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# **Chapter 1: Pyramid work-flow**

### Wire up

Connect the Pyramid to the supplied mini USB power supply, or connect the Pyramid to a computer with a standard mini USB cable, and press the **on/off** button.

*Editor's Note:* Some users report successfully powering the Pyramid from an iPad using an official Apple Lightning to USB 3 Camera Adapter with the Lightning cable connected to a power charger. Others report successfully powering Pyramid connected to mobile devices using a powered USB hub.

## **Pyramid work-flow**

# Understanding the terminology and work-flow of Pyramid is essential to getting the most out of it, and enjoying the vast possibilities with minimal confusion!

Pyramid allows you to easily produce music from scratch thanks to powerful creative tools such as:

- smart chord harmonizer
- scale generator
- beat repeat
- hold and relatch
- groundbreaking step sequencer (unlimited number of notes and CC messages per step, FX parameters step lock)
- euclidean sequencer
- polyrhythmy & polymetry
- real-time effects

32 SE	QUEN	CES		muted t unmute	track d track
SEO1	SEO2	SEO3		SE3	2
Track parame	eters:				
zoom resolution (25% to 1600%)	bar length (1 to 384 bars)	tim signa (1/1 to 3	iture	cho	tput innel cv/usb)
Track settings	:				
track name	run mode (free, relatch, trig)	transp ena			terns able
Track events:					
P1 P2	P3 P4	P5 F	P6   I	P7	P32
Notes (mono	or poly)				_=
CC automatic	ons + pressure >	$\sim$		A	$\sim$
Effects autom	,			$ \ge$	
PC, LSB, MSE	3 (program ch	ange &	bank s	elect)	
Track effects:					
Up to 4 effec	ts	1	2	3	4

The structure of a Pyramid project is described in three concepts:

**TRACK** A track is a loop that plays repeatedly, and controls instruments connected to MIDI A, MIDI B, USB MIDI, or CV outputs. Tracks contain settings such as MIDI Channel, Zoom level, Length, and Time Signature. As these settings are stored per track, you have the flexibility to do many interesting things. Since different tracks can have different lengths and time signatures, Most importantly, tracks contain PATTERNS. Pyramid provides 64 tracks.

**PATTERN** Patterns contain polyphonic or monophonic notes, automation and effects, Program Change messages, and Constant Controller (CC) messages.

**SEQUENCE** Sequences are the stored mute states of groups of tracks. The Pyramid work-flow is designed around muting and un-muting tracks to build sequences. Moreover, you can create up to 32 unique patterns (P1, P2, ...) per track, to add variety to your sequences. This very important--but somewhat confusing concept--is addressed more in-depth in the section titled "How to use PATTERNS."

**Editor's Note:** The concept of "sequences" in the Pyramid work-flow can be confusing at first. Think of a sequence, not as a linear collection of notes, but rather a snapshot of the patterns assigned to each track, and the mute state (playing or silenced) of that track, all stored on one keypad.

A Pyramid project can be composed of up to 32 sequences. Remember, in the Pyramid lexicon "sequence" defines the mute states of each of the 64 available tracks. In each sequence, you choose which track is unmuted (active) or muted (inactive) in order to build your song or arrange your set:



You can choose to play 64 tracks at the same time in a single sequence, or mute/un-mute any of the 64 tracks across 32 sequences: this is a great and versatile way to create songs very quickly.

In the example below **SE01**, (sequence 01) has only TR02A (track 02) un-muted. In **SE02** (sequence 02), TR02A and TR11A (tracks 02 and 11) are un-muted. In **SE03** (sequence 03), tracks 01, 06, and 14 are un-muted:

SE01	01 02 03 04 05 06 07 08 track A 09 10 11 12 13 14 15 16
	01 02 03 04 05 06 07 08 track Bank B
SE02	01 02 03 04 05 06 07 08 track A 09 10 11 12 13 14 15 16
	01 02 03 04 05 06 07 08 track B
SE03	01 02 03 04 05 06 07 08 track A 09 10 11 12 13 14 15 16
	01 02 03 04 05 06 07 08 track B

Individual tracks are shared between sequences. Changes to TR02A will apply to all sequences where TR02A is active (SE01 and SE02 in the example above).

When the sequence changes, if a previously active track is still active in the next sequence, it will not restart from the beginning like a classic sequencer. It will continue to loop. This can produce interesting polymetric effects. (see the "Note about track lengths concurrence & sequences" section of the manual). If you want to restart your track from the beginning like a classic sequencer, configure your track to play in "relatch mode." See the section "Track run modes: FREE, RELATCH & TRIG" of the manual.

## Quick tour of the 4 Pyramid modes

Pyramid is a dynamic sequencer that allows you to interact intuitively with tracks and sequences. All modes are always accessible. Launch sequences in SEQ mode; mute/un-mute tracks in TRACK mode; play with effects; and even add notes and CC messages in LIVE and STEP modes. You can assign each of the 5 multifunctional rotary encoders to control MIDI effect parameters in real-time. Encoder assignments are independent of the sequence you are viewing or the mode you are working in.



Record notes and CC automation to the current track using the built-in keypads, smartpads (8 pads that can be configured as chord generators, note repeats or a scaled piano), an attached MIDI controller, a CV instrument, or your computer.



Fill steps of the current track with notes and chords using the 16 pads of the NOTE & CHORD stepmodes. Set up the velocity, width and offset of a note or a group of notes. Edit your live recording with surgical precision. Switch to EUCLID stepmode to auto-fill steps. Switch to CC MESSAGES stepmode to create or edit midi CC automation. Switch to EFFECTS stepmode to create or edit effect parameter locks. Each step (and even microstep) can contain an unlimited number of notes, CC and FX automation!



Press TRACK :

Mute/un-mute tracks using the 16 pads. Change the current BANK (A/B/C/D) with < and >. Set up the length, time signature, zoom, and midi channel of the current track. Build the current sequence.



Launch your sequences (stored mute states of the 64 tracks) on the fly, or program a chain of sequences to create a complete structured song.

## Screen

In each of the 4 modes, the following data is displayed:



Pyramid mode: LIVE STEP TRACK SEQ

Track name: name of the current track.

Track zoom: zoom level of the current track (/4, /2, x1, x2, x4, x8, x16).

Track time signature: time signature of the current track (from 1/1 to 24/16).

Midi in flashes when a midi message is received; midi out A, midi out B and USB out flash when a midi message is sent.

Current track: track number and bank (A, B, C, D) in Live and Step Modes.

**Track out**: sequence number and the tracks you are editing in TRACK mode. Can also display the next sequence to be played in the chain.

**Current sequence** shows the playing sequence (and also the group of tracks you are editing in TRACK mode). Can also display the next sequence to be played in the chain.

Mode zone highlights the main parameters of each mode, which generally can be edited via the clickable data encoder **•**.

**Player zone**: track player (a representation of the current track, zoom level, track length), player position, and the page you are viewing in Live, Step and Track modes:



The example above shows a 12 and 1/4 measure long track (12 measures + 1 beat). The four outlined squares represent the first page of the track. The arrow icon indicates the player is currently at the twelfth measure.

In Seq Mode the **Player zone** gives the set sequence chain:



In the example above, 6 sequences are chained and sequence SE06 (highlighted) will play 2 measures.

### Track player: pages, zoom and length

The track player zone displays data on of the current track:

- Track length (number of bars
- **Page position** (viewed bars on the 16 pads)
- Player position (sequencer track progression)

A default track is 1-bar long. Therefore, the track player zone displays 4 white measures: they are the 4 measures you can see on the 16 pads (currently viewed page) in Step Mode. These 16 pads represent 16 steps = 16 quarter notes.



If you want to program a longer or shorter track, hold **TRACK** + length and rotate • to change the bar number of the track to 16 bars for example:



Press < or > to navigate through the pages:

#### 

*TIP* Hold < or > to quickly navigate.

To change the pad resolution, hold  $\frac{\text{TRACK}}{\text{TRACK}} + \frac{\text{zoom}}{\text{and rotate}}$  and rotate  $\bullet$ . For example, 2 bars are displayed in 2x (200%) zoom on a row of 16 pads, also called a page:

**TIP** Microscope mode: 16x (1600%) zoom provides you with the highest degree of precision to edit your track step by step.

Note: all examples given reference a standard 4/4 time signature. Pages I always represent a 4/4 measure. This convention is used because all 16 physical pads can be divided into four 4/4 measures. For all other time signatures, I represents all pages, and I represents the currently active group of 16 pads.

## **Display features**

You can access extra information in some modes by pressing **DISP.** For example, in **STEP** mode, pressing **DISP**will display the piano roll editor:



The above is an example of a track programmed with notes of different lengths. You are viewing page 1 (of 1). The current note is C4, the current velocity is 127, the current note length is 2 steps and the current note offset is 0%. If you add a step by pressing a pad you will add another note with these parameters.

# **Chapter 2: Basics**

## Tempo

Tap BPM to set up the tempo, or hold BPM and turn the data knob .

To fine tune BPM to decimal values, press • while rotating it. The tempo ranges from 10.0 BPM to 999.9 BPM.

**TIP** Hold **2ND** + BPM and turn the data knob •. The tempo change will be applied only when you release **2ND**. **TIP** Hold **2ND** + BPM and slide the touchpad X axis  $\Box$  to temporarily shift the tempo up or down. Very handy to manually syncing Pyramid with an external sound source(for example a turntable). **TIP** Hold **2ND** and press < or > to quickly double or divide the BPM.

By default Pyramid automatically synchronizes BPM to any instrument providing a sync signal at the MIDI input. You can also slave Pyramid to an analog clock.

## Undo

In every mode, press **2ND** + **undo** to cancel the last track edit, for example notes or automation recorded in Live mode. Another press of **undo** will redo this last edit.

Each time you do one of the following actions:

- REC ON in Live mode
- PLAY
- copy a step
- change stepmode
- select a new track

A copy of the current track will be saved in Pyramid internal memory. By pressing **2ND** + **undo**, Pyramid will revert to this copy.

## Saving and loading a project

In every mode, press 2ND + save/load to save, save as, load or create a new project.



An SD card must be inserted or you will be unable to enter the save/load menu.

## Tracks

Pyramid projects contain up to 64 tracks. Tracks are organized into 4 banks: A, B, C, D. Each bank contains a group of 16 tracks. Thus all 64 tracks and four banks are organized from TR01A to TR16A (track 1 through 16, bank A) through TR01D to TR16D (track 1 through 16, bank D).

• 16 tracks in bank A

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- 16 tracks in bank B
- 16 tracks in bank C
- 16 tracks in bank D



## Select a track (TR01A to TR16D)

In any mode, hold **TRACK** while pressing one of the 16 pads **TRACK** to select the track of the current BANK you want to work with (for example TR03A).

The current track number and its output channel are displayed on the screen:



Change the MIDI output channel of the selected track by pressing TRACK + midi channel. Multiple tracks can transmit on the same MIDI channel.

*Note:* A track is created as soon as you edit a note or a CC message in **LIVE** or **STEP** mode.

Each track can be configured according to your needs.

A track can be:

- a looping pattern (e.g. a 4 bar long track that plays repeatedly)
- a linear pattern (e.g. a 384 bar long track that plays once through)
- an euclidean pattern
- a polymetric pattern (e.g. a 1+1/4 bar track)
- a polyrhythmic pattern (e.g. an 8 bar track with 7/8 time signature)
- a micro track with a high zoom resolution (e.g. a 1/4 bar track with 1600% zoom)

### Muting and un-muting tracks

Enter **TRACK** mode. Press < > to select the track bank.

Use the 16 pads **I** to mute/un-mute any tracks you have created, from TR01A to TR16D.

You can play up to 64 tracks simultaneously! Muting and un-muting tracks is a great and intuitive way to perform your project spontaneously.

Press DISP in TRACK mode to display track progression:



Note: Changes in mute/un-mute states sync differently depending on the PERFORM type selected in SEQ mode.

## Quick track settings

This is one of Pyramid's most useful features, we strongly advise you try it!

To change the current track settings, in any mode, hold **TRACK H** to use the following shortcuts:

solo midi channel zoom length time signature

For example, when in **STEP** mode, hold **TRACK** + **zoom** and rotate • to quickly change the zoom resolution (from /4 to 1600x).



### Sequences

As described earlier, a sequence is the stored mute state of each of the 64 available tracks. Pyramid projects contain up to 32 sequences. Sequences are stored in two banks Bank 1...16 and Bank 17...32.

### Selecting a sequence

In all modes, the current sequence number is displayed on the screen:

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In any mode, hold **SEQ II** and select a sequence (from SE01 to SE16) by pressing the corresponding pad **IIIIIIII**. If you select an empty sequence a new sequence will be created and the track mute states of the last sequence will be applied.

To display sequences from SE17 to SE32, hold SEQ III and press >.

To launch a new sequence after the end of the currently playing sequence, enter **SEQ** mode and press one of the 16 pads **INTERPORT**. The newly selected sequence will begin when the current one ends. Holding **SEQ** while pressing one of the 16 pads **INTERPORT** will start the newly selected sequence without waiting for the end of the currently playing sequence (instant jump).

### Creating and editing sequences

In **TRACK** mode, hold **SEQ III** and select the sequence you want to create or edit by pressing one of the 16 pads

To display sequences SE17 through SE32, hold SEQ III and press >.

The current sequence number is displayed on the screen:



Mute/un-mute your active tracks to build the sequence. A sequence is automatically created as soon as you change the mute state of a track.

#### **Performing sequences**

Once you have created several sequences, enter **SEQ** mode to play them. Make sure "**PERFORM**" is selected, in order to perform sequences on the fly. Sequences will always remain in sync:



You can select how Pyramid transitions between sequences: **instant**, **1 beat**, **1 bar**, **2 bars**, ... which gives you deep control over performing with sequences.

Press any sequence number **HERMIN** to launch it. Pyramid waits until the current sequence ends (the end of the bar, if "1 BAR" selected) before launching the next sequence. The current sequence will play in a loop until you press another sequence number.

Enter **STEP** mode and press DISP to view the piano roll and see recorded notes:



Of course, it's possible to add, remove, edit notes quickly in **STEP** mode with the step-by-step sequencer.

### Using the step sequencer

Enter **STEP** mode. The default stepmode is **NOTE**: which means you can add, remove, edit **notes** on the current track:

- to select a note (e.g. C4), rotate •
- to add a note, press one of the 16 steps
- to remove a note, press the step again
- you can also hold one of the 16 steps, and rotate to select and set a note.

Pyramid is fully polyphonic, so you can add as many notes as you want on each step. You can set the **velocity**, width and offset of every note. You can zoom to set the resolution of steps (by default 1 step = a quarter note, but you can zoom up to 1 step = a 1/64 note). Finally, you can set the length and the time signature of the track, so you can work on very short or very long patterns!

Press DISP to view the piano roll of the current track and the notes entered in **LIVE** and **STEP** mode:



Cycle through stepmodes by holding **STEP** and rotating • There are 5 stepmodes:

- NOTE (add, delete, edit notes)
- CHORD (add, delete, edit chords)
- EUCLID (generate algorithmic patterns)
- EFFECTS (add, delete, edit FX automation)
- CC MESSAGES (add, delete, edit CC automation)

Multiple stepmodes can be used on a single track (except **EUCLID**) to add notes, chords, CC automation, and FX automation. Of course, you can also create tracks that only contain note or CC information.

#### Effect manager

Press FX to access the EFFECT MANAGER screen. Chain up to 5 real time MIDI MIDI effects per track:

	EFFE	CT MAN	AGER	
TROJA	]		0	но оот
<u>QUA</u>	ARP	HAR	<u>5HI</u>	RAN
+-■		┥ <sub>╸→</sub> ┇╎	<b> </b> ∎+%	
0	Θ	Θ	0	Θ
	EFFE	CT MAN	AGER	
TROJA	<b>EFF</b> ]	CT MAN	_	нојоит
TR D3 A	IIIII ] <u>DEL</u>	ET HRN	_	
	]		[	

EFFECT MANAGER				
TROJA	]		[	но оот
QUA	BPH	<u>Cha</u>	LFD	
l+∎	$\Delta$	B	∖⊶≌	-
0	Θ	Θ	o	9

There are 12 effects to choose from:

- Quantizer (with integrated humanizer)
- Arpeggiator
- Harmonizer
- Swing
- Randomization
- Delay
- Equalizer
- Scale
- Note to CC converter
- BPM
- Chance (probability)
- LFO

Effect parameters can be edited using the 5 encoders. Experiment to find your favorite settings:

TRA 03A ARPEGGIATOR EDIT			
<b>O</b> ENR6LE	ON		
<b>OSTYLE</b>	UP/DOWN		
€GATE	<b>153</b> %		
ORATE	1/12		
GOCTAVE	+2		

**TIP**You can still play or add notes in **LIVE** and **STEP** mode, mute/un-mute tracks in **TRACK** mode, and even launch sequences in **SEQ** mode with the effect manager activated.

