* Octatrack DPS-1 OS 0.998 Release information *

IMPORTANT: SECURE YOUR PROJECT TO COMPACT FLASH CARD USING
'PROJECT CARD SYNC' BEFORE UPGRADING AND RESTORE IT USING
'CHANGE PROJECT'. THIS IS THE MINIMUM SUPPORTED WAY TO KEEP
YOUR PROJECT INTACT BETWEEN OS UPGRADES!
SETTING A RESTORE POINT OR BACKING UP YOUR PROJECT TO
COMPUTER HARDDRIVE IS EVEN BETTER.

IMPORTANT: When upgrading from 0.995 to 0.995B or newer, and your current
project show broken slices, skip the card sync and do the following.

 * Turn the Octatrack off.
 * Hold [FUNCTION] while powering on.
 * Select [TRIG 2], Empty Reset, now the Octatrack boots without a mounted
   set or project.
   WARNING: Any changes to the current bank made using 0.995 will be lost.
 * Place the binary file in the root of your Compact Flash Card.
 * Select 'OS UPDATE' in the 'SYSTEM' menu and follow the instructions.
 * When the Octatrack is restarted, mount the set again and change to your
   project.
 * If the slices were never saved to the card in 0.995 or if you have used
   Set Restore Point before upgrading to 0.995 (then use Restore Project),
   the slices should now be ok.

How to upgrade:

You can upgrade either by using a binary file (.bin) or
a SYSEX file (.syx)

– Upgrading using a binary file –

* Place the binary file in the root of your Compact Flash Card.

* Select 'OS UPDATE' in the 'SYSTEM' menu.

  An 'OS UPGRADE' dialog will show up displaying the name of the
  binary file and 'OS UPGRADE OK'.

* Press [ENTER/YES] to continue.

  A status bar will show the preparation and programming of the
  flash. Please reboot when the dialog asks you to.

– Upgrading using a SYSEX file –

* Hold down the [FUNCTION] button while powering on.
* This should take you to the Octatrack boot menu.
* Enter the "MIDI Upgrade" mode by pressing the [TRIG 3] key.
* Send the SYSEX firmware file to the Octatrack.

To transfer the SYSEX file we recommend using C6 – Sysex Tool by Elektron.

After starting the transfer you should see the trig LED's lighting
up, and when the update is done the unit should reset itself and
boot the new OS.

Detailed instructions are available in the EARLY STARTUP MENU chapter
in the latest Octatrack users manual.

Please report any bugs you may find to support@elektron.se.

Enjoy!

The Elektron development team

List of changes from Octatrack DPS-1 OS 0.995C to 0.998

Updates

– General –

All project settings and operations are now available in the project menu,
which is accessed by pressing [FUNCTION]+[PROJECT]. The system menu is also
located in this window.

A live recording mode is now available. Press [RECORD]+[PLAY] to start live
recording. Use trig keys to record trigs, or adjust parameters with encoders
to record parameter locks. Holding [EXIT] during live recording will erase
trigs and locks on the track. Holding [FUNCTION]+[EXIT] during live recording
will erase locks only.

Pressing [FUNCTION]+[PART] now brings up a new part switcher window. Here, you
can quickly change part on the current pattern by keeping the function key
held down and pressing one of the arrow keys. To store or restore a part,
release the function key and select a part with the arrow keys. Then press
[FUNCTION]+[EDIT] to bring up a contextual menu on the selected part. You can
also copy/paste/clear the selected part by using [FUNCTION]+[COPY],
[FUNCTION]+[PASTE] and [FUNCTION]+[CLEAR].

Grid record edit mode can now also be toggled on/off inside record setup.

While inside record grid mode, [FUNCTION]+[EDIT] now brings up a new window
where user can quickly change what type of trigs to edit. Apart from normal
trigs, swing, slide and record trigs can all be selected here. A graphical
overview of the trigs is also available in this window. When swing is chosen,
it is possible to change swing amount using the [LEVEL] encoder. Hold
[FUNCTION] while adjusting swing amount to affect all tracks.

Pressing [FUNCTION]+[EDIT] in the main screen and with grid record disabled
brings up a new Pattern Settings window, where different pattern and track
settings can be altered. Switching between scale modes is now done from here,
and can no longer be done from scale setup.

