

DARK / RED
MATTER
MANUAL

Changelog

V1.1

- Added the 'Red Matter' Instrument which uses a standard Pattern based System rather than Snapshots.
- Random Volume Sequencer now disregards the 'Full V' setting.
- Added Copy To All and Remix functions.
- Added Row options Menu
- Random Slice now quantized to 1/4 to make them more useful especially for Drums.
- Added ALT/OPTION Vertical Editing for all Pattern knobs, Sequencer Rows still behave the same as they did previously.

v1.0

- Initial Release

Introduction



Dark Matter is a Loop Re-sequencer which has one pattern with a focus on full knob DAW automation, as well as 12 snapshots which can be triggered in real-time via the keyboard or the GUI.

Red Matter uses a traditional Pattern based System in the same way as other HGS instruments like Succession Pro and Emergent Properties. All other functionality is the same. This manual describes Dark Matter and has a section detailing the Differences of Red Matter.

Red Matter



Identical to Dark Matter except it uses a traditional Pattern System instead of Snapshots much like other HGS Instruments. This will describe those differences, the rest of the manual discusses Dark Matter but is still relevant to Red Matter.

Another Difference is that in Dark Matter all Snapshots are rolled out to 16 Steps whereas in Red Matter each Pattern can have different step sizes (the same as the Dark Matter Main Sequence).



There are 12 patterns in total and one is always selected. Pattern 1 is equal to the main Sequence in Dark matter and Snapshot 12 is dropped. You can change patterns using the GUI Buttons(which can be automated) or using the dedicated 'RED' Midi Octave.

- **MIDI ENABLE**
This will switch On/Off the Midi Octave changing Patterns, useful to temporarily disable for working on a specific Sequence if Pattern switching is already recorded.
- **TO ALL**
Copies the current Pattern to all other Patterns.
- **REMIX**
Copies to All other Patterns and Remixes the sequencers for creating a set of Instant Variations.
- **COPY BUTTONS**
Each Row has a 'C' Copy Button which will copy the Pattern to the Current Pattern.

Banks

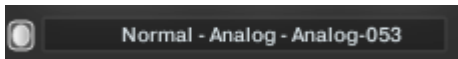
There are 7 Banks of 127 loops selected by the Banks Knobs:

1. **ANALOG** - 127 Loops created specifically for Dark Matter using an Analog Four and an Evolver.
2. **MORPH** - 127 Morphing sounds and Wavetables
3. **MORPH/RADIO** - 127 Wavetables and Radio Based Loops
4. **HITS A** - 127 Drum Hits, each Loop is made up of 4 individual drum Hits which can be selected via slices.
5. **HITS B** - 127 Drum Hits, each Loop is made up of 4 individual drum Hits which can be selected via slices.
6. **DRUM LOOPS A** – 127 Drum Loops
7. **DRUM LOOPS B** – 127 Drum Loops

Additionally there are 5 Different Modes selected by the Mode Knobs as follows:

- **1 – Time Machine Pro**
- **2 – Time Machine Pro Reversed**
These are Reversed for some David Lynch style madness
- **3 - TM**
These use Kontakt's Tone Machine Mode for some Granular and occasionally Sabres of Paradise type sounds.
- **4 - LQ**
These use the Time Machine Pro in Low Quality Mode which uses less CPU and sounds different. Note that the Tune Sequencer has no effect on these Banks.
- **5 - BM**
These banks use Beat Machine Mode which tends to split up the slices more like a Gate Effect. Note that the Tune Sequencer has no effect on these Banks.
- **6 - BRIGHT**
Uses TM Pro but has a brighter formant sound. The Morph, Mixed and Hits 1 & 2 banks use Sampler Mode and so don't use time-stretching. This means they will repitch like a traditional sampler and in the case of the Hits can add some out of time wildness to the rhythm.
- **7 - CHOPPER 8**
The Chopper Modes use an LFO SAW shape to affect the Volume and Filter Cutoff to overlay pulses of different tempos to the samples. Especially good with the Morphs and Wavetables. This one uses 1/8 beats.
- **8 - CHOPPER 16**
This one uses 1/16 Beats.
- **9 – CHOPPER 32**
This one uses 1/32 Beats
- **10 – CHOPPER 6**
Uses 1/6
- **11 – CHOPPER 3**
Uses 1/3
- **12 - CHOPPER 8 - Reversed**
The Chopper Modes use an LFO SAW shape to affect the Volume and Filter Cutoff to overlay pulses of different tempos to the samples. Especially good with the Morphs and Wavetables. This one uses 1/8 beats.

