The DMS

DIGITAL MIDI SEQUENCER

USER'S MANUAL

JCDMS V1.445

THE PHYSICAL INSTRUMENT

The instrument features a touchscreen with Windows or Android operating system

It is either integrated into a flight case (24-inch model), or comes as a touchscreen kiosk with stand

Optional: MIDI interface, audio interface

Models: see deadlines and availability on jcd-music. com

All machines come with an unlimited license, unlimited updates and upgrades, pre-installed and configured software

Compatible with any MIDI-standard instrument (DIN 5-pin or USB) and supplied with a virtual MIDI router for connecting a local MIDI/audio sequencer and virtual instruments (VSTi).

L'APPLICATION LOGICIELLE

Standard Version	PRO Version
50 Projects (internal memories)	**200 Projects (internal memories)**
4 sequences of 8 tracks (32 virtual tracks)	**8 sequences of 8 tracks (64 virtual tracks)**
10 track content generation algorithms	**20 track content generation algorithms + presets ****
16 programmable parts	**32 programmable parts**
Unlimited updates (update only)	**Unlimited updates and upgrades**
Possible upgrade to PRO version	**** Downloadable MRS presets**

To install the web application, follow the on-screen instructions.

- Chrome browser recommended
- Installation as application recommended (see application installation)

FEATURES

- 8-track, 64-step MIDI matrix sequencer.
- In-application memory storage.
- Projects can be saved/loaded onto hard disk or other media.
- Up to 8 sequences of 8 tracks can be linked in real time, for a total of 64 tracks.
- Independent tracks (channel, interface, loop, resolution, range and tone).
- Real-time chaining of sequences.
- Programmable Parts system allowing track configuration to be memorized (mute, loop, resolution, etc.). Parts can be selected in real time.
- Original transposition system (R.T.S) enabling melodic and harmonic progressions in real time.
- Random note generation system (M.R.S).
- Transposition or Part selection controlled by MIDI keyboard low note input (notes < split point).
- MIDI Thru function for sending information to connected MIDI peripherals.
- Compatible with multiple MIDI output interfaces.
- Master or slave MIDI synchro.
- Time arpeggiator with multiple options (natural order/forward/backward, etc.).
- Copy track/sequence/loop editing functions, automatic note input via MIDI keyboard.
- Note entry by touch or mouse with 12 velocity levels and 5 octaves plus RATCHET system (note repetition 1,2,3 or 4 times) or held note (number of steps).
- Automatic accentuation according to signature and resolution.
- Global track transformation.
- Song mode for memorizing part changes in real time.
- PC / MAC / Android compatibility.
- Chrome / Firefox / Edge browser html 5 compatible
- Application can be installed offline.
- Full HD 1920x1080 screen configuration - mouse/keyboard - touchscreen.
- DAW system compatible, VST plugins.

The interface has been **designed for use with a touch screen**, although some functions require a keyboard to enter information. **You can also use the application with a mouse**.

GLOSSARY

- **Project:** Local storage (in your browser) of a set of Sequences and Song.
- **Song:** Real-time storage of Parts chainings.
- **Sequence:** Set of 8 MIDI tracks and 32 Parts (16 in STANDARD version).
- **Part:** Storage of track parameters and global RTS transposition.
- **Track:** MIDI track programmed using a 64-step grid with its own parameters that can be modified in real time.
- **Track parameters:** mute, transposition lock, resolution, loop number, scale and tone.
- **Loop:** Track playback loop (see explanations in section S - LED ZONE).
- **R.T.S:** Degrees of global harmonic progression (Real Time Shift).
- **M.R.S:** Musical Randomize System.
- **Step Lock:** Transposition lock by column (steps).
- **Ratchet:** Notes played double, triple or quadruple.

Note :

Pressing or clicking the mouse changes the status of the LEDs: ON = LED on, OFF = LED off.

When recording a song, external sync is disabled.

