DotSurfer™
Mobile Internet Access

CDMA 1X 1900MHz

User Manual

GTRAN™
WIRELESS

Version: 0.1

Do not insert the DotSurfer modem card into your laptop before you insert the software CD!!

GPC-4000

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1. DotSurfer® 1X-1900 Introduction

GTRAN Wireless DotSurfer® 1X-1900 is a high-speed wireless Type II PCMCIA modem card that fits into major laptops and PDAs. Allowing for wireless Internet connectivity under CDMA2000 network, DotSurfer 1X-1900 delivers unmatched speed at up to 153Kkbps. At 86 mm in length, DotSurfer is small, compact and inserts perfectly into a laptop or PDA and has a flexible antenna applicable for all mobile users.

All DotSurfer modem card packages include the following components:

- DotSurfer 1X-1900 PCMCIA modem card with the flexible antenna
- User Manual
- Quick Start Guide
- CD-ROM containing the GT Dialer software

Product Features

► Flexible antenna

► Supports wireless data connection speeds up to 153Kbps

► Minimizes laptop battery power consumption through Self Power Control

► Compact, lightweight 86 x 54 x 5 mm and only 35 grams

► Sends and receives SMS messages on networks that support 2-Way SMS

► Real time card status indicators while on-line

► Supports Windows 95, 98, 2000, ME, NT, CE 3.0 and Linux

2. Installation for Windows 98, 2000, and ME

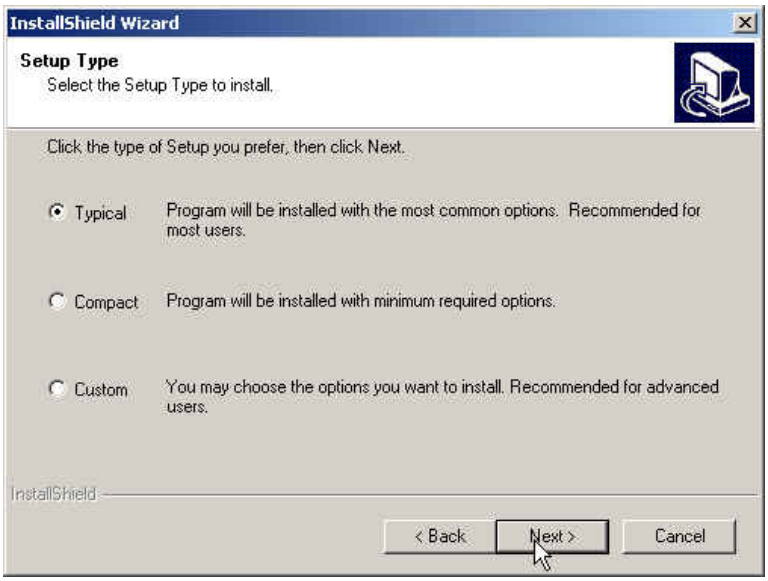
Do not insert the DotSurfer modem card into your laptop before you insert the software CD!!

a. Close all the other programs that are running before starting the application.

b. Insert the installation software CD into your CD-ROM drive. The InstallShield Wizard should run automatically. If it does not, click **Start-> Run** and enter **d:\Setup.exe**. Replace **d:** with the drive letter for your CD ROM drive, if necessary.

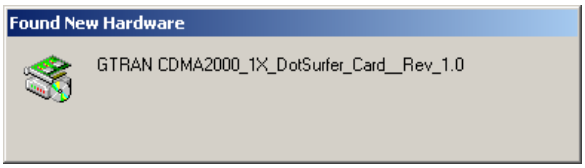
c. The InstallShield Wizard will guide you through the installation.

d. From the **Setup** screen, choose **Typical** and click **Next>** and follow the rest of the instructions.

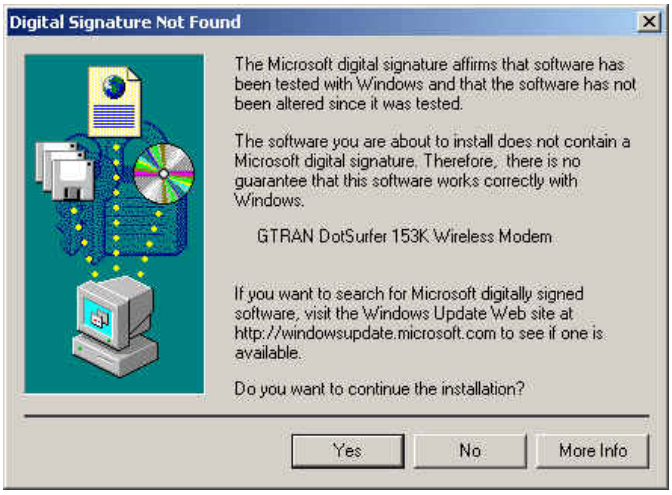


e. Select your choice under the **System Reboot** screen.

f. Insert the **DotSurfer 1X-1900** modem card into the PC slot of your laptop. **Make sure that the installation CD is still in the laptop.** Your Windows will automatically search for and load a device driver for the DotSurfer modem card and you will see the screen below. Once the device driver is loaded, the screen will disappear.



*** For WINDOWS 2000, you'll see the following Digital Signature Not Found screen. Click the Yes button.**



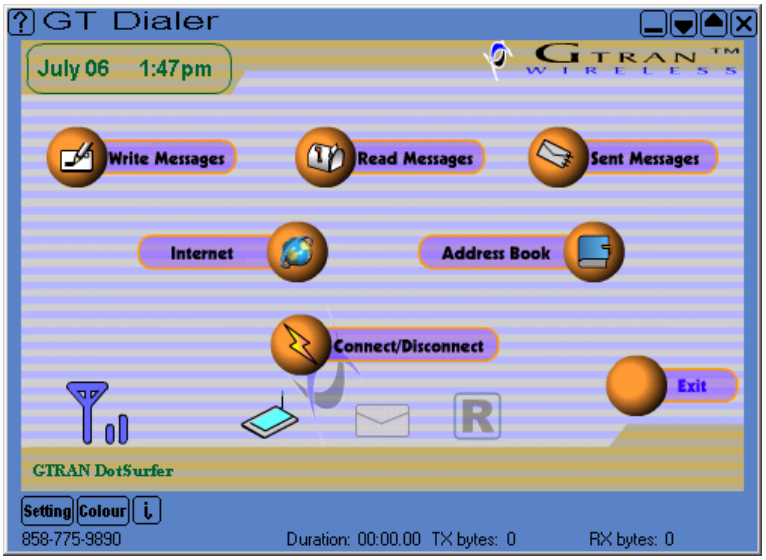
g. Now the **DotSurfer 1X-1900** modem card is ready for use!

