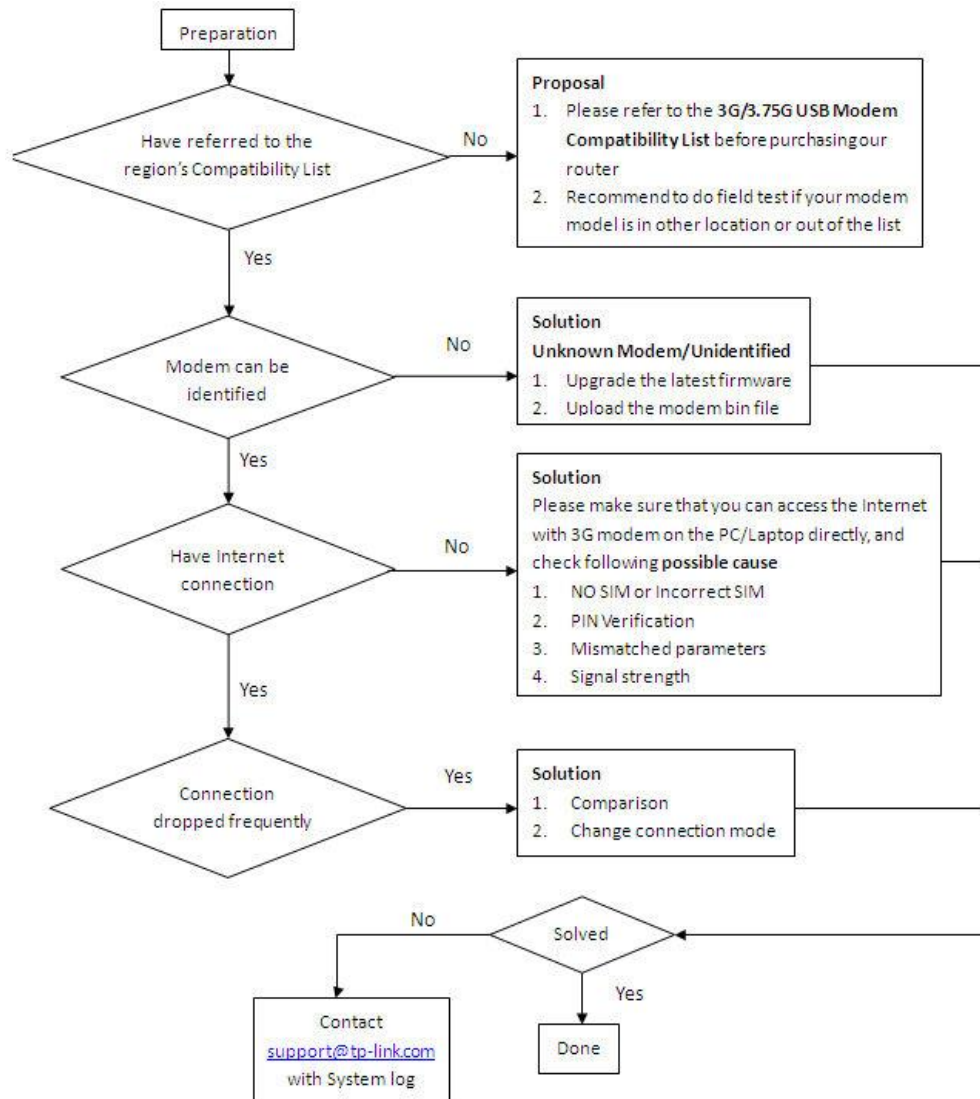
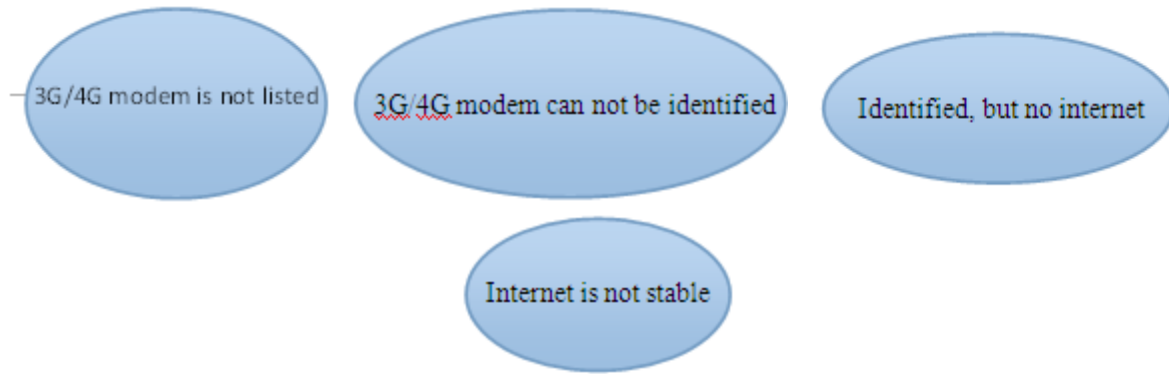


