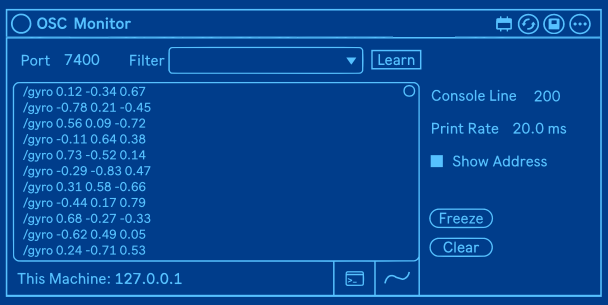
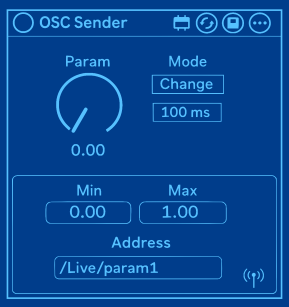
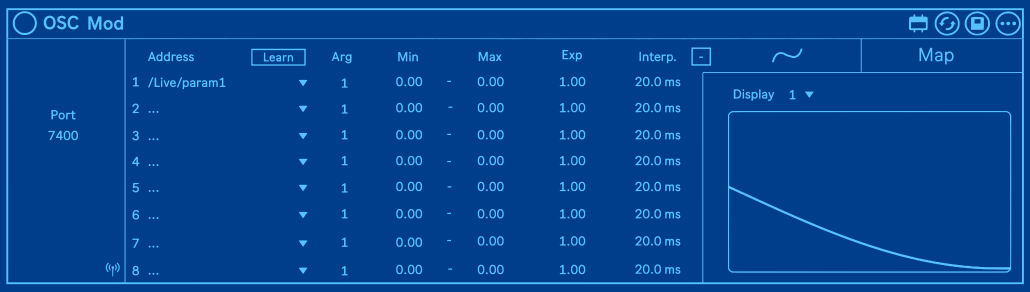
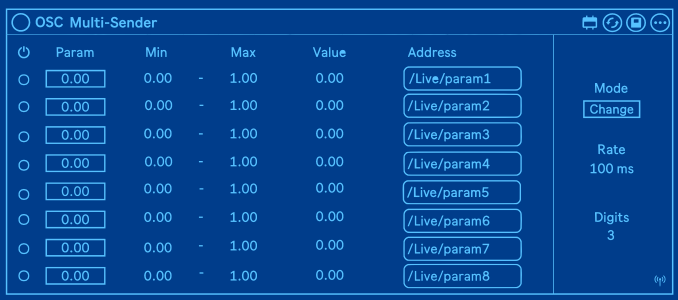
v.1.0.1

