Crystall-Ball

Editor

Reference Manual

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Chapter 1. Installation and execution

Crystall-Ball editor is available for download on : www.naonext.com under Support > Download tab.

Windows :

Download the installer InstallerCrystallBallEditor.exe, this will install the editor on your computer.

Run the editor by double clicking the shortcut icon on your desktop or in the ‘Run’ menu.

Mac :

Download the installer InstallerCrystallBallEditor.dmg, this will install the editor on your computer.

A folder ‘Crystall Ball’ will be created in your applications folder, containing the editor.

Note that the Crystall-Ball must be turned on and USB plugged on your computer before launching the editor.

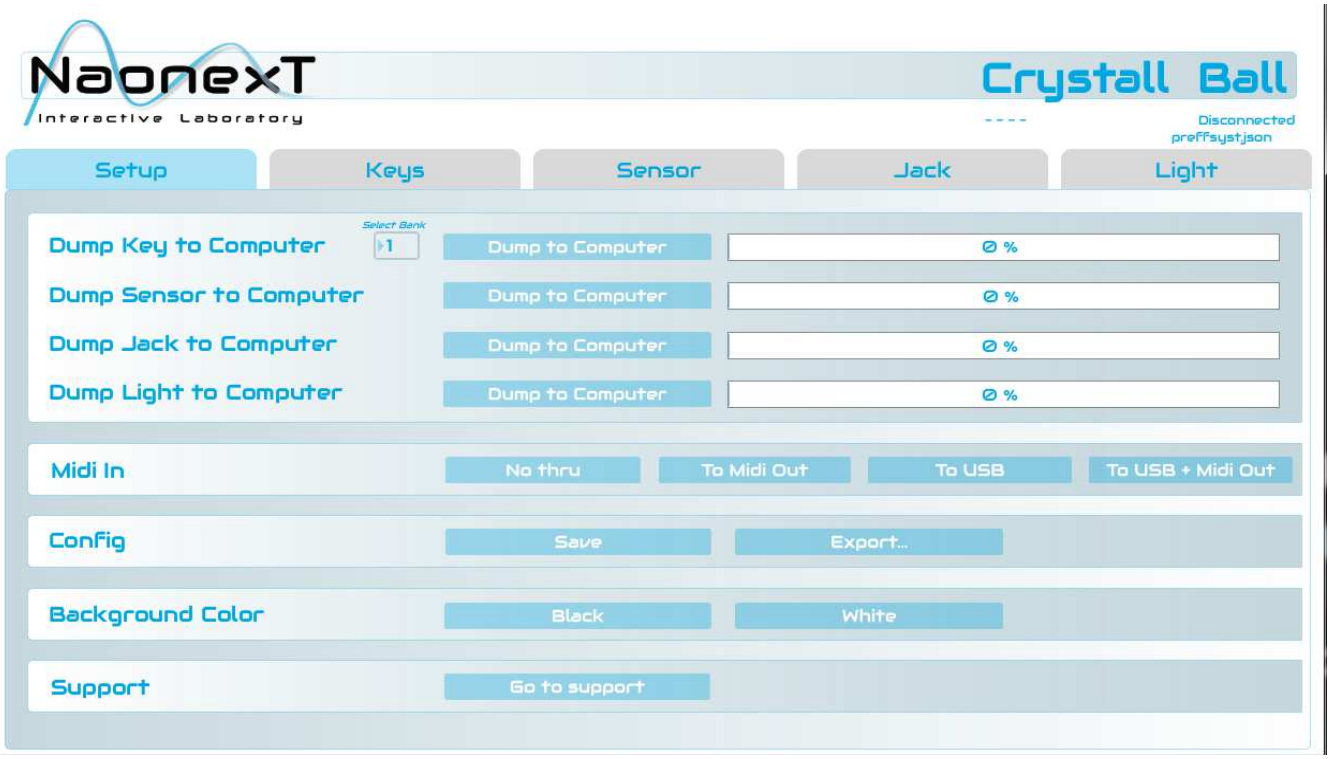
Chapter 2. Editor presentation

The editor will let you change most of the Crystall Ball configuration, such as :

- MIDI message type for each key
- Keys configuration (pad, latch, etc…)
- Jack configuration
- Light intensity
- Sensors sensibility.

