OSC Trigger
Configuration for Obsidian Onyx

Preamble

To extend Obsidian Onyx with sound control functionality, it can be combined with OSC Trigger. To do so, we will configure a function key for “Beat tapping” in Onyx and “virtually” tap it with OSC Trigger to set the tempo. There are two options to connect to Onyx, depending on your Onyx license and the hardware you use. The settings for this connection are described in this document. For general information about OSC Trigger, see the user manual.

Onyx and OSC

The free version (you do not have a license or special hardware by Obsidian) of Onyx (currently version 4.8) does not support OSC control. For details on different license versions and OSC support see https://support.obsidiancontrol.com/Content/License_Information/Onyx_Licenses.htm. In the free versions without hardware, OSC is disabled and only can be used in a “Trial” mode for 5 minutes at a time.

So in the free version we cannot use this for beat tapping. Therefore, OSC Trigger can simulate key presses and use Onyx’ **keyboard shortcut** functionality.

- Pro: Supports standalone, free version of Onyx
- Pro: Works without any network connection
- Pro: Simple configuration (see here: Keypress Configuration)
- Con: Only works while Onyx is the currently “active” window in the OS, to which all keyboard input is sent. Usually this is the case while you are working in Onyx but not always if you are using another application next to Onyx.

If you own a license of Onyx or use a supported hardware controller (see link above), Onyx’ function keys can be triggered by **OSC messages**. OSC is a is a network-based control protocol, which you can see as modern, flexible alternative to MIDI.

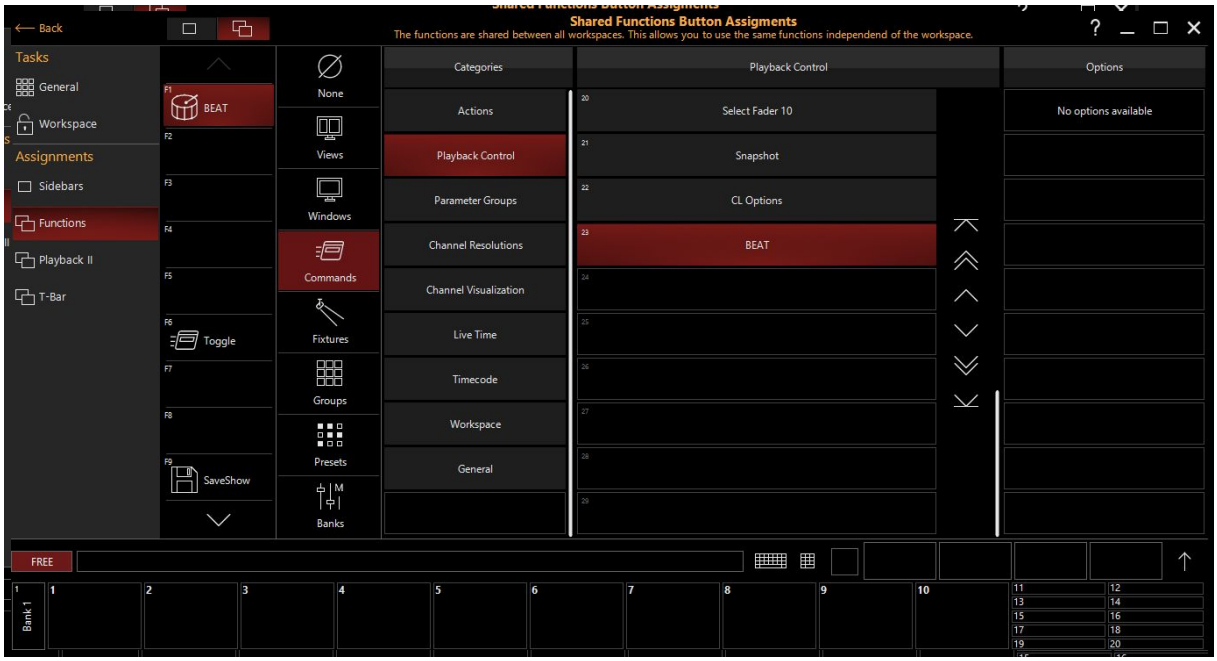
- Pro: Works even if Onyx is not the currently active window or even in the background
- Pro: Fast and reliable
- Con: Only works with a “full” Onyx version
- Con: Only works with a active network connection (see note below)
- Configuration see here: OSC Configuration

Attention: At the moment, Onyx only supports OSC control if it is connected to a “real” network interface. If no network connection is present, no connection (e.g. via “localhost”) is possible! One could try some workaround with a virtual network connection that can be selected in Onyx but this includes advanced (virtual) networking and is untested for now.

