

GL-INET GL-AR300M Shadow Mini Router



GL-INET GL-AR300M Shadow Mini Router User Guide

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GL-INET GL-AR300M Shadow Mini Router



Product Information

Specifications

- Model: GL-AR300M
- Antenna Version: Internal
- External Antenna Version: GL-AR300M-Ext

Package Contents

- Mini router

Press and hold the reset button for 10 seconds to restore the router to factory settings. This will clear all user data. When powered up, the mini router will broadcast a Wi-Fi signal with the SSID: GL-XXXXX-xxx. To set up your router, open your browser and visit <http://192.168.8.1>. Choose your preferred language to begin.

Product Usage Instructions

Internet Settings

1. After setting up your mini router, you will see the main web interface.
2. Find the Internet Settings icon and click the New Connection button.
3. The Internet Settings window will pop up, showing four types of connection methods: Cable, Repeater, 3G modem, and Tethering.
4. The default protocol is DHCP. If your network requires a static setting, you can change it to Static.

Repeater Mode

1. Repeater mode allows you to connect your mini router to another existing wireless network, such as Wi-Fi in hotels or public locations.
2. In the Internet Settings, choose Repeater mode and the mini router will automatically search for available SSIDs.
3. Select a SSID from the list and enter the Wi-Fi password.
4. Ensure that your existing Wi-Fi network supports WDS (Wireless Distribution System). Only use WDS if you are knowledgeable about this mode.
5. The repeater manager will automatically connect to your available networks. To disable the repeater manager, uncheck the “Auto scan & reconnect” box on the Internet status page.
6. Manage your saved networks by clicking Saved Stations. You can delete or choose one from the list to connect.

Tethering Mode

1. Tethering mode allows you to share the network from your smartphone or hostless modem to the mini router using a USB cable.
2. Plug your phone into the mini router and click “Trust” when the message pops up on your smartphone.
3. Turn on your phone’s Personal Hotspot.
4. Choose your phone from the device list and submit your choice.
5. A newly-added phone will be named beginning with “eth”.

OpenVPN Client

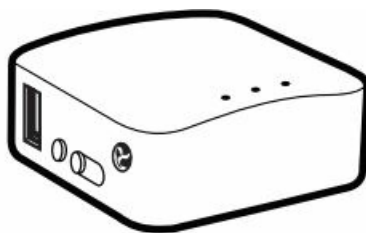
1. This router supports OpenVPN clients, but using OpenVPN may slow down your internet speed due to data encryption.
2. Click the OpenVPN icon and go to the VPN settings page.
3. The first time you access this page, it will ask you to upload your OpenVPN client configuration (OVPN files).
4. You can usually download the configuration files from your OpenVPN service provider’s website or console. Consult your service provider for more details.
5. To upload the configuration files, click “Select files” or drag and drop them onto the page.

Versions & Specifications

GL-AR300M

(Internal Antenna Version)

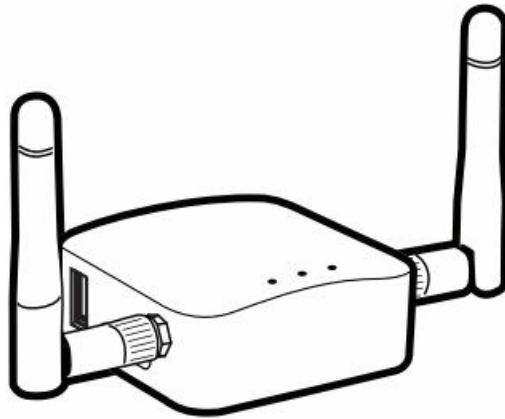
- Do NOT use any external antennas.



GL-AR300M-Ext

(External Antenna Version)

- Do NOT use without the antennas.
- Attach the antennas before connecting to power supply.
- Always keep the antennas connected.