- **13 - CHOPPER 16 - Reversed**
This one uses 1/16 Beats.
- **14 – CHOPPER 32 - Reversed**
This one uses 1/32 Beats
- **15 – CHOPPER 6 - Reversed**
Uses 1/6
- **16 – CHOPPER 3 - Reversed**
Uses 1/3
- **17 – SQ CHOP 8**
Uses a Square Waveform, Banks 2/3 use normal Sampler mode and the other banks use Time Machine 2.
- **18 – SQ CHOP 16**
- **19 – SQ CHOP 8 - Reversed**
- **20 – SQ CHOP 16 – Reversed**
- **21 – Sine Slow**
- **22 - Sine Faster**



There is a display which is used to show the currently playing Mode, Bank and Loop names. If you disable it, it will show this same information when adjusting the Mode, Banks and Wave knobs.

Modulation Wheel

The Modulation Wheel is used to shift the Waves in a positive direction to get an instant remix. It will wrap around if a step goes over 127 and start again from 0 onwards. If you find a sequence that you like, you can use the SET MW button to make the change permanent.

The Sequencer

The main Sequencer is the heart of Dark Matter and allows have individual step lengths for each Row. There are also 12 snapshots which can be used as patterns, the main Sequence can be copied to any of the 12 slots using the red copy buttons, more on that below.

Because the multi step length nature of the Main sequencer means that it can go on forever changing, which can be desirable, the Restart setting provides a way of restarting after X steps so that you can force repetition. This setting can be between 0 and 128 steps, setting it 0 will disable it for true freeform playback. This only affects the main Sequencer and not the snapshots which are fixed at 16.



When Editing the Knobs/Enable buttons with the Mouse using ALT/OPTION KEY all knobs in the Row will sync and move to the same value which is very handing for making a row all the same value. This can also be used to record automation.

There are 13 Sequence Rows which target the following:

- **VOL/ENABLE**
This determines if a step is played using the button and at what velocity level it will play.
- **MODE**
This will select which Mode will be used by an active step. See above for the list of available Modes.
- **BANK**
There are 7 Banks of 127 Loops, this will decide which will be triggered on the active steps.
- **WAVE**
This will determine which Loop will play on the active steps from the current Bank.
- **SLICE**
Each Loop can be triggered at 16 start points, they are not strictly slices as the loop will continue playback from that point, although slices describes them logically.
- **LENGTH**
This sets the percentage used for the length of a triggered step. The length itself is calculated up to the next triggered step which forms the 100% value. So if there are 3 steps that are un-triggered the full length value will be 4 steps.
- **TIME**
This determines the amount of Timestretch used. 1 is actual tempo, 2 is half tempo and so on. This is active on all steps.
- **TUNE**
Offsets the pitch of the step by -12/12 semitones. This is active on all steps.
- **CUTOFF**
Affects the Filter Cutoff in a positive direction. To the right of the Row is an amount knob to adjust the intensity as well as a Base value which represents the Sequencer setting of zero. This is active on all steps.



- **RESO**
Filter resonance. To the right of the Row is an amount knob to adjust the intensity as well as a Base value which represents the Sequencer setting of zero. This is active on all steps.
- **SAMPLERATE**
Reduces the Samplerate. To the right of the Row is an amount knob to adjust the intensity as well as a Base value which represents the Sequencer setting of zero. This is active on all steps.
- **BIT DEPTH**
Reduces the Bit Depth. To the right of the Row is an amount knob to adjust the intensity as well as a Base value which represents the Sequencer setting of zero. This is active on all steps.
- **DRIVE**
Affect Drive/Distortion. To the right of the Row is an amount knob to adjust the intensity as well as a Base value which represents the Sequencer setting of zero. Note that this has to be switched on by setting the Base Knob to at least 1 otherwise the drive is switched off. This is active on all steps.
- **PROBABILITY**
This row will add a probability factor to whether this Column is used or not which helps to add some variation to the playback. The percentage amount is set by the knob on the right. The scale goes between 100% will always play and 0% will never play.