Change an effect's position in the chain by holding **2ND** and rotating **•** . Different arrangements may produce very different results. Experiment!

**TIP** The effect manager is also a great tool if you are a keyboardist and you want to revive your old synths. Give them new features like arps and effects and they'll sound like they never did. You can also use Pyramid to control your modular system using CV in & out to create a truly unique instrument.

The effect engine also works when the player is stopped, as Pyramid clock always runs.

### Assign a control

Pyramid provides 5 clickable encoders and a touchpad. You can assign values by holding ASSIGN and turning an encoder or sliding the touchpad.

For each controller you can:

- send a CC midi message to the current track's MIDI channel (for example pitch or a CC message)
- link to a track's effect **effect parameter** (for example the quantization grid, the swing % or the arpeggiator rate of the track 02)



*TIP* Press an encoder to display its assignment and its value (for example TR02A Swing Grid = 1/16).

0	TRAEK D1 A
<u>5HI</u>	GRID
	1/16
•+%	

Once a controller has been assigned, use it to make realtime changes in any mode.

Press rec **O** in **LIVE** mode and record automation on a current track:

- If an encoder is assigned to a CC message, automation will be recorded to the track only if the MIDI out and the MIDI channel of the CC is the same as the current track out settings (for example MIDI A channel 04).
- If an encoder is assigned to an **effect parameter**, automation will be recorded to the track only if this effect is active on the current track.

### Play/Pause/Stop

Press H to play/pause the sequencer. H flashes (depending on the BPM and the current track time signature) if the project is playing, and is softly back-lit if the project is paused.

Press ☐ to stop the sequencer. If you are working with multiple pages (see Step Mode section), pressing once ☐ stops the player at the current track page, while pressing ☐ twice rewinds to the beginning of the track.

Two presses of STOP **D** will send an "All Note Off" MIDI message to your instruments, a third press will send an "All Sound Off" MIDI message to silence a MIDI synth's note release instantly. In addition, the third press of STOP also sends any Program Change messages of active tracks, if set.

By default MIDI clock is sent to MIDI A out, MIDI B out and USB out. Play/stop/continue messages are disabled by default. You can activate them separately in the SETTINGS menu.

#### Metronome

Hold **2ND** and press **LIVE** to activate the metronome:



The metronome will send a specified MIDI note on the selected output channel and will follow the tempo. You can configure the metronome in SETTINGS > MISC.

### Settings menu

Press 2ND + FX to enter General Settings.

GENERAL SETTINGS			
⊗+	&+	∼	
Hidi in	Hidi out	CV/PEDAL	
日	≡	-C	
SRVE	INF0	HISC	

Select a category to configure your project:

- MIDI IN (midi input configuration)
- MIDI OUT (midi outputs configuration)
- MISC (other project and core options)
- CV/PEDAL (CV/Gate inputs+outputs analog configuration, pedal control assignment)
- INFO (version, memory, analog inputs & outputs, midi monitors)
- SAVE (save/restore all general settings, save/restore all track settings)

# **Chapter 3: Connectivity**

## **MIDI connectivity**

#### **MIDI INPUT**



Connect one or more MIDI controllers (e.g. keyboard, drumpad, fader surface) to Pyramid's MIDI in, and transmit MIDI notes and MIDI CC messages to Pyramid. In SETTINGS you can choose between **OMNI-mode** (control the selected track, regardless of controller output channel) and **MULTI-mode** (control TR01A if a controller's channel = 01, control TR14A with a controller set to channel 14, etc.). This option allows you to record multichannel events as a MIDI looper.

Synchronize Pyramid's clock (tempo) with an external machine and even control play, pause, and start remotely.

#### **MIDI OUTPUTS**



Pyramid provides two MIDI outputs (A and B) to control a large range of electronic instruments such as synthesizers, drum machines, and MIDI enabled effects. Because both MIDI outputs provide 16 MIDI channels Pyramid can control up to 32 instruments.

### **USB** connectivity

#### **USB MIDI INPUT**



Connect Pyramid to your computer with a standard mini USB cable and Pyramid will receive MIDI notes, CC messages, pitch, aftertouch, transport messages and MIDI clock. USB works exactly like a MIDI DIN input.

#### **USB MIDI OUTPUT**



Pyramid can also control and sequence up to 16 virtual instruments (VST) on your computer, and sync your DAW via MIDI clock.

## **CV/Gate connectivity**

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#### **CV/Gate INPUTS**



There is one CV and one Gate input on the Pyramid. You can use them to convert CV/Gate notes to MIDI notes, then add real-time MIDI effects to your CV/Gate performance, and finally send these notes to MIDI OUT, CV/Gate OUT, or USB OUT.

To use these inputs, plug a CV pitch output from your instrument to the Pyramid's 3.5mm CV input jack, and plug the gate output of your instrument to the 3.5mm CV Gate input jack. Your external instrument will control MIDI notes on the currently selected Pyramid track.

You can also use the CV inputs as a voltage controlled MIDI CC MESSAGES. For example, a CV voltage of +5V can be converted to a CC MESSAGE value of 127. Pyramid will then send the CC Message via MIDI OUT, or you can choose to control an internal MIDI effect (e.g. control TRACK04 arpeggiator rate with CV input #1, and control the TRACK11 quantize grid with the CV input #2).

Finally, you can use the CV inputs to slave Pyramid with an analog clock.

#### **CV/Gate OUTPUTS**



Pyramid has only one CV output and one Gate output because we wanted to keep the machine compact. "ENV" is another control voltage output that is very useful for sequencing filters or any voltage-controlled input on your modular or CV synth.

#### **DIN Sync connectivity**



Pyramid provides an optional DIN sync output (configurable to Sync48, Sync24, Sync12, ...in menu SETTINGS) that lets you synchronize your vintage instruments with tempo clock and a run/stop message.

The DIN sync output is available on MIDI out B, routed as following:



In SETTINGS, you can also configure the 3.5mm CV ENV jack as a DIN Sync output to provide analog clock to your modular system.

#### Dual pedal foot-switch



You can plug a foot-switch type pedal and assign it to an internal control (rec, hard rec, play/pause, play/stop, previous track, next track, previous sequence, next sequence, tap tempo, clock sync). You can also use a dual pedal (with a stereo jack) to control 2 distinct Pyramid actions.

If you are looking for a dual pedal, we recommend this one: <u>www.brightonion.co.uk/dual-momentary-footswitch</u> with the polarity Normally Open.

### Examples

#### Pyramid on stage



#### Pyramid sequencing virtual instruments



Pyramid on the studio table



# Chapter 4: Live mode

## Capturing a performance

## O Live Mode

Live Mode is the quickest way to create tracks from scratch.

In your studio, use Live mode to experiment and record your music using the built-in keypad, knobs, touchpad and smartpads. (Smartpads can be configured as a chord harmonizer, advanced beat repeater, or a scaled piano).

On stage, use your Pyramid to make your performance lively and creative. Real-time effects allow you to easily generate complex music, always in sync.

### Screen



Note: the track player zone is described in the Step Mode section.

Pads

Pads in Live Mode are divided into two parts: a one-octave keyboard .....and 8 smartpads .....



Note: recorded & processed notes are displayed on the 13 black & white keypads with low luminosity.

## Play with the keypad

Use the keypad **....** to perform live. Press < or > to change the octave.

You can also use external MIDI controllers (keyboards, drumpads, fader surfaces) connected to the Pyramid's MIDI input to control the current track (control notes with velocity + aftertouch + pitch, or control CC messages).

With OMNI-mode disabled, a controller transmitting MIDI on channel 01 will control track 01A, a controller transmitting MIDI on channel 12 will control track 12A,...

**TIP** Midi effects on the current track will be applied to your live performance, even when using an external controller.

### **Record your performance**

Press rec o (or rec o + ► if the track is paused or stopped) to record your live performance on the current track using the keypads, smartpads, or an external MIDI controller.

Record FX and MIDI automation using the assignable encoders ••••••, the touchpad  $\Box$ , and the analog inputs. (See the Assign section to learn how to assign a control.)

### Hard record

Press **2ND**+ • to activate "hard recording." Previously recorded notes are overwritten in this mode of recording.



When the player is stopped, "arm" the track for recording by pressing rec o. When you press **H**, Pyramid sends a MIDI metronome countdown before recording starts - and remains until the end of the track loop.

Define the countdown duration in SETTINGS > MISC > REC COUNTDOWN

### Live looper

Pyramid provides you a new way to capture your performance in the style of looper pedals! In this mode, the length of a track grows to fit your initial performance. Press rec o to start recording a loop. Press rec o a second time to stop recording. Track length is now fixed. Perform freely without worrying about predetermining track length.

To activate Live looper, enter SETTINGS > MISC > LIVE LOOPER and select the looper time quantization (beat = the track length is set to the nearest beat, 1bar = the track length is set to the nearest bar, ...)

### Change smartpad type

- CHORD (default)
- SCALE
- REPEAT
- CUSTOM



## **Chord smartpads**

The Chord Smartpads represent the 7 degrees of the harmonized scale. These harmonized scales are the basis on which almost every song you know is built.

In Pyramid, we use two parameters to build chords: "tonality" is the root note of your harmonized scale and "complexity" represents the number of notes in each chord and chord inversion.

If we choose a CMaj tonality and 4 notes of complexity, we can obtain the following chords by pressing one (or more) of the smartpads:



Pyramid's original harmonizer algorithm allows you to quickly select a relative tone by rotating •. Unleash your creativity by building complex harmonies.

Holding 2ND + rotating • will jump to the next major/minor tonality. Add complexity by pressing and rotating •

#### <u>енная</u> Снял 83

2

Press < or > to shift the chord down or up by octaves.

TIP Increasing complexity will add «alterations» and eventually bring you to complex jazzy chords.

*TIP* Set a low complexity value to perform simple chords and then add additional tones with the keypads.

Press DISP to display the generated chords for the 8 smartpads and the currently recorded notes:

© 1000	E	DDIH	Ш	
C 111N	Chim	Ddih	Ечнај	
1844 INV2	E	<b>D</b>	(13	
100	Ghim	Alhaj	Вчнај	
	70 DI		пп	ппп

## Scale smartpads

A scale is an ordered set of musical notes based on a root note. Predefined scales help you easily compose melodic patterns.

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Pyramid includes a varied set of scales: Minor scale, Harmonic minor, Minor blues, Major blues, Romanian minor, Tunis scale, Dominant 7th, Spanish scale, Gipsy scale, Arabian scale, Egyptian scale, Hawaiian scale, Japanese scale, Minor third, Fourth scale, Fifth scale, Octave scale, Ionian scale, Dorian scale, Phrygian mode, Lydian mode, Mixolydian mode, Aeolian mode, Locrian mode.

Rotate • to select a scale in the list:



Hold 2ND and rotate • to select the root note of the scale.

For instance with the Romanian Minor scale and the root note C, you can play the following notes using the smartpads:



Press < or > to shift the scale's octave.

## **Repeat smartpads**

Hold a smartpad **\*\*\*\*\*\*\*** to choose the repeat speed (for example 1/8 = 8 notes per bar) and use the keypad **\*\*\*\*\*\*** to play a note repeatedly.



Rotate • to select the gate length of repeating notes (from 0% to 100%):

## **100%** 178

Press DISP to display the repeat speed of each of the 8 smartpads:

1/8 1/8 TER 1/16 TER 1/16 TER 1/132 1/32 TER 1/64 1/64 TER



## **Custom smartpads**

This livemode allows you to create and save up to 32 custom chords or scales. Page 25 of 98

To create a custom chord or scale, play notes with the internal keyboard or an external keyboard: the played notes will be displayed on the screen:



A chord has been played: C3 is the first played note, followed by 3 other notes.

To add the played note or chord onto a smartpad, hold **2ND** and press a smartpad **•••••••**: the smartpad will light up. Press this smartpad to play with the custom note or chord added.

You can save up to 32 custom chords per project (8 smartpads \* 4 banks). To change the bank (A/B/C/D), rotate the menu encoder •.

To transpose a custom smartpad, hold a smartpad and press < or >. Then you are free to add it to a new smartpad.

To remove a custom smartpad, press the menu encoder • to delete the buffer ("..." will be displayed), then hold **2ND** and press the smartpad to erase:

IB 01 🖸		CUSTON
© # 01	120.0	
<sup>₅</sup> 01	<u>85</u> J4/4 ⊿100	CUSTOM A
ŏ		[1

Press DISP to display an alternative view of the smartpads:

CUSTON	∎+2 Г4	⊞+3 04	₩+5 Γ4	<b>旧+2</b> 64#	
•••	E+1	<b>1</b> +3	⊡+3		
CUSTOM A	F4	E4	D4		
0 00 00 00 00 00 00 00 000000 000000 000000					
7 smartnads (hank A) have been					

7 smartpads (bank A) have been customized.

## Hold

Hold **2ND** and press **I** to activate the **HOLD** function. Hold allows you to sustain notes played with the keypad, smartpads, or an external MIDI device. Held notes are highlighted on the keypad.

**TIP** Hold is very useful when designing drones/synth pads or experimenting with an effect like the arpeggiator.

When HOLD is enabled, III is displayed on the screen.

### Relatch

Hold **2ND** and press **I** a second time to activate the **RELATCH** function, allowing you to hold the last keys or chords played until you play something else.

When RELATCH is enabled, the logo I is displayed on the screen.

Hold **2ND** and press **I** a third time to go back to default Live Mode.

### Copy/Paste/Delete

Press **2ND** + copy to copy the selected track (copy all notes + FX + FX automation + CC automation).



Press **2ND** + paste to paste the copied track to a selected destination track.

All notes, CC automation, FX, FX automation are copied, however track parameters like track length are not.



Press **2ND** + delete to delete only notes + CC automation + FX automation from the current track.



When in **LIVE** mode, capture a performance on a currently playing track by pressing rec **O**. If the track is paused, press **O** to "arm" the track, then press **H** to begin a count-off before recording begins.

You can also use an external MIDI controller to record notes and automation. It's even possible to record CV events thanks to the CV/gate input!

Pyramid allows unlimited polyphony and CC automation data per track. Quantize is not active by default, so you will capture the "human feel" of your performance.

# Chapter 5: Step mode

## Step mode

Step Mode is another way to create rhythms and melodies. Unlike Live Mode–where you perform in real-time using the keypad and the smartpads–Step Mode allows you to "program" sequencer information directly onto the current track. Step Mode is a great way to get the best from your synthesizers and drum machines.

Pyramid includes 16-step pads **\*\*\*\*\*\*\***, but you are free to extend the length of the track up to 384 bars (384 measures) and zoom up to 16x (1600%): the number of steps is almost infinite! The ability to add multiple notes on a single step and modify velocity, note width, and offset for each step, makes Pyramid one of the most advanced sequencers on the market.

Step Mode also allows you to edit previously recorded live performances using the piano roll view.

### Screen



## Pads



## Change Stepmode

Stepmode defines how steps are filled. Hold **STEP** and turn the data knob • to select from the following Stepmodes:

- NOTE (default)
- CHORD
- EUCLID
- EFFECTS

CC MESSAGES



All stepmodes (except **EUCLID**) can be used together to create a track. For example, you can add chords with the **CHORD** stepmode, then edit these chords with the **NOTE** stepmode, create step-lock automation with **CC MESSAGES** and **EFFECTS** stepmodes, go back to **NOTE** stepmode to add extra notes...

**EUCLID** stepmode can't be used with **NOTE** or **CHORD** stepmodes because the euclidean algorithm takes exclusive control of the track player.

### **Note Stepmode**

This mode allows you to program notes by filling steps.



Add notes

Select the current note on the screen with .



Press a step **I** to fill it with the current note.

Press the step **HETTHE** again to remove the note. You can add multiple notes on a single step. The pad corresponding to the step filled with the current note will be softly back-lit.

TIP Hold 2ND and rotate • to scroll the current note list faster.

**TIP** Preview the current note by pressing • . Pressing < or > while pressing • allows you to jump octaves and navigate notes more quickly. You can also press a key **\*\*\*\*\*\*** while holding to directly enter a desired note (or press multiple keys to enter a chord).

At any time, you can **zoom** to increase the step resolution and navigate the pages with < and >.

Poly / Mono editing

Switch to MONO/POLY EDITING by pressing O



**POLY EDITING** is enabled by default. Poly mode is useful when editing tracks controlling polyphonic instruments. This mode allows you to add multiple notes to a single step. In **POLY EDITING** mode, pads will be softly back-lit. only if they are filled with the current note, displayed on the screen. When copying steps, **copy** will only copy current notes. The same behavior is true for **paste**, transpose, move horizontally, and for **velocity**, width, offset quick edits.

To switch to **MONO EDITING**, press • (rec led will light up). Mono editing is useful for controlling tracks controlling monophonic instruments. Mono editing works similar to a classic step sequencer. Steps are softly back-lit. if they are filled. You can't add multiple notes on a single step; all notes of the track are stacked. If you copy some steps, the copy will be effective for all the notes in selection. The same behavior is true for paste, transpose, move horizontally, and for velocity, width, offset quick edits.

