

# **SIMADO GDT11**

## **System Manual**



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## **Documentation Information**

This is a general documentation and it covers many models with different specifications. A particular product may not support all the features and facilities described in the documentation.

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## **Section 1: Introduction**



## Welcome

Thanks for purchasing a Matrix product.

We want you to get the maximum performance from our product. If you run into technical difficulties, we are here to help. But please consult this system manual first.

If you still can't find the answer, gather all the information or questions that apply to your problem and, with the product close to you, call your dealer. Matrix dealers are trained and ready to give you the support you need to get the most from your Matrix product. In fact, most problems reported are minor and can be easily solved over the phone.

In addition, technical consultation is available from Matrix engineers every business day. We are always ready to give advice on application requirements or specific information on installation and operation of our products.

The system manual is divided in following sections:

Section 1: Introduction

Section 2: Features and Facilities

Section 3: Appendix

We suggest the first time users to read this system manual in the following sequence.

- Section 1
- Section 2

***The user can use page named 'Notes' for making note of customer's requirement and 'Programming Register' for registering the programming changes datewise. These could be used for future reference.***

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## Packing List

The ideal sales package for SIMADO GDT11 is as mentioned below:

<b>Sr.</b>	<b>Accessories</b>	<b>Qty.</b>
01	SIMADO GDT11	1
02	Antenna	1
03	System Manual	1
04	Modem Cable	1
05	Adapter 9VDC 1Amp	1
06	Screw M 7/30	1
07	Screw Grip	1
08	Warranty Card Set	1
09	Support Card	1
10	SIMADO GDT11 CD	1

- Please make sure that these components are present.
- In case of short supply or damage detection, contact the source from where you have purchased the system.

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## Warranty Statement

Matrix Telecom Pvt. Ltd. (Matrix) warrants to its consumer purchaser any of its products to be free of defects in material, workmanship and performance for a period of 15 months from date of manufacturing or 12 months from the date of installation which ever is earlier.

During this warranty period, Matrix will at its option, repair or replace the product at no additional charge if the product is found to have manufacturing defect. Any replacement product or part/s may be furnished on an exchange basis, which shall be new or like-new, provided that it has functionality at least equal to that of the product, being replaced. All replacement parts and products will be the property of Matrix. Parts repaired or replaced will be under warranty throughout the remainder of the original warranty period only.

***This limited warranty does not apply to:***

1. Products that have been subjected to abuse, accident, natural disaster, misuse, modification, tampering, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed.
2. Products which have been damaged by lightning storms, water or power surges or which have been neglected, altered, used for a purpose other than the one for which they were manufactured, repaired by customer or any party without Matrix's written authorization or used in any manner inconsistent with Matrix's instructions.
3. Products received improperly packed or physically damaged.
4. Products damaged due to operation of product outside the products' specifications or use without designated protections.

***Warranty valid only if:***

- Primary protection on all the ports provided.
- Mains supply is within limit and protected.
- Environment conditions are maintained as per the product specifications.

### **Warranty Card:**

- When the product is installed, please return the warranty card with:
  - Date, signature and stamp of the customer.
  - Date, signature and stamp of the channel partner.
- Matrix assumes that the customer agrees with the warranty terms even when the warranty card is not signed and returned as suggested.

The Purchaser shall have to bear shipping charges for sending product to Matrix for testing/rectification. The product shall be shipped to the Purchaser at no-charge if the material is found to be under warranty. The Purchaser shall have to either insure the product or assume liability for loss or damage during transit. Matrix reserves the right to waive off or make any changes in its warranty policy without giving any notice.

If Matrix is unable to repair or replace, as applicable, a defective product which is covered by Matrix warranty, Matrix shall, within a reasonable time after being notified of the defect, refund the purchase price of the product provided the consumer/purchaser returns the product to Matrix.

In no event will Matrix be liable for any damages including lost profits, lost business, lost savings, downtime or delay, labor, repair or material cost, injury to person, property or other incidental or consequential damages arising out of use of or inability to use such product, even if Matrix has been advised of the possibility of such damages or losses, or for any claim by any other party.

Except for the obligations specifically set forth in this Warranty Policy Statement, in no event shall Matrix be liable for any direct, indirect, special, incidental or consequential damages whether based on contract or any other legal theory and where advised of the possibility of such damages.

Neither Matrix nor any of its distributors, dealers or sub-dealers makes any other warranty of any kind, whether expressed or

implied, with respect to Matrix products. Matrix and its distributors, dealers or sub-dealers specifically disclaim the implied warranties of merchantability and fitness for a particular purpose.

This warranty is not transferable and applies only to the original consumer purchaser of the Product. Warranty shall be void if the warranty card is not completed and registered with Matrix within 30 days of installation.

## Introducing the System

The Matrix SIMADO GDT11 is a compact, ready to use unit providing a standard 9 pin RS232 port (serial) for data communication. When a PC is connected to the serial port, the SIMADO GDT11 can efficiently be used for web browsing, sending and receiving SMS, data transfer and fax services. The SIMADO GDT11 which can be setup with minimal effort, finds its application in business establishments, SOHO, Institutions, etc.

The SIMADO GDT11 offers advanced features like:

1. Short Message Services (Sending and Receiving of SMS).
2. Data Services (Sending and Receiving Data files).
3. Web Browsing (Exploring the Internet).
4. Fax Services (Sending and Receiving fax).

The SIMADO GDT11 is shown in the figure given below:



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## Installing the System

### Safety Instructions

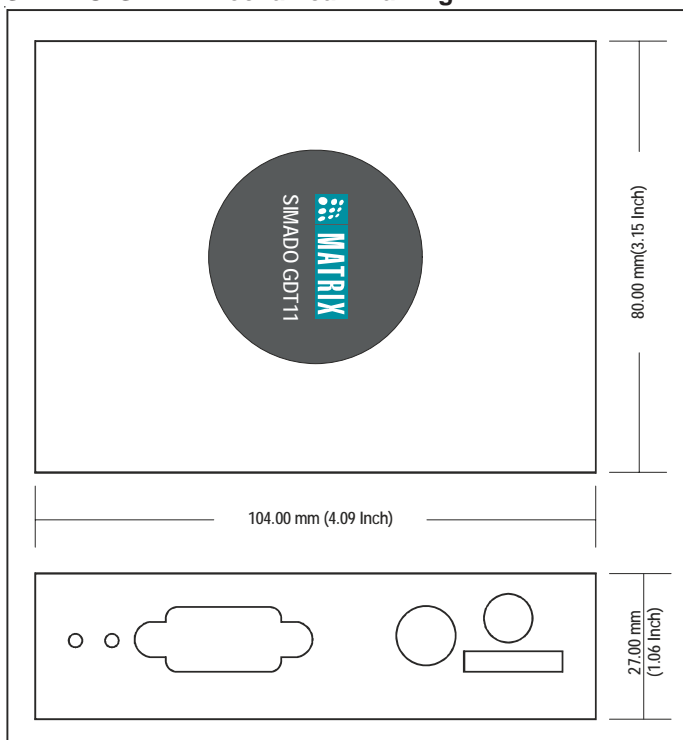
- Never do telephone wiring during a lightening storm.
- Avoid using telephone other than a cordless type during an electric storm. There may be a remote risk of electric shock from lightening.
- Never use a telephone to report gas leaks if it is near gas leak.
- Do not touch non-insulated telephone wires or terminals before disconnecting at the network interface.
- Do not install this product near water, for example near a bathtub, washing bowl, kitchen sink, laundry tub, swimming pool etc.
- Slots on enclosure are for proper ventilation. They will protect the system from overheating. Never cover the slots.
- Never place this product on heated place or any other equipment.
- Never push objects of any kind inside this product. This may short-circuit various parts.
- Unplug this product from electric wall outlet in following cases and contact authorized service personnel.
  - Liquid spills on to the product.
  - Product exposed to rain or water.
  - Product does not operate normally by following operating instructions.
  - Product dropped from height.
  - Product exhibits unusual change in performance.
- Do not open the system in power ON condition. Never try to remove the SIM card in power ON condition.

### Installing the SIMADO GDT11

- Don't power the system.
- Do not use the unit with damaged antenna.
- Fix the system on the selected site. Please refer 'SIMADO GDT11 Mechanical Drawing' at the end of this topic. The site chosen should ensure best call quality (Maximum signal strength)
- Check the voltage at the power point from where the supply is to be accessed via the adapter. It should be between 90 to 265VAC, 47-65Hz.

- Insert the SIM Card in the SIM card holder provided in the bottom of the SIMADO GDT11.
- Please note that the SIM card gets easily damaged by scratches or bending. Be careful when handling, inserting or removing the card.
- Connect the power supply to the system. Ensure proper contacts.
- To avoid the damage to the SIM card, do not power ON the system till the SIM is installed.
- Connect the PC to the COM port of the SIMADO GDT11 using the communication cable provided by Matrix.

### **SIMADO GDT11 Mechanical Drawing:**



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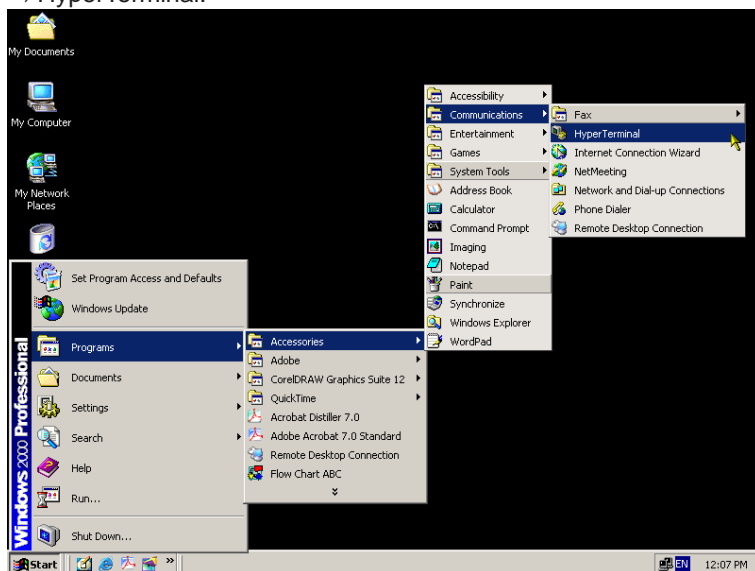
## Getting Started

After strictly following the safety instructions and installing the SIMADO GDT11 the system is now ready to be switched on.

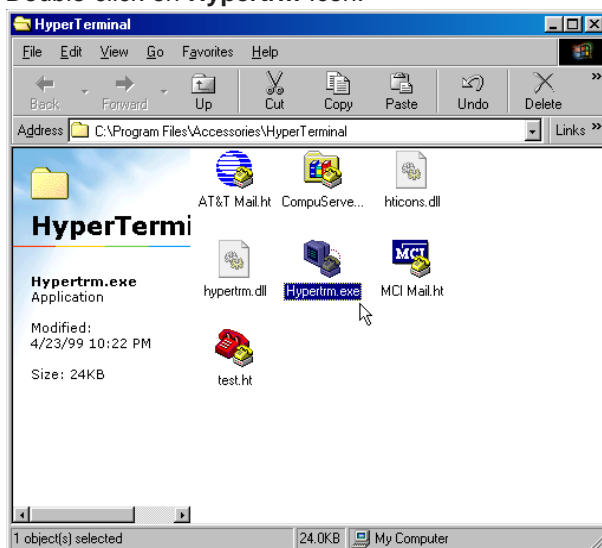
- Switch on the system. The LED labelled ON glows.
- The SIM card detection takes place automatically.
- The system now searches for the network and when successfully registered on the network, LED marked 'NW' flashes slowly.
- When the network is available LED marked 'NW' starts blinking slightly faster.
- The SIMADO GDT11 is now ready for use.

### Testing the Installation

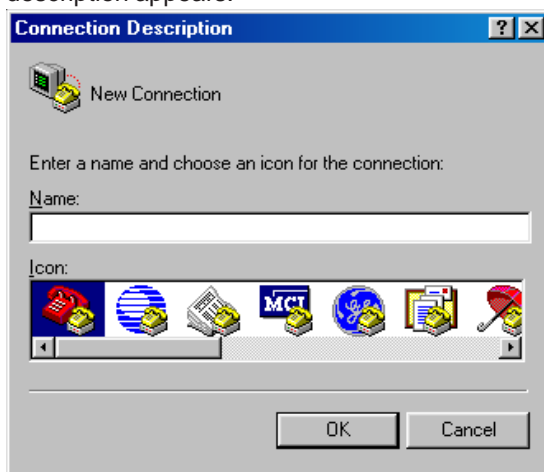
1. Click on Start → Programs → Accessories → Communication → HyperTerminal.



2. Double click on **Hypertrm** Icon.



3. A New Connection Dialog Box with a text box for connection description appears.





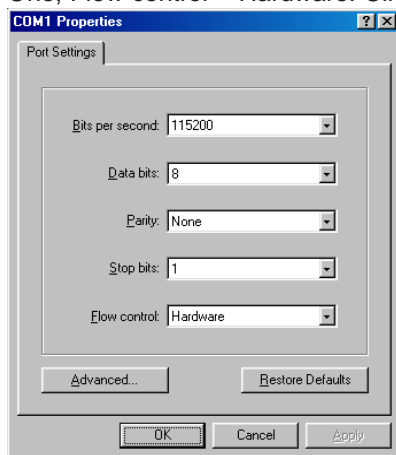
4. Enter a relevant name in the text box (such as the SIMADO GDT11 connection), choose an Icon from the Icon list provided and click on **OK** button.



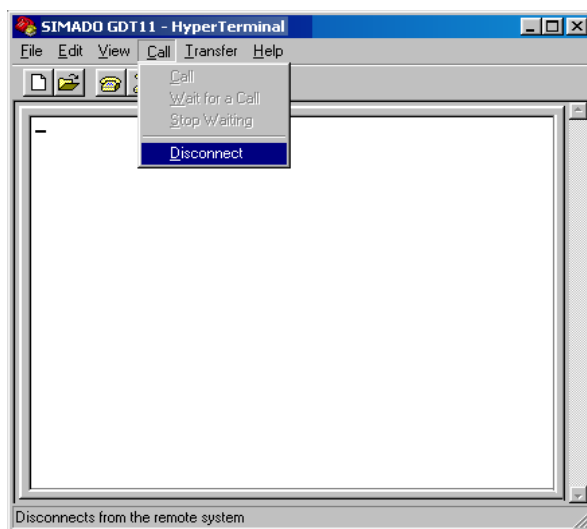
5. In the “Connect To” Window, to fill up the ‘Connect Using’ text box select the relevant COM Port. The rest of the options are disabled automatically. Click on **OK** button.



6. In the COM Properties Window make the following entries. Bits per seconds=115200, Data bits = 8, Parity = None, Stop bits = One, Flow control = Hardware. Click on **OK** button.



7. In the HyperTerminal Window, Click on the **Call** Menu and then Click on Menu Item **Disconnect**.



- 
- The installation is complete.

**Relevant Topic:**

1. Installing the System 13

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## **Section 2: Features and Facilities**



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## Data Services

### What's this?

SIMADO GDT11 allows GSM users to send and receive data files over the GSM network.

