARE



A shape shifting snare that can go all the way from strange alien sidesticks to a hefty punch. Try a long decay with Shape halfway and some Contour for an sidestick-like sound.

- Color**  • Inharmonicity amount
- Shape**  • Modulation amount and feedback
- Sweep**  • Pitch sweep depth and time
- Contour**  • Modulation envelope depth

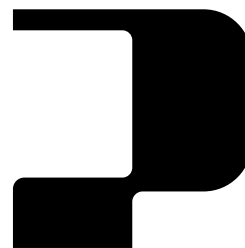
## METAL



A sweetspot-laden metallic voice for all your cymbal needs. Try setting a very high Pitch and let the FM engine go out of bounds for varied and unexpected metallic timbres.

- Color**  • Tune offset A
- Shape**  • Modulation amount and feedback
- Sweep**  • Tune offset B
- Contour**  • Modulation envelope depth

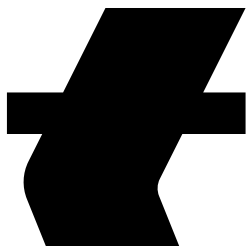
## PERC



A percussion voice that can make everything from toms to the sound of hitting a signpost. Try a low Shape and play around with Color for inharmonic ringing sounds.

- Color**  • Inharmonicity amount
- Shape**  • Modulation amount
- Sweep**  • Pitch sweep
- Contour**  • Modulation envelope depth

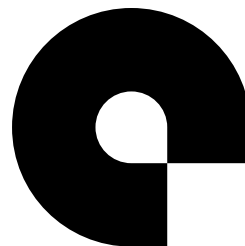
## TONE



A simple but powerful, highly dynamic, 2-OP voice. Try a low Shape with a high Sweep, no Contour paired with a Color that is slightly detuned (e.g 2.002) for a nasty bass sound.

- Color**  • Modulator ratio
- Shape**  • Modulation amount
- Sweep**  • Feedback amount
- Contour**  • Modulation envelope depth

## CHORD



A chord and unison cluster that utilizes the 4 FM operators as individual voices, with a sweeping wavetable for timbral complexity. Try choosing a chord you like and change it radically with Color.

- Color**  • Chord: Interval mix and osc balance. Unison: Detune
- Shape**  • Unison/chord
- Sweep**  • Wavetable sweep
- Contour**  • Filter cutoff envelope depth



- For more information about the SHAPE parameter settings for the Chord machine, please see “APPENDIX C: UNISON AND CHORD SETTINGS” on page 52.
- The MACHINES parameter can be parameter locked. In GRID RECORDING mode, press and hold a [TRIG] key, and then press [MACHINES] twice to open the MACHINES menu. Use the LEVEL/DATA knob to navigate and select the machine you want to assign to the trig. For more information, please see “9.12.1 PARAMETER LOCKS” on page 29.

### 10.3 TRACK PARAMETERS

The track parameters may be parameter locked to other settings on any step of the pattern by (in GRID RECORDING mode) first pressing and holding a **[TRIG]** key, and then changing the parameters' settings with the **TRACK PARAMETER** knobs. For more information, please see "9.12.1 PARAMETER LOCKS" on page 29.

#### 10.3.1 PITCH

Pitch sets the tuning of the preset. This parameter is bipolar, and a value of 0 leaves the pitch unchanged. (-24–+24, equivalent to four octaves.)

#### 10.3.2 DECAY

Amp Decay sets the length of the decay phase of the amp envelope. (0–127)

#### 10.3.3 MACHINE PARAMETERS

The four parameters, **COLOR**, **SHAPE**, **SWEEP**, and **CONTOUR**, affects the sound in different ways depending on what machine you have selected. For more information, please see "10.2 MACHINES" on page 35.



For more information about the **SHAPE** parameter settings for the Chord machine, please see "APPENDIX C: UNISON AND CHORD SETTINGS" on page 52.

#### 10.3.4 DELAY SEND

Delay Send sets the amount of the sound sent through to the Delay effect. For more information, please see "11. FX PARAMETERS" on page 40. (OFF, 1–127)

#### 10.3.5 REVERB SEND

Reverb Send sets the amount of the sound sent through to the Reverb effect. For more information, please see "11. FX PARAMETERS" on page 40. (OFF, 1–127)

#### 10.3.6 LFO SPEED

LFO Speed sets the speed of the LFO. Try settings of 8, 16, or 32 to sync the LFO to straight beats. The knob is bipolar. The LFO cycle can be played backward by using negative values. You find more LFO settings in the LFO and LFO SETUP menus. For more information, please see "10.6 LFO MENU" on page 38, and "10.7 LFO SETUP MENU" on page 39. (-64–63)

#### 10.3.7 VOLUME + DIST

Volume + Dist sets the level of the preset. The default setting is 60. Higher settings than 60 gradually increase volume and distortion. (0–127)

#### 10.3.8 SWING

Adjust the swing setting of the track, to employ a propulsive, rhythmic groove. The default setting is equal spacing, 50%. (50%– 80%)

#### 10.3.9 CHANCE

Track Chance sets the probability that the trigs on the track play or not. The probability outcome is re-evaluated every time a trig is set to play. The default setting is 100%, meaning that all the trigs on the track play every time. (0%–100%)



If you have placed a conditional lock on a trig in the sequencer, the trig condition overrides the **CHANCE** setting. For example, if you set **CHANCE** to 70% and a **FILL** trig condition on the trig, the trig will only (and always) play when the Model:Cycles is in **FILL** mode. For more information, please see "9.12.5 FILL MODE" on page 32.

