

YAMAHA RECEIVER

SEVENHUGS



YAMAHA

A VERY POWERFUL DEVICE



RX-V473

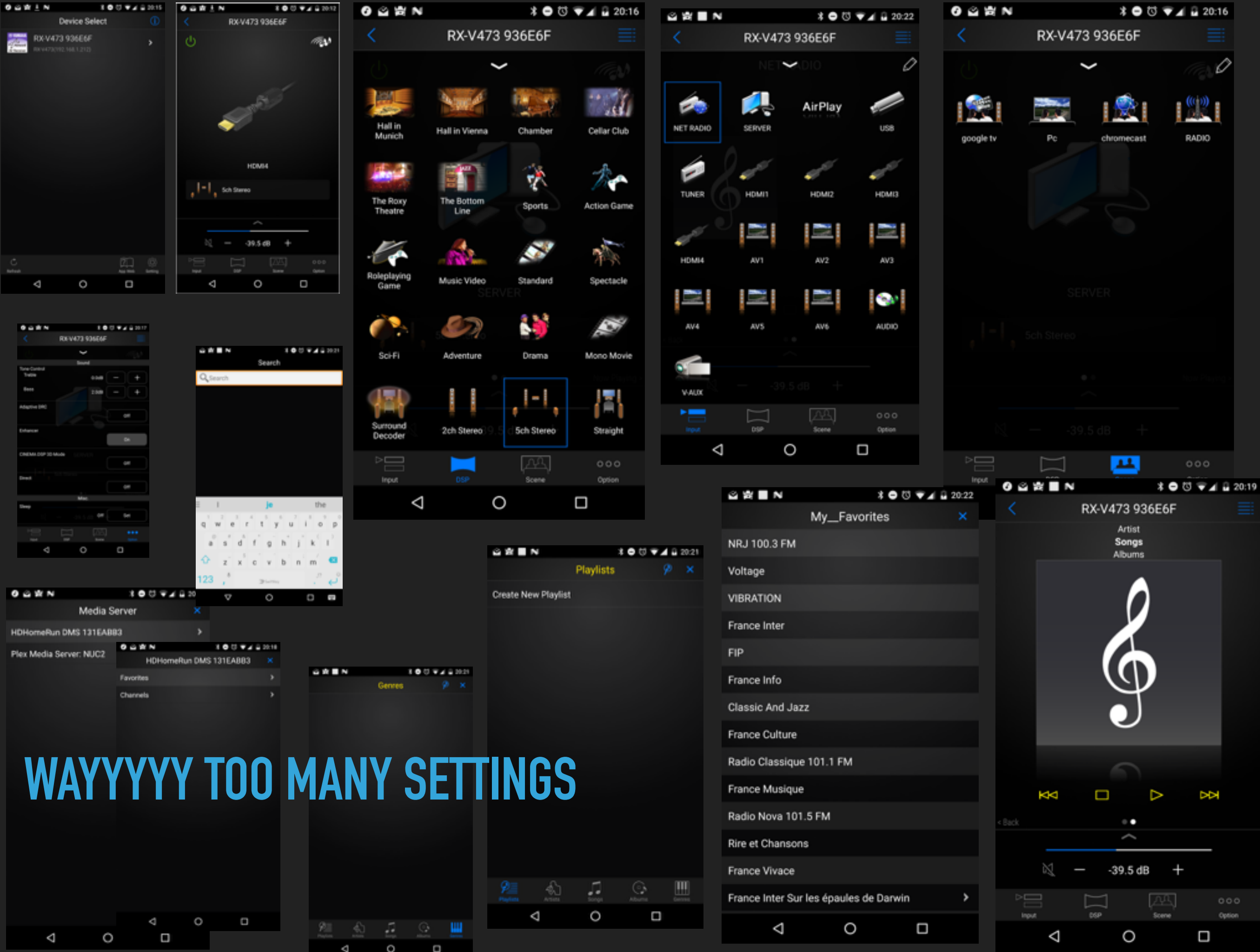
Connects to your TV, BluRay player, PC, Stream from Phone, DLNA server, IPOD, USB device etc...

