# **KIRNU - CREAM**

## MOBILE

Kirnu Interactive www.kirnuarp.com



Top elements Song selection MIDI in/out channel Status Messages Loading/Saving track presets Panic button MIDI learn **Global section** Track section Chord memory trigger All tracks Drum Loop Pattern controls Pattern data Pattern control specific controls Special marks Pattern specific controls Quick edit view Synth editor Chord memory Pattern sequencer On screen keyboard Control zone Configuration AudioBus How to use chord memory

### **Top elements**



### **Song selection**

Song presets contain all the information about the song: Track settings, tempo, instrument configuration and selected drum loop.

Cream will load previously used song preset if available. If not it will load the default song.

To make your own song you can modify the preloaded song or start from scratch by selecting 'Init' from the Song selection list top menu.

To save your song select 'Save' from the Song selection list top menu. All user presets are saved to 'User' section.

To load a song select song preset from the Song selection list.

To delete a song open up the Song selection list and swipe the list item from right to the left. Song deletion button will appear which you can use to delete the song.

The Synth Editor is toggled when the 'Synth' button is tapped. The second tap will close the editor.



### **MIDI** in/out channel

MIDI controls are Track specific controls so each Track could have their own MIDI in/outputs Input: Specifies MIDI channel Track listens MIDI messages from.

Output: Specifies MIDI channel Track sends generated MIDI notes to

These settings are only meaningful when sending MIDI to some external device.

# **Status Messages**

### **Status Messages**

Copyright © 2015 Arto Vaarala, Kirnu Interactive, all rights reserved. "Kirnu" is trademark of Arto Vaarala Displays current value of edited control. If you want to see a current value of the control tap the control once and you'll see it's value in the Status Messages section.



### Loading/Saving track presets

Track presets contain only track configuration information. These presets can be used also with the Cream plugin version.

To load a preset select one from the preset selection list.

To save your preset select 'Save' from the preset selection list top menu. All user presets are saved to 'User' section.

To delete a song open up the preset selection list and swipe the list item from right to the left. Preset deletion button will appear which you can use to delete the preset.

To init the preset select 'Init' from the preset selection list top menu.

When presets are saved they appear in the User-section. Factory presets can be found from the Factory-section.

Info: Toggles preset info popup

#### Information about factory presets:

Most factory presets are labeled "1k" or "3k" in their names. It means that the preset is intended to use with a "3 key chord". If the preset is labeled "1-8k" it means you can input a chord with up to 8 keys. Please read the description of each preset carefully to know how to use them properly!



### **Panic button**

With this button you can send 'stop all notes'-message so all notes will stop playing. This is very useful when you find some note is playing when it shouldn't be



### **MIDI learn**

Every knob has ability to be controlled by MIDI CC messages. MIDI learn can be toggled on/off by tapping the MIDI learn button. Only one control can have the same CC value at the same time.

MIDI learn controls obey the focus mode where UI button is moved only after the external control matches Cream control value.

### **Global section**



All Tracks share the same global control so for example if you change the Scale all Track's will have the same scale.

- Volume: adjusts all the generated notes volume from all key areas
- **Tempo**: adjusts the global tempo. Tap button can be used to set the tempo by tapping the button in rhythmic manner
- Scale: Specifies global scale for all Key areas. If some scale is selected all notes are snapped to that scale. Even transpose control follows the scale and every note output belong to that scale

Ones represent notes that are in scale All notes 1,1,1,1,1,1,1,1,1,1,1 (C,C#,D..) C-Major 1,0,1,0,1,1,0,1,0,1,0,1 (C,D,E,F,G,A,B)

C-Major mode 1 = 0,1,0,1,1,0,1,0,1,0,1,1 (C#,D#,E,,) C-Major mode 2 = 1,0,1,1,0,1,0,1,0,1,1,0 (C,D,D#..) this would be like C Dorian

So new scale is produced by shifting the selected scale by selected amount of semitones.

• **Control zone sync**: Specifies how control zone commands should be applied when they are triggered. Values are steps.

Values indicate how often pattern change is triggered. Value 4 means triggering is happening every 4 steps.

If value is for example 4 and current step is 5 pattern will be changed in step 9

### **Track section**



- Track on/off: With this control user can turn Tracks on or off. If Track is off the key zone will still be active but notes received will not be processed but send directly to MIDI channel specified by MIDI out control. (See global setting 'Transpose all output notes').
- Track selection control (1,2,3,4): Selects key areas for editing.

