

# **GSM GPRS QUAD BAND FWT with ANALOG & DIGITAL G3 FAX**

## **User Manual - TG130 and TG130F**

TYLER OH

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# REVISION HISTORY

Version	Change Summary	Date	Author
1.0	Draft version created	26/09/2008	TYLER.OH
1.1	Several wrong written commands fixed	15/10/2008	TYLER.OH
1.2	Added battery safety phrases	28/10/2008	TYLER.OH
1.3	Deleted SMS related functions	31/10/2008	TYLER.OH
1.4	Modified AUTO PIN Entering and Added Factory Reset	06/11/2008	ALVIN.KIM
1.5	Added note for Date and Time setting	14/11/2008	ALVIN.KIM

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## **Welcome to your TG130 / TG130F**

TG130 is a Fixed Wireless Terminal designed to provide better wireless connectivity between wire telephone and GSM 850/900/1800/1900 band network with high sensitivity to receive signal and large transmitting power to expand extensively the effective coverage of GSM service.

### **Main function & features**

- **SIMPLE TO INSTALL AND EASY TO MAINTAIN**
- **COMPATIBLE TO MOST TELEPHONES, PBX**
- **BATTERY BACK UP DURING AC POWER OUTAGES**
- **PROVIDE REVERSAL POLARITY SIGNAL FOR METERING**
- **ADJUSTABLE RECEIVER VOLUME**
- **3 LED DISPLAY (SIGNAL/MODE/POWER)**
- **10 SPEED DIALS**
- **CALLER ID DISPLAY**
- **NETWORK BAND SELECTION**
- **CALL WAITING/FORWARDING/BARRING**
- **CONFERENCE CALL**
- **DATA COMMUNICATION (CSD/GPRS, DIGITAL FAX VIA CSD) USING DATA CABLE(OPTIONAL)**
- **ANALOG FAX (TG130F)**

## For your safety

Here is important information for safe and efficient operation.

Please read this information before using your TG130.

For optimal performance, install this indoors. When specially used in an outdoor area, it may not work in below  $-10^{\circ}\text{C}$  or over  $50^{\circ}\text{C}$ .

Install TG130 on hard, flat surface for proper ventilation.

Avoid using TG130 in high temperature or near a source of fire or gas.

Avoid storing TG130 in cold areas.

Do not expose TG130 to moisture or dust.

Do not use TG130 in the hospital. It will interfere with medical electronic equipments such as a peace maker.

Do not use harsh chemicals, cleaning solvents to clean TG130. And wipe with a soft, clean, dry cloth to clean it.

Do not knock, drop, and shake TG130 to avoid breaking the case.

Use only the supplied or approved replacements

Do not use TG130 with a car battery.

Do not touch the antenna when TG130 is being used.

Do not use TG130 with a damaged antenna. Have your antenna replaced by a qualified technician immediately.

Use only the provided antenna. Do not use the provided antenna for any other purpose.

Use only the provided adapter. Do not use the provided adapter for any other purpose

If TG130 fails to work for any reason, do not attempt to disassemble.

Risk of explosion if battery is replaced by an incorrect type.

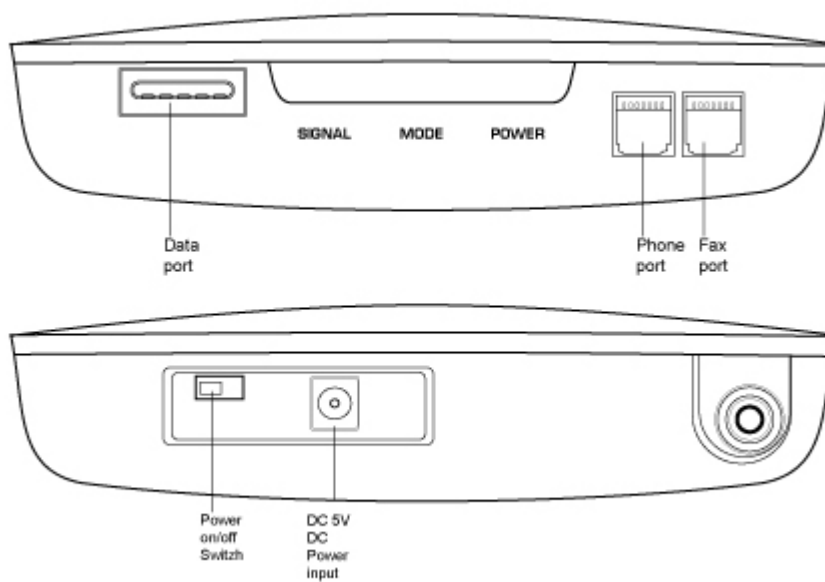
Dispose of used batteries according to the instructions.

# 1. Installation guide

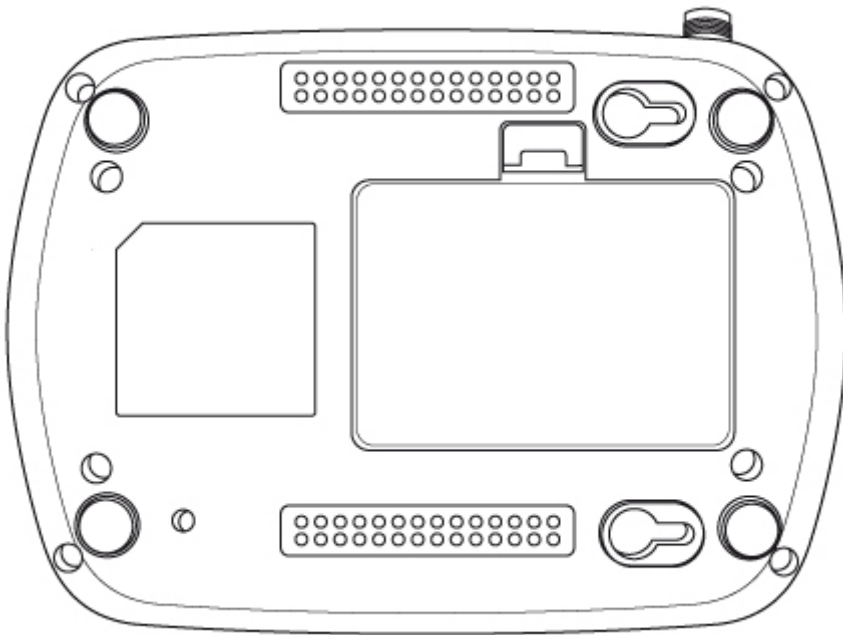
## 1.1. Front, Side and Rear View of TG130



[FRONT VIEW]



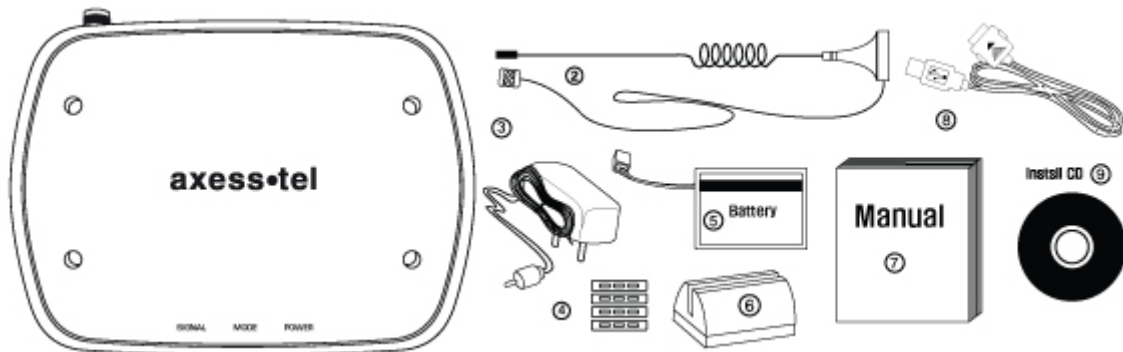
[SIDE VIEW]



[REAR VIEW]

## 1.2. Checking the components

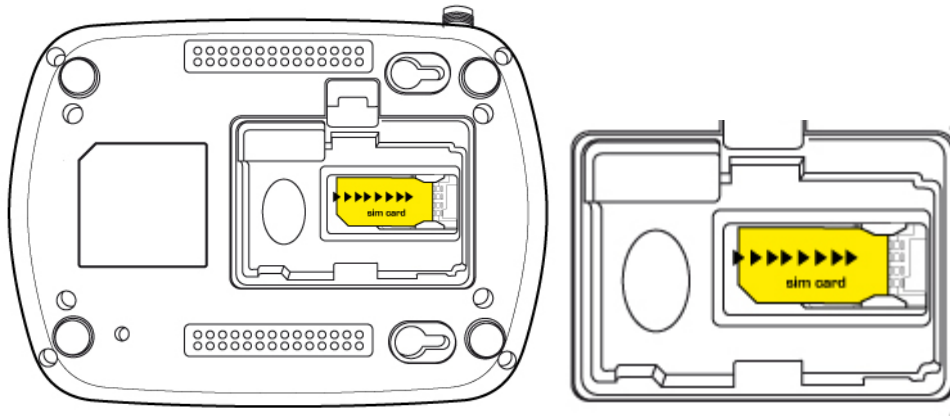
Check to make sure that you have all the parts shown below after opening the package. If any piece is missing or broken, please call your agent or customer service.