When playing a sequence or a song, make sure you don't open another window in full screen mode (see instructions for use).

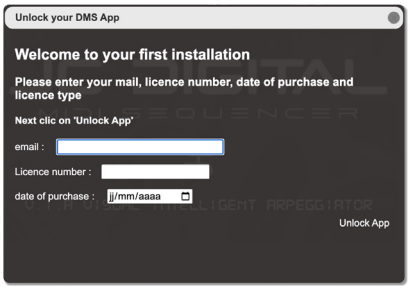
LAUNCHING AND UNLOCKING THE APPLICATION

Log on to the address provided by e-mail when you purchased

Complete the following fields:

- E-mail address
- License number
- Purchase date

Once the software is unlocked, this window will no longer

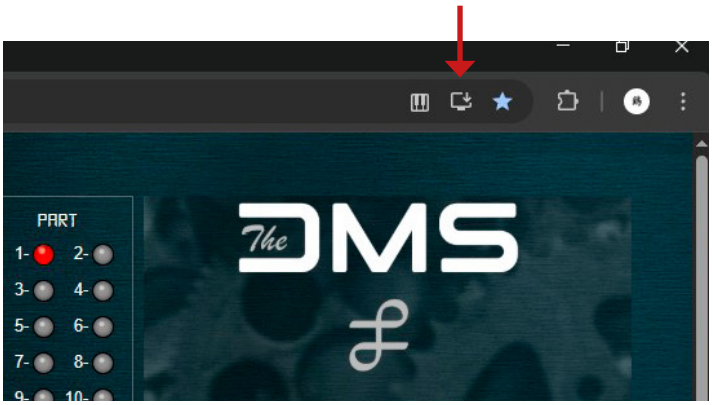


INSTALL YOUR APPLICATION

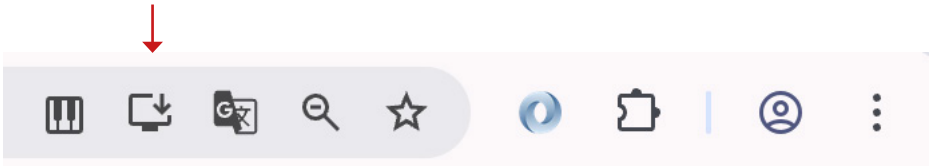
The DMS can be used online or offline, but it is recommended that you install it as a standalone application.

Click on "Install DMS..." in the top right corner of your browser, switch to full screen mode, then close the browser.

You will then find a new icon on your desktop and a link in your applications.

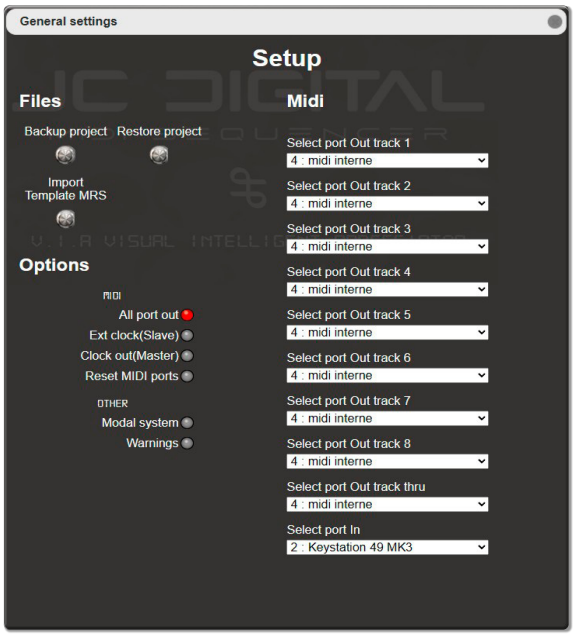


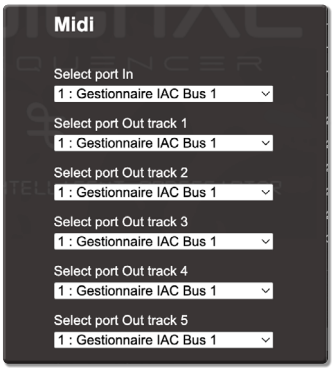
Installing a Web application on MAC



APPLICATION SETTINGS

To open the configuration window -> ‘Setup’ button
(A - CONTROL AREA)





Midi

Select MIDI input and output ports.

