

Your libre router and you!

Dear Customer,

Thank you for purchasing one of the few freedom respecting routers on the market! This router runs the libreCMC GNU/Linux distro : a collection of *free software* that respects your freedom. With the software on this router being *free software*, you have the freedom to review what the software on the router is doing, make changes to the software, re-flash the router with your modified copy and share the changes that you make. By choosing this router, you the customer, will help pave the way for more freedom respecting hardware in the future.



Setup instructions for those who are not connecting to a VPN

(and have not purchased a gigabit switch or TPE-R1300 wireless access point):

- 0) Plug an ethernet cable from your Cable Modem / DSL Modem / Fiber Optic Modem to the WAN port (labelled WAN).
 - 1) The TPE-R1400 boots from a micro-SD card, verify that the micro-SD card with appropriate firmware is in the micro-SD slot
 - 2) Connect an ethernet cable from your PCs LAN port to the LAN port on the mini router (labelled LAN).
 - 3) Connect the power cable to the mini router
- (you will see green lights on the front if it successfully boots)
- 4) To administer your router, go to : <https://192.168.10.1>

You may encounter a warning such as “Warning: Potential Security Risk Ahead” or “Your connection is not private”. Despite the scary sounding warning this is the result of a self-signed certificate and your connection is slightly more secure than it would be otherwise. Click the Advanced button and then “Proceed to 192.168.10.1 (unsafe)” or “Accept the Risk and Continue” depending on your browser.

Setting a password for your router (highly recommended)

1. Open a web browser on a PC connected to the router, go to <https://192.168.10.1> and login using the default password ‘none’.
2. Then go to : System -> Administration.
3. Enter a new password in the password box and repeat the password in the confirmation box
4. Scroll to the bottom of the page and click the Save & Apply button

Browse the web and enjoy! If all of your machines use "DHCP" for their network, everything should just work. Please refer to your modem 's documentation, ThinkPenguin.com/support for more documentation, and for more advanced users libreCMC.org

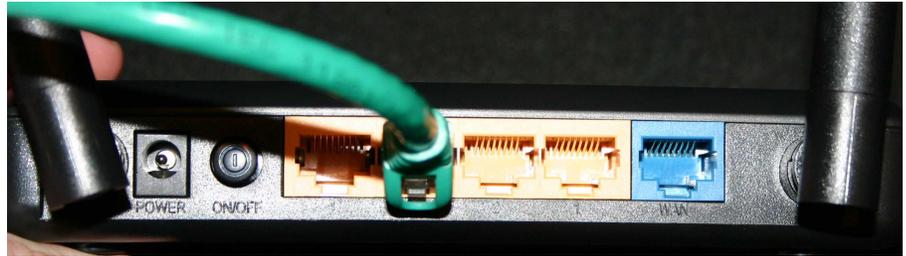
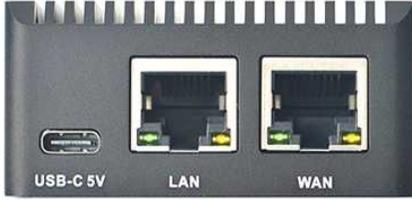
Product Information and Support

For additional documentation and support visit us on the web: ThinkPenguin.com/support

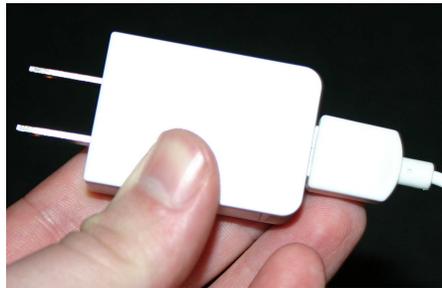
Free Software Gigabit Mini Router
Model: TPE-R1400

Setup instructions for those who purchased VPN service with the router:

1. Connect an Ethernet cable from the WAN port on the Mini Router (left image) to a LAN port on your modem or primary router (right image).



2. Connect the USB cable to the Mini Router where it says USB-C 5V (left image), connect the USB cable at the other end to the power adapter (center image), and the power adapter to a wall outlet (right). Note: the color/plug may differ from the image(s) on the right shown here depending on the county.