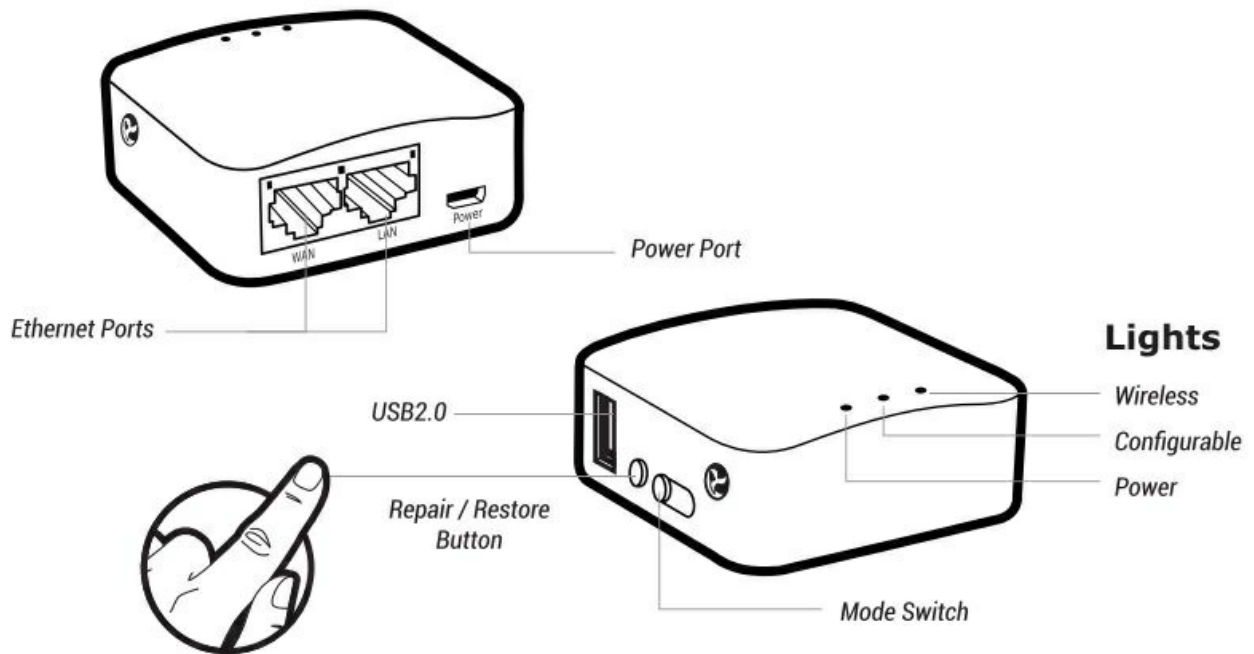


NOTE: Failure to follow above instructions may damage the internal radio of your router.

Technical Parameters

CPU	Atheros 9531, @650MHz
Memory / Storage	DDR2 128MB / Nor 16MB + Nand 128MB
Frequency	2.4GHz
Transmission Rate	300 Mbps
Max Tx Power	20dBm
Protocol	802.11 b/g/n
WAN / LAN	10 / 100 Mbps
Power Input	5V / 1A
Power Consumption	< 2W
Dimension / Weight	58 x 58 x 25 mm / 40g
GPIO Count	2
Working Temperature	0 - 45°C (32 - 113°F)

Product Info



Package Contents

- Router
- Instructions
- Micro USB power wire
- USB power adapter is sold separately

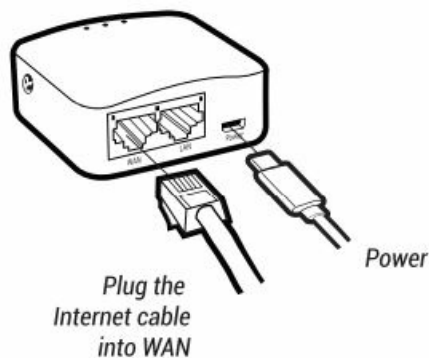
Repair/Restore

1. Press and hold for 3 seconds then release, your network will be repaired. Do this if you cannot connect to the router.
2. Press and hold for 10 seconds then release, the router will be restored to factory settings. All user data will be cleared.