Keypress Configuration

Configuration of Onyx

1. Assign Beat tap function to a function key
    a. Click **Onyx logo** in the top left of the Onyx window
    b. Go to "**Functions**" and choose free function key [e.g. F1]
        i. If "Functions" is unavailable, make sure "Workspace -> Lock" is not engaged
    c. Assign function "**Commands -> Playback Control -> Beat**" to key



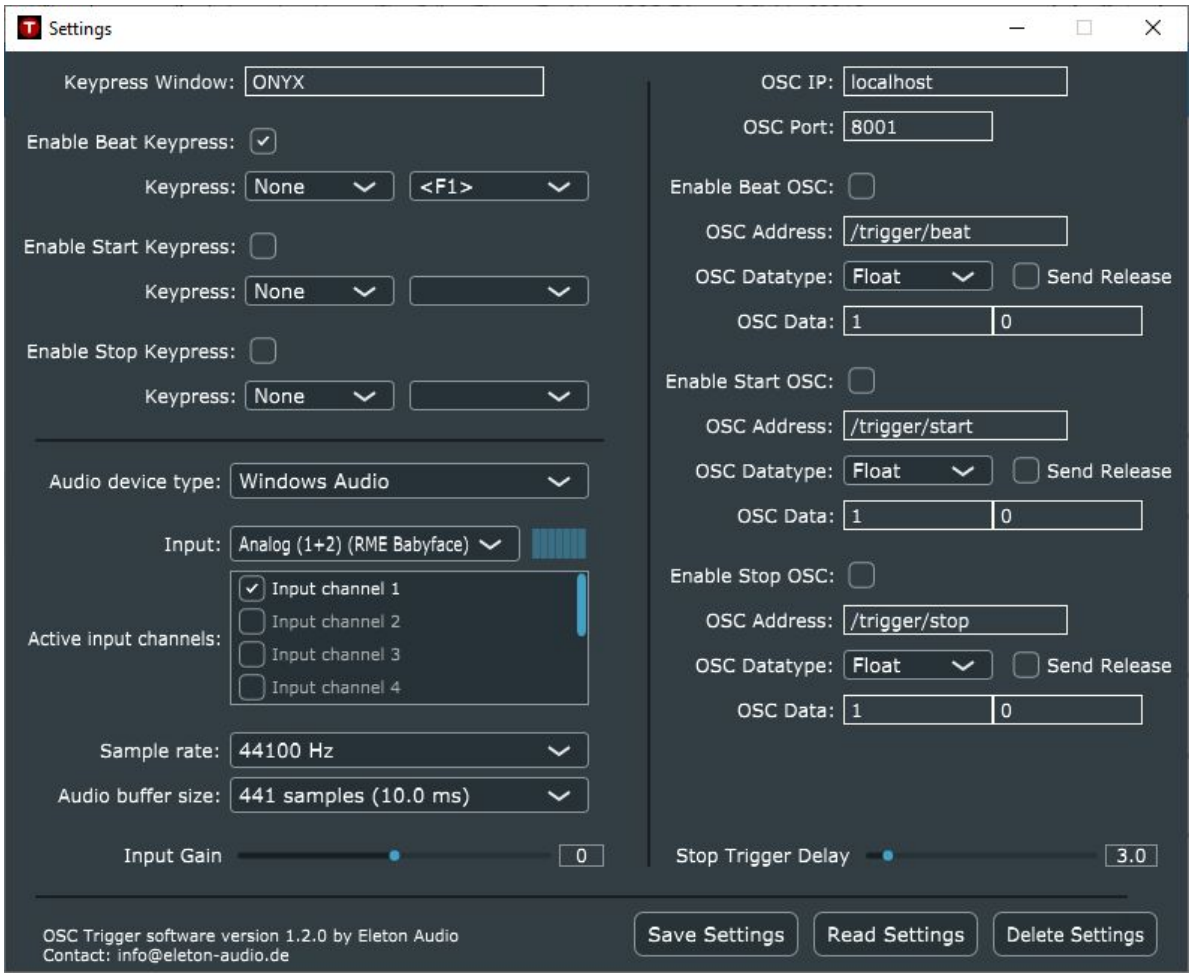
Configuration of OSC Trigger

Now we will configure OSC Trigger to send a virtual keypress that triggers the chosen function key of Onyx. Also, we will configure OSC Trigger only to simulate a keypress if Onyx is the currently active window. All of the following settings can be found in the "Settings" window of OSC Trigger.

