

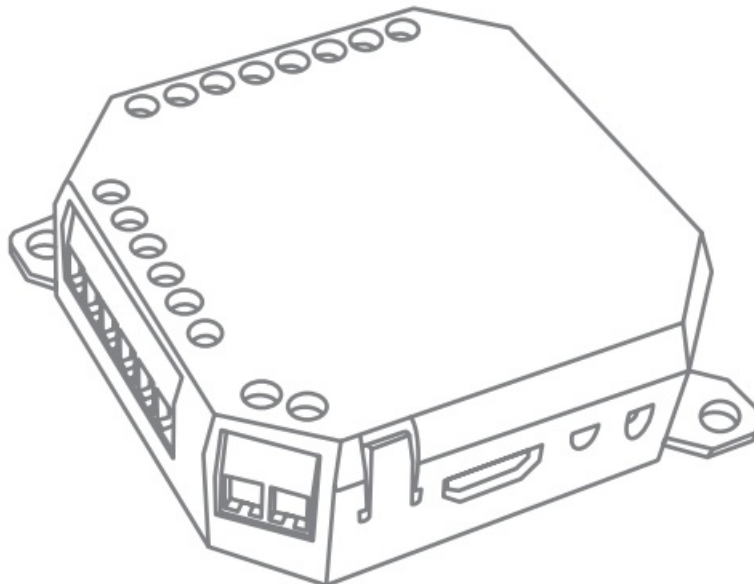


## frient IO Module Smart Zigbee Input Output Instruction Manual

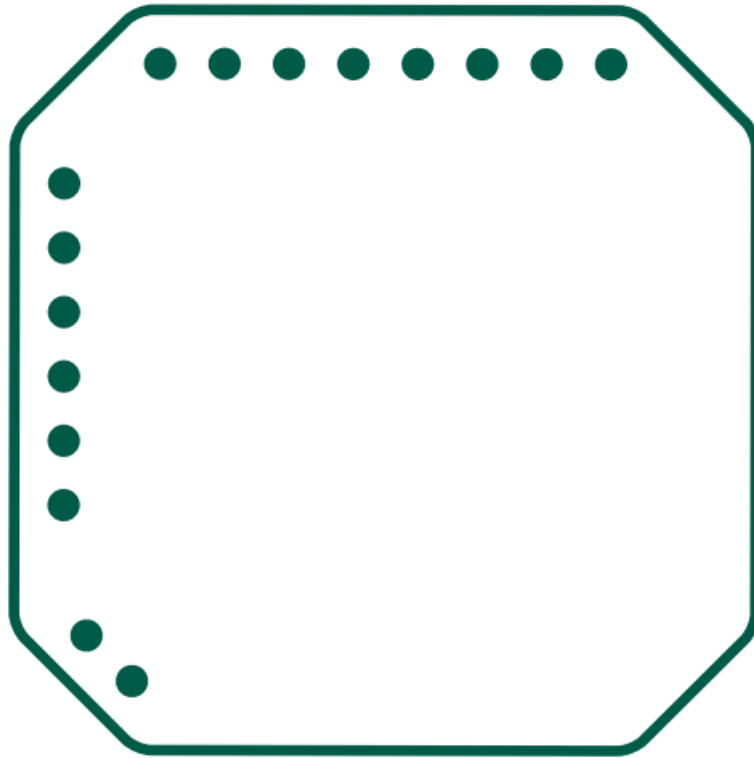
[Home](#) » [Frient](#) » frient IO Module Smart Zigbee Input Output Instruction Manual 

# frient<sup>®</sup>

IO Module



**INSTALLATION MANUAL**  
Version 1.0



## Contents

- [1 Product description](#)
- [2 Disclaimers](#)
- [3 Precautions](#)
- [4 Placement](#)
- [5 Getting started](#)
- [6 FCC statement](#)
- [7 CE certification](#)
- [8 Other certifications](#)
- [9 Documents / Resources](#)
- [10 Related Posts](#)

## Product description

With the IO Module, you can connect wired devices to a Zigbee network. Providing four inputs and two outputs, the IO Module works as a bridge between wired devices and a control system over Zigbee networks.

## Disclaimers

### CAUTION:

- Choking hazard! Keep away from children. Contains small parts.
- Please follow the guidelines thoroughly. The IO Module is a preventive, informing device, not a guarantee or insurance that sufficient warning or protection will be provided, or that no property damage, theft, injury, or any similar situation will take place. frient cannot be held responsible in case any of the above-mentioned situations occur.

