Raspberry Pi - RJ45 Ethernet User Manual

Pi Zero Net RJ45 x1 spec

The Pi ZeroW Play Box provides one Ethernet RJ45 socket with a HAT EEPROM. It gives you an easy way to plug and play (PnP) in all Raspberry Pi models: A+, B+, 2B, 3B, Zero, Zero W.

Features

- **Software included**: Main Menu, Snake Game, Atari Breakout Game, System Information and Status, WiFi settings, Clock function, BBC RSS Feed, Shut Down function to prevent Pi OS Micro SD card crashing

- Five buttons: up, down, left, right, enter

- 0.96" 128x64 Pixels White OLED screen

- One blue LED for the keypad backlight

- 3.3V power regulator that doesn't take the 3.3V from the Raspberry Pi

- TX (Yellow) and RX (Green) LED indicators on the Ethernet connector

- Optional Pi ZeroW Play Box Kit (see Photo 8. "Pi ZeroW Play Box kit"):
  - A Micro SD card hole for easy insertion and removal
  - A camera cable hole for the Raspberry Pi camera module installations

Pi Zero IP

Pi ZeroW IP

```
192.168.1.14 - PuTTY
root@raspberrypi:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.16  netmask 255.255.255.0  broadcast 192.168.1.255
        inet6 fd24:995:a570:3100:6410:59da:2800:f638  prefixlen 64  scopeid 0x0<
global>
        inet6 fe80::35e7:fe5b:e932:946f  prefixlen 64  scopeid 0x20<link>
        ether b8:27:eb:f9:55:41  txqueuelen 1000  (Ethernet)
        RX packets 38  bytes 2966 (2.8 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 91  bytes 13836 (13.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.14  netmask 255.255.255.0  broadcast 192.168.1.255
        inet6 fe80::b9fd:2d68:cc5d:2377  prefixlen 64  scopeid 0x20<link>
        inet6 fd24:995:a570:3100:b47e:68b:30f9:49ec  prefixlen 64  scopeid 0x0<g
lobal>
        ether 32:f7:49:3a:74:4b  txqueuelen 1000  (Ethernet)
        RX packets 3726  bytes 254414 (248.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 417  bytes 25018 (24.4 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
        device interrupt 169

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.10  netmask 255.255.255.0  broadcast 192.168.1.255
        inet6 fd24:995:a570:3100:9c49:f1d3:f0e3:b38e  prefixlen 64  scopeid 0x0<
global>
        inet6 fe80::ada8:79b0:cd04:e88f  prefixlen 64  scopeid 0x20<link>
        ether b8:27:eb:ac:00:14  txqueuelen 1000  (Ethernet)
        RX packets 3234  bytes 156126 (152.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 353  bytes 33269 (32.4 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

Pi 3 IP

if your system plug & play not working, try do setting as below

Configuration

Ensure SPI Is Enabled

Menu > Preferences > Raspberry Pi Configuration

Click the *Interfaces* tab

Ensure SPI is enabled and click OK

If you changed anything, you'll need to reboot for it to take effect.

Tweak config.txt

Add the following to your /boot/config.txt

