

# Direct Device to Device communication (DDD)

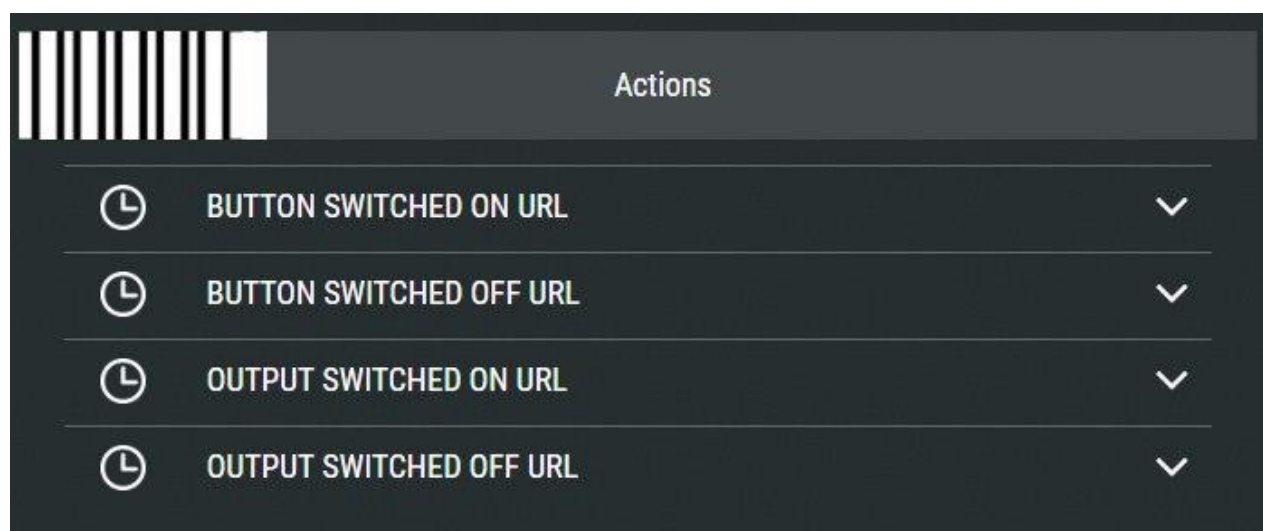
From firmware 1.5.0 we add an option to each device to communicate with another one without server or cloud between them. This allows many additional options.

