



Data connection guide for T350/390 terminals & P350/P390 phones On Windows XP

Introduction

The Burnside T350 & P350 support low speed data communication (Circuit Switched Data "CSD") and digital fax data over the GSM network. The T390 & P390 additionally support GPRS data communication. CSD can be used to connect to another device equipped with either an analogue modem or another GSM device. This could be an internet service provider. CSD can operate at either 9600bps or 14400 bps depending on the GSM service. GPRS can operate up to 86 kbps which can be convenient for email and light duty web surfing. In addition GPRS can be used as an "uplink" data connection for a satellite based broadband service. In the remainder of the document the T350, T390, P350 & P390 will be referred to as T/P3X0.

Some applications such a contact management or phone dialers may require TAPI compatible voice dialling commands. See page 4 of this guide.

Installing driver

A USB type B interface is provided for connection to a computer using a standard USB type A to B cable (supplied in some kits). Before connecting to the computer, pre-install the driver from the CD rom (supplied in some kits) or download from our web site: <http://www.burnsidetelecom.com/site.php/00002.html>

1. Run the program "CP210xVCPInstaller.exe". *It may be necessary to turn off any virus protection.*
2. The driver will install two "layers"; a USB layer and a "COM port" layer. When prompted, accept the installation.
3. When the installation is complete, connect the USB cable and turn on the P/T3X0.
4. To establish which COM port has been assigned, this can be viewed from the control panel/system properties/hardware/device manager (See figure 1).

To remove the driver, use the Add/Remove programs function from the system control panel and select "CP210xUSB to UART Bridge Controller"

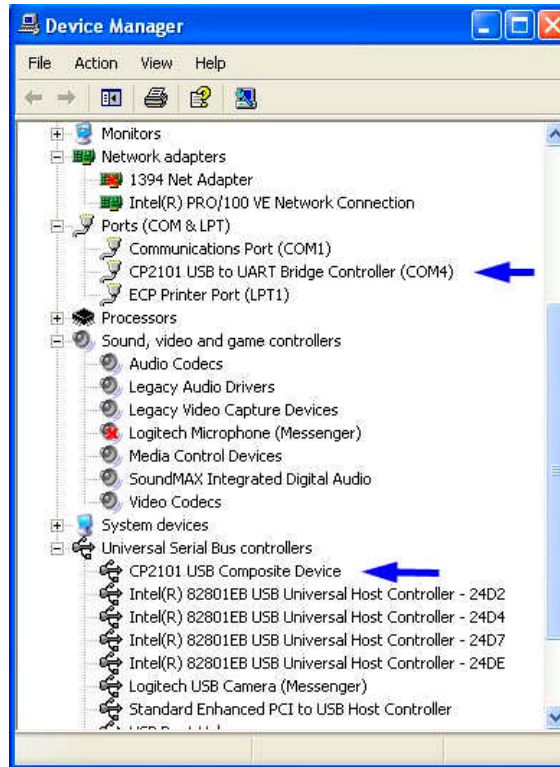


Figure 1

Windows configuration

To use most applications on Windows such as an email client, web browser or dialer, it is necessary to set up a standard modem.

To set up a connection in Windows XP: under control panel "Phone & Modem Options", select modems then select Add. In the "Add Hardware Wizard" window, select the "don't detect my modem" option and select NEXT. Under "manufacturer" select "standard modem types", under models select "standard 19200 bps Modem" then select NEXT. A list of connections will be displayed. Select the one that is assigned to the T/P3X0 such as COM4. Now the modem is installed, select "Properties" and then select the "Maximum Port Speed" to be 115200. This is the basic configuration for all models.

To connect to the internet using this modem connection, create a new dialup networking configuration in the normal way suitable for your ISP and make sure the "connect using" is set to the "standard 19200 modem"
You are now ready to connect.

Fax

You can use the T/P3X0 to send and receive faxes from a PC using fax software. We recommend the fax capability that is installed as standard in Windows XP Professional (free option provided with Windows XP Home). You can **send** a fax with most SIMs and services including "pay as you go" but before you can receive a fax, you will need to obtain a dedicated fax number from your service provider and this is normally only available with a contract SIM.

GPRS

To make a GPRS connection, you must configure the T/P390 by assigning an initialisation command in the modem Advanced section of Properties (see figure 2). The string should be <at+cgdcont=1,ip,orangeinternet> where orangeinternet is the Access Point Name (APN). See page 4 for UK examples. Now assign the phone number for GPRS which is *99**1# (star 99 star star star 1 hash) see figure 3.