3. Connect your computer to the libreCMC-VPN configured router via an ethernet cable between the LAN port on the Mini Router and the LAN port on your PC. If you have a TPE-R1300 wireless router you can connect the ethernet cable between the WAN port on the TPE-R1300 wireless router to the LAN port on the TPE-R1400 gigabit router. Then connect a computer to the LAN port on the TPE-R1300 wireless router and the other end to your PC. Alternatively select the libreCMC access point wirelessly. You can also connect a switch in-between the two routers if you have more than one computer or device you want to connect to the network.



Things to note: A VPN connection may result in problems with some online web sites that depend on correct location data to operate. This is primarily true for stores, banks, and commercial video streaming sites. If you encounter a problem with a site you may find an account temporarily locked or an order cancelled. This is because traditional electronic payment systems don't have an effective means of stopping fraud making any payments via Visa/Master Card/PayPal/etc risky. As such merchants refuse business to anonymous individuals to reduce the risk of fraud when users pay with these mechanisms. Cryptocurrencies are quickly becoming the online equivalent of cash. Not controlled by governments, banks, or other entities they act as a safer lower cost solution to make payments.

4. Open your web browser and check the IP address and location that your computer appears to be coming from. One such site you can utilize for this purpose is [infosniper.net](https://www.infosniper.net)



Note: We have changed the default Mini Router IP to maximize out-of-the-box compatibility: 192.168.3.1

Setup for those who purchased a gigabit switch & TPE-R1300 wifi AP:

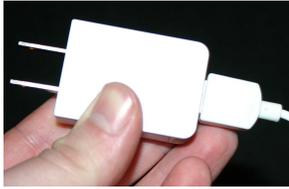
(Setup the TPE-R1300 to act as a bridge to the TPE-R1400 network, this maintains a single network, best for most users)

We have written up two sets of directions depending on how you'd prefer to setup your network. The first set of directions are a bit longer, but provides a single network for all your devices to operate on. This is likely ideal for those who have a network connected printer. The setup will behave as if you had only a single wireless router/network. All computers and devices on the network will have an IP in the 192.168.10.x IP range and be able to 'see' each other.

1. Connect an ethernet cable from the LAN port on your PC to the LAN port on the TPE-R1300 router, then power.
2. Give the TPE-R1300 router a minute to boot up and then open the browser on the computer and go to <https://192.168.10.1>, and hit enter
3. Click the Advanced button... and then the Accept the Risk and Continue button (if in Firefox/Abrowser)
4. Click the log in button (there is no password set by default, as you should set one)
5. Click the Go to password configuration button if you haven't set a password
6. Enter a password for the router twice, once in each password box, and click the Save button
7. Go to Network > Interfaces
8. Click the Edit button next to LAN
9. Change the IPv4 address to 192.168.10.99
10. Click the Save button
11. Click the Save & Apply button
12. When prompted with the Connectivity change message click the Apply and keep settings button
13. Give the router 90 seconds or so to apply the changes and then when the Device unreachable! message appears plug in an ethernet cable from the WAN port on the TPE-R1300 to a LAN port on the upstream TPE-R1400 router or one of the LAN ports on the 8-port switch (if you plug into the switch and you probably should make sure you have an ethernet cable connected between the switch and a LAN port on the TPE-R1400 too, also don't forget to plug in the power)
14. In the address bar enter the TPE-R1300 router's new IP and hit enter: <https://192.168.10.99>
15. Click the Advanced button... and then the Accept the Risk and Continue button (if in Firefox/Abrowser)
16. Log in to the router using the previously set password
17. Go to Network > Interfaces
18. Click the Edit button next to LAN
19. Click on the DHCP Server tab
20. Click the Ignore interface checkbox (to check it and disable the TPE-R1300's DHCP server)
21. Click the Save button
22. Click the Add new interface button
23. Enter relay_bridge in the Name box
24. Select Relay bridge in the protocol drop down box
25. Click the Create interface button
26. In the Relay between networks drop down box select the LAN and WAN interface(s)
27. In the Firewall Settings tab select LAN for the Create / Assign firewall-zone drop down
28. Click the Save button
29. Click the Save & Apply button
30. To enable the wireless access point go to Network > Wireless
31. Click the edit button next to the SSID: libreCMC access point
32. Scroll down to the Interface Configuration section and click the Wireless Security tab
33. In the Encryption drop down box select the WPA2-PSK (strong security) option
34. In the Key box enter a password you would like to use for connecting to your wireless network
35. Click the Save button
36. Click the Enable button next to the SSID: libreCMC access point
37. Click the Save & Apply button
38. If your connecting a device to the network via ethernet it is best to connect it to the 8-port gigabit switch as the TPE-R1300 wireless router may result in a bottleneck for those with internet connections that are faster than 100Mbps, so now would be a good time to unplug the ethernet cable from the TPE-R1300's LAN port (ie the cable connected to your computer's LAN port at the other end) and plug it into the 8-port gigabit switch