1. MAIN UNIT
2. ANTENNA AND THE CABLE WITH THEIR SUPPORT (YOU SHOULD COUPLE THE ANTENNA IN THEIR SUPPORT)
3. DC POWER ADAPTER
4. FOUR SUPPORTS TO HEAP SEVERAL UNITS.
5. .LI-ION BACKUP BATTERY
6. BASE TO SUSTAIN AN UNIT IN VERTICAL POSITION.

- 7. USER MANUAL.
- 8. CABLE FOR GPRS CONECCTION (OPTIONAL)
- 9. INSTALL CD(OPTIONAL)

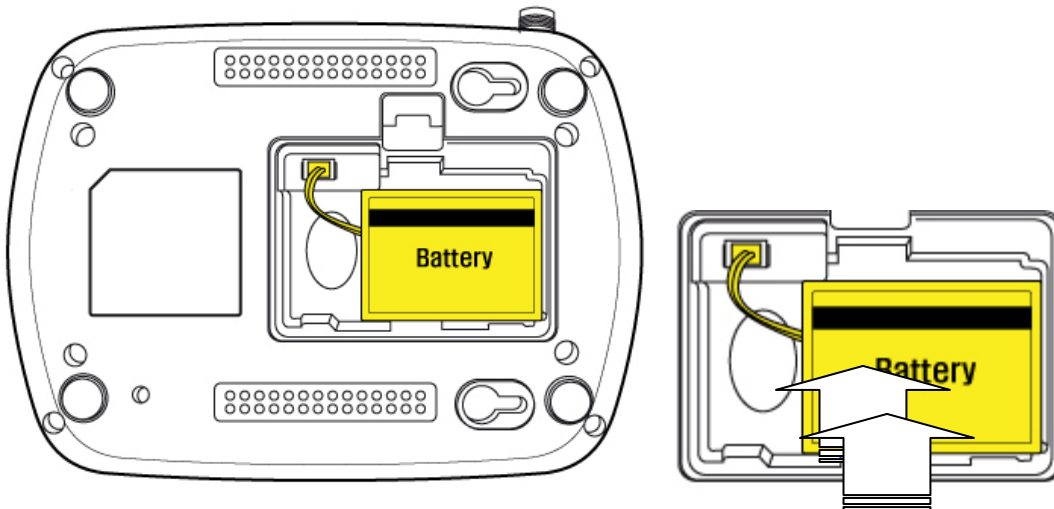
### 1.3. SIM card installation



1. Disconnect the power supply.
2. Open battery cover on the bottom side of the TG130.
3. Disconnect the DC power cable to TG130
4. Take out the battery pack in the right position between the hold bars
5. Insert the SIM card into the socket as shown in the picture.
  - \* Note: Make sure the SIM card is aligned properly with the directional arrow on the holder.
6. Connect the DC power cable to TG130.
7. Insert the battery pack in the right position between the hold bars.
8. Close the battery cover.
9. Connect the power supply to TG130.



#### 1.4. Battery installation



1. Disconnect the power supply.
2. Open battery cover on the bottom side of TG130.
3. Connect the DC power cable to TG130.
4. Close the battery cover.
5. Connect the power supply to TG130.

#### 1.5. Installation of the antenna and location of the equipment for voice service

Before you select a localization to place TG130(F), you should read the section for their Security in the first part of this manual. You can place it in a plane area just as the floor, the walls or the desk or table.

1. it connects the antenna at the TG130(F) (previously it should couple the antenna in their support, make sure of making the one it couples in a complete way, verify that the antenna mo is slack) and locate her it more far possible of the terminal. If the antenna is located near the TG130(F) noise she/he will take place during the communication, avoid it!

\* Notices: make sure of pressing the antenna completely to their connector in the terminal.

2. Using the marked port as "Phone "connects the TG130(F) to the central PBX, or to the system of tariff of the booth or a similar telephone. If their Terminal is model TG130F and you will use similar fax, connect the fax machine to the port "Fax ".

3. Connect the adapter to the Terminal. Use the connector "DC Input."

4. Connect the adapter DC in an appropriate energy plug.

5. Turn on the terminal. Use the switch "On/Off ".

6. Checks the power of the signal GSM, verify the state of the led "Signal "(check the section 2.1). To improve the signal reception, move the antenna and verify the state of the led "Signal ".

**Avoids leaving the antenna in a location in which the led illuminates red or be shut down**

7. The terminal is ready to be used.

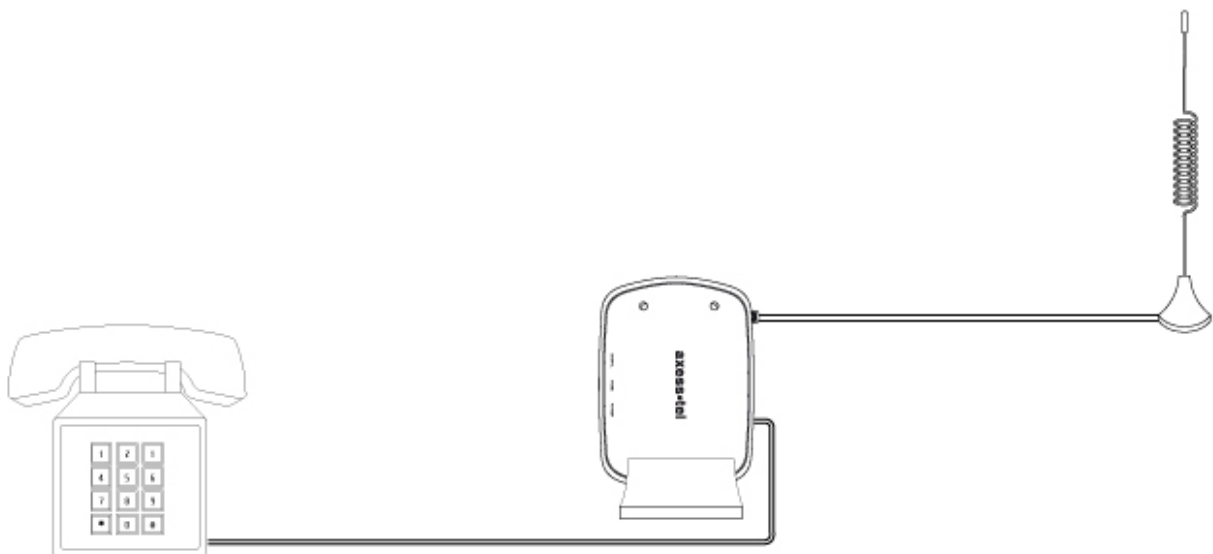
**Attention:** If the SIM Card (Chip) that will be used in the terminal has the number disabled PIN (it consults to their operator), it won't be necessary to make some additional configuration in the TG130(F); this will be ready for their use.

In case, on the contrary, the SIM Card has the active PIN that same number PIN it will be recorded in the terminal. To make it, connect a telephone similar to the port "Phone" and dial: #\* 110 \* 2 \* number PIN #

With the previous procedure it will be engraving in the terminal the number PIN. It is this way when the terminal is out and then lit, it won't be necessary to carry out this procedure again. Although the Terminal remains out a lot of time, without current and without battery, the PIN that was recorded will always remember.

IF THE PIN OF THE SIM CARD (CHIP) IT IS ACTIVATED AND SHE/HE IS NOT CARRIED OUT THE PREVIOUS PROCEDURE CORRECTLY, THE SIM CARD WILL BE ABLE TO BE BLOCKED AND YOU WILL HAVE TO ENTER THE NUMBER PUK TO UNBLOCK IT (TO CONSULT SECTION 4.9).

Avoid noise or interference during the communication: the antenna should be at least separated from the equipment a meter. Avoid proximity of the team and of their antenna to electric motors, fluorescent lamps, radios, televisions, computer monitors, speakers and in general electric equipment. Before connecting the terminal to central PBX, verify connecting a direct telephone and making calls of test that there are not noise or interference during the call; if there is verify the location of the equipment and their antenna.



## 1.6. Desktop installation

Before you select a location to place TG130, you must read “For your safety” section in the first part of this manual.

You can place it on the flat surface area such as above ground, on the walls, or table.

1. Connect the antenna to TG130 and locate it as far as it can reach

\* Note : finger-tighten the antenna.

2. Connect a wire telephone to TG130 using phone cord

3. Connect the barrel connector of the power supply to DC Adaptor

4. Plug the DC Adaptor into the power supply.

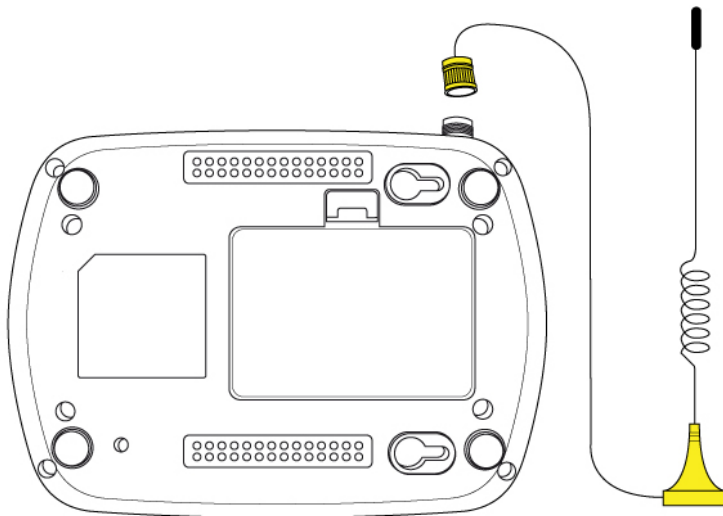
5. Plug the DC Adaptor into an appropriate power outlet.