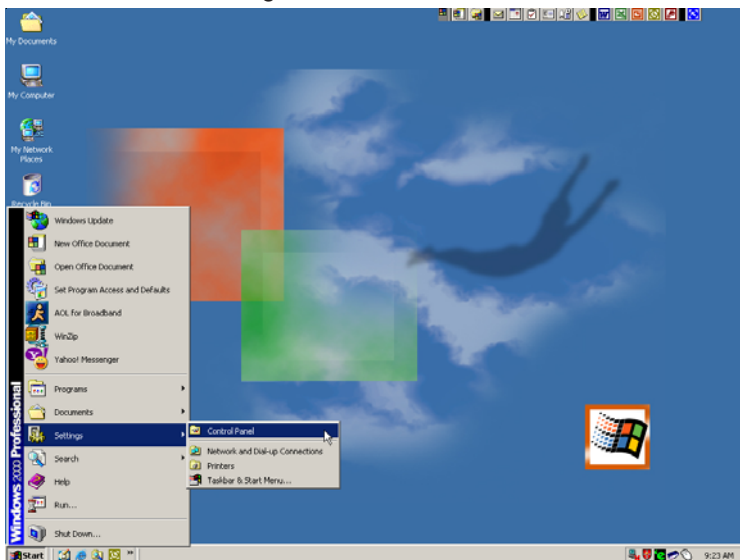
### How to Send/Receive Data using the SIMADO GDT11?

1. The data transfer service for the SIM used in the SIMADO GDT11 must be enabled from the Service Provider.
2. Set up the Modem.
3. Create a connection type using HyperTerminal.
4. You can successfully send/receive data using the SIMADO GDT11.

### How to program?

#### Setup the Modem

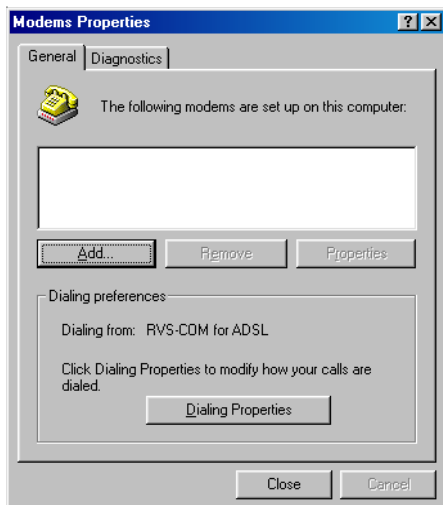
1. Click on Start → Setting → Control Panel.



## 2. Double Click on the **Modem** Icon.

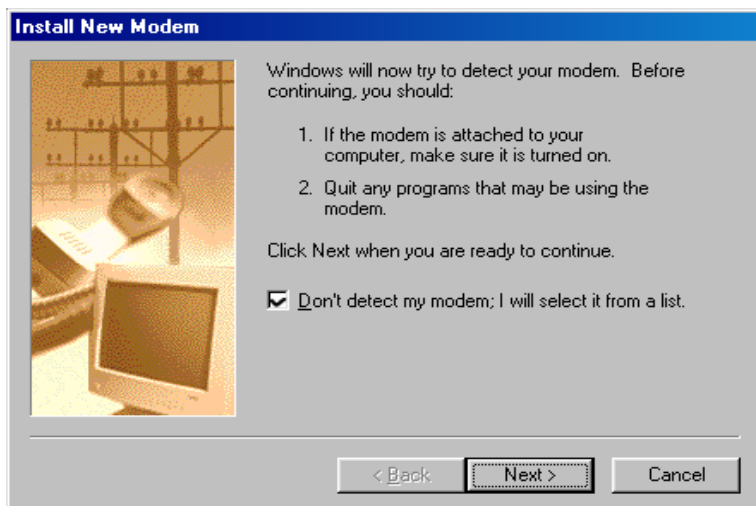


## 3. Modem properties dialog box opens as shown below. Click on **Add**.

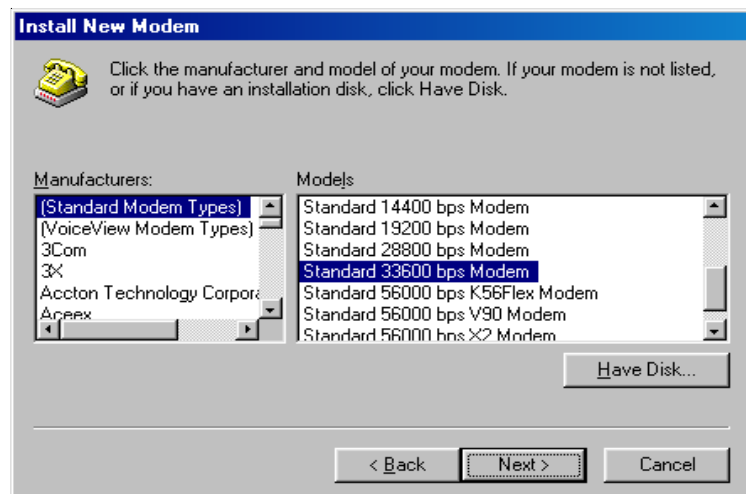




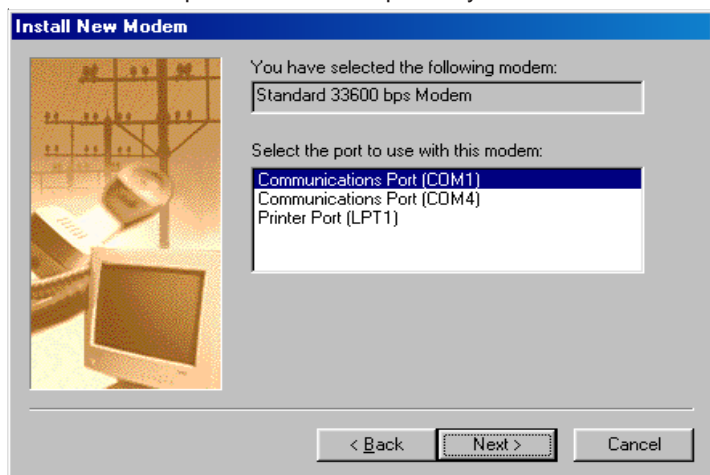
4. In Install New Modem window **check** 'Don't detect my modem; I will select from a list'. Click on **Next** button.



5. Select **Standard 33600 bps Modem** for models. Click on **Next** for the next screen.



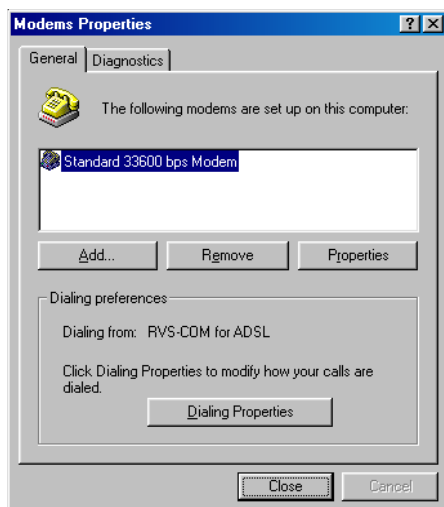
6. Select **Communication Port (COM1)** before clicking on **Next** for the next screen. Please ensure that COM1 is the correct communication port for the serial port of your PC.



7. The confirmation for Modem installation is received. Click on **Finish** button.

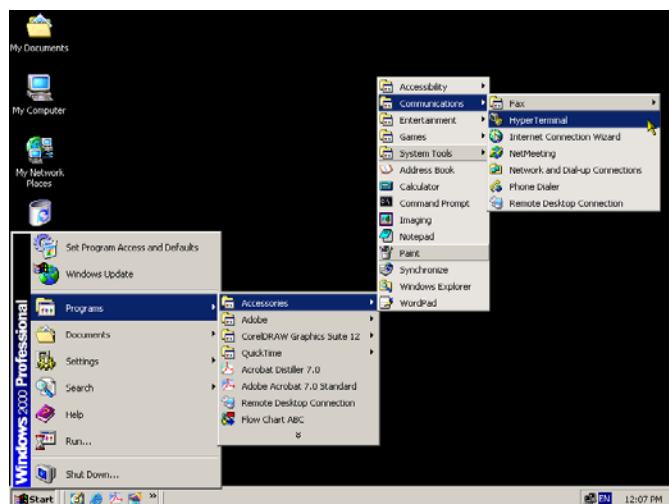


7. Click on **Close** button.



**Create a connection type**

1. Click on Start → Programs → Accessories → Communication → HyperTerminal.



2. A New Connection Dialog Box with a text box for connection description appears.



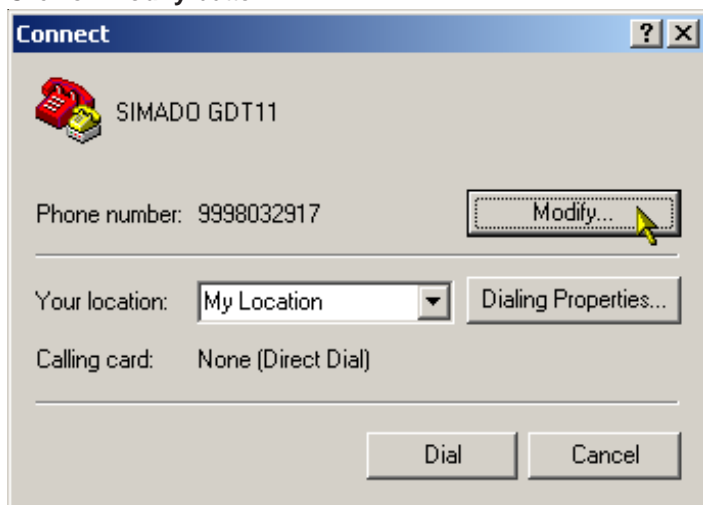
3. Enter a relevant name in the text box (such as the SIMADO GDT11 connection), choose an icon from the icon list provided and click on **OK** button.



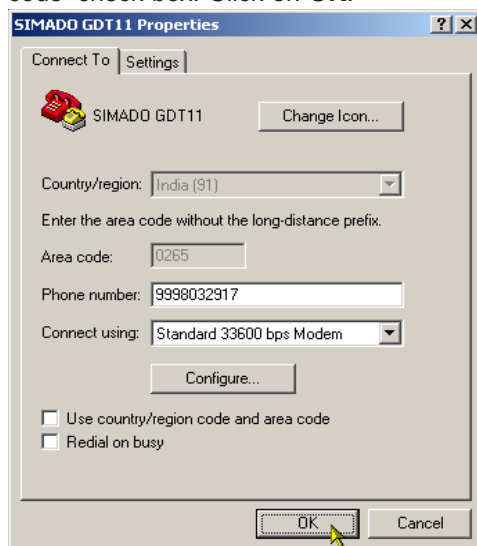
4. In the “Connect To” Window, to fill up the ‘Connect Using’ text box select the newly installed Modem. In the text box for Phone number fill in the number of the destination. Click on **OK** button.



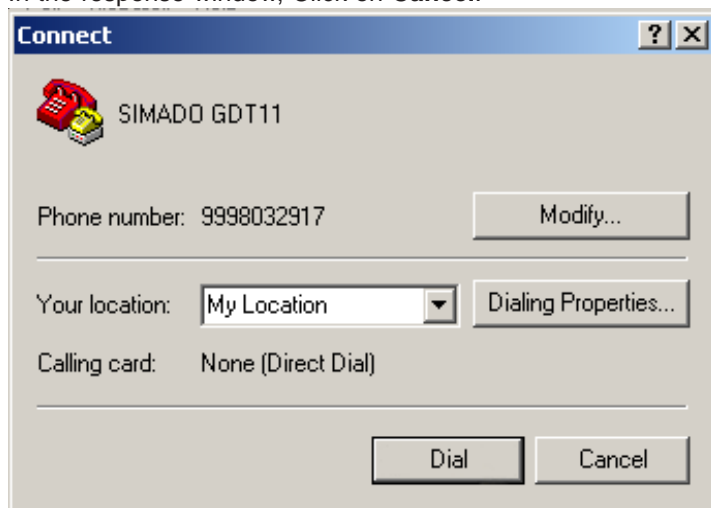
5. Click on **Modify** button.



6. In the response window **Uncheck** the 'Use country code and area code' check box. Click on **OK**.



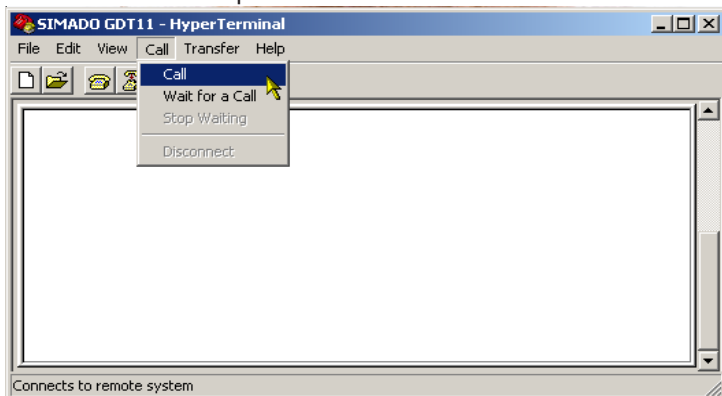
7. In the response window, Click on **Cancel**.



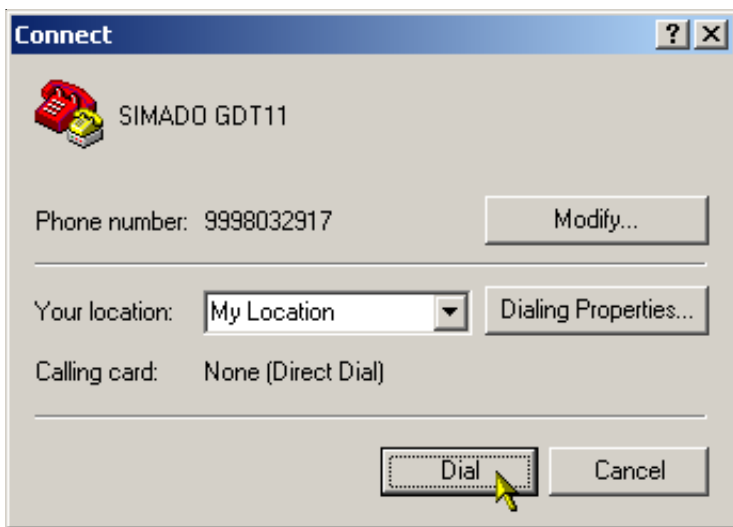
## How to use it?

### Sending the data files using the SIMADO GDT11

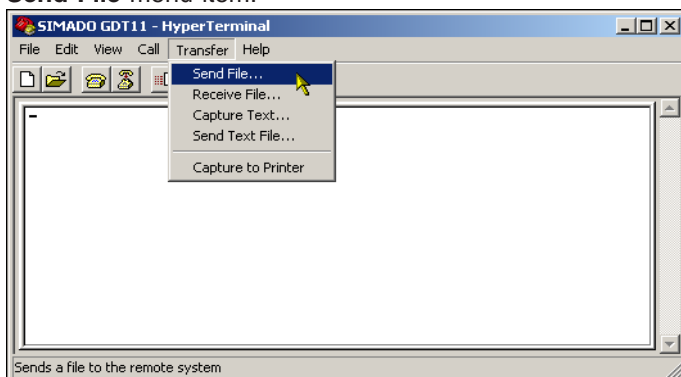
1. Double click on the connection type created. Click on the **Call** menu and in the dropdown menu click on **Call** menu item.