3. Using GT Dialer

Insert the **DotSurfer 1X-1900** modem card into your notebook computer. To run **GT Dialer**, double-click **GT Dialer** icon from the desktop or go to **Start** and select **Program-> GTRAN-> GT Dialer**.

3.1 Main Screen and Icons

Main screen shown below will appear once the **GT Dialer** is opened.



Icons and their features

Icon	Description	Icon	Description
July 06 1:47pm	Local date and time		No new message

Internet	Connect to Internet	NEW SMS	New message arrived
Address Book	Phone directory	R	Roaming off
Read Messages	Read SMS messages	R	Roaming
Write Messages	Send SMS message	exit	Exit GT Dialer
Sent Messages	Sent box	SETTING	Screen graphic, SMS tone, default homepage set up
		COLOR	Screen color set up
Connect/Disconnect	Network connect or disconnect	i	Modem diagnostic information and call history
	Signal strength		Close application
NO SVC	No service	H	Help
	Card is inserted in the notebook		Display phone number, connection time and bytes sent and received
	Connected to network		Minimize screen
	Dormant state		Decrease screen size one step
TX bytes: **RX bytes:**	Once connected, transfer/receive byte size		Increase screen size one step

3.2 Network Connection

To connect to network, open the **GT Dialer** and click the **Connect/Disconnect** button.

To disconnect, simply click the **Connect/Disconnect** button again.

3.3 Internet Connection

Establish network connection by clicking **Connect/Disconnect** from the main screen. By clicking the **Internet** icon, you will go to a web browser. To change the default website which is set up under the **Internet** icon, click **Setting** and enter the desired website URL.

3.4 SMS

3.4.1 Sending SMS Messages

a. From the main screen, click **Write Messages** icon. **NEW MESSAGE** screen will appear.

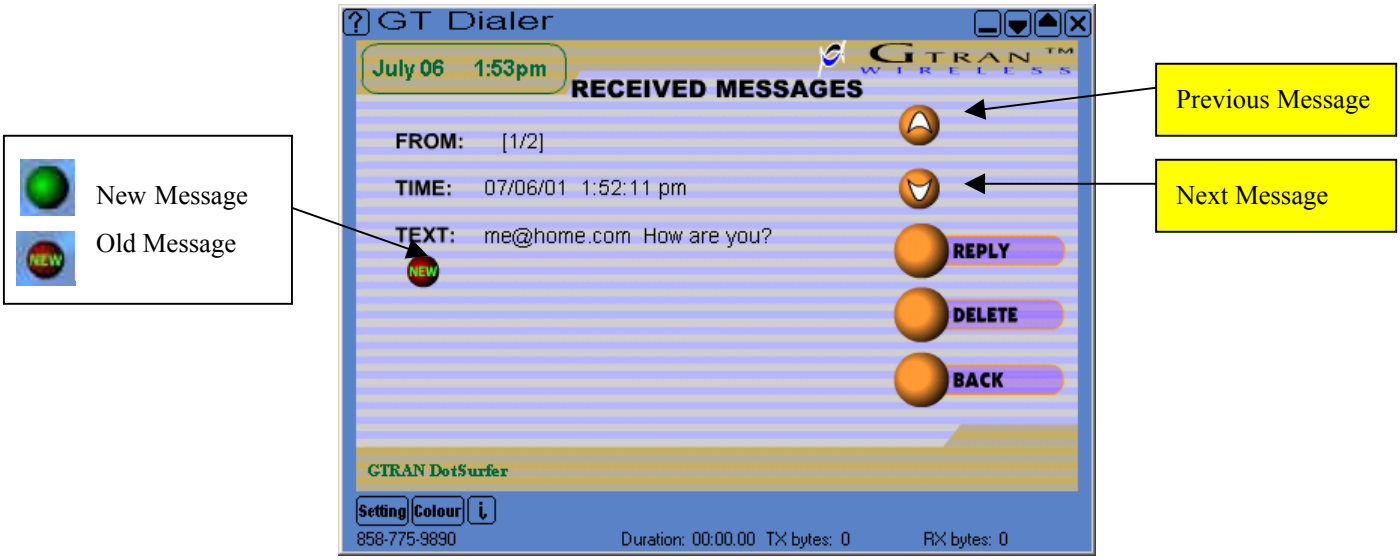
b. Input receiver's phone number and text.

c. Once finished inputting, click one of the three buttons: **SEND, SAVE**, or **SEND & SAVE**.

SEND	Sends new message without saving in Sent box
SEND & SAVE	Sends new message and saves in Sent box
SAVE	Saves new message in Sent box without sending

3.4.2 Reading SMS Messages

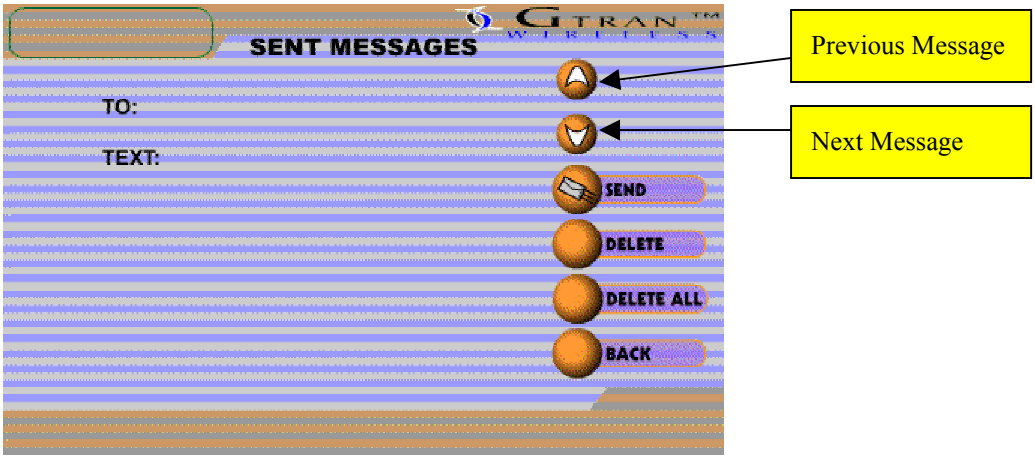
From the main screen, click **Read Messages** icon. **RECEIVED MESSAGES** screen will appear.