It is now possible to configure tracks to play freely both in normal scale
mode and per-track scale mode.

Tracks that are set to play freely can now be configured as oneshot tracks,
meaning they will not loop once they are triggered.

Three different trig modes are now available for free-playing tracks. ONE
starts the track each time the track trig button is pressed. ONE2 starts the
track if it is stopped, and stops the track if it is playing. HOLD plays the
track only for as long as the track trig button is held down.

Inside scale setup, the trig keys can now be used to quickly set intermediate
lengths.

Recording audio with record trigs will now use the sequencer tempo as timing
source on the resulting sample. On manually triggered recordings, the recorder
will still try to make a qualified guess and use bars as source.

While naming samples/projects etc, [FUNCTION]+[EXIT/NO] can now be used as a
backspace key, to quickly erase characters. To copy/clear/paste names, you
can also use [FUNCTION]+[COPY], [FUNCTION]+[CLEAR] and [FUNCTION]+[PASTE].

Track copy & paste from grid edit now includes all track settings, not just the
trig data. To copy only trig data, use copy & paste from within the TRACK EDIT
window (still inside grid edit mode) instead. Track clear, however, still
clears only trig data, regardless of the prescence of grid edit window.

Trigless trigs in the sequencer no longer produce LED blinks on the sample
trig keys when outside grid edit mode.

– Audio Editor –

Sample / slice preview key combinations changed such that [FUNCTION]+[ENTER]
is normal preview, and [CUE]+[ENTER] is preview in CUE-output only.

- MIDI -

The following MIDI functions have been implemented.

The tracks respond to respective MIDI channels configured in the
PROJECT->MIDI->MIDI CHANNELS menu. There is an autochannel mapping
to the channel currently in focus on the Octatrack.

The autochannel chromatic trig keys can be used to realtime record trigs
on the current track.
CC messages on the autochannel can be realtime recorded on the current track.

The channels respond to MIDI Note on according to table:

Octave (Notes)	Function
#1 (0-11)	-
#2 (12-23)	-
#3 (24-35)	Track Trigs
#4 (36-47)	Sample Trigs
#5 (48-59)	-
#6 (60-71)	Recording
#7 (72-83)	Chromatic trig channel n, octave 1
#8 (84-95)	Chromatic trig channel n, octave 2
#9 (96)	Chromatic trig channel n, octave 3

The track trigs and sample trigs are mapped as follows to MIDI notes

Track	Note
#1	C (+0)
#2	C# (+1)
#3	D (+2)
#4	D# (+3)
#5	F (+5)
#6	F# (+6)
#7	G (+7)
#8	G# (+8)

The recording trigs are mapped as follows to MIDI notes

SRC	Note
Combo	C (+0)
A-B	C# (+1)
C-D	D (+2)
SRC3	D# (+3)

The channels repsond to MIDI control change according to table:

Hex Dec	Ctrl parameter
$07 7	Track level
$08 8	Track balance
...	...
$10 16	Playback param #1
$11 17	Playback param #2
$12 18	Playback param #3
$13 19	Playback param #4
$14 20	Playback param #5
$15 21	Playback param #6
$16 22	Amp param #1 (Attack)
$17 23	Amp param #2 (Hold)
$18 24	Amp param #3 (Release)
$19 25	Amp param #4 (Volume)
$1A 26	Amp param #5 (Balance)
$1B 27	Amp param #6 (N/A)
$1C 28	LFO param #1 (Speed 1)
$1D 29	LFO param #2 (Speed 2)
$1E 30	LFO param #3 (Speed 3)
$1F 31	LFO param #4 (Depth 1)
$20 32	LFO param #5 (Depth 2)
$21 33	LFO param #6 (Depth 3)
$22 34	Effect 1 param #1
$23 35	Effect 1 param #2
$24 36	Effect 1 param #3
$25 37	Effect 1 param #4
$26 38	Effect 1 param #5
$27 39	Effect 1 param #6
$28 40	Effect 2 param #1
$29 41	Effect 2 param #2
$2A 42	Effect 2 param #3
$2B 43	Effect 2 param #4
$2C 44	Effect 2 param #5
$2D 45	Effect 2 param #6
$2E 46	Track level
$2E 47	Cue level
$30 48	Crossfader
$31 49	Track Mute (0 Unmuted, [1..127] Muted)

```
+---------+--------------------------------------------+
| $32  50 | Track Solo (0 No solo, [1..127] Soloed)    |
+---------+--------------------------------------------+
| $33  51 | Track Cue (0 Not Cued, [1..127] Cued)      |
+---------+--------------------------------------------+
```

MIDI transport and synchronization settings are located in
PROJECT->MIDI->MIDI SYNC. MIDI Transport and Clock messages
can be sent as well as received.