On the upper right corner you can see if the Crystall-Ball is connected and what configuration file is loaded.

Chapter 3. Set up tab



Uploading the configuration to the computer

On the **Setup** tab, you can upload the current Crystall-Ball configuration on the computer using the " **Dump ... to Computer** " commands.

To choose the bank you want to upload, enter a number between 1 and 24 in '*Select Bank*'.

MIDI port configuration

You can chose the MIDI In behaviour :

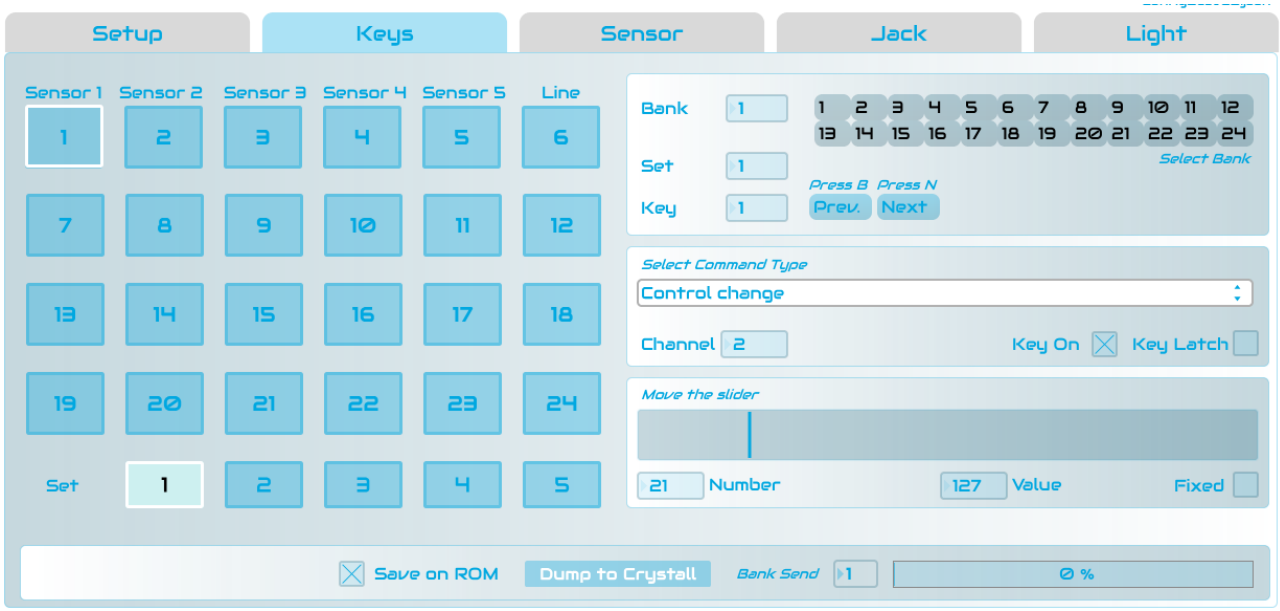
- **No Thru** : messages from MIDI In are read by the Crystall-Ball only.
- **To MIDI Out** : messages from MIDI In are read by the Crystall-Ball and transferred to MIDI Out.
- **To USB** : messages from MIDI In are read by the Crystall-Ball and transferred to the USB (out).
- **To USB + MIDI Out** : messages from MIDI In are read by the Crystall-Ball and transferred to MIDI Out and USB (out).

Loading and saving a configuration file

You can load a configuration just by dragging and dropping a file in the editor window. You can save it by clicking '*save*' and export it by clicking '*export*'.