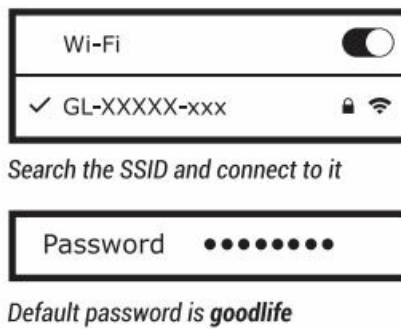
First-time Settings

1. Plug in power & Internet cable

When powered up, your mini router will broadcast Wi-Fi signal with the SSID: GL-XXXXX-xxx

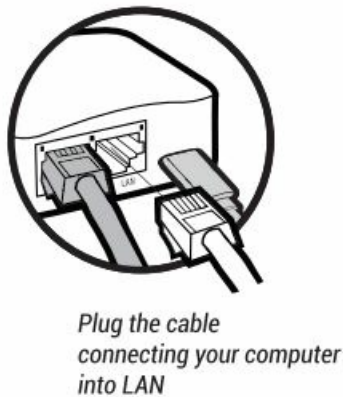


2. Connect via Wi-Fi



The default Wi-Fi password is good life, and it is also printed on the bottom of the mini router.

or Connect via LAN



3. Set up the mini router

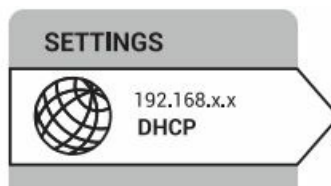
Visit <http://192.168.8.1> in your browser to set up your router; start by choosing your preferred language.

- Access the above address using your browser



Internet Settings

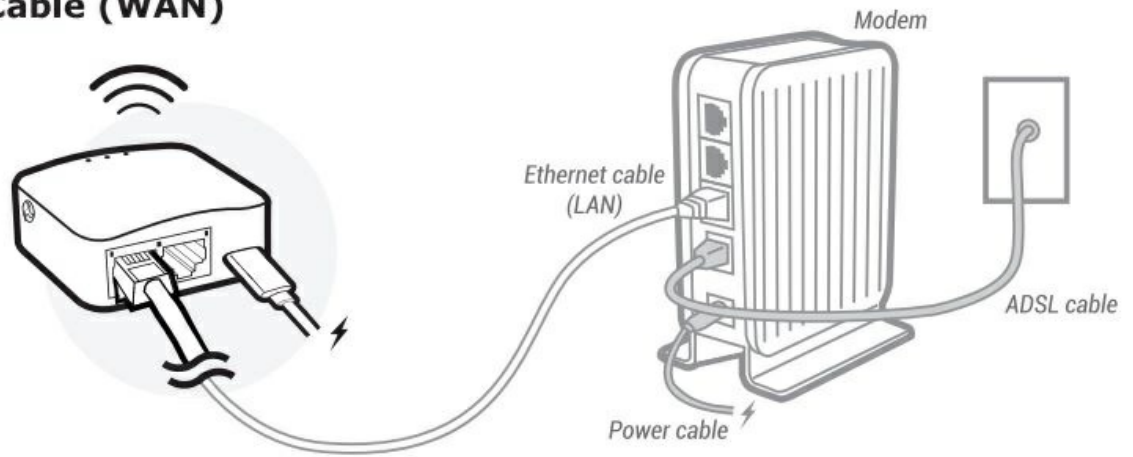
After you have set up your mini router, you will see the main web interface. Find the Internet Settings icon, then click the New Connection button. The Internet Settings window will pop up showing four types of connection methods: Cable, Repeater, 3G modem and Tethering.



(A Cable (WAN))

- **DHCP/Static**
 - The default protocol is DHCP. If your network needs a static setting, you can change it to Static.
- **PPPoE**
 - Change to PPPoE protocol when you need to apply username and password provided by your Internet service provider.

A Cable (WAN)



Internet Settings

Cable Repeater 3G Tethering

Protocol ▼

- DHCP
- DHCP
- PPPoE
- Static

Submit

(B Repeater)

• Mode

- If you want your router to have its own subnet, you need to choose WISP mode. If you want to extend your existing network by bridging the mini router and your current router wirelessly, you can use WDS.
- Make sure your existing Wi-Fi network supports WDS. Use WDS only if you are knowledgeable about this mode.

• Saved Networks

- The repeater manager will work once you set up a repeater and it will automatically connect to your available networks.
- To disable the repeater manager, uncheck the box Auto scan & reconnect on the Internet status page. You can manage your saved networks by clicking Saved Stations Delete or choose one from the list to connect.