### 10.4 PUNCH

Press **[PUNCH]**  to add pseudo-compression and distortion to the sound, which results in something similar to accent. The **[PUNCH]** key toggles the function on/off.

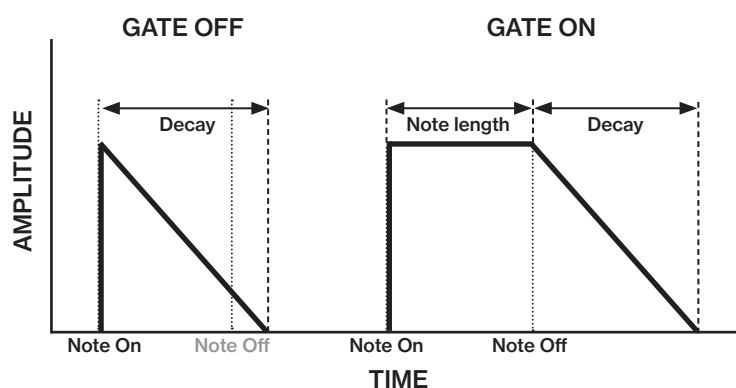


The **PUNCH** parameter can be parameter locked. In **GRID RECORDING** mode, press and hold a **[TRIG]** key, and then press **[PUNCH]**. For more information, please see "9.12.1 PARAMETER LOCKS" on page 29

## 10.5 GATE

Press **[GATE]**  to set the envelope to GATE mode. The **[GATE]** key toggles GATE mode on/off.

- **GATE OFF** The sound envelope goes directly from being triggered (Note On) to the decay phase and ignores Note Off messages and the **LEN** parameter setting. (Key unlit)
- **GATE ON** The sound envelope is held at maximum level after it is triggered (Note On) until the pad is released (Note Off) or until the length specified by the **LEN** parameter is reached. Then it continues to the decay phase. (Key lit red)



The GATE parameter can be parameter locked. In GRID RECORDING mode, press and hold a **[TRIG]** key, and then press **[GATE]**. For more information, please see “9.12.1 PARAMETER LOCKS” on page 29.

## 10.6 LFO MENU

The Low-Frequency Oscillator can be used to modulate the track parameters. Set the low-frequency oscillator shape, speed multiplication, destination and depth on this page. Use the **LEVEL/DATA** knob to navigate the menu and change the parameter settings.

The LFO SPEED parameter sets the speed of the LFO. For more information, please see “10.3.6 LFO SPEED” on page 37.

Press **[LFO]**  to access the LFO menu.



### 10.6.1 WAV

Waveform sets the LFO waveform. There are seven waveforms: Triangle, Sine, Square, Sawtooth, Envelope, Ramp, and Random.



The Envelope (ENV) waveform makes the LFO behave differently. If you select ENV, the LFO starts from the beginning of its cycle every time a note is triggered (The RST parameters setting is ignored), run for one cycle and then stop (one-shot). This makes it very useful as an envelope. The waveform is similar to a sawtooth but with an exponential decay. The LFO SPEED sets the length of the decay.

### 10.6.2 MUL

Multiplier multiplies the SPD parameter by the set factor either by multiplying the current tempo (these settings have an “X” prefix before the multiplier numbers), or by multiplying a fixed tempo of 120 BPM (basically letting the LFO run free and disregard the current tempo of the device).

### 10.6.3 DST

Destination selects the modulation destination for the LFO. Preview how the LFO modulation affects the sound by highlighting a destination.

### 10.6.4 DEP

Depth sets the depth and polarity of the LFO modulation. Both negative (inverted) and positive modulation depth is possible. A center setting, 0, equals no modulation depth. (-64–63)



- Press and hold [LFO] and then turn a TRACK PARAMETER knob to set that knob's parameter as an LFO modulation destination. Keep turning the TRACK PARAMETER knob to set the modulation depth. This functionality is also available on individual steps on the sequencer using parameter locks. See below.
- The LFO menu parameters can be parameter locked. In GRID RECORDING mode, press LFO to open the LFO menu. Press and hold a [TRIG] key, and then use LEVEL/DATA to change the settings. For more information, please see "9.12.1 PARAMETER LOCKS" on page 29.

