

⟨R⟩ - Control IP 4 (former TCR IP 4)

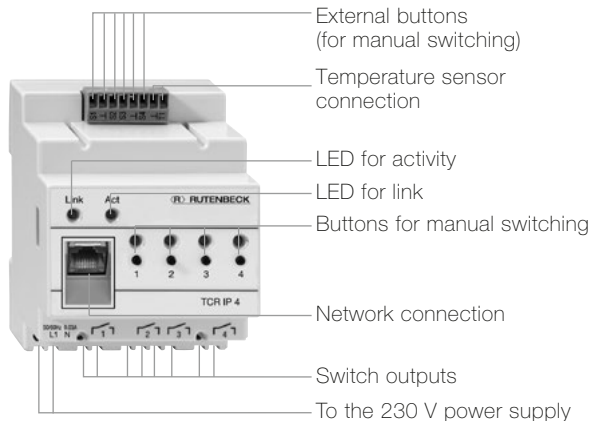


Control IP 4

Operating instructions



Device overview



General information

Electrical devices can be switched via a TCP/IP network with the Control IP 4. The device is stored in a series mounting case.

The Control IP 4 outputs can be switched via web browser from all computers on the same network by accessing the IP address 192.168.0.3.

The switch outputs can be operated using integrated or installed buttons on the device.

The current switching state of an output is displayed via an LED on the associated switch button. The Control IP 4 is equipped with an integrated time switch function. Five switch-on or switch-off times can be individually selected for each switch output.

The Control IP 4 automatically obtains the time required for the switch functions from the **europe.pool.info.org** server using the Simple Network Time Protocol (SNTP) and, providing that the server can be reached, is then compared each hour.

The current temperature can be displayed (providing that a temperature sensor is connected), the network properties and the timer switch can be set via the web browser.

Alternatively, the Control IP 4 can be operated via the Internet or a Smartphone if a fixed IP address or the translation of the dynamic IP address is present in a host name.

The Control IP 4 can be controlled directly via UDP. Two languages can be selected for the settings (German/English).

Installation

Notice

The free app '**Rutenbeck-Remote**', available from Apple's App Store, allows remote control of the device via Apple smartphone or tablet.

Installation



Attention: Work to the power supply network may only be performed by authorised electricians.



Risk to life from electric current!

Ensure that the power supply is disconnected before performing any assembly work.

Please observe the permissible operating temperature, do not use the Control IP 4 directly next to devices that generate a high amount of heat (e. g. dimmer).

Ensure that the device is only used indoors.

Settings

Network settings without DHCP server

TCR IP 4

Hall
Off
Switch on

Stairs
Off
Switch on

Court
On
Switch off

Output 4
On
Switch off

System time: Monday, 04.07.2016, 13:33:31
TCR IP 4 time: Monday, 04.07.2016, 13:33:27

Save system time

Temperature: 27 °C

Send impulse

Hall

Stairs

Court

Output 4

Settings

Network

Save

MAC: 00:0D:13:30:03:A9

Network name TCRIP4

UDP-Port ☐ 30303

HTTP-Port 80

DHCP ☐

IP-address 192.168.51.240 x

Subnet-mask 255.255.255.0

Gateway 192.168.0.99

DNS server 192.168.0.99

A

B

C

D

E

F

Figure 1

Settings

5

Settings

Network settings without DHCP server

1. Connect the Control IP 4 to the local network using a patch cable (available separately).
2. If necessary, connect the temperature sensor to the two terminals.
3. Connect the Control IP 4 to the 230 V mains voltage.
4. The Control IP 4 can now be accessed via the address <http://192.168.0.3> or <http://TCRIP4> (factory setting).
5. Select the "Network" menu in the menu bar (Fig. 1, A).
6. Select an individual "Network name" in order to be able to call up the Control IP 4 directly.
7. Modify the IP-address of the Control IP 4 to suit your own needs.
8. The configuration is stored by pressing "Save".

Settings

Network settings with DHCP server

1. Connect the Control IP 4 to the local network using a patch cable (available separately).
2. If necessary, connect the temperature sensor to the two terminals.
3. Connect the Control IP 4 to the 230 V mains voltage.
4. The Control IP 4 can now be accessed via the address <http://192.168.0.3> or <http://TCRIP4> (factory setting).
5. Select the "Network" menu in the menu bar (Fig. 1, A).
6. Select an individual "Network name" in order to be able to call up the Control IP 4 directly.
7. Now activate the DHCP client (Fig. 1, B).
8. A free IP-address is now assigned to the Control IP 4.

