

USER MANUAL AND SAFETY DATASHEET

BEVRLink Relay Module, 4 Channel, 12V, ESP32 C6 WiFi, Bluetooth, Zigbee, Matter

EAN:7350001161815

Read before use

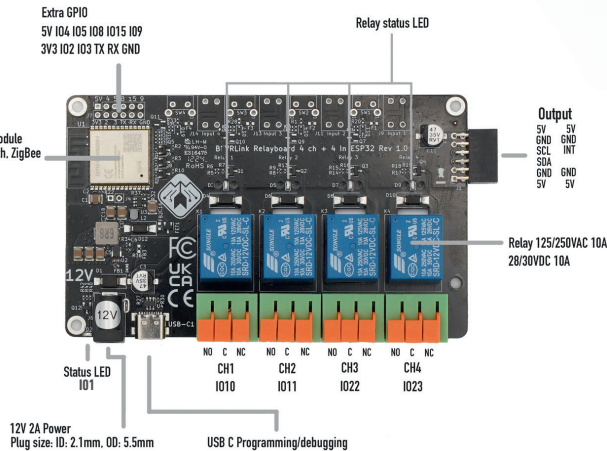
This document contains important technical and safety information about the device, and its safety use and installation

⚠ CAUTION! Before starting the installation of your BEVRLink Relay Module, it is crucial to thoroughly read and understand the entire user manual and all safety instructions. This will ensure a safe and successful setup. Failure to adhere to the installation procedures can result in malfunctions, electrical hazards, and serious injury. Non-compliance may also result in data loss, legal consequences, or void any applicable warranties (if any). Gothenburg Design AB is not responsible for any damage or loss caused by improper installation or operation of this device due to neglect of the provided instructions and safety guidelines.

Product Introduction

The 4-Channel Relay ESP32 Board is a compact and versatile solution for controlling high-power devices via WiFi, Bluetooth, or Zigbee. Equipped with 4 high-quality relays, it can handle loads up to 10A at 250V AC or 30V DC, making it ideal for various applications. The board is powered by a 12V/2A DC jack. Featuring 4 relay channels with onboard LEDs for status indication, it facilitates easy monitoring. The ESP32-C6 module supports WiFi, Bluetooth, and Matter, offering advanced connectivity and efficient automation. Its multi-protocol support, powerful performance, and compatibility with platforms like ESPHome and Home Assistant make it a versatile and future-proof choice. Quick wire connections and plug-and-play BEVRLink system integration, along with compatibility with various BEVRLink accessories, provide a robust solution for home, hobby, or industrial automation needs.

Schematic of Features



Legend

- NO: Normally Open
- C: Common
- NC: Normally Closed
- CH1: Channel 1
- CH2: Channel 2
- CH3: Channel 3
- CH4: Channel 4
- GND: Ground
- SCL: Serial Clock Line
- SDA: Serial Data Line
- INT: Interrupt

Installation Instructions

The example below is only one way how to set up the Relay Module giving examples for both with and without buttons. The BEVRLink Relay 4 with inbuilt ESP32 12V use the ESP32-C6 module with WiFi, Bluetooth and Zigbee/Matter support. Here we will give examples how you can control the relays with code, this code can later be added to your wireless control. With this relay module board you need the BEVRLink Power Supply 12V 2A. Optional for a safe setup we recommend to use case for both the manager and relay boards.

⚠ CAUTION! Risk of electrical shock. Installation of device to higher voltages must be performed by a qualified electrician. Adequate isolation of the circuit is required.

Set up ESP32 support in Arduino

1. Download latest [Arduino IDE](#)
2. Add ESP32 3.0 to Arduino board manager database
 - a. File->Preference
 - b. To the textbox "Additional boards manager URLs" add: https://espressif.github.io/arduino-esp32/package_esp32_index.json
3. Press OK
4. Tools->Board->Board Manager
5. Search for ESP32, you might get many results, select the one from Espressif System and change the version 3.0.0-alpha3 or newer in the drop down menu. 3.0 adds support for the ESP32-C6 module.
6. Press install
7. Coffee break while it installs
8. Tools->Board->esp32 and select the board you are using (ESP32C6 Dev Module)

⚠ CAUTION! Ensure that the power supply is turned off and disconnected to avoid electrical shock or damage, and verify that the power supply matches the required specifications of 12V DC.