**TIP** Switch to **MONO EDITING** to have a global view of which of the 16 steps are filled with notes. If you press a filled step, it will remove all notes in this step. **TIP** Long press a step (if **MONO EDITING** is enabled) to auto-select the note nearest to the step. For example if a step contains a C2 and a C3 note, and if the current note of the piano roll is C4, a long press will select note C3. This is a very handy way to quickly view or edit a note on a step.

#### Note parameters: velocity, width, offset

When you add a note on a step, the step is filled with its **3 current parameters**: velocity, note width and offset. Default velocity is **100**, default note width is **1 step** and default offset is **0%**.

This means that by default notes will fill a step from its start to its end. Note duration depends on zoom and time signature. If zoom = 1x (100%) and note width = 1, a new note will be a quarter note (because the 16 steps represent 16 quarter notes). If zoom = 4x (400%) and note width = 1, the new note will be a sixteenth note (because the 16 steps now represent 16 sixteenth notes). You can play with the zoom shortcut to edit your track with a high degree of resolution!

#### SET NOTE VELOCITY

To change default note velocity, hold velocity and rotate • (from 0 to 127):

**496 31 |4**0% |

*TIP* Double tap a step pad **ITITITI** to add a low velocity note to quickly create accents.

#### SET NOTE WIDTH

By default notes are played the entire width of a step. To change the default note width, hold width and rotate

(from 1/32 of a step to 16 steps):

#### **⊿96 64 10**%

TIP Using a note width longer than 1 step is an easy way to create slides on monophonic instruments.

#### SET NOTE OFFSET

Each note starts at the beginning of a step. To change the default offset, hold offset and rotate • (from 0% to 99% of a step):

**⊿96 |24 £55%** 

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When you hold a step (or when you hold two steps to select a row of steps), the screen displays the note parameters of the selection:



Note velocities ranges from 60 to 120, note width ranges from 1 step to 4 steps, note offset ranges from 0% to 45%.

With one or more steps held, you can quickly edit selected note parameters:

- Rotate encoder 1 to transpose notes
- Rotate encoder 2 to transpose notes, by octaves
- Rotate encoder 3 to increase/decrease velocity
- Rotate encoder 4 to increase/decrease note width
- Rotate encoder 5 to increase/decrease note offset
- Press < or > to move the selected steps horizontally

*TIP* In **POLY EDITING** mode, only the currently selected note will be edited. In **MONO EDITING** mode, all selected notes will be edited. *TIP* Hold **O** to select the entire track, instead of pressing the first and the last step. For example, hold **O** and rotate **1** to transpose all notes.

#### Enter notes with an external keyboard

Use your external keyboard to quickly set the note on a currently selected step, or even enter a chord.

A step can be filled with a note received at the MIDI input, (for example C3♯). You can also play a chord with your external keyboard (for example C2+2) instead of a note. So you can fill your step sequence with custom chords:



**TIP** You can also press a keypad **\*\*\*\*\*\*** while holding • to directly select the note. Select multiple notes to quickly create a custom chord. Pressing < or > while holding • allows you to jump octaves.

#### Mute a step

Press **2ND** + a step **\*\*\*\*\*\*** to mute/un-mute notes in this step.

In **POLY EDITING** mode, you will mute only the selected note of the step. In **MONO EDITING** mode, you will mute all notes of the step.

Muted steps are softly highlighted.

Press DISP to view the piano roll sequencer:



An example of a track, programmed with notes of different lengths. You are viewing page 1 (of 1 page). The current note is C4, current velocity is 127, current note length is 4 steps and the current offset is 0%. If you press a step to add a note, the new note will be added with these parameters.

This is a great way to see the notes you are editing. For example:

In POLY EDITING, hold O and rotate • to transpose the current notes of the track (e.g. all C4 notes).



In **POLY EDITING**, hold a step **IIIIIIII** and rotate **S** to transpose the current note of the step.



In **MONO EDITING**, hold **O** and rotate **S** to transpose all notes of the track.



In **MONO EDITING**, hold a step **IIIIIII** and rotate **•** to transpose all notes of the step.



TIP Press STEP to go to the nearest note. Press STEP again to go to the next nearest note.

## **Chord Stepmode**

This mode is similar to Note Stepmode except the steps are filled with chords.

🛛 STEP 🛛		
IR 01 🖸		CHORD
⊗a01	120.	3
55 01	<u>84</u> J4/4	CHAJ
** UI	<b>⊿10</b> 4   <b>2</b> 1	<b> 4</b> 0%
		[4

#### Add chords

Select a chord degree on the screen with .



TIP Hold 2ND and rotate • to change the chord tonality (root note).

Press a step **IIIIIIII** to fill it with a chord. A step filled with a chord is semi-highlighted.

TIP Preview to the selected chord by pressing •.

You can add one chord per step. If you add a chord to a step that has already been filled, the previous chord will be replaced with the new one.

There are 7 chord degrees across the 10 octaves:

#### I, II, III, IV, V, VI, VII

These are the same chords you will find on the Live Mode's chord smartpads (chord degree I is smartpad 1, chord degree III is smartpad 3, etc.)

The chord tonality (by default **CMAJ**) and the chord complexity (by default **3**) can be set in Live Mode using the chord smartpads.

Note: see the Live Mode section of the manual for further details about chord generation.

Quick step edits: velocity, width, offset, transpose, move horizontally

As in Note Stepmode, you can edit the velocity, width and offset of the chord, move the chord horizontally, and even chromatically transpose the chord.

#### Piano roll

Press DISP to view the piano roll sequencer:



An example of a track, programmed with chords of different lengths. You are viewing page 1 of 1 page. The selected chord is III3, the current velocity is 100, the current note length is 1 steps and the current offset is 0%.

## **Euclid Stepmode**

Ø STEP	
TR 01 🖸	
@a01	12U.0 U4
<sup>5€</sup> 01	_44/4 ≈16 +4 104  350  40
	<u>- 10 1 1000 140</u> 04

The Euclidean sequencer provides one of the most intuitive ways to create uncommon and rich rhythmic patterns.

Originally derived from nuclear physics, and then applied to music theory, an Euclidean algorithm evenly generates distributed notes (fills) among a defined number of available slots (steps).



This leads to a great number of well-known rhythm patterns, as well as many odd-sounding ones. Almost all traditional rhythms from across the world can be generated with this tool, which is why we decided to implement on the Pyramid.

The EUCLID stepmode takes exclusive control of the track player. You can't use it together with NOTE and CHORD stepmodes. When you change stepmodes, EUCLID is activated at the STEP pad release, and NOTE + CHORD stepmodes are disabled. As soon as you switch to NOTE, CHORD, CC MESSAGES or EFFECTS stepmodes, EUCLID is disabled again.

Hold euclid step and rotate to select the number of notes in your pattern. Hold euclid fills and rotate • to select the number of steps in your pattern.

Press 2ND+< or 2ND+> to rotate the pattern.

• 16 +4
By default, there are 16 euclid steps (1 bar) and 4 euclid fills.

Turn ● to change the triggered note (for example **C3**♯) and use **note width** to change the gate.

Press DISP to view the Euclidean circle:



**TIP** Steps that are filled with notes are displayed on the pads. You can press a step **TIP** to add or remove steps and thus create your own pattern.

Create multiple euclidean tracks to generate complex rhythmic patterns. Each pattern will be 1 bar or shorter in length, but if each bar is a different length, they will shift against each other creating a constantly changing loop.

**TIP** Decrease the time signature's lower number to multiply the euclidean pattern length (only if *SETTINGS* > *MISC* > *SIGNATURE* = *POLYRHYTHMS*). By default the time signature of a euclidean track is 4/16 (1 bar long) but you can set a 4/8 time signature (2 bars long), a 4/4 time signature (4 bars long)...

#### Note learn with a keyboard

Use your external keyboard to set a note, or even a chord, from any mode!

The euclidean note can be filled with a note received on the MIDI input, (for example C3♯). You can also perform a chord with your external keyboard (for example C2+2) instead of a note. So you can create an euclidean pattern with custom chords.

**TIP** You can also press a keypad **\*\*\*\*\*\*** while holding • to directly select the note. Select multiple notes to quickly create a custom chord. Pressing < or > while holding • allows you to jump octaves.

### CC message Stepmode

This stepmode allows you to create MIDI constant controller automation.

111111
CHI
<b>~</b>
:
04

#### Create step automation

Use • to select a CC message (0 to 119), PITCH BEND, PRESSURE or PROGRAM CHANGE you want to automate. Hold **2ND** and rotate • to scroll the CC list faster:



PITCH BEND message is selected, the current value is 63

Now you can fill steps with the selected CC message. Hold velocity and rotate • (or hold velocity and slide the touchpad  $\Box$  from left to right) to select a CC value, from 0 to 127:



PITCH BEND automation is selected, the current value is 127 (if you press a step, a pitch=127 message will be added)

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Continue to hold velocity while activating step pads **IIIIIIII** to create steps with different CC values.

At any time, press **DISP** to display automation:



A 16-step automation of the PITCH BEND message. The dotted line represent the current CC value.

**TIP** Press ASSIGN to activate ENCODER STEP EDIT. This allows you to select the current CC value directly with the touchpad X axis — or with the encoder **3**.

This stepmode can also be used to display and edit automation recorded in live mode, for example CC10 value performed with the touchpad:



A live recorded automation of the CC10 (PAN) message.

As in other stepmodes, you can zoom to increase the step resolution and navigate the automation pages with < and > :



A live recorded automation of the CC10 (PAN), zoomed.

You can create an infinite number of automation on the same track. Rotate • to select another CC message and program another automation!

*TIP* Press the menu encoder to "preview" the current CC value (displayed as a dotted line). *TIP* Press **STEP** to go to the nearest CC automation. Press **STEP** again to go to the next nearest CC automation.

#### **Draw automation**

Hold • while sliding your finger over the touchpad to draw a CC automation. This technique is very useful for quickly experimenting with complex automation.



Each new automation will delete the last automation drawn.

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Hold a step **HEREN** and rotate the encoder **3** to increase or decrease the step's automation. Very useful for quickly creating step-lock automation.

You can also increase or decrease a row of steps **...**, by pressing the first and last step, and rotating encoder **3**.

TIP Hold O and rotate encoder 3 to equally increase or decrease all the values of an existing CC automation.

## **Effects Stepmode**

This stepmode allows you to create FX parameters automation. First, you need to add at least one effect with the FX manager on the current track, for example an arpeggiator.

ØSTEP		
TR 01 🖸		EFFECTE
	120.	ARPE
© A 01	8 <b>4</b> J4/4	RATE
°° <b>01</b>		FX#1/16
		04

Create step automation

In EFFECTS stepmode, select the effect parameter you want to automate by rotating • :

**ERREGGIAT** RRPEGGIAT RATE

#### F841/4

ARPEGGIATOR effect: RATE parameter is selected, the current parameter value is 1/4

Now you can fill steps with FX parameters. To choose the parameter value, hold velocity and rotate • (or hold velocity and slide the touchpad if from left to right):

**HARANA** Arpeggiat Rate

#### F841/32

ARPEGGIATOR effect : RATE parameter is selected, the current parameter value is 1/32 (if you press a step, a rate=1/32 message will be added)

Fill some steps with different parameters values. Press**DISP** to display the automation:



A 16-step automation of the ARPEGGIATOR effect : RATE parameter

**TIP** Press ASSIGN to activate ENCODER STEP EDIT. You can now select the current FX value directly using the touchpad X axis — or with encoder **3**.

As in other stepmodes, you can zoom to increase the step resolution and navigate the automation pages with < and > to create a complex automation:



A 64-step automation of the QUANTIZER effect : GRID parameter

This stepmode can also be used to display and edit automation recorded in live mode, for example a swing automation performed with an encoder:



0\_\_\_6\_\_.

You can create an infinite number of automation on the same track. Rotate • to select another effect parameter and program another automation!

#### Draw an automation

Hold O while moving your finger across the touchpad to draw FX automation. Very useful for experimenting with complex automation!

Newly drawn automation replaces all prior automation on that track.

#### **Step-lock automation**

Hold a step **HEATTON** and rotate **3** to increase or decrease that step's automation value. Very useful for quickly creating step-lock automation.

You can also edit FX parameters on a sequential range of steps **BEFERE**. Select a range of steps by holding the first and last step and rotate **3**.

TIP Hold O and rotate 3 to increase or decrease the whole existing FX automation.

## Rotate

In all stepmodes (NOTE, CHORD, EUCLID, EFFECTS, CC MESSAGES) press 2ND +< or 2ND +> to shift the track notes or the track automation one step left or right.

Zooming in changes the track resolution (step length) and allows you to rotate your track with increasing precision.

TIP Press 2ND and hold < or > to quickly rotate your track.

## Duplicate

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In stepmodes **NOTE**, **CHORD**, **EFFECTS** or **CC MESSAGES**, hold **TRACK** + **length** and press < or > to duplicate or divide the track.

For example, if your track is 4 bars long, holding TRACK + length and pressing > will duplicate the track creating a pattern 8 bars long. Notes and automation will be pasted.

Note: this feature can use a lot of processing resources and memory.

# Copy/Paste

Press 2ND + copy to copy all events of the current page (even if POLY EDITING is set, it will copy all notes).

Press **2ND** + **copy** + any step **\*\*\*\*\*\*\*** to copy all events contained in a step.

You can copy multiple steps by pressing **2ND** + **copy** + the first and the last steps **better** of your selection.

Then you can paste notes and automation in the current track or in another track. Press **2ND** + **paste** + the step **.** You can also simply press **2ND** + **paste** to start the paste from the first step.

Note: copy/paste is not available in EUCLID stepmode.

## Delete

Press 2ND + delete to delete all events contained in the 16 steps of the current page.

Note: delete is not available in EUCLID stepmode.

## Encoder step edit

At start-up, the 5 encoders ••••• can be assigned to a CC or FX parameter, in every mode. But they can do more. In STEP mode, you can directly assign each of the 5 encoders and the touchpad to step shortcuts.

Simply press ASSIGN to enable the "ENCODER STEP EDIT" FEATURE:



This is a great way to edit your notes and automation, you no longer have to rotate • while pressing a green shortcut.

In stepmode NOTE, encoders & touchpad will control:

- 1 note
- 2 note octave
- 3 note velocity
- 4 note width
- 5 note offset

touchpad X note velocity

In stepmode CHORD, encoders & touchpad will control:

1 chord degree

2 chord tonality

3 chord velocity

4 chord width

5 chord offset

touchpad X chord velocity

In stepmode **EUCLID**, encoders & touchpad will control:

euclid steps
 euclid fills
 euclid velocity
 euclid gate length
 rotate
 touchpad X euclid velocity

In stepmode CC, encoders & touchpad will control:

3 CC value touchpad X CC value

In stepmode EFFECTS, encoders & touchpad will control:

3 FX value

touchpad X FX value

TIP In LIVE mode, you can also use the touchpad to set the velocity of the keyboard and the smartpads.

Press ASSIGN again to disable these shortcuts.

## Filter

In NOTE and CC MESSAGES stepmodes, press **2ND** + **STEP** to activate the filter. The filter allows you to scroll only through programmed notes or CC messages. A pop-up is displayed for a few moments:



For example, in NOTE stepmode, rotating • will jump to the next programmed note (e.g. D4), useful if using a wide range of notes. In CC MESSAGES stepmode, rotating • will jump to the next CC automation (e.g. Program Change).

When the filter is activated, a circle pictograph is displayed next to the stepmode name:



Press **2ND** + **STEP** to exit the filter mode.

TIP Without activating the filter mode, you can also jump to the next note by simply pressing STEP.

# **Player tracking**

The viewed page (viewed bars on the 16 pads) will auto-follow the player position if you press **2ND** + **DISP**. Useful if you are working on multiple pages.



# **Chapter 6: Track mode**

# 🗮 Track mode

Track Mode has four purposes:

to configure the current track (midi channel, zoom, length, time signature) using the shortcuts before playing in Live Mode or programming in Step Mode.

2 to mute/un-mute the 64 tracks using the 16 pads and < >. This tactile, intuitive method allows you to perform songs on the fly.

**3** to manage your track PATTERNS.

4 to build your current sequence (a set of the 64 muted/un-muted tracks).

## Screen



This display shows that TR01A is selected (current track) and contains notes, effects, CC automation and FX automation.

Sequence SE01 groups 6 un-muted tracks of bank A: TR01A, TR02A, TR05A, TR08A, TR12A and TR15A. The other tracks are muted or empty.

# Pads



## Mute/un-mute tracks on the fly

Press one of the 16 pads **E** to mute or un-mute a track in the current BANK. Change the current BANK (A/B/C/D) with < and >.

An empty track (without notes, effects or automation) can't be muted.

When the sequencer is playing, tracks evolve in parallel even if they are muted: this enhances your ability to perform with them.