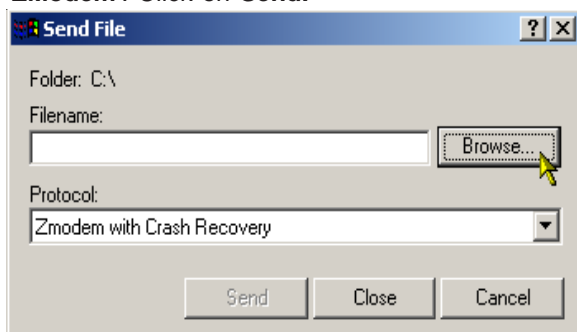
2. Click on **Dial** if the destination number is same as the Phone number displayed. If not, Click on the **Modify** button and change the Phone number and then Click on **Dial**.



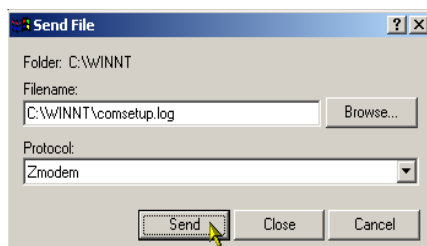
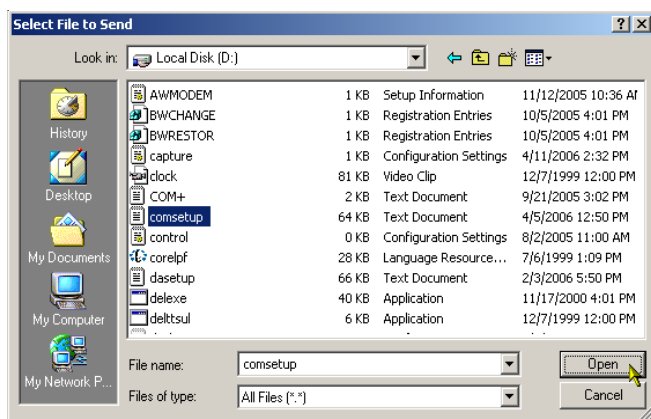
3. The status bar of the HyperTerminal window displays connected. Click on **Transfer** menu and in the dropdown menu. Click on **Send File** menu item.



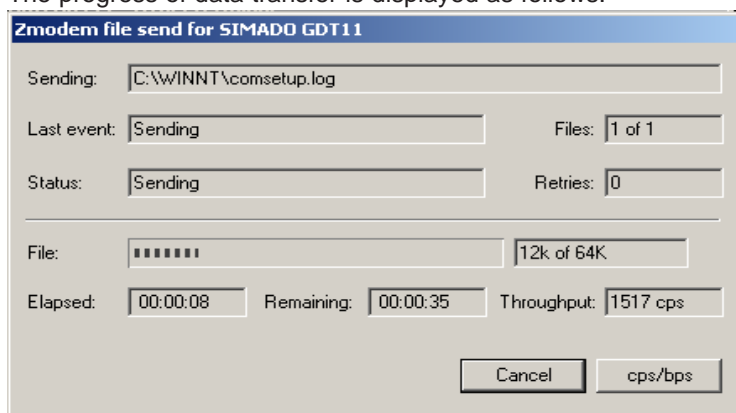
4. In the response window choose the file to be transferred by clicking on browse. Ensure that the protocol selected is '**ZModem**'. Click on **Send**.







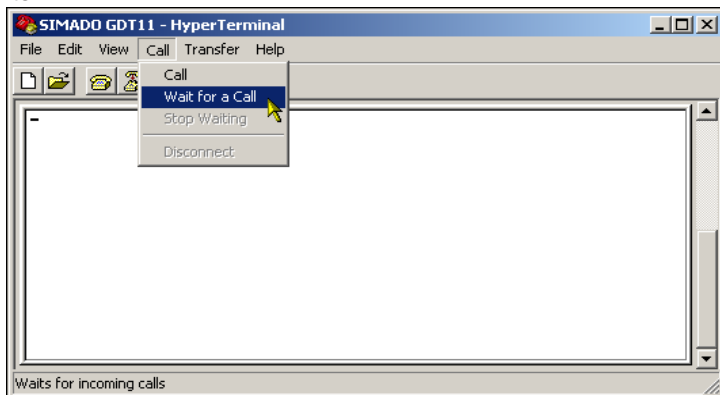
5. The progress of data transfer is displayed as follows.



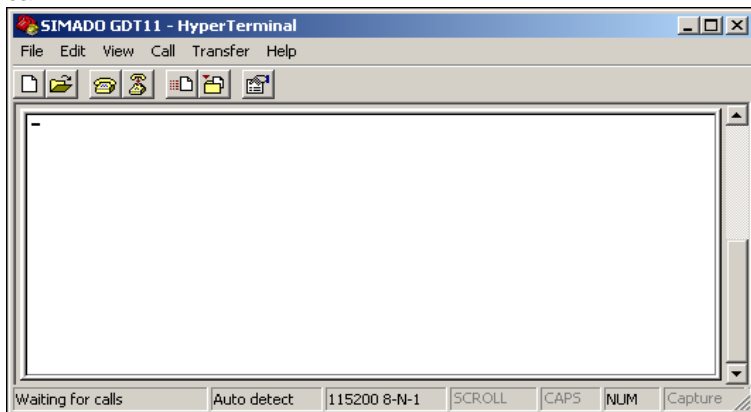
6. The destination should be Receiving File mode. Once the data transfer is over the connection can be disconnected and re-established if and when required.

### **Receiving the data files using the SIMADO GDT11**

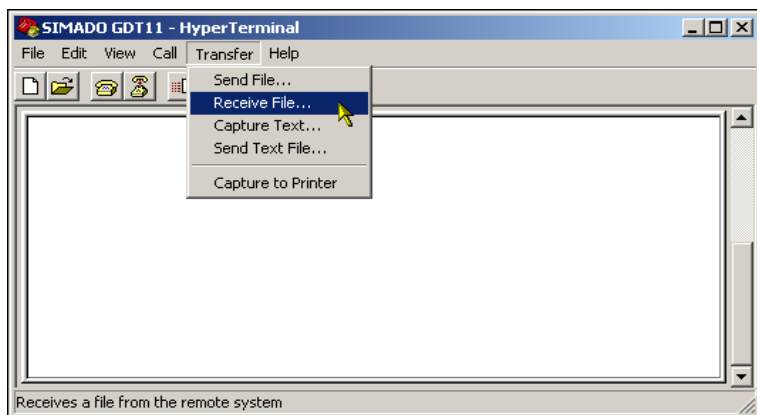
1. Double Click on the connection type created. Click on the **Call** menu and in the dropdown menu Click on **Wait for Call** menu item.



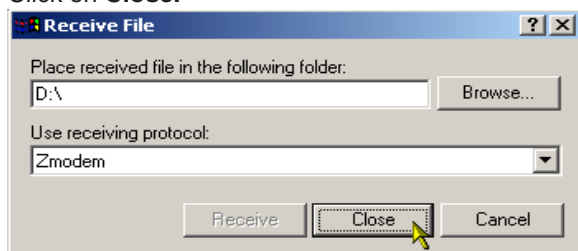
2. The status bar of the HyperTerminal window displays waiting for call.



3. Click on **Transfer** and in the dropdown menu Click on **Receive File**.



4. In the response box you can program the destination for storing the received file. Ensure the receiving protocol is '**ZModem**'. Click on **Close**.



5. When a data file is received the progress status as shown below is displayed.

**Zmodem file receive for SIMADO GDT11**

Receiving: ARM 7&9 PRESENTATION.PDF

Storing as: D:\ARM 7&9 PRESENTATION.PDF Files: 1 of 1

Last event: Receiving Retries: 1

Status: Receiving

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File: [Progress Bar] 186k of 1853K

Elapsed: 00:02:57 Remaining: 00:26:30 Throughput: 1073 cps

Cancel Skip file cps/bps

- Once the data transfer is complete the above dialog box disappears and the received data file can be accessed from the prior programmed destination. The connection can be disconnected and re-established if and when required.

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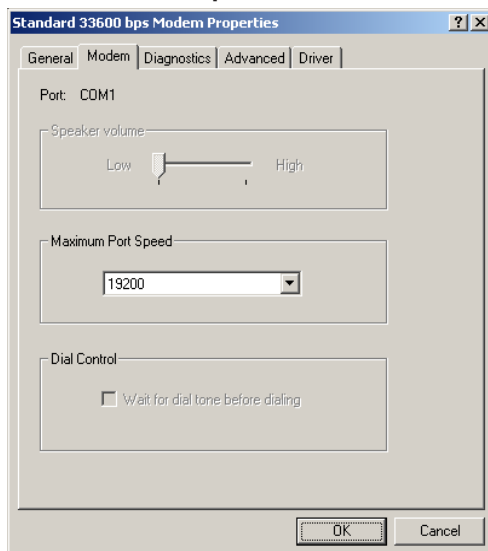
## Fax Services

### What's this?

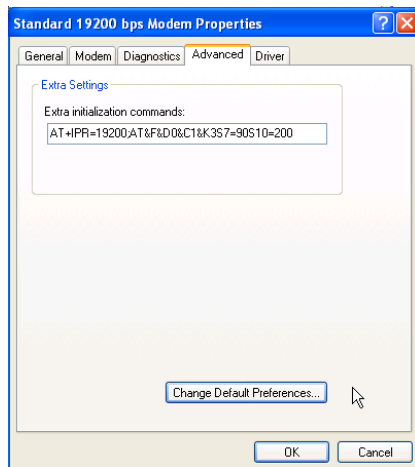
The GSM Fax and Data Service allows GSM users to send and receive fax over the GSM network. The Matrix SIMADO GDT11 supports sending and receiving of Fax.

### How to use it?

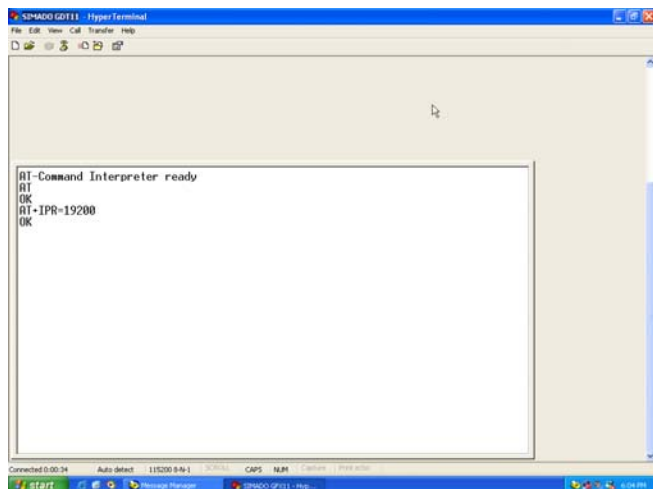
- The Fax Service for the SIM used in the SIMADO GDT11 must be enabled from the service provider.
  - A PC Fax application which is Fax Class 2.0 compliant must be installed on the Computer.
  - Proceed with the further Set-up as per the WinFax Application requirement are as under.
1. Go to Control Panel → System → Device Manager → Modem → Open Standard 19200bps Modem → Modem Tab → **Set the Maximum Port Speed to 19200.**



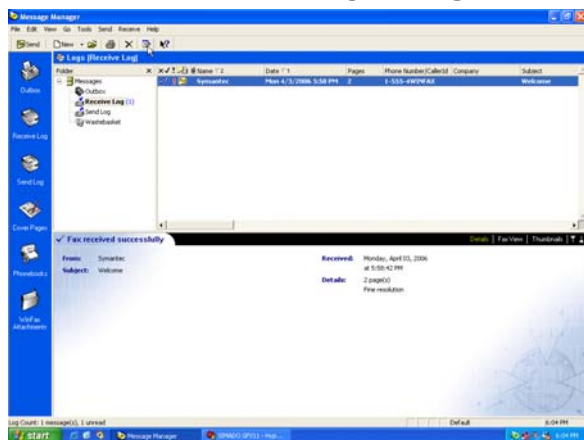
- Go to Control Panel → System → Device Manager → Modem → Open Standard 19200bps Modem → Advance Tab → Set the Extra Settings to **AT+IPR=19200;**  
**AT&F&D0&C1&K3S7=90S10=200.**



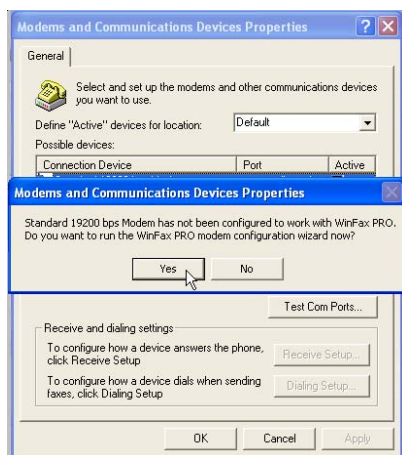
- On HyperTerminal → **Set AT+IPR** (Note: Do this step every time before running Symantec WinFax).

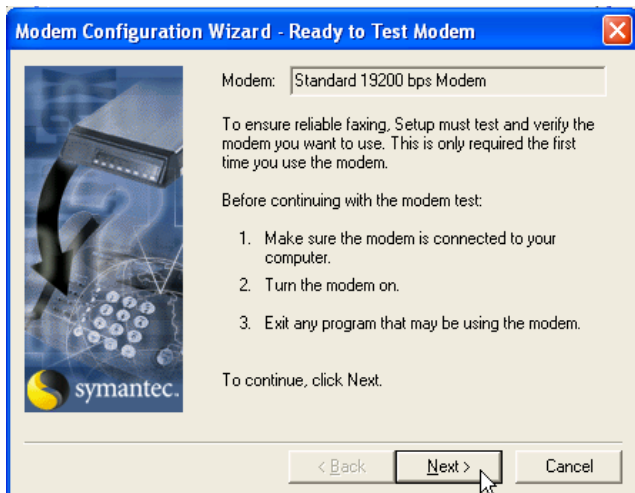
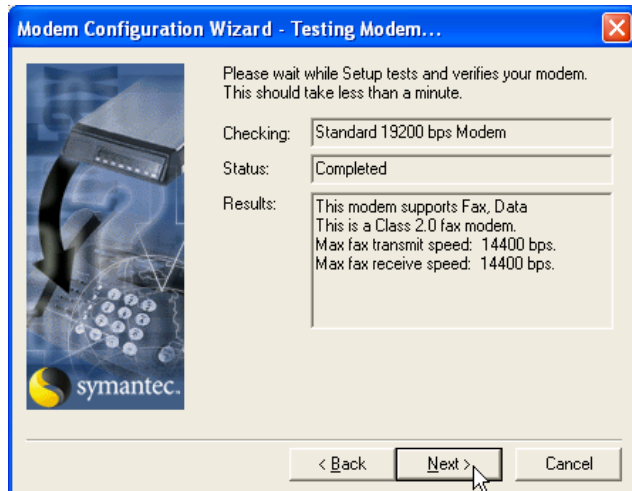


4. Make sure **SIM Card is inserted** and power is supplied.
5. Launch **WinFax PRO Message Manager**.



6. Go to Tools → Program Setup → **Modems and Communications Devices**.
7. Select **Active** devices for location at **Cellular (PCS/GSM-Digital)**.
8. Select Active modem **Standard 19200 bps Modem** and Click on **Yes** button.



