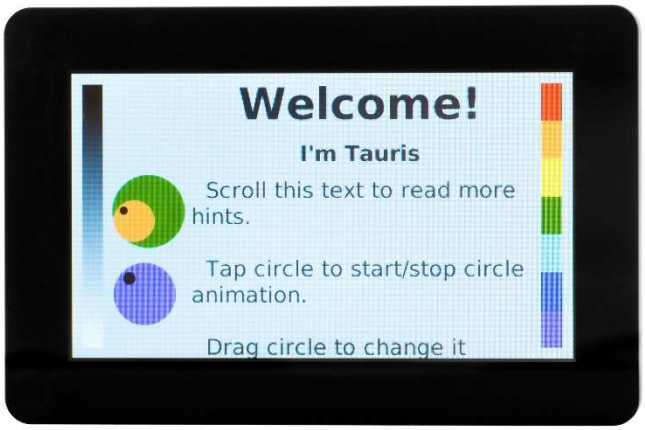
INSTRUCTION Version 22.04.2020

RBG TAURIS
Room control unit recessed mount
4,3“ TFT Modbus®-TCP/IP with Linux operating system and Modbus®-RTU gateway



AS CONTROL UNIT for R02
or
AS CONTROL UNIT for your PLC
or
as PLC with Windows EAP Studio PT2020
(approx. available end of 1st quarter)

Available designs:

RBG Tauris 4,3” with browser function	Art.No.: 5420
RBG Tauris 4,3” with PT2020 App as control unit for R02	Art.No.: 5420-2
RBG Tauris 4,3” with Software Windows EAP Studio PT2020	Art.No.: 5420-1

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Introduction

Dear Sir or Madam,

we would like to thank you once again for the trust you have placed in us by purchasing this product.

TAURIS 4.3" is a room control unit with Modbus®-TCP/IP interface with Linux operating system and integrated Modbus®-RTU gateway. The room control unit with Chromium Browser can be used for visualization in combination with your desired PLC. The PLC must provide an HTML page. The design with PT2020 App Image can be used with our R02 control unit as an operating unit. The design with PT2020 runtime (future) is a small PLC and can be used without R02 for various applications such as individual room controllers. Programming of the function and visualization is done with software Windows EAP Studio PT2020. The range of functions is identical to the R02. Required I/O's can be connected via Modbus RTU (our field bus modules for distributed systems) and Modbus TCP/IP (MODUL2020 for more I/O's). Networking with other PLCs or building management systems is done via TCP/IP. The application is used as control and visualization in the medical sector, in building services engineering and industry.

Technical data

Voltage supply:	24V DC +10%
Power:	3W
Display type:	4,3“ TFT with projected capacitive Multi-Touch
Resolution:	272 x 480 Pixel, 65535 colours
Backlighting:	dimmable
Processor:	ARM Cortex A8 CPU, ARM Mali 400 CPU
Clock frequency:	1 GHz
Memory:	8GB uSD Card, 512 MB RAM
Bussystem:	Modbus®-TCP/IP with Linux operating system Ethernet: Baudrate 10/100 Mbit full duplex auto MIDX, DHCP or fixed IP address
Connections:	2x RJ45 with integrated switch Modbus RTU gateway for connection of sensors and remote devices
Configuration:	via web browser menu-driven to IP192.160.1.3. as HTML Browser SSH: root, password = linuxPC or rather IP 172.31.1.110 in connection with R02 IP 172.31.1.100 with PLC Software
IP Paramater:	adjustable
Ambient temperature:	0...+50°C
Humidity:	< 90% RH , non-condensing air
Mounting:	on concealed outlet Ø 55mm
Housing:	with glass front and black anodised aluminium frame
Dimensions WxHxD:	79 x 120 x 11 mm
Protection class:	IP30

Commissioning RBG Tauris 4.3" with standard browser function

1. the device automatically starts the Chromium browser
2. go to the homepage with a PC browser (Firefox, Chromium)
   (192.160.1.3 or set IP or DHCP assigned IP)
3. IP address: 192.160.1.3, SSH: root, password: linuxPC
4. set the configuration (e.g. brightness, kiosk mode..full screen, no info bars; IP address, ...)
5. use the recessed button to switch off the device (long press - 5 sec.). switch on again short press - (2 sec.)
6. for remote Full HD view create a new VNC session in MobaXterm with
   the following settings: IP address - the same address you used for the SSH connection
   PORT = 5900, then run the VNC session you created

Update Images RBG Tauris 4.3" with browser function

You can find the latest version under the following link:

Tauris_browser_v0.1_24_03_20: https://1drv.ms/u/s!Ap7jP8DI1-I-qHTs6ZCr06_bjEqL?e=vgAxqu

Use Win32DiskImager to transfer the unzipped image to the SD card, put it into the designated drive and then power the device, then the new image will be loaded automatically. Since the devices are shipped with this image, this is only necessary if something needs to be changed.