REPLY	Replies to sender
DELETE	Deletes the message
BACK	Goes back to the main window

4.4.3 Sent Messages (Sent Box)

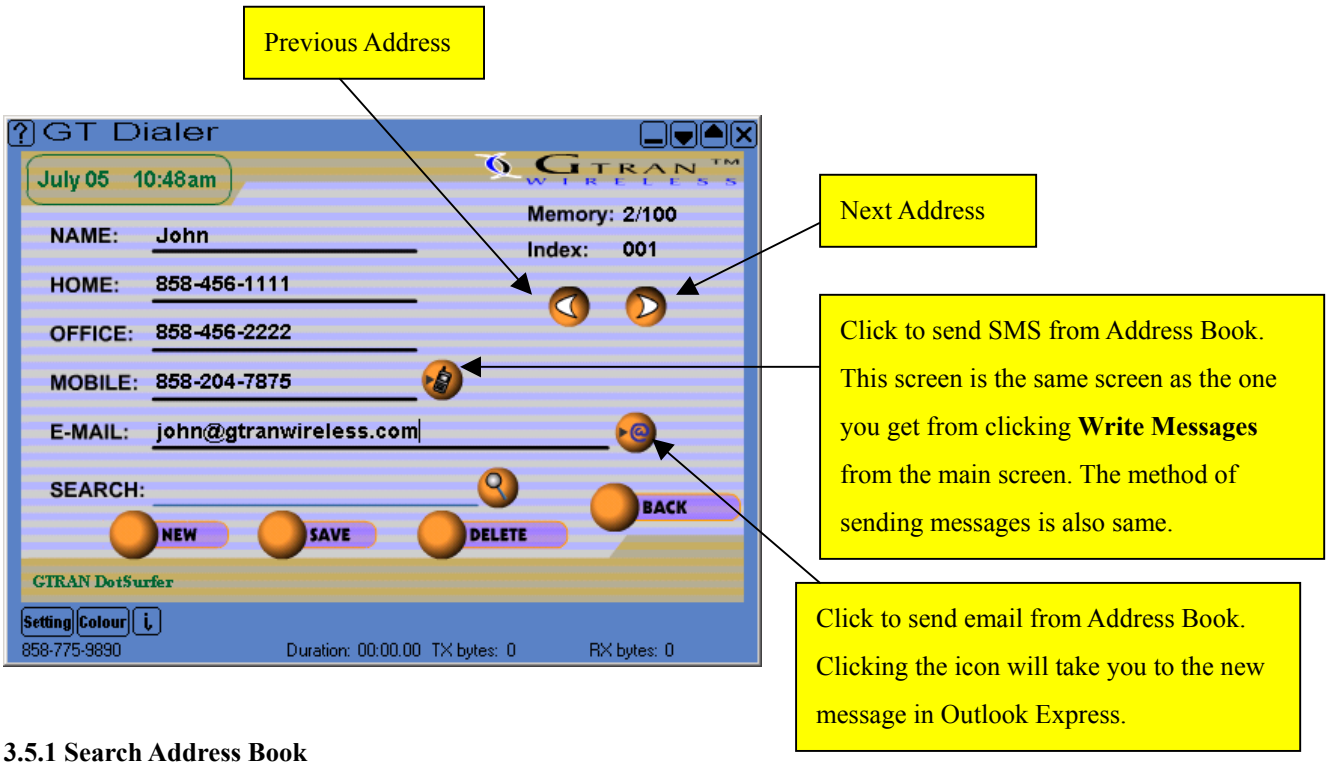
Click **Sent Messages** button from the main screen.



SEND	Sends or resends a message
DELETE	Deletes a sent message
DELETE ALL	Deletes all sent messages in the Sent Box
BACK	Goes back to the main window

3.5 Address Book Management

On the main screen, click **Address Book** icon and **Address Book** screen will appear as shown below.



3.5.1 Search Address Book

You may search by name, by phone number,

by e-mail,

by index number,

3.5.2 Add to Address Book

a. From **Address Book** screen, click **NEW**. If you enter the address information without first clicking **NEW**, the information you input will NOT be saved.

b. Input name, home number, office number, mobile number, and e-mail address. Click **SAVE** and the inputted data will be stored.

3.5.3 Edit Address Book

a. Select the address to edit and update information.

b. When editing is finished, click **SAVE**.

