SMART OUTPUTS
SHELLY - SONOFF

1. INTRODUCTION

This manual is intended for qualified electrical installers for integrating Shelly and Sonoff devices into residential and commercial electrical systems.
Shelly devices offer a local web interface that allows you to control and configure the devices via a standard web browser on both a computer and a mobile device.
With it, you can turn on or off the appliances connected to your device, set schedules, and configure actions to be performed when certain conditions occur.
Advantages of Shelly and Sonoff technology:

- Retrofit installation without masonry work
- Wi-Fi control
- Local and cloud automation
- Integration with home automation systems

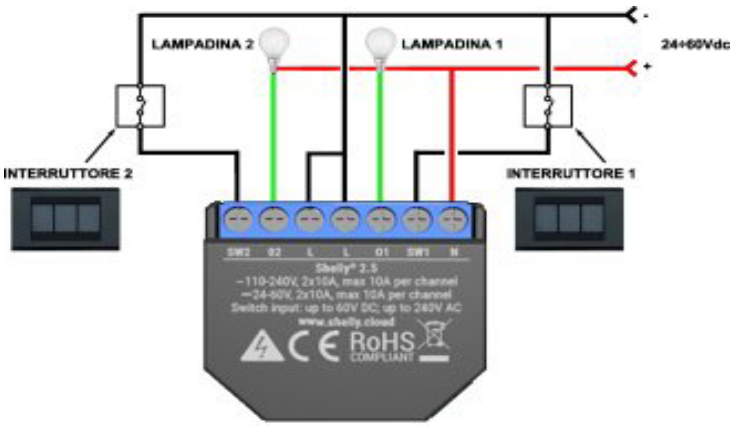
2. DEVICE OVERVIEW

Shelly Gen1
Models Shelly 1, 1PM, 2.5, Dimmer 2, Plug S, Shelly RGBW2.

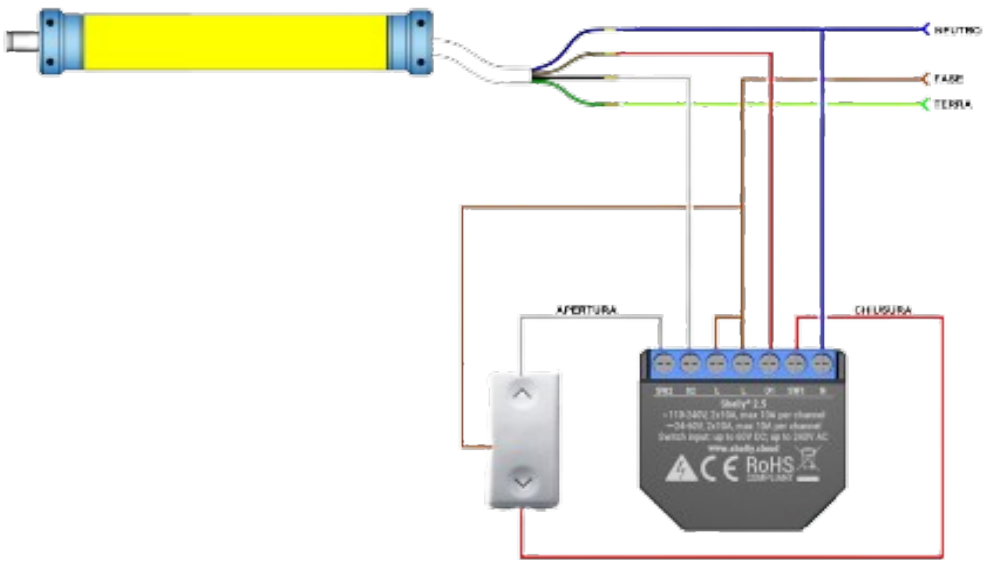
Shelly Gen2 e Gen3
Models Shelly Plus 1, Plus 2PM, Pro 4PM, Shelly Mini Gen3

Almost all Sonoffs based on the ESP8266, ESP8285, or ESP32 chip are compatible.
Relays: Sonoff Basic (all versions), Sonoff Mini (R2/R3/R4), Sonoff Dual, Sonoff 4CH.