OSC Toolkit







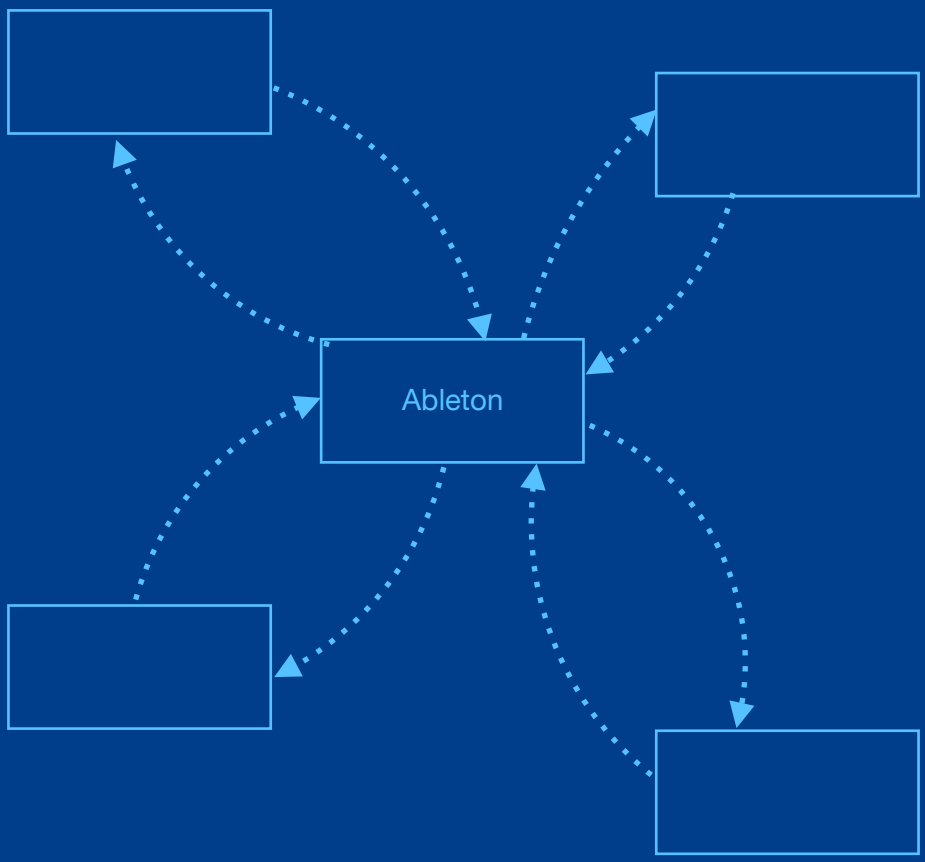


by Riccardo Sellan

Contents

Concept

The **OSC Toolkit** has been designed to enable integration between Ableton Live and the OSC/UDP protocol, extending Live's functionality and capabilities. Through a set of dedicated devices, you can receive OSC/UDP data, filter and map incoming messages, or use Ableton Live as an OSC control interface.



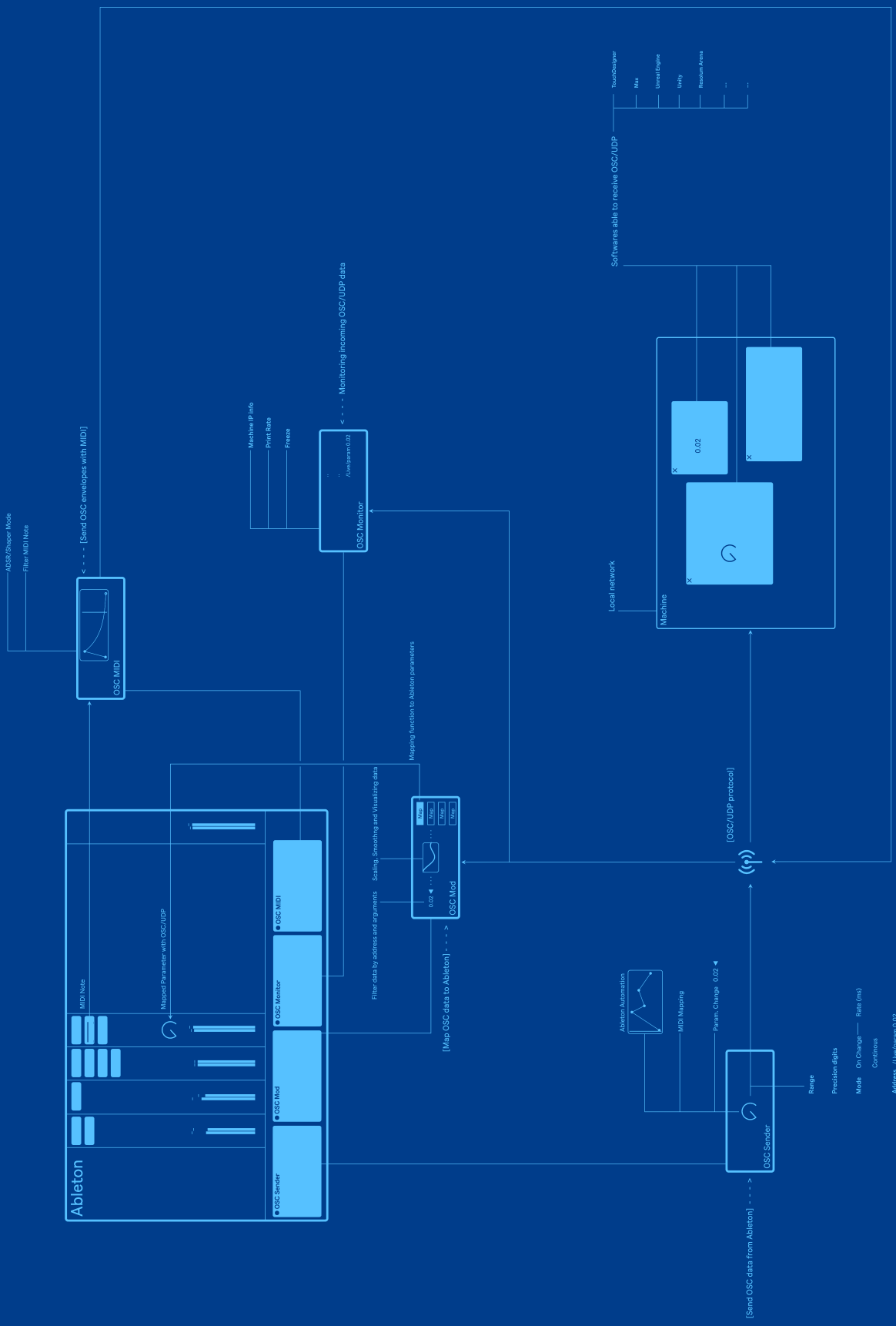
What can be connected?
Any device or software on the same local network (via Ethernet or Wi-Fi) that supports the OSC protocol.

