



NTC-790 NTC-990 HSPA Cellular Routers Quick Start Guide

Thank you for choosing the NTC Series Router from NetComm. This guide will cover the NTC-790 and NTC-990 (collectively referred to in this document as the NTC series). This guide will provide a series of step by step instructions to ensure the configuration of your router goes as smooth as possible.

Firstly please check off that you have received all the items in your package.

No.	Description
1	NTC Series Cellular Router
1	Cross over Ethernet cable
1	Plug in Power Supplies

Antennas

No.	Description
2	NTC-790 Black Right Angle Antennas (850MHz use) only Or Gray Right Angle Antennas if intended use is on (2100/1900MHz)
2	NTC-990 Black Right Angle Antennas (900MHz use) only Or Gray Right Angle Antennas if intended use is on (2100/1900MHz)

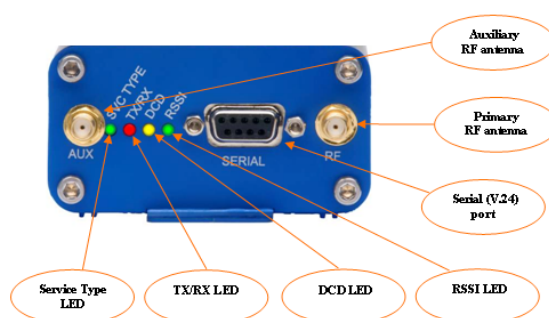


Figure-1 overview of the NTC series router front panel

Service Type – Indicates the network you are on

LED	Description
solid	3G
blink	EDGE
off	2G

Field	Description
TX/RX	Indicates the sending and receiving of data through the router
DCD	led on Indicates routers connection to the network
RSSI – indicates network signal strength	solid = Strong
	blink = Medium
	off = Poor

Serial port

used for configuration alternative to the html page. Or serial based data transfer

RF Port for connection of antenna (SMA connection)

- Black antenna for use on 850/900MHz networks
- Gray antenna for use on 2100/1900Mhz networks

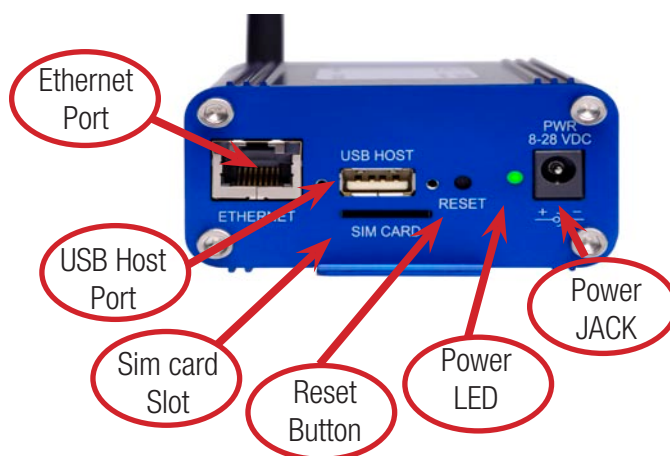


Figure-2 overview of the NTC series router back panel

Field	Description
Ethernet Port	For direct connection to your device or number of devices through a hub or network router.
USB Host Port	For connection to external devices such as a memory stick or a GPS tracking device.
Sim Card Slot	For your chosen carriers supplied USIM required to activate a connection on to your chosen cellular network.
Reset Button	used to give the Router a full reboot
Power LED	On indicates the Router has powered up
Power Jack	Plug the power supply in here

Step One: Computer Preparation

The NTC Cellular is configured using a web browser, In order for your PC to be able to connect to the device configure your PC to obtain an IP address automatically from the NTC series device using DHCP.

Windows XP users may use the following procedure.

- Follow the path Start -> Control Panel -> Network Connections. Right click Local Area Connection and select Properties to open the configuration dialogue box of Local Area Connection as per Figure-3.

