

## **WebSocket driver & API nodes Control4 by Soundimage**

Before we start, we need to take a look at the names,  
The values presented below are values implemented specifically for nodes, they do not simply return the status of a control4 VariableId, they call commands, in this case, the values of variables below are specific to our Node-red.

Please do not send **any random value** at the risk of disconnecting the web socket and use the recommended format below for stable results.

Version on which this documentation is based: **1.0.3**

***At this stage this driver is distributed with 30 days of trial, the possibility of purchasing a lifetime license will be implemented as soon as possible. I cannot guarantee at this stage of development that my driver is compatible with all devices, if you encounter a problem with one of your devices, please send me the information, I can add compatibility.***

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This driver comes with a limited trial period of 30 days, at the end of these 30 days, the connection to the websocket server will no longer be initialized, a license key will be required.

To obtain a license for the driver, please contact us at [christophe@soundimage.be](mailto:christophe@soundimage.be)

If you find a flaw or a bug, please send it to us via this same email address or open an issue on my GitHub.

Thanks, for your interest.  
Enjoy,

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## **Configuration of the websocket driver for use with Node-red**

### **General approach:**

1) You must configure the driver with the address of your Raspberry (In composer Pro or ask your dealer Control4) with this format:

"ws://ipadressofnodered:1880/control4"

2) Then select all the devices you want to display in Node-red in the "Properties > Devices Selector" section

3) Select the devices to be exposed on N-R and click set to save the Devices

4) Go to "Actions" > Register All Listeners

Once done, you can check that the devices are properly tracked in the Properties section you have the status of the selected devices.

It is important to note that uninstalling or updating the driver does not automatically unsubscribe listens, it is something that will only remain active during the development of the driver in depth for less heavy updates.

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## **Installation in Node-red**

Use the node websocket node-red, start by installing this palette first to avoid compatibility issues when adding dependent modules.

You can import the provided node example to comply with the rules. Here are examples of formats to send to manage devices:

It is possible to send directly the control4 driver variable values, but the following standards must be observed:

- For use with switch and basic light:
  - Send 1 = ON or 0 = OFF
- For use brightness light:
  - Send brightness value: 0-100
- For use with blind:
  - Send value of opening 0-100
- For use with fan:
  - Send 1 = ON or 0 = OFF

- For use with TV:
    - Send 0 = Room Off
    - 1 = ON to activities if you use watchId
    - 2 = Get input watchId
  - For use with relay:
    - Send 1 = ON or 0 = OFF
- 

It is also possible to send values to devices using the API variables, so you can build a message to retrieve your values and send them in the correct format by adding a "Template node" on the path of your msg. payload, like this:

Example for the brightness variable, "1001»:

```
{  
    "Brightness": '{{payload. Brightness}}',  
    "Variable": "1001"  
}
```

Be careful when I talk about API, I am talking about the above information, these VariableId only concerns this driver and we are not talking about control4's VariableId.

## API:

### Light Module

Variable: 1000

Method: Change state of the light → 0 or 1

Format node SET:

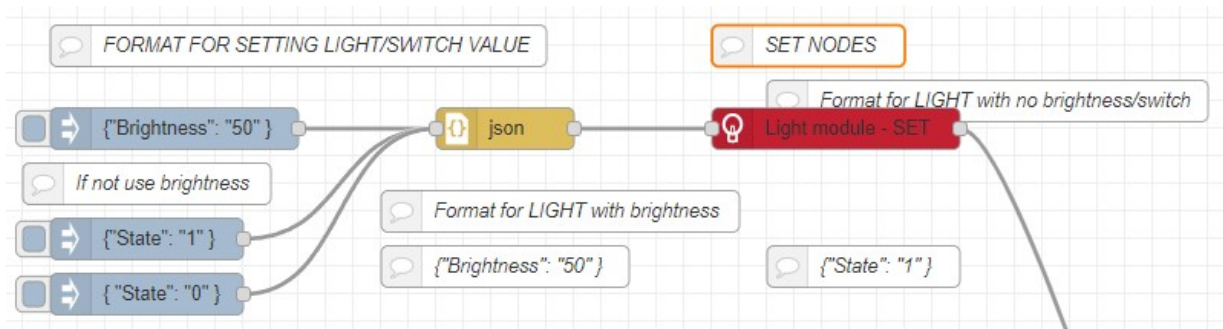
`{"State": "1"}` --> ON  
`{"State": "0"}` --> OFF

Variable: 1001

Method: Change brightness value of the light → 0 - 100

Format node SET:

`{"Brightness": "50"}` --> Brightness to 50%  
`{"Brightness": "100"}` --> Brightness to 100%  
`{"Brightness": "0"}` --> Brightness to 0%



