# Chapter 18 : The new Operating System

Welcome to the new „JJ' OS for your MPC 1000. This operator's manual describes how to utilize all the new and modified features of the MPC 1000. This chapter is based on the information provided on JJ's website *http://www7a.biglobe.ne.jp/~mpc1000/new_os_e.htm.* Enjoy.

## Installing the new OS / Upgrading from earlier versions

**■ Switching from the original AKAI OS to the new JJ-OS**

01. Download the latest version of the new OS from http://www7a.biglobe.ne.jp/~mpc1000/
02. Put the new OS (.bin) on your Compact Flash Card (CF).
03. Put the CF Card with the new OS data into your MPC 1000.
04. Fire it up while holding [WINDOW] button.
05. Press [REC] button – the softwareupdates starts. After that the MPC reboots running on the new OS.

**■ Upgrading from earlier JJ-OS (3.0x beta) to the new JJ-OS 1.xx**

01. Download the latest version of the new OS from http://www7a.biglobe.ne.jp/~mpc1000/
02. Mount the MPC via USB Function: [MODE] + pad 2 (Load) + F3 (USB).
03. Copy the new OS to the selected drive of the MPC (either CF or HD).
04. Press LOAD (F1) and select the new OS (mpc1000_nv10x.bin) in the sample browser. Press DO IT (x2) and the upgrade starts.
05. Restart the MPC to complete the update process.

***NOTE:*** *The older upgrade method still works with the new OS, but the second is easier and more flexible especially if you want to switch back and forth between different versions.*

## Basic changes

After installing JJ's new OS 1.xx some basic functions are changed. These changes concern:

01. [STOP] + DATA WHEEL now changes LCD contrast.

02. DATA wheel + [SHIFT] or [TAP TEMPO] increases the amount of change in values by 10 times.

03. Pressing [MAIN] before turning off your MPC allows the following settings to be saved in the internal memory:

■ **GENERAL**
- LCD contrast
- USB default device: MEMORY CARD, HARD DISK
- LOAD Screen: Assign to pad: ON, OFF
- Auto load device: internal, memory card, hard disk.
- Auto load folder name.
- Tap tempo average: 2,3,4
- Tap tempo pad: 1-16
- MAIN Screen: Next Sequence play mode: END OF SEQ, IMMEDATE START, IMMEDIATE PLAY
- RECORD Monitor: ON, OFF

■ **METRONOME**
- Counting: OFF, REC ONLY, REC+PLAY
- Counting rate:1/4, , ,1/32(3)
- Click in play: YES, NO
- Click in rec: YES, NO
- Accent sound mode: CLICK, INTERNAL, SAMPLE.
- Accent sound name.
- Normal sound mode: CLICK, INTERNAL, SAMPLE.
- Normal sound name.

■ **MIDI**
- MIDI in channel: ALL, 1-16
- MIDI in soft thru mode: OFF, AS TRACK, OMNI-A, OMNI-B, OMNI-AB
- MIDI in program change: pgm change ==> sequence change ON/OFF
- MIDI Pad to internal sound: ON, OFF
- MIDI SYNC IN : ON,OFF
- MIDI SYNC IN mode : CLOCK,MTC
- MIDI SYNC IN MMC : ON,OFF
- MIDI SYNC OUT : OFF,A,B,AB
- MIDI SYNC Out mode : CLOCK,MTC
- MIDI SYNC Out MMC : ON,OFF
- MIDI SYNC Out Frame : 24,25,30,30D
- MIDI SYNC Start time : 00.00.00.00~23.59.59.29

■ **STEP EDIT**
- Auto Step increment: ON, OFF
- Duration of record notes: AS PLAYED, TC VALUE
- Duration of record note TC value: 0~100

■ **GRID EDIT**
- Step sound: ON, OFF
- Display pad: Track 1~8 (each 6pad ) ATTENTION: Not memorized: Track 9~64

■ **SEQUENCE**
- Default Tempo : 30.0~300.0
- Default Bars : 1~999
- Default Name

■ **OTHER**
- Master level: 0 dB, , ,-42 dB
- Pedal to duration: YES, NO
- Truncate duration: SEQ. RENGTH, SEQ.EBND, PLAYED
- Mute note off mode : THROUGH,IMMEDIATE
- Foot Switch 1: PLAY START, , , ERASE
- Foot Switch 2: PLAY START, , ,ERASE

