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 for those who are not connecting to a VPN:
(and did not purchase a gigabit switch/wireless router)

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 documenation, 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:

(and did not purchase a gigabit switch/wireless router)

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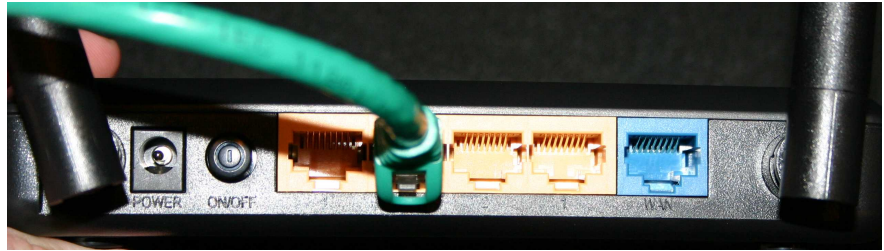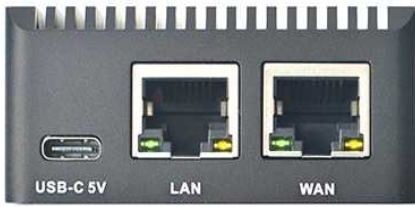

2. Connect the USB cord to the Mini Router where it says USB-C 5V (left), connect the USB cord at the other end to the power adapter (center), and the power adapter to a wall outlet (right).
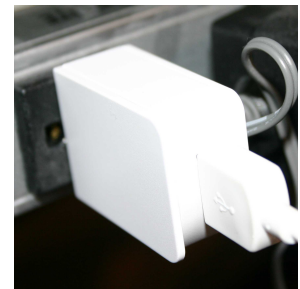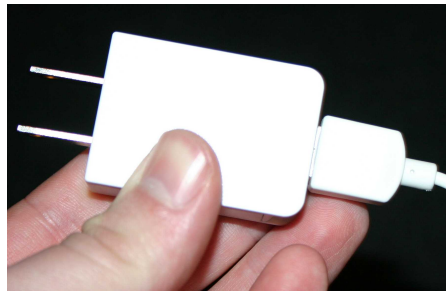
3. Connect your computer to the libreCMC-VPN configured router whenever you want to surf psudo-anonymously.

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 risk when users pay with these mechanisms. Fortunately there is a solution. 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 payment acceptance.
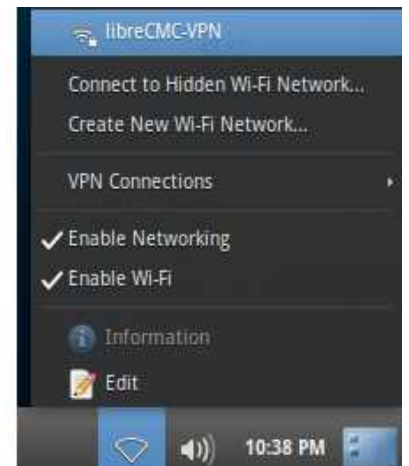
4. Open your web browser and check the IP address and location that your computer appears to be coming from. One such site you can utilize for this purpose is www.infosniper.net

If you are in New Hampshire and the site indicates that you are browsing from Jacksonville, Florida then chances are good you're surfing psudo-anonymously.

Please note that the level anonymity should be adequate for the majority, but may not be sufficient to protect against more sophisticated adversaries targeting groups such as journalists, whistleblowers, dissidents, etc.

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

Directions for users who've purchased a wireless router + gigabit router + 8-port gigabit switch

Before we connect all these devices together we need to change the default IP address of at least one of the two routers. This is as no two devices on a network can have the same IP address.

Below are the directions on how to do this:

Connect a LAN cable from your computer to the TPE-R1300 Wireless router's LAN port. Connect the power, antennas, etc. Give it 60 seconds or so to boot up.

On the PC go to your network applet and disconnect from the wifi.

Then click the wired network to connect to the router.

Open a web browser and enter https://192.168.10.1/ into the address bar and hit enter.
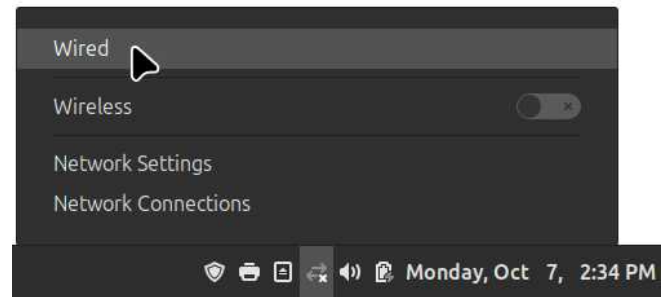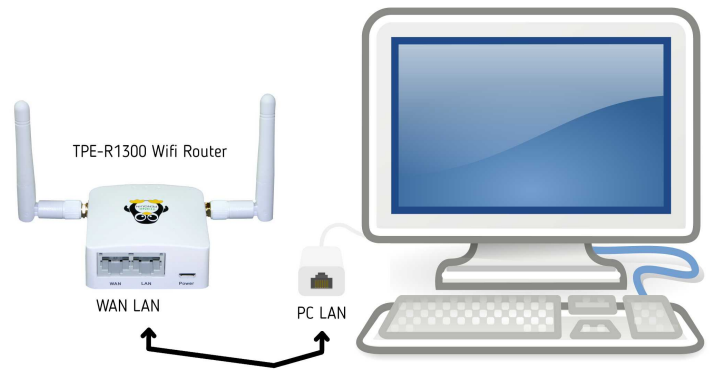
You will get a security warning message about a self signed certificate. This is normal, it's actually potentially sightly more secure if you know what you are doing than there being no certificate. If in Firefox you will need to click the Advanced button and then the Accept the Risk and Continue button.

