

The BT-6600 series modems are rugged wireless modems built to provide simple and reliable communication over Alltel's CDMA EVDO Rev A wireless data network.

This guide covers initial activation and configuration of the following models:



BT-6600



BT-6601 &  
BT-601EB



BT-6621

**FEATURES**

- CDMA EVDO Rev.A, 1XRTT, and IS95
- Diversity antenna
- EVDO Rev. A speeds of up to 3.1 Mbps
- Ethernet, Serial, and USB
- Reliable Always-on cellular link
- Rugged electrical and mechanical design
- Remote diagnostics, configuration and updates
- Router and IP Pass-through modes
- 5-port Ethernet switch (on BT-6621)
- Power over Ethernet (on BT-6601EB)
- IPsec VPN multiple tunnel and 3DES/AES up to 256-bit encryption

**LED INDICATORS**

LED	State	Description
<b>Power</b>	ON	Power is applied to the modem
	ON	Excellent signal strength
	FLASH	Flashes faster as signal is stronger
<b>WAN</b>	OFF	Very weak or no signal (less than -100 dBm)
	ON	Wireless link established, but no data activity
	FLASH	Data transmitted/received on wireless network
<b>RS-232</b>	ON	Link established with serial device but no data activity
	FLASH	Data transmitted/received with attached serial device
<b>Ethernet Link</b>	ON	Link established with Ethernet device
<b>Ethernet Activity</b>	FLASH	Data transmitted/received with attached Ethernet device

**POWER**

There are 3 methods to provide power to the modem:

1. 4-pin Molex connector – available on BT-6x00
2. 4-pin screw terminal – available on BT-6xx1/EB
3. Side mounted 2.5mm barrel connectors – available on all models
4. Power-over-Ethernet – available on BT-6x01EB

The modem requires a power source between 8 and 30 VDC to operate:

Label	Color	Description
GND	Black	Ground
PWR +	Red	Power 8 to 30 VDC (500mA@12VDC)
IN	White	Digital input
OUT	Green	Digital output

\* An AC-DC power adaptor can be purchased as an accessory from your sales contact.

**ANTENNA**

An antenna with an SMA connector should be connected to the modem. This antenna should meet the following specifications:

- Dual-band 800 & 1900 MHz
- Nominal 50 ohm impedance
- Voltage Standing Wave Ratio (VSWR) less than 2.5:1

\* Antennas can be purchased as accessories from your sales contact.

**DATA INTERFACES**

**Ethernet:** 10/100 Mbps Auto-sensing Female RJ45 port

**USB:** Side mounted USB 2.0 mini Female

**Serial:** RS-232 9 pin DCE Female, with these default settings:

Speed: 115200 bps	Stop Bits: 1
Data bits: 8	Flow Control: Hardware
Parity: None	

**ADDITIONAL INFORMATION**

Visit our support site at [www.sixnet.com](http://www.sixnet.com) to access the Modem User's Guide for an in-depth overview of the modem's features and capabilities, as well as configuration help and troubleshooting. Also available for download are BlueVue software updates and modem firmware updates.

**SUPPORT CONTACT INFO**

Toll-free	+1 (877) 422-9110 option 2
Phone	+1 (514) 422-9110 option 2
Hours	8:30am – 5:00pm Eastern Time
Email	<a href="mailto:support@sixnet.com">support@sixnet.com</a>
Website	<a href="http://www.sixnet.com">www.sixnet.com</a>
Fax	+1 (514) 422-3338

**WARRANTY**

Sixnet LLC wireless products including the BT-5600V2, BT-5800 and the BT-6000 series, Sixnet's obligation under this warranty will be limited to repairing or replacing, at Sixnet's option, the defective parts within three year of the date of installation, or within 36 months of the date of shipment from the point of manufacture, whichever is sooner.

Sixnet further warrants that any software supplied as part of a product sale, except obsolete products, will be free from non-conformances with Sixnet published specifications for a period of 90 days from the time of delivery. While Sixnet endeavors to improve the features and performance of software associated with its products, no effort on the part of Sixnet to investigate, improve or modify Sixnet software at the request of a customer will obligate Sixnet in any way.

This limited warranty does not cover losses or damages which occur in shipment to or from Buyer or due to improper installation, maintenance, misuse, neglect or any cause other than ordinary commercial or industrial applications. This limited warranty is in lieu of all other warranties whether oral or written, expressed or implied. Sixnet's liability shall not exceed the price of the individual units, which are the basis of the claim. In no event shall Sixnet be liable for any loss of profits, loss of use of facilities or equipment, or other indirect, incidental or consequential damages.

