

NTC-140 SERIES

QUICK START GUIDE

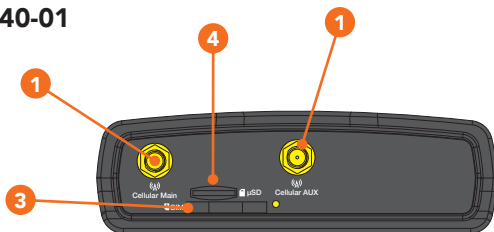


4G M2M Router

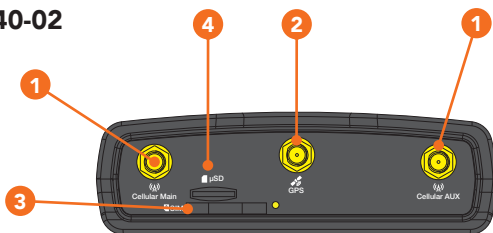
LANTRONIX

Device overview

NTC-140-01



NTC-140-02









ITEM		DESCRIPTION
1	3G/4G antenna connectors	SMA female connector for 3G/4G antennas.
2	GPS antenna connector	SMA female connector for GPS antenna.
3	SIM card slot	Insert SIM card here.
4	MicroSD card slot	Insert a MicroSD card here to provide additional storage (Optional).

Quick start guide

This quick start guide is designed to get you up and running quickly with your new NTC-140 Series router. More advanced set up instructions are provided in the User Guide available at <https://www.lantronix.com/products/ntc-140-series/>.

Package contents

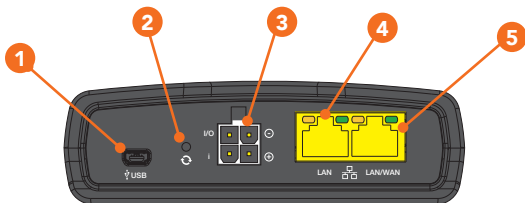
All NTC-140 Series packages include:

-  1 x NetComm NTC-140 router
-  2 x 3G/4G antennas
-  1 x 1.5m Black Ethernet cable
-  1 x DIN rail mounting bracket
-  1 x Welcome card
-  1 x Power supply cable with fitted Molex connector

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4G M2M Router

NTC-140-01 / NTC-140-02



ITEM		DESCRIPTION
1	Mini USB 2.0 OTG port	Provides connectivity for optional external storage or a USB Ethernet dongle. Supplies up to 0.5A to connected device.
2	Reset button	<p>Press and hold for less than 5 seconds to reboot to normal mode. The LEDs are green and extinguish in sequence to indicate that the router will reboot normally if the button is released during this period.</p> <p>Press and hold for 5 to 15 seconds to reboot to recovery mode. The LEDs are amber and extinguish in sequence to indicate that the router will reboot to recovery mode if the button is released during this period.</p> <p>Press and hold for 15 to 20 seconds to reset the router to factory default settings. The LEDs are red and extinguish in sequence to indicate that the router will reset to factory default settings if the button is released during this period.</p>
3	Molex Mini-Fit™ receptacle	<p>Connect the provided power supply here. The Molex receptacle provides:</p> <ul style="list-style-type: none">• Ground (-)• Power (+)• /O terminal• (i) ignition input detection terminal.
4	LAN port	LAN port for wired Ethernet clients.
5	LAN/WAN port	LAN or WAN port for wired Ethernet clients or to bridge another network connection.

Overview of LED indicators

LED ICON	NAME	COLOR	STATE	DESCRIPTION
	Power		Off	Power off
			Double flash	Powering up
			On	Power on
			On	Power on in recovery mode
			Slow flashing	Hardware error, such as SIM not inserted.
	GPS'/ Customisable LED		Off	GPS function disabled
			Slow flashing	GPS function is enabled but no satellite detected
			On	Satellite detected, location acquired
	Network		Off	Radio Off
			On	Connected via WWAN
			Blinking2	Traffic via WWAN
			Slow flashing	Connecting PDP
			On	Registered on Network
			Slow flashing	Registering network
			Slow flashing	SIM PIN locked
			Fast flashing	SIM PUK locked
			On	Can't connect
	Signal strength		On	LTE signal
			On	WCDMA signal
			On	GSM signal