LFO speed (measured in whole note values) generated by combinations of the LFO SPEED and MUL settings.

|              |    | MUL |    |     |     |     |      |      |      |       |       |       |        |
|--------------|----|-----|----|-----|-----|-----|------|------|------|-------|-------|-------|--------|
| LFO<br>SPEED |    | 1   | 2  | 4   | 8   | 16  | 32   | 64   | 128  | 256   | 512   | 1K    | 2K     |
|              | 1  | 128 | 64 | 32  | 16  | 8   | 4    | 2    | 1    | 1/2   | 1/4   | 1/8   | 1/16   |
|              | 2  | 64  | 32 | 16  | 8   | 4   | 2    | 1    | 1/2  | 1/4   | 1/8   | 1/16  | 1/32   |
|              | 4  | 32  | 16 | 8   | 4   | 2   | 1    | 1/2  | 1/4  | 1/8   | 1/16  | 1/32  | 1/64   |
|              | 8  | 16  | 8  | 4   | 2   | 1   | 1/2  | 1/4  | 1/8  | 1/16  | 1/32  | 1/64  | 1/128  |
|              | 16 | 8   | 4  | 2   | 1   | 1/2 | 1/4  | 1/8  | 1/16 | 1/32  | 1/64  | 1/128 | 1/256  |
|              | 32 | 4   | 2  | 1   | 1/2 | 1/4 | 1/8  | 1/16 | 1/32 | 1/64  | 1/128 | 1/256 | 1/512  |
|              | 64 | 2   | 1  | 1/2 | 1/4 | 1/8 | 1/16 | 1/32 | 1/64 | 1/128 | 1/256 | 1/512 | 1/1024 |

## 10.7 LFO SETUP MENU

In the LFO SETUP menu, you can customize the low-frequency oscillator's behavior and orientation. Use the **LEVEL/DATA** knob to navigate and change the parameter settings.

Press [FUNC] + [LFO] to access the LFO SETUP menu.



### 10.7.1 RST

Reset sets if the LFO should restart its phase every time a note is triggered.

- **OFF** is the default free-running mode. It makes the LFO run continuously, never restarting or stopping even if notes are triggered.
- **ON** makes the LFO restart when a note is triggered.

### 10.7.2 FDE

Fade In/Out makes it possible to fade in/fade out the LFO modulation. The parameter is bipolar. Positive values give a fade-out, negative values give a fade in. 0 gives no fade in/fade out. (-64–63)

### 10.7.3 SPH

Start Phase sets the point within the wave cycle where the LFO starts when it is triggered. 0 makes the LFO start at the beginning of a complete wave cycle, 64 makes it start at the center. (0–127)



The parameters in the LFO SETUP menu cannot be parameter locked.

## 11. FX PARAMETERS

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In this chapter we will have a look at the Model:Cycles effect parameters.

### 11.1 REVERB

The Reverb send effect controls the persistence, and ambient characteristics, of the sound reverberations. It can simulate many different sonic locations, from huge spaces to small rooms.

#### 11.1.1 REVERB SIZE

Sets the length of the decay time of the reverberated signal, essentially setting the size of the acoustic space. (1–127, INF)

#### 11.1.2 REV TONE

Reverb Tone changes the tone of the reverb by dampening either the low frequencies or the high frequencies of the reverberated signal. The parameter is bipolar. Positive values dampen the low frequencies. Negative values dampen the high frequencies. Press **[FUNC]** and then turn **REVERB SIZE** to access the **REV TONE** parameter. (-64–63)

### 11.2 DELAY

The Delay send effect takes the input signal, delays it in time and then blends it with the original signal.

#### 11.2.1 DELAY TIME

Delay Time sets the delay time. It is relative to the current BPM and measured in 128th notes. (1.00–128.00)

| TIME setting | Divide ratio |
|--------------|--------------|
| 1            | 1/128        |
| 2            | 1/64         |
| 3            | 1/64.        |
| 4            | 1/32         |
| 6            | 1/32.        |
| 8            | 1/16         |
| 12           | 1/16.        |
| 16           | 1/8          |
| 24           | 1/8.         |
| 32           | 1/4          |
| 48           | 1/4.         |
| 64           | 1/2          |
| 96           | 1/2.         |
| 128          | 1            |

#### 11.2.2 DEL FEEDBACK

Delay Feedback sets the amount of delay output signal to feed back into the input of the delay. With higher parameter settings, infinite and/or swelling delays are possible. Please be aware that high feedback can lead to a very loud signal. Press **[FUNC]** and then turn **DELAY TIME** to access the **DEL FEEDBACK** parameter. (0–198)

## 12. CONFIG MENU

The CONFIG menu offers settings that affect Model:Cycles and here you can also manage Patterns and Projects.

Press [SETTINGS] to access the CONFIG menu. Use **LEVEL/DATA** to browse and change the settings. Press **LEVEL/DATA** to select list items, or to open folders.



### 12.1 PATTERN



#### 12.1.1 RENAME

Opens a NAMING menu where you can rename the active pattern. For more information, please see “6.6 NAMING MENU” on page 17.

#### 12.1.2 SAVE

You must have saved the project at least once before you can save pattern information. You will be prompted to save the project first. If you try to save a pattern to an unsaved project.

Saves the active pattern's sequence data and sound data to the project. It also opens a NAMING menu where you can rename the active pattern before saving the pattern. A prompt then appears when you select this option. Press “YES” to save, or “NO” to cancel the operation.