3G/4G Router All-in-One Troubleshooting Guide

For better compatibility, TP-Link keeps testing all the mainstream modems all over the world, and continuously updating the firmware and compatibility list as soon as a new modem get compatible. However, some customers still encounter compatible problem, this document will guide you to do the troubleshooting and resolve it.





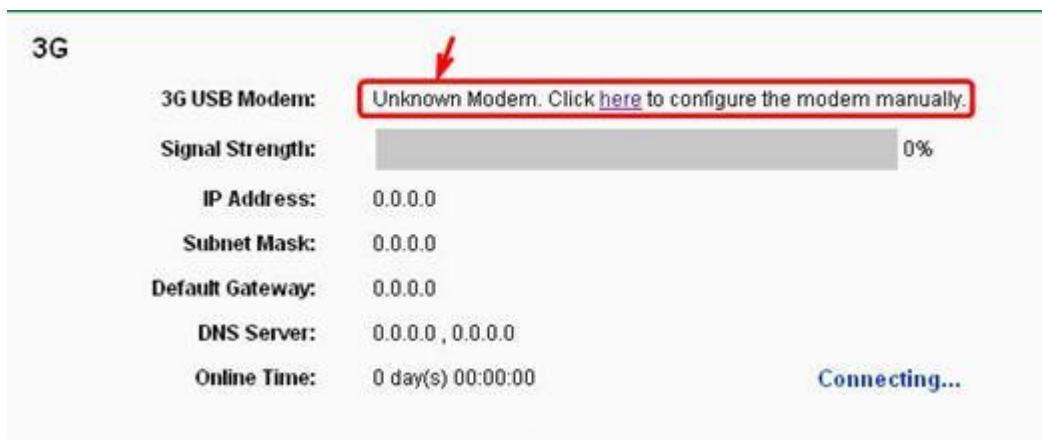
Situation 1: 3G/4G modem/Region/ISP is not listed in the compatibility list of our router.

We recommend our users to check the [3G/3.75G USB Modem Compatibility List](#) before purchasing our 3G router. This list contains the tested modems with corresponded information such as region/ISP. If your country is not in the list, please take “Other Location” option for reference only. **Please note**, due to the firmware upgrading or various parameters changed by some 3G ISPs, there are some 3G modems in the "Other Location" list that may NOT be compatible with our router. So please be careful with the “Other Location” list.

If you have a 3G modem out of the region’s compatibility list, we recommend you to test your 3G modem with our router before purchasing, and we do really appreciate receiving your feedback to [TP-Link Support](#) as it is really valuable information for other customers.

Situation 2: My 3G/4G modem is not identified by the TP-Link router.

Unknown modem



(1)Update Firmware

Please [click here](#) to download the latest firmware and then [upgrade the firmware](#) of your router.

(2)Upload Modem Bin File

When we make a brand new modem compatible with our 3G router without the new firmware released right away, we will upload the **Modem Bin File** to our website at first. Please [click here](#) to go to the **Modem Bin File**page to download it if the bin file for your modem is available.