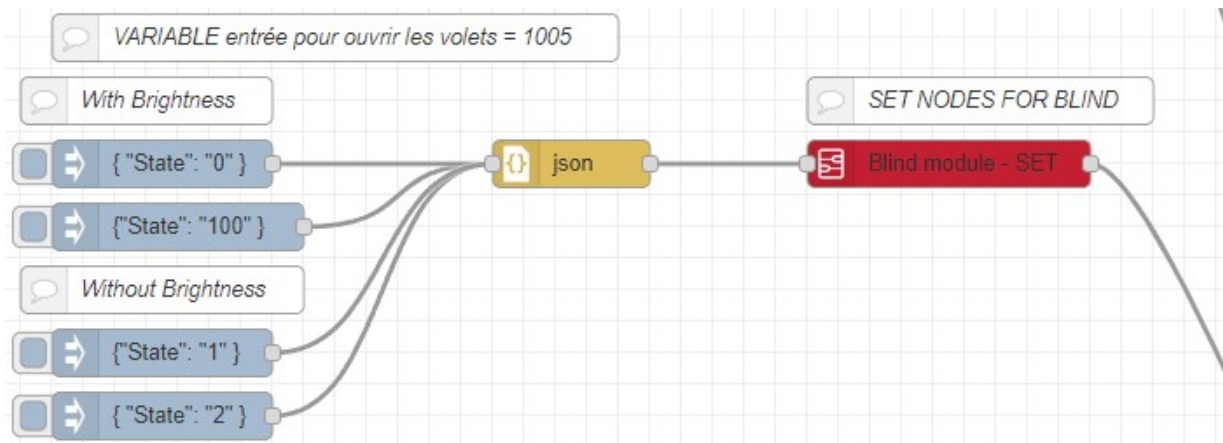
## Blind Module

Variable: 1005

Method: Change the state of the blind/gate → 0 - 100

Format node SET:

`{"State": "100"}` --> Opening to 100%  
`{"State": "0"}` --> Close



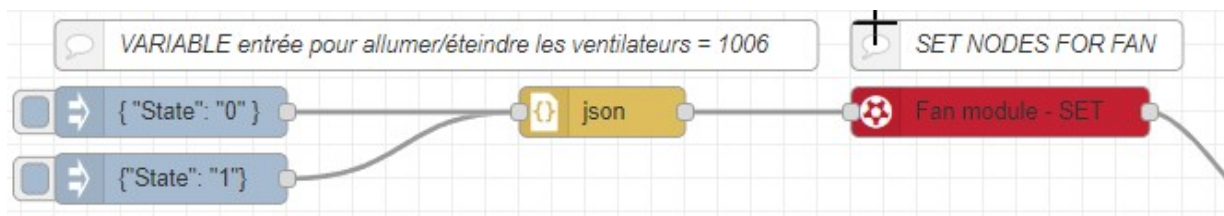
## Fan Module

Variable: 1006

Method: Change state of fan → 0 or 1

Format node SET:

`{"State": "0"}` --> Off  
`{"State": "1"}` --> On



## TV Module

Variable: 1007

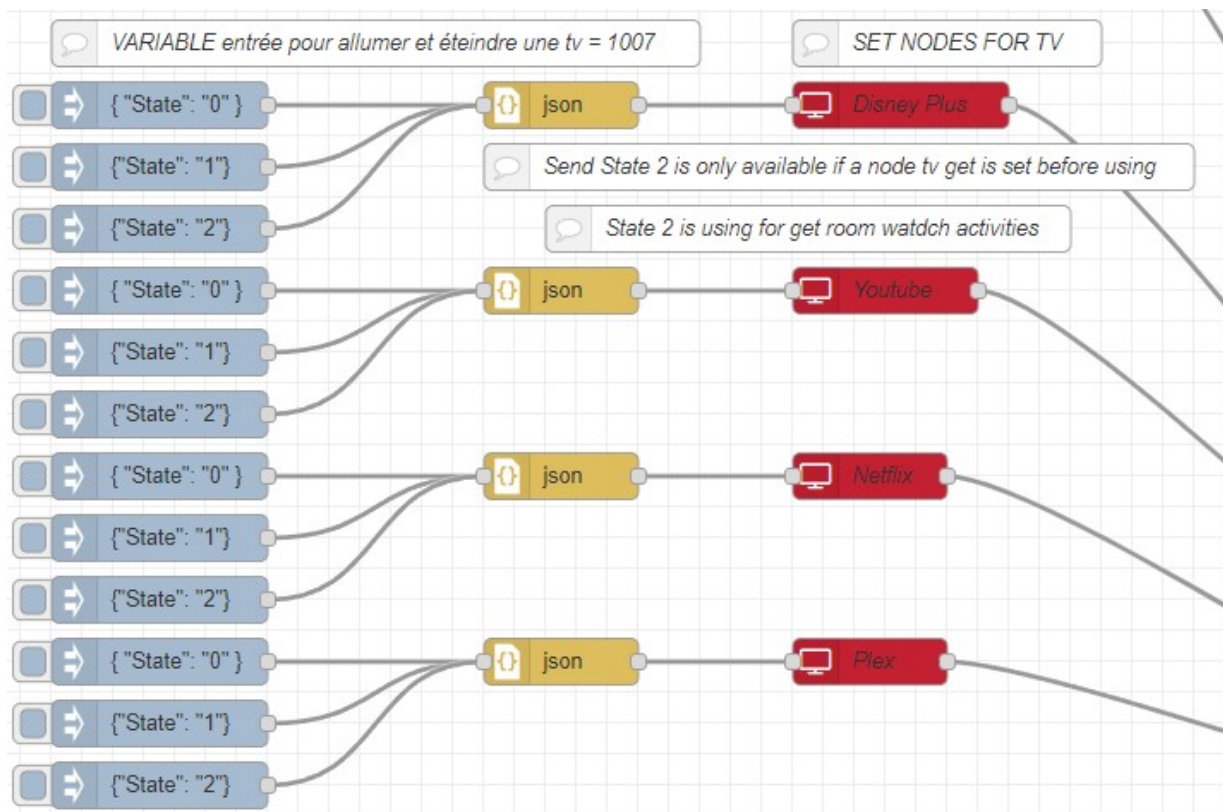
Method: Launch Watch activities or room off → 0 or 1