Each sequencer Row has the following options

- **< >**
Shifts the Row Left or Right. Note that Enables are shifted Left/Right with Volumes.
- **D**
sets the Row to the Default settings stored in the Default File. (You can save your own at anytime using the SAVEDEF Option.
- **R**
This will Randomize the Row.
- **G (global randomize)**
Decides if the Row will be Randomized by the Global Randomizers.
- **ENABLE**
Decides whether a Sample will be triggered on this step.
- **RANDOM AMOUNT**
This will add a random Value to each step, additionally the **RND Prob** Setting will determine the probability of a random value being used.



Snapshots



The main intention of the Dark Matter sequencer was to have a Sequencer where every step parameter supports automation. This allows total freedom on transforming a sequence through time. The downside of this approach is that because the knobs have to be shared it makes having different patterns impossible in this scenario as the automation would overwrite the different patterns with the same values.

The snapshot system is a way around this, by using virtual copies of the main Sequencer which can be played without being affected by Automation. With Edit disabled this means that the knobs will always be connected to the main Sequencer and hidden when a snapshot is played.

Edit Mode allows for the editing each snapshot as normal, and if you don't plan on using automation Dark Matter can then be used as a standard pattern sequencer. By using this system it allows the best of both worlds.

The idea is that you can copy the main Sequence to a snapshot by clicking the record button to one of the 12 available slots. This will roll out the current Main sequence to 16 steps and place it in the snapshot. These Buttons can also be automated which opens up some interesting possibilities for performance.



The Button at the bottom indicates that this slot has a Sequence loaded, you can remove the sequence by clicking it so that it goes dark. Empty snapshots will not engage and will play the main Sequencer.



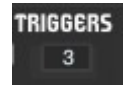
The restore Buttons will send the snapshot back to the main Sequencer. Restore will recreate the original step lengths used, whereas Restore 16 will copy it as a 16 step Sequence as used by the snapshot.

The snapshots use 16 steps for 2 reasons. Firstly it allows them all to play synchronised so that when jamming with changing them they are always lined up. The second is that when using different pattern lengths in the main Sequence you may have a pattern you like but it starts on the wrong beat. If you try to adjust that using the Pattern Left/Right shifts, it will most likely completely change the pattern due to the different lengths. Because snapshots use 16 steps it means that it can be shifted for this purpose and will always sound the same but change the start location. Copying it back using standard Restore does not always work, but often does. If it doesn't you can use Restore 16.

'To All' will copy the current snapshot to all other snapshots.

'Remix' will Copy and Remix the current Snapshot to all other Snapshots.

Triggering Snapshots has 2 methods. Firstly you can use the buttons which can also be automated. This way means that the snapshot will stay fixed until another is pressed or the same one depressed. The 2nd method is to use Octave dedicated to triggering them highlighted in yellow on the GUI keyboard. This method works by only playing the snapshot whilst the note is played and will always revert back to the main sequencer when none are held. You can choose which octave these triggers are used by setting the Triggers Octave setting.



The enable button decides whether the Snapshots respond to Midi Triggers, this is useful if you want to work on a particular snapshot whilst trigger notes are playing back in your sequencer.



The Options Menu has some functions relating to the Sequencer. Duplicate will repeat the 1st 'X' Steps through the rest of the Sequence. For example Duplicate 1-4 will repeat steps 1-4 four times to make up the 16 steps.