6. Check signal strength moving the antenna until you find the best signal possible.

(See 2.1 LED Status Indicator section)

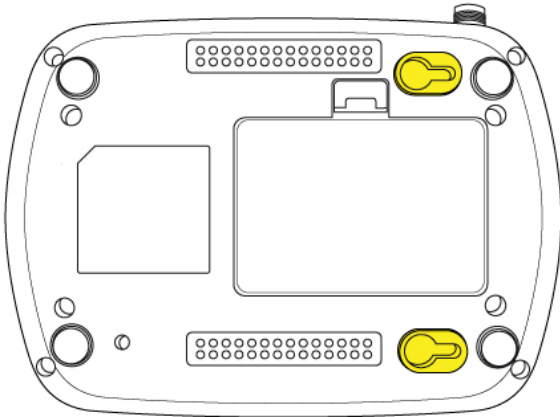
7. If you use Data Service or PC FAX Service, connect your data cable to the Data port located at the side of TG130.

8. If you use G3 FAX machine, connect your line cord of G3 FAX to the RJ-11 port located at the side of TG130F.

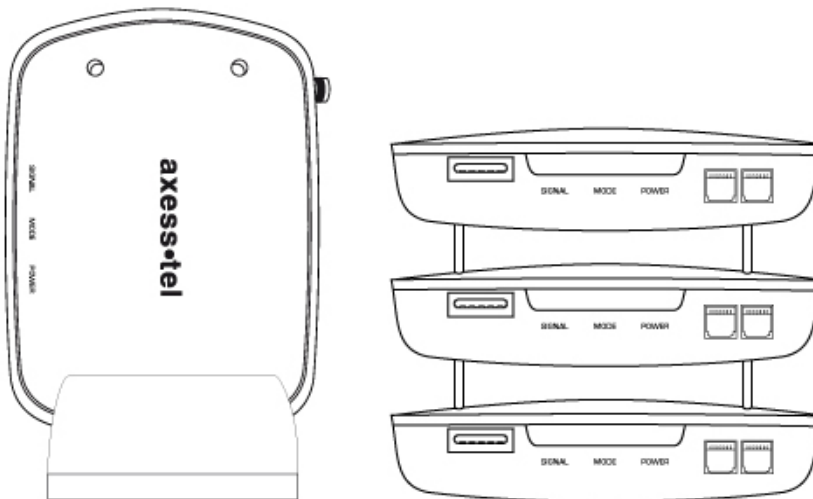


### 1.7. Wall mounting

1. Mark two mounting hole locations to match the screw hole in the back of TG130.
2. Drill two holes at the marked locations.
3. Tighten the screws until the head is about 3~5mm from the wall.
4. Hang TG130 on the screw using the two holes in the back.
5. Push TG130 down until the unit is firmly locked into place.



### 1.8. how to use the supports



## 2. Getting To Know TG130

### 2.1. LED Status Indicator

When your TG130 is powered on, the LED Status Indicators show operation of the indicators and the modes. When your TG130 is turned on, the LED Status Indicators show operation of power status, signal strength and current mode.

\* Note : If you are getting no service or limited service, contact your service provider.

#### 1. LED STATUS INDICATOR

##### 1) POWER

LED COLOR	ACTIVITY	DESCRIPTION
GREEN	Continuous	Normal
AMBER	Continuous	Charging
RED	Continuous	Low
RED	Flashing	Very Low

##### 2) SIGNAL

LED COLOR	ACTIVITY	DESCRIPTION
GREEN	Continuous	High
AMBER	Continuous	Middle
RED	Continuous	Low
RED	Flashing	Limited Service
OFF	Continuous	No Service

##### 3) MODE

LED COLOR	ACTIVITY	DESCRIPTION
GREEN	Continuous	Fax/Data Call
GREEN	Flashing	Incoming Fax/Data Call
RED	Continuous	Off-Hook or Voice Call
RED	Flashing	Incoming Voice Call

#### 4) EXCEPTION STATUS

LED ACTIVITY	DESCRIPTION
ALL LED Flashing(Red) then Mode LED : GREEN	Insert SIM
ALL LED Flashing(Red) then Signal LED : GREEN	Equipment Locked, Enter Lock Code (See 4.8 Equipment Lock section)
ALL LED Flashing(Red) then Signal LED : AMBER	PIN Locked, Enter PIN (See 4.9 PIN Lock section)
ALL LED Flashing(Red) then Signal LED : RED	PIN Blocked, Enter PUK * (See 4.9 PIN Lock section)
ALL LED Flashing(Red) then Mode LED : AMBER	MEP Locked *
ALL LED Flashing(Red) then Mode LED : RED	AUTO PIN Locked **
ALL LED Flashing(Red) then Mode LED : GREEN	Cell Locked *

\* Contact your service provider to verify that service has been activated.

\*\* If your service provider use AUTO PIN feature, you must use the SIM card provided from your service provider. If a proper SIM card is installed and 'AUTO PIN Locked' state continues, contact your service provider.

### 3. Basic operations

#### 3.1. Making calls

1. Check to see that your TG130 is turned on.
2. Pick up the handset of the phone.
3. If you listen for dial tone, dial the desired telephone number. The call will be automatically made by TG130. If you hear fast beep tone, check SIM card or signal strength.

\* Note : If you can't hear dial tone produced, check to make sure that all the parts are properly connected, hang up the phone, and try again.

If you press 'Flash key', or press the switch-hook and release after dialing a number, Call will be made immediately.

#### 3.2. Receiving calls

1. When the phone rings, pick up the telephone handset, begin to talk.
2. To disconnect after finished, replace the handset on the phone.

\* Note : When there is an incoming call when you are already holding the receiver, press 'Flash key' to answer the call.

## 4. Basic Settings

### 4.1. Receiver Volume

You can control the volume level in the range of 1 to 7 using the keypad on the telephone.

Set Receiver Volume	# * 100 * <level> #	level : 1 - 7
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Default volume is "5".

### 4.2. Dial Delay Time

You can set dial delay time that your TG130 waits after the phone number is dialed before automatically sending the number.

Set Dial Delay Time	# * 101 * <delay> #	delay : 3-20 seconds
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Default delay time is 3 seconds.

### 4.3. Speed Dial Entry

You can store up to 10 frequently used phone numbers in the 'SIM card' memory and you can make a call by pressing record number.

Add/Modify	# * 102 * <N> * <NNNN> #	N : Record number(0-9) NNNN : Phone number
Delete	# * 103 * <N> #	N : Record number (0-9)
Call using speed dial	# * <N> #	N : Record number (0-9)

### 4.4. Time and Date

You can set time and date to be displayed on a connected caller ID device.

Set Time	# * 104 * <HH><MM> #	HH : Hours(24h) MM : Minutes
Set Date	# * 105 * <MM><DD><YYYY> #	MM : Month DD : Day YYYY : Year

For 2:30 PM, press # \* 104 \* 1430 #

For 31 DEC 2007, press # \* 105 \* 12312007 #

\* Note : This function is dependent on the phone connected to TG130..

### 4.5. CID Format

You can set CID format that is available on wire phone with CID function.

SDMF format	# * 106 * 1 #	Default
MDMF format	# * 106 * 2 #	

\* Note : SDMF stands for Single Data Message Format and MDMF stands for Multiple Data Message Format.

#### 4.6. Band Selection

Your phone supports quad frequency band.( GSM900, DCS1800, GSM850, and PCS1900)

This feature depends on your service provider's setting.

GSM900/DCS1800	# * 108 * 1 #	
GSM850/PCS1900	# * 108 * 2 #	
GSM900, DCS1800, GSM850, PCS1900	# * 108 * 3 #	

#### 4.7. Equipment Lock

The lock code prevents TG130 from being used by unauthorized person without your permission. The default lock code is 0000.

When equipment lock is activated, you must enter lock code using 'Enter Lock Code' string every time the TG130 is turned on. (See 2.1 LED Status Indicator section)

Activate	# * 109 * 1 * <password> #	
Deactivate	# * 109 * 0 * <password> #	Default
Enter Lock Code	# * 109 * 2 * <password> #	password : 4 digits
Change Lock Code	# * 109 * 3 * <old password> * <new password> #	

#### 4.8. Polarity Reverse

This feature is provided for metering or PBX.

Activate	# * 111 * 1 #	
Deactivate	# * 111 * 0 #	

#### 4.9. Loop Current Disconnect

This feature is provided for metering or PBX.

Activate	# * 112 * 1 #	
Deactivate	# * 112 * 0 #	

#### 4.10. DTMF tone generation

This feature is provided for specific PBX.

By wire phone	# * 113 * 0 #	default
By TG130	# * 113 * 1 #	



For recharging prepaid SIM card	#* 113 * 2 #	
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\* Note : In case of setting “FOR RECHARGING PREPAID SIM CARD”, default value will be automatically set after the call was disconnected.

#### 4.11. Factory Reset

This function is used to change the main settings of the terminal back to the default settings, which were programmed into the terminal at the factory.

Factory Reset	# * 119 * <password> #	
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#### 4.12. PIN Lock

The SIM card has a PIN to prevent TG130 from being used by unauthorized person without your permission.

The PIN can be between 4 and 8 digits in length and any combination of digits 0 to 9.

When PIN lock is activated, you must enter the PIN using ‘Enter PIN’ string.