Copy: Copies current Track Paste: Pastes copied Track to selected track To all: Pastes copied track to all tracks

#### Send only CC

When 'Send only CC' is enabled the selected track only sends CC messages. No note ON/OFF messages are being sent.

#### Chord memory trigger

When 'Trigger CM' is enabled chords can be played by using keyboard keys. The first CM slot can be played using the first key from Track Key Area. Second note triggers the second CM slot etc.. If this feature is enabled but there is no keys enabled in corresponding CM slot no notes are played.

Key area control: Range which this track listens to incoming MIDI notes. Track key areas can overlap. This means same note might be played at the same time. Cream stops the currently played note and starts to play the new note in this situation.
If you want to prevent this overlapping note behaviour please use different MIDI out channels in all Key areas.

- Base note indicates the base note of the output note. For example if key area is C1 C2 and base note in C2. Note C1 is played but note C2 is output. Base note specifies how the output note is transposed in relation to the key area start note.
- Velocity mode: Specifies output note velocity/volume
  - Max: Velocity is 127 i.e maximum value Note: Velocity is the actual input note velocity First: Velocity is taken from the first note in the note list Last: Velocity is taken from the last note in the note list Average: Velocity is the average of all notes in the note list
- Volume: adjusts all the generated notes volume from selected Track
- **Start notes:** Specifies how many notes must be input before Cream will start processing the notes. This enables playing melodies without Cream processing the notes.
- Hold

Hold mode is very powerful feature. It makes it easy to play songs in live situation because only thing you must do is press chords once and not keep pressing them all the time. Cream Mobile uses hold latch mode which means notes can be toggled on/off by clicking the notes.

- Sync: This control specifies when new input chord is actually played. these values are in steps. If value is for example 3 the chord will actually be triggered when next third step sequence starts.
- Transpose: When this control is enabled the current chord is transposed by notes played. For example if chord played ie C3 E3 G3 and transpose enabled and then note G3 is played the output chord would be G3 B3 D3 (G Major)
- Bypass: When this mode is enabled all incoming notes are sent directly without processing them. Currently played note in hold mode keeps playing.



### All tracks

With this button you can choose whether the Hold button and pattern selection buttons affects to all tracks simultaneously. This feature is useful for example in situations where you want to change patterns in different tracks simultaneously.

### **Drum Loop**



You can set the global drum loop with the drum loop control. If enabled drum loop plays always when some track pattern is playing.

Select the loop by clicking in the centre of the control and then selecting from the prompt list. To apply the selection click the 'Load' button. Otherwise the previous loop will be selected. The rightmost control controls the drum loop volume.

### **Pattern controls**



These controls can be 'locked' using the lock control. This means control value is not changed when new preset is loaded.

- **Gate:** Specifies how much note is shortened/lengthened. The maximum value is (when control is at 100) 50% of rate value. The minimum value is -50% of the rate value.
- Swing: Specifies how much every second note is delayed. The maximum value (when control is at 100) 50% of the rate value
- Octaves: Specifies how many octaves is generated from all the input notes.
- **Transpose:** Transposes all output notes by amout control specifies. If Scale is used all notes are transposed to the selected scale. See Global Settings section how to override this behaviour.
- Rate: Specifies the length of the note/step played. If free mode is selected values are specified in hz. for example 1hz means that in one second only one note is played. When value is 20hz 20 notes will be played in every second.

Pattern view

ORDER	CHRDMEN	LENC	GTH	GAT	E	ACC	CENT	Ť	RAN	SP	C	DIV	2	SHIF	т	S	EQ	С	C 1	2	3	4	5	6	7	8
×																										•
							12				16		0		20	0	0	0	24		0	28	0	0		32

You can change values by tapping or dragging your finger inside data column. When double tapping the value is reset to default value.

The bottom control can be used to turn selected data section steps on or off. When step is off the value in step is ignored.

Note!

ORDER control step on/off control can be used to mute note completely. This means note is not played when step in ORDER tab is disabled.



• Pattern selection: This control is used to select Track patterns for editing and for playing. Only the selected pattern is played from each Track. When Pattern Sequencer is enabled patterns are automatically changed.