1. Enable **Beat Keypress: On**
2. **Keypress**: No modifier, Key according to chosen function key [e.g. F1]

Onyx Function Key	OSC Trigger Keypress
F1	F1
F2	F2
…	…
F12	F12

3. Keypress **Window: ONYX**
   If this should be altered with a newer version of Onyx, look at the title of your Onyx window. At the moment it is e.g. "ONYX [internal right]" for the standard "display" (= window) of Onyx and all of the configurable "displays" contain the string "ONYX" and accept keyboard shortcuts.
1. Optionally, you may setup additional Function Keys that trigger e.g. a "pause" lighting scene. You can make OSC Trigger activate this Function Key by configuring the "Start" or "Stop Trigger", see the OSC Trigger manual for more details.



Testing

To test the configuration, first send a music signal to the configured audio input and setup OSC trigger so that the beat triggers correctly. Then switch over to Onyx, open the “Beat Editor” and look at the BPM value adapt to the music signal.

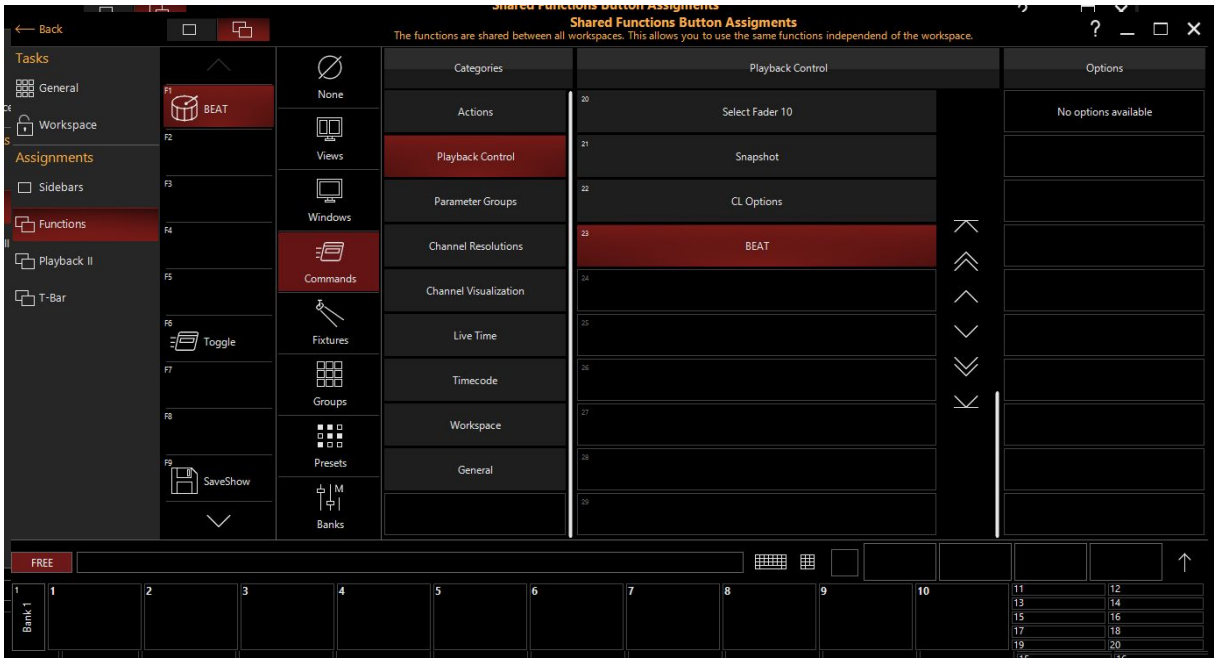
Tipp: To keep monitoring the triggering behaviour of OSC Trigger, use the “Top” button to keep OSC Trigger on top, even while Onyx is the active window.

Tipp: If you have problems and are unsure if the problem is on the OSC Trigger side of things, you could set the “Keypress Window” to “Editor”, the “Key” to “a” and use the built-in Windows Editor to check if the “a” key is pressed with the beat of the music.