(this is for a two network setup, which may be quicker and easier to setup, but may not work well for those with network printers)

1. Screw on the antennas to the mini TPE-R1300 wireless router and connect the micro USB power cable from the mini wireless router to a USB port or USB power adapter.



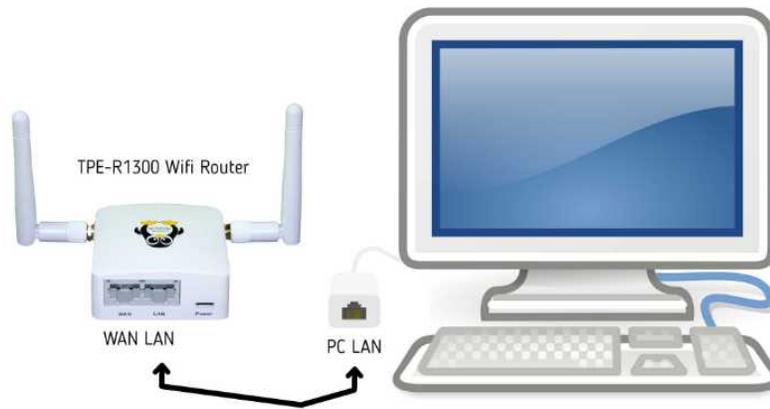
Power Adapter



Micro USB port

The micro USB end connects to the router and the other end connects to a USB port. The included USB power adapter can be used for this. Then plug that into a wall socket. Also give the router a minute to boot up.

2. Connect an ethernet cable to the LAN port on the TPE-R1300 mini wireless router and the other end to to your PC.



3. Open a browser and go to <https://192.168.10.1> and click the login button to login to the mini wireless router. There is no password set by default. It is generally advisable to set one.



Note: You will likely get a warning message about a security issue. This is normal and actually the result of enhanced security as the router has a self-signed certificate. Click the advanced button and add an exception for the router to continue to the routers login page.



Warning: Potential Security Risk Ahead

Firefox detected a potential security threat and did not continue to 192.168.10.1. If you visit this site, attackers could try to steal information like your passwords, emails, or credit card details.

[Learn more...](#)

Go Back (Recommended)

Advanced...

4. Go to Network > Interfaces and click the Edit button next to where it says LAN.

Interfaces

LAN br-lan	Protocol: Static address Uptime: 12d 2h 28m 54s RX: 1.13 TB (749312831 Pkts.) TX: 556.99 GB (708774485 Pkts.) IPv4: 192.168.10.1/24	Restart	Stop	Edit	Delete
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5. In the IPv4 address box change the default 192.168.10.1 IP address of the router to something else. 192.168.11.1 for instance is a good choice.