Then please go to **Network-> 3G-> Modem settings-> Add New** to upload the **Modem Bin File**

QSS

- Network
- Internet Access
- 3G
- WAN
- MAC Clone
- LAN
- Wireless
- DHCP
- Forwarding
- Security
- Parental Control
- Access Control
- Advanced Routing
- Bandwidth Control
- IP & MAC Binding
- Dynamic DNS
- System Tools

MODEM ISP: bigpond Default Use number: 1300 77 7777 APN: wss04.bigpond

Set the Dial Number and APN manually

Dial Number:

APN:

Username: (optional)

Password: (optional)

Disconnected

Connection Mode: Connect on Demand Connect Automatically Connect Manually

Max Idle Time: minutes (0 means remain active at all times)

Authentication Type: Auto PAP CHAP

Notice: The default is Auto, do not change unless necessary.

MTU Size (in bytes): (The default is 1480, do not change unless necessary)

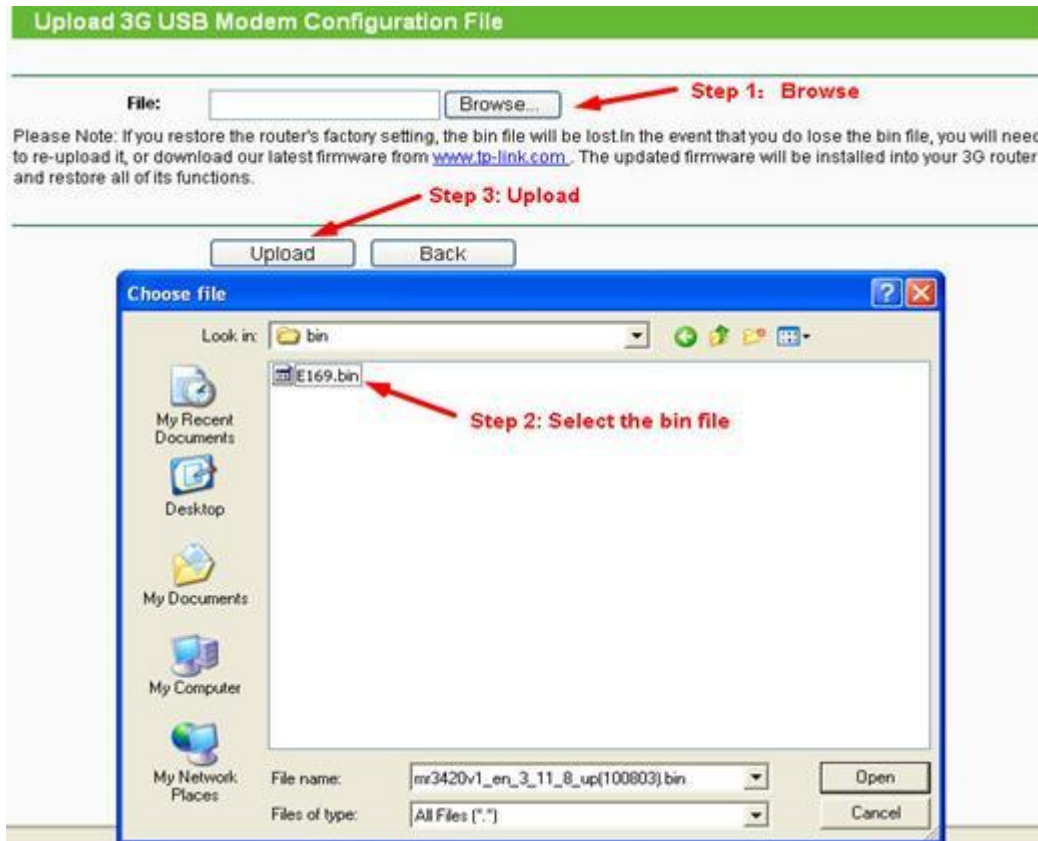
Use the following DNS Servers

Primary DNS:

Secondary DNS: (Optional)

3G USB Modem Settings

ID	Vendor	Model	Delete
<input type="button" value="Add New..."/> <input type="button" value="Delete All"/>			
<input type="button" value="Back"/>			



Finally, please go to **System Tools-> Reboot** and **reboot** your 3G router,.



If the modem still cannot be identified by the 3G router, please plug your modem to the router then restart the router and wait for about 5-10min, next go to **System Tools-> System Log** to save the log of the router and then send the log with some other related information such as the 3G modem model, your country name and ISP to [TP-Link support](#) ..

