

Chris Hein OCTA

Chris Hein - OCTA Manual

The heart of OCTA is the 8 channel mixer, which can hold up to 8 sound sources, each with its individual settings.

The interface is divided into 6 pages:

- The Mixer page provides a general overview with a big picture of the sound sources loaded.
- The Main page lets you adjust several global parameters, and a lot of settings for the 8 channels.
- The Effects page holds up to 20 different effects simultaneously.
- The Preset page offers the menu of Instruments presets.
- The Sequencer page lets you design the sequencer presets.
- The Settings page holds several global settings and the CC MIDI Controller assignment.



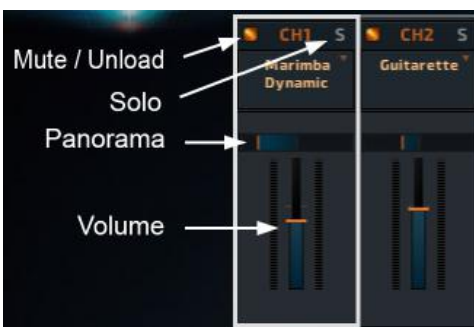
Mixer Page

The heart of OCTA is the 8 channel mixer, which can hold up to 8 sound sources, each with its individual settings.

It's like having 8 completely independent instruments in one.



The mixer page provides a general overview with a big picture of the sound sources loaded. Click on an Instrument name or on the small instrument picture to load individual Sound Sources to each channel.



For each channel you have:
Volume, Panorama and Solo.
Mute a channel, by simply unloading it,
which also can save a lot of memory.

Drum / Percussion Instruments:



On Drum & Percussion instruments, click "Show keys" in the lower right of the interface to see the keyboard mapping all available samples



Main Page

Here you can adjust some global parameters and a lot of individual settings for all channels.



"Scale" is a global parameter for all channels and lets you limit the notes to a specific major or minor scale.

"Key" sets the root key for this scale.

"Chord" adds an interval or a chord, based on the notes you play.



Hint: Hold the shift key while dragging the fader for more precise adjustments.

Command click resets each function to zero.

"Transpose" up to 36 semitones up or down.



"Tune" fine tunes the sound.

"Type" lets you design the way a channels sound will be triggered/heard.



"Layer" leaves the channel open for regular playing
 "Blend In" blends in the sound by using CC11
 "Blend Out" reduces the volume when increasing CC11.

"Output" assigns the channel to a specific audio output, depending on your audio interface.

The CC number for the blending control can be changed in the Settings page.
 With the combination of "Blend in" and "Blend out", you can morph between the sounds of two or more channels.

"Pad Center" and "Pad A-H" route the channel to the OCTA-Pad,
 "Release" plays the sound when releasing a key.



The "OCTA-Pad" lets you morph between all channels via the mouse on the XY-axis or with two MIDI controllers.

By default that's CC2 and CC3, but you can change the MIDI CCs on the settings page.

The Movement of the XY-PAD can be animated in the sequencer or on the settings page.

When using the OCTA-pad channel level indication is displayed in blue in the mixer



"Keyrange" defines the playable keyboard range of each channel with smooth crossfading between them. Select the upper and lower key limit with the black line and the fade in/out range with the orange line. This way you can create intriguing playable blends between instruments across the keyboard.



"Envelope" provides a classic envelope.
 "Curve" - sets the velocity curve for the Attack time
 "Attack" - sets the time it takes for the sound to reach full volume.
 "Decay" - the time it takes to fade to its sustained volume.
 "Sustain" - how loud the sound is after reaching secondary volume.
 "Release" - how long it takes to completely fade out.