Copy: Copies current pattern Paste: Pastes copied pattern to selected pattern To all: Pastes copied pattern to all patterns



#### **Tools section**

- Draw tool: With this tool user can 'draw' step values
- Select tool: With this tool user can select area from step section. This section can then be copied or copied values can be pasted into it.
- Random tool: With this tool user can set random values to selected steps

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- Copy tool: Copy selected steps
- Paste tool: Paste copied steps to selected area. Only same control steps can be copied/pasted
- Clear tool: Clear selected area i.e set values to default
- Switch to quick edit view: Switches to quick edit view

### Pattern data



- ORDER:
  - O Off Arp plays nothing and note list is not advanced.
  - O Prev Arp plays same note it played in previous step
  - O 1st Arp plays the first note from the note list
  - O Last . Arp plays the last note in the note list
  - O Hi Arp plays the highest note in the note list
  - O Low Arp plays the lowest note in the note list
  - O Rnd Arp plays the random note from the note list
- CHRDMEM: Specifies the chord memory slot for this step
- LENGTH: With length you can multiply the the note length of the step. Value is relative to the current rate. For example if rate is 1/16 and length is 2 the actual note length is 1/8.
- GATE: With gate you can specify the the note length of the step. Value is relative to the current rate and note length. For example if rate is 1/16 and length is 2 and gate is 50 the actual note length is 3/16. This value overrides the pattern Gate value.
- ACCENT: With accent user can emphasize certain notes. Accent affects on note velocity. If note's accent is raised it's velocity is also rised and other note's velocity is lowered when needed. Remember that not all VST instruments obey MIDI velocity so it's advised to learn how to increase the velocity sensitivity for particular VST if accent values make no differences in played notes
- TRANSP: Specifies the amount of semitones every note is transposed. If scale is not defined transpose is done by semitones otherwise note transposition is done to correct scale degree. For example Played notes are C3 E3 G3 transpose value 1: no scale C#3 F3 G#3 C-major scale D3 F3 A3
- DIV: The note is divided into smaller parts defined by div value. For example if rate is 1/16 and LENGTH value is 1 and DIV is set to 2 there are two notes played in this step each 1/32 note in length
- SHIFT: Note is shifted left (negative values) or right (positive values) by amount specified by shift value.

- SEQ: Each column represents the played notes. Lowest note is at the bottom. For example if 3-note chord is played in step and only bottom slot is selected only the lowest note from the notelist will be played.
- CC sections: These data sections can be used to specify a CC data send to external device

### Pattern control specific controls

## The blue line below the looper control area represents pattern length The notes displayed in Pattern control data area represents current pattern position. The small orange line on top of the control area represents currently selected control position

• Loop control: Every step control have their own loop control. This enables playing different controls independently from other controls.

Loop points follow the tap so that the pointer closest to the tap point is moved.



- Loop direction: Specifies direction in which pattern control steps are advanced.
  - O Up: From note list start to end = from left to right
  - O Down: From note list end to start = from right to left
  - O Up alt: From notelist start to end and back
  - O Down alt: From note list end to start and back
- **CC controls**: With these controls it's possible to control other VST's controls by sending special CC messages

#### Using CC section

- O Select MIDI learn (or similar) from 'slave' application. By doing this 'slave' application begins to listen to CC messages.
- O Select Teach CC control value from selection list and enable TEACH CC control. You can

verify that 'slave' application has learned the MIDI message when control value slowly moves from value 0 to max value.

- O Disable TEACH CC control so it won't send any more teach messages to 'slave' application
- O Repeat this procedure for all desired CC controls.
- O Now CC values can be draw to CC control and 'slave' control will move according to them
- Reset on pattern reset: Reset pattern control when pattern resets. Otherwise continue looping normally.

NOTE! The default note list reset mode is continuous i.e doesn't reset. If one wants note list to reset when pattern resets he must enable Reset on pattern reset on ORDER tab!

### **Special marks**



The control tab left upper corner has mark which can be red or green. When mark is green the data control is on. When mark is red the data control is off and all it's values are ignored.

The control tab right upper corner has white mark which indicates that that control has input values.