## New and future features list (Latest build: 1.05)

The JJ-OS Version 1.xx includes the following new features:

1. MTC & MMC
2. MODE + PAD11 additions (Attack, Decay and LFO, Propellant-actuated device Mute)
3. Adding DELAY to 3 FX1
4. Auto Chromatic Assignment
5. Recordable Track Mutes
6. P.Mode: [MODE] + PAD10 + F5 [MODE] (Propellant-actuated device Function)
7. Added Shift Timing to Timing Correction
8. Modified SOLO specifications.
9. [MODE] + PAD1 (SLDIR) adding ALL to the Assign Propellant-actuated device.
10. Adding Q-Link slider to the Tempo *(on MAIN screen hilite Tempo then press WINDOW).*
11. Customized metronome sounds. *(Press F1 on MAIN screen)*
12. Added T.C. to GRID
13. SLICE doing the stereo sample with TRIM. (As for PATCHED PHRASE MONO).
14. TRIMMODE: Modified AUTO-CHOP function. (Adding the parameter of Recovery time and Threshold).
15. Record Mode: Default time of sound recording time is now set to unlimited by default. When recording, the remaining record time counts down.
16. Time indication addition in the MAIN screen.
17. Modified Name Edit.
18. Adding Step sound play performance to GRID.
19. [MODE] + PAD10 (OTHER) =>F3 [adding ERASE to FOOTSW]
20. Modified GRID Editor layout.

21 ON/OFF Memory of RECORD => Monitor

**■ Future features (as on Sept. 25th, 2006):**

1. MIDI track in GRID.
2. Program for MIDI track.
3. Mixer of a track unit.
4. Q-Link edit in GRID.
5. Q-Link -> sample start/end point.
6. MUTE event edit in GRID.
7. Simult sequence.
8. Pattern.
9. Simult pad.

...It takes half year.

***Note:*** *The features mentioned above are taken from the online resource of the japanese JJ site. I tried to formulate and translate the feature's desriptions in propper English as accurate as I can. But due to the fact that I did not have had the time to check out all of these features yet, there might be some mistakes in the list.*

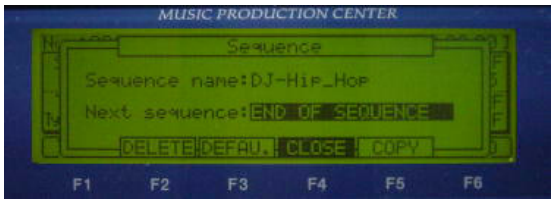
## Changing the Playmode

You can change the play mode for Next Sequence in the MAIN Screen:

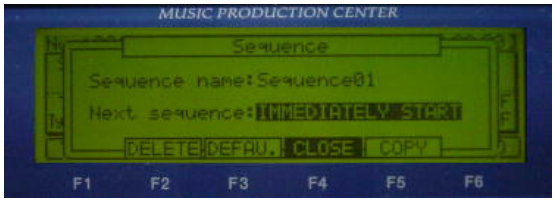
01. Hilite the sequence Column (Sq) as shown below with the CURSOR keys.


02. Press [WINDOW] and another screen appears. Here you can choose from three different playback styles for the next sequence.

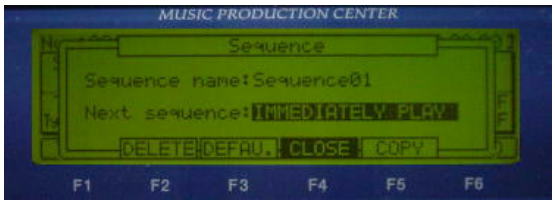
03. Select your playback-style of choice with the DATA wheel then use the above shown F-Keys to change the sequence's playback preferences.




END OF SEQUENCE – The next sequence starts after the last has has finished playing.



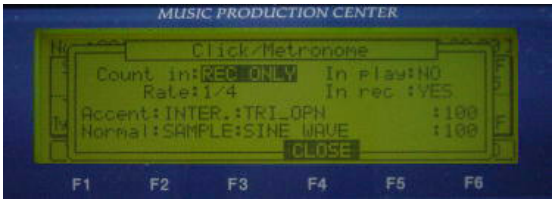

IMMEDIATELY START – When skipping to the next sequence, it immediately starts from its beginning.




