JR Hexatone™ Pro Help 1.0

Introduction

JR Hexatone™ Pro is a next-generation music application which features a unique approach to sound design. Thanks to its ability to load any custom samples and transpose them, JR Hexatone™ Pro can be used to create not only drum patterns, but also rhythmic or melodic sequences and progressions.

A single JR Hexatone™ Pro sound session is comprised of 6 samples. (This is a common number for many traditional drum machines. Those 6 samples usually include a bassdrum, a snaredrum, open hihat, closed hihat, crash/ride or a couple of toms). Of course, in JR Hexatone™ Pro you are not limited to this set - you can import any samples you like and create the most unusual-sounding rhythms ever! Or you can acheive fantastic results, such as unique melodic sequences, by importing the same multi-pitched samples, each with different effects and sample lengths.

JR Hexatone™ Pro is very flexible and you can create millions of original cool loops, sequences, and rhythms with it. To hear some examples, **press Menu -> Load Session to listen to the factory presets.**

Editing JR Hexatone™ Pro sessions

You perform all editing on one single screen. There are 4 "modes" of editing; you enable each one by tapping the appropriate shift button: **GRID, CELLS, SND, or SETUP.**

Basic JR Hexatone™ Pro functions

There are 90 “Field” hexagons (or “hexes”) on the screen plus the 6 "Start" hexes in the middle. "Start" hexes (the colored hexagons in the center) serve as "oscillators" - the basis of the sound. Once you press the Play button (the blue triangle), each of the 6 oscillators begins "travelling", starting from the center, moving forward to one of 3 (later - 6) possible Field hexes.

This travel continues for a specific number of beats (usually 4, 6 or 8) and then the oscillators return to the starting position in the center and start over. Because the movement of each of the oscillators can involve some degree of randomness, each sequence produced by JR Hexatone™ Pro can be quite different. However, you can control the amount of randomness, and create totally chaotic as well as perfectly stable and controlled patterns. (Be sure to check out the preset sessions as there are examples of both session types.)

So basically, when "Play" is activated, the 6 oscillators and their associated samples start moving in the hex field, changing position on every beat, and being affected by the “commands” they encounter as they travel.

Start hexes

The 6 colored cells in the middle of the field are the Start hexes. Each Start hex is associated with a specific sound sample, and each hex is the starting point for the oscillator travel. In GRID or CELLS mode, tap any Start hex to audition it. In SETUP mode, double-tap the Start hex to audition it. In SND mode, tap a Start hex to turn it on and off.

Oscillators

Each of the 6 Start hexes represents a sonic source or oscillator - a discreet sample with effects. When you press the "Play" button, the oscillators come alive and travel out into the field, starting from the field center. On every beat (depending on your settings),

the oscillators move to a new Field hex which can contain different Cell commands and/or Noteon commands; these commands alter the sound or operation of the oscillators as they pass through the cells. You can easily trace the paths of the oscillators visually as they travel.

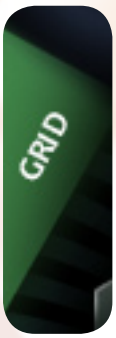
Field hexes

There are 90 cells in the field. Each cell can contain a Cell command (represented by a white icon inside the cell), a Noteon command (a red border around the cell), or both. Each cell can also have one of 3 levels of probability (represented by the cell's transparency).

Clearing the Field

Shake your device until the confirmation window appears, then press Clear or Cancel.

Hex probability ("GRID")



Oscillators have a kind of artificial intelligence - on every beat cycle (which can be different for each oscillator, as specified in the SETUP mode for each oscillator) they have to decide to which Field hex they will jump next. While making the decision, they follow these simple rules:

1) An oscillator always moves to the Field hex with the highest probability value.

There are 3 levels of the probability values: dim (lowest), middle and bright (highest).

The field is filled with hexes with "middle" probability by default. So if the oscillator is surrounded by 5 dim Field hexes and 1 middle, it will jump to the Field hex with middle probability. If the oscillator is surrounded by 3 dim hexes, 2 middle and 1 bright, it will jump to the "bright" Field hex.

In practice, manipulating probabilities is one of the key factors to creating breathtaking sonic patterns. By combining probabilities and "jump" Cell commands, you can create cool, long paths for the oscillator's travels.

If there are several cells with the same probability value nearby, the oscillator will choose the next Field hex randomly from them.

