

# Package: huecontroller (via r-universe)

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**Description** Control Philips Hue lights using the R programming language

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hue\_convert\_to\_hue\_sat

*Convert hex colour to*

---

### Description

Convert hex colour to

### Usage

```
hue_convert_to_hue_sat(colour)
```

### Arguments

colour            A colour name as listed by colours() or a hexadecimal colour string.

### Value

A named list with two elements: hue and sat

### Examples

```
hue_convert_to_hue_sat("red")
hue_convert_to_hue_sat("#E414FF")
if (interactive()) {
  hue_convert_to_hue_sat(colourpicker::colourPicker(numCols = 1))
}
```

---

hue\_delete\_group      *Delete group*

---

**Description**

Delete group

**Usage**

hue\_delete\_group(id)

**Arguments**

id                      If numeric, numeric id of group. If character, name of group You can check id and names with hue\_get\_groups\_names()

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_delete\_light      *Delete light*

---

**Description**

Delete light

**Usage**

hue\_delete\_light(id)

**Arguments**

id                      If numeric, numeric id of light. If character, name of light. You can check id and names with hue\_get\_lights\_names()

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_get\_groups      *Get all details about groups*

---

**Description**

Get all details about groups

**Usage**

```
hue_get_groups()
```

**Value**

A list

---

hue\_get\_groups\_names      *Get names of available groups*

---

**Description**

Get names of available groups

**Usage**

```
hue_get_groups_names()
```

---

hue\_get\_group\_lights      *Get state of given group*

---

**Description**

Get state of given group

**Usage**

```
hue_get_group_lights(id)
```

**Arguments**

id                      If numeric, numeric id of group. If character, name of group. You can check id and names with hue\_get\_groups\_names()

**Value**

An integer vector with id of lights included in a group.

---

hue\_get\_group\_state     *Get state of given group*

---

**Description**

Get state of given group

**Usage**

hue\_get\_group\_state(id)

**Arguments**

id                     If numeric, numeric id of group. If character, name of group. You can check id and names with hue\_get\_groups\_names()

**Value**

A list with details on the state and attribute of the given group

---

hue\_get\_lights             *Get details about all lights*

---

**Description**

Get details about all lights

**Usage**

hue\_get\_lights()

**Value**

A list with details about all lights

---

hue\_get\_lights\_names     *Get names of all available lights*

---

**Description**

Get names of all available lights

**Usage**

hue\_get\_lights\_names()

hue\_get\_light\_state    *Get light state*

---

**Description**

Get light state

**Usage**

```
hue_get_light_state(id)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with hue_get_lights_names()
----	--

---

hue\_mod\_group\_card\_server  
*Server function for shiny app*

---

**Description**

Server function for shiny app

**Usage**

```
hue_mod_group_card_server(id)
```

**Arguments**

id	Module id
----	-----------

---

hue\_mod\_group\_card\_ui *UI function for shiny app*

---

### **Description**

UI function for shiny app

### **Usage**

```
hue_mod_group_card_ui(  
  id,  
  group,  
  onoff,  
  brightness,  
  temperature,  
  min_temperature,  
  max_temperature  
)
```

### **Arguments**

id	Module id
group	Group id

---

hue\_mod\_light\_card\_server  
*Server function for shiny app*

---

### **Description**

Server function for shiny app

### **Usage**

```
hue_mod_light_card_server(id)
```

### **Arguments**

id	Module id
----	-----------

hue\_mod\_light\_card\_ui *UI function for shiny app*

---

**Description**

UI function for shiny app

**Usage**

```
hue_mod_light_card_ui(  
  id,  
  light,  
  onoff,  
  brightness,  
  temperature,  
  min_temperature,  
  max_temperature  
)
```

**Arguments**

id	Module id
light	Light id

---

hue\_output\_group\_id *Check if given id is valid*

---

**Description**

Check if given id is valid

**Usage**

```
hue_output_group_id(id)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with hue_get_lights_names()
----	--

**Value**

Always return an integer corresponding to a given light.



---

hue_output_id	<i>Check if given id is valid</i>
---------------	-----------------------------------

---

**Description**

Check if given id is valid

**Usage**

```
hue_output_id(id)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with hue_get_lights_names()
----	--

**Value**

Always return an integer corresponding to a given light.

---

hue_settings	<i>Set IP and username to interact with the api</i>
--------------	---

---

**Description**

Set IP and username to interact with the api

**Usage**

```
hue_settings(ip = NULL, username = NULL)
```

**Arguments**

ip	A character vector of length one. The IP of your hue bridge, e.g. "192.168.0.1"
username	A username generated to interact with the API. For details, <a href="https://developers.meethue.com/develop/get-started-2/">https://developers.meethue.com/develop/get-started-2/</a>

---

hue\_set\_group\_brightness  
*Set brightness of group*

---

**Description**

Set brightness of group

**Usage**

```
hue_set_group_brightness(id, brightness, by = 10)
```

**Arguments**

id	If numeric, numeric id of group. If character, name of group. You can check id and names with <code>hue_get_groups_names()</code>
brightness	A numeric value, or one of either "brighter" (or "+") or "darker" (or "-"). The highest value is 254, the lowest 1.
by	Numeric, defaults to 10. Ignored if brightness is numeric. Otherwise determines the size of the increment/decrement.

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_set\_group\_colour *Set colour of a group of lights with relevant capabilities*

---

**Description**

N.B. Colour accuracy may not be perfect. See the official documentation for details, and consider using custom parameters with `hue_set_group_state()` if this function does not achieve what you expect. <https://developers.meethue.com/develop/application-design-guidance/color-conversion-formulas-rgb-to-xy-and-back/>

**Usage**

```
hue_set_group_colour(id, colour, transition_time = 0.4)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with <code>hue_get_groups_names()</code>
colour	A colour name as listed by <code>colours()</code> or a hexadecimal colour string.
transition_time	Duration of the transition in seconds. Defaults to 0.4 seconds.