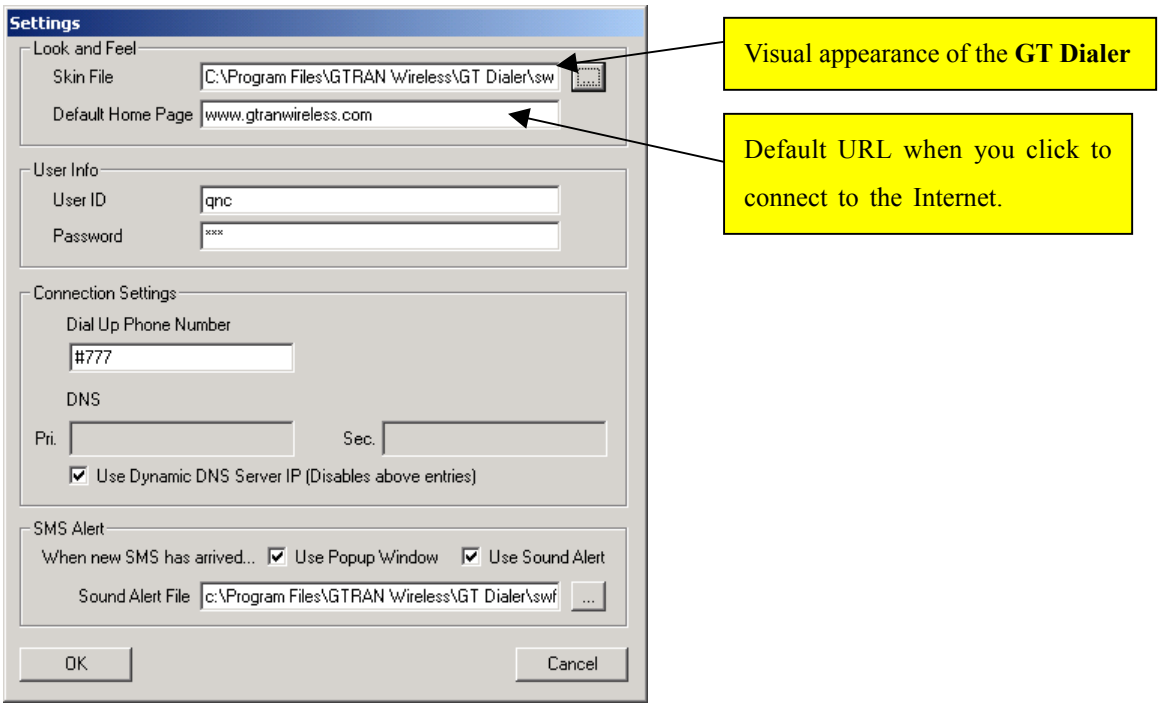
3.5.4 Delete from Address Book

Select the address to delete and click **DELETE**.

3.6 Screen Graphic, Sound, SMS Pop-up Window, and Connection Set Up

a. From the main screen, click

which is at the bottom of the screen. Screen shown below will appear. Enter the appropriate information to customize your settings.



b. If you do not know your User ID and Password, please consult your wireless service provider. Most systems use Dynamic DNS Server IP. If you encounter network problems and you do not know the DNS addresses, please consult your wireless service provider.

c. **SMS Received Sound Alert** → To have sound when you receive a new SMS, put a check mark as shown

and select the sound. To remove the SMS received sound, remove the check mark.

d. **SMS Received Pop-Up Window** → To have a pop-up window alert when you receive a new SMS, put a check mark as shown

.

e. **To connect to network** → input the user ID, password, and DNS Server IP. Generally, use 'set default value' (User ID, Password, Dynamic DNS Server IP).

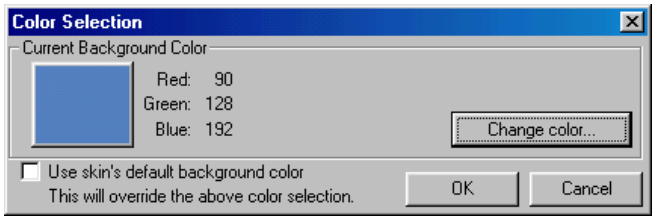
f. Once the set up is finished, click **OK**.

3.7 Color Set Up

This feature is to change the outline color of your **GT Dialer.**

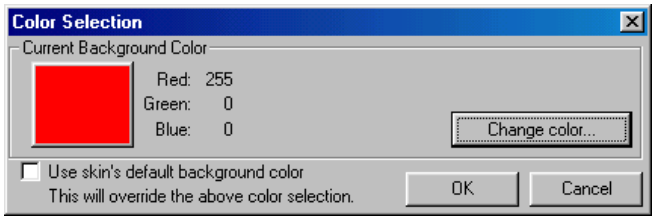
a. Click

which is at the bottom of the main **GT Dialer** screen.

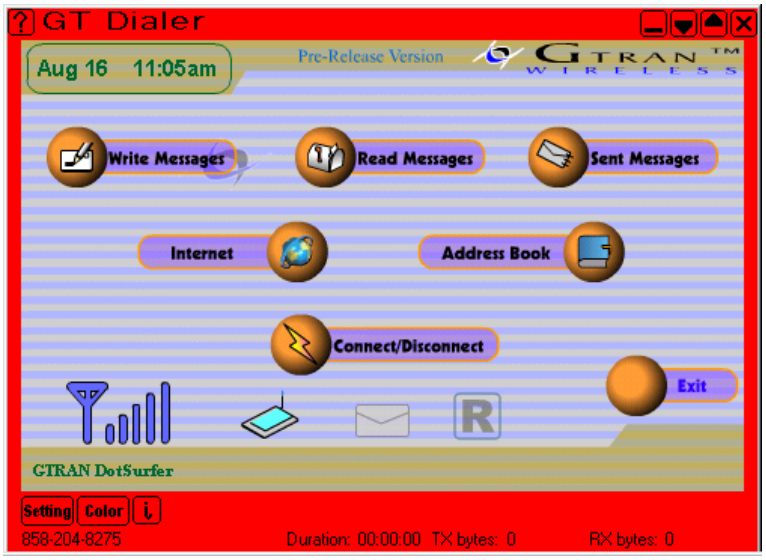


b. Click **Change color…** and select the color you want

Do not set the color to black. You won't see some of the buttons on the screen.

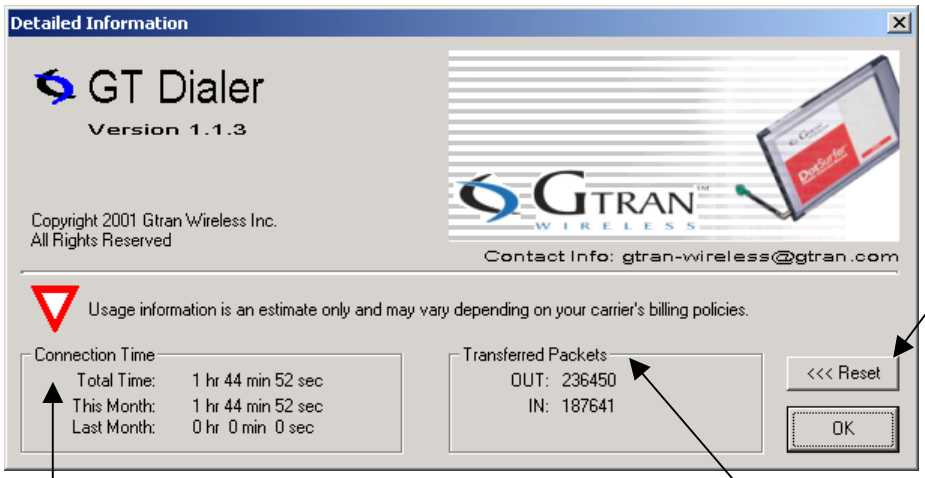


c. Click **OK.** The outline color of the **GT Dialer** screen will change.