You have several chances to enter the PIN. If incorrect PIN is entered maximum times consecutively, the SIM card will be blocked. To unblock the SIM card, you must enter the PUK using ‘Enter PUK’ string.

(See 2.1 LED Status Indicator section)

A correctly entered PIN is stored in TG130’s memory. The PIN will be entered automatically upon the next power up.

Activate	# * 110 * 1 * PIN #	
Deactivate	# * 110 * 0 * PIN #	
Enter PIN	# * 110 * 2 * PIN #	
Enter PUK (Unblock SIM Card PIN)	# * 110 * 4 * PUK * New PIN #	
Change SIM Card PIN	** 04 * old PIN * new PIN * new PIN #	

#### 4.13. Automatic PIN Entering

You do not need to enter the PIN upon power up if it is stored in TG130 – the PIN is entered automatically.

This function is convenient in case of power failure; TG130 would be operable in a short time after power recovery without any intervention by the operating staff.

Note: When the Automatic PIN Entering is attempted with the incorrect PIN stored in TG130. The TG130 would make alert signals with LED(See 2.1 “Exception Status” section). There is the manual PIN-entering way after such unsuccessful automatic entering(See 4.12).

## 5. Supplementary Service Features

### 5.1. Call Forwarding

An incoming call can be delivered to another telephone number programmed.

Please contact your service provider for availability.

#### 1) All Calls

You can send all incoming calls to a different number using this feature.

Activate & register number	<b>** 21 * &lt;Number&gt; # Flash</b>	
Deactivate & deregister number	<b>## 21 # Flash</b>	
Activate	<b>* 21 # Flash</b>	
Deactivate	<b># 21 # Flash</b>	

#### 2) No Answer

When your phone is not answered after certain amount of time, you can send all incoming calls to a different number.

Activate & register number	<b>** 61 * &lt;Number&gt; * 10 * &lt;Delay&gt; # Flash</b>	Delay : 5 – 30 Seconds
Deactivate & deregister number	<b>## 61 # Flash</b>	
Activate	<b>* 61 * &lt;Number&gt; # Flash</b>	
Deactivate	<b># 61 #</b>	

#### 3) Unreachable

When your account is not reachable, you can send all incoming calls to a different number.

Activate	<b>** 62 * &lt;Number&gt; # Flash</b>	
Deactivate	<b>## 62 # Flash</b>	

#### 4) Busy

When your account is Busy, You can send all incoming calls to a different number.

Activate	<b>** 67 * &lt;Number&gt; # Flash</b>	
Deactivate	<b>## 67 # Flash</b>	

#### 5) All Types

To deactivate all type of 'Call Forwarding' feature,

Deactivate	<b>## 002 # Flash</b>	
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## 5.2. Call Barring

Call Barring is a feature, which the specified numbers cannot be called.

### 1) Bar all outgoing calls

Does not allow all outgoing calls, but still wish to receive incoming calls at any time.

Activate	<b>* 33 * PIN # Flash</b>	
Deactivate	<b># 33 * PIN # Flash</b>	

### 2) Bar all outgoing international calls

Does not allow all outgoing international calls to the subscribers of networks outside country you are in. But still wish to receive incoming calls at any time.

Activate	<b>* 331 * PIN # Flash</b>	
Deactivate	<b># 331 * PIN # Flash</b>	

### 3) Bar all outgoing international calls when roaming (except to home country)

Does not allow all outgoing calls to countries other than the one where your home network is located.

Activate	<b>* 332 * PIN # Flash</b>	
Deactivate	<b># 332 * PIN # Flash</b>	

### 4) Bar all outgoing calls

Does not allow all outgoing calls, but still wish to receive incoming calls at any time.

Activate	<b>* 333 * PIN # Flash</b>	
Deactivate	<b># 333 * PIN # Flash</b>	

### 5) Bar all Incoming Calls

Does not allow all incoming calls but still wish to make outgoing calls at any time.

Activate	<b>* 35 * PIN # Flash</b>	
Deactivate	<b># 35 * PIN # Flash</b>	

### 6) Bar all incoming calls when international roaming

Does not allow all incoming calls when you are roaming outside the country where your home network is located. But still wish to make outgoing calls at any time.

Activate	<b>* 351 * PIN # Flash</b>	
Deactivate	<b># 351 * PIN # Flash</b>	

7) Bar all calls

Does not allow all incoming or outgoing calls.

Activate	<b>* 350 * PIN # Flash</b>	
Deactivate	<b># 350 * PIN # Flash</b>	

8) Bar all incoming calls

Does not allow incoming calls but still wish to make outgoing calls at any time.

Activate	<b>* 353 * PIN # Flash</b>	
Deactivate	<b># 353 * PIN # Flash</b>	

9) Deactivate all call barring

Deactivate	<b># 330 * PIN # Flash</b>	
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### 5.3. Call Waiting

Call Waiting is a feature, which enables you to be alerted to another incoming call while you are on the call of your telephone.

These features are network-dependent. Contact your service provider to activate or deactivate Call Waiting.

Activate	<b>* 43 # Flash</b>	
Deactivate	<b># 43 # Flash</b>	

The following table describes multiparty call features. These features are handled within an active call.

Contact your service provider for availability.

FEATURE	STRING	DESCRIPTION
Reject call waiting or end call on hold	<b>0 Flash</b>	Release all held calls or set User Determined User Busy for a waiting call
End active call and switch to held or waiting call	<b>1 Flash</b>	Release all active calls and accept the held/waiting call
End a specific call	<b>1&lt;n&gt; Flash</b>	n = call number release a specific active call
Hold active call and retrieve held or waiting call	<b>2 Flash</b>	Place all active calls on hold and accept the held/waiting call
Hold all active calls and except one	<b>2&lt;n&gt; Flash</b>	n = call number Place all active calls on hold except call <n>
Add held call into active call	<b>3 Flash</b>	Add a held call to the conversation
Hold active call and place outgoing call	<b>&lt;Number&gt; Flash</b>	Place all active calls on hold and make a call to a specified number

### 5.4. Caller ID

1) Incoming (CLIP: Calling Line Identification Presentation)

You can activate the identification information presentation - name and number- of person calling you.

Activate	* 30 # Flash	
Deactivate	# 30 # Flash	

2) Outgoing (CLIR : Calling Line Identification Restriction)

You can prevent your identification information from be presentation to person you call.

Activate	* 31 # Flash	
Deactivate	# 31 # Flash	

3) Outgoing per-call block

To hide your information for the next call only.

Activate	* 31 # <Number> Flash	
Deactivate	# 31 # <Number> Flash	

## 6. Data Service Features

You can send and receive digital fax and access internet if TG130 is connected to the personal computer.

Before you start, Please refer to Appendix A(HOW TO SET UP DATA CONNECTION FOR CSD FAX/DATA AND GPRS DATA)

## 7. Fax Service Feature

### 7.1. Analog Fax

1) TG130F supports

- ECM (Error Correction Mode)
- Max 14.4kbps (Local – directly plugged)
- Max 9.6kbps (Network)
- Multiple-page

You can answer faxes through analog fax by setting up the fax-port of *TG130F* to RJ-11.

And before sending faxes, you need to setup *TG130F* to fax-mode as below.

FEATURE	MODE	STRING	DESCRIPTION
Bypass Mode	Voice	<b>#* 300 * 0 #</b>	Outgoing Call is whether Voice or Fax.
	Fax	<b>#* 300 * 1 #</b>	
	Fax Once	<b>#* 300 * 2 #</b>	
Fax Port Selection	Serial port(Digital)	<b>#* 301 * 0 #</b>	Incoming fax call is where to be routed.
	RJ-11(Analog)	<b>#* 301 * 1 #</b>	
Fax National Setup		<b>#* 302 * 2 #</b>	Fax machine should be connected

Note: Every fax machine has settings to communicate in specific country. If you have a problem of transmission between TG130F and local fax machine, you can change the national configuration of TG130F by pressing dial **#\*302\*2#**. The setting is originally configured by SIM, but after performing this national-setup TG130F will automatically find out the correct setup.

Note: After failure of sending faxes due to network problem or not working fax line, TG130F tries to transmit twice more to designated fax machine. If the transmission was not successful in spite of 3-tries, you will receive error report.

TG130F also tries to transmit to local fax twice more if failed to transmit faxes successfully got from remote fax machine beyond network.

## 7.2. Digital Fax

1) TG130 supports

- Max 9.6kbps

TG130 can be used with any fax-software application on PC. Before using fax capability, you should verify TG130 was plugged in PC. After then choose the right COM-Port for TG130 on your application.

When you answer faxes, you should set up TG130 to digital-mode as below.

Serial port(Digital)	<b>#* 301 * 0 #</b>	
RJ-11(Analog)	<b>#* 301 * 1 #</b>	

NOTE: Every fax specification except max-speed will be taken care of by your fax-software application

## 8. General Information

### 8.1. Specifications

#### MAIN UNIT

ITEM	TG130/TG130F
Frequency range	GSM850, GSM900, DCS1800, PCS1900
Protocol	GSM , GPRS Class B
Multi connection	5 REN
Connection port	RJ11 port(For Phone/Fax), Serial port(Data/Fax)
Size(mm)	<b>160*158*26</b>
Weight	about 268g with a standard battery
Working condition	Environment temperature: -10℃ ~ 50℃ Relative humidity : 10~95% Air pressure : 86~106kpa

#### AC/DC ADAPTER

Input voltage	AC100-240V
Input Frequency	50/60Hz
output voltage	5V 1A

#### INTERNAL BACK-UP BATTERY

Capacity	Li-ion battery 3.7V, 1000mAh
----------	------------------------------

### 8.2. Additional Safety Information

For further assistance, contact your Authorized Distributor for service and assistance. Please keep your Model number and Serial number ready for quicker service.