In the example below, 3 tracks are un-muted, 2 tracks are muted and all tracks have the same length:



Tracks of different lengths are played simultaneously; shorter tracks will repeat before the others:



**TIP** Use different track lengths (for example 2 bars, 4 bars and 6 bars) to create a non-repetitive, evolving sequence.

#### Mute/un-mute in sync

Mute/un-mute changes are in sync, depending on the **PERFORM** type selected in **SEQ** mode:

BPH 120.0 Interform Interf	BPH 120.0 Interform Delay Loop		BPH 120.0 DPLAU LOOP
--	---	--	-------------------------------

For example, if you un-mute the track 01, this track will be activated at the beginning of the next bar (if **PERFORM = 1BAR** in **SEQ** mode). This allows you to play tracks by changing mute states in perfect sync.

To mute/un-mute tracks instantly, select **PERFORM** = **INST** in SEQ mode.

**TIP** SETTINGS > MISC > TRACKMUTE DELAY allows you to specify that tracks mute/un-mute in sync by selecting "**SEQ PERFORM**" or mute/un-mute instantly by selecting "**INST**" **TIP**You can always mute/un-mute a track instantly by pressing **2ND** + its corresponding pad **INST**.

## Mute/un-mute tracks to create sequences

A sequence is a set of 64 tracks, muted or un-muted. To build a sequence, mute and un-mute tracks using the 16 smartpads **\*\*\*\*\*\*\*** and < >.

For example in **SE01**, only TR02A is un-muted. In **SE02**, TR02A and TR11A are un-muted. In **SE03**, TR01A, TR06A and TR15A are un-muted:

SE01	01 02 03 04 05 06 07 08 track 09 10 11 12 13 14 15 16 track 01 02 03 04 05 06 07 08 track bank A
SE02	01 02 03 04 05 06 07 08 track 09 10 11 12 13 14 15 16 track 01 02 03 04 05 06 07 08 track bank B
SE03	01 02 03 04 05 06 07 08 track 09 10 11 12 13 14 15 16 track 01 02 03 04 05 06 07 08 track bank B

Once you have created your sequences, jump in Seq Mode to launch them, or program a chain of sequences to create a complete structured song.

### Save mute states OFF

By default, track mute states changes are saved in the current sequence (**REC** o is lit). If you mute or un-mute a track, the sequence will save the mute states.



Press **REC** • to disable saving sequence mute states (REC led will be OFF). If you mute or un-mute a track, the sequence will not save the mute states. This allows you to mute and un-mute tracks in TRACK mode, without losing your sequence's track states. Switching a sequence restores it to its "default" state.

## Track options (2ND+TRACK)

Press 2ND + TRACK to enter the track options display:

OLIVE			
18 O1 🖸	MAHE		COMS
⊗¤01		RM 🗌 TRSI	P 🕨 RUM
<sup>se</sup> 01	0 PC	⊖ <sup>HSB</sup>	€ <sup>L58</sup>
ŏ			01

Press 2ND to exit.

Track name

Each of the 64 tracks can be named.

Click NAME to name your track:

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### **Call instruments**

On any track, you can "call" an instrument (defined in the .txt file). It will auto-set the track name, the track channel and the track output.

To know how to use this feature, please refer to the section of the manual titled "Call an instrument."

#### Consolidate

On any track, you can "consolidate" effects, which freezes the notes and CC messages recorded. Consolidating a track will also consolidate that track's patterns. After the consolidate, all the effects will be removed.

You can even consolidate an euclidean track, in order to get the euclid pattern inside the classic stepmode NOTE.

To consolidate a track, click CONS:

OLIVE			
™ 01 E	MAHE		CONS
©¤01	Порти	1 TRS	P 🕨 RUM
<sup>5€</sup> 01	O PC	$\Theta^{\text{HSB}}_{}$	€LSB
ŏ			01

Then select the destination track with the menu encoder (can be the current track, or an empty track):



If you select the current track, this track will be definitely deleted and replaced by its consolidated version.

Track run mode

Click RUN to set the track run mode:



See the "Track run modes: FREE, RELATCH & TRIG" section of the manual.

Track transpose

Click TRSP to enable/disable track transpose:

OLIVE			
TR 01 🖸	MAHE		COMS
®¤01		M <u>TRS</u>	P 🕨 RUM
<sup>s</sup> 01	O	$\Theta_{}^{\rm HSB}$	$\Theta_{}^{LSB}$
Ō			01

Set if the track can be transposed in real time with a MASTER TRANSPOSE track (see the "Midi Channel" section of the manual). You can also transpose this track with an external keyboard (when *SETTINGS > MIDI IN > ASSIGN NOTE TO = MASTER TRANSPOSE*).

### **Track patterns**

Click PTRN to enable/disable PATTERNS on this track:

OLIVE			
1º 01 🖸	MAHE		COMS
®¤01		IM 🗌 TRSI	P 🕨 RUM
<sup>₅</sup> 01	O	$\Theta_{}^{\rm HSB}$	€LSB
Ō			01

Each track can include up to 32 patterns (variation of notes, CC automation, FX automation, euclidean engine).

### Track PC + bank

Rotate encoder 1 to set the track PROGRAM CHANGE, rotate encoder 2 to set the track BANK MSB, rotate encoder 3 to set the track BANK LSB:

OLIVE			
<sup>TR</sup> O1 🖸	MAHE		COMS
⊗a01		M 🗌 TRSI	P 🕨 RUM
<sup>s</sup> 01	O 00	⊖ <sup>H58</sup> 06	€ L58 05
Ō			<b>E1</b>

Each track and each pattern can have its own PC and BANK.

## Solo a track

Hold **solo** and select a track with the pads **TETTER** to solo a track.

To cancel solo, press any track

## Midi Channel

Pyramid includes two midi outputs, one USB midi output and one CV/Gate (analog) output.

Each midi output provides 16 channels, which means that you can control up to 16 electronic musical instruments per midi output.

Hold channel and rotate • to select the channel and the midi output of the track.

TIP Hold channel and press and rotate • to select the midi output of the track.

A message pops up, displaying the selected output type (CV, MIDI A, MIDI B, USB) and channel number:

TR 01 🖸	CV HIDIA HIDIB USB J±
S € 04	~ 4
<sup>₅</sup> 01	O CHRNNEL U4

You can link the track to two different outputs, for example both MIDI A and MIDI B or CV and USB.



You can also select the J± MASTER TRANSPOSE icon. In this case, this track can be used to transpose any track with TRSP enabled (in 2ND+TRACK display):

TR 01 🖸	CV HIDIA HIDIB USB J±
J±	HASTER
<sup>se</sup> 01	<b>O TRANŠPOSE</b>

The output channel is always displayed under the track number.

TIP While channel is pressed:

- rotate encoder 1 to set the CV/GATE output
- rotate encoder 2 to set the MIDI A channel
- rotate encoder 3 to set the MIDI B channel
- rotate encoder 4 to set the USB channel
- rotate encoder 5 to set MASTER TRANSPOSE

Note: DIN sync output (also called SYNC24) is available on the MIDI port B. You can enable and configure it using the Settings menu. TIP You can also assign the CV output **ENV** to notes (pitch or gate): hold channel and rotate left • while pressing it. Select "NOTE ENV" to output the pitch of notes to the ENV output (1V/octave). Select "GATE ENV" to only output the gate of notes (useful to trig external drum for example).

## Zoom

Hold zoom and rotate • to set the resolution, from 1x (100%) to 16x (1600%):



- 1x zoom: 1 step = quarter note
- 2x zoom: 1 step = eighth note
- 4x zoom: 1 step = sixteenth note (default)
- 8x zoom: 1 step = thirty-second note
- 16x zoom: 1 step = sixty-four note (useful to surgically edit your track ).

You can also set lower resolutions to have a global view of your track:

- /2 zoom: 1 step = half note
- /4 zoom: 1 step = whole note

TIP While zoom is pressed: press a pad (from 01 to 07) to quickly set the track zoom (from /4 to 16x).

Note: please read the "Step Mode section "Track player: pages, zoom and length" for further details about the zoom feature.

## Length

Hold length and rotate • to increase or decrease a track's length in bars:

TR 01 🖸	¥		Ĩ		3	Ĩ	Ĭ		Ĩ	Ħ
♥B+USB 04		6AR	5: '	4				 		
<sup>₅</sup> 01		STE	P5	:64	<u> </u>					

A length of 4 bars = 64 steps in 4x zoom

™01 🖸	
👁 8+USB 04	6885: <b>64</b>
<sup>se</sup> 01	STEP5:1024

A length of 64 bars = 1024 steps in 4x zoom

Hold length and press and rotate • to set the track's length with step precision:

TR 01 🖸	
👁 8+USB 04	BAR5: 24
<sup>s</sup> 01	STEP5:36

A length of 2 bars + 1 quarter-note = 36 steps in 4x zoom

TR 01 🖸		₩
👁 8+USB 04	BARS: <b>O</b> '4	
<sup>₅</sup> 01	STEP5:4	

A length of 0 bar + 1 quarter-note = 4 steps in 4x zoom

*TIP* While length is pressed: press a pad (from 01 to 16) to quickly set the track length (from 1 to 16 bars).

TIP Bear in mind that you can, in every mode, hold TRACK to activate the following shortcuts:

solo midi channel zoom length time signature

## Copy/Paste/Delete a track

Press **2ND** + **copy** + a track **to copy** it.

Press 2ND + paste + a track to paste it.

TIP Copy saves track settings + notes + automation + effects.

## How to use PATTERNS

A pattern is a track variation. In each track, you can create up to 32 patterns (from P1 to P32):



Each pattern includes its own notes, CC automation, FX automation and euclidean engine. A pattern can also have its own length, time signature, run mode, and default PC/BANK message.

First, enable patterns on the selected track. Press **2ND** + **TRACK** and enable **PTRN**:

OLIVE 📕	PI		
TR 01 🖸	MA	HE [	FRUM
<b>⊗</b> ¤01			TRSP
<sup>₅</sup> 01	O	⊖ <sup>HSB</sup>	$\Theta_{}^{LSB}$
ŏ			01

The pattern number is always displayed next to the track name: by default the active pattern is 🔳 .

Now you can fill your track patterns with notes and automation, change each pattern length, time signature and run mode. Each track's effects (for e.g. quantizer, swing, arp, ...) will affect all patterns of the track.

Finally, if you use **SEQ** mode, you can set in each sequence (**SE01** to **SE32**) a different pattern (**P1** to **P32**):



**TIP** If you enable SETTINGS > MISC > AUTO PATTERN = AT NEW SEQ, all patterns will follow the selected sequence. For example, if you select **SE07**, all current patterns will be auto set to **P7**. This is an easy way to start from scratch at each new sequence selection.

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### Trackmode PATTERNS

To enter the trackmode PATTERNS, press **STEP** + **TRACK**:

≝ TRACK <b>⊿</b> PI	
18 O1 🖸	
<b>⊗</b> ¤ 01	
<sup>se</sup> 01	
Ĭ	01

This track has 1 pattern. P1 is now playing and includes only notes.

🗄 TRACK 🖌 PI	5	
18 O1 🖸		
© A 01	PATTERN	
°° 01	HOTE	
Ť		6

This track has 6 patterns. P5 is now playing and includes notes and CC automation.

Select the pattern to be played with the 16 pads **EXEMPTIN**. By default, pattern changes are in sync, depending on the **PERFORM** type set in **SEQ** mode. *SETTINGS > MISC > PATTERN DELAY* allows you to set an other sync delay. You can also select the played pattern by holding **STEP** and pressing a pad **EXEMPTIN**.

Display patterns page 1-16 or 17-32 with < or >.

Press **2ND** + **copy** + a pattern **to copy** it.

- Press **2ND** + **paste** + a pattern **\*\*\*\*\*\*** to paste it.
- Press 2ND + delete + a pattern **\*\*\*\*\*\*\*** to delete it.

To exit the trackmode PATTERNS, simply select an other mode.

**TIP**You can also select a pattern number by holding **STEP** + **TRACK** and pressing a pad **TUTTON**. In this case, if PTRN is disable on the track, it will enable it automatically.

## Time signature and polyrhythms

Create cross-rhythms and pattern variations! The **4**/**4** standard time signature often sounds good, but sequencing with other time signatures is an easy way to add complexity and originality to your songs.

In SETTINGS > MISC > SIGNATURE, you can choose how your track time signature will be interpreted by Pyramid: either Polyrhythms (default) or Polymeters.

If Polyrhythms is selected, Pyramid apply true polyrhythms when different time signatures are used. If you select a 3:4 time signature you will have bars of 3 quarter notes, but the bar will have the same duration as a 4/4 bar. The bar size is the same, but the beat differs.

If Polymeters is selected, all quarter notes remain the same. If you select a 3/4 time signature you will have bars of 3 quarter notes, and each quarter note will have the same length than the 4/4 ones. The length of the bar differ, but the beat unit remains the same. The polymetric mode is easier to understand than the Polyrhythmic one because it doesn't mix several speeds.



The **lower number** works the same in Polyrhythms or Polymeters. By default the time signature's **lower number** is set on **4**, which means "quarter note". It can also be set on **2** "half note", **8** "eighth note" or **16** "sixteenth note" by holding time signature and pressing + rotating • :

TR 01 🖸	
®a01	516" J7/8
<sup>s</sup> 01	STEPS:4

Each increment multiplies or divides the basic /4 bar length by 2:

4 ⁄ 2	
4 / 4	
4 / 8	

### Polyrhythms signature (x:4) (default)

With Pyramid you can mix a **4**/**4** track with a **5:4** track, a **9:4** and a **15:4** track: true polyrhythms! Tracks with different time signatures are synchronized and will loop at the same time, but steps follow their own path. The bar size is the same, but the beat differs. Of course you may still use all functionality such as track length, zoom, offset and effects, as the PyraOs core system is based on Polyrhythm.

The length of a bar is the same whether you set a common 4/4 signature or you choose an odd one such as 15:4. For example, at 120 bpm, a bar in 4/4, 3:4 or 15:4 will last 2 seconds, and all tracks will loop at the same time:

4 / 4	
3:4	
15:4	

The difference is the length of each note. If you increase the time signature's upper number, it will increase the number of beat in one bar: 4/4 means 4 quarter-notes in a bar, 15:4 means 15 quarter-notes in a bar.

Hold **time signature** and rotate • to change the time signature's **upper number** on the current track:



You can adjust the track's length to 4 bars to achieve a 7:4 time signature (28 quarter notes) or any other track length you choose (for example 2 bars + 2/7ths quarter notes).

Polyrhythms signature can also be seen as a way to create tracks with different BPM speeds.

Polymeters signature (x/4)

With this setting, all quarter notes will remain the same as a 4/4 beat, but the length of your loop will be different. Your loops will shift against each other as they play: this is polymetry!

In other words, the length of the bar differ, but the beat unit remains the same.



- The 1st track is a standard 4/4 bar
- The 2nd track is a 3/4 bar (3 quarter notes)
- The 3rd track is a **5**/**4** bar (5 quarter notes)

Hold time signature and rotate • to change the time signature's **upper number** on the current track:

TR 01 🖸	
®¤01	, ‱ , ٦/4
<sup>₅</sup> 01	STEPS:4

# Track length fraction and polymetry

Changing the length of a track is an other way to create polymeters.

Let's say we are working with a 1 bar track and a 4/4 time signature. Each step represents a quarter note.

Hold **length** and press + rotate • to add or remove one quarter note (one step) to the length of the selected Track. This leads to the following possibilities:



- The 1st track is a standard 4/4 bar
- The 2nd track is a 4/4 bar with 1 quarter note removed
- The 3rd track is a 4/4 bar with 1 quarter note added

The length of your loops are different, so they shift against each other as they play. The length of the bar differ, but the beat unit remains the same.

Using polymetric tracks is a good trick to create lively, ever-changing and lengthy sequences. In the following example, the sequence composed of 3 short tracks will get back to its starting point after 15 loops of the standard **4/4** track:



**TIP** Link these 3 tracks to the same midi channel (ie to a unique musical instrument) to create a progressive pattern.

## Irrational rhythms (advanced users)

An irrational rhythm uses step duration that lie outside the scope of the **4/4** system and loop on a different bar length.

Create a polyrhythmic (tracks with different time signatures) and polymetric (tracks with different bar lengths) sequence to experiment irrational rhythms! Both the measure size and the beat differ.

In the example below you get a simple overview of all these concepts for 3 simple tracks:



This sequence will get back to its starting point after 6 loops of the **4**/**4** track. Within the sequence, track quarter-notes are never on time because of the beat phase shift.

## **DISP track view**

Press DISP to display your tracks progressions and easily understand your track polymeters:



This screen displays:

- Track number: from 1 to 16
- Track progression: percentage of the loop being played
- Output: flashes if the track is sending events via MIDI, USB or CV/GATE.

Muted tracks are shaded:



The DISP view displays tracks from TR01 to TR16 of the selected bank.