3.8 Detailed Connection Information

Click at the bottom of the main **GT Dialer** screen and you will see a screen as shown below.



Click here to reset and start a new tracking session.

Total Time: Total time connected since last tracking session

This Month: Total time connected this month

Last Month: Total time connected last month

OUT: Transferred packet size from the last connection

IN: Received packet size from the last connection

Usage information is an estimate only and may vary depending on your carrier's billing policies.

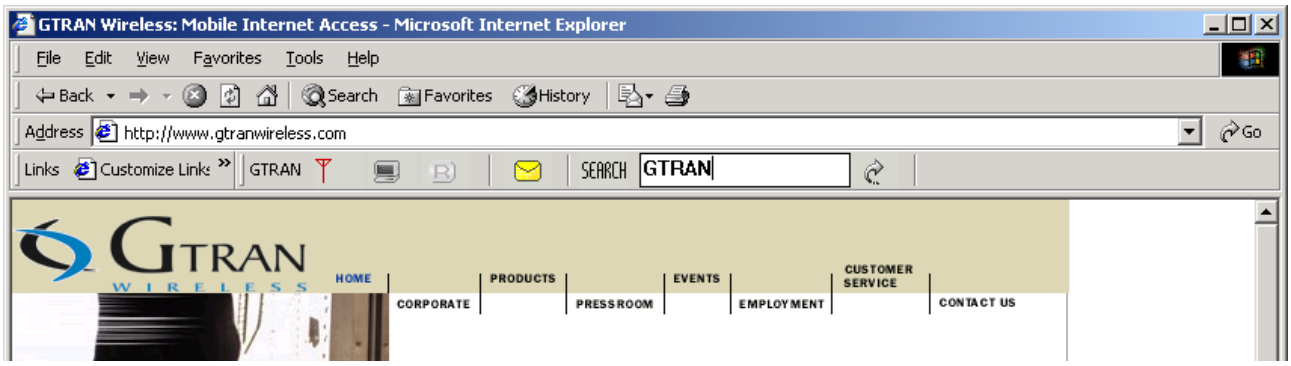
4. GT Indicator

GT Indicator Program is a supplemental program for **GT Dialer**. When surfing the web by using Internet Explorer, the **GT Indicator** shows features of GT Dialer on top of the Explorer screen. Basic user setting should be IE 5.01 or higher and **GT Dialer** should be running properly.

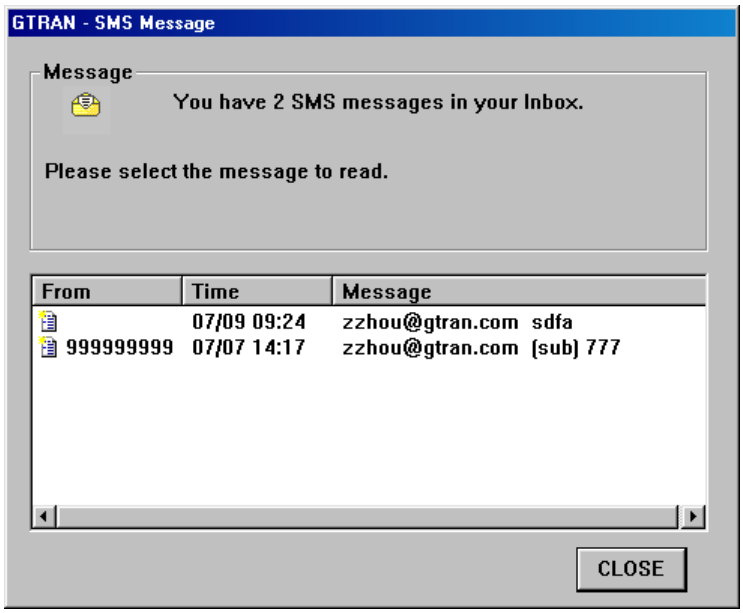
4.1 GT Indicator User Manual

a. Open **Internet Explorer**.

b. Go to **View -> Toolbars** and select **GT Indicator**. You should see the **GT Indicator** on Explorer as shown below.



c. To read SMS, Click and you'll see a screen shown below.



4.2 GT Indicator Icons

RSSI Status Indicator Icon	
	No service
	Signal strength (RSSI)
CONNECTION Status Indicator Icon	
	Modem is connected to network
	Modem is disconnected from network
	Modem is in dormant mode
ROAMING Status Icon	
	Roaming off
	Roaming
SMS Dialog Box Viewer Icon	
	No new SMS message
	New SMS message Click the icon to read SMS messages
GO to Web Page Search Icon	
	Goes to selected URL page

5. Windows CE (Pocket PC Procedures)

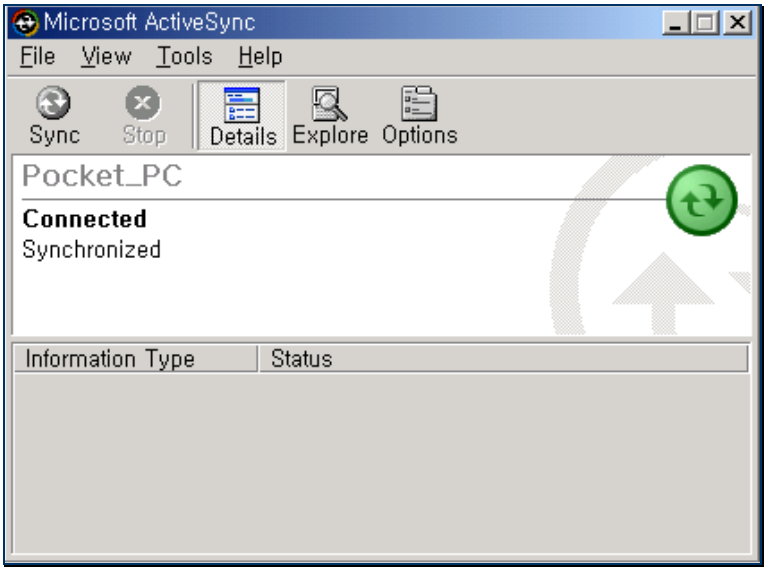
5.1 Installation for COMPAQ iPAQ

a. In addition to your iPAQ, you need the following:

- USB cradle
- Desktop or laptop PC
- PC card expansion pack

b. Insert **Microsoft ActiveSync3.1** CD into your computer to synchronize your PC and iPAQ PDA. For help with this procedure, please look at the user manual for iPAQ. Once the computer and the iPAQ

are synchronized, you should see the screen shown below on your PC.

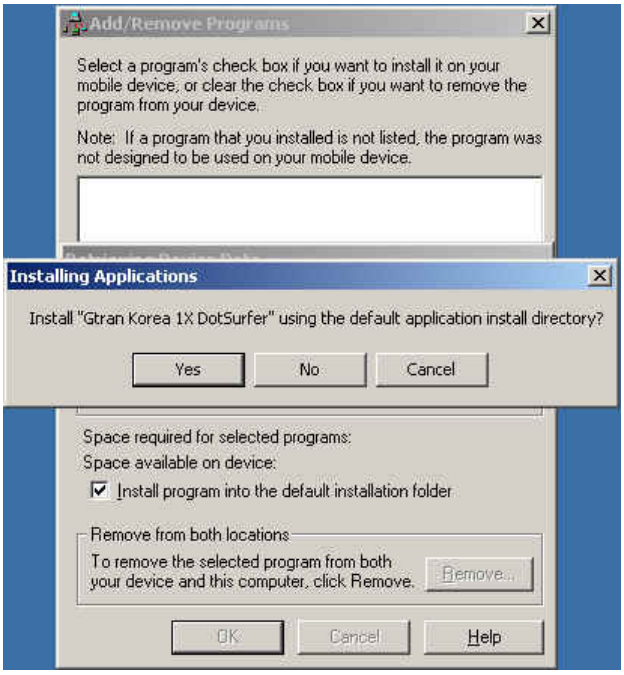


c. Insert DotSurfer installation CD into your PC. Click **Cancel** on the following screen.

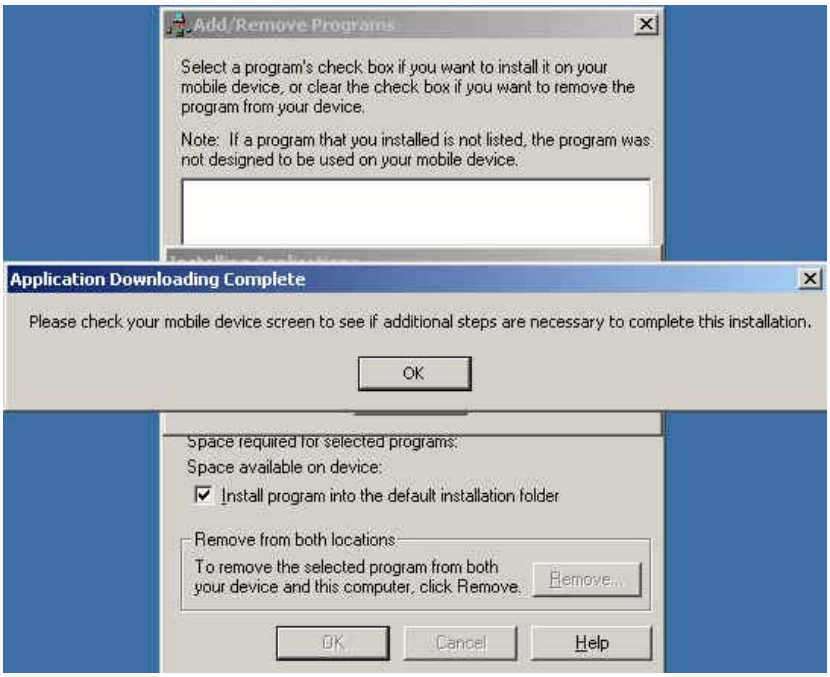
d. Go to **Start** -> **Programs** -> **Windows Explorer** -> **D:** -> **WinCE** -> **Sa1110** -> **setup.exe,** where **D** is the driver for CD-ROM.

e. Follow the on-screen instructions.

f. On the screen asking to install Default Installation Folder, click **Yes**.



g. When installation is complete, screen will appear as shown below. Click **OK** and the installation automatically will run in iPAQ PDA.

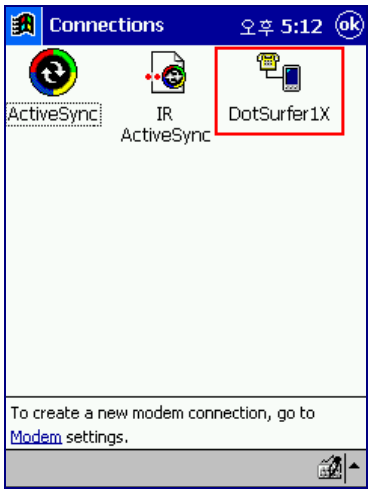


h. When the synchronization is complete, take out the iPAQ from the cradle. Attach the PC card expansion pack onto the PDA and insert the DotSurfer® CDMA 1X card into the PC card slot.

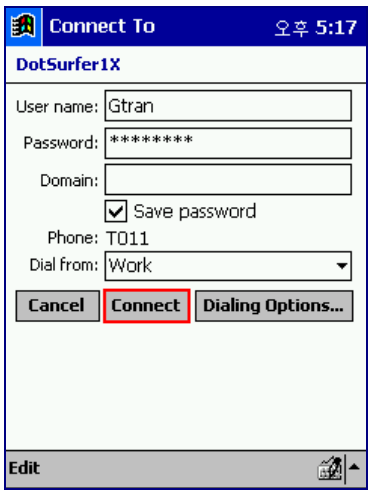
i. Using iPAQ's stylus, press the reset button on the right bottom of the PDA.