"Low" probability is usually used as a "border". "Bright" probability is usually used as an "attractor" for the oscillators.

2) If the current Field hex contains a "jump" Cell command (the direction arrow), it will jump to where it's told to, regardless of the Field hex probability value at the destination Field hex.

You change Field hex probability values in "GRID" mode (enter GRID mode by tapping the "GRID" shift button). Once in GRID mode, tap a Field hex to cycle through the 3 possible probability values.

Cell commands ("CELLS")

Each Field hex can contain a Cell command. In JR Hexatone™ Pro 1.0, there are 5 types of cell commands, and each has 6 variations. **Tap the big blue hexes at the bottom of the screen repeatedly to cycle through the possible variations.**

The position of the blue dot in one corner of the hex represents the variant, both in the big blue hexes at the bottom of the screen and in the individual cells.

1) Retrigger

Retrigger is a very quick repetition of the sound, and is a cool effect often used in IDM and glitch music. JR Hexatone™ Pro offers 6 types of retrigger: 2 times repeatedly, 4 times, 6 times, 2 times with an interval, 4 times with an interval, and 6 times with an interval. Retrigger takes the current oscillator sample length as its basis so you might want to limit the sample length by using SETUP Mode's Sample Length command, or with the Cell command "Slice".

2) Jump

This command tells the oscillator the direction in which to jump after the default sample measure time elapses. If the direction defined is impossible (for example, an

arrow pointing outside the field), the oscillator will perform a random movement.

3) Volume / Pan

Use these commands to alter an oscillator's volume/pan on the fly. Variant 1 reverts the volume changes back to the default settings defined in the oscillator's SETUP. Variant 2 increases the volume by 25%, and variant 3 decreases the volume by 25%. The same applies to panning (the stereo position of the sample): variant 4 reverts the panning to the default

value defined for that oscillator, variant 5 moves the panning 25% right and variant 6 moves the panning 25% left. If you use these commands often in your session, be sure to place the "revert to default" variants 1 and/or 4 at the very start of the oscillator path (at the center) so the sequence starts with the same parameters every time; otherwise, your playback might get too unpredictable (unless, of course, that's exactly what you want!)

4) Slice

The Slice command allows you to extract a small piece of sound from the whole sample, after which the oscillator will use that "cut down" version of the sample. Slice is best combined with the Retrigger Cell command. Variant 1 "Full" reverts the oscillator sample to its normal state. Variant 2 "ST-L" stands for "Start-Long"; in this variant, JR Hexatone™ Pro will use about 20% of the initial sample from its beginning. Variant 3 "ST-S" stands for "Start-Short" (using 10% of the original sample). Variant 4 "ST-VS" stands for "Start-Very Short" (using 2% of the original sample). Variant 5 "M-S" stands for "Middle-Short"; in this variant, Hexaton will use approximately 10% from the middle of the sample. Variant 6 "M-VS" is "Middle-Very Short" (using 2% from the middle of the sample.)

Each Slice variant produces a differently sounding output and if used wisely can give impressive results with only 2-3 oscillators.

5) Wait

Wait is a very important command - it allows you to override the global settings for the standard timelines and create an individual timetrack for each oscillator. Variant 1 tells the oscillator to wait twice the time defined as its default measure in SETUP. Variants 2, 3, 4, 5, 6 stand for the wait times of 1/2, 1/4, 1/8, 1/16, and 1/32 respectively.

Placing Cell commands on the field

To put a Cell command in a Field hex, engage the "CELLS" mode by tapping the "CELLS" shift button (or, if the blue Cell command hexes are already present at the bottom of the screen, tap directly on one of them). Choose the desired Cell command by tapping one of the 5 blue hexes at the bottom of the screen. You may need to tap the hex several times to choose the desired variant of the Cell command. Finally, tap the desired Field hex to insert the Cell command.

Deleting a Cell command

Drag a Field hex to the center of the field (the Black Hole) to remove the Cell command from it.

Instant IDM (placing random commands on the field)

Tap the Black Hole (the center of the field) and hold (do not lift your finger). The field will shortly start filling in with random Cell commands, and the longer you hold, the greater the number of Cells that will fill with commands.Try combining this with "Randomize Samples" (tap Menu -> More...); with some luck, you'll get an instant dream sequence!

Noteon command ("SND")

While travelling through the field, an Oscillator will only produce sound if it jumps to a cell which has a Noteon command (a red border on the cell). Try manipulating Noteon commands while playing live as a great tool for achieving astonishing results!