3. EXAMPLES ELECTRICAL CONNECTION DIAGRAMS - LOGIC DIAGRAM



ROLLER SHUTTER DIAGRAM (SHELLY PLUS 2PM) - LOGICAL DIAGRAM



4. PRACTICAL INSTALLATION

Preliminary checks:
- Neutral wire presence
- Box space (min. 40 mm depth)
- Wi-Fi coverage

Standard procedure:
- Disconnect the system
- Identify the phase and neutral
- Connect the terminals
- Secure the device
- Restore power

Common mistakes
- L/N inversion
- Relay overload
- Boxes too tight

5. CONFIGURATION SHELLY

Initial access
- From the web interface, go to Settings > Wi-Fi > Device Hotspot Connection
- IP default: 192.168.33.1

Configuration via app
- Shelly Cloud
- Wi-Fi Connection
- Firmware Update

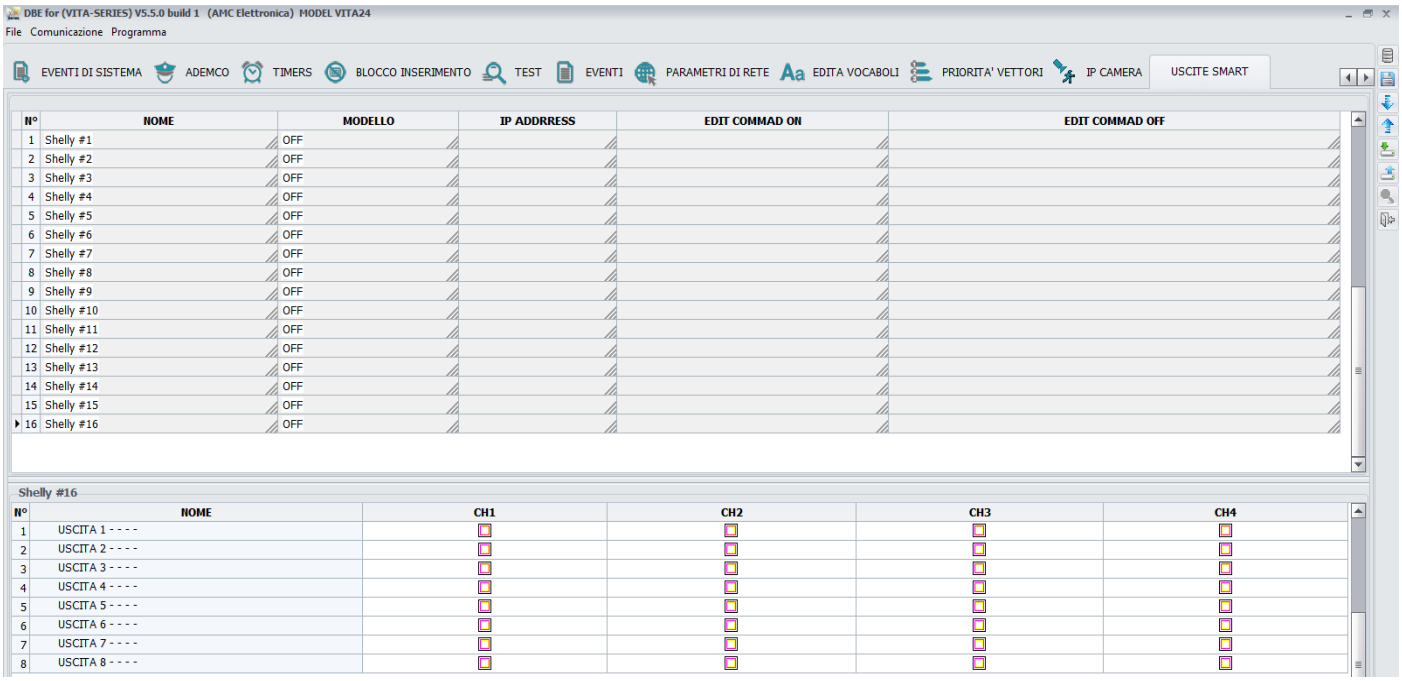
Advanced parameters
- Static IP **(always)**
- Timers and scenes