5.2 Connecting to Internet

a. Go to **Start -> Programs -> Connections ->DotSurfer® 1X**.



b. When you see the screen below, input user ID, password, etc. and click **Connect**.



c. Once connected, go to **Start –> Internet Explorer** and start surfing the web.

5.3 GT Dialer User Manual

Go to **Start –> Programs -> GT Dialer**. Screen showing DotSurfer® 1X status will appear.

< Before connection>

<After connection>

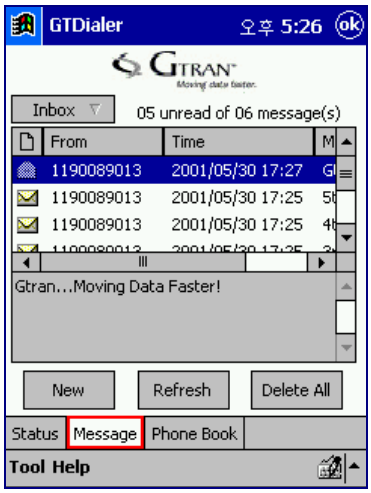
Receiving signal strength

New SMS message received

Card connection status

5.3.1 Send and Read SMS Messages

a. Click **Message** tab on the bottom of GT Dialer main screen.



b. To send an SMS message, click **New** button on the bottom and create a message.

c. Input the destination number and text message and click **Send** button.

d. To read an SMS message, double-click the message.

5.3.2 Delete, Reply, Forward SMS Messages

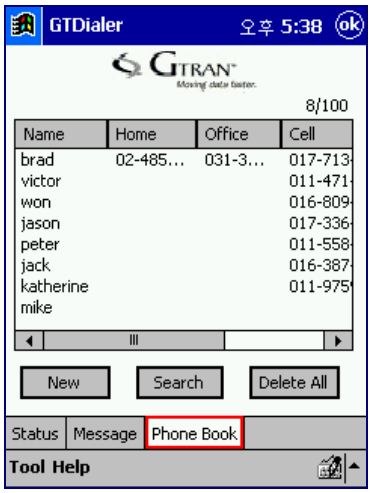
a. To delete an SMS message, select the message. Using the Stylus, tap and hold, which will display the pop-up menu. Select **Delete** from the pop-up menu.

b. To reply to the received message, select the message and with the Stylus, tap and hold. Select **Reply** from the pop-up menu.

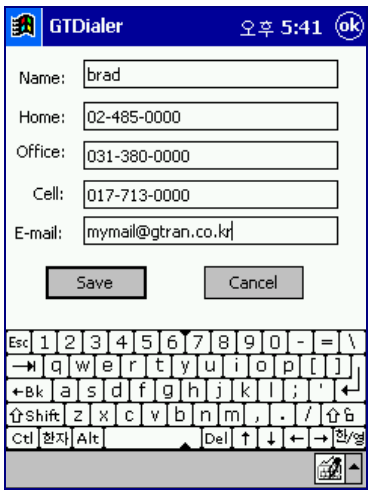
c. To forward a message to others, using the Stylus, tap and hold. Select **Forward** from the menu.

5.3.3 Phone Book

a. Click **Phone Book** tab, which is located at the bottom of GT Dialer.



b. To add new number, click **New** button, input the info and click **Save**.

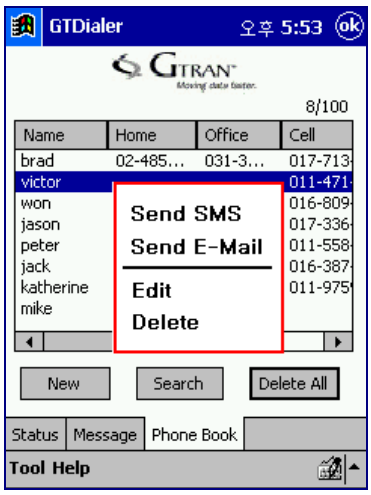


c. To search for the phone number or string from your contact list, click **Search** button. Enter a number or string and click **OK** button.

d. To send an SMS message to a person listed under contact list, select a contact with the stylus by tapping and holding. Select **Send SMS** or **Send E-Mail** from the pop-up menu.

e. To edit a contact from the list, click **Edit** from the pop-up menu and edit.

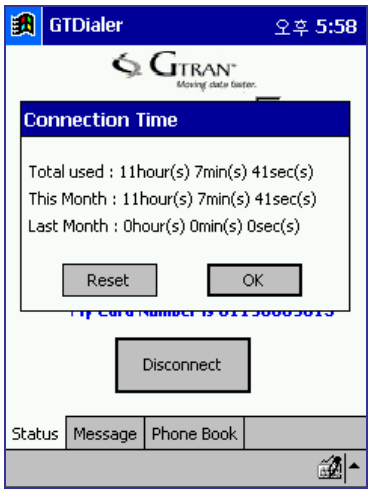
f. To delete a contact from the list, click **Delete** from the pop-up menu



5.3.4 Other Displays

From GT Dialer main screen, click **Tool** -> **Information** -> **Time**.

- Go to **Tool** -> **Information** -> **Time** to access Connection Time display.

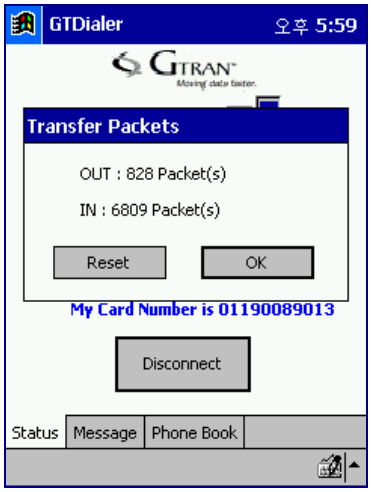


Total used: Total time used prior to resetting the accumulated time

This Month: Accumulated time for this month

Last Month: Accumulated time for last month

- Go to **Tool** -> **Information** -> **Transfer Packets** to display Transfer Packets status. Card displays the transfer packets. A packet size defines to 512 bytes.