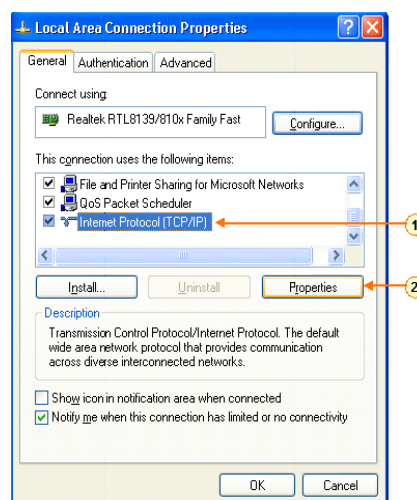


Figure-3: Configuration Window of Local Area Connection

- Find and click Internet Protocol (TCP/IP) from the protocol list box and then click the Properties button (as per Figure-2). The TCP/IP configuration window will pop up as per Figure-3.
- Under General tab, select radio button Obtain an IP address automatically and Obtain DNS server address automatically (See Figure-4). Then press OK button to close TCP/IP configuration window.
- Press the Close button to complete the computer preparation for NTCseries device.

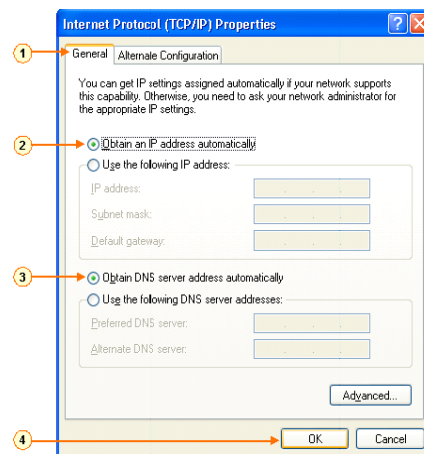
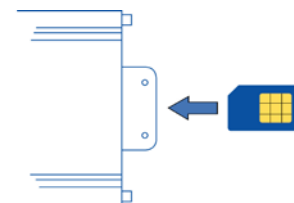


Figure-4: Configuration Window of TCP/IP

Step Two: Inserting SIM card

Inserting the SIM card

First make sure the SIM card is inserted correctly. You insert the SIM with gold side up and in the direction as shown below:



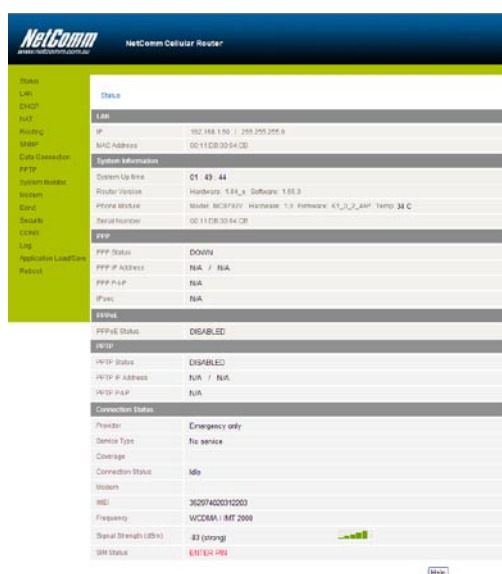
Step Three: Physical Connection

- Install the supplied antenna to the NTC Series Router. This needs to be screwed to the RF/AUX Antenna connector(s).
- Connect the NTC Series Router to your apparatus with the supplied Ethernet Cable. One end of the cable is plugged in to the NTC Series Router's Ethernet Port; the other end is plugged in to the network port of your Ethernet device.
- Connect the input of Power Adapter to the mains and plug its output to the Power Jack of NTC Series Router. The Power LED on the panel should be illuminated.
- Wait for a while until Service LED (SVC TYPE) and RSSI LED turn solid green indicating that the NTC Series Router has booted up successfully.

To get connected to the NTC's configuration pages, open a web browser to the NTC's default IP address of 192.168.1.50

On connection you will be asked to supply a User Name: admin and Password: password.

If this is the first time you have used this SIM card chances are that the SIM will be locked if this is the case it will be indicated by the SIM Status showing ENTER PIN on the Status page



(Figure-5) you will need to unlock it with a PIN number supplied with the SIM card by your chosen carrier.