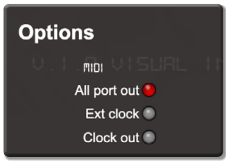
Files

- **Restore Project: Loads a file in .DG3 format from your computer.**

Note: The loaded file does not replace the current project.

- **Backup Project: Saves the current memory in .DG3 format in your “Download” folder.**

Options



- **All Port out** : ON by default assigns all tracks to the same port.

If you wish to assign different ports to your tracks, deactivate ‘All Port out’ (OFF) LED off.

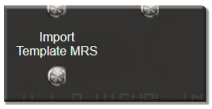
Synchronization MIDI CLOCK master or slave

- **Ext Clock** : OFF by default, ON => slave mode, the sequence will synchronize to the input instrument (or sequencer).
- **Clock out**: OFF by default, ON => master mode, the application generates MIDI CLOCK events and the output instruments (or sequencers) will synchronize to the sequence played.

OTHER

- **Modal system** : Modal ranges (ON) or Standard ranges (OFF) (see H . Track parameters).
- ***Warnings :*** Display of a confirmation window when resetting sequences to zero (Clr) or loading a memory.

Musical Randomise System (PRO Version only)



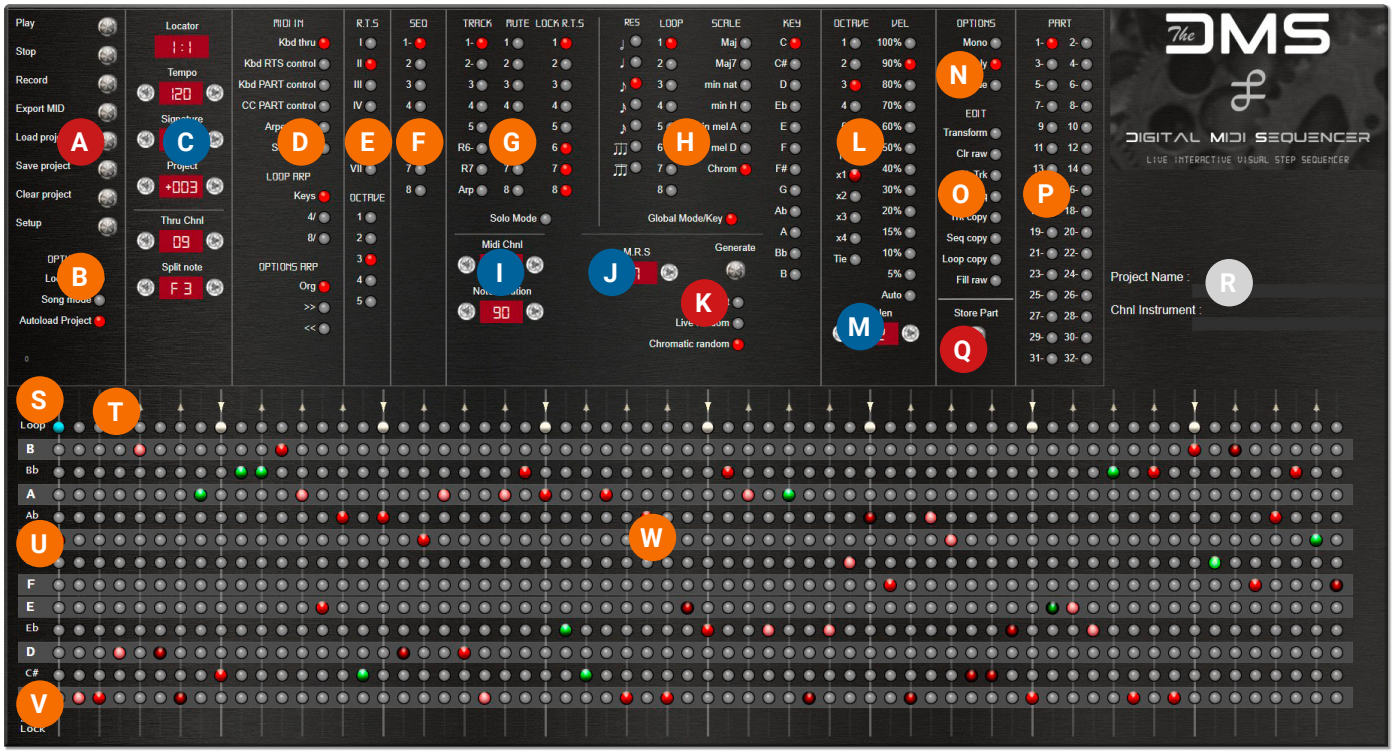
- Loads an MRS (content generation algorithm) preset file.
- MRS presets can be downloaded at the following address
- www.jcd-music.com/support