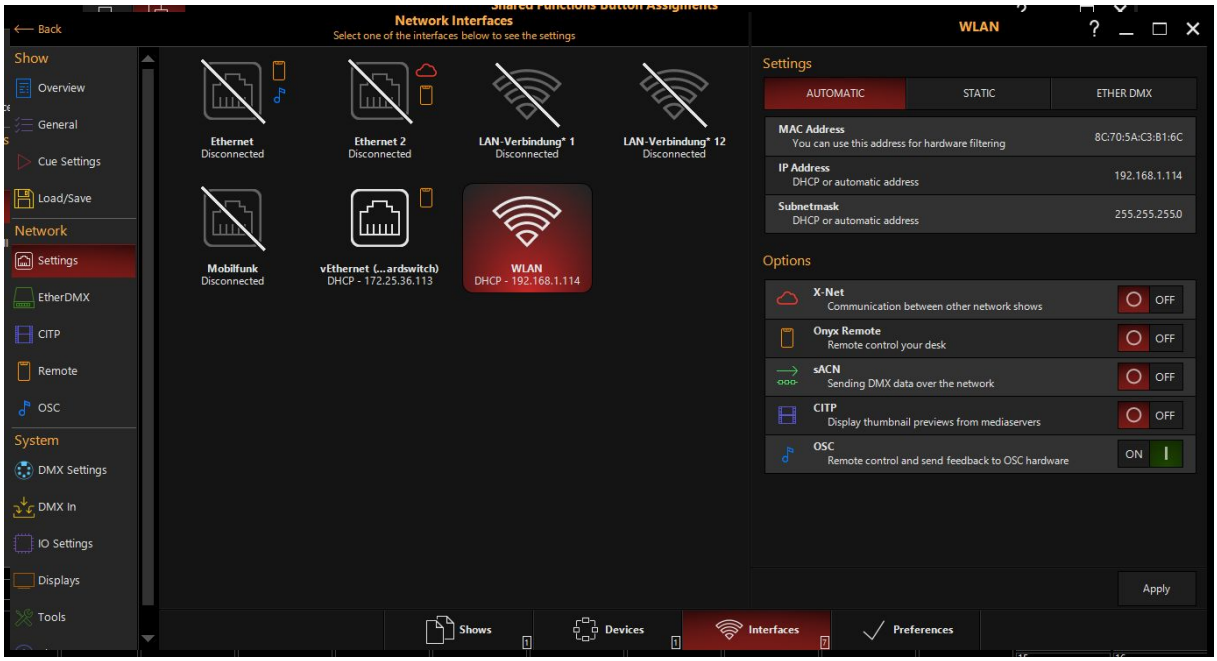
OSC Configuration

Configuration of Onyx

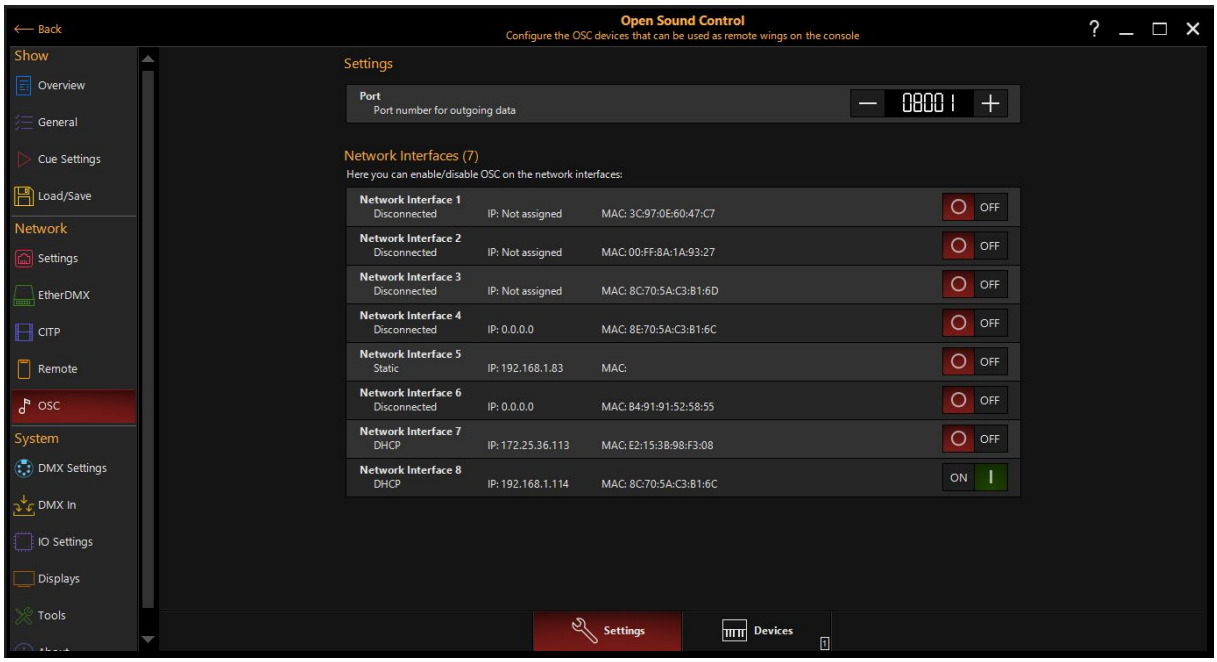
1. Assign Beat tap function to a **function key**
    a. Click **Onyx logo** in the top left of the Onyx window
    b. Go to "**Functions**" and choose free function key [e.g. F1]
        i. If "Functions" is unavailable, make sure "Workspace -> Lock" is not engaged
    c. Assign function "**Commands -> Playback Control -> Beat**" to key