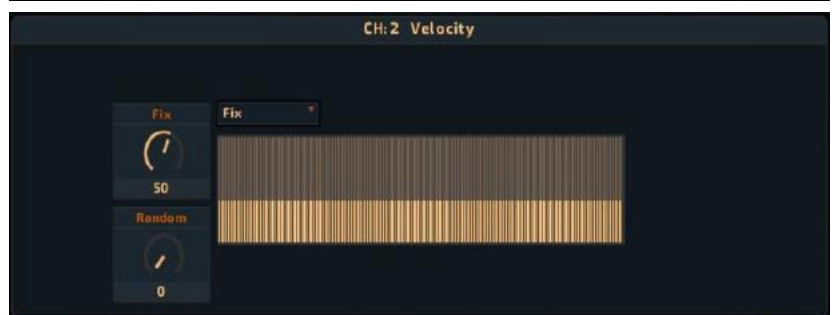
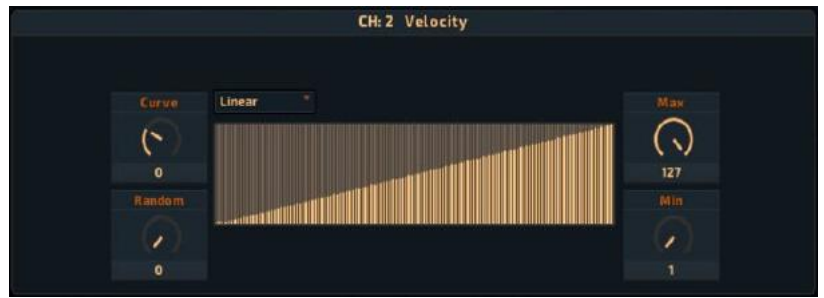


"Velocity" Tailor the velocity response to suit your playing style or perhaps make quick adjustments to how a sound responds to pre recorded midi notes. Set minimum/maximum velocity values and choose from 5 curve modes: Linear, Shelf, Compressed/Expanded, Fixed or Range. An extremely simple yet powerful section well worth experimenting with!



Setting different velocity curves to different channels can produce interesting sonic changes, depending on the keyboard velocity you play. You can even switch between channels by assigning a specific velocity range to each of them.

E.g. assign a channel to play loud on lower velocities, and another channel to play loud on higher velocities.



* A personal word on velocity here: Some keyboard players I see playing the Instruments in CH-OCTA play with high energy on loud velocities.

Keep in mind, that many of the instruments have up to 24 dynamic layers.

The jewels of OCTA are often found in the very low velocities.

Some MIDI keyboards struggle to reach the lowest velocities.

With this in mind raise the volume or use a compressor to try out the low dynamics.

"Keyswitches" are a nifty feature on the Main page to activate specific channels on the fly. Activate key switches, and assign any channel to any keyswitch. Up to 8 key switches can be programmed each individually positionable on the keyboard. Keyswitches are displayed in Red on the Kontakt Keyboard.



The orange key is the "Repetition Key" which triggers the last note or chord you have played. Great for fast repetitions of percussive instrument. Easily play a realistic tremolo e.g. on a Marimba.

You can assign the position of the repetition key on the settings page

Effects Page

Up to 21 Effects can be assign simultaneously to any instrument channel



The Effects page provides 3 ways to assign an effect to a channel:

- 6 Channel Effects plus an individual filter for each channel
- 6 Send Effects with an intensity fader for each channel
- 6 Insert Effects, which work as Master Effects for the whole instrument.

You can choose from three different views:

View A displays the Mixer and the Channel Effects

View B displays the Mixer and the Send Effects

View C displays the Channel Effects and Send Effects



Filter has its own dedicated page.

Each channel can have its own filter settings.

Cut Off and Resonance can be animated with the sequencer.



Vibrato controls are also on the Effects page.

Intensity and Speed are controllable via MIDI CC.

The intensity can control volume, Pitch and an Equalizer.

Vibrato can be turned on or off for each channel separately.



Channel Effects

Chose from a large variety of high quality, on board effects. And assign up to 6 completely independent effects for each channel.

Send Effects

present the most common effects. The send level can also be animated on the sequencer page.

Insert Effects

up to 8 Insert Effects can be assigned as master effects applied to all channels of the instrument.



Presets Page

OCTA offers 2 kinds of presets:

- Instrument presets
- Channel Presets

Instrument - Presets

Instrument presets contain whole combinations of channels along with all their Effects, Sequencers and other settings.

The Sound sources are tagged and organized in various Categories.

Double Click on a preset name to load it.

To save a Channel Preset, select an empty preset slot, click "save", enter a name and description and click "Apply"

You can also import Instrument Presets from third party preset libraries



Loading Instrument Presets via Snapshots

Open the drop-down menu and select any of the Snapshots.

Click the camera icon to switch the Instrument Header to the Snapshot View.