Bug fixes

Preview function in slice editor would sometimes fail. Fixed.

Static slice playback failed in certain scenarios. Fixed.

Slice playback could fail when using bars as timing source on a sample. Fixed.

STRT parameter was sometimes hidden on static machines, even if slice mode was
enabled. Fixed.

Recording and playing back recorded data simultaneously was erratic. Fixed.

Trim markers were not always set after having recorded a new sample. Fixed.

The audio editor would sometimes hang editing large samples. Fixed.

Static slice knob bug was sometimes invisible when it should be visible.
Fixed.

List of changes from Octatrack DPS-1 OS 0.995B to 0.995C

Bug fixes

The Octatrack would sometimes hang when exiting from USB mode.
Fixed.

It was possible to set the static machine playback rate to
negative using LFO, allthough reverse playback is not yet
supported. Fixed.

Full Amp Release wasn't infinite. Fixed.

List of changes from Octatrack DPS-1 OS 0.995 to 0.995B

Bug fixes

LFO Speed multiplicator was not properly initialized when starting
the Octatrack, or mounting or restoring a project. Fixed.

Slices and trim was not properly loaded from a 0.99E project. Fixed.

Retrig could sometimes cause the machine to hang. Fixed.

List of changes from Octatrack DPS-1 OS 0.99E to 0.995

Updates

– General –

Scene Copy and Paste added.

All clear and paste operations now have Undo function.

Setup pages are now accessed using double click instead of holding down page buttons for a period of time.

A new sample list is accessed by double clicking a track button. It allows loading samples to empty slots without first assigning the slots to a track. It also allows changing machine type without going to the playback setup menu.

Muting track 8 is blocked when it is configured as master track.

The filebrowser now presents all files/dirs in a sorted manner, and supports larger directories, with up to 1024 files.

The flex sample list shows size of each loaded sample, and also the amount of free flex memory. When browsing for samples to load, the filebrowser will warn if a sample is too large, or if the format is unsupported.

– Mixer –

The blinking in Solo mode has been replaced with halfbright LEDs, Soloing is now done pressing [Cue]+[Trig 1-8]. [Function]+[Trig 1-8] will hold mute/unmute until [Function] release, a + represents a track that will go from muted to unmuted, an X represents a track that will go from unmuted to muted.

– Audio Editor –

In trim and slice editors, moving START marker of a trim section or a slice now preserves the length of the section and moves END and LOOP correspondingly. In order to adjust the length, use END marker instead.

Samples are now edited by pressing [FUNC]+[EDIT] on any slot in the sample list. This means you can edit samples that are yet unassigned. To edit the sample that is assigned to a track, shortcut [TRACK]+[EDIT] can be used. To edit a recorder, shortcut [RECORD]+[EDIT] can be used after the corresponding track has been selected (the recorder needs not be assigned to the track).

When saving recorded samples, the proposed default filename is now based on current date and time, which allows quickly saving recordings without having to give them meaningful names each time.

A new sample save operation is available, "Save Trim and Auto-Assign". Similar to "Save Trim as New Sample", but also auto-assigns the saved sample to the selected slot. Fascilitates the process of quickly recording a sample, saving it to a file and associating the file with the recorder. Slices and attributes are also preserved in this process.

Static samples can now be sliced.

In slice editor, preview is now started at the cursor position when no slice is selected. This makes it easier to search for interesting parts of a sample before any slices have been created.

– Audio –

Retrig functionality is now available in flex machine.

Track + MIDI button key combination can now be used to start recording internal sources even when the record setup window is not open.

Slices are now supported on static samples, though in a slightly more limited manner than on Flex machines. The START parameter cannot be locked to scenes, nor can it be modulated by LFOs. It can, however, be sequencer locked. Please note that due to file load time there may be a small delay between changing START parameter and being able to play from the new position.