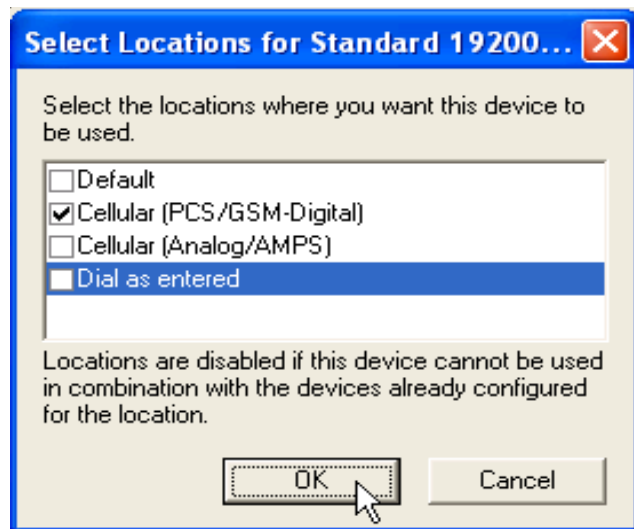
9. Click **Next**.10. Query **Modem Results**. After Querying Modem results. Click on **Next** button.



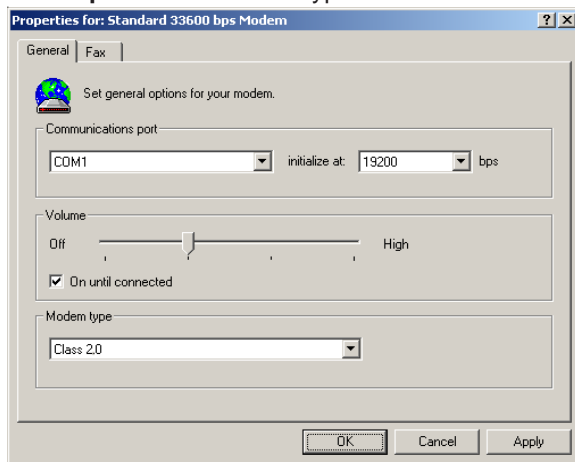
11. Your modem has been successfully configured. Click on **Finish**.



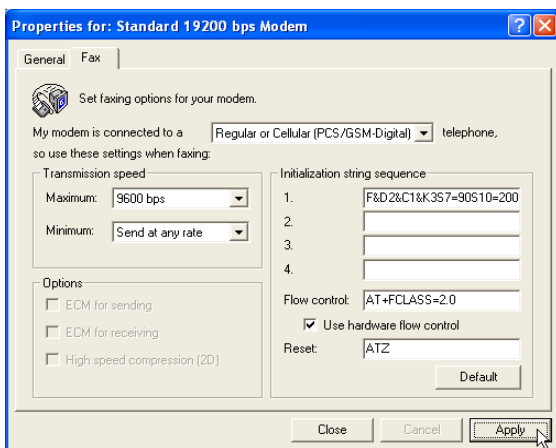
12. Check only **Cellular (PCS/GSM-Digital)** of check box. Click **OK**.



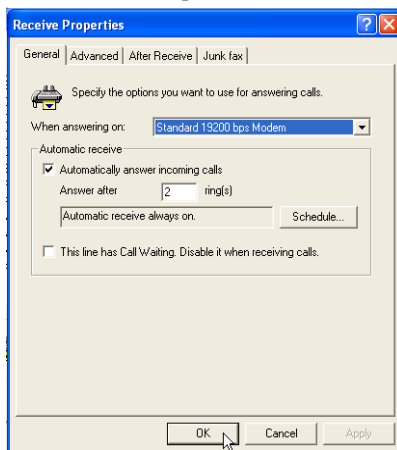
13. Select **Standard 19200bps Modem** and Click on **Properties** button. Select **General** Tab. Select **COM1** initialize at **19200bps**. Select Modem type to be **Class 2.0**.



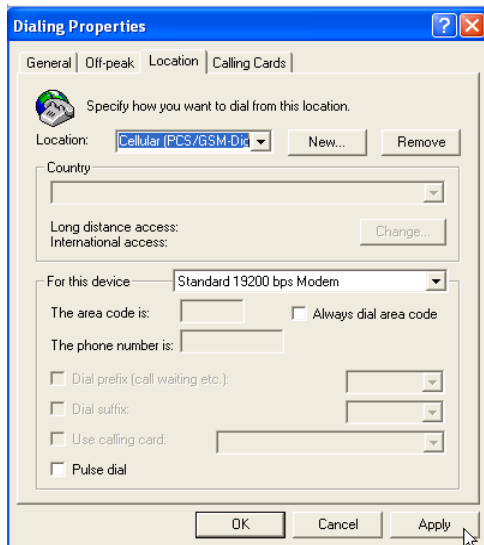
14. Select **Fax** Tab. Transmission speed to be **9600bps**. Add **AT&F&D0&C1&K3S7=90S10=200** to the initializing string sequence. Flow control to be **AT+FCLASS=2.0**. Check Use hardware flow control is **ATZ**.



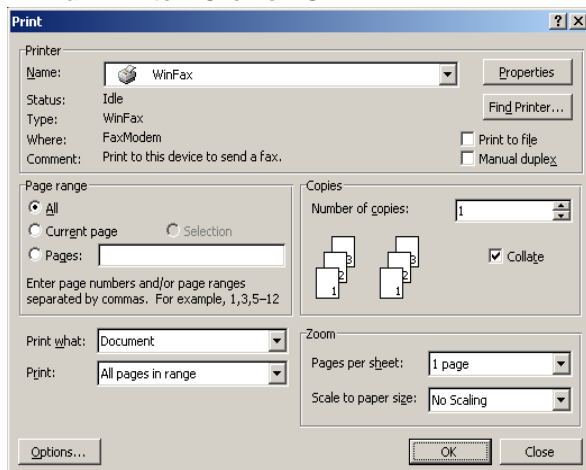
15. Click **Receiving Setup**. Select **Automatically answer incoming calls after 2 rings**. Click on **OK** button.



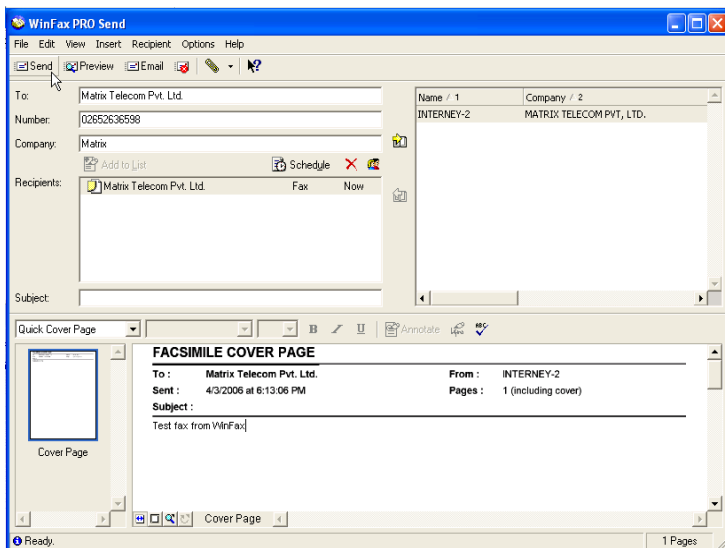
16. Click **Dialing Setup**. Make sure **Standard 19200bps Modem** is **Selected**. Click **Apply** and then **OK**.



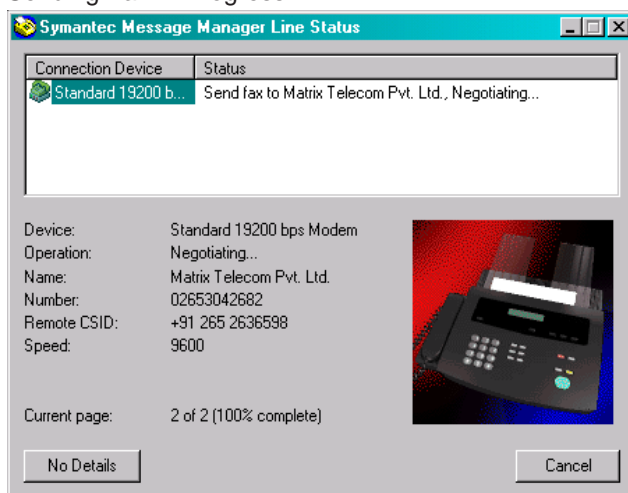
17. Open the document to be faxed. Print the document with **WinFax Printer**. Click on **OK**.



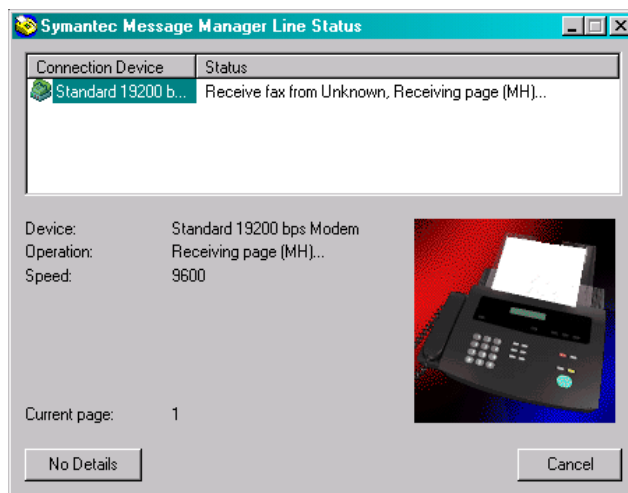
18. WinFax PRO Send will initialize. Kindly follow the guided steps. Click **Send** button to send the fax.

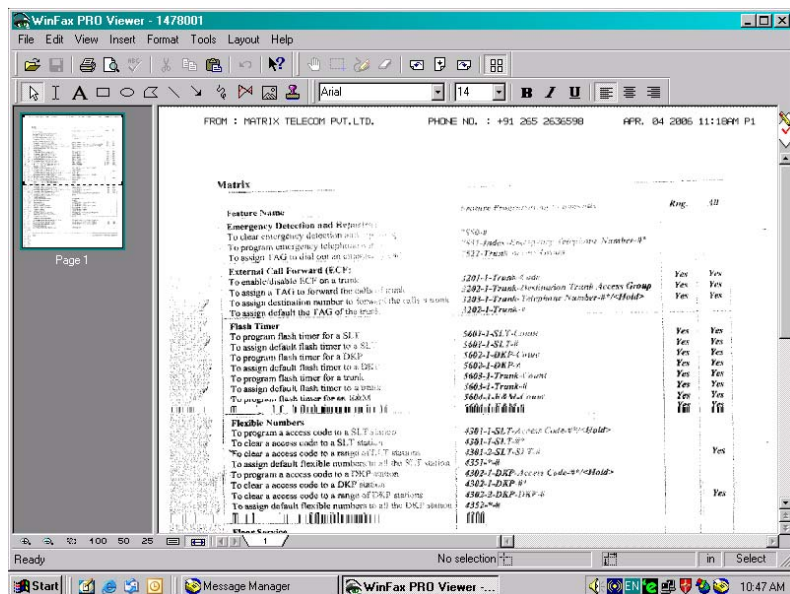


## 19. Sending Fax in Progress.



## 20. Receiving Fax in Progress.





=X=X=

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## **GPRS (General Packet Radio Service)**

### **What's this?**

The General Packet Radio Service (GPRS) is a new, value added service that allows information to be sent and received across a mobile telephone network.

Some important applications of GPRS are Chat, transfer of textual/visual information, transfer of Still and moving images, Web Browsing, File Transfer.

### **How to surf the Internet using SIMADO GDT11?**

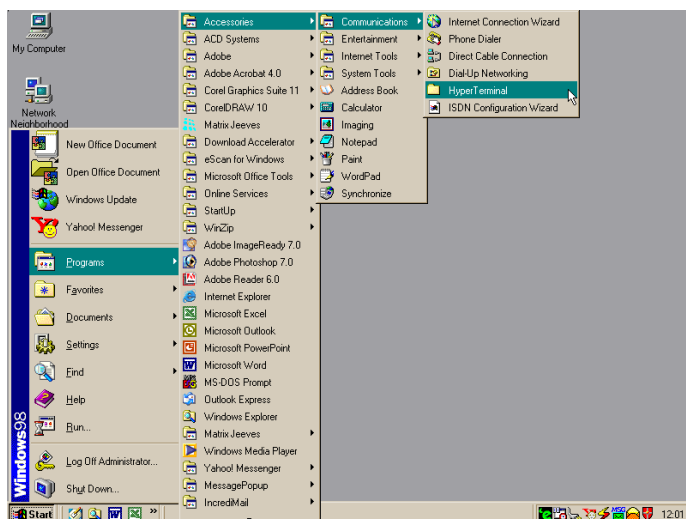
1. The GPRS service for the SIM used in the SIMADO GDT11 must be enabled from the service provider.
2. Create a connection type.
3. Set up a Modem.
4. Set up the Dial-Up network.
5. Get connected to the New GPRS connection.
6. Use the Internet Explorer or Netscape Navigator browser to surf the Internet.

### **How to program?**

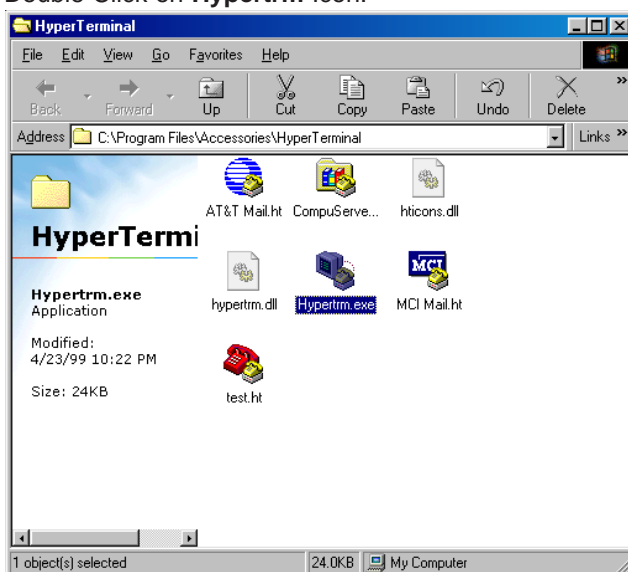
***(Operating System-Windows 98)***

#### **Create a connection type**

1. Click on Start → Programs → Accessories → Communication → HyperTerminal

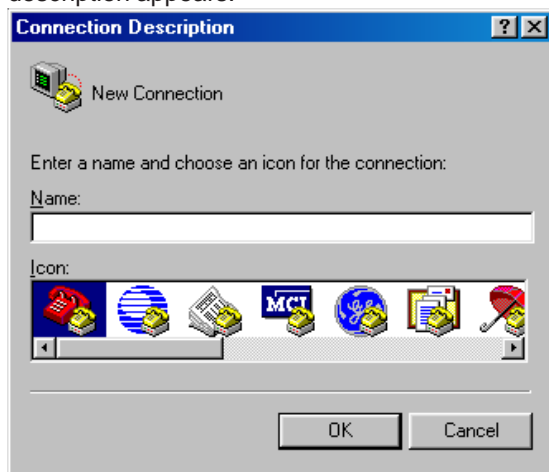


## 2. Double Click on **Hypertrm** Icon.





3. A New Connection Dialog Box with a text box for connection description appears.



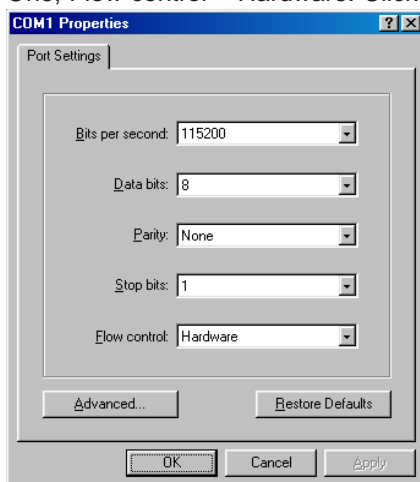
4. Enter a relevant name in the text box (such as the SIMADO GDT11 connection), choose an icon from the icon list provided and click on **OK** button.