Figure-5: Status page showing ENTER PIN

If the SIM Status is ENTER PIN then do the following:

- Click on the Security Link tab on the left (Figure-6)

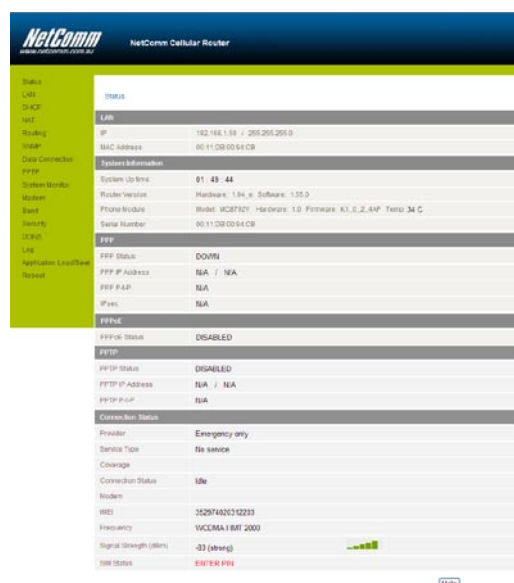


Figure-6: Status page Security Link tab location

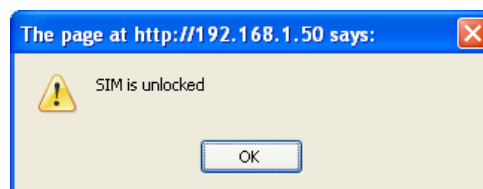
- On security page enter PIN code and confirm the PIN code. Then hit Save (Figure-7).

PIN Settings

SIM Status	ENTER PIN
PIN	****
Confirm PIN	****
Remember PIN	<input checked="" type="radio"/> Yes <input type="radio"/> No
Disable PIN	<input type="radio"/> Yes <input checked="" type="radio"/> No

Figure-7: Security page PIN settings

- Once the SIM has been unlocked you will see a pop up confirming this.



- Now Click on the Status Button and the Status page should look as below with SIM Status OK (Figure-8).

NetComm NetComm Cellular Router

www.netcomm.com.au

Status

LAN	192.168.1.50 / 255.255.255.0
WAN	00:11:DB:00:94:CB
Routing	
SNMP	
Data Connection	
PPPoE	
System Monitor	System Up time: 01:49:44
Modem	Router Version: Hardware: 1.04_s Software: 1.55.0
Band	Phone Module: Model: MCB792V Hardware: 1.0 Firmware: K1_0_2_4AP Temp: 34 C
Security	Serial Number: 00:11:DB:00:94:CB
DDNS	
Log	
Application Load/Save	
Reboot	

PPP

PPP Status	DOWN
PPP IP Address	N/A / N/A
PPP P.A.P	N/A
P.A.P	N/A

PPPoE

PPPoE Status	DISABLED
--------------	----------

PPPoP

PPPoP Status	DISABLED
PPPoP IP Address	N/A / N/A
PPPoP P.A.P	N/A

Connection Status

Provider	UMTS HSDPA Service
Service Type	HSDPA
Coverage	Idle
Connection Status	Idle
Modem	
IMEI	352974020312203
Frequency	WCDMA / RMT 2000
Signal Strength (dBm)	-76 (strong)
SIM Status	OK

[Help]

Figure-8: Status page for SIM Status OK.

Step Five: Network Connection

- Click on the Status button and the status page of NTC Series Router Setup will now be displayed as per Figure-9. The PPP status on the page should be DISABLED because your new device is not enabled (see the area pointed by the red arrow). Click the Data Connection item on the left panel of the screen to activate the Data Connection page:

Status	Status
LAN	LAN
DHCP	IP 192.168.1.50 / 255.255.255.0
NAT	MAC Address 00:11:DB:00:94:1B
Routing	System Information
SNMP	System Up time 00 : 48 : 01
Data Connection	Router Version Hardware: 1.04_e Software: 1.55.0
PPP	Phone Module Model: MC8790 Hardware: 1.0 Firmware: K1_0_2_1AP Temp: 41 C
System Monitor	Serial Number 00:11:DB:00:94:1B
Modem	PPP
Band	PPP Status DISABLED
Security	PPP IP Address N/A / N/A
DDNS	PPP P-I-P N/A
Log	IPsec N/A
Application Load/Save	
Reboot	