– Sequencer –

The sequencer now reacts to MIDI transport messages (start, stop and continue). The functionality is enabled in Project Settings.

Holding [FUNCTION] while adjusting the tempo now postpones the change until [FUNCTION] is released.

Bug fixes

Saving samples would swap left/right channels. Fixed.

The AMP envelope did not work properly in the release phase when the
attack was set to LIN. Fixed.

Recorded audio was misaligned when recordings overlapped each other. Fixed.

LOOP parameter in Recorder Setup didn't properly set loop on/off on the
recorded sample. Fixed.

Setting RLEN parameter in Recorder Setup to MAX would limit the length to 65
steps rather than the maximum recorder length of 16 seconds. Fixed.

Recording audio trigs started 5/6 steps to soon. Fixed.

The stored parts as well as part modification flags could be lost when
rebooting the machine without reloading the project. Fixed.

Sometimes, banks weren't saved properly to the card during bank change. This
could result in data loss after rebooting the machine. Fixed.

Input signal level LEDs gave a very faint impression. Fixed.

Feedback could make the Chorus self resonate when using 4-5 stereo taps. Fixed.

Going into USB mode without a saved project could result in project being
cleared. Fixed.

List of changes from Octatrack DPS-1 OS 0.99D to 0.99E

Updates

The slide pattern is now included in pattern rotate operation.

In slice mode, the STRT parameter now presents Slice number.

Bug fixes

Some, particularly large, compact flash cards interacted wrongly
when connected to USB. If your card has had problems, we advise you
to secure your files to a connected computer and reformat the card
as FAT32. (Then restore your files to the card)

Sequencer micro timing retrig count did not work properly. Fixed.

The tempo/bars setting not used as timing source on a sample was
sometimes incorrectly calculated after sample had been trimmed. Fixed.

Some other minor bugs addressed as well.

List of changes from Octatrack DPS-1 OS 0.99C to 0.99D

Updates

Press [SCALE]+[COPY]/[CLEAR]/[PASTE] in grid edit mode to copy,
paste or clear a page.

Bug fixes

A bug in Arrangement chaining would crash the machine. Fixed.

Soloing also muted the Master track. Fixed.

The tap tempo box never closed if enabled over a dialog window. Fixed.

List of changes from Octatrack DPS-1 OS 0.99B to 0.99C

Updates

– General –

A separate track cue volume is available by holding [CUE].

10% tempo nudge added to [LEFT] and [RIGHT] in the main
interface screen.

Scene parameter XVOL in the AMP screen is now only displayed
when pressing the Scene buttons.

A new project function "Purge Samples" is available, removing unused
samples from the project.

– Scenes –

Crossfader can be assigned to the Direct AB and CD parameters
in the Mixer menu for crossfading between inputs

– Audio Editor –

Zero cross search is now available in Trim and Slice editors for Flex
samples. Hold [FUNCTION] while moving the cursor (or any of the markers) to
snap to zero-crossings. Zero crossings are indicated by a small rectangle
in the middle of the marker.

"Create Slice Grid" now allows grids of 48 and 64 slices.

[LEFT] and [RIGHT] are now be used to navigate between different slices
inside the Slice editor.

Clearing Recorder samples is now possible in the flex sample list using
[FUNCTION]+[CLEAR].

Recorder slots can now be preloaded with samples and used as flex slots.
A Recorder slots length is fixed (2.7MiB), so samples that are too long
will be truncated.

– Audio –

On popular demand, the filter dist now raises the level.

Mixer main level now acts post the Master track.

Bug fixes

In some cases Compact Flash communication got stuck leaving
an endless barberpole. Fixed.

Normalize did not work properly in Audio Editor. Fixed.

Neighbor tracks did not activate properly. Fixed.

Pattern chaining always reverted to bank A after stop. Fixed.

Old samples remained from the last project to the next project.
Fixed.

Several other bugs squashed, too.

List of changes from Octatrack DPS-1 OS 0.99 to 0.99B

Updates

Demo mode added. Remove card and hold [ENTER/YES] while booting
to engage. Insert card to disengage. Mostly useful in music stores.

New, insert and wrong card pop up.

Bug fixes

Micro timing trig count didn't work. Fixed.

Pause didn't work at all. Fixed.