GL·iNet

WHITE
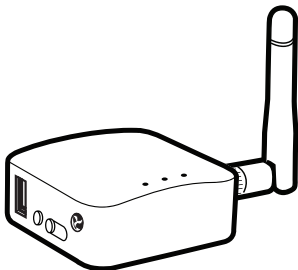### GL- AR150 Mini Router
USER GUIDE
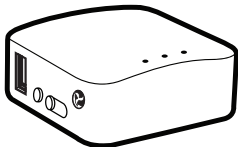
GL-AR150
(Internal Antenna Version)

GL-AR150-Ext
(External Antenna Version)

- Do NOT use without the antenna.

- Attach the antenna before connecting to power supply.

- Always keep the antenna connected.

- Do NOT use any external antennas.

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

CPU	Atheros 9331 CPU, @400MHz
Memory / Storage	DDR2 64MB / FLASH 16MB
Frequency	2.4GHz
Transmission Rate	150Mbps
Max Tx Power	18dBm
Protocol	802.11 b/g/n
WAN / LAN	10 / 100 Mbps
Power Input	5V / 1A
Power Consumption	< 1.5W
Dimension / Weight	58 x 58 x 25 mm / 39g
GPIO Count	4
Working Temperature	0 - 45°C (32 - 113°F)

Product Info

Package Contents

- Router
- Instructions
- Micro USB power wire

(!) *USB power adapter is sold separately*

Power Port

Ethernet Ports

WAN LAN Power

USB2.0

Repair / Restore Button

Mode Switch

Lights

Wireless

Configurable

Power
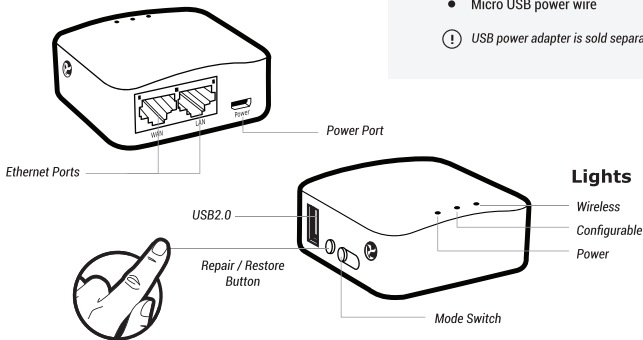
Repair/Restore

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.
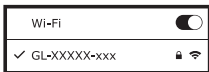
First-time Settings

1 Plug in power & Internet cable

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

Power

*Plug the
Internet cable
into WAN*
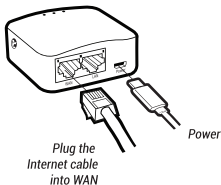
2 Connect via Wi-Fi

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

Wi-Fi	⬤
✓ GL-XXXXX-xxx	🔒 📶

Search the SSID and connect to it

Password	••••••••

*Default password is **goodlife***

or Connect via LAN

*Plug the cable
connecting your computer
into 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.
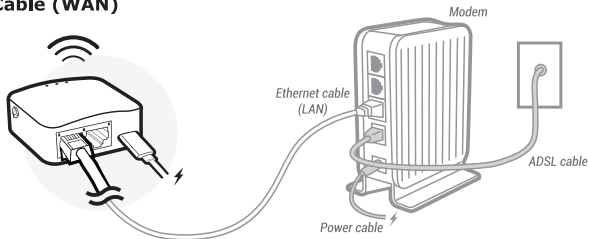
≡ http://192.168.8.1 ↻
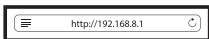
*Access the above address
using your browser*

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**.

SETTINGS

192.168.x.x
DHCP

Ⓐ Cable (WAN)

Modem

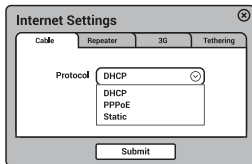Ethernet cable (LAN)

ADSL cable

Power cable
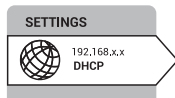
DHCP/Static

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.

Internet Settings

| Cable | Repeater | 3G | Tethering |

Protocol   DHCP

DHCP
PPPoE
Static

Submit

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.
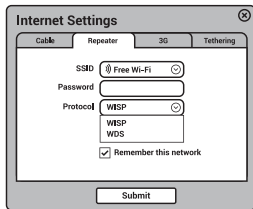
Mode

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 exiting Wi-Fi network supports WDS. Using WDS only if you are knoweledgeable 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.

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 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   USA
Service Provider   Verizon
Modem Device   /dev/ttyUSB2
Service Type   UMTS/GPRS (W-CDMA)
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   ⊗
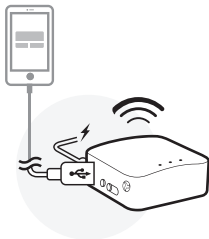
| Cable | Repeater | 3G | Tethering |

Phone Device   eth2

Trust This Computer?

| Trust | Don't Trust |

Submit

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.

VPN
OpenVPN

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 [   ]

Submit

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**	☑
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 ⊙
		Apply

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   [New Connection] [Clone MAC] [Custom DNS]

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 ☑

Apply

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

DIY Guidance

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

Left | Right
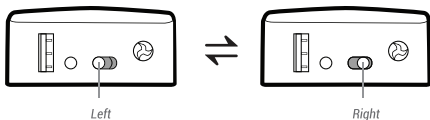
	Left	Right
Default	No Function	No Function
Mode Switch	Router Mode *Router will act as NAT, firewall & DHCP server*	Bridge Mode *Router will be transparent.*
VPN Toggle	On *Activate VPN client*	Off *Deactivate VPN client*

⚠ *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 +).

Support

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**
- **Hong Kong Office**

    GL Technologies (Hong Kong) Limited
    210D Enterprise Place, 5W Science Park, Hong Kong
- **Shenzhen Office**

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http://www.gl-inet.com/docs

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