Chapter 4. Keys tab

On the **Keys** tab, you can modify the keys configuration of the Crystall-Ball.



Bank, set and key

The Crystall-Ball has a keyboard of 24 assignable keys, with 5 quickly reachable sets.

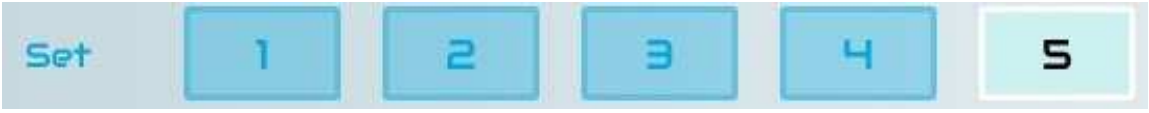
Each key combined with **Shift** (⇧) let you choose one the 24 banks. All in all the Crystall-Ball has 24 x 5 x 24 = 2880 assignable keys.

Bank

To choose the bank you want to configure use this digit pad

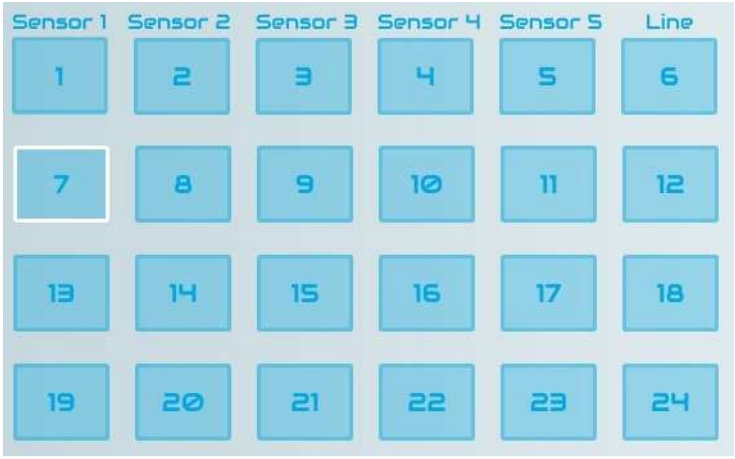
Set

To choose the set you want to configure use one of the following buttons :



Key

To choose the key to configure use the button pad.



You can also use Prev. and Next or 'B' and 'N' to navigate between keys.

MIDI Message selection

No MIDI : key will not send any MIDI message

Note : keys n°6, 12, 18 and 24 will still activate and deactivate full lines.

Note : MIDI note message is allocated

Control Change : MIDI Control Change message is allocated

Program Change : MIDI Program Change message is allocated

To set the MIDI channel, click on **Channel** and enter a value from 1 to 16.

If you want the key to be 'ON' by default, tick **Key On**.

You can also choose if the key is ‘Latch’ by ticking **Key Latch** or ‘Unlatch’ by leaving the field blank.

Note that lines in Crystall-Ball mode are always in ‘Latch’ mode.

On the ‘Line’ keys you can also choose if the entire line will be in Crystall-Ball mode (to play with sensors) or in Pad mode (send MIDI message directly).

Note messages configuration

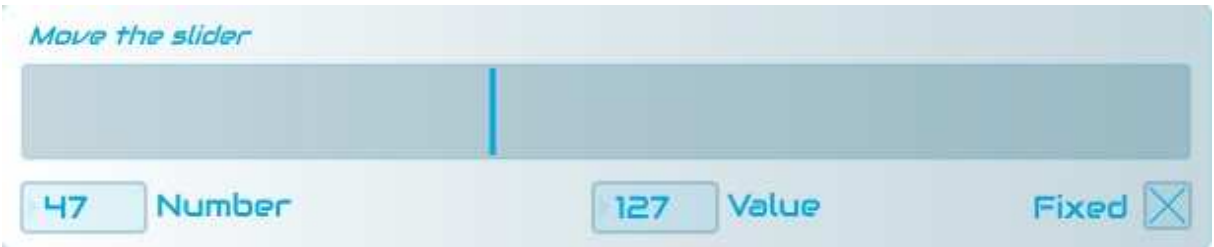
When you choose **Note** for a key the following keyboard appears :

When clicking a key, the chosen note will appear in **Note Value**.