### **Pattern specific controls**



- **Steps:** Defines pattern length. The blue line below looper control also represents this control value
- Play order: Specifies how notes in nelist are ordered
  - O Hi-Lo: Notes are sorted from highest note to lowest note
  - O Lo-Hi: Notes are sorted from lowest note to highest note
  - O As Played: Notes are sorted in order they are played
  - O *Reversed*: Notes are sorted in reversed order they are played
- Reset on new note: Pattern is reset and started from beginning every time new note is played

### **Quick edit view**



Quick edit view is a bigger edit view with fewer controls. It can be opened using the open quick view button.

### Synth editor



Cream Mobile features one virtual 2 osc synth for every track. You can open the instrument editor using the instrument editor button.

The controls are the same which you can find from every VA synth. These are explained in detail below:

#### Main

Mono - When enabled the synth plays only one note at a time.

Portamento - Adds portamento effect to the notes. Notes must be overlapping each others in order to hear this effect.

Volume - The main volume control for this synth.

#### Oscillators

Sample select - Choose either real instrument samples or wavetables as oscillator samples. Num Osc - The amount of oscillators to be used.

Detune - The detune of the oscillators.

Tune - Tuning of the oscillators.

Fine - Fine tuning of the oscillators.

Phase - The starting phase of the oscillators.

Volume - Oscillator specific volume.

#### Filter

Frequency - The cut frequency Resonance - The resonance of the filter Filter type select - None, Low pass, High pass, band pass, band pass peak, Band stop, Bell, Low shelf, High shelf

#### Presets

Load preset - Load a instrument preset Save preset - Save current instrument parameters to a preset file Init preset - Init instrument parameters. Note that the samples will not reset only the parameters.

#### Amp Envelope

The ADSR envelope af the instrument amp

#### LFO

You can control different instrument parameters with the lfo. Rate - The rate of the LFO Depth - The depth of the LFO

#### Envelope

You can control different instrument parameters with two different ADSR envelopes. Depth - The depth of the envelope

#### EQ

Simple to band EQ.

#### **FX** section

FX section includes 5 different effects. Distortion, Delay, Phaser, Chorus, Ambience. Use the effects carefully especially when you have more than one instrument enabled!

### **Chord memory**



With this section user can specify 16 different chords to be used in CHRDMEM data section. One chord can contain 8 notes maximum.

Chords contain only information about the intervals between notes. This is important thing to remember.

If chord memory slot has Major triad chord the actually played chord is determined by the input note. If input note is C3 then the chord would be C3 E3 G3.

- With preset control you can load and save chord memory banks. Each bank contains one chord for all chord slots.
- With fill chord control you can automatically set pre defined chords.
- Inv makes inversion out of the chord.
- Base note control specifies the chord's base note. Base note is the note where chord is placed in relation to the played note.

The neutral position for basenote is at note 13 (first note of the second octave)

For example: 1. Chord memory: notes 0 4 7 (C E G), Base note 0 Played note C1 -> Chord=C1 E1 G1

2. Chord memory: notes 0 4 7 (C E G), Base note 4 Played note C2 -> Chord=G#1 C2 D#2

3. Chord memory: notes 2 4 7 (D E G), Base note 0 Played note C1 -> Chord=D1 E1 G1

You can think the chord as a stamp where the base note is the handle. Wherever you put the handle (that is play one note) your chord is copied there.

#### Moving chords

If one wants to move chords left and right this is done by moving the base note instead of the chord itself. this is because we are dealing with only the intervals and when moving chords interval stays the same chord notes only rises and lowers.

For example user have simple Major triad chord and he wants it to begin one note higher than the note which triggers it.



He only moves the base note one half step to left.



In the first case if input note would be C3 the generated chord would be C3 E3 G3. In the latter case the chord would be C#3 F G#

Using 'Trigger CM' feature enables playing chord memory chords with keyboard keys. <u>See</u> 'Trigger CM' section for more information.

### **Pattern sequencer**

Live Ke			Cho	ord Me	mory			Pattern Sequencer								
Pattern	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶► 1
Length	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32	▶▶ 32
Repeat	▶▶ 1	<b>&gt;&gt;</b> 1	▶▶ 1	▶▶ 1	▶▶ 1	►► 1	▶▶ 1	<b>PP</b> 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	▶▶ 1	►► 1
Active Steps		0				0	0	0	0		0	0	0	•		

- This enables user to change Track patterns automatically.

- Pattern: Pattern number to be changed
- Length: length in rate steps which this sequencer step will last
- Repeat: How many times this step is repeated
- Active Steps: The length of the looped sequence

### On screen keyboard



The on screen MIDI Keyboard can be used to play Cream if there is no external MIDI device available.