To insert a Noteon command, first enter "SND" mode by tapping the "SND" shift button, then tap a desired Field hex to set the red border. Tap again to clear the red border.

Remember, in "SND" mode, tapping a Start hex turns that hex on and off.

SETUP samples ("SETUP")

You set up all your samples in SETUP mode. Tap the "SETUP" shift button to enter SETUP mode. The 5 big hexes at the bottom of the screen will turn purple. Tap the desired Start hex to choose your oscillator. When you do, note that the color of the central big hex at the bottom of the screen changes to match the color of the selected Start hex.

Each of the big purple hexes at the bottom of the screen lets you edit 2 different sample parameters. Tap a hex to switch between parameters, then tap and slide up and down or left and right to change the values. (Note that this may require some practice.)

Available sample parameters:

1) Volume

Range: 0 - 100. Defines the default volume of the sample/oscillator.

2) Pan

Range: 0 - 100 (0 = Left, 50 - Middle, 100=Right). Defines the default panning of the sample/oscillator.

3) Pitch

Range: -24 to +18 semitones (0: no transposition). Defines the pitch transposition of the sample. Note that this affects the sample playing time (as it speeds it up or slows it down)

4) Length

The Length parameter is a simple version of an ADSR envelope. A value of 100 is 100% of the overall sample length; smaller values select a section from the beginning of the sample and fade out the rest. For example, a value of 50% means that only the first 50% of the sample will be used; the remainder of the sample will be truncated with a fast-decay envelope.

5) Timing

This is a very important parameter that will define the default speed with which the oscillator will travel in the hex field. It is measured in fractions of a beat. 1/1 stands for a single beat, 1/2 is half a beat, etc. (Please note that the current implementation of Swing in JR Hexatone™ Pro is intended for 1/2 measures only.)

6) Noise

Noise is very important since it is perceived on a subconcious level. So it might be a good idea to add some cool white noise to your clean and shiny samples. It can also be useful to add some noise to snare/clap samples to make them snappier.

7) FWDonly

A very important parameter. By default, an oscillator is allowed to go backwards while travelling in the hex field, so that on one step it might go forward, on the next backwards, on the next forwards again, etc.) By setting the FWDonly parameter to ON, you will prevent the oscillator from going backwards to the previous hex until the oscillator reaches the edge of the field. Once it reaches the edge of the field it will turn around and head back to towards the center, based on your cell probabilities and Jump settings.

8) FX

FX is the unique Destrukto effect which combines Bitcrushing with Distortion. Try different settings for different sounds.

Selecting a sample to be used by an Oscillator

Tap the center big cell at the bottom of the screen to change the sample associated with the oscillator.

For your convenience, all the samples are divided into 8 subcategories:

1) BD (bassdrums)
2) SD (snaredrums, claps)
3) HH (hihats, crashes, rides)
4) TOM (toms)
5) PERC (percussive bits, elements, pieces)
6) CHR (chromatic (pitched) percussion and instruments)
7) SYN (various synthesized sounds)
8) JR (Signature samples by Jordan Rudess)

If you upload your custom .wav samples through ioLibrary Wi-Fi Server, you can assign your file one of those prefixes ("bd_user01", for example) and it also will be listed in the corresponding category. (Files without one of these prefixes will be listed in the "ALL" category). Important: JR Hexatone™ Pro accepts only 16Bit/44.1kHz mono .wav files.

Tap the blue arrow at the right side of the screen to load the sample.

Tap the filename to audition the sample. Tap any other file or the same file again to stop the audition.

You can also produce samples with other Amidio apps (Noise.io, Star Guitar Pro, Star Piano, Star Melody) and then use them in your JR Hexatone™ Pro sessions.

OTHER MAIN SCREEN FUNCTIONS

Recording

Tap the "REC" button to start recording. Tap it again to let JR Hexatone™ Pro know that you're willing to finish the recording. JR Hexatone™ Pro will record the current measure to the end (to produce a Seamless Loop). A third tap will stop the recording immediately, if you prefer.

You can audition your recording instantly by pressing the button labeled "PLAY". All recordings are saved to the "Local Session" folder. (You will need to locate them with File Manager and "export" them to ioLibrary if you want to access them via the ioLibrary Wi-Fi Server, Intua Beatmaker or other Amidio music apps, all of which share the same ioLibrary folder).