For complete and most up-to-date warranty information go to [www.sixnet.com](http://www.sixnet.com)

#### 1 Setup a data account for the modem

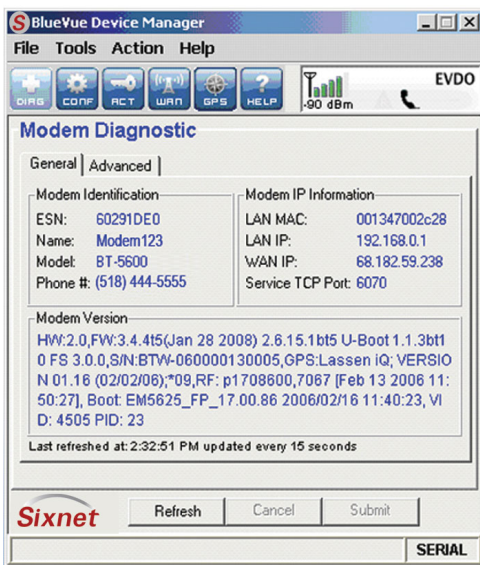
Contact your Verizon dealer and request a data account to be assigned to the modem's ESN (electronic serial number). The ESN is printed on modem's label.

#### 2 Wiring and power-up

1. Connect the modem to your computer using a standard Ethernet cable. Alternatively, the RS-232 or USB ports can be used for setup.
2. Connect the cellular antenna to the Antenna connector.
3. Plug in the power connector to power-up the modem.

#### 3 Start BlueVue Device Manager software

1. Download and install the latest version of BlueVue Device Manager from: [www.sixnet.com](http://www.sixnet.com)
2. When launched, it will attempt to connect to 192.168.0.1 by default, once connected to the modem the Modem Diagnostic window will open (Note that 192.168.0.1 connects to the Ethernet cable. To connect to the USB port use 192.168.111.1):



#### Troubleshooting

If BlueVue displays "Detecting Modem at 192.168.0.1" indefinitely, then:

- Make sure the modem is powered on
- Check the Ethernet Link LED on the modem. If it's off, it usually means you have a problem with the Ethernet cable or with your computer's network card.
- Close all other network connections (such as WiFi)
- Set your computer to obtain an IP address automatically

#### 4 Confirm that the modem is acquiring a cellular signal

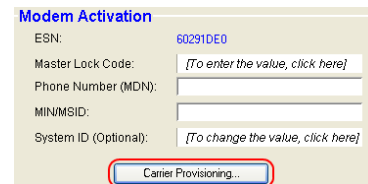
The **Signal** LED should be on or flashing, indicating that the modem has a signal. BlueVue Device Manager displays signal information in the top right of its window; a minimum of 1 bar is required to connect to the carrier with the modem.

#### Troubleshooting

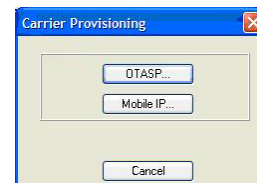
If the Signal LED is off, then there may be an issue with the antenna or cellular coverage might be too low in your current location.

#### 5 Activate the modem

1. Click on the **ACT** button located at the top. Click on the **Carrier Provisioning** button to open the **Carrier Provisioning** dialog



2. In the **Carrier Provisioning** window, Click on the **OTASP...** button and then click **OK** at the warning prompt



3. Wait for the activation process to complete.
4. Confirm the success of the number's programming
5. Click on the **DIAG** button located at the top left to navigate to the **Modem Diagnostic** screen. Check the phone number reported by the modem under **Modem Identification**: it should match the MDN provided by the Verizon.

#### Troubleshooting

If the above does not occur, then the modem most likely has no account. Contact the wireless service provider who provided you with the account and ask them to confirm that the phone number and MIN/MSID assigned correspond to the modem's ESN (electronic serial number), and that the account is ready to be used.

6. Confirm the modem has successfully connected to the cellular network:

- The WAN LED will be on or flashing
- In BlueVue, click the DIAG button, the WAN IP should indicate the IP address assigned to the modem by the cellular network.

#### Setup is complete!

The modem should be ready for use as a basic internet access point. For more advanced modem configuration, consult the documentation section of our website [www.sixnet.com](http://www.sixnet.com)