You can also press and hold [FUNC] + [SETTINGS] for a second to access the Save pattern functionality.

#### 12.1.3 RELOAD

You must have saved the pattern at least once before you can reload pattern information.

Reloads the active pattern's sequence data and sound data from the +Drive. A prompt appears when you select this option. Select “YES” to reload, or “NO” to cancel the operation.

For more information, please see “9.12.7 TEMPORARY SAVE AND RELOAD PATTERN COMMANDS” on page 33.



You can also press and hold [FUNC] + [PATTERN] for a second to access the reload pattern functionality.

#### 12.1.4 CLEAR

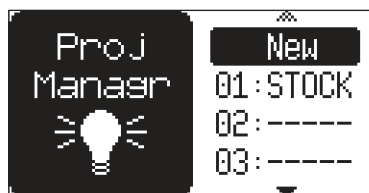
**ALL DATA** Clears the active pattern's sequencer data, sound and all pattern settings. A prompt appears when you select this option. Press “YES” to clear, or “NO” to cancel the operation. Note that no pattern information is permanently lost until the pattern is saved. (To the same pattern slot.)

You can also press and hold [PATTERN] + [TRIG] (one or several) + [PLAY] to clear all pattern data.

**PRESET** Clears the active pattern's presets loaded to the tracks with their parameter settings. The sequencer data remains unchanged. A prompt appears when you select this option. Press “YES” to clear, or “NO” to cancel the operation. Note that no sound information is permanently lost until the pattern is saved. (To the same pattern slot.) [TRACK] + [PLAY] clears active track's preset.

**SEQUENCE** Clears the active pattern's sequence data. All presets will remain unchanged. A prompt appears when you select this option. Press "YES" to clear, or "NO" to cancel the operation. Note that no sequencer information is permanently lost until the pattern is saved. (To the same pattern slot.)

## 12.2 PROJECT



Select PROJECT to open the Project Manager. It lets you manage your projects and create, load, clear and save projects. An inverted slot number denotes the active project. Use **LEVEL/DATA** to browse projects and then push **LEVEL/DATA** to open a popup menu that gives you the following options:

**LOAD** Loads the selected project. This operation overwrites the active project!

**SAVE** Saves the active project to the selected slot. If you wish to save the project to an empty slot select a ---- slot at the bottom of the list. A NAMING menu opens where you can name the project when you select this option.

**DELETE** Resets the project slot to a clean state. A prompt appears asking if you want to execute the operation. Turn **LEVEL/DATA** to select YES or NO. Press **LEVEL/DATA** to execute.

To create a new project, select **NEW** at the top of the project list. The new project is empty. This operation overwrites the active project!



If you load a project or create a new one, it overwrites the active project. Be sure to save your active project before you load or create a new project.

## 12.3 MIDI

In this menu, you find various sub-menus dealing with the MIDI functionality of Model:Cycles.



### 12.3.1 SYNC

Controls how Model:Cycles receives and sends MIDI clock and transport commands. Use **LEVEL/DATA** to browse and change the settings.



**CLK IN** will, when set to ON, make Model:Cycles respond to MIDI clock and MIDI transport messages sent from external devices.

**CLK OUT** will, when set to ON, make Model:Cycles transmit MIDI clock and MIDI transport messages.

**PCH IN** will, when set to ON, make Model:Cycles respond to incoming program change messages, which is useful when wanting to select patterns externally. You set the MIDI channel for the program change messages in the MIDI CHANNELS menu. For more information, please see "12.3.2 IN CHAN" on page 43.

**PCH OUT** will, when set to ON, make Model:Cycles send program change messages when one pattern changes to another. You set the MIDI channel for the program change messages in the MIDI

CHANNELS menu. For more information, please see “12.3.3 OUT CHAN” on page 43.

### 12.3.2 IN CHAN

Here you find the MIDI input channel configuration. Use **LEVEL/DATA** to browse and change the settings.



**T1-6 IN** selects the dedicated MIDI channel that is used to receive parameter data to a specific track. If configured as OFF, parameter data are not received via MIDI.

**FX IN** selects the dedicated MIDI channel for the DELAY and REVERB parameters. If configured as OFF, parameter data are not received via MIDI.

**AUTO IN** selects the MIDI channel for the AUTO channel that gives access to the currently active track. If an external MIDI keyboard connected to Model:Cycles sends MIDI data on this channel, the keyboard controls the active track. This is useful when for example quickly changing between the active audio tracks to play different Sounds.



The Model:Cycles uses the Tracks dedicated channels and the **AUTO** channel to record to the sequencer tracks from external MIDI keyboards and controllers.

**PCH IN** selects the MIDI channel that listens for incoming program change messages. An **AUTO** setting uses the **AUTO** channel. Enable Model:Cycles to respond to program change messages in the **SYNC** menu. For more information, please see “12.3.1 SYNC” on page 42.

### 12.3.3 OUT CHAN

This menu handles the MIDI output channel configuration. Use **LEVEL/DATA** to browse and change the settings.