Index	Time	Type	Level	Log Content
9	1st day 00:00:08	SECURITY	INFO	RTSP ALG enabled
8	1st day 00:00:08	SECURITY	INFO	H323 ALG enabled
7	1st day 00:00:08	SECURITY	INFO	TFTP ALG enabled
6	1st day 00:00:08	SECURITY	INFO	FTP ALG enabled
5	1st day 00:00:08	SECURITY	INFO	IPSEC Passthrough enabled
4	1st day 00:00:08	SECURITY	INFO	L2TP Passthrough enabled
3	1st day 00:00:08	SECURITY	INFO	PPTP Passthrough enabled
2	1st day 00:00:08	DHCP	NOTICE	DHCP server started
1	1st day 00:00:04	OTHER	INFO	System started

Time = 2000-01-01 0:01:19 80s
H-Ver = MR3420 v1 00000000 : S-Ver = 3.12.8 Build 110125 Rel.43954n
L = 192.168.1.1 : M = 255.255.255.0
3G : 3G = 0.0.0.0 : M = 0.0.0.0 : G = 0.0.0.0

Situation 3: 3G/4G modem is identified, but there is no internet access through the TP-Link router. Before sharing the broadband with our 3G router, please make sure you do have Internet access with the 3G modem on PC/Laptop directly.

Now we assume that your 3G modem can be identified successfully by the 3G router, as you can see the following picture. Here we take Huawei EC169 as an example.

3G

3G USB Modem: EC169

Signal Strength: 100%

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0, 0.0.0.0

Online Time: 0 day(s) 00:00:00

Connecting...

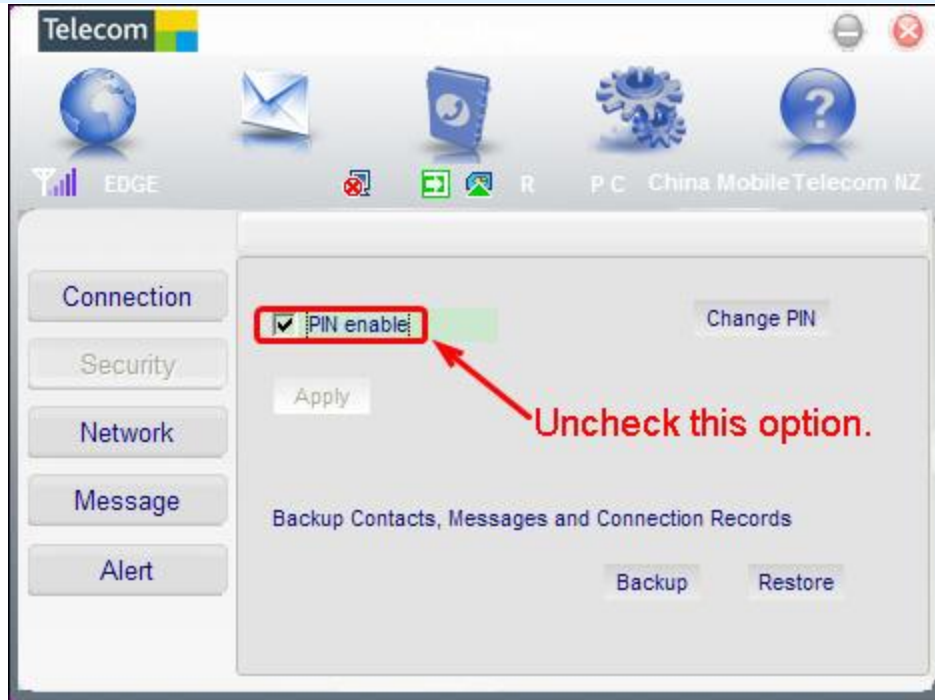
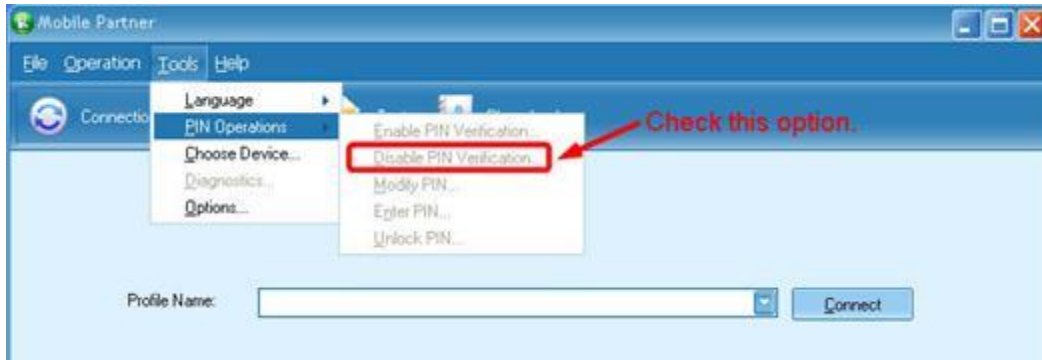
If you cannot have Internet via the 3G router, it may be caused by following issues.