B Repeater



Internet Settings

Cable Repeater 3G Tethering

SSID ▼ Free Wi-Fi

Password

Protocol ▼

- WISP
- WISP
- WDS

☒ Remember this network

Submit

(C 3G/4G Modem)

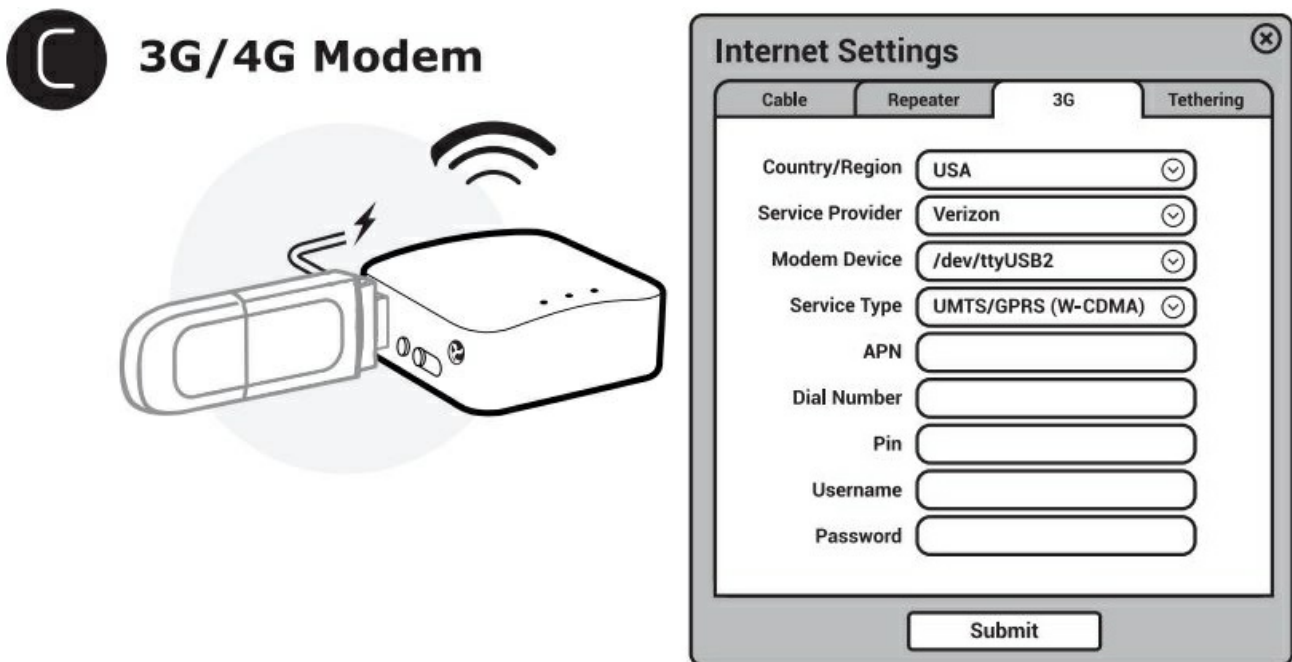
Plug your 3G/4G modem into the USB 2.0 port of the router, and it can transfer the 3G/4G signal to Wi-Fi.

NOTE: Due to the high power consumption of 3G/4G modems, you need to use a 5V1A or higher power supply.

After choosing your Region and Service Provider, your carrier settings should be filled automatically. If you find the setting information is incorrect, you will need to input it manually. Generally, most modems work in TTY serial mode. You need to find out the correct device, e.g. using `/dev/ttyUSB2`.

FOR WHAT? For a list of compatible 3G/4G modems, check our docs at www.gl-inet.com/docs

NOTE: Some modems work in Tethering (hostless) mode. Please see below.