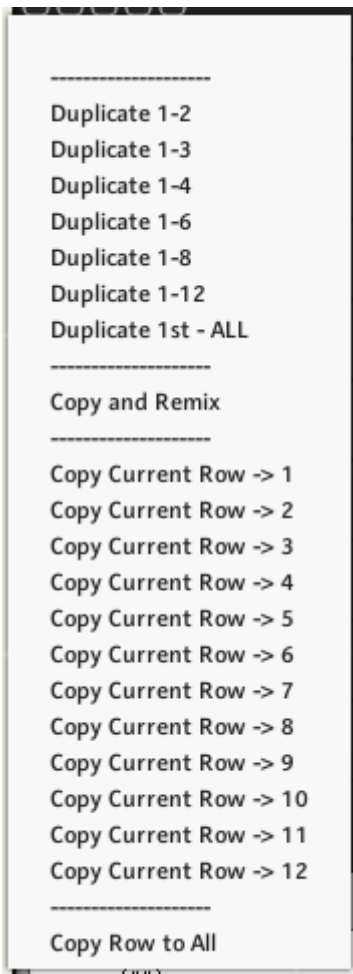
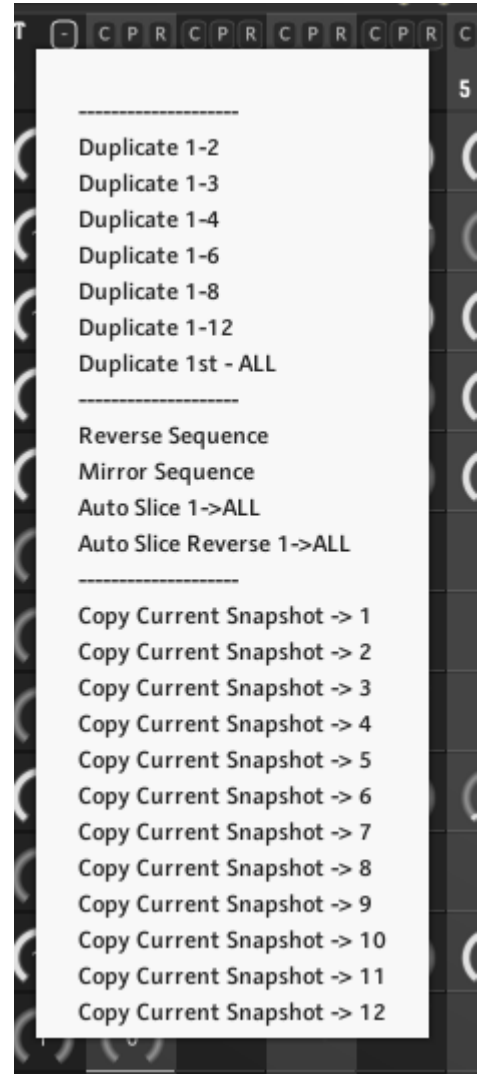
Reverse Sequence will flip the sequence, and Mirror will repeat the 1st Half of the Sequence backwards in the Second Half of the active steps.

Auto Slice 1→ All will duplicate the 1st step to all 16 steps and set the slice order to play forwards so that it sounds the same as playing the loop. Auto Slice Reverse is the same but reverses the slice order.

Copy Current Snapshot can be used when a snapshot it is active. Using this option you can copy the current snapshot to any other slot.



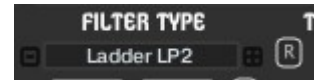
The Top of each column has a copy, paste and Randomize. Copy will register that step ID and paste then copies to the new step.



Additionally there is a menu for each Row which provides useful Functions for each Row. There is also the ability to Copy to All Snapshots/Patterns and Copy/Remix Row.

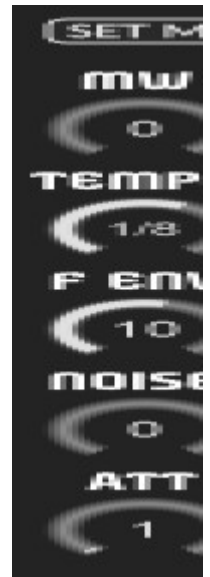
Synth Options

- **FILTER TYPE**
Select which filter is used.



All of the following can be unique in each snapshot.

