



(https://web.archive.org/web/20160809090717/http://lubyk.org/)

# Lubyk

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| osc           |  |  |
|---------------|--|--|
| Class methods |  |  |

## **OpenSoundControl for Lua**



(https://web.archive.org/web/20160809090717/https://travis-ci.org/lubyk/osc)

OpenSoundControl pack and unpack for Lua.

(https://web.archive.org/web/20160809090717/https://github.com/lubyk/osc)

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Web page for oscpack (https://web.archive.org/web/20160809090717/http://www.rossbencina.com/code/oscpack).

#### Installation

With luarocks (https://web.archive.org/web/20160809090717/http://luarocks.org/):

```
$ luarocks install osc
```

Supports sending basic Lua values and (nested) lua tables either as Array or Hash. A table with both numeric and string keys is treated as an array.

WARThis implementation does not support sending binary data.

#### Usage example

```
local osc = require 'osc'
local data = osc.pack('/some/url', true, 2, {foo = 'bar'})
-- ... send ... receive
local url, a, b, c = osc.unpack(data)
```

```
.VERSION = '1.0.1'
```

Current version respecting semantic versioning (https://web.archive.org/web/20160809090717/http://semver.org/).

#### .DEPENDS = {

```
"lua >= 5.1, < 5.4"
```

Compatible with Lua 5.1 to 5.3 and LuaJIT

```
'lub >= 1.0.3, < 2.0'
```

Uses Lubyk base library (https://web.archive.org/web/20160809090717/http://doc.lubyk.org/lub.html)

}

## Class methods

```
.pack (url, ...)
```

Pack an url with values into a binary string ready to be transmitted.

```
local data = osc.pack(url, value1, value2)
```

.unpack (data)

Unpack binary data into lua values. This is a multi value return function:

```
local url, value1, value2 = osc.unpack(data)
```

#### Client (osc.Client.html)

This is a simple UDP client (based on lens. Socket) to send OSC messages.

#### Server (osc.Server.html)

This is a simple UDP server (based on lens.Socket) to receive OSC messages.

osc (index.html)

Client (osc.Client.html)

Server (osc.Server.html)

made with lut.Doc (https://web.archive.org/web/20160809090717/http://doc.lubyk.org/lut.Doc.html)



(https://web.archive.org/web/20160811014512/http://lubyk.org/)

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| osc.Client      |  |
|-----------------|--|
| Class functions |  |
| Methods         |  |

## osc send client

This is a simple UDP client (based on lens. Socket) to send OSC messages.

NOTEhis class needs the lens (https://web.archive.org/web/20160811014512/http://doc.lubyk.org/lens.html) library.

### **Usage example**

```
local osc = require 'osc'

client = osc.Client (osc.Client.html)('127.0.0.1', 11000)

client:send('/hello', 'lubyk', 2014)
```

# **Class functions**

.new (host, port)

Create a new client connected to a given host and port.

## **Methods**

| osc (osc.html)           |  |  |
|--------------------------|--|--|
| Client (osc.Client.html) |  |  |
| Server (osc.Server.html) |  |  |

:send  $[(url, \ldots)]$ 

Send osc message.

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| osc.Server |  |
|------------|--|
| Callback   |  |

## osc receive server

This is a simple UDP server (based on lens.Socket) to receive OSC messages.

The server must be created and run inside lens. Scheduler (lens. Scheduler.html) (see example below).

NOTEhis class needs the lens (https://web.archive.org/web/20160809090712/http://doc.lubyk.org/lens.html) library.

### Usage example

```
local lens = require 'lens'
-- Using Live coding
lens.run(function() lens.FileWatch (lens.FileWatch.html)() end)

local osc = require 'osc'

server = server or osc.Server (osc.Server.html)(11000)

function server:receive(url, ...)
    print(url, ...)
end
```

```
.new (port, map)
```

Create a new server. If port is '0', a random available port will be chosen. If an optional map table is provided, it is used to trigger functions from message url (see map).

```
:map (map)
```

Trigger functions from message urls. Calling this function overwrites the receive callback.

#### Example:

```
server:map {
  ['/1/fader1'] = function(url, value)
    print('HEY, fader 1 changed', value)
  end,

  ['/1/pad1'] = function(url, x, y)
    box:move(x, y)
  end,

unknown = function(url, ...)
  print('Missing entry in map table', url, ...)
  end,
}
```

The 'unknown' entry is used to map all urls not present in the table.

## **Callback**

```
:receive (url, ...)
```

This callback is called when osc messages arrive. If map is used, this callback is changed.

```
osc (osc.html)

Client (osc.Client.html)

Server (osc.Server.html)
```

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