Shelly Europe i4DC 4 Digital Inputs Controller User Guide
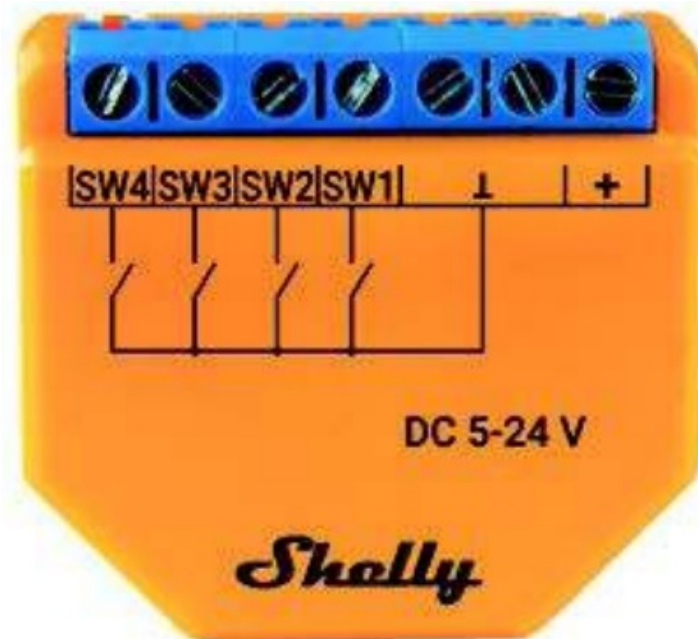
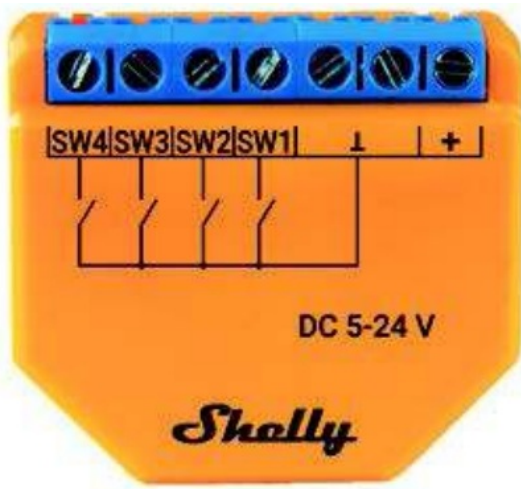**Shelly Europe i4DC 4 Digital Inputs Controller User Guide**

Read before use

This document contains important technical and safety information about the device, its safety use and installation.

CAUTION! Before beginning the installation, please read carefully and entirely this guide and any other documents accompanying the device. Failure to follow the installation procedures could lead to malfunction, danger to your health and life, violation of law or refusal of legal and/or commercial guarantee (if any). Shelly Europe Ltd. is not responsible for any loss or damage in case of incorrect installation or improper operation of this device due to failure of following the user and safety instructions in this guide.

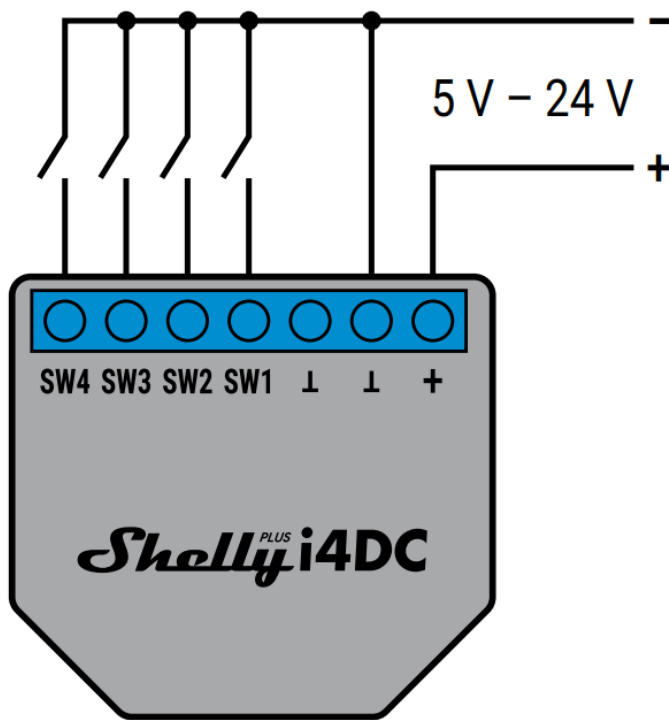Front View

Rear View

Serial interface   Reset button

Product Introduction

Shelly® is a line of innovative microprocessor-managed de- vices, which allow remote control of electric circuits through a mobile phone, tablet, PC, or home automation system. Shelly® devices can work standalone in a local Wi-Fi network or they can also be operated through cloud home automa- tion services. Shelly Cloud is a service that can be accessed using either an Android or iOS mobile application or with any internet browser at **https://control.shelly.com/**. Shelly® de- vices can be accessed, controlled, and monitored remotely from any place where the user has internet connectivity, as long as the devices are connected to a Wi-Fi router and the Internet. Shelly® devices have an Embedded Web Interface accessible at **http://192.168.33.1** when connected directly to the device access point, or at the device IP address on the local Wi-Fi network. The embedded Web Interface can be used to monitor and control the device, as well as adjust its settings.