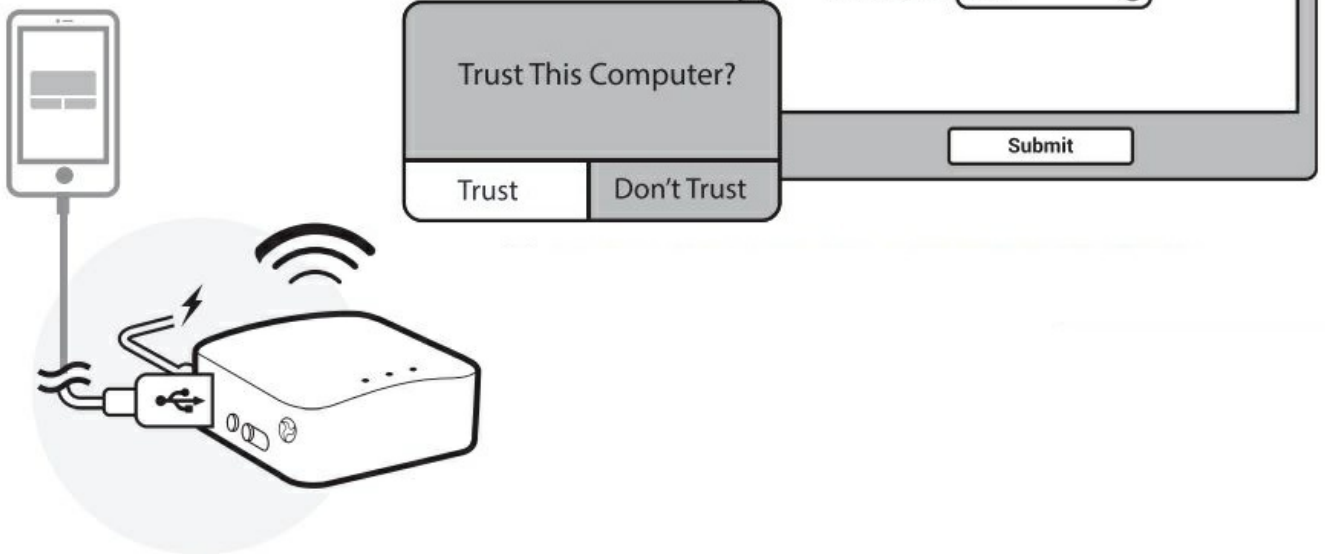


(D Tethering)

- Using the USB cable to share the network from your smartphone or hostess modem to the mini router is called Tethering.
- Plug your phone into the mini router and click Trust to continue when the message pops up on your smartphone. Then turn on your phone's Personal Hotspot. Choose your phone from the device list and submit your choice.

FOR WHAT? A newly-added phone will be named beginning with eth.

D Tethering



OpenVPN Client

This router supports OpenVPN clients. Using OpenVPN will slow down your Internet speed because of data encryption. Click the Open VPN icon and go to the VPN settings page. The first time it will ask you to upload your Open VPN client configuration (OVPN files). Usually, you can download it from your OpenVPN service provider's website or console. Consult your service provider for more details.

1. Upload Open VPN configurations

After uploading the OVPN files, the router will check them. If you are prompted for a username and password, or a private key passphrase, or both, a window for VPN Authentication will pop up so that you can Submit this information for all files you upload.

This may not be necessary for some service providers.



A dialog box titled 'VPN Authentication' with a close button (X) in the top right corner. The text inside says: 'Some of your ovpn files need a username, a password and a passphrase. Please submit yours to authenticate these files.' Below this text are three input fields labeled 'Username', 'Password', and 'Passphrase'. At the bottom is a 'Submit' button.

2. Connect to Open VPN

Now you can choose from a list of configurations and apply your choice to connect as an OpenVPN client. To protect against DNS leaks, you must customize your DNS servers. You can enable Force all clients to

override the DNS server settings for your client devices. To customize your DNS server, go to Internet Settings › Custom DNS

FOR WHAT? To get more detailed instructions or information about compatible VPN service providers, please visit <http://gl-inet.com/docs/>

2 Connect to OpenVPN

Enable OpenVPN connection — Enable ☒

Force all connected clients to use VPN — Force VPN ☒ No Internet VPN is not connected

Change your config file — Config File 06-USA-Denver-2.ovpn

SETTINGS 192.168.x.x DHCP

Internet Status

DNS Settings

DNS Server 1 8.8.8.8

DNS Server 2 8.8.4.4

Using public DNS Servers (e.g. Google's) can prevent leaking your local DNS

Force all clients to use ☒

DIY Guidance

• OpenWrt Firmware

Our firmware is developed based on OpenWrt and you can download all the firmware from our website: www.gl-inet.com/firmware. Find the available firmware from the folder according to your device model, and they are located in different sub-folders:

- v1 folder contains release versions. It should be the default firmware shipped with the router.
- clean folder contains clean versions of OpenWrt firmware, with Luci software only. By default, Wi-Fi is disabled and you need to enable it in Luci.
- tor folder contains Tor firmware for the device.