**T1-6 OUT** selects the dedicated MIDI channel that is used to send (by turning the knobs) parameter data from a specific track. If configured as OFF, parameter data are not sent via MIDI.



A track must be set to send MIDI data to send MIDI data using the **TRACK PARAMETER** and **FX** knobs. For more information, please see “9.4.2 MOUT” on page 26.

**FX OUT** selects the dedicated MIDI channel for the DELAY and REVERB parameters. If configured as OFF, parameter data are not sent via MIDI.

**PCH OUT** selects the MIDI channel that sends program change messages when changing patterns. Enable Model:Cycles to send program change messages in the **SYNC** menu. For more information, please see “12.3.1 SYNC” on page 42.

### 12.3.4 PORTS

Here you find the MIDI port-related settings. Use **LEVEL/DATA** to browse and change the settings.



**INP FROM** selects the source Model:Cycles receives MIDI data from.

- **OFF** makes Model:Cycles disregard any incoming MIDI data.
- **MID** makes Model:Cycles listen only to MIDI data sent to the MIDI IN port.
- **USB** makes Model:Cycles listen only to MIDI data sent to the USB port.
- **M+U** makes Model:Cycles listen to MIDI data sent to both the MIDI IN and USB ports.

**OUT TO** selects the destination to which Model:Cycles will send MIDI data.

- **OFF** stops Model:Cycles from sending out any MIDI data.
- **MID** makes Model:Cycles send MIDI data to the MIDI OUT port only.
- **USB** makes Model:Cycles send MIDI data to the USB port only.
- **M+U** makes Model:Cycles send MIDI data to both the MIDI OUT and USB ports. This setting will slow the data transfer over USB down to the max speed for data transfer over MIDI.

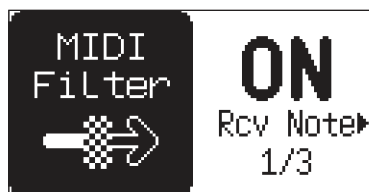
**OUT POL OUT** Output polarity sets the polarity of the MIDI OUT port to accommodate the two different versions of 3.5 mm (Tip/Ring/Sleeve) to female 5 pin DIN cable wiring. The MIDI IN port accepts any polarity and does not need to be configured.

- **STD** Standard (“Type A”, Tip: current sink, Ring: current source, Sleeve: shield)
- **INV** Inverted (“Type B”, Tip: current source, Ring: current sink, Sleeve: shield)

**OUT/THRU** sets if the MIDI OUT/THRU port should function as an OUT or THRU port.

### 12.3.5 FILTER

Here you find the MIDI filter related settings. Use **LEVEL/DATA** to browse and change the settings.



**RCV NOTE** will when active, make it possible to play Model:Cycles using an external MIDI keyboard or controller.

**RCV CC** will when active make it possible to control Model:Cycles parameters from an external MIDI device sending CC/NRPN data.

**ENCS** controls whether the **TRACK PARAMETER**, **FX PARAMETER** and **LEVEL/DATA** knobs sends MIDI data or not.

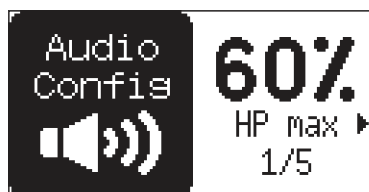
- **INT** The knobs only affect the Model:Cycles and does not send any MIDI data.
- **I+E** The knobs affect the Model:Cycles and also send MIDI data to external devices.



If **ENCS** is set to **INT**, the encoders will not send MIDI to external devices even if the track is set to send MIDI out. For more information, please see “9.4.2 MOUT” on page 26.

## 12.4 AUDIO

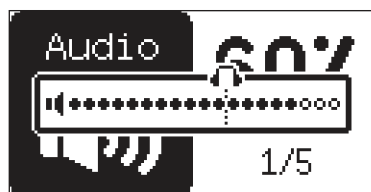
In this menu, you specify audio-related settings for the Model:Cycles. Use **LEVEL/DATA** to browse and change the settings.



### 12.4.1 HP MAX

The parameter sets the limit of the Headphones volume. This setting is useful if you want to have different volume settings for MAIN out and HEADPHONES OUT, for example to protect your ears and your

headphones if you want to turn up the MAIN OUT volume really loud. You can see the HP MAX setting as a little headphones symbol when you turn the MAIN VOLUME knob.



#### 12.4.2 INT OUT

Sets if Model:Cycles sends audio to the MAIN OUT and HEADPHONES OUT or not.

**OFF** sends no audio.

**AUT** sends audio unless you are sending and receiving audio over USB. If so, the Model:Cycles detects this and sends no internal audio to MAIN OUT and HEADPHONES OUT.

**ON** sends audio.

#### 12.4.3 TRK OUT

Sets if the separate tracks sends audio to the MAIN OUT, HEADPHONES OUT, and USB or not. Use the [T1-T6] pads to toggle the tracks on and off.

#### 12.4.4 DEL OUT

Sets if the delay effect sends audio to the MAIN OUT, HEADPHONES OUT, and USB or not.