Software: TouchDesigner, Max, Unreal Engine, Unity, Ableton Live, Pure Data, Resolume Arena, …

Hardware: smartphone with OSC applications like TouchOSC, ZigSim, Raspberry Pi, Arduino IoT, …

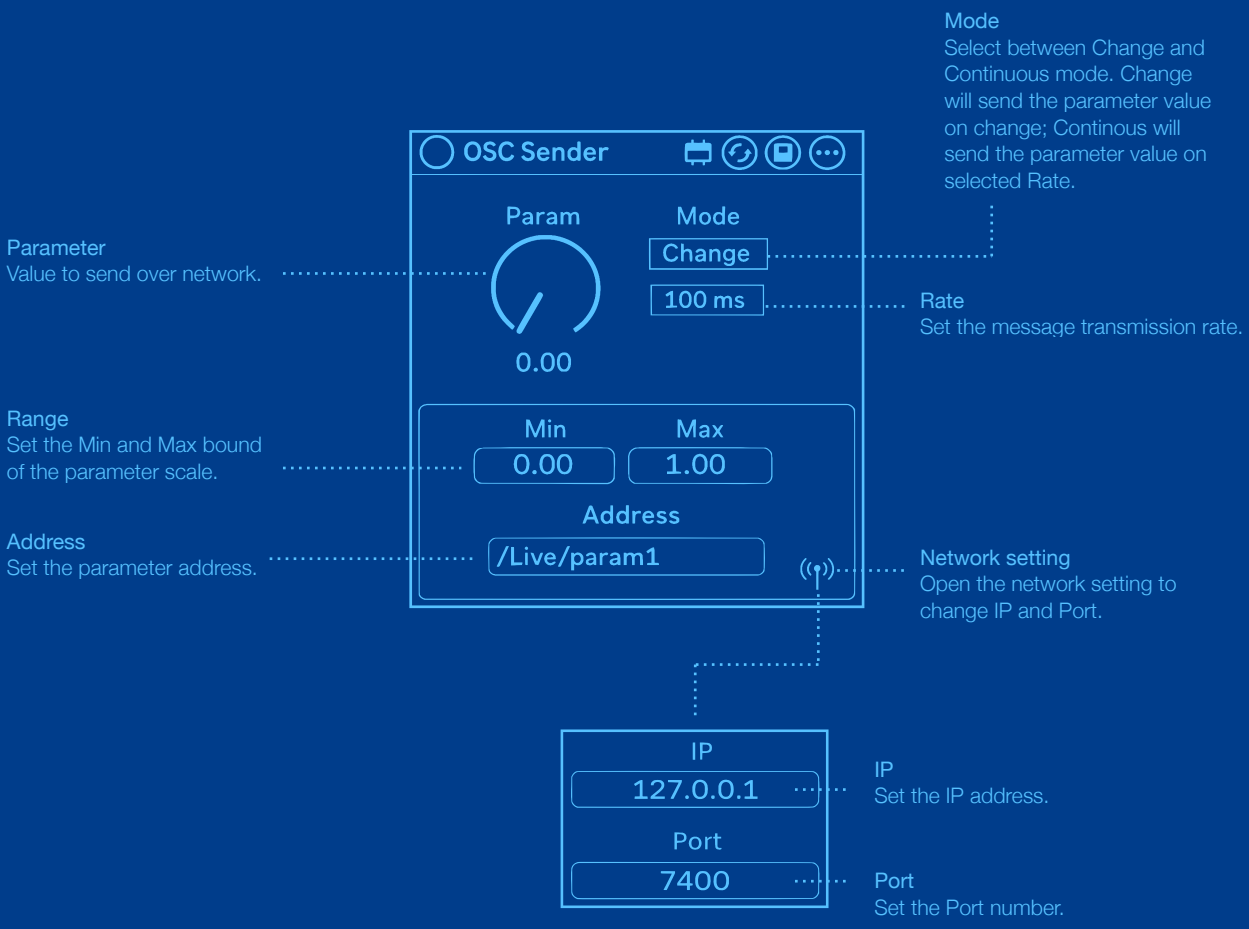
Overview

The following diagram shows how the devices operate and connect within a network environment.