Click the little arrows to quickly load the previous or the next Snapshot



Channel - Presets

Channel Presets let you load an individual sound source for each channel separately.

Click on a channels name, to open the Channel Presets browser.

- <- Load a Sound Source only to keep all settings
- <- Load a clean Sound Source
- <- Load a processed Source

To load a clean version of the sound source, load the "Default Setting"

There are several presets for each sound source available with pre-programmed Effects, Envelope, filter and other settings.

To load a new sound without changing a channels settings load with "Source only"

The Sound sources are tagged and organized in various Categories.

To save a Channel Preset, select an empty preset slot, click "save", enter a name and description and click "Apply"

List of Instruments:

Real Instruments:

| | |
|------------------------|-----------------------|
| Vibraphone Soft | My Tube |
| Vibraphone Medium | Pizzicato Ensemble |
| Vibraphone Hard | Pizzicato Solo |
| Vibraphone Dynamic | Harp |
| Vibraphone Mute Soft | Harp Flageolet |
| Vibraphone Mute Medium | Harp Inch Harmonics |
| Vibraphone Mute Hard | MonoChord Finger |
| Marimba Soft | MonoChord Pick Center |
| Marimba Medium | MonoChord Pick Bridge |
| Marimba Hard | MonoChord Mallets |
| Marimba Dynamic | Piano |
| African Marimba | Toy Piano |
| Xylophone Soft | E-Piano 1 |
| Xylophone Hard | E-Piano 2 |
| Xylophone Dynamic | E-Piano 3 Pad |
| Glockenspiel | E-Piano 4 |
| Glockenspiel Mute | String Ensemble |
| Kalimba Finger Soft | E-Bass |
| Kalimba Nail Hard | Fretless Bass |
| Sansula | Slit Drum 1 |
| Bass Kalimba | Slit Drum 2 |
| Guitarette | Chimes |
| Hang Finger | Hang Mallets Soft |
| Hang Thumb | Hang Mallets Hard |
| Hang Stick | Hang Metal |
| Hang Brushes | Guitar Acoustic |
| Tongue Drum Soft | Ovation Stereo |
| Tongue Drum Hard | Ovation Pick Center |
| Tongue Drum Wood | Ovation Pick Bridge |
| Wine Glass | Ovation Mute Center |
| Boomwhackers | Ovation Mute Bridge |
| | Ambient Vibes |

Synths:

Pad 1 Space Traveler
Pad 2 Singing Heaven
Pad 3 Analog String
Pad 4 Breathing Warm
Pad 5 Spakling Chimes
Pad 6 Evolving Strings
Pad 7 Digital Organ
Pad 8 Cold Breeze
Pad 9 Big & Wide
Pluck 1 Nice and simple
Pluck 2 Funky Attack
Pluck 3 Synth Pizzicato
Pluck 4 Analog Lead
Pluck 5 Guitar Like
Pluck 6 Clean Bell Lead
Pluck 7 Digital Wave
Pluck 8 Waterharp
Pluck 9 Earth Tone
Bel Coloured Bell
Synth Bass 1
Synth Bass 2
Synth Bass 3
Key Thin Metal Keys
Key Rich Glass Keys
Key Windy KeyPad
Key Guitar Magic
Pad Massive Pad 10
Synth Lead 0Z
Key Bambule
Bel SpaceBells
Pluck Pluck Shape

Drums/Percussion

Hang Percussion
Drum Kit
Perc. Wood
Perc. Metal
Perc. Mix

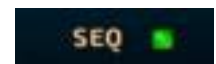
Sequencer Page

The heart of Chris Hein - OCTA is its powerful Sequencer.

8 independent sequencer channels provide endless possibilities to create stunning movements.



Select the sequence page in the Top menu and activate the sequencer by clicking the green light.



Clicking the green light at the bottom of each channel, activates or de-activates the sequencer for each channel individually.

This way you can play some channels and have other channels playing the programmed sequence on top.



On the top left, we have some global controls for the sequence.



"Chord Time" sets the time in milliseconds, to recognise the incoming notes as a chord.

It's hard to play all notes of a chord exactly at the same time, that's why the sequencer waits 20 milliseconds for incoming notes to recognise them as a chord.

20ms is usually enough time for chord recognition but you may need to adjust this.

"Start" and "End" sets the time when the sequence begins and stops.

