Quick Installation Guide

for

53R-EXT 300M 3G/Wireless Broadband Router

Conventions

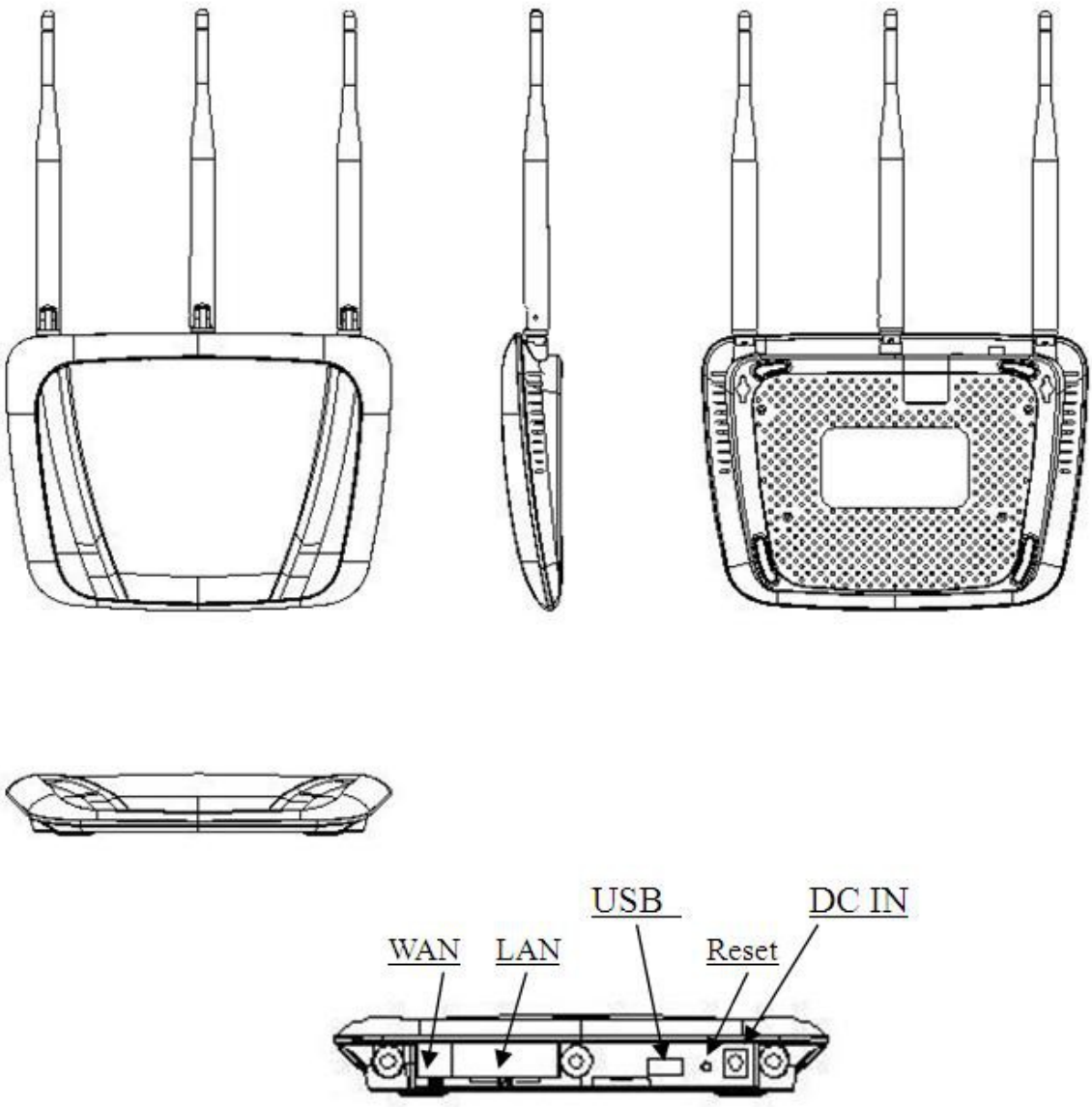
This Installation Guide quickly explains the WebUI-based configuration method for the 53R router. In this guide Windows OS with Internet Explorer is used as an example.