## The main advantages of this new option are:

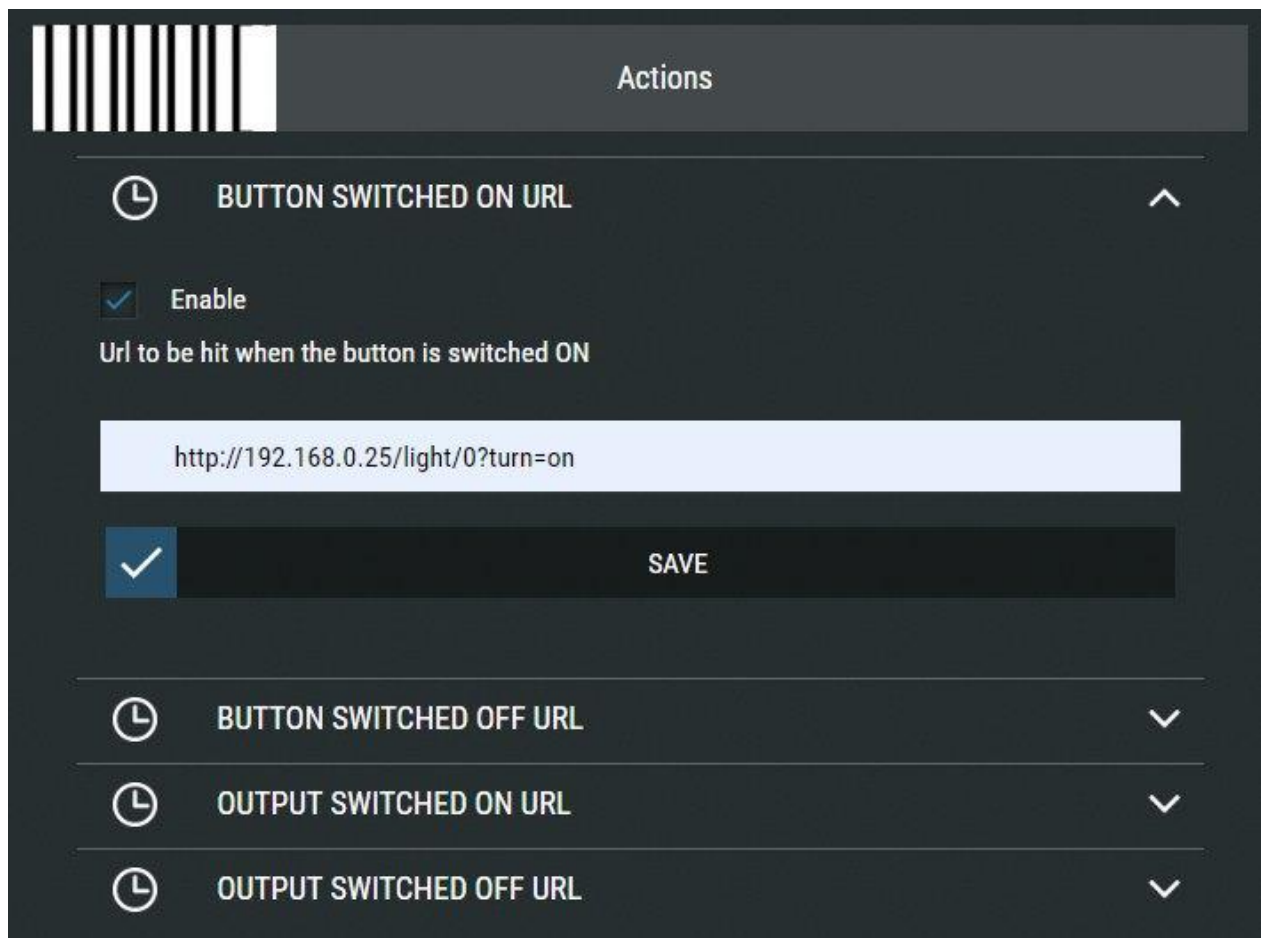
1. Even if you do not have Internet devices, they can work together. For some critical situations, this is important. For example, when the crane opens, the pump must also be switched on. Or, you can add another key on the wall to control the lighting without having a connection to the lamp.
2. Extremely fast speech - just a few milliseconds.
3. Ability to manage other devices that have an HTTP API or activate a scene in IFTTT.

## How to control one shelly from another?

First, you need to choose when action could happen. There are 4 possibilities at the moment.



- When the button is switched ON or OFF and When the output is ON or OFF. The difference is that button means physical action (push with hand), the relay can be switched ON/OFF from scene, Schedule, Application ...
- Different type of devices can support different actions.



You must activate the required option and enter the URL that is being executed.

## What commands are possible between Shelly device

Detailed description can be found here <https://shelly-api-docs.shelly.cloud/>, but we will try to make a simple for you.

# Shelly relays: 1/1PM/2/2.5/4Pro

The command syntax to control them is:

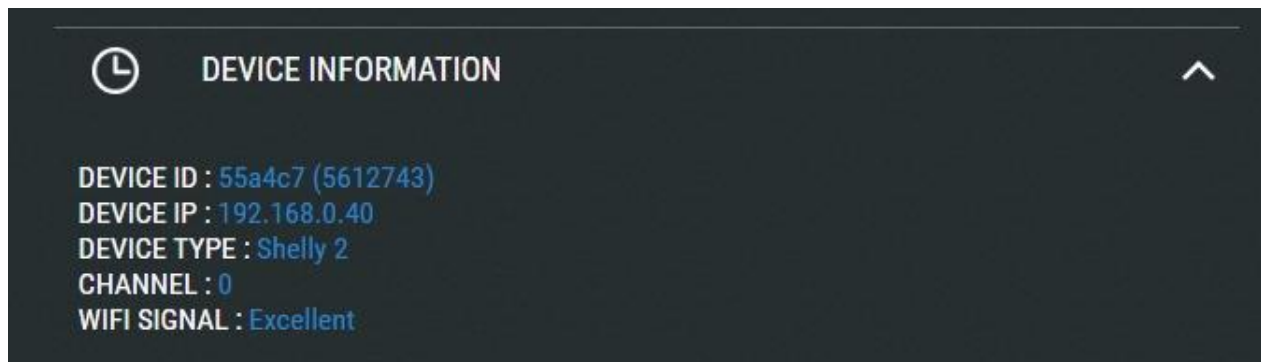
`http://[deviceIP]/relay/[channel]?[command]&[command]`