IMMEDIATELY PLAY – When skipping to the next sequence, this will play back the new sequence from the actual playback position.

## Alternate Click / Metronome Sounds

With the new JJ-OS it's now possible to use your own samples as click sounds. To change the click sound of the metronome enter the MAIN Screen and Push [F2] (CLICK). Select samples for NORMAL and ACCENT, then press [F4] (CLOSE) to save changes.

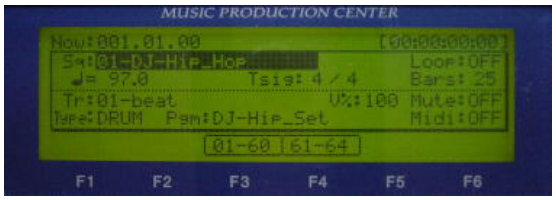



Explaination: The sample of INTER. = INTERNAL, SAMPLE = load the sample, Right numerical value is level.

## Quick-Jumping between Tracks

While in the MAIN screen press and hold shift to quck-jump between Tracks. For Tracks 01 to 60 [SHIFT] + [F3] and for Tracks 61 to 64 [SHIFT] + [F4].

***NOTE:*** *This is especially helpful if you plan to work in Direct-Record-Mode!*




The screen when pressing [SHIFT].

## Customizing pad functions [P. Mode]

It's now possible to fully customize the functions layout of the drum pads individually. JJ refered to it as the *Propellant-Actutated Device Function:* Press [MODE] + [F10] + [F5] to enter the *P. Mode.* In the center column you can assign the following Functions or Modes to the 16 Pads:

- Tap Tempo, Bar >>, << Bar, Beat >>, <<Beat, T.C.>>, << T.C. Go to Bar, [GRID], [NEW PGM], [TRIM], [STEP EDIT], [SAVE], [LOAD], [EFFECT], [MIXER], [PROGRAMM], [RECORD], [SLIDER], [SEQ. EDIT], [SONG]

## New Q-Link Slider features

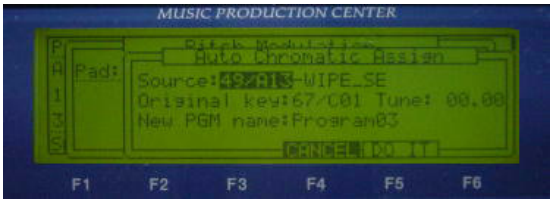
The Effect you put on the Q-Link Slider can be assigned to all bads and banks in Real Time and on tempo now.
Press [MODE] + PAD 1 to enter the Q-Link menu.


## Auto-Chromatic Assignment

JJ implemented this feature of the MPC 2500 OS into the MPC 1000. Here is how it works.
Samples can now be automatically assigned chromatically to the drum pads. The 64 drum pads, (pads A01 - D16) will correspond to a note range from 35 - 98 on a MIDI keyboard. To assign a sample chromatically, do the following:

01. Press [MODE] + [PAD7] (PROGRAM).


02. Press a pad.
03. Choose a sample you want to chromatically assign to the selected pad.
04. Select the ‚*Tune*' column and press [WINDOW]. The Settings for ‚*Pitch Modulation*' appears.
05. Press [F5] (AUTO) to open the ‚*Auto Chromatic Assign*' window. In the ‚Source' field it says 49 / A 13: the sample you want to assign chromatically is on pad A 13 and binded to MIDI Note 49 on the keyboard. ‚Original key' shows the position of the original Source after the automatic Assignment is done. In the example below this will be MIDI note 67 / pad C 1.




6. Pick the sound to be assigned in the ‚*Source*' field. You can select the sound with the drum pads or the DATA wheel (the name of the sound also appears).

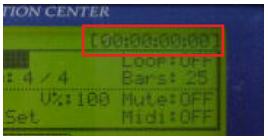
***Note:*** *The parameters of the sound selected will be copied to each note.*

7. In the ‚*Original key*' field, select the note on the MIDI keyboard/drum pad which will play the original pitch of the sound. You can also use the ‚Tune' setting to apply an offset to the original pitch. This setting will affect each note.
8. In the ‚New PGM name' field, you can enter a new name for the Chromatic program to be created.
9. Press [DO IT] to create a new auto chromatically assigned program.