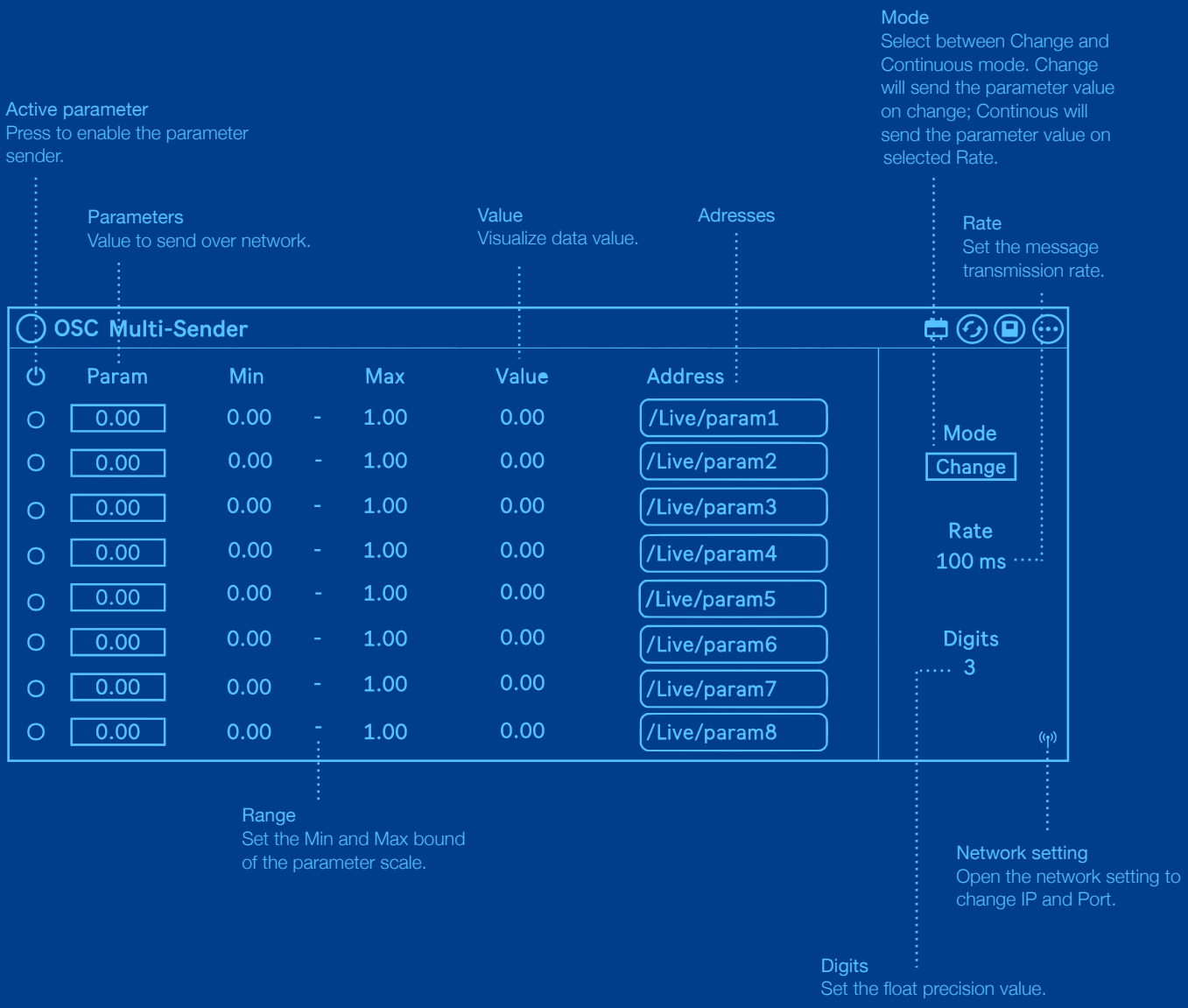
OSC Sender

OSC Sender is a device used to send OSC/UDP messages over the network. These messages can be sent simply by adjusting the device parameter, through parameter automation, or via MIDI mapping.
If you need to send multiple parameters simultaneously, you can duplicate the device or use OSC Multi-Sender, which will be explained in the following section.