THE DIFFERENT AREAS

The interface has been designed for use with a touch screen, although some functions may require a keyboard/mouse (e.g. entering memory names, selecting MIDI channels)

Of course, you can also use the application only with a mouse and keyboard.

- LED on = **ON**
- LED off = **OFF**
- LED flashing = Waiting for zone selection



In this manual you can refer to the prefixes of the different zones

- **Control zones characterized by fugitive pushbuttons**
- **Display zones characterized by LED displays**
- **LED zones characterized by colored LEDs**

CONTROL ZONE

SEQUENCER CONTROLS

Play : Starts sequence (or space bar on keyboard).

Stop : Stops the sequence (or space bar on keyboard).

Record : Starts song recording ** See SONG (chaining of Parts).

Export MID : Export **the last complete playing session** in MIDIFILE format. (**from PLAY to STOP**)

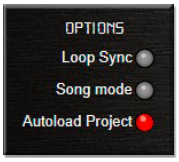
Load : Load project (memory) from application.

Save : Saves the current project in the application.

Clr : Sequences and tracks reset.

Setup : Opens the general settings window

B LEDS ZONE



OPTIONS

Loop sync :

ON - Synchronize Part or sequence selection at the end of each loop.

OFF (défaut) - Synchronizing part or sequence changes on a quarter note.

Song mode : Rejoue la SONG de la séquence quand Play est activé.

Autoload Project : Automatically loads the project
when the memory number changes.

C DISPLAY ZONE

Locator : Readout position in bar and time.

Tempo : Project tempo.

Signature : Project signature (only displayed on timeline, does not affect sequence).

Project : Memory number (the '+' sign in front of the number indicates an occupied memory).

Thru chnl : MIDI Thru channel.

Split note : Adjustment of the lower zone of the MIDI keyboard to control transposition changes ('Kbd RTS control' mode) or part changes ('Kbd PART control' mode)..

D LEDS ZONE

MIDI INPUT MODES

MIDI IN

Kbd thru : MIDI Thru, routing of MIDI input to output via the Thru channel.

Kbd RTS control : R.T.S transposition selection via MIDI keyboard (the 7 white notes of the MIDI keyboard + octave < Split point).

Kbd PART control : Part selection via MIDI keyboard (< Split point).

CC PART control : Part selection using MIDI code (control CC: Hexa Cx part number)

Arpeggiator : Real-time input of notes on track 8 via MIDI keyboard

(note: the sequence starts automatically when MIDI keyboard keys are pressed)..

Step input : Step-by-step note input using the instrument connected to the MIDI input.