- **LEVEL**
Main Level of the Sequencer/Snapshot
- **MW – MOD WHEEL**
This is a representation of the Mod Wheel which has the effect of shifting the samples through the current Bank which is great for real time performance. However this can also be used to explore different sequences, once you find one that you like, click on the SET MW button and it will permanently change the Sequencer to those loops and reset the MW Slider to zero. These can also be stored in snapshots.
- **HOLD**
This will allow holding played notes indefinitely as an easy way to work on presets hands free.
- **TEMPO**
The Tempo Synced clock divide of the Sequence.
- **SWING**
Applies a Swing to the tempo
- **ENV AMOUNT**
Amount of Envelope applied to the Filter, this can be Positive or Negative
- **FILTER DECAY**
Sets the Decay Time for the Filter
- **NOISE**
Adds lofi white noise to the mix.
- **TUNE**
Allows detuning the entire Sequencer by -+12 Semitones
- **ATTACK**
Attack Time of the Volume of each triggered Sample
- **RELEASE**
Release Time of each triggered Sample. Note that this will only be obvious when using shorter step Lengths, as the steps are monophonic in playback.



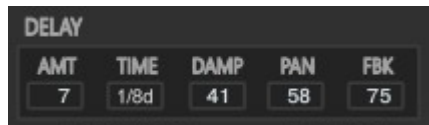
Reverb



The Reverb uses Impulse Responses to generate the Reverb.

- **AMT**
How much Reverb between dry and wet.
- **Size**
This is the Time of the Reverb Tail in a percentage of the original IR Time.
- **LP**
Low Pass Filter
- **HP**
High Pass Filter
- **PRE**
Pre-Delay of the Reverb
- **Impulse**
Selects which Impulse Response is used from a selection of 50

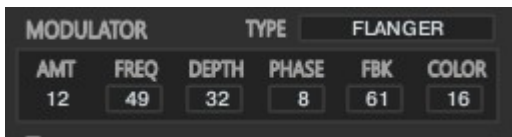
Delay



The Amount is unique to each Snapshot.

- **AMT**
How much Delay between dry and wet.
- **Time**
Tempo Locked Time of the Delay
- **Damp**
How much the signal is dampened.
- **Pan**
Width of the Delay Pan
- **Feedback**
How much Feedback the Delay uses to generate repeats.

Chorus/Flanger/Phaser



Multi Purpose Modulator which can be used as a Chorus, Flanger or Phaser. The Amount is unique to each Snapshot

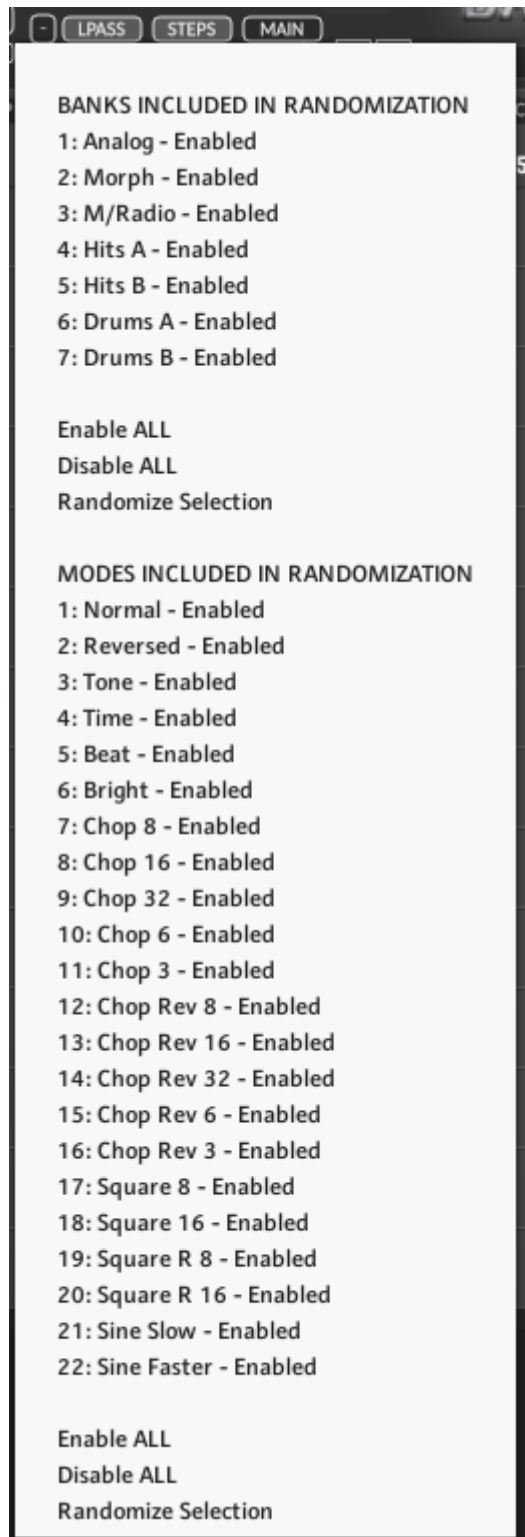
- **AMT**
The Amount of Chorus between 100% dry and 100% Wet.
- **FREQ**
The Frequency of the Modulators LFO
- **DEPTH**
The depth of the Modulation
- **PHASE**
Stereo Phase Offset of the effect
- **FDBK**
The Feedback Level of the Flanger and Phaser
- **COLOR**
The Central Delay time of the Flanger.