#### 12.4.5 REV OUT

Sets if the reverb effect sends audio to the MAIN OUT, HEADPHONES OUT, and USB or not.

#### 12.4.6 USB GAIN

Sets the gain level of the audio sent from the USB audio host to the Model:Cycles. This setting only affects the audio sent from the USB audio host to the analog MAIN OUT and HEADPHONES outputs. (0 dB--18 dB)

### 12.5 BACKUP

Here you can send and receive project or pattern data in SysEx format to a receiving device for backup via the MIDI port or the USB port of the Model:Cycles.

When sending or receiving SysEx data, the MIDI ports or the USB port of the Model:Cycles must be connected to the external sending/receiving device.

#### 12.5.1 SENDING BACKUP PROJECT/PATTERN DATA

Press **LEVEL/DATA** to initiate SysEx data transfer of the current project. Use **LEVEL/DATA** to select if you want to send project or pattern data.



Before initiating a SysEx send, first, make sure the receiving device is listening for data.

#### 12.5.2 RECEIVING BACKUP DATA

Model:Cycles is continuously listening for SysEx data so you can at any time send backed up projects or patterns to the device.



When you send backup data to the Model:Cycles, it overwrites all data in the active project

## 12.6 UPGRADE

Here you can upgrade the Model:Cycles OS. To send the OS syx file, use our free Elektron Transfer software. The OS syx file and Elektron Transfer can be downloaded from the Elektron website.

Please note that the Model:Cycles will not appear as an icon on your computer desktop.

### 12.6.1 UPGRADING OS IN STANDARD MODE

1. Connect the Elektron device to the computer via USB and switch it on.
2. Open the Transfer application on your computer.
3. On the Transfer CONNECTION page, set the MIDI IN and MIDI OUT ports to your Elektron device.
4. On the Transfer DROP page, drag and drop the OS file. The OS file is then automatically transferred to the Elektron device and the OS update initiates. A progress bar is visible on device screen when receiving the OS.
5. On your device, Press "YES" to confirm the OS update.

When the process is successfully completed, the OS is updated and the unit reboots.

### 12.6.2 UPGRADING OS IN LEGACY MODE

If your device OS (or device) does not support OS upgrade in STANDARD mode you are automatically redirected to the LEGACY mode. If so, jump to step 4 in the procedure below. The LEGACY OS UPGRADE mode is also used when you upgrade your OS from the STARTUP menu. For more information, please see "13.4 OS UPGRADE" on page 47.

1. Connect the Elektron device to the computer via USB (can not be used when you upgrade from the STARTUP menu) or MIDI and switch it on.
2. Open the Transfer application on your computer.
3. On the Transfer CONNECTION page, click "LEGACY OS UPGRADE mode"
4. On the Transfer LEGACY OS UPGRADE mode page browse to, and select, the downloaded OS syx file.
5. Select your Elektron device or MIDI interface.
6. On your device, navigate to GLOBAL SETTINGS > SYSTEM > OS UPGRADE, and then press "YES" to initiate the OS update.
7. In Transfer, press "UPGRADE".

When the process is successfully completed, the OS is updated and the unit reboots.

## 12.7 DEVICE

Use this menu to set various device related settings



### 12.7.1 USB MODE

Selects which functionality Model:Cycles has over USB.

**A+M** Model:Cycles functions both as a sound card and as a MIDI interface.

**MID** Model:Cycles functions as a MIDI interface.

### 12.7.2 LCD

Sets the brightness of the LCD screen. (LOW, MID, MAX)

### 12.7.3 LED

Sets the brightness of the LED lights and buttons. (LOW, MID, MAX)

---

## 13. STARTUP MENU

---

To access this menu, hold down the **[FUNC]** key while powering up the Model:Cycles. From here you can perform a variety of tasks. To choose the different alternatives, press the corresponding **[TRIG]** key.

### 13.1 EXIT

Press the **[TRIG 1]** key to exit the STARTUP menu.

### 13.2 EMPTY RESET

To perform this operation, press the **[TRIG 2]** key. All patterns will be erased. The data on the +Drive remains intact.

### 13.3 FACTORY RESET

When performing a factory reset on the Model:Cycles, it overwrites and re-initializes the active RAM project (including all pattern and global data). The +Drive project in slot 1 is overwritten and re-initialized with factory preset patterns and settings.

If you wish to keep the active project, remember to save it to a +Drive project slot higher than 1 before you perform a factory reset. To perform a factory reset, press the **[TRIG 3]** key.



You also have the possibility to perform a total reformatting of the +Drive and at the same time perform a factory reset. Please keep in mind that it will empty the +Drive of all your presets and patterns and reset it to the factory content only.

To reformat the +Drive and make a factory reset, press **[PATTERN] + [TRACK] + [TRIG 3]**.

### 13.4 OS UPGRADE

Press the **[TRIG 4]** key to initiate the OS upgrade. Model:Cycles enters a waiting stage, listening for incoming OS data, and "READY TO RECEIVE" are shown on the screen. For the transfer to be possible, the device sending the OS syx file must be connected to the MIDI IN port of Model:Cycles. To send the OS syx file, use our free Elektron Transfer software. The OS syx file and Elektron Transfer can be downloaded from the Elektron website.