=> You can use the right/left keys on the keyboard to move to the desired position.

THE ARPEGGIATOR

Notes played are automatically entered on track 8 (Arp), and the loop area is adjusted according to the mode and number of notes pressed.

All notes must be released to modify the loop content..

LOOP ARP

Keys : The track retains its resolution, and the loop corresponds to the number of notes played (16 notes maximum)..

4/ : Quarter-bar resolution (loop on 1 to 4 quarter notes)

8/ : Resolution to the eighth bar (loop on 1 to 4 eighth notes).

OPTIONS ARP

Org : Notes are played in the order in which they are pressed..

>> : Notes are played from lowest to highest.

<< : Notes are played from highest to lowest.

Note: *the arppeggiator must be set to transposition lock (I.T.S. lock) and Chromatic mode, which authorizes all notes.*

E LEDS ZONE

GLOBAL TRANSPOSITION

R.T.S : Real Time Shift

Global degree transposition of all tracks, preserving their scale and tonic.

This enables harmonic or melodic progressions.

This is a relative transposition based on diatonic modes, comprising 7 degrees.

Only the 7 notes of the scale are transposed; if alterations exist in the grid, the note will be the fundamental.

Depending on the degree chosen (I, II, III, ... VII), the notes in the grid are transformed as follows:

** e.g. for a track in the key of C major, the following notes and intervals will be obtained:

I => (non-transposed tracks) C, D, E, F, G, A, B => correspondence

1st line of the grid = C then intervals third and major seventh

II => D, E, F, G, A, SI, C (octave) => correspondence 1st line of the grid = D then intervals third and minor seventh

III => E, F, G, A, B, C (octave), D (octave) => correspondence 1st line of the grid = E then intervals second, third, sixth and minor seventh etc. . . for IV ,V , VI, VIIVous

IMPORTANT: The principles of transposition and the terms used in this application are in no way an exact reference to the theory of solfeggio, they are only intended for the understanding of the principle of the software..

OCTAVE : Transposition octave.

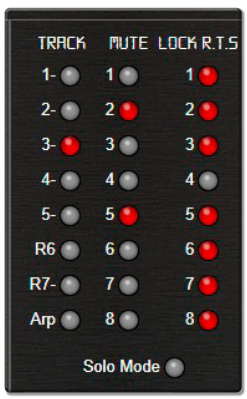
F LEDS ZONE

SEQUENCE SELECTION

SEQ : Each sequence has eight independent tracks.
Sequences can be linked in real time.

Note that each sequence has its own parts.

G LEDS ZONE



TRACK

TRACK : Track selection. (The track is displayed in the grid)

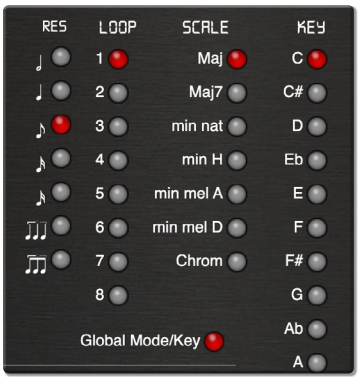
MUTE : Muted or unmuted track.(Silent track)

LOCK R.T.S : Lock the track in its original scale and key (no transposition into R.T.S. degrees).

Solo mode : When active, click on the track to play it alone.

Click on the '**PART**' button again to return to the previous mute configuration.

H LEDS ZONE



TRACK PARAMETERS

RES : Grid resolution for track (white, quarter note, eighth note, sixteenth note, triple eighth note, quarter note triplet, eighth note triplet).

LOOP : Selecting the active loop.

SCALE : Scale or track mode or Chromatic mode.

2 systems are available:

- 6 Diatonic scales (7 notes): Major, Major 7, natural minor, descending melodic minor, harmonic minor, ascending melodic minor.
- 6 Diatonic modes (if Modal System is checked in the parameters): Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian..
- + a **chromatic scale** (12 notes) not transposed by **RTS**

Note : *for more details, please refer to the books on musical modes*

KEY : Track tone (keynote).