- Instant plays the sequence immediately when a note is pressed.

- Beat, 1/2 bar or bar starts or ends the sequence on the next beat or bar.

With these settings you are always in time with DAW tempo and the sequencer will always play to the end of the beat or bar. However you can prolong sequencer playback with a sustain pedal!

"Swing" lets you shuffle the groove up to 50%

"Dynamic" offers three modes:

"Fixed", plays the velocities exactly as programmed in the sequencer.

"Velocity" plays the dynamics depending on the keyboard velocity, relative to the programmed dynamic.

"X-Fade" controls the dynamic via CC1, the modwheel.

On the right side, we also have some global controls for the sequence.



"Variations"

Each sequence can have up to 12 variations.

You can select the variations from the drop down menu at the right side of the interface.

Or you simply press the variation keys, displayed in green on the keyboard.



"Var. Keys" sets the position of the variation keys.

Variation keys work like key switches to select a specific variation, but you can even change the variation while a sequence is playing and the variation changes instantly.

You can copy and paste variations from one to the other.



On the right hand side of the interface are also some global controls for each sequencer channel.

"1/16" You can change the Note division from 16th notes to triplets.

"64" A Sequence can have up to 64 steps. Set the amount of steps from one to 64.

"Speed" The Sequence can be played at half time, normal or double time. Select double time for example to enable 32th notes.

"Copy Paste Init" You can copy and paste all channel settings from one channel to any other.

Or clear the whole channel by clicking "init".



"Page" Each page contains 16 steps. You can have up to 4 pages of steps.

Select the page you want to edit.

Click again to loop the page you are working on, so you can focus on just this page

Don't forget to turn off loop, when you are ready.

Copy, paste and initialize single pages.

Now, to the actual sequence:

Each channel has its own sequence.

Select a channel to edit its sequence.

The orange fields in the top bar show the active steps.

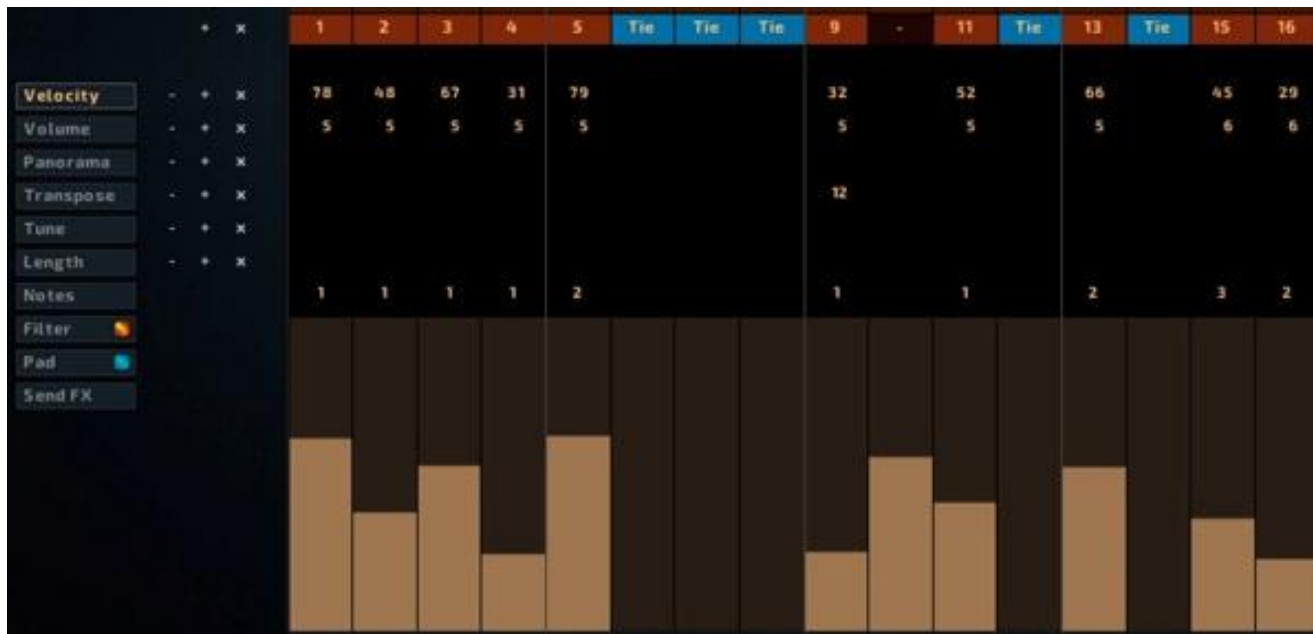
Click on a field to activate a step. Click again to set the set to "tie". The field turns blue.