With DISP activated, the 16 pads flashes when tracks send midi events (notes and CC messages).

### Microstep track Page 53 of 98

To create a **Microstep** track, set the track length on **0+1/4** bar, the zoom to **1600%** and increase the time signature lower number up to **4/16**. The step-by-step player will run at high speed, which is very useful to create drones, black midi and glitch sounds, and to expand the boundaries of your instruments.

# Chapter 7: Seq mode

# II: The Seq Mode

A sequence is a group of active tracks. A sequence saves each 64 tracks "mute state" and "pattern."

After creating your tracks in **LIVE** and **STEP** mode, and assembling them into several sequences in **TRACK** Mode, you are now able to play with sequences.

Seq Mode is the second way to perform your song. Instead of muting/un-muting tracks like you do in Track Mode, Pyramid offers an advanced system of playing sequences:



- PERFORM: launch your sequences on the fly. You can select the delay Pyramid will wait until playing the next sequence (Instant, 1 Beat, 1 Bar, 2 Bar, ... 8 Bar).
- PLAY: play straight through a sequence arrangement (chain) programmed using the project song zone.
- LOOP: loop a sequence arrangement (chain) programmed with the project song zone.

When your sequences are playing, remember that you can still enter TRACK mode to change the mute states of the currently playing sequence; enter LIVE mode or STEP mode to play, rec or program notes and automation on the current track.

## Screen



The sequence progression is displayed (in %). If the current sequence contains a 3 measure track and a 4 measure track, the sequence will be 12 measures long (number of measures after which all tracks restart at the same time again). This progression zone will be 100% filled after 12 measures.

Note: On all 4 modes, Pyramid displays the current sequence and the next sequence to be played if there is one:



## Pads



## How to create and edit sequences

In **TRACK** mode, hold **SEQ III** and select the sequence (from SE01 to SE16) you want to create or edit with one of the 16 pads **III** and select the sequence (from SE01 to SE16) you want to create or edit with

To display sequences from SE17 to SE32, hold SEQ III and press >.

The current sequence number is displayed on the screen:



Mute/un-mute your active tracks to build a sequence. As soon as you make a mute state change, a sequence is created.

**TIP** A sequence saves the mute state of each track, but also the selected pattern of each track. Changing the pattern of a track will also create the sequence.

When selecting an empty sequence, Pyramid will copy the previous mute states, so you can perform your live set without blanks!

Selecting a sequence can only be done with SEQ PERFORM enabled. This action is non available when "PLAY" or "LOOP" is enabled, because the sequencer will play the defined sequence chain (and therefore the selected sequence = the played sequence).

## "PERFORM" project



This mode allows you to build a song from sequences in a free and creative way, while always remaining in sync.

At start-up, **PERFORM** is activated and sequence **SE01** plays in a loop.

Press any sequence number **ITTITUTE** to launch it on the fly. Pyramid waits until the current sequence ends (the end of the bar, if "1 BAR" selected) and then it launches the new sequence right away. The new sequence will then play in a loop until you press another sequence number.

<b>SE01</b>	<b>SE03</b>	<b>SE06</b>	SE02	•
TR01			TRO1	
	TR02		TRO2	
	TR03			
	TRO4		TRO4	
	TR05	TR05	TR05	

In the example above, Pyramid plays the SE01, where only the TR01 is un-muted. Then the user presses SE03 **WWWW** which starts as soon as the SE01 ends. Tracks: TR02, TR03, TR04 and TR05 play together in a loop until the user presses another sequence.

### **PERFORM** delay selection

You can select the delay Pyramid waits before switching to the next sequence.

BPH SPERFORH 120.0	BPH 120.0 DPLAY LOOP	BPH 120.0 DPLR4 LOOP
-----------------------	-------------------------------	-------------------------------

- INST: The next sequence will be launched instantly, without delay.
- BEAT: The next sequence will be launched at the next beat of the current sequence.
- 1 BAR: The next sequence will be launched at the next bar of the current sequence.
- 2 BAR ... 8 BAR: The next sequence will be launched at the modulo (2, 3, 4, 5, 6, 7 or 8 bar) of the current sequence.
- FULL: The next sequence will be launched when the current sequence is fully played (when the sequence progression reaches 100%).

# "PLAY" project

This mode allows you to program a set of sequences to compose a complete song ready to play.

Before enabling **PLAY PROJECT**, you need to design your chain of sequences.

Rotate Sclockwise to highlight the first sequence slot:



Press • to make your selection and rotate • to choose the first sequence to be in the chain, for example **SE03**:

|--|

Press • to confirm and rotate • to choose the number of bars this sequence will play. A sequence can be between 1 and 64 bars long, or it can be shorter than one bar (1/4 bar, 2/4 bar, 3/4 bar...)



For your information, the screen indicates the full length of the sequence. This is the number of bars after which all tracks are perfectly synced again, if using different track lengths. For example a sequence with a 3 bar long track and a 4 bar long track has a total length of 12 bars.

Press 
to confirm:



Repeat this one-handed operation to create a sequence chain as long as you choose, there is no limit to the number of sequences you can chain:

03)01)06)02)1306

Select the **PLAY PROJECT** Submode:

08



The player stops and stands ready to play the programmed sequence chain. Press play HI to launch your project. Once the song is finished, the player stops and waits for another press of HI.

Once the chain is programmed, you can change the number and the length of a sequence, and even move it and delete it.

When Pyramid is playing a chain of sequences:

- Press O to loop the currently played sequence. This sequence will keep running until you press again O.
- Press **2ND** + < or > to jump to the previous/next sequence in the chain.

# "LOOP" project

It's exactly the same mode as the "PLAY" project, except that the sequence arrangement loops, creating an infinite song.

врн <b>120.</b> 0	□PERFORH <sup>i</sup> <u>I BAR</u> □PLA4 ⊠LOOP
----------------------	---

## Note about track lengths concurrence & sequences

One of Pyramid's great features is when switching from one sequence to another a track active in the prior sequence keeps playing from its last position. We call it FREE run mode (enabled by default).

In the example below, you see 4 tracks:



If you play these tracks organized in sequences:

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- TR01 is un-muted in all sequences: it plays fully.
- TR02 is muted in SE02: it replays from the start in SE03.
- TR03 is 6-bar long: it replays from the start in the middle of SE03.
- TR04 is only 1-bar long: it loops in SE04.

# Track run modes: FREE, RELATCH & TRIG

By default tracks play concurrently in FREE run mode. Each track can also be configured in RELATCH or TRIG run modes:

- RELATCH (H icon displayed under TR): when a new sequence starts, the track always restarts at its beginning. It's an easy way to sync tracks.
- TRIG (\*1 icon displayed under TR): track plays once at the beginning of the sequence and does not loop. The track is simply triggered and stops when it reaches its end.

To change the track run mode, press **2ND** + **TRACK** to enter the track options display, and click RUN to set the track run mode:

<b>₽01 ©</b>	땲01 ወ
<b>⊘</b> ¤01	<b>⊘</b> ¤01

TR01A configured as a RELATCH track, and as a TRIG track.

### **RELATCH run mode**

Each of these 4 tracks are configured in RELATCH run mode:



If you play these tracks organized in sequences:

SEO1 4 bars	SEO2 4 bars	SEO3 4 bars	SEO4 4 bars	
н	H	H	н	
н		H	н	
	H	H	H	
			H	

If an active track in the sequence is set to RELATCH, it will always start from the beginning of each sequence, even if the track is not finished yet. In other words, each track restarts at the beginning of each sequence.



Each of these 4 tracks are configured in TRIG run mode:



Now if you play these tracks organized in sequences:

SEO1 4 bars	SEO2 4 bars	SEO3 4 bars	SEO4 4 bars	
F1				
F1		E1		
	E E			
			F1	

If an active track in the sequence is set to TRIG, it will play once without looping. If the track is active in the next sequence, it will continue to play just as in FREE run mode.



A great way to add complexity to your song is to use different run modes for different tracks. Performing sequences just goes one step beyond!

SEO1 4 bars	SEO2 4 bars	SEO3 4 bars	SEO4 4 bars	
	н	н	н	
			M	

## Copy/Paste/Delete a sequence

Press 2ND + copy + a sequence to copy it.

Press 2ND + paste + a sequence to paste it.

TIP Copy saves only tracks mute states.

Press 2ND + delete + a sequence to delete it.

## **DISP seq view**

Press DISP to display all active tracks in the current sequence. A list will also display up to 5 active tracks names + patterns numbers:

<sup>₅</sup> 01	<b>A 1 2 2 4</b> 5 6 7 8 9 10 11 12 13 14 15 16
8855 Synth	B 12345678 910111213141516
EDDRUMS	C 12345678 910111213141516
	I 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Sequence 01 is playing TR01A, TR02A, TR03A and TR04A. The other tracks are empty.

If a track is not named, "..." will be displayed.

# **Chapter 8: Effect manager**

## Effect manager principles

You can add up to 5 real-time MIDI effects per track, from TR01A to TR16D. Notes (played or recorded in **LIVE** mode, or programmed in **STEP** mode) are processed and sent to the outputs in real-time by the effect engines. All the effects are non-destructive.

The position of an effect in the chain is very important: an Harmonizer placed after an Arpeggiator will not sound like an Arpeggiator placed after an Harmonizer. Experiment with the order of effects to generate eccentric melodies. It's also possible to add multiple effects of the same engine on the same track (e.g. chaining two arpeggiators).



Quantize FX is always present on slot 1, and can't be removed. Its default grid can be configured in SETTINGS > MISC > DEFAULT QUANTIZE, so you can decide to power on Pyramid and get a quantize active on each track, very handy for live performances.

With the effect manager activated, you can still play notes and smartpads in LIVE mode even if Pyramid is stopped or paused, very handy for experimenting with effect parameters. You can also add notes in STEP mode, mute/un-mute tracks in TRACK mode, launch sequences in SEQ mode.

Effects compute notes according to the track time signature, so if you change the time signature from 4/4 to 4/8, effects will operate twice as fast.

Finally, all the effect parameters can be edited in real-time using the programmable controllers, even if you are not viewing the FX manager screen. You can even automate parameters in REC mode or by step (parameter locks).

Some examples of midi FX chaining:



# How to add effects to a track

Press FX to display the Effect manager of the current track:



To place an effect in the chain, select one of the 4 free slots and press • :

<u>ARP</u>	HAR ••	<u>5HI</u> ■→%	<u>RAN</u> ? ■→■
DEL	Equ	<u>5CA</u>	<u> </u>
■ X · ■ X ·	- III III-	Ŧ	• <b>→</b> #

Select an effect from the list, for example an arpeggiator, and press • to add it. It is now possible to edit the effect using the 5 encoders ••••• to find a preferred setting:

TRA 01A ARPEGGIATOR EDIT		
<b>O</b> ENR6LE	ON	
OSTYLE	UP/DOWN	
€GATE	132%	
ORATE	1/12	
<b>GOCTAVE</b>	+2	

*TIP* In **LIVE** mode, when you are editing an effect using the 5 encoders ••••••, press rec **O** to directly record effect parameter automation.

Press again • to go back to the FX manager. Repeat this operation to fill up to 5 slots:

EFFECT MANAGER				
TROJA	]		[	ню оот
<u> PUA</u>	ARP	HAR	<u>5HI</u>	RAN
l+∎		┤╻ <sub>→</sub> ┇╎	<b> </b> ∎+%	·→²
0	Θ	Θ	0	Θ

A disabled effect is grayed out (in the screen below, the effect CC is disabled):

EFFECT MANAGER				
TROJA	]		[	HIDI OUT
QUA	DEL	Equ	<u>SCA</u>	
14-	∎ו	հանտե	<u>_</u>	
	∎×· A	1	<u>،</u>	
	Θ	E E	<u>v</u>	

To exit the effect manager, press FX.

## Other tools

Rotating • while pressing **2ND** allows you change the position of the selected effect. The Quantizer can't be moved:

EFFECT MANAGER				
TROIA			[	ню опт
<u>PUA</u>	HAR	ARP	ARP	SHI
I+•	┤╻ <sub>→</sub> ┇╎			•+%
0	Θ	Θ	0	Θ

Edit, delete or replace an effect by selecting it with • :

TRA D1A ARPEG	GIATOR EDIT
<b>O</b> ENRBLE	ON
OSTYLE	UP/DOWN
€GATE	132%
ORATE	1/12
<b>GOETAVE</b>	+2

Quick FX selection:

- Press encoder 1 to enter the edit view of effect 1
- Press encoder 2 to enter the edit view of effect 2
- Press encoder 3 to enter the edit view of effect 3
- Press encoder 4 to enter the edit view of effect 4
- Press encoder 5 to enter the edit view of effect 5

Quick FX enable/disable:

- Press 2ND + 1 to turn on/off effect 1
- Press 2ND + 2 to turn on/off effect 2
- Press 2ND + 3 to turn on/off effect 3
- Press 2ND + 4 to turn on/off effect 4
- Press 2ND + 5 to turn on/off effect 5

**TIP** Selecting another track with **TRACK** + **TRACK** does not exit the FX manager, useful to check if effects are added in the other tracks.

# **Chapter 9: Effect list**

# Quantizer / humanizer

Eliminates or adds note imprecision to your performance or step note edits.

<b>TOO 030</b>	QUANTIZER HUMANIZER	
188.058	UUHNIIZEK NUCHNIZEK	
	+81011112211 1181 1111112211	

<b>O</b> ENRBLE	ON
OGRID	1/15
€HUMAN-	<b></b> 0X
OHUMAN+	<b></b> 0X
<b>GLEGATO</b>	

### ENABLE ON OFF

Activate/disable the quantizer / humanizer engine.

### GRID 1/4 1/6 1/8 1/12 1/16 1/24 1/32

Amount of quantization. A grid of 1/4 bar will move notes (forward or backwards) to the nearest beat.

### HUMAN- 0% ... 100%

Amount of humanization advance. Moves notes backwards (millisecond level) randomly, to mimic the "organic" human playing.

### HUMAN+ 0% ... 100%

Amount of humanization delay. Moves notes forward (millisecond level) randomly, to mimic the "organic" human playing.

## LEGATO OFF ON

Allows to lengthen (a few ppqn) all notes of the tracks, and create a glide/legato effect on some mono synths. Useful when you record a performance in LIVE mode, but the recording do not preserve the legato of your performance.

## Arpeggiator

Turns notes and chords into running patterns.

### TRA 01A ARPEGGIATOR EDIT

<b>O</b> ENRBLE	ON DI
OSTYLE	L I I I I I I I I I I I I I I I I I I I
<b>€</b> GATE	<b>5</b> 0
ORATE	1/4
<b>GOCTAVE</b>	

**ENABLE** ON OFF Activate/disable the arpeggiator engine.

### STYLE UP DOWN UP/DOWN RANDOM ASSIGN DOUBLE

OCT UP UP DOWN DRUNK FIFTHS ONE TWO SILENCE RUNNER DISCO MARBLE RHYTHM1 RHYTHM2 RHYTHM3

Direction of the arpeggiated pattern.

- UP: plays notes from the lowest note to highest.
- **DOWN:** plays notes from the highest note to lowest.
- UP DOWN: plays notes from the lowest note to highest, then to from highest to the lowest.
- RANDOM: plays notes in a random order.
- **ASSIGN:** plays notes in the order they were played.
- DOUBLE: notes are played twice with different velocities.
- OCT UP: each note is followed by the same note, shifted one octave up.
- OCT DOWN: each note is followed by the same note, shifted one octave down.

- **DRUNK:** plays the three first notes, then plays three notes starting on the second note, and so forth, in a circular fashion.

- FIFTHS: each note is immediately followed by its fifths.
- **ONE TWO:** one note out of two is played twice.
- SILENCE: one note out of two is a silence.
- RUNNER: the pattern is played up and down alternatively.
- **DISCO:** the first hit note will be played between every other inputed notes.

- MARBLE: emulates a bouncing marble ball. The velocity decrease over time. Rate value of 1/64 is advised.

- **RHYTHM 1/2/3:** these three arp styles are custom rhythms, with fixed lengths. They contain silences and velocity variations.

GATE 1% ... 200%

Pattern note lengths, depends on the rate.

### RATE 1/4 ... 1/64

Speed of the pattern. A rate of 1/4 will play a note of the arpeggio every beat.

## OCTAVE -5 ... +5

To create octaves progression. If **OCTAVE=1** the arpeggiator will play the original pattern, followed by the same pattern one octave higher. If **OCTAVE=-2** the arpeggiator will play the original pattern, followed by the same pattern one octave lower, followed by the same pattern two octaves lower.

## Harmonizer

Turns notes into chords.

### TRA 01A HARMONIZER EDIT

<b>O</b> ENABLE	ON DI
Oharho 1	+12
€HARHD 2	+6
OHARHO 3	-6
GHARHO 4	-3

**ENABLE** ON OFF Activate/disable the harmonizer engine.

### HARMO1 -24 ... +24

Add an extra note simultaneously with the sequenced note according to the selected interval (harmonic). If **HARMO1=12**, a note will be generated one octave higher. If **HARMO1=NO**, no note will be added.