## MTC & MMC Sync Options

**MIDI TIME CODE**
In addition to MIDI clock, the MPC 1000 will now sync to and transmit MIDI Time Code, or MTC.
MIDI Time code is a standard protocol to allow various devices, such as hard disk recorders, video cameras and tape based recorders to sync together. MIDI Time Code contains location information in Hours: Minutes:Seconds:Frames, but unlike MIDI Clock, it does not contain tempo information. The following frame rates are supported:

30 Frames
30 Drop (29.97) Frames
25 Frames
24 Frames




**■ Setting the framerate**
The Framerate can be set from the MAIN Screen. Move the cursor to the right corner of the screen where the time code display is located. Then press WINDOW and change the framerate.

***NOTE:*** *since MIDI Time Code is used to sync vastly different devices, ‚chase' time is often required to ensure that all devices will be accurately locked to the same time. For the MPC 1000 it is recommended that a song to be synced to MTC contain at least 1 blank measure in the beginning to allow for accurate sync. Most hard disk recorders recommend 10 seconds of chase time. Some tape based video decks require a minimum of 30 seconds. For recommended chase times, please see your master device's owners manual.*

## Master / Slave Settings

**■ MPC 1000 as the Slave**

To sync the MPC 1000 to MIDI Time Code, do the following:

01. Connect the MIDI output of your master device to one of the MIDI inputs on the MPC 1000.
02. Make sure your master device is set to send MIDI Time Code.
03. Press [MODE] + [PAD9] (MIDI / Sync).
04. In the ‚Sync in' field [F2], choose the MIDI input the master device is connected to.
05. In the ‚Mode' field, choose ‚MIDI TIME CODE'. When the MPC receives MIDI Time Code, it will automatically determine the frame rate, and sync to the master device.

**■ MPC 1000 as the Master**

To sync MTC capable devices to the MPC 1000, do the following:

01. Connect the MIDI input of your master device to one of the MIDI outputs on the MPC 1000.
02. Make sure your slave device is set to receive MIDI Time Code.
03. Press [MODE] + [PAD9] (MIDI / Sync)
04. In the ‚Sync out' field [F2], choose the MIDI output the master device is connected to.
05. In the ‚Mode' field, choose ‚MIDI TIME CODE'
06. In the ‚Frame Rate' field, select the frame rate appropriate for your slave device.

***NOTE:*** *For more information on appropriate frame rates for your slave devices, consult the devices owners manual.*

## MIDI Machine Control (MMC)

The MPC 1000 can now send and receive MIDI Machine Control, or MMC. MIDI Machine control is a standard protocol for transport controls. The MPC1000 sends and receives the following:

**Send**

| MPC Control | MMC Command sent |
|---|---|
| Play | MMC Deferred Play |
| Play Start | MMC Locate Zero, followed by Deferred Play |
| Stop | MMC Stop |
| <> Step, << >> Bar | MMC Locate |

**Receive**

| MMC Command sent | MPC Equivalent |
|---|---|
| MMC Deferred Play | Play |
| MMC Locate Zero, Deferred Play Play Start | Play Start |
| MMC Stop | Stop |
| MMC Locate | Locate |
| MMC Record Strobe | Record |
| MMC Pause | Stop |

**■ Sending MMC to a device**

To send MIDI Machine Control to a device, such as a Computer DAW, do the following:

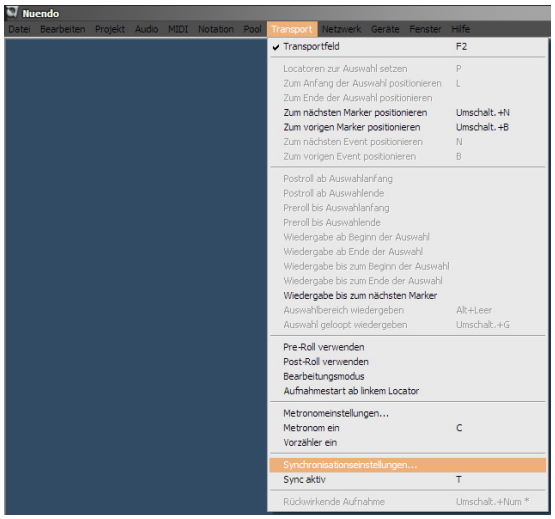
01. Connect MIDI out A of the MPC 1000 to the MIDI in of the selected device.
02. Press [MODE]+[PAD9] (MIDI/SYNC)
03. Press [F2] (SYNC) to select the Sync tab.
04. Set the ‚Sync out' parameter to ‚A (Master)'
05. Set the ‚Send MMC' parameter to ‚ON'
06. Configure the device to be controlled to receive MMC as per the instructions in the device's manual.
07. Press [PLAY] on the MPC 1000. The slaved device should start playing along with the MPC 1000.