Global Randomizers/Options

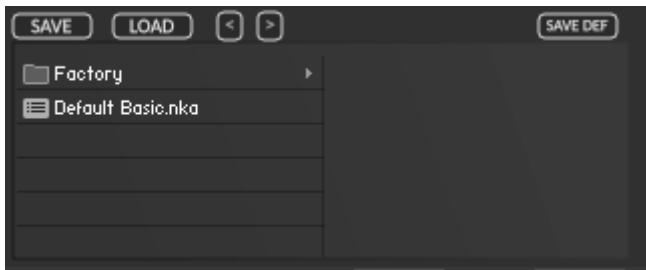


The Global Randomizer will Randomize Everything to create a unique Preset. The random Option will also affect other Randomizers where appropriate:

- **FULL VL**
Forces the any Trigger Randomization to use Full Volume Levels, global or local.
- **LPASS**
Forces the Filter Type to be locked to Low Pass when Randomizing.
- **FX**
When enabled the FX Section will be Randomized when using the Global Randomizers.
- **STEPS**
This will enable randomizing Step Lengths on the Main Sequencer.
- **G – Row Randomize?**
Each Sequencer Row has one of these Buttons and the Row will only be Randomized when enabled.
- **MAIN**
Allows Randomizing the Main Sequencer
- **SNAPS**
This will allows the Global Randomizer to Randomize all the snapshots
- **Options Menu**
This allows selecting which Banks and Modes are available to the Randomizers. You can also randomize the selection.
- **D**
This will Load the Main default Preset. You can overwrite this with the current Preset by using 'Save Def.'
- **R**
Global Randomizer which affects all enabled options.



Browser



Dark Matter uses it's own Preset System and Presets can be loaded or Saved using the Preset Browser. The Preset Folder is called 'Dark Matter Presets'

- **SAVE PRESET**
When you save a Preset, unfortunately Kontakt always opens the File Browser showing the data folder which stores all the configuration files for the Synth, so you must select the Preset Folder and save your preset there so it will be visible next time you load the synth. You can create sub folders in this directory if you wish, they will be listed on the Left hand side.
- **LOAD PRESET**
This is only needed to load a preset which isn't visible in the File Browser. Useful because Kontakt script provides no way of refreshing the browser except by reloading the Instrument. This provides a way of loading a preset in that situation.
- **SAVE DEFAULT**
All Homegrown Sounds Kontakt Instruments use a Default File for referencing when using any section or Global Default button. This Button will allow you to overwrite the file with the current state of the instrument, which will be used from then onwards.
- **PRESET PREVIOUS AND NEXT**
These Buttons will navigate through the presets. However a Preset must be loaded in the Browser first to create the start point.