OVERVIEW

The BlueTree 5600v2 modem is a rugged 3G wireless modem built to provide simple and reliable communication over the EVDO Rev. A cellular data network.

This guide covers initial configuration of the following model:

BT-5600v2

FEATURES

- CDMA EVDO Rev. A with fallback to Rev. 0 a, 1XRTT and IS95
- Diversity antenna
- Ethernet, Serial, and USB
- Reliable Always-on cellular link
- Rugged industrial design
- Remote diagnostics, configuration and updates
- 3 Analog inputs, 4 Digital inputs, 3 Digital outputs
- IPsec VPN multiple tunnel and 3DES|AES up to 256-bit encryption

LED INDICATORS

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

ADDITIONAL INFORMATION

Visit our support site at www.bluetreewireless.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.

POWER

The modem has a 4-pin Molex connector for power input, and requires a power source between 8 and 30 VDC:

Label	Color	Description
GND	Black	Ground
POS	Red	Power 8 to 30 VD (500mA@12VDC)
IGN	White	Ignition sense
O3	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 then 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: USB 2.0 Type B Female
Serial: RS-232 9 pin DCE Female, with these default settings:
    Speed: 115200 bps
    Data bits: 8
    Parity: None
    Stop Bits: 1
    Flow Control: Hardware

SUPPORT CONTACT INFO

Toll-free	(877) 422-9110 option 2
Phone	(514) 422-9110 option 2
Hours	8:30am – 5:00pm Eastern Time
Email	techsupport@bluetreewireless.com
Website	www.bluetreewireless.com
Fax	(514) 422-3338

WARRANTY

BlueTree Wireless Data Inc. warrants its wireless modems against all defects in materials and workmanship for a period of one (1) year from the date of purchase. The sole responsibility of BlueTree Wireless Data Inc. under this warranty is limited to either repair or, at the option of BlueTree Wireless Data Inc., replacement of the cellular modem. There are no expressed or implied warranties, including those of fitness for a particular purpose or merchantability, which extend beyond the face hereof. BlueTree Wireless Data Inc. is not liable for any incidental or consequential damages arising from the use, misuse, or installation of the BlueTree cellular modem. This warranty does not apply if the serial number label has been removed, or if the cellular modem has been subjected to physical abuse, improper installation, or modification. The unit is automatically registered for warranty at the date it is purchased and/or shipped.

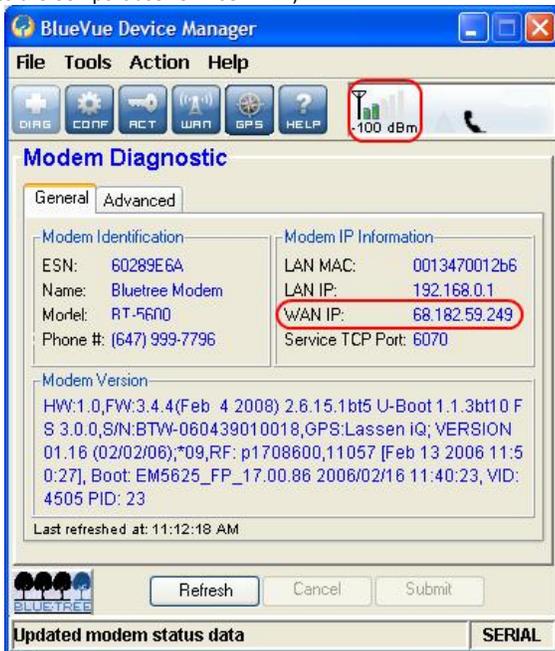**1** **Setup a data account for the modem**

Contact your MTS 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.bluetreewireless.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**

This step programs the phone number and other MTS specific settings into the modem so that it may be used on the MTS wireless network.

1. Click on the **ACT** button located at the top and enter the following information provided by MTS:
   a. **Master Lock Code:** a 6-digit number
   b. **Phone number (MDN)**: a 10-digit number
   c. **MIN/MSID:** a 10-digit number. If you were not provided with an **MIN/MSID**, enter the **MDN** here
   d. Click on **Submit** and wait for activation to complete

2. Click on the **DIAG** button located at the top left to navigate to the **Modem Diagnostic** screen. Click on the **Refresh** button at the bottom and check the phone number reported by the modem under **Modem Identification**: it should match the MDN provided by MTS.

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.

3. 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.bluetreewireless.com