#### EVERYDAY USE OF YOUR TG130

Do not touch the antenna unnecessarily when your TG130 is in use, as this will affect call quality and may cause TG130 to operate at a higher power level than otherwise needed.

As with any other radio transmitting equipment, you are advised that for the satisfactory operation of your TG130 and for your own safety, you should use your TG130 only in the normal operating position.

### **NON-IONIZING RADIATION (EXPOSURE TO RADIO FREQUENCY SIGNALS)**

Your TG130 is a low power radio transmitter and receiver. When it is on, it receives and also sends the radio frequency(RF) signals. Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals from your TG130. RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Consult your vehicle manufacturer and the manufacturer of any equipment that has been added to the vehicle.

### **PACEMAKERS**

The Health industry Manufacturers Association recommends that a minimum separation of six inches be maintained between TG130 and a pacemaker to avoid potential interference with the pacemaker. Users with pacemakers:

Always keep your TG130 at least 20 cm (6inches) from your pacemakers when the TG130 is switched on. Switch off your TG130 immediately if you suspect that interference is being caused.

### **OTHER MEDICAL DEVICES**

If you use any other medical devices, please consult a physician or the manufacturer of the medical devices to determine if they are adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Always check the regulations of the healthcare facilities, which generally request that TG130 is switched off .

### **OPERATING ENVIRONMENT**

Remember to follow any special regulations in force in any area, and always turn off your TG130 wherever it is forbidden to use it, or when it may cause interference or danger.

### **EXPLOSIVE ATMOSPHERES AND MATERIALS**

Turn your TG130 off and do not remove the battery when in any area with a potential explosive atmosphere and obey all signs and instructions. You must observe restrictions on the use of radio equipment in fuel depots; below deck on boats; fuel or chemical transfer or storage facilities; areas where the air contains chemicals or particles, such as grain, dust, or metal powders; areas with signs about explosive atmospheres or where blasting operations are in progress; any other areas where you would normally be advised to turn off your vehicle engines.

### **BATTERY CHARGING**

Do not charge TG130 without the battery in place.

Please use only approved batteries and chargers.



### 8.3. Guarantee

Limited guarantee for the products of personal communication, accessories and software.

What does it cover this guarantee? According to the contained exclusions Axesstel guarantees its products next, (" products "), this free of defects in materials and of manipulation under the consumer's normal use for the period(s) sketched next. This limited guarantee is the consumer's exclusive remedy, and it applies like it continues to new products that are accompanied by this written guarantee:

#### COVERED PRODUCTS

1. Wireless fixed telephone.
2. The accessories included with the wireless fixed telephone.

#### EXCLUSIONS

**Batteries.** Only batteries whose loaded capacity totally falls below 80% of its capacity average, and batteries that its escape is covered by this limited guarantee.

**Abuse and wrong use.** Defects or damages that are of: (to) inappropriate operation, storage, wrong use or abuse, accident or negligence, like physical damage (cracks, scratches, etc.) TO the surface of the product that you/they are the result of the wrong use; (b) I contact with liquid, it dilutes, rain, extreme humidity or heavy perspiration, corrosion, dirt or similar, extreme heat, or eaten; (c) I use of the product for commercial purposes or to subject the product to use or abnormal conditions; or (d) other acts that are not blame of Axesstel, are excluded of the cover

**Use of products and non original accessories:** defects or damage that are the result of the use of products, accessories, software or other outlying teams not marked or certificates as original, are excluded of the guarantee

**Altered products:** Products or accessories with (to) series numbers or date labels that they have been removed, altered or erased; (b) stamps that show evidence of manipulation; (c) series numbers that don't agree; or (d) housing or non compatible pieces or of mark different to the original, they are excluded of the guarantee

**Communication services:** Defects, damages, or flaw of products, due to any communication service or sign to which you have subscribed or used with the products they are excluded of the covering.

#### WHO ARE COVERED?

This guarantee only extends to the first consumer/buyer, and it is not transferable.

#### WHAT WIL AXESSTEL Make?

Axesstel, to its will, without position for you, will repair, it will replace or it will reinstate the price of the purchase of any product that is not according to this guarantee. We can use products, accessories or reconditioned equivalent parts, restored of second hand functionally or new. Any fact,

software or applications that have been added to their product, accessory or software, included but not limited to the personal contacts, games and bell tones, it will be reinstalled. To please avoid to lose such data, software and applications; she/he believes a back of those data before requesting the service.

#### HOW TO OBTAIN SERVICE OF GUARANTEE OR OTHER INFORMATION

For information in how to obtain service, contact the place where the product was bought or a center of service Axesstel in its country.

So that this guarantee has effect, take its unit, together with this policy, to the purchase place or a center of authorized service Axesstel.

You will receive instructions of as sending the products, to his expense, to an authorized repair center of Axesstel. To obtain service, you should include: (to) a copy of their receipt, sale invoice or another test comparable of purchase, (b) a written description of the problem; (c) their supplier's of service name, if it applies; (d) the name and lease of the establishment of the installation (if it applies) and, but important; (and) their address and telephone number.

#### HOW OTHER LIMITATIONS EXIST?

Any implicit guarantee includes without limitation the implicit guarantees of commercial and aptitude for a particular purpose, it will be limited to the duration of this limited guarantee, on the other hand the repair, substitution, or provided refund lower this limited guarantee it is the consumer's exclusive remedy, and it is provided instead of all the other guarantees, expressly or implicitly. In any event

Axesstel will be responsible, either in contractual or civil environments (even negligence) for damage and damages for but of the price of purchase of the product, or for any indirect, incidental damage, special of any type. Or lost of earnings or dismissed lucre, lost of business, lost of information or data or another lost one financial that arise of the capacity or inability of using the products, the magnitude of these damages will be able to be denied by the law

Some states and jurisdictions don't allow the limitation or the exclusion of incidental or rising damages, or limitation in the duration of an implicit guarantee, so the previous limitations or exclusions can not be applied you. This guarantee gives him right legal specific, and you can also be entitled other that vary from state to state or of a jurisdiction to another.



Axesstel corp. declares that this unit is according with the excellent provisions of the directive one of low voltage 73/23/eec and the directive emc 89 / 336 / eec.

The certification alone fcc applies for the pattern of frequency 850-1900 MHz.

The version frequently 900-1800 MHz this marked one as agreement ce-mark with the directive related European.

### **Warning of FCC to the users**

This device fulfills the part 15 of the rules of the fcc. The operation is subject to the following two conditions:

- : (1) this device can not cause harmful interference, and
- : (2) this device should accept any received interference, even interference that can cause not wanted operation.

If their device or accessory has a connector usb, or it is on the other hand it is considered then as outlying device of computer that can be connected to a computer for purposes of transferring data, a device class it is considered b it applies the following declarations:

This team has been proven and she/he has been that it fulfills the limits for a device class digital b, rising to the part 15 of the rules of the FCC. These limits are designed to provide reasonable protection against the harmful interference in a residential installation.

This team generates, it uses and it can radiate radiofrequency energy and, if it doesn't install and it uses of agreement with the instructions, it can cause harmful interference to the radio communications.

However there is not any guarantee that the interference doesn't happen in a particular installation. If this team causes harmful interference to the radio reception or television which can be determined turning off and lighting the team, the user can try to correct the interference through an or more than the following measures:

To reorient or re to locate the antenna receptor

To increase the separation between the equipment and the receiver.

To connect the team to an electric outlet in a circuit different to which the receiver is connected.

To consult with their salesperson authorized by a technician with experience in radio that helps him.

### **Exhibition guide to the RF**

During transmission operations in order of completing the guides of you limit them maxima of exhibition to the RF a minimum distance of 20 cm it should be maintained between the antenna and the user of the telephone.

### **Information of CE**

Hereby, Axesstel Inc declares that this TG130/TG130F is in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC

Directive of the UE 2002/96/EC in Waste Electrical and Electronic Equipment (WEEE):

Axesstel Corporation this focused in fulfilling the program of the European Union as for the handling of electronic waste. We are committed in completing to honesty the environmental standards in the production of all our products in order of completing these directive ones.

### 8.4. Troubleshooting

ITEM	REMEDY
No power	Check the power adaptor connection Check for the appropriate service indication on the LED.
Telephone service is not Working	Make sure TG130 powered on properly. Check any equipment connected to the TG130 is correctly connected. Make sure your service is established with a service provider.
Call can not be received.	Check the appropriate power indication on the LED Check signal strength. Make sure handset is placed on the cradle
Call can not be made.	Make sure your service is established with a service provider. Check any equipment connected to the TG130 is correctly connected.
Adequate signal is not present	Try different locations for the better signal reception.
Analog fax calls isn't sent or received	Check the appropriate power indication on the LED Check the cable is correctly connected to the TG130F
GPRS service isn't Connected.	Check the cable connection Contact the GPRS service provider whether you have service on the account.

#### **FCC WARNING:**

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

## APPENDIX A:

### HOW TO SET UP DATA CONNECTION FOR CIRCUIT SWITCHED DIGITAL FAX/DATA AND GPRS DATA

#### 1. INTRODUCTION

FOR THE DATA CONNECTION, BELOW REQUIREMENTS ARE NEEDED.