YAMAHA RECEIVER REMOTE

TOO MANY SETTINGS :

- ▶ HDMI 1,2,3,4,
- ▶ Audio Video 1,2,3,4,5,6
- ▶ USB, V-AUX, NET, TUNER
- ▶ 15+ DSP settings,
- ▶ and many more options...

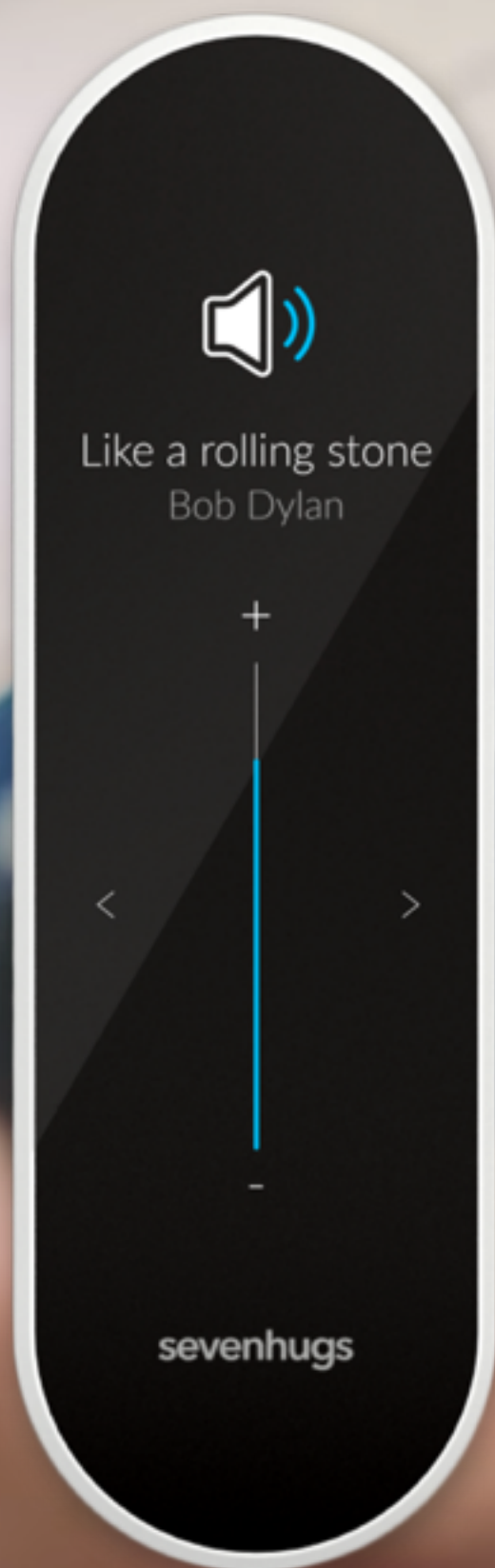




ONCE YOUR DEVICE IS SET

ALL YOU NEED IS REALLY

- ▶ Power
- ▶ presets 1 to 4
- ▶ volume



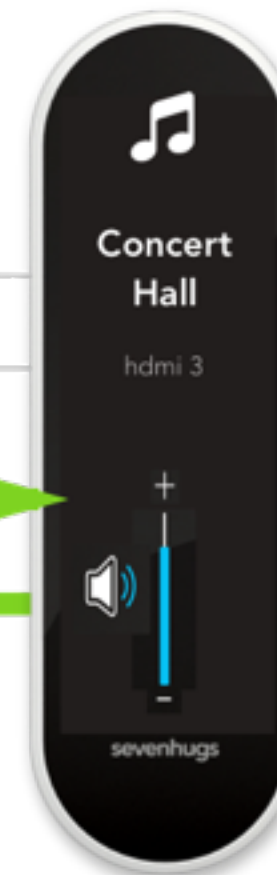
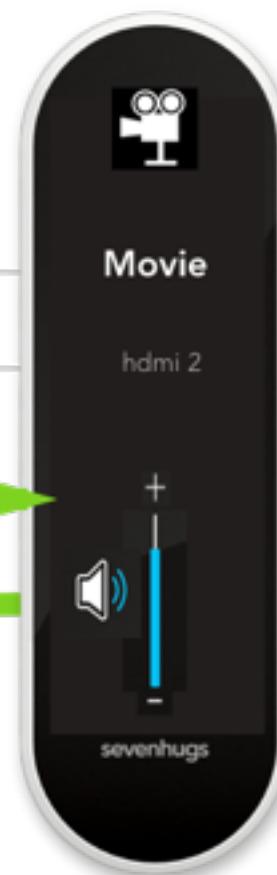
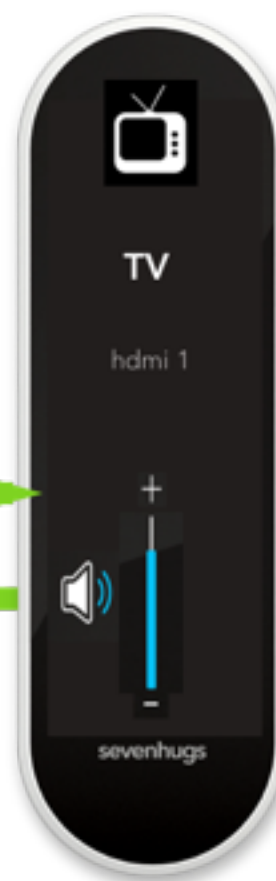
**SEVENHUGS SMARTREMOTE
TO THE RESCUE!**