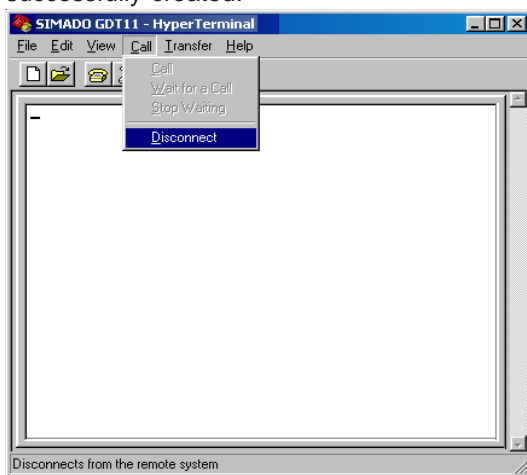
5. In the “Connect To” Window, to fill up the ‘Connect Using’ text box select the relevant COM Port. The rest of the options are disabled automatically. Click on **OK** button.



6. In the COM Properties Window make the following entries. Bits per seconds=115200, Data bits = 8, Parity = None, Stop bits = One, Flow control = Hardware. Click on **OK** button.



7. In the HyperTerminal Window click on the **Call** Menu and then Click on Menu Item **Disconnect**. The connection type is successfully created.

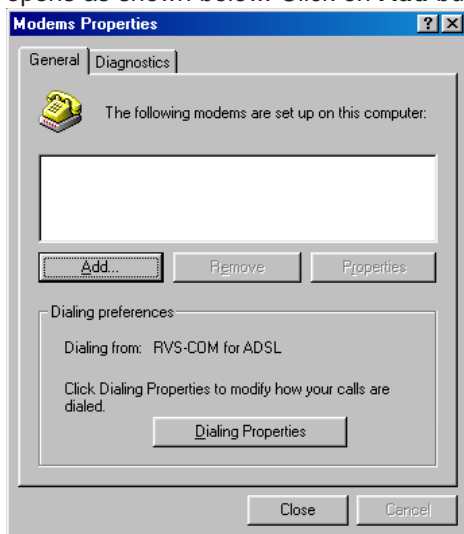


## Set up a Modem

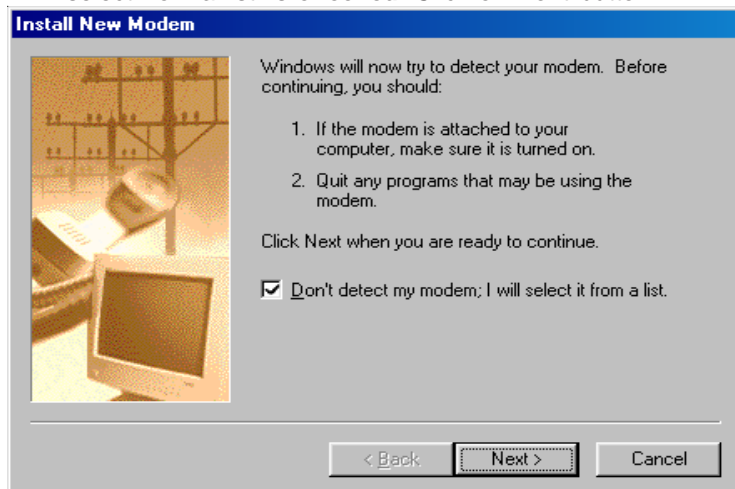
1. Click on Start → Setting → Control Panel → Modem.



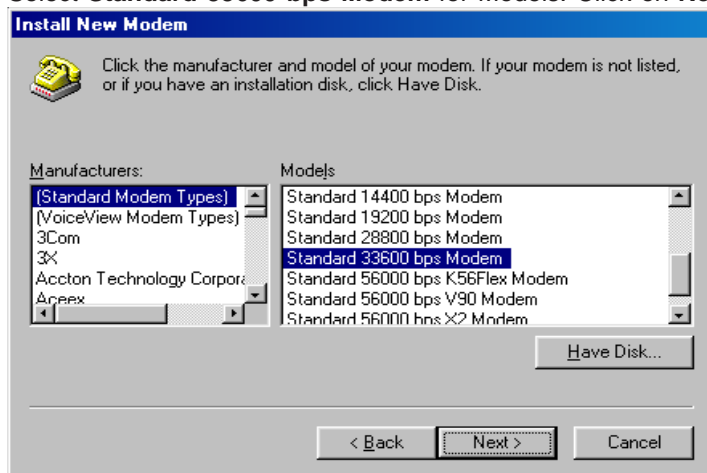
2. Double Click on **Modem** Icon. Modem properties Dialog box opens as shown below. Click on **Add** button:



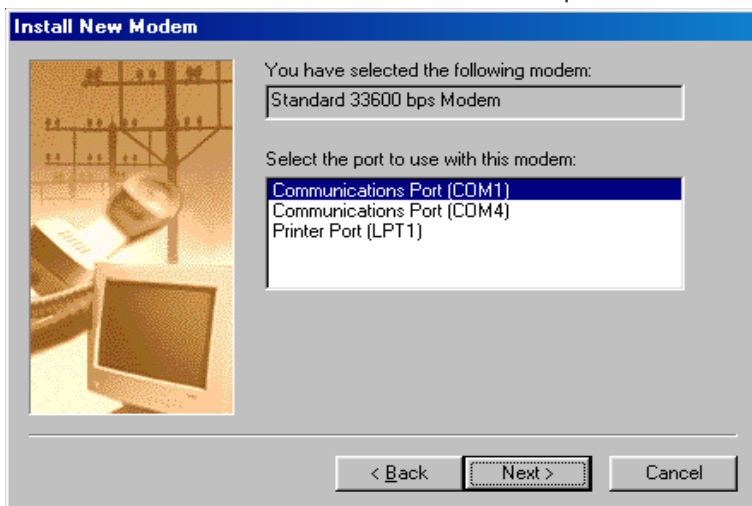
3. In Install New Modem Window, ensure 'Don't detect my Modem, I will select from a list' is **checked**. Click on **Next** button.



4. Select **Standard 33600 bps Modem** for Models. Click on **Next**.



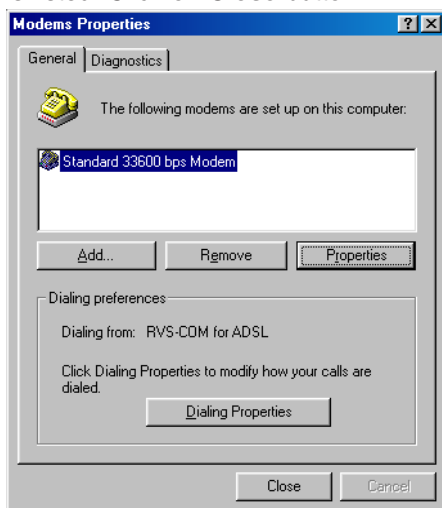
5. Select **COM1** before clicking on **Next** for the next screen. Please ensure that COM1 is the correct communication port.



6. The confirmation for Modem installation is received. Click on **Finish** button.

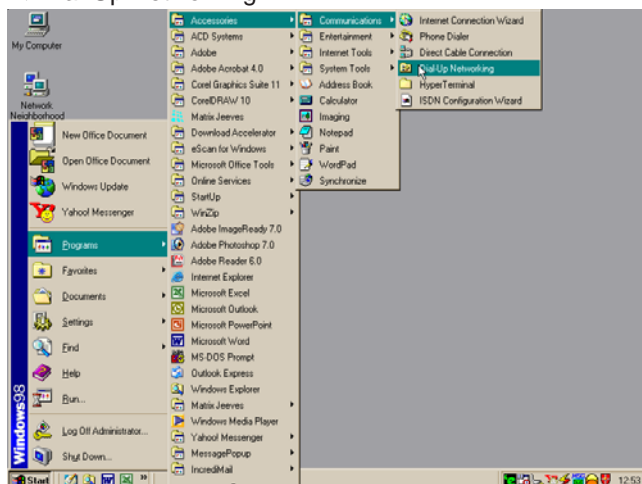


7. Modem Properties Window appears. The newly installed Modem is listed. Click on **Close** button.

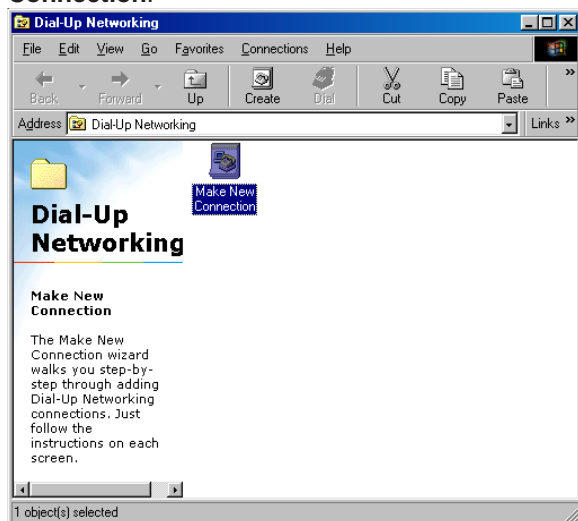


## Set up the Dial-Up Network

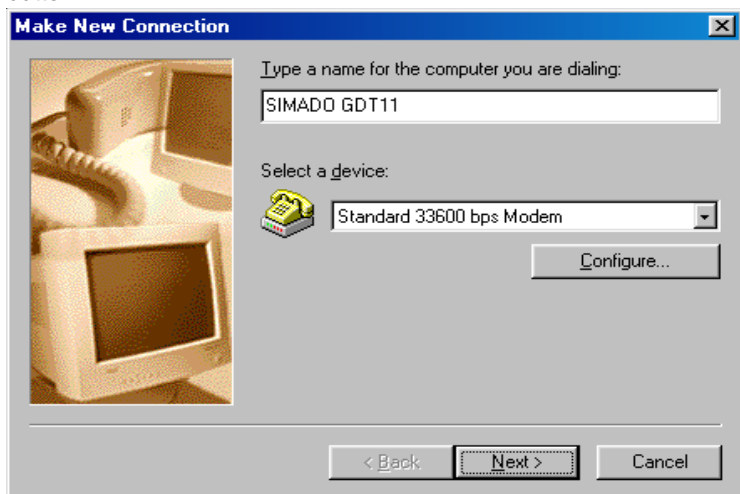
1. Click on Start → Programs → Accessories → Communication → Dial-Up Networking.



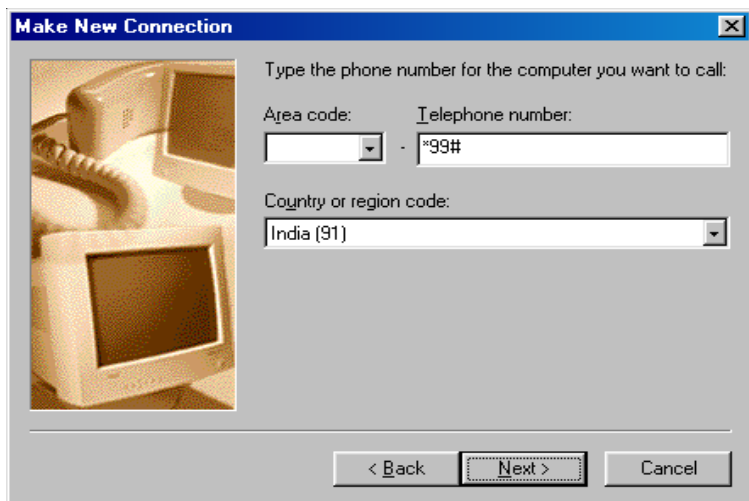
2. Dial-Up Networking window appears. Double Click on **Make New Connection**.



3. The Make New Connection Window appears. Click on **Next** button.



4. In the Response Window make the following entries. Telephone number = **\*99#**, Country or region code = India (91). Click on **Next** button.



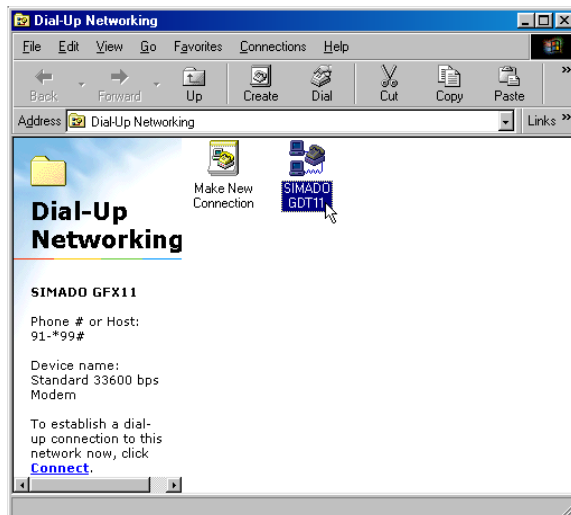


**Country or region code varies from region to region and has to be entered accordingly.**

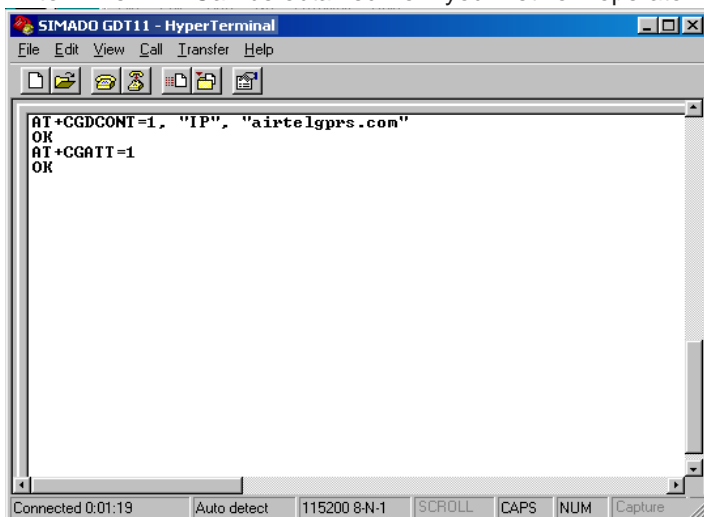
7. The confirmation for New Dial-Up Networking Connection successfully is received. Click on **Finish** button.



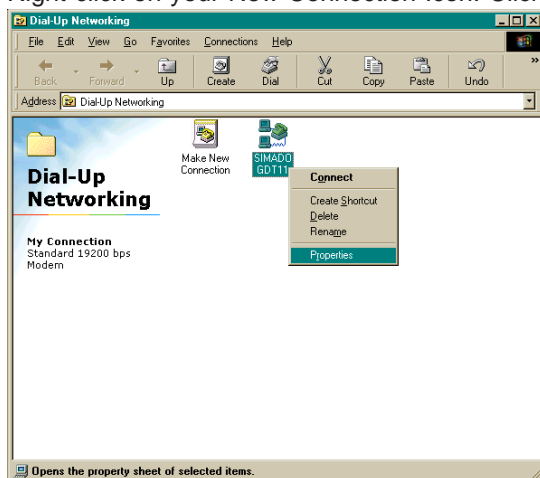
8. The new Connection Looks like:



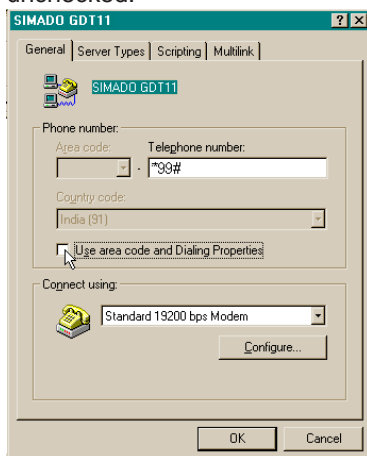
9. From HyperTerminal, enter the network's APN (Access Point Name) into the module: **AT+CGDCONT=1,"IP","APN"** and **Enter**. The APN Can be obtained from your network operator.