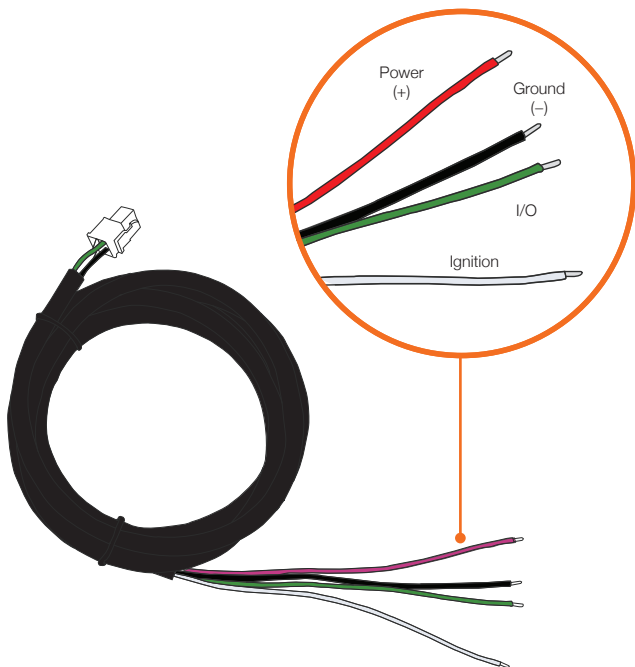
1 GPS is only available on the NTC-140-02

2 The term "blinking" means that the LED may pulse, with the intervals that the LED is on and off not being equal. The term "flashing" means that the LED turns on and off at equal intervals.

Power supply cable

The included power supply cable has colour-coded breakout wires which can be terminated to provide power, ignition detection and input/output functionality.

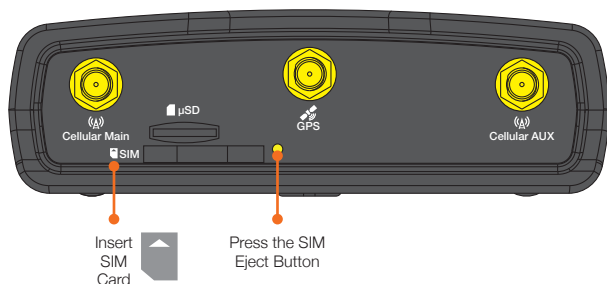
The picture below outlines the polarity and functions of the wires.



Installing your device

Step 1: Insert the SIM card

Using a paper clip, press the SIM Eject button to eject the SIM card tray. Place the SIM card in the tray and then insert the loaded tray into the SIM slot with the gold side facing up, as shown below.

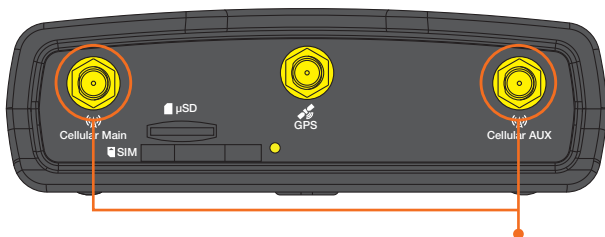


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4G M2M Router

Step 2: Attach the antennas

The NTC-140 router is shipped with caps on the LTE and GPS* antenna sockets. To attach the supplied antennas, first remove the antenna socket caps from the Main and Auxiliary antenna sockets by turning them in an anti-clockwise direction, then screw the antennas onto the sockets by turning them in a clockwise direction. Please refer to the [Device overview](#) section for the antenna socket layout. If you have purchased a GPS antenna, remove the socket cap from the GPS antenna socket and attach the antenna to the socket in the same manner.



*GPS is only available on the NTC-140-02

Remove caps
then screw
antennas on

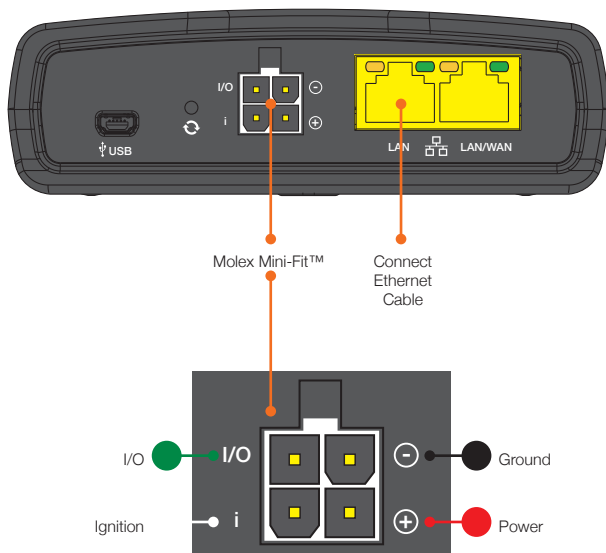
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4G M2M Router

Step 3: Connect the power and Ethernet cables

Connect the included power supply cable to the Molex Mini-Fit™ receptacle and then connect the green and white breakout wires to the ignition and I/O connections as required. Connect the Power (red) and the Ground (black) wires to your power source. The power LED on the router lights up when a power source is connected.