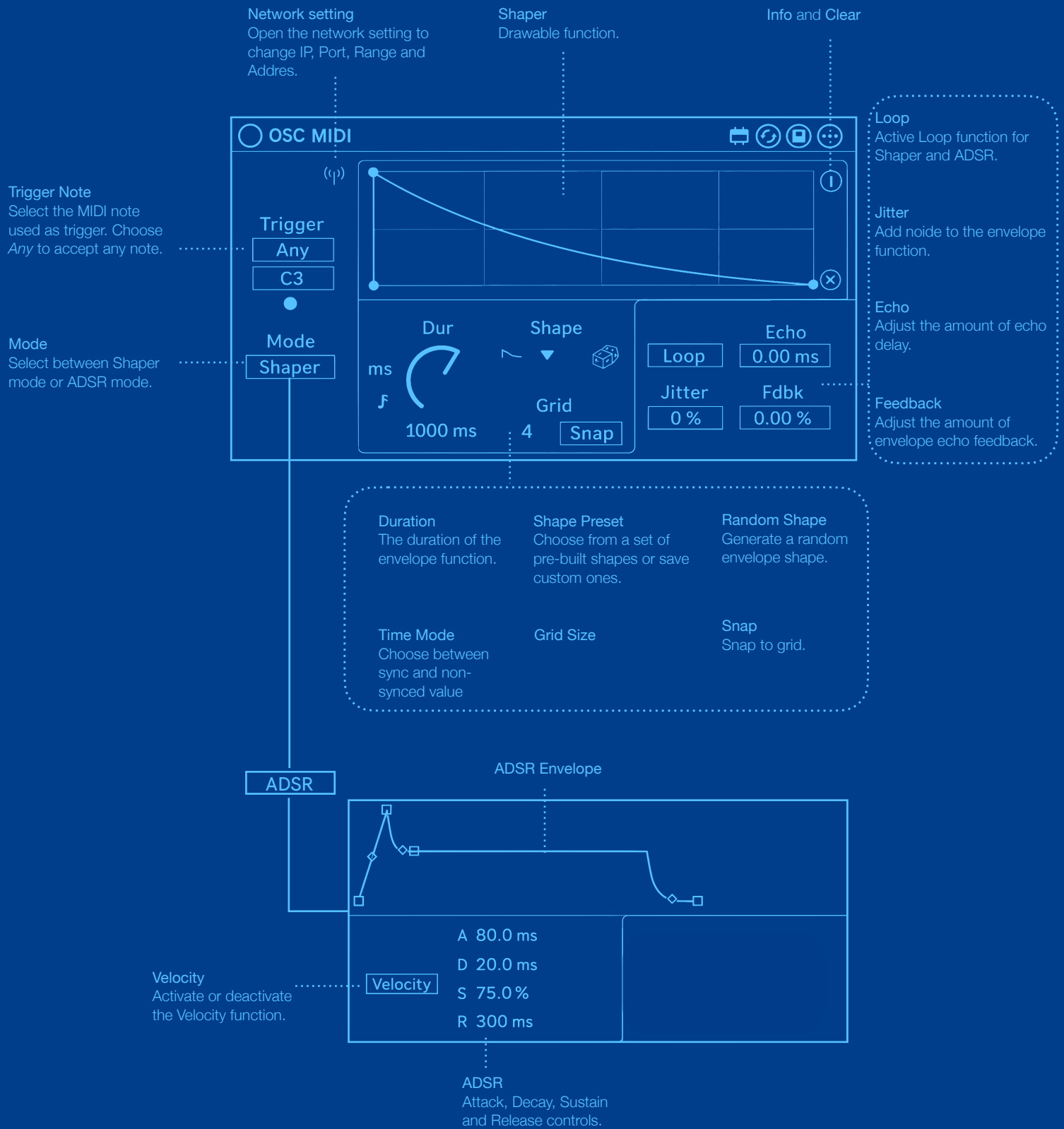
OSC Multi-Sender

OSC Multi-Sender works similarly to OSC Sender, but allows multiple parameters to be controlled at once. It provides eight independent parameters that can be adjusted individually to send different OSC/UDP messages simultaneously.