## MTC & MMC DAW Sync Tutorials

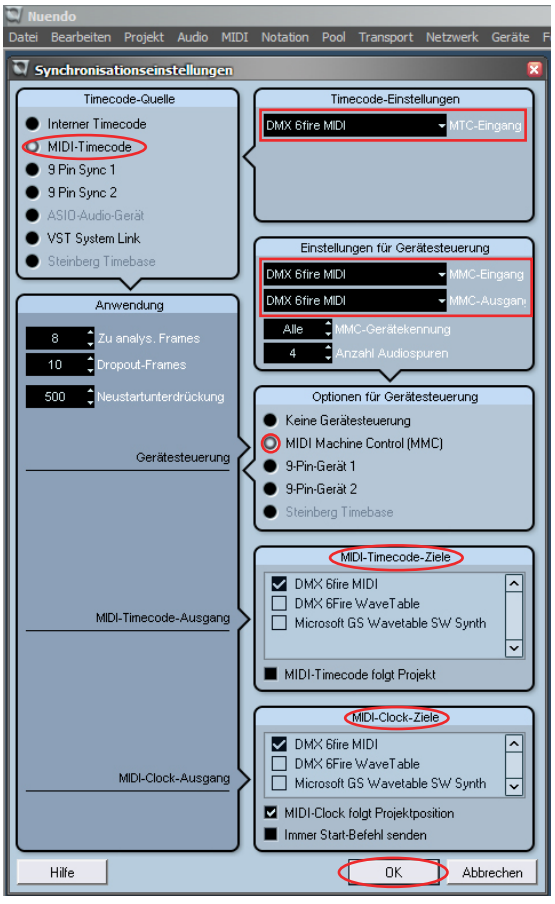
**■ MPC 1000 and CUBASE SX / NUENDO**

To sync the MPC 1000 with Steinberg's CUBASE or NUENDO you have to do the following:

01. Open Nuendo / Cubase SX.
02. Click on Transport and Select Syncronizing Options or similar in the menu:




03. Select MIDI-Timecode in the *Timecode Source* field. Next select your MIDI Ports for MTC and MMC:

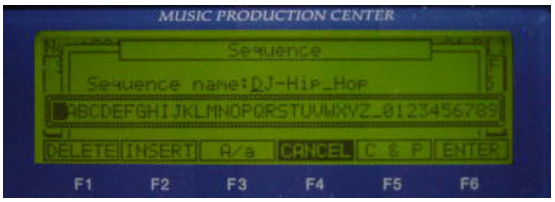



04. Save changes with OKAY. Maybe you will have to restart the application so the changes take effect.
05. If you haven't done already you need to hook up the MIDI cables between the MPC and your MIDI controller. Refer to the earlier *Master / Save Settings* chapter to hook it up correct.
06. It's recommended to use the DAW as Master so, you should set the MPC as slave in the MPC Sync Menu (MODE + Pad 9).
07. In the Transport Field of your DAW click on Sync until it lights up, as shown below.
08. Load a Song into your MPC and then press Play in the Transport field. The MPC starts to play back the song.


***NOTE:*** *Future Tutorials for other DAWs will follow.*

## Reworked Name Edit

JJ retouched the Name Edit Screen too...



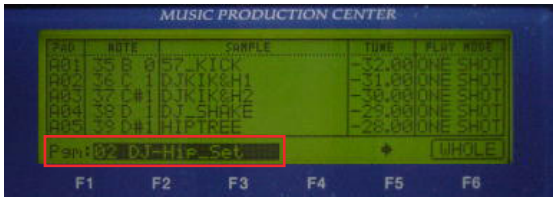


As for COPY and PASTE, while holding the F5 [C & P] key, please push F2 [COPY] or F3 [PASTE] key.