- SIM CARD FROM YOUR NETWORK SERVICE PROVIDER FEATURING CSD OR GPRS .
- PC OR LAPTOP WITH USB PORT
- WINDOWS 2K OR LATER VERSION
- USB DATA CABLE INCLUDED IN BOX

**NOTE** THIS MANUAL IS FOR WINDOWS XP. SETTING IN OTHER WINDOWS VERSIONS IS SIMILAR.

#### 2. INSTALL THE DRIVER FILES

1. EXTRACT THE DRIVER FILE "CP210X\_VCP\_WIN2K\_XP\_S2K3.ZIP"

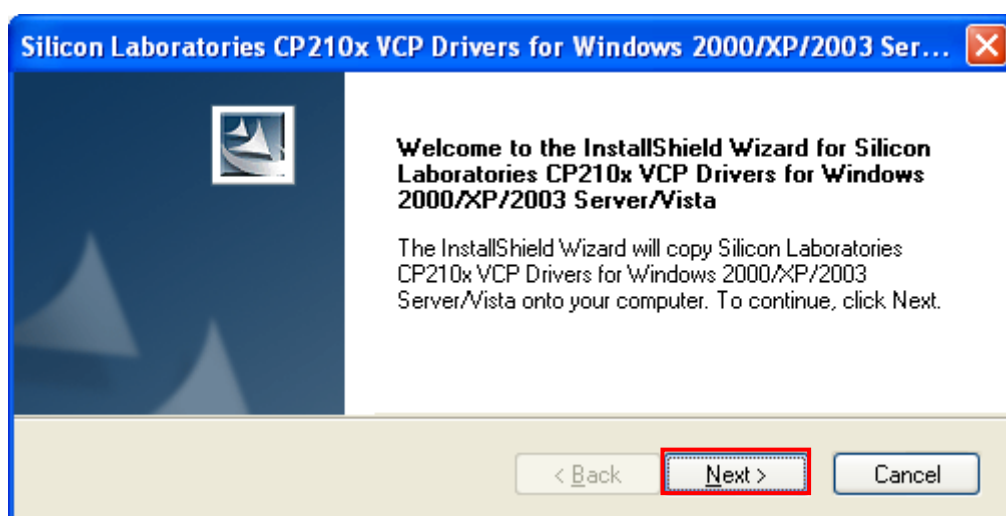
**NOTE 1** PLEASE ASK THE DRIVER FILE AT THE PLACE WHERE YOU BOUGHT PHONE OR TERMINAL

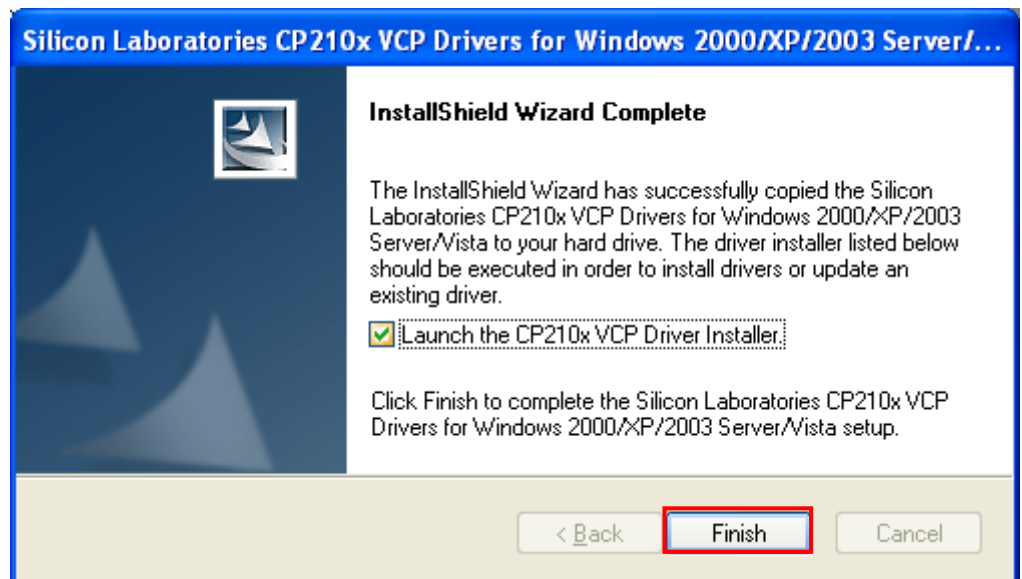
**NOTE 2** DOWNLOAD ALSO AVAILABLE ON THE VCP(VIRTUAL COM PORT) DRIVER MANUFACTURER'S  
HOMEPAGE:[HTTP://WWW.SILABS.COM/TGWWEBAPP/PUBLIC/WEB\\_CONTENT/PRODUCTS/MICROCON  
TROLLERS/USB/EN/MCU\\_VCP.HTM](http://www.silabs.com/tgwwebapp/public/web_content/products/microcontrollers/usb/en/mcu_vcp.htm)

VERSION 4.40 SHOULD ONLY BE USED, IF NOT AVAILABLE. EMAIL TO: SUPPORT@QUESTLABS.CO.KR

2. THEN, MANY FILES ARE EXTRACTED IN THE DIRECTORY WHERE YOU UNZIPPED.

3. EXECUTE THE FILE "CP210XVCPINSTALLER.EXE" FOR INSTALLING DRIVER.



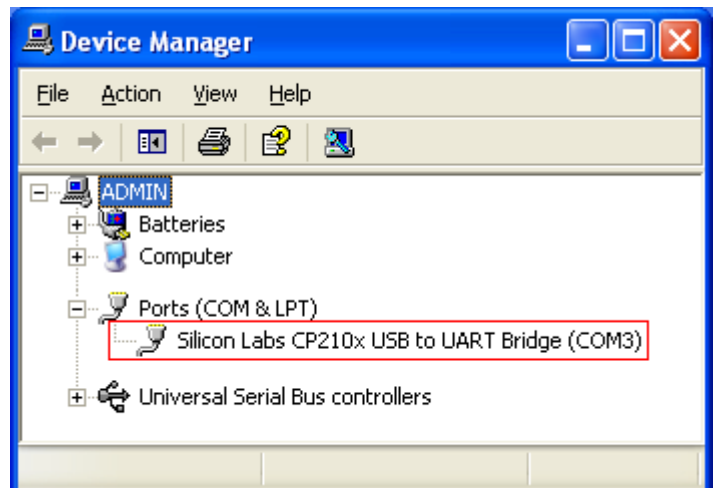


**NOTE** AFTER INSTALLING DRIVER FILE, YOU COULD NEED TO REBOOT THE PC.

### 3. INSTALL NEW MODEM

CONNECT THE PHONE TO PC USING USB DATA CABLE, CABLE DRIVER IS INSTALLED AUTOMATICALLY.

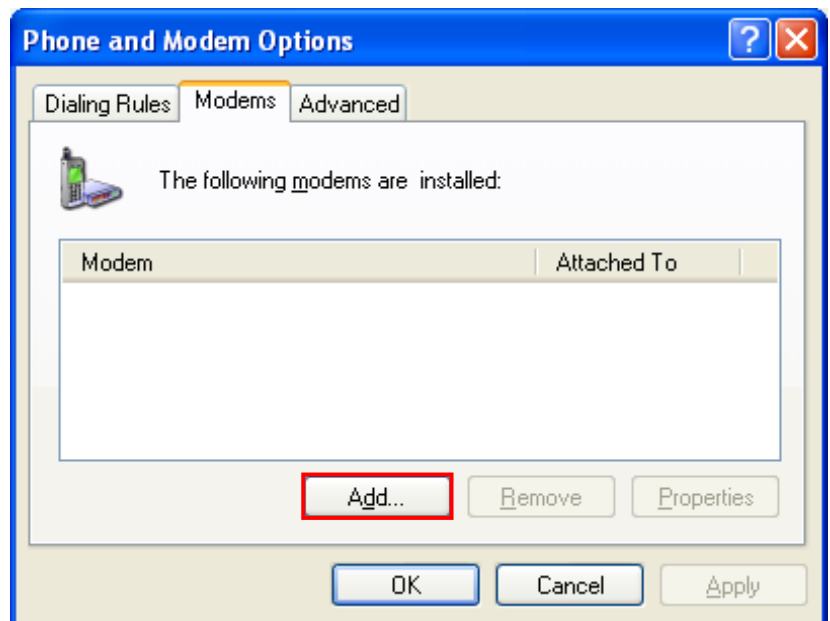
AFTER INSTALLING YOU CAN SEE NEW PORTS (COM & LPT) IN A DEVICE MANAGER WINDOW.



**NOTE** IN THE COM3, COM PORT NUMBER COULD BE DIFFERENT ON THE PC ENVIRONMENT.

GO TO THE "NETWORK CONNECTIONS" MENU.

START BUTTON > CONTROL PANEL > PHONE AND MODEM OPTIONS  
AND SELECT THE ADD BUTTON FROM MODEMS FROM TAP MENU.