Global Mode/Key : ON by default (all tracks have the same tonic and mode except Chromatic).

Note *: Chromatic mode provides access to the 12 notes of the grid without R.T.S. transposition..*

I DISPLAY ZONE

MIDI Chnl : Track channel.

Note Duration : Note duration 20% to 100% of grid pitch.

J DISPLAY ZONE

RANDOM GENERATION

M.R.S : Musical Randomization system

10 Algorithms for randomly generating diatonic content on the selected track

(PRO version: 10 additional algorithms with step lock and MRS preset loading capability)

Choisir un numéro : the higher the number, the more intervals you'll have

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K CONTROL ZONE

Generate : Button for creating track content

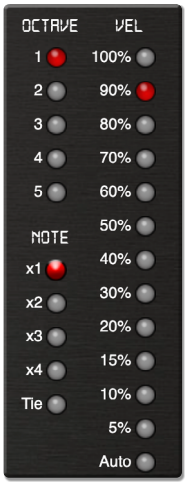
Rest : Allows you to introduce silences

Live Random mode : The notes in the tracks will be played randomly.

Important: in this mode, real-time tracking is no longer displayed.

Chromatic random : Total random generation in chromatic mode (12 notes per octave).

L LEDS ZONE



GRID NOTE SETTINGS

OCTAVE : Note octave selection.

NOTE : Number of notes per grid step 1,2,3,4 or note held -> Length indicated by Tie Len display.

Please note: The colors of the LEDs indicate the octave and type of note (see below). **** LED colors**

VEL : Note velocity (12 levels).

Auto : Automatic variation of velocity according to beats.

Important: The note on the grid cannot be directly edited. To modify it, click on it to delete it, then choose the note type, velocity and octave, then click on the desired grid position again..

M DISPLAY ZONE

TIE LEN : Length of note held in number of steps.

N LEDS ZONE

OPTIONS

Mono : Monophonic mode (one note per grid step).

Loop only : ON/OFF (default ON) Transforms only the active loop zone, otherwise transforms all notes in the track, also for line deletion.

Edit mode : Note-by-note editing.

=> **Click on the note** or **use the left/right keys** on the keyboard to select the note. You can then modify the note parameters (octave, velocity, ratchet note transformation, or note duration).

O LEDS ZONE

EDIT

Transform : Relatively modifies velocity and octave of track notes.

Clr raw : Delete the current line => LED flashes, then select the desired line in the first column of the grid (Column T - LED ZONE)..

C**lr Trk** : Deletes the current track.

Clr Seq : Deletes the current sequence.

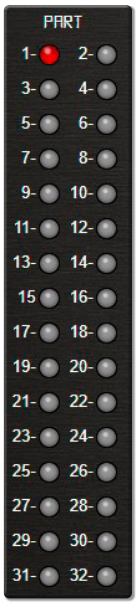
Trk copy : Copy current track => LED flashes then select destination track.

Seq copy : Copy current sequence => LED flashes then select destination sequence.

Loop copy : Copies the contents of the current loop to the desired step.
=> LED flashes then select destination track and Click on the loop point corresponding to the selected column.

Fill raw : Fill a line => LED flashes, then select the line located in the first column of the grid (Column T - LED ZONE).

P LEDS ZONE



PARTS SELECTION (previously Patterns)

Click to select a PART

PARTS allow you to create musical phrases from your sequence, with each PART corresponding to a snapshot of your track configuration.

The following parameters are stored: **resolution, mute, RTS lock, current loop, range and tone, and global RTS degree**.

Q CONTROL ZONE

Store Part : Store Part

- **If a Part is free**, clicking on 'Store Part' stores the track parameters (res, mute, loop, etc.).
- I**f it's already occupied**, the button turns red and allows you to choose another Part or modify the current one by clicking again..