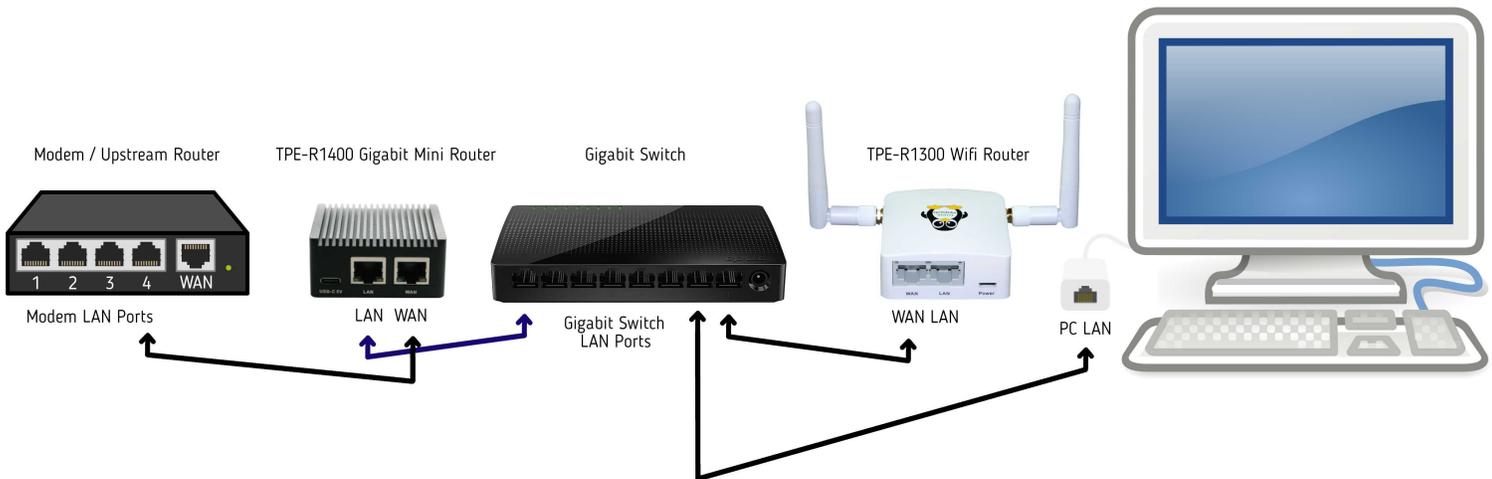
6. Click the Save & Apply button at the bottom of the page.

Note: Pay close attention to what is happening on the screen. After a minute the router will tell you that the operation has failed and the settings have been rolled back. This is normal. You need to click the Apply anyway button. After a minute you will see another although different failure message. This is fine. It just means your router has a new IP and the router configuration page is no longer accessible at the old IP.

7. From now on you will need to login using the new IP you set. aka in our example you would go to <https://192.168.11.1> to access the routers configuration page.

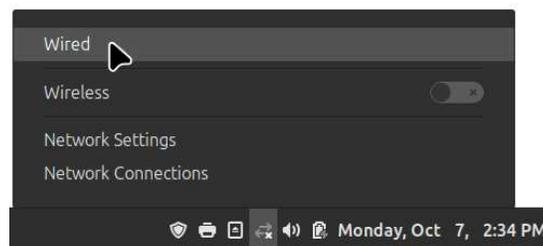
8. Connect an ethernet cable from the mini wireless routers WAN port to a LAN port on the switch.

9. Take a look at the diagram below and finish connecting the cables as shown:



Note: Also make sure the power cables are connected for the switch and upstream gigabit router.

10. On your computer go to the network applet and disconnect and reconnect. Assuming your upstream router is connected to the internet your wireless and physical LAN port on the mini wireless router should now provide you with internet access.



Note: If you do not see libreCMC in your list of access points it's like that the wireless is disabled on the router. Log back into the mini wireless router and go to Network > Wireless and click the Enable button that is next to the libreCMC SSID. To set a password for the SSID/access point click the Edit button next to the SSID to change the password. Under Interface Configuration select the Wireless Security tab. In the key box enter a password. Then click Save & Apply.

We have lots of additional documentation from utilizing third party VPN providers to connecting a USB modem via the USB port.

For additional documentation check out ThinkPenguin.com/support