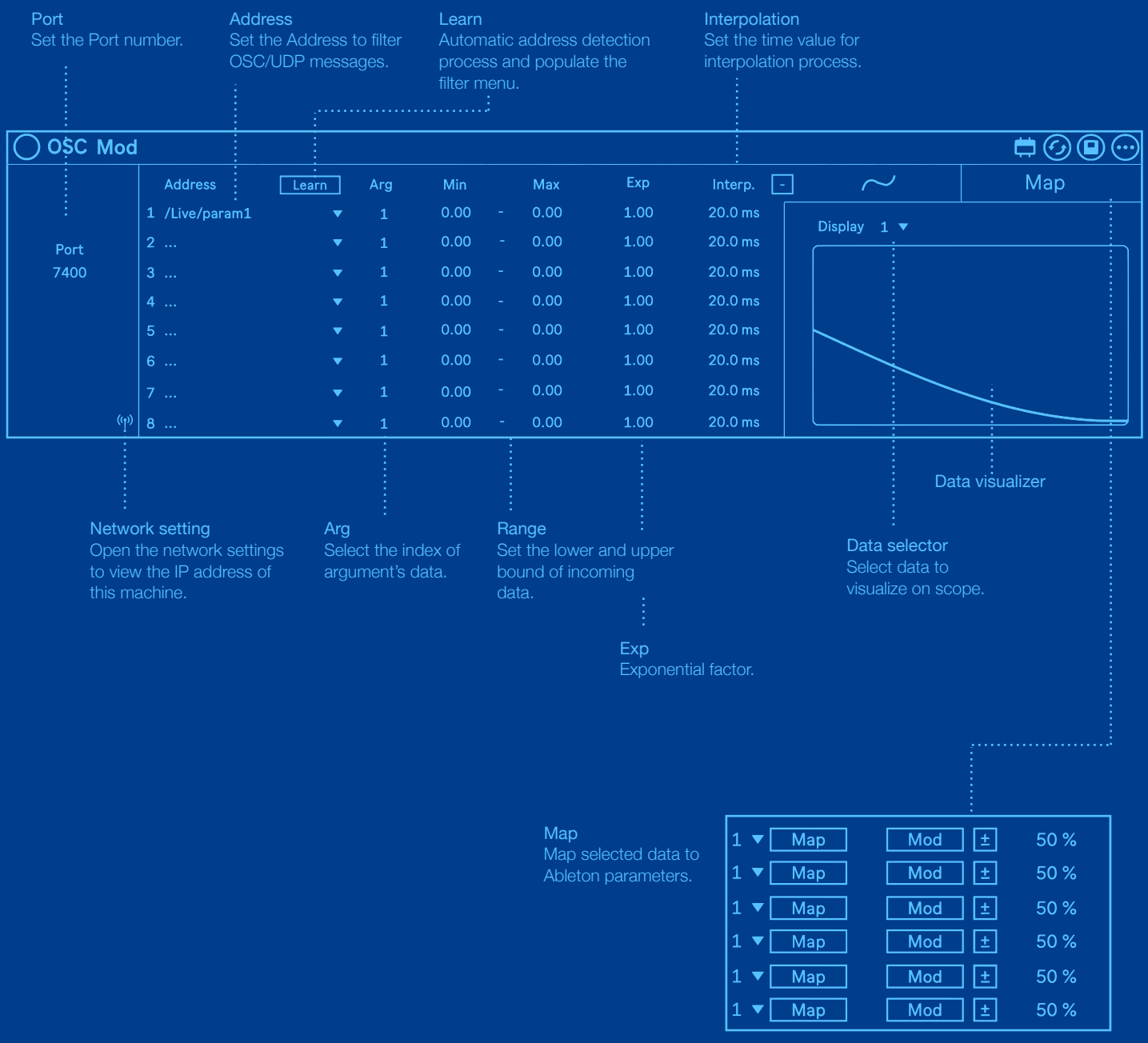
OSC MIDI

OSC MIDI is a device that uses MIDI notes as triggers to generate modulation in the form of either a user-drawn envelope (Shaper) or a traditional ADSR envelope.