Attach the supplied Black Ethernet cable to the LAN Ethernet port on your router and the other end to your computer.



Step 4: Access the router's web interface

In your web browser's address bar enter **http://192.168.1.1/** or **http://my.router/**. The login page is displayed.

There are two system management accounts (Root Manager and Admin) with different management capabilities.

Root Manager account

Grants full privileges such as firmware upgrades, device configuration, backup and restore, and reset to factory default settings. To access the Root Manager account, use these login details.

http://192.168.1.1 or http://my.router	
Username	root
Password	admin

Admin account

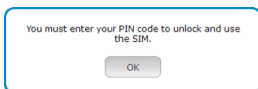
Allows updates to general settings. To access the Admin account, use these login details.

http://192.168.1.1 or http://my.router	
Username	admin
Password	admin

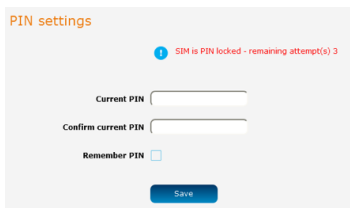
Enter the username and password for the admin or root manager account and click **Log in**. The Status page is displayed.

Step 5: Unlock the SIM card

If the inserted SIM card is PIN locked, a pop-up window is displayed informing you that you must unlock the SIM before use.



Click the **OK** button. The SIM Security page is displayed.

The "PIN settings" page has a light gray background. At the top left, the title "PIN settings" is in orange. To its right is a red error message: "SIM is PIN locked - remaining attempt(s) 3", preceded by a small red circle with a white exclamation mark. Below this, there are two input fields: "Current PIN" and "Confirm current PIN", each with a white text box and a small gray arrow on the right. Under the "Confirm current PIN" field is a "Remember PIN" label followed by an unchecked checkbox. At the bottom center is a blue "Save" button with white text.


In the **Current PIN** field, enter the SIM PIN and then enter it again in the **Confirm current PIN** field. If you do not want to enter the PIN code each time the SIM is inserted, select the **Remember PIN** option. Click the **Save** button. After a moment, the router displays "Success! The SIM unlock was successful".

Step 6: Connect to the Internet

If the SIM Status is OK, the NTC-140 Series router automatically attempts to connect to the Internet by detecting the correct APN and connection details.

If automatic configuration was unsuccessful, you must manually enter the connection details.

To manually configure the connection profile:

1. From the top menu bar, select the **Networking** option.
2. Next to Profile1, click the  button. The Data connection profile settings screen is displayed.
3. Ensure that the **Automatic APN selection** toggle key is set to the OFF position.
4. In the APN field, enter the APN name that your carrier requires for mobile broadband connection. If required, enter the Username and Password in the Username and Password fields. Click the Save button.

Automatic APN selection ☐ ON ☒ OFF

The connection profile is now configured.

Verifying the connection status

Click on the **Status** menu item from the top menu bar. The Status page is displayed. The mobile broadband connection is established successfully if the Status field in the **WWAN connection status** section displays **Connected**.

^ WWAN connection status

Profile name
Profile1

Status
Connected

Default profile
Yes

WWAN IP
10.100.108.132

DNS server
10.4.81.103
10.4.102.20

APN
xxxxxxxxxx

Connection uptime
00:11:27

Show data use

Step 7: Mount the router

Mount your router in a suitable location using the options listed in the [Mounting options](#) section.

When selecting a location to mount the NTC-140 router, keep in mind that it features high performance antennas designed to provide optimum signal strength in a wide range of environments. You can check the signal strength by observing the colour and number of LEDs illuminated on the front of the device. For a precise reading of the signal strength, refer to the Status page on the web user interface. If you find the signal strength is weak, try moving the router to a different place, mounting it differently or changing the orientation of the antennas.

The signal strength LEDs update within a few seconds with a rolling average signal strength reading. When selecting a location for the router, please allow up to 20 seconds for the signal strength LEDs to update before repositioning.

Congratulations - your NTC-140 router is now ready to use!

Mounting your device

Depending on your individual setup, you may need certain components to mount your device correctly, such as additional fasteners and screwdrivers for specific wall or rail mounting.