The octaves can be changed with the octave arrow control on the right.

Keyboard notes shows information about which note it is and also to which Track key area it belongs.

### **Control zone**

#### Range CO-A#0

- C0 Toggle current pattern ORDER data on/off
- C#0 Toggle current pattern CHRDMEM data on/off
- D0 Toggle current pattern LENGTH data on/off
- D#0 Toggle current pattern GATE data on/off
- E0 Toggle current pattern ACCENT data on/off
- F0 Toggle current pattern TRANSP data on/off
- F#0 Toggle current pattern DIV data on/off
- G0 Toggle current pattern SHIFT data on/off
- G#0 Toggle current pattern SEQ data on/off
- A0 Toggle current pattern HOLD on/off
- A#0 Toggle current pattern HOLD BYPASS on/off
- B0 Panic! -> Reset Cream

#### Range C1-B1

- You can change Track patterns with MIDI-keys. Only patterns from the currently selected Track will be changed

Control Zone can be disabled from Configuration -> Settings -> Disable Control Zone

### Configuration



#### **MIDI** input

MIDI Source

MIDI input devices can be chosen using the MIDI input MIDI source section. If you want to use Cream virtual MIDI in port choose the 'Cream virtual destination'.

Choosing the MIDI input Cream starts to listen to incoming MIDI messages from that input. If MIDI in device is something different than Internal the internal keyboard can't be used.

#### Sync Source

When choosing the MIDI sync source Cream starts to listen MIDI clock messages and tries to set the inner tempo automatically.

When sync source is chosen the tempo can't be changed manually.

#### **MIDI** output

MIDI output devices can be chosen using the MIDI output MIDI section. If you want to use Cream virtual MIDI out port choose the 'Cream virtual source. There are separate outputs for every track

If 'Send MIDI Clock messages' is enabled Cream send the tempo information to all selected output devices.

'Send audio when Audiobus is connected' - When this control is enabled Cream generated sound is sent to Audiobus channel.

When Cream track MIDI messages are sent to external device no track audio is played internally.

When Cream receives MIDI messages from external device the internal keyboard is disabled.

#### Settings

- Audio latency: Specifies the internal audio buffer size. When latency is low the buffer is smallest.
- Start notes immediately: With this setting you can decide if the first note played will trigger Cream immediately or at the next note specified by the rate control.
- Use only ORDER on/off: If false all pattern step controls will have their own on/off buttons. This means if for example SEQ step 1 is off it's value will be ignored. If value is true only ORDER section on/off buttons will be shown in all control section. This helps building presets where user only wants to mute/unmute certain notes with on/off buttons.
- Transpose as semitones: By default Cream transposes notes to the selected scale if one is specified. With this setting you can specify that notes are transposed as semitones
- Transpose all output notes: With this setting all notes Cream output are transposed within the selected scale.
- Connect MIDI devices automatically: If enabled when opening Cream last used MIDI connections are restored. MIDI connections are also saved to song presets so if 'Connect MIDI devices automatically' is enabled Cream will connect to same MIDI devices it was connected when the preset was saved.
- Disable Control Zone: When enabled Control Zone no longer send control messages and all keyboard keys can be used for playing notes.
- Gate length in steps: When enabled GATE tab data can be used to specify gate length in steps. When GATE data values are greater than zero you can specify length in steps. Minimum value is 1 and maximum value is 32.

#### Store

Here you can purchase additional features to Cream.

### **AudioBus**

Cream can act as an AudioBus Generator. This means the AudioBus connection can be used to record Cream audio output to some other application which supports AudioBus.

Cream Mobile also support AudioBus state saving so you can make your own AudioBus configuration presets and recall them later on.

### How to use chord memory

- Go to PATTERNS->CHORDMEM: step data values contain values 1-16 (there's a bug now only shows values between 1-15)

- Outputted Chord is constructed taking the lowest note from the input.

For example if base note is note 13. on Chord Memory keyboard and notes 1,5,8 are enabled. User plays chord C3 D3 using his external keyboard. In PATTERNS->CHORDMEM section all slots are set to value 1 The actual outputted note is taken from chord C2 E2 G2.

Try to place the lowest note to where base note indicator is (in your mind) to better understand how chords are constructed.