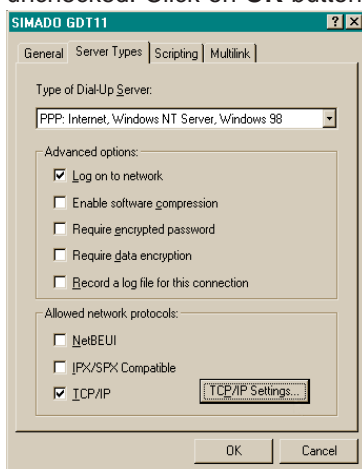
10. Right click on your New Connection Icon. Click on **Properties**.



11. The properties Window appears with General tab active. **Ensure 'Use Area Code and Dialing properties' Option is unchecked.**



12. Click on **Server Types** Tab of the properties window. **Ensure** that 'Enable Software Compression' is unchecked, 'TCP/  
**IP' is checked 'NetBEUI' is unchecked** and 'IPX/XPS' is unchecked. Click on **OK** button to close the window.

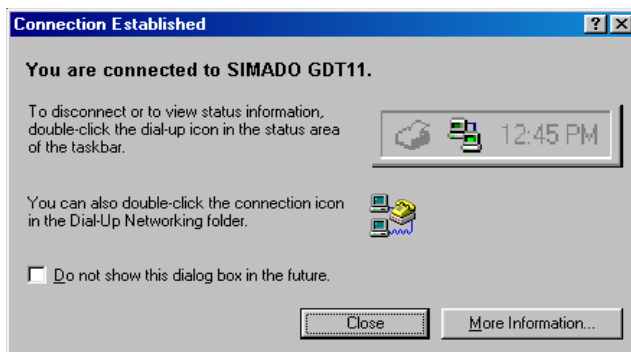


## How to make a Connection of GPRS

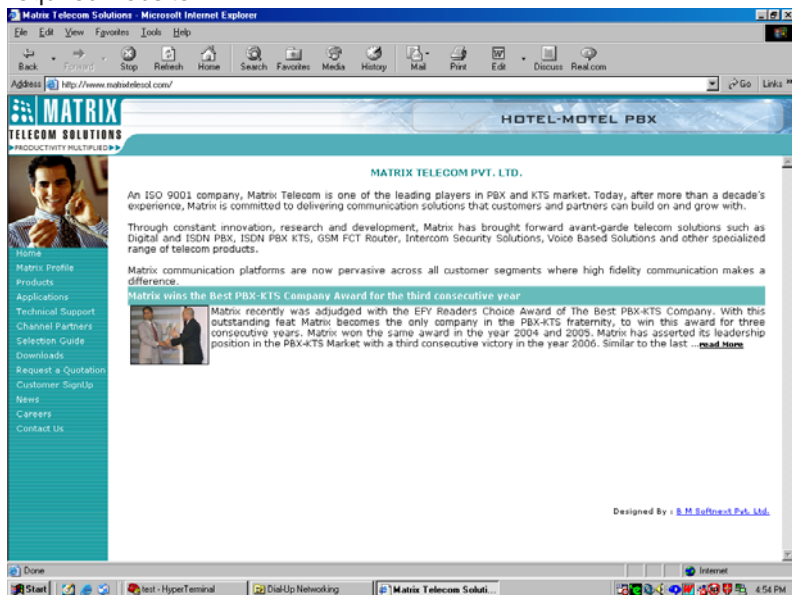
1. Right click on your dial up networking Icon. Click on **Connect**.



2. Once the connection is established, the application is automatically minimized and visible on task bar.



Use Internet Explorer or NetScape Navigator for browsing the required website.

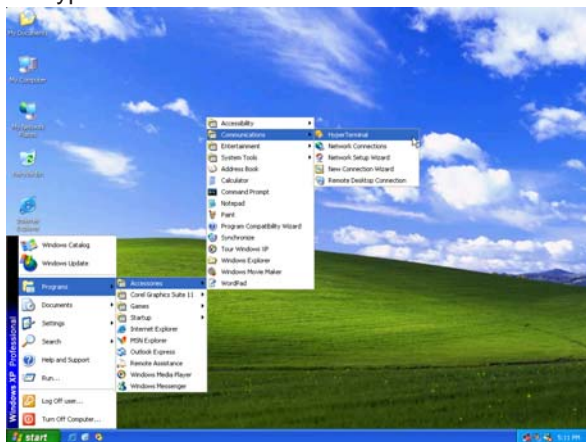


## How to use it?

***(Operating System-Windows 2000, Windows XP, Windows NT)***

### **Create a connection type**

1. Click on Start → Programs → Accessories → Communication → HyperTerminal.



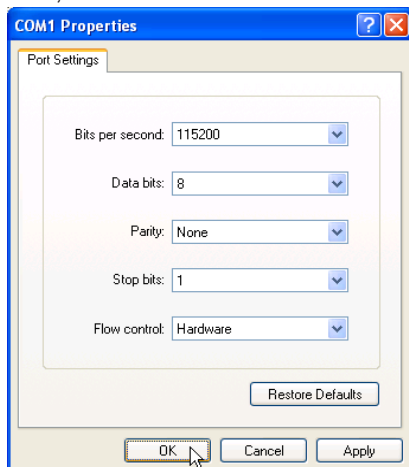
2. Enter a relevant name in the text box (such as the SIMADO GDT11 connection), choose an icon from the icon list provided and click on **OK** button.



3. In the “Connect To” Window, to fill up the ‘Connect Using’ text box select the relevant COM Port. The rest of the options are disabled automatically. Click on **OK** button.



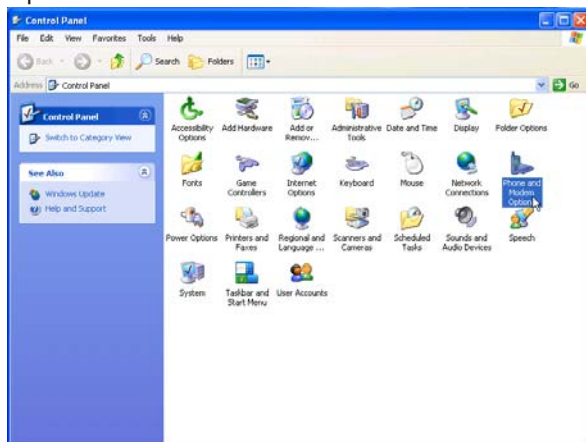
4. In the COM Properties Window make the following entries. Bits per seconds=115200, Data bits = 8, Parity = None, Stop bits = One, Flow control = Hardware. Click on **OK** button.



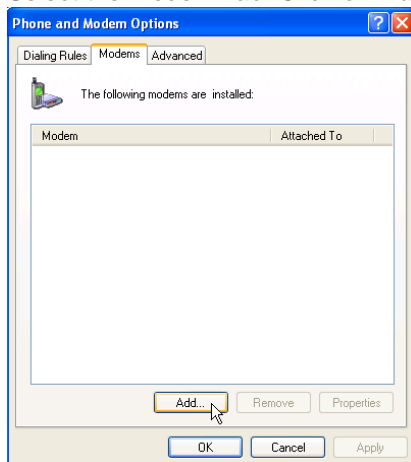
5. In the HyperTerminal Window Click on the **Call** Menu and then Click on Menu Item **Disconnect**. The connection type is successfully created.

## Set up a Modem

1. Click on Start → Setting → Control Panel → Phone and Modem Options.

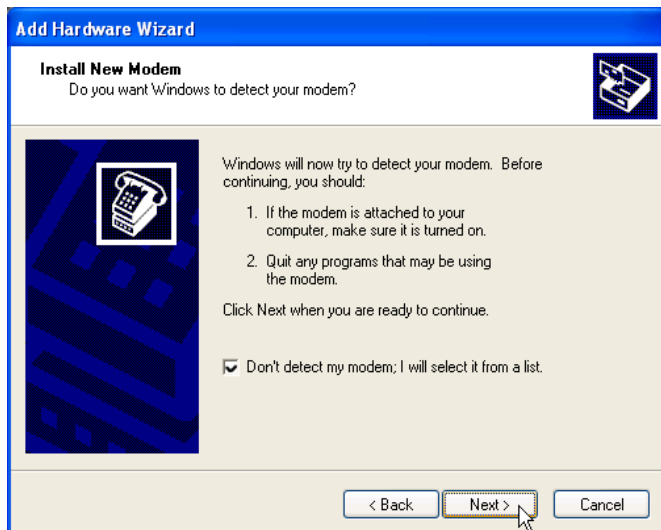


2. Select the Modem Tab. Click on **Add** button:

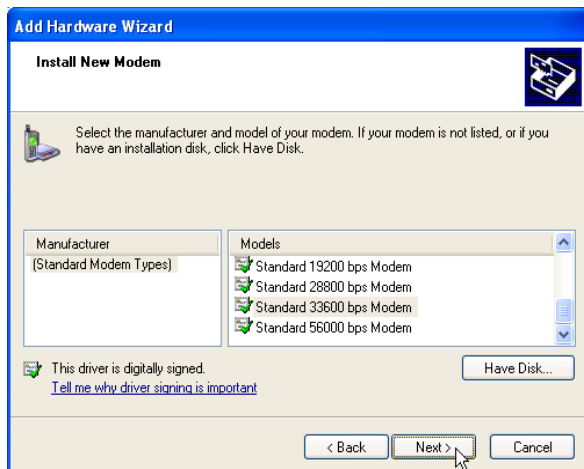




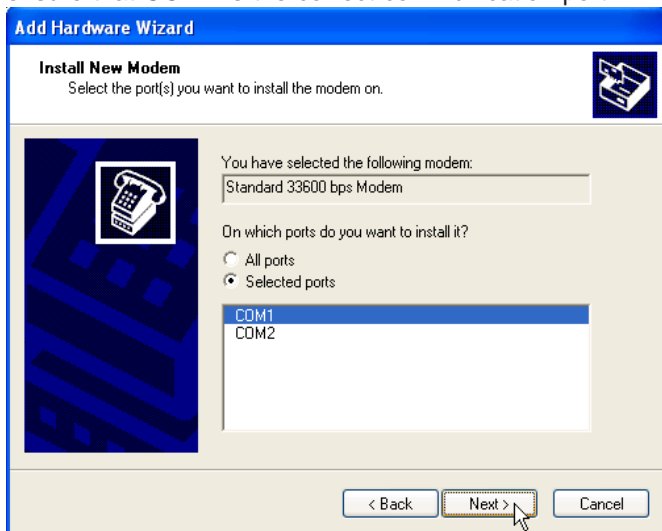
3. In Install New Modem window **check** 'Don't detect my modem; I will select from a list'. Click on **Next** button.



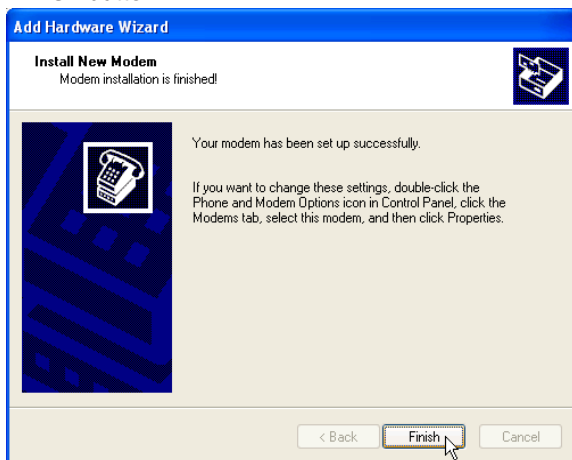
4. Select **Standard 33600 bps Modem** from Models. Click on **Next** for the next screen.



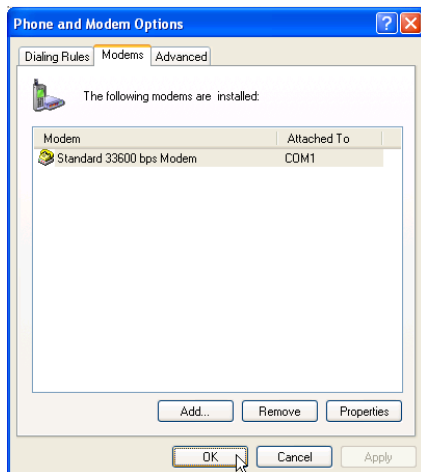
5. Select **COM1** before clicking on **Next** for the next screen. Please ensure that COM1 is the correct communication port.