• DDWRT Firmware

GL-AR150 has official DDWRT firmware which you can download from the DDWRT website. DDWRT firmware is not available for other GL models. For further information, please visit <https://www.dd-wrt.com>

• Tor Firmware

Each model has its own Tor firmware which you need to flash to the router. It is quite easy and you can refer to our online tutorial at www.g/-inet.com/docs/openwrt/tor/

• Compile Your Own Firmware

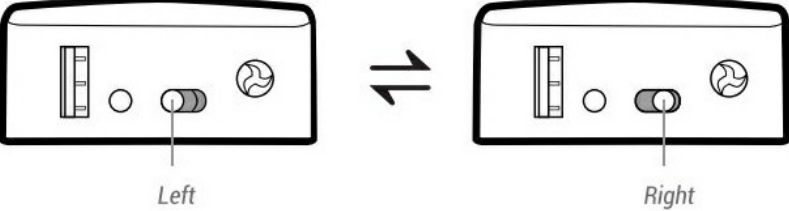
If you have sufficient technical skills, you can compile your own firmware and flash to the router. Please refer to our online docs at github.com/domino-team/openwrt-cc

• Uboot Failsafe

If you flash the wrong firmware, you would brick your router. But you still can recover it by using boot failsafe.
Please refer to the guide at www.gl-inet.com/docs/diy/uboot/

NOTE: Using the above DIY features might have a risk of bricking your router. We have no obligation to provide support, maintenance, upgrades, modifications, or new releases on DIY features. We reserve the right to interpret on above DIY contents without further announcement.

Switch Button

		
Default	No Function	No Function
Mode Switch	Router Mode <i>Router will act as NAT, firewall & DHCP server</i>	Bridge Mode <i>Router will be transparent.</i>
VPN Toggle	On <i>Activate VPN client</i>	Off <i>Deactivate VPN client</i>

NOTE: By default, the switch button has no function. You need to enable the above functions manually on the web interface (Available in our firmware v2.26 +).

Support

Warranty

- Each router has a one-year warranty. Accessories have a three-month warranty. Please use standard USB power adapter, 5V/1A.
- Any damage to the router caused by not following the instructions will render this warranty null and void.
- Any damage to the router caused by modifying the PCB, components, or case will render this warranty null and void.
- Issues caused by the use of third-party firmware may not get official support from us.
- Any damage to the router caused by inappropriate use, e.g. inappropriate voltage input, high temperature, dropping in the water or on the ground will render this warranty null and void.
- Pictures on the instructions are only for reference. We reserve the right to change or modify these materials without further notice.

Technical Supports & General Enquiry

- For more detailed and updated instructions, please visit our website www.gl-inet.com/docs.
- For further questions, you can get help in the following ways:
 1. Send us an email at service@gl-inet.com
 2. Open a ticket at www.gl-inet.com/tickets
 3. Ask in our forum www.gl-inet.com/forums
 4. Ask in other forums e.g. OpenWrt, LEDE, or other professional websites
- Hong Kong Office GL Technologies (Hong Kong) Limited 210D Enterprise Place, 5W Science Park, Hong Kong
- Shenzhen Office 30530(+86-0755-86606126)

www.gl-inet.com

ver. 20170628.1



<https://manual-hub.com/>

FAQ's

Can I use external antennas with the GL-AR300M?

No, the GL-AR300M is the internal antenna version and should not be used with any external antennas.

Can I use the GL-AR300M-Ext without the antennas?

No, the GL-AR300M-Ext is the external antenna version and should always be used with the antennas attached. Failure to do so may damage the internal radio of your router.

Documents / Resources



[GL-INET GL-AR300M Shadow Mini Router](#) [pdf] User Guide

GL-AR300M Shadow Mini Router, GL-AR300M, Shadow Mini Router, Mini Router, Router

References

-  [Overview - GL.iNet Router Docs 3](#)
-  [Manual-Hub.com - Free PDF manuals!](#)
- [User Manual](#)

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