## Global Program Edit[1]

JJ implemented a totally new Program Editor into their OS. It can be accessed via [MODE] + pad 11. Inside it you'll find five pages which display different columns with all settings that can be applied to a program. Use F 4 (previous page) and F 5 (next page) to navigate through the whole menu.

01. To select a program you want to edit press F1 to browse through your programs with the DATA Wheel.




02. Press p on the MPC. The cursor jumps to position A01 in the PAD column. To select the pad you want to edit you can either use the DATA Wheel to browse throuh it or you can quick jump between pad bank A to D with the pad bank buttons and the pads themself to speed things up.


03. Next use the arrow keys to select the parameter you want to change.

***NOTE:*** *If you want to change one parameter for all 48 pads at once, just click [WHOLE] and any value you change in the programm will be applied to all pads. In many columns – like in Note, Sample and Tune to name a few – the [WINDOW] Button lights up, giving you access to further editing options. Since these features are all part of the original OS I won't get into details here. Just try them and you will see.*
*So what's the use of this global editor? Well I think its a very clean menu to organize your samples and to fine-tune them. You got control over everthing here!*

[1]This name was suggested by Knoxximus at MPC-Forums: *http://www.mpc-forums.com/viewtopic.php?t=58441&postdays=0&postorder=asc&start=30*

## Grid Edit Mode

The MPC 1000 now has a Grid Edit mode for editing or entering the Pad event in the sequence. In Grid Edit mode, you can enter and edit the Pad Event in the Graphic Matrix Editor.

**■ About Grid Edit**

Each track in the MPC 1000 has the performance data you entered with the pads, or MIDI note information from an external MIDI keyboard. In the Grid Edit mode, you can only enter or edit (such as Copy, Delete, Move, etc.) the Pad Event on the Graphic Matrix Editor. The Grid Edit mode is yet only for the Drum track, not a MIDI track. MIDI implementation is in the future plan of JJ. If you select the MIDI track in the Grid Edit mode, the MIDI note are displayed as the Pad numbers.
Pressing [MODE] + [PAD 15] to enter the Grid Edit mode. Once inside you will see the following screen:


**Navigation and control in Grid Edit Mode**

The Grid Edit Mode offers a lot of features so the navigation and controls of it is more complex than usually.

**■ Arrow-Button Functions**

1. With ▲ and ▼ you move up and down *inside* the Grid, meaning you move from pad to pad.
2. With ◀ and ▶ you move forward or backward in a track's position.
3. Hold ▲ or ▼ + turn DATA wheel to quickly browse up and down in the Grid.
4. Hold ◀ or ▶ + turn DATA wheel to quickly scroll from left to right and vice versa.
5. By holding [SHIFT] + CURSOR keys you can move the cursor *outside* out of the Event Grid to change various settings (alternatively push [TRACK] to jump out of the grid):

[SHIFT] + ▲: Jump to upper parameter field. Push ▼ to return to the Event Grid.
[SHIFT] + ◀: Jump into the small pad field on the left. Inside it use up and down buttons to browse through the pads. *When in 6PAD-Mode you can also change the pad order with the DATA Wheel!*
[SHIFT] + ◀◀: Jump into the small track field. Change the tracks by turning DATA wheel (or press TRACK)

**■ The F-Keys**

First of all the F-keys are binded – in some cases – with three differnt sets of functions. You got a default set, then a scondary which is activated by pressing and holding [SHIFT] and a third set that changes the screen resolution based on the note length. It's activated by [TAP TEMPO]. Here is an overwiew of the differnt F-Key sets:

1. Default-Set: F1 = [TRACK]
   F2 = [EVENT]
   F3 = [16 PAD / 6PAD]
   F4 = [DELETE]
   F5 = [MUTE]
   F6 = [SOLO]

2. Shift-Set: [SHIFT] + F1 = [TRACK]
   [SHIFT] + F2 = [EVENT]
   [SHIFT] + F4 = [PASTE]
   [SHIFT] + F6 = [LOOP ON / OFF]

3. Tap-Set: [TAP] + F-Keys = Screen resolution based on Note length [1/8, , ,1/32 (3)].

**■ Selecting and editing Events**

In the Event Grid you can see a vertical and a horizontal line which cross. The Events themselves are represented by a black square. If you navigate the cursor to an event it is selected and can be edited. Pressing a pad will create a new Event. Also you can select multiple Events in two different ways:

01. In the Grid Push and Hold [TAP TEMPO] + turn DATA wheel (or hold the left / right cursor) to select events from left to right or vice versa.