6. The confirmation for Modem installation is received. Click on **Finish** button.

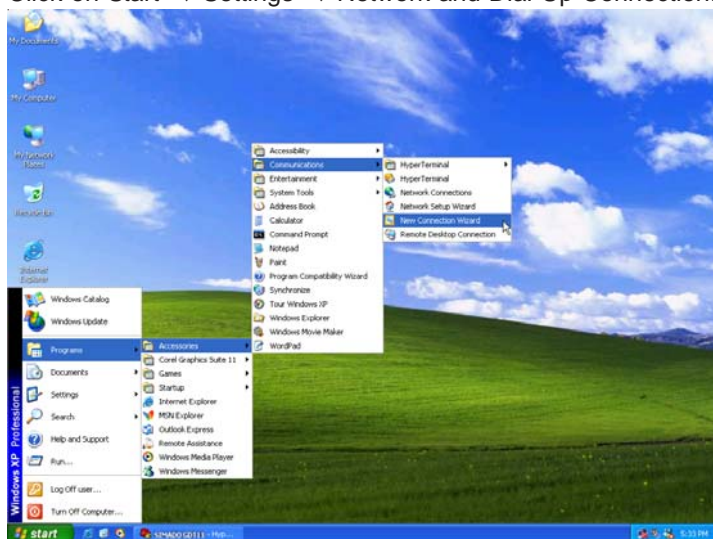


7. Modem Properties Window appears. The newly installed Modem is listed. Click on **OK** button.

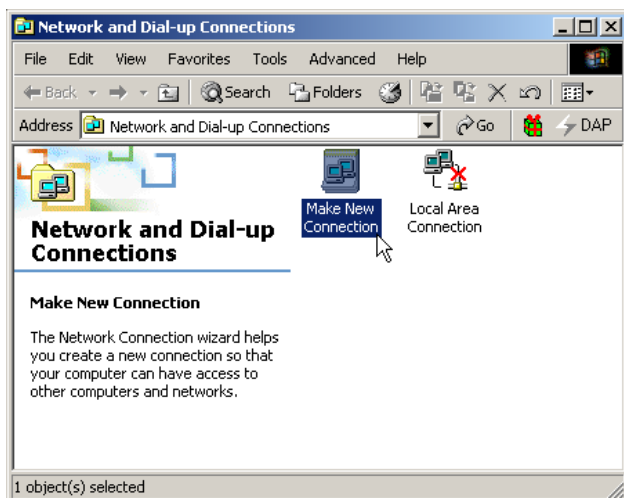


## Set up the Dial-Up Network

1. Click on Start → Settings → Network and Dial-Up Connection.



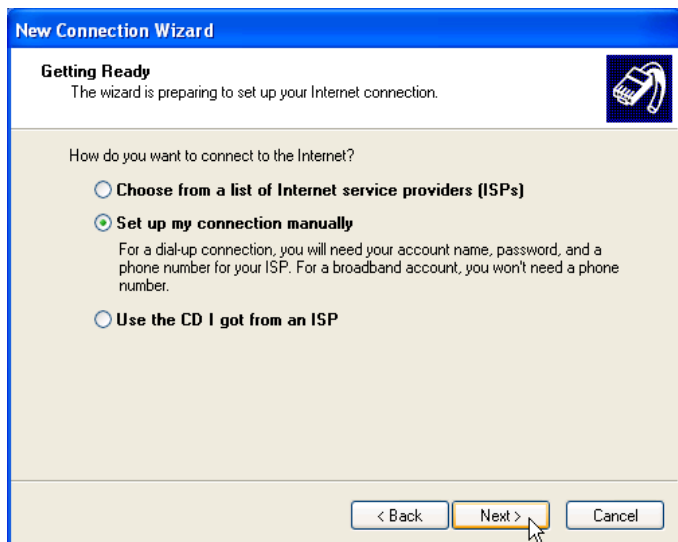
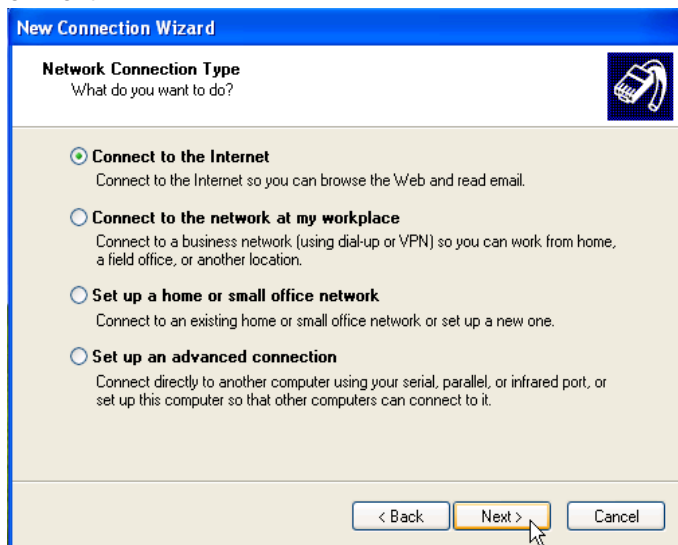
2. Network and Dial-Up Connections window appears. Double Click on **Make New Connection**.



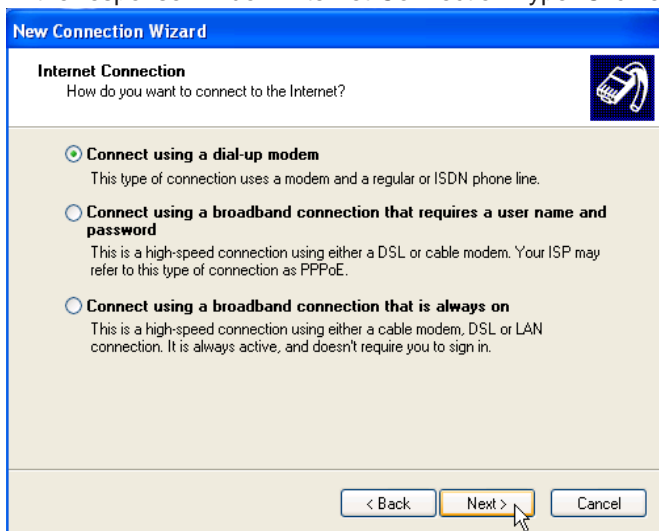
3. New Connection Wizard window opens. Click on the **Next** button.



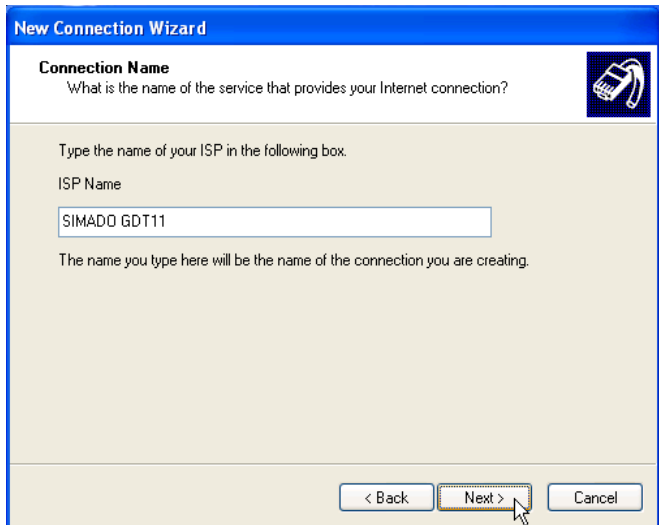
4. In the response window select Network Connection Type. Click on **Next**.



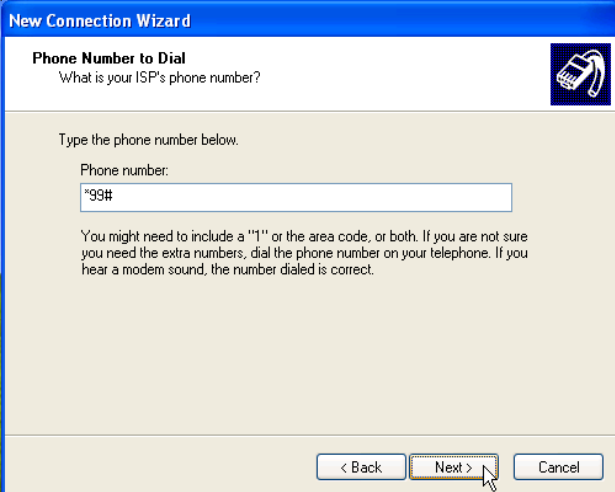
5. In the response window Internet Connection Type. Click on **Next**.



6. Enter ISP Name in Connection Name wizard. Click on **Next**.



7. In the Response Window make the following entry. Phone number = **\*99#**. Click on **Next**.



**New Connection Wizard**

**Phone Number to Dial**  
What is your ISP's phone number?

Type the phone number below.

Phone number:

You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telephone. If you hear a modem sound, the number dialed is correct.

< Back   **Next >**   Cancel

8. In the response window, **Uncheck** all option of the check box. Click on **Next**.



**New Connection Wizard**

**Internet Account Information**  
You will need an account name and password to sign in to your Internet account.

Type an ISP account name and password, then write down this information and store it in a safe place. (If you have forgotten an existing account name or password, contact your ISP.)

User name:

Password:

Confirm password:

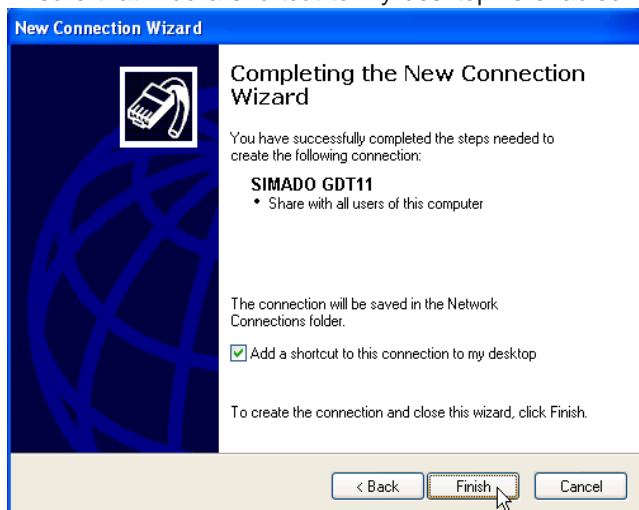
☐ Use this account name and password when anyone connects to the Internet from this computer

☐ Make this the default Internet connection

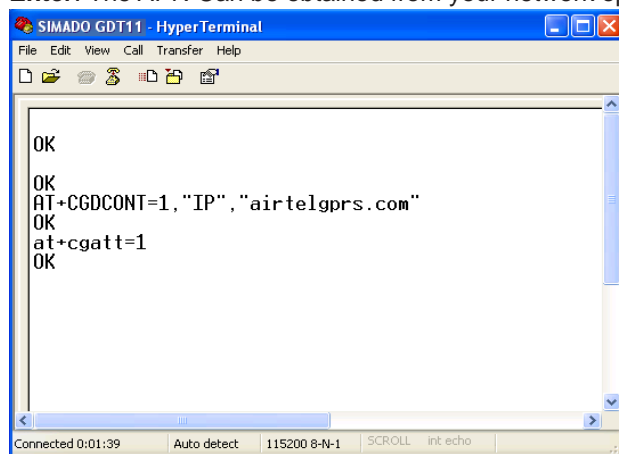
☐ Turn on Internet Connection Firewall for this connection

< Back   **Next >**   Cancel

9. The dial-up connection create successfully. Click on **Finish**. Ensure that 'Add a shortcut to my desktop' is enabled.



10. From HyperTerminal, enter the network's APN (Access Point Name) into the module: **AT+CGDCONT=1, "IP", "APN"** and **Enter**. The APN Can be obtained from your network operator.





## How to make a Connection of GPRS

1. Double Click on the shortcut of **SIMADO GDT11** on the Desktop.



2. Connect SIMADO GDT11 window is open. Click on **Dial**.



3. Once the connection is established, use Internet Explorer or NetScape Navigator for browsing the required website.



### Caution:

If you are having an existing LAN connection, then this dial-up connection will **interface** with your existing connection. Once the connection is initiated it will take over as the “default route” for the majority of your LAN traffic, specifically internet access. It’s recommended to disconnect your LAN connection before using the PPP (Dial-up) connection.

If however you want two connections to co-exist, you can use the **route** command to setup routing through the modem properly. Go to the Command Prompt and type **route/?** to find out more, or talk to your System Administrator.

**Important Point:**

- The GPRS service for the SIM card must be enabled.

**=X=X=**

## SMS (Short Message Service)

### What's this?

- The SIMADO GDT11 supports Short Message Services (SMS).
- It allows sending and receiving of messages.
- The SMS received by the SIMADO GDT11 can be read:
  - On a computer.
- The SMS to be sent by the SIMADO GDT11 can be edited (written) from:
  - A computer.
- Receipt of a SMS by the SIMADO GDT11 is indicated to the user
  - On the computer.

### How it works?

- Received messages (SMS) are stored at various locations in the memory of the SIM card. These locations are referred to as indexes.
- More than one SMS can be received at a time. A queue of 10 new message indications are maintained and the messages can be retrieved as required. In case the 11th message is received, it overwrites the message indication of the first message.
- The indication of a new message is given in form a signal on computer.

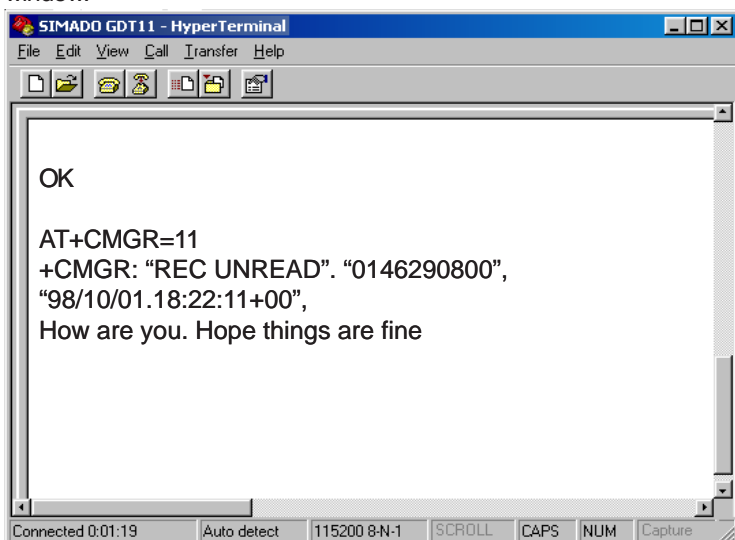
### How to use it?

#### ***Reading the received messages.***

- Start the computer.
- Click on Start → Programs → Accessories → Communication → HyperTerminal.
- Double click on HyperTerminal icon.
- You get HyperTerminal window.
- Type **AT** ↵ in the HyperTerminal Screen (not seen to the user). **OK** should be seen in response.
- Write **AT+CMGR=(Index)** ↵  
Where,  
Index is the index number at which SMS is stored. (The index of the message is displayed when the SIMADO GDT11 indicates

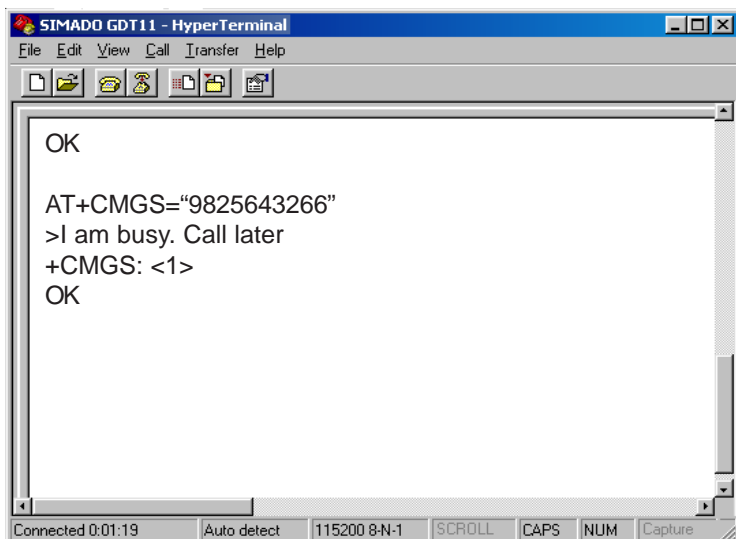
the arrival of a new message).

- After this command, the message will appear in HyperTerminal window.



### ***Entering (Editing) the messages to be sent from the computer***

- Start the computer.
- Click on Start → Programs → Accessories → Communication → HyperTerminal.
- Double click on HyperTerminal icon.
- You get HyperTerminal window.
- Write AT+CMGS="Telephone Number".␣ (The telephone number is the number to which you want to send the SMS).
- Now key-in the message.
- When the message is completed, press CTRL+Z.
- On successful transmission of the message a dialog box with the message 'OK' pops up.

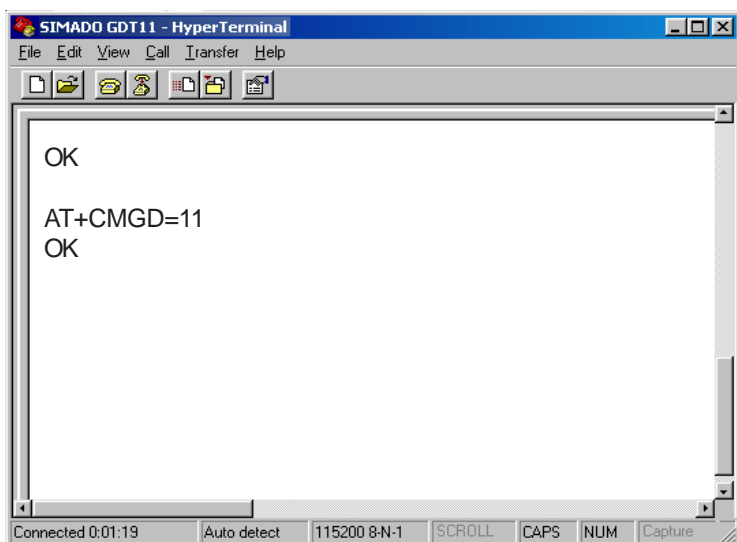


Deleting the messages from computer:

- Start the computer.
- Click on Start → Programs → Accessories → Communication → HyperTerminal.
- Double click on HyperTerminal icon.
- You get HyperTerminal window.
- Write AT+CMGD=(Index) ↵

Where,

Index is the index number of the message to be deleted.