HARMO2 -24 ... +24 Add a second extra note.

HARMO3 -24 ... +24 Add a third extra note.

HARMO4 -24 ... +24 Add a fourth extra note.

## Swing

Swing notes to create groove rhythms and easily go "off the grid".

TRR 01R SH	ING EDIT
<b>O</b> ENRBLE	OH OH
<b>OPERCENT</b>	63
€grid	1/16
OVELOCITY	DO 🗖 🗖

### **ENABLE** ON OFF Activate/disable the swing engine.

### PERCENT 50% ... 99%

Percentage of swing (delay the position of every second point in the quantization grid). **50%** (default) has no effect on notes position.

GRID 1/1 ... 1/64 Swing quantization grid, to define positions of second points. Most common grids are 1/8 and 1/16.

### VELOCITY 0% ... 100%

Amount of swing accent. **50%** (default) has no effect on notes volume. Decrease this parameter to accentuate the first note. Increase it to accentuate the second note.

## Randomizer

Randomly changes notes parameters (velocity, pitch or length).

TRA 01A RE	INDOHIZER EDIT
<b>O</b> ENRBLE	DN
OPARAH	
€RANDOH-	13
ORANDOM+	18

**ENABLE** ON OFF Activate/disable the randomizer engine.

### PARAM VELOCITY PITCH OCTAVE NOTE LENGTH

If VELOCITY selected, each note velocity will be randomized. If PITCH selected, each note pitch will be randomized. If OCTAVE selected, each note pitch will be randomized to an other octave. If NOTE LENGTH selected, each note length will set to the GRID parameter, and then randomized.

### RANDOM- 0% ... 100%

Negative amount of randomization. **0%** (default) has no effect on notes. **100%** set the maximum range of negative randomization.

### RANDOM+ 0% ... 100%

Positive amount of randomization. **0%** (default) has no effect on notes. **100%** set the maximum range of positive randomization.

All random-based FX (Humanizer, Randomizer, Chance, Arpeggiator) utilize a true random number generator (TRNG) algorithm!

## GRID 1/32 ... 16

### (available if PARAM = NOTE LENGTH)

Re-sizes all notes of the track to the selected grid, before the note length randomization.

### CHANCE 100% ... 0%

### (available if PARAM = VELOCITY/PITCH/OCTAVE)

Add a probability to randomize or not the parameters VELOCITY, PITCH or OCTAVE.

## Delay

MIDI delay creates a copy of entered notes, simulating a standard delay effect, but using velocity MIDI data.

TRA 02A DELAY EDIT	
DN	
1/8	
L1	
100%	
<b>50%</b>	

**ENABLE** ON OFF Activate/disable the delay engine.

TIME 1/4 1/8 1/12 1/16 1/24 1/32 1/48 1/64

Delay time is the amount of time between the original notes and the delay notes.

**REPEAT** 1 ... 128 Number of delay notes.

### GAIN 0% ... 200%

Change the MIDI velocity of each delay note. The velocity of the delay notes will be gradually decreased (gain > 100%) or increased (gain < 100%). If the gain is set to 100% velocity will not change.

DRY/WET 0% ... 50% ... 100% Change the midi velocity of all notes:

Shange the midi velocity of all notes.

• if 0%, you will only hear the original notes,

- if 50%, you will hear both the original notes and the delay notes,
- if 100%, you will only hear the delay notes.

TIP The delay will work very differently depending on the synth you are using, as velocity midi data can be interpreted in many ways.

## Equalizer

MIDI equalizer changes the velocity of the original notes, simulating a standard EQ effect, but using the velocity MIDI data. It increases or decreases note velocities, according to the note pitch. The EQ slope is linear. You can, for example, increase the velocity of all lowest and highest notes, increase only medium notes, decrease the velocity of highest notes, ...

TRA 02A EQUALIZER EDIT	
<b>O</b> ENRBLE	DN
OBASENDTE	E4 [60]
€LOH GRIN	100%
Ohid Grin	100%
ghi grin	100%

**ENABLE** ON OFF Activate/disable the equalizer engine.

**BASENOTE** C-1# ... F9# Select the "mid gain note" = the central note pitch of the equalizer.

LOW GAIN 0% ... 100% Select the gain of the lowest notes (C-1#).

MID GAIN 0% ... 100% Select the gain of the central notes (according to the BASENOTE parameter).

HI GAIN 0% ... 100% Select the gain of the highest notes (F9#).

## Scale

This effect quantizes all note pitches to a defined scale in real time, to refine your melody.

TRA 02A SCALE EDIT	
<b>O</b> ENABLE	DN
OSCALE	MAJOR
●KEY	
OSTICK	
gtransp.	+0

### ENABLE ON OFF

Activate/disable the scale engine.

SCALE MAJOR MINOR ... AEOLIAN LOCRIAN CHROMATIC

Select the scale.

**KEY** C ... B Select the scale root note.

### STICK UP DOWN FILTER ALGO1 ALGO2

If a non-scaled note is exactly between two scalednotes, select if the effect have to choose the note below (DOWN) orabove (UP). FILTER will not play notes outside the scale. ALGO1 or ALGO2 will randomly select the scaled note up or down.

**TRANSPOSE** -12 ... +12 Transpose all track notes before scaling.

## Note to CC

This effect converts a note parameter value (note pitch or note velocity) to a selected CC message (or to the MIDI "pitch bend", "aftertouch" or " program change"). For example, you can change a synth parameter (like the filter) according to the velocity of a note. It's also very handy to fully control the Korg Volca Sample parameters (pitch, velocity, ...) with a keyboard.

TRA 02A NOT	e 2 CC edit
<b>O</b> ENABLE	DN
oparah 🛛	L INT ON
€TO CC	CC#44
OPLAY NOTE	DN

**ENABLE** ON OFF Activate/disable the Note 2 CC engine.

### PARAM NT ON VELOCITY NT ON/OFF

Select the note parameter value to convert (pitch of the note ON, velocity of the note, pitch of the note ON and note OFF).

**TO CC** CC0 ... CC119 PITCH PRESSURE PR. CHANGE Select the midi CC message to be created.

### PLAY NOTE OFF ON

If OFF, the inputed note will be filtered. If ON, the inputed note will be played.

## BPM

This effect enables you to create global tempo automation! Very useful for creating BPM changes between two tracks during your live set, automating small BPM variations, creating "bouncing ball" effects in sync, ...

TRR 02R BPH	EDIT
<b>O</b> ENRBLE	DN
<b>O</b> BPH	120

### ENABLE ON OFF

Activate/disable the BPM engine.

BPM 10 ... 250

The new global BPM (substitutes to the tap BPM).

## Chance

This effect plays or does not play a note based on probability. It's a great way to add variations to drums or melodies.

TRA 02A CHANCE EDIT	
<b>O</b> ENABLE	DN
OCHANCE	50%
<b>€</b> SYNE	L DFF
OSYNE CHNC	100%
GAPPLY	PER PPON

### ENABLE ON OFF

Activate/disable the Chance engine.

### CHANCE 0% ... 100% VELOCITY

If "0%", the note will never be played. If "50%", the note has a fifty-fifty chance to be played. If "99%", the note will almost always be played. If "VELOCITY," the note will have the same probability of being played as its velocity. Very handy for programming different per note probability.

### SYNC OFF 1/4 1/8 1/16

Add a synced probability ("sync chance" parameter). If sync = "1/4", all beat notes will have a different probability of being played. If sync = "1/16", all sixteenth notes will have a different chance to be played...

### SYNC CHANCE 0% ... 100%

The probability of a synced note to be played. For example, if sync = "1/4" and sync chance = "100%", all beat notes will be played.

### APPLY PER PPQN PER NOTES

If "PER PPQN" is selected, the probability affects a group of notes contained in the same PPQN (if a chord is played, all notes of the chord will be played or not). If "PER NOTE" selected, the probability affects each note (if a chord is played, only some notes of the chord will be played).

## LFO

Generate high resolution CC waveforms in a flash, based on wavetables!

TRA 01A CC LFO EDIT	
<b>O</b> HRVEFORM	SINE
<b>OPHASE</b>	90*
<b>€</b> RANGE	+100%
ORATE	1/4
<b>910 CC</b>	CC#80

### WAVEFORM OFF SINE TRIANGLE SQUARE RAMP S AND H

Set the LFO waveform. S AND H means "sample & hold", generating a random value at each synchronized step.

PHASE 0° ... 180° Set the phase of the waveform.

### RANGE -127 ... 0 ... +127

Set the amplitude of the waveform. If 0, no LFO will be generated. If +63, the LFO will be generated with the maximum range value (0 to 127). If -63, the LFO will be generated with the maximum range value, but the waveform will be inverted (127 to 0). If the value is upper 63, the LFO will "saturate".

**RATE** 1/16 ... 64 Set the rate of the waveform (from 1/16 bar to 64 bars).

**TO CC** CC0 ... CC119 PITCH PRESSURE PR. CHANGE Set the CC message destination.

TIP Press DISP to display the LFO in real-time:

05IN 00" 0+50 01/2 044 SINE

ORAH GO 0+63 03/8 044

944 RAMP

05HH 00" 0+63 01/16 044 S AND H

It's possible to chain multiple LFOs (with the same CC number, on the same track), in order to create original waveforms:

OTRI @100"@+30 01/4 @44

TRIANGLE + TRIANGLE

05IN 00 0+40 01/2 044 SINE + RAMP

**TIP** Rotate the main encoder • right to display the **OFFSET** parameter, instead of the **PHASE** parameter: **OFFSET** 0 ... 64 ... 127

Set the offset of the waveform (the central value). You can also add a CC automation in stepmode CC, in order to set or automate this offset.
# **Chapter 10: Assigning Controllers**

# **Assign principles**

The 5 encoders  $\bullet \bullet \bullet \bullet \bullet \bullet$ , the analog inputs, as well as the touchpad  $\Box X+Y$  axis, are able to control CC messages and effect parameters in real-time.

Once they are assigned, you can perform with them in all Pyramid's modes and submodes.

**TIP** You can choose to assign inputs, encoders and the touchpad PER PROJECT (changing the current track will not change assignments) or PER TRACK (each track will have its own set of assignments). You can configure this in SETTINGS > MISC > ASSIGN TYPE.

To record CC messages automation or effect parameters, you must be in **LIVE** mode, with REC enable.

We tried to make the controller assignment process as easy as possible. If you love to play the touchpad for creating automation, it's fast and simple to reassign the control to another CC message or effect parameter and record your performance.

**TIP** Once an encoder is assigned, press it to display its set value. In **LIVE** mode, the encoder value will be displayed on the 16 leds when rotated.

You can record automation on a track filled with notes, or on a blank track. This allows one to create tracks filled only with automation, and thus mute/un-mute, and sequence CC messages and effect parameter automation.

# Assign a CC message

Hold ASSIGN and ...

- turn an encoder ••••• , or
- slide the touchpad 
  X or Y axis, or
- plug a jack into the CV or the GATE input.

The display "assign control to..." will appear on the screen. Select MIDI CC by rotating • then press to confirm:

ASSIGN ENCODER 1 TO	
HIQI EC Effect Param Effect Master Cancel	

Now select the CC message number, from CC0 to CC119. Scroll the list and press • to assign the CC message. Holding **2ND** and rotate • allows fast scrolling.

<u>Select a CC Message</u>		
HIQI CO Effect Param Effect Master Cancel	O BRINK HSB 1 Modulation 2 Breath 3 4 Foot Pedal 5 Portamento	

At the end of the CC list, you can find the **PITCH BEND**, the **PRESSURE** (aftertouch) and the **PROGRAM CHANGE** midi messages:

SELECT A CC MESSAGE		
HIQI EC Effect Param Effect Master Cancel	Î18 119 Pitch Xend Pressure Prog Change Back	

The CC message will be assigned to the current track channel and output.

You can record the automation on the current track only if:

- the CC channel (e.g. CH14) is the same as the track channel
- the output of the CC is the same as the track.

Note: as soon as you assign a CC control and move it to set the value, an automation message is created to store this value (you can display it or remove it in stepmode CC MESSAGES). This message will be sent at the start of the track, so your synthesizer will always have the right set value. You can disable this feature in SETTINGS > MISC > CC ASSIGN > AUTOREC OFF.

When an assigned encoder is moved or pressed, a pop-up is displayed, with the CC number (68), the CC value (111) and the CC MIDI channel (CH09A):

Θ	ЕН 09 👁 я
CC	LEGATO
68	111

**TIP** When ASSIGN TYPE is PER PROJECT, to assign a CC message globally (the CC channel will follow the selected track channel), hold **2ND** when selecting the CC number in the CC assignment list. For example, if you are working on TR01 = CH01A, the CC assigned will be sent on channel 01A. If you are working on TR02 = CH02B, the CC assigned will be sent on channel 02B.

## Assign an effect parameter

Hold ASSIGN and ...

- turn an encoder ••••• , or
- slide the touchpad 
  X or Y axis, or
- plug a jack into the CV or the GATE input.

The display "assign control to..." must pop up. Select and press EFFECT PARAM with • :

ASSIGN ENCODER 1 TD... HIDI CC EFFECT DOBRIH EFFECT MASTER CANCEL...

Select the effect you want to assign with .

SELECT AN	I EFFECT
TRACK D1 A TRACK D1 A TRACK D1 A BACK	CUCINITIZER ARPEGGIATOR Shing Harmonizer Back

Using •, select the parameter you want to assign:

SELECT A P	ARAMETER
QUANTIZER	ENABLE
ARPEGGIATOR	STYLE
SHING	GATE
2	BACK
SHING Harmonizer Back	RATE Detrve

You can record the effect parameter automation on the current track only if the effect belongs to the current track.

When an assigned encoder is moved or pressed, a pop-up is displayed displaying the effect (ARP), the effect parameter (STYLE), the effect value (DOWN), and the effect track (01A):

0	TRAEK 01 A
RP	STYLE
	DOWN
-	

## Assign a master effect

You can change the Quantizer **GRID** with a single control: **SCALE**, the Scale **KEY**, **CHANCE** or the Swing **PERCENT** of all tracks. For example, if you assign an encoder to the MASTER SWING, the Swing parameter **PERCENT** will be affected on each track containing a Swing effect. We also added the Mute **PROBABILITY**, allowing you to change the probability a muted note will be played (from 0% to 100%).

Hold ASSIGN

- turn an encoder ••••• , or
- slide the touchpad 
  X or Y axis, or
- plug a jack into the CV or the GATE input.

The display "assign control to..." will pop up. Select and press EFFECT MASTER with • :

ASSIGN ENC	ODER 1 TO
HIDI CC Effect Param Iafaan fiistar Cancel	

Select the master effect you want to assign with • :

SELECT AN EFFECT		
HIDI CC Effect Param Effect Haster Cancel	UUIINTIZEN Scale Scale Key Chance Mute probability Shing	

Note: you can't record master effects.

# Automation recording and overdub

Unlike notes, automation is not overdubed. This means newly recorded automation will erase any existing automation on any step.

For example, if you activate REC • in LIVE mode and progressively change an assigned value (e.g. CC10) during the first loop, an automation is created:



If you don't disable REC O during the second loop, and even if you don't change the assigned value, the automation will be erased step-by-step:



CC#10	PAN		<b>4</b> 63	
п	a	O	161	

You can of course record an other automation if REC O still enabled:



Disable REC O to prevent automation from being overwritten:



This operation applies to all CC messages, pitch bend, pressure, program change and effects parameters.

## Assign touchpad to smartpads

When assigning the touchpad, another option appears: SMARTPADS



Select the octave range of the touchpad X axis:

TOUCHPAD OCI	TAVE RANGE
HIDI CC Effect Param Eministrios Cancel	1 DATRUE 2 OCTAVES 3 OCTAVES 4 OCTAVES BACK

Assign the touchpad Y axis to a note parameter:

Y AXIS ASSIGNATION		
1 DETRUE	WELDEITY	
2 Detrues	AFTERTOUCH	
3 OCTAVES	PITCH	
4 OCTAVES	Hodulation	
BACK	Back	

Now you can slide along the touchpad's X axis to:

- play with chords (if LIVE smartpads = CHORD)
- play with repeats (if the LIVE smartpads = REPEAT)

• play with scales (if the LIVE smartpads = SCALE)

For example, if **LIVE** smartpads = **SCALE**, X axis = **2 OCTAVES** and Y axis = **VELOCITY**, slide the touchpad X to play notes (in the selected scale) and the touchpad Y to change notes velocity.

You can play smartpads with the touchpad inevery mode, and record your performance. Notes are always sent on the current track, so you can use some midi effects if you want.