## Precautions

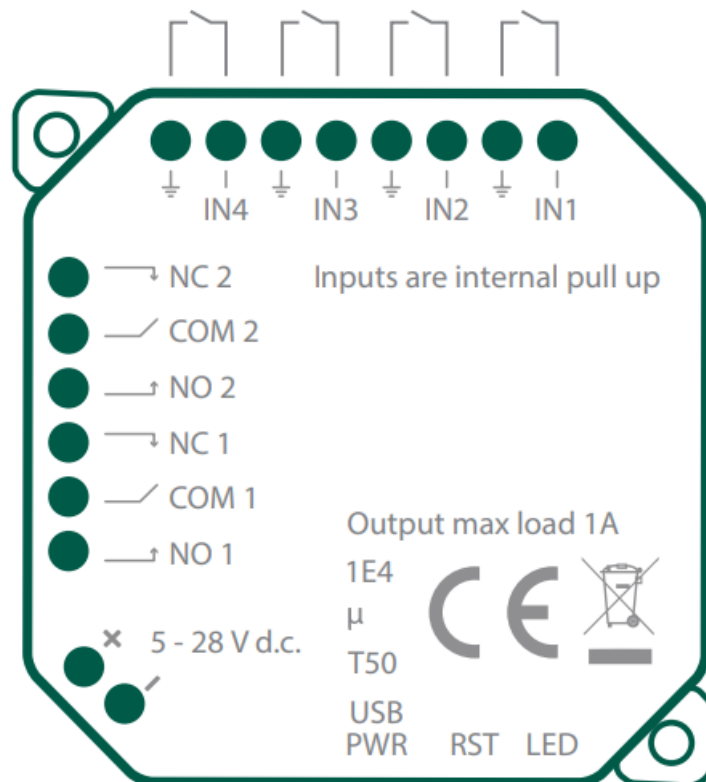
**WARNING:** For safety reasons, always disconnect power from the IO module, before connecting wires to inputs and outputs.

- Do not remove the product label as it contains important information.
- Do not open the IO Module.
- Do not paint the device.

## Placement

Connect the IO Module to a device that is located at a temperature between 0-50°C.

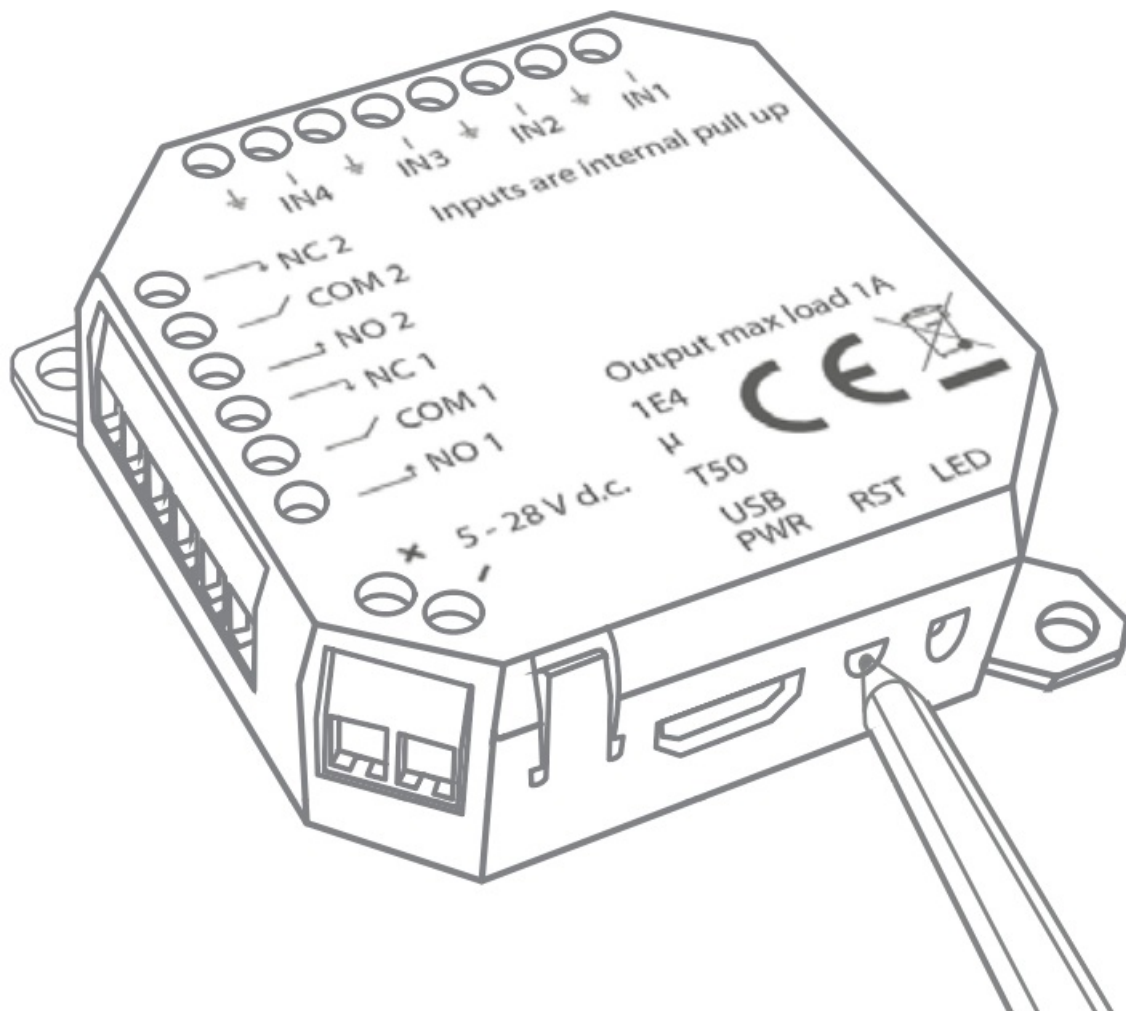
Connecting to wired device You can connect the IO Module to different wired devices: doorbells, window blinds, wired security devices, heat pumps and more. The connection of the different devices follows the same principle, using the different inputs and outputs:



IN1	
IN2	Inputs with internal Pull Up. Must be
IN3	shorted to IO Module GND for signal
IN4	IO Module GND
NC2	Normally Closed for Relay Output 2
COM2	Common for Relay Output 2
NO2	Normally Open for Relay Output 2
NC1	Normally Closed for Relay Output 1
COM1	Common for Relay Output 1
NO1	Normally Open for Relay Output 1
5-28 V	Power Supply
d.c.	NOTE: Use "5-28 V" or "USB PWR". Use "5-28 V" or "USB PWR". If both are connected "5-28V" is the primary Power Supply.
USB	Power Supply
PWR	NOTE: USB PWR is then used USB PWR is then used as fall back in case "5-28 V" is disconnected.
RST	Reset
LED	User Feedback

## Getting started

1. When the device is connected and powered up, the IO Module will start searching (up to 15 minutes) for a Zigbee network to join. While the IO Module is searching for a Zigbee network to join, the yellow LED flashes.
2. Make sure that the Zigbee network is open for joining devices and will accept the IO Module.
3. When the LED stops flashing, the device has successfully joined the Zigbee network.
4. If the scanning has timed out, a short press on the reset button will restart it.

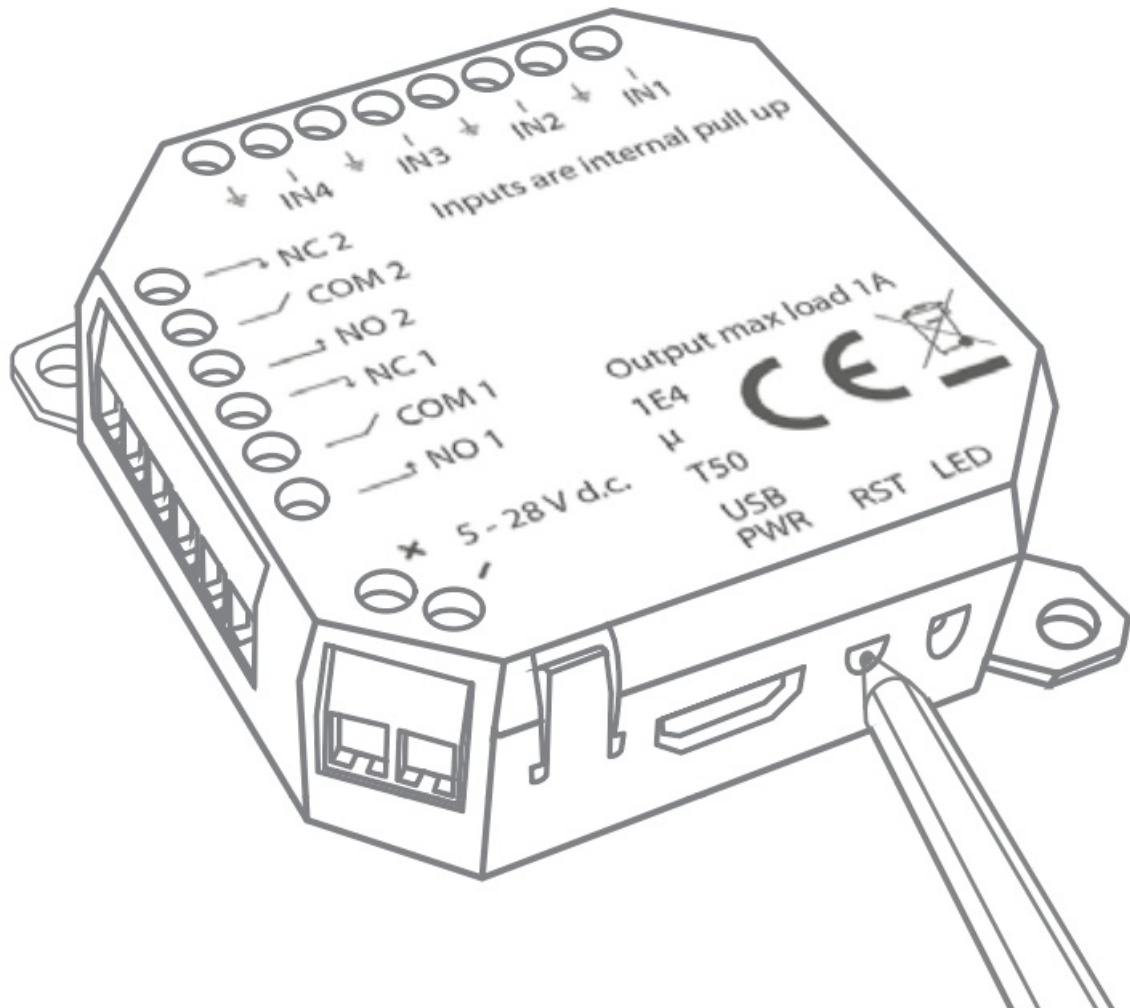


### Resetting

Resetting is needed if you want to connect your IO Module to another gateway or if you need to perform a factory reset to avoid abnormal behavior.

#### STEPS FOR RESETTNG

1. Connect the IO Module to a power outlet.
  2. Press and hold the reset button with a pen (see Illustration b).
  3. While you are holding the button down, the yellow LED first flashes once, then two times in a row, and finally numerous times in a row.
- c.



4. Release the button while the LED is flashing numerous times in a row.
5. After you release the button, the LED shows one long flash, and the reset is completed.

### Modes

#### SEARCHING GATEWAY MODE

The yellow LED flashes.

### Fault finding

- In case of a bad or weak wireless signal, change the location of the IO Module. Otherwise, you can relocate your gateway or strengthen the signal with a range extender.