Tie glues the steps together and extends the length of the active step, for longer notes.

The little plus on the left side activates all steps, the x deletes all steps.

In other functions, the plus or minus increases or decrease the value of all steps,

the x sets all values to zero.



"Velocity" here you set the keyboard velocity for each step.

"Volume" lets you change the volume, independently from the volume fader in the mixer.

"Panorama" spreads the steps in the stereo field.

"Transpose" works in a range of 36 semitones up and down, that's a range of 6 octaves

"Tune" changes the tuning. Use shift click on all functions for fine editing.

"Length" lets you change the duration of each step.

Usually you will use the bar graph to draw the values with the mouse,

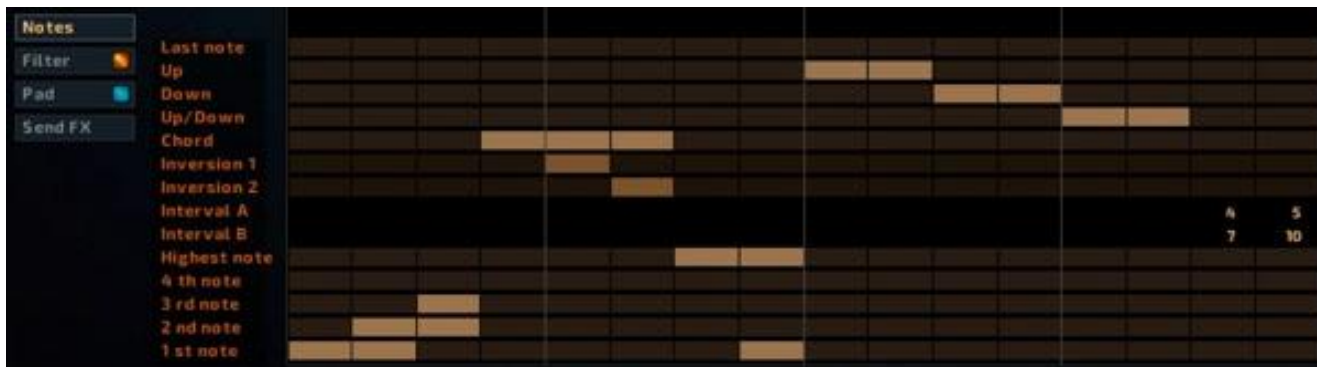
but you can also type in a certain value by double clicking in the corresponding field.

"Notes" Here you decide which notes of a chord you want to hear.

This section is complex but is indeed the reason why I named it "Sequencer" rather than arpeggiator!

I designed the Sequencer to encourage the adventurous musical spirit whereby you can play in any chords or single notes and it will follow your playing without any need to think about scales, major or minor.

It's a great tool for arriving at pleasing harmonies and surprising sonic textures!



"Last Note" simply plays the last note you pressed.

"Up" "Down" "Up/Down" acts like a traditional arpeggiator playing the single notes of a chord you play from low to high or from high to low. If you play a single note, this note will be repeated.

"Chord" plays exactly the chord you have played.

"Inversion1" "Inversion2" plays the first or second harmonic inversion of the chord or note you play.

Lets say you play C2-E2-G2 the first inversion will shift the lowest note one octave higher, so that you hear E2-G2-C3 the second inversion would be G2-C3-E3

The inversions are a fantastic feature, because they work not only for chords, but for all other playing methods.

"Interval" plays a straight interval from the lowest note you play.

Both intervals A and B play together and will be added to the note you play.

This is the only playing method, which may result in disharmony with the chords you play. But maybe you want that!

"highest note" "1st note" "2nd note" "3rd note" "4st note" act like guitar strings.

They play the single notes of the chord you play.

Multiple notes can be selected and added together.

Keep in mind, if you assign a step to a second note,

but play only one note, no sound will be audible on this step.