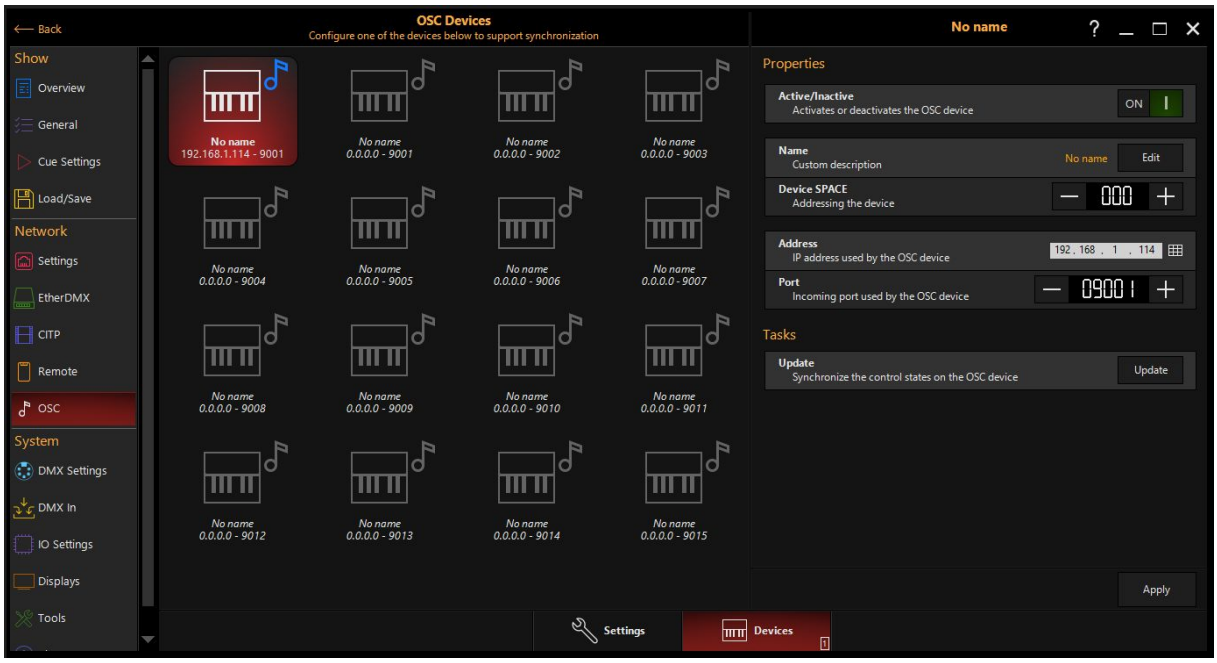
2. Activate **global OSC functionality**
    a. Go to **General -> Menu**
    b. Go to **Network -> Settings -> Interfaces** and choose the active network interface
    c. Set **Options -> OSC** to "**On**"
    d. Click "**Apply**"



3. Configure **OSC settings**
    a. Go to **Network -> OSC -> Settings**
    b. Set network **port** (for communication OSC Trigger -> Onyx) [e.g. **8001**]
    c. **Enable OSC** for the active network interface