Shelly® devices can communicate directly with other Wi-Fi devices through HTTP protocol. An API is provided by Shelly Europe Ltd. For more information, please **visit: https://shelly-api-docs.shelly.cloud/#shelly-family-overview**. Shelly® devices are delivered with factory-installed firmware. If firmware updates are necessary to keep the devices in conformity, including security updates, Shelly Europe Ltd. will provide the updates free of charge through the device Embedded Web Interface or the Shelly mobile application, where the information about the current firmware version is available. The choice to install or not the device firmware updates is the user's sole responsibility. Shelly Europe Ltd. shall not be liable for any lack of conformity of the device caused by failure of the user to install the provided updates in a timely manner.

Schematics

Legend

- +: Posidive terminal / wire
- : Negative terminal
- : Negative wire
- **SW 1, SW 2 , SW 3 , SW 4 :** Switch terminals

Installation Instructions

Shelly Plus i4DC (the Device) is a DC powered Wi-Fi switch input designed to control other devices over the Internet. It can be retrofitted into a standard in-wall console, behind light switches or other places with limited space.

⚠️ **CAUTION!** Mounting/installation of the Device has to be performed with caution, by a qualified electrician.

⚠️ **CAUTION!** Danger of electrocution. Make sure the voltage at the wires is not higher than 24 VDC. Use only stabilized voltage to power supply the Device.

⚠️ **CAUTION!** Every change in the connections has to be done after ensuring there is no voltage present at the Device terminals.

⚠️ **CAUTION!** Use the Device only with a power grid and appliances which comply with all applicable regulations. A short circuit in the power grid or any appliance connected to the

Device may damage it.

⚠️ **CAUTION!** Connect the Device only in the way shown in these instructions. Any other method could cause damage and/or injury.

⚠️ **CAUTION!** Do not install the Device where it can get wet.
Connect a switch or a button to a SW terminal of the Device and the Negative wire as shown on fig. 1.
Connect the Negative wire to a terminal and the Positive wire to the + terminal of the Device.

⚠️ **CAUTION!** Do not insert multiple wires in a single terminal.

Troubleshooting

In case you encounter problems with the installation or operation of Shelly Plus i4DC, please check its knowledge base page:
https://kb.shelly.cloud/knowledge-base/shelly-plus-i4dc

Initial Inclusion

If you choose to use the Device with the Shelly Smart Control mobile application and cloud service, instructions on how to connect the Device to the Cloud and control it through the Shelly Smart Control app can be found in the mobile application guide.
The Shelly mobile application and Shelly Cloud service are not conditions for the Device to function properly. This Device can be used standalone or with various other home automation platforms and protocols.

⚠️ **CAUTION!** Do not allow children to play with the buttons/ switches connected to the Device. Keep the devices for remote control of Shelly (mobile phones, tablets, PCs) away from children.

Specifications

- **Power supply:** 5 – 24 VDC (stabilized)
- **Dimensions (HxWxD):** 42x37x17 mm
- **Working temperature:** -20°C to 40°C
- **Max altitude:** 2000 m
- **Electrical consumption:** < 1 W
- **Multi-click support:** Up to 12 possible actions (3 per button)
- **Wi-Fi:** Yes
- **Bluetooth:** Yes
- **RF band:** 2400 – 2495 MHz
- **Max. RF power:** < 20 dBm
- **Wi-Fi protocol:** 802.11 b/g/n
- **Wi-Fi operational range (depending on local conditions):**
    - up to 50 m outdoors
    - up to 30 m indoors
- **Bluetooth protocol:** 4.2
- Bluetooth operational range (depending on local conditions):
    - up to 30 m outdoors

- up to 10 m indoors
- **Scripting (mjs):** Yes
- **MQTT:** Yes
- **Web hooks (URL actions):** 20 with 5 URLs per hook
- **CPU:** ESP32
- **Flash:** 4 MB

Declaration of conformity

Hereby, Shelly Europe Ltd. (former Allterco Robotics EOOD) declares that the radio equipment type Shelly Plus i4DC in compliance with Directive 2014/53/EU, 2014/35/EU, 2014/30/EU, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address: **https://shelly.link/Plus-i4DC_DoC**
Manufacturer: Shelly Europe Ltd.
Address: 103 Cherni vrah Blvd., 1407 Sofia, Bulgaria
Tel.: +359 2 988 7435
E-mail: support@shelly.cloud
Official **website: https://www.shelly.com**
Changes in the contact information data are published by the Manufacturer on the official **website.**
https://www.shelly.com
All rights to the trademark Shelly® and other intellectual rights associated with this Device belong to Shelly Europe Ltd.

Documents / Resources

Shelly Europe i4DC 4 Digital Inputs Controller [pdf] User Guide
i4DC 4 Digital Inputs Controller, i4DC, 4 Digital Inputs Controller, Inputs Controller, Controller

References

- **Welcome to Shelly Technical Documentation | Shelly Technical Documentation**
- **User Manual**