Items list

Please check for the following items in the packing box:

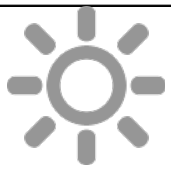
- ✧ 300 Mbps wireless router × 1
- ✧ Power adapter × 1
- ✧ Quick Installation Guide × 1
- ✧ 2 x 2.4GHz WiFi antenna, 1 x 3G antenna

Overview



DC IN	DC input, connecting to a 9V/1A or 12V/1A power adapter
RESET	Reset key. Pressing this key for 5 seconds will restore the router to factory settings.
WAN	RJ45 port for connecting to an internet access device such as ADSL or fibre router. A static or dynamic IP address can be used for this interface.
LAN	LAN port 1-3, connecting to a terminal device with an RJ45 port such as a computer or supplementary switch
USB	USB port, connecting to USB mass storage device

LED indicators

Indicator	Meaning	State	Description
	Power	Always on	System started up and in working state
		Off	Not working
3G /4G	3G or 4G data indication	Always on	Built-in 3G/4G modem is powered on normally.
		Flashing	Built-in 3G/4G modem is receiving or sending data.
		Off	Built-in 3G modem is not started.
	WiFi	Always on	Wireless function is enabled.
		Flashing	Data is being received or sent via WLAN.
		Off	Wireless function is not enabled
	RJ-45	Always on	An Ethernet cable is connected to the LAN port properly.
		Flashing	Data is being received or sent through the RJ-45 port.
	WAN	Always on	WAN port is connected to ethernet equipment properly.
		Flashing	WAN port is receiving or sending data.
	Zigbee	Option not fitted	
	System indication	Start 3G	① Quick flashing (0.5 sec/time): 3G modem starts dialing up. ②Always on: 3G dial-up success ③Off: 3G dial-up network is not established
		Insert USB drive	①Always on: A storage device is successfully loaded. ②Off: A storage device is not loaded.

Installation environment

To ensure proper function of the router please ensure the router is placed away from a direct heat source and where there is adequate ventilation. Also ensure it's not located where it would be subject to damp or dusty conditions.

In the event that the unit or power supply is damaged by lightning or high static discharge then do NOT dismantle the power supply or the router.

Note: please ensure a power supply of the correct voltage and rating is used. Using an incorrect power supply could damage the router and run the risk of fire.

Operating condition

	Temperature	Humidity
Working status:	0-50℃	10-85% (non-condensation)
Store status:	-20-70℃	5-90% (non-condensation)

