

Guide to Getting Connected

FOREWORD

The instructions provided below will assist you in programming your modem using AT commands. This modem has been tested and approved for use on Windows 98, 2000, and XP

1. Installation the Modem

A. WINDOWS 98 OPERATING SYSTEMS

Select **Start > Settings > Control Panel**

Double click on **Modems**. This will open the modems properties window.

Select the **General** tab and click on **Add**.

Select *other* for type of modem and click on **Next**.

Select *don't detect my modem: I will select it from a list*, and click on **Next**.

Under the "Manufacturers" column select **[Standard Modem Types]**

Under the "Models" column select **Standard 19200 bps Modem**.

Click on **Next**

Select the communications port on the computer that the modem is attached to. Click on **Next**.

Click on **Finish**.

Select the **Standard 19200 bps Modem**

Click on **Properties**

Adjust **Maximum Port Speed to 115200**

Click **OK**

Click **OK** again to close the **Modems** window and close the **Control Panel** window.

The **[MODEM]** driver is now installed and ready for use by Windows 98 programs.

B. WINDOWS XP OPERATING SYSTEMS

Select Start > Settings > Control Panel

Double click on Phone and Modem Options. This will open the phone and modems properties window.

Select the Modems tab and click on Add.

Select *don't detect my modem: I will select it from a list*, and click on **Next**.

Under the "Manufacturer" column select **[Standard Modem Types]**

Under the "Models" column select **Standard 19200 bps Modem**.

Click on **Next**

Select the communications port on the computer that the modem is attached to. Click on **Next**.

Click on **Finish**.

Select the **Standard 19200 bps Modem**

Click on **Properties**

Adjust **Maximum Port Speed to 115200**

Click **OK**

Click **OK** to Close the **Modems** window and close the **Control Panel** window.

The **[MODEM]** driver is now installed and ready for use by Windows XP programs.

C. WINDOWS 2000 OPERATING SYSTEMS

Select Start > Settings > Control Panel

Double click on Phone and Modem Options. This will open the modems properties window.

Select the Modems tab from top of window and click on Add.

The Add/Remove Hardware Wizard will appear.

Select *don't detect my modem: I will select it from a list*, and click on **Next**.

Under the "Manufacturers" column select **[Standard Modem Types]**

Under the "Models" column select **Standard 19200 bps Modem**.

Click on **Next**

Select the communications port on the computer that the modem is attached to. Click on **Next**.

Click on **Finish**.

Select the **Standard 19200 bps Modem**

Click on **Properties**

Adjust **Maximum Port Speed to 115200**

Click **OK**

Click **OK** to Close the **Modems** window and close the **Control Panel** window.

The **[MODEM]** driver is now installed and ready for use by Windows 2000 programs.

2. Activation

A. USING AT COMMANDS TO CONTROL THE MODEM

The **[MODEM]** supports the full AT command set for wireless data modems. This command set can be used to configure, control, and troubleshoot the modem.

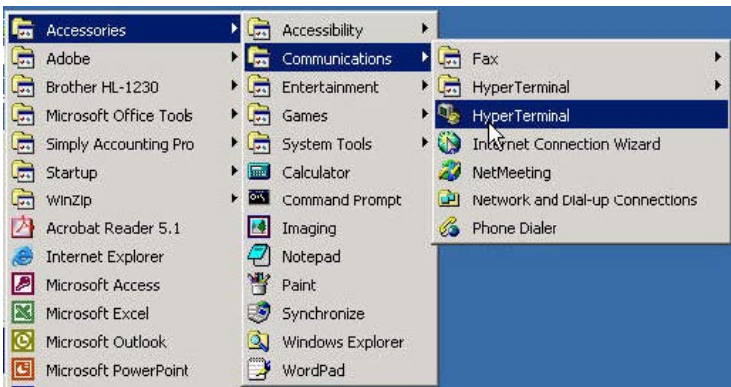
Most terminal emulation programs such as Windows HyperTerminal can be used to access the **[MODEM]** with AT commands. Terminal configuration parameters are: Data rate 115,200 baud Data bits 8 Parity None Stop bits 1 Flow control Hardware

B. USING HYPER TERMINAL

Windows Hyper Terminal is a useful application for initialization and testing of the **[MODEM]**. Using Hyper Terminal and AT Commands the **[MODEM]** can easily be configured, controlled and diagnosed.