When in Crystall-Ball mode, you can choose to fix the velocity by ticking the ‘**Fixed**’ box. In this case the velocity will always be the value entered in **Velocity**, without taking into consideration the distance to the sensors. In Pad mode the velocity will always be the value entered.

Control change messages configuration

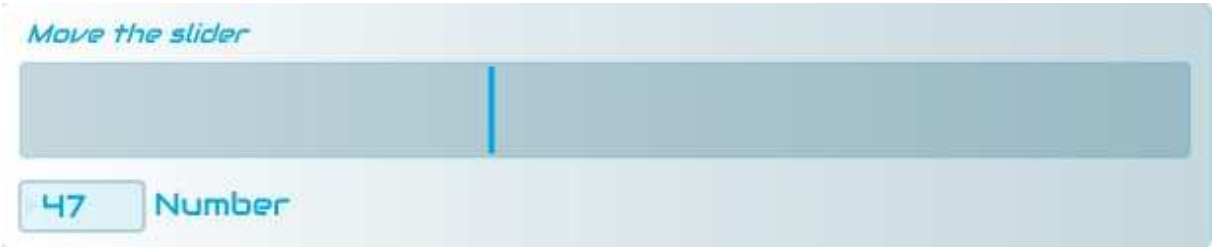
When you choose **Control change** for a key the following slider bar appears. Choose a control number by moving the slider bar. The control number appears in the ‘**Number**’ box.



When in Crystall-Ball mode you can choose to fix the control value by ticking the '**Fixed**' box. In this case the value will always be the value entered in **Value**, without taking into consideration the distance to the sensors. In Pad mode the value will always be the value entered.

Program Change messages configuration

When you choose **Program change** for a key, the following slider appears. Choose a number (between 0 and 119) by moving the slider bar.



Loading the configuration into the Crystall-Ball

In order to load the configuration into the Crystall-Ball, click on Dump to Crystall .

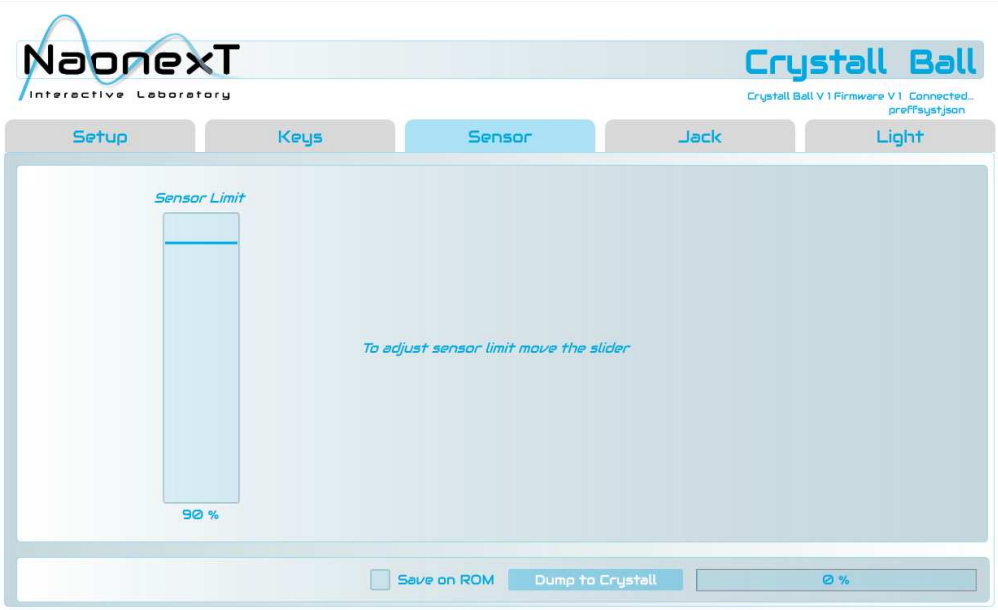
You can choose the bank to send by entering a value between 1 and 24 in ***Bank Send*** .