*or*

02. In the Grid Push and Hold [TAP TEMPO] + [▲] (or [▼]) together, then turn DATA wheel, to select events from top to bottom or vice versa.

The selected data can then be edited further with the various functions binded to the F-Keys!

***NOTE:*** *If you are familiar with Fruity Loop you will easily see whats going on in Grid Edit mode...*

## Bug fixes

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Bug fixes: New OS Ver1.05 26-SEP-2006
---
1.[SAVE]page
  [NEW] create new folder
   and A holder is not opened although created.

2.[GRID]
  PAD01 MODE BANK A,B,C,D ==> PAD16 MODE BANK A,B,C,D It is then saved.
  but
  PAD16 MODE BANK A,B,C,D ==> PAD06 MODE set to BANK A

3.[GRID] OVER DUB LED
 Since problems various otherwise occurred, it returned.
 Change Event ==>Automatically OVER DUB LED ON( Over dub mode ON )

---
Bug fixes: New OS Ver1.04 25-SEP-2006
---
1.[TAP TEMPO]or[SHIFT] + DATA WHEEL value does not increase 10 times.

2.if next sequence = immediate start or immediate play
 MAIN window -> select Sq: -> turn jog wheel to change sequence.
 if next sequence is empty -> cannot turn to the seq after the empty seq.

3.if next seq = immediate play
 if seq1 = 4 bars and seq2 = 2 bars
 seq1 play
 turn jog wheel when NOW = 004:01:00
 but not start 002:01:00

4.[TRIM]
   [CHOP]
    if cursor on [Slice:16.0]
    Press[TAP TEMPO] -> cursor move to St:00000

---
Bug fixes: New OS Ver1.03 24-SEP-2006
---
1.[MODE]+[PAD11]==> Sample select window [CANCEL] It does not work.

---
Bug fixes: New OS Ver1.02 23-SEP-2006
---
1.[GRID] [Play]==> delay in playback  ( Play EARLIER position )
2.[PROGRAM] New program name edit [ENTER] but nothing happens.

---
Change: New OS Ver1.02 23-SEP-2006
---
[GRID] OVER DUB LED
 Old
  Change Event ==>Automatically OVER DUB LED ON( Over dub mode ON )
 New
  Try Change Event ==>A message will be displayed if there is nothing at OVER DUB.

---
Bug fixes:  New OS Ver.1.01 22-Sep.-06
---
1.Jog wheel sensitivity.
2.Trk61-64 Rec. and stop, Bars change window freeze
3.when ‚immediately play' or ‚start' is used, the ‚track mute' button is disabled.
4.[GRID] [TAP TEMPO] + F1,,,F6 T.C is NG
5.[GRID] BANK B,C,D event copy & paste
6.[GRID] At the time of „TC OFF"  COPY,MOVE  The first event cannot be chosen.
---
1.[GRID] [Play]==> delay in playback  ( Play EARLIER position )
2.[PROGRAM] New program name edit [ENTER] but nothing happens.

---
Change: New OS Ver1.02 23-SEP-2006
---
[GRID] OVER DUB LED
 Old
   Change Event ==>Automatically OVER DUB LED ON( Over dub mode ON )
 New
   Try Change Event ==>A message will be displayed if there is nothing at OVER DUB.

---
Bug fixes:  New OS Ver.1.01 22-Sep.-06
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1.Jog wheel sensitivity.
2.Trk61-64 Rec. and stop, Bars change window freeze
3.when ‚immediately play' or ‚start' is used, the ‚track mute' button is disabled.
4.[GRID] [TAP TEMPO] + F1,,,F6 T.C is NG
5.[GRID] BANK B,C,D event copy & paste
6.[GRID] At the time of „TC OFF"  COPY,MOVE  The first event cannot be chosen.