**Important Points:.**

- Messages can only be read/edited from HyperTerminal.
- Messages can be deleted one by one, index wise from computer.
- From computer:
  - Messages can be read.
  - Messages can be write/edited.
  - Messages can be deleted.

**=X=X=**

## Voice Services

### What's this?

SIMADO GDT11 supports, sending and receiving voice signal to and from remote user of routers like GDT11, GFX11 or Mobile Phone. This feature is called Voice Services.

User has to just connect headphone to the jack provided at rear side of the GDT11 and use AT commands. User can connect handset cable also for sending and receiving voice signal.

### Note:

- Do not connect handset and head phone simultaneously(parallel).

### How it works?

- The voice signal is received if GDT11 goes OFF-Hook on receiving a display of RING on the HyperTerminal.
- The received signal is routed to head phone and is answered with proper audio gain setting, which is programmable.
- The side tone signal can be minimized by setting level of MIC feedback to speaker.

### How to use it?

#### **Audio Signals:**

- Before using voice service follow the steps mention below:
  - Select Phone as audio path out of options: Phone or Auxiliary.
  - Set fine tuning of the speaker gain (output path).
  - Set speaker volume.
  - Set fine tuning of microphone gain (input path).
  - Set level of audio side tone.

### Initiate Voice Call

- Activate voice call by ATD <string>;
- Dial the number by ATD<n>, from the HyperTerminal. Where n = number to be dialed.
- When called party attends the call, speech is established.



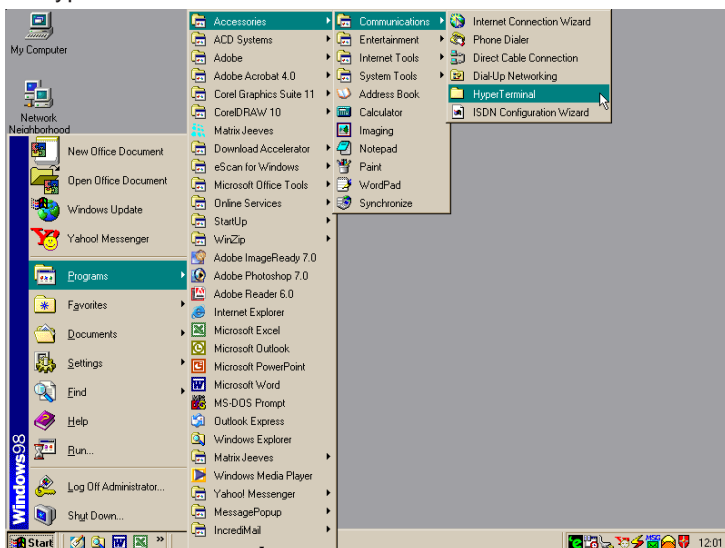
## Receive a Voice Call

- When incoming call is for GDT11, RING is indicated on HyperTerminal.
- Enter ATA command on indication of RING.
- Speech is established.
- Terminate the call by ATH command.

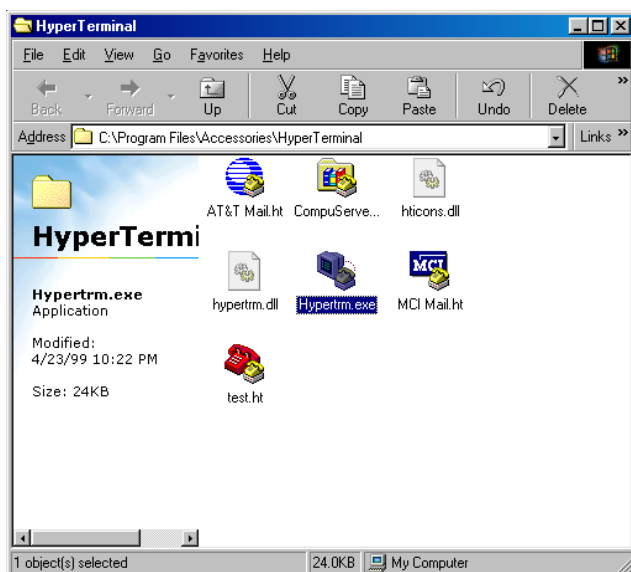
## How to program?

Create a connection type:

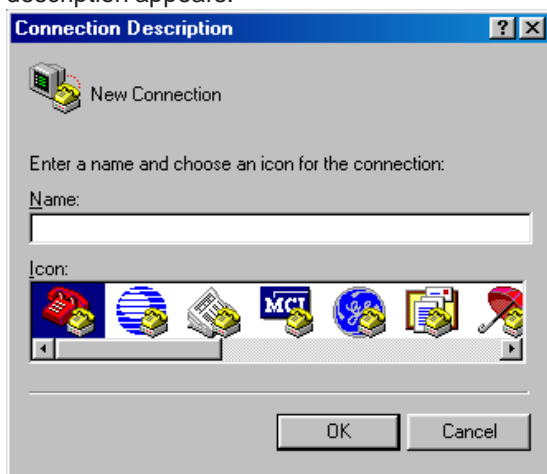
1. Click on Start → Programs → Accessories → Communication → HyperTerminal.



2. Double Click on **Hypertrm** Icon.



3. A New Connection Dialog Box with a text box for connection description appears.



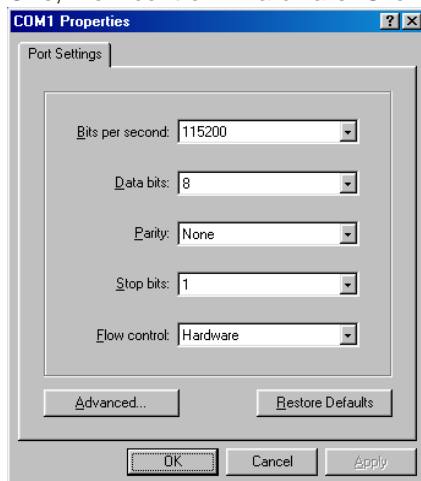
4. Enter a relevant name in the text box (such as the SIMADO GDT11 connection), choose an icon from the icon list provided and click on **OK** button.



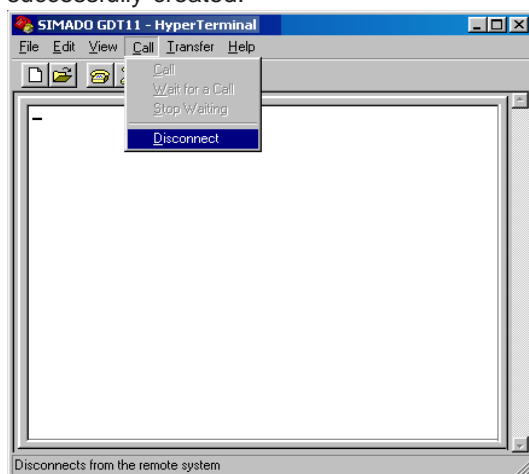
5. In the "Connect To" Window, to fill up the 'Connect Using' text box select the relevant COM Port. The rest of the options are disabled automatically. Click on **OK** button.



6. In the COM Properties Window make the following entries. Bits per seconds=115200, Data bits = 8, Parity = None, Stop bits = One, Flow control = Hardware. Click on **OK** button.



7. In the HyperTerminal Window click on the **Call** Menu and then Click on Menu Item **Disconnect**. The connection type is successfully created.



- Select audio path, using command AT + AUDP = <Path>  
Where,  
<Path> is 0 = for AUX as audio input, AUX ON as audio output. 1 = for MIC input as audio input, EARN/P as audio input. **Default path is 0.**
- Select path is 1.
- Set gain of the output path, by fine tuning of the speaker gain, using AT + ARXG = <level>  
Where,

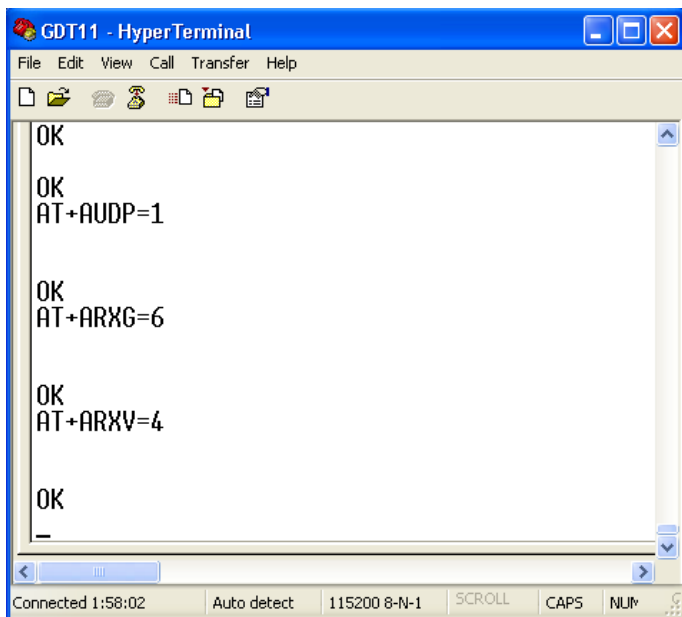
Level	Gain dB
00	-6
01	-5
02	-4
03	-3
04	-2
05	-1
06	0
07	1
08	2
09	3
10	4
11	5
12	6

**By default, Level is 6 (0dB).**

- Set the speaker volume level by AT + ARXV = <level>  
Where,

Level	Gain dB
0	Mute
1	-24
2	-18
3	-12
4	-6
5	0
6	Mute
7	Mute

**By default, level is 4 (-6dB).**



- Set the gain of the input path, by fine tuning of the microphone gain, using command `AT + ATXG = <level>`  
Where,

Level	Gain dB
00	-12
01	-11
02	-10
03	-9
04	-8
05	-7
06	-6
07	-5
08	-4
09	-3
10	-2
11	-1
12	0

Level	Gain dB
13	1
14	2
15	3
16	4
17	5
18	6
19	7
20	8
21	9
22	10
23	11
24	12

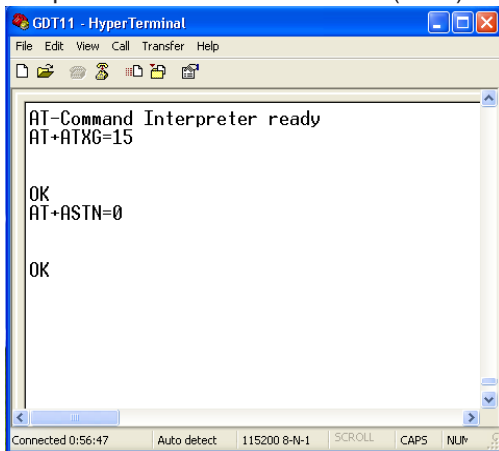
**By default, level is 15 (3dB).**

- Set the level of microphone (input) feedback in the speaker output, by command AT + ASTN = <level>  
Where,

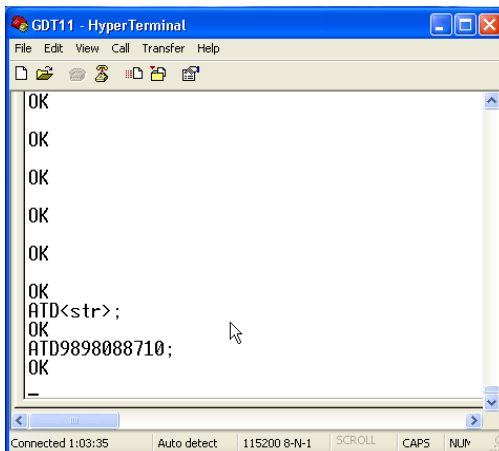
Level	Gain dB
0	Mute
1	-23
2	-20
3	-17
4	-14
5	-11
6	-8
7	-5
8	-2
9	+1

***By default, level is 7 (-5dB).***

- It is preferable to set the level = 0 (mute).

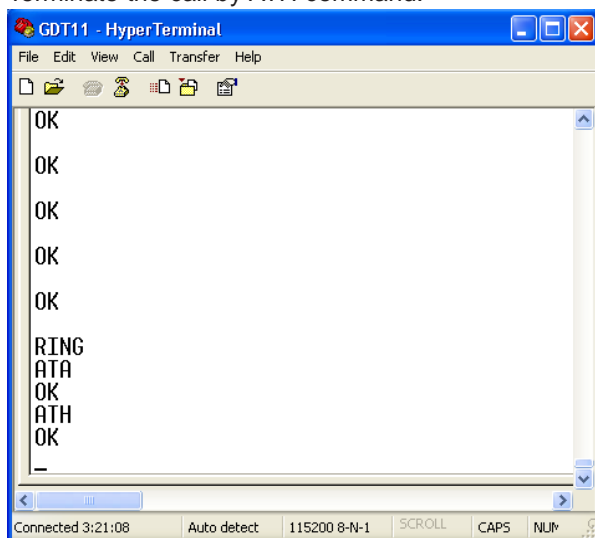


- Originate the voice call by adding semicolon character by command ATD <string>;
  - Dial the number by ATD > <n> [:]
- Where,  
n = number to be called.





- Incoming call is identified by display RING on the screen.
- Answer the call by ATA command.
- Terminate the call by ATH command.



**=X=X=**



## **Section 3: Appendix**



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## Appendix A: Technical Specifications

### System Capacity

SIM Connection	: 1
Communication Port	: 1 (RS232C)
Auxiliary Port	: 1 (Audio jack to connect the headphone)

### GSM Port

GSM Type	: Phase 2 + features
GSM Quad Band	: GSM 850, EGSM 900/1800/1900MHz
Frequencies	: EGSM 900: RX=925-960MHz, TX=880-915MHz GSM 1800 : RX=1805-1880MHz, TX=1710-1785MHz GSM 1900: RX=1930-1990MHz, TX=1850-1910MHz
GPRS	: Class 4
RF power	: 2W (900MHz) & 1W (1800MHz)
RF Sensitivity	: Better than -102dBm
Antenna Type	: Dipole, Fixed or Roof-Top with Flexible Cable (5 meter [196.85 Inch])
Antenna Gain	: 2.5 dBi
Antenna Connector	: SMA (Female)

### RS232C (COM) Port

Signals	: TX, RX, RTS, CTS, DTR, DSR
Connector	: DB9 Female

### Power Supply

Supply Input	: 8V-14VDC@0.5A. External adaptor (90-265VAC, 47-63HZ) supplied with Matrix SIMADO GDT11
Power Consumption	: 5W (Typical)
Connector	: DC power Jack
LED Indications	: Power Supply, Network

### Mechanical Parameters

Dimensions (WxHxD)	: 104x80x27mm (4.09x3.15x1.03Inches)
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## Matrix

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Weight : 0.3Kg. (0.66lbs)  
Mounting : Wall Mounting or Table-Top

### **Operational Conditions**

Temperature : -10°C to +55°C (14° to 131° Fahrenheit)  
Humidity : 5-95% RH, non-condensing

### **Storage Conditions**

Temperature : -40°C to +85°C (-40° to 185° Fahrenheit)  
Humidity : 0-95% RH, non-condensing

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## Notes

## Programming Register

[illegible]