6. DIAGNOSTICS AND TROUBLESHOOTING

Problem	Possible cause	Solution
Offline	Wi-Fi weak	Reposition router
It does not switch	Incorrect wiring	Verifiy SW
Overheating	Overload	Reduce load

7. INTEGRATION WITH VITA SERIES CONTROL UNITS

The VITA FW 5.50 series and higher allows you to associate the alarm control panel's physical outputs with virtual outputs managed by third-party devices, such as Wi-Fi modules like Shelly, Sonoff, or equivalent devices, via editable HTTP commands.
This feature allows you to extend the system's control capabilities by integrating home automation and custom scenarios.
The control panel's outputs can be configured to activate in response to specific events such as alarms, arming/disarming, faults, manual commands, etc.
These states can be replicated on virtual outputs via supported communication protocols, such as HTTP, allowing external devices to react consistently.



N°	NOME	MODELLO	IP ADDRESS	EDIT COMMAD ON	EDIT COMMAD OFF
1	Shelly #1	OFF			
2	Shelly #2	OFF			
3	Shelly #3	OFF			
4	Shelly #4	OFF			
5	Shelly #5	OFF			
6	Shelly #6	OFF			
7	Shelly #7	OFF			
8	Shelly #8	OFF			
9	Shelly #9	OFF			
10	Shelly #10	OFF			
11	Shelly #11	OFF			
12	Shelly #12	OFF			
13	Shelly #13	OFF			
14	Shelly #14	OFF			
15	Shelly #15	OFF			
16	Shelly #16	OFF			

N°	NOME	CH1	CH2	CH3	CH4
1	USCITA 1 - - - -	☐	☐	☐	☐
2	USCITA 2 - - - -	☐	☐	☐	☐
3	USCITA 3 - - - -	☐	☐	☐	☐
4	USCITA 4 - - - -	☐	☐	☐	☐
5	USCITA 5 - - - -	☐	☐	☐	☐
6	USCITA 6 - - - -	☐	☐	☐	☐
7	USCITA 7 - - - -	☐	☐	☐	☐
8	USCITA 8 - - - -	☐	☐	☐	☐

8. ACTUATOR CONFIGURATION

In the new **SMART OUTPUTS** menu, you can configure up to 16 compatible actuators, defining their name, model, and the network parameters required for operation.
The following columns are available:

Name

In the first column, you can freely enter the actuator's identifying name.
We recommend using a clear and descriptive name such as Garden Light, Gate, Irrigation to facilitate system management.

Model

In the second column, you can select the actuator model you want to use.
Based on the model selected, the software will automatically generate HTTP commands compatible with the device.

IP address

In this column, you must enter the actuator's static IP address.
Each device must have a fixed IP address within the local network to ensure stable and continuous communication with the control unit.

EDIT COMMAND

The URL columns are automatically populated by the software after selecting the model.
The following will be generated:

- the HTTP command for activation (ON)
- the HTTP command for deactivation (OFF)
- the HTTP command for implusive (TOGGLE)

These URLs are used by the control panel to send control commands to the actuator via the IP network.

Configuring Control Panel Outputs

At the bottom of the window is the table of control panel outputs associated with the selected actuator.
For each output, you can define the association with the available channels (CH1, CH2, CH3, CH4) using the appropriate checkboxes.
You can control the control panel output with different functions according to your needs (ON - OFF - TOGGLE)

9. FUNCTIONAL DIAGRAM