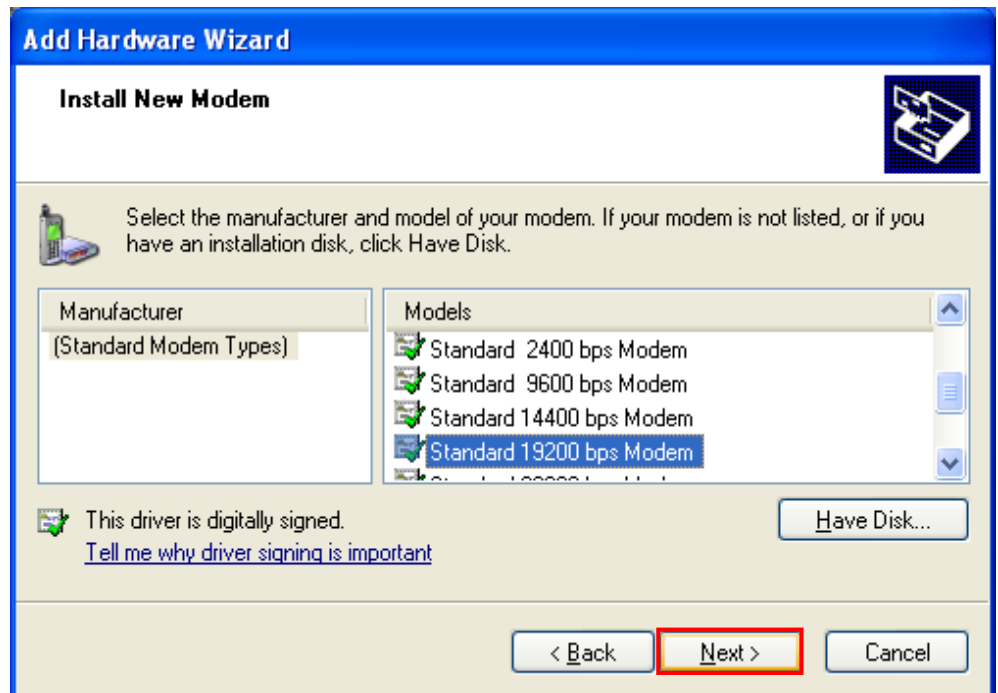


SET AS SHOWN BELOW. AND PRESS THE NEXT BUTTON.

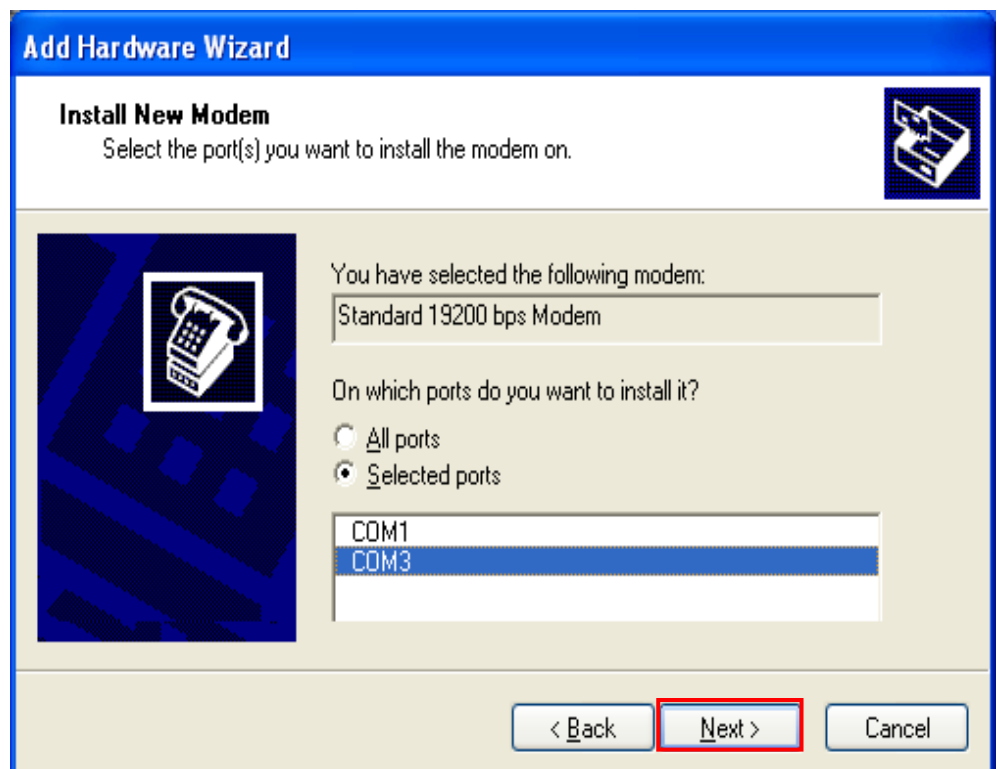




SELECT “[STANDARD MODEM TYPES]” AND “STANDARD 19200 BPS MODEM”. AND PRESS THE NEXT BUTTON.

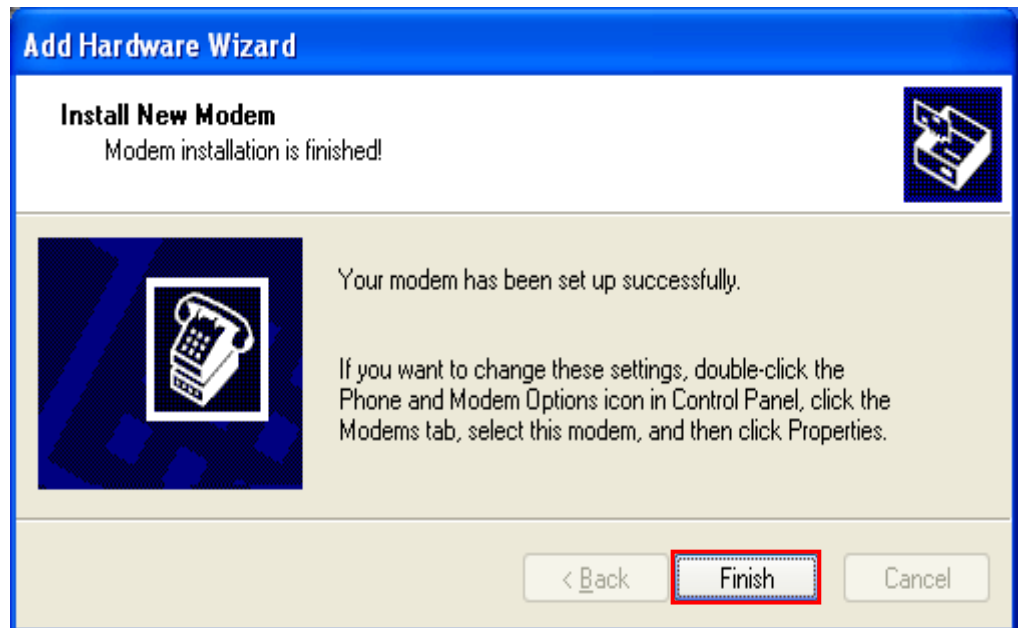


SELECT A APPROPRIATE PORT THAT YOU HAVE SELECTED. THIS MAY TAKE SEVERAL MINUTES.



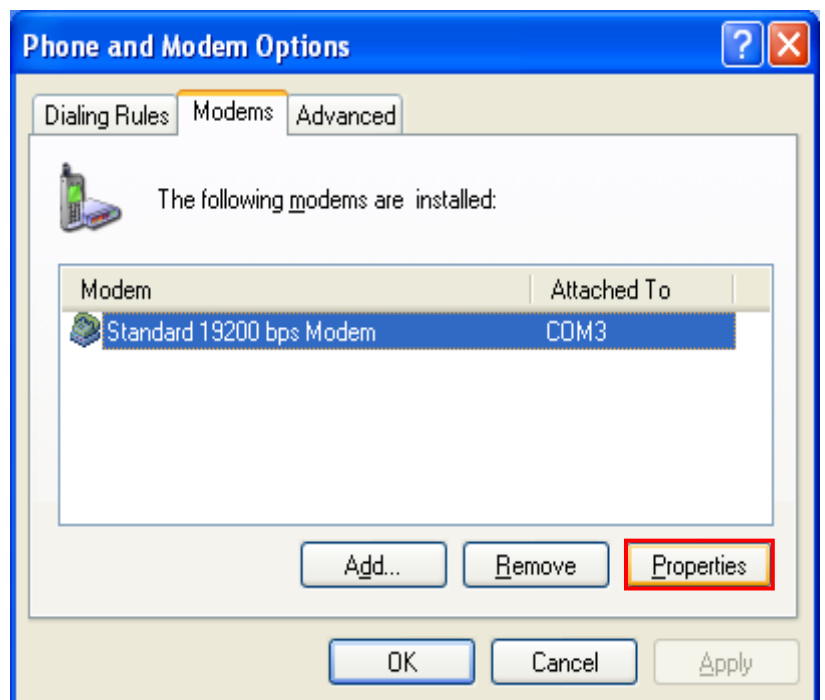
**NOTE** IN THE COM3, COM PORT NUMBER COULD BE DIFFERENT ON THE PC ENVIRONMENT.

IF YOU SEE BELOW WINDOW, MODEM IS INSTALLED SUCCESSFULLY.