Format node SET:

{"State": "0"} --> Room Off

{"State": "1"} --> On (Only work when watch activity is enable)

{"State": "2"} --> Get all watch id of the RoomId



## Relay Module

Variable: 1008

Method: Change state of the relay → 0 or 1

Format node SET:

```
{"State": "0"} --> Off  
{"State": "1"} --> On
```

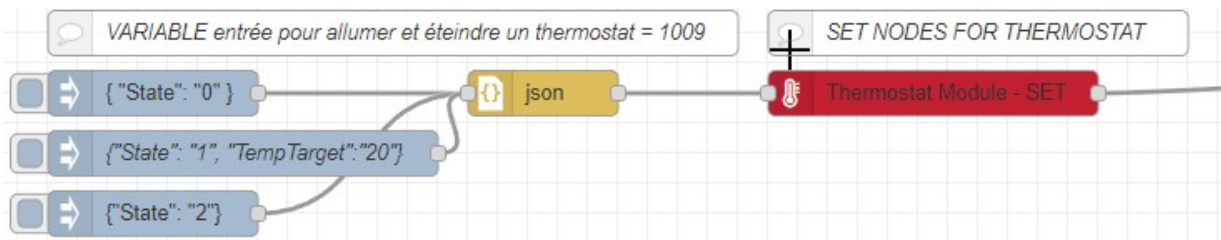
## Thermostat Module

Variable: 1009

Method: Change thermostat mode → 0 or 1 or 2

Format node SET:

```
{"State": "0"} --> Off  
{"State": "1", "TempTarget": "24"} --> Update target temperature (Auto)  
{"State": "2"} --> Heat mode
```



**Caution:** This part of the driver is in very early development stage, please, if you encountered any issues with your thermostats, send me your information about the driver used and the version of the control4 OS, I can try to fix it.



### **Parameters of each node**

Each node needs specific parameters to work, I will describe here node by node, each parameter to make the nodes work.

#### **Module Light GET :**



 Name

 Light proxyID

☒  Brightness

- **Name:** Name the node with the name of your light
- **Light ProxyID:** Indicate the light ProxyID
- **Brightness:** If you want to use the brightness format

#### **Module Light SET:**






 Name

 ProxyID

☒  Use Brightness

- **Name:** Name the node with the name of your light
- **ProxyID:** Indicate the light ProxyID
- **Brightness:** If you want to use the brightness format

### **Module Blind GET:**

 Name	<input type="text" value="Volets Control 4"/>
 ProxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 637"/>
<input type="checkbox"/>  Use level	

- **Name:** Name the node with the name of your blind/gate
- **ProxyID:** Indicate the blind's ProxyID
- **Use Level:** If you want to use the level of your gate

### **Module Blind SET:**





 Name	<input type="text" value="Name"/>
 ProxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 637"/>

- **Name:** Name the node with the name of your blind/gate
- **ProxyID:** Indicate the blind's/gate's ProxyID

### **Module Fan GET & SET :**






The module for the fans is essentially the same as the one for the blinds, it only requires the ProxyID.

### **Module TV GET:**

 Name	<input type="text" value="Name"/>
 ProxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 48"/>
 RoomID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 10"/>
<input type="checkbox"/>  Get mode ?	

- **Name:** Name the node with the name of your TV/ Home Cinema system/activity
- **ProxyID:** Indicate the ProxyID of your video endpoint
- **Room ID:** Indicate the RoomId
- **Get Mode?:** For dev use only.

### **Module TV SET:**

 Name	<input type="text" value="Disney Plus"/>
 ProxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 48"/>
 Watch proxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 93"/>
<input checked="" type="checkbox"/>  Watch select	
 ID Room	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 10"/>

- **Name:** Name the node with the name of tv/Home cinema system/ Activity
- **ProxyID:** Indicate the video endpoint ProxyID
- **Watch ProxyID:** Indicate the target watchId
- **Watch Select:** If active, controls the ProxyID Watch, if inactive then controls the TV (The second option cannot work at this time)
- **ID Room:** Enter the room ID of the controlled system

### **Module Thermostat GET & SET:**

 Name	<input type="text" value="Name"/>
 ProxyID	<input type="text" value="0&lt;sub&gt;9&lt;/sub&gt; 68"/>

- **Name:** Name the node with the name of your thermostat
- **ProxyID:** Indicate the thermostats ProxyID