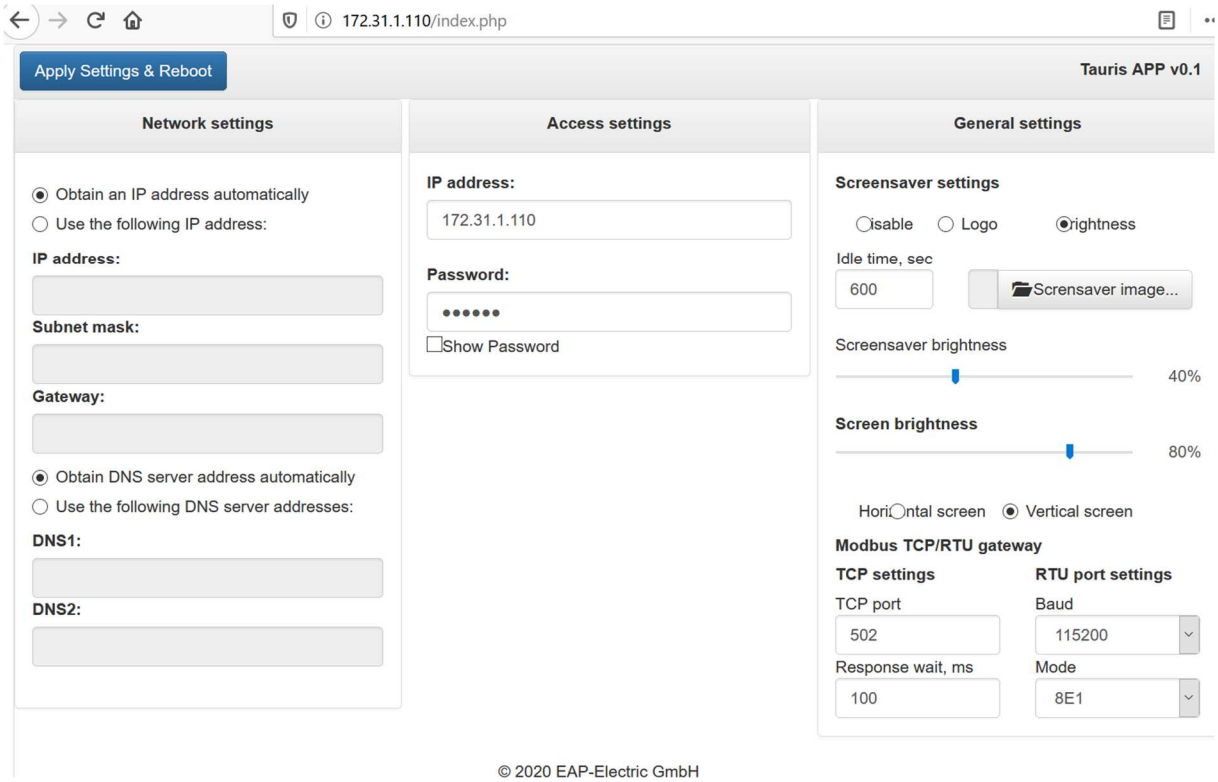
Commissioning RBG Tauris 4.3" for connection with R02

If the appropriate 5420-2 device was not ordered or the software version was changed, the correct image must be uploaded to the RBG Tauris. The devices are delivered with the image for the browser function as standard, if the order was not placed with art. no. 5420-2 or the connection with R02 was not pointed out.

Tauris_2020_04_12_app: https://1drv.ms/u/s!Ap7jP8DI1-I-qU27amh3RFXWmdgI?e=eAfRg1

Please unzip the file and write it with Win32diskmanager to an 8GB SD card.
Without power change the SD card from the Tauris and test it.

1. the device automatically starts the app and tries to connect to the R02 (according to the settings)
2. go to the homepage with a PC browser (Firefox, Chromium), enter 172.31.1.110 and the destination address (R02 IP, default 172.31.1.100:admin:pt2020) including user and password. The format is IP:user:password
3. use the button to switch off the RBG Tauris (long press - 5 sec.). switch on again short press - (2 sec.)



Information for use as a PLC, e.g. as an individual room controller:

Download the latest studio version from www.eap-pt2020.at and install it.

In the studio you will find information about hardware and controller configuration. Under General/Introduction/Commissioning of the controller you will find a step-by-step explanation of how to start.
Also update the RBG TAURIS to the current status before starting work.