In order to write into the internal memory of the Crystall-Ball, tick the box '**Save on ROM**'.

Important notice :

Each time you will save to the Crystall-Ball memory, the keyboard will show a 'busy routine', **DO NOT INTEND ANY ACTION** while the Crystall-Ball is busy writing in its memory.

Chapter 5. Sensor Tab



The slider ***Sensor Limit*** let you set the sensors sensibility. At 100% sensors are set to full range (35cm), at 0% sensors are set to minimum range (20cm).

Loading the configuration into the Crystall-Ball

In order to load the configuration into the Crystall-Ball, click on Dump to Crystall .

In order to write into the internal memory of the Crystall-Ball, tick the box '**Save on ROM**'.

Important notice :

Each time you will save to the Crystall-Ball memory, the keyboard will show a 'busy routine', **DO NOT INTEND ANY ACTION** while the Crystall-Ball is busy writing in its memory.

Chapter 6. Jack Tab

The Jack 1/4" port will let you plug in external devices, such as a footswitch or extra sensors.

To choose the Jack function, click on the menu :

MIDI Function : Jack will send MIDI messages (Note / CC or Program Change).

Bank Previous : navigate to the previous bank

Bank Next : navigate to the next bank

Set Previous : navigate to the previous set

Set Next : navigate to the next set

MEM : activate MEM function (same as key

)

All OFF : activate All Off function (same as keys +

)

Hold : activate Hold function (same as key

)

STB : activate STB function (same as keys +

)

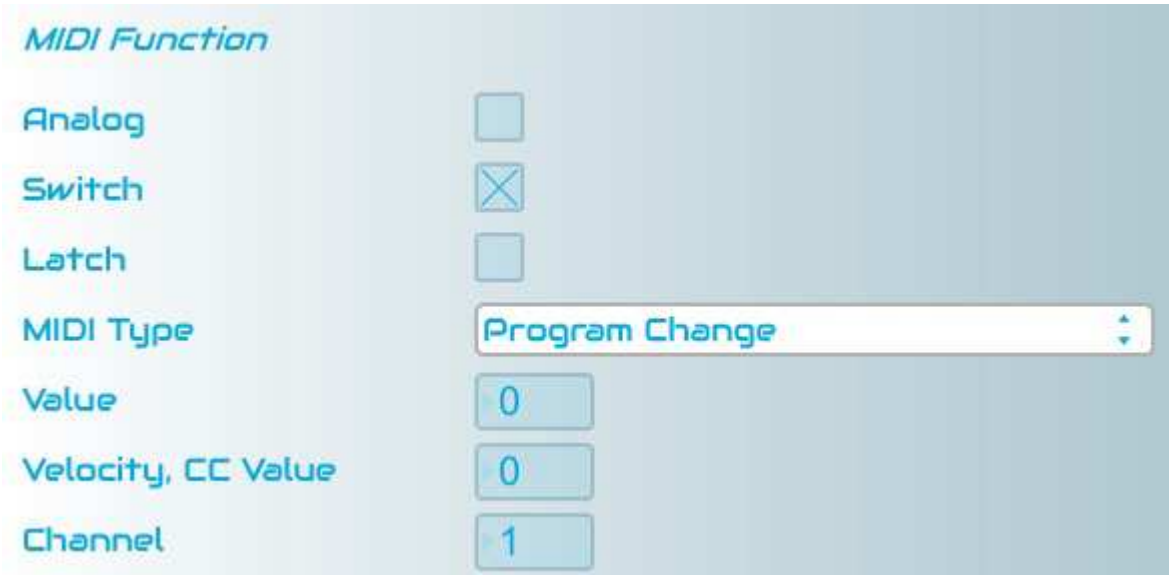
Important notice:

The hardware configuration of the Jack port is as follows :

The reference voltage for using the Jack port in MIDI function – Analog is 3.3V. Connecting a sensor which provides higher voltage can cause irreversible damages to the Crystall Ball, which could not anymore be covered by the warranty.