⚠ CAUTION! Avoid exceeding the maximum current ratings per channel (10A at 250V AC or 30V DC per relay) to prevent overheating and potential fire hazard.

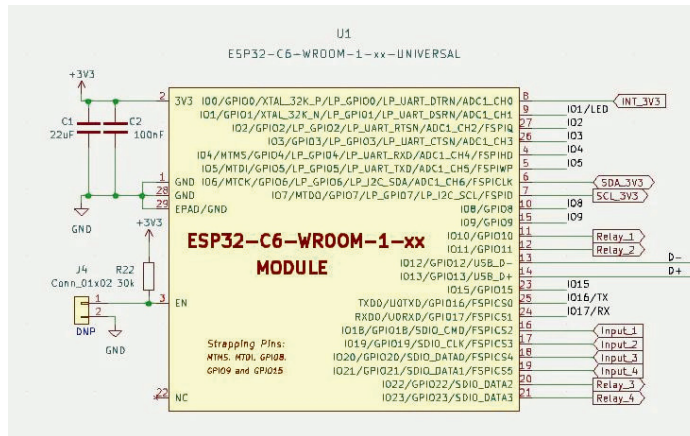
⚠ CAUTION! Before proceeding, examine the module for any physical damage or defects and do not install it if any damage is apparent.

⚠ CAUTION! Make sure the installation area is free from flammable materials and gases, and keep the module away from direct sunlight and heat sources.

⚠ CAUTION! Securely mount the module using appropriate hardware to prevent displacement or damage during operation or maintenance.

⚠ CAUTION! Ensure that children and pets are kept away from the installation area to prevent accidental injury or damage.

Pinout



For code information, please visit:

<https://bevrlink.com/blogs/control-options/getting-started-with-bevrlink-relay-4-4-buttons-esp32-arduino>

Specification

- Dimensions: 118.9 mm x 72 mm x 17.5 mm
- Mounting Holes: 4, with a diameter of 3.3 mm
- Power Supply Compatibility: 12V/2A DC Jack power input 5.5x2.1mm
- Expansion connector 5V/3A power
- Relay channels: 4-ch
- Communication: SPDT-NO, NC
- Connectors: Spring clamp terminal block
- Mounting hole size: M3
- 3.3A available for ESP32 + additional modules
- BEVRLink system expansion
- Relay coil supplied directly from power input, 15mA used by each relay active.
- BEVRLink Expansion connector
- The new ESP32-C6 module, able to communicate and be controlled over WiFi, Bluetooth, Zigbee, Matter and many more.
- Onboard LEDs for indicating relays status
- User controllable Status LED

Standards for Inclusion

- RoHS: EN 62321
- CE-RED: EN 301 489-1; EN 301 489-17; EN 300 328
- UKCA-RoHS: BS EN 62321
- UKCA-RED: BS EN 301 489-1; BS EN 301 489-17; BS EN 300 328
- FCC Part 15 Class B

Declaration of Conformity

Hereby, Gothenburg Design AB declares that the product described above is in conformity with the relevant Union harmonization legislation: RoHS: (EN 62321), CE-RED: (EN 301 489-1; EN 301 489-17; EN 300 328), UKCA-RoHS: (BS EN 62321), UKCA-RED: (BS EN 301 489-1; BS EN 301 489-17; BS EN 300 328). The product has been tested and is compliant with the essential requirements and other relevant provisions of the directives.

Disposal and Recycling

To protect the environment and human health, and to conserve natural resources, it is important that you dispose of the BEVRLink Relay Module responsibly. This product contains electronic components that can be harmful if not disposed of properly.

- Do not dispose of the BEVRLink Relay Module as unsorted municipal waste.
- Take the module to a designated electronic waste (e-waste) recycling facility.
- Do not incinerate or dispose of the module in regular household waste.

By adhering to these disposal and recycling guidelines, you can help ensure that the BEVRLink Relay Module is disposed of in an environmentally responsible manner.

FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

⚠ CAUTION! Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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Changes in the contact information data are published by the manufacturer on the official website.