- If the search for a gateway has timed out, a short press on the button will restart it.

### Disposal

Dispose the product properly at the end of its life. This is electronic waste which should be recycled.

### FCC statement

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** 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 and, if not installed and used in accordance with the instructions, 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. This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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, and
2. this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

#### **ISED statement**

Innovation, Science and Economic Development Canada ICES-003 Compliance Label: CAN ICES-3 (B)/NMB-3(B).

#### **CE certification**

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product and, in particular, its compliance with the harmonized standards and specifications.



IN ACCORDANCE WITH THE DIRECTIVES

- 2014/53/EU
- RoHS Directive 2015/863/EU amending 2011/65/EU
- REACH 1907/2006/EU + 2016/1688

#### **Other certifications**

Zigbee 3.0 certified

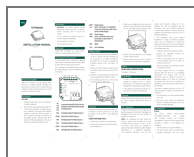


**All rights reserved.**

frient assumes no responsibility for any errors, which may appear in this manual. Furthermore, frient reserves the right to alter the hardware, software, and/or specifications detailed herein at any time without notice, and frient does not make any commitment to update the information contained herein. All the trademarks listed herein are owned by their respective owners.

**Distributed by frient A/S**  
**Tangen 6**  
**8200 Aarhus**  
**Denmark**  
**Copyright © frient A/S**

**Documents / Resources**



[frient IO Module Smart Zigbee Input Output](#) [pdf] Instruction Manual  
IO Module Smart Zigbee Input Output, IO Module, Smart Zigbee Input Output, Zigbee Input Output, Input Output, Output