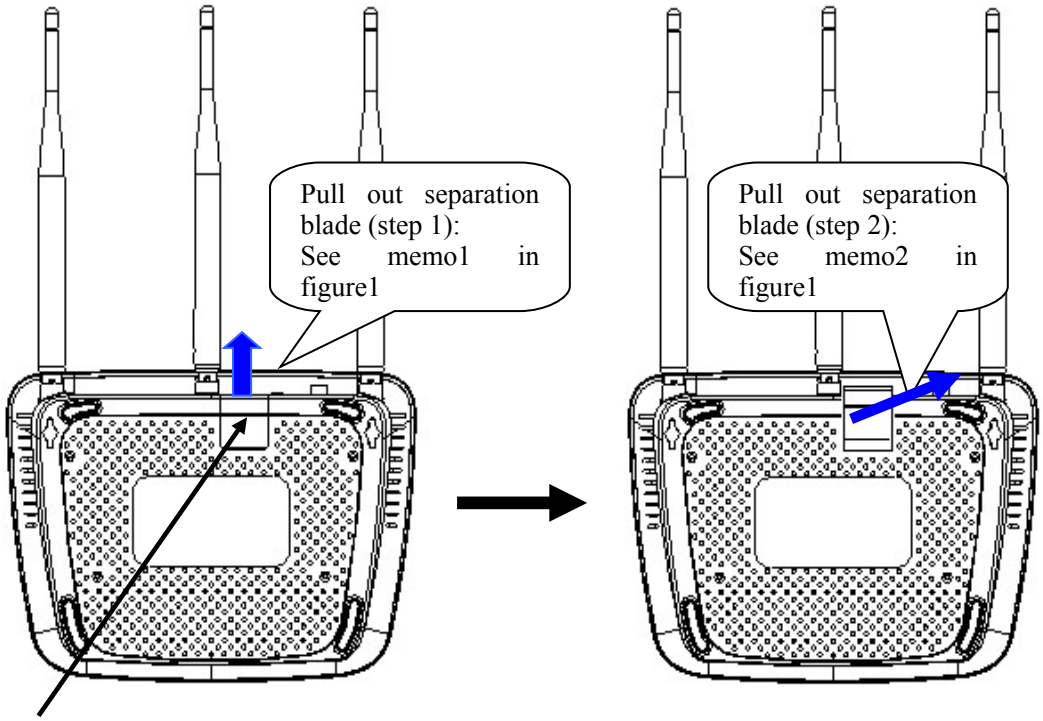
System requirement

- ✧ 3G Internet service to operate as a 3G router
- ✧ Internet router if you want to operate over the WAN port
- ✧ Computer or similar with 2.4GHz WiFi operation if you want to connect to the router over wireless.
- ✧ Windows or iOS or Linux system that supports TCP/IP protocol with a browser such as IE6 or Firefox for setup and configuration

Product installation

1. SIM card slot

Please see the diagrams below for details about how to insert your 3G SIM card:



SIM card clot is located inside this area

1 Slide off the plastic cover to the SIM slot.

2 Pull the metal holder cover back and then lift is up on it's hinge. Insert your SIM. Replace metal cover and plastic door.

(Figure 1)

2. Hardware connection

Connect the power supply to the mains and DC socket on the router. Connect one of the lan ports to your computer or switch. If you plan to use the 53R with an internet router then connect the WAN port to a LAN port on your router. Wait about two to three minutes for the 53R to start up.

Note you can configure the 53R over it's WiFi interface but we recommend that you do this over the lan interface instead.

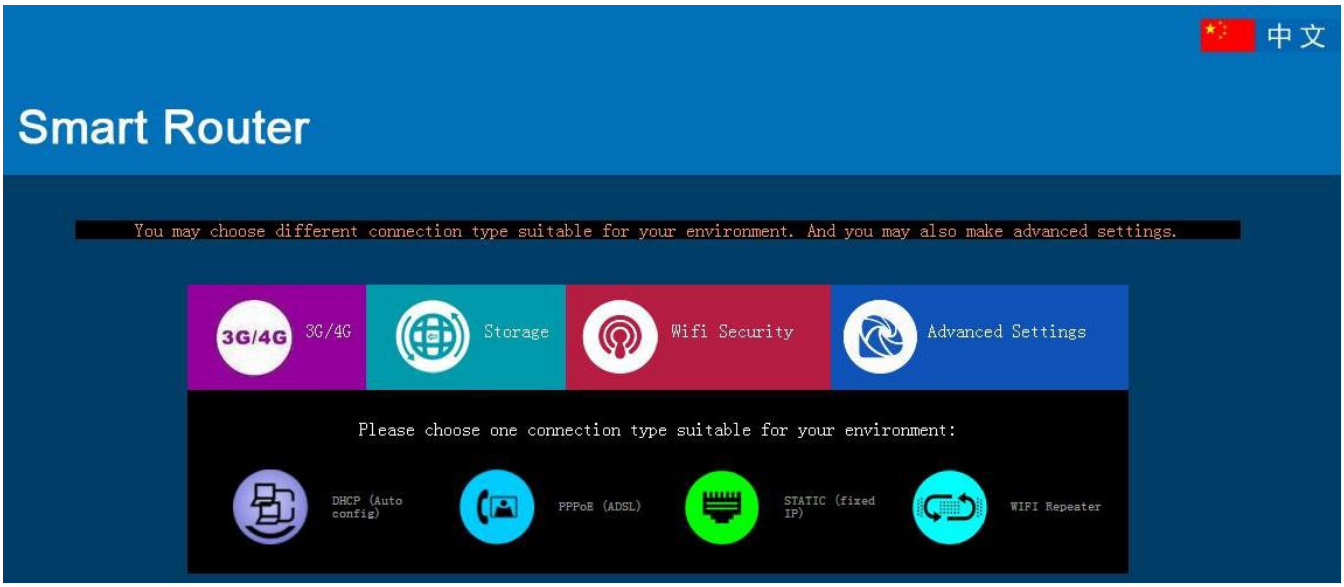
3. Log onto router configuration page

1) Open your browser and enter at address bar: **192.168.169.1**,

2) In the log-in window input the administrator user name: **admin**; password: **admin**; then click "**OK**".

