

# Device: OSC (Open Sound Control)



## Introduction

The OSC (Open Sound Control) Protocol was originally developed to create an alternative to the widely used MIDI Protocol. OSC has several advantages: It works on the network, has a path based system for commands and allows much greater accuracy in the transmitted values than MIDI.

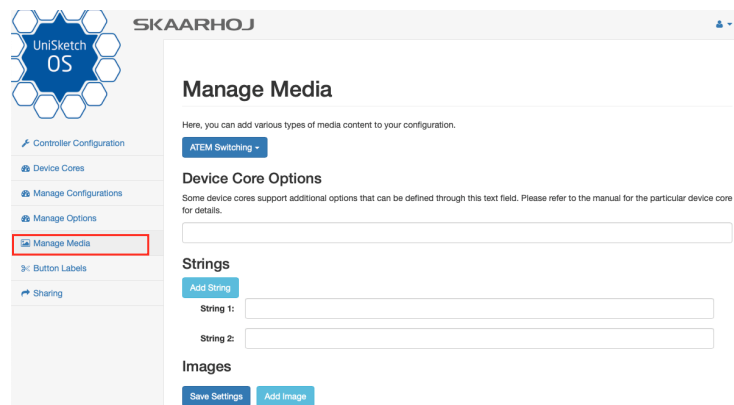
Since OSC is a very customizable protocol it was never implemented on as many devices as Midi, but it is still found in Visual and Audio FX Software such as Resolume and Max/MSP

## Important Notice

We are still in the process of figuring out how OSC can help you and all our customers in their workflow and how the OSC device core should work on a SKAARHOJ Controller. This implementation is a starting point for us. If you have any Ideas about this topic please let us know at [support@skaarhoj.com](mailto:support@skaarhoj.com)

## Basic usage of the Device Core

Since OSC is a string based protocol all strings needed need to be added to the "Manage Media" on the controllers configuration page. At this point it is not possible to change these strings in the local configuration interface. During the actual configuration you can select a string number using the drop down selectors of the actions.



## Strings

Add String

String 1: /test/analog

String 2: /test/osc

String 3: /lights/state/color

## DeviceCore Actions

<p><b>Send Binary</b></p> <p>Normal</p> <p>OSC: Send Binary</p> <p>String: 0 String: 1 ✓ String: 2 String: 3 String: 4 String: 5 String: 6 String: 7 String: 8 String: 9</p> <p>INS CP</p>	<p>Send a binary command to the path specified in the string on a button press.</p> <p>When the button gets pushed down it sends a 1 (integer) and when it gets released it sends a 0 (integer)</p>
<p><b>Send Encoder</b></p> <p>Normal</p> <p>OSC: Send Encoder</p> <p>String: 6</p> <p>INS CP</p>	<p>Send the actions of an encoder to the path specified in the string.</p> <p>When the encoder turns left it sends 1 (integer) and when it gets turned right it sends a -1 (integer)</p> <p>Pressing on the encoder sends a 0 (integer)</p> <p>Long pressing on the encoder sends first a 0 (integer) (because of the short press action) and after 1 second sends a 2 (integer)</p>
<p><b>Send String</b></p> <p>Normal</p> <p>OSC: Send String</p> <p>CMD String: 3</p> <p>VALUE String: 3</p> <p>INS CP</p>	<p>Send a binary command to the path specified in the string on a button press.</p> <p>When the button gets pushed down it sends a 1 (integer) and when it gets released it sends a 0 (integer)</p>
<p><b>Send Absolute</b></p> <p>Normal</p> <p>OSC: Send Absolute</p> <p>String: 7</p> <p>INS CP</p>	<p>Send an analog value command to the path specified in the string on the move of an analog input like a fader.</p> <p>When the fader gets moved its value is sent in a normalised floating point value. The minimum value is therefore 0.00 and the maximum value is 1.00</p>