To setup Hyper Terminal for use with the **[MODEM]** you need to open Hyper Terminal and create a new connection:

Start > Programs > Accessories > Communications > Hyper Terminal (application, not folder) start the Hyper Terminal application.



Then enter TELUS 1XRTT as the name for your connection



Click **OK**.

Under **Connect To:** select the correct communications (serial) port that the modem will be connected to. (COM1 in the example)



Click **OK**.

Under **Port Settings**, set **Bit per second:** to 115200.



Click OK.

Hyper Terminal is now ready to use the your **[MODEM]**. Ensure that the modem is powered up and connected to the correct serial port with a functional serial cable.

When you exit Hyper Terminal you will be asked if you “want to save session test? Click **Yes**, and all your settings will be saved for next time.

C. TELUS ACTIVATION

The **[MODEM]** comes ready provisioned for TELUS 1X network. This means that it is already configured with all the right internal parameters to allow correct operation on the TELUS Mobility 1X network. Prior to the **[MODEM]** being able to use the network for data communications it is first necessary to have it activated.

You will need to contact TELUS and provide them with the Electronic Serial Number (ESN) of the **[MODEM]**. The dealer will then provide you with the following information (please write it down for future reference):

6 digit Client Subsidy Lock or CSL

10 digit telephone number (NUM)

This information then needs to be input to the **[MODEM]** in order to activate it for operation on the network. Setup an AT command session with the **[MODEM]** as described in below:

Start HyperTerminal (Start, Programs, Accessories, Communications, HyperTerminal). You will be prompted to select a New Connection – click Cancel.

From the menu, select File, then Properties. In the Properties window, under the Connect using: line, select the **[MODEM]**. Click OK

Type AT (the letters will not appear), then hit the Enter button on your keyboard. The modem should respond with OK.

Type ATE1 (the letters will not appear), then hit the Enter button on your keyboard. The modem should respond with OK. Now you will be able to see what you are typing.

Enter the command: AT+SPC="cccccc", where ccccc is the 6 digit CSL. The modem will respond with OK.(you must include the quotation marks)

Enter the command: AT+WMIN="pppppppppp" where ppppppppppp is the 10 digit NUM. The modem will respond with OK. (you must include the quotation marks)

Please perform a hard reset by unplugging your [Modem] from the power source

Type AT (the letters will not appear), then hit the Enter button on your keyboard. The modem should respond with OK.

Type ATE1 (the letters will not appear), then hit the Enter button on your keyboard. The modem should respond with OK. Now you will be able to see what you are typing.

Enter the command: AT+MIN?

The modem will respond with the 10 digit NUM if steps were done correctly

The **[MODEM]** is now activated on the TELUS 1X network. Next you will need to setup your Internet connection.

3. Configuring Windows® Dial-up Networking

To have the **[MODEM]** connect to an Internet Service Provider (ISP) it is necessary to configure a Dial-up Networking (DUN) application on your PC. The DUN set up may vary in detail for different Windows operating systems.

Start by opening the DUN window either from the My Computer icon on the desktop or from Start > Programs > Accessories > Communications > Dial Up Networking

Then double click on Make New Connection, this will load the connection Wizard click Next

Select Dial-Up to the Internet then click Next

Select I want to set up my Internet connection Manually or, I want to Connect through a local area network (LAN) then click Next

Select I connect through a phone line and a modem then click Next

Select the **[MODEM]** you are installing from the drop down menu then click Next

Enter #777 as the Phone Number and make sure that Use area code dialing rules is not selected then click Next

Enter User Name: areacodephonenumber@1x.telusmobility.com (e.g.: 4165555555@1x.telusmobility.com)

Enter Password: device ESN, e.g.: 10801131252

Then click Next

Enter the name for the connection (ie. Telus 1X) then click Next

Select No for Do you want to set up an Internet mail account now then click Next

Click on Finish.

Click on Properties

Click on Configure

Change the Maximum speed (bps): to 115200, Click OK

Click OK

This has setup the 1x packet data connection that offers speeds of 40 to 60 Kbps. The qnc connection works at 14.4 Kbps. This is a circuit switched connection – you can use it to dial into a modem pool as well. To configure this connection use:

Phone number:#888

User Name: qnc

Password: qnc

You can also use an existing ISP connection; in this case you'll need to configure the connection with the information provided to you by your ISP.

Please note that these instructions were based on the Windows 2000 Operating System and your experience may be slightly different based on the operating system you have.