Note *: Occupied Parts are indicated by a dash behind the number (e.g. 1-).*

If a Part is empty, it is stored when Store is pressed..

R TEXT ZONE

Project Name : Name of current memory (**keyboard entry then Enter**).

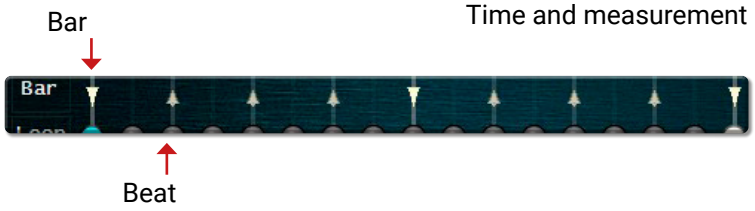
Chnl Instrument : Track channel name (**keyboard entry followed by Enter**).

Important Note: Memory and track names are not associated directly with memories but are stored in the browser..

S LEDS ZONE

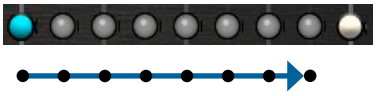
BAR LINE

Time and measurement indicators (icons).



T LEDS ZONE

LOOP LINE



*** Explanation of the loop concept:*

Each track has its own loop points, represented by white LEDs.

Playback is continuous between the starting point and the point preceding the finish.

The first step of the active loop is indicated by a blue LED..

Reminder for loop selection

The loop is selected via the LOOP column.

U LEDS ZONE

RELATIVE NOTE NAME COLUMN

Depending on the transposition, the name of the notes played is automatically displayed..

Note *: In the 'SCALE' or 'MODE' column, accidentals (***black line***) are not transposed by the R.T.S. system, but* **play the note of the first line**.

** Examples with no global transposition R.T.S => I (first degree)

- **Track => Scale : Maj, Key : C**

Correspondence on the grid

1:C 2:D 3:E 4:F 5:G 6:A 7:B

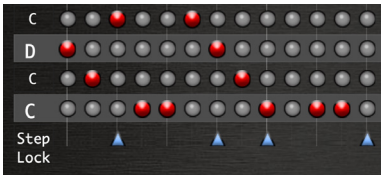
- **Track => Scale : Min, Key : C**

Correspondence on the grid

1:C 2:D 3:Eb 4:F 5:G 6:Ab 7:Bb

Track => Mode : Maj, Key : A

V LEDS ZONE



STEP LOCK LINE

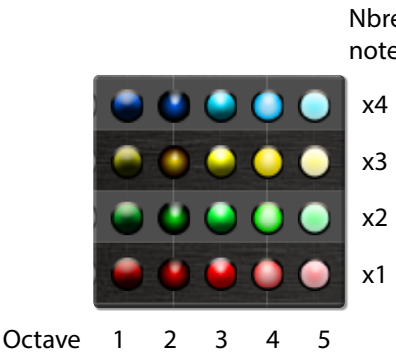
Locks a column (notes in this column will not be transposed by the R.T.S. system).

Step transposition lock indicator line.

Click in the line at the level of the column to be locked.

This option preserves the tonality of the notes in a step (column) during R.T.S. transpositions in real time..

W LEDS ZONE



NOTE ENTRY GRID

To enter notes in the grid:

Choose a note type 1x, 2x, 3x, 4x or tie, an octave and a velocity (L - CONTROL ZONE).

Click on the LED to insert the desired note, click again to delete it..

**** LED colors**

LED colors indicate note type and octave (see picture).

RESSOURCES

Facebook

Notre chaîne Youtube

Tutoriaux

Les bases du DMS
(french version)

CONTACT US

contact@jcd-music.com

Thanks

For their help, advice and support

Sylvain waneph, Michel Geiss, Marc Grauss, Stephen Ingrand, et toute l'équipe du Synthfest France.