Settings

Configuration

TCR IP 4

Hall
Off
Switch on

Stairs
Off
Switch on

Court
On
Switch off

Output 4
On
Switch off

System time: Monday, 04.07.2016, 13:34:19
TCR IP 4 time: Monday, 04.07.2016, 13:34:15

Save system time

Temperature: 27 °C

Send impulse

Hall

Stairs

Court

Output 4

Settings

Network

Save

Administrator nameadmin

Password*****

Confirmation*****

User nameuser

Password****

Confirmation****

Name output 1Hall

Name output 2Stairs

Name output 3Court

Name output 4Output 4

Automatic time synchronization

☒

GMT: +1

Firmware Version =1.0.0.5

G

H

I

Figure 2

Settings

Configuration

Increase the access security to the Control IP 4 by setting an individual user name and a password in the “Settings” menu. (Fig. 2, G).

As soon as you issue a password, the user name and the password will be queried prior to accessing the Control IP 4. The user will remain logged on until the browser is closed. Three access security setting categories are available:

1. No Administrator name, no User name: Everybody has full access to all functions.

2. Only Administrator name: Everybody has access to the website, is able to switch manually and operate the timer switch. Only the “admin” is able to perform network settings and configuration.

3. Administrator name and User name: “user” and “admin” have access to the website and are able to switch manually. However, the network settings, the timer switch settings and the configuration can only be performed by “admin”.

You can give the four outputs individual names. These names will then be displayed in the menu bar.

If you wish, you can switch the automatic time synchronisation function (H) on.

In order to do so, you must enter the “Gateway” (Fig. 1, D) and “DNS server” (Fig. 1, E) information in the “Network” menu.

The configuration is stored by pressing “Save”.

Settings

Factory settings

You can replace the Control IP 4 factory settings with your own settings.

Proceed as follows to restore the factory settings:

1. Disconnect the Control IP 4 from the 230 V mains voltage.
2. Simultaneously press buttons 1 and 2 on the device and re-connect the mains voltage whilst holding the buttons.
3. The LEDs for the outputs flash after three seconds and the factory settings are loaded.

Operating elements

The Control IP 4 outputs can be switched via the buttons located directly on the device,

the installed buttons or via the Control IP 4 website.

Buttons

1-4: Switches the connected device on/off; restores the factory settings (see above)

LEDs

1-4: Switching state of the device (illuminated when switched on)

Link: Link state (illuminated in the event of a network connection)

Act: Activity (flashes when the Control IP 4 web interface is being called up)

Switching

Impuls mode

TCR IP 4

Hall
Off
Switch on

Stairs
Off
Switch on

Court
On
Switch off

Output 4
On
Switch off

System time: Monday, 04.07.2016, 13:35:34

TCR IP 4 time: Monday, 04.07.2016, 13:35:31

Save system time

Temperature: 27 °C

Send impuls - - -

Hall

Stairs

Court

Output 4

Settings

Network

Save

No.	Interval	Action	Time (hh:mm:ss)	Day (tt)	Date (dd.mm.yyyy)	Day of the week
1	Weekly	Switch on	05:30:00			Mo Tu We Th Fr Sa Su ☒ ☒ ☒ ☒ ☒ ☐ ☐
2	Weekly	Switch off	17:00:00			Mo Tu We Th Fr Sa Su ☒ ☒ ☒ ☒ ☒ ☐ ☐
3	Daily	Switch on				Mo Tu We Th Fr Sa Su ☐ ☐ ☐ ☐ ☐ ☐ ☐
4	Daily	Switch off				Mo Tu We Th Fr Sa Su ☐ ☐ ☐ ☐ ☐ ☐ ☐
5	Disabled	Switch on				Mo Tu We Th Fr Sa Su ☐ ☐ ☐ ☐ ☐ ☐ ☐

J

K

Figure 3

Switching

Impuls mode

The outputs can also be switched to impulse mode via the “Send impulse” menu (Fig. 3, J). There are two different types of impulse. The “On” impulse switches the output on for a selected period of time, the “Off” impulse switches the output off.

The impulse period commences when the “Send” field is clicked.

The time at which the ‘Impulse activated’ notification is confirmed with ‘OK’ has no effect on the impulse period.

The output is switched off once the period has elapsed.

The Control IP 4 acts conversely when an out impulse is sent when the output is switched off.

The current state of the respective output is displayed.