Figure-9: Status page for Data Connection down

- Figure-10 shows the major area of the Data Connection page. In PPP Profile Connect field, the Auto Connect option is currently Disabled - to make the NTC Series Router operational you must enable it.
- Select a profile number in the PPP User Configurable Profile Setting section and make sure that the APN field is set appropriately. If it is not set then key in the APN and hit the Modify Entry Button. The username and password is required if this is a VPN profile.
- Select the preferred profile from the PPP User Configurable Profile Setting section and select its Item number in the dropdown list of Profile to connect to.
- Finally, press the Save button and wait until DCD LED becomes solid amber indicating that connection to the network is successful. From now on, Auto

Connect will keep Enabled status unless you come back to this page and disable it. Then click the radio button Enable to activate Auto Connect.

The screenshot shows two main configuration sections. The first section, 'PPP PROFILE CONNECT', includes options for 'Auto Connect' (radio buttons for Enable/Disable), 'Authentication Type' (radio buttons for CHAP/PAP), 'PPP verbose logging' (radio buttons for Enable/Disable), 'Reconnect Delay' (a numeric field set to 30), 'Reconnect Retries' (a numeric field set to 0), and 'Profile to connect to' (a dropdown menu set to 1). A 'SAVE' button is at the bottom. The second section, 'PPP USER CONFIGURABLE PROFILE SETTING', includes fields for 'Profile Number' (dropdown set to 1), 'Dial Number' (text field with 'at*99#'), 'APN Name', 'User', 'Password', 'Remote Host' (text field with '0.0.0.0'), 'Port' (text field with '0'), 'Local Encoding' (radio buttons for Enable/Disable), 'PAP Mode' (dropdown menu set to tcp), and 'PAP Auto Answer' (radio buttons for Enable/Disable). A 'MODIFY ENTRY' button is at the bottom. Below these sections is a table with 9 columns: Item, Num, APN, User, Rem Host, Rem Port, Loc Enc, Mode, and Ans. It contains 4 rows of data, all with 'at*99#' in the APN column and '0.0.0.0' in the Rem Host column.

Figure-10: Data Connection screen

- To confirm the connection, press the Status button near the left top corner of the web page - you should see an updated Status page as per Figure-11. Please pay close attention to PPP field on the page (shown by the red arrow). PPP Status should be UP. PPP IP Address shows the current IP address that the network has allocated for the NTC Series Router device. Other information is also shown there;

PPP	
PPP Status	UP
PPP IP Address	10.237.75.46 / 255.255.255.255
PPP P-I-P	10.64.64.64
IPsec	N/A
PPPoE	
PPPoE Status	DISABLED
PPTP	
PPTP Status	DISABLED
PPTP IP Address	N/A / N/A
PPTP P-I-P	N/A
CONNECTION STATUS	
Provider	
Service Type	UMTS HSPA Service
Coverage	HSPA
Connection Status	Active
Modem	
IMEI	354219010085635
Frequency	WCDMA I MT 2000
Signal Strength (dBm)	-80 (strong)
SIM Status	OK

Figure-11: Status page for Data Connection up

Congratulations - your new NTC Series Router is now ready to use! Enjoy your wireless web surf with this fantastic device.

For more detailed information on The configuration and activation of other features of the NTC Series Router, please visit our website www.netcomm.com.au and download the document titled:

NTC-790NCT-990CellularRouterUsersManualv1-55.pdf

For further assistance in trouble shooting please contact your accredited vender where the NTC Series Router was purchased from.

Product Warranty

NetComm products have a standard 12 months warranty from date of purchase. However some products have an extended warranty option, via registering your product online at the NetComm website www.netcomm.com.au.

Technical Support

If you have any technical difficulties with your product, please refer to the support section of our website.

www.netcomm.com.au/support

Note: NetComm Technical Support for this product only covers the basic installation and features outlined in the Quick Start Guide. For further information regarding the advanced features of this product, please refer to the configuring sections in the User Guide or contact a Network Specialist.