(1) No SIM or incorrect SIM

It is necessary for you to have a suited SIM and 3G modem, and please make sure that you have installed your SIM into the 3G modem correctly.

(2) PIN Verification

Some SIM cards need to validate the PIN number by factory default. If so, please plug the 3G modem into your PC directly, and then disable this function in the bundled 3G modem utility. Here we take two models as example.



(3) Mismatched parameters

When we try to connect to a 3G network, some parameters such as **Dial number**, **APN**, **username** and **password** are required. It is very important for us to know the correct information. If you see the following red-circled words in the **System Tools-> System Log** page, that means you need to **ask your ISP (who provide you the 3G service)** to confirm the above parameters.

16	1st day 00:06:07	3G	NOTICE	USB modem is ready
17	1st day 00:18:18	3G	NOTICE	3G Modem connecting error, please check the dial number and APN.

After you get the correct information from your ISP, please type them into the "**Network-> 3G**" page as the following picture.

3G

3G USB Modem: EC169

If your location or ISP is not listed, or the default Dial number / APN is not the latest one, please enable **Set the Dial Number and APN manually** and fill in the right ones.

Location: China

Mobile ISP: China Telecom

Set the Dial Number and APN manually

Dial Number: #777

APN: internet

Username: user (optional)

Password: ●●●● (optional)

Connect Disconnect Connecting...

(4) Signal strength

If the 3G signal is weak or unstable in your location, there will be a probability to suffer this problem, so it is recommended to compare the performance in a different place.

If you still suffer this problem after following the troubleshooting procedures above, please save the system log ([click here](#) to check how to save it) and feel free to contact with [TP-Link support](#).

Situation 4: Internet is not stable,drops frequently though the TP-Link router.

Please first make sure that your 3G modem has been identified successfully and dialed up to the Internet on the router.

(1) Comparison

If you suffered the problem of dropping Internet frequently, please save the log and send it to us first. Then unplug the 3G modem from the router and plug it directly to PC/Laptop in the same place to test whether there is a similar phenomenon. More tests and comparisons would be better.

If not, please plug the 3G modem back into the router and compare the performance in a different place.

What's more, please also compare the performance between wired connection through Ethernet cable and wireless connection to check whether there are any differences about this issue.

(2) Connection Mode

Please go to **Network-> Internet Access** and select **3G Only** option.

Internet Access

The router provides four Internet access mode for you to choose:

3G Preferred - Use 3G as the primary access, WAN as a backup.

3G Only - Only use 3G as the access to the Internet.

WAN Preferred - Use WAN as the primary access, 3G as a backup.

WAN Only - Only use WAN as the access to the Internet.

Save

Next please go to **Network-> 3G** and select **Connect Manually** of **Connection Mode** option.

- QSS
- Network**
- Internet Access
- 3G**
- WAN
- MAC Clone
- LAN
- Wireless
- DHCP
- Forwarding
- Security
- Parental Control
- Access Control
- Advanced Routing
- Bandwidth Control
- IP-MAC Binding

please enable **Set the Dial Number and APN manually** and fill in the right ones.

Location: Australia

Mobile ISP: Bigpond Default Dial Number: ""99"" APN: "telstra.bigpond"

Set the Dial Number and APN manually

Dial Number: *99**#

APN: telstra.bigpond

Username: (optional)

Password: (optional)

Disconnected

Connection Mode:

- Connect on Demand
- Connect Automatically
- Connect Manually**

Max Idle Time: 15 minutes (0 means remain active at all times)