Switching

Time switch function

TCR IP 4

Hall
Off
Switch on

Stairs
Off
Switch on

Court
On
Switch off

Output 4
On
Switch off

System time: Monday, 04.07.2016, 13:37:34
TCR IP 4 time: Monday, 04.07.2016, 13:37:31

Save system time

Temperature: 27 °C

Send impulse

Hall

Stairs

Court

Output 4

Settings

Network

Hall

Send impulse (hh:mm:ss)

☒ On ☐ Off

00:00:03

Send

Stairs

Send impulse (hh:mm:ss)

☒ On ☐ Off

00:00:00

Send

Court

Send impulse (hh:mm:ss)

☒ On ☐ Off

00:00:00 x

Send

Output 4

Send impulse (hh:mm:ss)

☒ On ☐ Off

00:00:00

Send

Figure 4

Switching

Time switch function

The Control IP 4 is equipped with an integrated time switch function. Switch-on and switch-off times can be freely selected for each switch output.

A company's lighting system is controlled by the Control IP 4 in the example (Fig. 4).

Names were issued for the three utilised outputs in this configuration.

They can be seen in the menu bar and can be clicked individually in order to perform settings.

The company's hall lighting is connected to switch output 1

on the TCP IP 4 and is switched on at 05:30 (No. 1) and is switched off at 17:00 (No. 2) from Monday to Friday.

One-off switching processes can also be applied for set dates.

The company's lighting for the stairs is connected to switch output 2. The court lighting is connected to switch output 3.

The user can also switch the lighting on outside of the stipulated times by using the buttons or via the website (Fig. 4, H).

Where necessary, the output can also be put into impulse mode as described above and in Fig. 3, F. This means that the lighting can be switched on or off for a certain period of time (e.g. one hour) via an impulse where necessary.

The lighting is switched on or off automatically after an hour has passed.

A temperature sensor can also be installed.

The temperature can be controlled via website (Fig. 3, K).

Switching

Time switch function

The system time of the PC and the internal Control IP 4 time can be displayed via the switching function field.



The system time is the current PC time.

The PC system time is saved in the Control IP 4 by pressing the "Save system time" button. It is updated and is accurate to one second.

In order to prevent unnecessary network load, the Control IP 4 time is only updated on the

screen display every 30 seconds.

The internal clock of the ICP IP 4 will continue to run for approx. four days after being disconnected from the mains.

Technical data

Mechanical characteristics

Dimensions L x W x H:	72 x 90 x 65 mm
Material:	PC
Weight:	210 g
Colour:	Light grey (similar to RAL 7035)
Protection class:	IP20 according to DIN EN 60529

Temperature range

Operation:	-20 to 55 °C
Storage temperature:	-25 to 70 °C

Electrical properties

Nominal voltage:	100–240 V AC / 50–60 Hz
Switching capacity:	max. 230 V AC / 50–60 Hz / 10 A ohmic load ($\cos \varphi = 1$) max. 230 V AC / 50–60 Hz / 7 A inductive load ($\cos \varphi = 0,4$)

Power consumption	
Outputs off, network off:	approx. 1 W
Outputs on, network on:	approx. 3.5 W

Timer

Power reserve:	approx. 4 days (following disconnection from the 230 V mains)
Power deviation:	≤ 1.7 seconds / day

Technical data

Connections

Network connection: RJ45, 10 Mbit/s

Temperature sensor (optional)

Article number: 700 802 201

Length: 0.6 m

Extension: to a maximum of 10 m

Temperature range: -25 to 55 °C, resolution 1 °C

Temperature range

-25 °C: 86.4 kΩ

25 °C: 10 kΩ

50 °C: 4.1 kΩ

B value: 3.435 K ±1 %

Subject to technical modifications.

Scope of delivery

Control IP 4 700 802 610
Operating instructions 293 656_GB

Accessories (optional)

Temperature sensor 700 802 201

Manufacturer's Warranty

The guarantee preconditions are described in our general terms and conditions. These can be found in the download section of our homepage www.rutenbeck.com

CE Declaration



We, Wilhelm Rutenbeck GmbH & Co. KG, declare under our sole responsibility that this device is in conformity with the essential requirements and the relevant regulations of the applicable EU-directives (2014/30/EU, 2014/35/EU, 2011/65/EU).

The complete Declaration of Conformity is available in the Download Section at www.rutenbeck.com

Disposal of Waste



The adjacent symbol indicates separate waste collection for electrical and electronic devices. In accordance with EU-directives, all electrical and electronic devices with this symbol must be disposed in the corresponding separate waste collections and not in the domestic waste. This device as well as all the electronic parts included in the delivery may not be disposed in the regular household waste but must be brought to a competent collection site after end of its use.



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