Server activation for remote control (Android, IOS, Windows) and/or remote maintenance (PT2020 Studio) via Internet:
Register the controller on www.eap-pt2020.at and enter the data according to the menu. The serial number of the control unit can be read out via the HTML page of the TAURIS (for the R02 also via the connected studio under Online System Information). To avoid typing errors copy-paste is recommended. ATTENTION, except for tests it is necessary to assign a good password. The e-mail address is only necessary once for activation and then only as a name for identification via the online server. It is important that the e-mail address is noted with the controller so that the assignment is known. It is also recommended to assign the e-mail name according to address, name or other unique characteristics. Each controller therefore requires a different e-mail address for registration. (Alarm messages are sent to a separately set e-mail address). For example, free disposable e-mails can be obtained without registration from www.trash-mail.com
Click the confirmation link in the e-mail, then the message is successfully activated.
Now all devices can be accessed via the server (e-mail) in addition to the local LAN connection (IP address).
The example of Android:
Settings / Set up new connection / Cloud service
User name (controller): root (default value, change for security reasons)
Password (controller): pt2020 (default value, change for safety reasons)
E-mail (Cloud Service): e-mail above
Password (Cloud Service): password assigned above

For the connections you only have to select the IP or e-mail of the desired controller. The last valid interface will be loaded automatically during the connection.
While you make changes with the Studio, they are not forwarded to the apps. Only when the program is saved permanently, the interfaces of the other devices are synchronized.

Additional info:

- The 2 RJ45s have equal rights and operate as switches.

- The browser reports as touch device.

- There is a browser version with keyboard (e.g. input password)

- Update gesture with clear cache and reload page available
  (e.g. fast wiping with a finger from top to bottom)

- Configuration changes: with apply settings the changes will be saved, with reboot button or after a current recycle, the changes become active.

- It is possible to reduce only the brightness as a screensaver (energy saving and increase the service life of the LED´s). This is done via a selection box (active LCD backlight value and standby value).

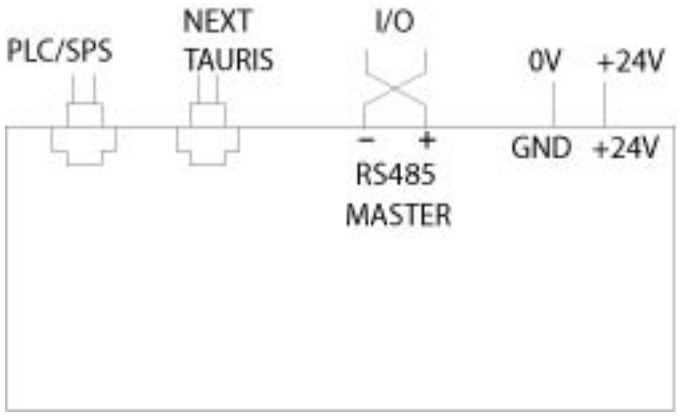
- Time for the screensaver adjustable up to 999 seconds.

- The Modbus®-TCP/IP to Modbus®-RTU gateway can be used simultaneously

- The scaling of images is possible.

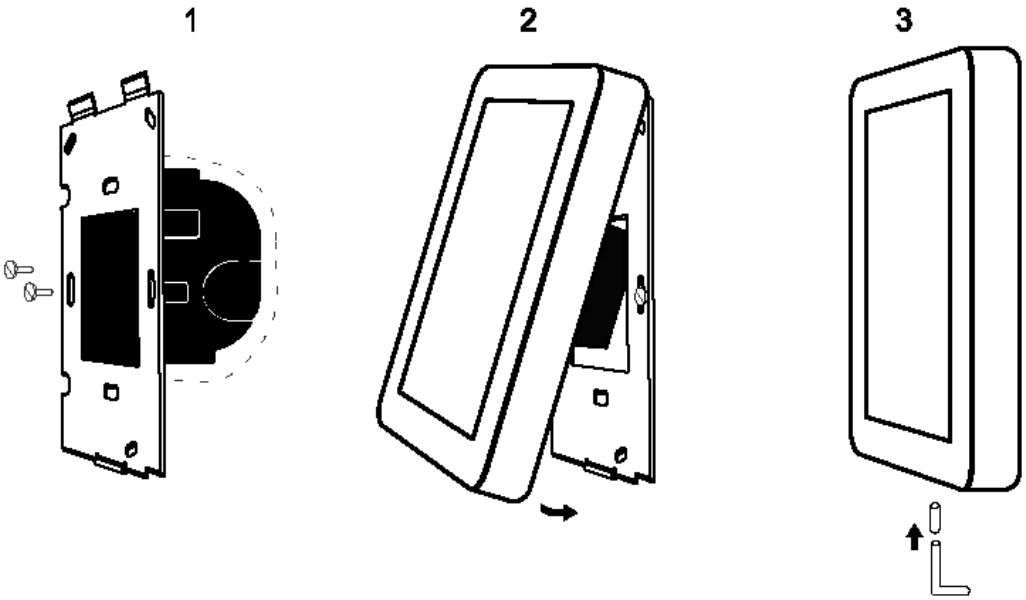
- adjustable vertical or horizontal

Connection diagram:



Mounting:

The TAURIS is designed for mounting on concealed outlet and the assembly takes place with a mounting plate, screws and connection plug with plugable double-push-in terminals (preinstallation possible), which are included in the scope of delivery.



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