



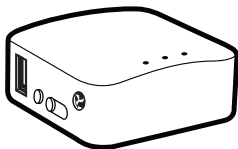
GL·iNet

SHADOW

GL- AR300M Mini Router

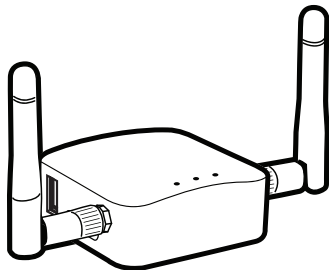
USER GUIDE

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.

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

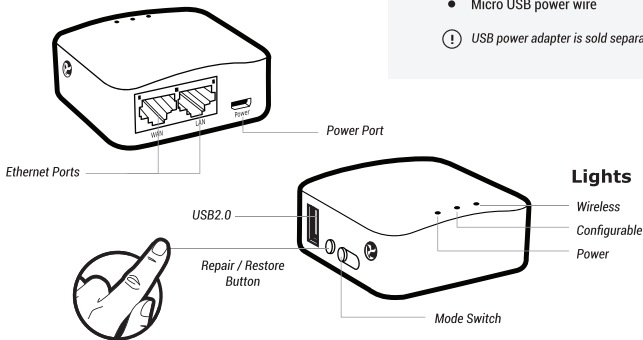
CPU	Atheros 9531, @650MHz
Memory / Storage	DDR2 128MB / Nor 16MB + Nand 128MB
Frequency	2.4GHz
Transmission Rate	300 Mbps
Max Tx Power	20dBm
Protocol	802.11 b/g/n
WAN / LAN	10 / 100 Mbps
Power Input	5V / 1A
Power Consumption	< 2W
Dimension / Weight	58 x 58 x 25 mm / 40g
GPIO Count	2
Working Temperature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

Product Info

Package Contents

- Router
- Instructions
- Micro USB power wire

! USB power adapter is sold separately



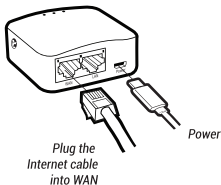
Repair/Restore

- 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

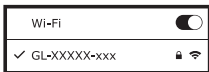
1 Plug in power & Internet cable

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 **goodlife**, and it is also printed on the bottom of the mini router.



Search the SSID and connect to it



Default password is **goodlife**

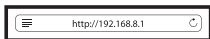
3 Set up the mini router

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

or Connect via LAN



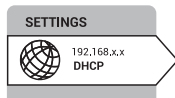
Plug the cable connecting your computer into LAN



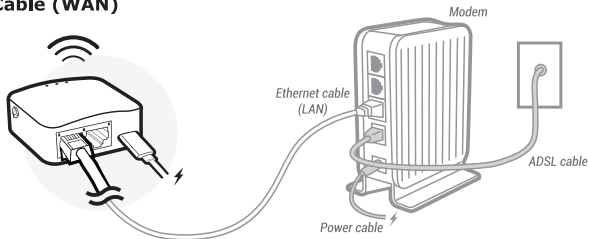
Access the above address using your browser

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)

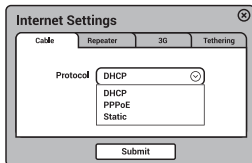


DHCP/Static

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.



B Repeater



Using **Repeater** means connecting your mini router to another existing wireless network, e.g. when you are using Wi-Fi in hotels or other public locations.

Choose **Repeater** mode in your **Internet Settings** and the mini router will automatically search for SSIDs. Choose a SSID and input the Wi-Fi password.

Mode

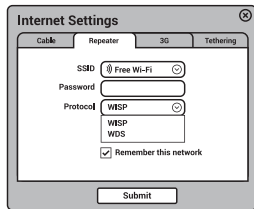
If you want your router to have its own subnet, you need to choose **WISP** mode. If you want to extend your existing network by bridging the mini router and your current router wirelessly, you can use **WDS**.

! *Make sure your existing Wi-Fi network supports WDS. Using 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 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.



C 3G/4G Modem



Plug your 3G/4G modem into the USB2.0 port of the router, and it can transfer the 3G/4G signal to Wi-Fi.

! *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 a list of compatible 3G/4G modems, check our docs at www.gl-inet.com/docs
- ! Some modems work in Tethering (hostless) mode. Please see below:

Internet Settings

Cable Repeater 3G Tethering

Country/Region

Service Provider

Modem Device

Service Type

APN

Dial Number

Pin

Username

Password

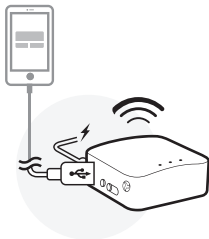
Submit

D Tethering

Using the USB cable to share network from your smartphone or hostless 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 in your smartphone. Then turn on your phone's **Personal Hotspot**. Choose your phone from the device list and submit your choice.

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



Internet Settings

Cable Repeater 3G Tethering

Phone Device

Submit

Trust This Computer?

Trust Don't Trust

OpenVPN Client

This router supports OpenVPN client. Using OpenVPN will slow down your Internet speed because of data encryption.

Click the **OpenVPN** icon and go to the VPN setting page. The first time it will ask you to upload your OpenVPN 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 OpenVPN configurations

Click here to select files or drag and drop them here: .ovpn .zip .tar .gz

VPN Authentication ✕

Some of your ovpn files need a username, a password and a passphrase. Please submit yours to authenticate these files.

Username

Password


Passphrase

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** these information for all files you upload.

This may not be necessary for some service providers.


2 Connect to OpenVPN

Now you can choose from a list of configurations and apply your choice to connect as OpenVPN client.

Enable OpenVPN connection	Enable	<input checked="" type="checkbox"/>
Force all connected clients to use VPN	Force VPN	<input checked="" type="checkbox"/> No Internet VPN is not connected
Change your config file	Config File	06-USA-Denver-2.ovpn 

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**

SETTINGS

 192.168.x.x
DHCP

Internet Status

DNS Settings

DNS Server 1

DNS Server 2

Force all clients to use

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

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

OpenWrt Firmware

Our firmware is developed based on OpenWrt and you can download all the firmwares from our website: www.gl-inet.com/firmware. Find the available firmwares 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 an official DDWRT firmware which you can download from 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.gl-inet.com/docs/openwrt/tor/

Compile Your Own Firmware

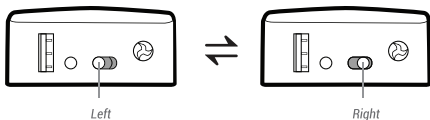
If you have sufficient technical skills, you can compile your own firmware and flash to the router. Please refer to our online docs at github.com/domino-team/openwrt-cc

Uboot Failsafe

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

! *Using 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 rights of interpretation on above DIY contents without further announcement.*

Switch Button



Default

No Function

No Function

Mode Switch

Router Mode
*Router will act as NAT,
firewall & DHCP server*

Bridge Mode
Router will be transparent.

VPN Toggle

On
Activate VPN client

Off
Deactivate VPN client



By default, the switch button has no function.

You need to enable above functions manually on the web interface (Available in our firmware v2.26+).

Warranty

- Each router has **one-year warranty**. Accessories have **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 from 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

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