MIDI Function configuration

When you choose **MIDI Function** for the Jack Port, new adjustable parameters appear.



If you have an analog device plugged on the Jack port, tick the '**Analog**' box.

If you want to use your external device as a switch (just On and Off), tick the '**Switch**' box.

The '**Latch**' box allows you to choose whether the device is used in Latch mode (tick the box) or Unlatch mode (leave the field blank).

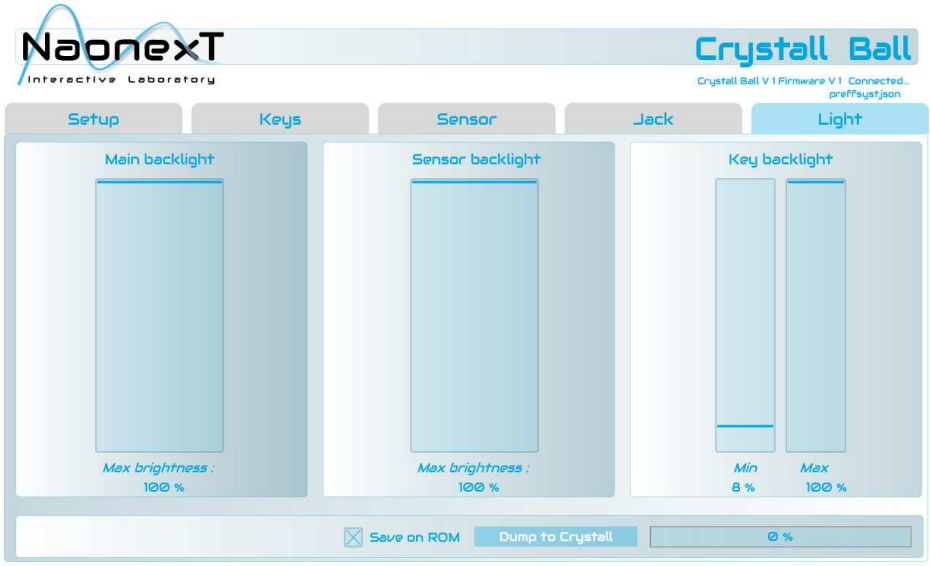
The **MIDI Type** drop-down menu will let you choose to send a **Note**, a **Control Change** or a **Program Change**.

The 3 following adjustable parameters are the same as the ones for the keys (please refer to pages 10 and 11 of this manual).

Chapter 7. Light Tab

The Crystall-Ball has 3 light systems :

- The Sphere (Main) backlight
- Sensors feedback
- Keypad backlight



Sphere backlight configuration

Move the '**Main backlight**' slider to adjust the intensity of the backlight of the sphere. The intensity of the backlight is expressed as a percentage of the maximum intensity.

Sensor feedback configuration

Move the '**Sensor backlight**' slider to adjust the intensity of the feedback of the sensors. The intensity of the feedback is expressed as a percentage of the maximum intensity.

Keypad backlight configuration

The keypad is backlit. The keys are dimly lighted when unactivated and strongly lighted when activated, either blue or white, depending on their mode (Crystall Ball or Pad).

Move the left ‘Key backlight’ slider to adjust the intensity of the unactivated keys. The intensity of the feedback is expressed as a percentage of the maximum intensity.

Move the right ‘Key backlight’ slider to adjust the intensity of the activated keys. The intensity of the feedback is expressed as a percentage of the maximum intensity.