<b>SI STEP</b>				
ؤ 01		TIT	זוווו	TITI I
<sup>5€</sup> 01		141   41	 [21	140%
Ŏ				01

# Assign external knobs (midi in "learn" CC messages)

It's possible to assign CC messages (received from midi in) to another CC message or to an effect parameter:

- 1) Stop pyramid
- 2) Hold ASSIGN

3) Rotate an external midi controller knob (or an other CC message control source)

In this way, you can assign up to 120 external controls (rotary encoders, potentiometers, sliders, ribbon controllers, touchpads, ...) to expand the limits of the Pyramid interface. You can also assign an external pitch wheel or aftertouch!

# Note about analog input voltage assignment

You can assign the two analog stereo jack inputs (CV input and GATE input) to control in real-time CC messages and effect parameters. Control Pyramid with CV modules, or create your own DIY analog controller.

The voltage (0V to 5V) will be converted to a CC MIDI value (0 to 127) or to an effect parameter value (for example the arpeggiator STYLE).

First, enter SETTINGS and select if you want to assign a mono jack or a stereo jack with CV/PEDAL > CV IN MODE = MONO ASSIGN or STEREO ASSIGN.

Hold ASSIGN and plug a jack on the input you want to assign (CV input or GATE input), the assign manager display will appear. Then select the CC message or the FX you want to assign.

# Analog sync (CV inputs or pedal)

You can assign the CV input and the gate input to slave Pyramid with an analog clock.

- Enable analog sync with SETTINGS > CV/PEDAL > CV IN MODE = CLOCK

- Set the number of beats (or PPQN) the player will move forward each time Pyramid receive a clock with SETTINGS > CV/PEDAL > INPUT SYNC

- Set the Pyramid tempo with BPM

Then, you can start the sync with an analog gate on the CV input. For example, you can slave Pyramid with a modular system or with an old machine.

If SETTINGS > CV/PEDAL > CV IN MODE = CLOCK+STOP, you can use the GATE input to receive an analog STOP/PLAY (low state = STOP, high state = PLAY).

If SETTINGS > CV/PEDAL > PEDAL HOT = CLOCK, you can sync Pyramid "manually" by pressing your pedal.

# Chapter 11: Save/load

# Save/load principles

To save or load a project, make sure a SD card is inserted, hold **2ND** and press **save/load** to enter the menu:



A project is a whole set of 64 tracks (32 patterns + notes + effects rack + CC messages automation + effect parameters automation), 32 sequences, sequence chains, assignments and settings. Saving or loading a new project will stop playback.

Please not remove the SD card while save/load menu is activated.

To exit the Save/load menu, press save/load or 2ND.

## Save

Select **SAVE** with • to save the project on the SD card with the current project name. If no project name was defined (NEW PROJECT), **SAVE** will redirect you to **SAVE AS**.

Saving an existing project creates a backup file on the SD card, located in the directory "BACKUP/." This preserves an old version of your project. This backup is not displayed on the LOAD project list.

# Save As

Select SAVE AS with • to save the project with a new name. Then edit the project name with this display:



Select "<" to delete the last character. Select "SAVE" to confirm.

TIP Hold 2ND and rotate • to move the cursor vertically in the edit display.

## Load

Select **LOAD** with • to load a new project on the SD card. This action will delete the current project: you must save your project before loading an other one.

Select the project to load in the drop-down list with • :

Press • to load to selected project.

*TIP* Press **2ND** + **delete** to immediately remove the selected project from the SD card (note: the backup project is not removed). *TIP* To avoid a BPM jump between two projects, hold **2ND** while selecting a project to load. This will not load the BPM of of newly loaded project.

## New

Select **NEW** to delete everything in the project and restart from scratch.

# **Project files**

Projects directories are always saved on the SD card with the prefix "PYRA\_", on the SD root directory.

You can read the project files on your computer:



The **core.pyr** file contains the project settings, the sequences data, assignations and effects racks.

The other files can be deleted:

- The track 01A (track 1) contains midi notes + midi CC automation (**track01.mid**) and effects parameters automation (**FX\_track01.pyr**).

- The track 10A (track 10) contains only effects parameters automation (FX\_track10.pyr).

- The track 01B (track 17) contains midi notes + midi CC automation (track17.mid).

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- The track 16D (track 64) contains midi notes + midi CC automation (track64.mid).

# Import and export files

It's easy to import and export MIDI files (notes and CC automation) because Pyramid store these files as standard \*.mid data (type 0 MIDI file: single track). All popular DAWs can play and edit MIDI files.

You can import or export from short patterns up to long linear tracks. For example, you can drag-and-drop a \*.mid file from the SD card project directory to your favorite software sequencer (e.g. Ableton) and play & edit this pattern on the DAW:



You can also create a MIDI track from scratch on your DAW and export it to an existing SD card project directory, with a valid name. If you want to export the \*.mid file (filled with notes and/or automation) to the Pyramid TR08A, name the file **track08.mid**. For TR01B, name the file **track17.mid**. For TR16D, name the file **track64.mid**...

Pyramid will play this \*.mid note pattern in a loop, depending on the track length.

Note: if your track includes multiple patterns, it will be saved as a type 1 midi file (multiple track file). In the same way, if you import a type 1 midi file, all tracks will be imported as multiple patterns.

*TIP* Creating a midi file type 1 with a computer can be tricky, <u>this paper</u> give you some great tips.

# **Chapter 12: Settings**

# Settings menu

Press **2ND** + FX to enter General Settings.

GENERAL SETTINGS				
&+	&+	\		
Hidi in	Hidi out	CU∕PEDAL		
日	≡	- <b>C</b>		
SRVE	INF0	HISC		

To exit the settings menu, press FX.

TIP You can restore all default settings at start-up: hold FX while powering ON Pyramid.

## Midi in

#### PYRAMIDI CHANNEL 1 ... CHANNEL 16 OFF

Select the input channel to control Pyramid with PYRAMiDi messages (see the <u>midi implementation chart</u>). For example, if CH13 is selected, you can send channel 13 midi CC messages (with an external controller) to Pyramid, to mute/un-mute the 64 tracks on the fly, select a track, activate REC, launch a sequence...

#### ASSIGN NOTE TO KEYPAD SMARTPADS

SMARTPADS ONLY WHITE MASTER TRANSPOSE OFF

Specifies if received midi notes are performed as:

- KEYPAD (trig notes)
- SMARTPAD (trig CHORDS, REPEAT or SCALE)
- SMARTPADS ONLY WHITE (trig CHORDS, REPEAT or SCALE)
- MASTER TRANSPOSE (transpose all selected TRSP tracks)
- OFF (ignore)

#### TRANSPOSE NOTE C-1 ... G9

Set the transposition root note (when ASSIGN NOTE TO = MASTER TRANSPOSE).

# OMNI MODE MULTITRACK OFF MULTITRACK BANK A MULTITRACK BANK B MULTITRACK BANK C MULTITRACK BANK D CH01 ... CH16

- MULTITRACK OFF will play notes and CC on the current track, regardless of the controller channel.

- MULTITRACK BANK X will play channel 01 events on TR01X, channel 02 events on TR02X, ... channel 16 events on TR16X.

- CH01 to CH16 will play events of the selected channel on the current track. Other channels are always sent thru MIDI A output.

#### CLOCK SYNC OFF ON

Enables or disables the BPM auto-sync, if your MIDI IN controller is sending a timing clock.

#### START/STOP OFF ON

Filters out all START, STOP and CONTINUE messages from your MIDI IN controller.

#### USB CLOCK SYNC OFF ON

Enables or disables the BPM auto-sync, if your USB IN master device is sending a timing clock.

#### CC MESSAGES OFF ON

Filters out all CC messages from your MIDI IN controller.

#### PITCHBEND OFF ON

Filters out all PITCH BEND messages from your MIDI IN controller.

#### PRESSURE OFF ON

Filters all AFTERTOUCH (channel pressure) messages of your MIDI IN controller.

#### PROG CHANGE OFF ON

Filters all PROGRAM CHANGE messages of your MIDI IN controller.

#### TRANSMIT SYSEX NO MIDI A MIDI B MIDI AB

IfOFF, received sysex messages are ignored. IfMidi A(orMidi B, orMidi A+B), received sysex messages transmitted toMidiA(orMidi B, orMidi A+B).

#### MIDI ECHO ALLOW ECHO STOP ECHO AUTO A AUTO B

IfSTOP ECHO, received notes (midi in) are not transmitted to midi out, but they still can be recorded. Handy if your synth (connected to Pyramid via midi in and midi out) does not include the setting "Local Control = OFF/ON". If AUTO MIDI A or B, midi events received on the MIDI input will be ignored if they were previously sent on MIDI A or MIDI B, to avoid midi loops.

#### **CLOCK TIMEOUT** SHORT LONG

When pyramid lost the input midi clock (sync), Pyramid will disable its slave mode after 2 seconds (SHORT) or will wait 10 seconds for an incoming clock (LONG).

### Midi out

#### MIDI A MODE MIDI OUT MIDI THRU MIDI OUT + THRU MIDI OFF TURBO MIDI X2 TURBO MIDI X4 TURBO MIDI X5 TURBO MIDI X6.7

Configures Pyramid MIDI out A as a MIDI out (default), as a MIDI thru (all messages received on the MIDI input will be sent directly on the MIDI out A), as a MIDI out + thru (all messages received on the MIDI input will be sent directly on the MIDI out A, together with Pyramid MIDI messages).

It's possible to speed up the midi A communication up to 6,7 times and avoid latency problem, when sequencing an Elektron machine (Analog Four, Analog Keys, Analog Rytm, Octatrack), by using the TURBO MIDI protocol.

#### SYNC MIDIA OFF SEND

Sends BPM midi timing clock to midi out A.

#### START/STOP MIDIA OFF SEND

Sends START, STOP and CONTINUE messages to midi out A.

#### MIDI B MODE MIDI OUT MIDI THRU MIDI OUT + THRU MIDI OFF

Configures Pyramid MIDI out B as a MIDI out (default), as a MIDI thru (all messages received on the MIDI input will be sent directly on the MIDI out B), as a MIDI out + thru (all messages received on the MIDI input will be sent directly on the MIDI out B, together with Pyramid MIDI messages). Page 84 of 98

#### SYNC MIDI B OFF SEND

Sends BPM midi timing clock to midi out B.

#### START/STOP MIDI B OFF SEND

Sends START, STOP and CONTINUE messages on midi out B.

#### SYNC USB OFF SEND

Sends the BPM timing clock on midi USB.

#### START/STOP USB OFF SEND

Sends START, STOP and CONTINUE messages to midi USB.

#### SYNC STOP OFF SEND CLOCK

If OFF selected, the sync (timing clock) will never be sent when the player is stopped or paused.

#### SYNC LOAD OFF SEND CLOCK

If enable, the clock will be sent during the loading of a project. Your slaved instruments (eg a drum machine with an internal sequencer) will keep the sync during and after the load. SETTINGS > MIDI OUT > MIDI A SYNC or MIDI B SYNC must be enable on the previous and the next project. When loading is done, press PLAY: Pyramid and your slaved instruments will start to play from the beginning, allowing you to keep the perfect sync. When pressing PLAY after a load, Pyramid will wait for the next bar to start the playback.

# CV/pedal

#### CV IN MODE OFF CV/GATE MONO ASSIGN STEREO ASSIGN CLOCK CLOCK+STOP

Selects if the CV inputs control notes of the track (CV/GATE) or can be used to assign CC messages and FX parameters (MONO ASSIGN and STEREO ASSIGN. You can also set the CV inputs as a clock input, to slave Pyramid with an analog clock (see Analog sync section of the manual).

#### CV IN 1V NOTE C0 ... F3#

Selects the CV INPUT TO MIDI root note. By default, a CV voltage of 2V plays a C2 midi note on the current track.

#### **CV IN TYPE** VOLT/OCTAVE HERTZ/VOLT Selects if your analog controller generates CV V/oct or CV Hz/V.

#### CV IN FINE -100mV ... +100mV

Fine tune the CV inputs.

#### FOLLOW TRACK ACTIVE TRACK TRO1A ... TR16A

CV/GATE notes can track the active track, or a specific track.

#### CV OUT 1V NOTE C1 ... F5#

Selects the MIDI TO CV OUTPUT root note. By default, a C2 midi note plays a CV voltage of 2V.

**CV OUT TYPE** VOLT/OCTAVE HERTZ/VOLT 1.2 VOLT/OCTAVE 0.32 VOLT/OCTAVE 0.5 VOLT/OCTAVE Selects if your analog synthesizer is controlled by CV V/oct or CV Hz/V, or exotic voltages like 1.2, 0.32 or 0.5 V/oct. Fine tune the CV outputs.

#### GATE POLARITY ACTIVE 5V ACTIVE 0V

Selects the active polarity gate of your analog synthesizer.

# ASSIGN ENVIOUT TO -- VELOCITY PITCH AFTERTOUCH MODULATION DIN SYNC START DYN SYNC/START METRONOME

Selects if the CV ENV outputs the note velocity, the pitch, the aftertouch (channel pressure) or the modulation of the CV track. You can assign the CV ENV output to the DIN SYNC clock, to easily sync your modular system with a mini jack. If START is selected, Pyramid will send a start level (high level) when it's playing, and a stop level (low level) when it's stopped.

If DYN SYNC+START is selected, same behavior as DYN SYNC, but the START level will be sent on the GATE output.

**DIN SYNC** OFF SYNC1 SYNC2 SYNC4 SYNC8 SYNC12 SYNC16 SYNC24 SYNC48 SYNC96 Selects the DIN SYNC clock speed (outputted on the 2 free pins of the midiB connector).

#### SEND DIN SYNC PLAY ONLY ALWAYS

The DIN SYNC clock can be sent only when the player is playing, or always (when player is stopped or played).

**PEDAL HOT** REC HARD REC PLAY/PAUSE PLAY/STOP PREVIOUS TRACK NEXT TRACK PREVIOUS SEQ NEXT SEQ TAP TEMPO CLOCK SYNC FREEZE SEQ UNDO/REDO Sets the action that will be triggered by the footswitch pedal.

PEDAL COLD REC HARD REC PLAY/PAUSE PLAY/STOP PREVIOUS TRACK NEXT TRACK PREVIOUS SEQ NEXT SEQ TAP TEMPO CLOCK SYNC FREEZE SEQ UNDO/REDO

Sets the second action that will be triggered by the footswitch pedal (if "stereo" double pedal used).

**INPUT SYNC** 1PPQN 2PPQN 4PPQN 8PPQN 12PPQN 16PPQN 24PPQN 48PPQN 1 BEAT 2 BEAT 3 BEAT 1 BAR 2 BAR 3 BAR 4 BAR Sets the number of beat (or PPQN) the player will move forward each time Pyramid receive an analog clock.

### Misc

#### LIVE LOOPER OFF BEAT 1 BAR 2 BAR ... 8 BAR

Enable the LIVE looper recording and select the looper time quantization (see the section of the manual titled "Record your performance").

#### SIGNATURE POLYRHYTMS POLYMETERS

- IfPOLYRHYTHMIC is selected, Pyramid apply true Polyrhythms when different time signatures are used. If you select a 3:4 time signature you will have bars of 3 quarter notes, but the bar will have the same duration as a 3/4 bar.

- IfPOLYMETRIC is selected, all quarter notes remain the same. If you select a 3/4 time signature you will have bars of 3 quarter notes, and each quarter note will have the same length than the 4/4 ones. The polymetric mode is easier to understand than the Polyrhythmic one because it doesn't mix several speeds.

#### DOUBLE TAP MODE VELOCITY GLIDE

In NOTE and CHORD stepmodes, double tap a pad to enter velocity accents or gliding notes. Glides only works with compatible synths: if two notes follow, the first one must be double tapped to create a glide (= an overlapping) between these two notes.

#### REC COUNTDOWN OFF 1 BAR 2 BAR 3 BAR 4 BAR

Activates a countdown before a recording in live mode (When the player is stopped and you press REC then PLAY). You can select the duration of the countdown. The countdown will be sent on the metronome output channel and note.

#### METRONOME CH CURRENT TRACK MIDICH01A ... USB CH16

Select the metronome output channel (made with midi notes). If the metronome is activated (2ND + LIVE), the metronome will be send on this selected track, and will follow the beat.

#### METRONOME NOTE C-1 ... G9

Select the metronome output note. If the metronome is activated (2ND + LIVE), the metronome will click on the selected note.

#### LEARN NOTES OFF MIDI IN MIDI IN + LIVE

If OFF, the step note learn with an external keyboard is disabled (see "Note Stepmode" in the manual). If MIDI IN, Pyramid STEP MODE will learn notes (or chords) of your external midi keyboard. If MIDI IN + LIVE, when playing a note/chord in LIVE MODE with the internal keyboard, this note/chord will be selected in STEP mode.

#### CC ASSIGN AUTOREC OFF AUTOREC ON

With autorec on, as soon as you assign a CC control and move it to set the value, an automation message is created to store this value (you can display it or remove it in stepmode CC MESSAGES). This message will be sent at the start of the track, so your synthesizer will always have the right set value.

