

SEAHU SH017 QUICK START MANUAL



Seahu 017 PiToDIN (RaspbeeryPI To DIN)

Description:

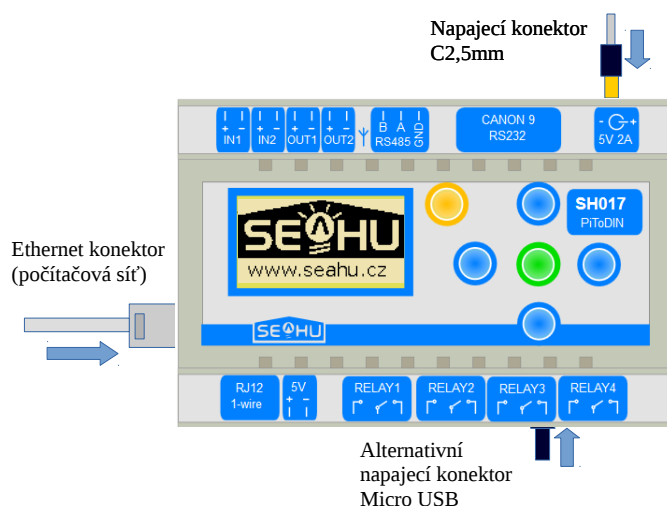
PLC computer based on raspbeeryPI on DIN case, deployment for easy create home automation. Included monochrome display witch 5 buttons, rassperryPi B+ v3 and base board witch 4x relay, RS232, RS485, 2x optical isolated output, 2x optical isolated input, buzzer, real time witch battery and 5V one wire interface. DIN case 6 module width. Software run on popular operating system for raspbeery PI – raspbian (clon of Debian - Linux distribution), therefore you may use any program for those distribution not only pre installed software. This module have two pre installed automation system Domoticz and Rex controls. Domoticz is user friendly automation system mainly for home use. Rex controls system is more complex system for generic automation (home and industry).

Plug power and get IP address

First step is get IP address and other setting doing via web. You can connect device via Ethernet cable or Wi-Fi. Next manual assume that, your network have dhcp server, other way you must configure IP manually (not in this manual).

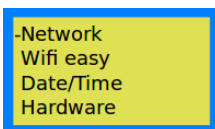
Plug power

Plug power connector to module. Recommended is use adapter 5V min. 2A with C 2,5mm connector (alternative microusb connector plugged directly into raspbeery PI mini PC). And plug Ethernet cable. Start system is finished after beep and draw seahu logo on display.

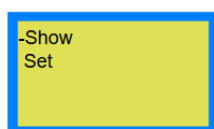


Get IP from Ethernet cable connection to network

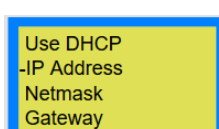
1. Plug power connector and Ethernet cable to module and wait to finish start system.
2. Press any key for view menu on LCD display and search IP address by example below.



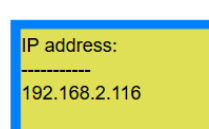
Click OK



Click OK



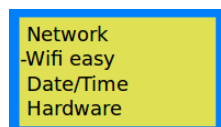
Click DOWN, then OK



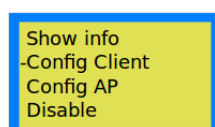
Get IP address from connect to existing Wi-Fi network

1. Plug power connector and Ethernet cable to module and wait to finish start system.
2. Set Wi-Fi connection

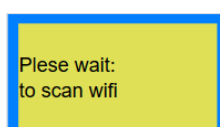
Press any key for view menu on LCD and follow next step:



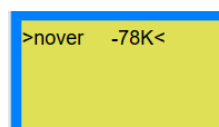
Vyberte Wi-Fi easy



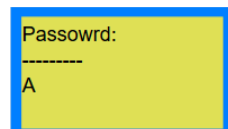
Select Config Client



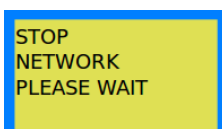
Wait



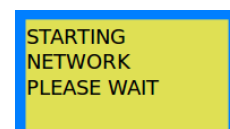
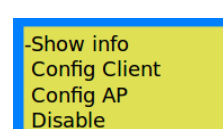
Select your Wi-Fi
number is strength signal
K – means KEY password
F – means free



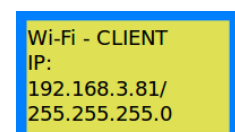
Set password
DOWN,UP select character
LEFT,RIGHT select position
OK set password
ESC cancel setting



Wait for network restart


Wait for end network
restart


Select Show info



Read IP

Create Wi-Fi access point and get local IP address

1. Plug power connector and Ethernet cable to module and wait to finish start system.

2. Set Wi-Fi access point

Press any key for view menu on LCD and follow next step:

Network -Wifi easy Date/Time Hardware	Show info Config Client -Config AP Disable	SSID: ----- SEAHU	PASSWORD: ----- 12345678
Select Wi-Fi easy	Select Config AP	Enter own Wi-Fi name	Enter own passwd min. 8 chars
STOP NETWORK PLEASE WAIT	STARTING NETWORK PLEASE WAIT	-Show info Config Client Config AP Disable	Wi-Fi - AP IP: 192.168.128.1/ 255.255.255.0
Wait for network restart	Wait for end network restart	Select Show info	Read IP

Setting via web

Start web browser and into address line type IP address your SH017. Via web you can easy edit network (Wi-Fi) setting, set time and time zone, look actually status of device (eventually change), reset, change password and select type of automation system. Some task need by log-in. Default Log-in password is: raspberry . Is strongly recommended this password change. In case of lost password, the module can be reset to original state, by pressing the ESC key during start-up device.