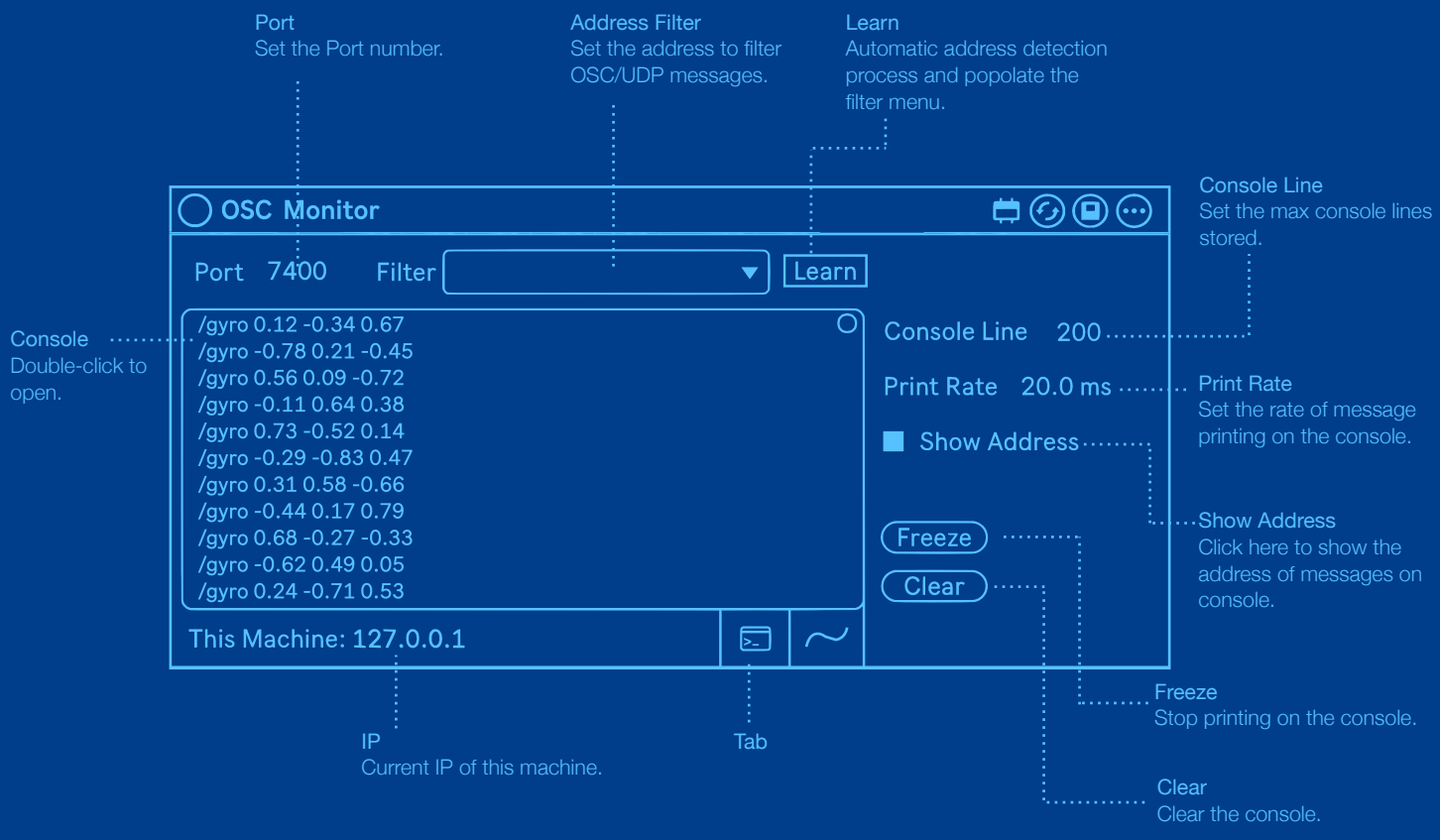
OSC Mod

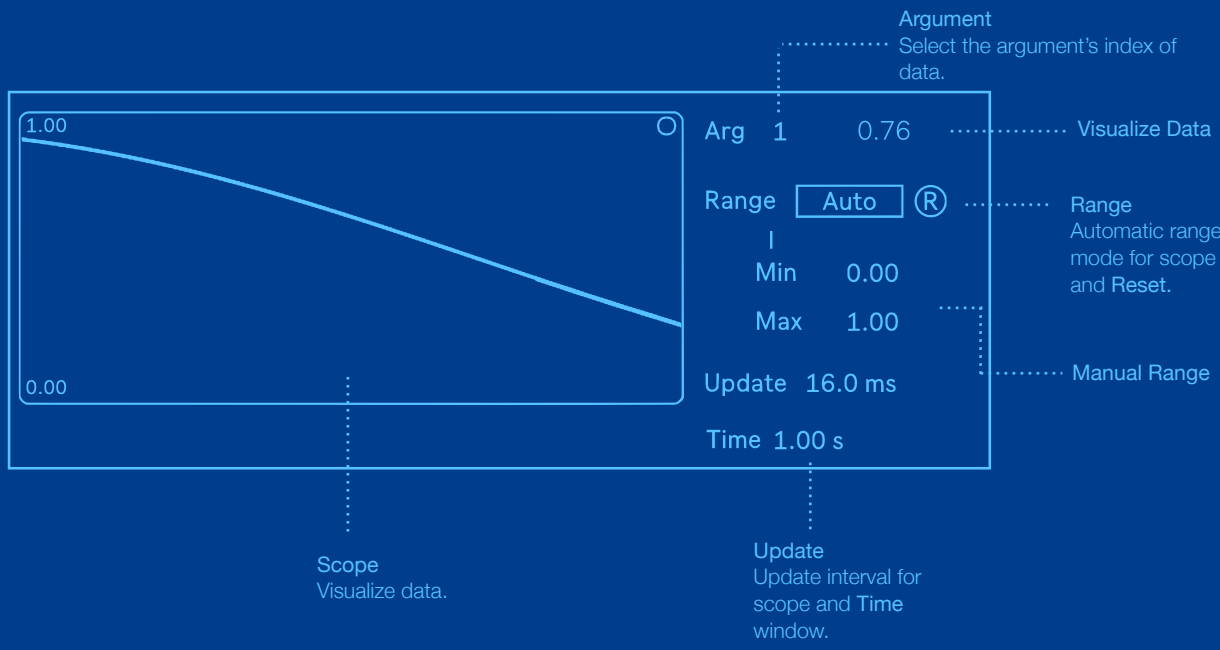
OSC Mod is a device that receives OSC/UDP messages and allows their data to be mapped to parameters in Ableton Live.



OSC Monitor

OSC Monitor is a device used to monitor messages received on a specific port.





Troubleshooting

Ableton crash when a device is opened (Win, Mac)
Make sure Ableton is using the latest version of Max. Follow these steps to use the latest version
https://help.ableton.com/hc/en-us/articles/209070309

The device appears incorrectly (Win, Mac)
Make sure Ableton is using the latest version of Max. Follow these steps to use the latest version
https://help.ableton.com/hc/en-us/articles/209070309

Minimum System Requirements

Mac

- Intel® Core™2 Duo processor. Intel® Core™ i5 processor or faster recommended (it works with M1 and others following)
- 4 GB RAM (8 GB or more recommended)
- 1280x800 display resolution
- Core Audio compliant audio interface recommended

Windows

- 64-bit Intel® (Intel® Core™ i5 processor or faster recommended) or AMD multi-core processor.
- 4 GB RAM (8 GB or more recommended)
- 1366x768 display resolution
- ASIO compatible audio hardware for Link support (also recommended for optimal audio performance)