```
dtoverlay=enc28j60
```

Package Content

1x Pi-Zero Net RJ45x1 HAT Board   1x Manual

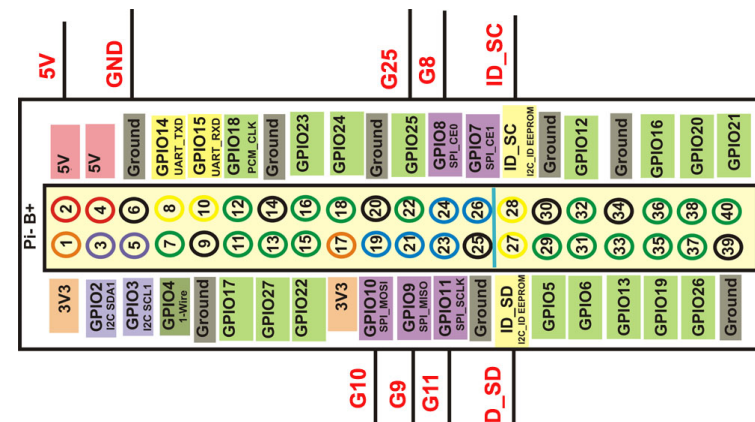Pi Zero Net RJ45 use signal

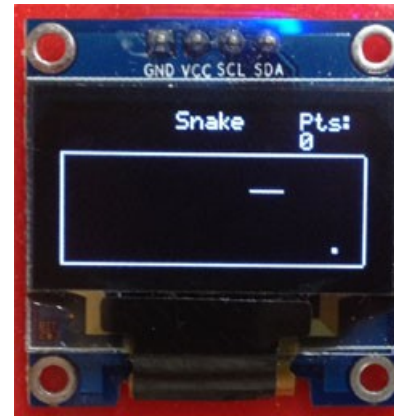|		
VCC – 5v to 3v3	GND – GND	CS – CE0 (gpio 8)
SI – MOSI (gpio 10)	SCK – SCKL (gpio 11)	SO – MISO (gpio 9)
IRQ (INT) – GPIO 25	ID_SC - HAT EEPROM ID_SC	
ID_SD - HAT EEPROM ID_SC		

1. Pi Zero W Play Box Main Menu:

Zero-W-Net System
[Information]
[Snake]
[Atari]
[Clock]
[Wifi Setting]
[Exit]

2. System Information:

15:32:19 Pridopia 30.75%

Uptime: 02:13:49

eth0: 192.168.0.27
wlan0: 192.168.0.25

3. Snake Game:

Pridopia

SNAKE

[Options]
[Quit]

Snake   Pts:
         0
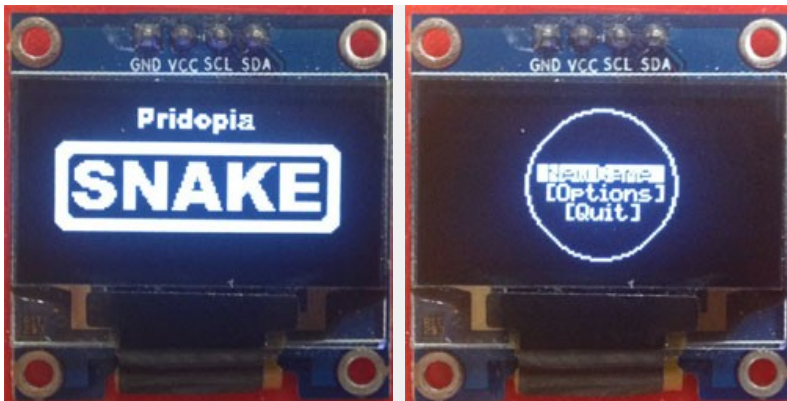
4. Atari Breakout Game:
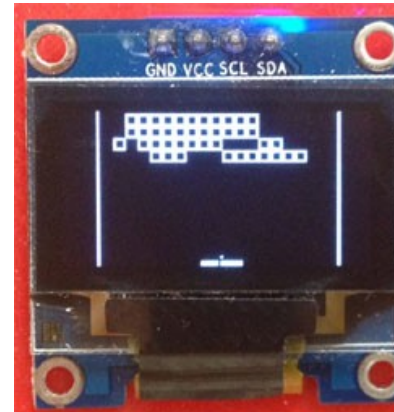
5. Clock & Extra Functions (System Status, Network, BBC RSS feed):

Thu 18
May   11:09:46

System Stats

CPU Usage: 100.00%
Ram Used: 21.57%

Network

WiFi: 192.168.0.25
Eth0: 192.168.0.26
Eth1: Not Connected

BBC RSS Feed   Page: 05/10

Retail sales in April beat forecasts with a 2.3% rise

6. WiFi Setting (search SSID & setting password)

[Wifi Setting]
[Clear Wifi Setting]
[Quit]

Wifi Setting   Page: 1/6

["BTWi-fi"]
["BTWifi-X"]
["IMS"]
["Extra Help Care"]
["pridopia-u27a"]

Enter Password

0123456789abc
defghijklmnop
qrstuvwxyzABC
DEFGHIJKLMN
QRSTUVWXYZ

7. Menu [Exit] provides "Shut Down" function to prevent Pi OS Micro SD card crashing:

Shutting Down.
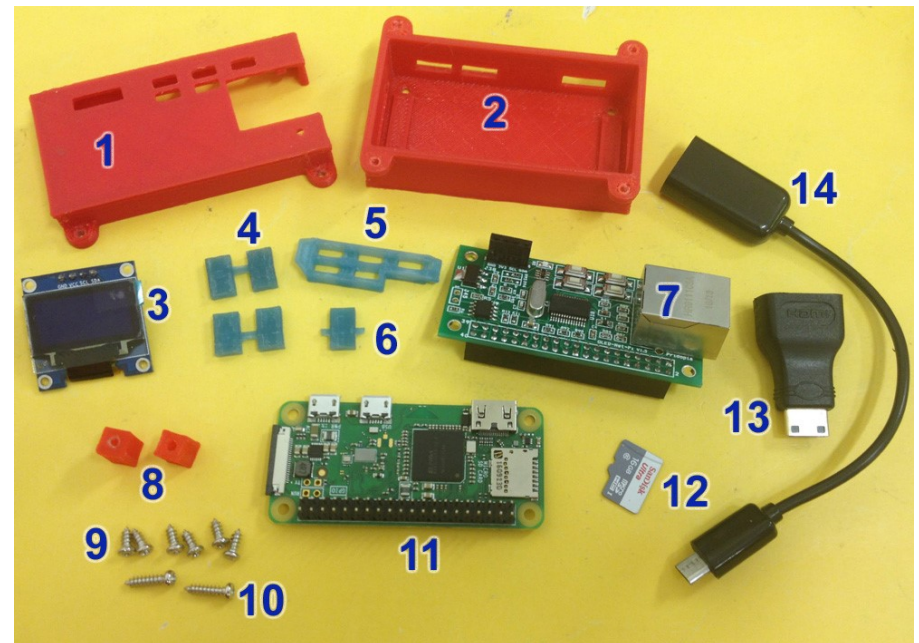
1. 3D printed cover **2**. 3D printed base **3**. 0.96" 128x64 Pixels White OLED screen **4**. Two buttons **5**. Shaft button **6**. Single button **7**. Play Box function headboard **8**. Two 11mm spacers, **9**. Six M2.5 6mm screws **10**. Two M2.5 10mm screws **11**. Raspberry Pi ZeroW Board **12**. 16GB Micro SD card **13**. Mini HDMI to HDMI adapter **14**. Micro USB OTG cable