Home page:



Default not running services.

Network setting:

Network Adapter Status

Use DHCP client: ☒ Yes

IP: 192.168.2.116

Netmask: 255.255.255.0

gateway: 192.168.2.1

Primary DNS server: 10.10.0.34

Mac address: b8:27:eb:48:96:23

View status

Network

DHCP: ☐ No ☒ Yes

IP:

Netmask:

gateway:

Primary DNS server:

Set network configure

Wi-Fi setting:

Wifi Adapter Status

Type: **AP**

SID: SEAHU

Channel: 6

Password: 12345678

IP: 192.168.128.1

Netmask: 255.255.255.0

Mac address: b8:27:eb:43:57:ed

DHCP server range IP: 192.168.128.50 - 192.168.128.200

Forward packets: Enable

NAT: Enable

View Wi-Fi status

Wifi

SSID: ☐ Skritek (passwd) ☒ nover (passwd) ☐ ASUS (passwd) ☐ lisak (passwd)

Wifi password:

DHCP: ☐ No ☒ Yes

IP:

Netmask:

gateway:

Primary DNS server:

Set Wi-Fi configure.
(view this page may take some time
because scan available Wi-Fi network)

Wifi

SSID:

Wifi password:

Channel (1-13):

IP:

Netmask:

DHCP server range from IP:

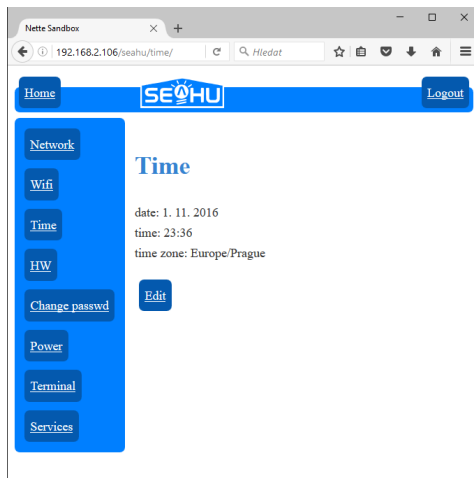
DHCP server range to IP:

Forward packets: ☐ Disable ☒ Enable

NAT: ☒ Disable ☐ Enable

Setting for Wi-Fi access point.

Time setting:

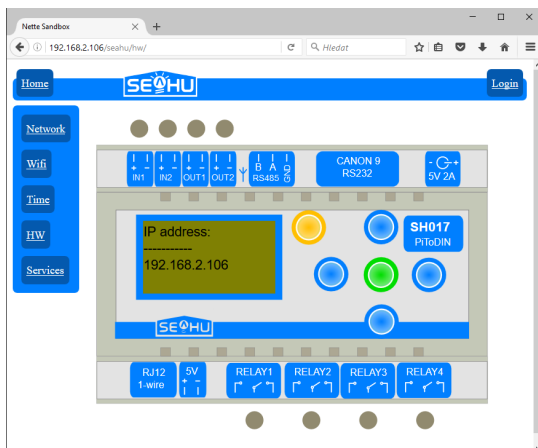


View time status

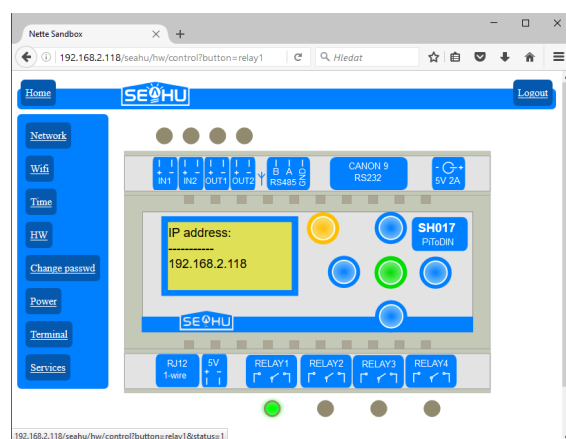


Set time. If available internet time get from internet, do not need setting. Important is only select time zone.

View and control hardware status:



View actual status. Display only text and ignore inversion text.