Turns on simply by
pointing
at the receiver



Swipe up/down
between
bookmarked
Radios

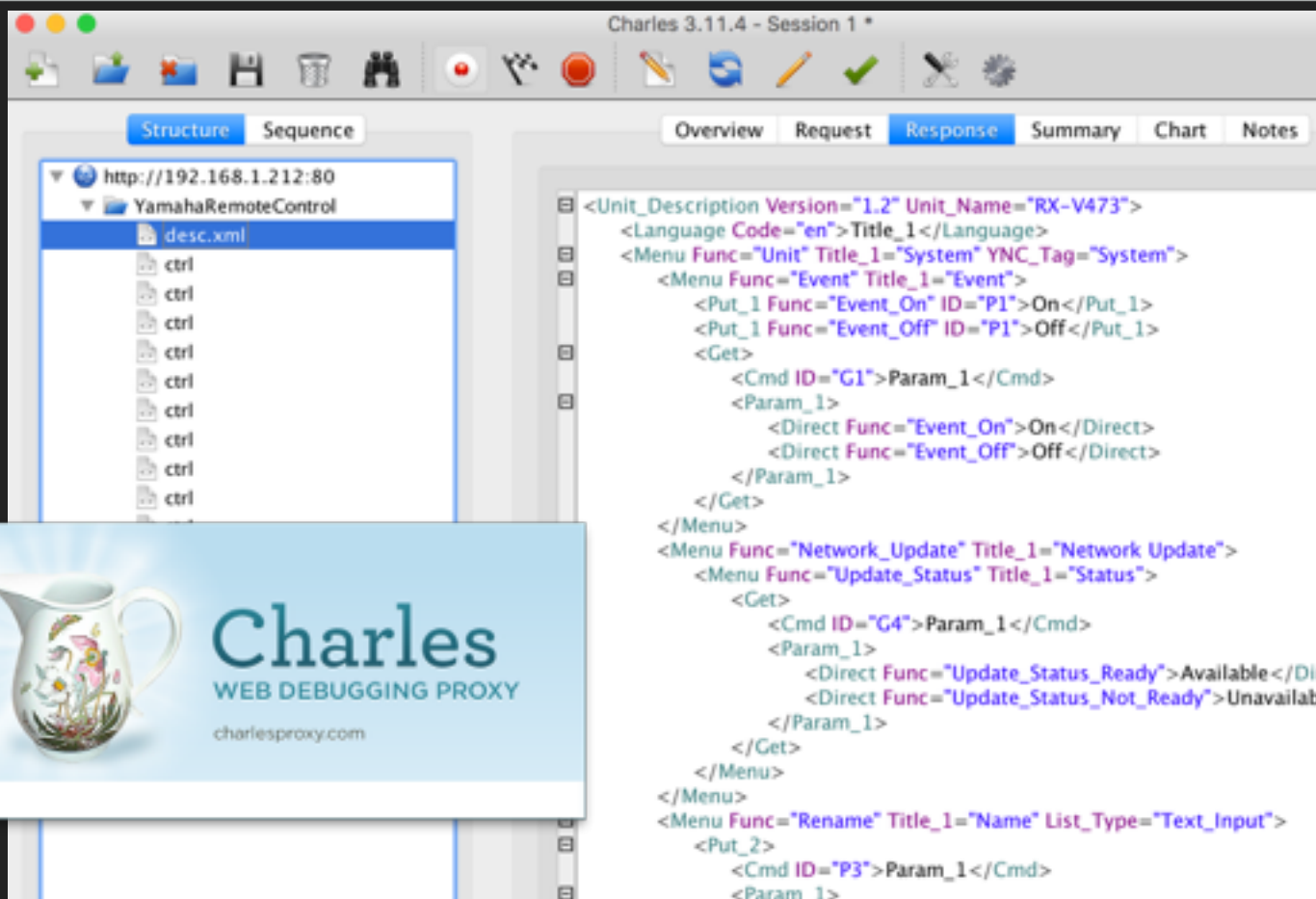


Dsp effects
Inputs

Swipe left/right
between
Presets



SOME HACKING



1. SNIFF HTTP REQUEST USING CHARLES AND THE PHONE APPLICATION
2. EXTRACT XML REQUEST AND RESPONSES
3. IMPLEMENT IN LUA WITH SMARTREMOTE SDK

```
yamaha.lua
1  -- Yamaha control receiver.
2  --
3  --
4  -- Tested on Yamaha receiver RX-V473
5  -- you can query the capabilities of the receiver with :
6  -- get(self.params.address, '/desc.xml', '', done, fail)
7  --
8  -- ctrl commands (post request):
9  -- post(self.params.address, 'ctrl', cmd, done, fail)
10 --
11 -- some cmd samples (check the desc.xml file for more):
12 -- status = '<?xml version="1.0" encoding="utf-8"?><YAMAHA_AV cmd="GET"><Main_Zone><
13 -- powerOn = '<YAMAHA_AV cmd="PUT"><Main_Zone><Power_Control><Power>On</Power></Power>
14 -- volume = '<?xml version="1.0" encoding="utf-8"?><YAMAHA_AV cmd="PUT"><Main_Zone><
15 --
16 --
17 --
18 --
19 local control = require 'sevenhugs.remote.control'
20 local yamaha = control.class()
21
22 yamaha.description = {
23     capability = 'speaker',
24 }
25
26 local http = require 'http'
27
28
29 function yamaha:init()
30
31 end
32
33
34 function yamaha:close()
35     if self.req then
36         self.req:close()
37     end
38 end
39
40 local function get(ip, control, data, done, fail)
41     local url = string.format('http://%s:80/YamahaRemoteControl%s', ip, control)
42     return http.post{
43         url = url,
44         data = data,
45         done = done,
46         fail = fail,
47     }
48 end
49
50 local function post(ip, control, data, done, fail)
51     local url = string.format('http://%s:80/YamahaRemoteControl%s', ip, control)
52     return http.post{
53         url = url,
54         data = data,
55         done = done,
56         fail = fail,
57     }
58 end
59
60 local function parseResult(ui, content)
61     local power = content:match('<Power_Control><Power>([%a_]+)<')
62     if power then
63         print('power is: '..power)
64     end
65 end
```

QUESTIONS?

ex:

Q: proof that it actually works?

A: I made a boring shaky video, check it on youtube