Next the router's luci web user interface will appear. There is no password set by default. Just click the Log in button. It's recommended that you set a password once logged in. We'd recommend writing the password down and making a note of it on the bottom of the router for future reference.

You will need to change the IP address of the router as no two devices on the network can have the same IP address. By default the TPE-R1300 wireless router and the TPE-R1400 gigabit router both have the same IP, ie 192.168.10.1. So we're going to change the default IP on the TPE-R1300 wireless router to 192.168.5.1.

To do this go to Network > Interfaces and click the Edit button next to the LAN interface.

In the IPv4 address box change the IP from 192.168.10.1 to 192.168.5.1. Make a note of this change. Again, we recommend noting this on the bottom of the router alongside the log in password.


Scroll down to the bottom of the page and click the Save & Apply button. Click the Apply and keep settings for the Connectivity change message.

When Device unreachable! message appears go to your computers network applet and disconnect from the wired network. Then reconnect. The router will issue you a new IP address.

You can now disconnect the ethernet cable from the computer, and connect using wireless if you so desire.

We will now connect all the devices together. Here is a little diagram of this:
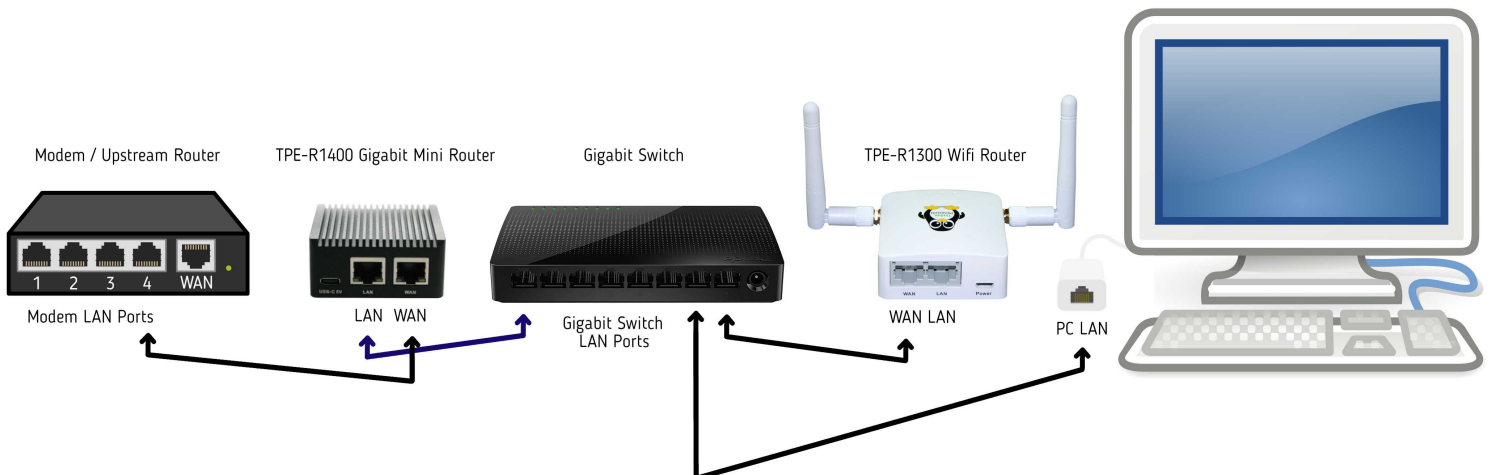
You will now need to connect an ethernet cable from the WAN port on the TPE-R1300 wireless router to the LAN port on the 8-port gigabit switch.

Next connect an ethernet cable from the 8-port gigabit switch to the LAN port on the TPE-R1400 gigabit router.

Lastly connect an ethernet cable from the WAN port on the TPE-R1400 gigabit router to a modem's LAN port. For example, a cable modem, an ADSL modem, or a fiber optic modem.

Plug the power in for the 8-port gigabit switch and the TPE-R1400 gigabit router.

You should now have a full network setup where you can connect wirelessly or via a faster gigabit ethernet port on the 8-port gigabit switch.

We have lots of additional documentation online at:

ThinkPenguin.com/support

A short list of some of this documentation includes:

Configuring the router for use with third party VPN providers

Configuring the router for use with USB 4G modems

Expanding your storage with a USB flash drive

Setting up a firewall to limit access to a particular set of domains

Setting up a mesh network (TPE-R1300 wireless model only)

Configuring the router to tunnel traffic through a Wireguard VPN tunnel where the WAN is another wireless AP (TPE-R1300 wireless model only)