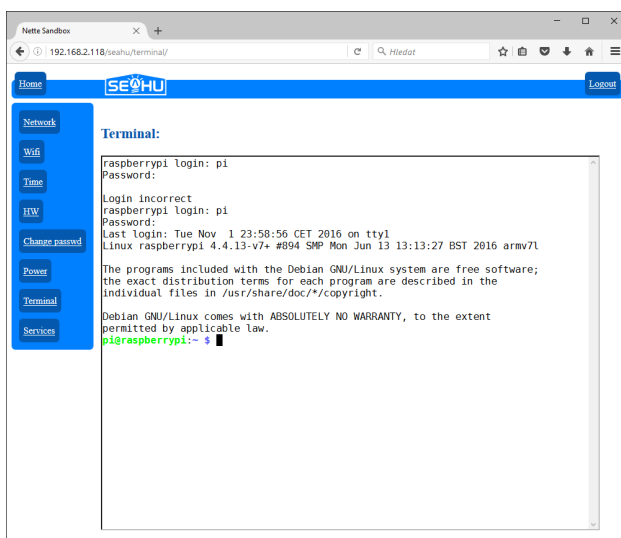


Control relay or output and press buttons. Be careful, if run another service that control this relay or output manually intervention may confuse this service.

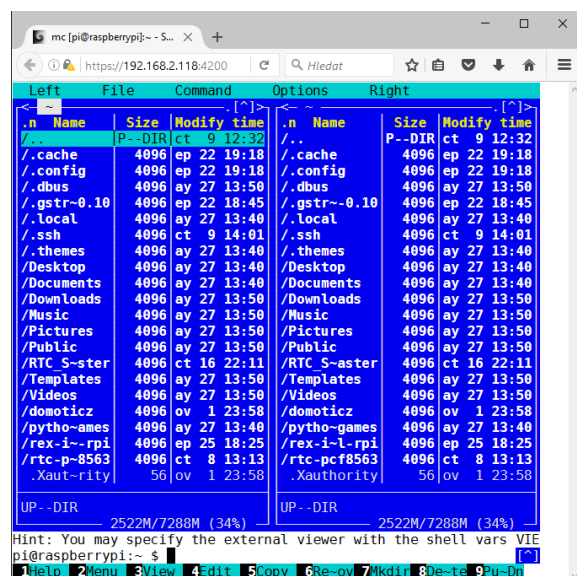
PS: Content of display view only text without resolution inversion text and background.

TERMINAL

Button TERMINAL is available only for log-in users. Terminal use ssl connection with self sign certification who is not for modern web browsers trustworthy. If you want use this terminal, you must add security exception into your web browser. Terminal may be also run as separate web on address: https://your_IP:4200 . Login is: pi default password: raspberry or yours changed password. Another way connect to terminal is use program ssh in Linux or program putty on Windows.



Example terminal



Terminal as separate web page

Service setting

On this page you can select automation service who you can use. Actually is supported two automation services and some addition services. If you log-in than can stop or start service. Click to illustration image of service for redirect to web page this service. You can also install any other automation system, but it is not easy.

The screenshot shows the SEAHU web interface with a sidebar menu (Network, Win, Modem, Time, HW, Change password, Power, Terminal, Services, Help) and a main section titled 'Aviable Services'. Five service cards are displayed:

- Domoticz**: Open source home automation system, easy to use and with support lot of sensors.
- REX control system**: Commercial excellent automation system not only for home automation.
- Serial port to net**: Service for bridge serial ports over network. If you need control serial devices from remotely PC, than you can use this module with this service.
- RFX 433MHz**: If you have on this module receiver and transceiver for free broadcast band 433MHz than you can use this service as interface between Domoticz automation system and wireless 433MHz devices. For same purpose you can also use RPLink service.
- RPLink**: If you have on this module receiver and transceiver for free broadcast band 433MHz than you can use this service as interface between Domoticz automation system and wireless 433MHz devices. For same purpose you can also use RFX 433MHz service. (If you stop this service, than you open start after 5 minute or after restart systems).

Domoticz

Easy open source system. Ideal for home automation. This system has easy configuration, who can handle everyone (but strongly recommended read min. quick manual).

REX controls

Complex automation system, suitable for bigger or industry automation. It is not open-source, for fully use must bay licence on <http://rexcontrols.com> . Otherwise this system running in demo. Demo run only two hours, for next rum must be restart.

Serial port to net

Addition services for create bridge serial port over network into remote PC. For bridge can be used internal serial port or additional USB serial ports.

RFX 433MHz

Addition services for enable control selected wireless devices on free band 433MHz. Specialy for use with system Domoticz.

RFLink

Service like as RFX 433 MHz. Create interface between 433MHz devices and automation system. This is mainly for used with system Domoticz. Selection between RFX 433MHz and RFLink is on user, but is not recommender use both at one time.

More information:

Next manual select by your preferred automation system.

Eventually go:

- web raspberrypi project: <https://www.raspberrypi.org/>
- web domoticz project: <http://www.domoticz.com/>
- web Rex controls: <https://www.rexcontrols.com/>
- or: <http://www.seahu.cz>

Writer:

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version document: 1.02