if you use authorisation syntax is:

`http://user:pass@[deviceIP]/relay/[channel]?[command]&[command]`

[device IP] and [channel] - can be check from the APP in menu Settings -> Device Info.

Channels start from 0, that's mean Shelly2.5 have channel 0 and channel 1 for Output1 and Output2.



Device IP

[command] could be:

*turn=on* - switch output ON

*turn=off* - switch output OFF

*turn=toggle* - reverse state

On and off can be combined with timer:

*timer=X* - where X is in seconds. Switch output will be turned On or OFF for X seconds and will be switched back to previous state after that.

**Examples:**

<http://192.168.0.40/relay/0?turn=on> Will switch output ON.

<http://192.168.0.40/relay/0?turn=on&timer=10> Will switch output ON for 10 sec.

<http://192.168.0.40/relay/0?turn=toggle> Will switch the output On if OFF or vice version.

## Shelly rollers : 2/2.5

The command syntax to control them is:

`http://[deviceIP]/roller/0?[command]&[command]`

[command] could be:

*go=open - open roller*

*go=close - close roller*

*g0=stop - stop roller*

*roller\_pos=0-100 - open roller to this position. Need to calibrate it before that.*

Open and close can be combined with the duration

*duration=X - move the roller X seconds.*

*Examples:*

<http://192.168.0.40/roller/0?go=open> Will open the roller

<http://192.168.0.40/roller/0?turn=open&duration=5> Will opening 5 seconds.

[http://192.168.0.40/roller/0?roller\\_pos=30](http://192.168.0.40/roller/0?roller_pos=30) Will Open at 30%

## Shelly Bulb/LED/RGBWW/RGBW2

### Color mode:

The main command to control them is:

`http://[deviceIP]/color/0?[command]&[command]`

**[command] id you choose Color mode could be:**

*turn=on - switch output ON turn=off - switch output OFF turn=toggle - reverse state* On and off can be combined with timer: *timer=X - where X*

*is in seconds. Switch output will be turned On or OFF for X seconds and will be switched back to previous state after that.*

*red = 0 - 255 ; change red color intensity*

*blue = 0 - 255 ; change blue color intensity green = 0 - 255 ; change green color intensity white = 0 - 255 ; change white color intensity gain = 0 - 100 ; change intensity for RGB*

*Examples:*

<http://192.168.0.50/color/0?turn=on&red=255&green=86&blue=112&white=0>

*Will switch device ON and set Red, Blue, Green and White colours.*

<http://192.168.0.50/color/0?turn=on&white=20> *Will switch device ON and set only White*

<http://192.168.0.40/color/0?turn=on> *Will switch device ON.*

<http://192.168.0.50/color/0?turn=on&gain=27> *Change the intensity or RGB to 27%*

### **White multi-channel mode:**

The main command to control them is:

HTTP://[deviceIP]/white/[channel]?[command]&[command]

Channels start from 0, that's mean ShellyRGBW2 have channel 0 to 3 for Output1 tp 4.

#### **[command] id you choose White mode could be:**

*turn=on* - switch output ON *turn=off* - switch output OFF *turn=toggle* - reverse state On and off can be combined with timer: *timer=X* - where X

is in seconds. Switch output will be turned On or OFF for X seconds and will be switched back to previews state after that.

*brightness = 0 - 100*; set birgtness level

*Examples:* <http://192.168.0.50/white/0?brightness=70> *Will set intensity of 70%.*

<http://192.168.0.50/color/0?turn=on&brightness=70> *Will switch the device on and set intensity to 70%*