4. Configure **OSC device**
    a. Go to **Network -> OSC -> Devices**
    and choose one unused device
    b. Set **Active/Inactive** to “**On**”
    c. Set Address to **local IP address**
    shown for active network interface at Network -> Settings -> Interfaces
    d. Set network **port** (for communication Onyx -> OSC Trigger) [e.g. **9001**]
    e. Click “**Apply**”



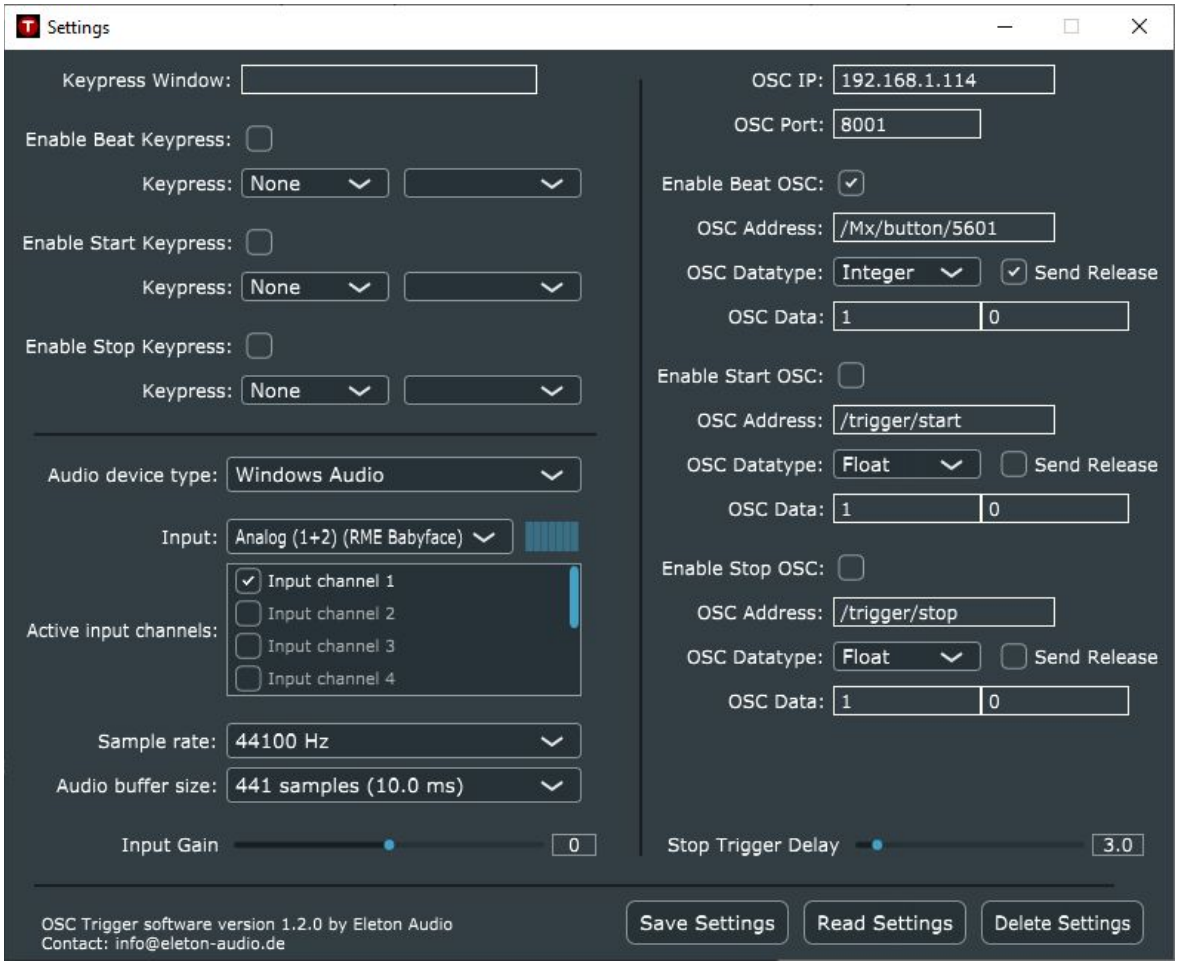
Configuration of OSC Trigger

You have to configure OSC Trigger to send a OSC message matching the Onyx requirements. All of the following settings can be found in the “Settings” window of OSC Trigger.