Note the initial administrator user name and password are: **admin.** This can be changed via the system setup if required.

3) After inputting the correct user name and password the router goes into the WEB configuration screen.

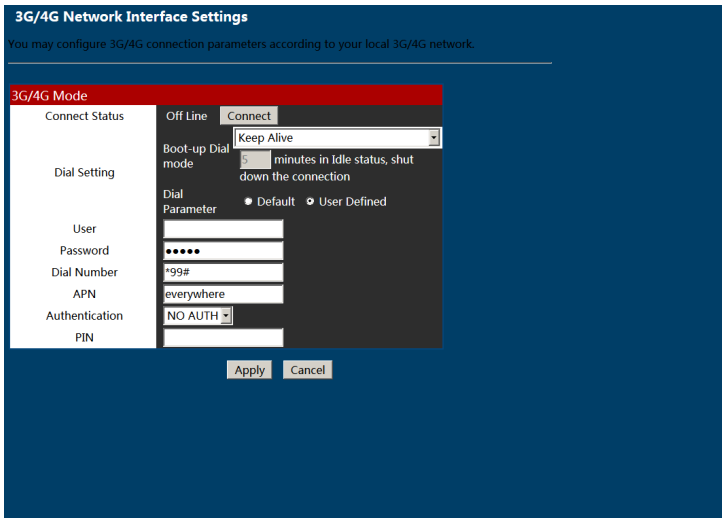


4. Select 3G/4G Connection

Step 1: Ensure SIM card in effect, in normal service;

Step 2: confirm whether 3G dial-up setting of the router meets setting requirement of your local ISP. After you obatain the correct dial-up parameters, Specific operation procedure is as follows:

Click on the “3G" icon on home page to enter 3G dial-up settings.