**Examples**

```
if (interactive()) {
  hue_set_group_colour(id = 11, colour = "green")
}
```

---

hue\_set\_group\_state     *Change state of Hue groups*

---

**Description**

Change state of Hue groups

**Usage**

```
hue_set_group_state(id, params)
```

**Arguments**

id	If numeric, numeric id of group. If character, name of group. You can check id and names with <code>hue_get_groups_names()</code>
params	A named list. For a full list of available parameters, check <a href="https://developers.meethue.com/develop/hue-api/groups-api/">https://developers.meethue.com/develop/hue-api/groups-api/</a>

---

hue\_set\_group\_temperature  
                          *Set temperature of group*

---

**Description**

Set temperature of group

**Usage**

```
hue_set_group_temperature(id, temperature, by = 10)
```

**Arguments**

id	If numeric, numeric id of group. If character, name of group. You can check id and names with <code>hue_get_groups_names()</code>
temperature	A numeric value, or one of either "warmer" (or "+") or "colder" (or "-"). The warmest value available is usually 500, the coldest 153.
by	Numeric, defaults to 10. Ignored if temperature is numeric. Otherwise determines the size of the increment/decrement.

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_set\_light\_brightness  
*Set brightness of light*

---

**Description**

Set brightness of light

**Usage**

```
hue_set_light_brightness(id, brightness, by = 10)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with <code>hue_get_lights_names()</code>
brightness	A numeric value, or one of either "brighter" (or "+") or "darker" (or "-"). The highest value is 254, the lowest 1.
by	Numeric, defaults to 10. Ignored if brightness is numeric. Otherwise determines the size of the increment/decrement.

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_set\_light\_colour *Set colour of a Hue light with relevant capabilities*

---

**Description**

N.B. Colour accuracy may not be perfect. See the official documentation for details, and consider using custom parameters with `hue_set_light_state()` if this function does not achieve what you expect. <https://developers.meethue.com/develop/application-design-guidance/color-conversion-formulas-rgb-to-xy-and-back/>

**Usage**

```
hue_set_light_colour(id, colour, transition_time = 0.4)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with <code>hue_get_lights_names()</code>
colour	A colour name as listed by <code>colours()</code> or a hexadecimal colour string.
transition_time	Duration of the transition in seconds. Defaults to 0.4 seconds.

**Examples**

```
if (interactive()) {
  hue_set_light_colour(id = 11, colour = "blue")
}
```

---

hue\_set\_light\_state    *Change state of Hue lights*

---

**Description**

Change state of Hue lights

**Usage**

```
hue_set_light_state(id, params)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with <code>hue_get_lights_names()</code>
params	A named list. For a full list of available parameters, check <a href="https://developers.meethue.com/develop/hue-api/lights-api/">https://developers.meethue.com/develop/hue-api/lights-api/</a>

---

hue\_set\_light\_temperature  
*Set temperature of light*

---

**Description**

Set temperature of light

**Usage**

```
hue_set_light_temperature(id, temperature, by = 10)
```

**Arguments**

id	If numeric, numeric id of light. If character, name of light. You can check id and names with <code>hue_get_lights_names()</code>
temperature	A numeric value, or one of either "warmer" (or "+") or "colder" (or "-"). The warmest value available is usually 500, the coldest 153.
by	Numeric, defaults to 10. Ignored if temperature is numeric. Otherwise determines the size of the increment/decrement.

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_shiny\_controller *Interactive interface to control lights*

---

**Description**

options Options to be passed to the shiny app. See `?shiny::shinyApp()` for details.

**Usage**

```
hue_shiny_controller(options = list())
```

---

hue\_turn\_group\_off *Turn off group*

---

**Description**

Turn off group

**Usage**

```
hue_turn_group_off(id)
```

**Arguments**

id If numeric, numeric id of group. If character, name of group. You can check id and names with `hue_get_groups_names()`

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_turn\_group\_on *Turn on group*

---

**Description**

Turn on group

**Usage**

```
hue_turn_group_on(id)
```

**Arguments**

id                    If numeric, numeric id of group. If character, name of group. You can check id and names with hue\_get\_groups\_names()

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_turn\_light\_off     *Turn off light*

---

**Description**

Turn off light

**Usage**

hue\_turn\_light\_off(id)

**Arguments**

id                    If numeric, numeric id of light. If character, name of light. You can check id and names with hue\_get\_lights\_names()

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

---

hue\_turn\_light\_on     *Turn on light*

---

**Description**

Turn on light

**Usage**

hue\_turn\_light\_on(id)

**Arguments**

id                    If numeric, numeric id of light. If character, name of light. You can check id and names with hue\_get\_lights\_names()

**Value**

Silently returns http response from the bridge, but mostly used for its side effects.

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