Setting Tempo / Swing / Loop length

JR Hexatone™ Pro has a merged control for Tempo, Swing, and Loop Length. Tap the big hex to cycle through the parameters, then slide up and down or left and right to change the parameter value. We recommend Loop lengths equal to 4, 6, or 8. Swing will generally work best if all oscillators have their Measure value set to 1/2 (although feel free to experiment with other values).

Play button

This button can be used for instant auditioning of what you've just recorded, or for auditioning/overdubbing of any sound file you have in the Local Session / ioLibrary folder. Start File Manager (Menu -> File Manager), then locate the desired sample, tap it, and press "Load". Then press "Play". Now, if you perform a Record, you will overdub your file (layer up the sounds).

Recording along with the Microphone

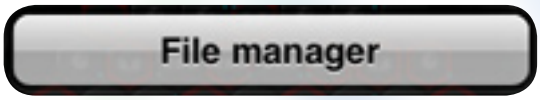
Tap Menu, then More, then "Mic On" button. Note that this will not work with the internal mic on an iPhone or iPod Touch - you will neet to connect an external mic or headset. You can set the microphone volume with the slider.

Effects

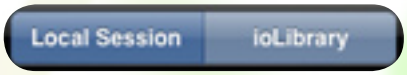
You can utulize Chorus/Delay or Stutter (buffer override) effects by pressing the corresponding CH or ST buttons at the top corners of the screen. Move/rotate your device and feel the sound changes. Press the buttons again to turn the effects off.

FILE MANAGER

Press **Menu -> More... -> File Manager to launch it.**



Just like any other Amidio app, JR Hexatone™ Pro has 2 storage folders:

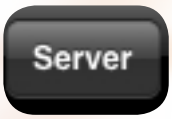


1) Local Session (your own private folder, not visible/accessible by server or other apps).

2) ioLibrary (the shared Amidio folder, the contents of which are visible by all Amidio apps and Intua Beatmaker. You can access the files in ioLibrary by using the built-in Wi-Fi server).

Important: Factory samples in JR Hexatone™ Pro are located in the Local Session folder due to their quantity (300+). So, if you like one of the samples and want to use it in your desktop DAW or Beatmaker, locate it within the Local Session folder, tap it and press "Export".

Launching ioLibrary Wi-Fi Server



In order to transfer your files to your desktop PC or to upload your own samples to JR Hexatone™ Pro, you first have to be connected to a Wi-Fi network.

In File Manager, press the "Server" button. You will be given a URL address (something like "http://10.0.1.168:8080", although you might see something different). Launch your web browser on your desktop computer (Amidio recommends Safari or Firefox), and type that URL into the address field.

Important: The server is active (on) as long as you have the URL window displayed inside JR Hexatone™ Pro. Do not close that window until you finish your work with the ioLibrary server.

Deleting files from Local Session / ioLibrary

Press the "Edit" button and then delete the desired files. Alternatively, you can clean up some space in the ioLibrary folder from your desktop computer (via Wi-Fi Server)

Important: Deleting factory samples can affect the stability of factory sessions.

Getting your recordings to Intua Beatmaker

Important: The same actions will be required for any Amidio app (Noise.io Pro, Star Guitar Pro, Star Piano Pro, Star Melody).

1) Record a loop of your choice.
2) Go to File Manager (Menu -> More... -> File Manager)
3) Locate your recording in the Local Session folder (you may need to tap it and listen to it by hitting "play"). Rename it if needed by tapping the window with the filename.
4) Press the "Export" button. It will generate .CAF and .WAV files with the same name inside the ioLibrary folder.
5) Launch Beatmaker and get the file by going to Pads -> Sample -> Load -> Noise.io Samples

Overdub-recording of Hexatone with loops generated by other Amidio apps

You can overdub-record Hexatone's loops with loops generated in Noise.io Pro, Star Guitar Pro, Star Piano Pro, and Star Melody.

It is recommended to set the same BPM for the base loop and the overdub-loop so that they match.

Assuming that you have exported those loops to ioLibrary:

1) Go to File Manager (Menu -> More... -> File Manager)
2) Locate your recording in the ioLibraryfolder (you may need to tap it and listen to it by hitting "play")
3) Press "Load"
4) Press "Play" (top right button). Your loaded loop will start playing
5) As soon as the loop repeats once, press "Rec" button. Careful timing is needed here but it's quite possible and easy.

GOOD LUCK!

Important links

http://amidio.com