2. OSC IP: Enter the **IP Address shown in Onyx** for active network interface at Network -> Settings -> Interfaces. Do NOT use “localhost” or “127.0.0.1”!
3. OSC **Port**: Enter the network port configured in Onyx (for communication OSC Trigger -> Onyx) shown at Network -> OSC -> Settings [e.g. **8001**]
4. **Enable Beat OSC**: On
5. **OSC Address**: Enter the string from following table, matching the chosen Onyx function key [e.g. F1, so enter “/Mx/button/5601” without quotes]

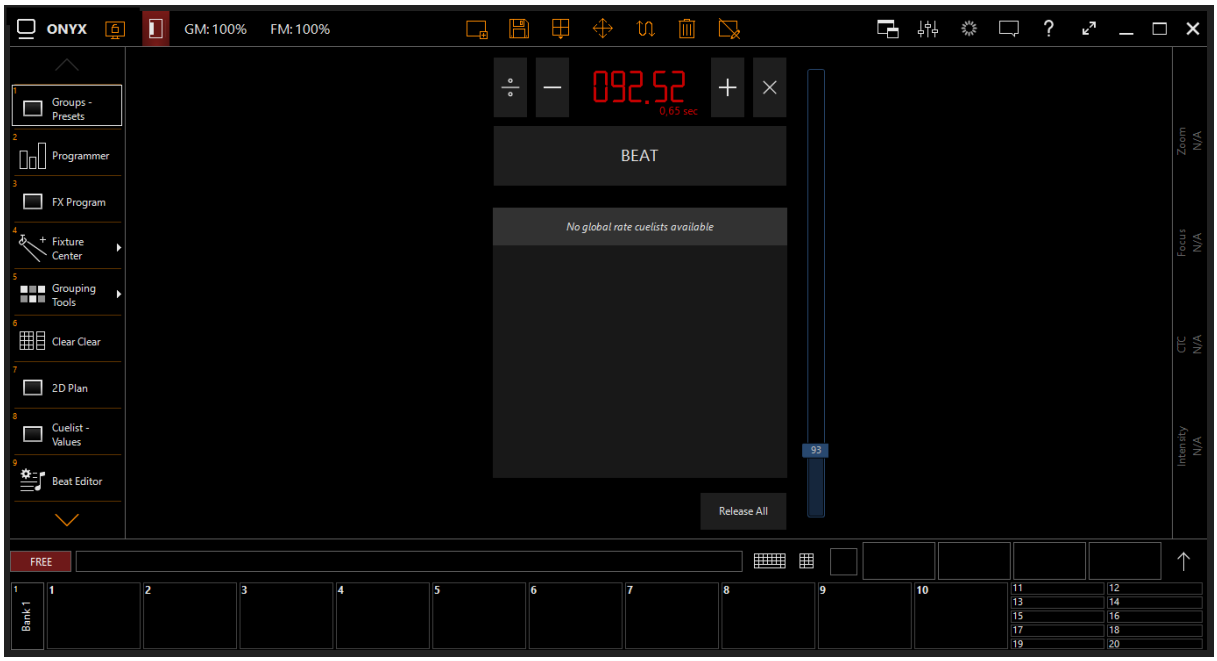
Function Key	OSC Address
F1	/Mx/button/5601
F2	/Mx/button/56A1
F3	/Mx/button/5602
F4	/Mx/button/56A2
F5	/Mx/button/5603
F6	/Mx/button/56A3
F7	/Mx/button/2101
F8	/Mx/button/21A1
F9	/Mx/button/2102
F10	/Mx/button/21A2

6. OSC **Datatype: Integer**
7. OSC Data: **1**
8. **Send Release**: On
9. OSC Data for Release message: **0**
10. Optionally, you may setup additional Function Keys that trigger e.g. a “pause” lighting scene. You can make OSC Trigger activate this Function Key by configuring the “Start” or “Stop Trigger”, see the OSC Trigger manual for more details.



Testing

To test the connection, you may tap the Trigger Indicator (the coloured box in the top left) of OSC Trigger a few times. Now you should be able to see the tempo (bpm) change in the Onyx Beat Editor.


ONYX
GM: 100%
FM: 100%
Groups - Presets
Programmer
FX Program
Fixture Center
Grouping Tools
Clear Clear
2D Plan
Cuelist - Values
Beat Editor
092.52
0.65 sec
BEAT
No global rate cuelists available
Release All
Zoom N/A
Focus N/A
CTC N/A
Intensity N/A
93
FREE
Bank 1