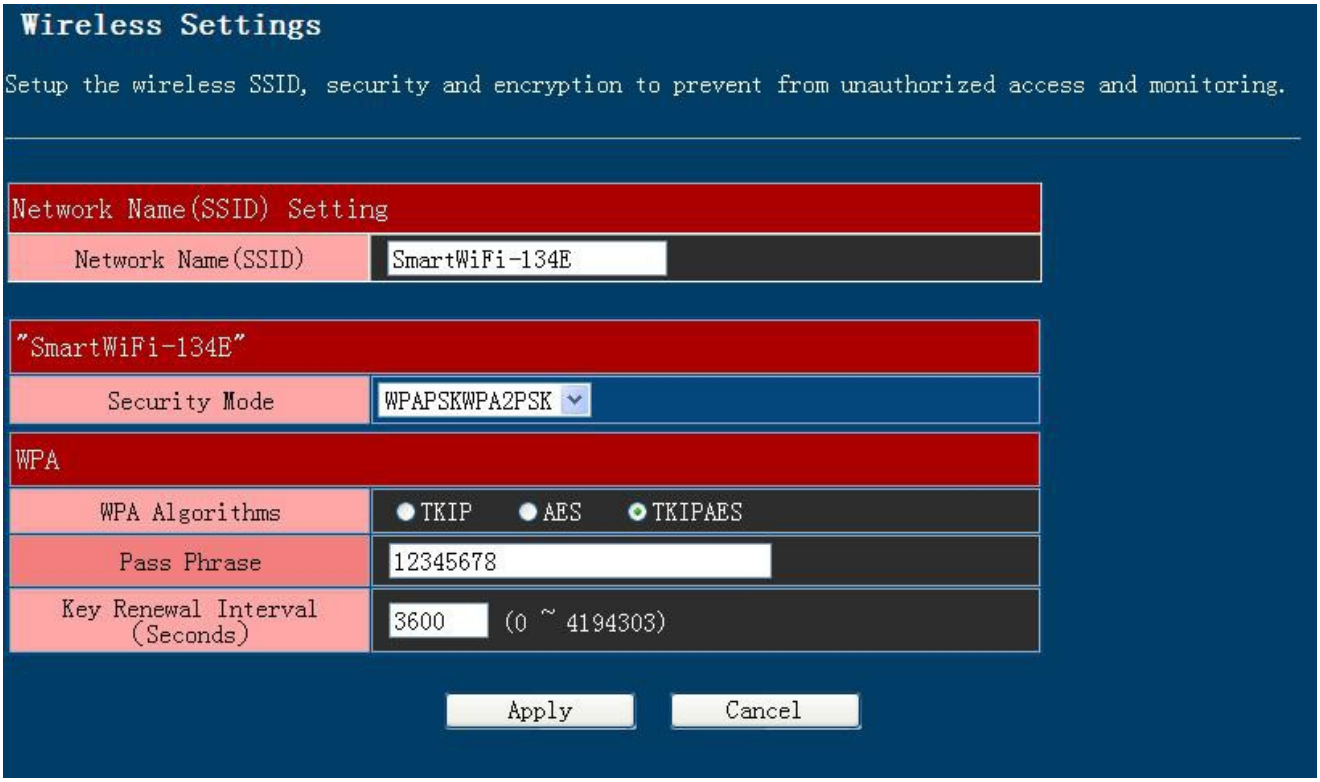


In dial-up setting, select "**User Defined**" then input **users name, password, dial number (always *99# for the UK),** and the **APN parameter** provided by 3G ISP (a list of the common settings is given below), and click Apply. After settings are applied click on Cancel to exit.

Configuration for 3G connection should now work.

5. Wireless network security setting

From the Home page select WiFi Security:



Enter your preferred WiFi options.

If you need more advanced configuration then click on Advanced Settings from the Home page.

APN List

Please note this is not a definitive list and operators often change settings so this should only be used as a starting point. Your provider should be able to give you these details.

Operator	APN	Username	Password	Authentication (if not known then leave as auto or blank)
3	three.co.uk	guest	guest	
AirTel Vodafone	airtel-ci-gprs.com	guest	guest	
Jersey Telecom	pepper	abc	abc	
3 (broadband)	three.co.uk	guest	guest	
O2 (contract) (optimised)	mobile.o2.co.uk	faster	web	
O2 (contract) (non-optimised)	mobile.o2.co.uk	bypass	web	
O2 (pre-pay)	payandgo.o2.co.uk m-bb.o2.co.uk	payandgo o2bb	payandgo password	
O2	mobile.o2.co.uk	o2web	password	PAP
Orange (Pay Monthly)	orangeinternet	orange	multimedia	
Orange (Pay as you go)	orangeinternet	user	pass	
Orange (JustTalk)	orangeinternet	wap	wap	
Orange	everywhere	eesecure	secure	PAP
Vodafone	internet PAYG - pp.vodafone.co.uk	web	web	None
EE	everywhere	blank	blank	PAP
GiffGaff	giffgaff.com	giffgaff	password	
T-Mobile	general.t-mobile.uk	t-mobile	tm	PAP
Virgin	goto.virginmobile.uk	user	blank	PAP

Product Specification

Hardware Configuration	
Interface	1×WAN RJ-45 port,10/100Mbps
	3×LAN RJ-45 port,10/100Mbps
	1×USB type A host
	1×SIM Card slot
Reset Button	Reset router setting to factory default
Power requirements	Power Jack, DC 9V/1A or 12V/1A
Antenna	External 2x5 dbi 2.4G Wifi antenna External 1x3G antenna
LEDs Status	Power、LAN、WAN、WiFi、3G/4G
RF Configuration	
Frequency Band	2.400~2.484GHz
Standard	IEEE802.11b,IEEE802.11g，IEEE802.11n;
	IEEE802.3,IEEE802.3u
Operating Channel	Auto-selection,manually
Security	644/128 bit WEP Encryption
	WPA-PSK,WPA2-PSK(using TKIP or AES)
Available Transmit Power	11b:19±1.0dBm@11Mbps
	11g:19±1.0dBm@54Mbps
	802.11n:15±1.0dBm@HT20-MSC7 @150Mbps
	802.11n:15±1.0dBm@HT40-MSC7 @150Mbps
SOFTWARE FEATURES	
WAN	3G,DHCP client,Static IP,Wifi Repeater
SIP Firewall	MAC/IP/Port Filtering Virtual Server Setting DMZ
	Content Filtering
Management	Web-based UI.remote login,backup/restore setting
ENVIRONMENT&PHYSICAL	
Temperature Range	0 to 40℃-Operating,-20 to 70℃-storage
Humidity(non-condensing)	15%~95% typical
Dimensions	21(L)*7(W)*3.5(H)cm
Weight	290kg