#### 13.4.1 UPGRADING OS FROM STARTUP MENU

1. Open the Transfer application on your computer.
2. On the Transfer CONNECTION page, click "OS UPGRADE LEGACY MODE"
3. On the Transfer OS UPGRADE LEGACY MODE page browse to, and select, the downloaded OS syx file.
4. Select your MIDI interface.
5. In Transfer, press "UPGRADE".

As the Model:Cycles receives the OS, a progress bar shows how much of the OS has been received. When the transfer finishes, the message "UPGRADING... DO NOT TURN OFF" appears. When the process is successfully completed, the OS is updated and the unit reboots.



USB MIDI is not supported for file transfers in the STARTUP menu

## 14. KEY SHORTCUTS

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You can use these key shortcuts to quickly perform certain tasks.

### GENERAL

[FUNC] + [RECORD] performs a copy command. Action depends on the currently active page or mode.

[FUNC] + [PLAY] performs a clear command. Action depends on the currently active page or mode.

[FUNC] + [STOP] performs a paste command. Action depends on the content that was copied.

[FUNC] + [RETURN] (hold for a second) toggles fixed velocity ON/OFF

### TRACK/PATTERN/BANK SELECT

[TRACK] + [T1-6] keys to select a track without triggering the track's preset.

[T1-6] to select a track and trigger the track's preset.

[PATTERN] + [TRIG 1-16] keys to select a pattern.

[PATTERN] + [T1-6] keys to select a bank.

### PRESETS

[TRACK] + [RECORD] to copy a track preset.

[TRACK] + [STOP] to paste a track preset

[TRACK] + [PLAY] to clear a track preset

### NAMING MENU

[FUNC] + turn *LEVEL/DATA* to choose a letter.

[FUNC] + press *LEVEL/DATA* to toggle between upper and lower case characters.

### SAVING AND RELOADING

[FUNC] + [SETTINGS] temporary saves the active Pattern.

[FUNC] + [PATTERN] temporary reloads the active Pattern.

[FUNC] + [SETTINGS] (long press) saves Pattern to Project.

[FUNC] + [PATTERN] (long press) reloads Pattern from Project.

### MENU ACCESS

[FUNC] + [PUNCH] opens the QUANTIZE menu.

[FUNC] + [GATE] opens the CLICK menu.

[FUNC] + [RETURN] opens the PAD SETUP menu.

[FUNC] + [LFO] opens the LFO SETUP menu.

[FUNC] + [TRACK] opens the TRACK SETUP menu.

[FUNC] + [RETRIG] opens the RETRIG SETUP menu.

[FUNC] + [PAGE] opens the pattern/track SCALE menu.

### SEQUENCER SETTINGS

[FUNC] + [TEMPO] to tap tempo.

[TRACK] + turn *LEVEL/DATA* to move all trigs a whole step, left or right (when in GRID RECORDING mode).

[TRIG] key (hold) + [RETRIG], opens the TRIG REPEAT menu and turns retrig on for the trig (when in GRID RECORDING mode).

[FUNC] + [GATE] (long press) toggles Click on/off.

### SEQUENCER RECORDING

[RECORD] + [PLAY] starts LIVE RECORDING.

[RECORD] + [PLAY twice] toggles quantized LIVE RECORDING on/off.

[TRIG] + [PLAY] to remove the parameter locks in the TRIG NOTE menu on a trig in GRID RECORDING mode.

## MUTES

[FUNC] + [T1-6] keys mutes/unmutes tracks.

## FILL MODE

Press and hold [PAGE] to activate FILL mode for as long as [PAGE] is held.

Press [TRACK] + [PAGE] to latch FILL mode. Press [TRACK] + [PAGE] again to unlatch FILL mode.

## CLEAR TRACK/CLEAR PATTERN/CLEAR PRESET

[FUNC] + [PLAY] (while in GRID RECORDING mode) clears active track.

[FUNC] + [PLAY] (while in no mode or LIVE RECORDING mode) clears the pattern's sequencer data

[TRACK] + [PLAY] clears active track's preset.

## 15. TECHNICAL INFORMATION

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### ELECTRICAL SPECIFICATIONS

Impedance balanced audio outputs  
Main outputs level: +10 dBu  
Output impedance: 33  $\Omega$  unbalanced

#### Headphones output

Headphones out level: +6 dBu  
Output impedance: 1  $\Omega$

Unit power consumption: 2–4 W depending on LED/  
LCD brightness

Compatible Elektron power supply: PSU-4

### HARDWARE

128 × 64 pixel LCD screen  
3.5 mm dual polarity TRS MIDI In, Out/Thru jacks  
2 × 1/4" impedance balanced audio out jacks  
1 × 1/4" stereo headphone jack  
48 kHz, 24-bit D/A converters  
Hi-speed USB 2.0 Micro B port  
Power inlet: Center positive 3.5 × 1.35 mm barrel  
jack, 5 V DC, 1 A  
Battery In: Center positive 5.5 × 2.1 barrel jack, 4–10  
V DC