# PLAY PAD PLAY/PAUSE PLAY/RESTART PLAY/MUTE RESTART 1/16 RESTART 1/8 RESTART BEAT RESTART BAR

If "play/pause" selected, a press on the PLAY pad will alternately play and pause the playback. If "play/restart" selected, a press on the PLAY pad will always restart all tracks from the beginning. If"mute" selected, Pyramid continue to play but send no midi data if the player is paused. If"restart 1/16" selected, pressing PLAY will restart all tracks in sync, at the next 1/16 note. If"restart bar" selected, pressing PLAY will restart all tracks in sync, at the next 1/16 note.

#### TRACKMUTE DELAY SAME AS SEQ PERFORM INSTANT BEAT 1 BAR ... 8 BAR

Select if tracks mute/un-mute are in sync with SEQ PERFORM, or set a default delay (see "Mute/un-mute tracks on the fly" in the manual).

**PATTERN DELAY** SAME AS SEQ PERFORM INSTANT BEAT 1 BAR ... 8 BAR Select if pattern changes are in sync with SEQ PERFORM, or set a default delay.

#### AUTO PATTERN OFF AT NEW SEQ

Set if track patterns follow the selected sequence. For example, if AUTO PATTERN = ON, when you select SE03, all patterns will change to P03. In other words, selecting a new sequence will create new patterns.

#### DEFAULT STEP ASSIGN OFF ASSIGN ON

To enable by default (in STEP mode) ASSIGN (rotating the encoders will control your assigned values), or STEP EDIT (rotating the encoders will control the note number, the velocity, the length, ...).

DEFAULT TRACK MODE FREE MODE RELATCH MODE TRIG

Set the default run mode of new tracks.

**DEFAULT ZOOM** /4 /2 x1 x2 x4 Define the default zoom of all tracks at start-up.

**DEFAULT LENGTH** 1 BAR ... 64 BAR Define the default length of all tracks at start-up.

**DEFAULT TS L** 1/ ... 24/ Define the default time signature left number of all tracks at start-up.

**DEFAULT TS R** /1 ... /16 Define the default time signature right number of all tracks at start-up.

DEFAULT PERFORM INST BEAT 1 BAR ... 8 BAR

Set the default run mode of new tracks.

DEFAULT QUANTIZE OFF 1/4 1/8 1/12 1/16 1/24 1/32 1/48 1/64 1/96

Set the default quantize FX grid.

PLAY AT START-UP NO YES Set if Pyramidplay by default at start-up.

#### POP-UP ASSIGN ON CLICK ON ROTATE AND CLICK

Displays a pop-up with encoder assignment information on click or on rotation.

#### ASSIGN TYPE PER TRACK PER PROJECT

PER TRACK = each track will have its own set of assignments, assignments depends on the current track. PER PROJECT = only one set of assignments, changing the current track will not change the assignments.

#### TOUCHPAD ON OFF

Enables or disables the touchpad.

#### TOUCHPAD RELATCH NO RELATCH 0 ... 127

If no relatch selected, the touchpad (assigned X or Y position) will keep it's last set value. If a value is selected (for example 0), the touchpad will send back this value when the touchpad is released.

#### USB ON OFF

Enables or disables the USB output.

#### AUTOLOAD OFF LAST SAVED PROJECT LAST LOADED PROJECT

After start-up, Pyramid can load an empty project, load the last saved project or load the last loaded project.

#### LED BRIGHTNESS DEFAULT SHOW LED STOP NIGHT MODE

If SHOW LED STOP selected, when Pyramid is stopped or paused, the led displaying the player position on the 16 pads will blink. If NIGHT MODE is selected, it enables white leds low luminosity for night uses.

## Info

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#### HARDWARE VERSION

Display the Pyramid hardware version.

**PYRAOS VERSION** Display the Pyramid software version.

#### ANALOG IN

Display the 4 inputted analog voltages (0 to 5V).

ANALOG OUT Display the 3 outputted analog voltages (0 to 5V).

MIDI IN MONITOR Display all inputted midi messages.

MIDI OUT A MONITOR Display all outputted messages on midiA.

MIDI OUT B MONITOR Display all outputted messages on midiB.

#### MIDI OUT USB MONITOR

Display all outputted messages on midi USB.

### Save

#### SAVE SETTINGS

Save settings in flash memory. Settings parameters will be auto-loaded at Pyramid start-up. Please note that this action will erase all the track names of your current project, if not saved before with **SAVE TRACKS** 

#### SAVE TRACKS

Save "tracks channels mapping + tracks names + tracks patterns enable + tracks transpose enable" in flash memory. The 64 track channels will be auto-loaded at Pyramid start-up.

#### DEFAULT SETTINGS

Restore default settings.

#### DEFAULT TRACKS

Restore default tracks.

# **CV** calibration tool

Power on Pyramid while pressing the encoder 5 at start-up to enter the CV calibration tool. Then, rotate the menu encoder to calibrate a precise 1.000V, and click the menu encoder. Same for the 2.000V, 3.000V, 4.000V and 5.000V CV output voltages. We recommend to use a voltmeter to monitor the CV output voltages.

# **Chapter 13: Definition files**

# **Definition files principles**

By default, Pyramid always display the same CC and NOTE labels on the screen. For example, CC1 message is named *MODULATION*, CC7 is named *VOLUME*, and the NOTE 60 is named *C4*.

These names are defined by midi standards, but they does not always match your synthesizer or drum machine names. For example, CC7 can be the *CUTOFF* of one of your synthesizer, and the NOTE 60 can be the *KICK*. Each instrument has its own CC and/or NOTE names, so it can be very handy to display the right names on the screen when you are playing with Pyramid, in order to smooth the work-flow.

At Pyramid start-up, if a **???.txt** file is present inside the SD card root, Pyramid will load its "names definitions". You can create multiple file inside your SD card, in order to define up to 16 multiple instruments.

To enable definition files, SETTINGS > MISC > LOAD DEFINITION must be different from OFF.

# How to create a CC definition file

A definition file includes 5 important bits of information:

- the name of the instrument,
- the midi channel of the instrument (1 to 16),
- its midi output (A, B or USB),
- CC definitions (CC 0 to CC 119),
- NOTE definitions (note N0 to N119)

The definition file must be named **???.txt** (for example **tanzmaus.txt**, the name does not matter) and be present inside the SD card root:



You need to create this text file on your computer (with MacOS TextEdit or Windows Notepad). Here is an example of what's inside a definition file:

NAME:TANZMAUS OUT:A CHANNEL:10 2:BD\_ATT 64:BD\_DECAY 65:BD\_PITCH 3:BD\_TUNE 4:BD\_NOISE 5:BD\_NOISE\_DEC 6:BD\_DIST 66:BD\_TRIGGER

Pyramid will display the name of the CC (e.g. BD\_PITCH) if your track has the same CHANNEL and OUT as the instrument definition. For example, if you select a track with MIDI CHANNEL = 10 and OUTPUT = A, Pyramid will display the defined CC names in the file above: CC02 = BD\_ATT, CC64 = BD\_DECAY, ...

In other words, if the CHANNEL + OUTPUT of a track match the CHANNEL + OUT of a definition file, Pyramid will display the custom CC names.

Definition file syntax and rules:

- Each file can include up to 120 CC definition names. The syntax is XX:??? where XX is the number of the CC (0 to 119) and ??? is the name of the CC.
- There is no maximum name length, although Pyramid will display only the first 8 characters.
- The name NAME:XX, the midi channel CHANNEL:XX and the output OUT:A are mandatory. The NAME line is only intended for the CALL instrument feature.
- You can write this file using lower case or upper case.

You can create multiple instrument definition files (for example: "tanzmaus.txt", "novation circuit.txt", "volca beat.txt", ...), they will be all loaded at start-up if they are present at the root of your SD card. You can also add all your instrument definitions in a single file.

You can't create more than 16 instrument definitions.

**TIP** If you set an instrument definition with a channel number = 0 (instead of 1 to 16), every "not defined" instruments of the selected output will be defined as this definition.

# How to create a NOTE definition file

In the same way, you can create NOTE definitions, in order to rename some notes (e.g. renaming C2 = KICK, D2 = SNARE, ...). It's great for drum machines and samplers, so you can name your kit.

A definition file (**???.txt**) can include CC and NOTE definition at the same time, so you can decide to define only notes or CC messages, or both.

To define a note, the syntax must be NXX:??? where NXX is the note number (N00 to N127) and ??? is the name of the CC.

Here is an example of a file with only NOTE definitions:

NAME:DRUMMACHINE OUT:B CHANNEL:4 N36:KICK N37:SNARE N38:RIM N39:CLAP N40:TOMTOM

Pyramid will display the name of the notes (e.g. KICK) if your track has the same CHANNEL and OUT as the instrument definition. For example, if you select a track with MIDI CHANNEL = 4 and OUTPUT = B, Pyramid will display the defined note names in the file above: note 36 = BD\_ATT, note 37= SNARE, ...

There is no maximum name length, although Pyramid will display only the first 4 characters.

TIP The best way to know the number of a note (0 to 127) is to scroll notes with menu encoder in stepmode NOTE.

Of course, you can create instruments with both CC and NOTE definitions, with up to 120 CC and 127 NOTE definitions:

NAME: TANZMAUS OUT:A CHANNEL:10 2:BD ATT 64:BD DECAY 65:BD\_PITCH 3:BD\_TUNE 4:BD NOISE 5:BD NOISE DEC 6:BD DIST 66:BD TRIGGER N36:KICK N37:SNARE N38:RIM N39:CLAP N40:TOMTOM

# Filters

Another great thing with definition files is the ability to scroll and select only the defined CC and/or NOTES.

- If an instrument's CC number is not defined in the .txt file, Pyramid will not display it in the CC messages list, allowing you to filter unused CC messages (only if SETTINGS > MISC > LOAD DEFINITION = FILTER CC).
- If an instrument's NOTE number is not defined in the .txt file, Pyramid willnot displayit in the piano roll, allowing you to filter unused notes (only if *SETTINGS > MISC > LOAD DEFINITION = FILTER NOTE*).
- You can also filter both unused CC and NOTES with SETTINGS > MISC > LOAD DEFINITION = FILTER

# Call an instrument

On any track, you can "call" an instrument (defined in the .txt files). It will auto-set the track name, the track channel and the track output.

To call an instrument, press 2ND + TRACK and select CALL

OLIVE			
™ O1 🖸	MAHE	CALL	CONS
@a 01		IN 🗌 TRS	P 🕨 RUM
<sup>₅</sup> 01	O PC	$\Theta^{\text{HSB}}_{}$	€LSB
ŏ			01

Then select the instrument you want to call in the list with the menu encoder •. Up to 16 instruments can be created. If an instrument is not defined, "..." will be displayed:

OLIVE		
IR 01 🖸	O3 TEMPEST	
⊗a01	04 PROPHET	
5E 01	OS VOLCA Og hermod	
- UI		
ŏ		[1

The track name, its channel and output will be set:

OLIVE	ERHOD		
<sup>TR</sup> O1 🖸	MAHE	CALL	COMS
USB 01		IN 🗌 TRSI	P 🕨 RUM
<sup>s</sup> 01	0 PC	$\Theta^{\text{HSB}}_{}$	$\Theta_{}^{LSB}$
Ō			01

# Download users definition files

You can download ready-to-use definition files on the Squarp forum <u>squarp.community/c/def</u> where a lot of instruments are already created.

Do not hesitate to share your own definition files for the community on the forum!

# **Chapter 14: Shortcuts**

## In any mode

Hold **TRACK** to activate the following shortcuts:

solo

midi channel zoom length

time signature

To change the BPM decimal, turn • while pressing it.

Hold **2ND** + BPM and turn the data knob • to change the tempo, which will apply only when you release **2ND**.

Hold **2ND** and press < or > to quickly double or divide BPM.

Once an encoder is assigned, press it to display its set value.

In FX manager, Assign, DISP or Settings, press BPM to exit and return to the current mode.

Hold **2ND** and press **LIVE** to enable/disable the metronome.

## Live mode

Hold LIVE and rotate • to change the type of the 8 smartpads.

Hold **STEP** + **velocity** and rotate • to change the keypad and smartpads velocity. You can also press ASSIGN to enable the ENCODER STEP EDIT feature, in order to set the **velocity** with the touchpad X axis.

Hold **2ND** and press rec **O** to activate hard recording.

When the player is stopped **D** and you press rec **O**, Pyramid is waiting for a press on play **H**. Once you press **H** a countdown is launched. After one bar of countdown, recording starts and continues until the end of the track loop, at which point recording then stops and the loop continues to play as normal

When smartpads = CHORD, **2ND** + rotating • will jump to the very next major/minor tonality. Add complexity by pressing and rotating • .

When smartpads = SCALE, 2ND + rotating • will select the root note of the scale.

2ND + play ► activate the HOLD/RELATCH mode.

Press 2ND + delete to delete only notes + CC automation + FX automation of the current track.

### Step mode

Hold **STEP** and turn • to change the Stepmode.

Hold **2ND** and rotate **s** to scroll the note list or the CC list faster.

Pre-listen to the selected note by pressing • . Pressing < or > while holding • allows you to jump octaves for a quicker note navigation. You can also press a key **\*\*\*\*\*\*** while holding • to straight select the note number.

In stepmode NOTE, you can display the parameters of a step. Hold velocity and press a filled step to display (and even edit) the step velocity. Same behavior for length and width. You can also display and edit several steps: hold velocity (or length or width) and press the first step together with the last step of the row

Double tap a step-by-step pad **IIIIIIII** to add a low velocity note in order to create accents quickly.

In stepmode NOTE and CHORD, hold **2ND** and press a pad **\*\*\*\*\*\*\*\*** to mute all notes in this step.

Hold velocity and slide the touchpad from left to right to quickly set the velocity, the CC value or the FX value.

Hold < or > to quickly navigate pages.

Press 2ND and hold < or > to quickly rotate the track (shift all notes one step left or right).

Press rec • to switch to MONO EDITION, to have a global view of which of the 16 steps are filled with notes. If you press a filled step, it will remove all notes in this step, whatever the selected note is.

In stepmode NOTE and CHORD, hold a step **\*\*\*\*\*\*\*** (or a row of steps) and rotate **•** to transpose it. Hold rec **•** and rotate **•** to transpose the track notes.

In stepmode CC MESSAGES and EFFECTS, hold a step **\*\*\*\*\*\*\*** (or a row of steps) and rotate • to increase/decrease its value. Hold rec • and rotate • to transpose the whole automation.

In stepmode CC MESSAGES and EFFECTS, hold rec O and slide the touchpad to draw an automation.

Press ASSIGN to enable the ENCODER STEP EDIT feature, in order to assign directly the 5 encoders and the touchpad to shortcuts.

In stepmode NOTE or CC MESSAGES, press **STEP** to go to the nearest note or CC automation. Press **STEP** again to go to the next nearest note or CC automation.

In stepmode NOTE or CC MESSAGES, press **2ND** + **STEP** to activate the filter, in order to scroll only through programmed notes or CC messages. Press **2ND** + **STEP** again to quit the filter.

Press **2ND** + **DISP** to enable/disable the player tracking.

## Track mode

Hold **2ND** and select a track **EXECUTE** to mute/un-mute it instantly.

Hold midi channel and press + rotate • to quickly select the midi output of the track.

Hold length and press + rotate • to set the bar level with step precision.

Hold **time signature** and rotate **•** to change the time signature's **upper number** on the current track.

Pess rec O in order to don't save the sequence mute states (rec led will be OFF). If you mute or un-mute a track, the sequence will not save the mute states.

In DISP view, rotate • to scrollthetrack banks (TR01A > TR07A, TR08A > TR16A, TR01B > TR07B, ...)

Double-tap TRACK to enter trackmode PATTERNS, tap TRACK to go back to trackmode MUTES.

Hold **STEP** and press a pad **TETTER** to select a pattern.

## FX manager mode

With the effect manager activated, you can still play or add notes in LIVE and STEP mode, mute/un-mute tracks in TRACK mode, and even launch sequences in SEQ mode.

Rotating • while pressing 2ND allows you change the position of the selected effect.

In **LIVE** mode, when you are editing an effect with the 5 encoders ••••• , press rec **O** to record directly the effect parameters automation.

In FX mode:

- Press encoder 1 to enter the slot 1 effect.
- Press encoder 2 to enter the slot 2 effect.
- Press encoder 3 to enter the slot 3 effect.
- Press encoder 4 to enter the slot 4 effect.
- Press encoder 2ND + 1 to on/off the slot 1 effect.
- Press encoder 2ND + 2 to on/off the slot 2 effect.
- Press encoder **2ND** + **3** to on/off the slot 3 effect.
- Press encoder 2ND + 4 to on/off the slot 4 effect.

### Assign mode

Hold 2ND and rotate • to scroll the CC list faster.

### Save/load mode

Hold **2ND** and rotate **s** to move the cursor vertically in the SAVE AS... edition display.

In the LOAD project list, press **2ND** + **delete** to remove a project definitively from the SD card (note: the backup project is not removed).

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