OUT: Received packets during connection

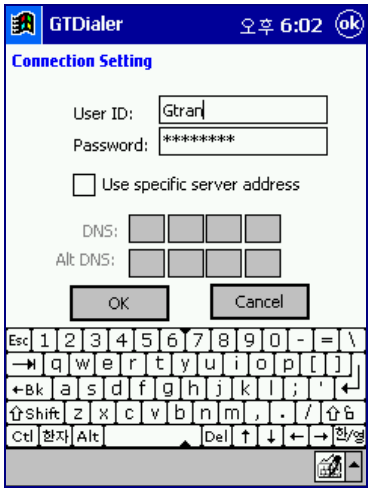
IN: Sent packets during connection

From GT Dialer main screen, click **Tool** -> **Setting**. You'll see three options on the pop-up menu: **Message**, **Sound**, and **Connect**.

- To select a method of receiving, go to **Tool** -> **Setting** -> **Message**. If inbox is full, select **Rejected new msg** and select **Deleted the oldest & stored new msg**.

- To select Message Alert sound, go to **Tool** -> **Setting** -> **Sound**. Choose a wav file and click **OK** button.

- To go to Connection Setting, click **Tool** -> **Setting** -> **Connect**. Use set value as is, with the exception of certain cases.



The battery life on your iPAQ or Pocket PC device will be affected by the use of your DotSurfer® card.

6. LINUX Procedures

To access the manual for Linux based software installation procedure, go to www.gtranwireless.com.

Appendix A: Updating the GT Dialer (GT Updater)

GT Updater is a unique application included in the DotSurfer software suite. It allows the user to check, download, and update the latest DotSurfer software remotely with intuitive graphical user interface. Examples of the components that can be updated are:

- **GT Dialer** skin
- Application
- Device driver

Through **GT Updater**, user can download the newest GT Dialer skins, latest available features and enhancements.

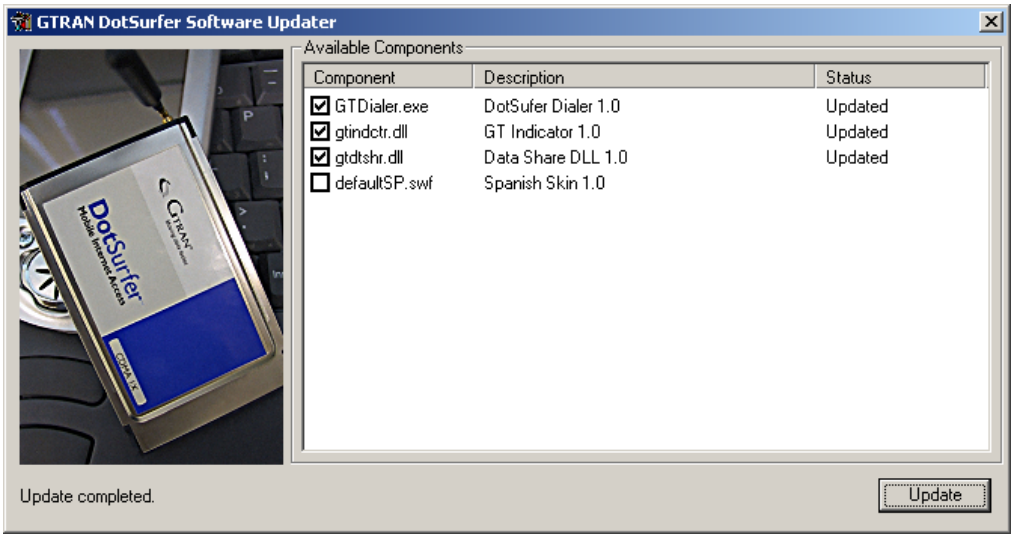
a. Open **GT Dialer** and connect to network.

b. Close the **GT Dialer** without disconnecting from the network.

c. Go to **Start** and run **Program-> GTRAN Wireless-> GT Dialer -> GT Updater**.

d. **GT Updater** will automatically connect to the Update Server and display the updated components available on the server. If no newer components are available on the server, the available component entry will be blank.

e. Select the components to be updated and click **Update**.



f. Once update is completed, the update results will be shown in the **Status** column.

g. Exit the **GT Updater** and reboot the computer.

Appendix B: Product Specifications

System Requirements

Card Slot	1 Type II PCMCIA						
Computer	5 Mb's free hard drive space, 32 Mb of ram & a CD-ROM						
Operating System	Windows 95	Windows 98	Windows ME	Windows 2000	Windows NT	Windows CE*	Linux (See www.gtranwireless.com)

*Requires appropriate adapter to interface to Type II PCMCIA card

Environmental and Electrical Specifications

Operating Temp:	-30º - +60º C Ambient, outside PC card enclosure
Storage Temp:	-30 ~ +70
Humidity:	90%
Vibration:	100 ~ 500 Hz
Drop:	90 Cm
Voltage	3.3 VDC
Current	TX 850 mA MAX, RX 150 mA MAX, Sleep Mode 2.5mA MAX
Transmit Power	200 mW MAX
Transmit Frequency	1850 MHz - 1909.950 MHz

Receive Frequency	1930 MHz- 1989.950 MHz
Channel Spacing	45 MHz
Frequency Stability	+/- 300Hz

Appendix C: Safety and Regulatory Information

Safety and Hazards

DotSurfer modem card should not be used in any environment where radio frequency equipment is restricted or prohibited to be in use. This includes airports/aircrafts, hospitals, and other areas susceptible to any form of radio interference. DotSurfer can transmit signals that could interfere with various systems in aircraft, medical equipments, and life support equipments. To insure safety, The DotSurfer modem card must be turned off under above conditions.

Regulatory Information

TBD

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4,901,307	5,490,165	5,056,109	5,504,773	5,101,501
5,506,865	5,109,390	5,511,073	5,228,054	5,535,239
5,267,261	5,544,196	5,267,262	5,568,483	5,337,338
5,600,754	5,414,796	5,657,420	5,416,797	5,659,569
5,710,784	5,778,338			