### PHYSICAL SPECIFICATIONS

Dimensions: W 270 × D 180 × H 39 mm  
(10.7" × 7.1" × 1.6") (including knobs and feet)  
Weight: approximately 0.8 kg (1.8 lbs)  
Maximum recommended ambient operating  
temperature: +40 °C (+104 °F)

## 16. CREDITS AND CONTACT INFORMATION

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### CREDITS

#### PRODUCT DESIGN AND DEVELOPMENT

Oscar Albinsson  
Johannes Algelind  
Ali Alper Çakır  
Ufuk Demir  
Magnus Forsell  
Andreas Henriksson  
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Ess Mattisson  
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Jon Mårtensson  
Viktor Nilsson  
David Revelj  
Mattias Rickardsson  
Martin Sigby

#### ADDITIONAL DESIGN

Magnus Almberg  
Johan Damerau  
Cenk Sayinli

#### DOCUMENTATION

Erik Ångman

### PRESET SOUND DESIGN

Johannes Algelind  
Animistic Beliefs  
Blush Response  
(d) (glitched) – D. Lee  
Richard Devine  
Thomas Jansson  
Ess Mattisson  
Jimmy Myhrman  
Olle Petersson  
Pselodux  
Cenk Sayinli  
Skinnerbox  
Richard Venstra  
Erik Ångman

### CONTACT INFORMATION

#### ELEKTRON WEBSITE

<http://www.elektron.se>

#### OFFICE ADDRESS

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SE-414 51 Gothenburg  
Sweden

## APPENDIX A: MIDI SPECIFICATIONS

This appendix lists the specifications of the Control Change (CC) messages for the Model:Cycles.

### A.1 TRACK PARAMETERS

| TRACK PARAMETERS |        |
|------------------|--------|
| Parameter        | CC MSB |
| Note             | 3      |
| Mute             | 94     |
| Track level      | 95     |
| Pan              | 10     |
| Pitch            | 65     |
| Decay Time       | 80     |
| Color            | 16     |
| Shape            | 17     |
| Sweep            | 18     |
| Contour          | 19     |
| Delay Send       | 12     |
| Reverb Send      | 13     |
| Volume + Dist    | 7      |
| Swing            | 15     |
| Chance           | 14     |

### A.2 PLAYBACK PARAMETERS

| PLAYBACK PARAMETERS |        |
|---------------------|--------|
| Parameter           | CC MSB |
| Punch               | 66     |
| Gate                | 67     |

### A.3 LFO PARAMETERS

| LFO PARAMETERS |                |
|----------------|----------------|
| Parameter      | CC MSB         |
| Speed          | 102            |
| Multiplier     | 103            |
| Fade In/Out    | 104            |
| Destination    | 105            |
| Waveform       | 106            |
| Start Phase    | 107            |
| Reset          | 108            |
| Depth          | 109 (LSB: 110) |

### A.4 FX PARAMETERS

| FX PARAMETERS  |        |
|----------------|--------|
| Parameter      | CC MSB |
| Delay Time     | 85     |
| Delay Feedback | 86     |
| Reverb Size    | 87     |
| Reverb Tone    | 88     |

## APPENDIX B: MODULATION DESTINATIONS

The following are the modulation destinations for the Model:Cycles's LFO and Velocity:

### LFO

- Pitch
- Fine Tune
- Decay
- Color
- Shape
- Sweep
- Contour
- Delay Send
- Reverb Send
- Volume + Distortion
- Pan
- Punch
- Gate

### VELOCITY

- Pitch
- Fine Tune
- Decay
- Color
- Shape
- Sweep
- Contour
- Delay Send
- Reverb Send
- Volume + Distortion
- Pan
- Punch
- Gate
- LFO Speed
- LFO Mult
- LFO Fade
- LFO Wave
- LFO Start Phase
- LFO Trig Mode
- LFO Depth

## APPENDIX C: UNISON AND CHORD SETTINGS

These are the unison and chord settings you can choose with the **SHAPE** parameter if you select the Chords machine. For more information, please see “10.3.3 MACHINE PARAMETERS” on page 37.

- |              |         |             |
|--------------|---------|-------------|
| • Unison × 2 | • madd9 | • M9no5     |
| • Unison × 3 | • Madd9 | • Madd9b5   |
| • Unison × 4 | • m6    | • Maj7b5    |
| • minor      | • M6    | • M7b9no5   |
| • Major      | • mb5   | • sus4#5b9  |
| • sus2       | • Mb5   | • sus4add#5 |
| • sus4       | • m7b5  | • Maddb5    |
| • m7         | • M7b5  | • M6add4no5 |
| • M7         | • M#5   | • Maj7/6no5 |
| • mMaj7      | • m7#5  | • Maj9no5   |
| • Maj7       | • M7#5  | • Fourths   |
| • 7sus4      | • mb6   | • Fifths    |
| • dim7       | • m9no5 |             |



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