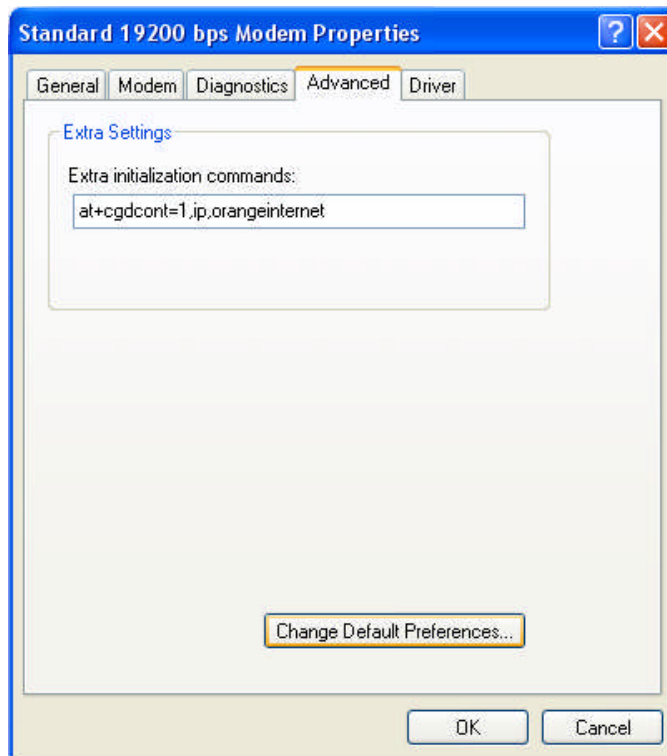
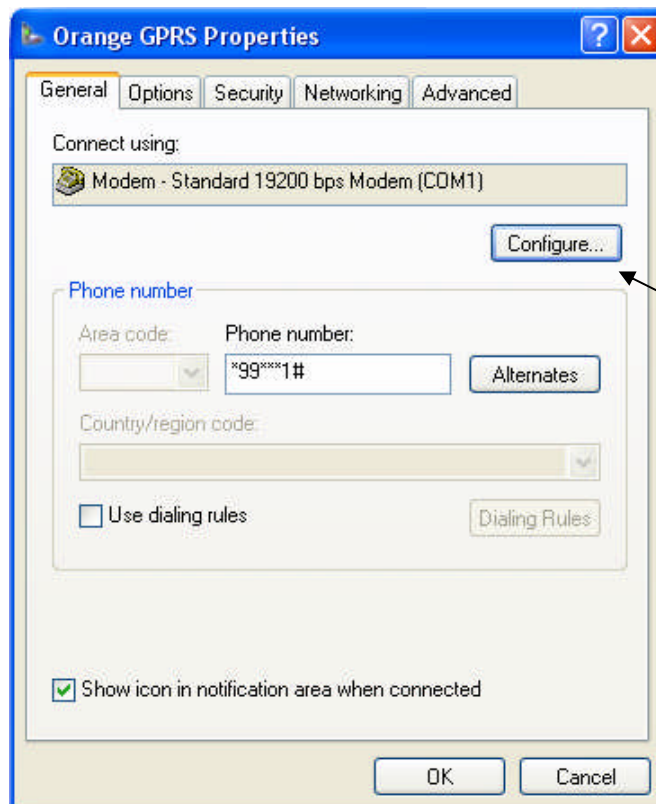


Figure 2



Use this button to make sure that the port connection speed is also set to 115200 here. Also select hardware flow control.

Figure 3

Using voice calls and data

During a voice call, an incoming CSD call or fax will experience the number as busy. If an attempt is made to make an outgoing CSD or fax call from the connected computer, the voice call will be disrupted. When an outgoing voice call is attempted, the T/P3X0 will report the busy tone.

With a GPRS connection, the connection may remain active at all times. When data is flowing, new incoming and outgoing voice will be met with a busy tone. When a voice call is established, an attempt to send/receive data will result in a failure, for example a "server not found" message. When the voice call had ended, the data connection may resume without any special intervention.

Testing the driver installation

After the device driver has been installed and a COM port assigned, make a test connection using Hyperterm (accessories/communications). The connection will be direct to COMx and select 115200 8/N/1.

Enter AT<cr> and you should see the OK response. Enter ATI<cr> and the model number of the Siemens GSM module will be displayed.

UK GPRS settings

Mobile Operator	APN	Username	Password
Vodafone	internet	web	web
O2	mobile.o2.co.uk	mobileweb	password
T Mobile	general.t-mobile.uk	user	wap
Orange	orangeinternet	user	pass
Tesco-mobile	prepay.tesco-mobile.com	tescowap	password
BT Mobile	btmobile.bt.com	user	wap
Virgin	goto.virginmobile.uk	user	(leave blank)

Please consult with your service provider if the above settings do not work, they may have changed.

TAPI compatibility

For applications that use the T/P3X0 for voice dialling, it is probably necessary to configure the T/P3X0 for "TAPI" compatibility. In the case of the T3X0, dial *8821#. To revert to GSM voice dialling command protocol, dial *8820#. For the P3X0, make the selection from the advanced settings menu (page 30 of the P3X0 user manual).

SMS server

The T3X0 is particularly suitable for SMS server applications that may fully utilise ETSI compliant commands for sending and receiving SMS. This can also co-exist with voice applications such as LCR on a PBX.

The P3X0 also supports ETSI compliant commands for SMS, but there may be conflict between the phone user interface and remote SMS application (contact technical support for further information)

SMS sender

There is a free "SMS Sender" application from Microsoft. This will work with T/P3X0. To locate the application, search for "Microsoft SMS Sender".

Burnside Telecom Ltd
Burnside House
Isington
ALTON
GU34 4PP
United Kingdom

Tel/Fax: +44 (0)8 700 762 766
Email: info@burnsidetelecom.com
Web: www.burnsidetelecom.com