Mounting options

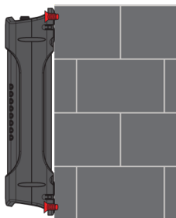
The NetComm Wireless NTC-140 Series router can be installed quickly and easily in a variety of locations.

MOUNT TYPE	DESCRIPTION	BENEFITS
Wall mount	Flat against the wall	Slimline form factor, close to wall
Wall mount via DIN rail mounting bracket	DIN Rail mounting bracket is secured to the wall and the router is attached to the mounting bracket.	Easy to remove
DIN rail mount	DIN Rail mounting bracket is slid or snapped on to the DIN Rail and the router is attached to the mounting bracket.	Simplicity, easy to remove.
Pole mount via DIN rail mounting bracket	DIN Rail mounting bracket is secured to a pole or other fixed object using cable ties and the router is attached to the mounting bracket.	Easy to remove, flexibility of orientation, variety of objects to which the router may be mounted.
Desk mount	Stand on a desk	Simplicity, versatility

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4G M2M Router

Wall mount

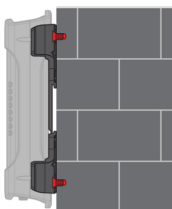


DIN Rail mounting bracket

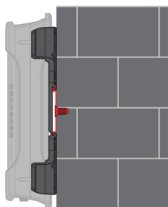
V Bend allows you to snap the DIN bracket onto the middle of a DIN rail rather than sliding it onto the end.



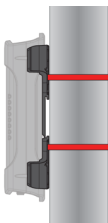
Wall Mounted via DIN Rail Bracket



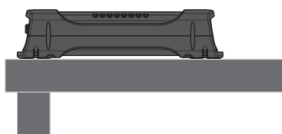
DIN Rail mount



Pole mount using DIN Rail bracket



Desk mount



Configuring multiple devices

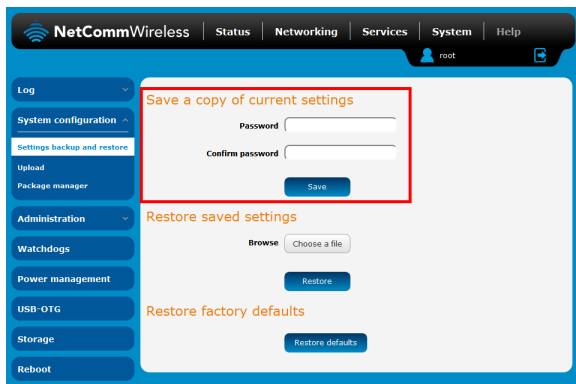
To apply your advanced configuration settings to more than one NTC-140 Series router, follow these simple steps.

Step 1

Back up your router's configuration

Log in to the web configuration interface, click on the **System** menu, select **System configuration** and click on **Settings backup and restore**.

If you want to password protect your backup configuration files, enter your password in the fields under **Save a copy of current settings** and click on **Save**. If you don't want to password protect your files, just click on **Save**. The router will then prompt you to select a location to save the settings file.



Step 2

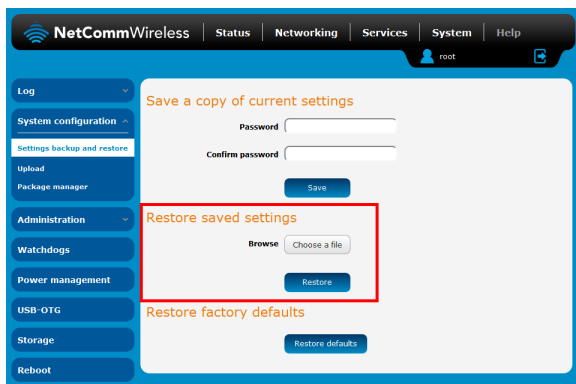
Restore your backup configuration

In the web configuration interface click on the **System** menu, select **System configuration** and click on **Settings backup and restore**.

From the **Restore saved settings** section, click on **Choose a file** and select the backup configuration file on your computer.

Click **Restore** to copy the settings to the new NTC-140 Series router. The router will apply these settings and inform you it will reboot - click on **OK**.

Tip: Don't change the file extension of the backup file as this may cause it to corrupt.



Safety and product care

For safety and product care information, please see the User Guide available at <https://www.lantronix.com/products/ntc-140-series/>.

Trademark Notice

This product may reference NetComm. On December 26th, 2024, Lantronix, Inc. acquired the Industrial Internet of Things (IIoT) portfolio from NetComm Pty Ltd and is authorized to use the NetComm trademark in association with this product.

US

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