"Filter" lets you animate the filter by drawing a line for CutOff and resonance of the filter, if the filter is activated in the Effects page.

You can switch to the Effects page with the button "Filterpage" to make your adjustments there, and you can switch back to the Sequencer with the corresponding button on the Effects page.

You can choose a filter curve from sine, square and triangle.

Adjust the amplitude of the curve and change the frequency of the filter curve.

And of course you can draw the curve for CutOff and resonance manually.



"Pad" lets you design the animation of the OCTA-Pad.

You can draw the Pad movements manually with the X and Y controller, or you can record the PAD automation by clicking the record button, play a note and move the cursor in the XY-Pad with your mouse.

The length of the recording depends on the amount of pages you have assigned on the right side.

The XY-Pad can also be automated independent from the Sequencer on the Settings Page.



"Send FX" lets you automate the Effects, selected in the Effects page as send effects.

Activate a send effect to prepare it for automation, and draw the send level, (intensity) of the effect. A great function, if for example you want a reverb only on the snare sound of a groove, or a delay only on certain notes of a sequence, the possibilities are endless.



"Drum Groups" are a little bit different, because, of course, they don't follow the chords you play. In the sequence page, clicking on "key 1" opens up the menu of drum articulations available. Click on a name to assign a drum articulation to a step. Click and move the mouse to hear and adjust the actual velocity. Click "No Sound" to clear a step. You can assign up to 4 drum layers together on a single channel. Click "Edit Keys" to select a drum sample by playing notes on your keyboard. Close the window by click "Close" or press the actual step again.

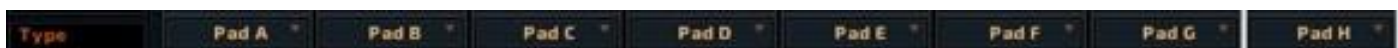
The screenshot displays a drum programming interface with the following components:

- Drum Articulation Menu (Top):** A grid of 60 options, organized into six columns and ten rows. Each option includes a key code (e.g., C 1, D#1, E 1) and a drum name (e.g., Takot Stick Center, Tom 5 Stick Center, Timba Finger Side Mute, Rebojador Heel, Congo Heel, Bongo Low Thumb).
- Sequence Grid (Middle):** A 16-step grid with velocity values above each step. Drum assignments are shown below the grid, such as 'B 6' in step 1, 'C#4' in step 2, and 'E 5' in step 3.
- Channel Settings (Bottom Right):** Controls for 'Variation (CH 1-8)' and 'Channel 2', including parameters for the number of variations, variation keys, speed, and page navigation.
- Control Panel (Bottom Left):** A vertical sidebar with controls for Velocity, Volume, Panorama, Transpose, Drum (Key 1-6), Filter, Pad, and Send FX.

The OCTA-Pad can be automated with the sequencer or here on the settings page, if you want to use the OCTA-Pad without any sequence running.



First, make sure, on the Main Page, all or at least a few channels are assigned to the OCTA-Pad.



Now you can automate the PAD movement:

- using the mouse,
- with two MIDI CCs from an external hardware controller,
- by drawing the CCs in the editor in your DAW.

But you can also record the Pad Movement within the instrument. Activate "Pad Automation", click record, press a note and move the cursor in the XY-Pad. The recording stops, when the selected length of the sequence is over.

Of course you can edit and fine tune the XY-Pad movement later.





The MIDI mode changes the general behaviour of the Instrument. When set to Instrument, all channels respond to the same MIDI Channels assigned for the Instrument. When set to "Channel" channel 1-8 respond to MIDI channel 1-8 and MIDI channel 9-16 affect all channels. This way you can play each instrument channel on its own MIDI channel. When "Channel" is activated, the instrument must be set to omni to receive all incoming MIDI channels.



Activate "Round Robin" and assign the note for the Repetition key.



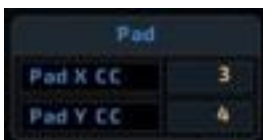
Blend Mode sets the MIDI CC for blending channels in or out, depending on the settings on the main page.



Assign the MIDI CCs for Vibrato Intensity and Vibrato Speed



Assign the MIDI CCs for the Sequencer velocity. Set the position of the Sequencer variation keys



Assign the MIDI CCs for X & Y axes of the OCTA-Pad