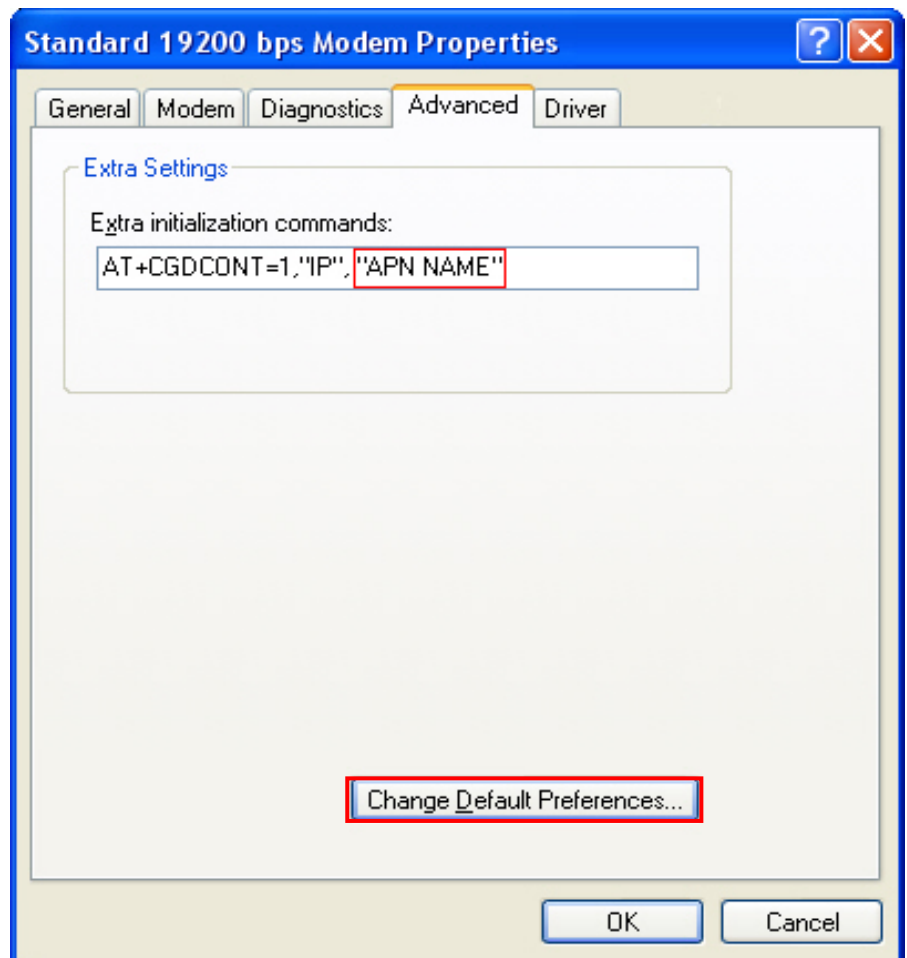
NEW MODEM IS LISTED IN BELOW WINDOW.

SELECT THE NEW MODEM, AND PRESS THE PROPERTIES BUTTON FOR SETTING.

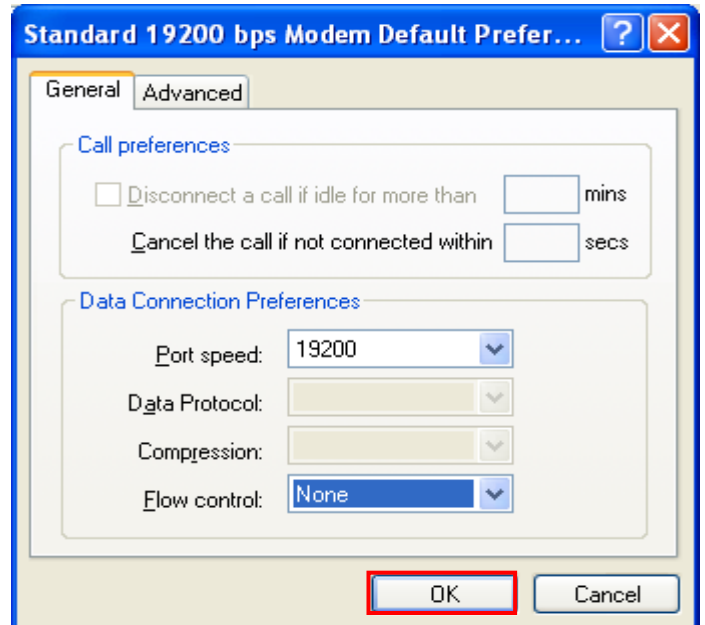


SELECT "ADVANCED" TAB MENU.

THE **APN NAME** MAY BE DIFFERENT ON EVERY SERVICE PROVIDERS AND PERHAPS SOME SERVICE PROVIDERS DO NOT REQUIRE **APN NAME**. SO YOU SHOULD CHECK FIRST WITH YOUR SERVICE PROVIDER OF USING APN NAME. IF YOUR SERVICE PROVIDER REQUIRES THEIR OWN APN NAME TO BE ENTERED, YOU MUST HAVE TO ENTER BELOW INITIALIZATION COMMANDS EXACTLY WITH CHANGING APN NAME(RED BOX) AS REAL APN NAME PROVIDED BY SERVICE PROVIDER. IF APN NAME DOES NOT NEED, LEAVE THE WHOLE INPUT BOX IN BLANK.



SELECT "CHANGE DEFAULT PREFERENCES...". AND SET AS BELOW WINDOW. AND PRESS THE OK BUTTON.

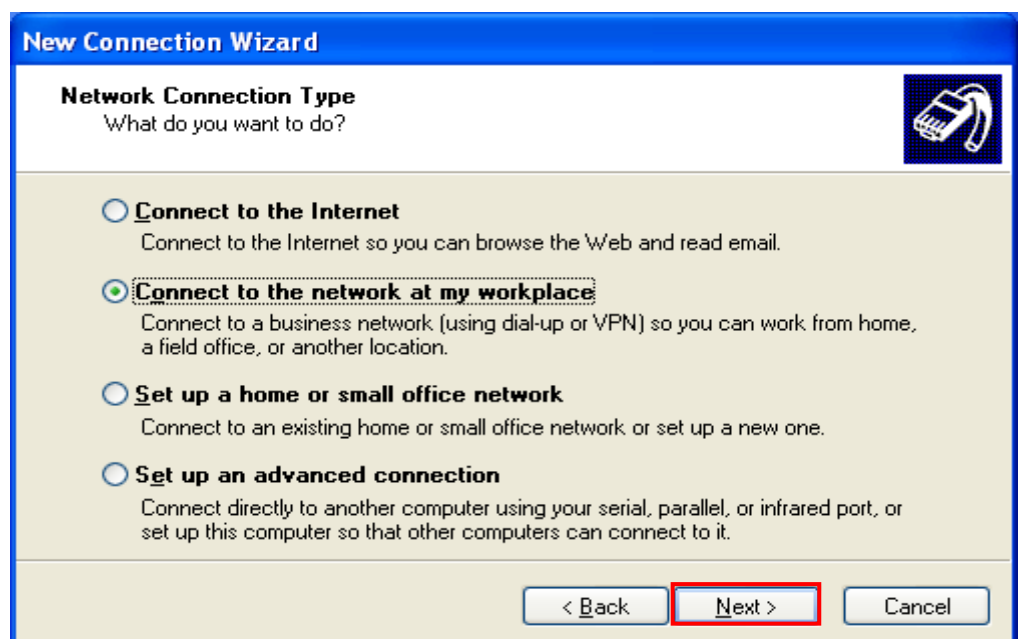


#### 4. CREATE NEW NETWORK CONNECTION

GO TO THE "CREATE A NEW CONNECTION" MENU.

START BUTTON > CONTROL PANEL > NETWORK CONNECTIONS > CREATE A NEW CONNECTION

SELECT "CONNECT TO THE NETWORK AT MY WORKPLACE". AND PRESS THE NEXT BUTTON.

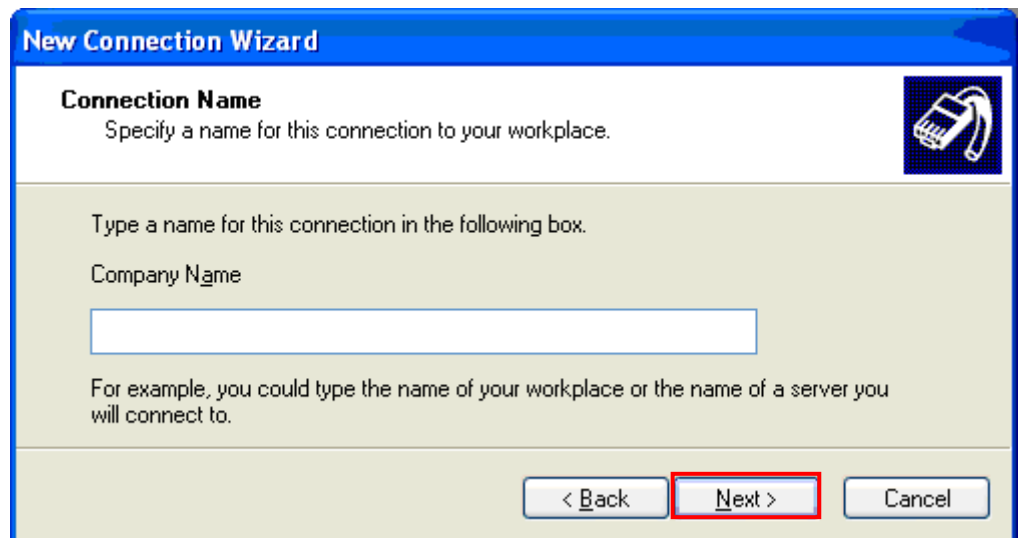


SELECT "DIAL-UP CONNECTION". AND PRESS THE NEXT BUTTON.

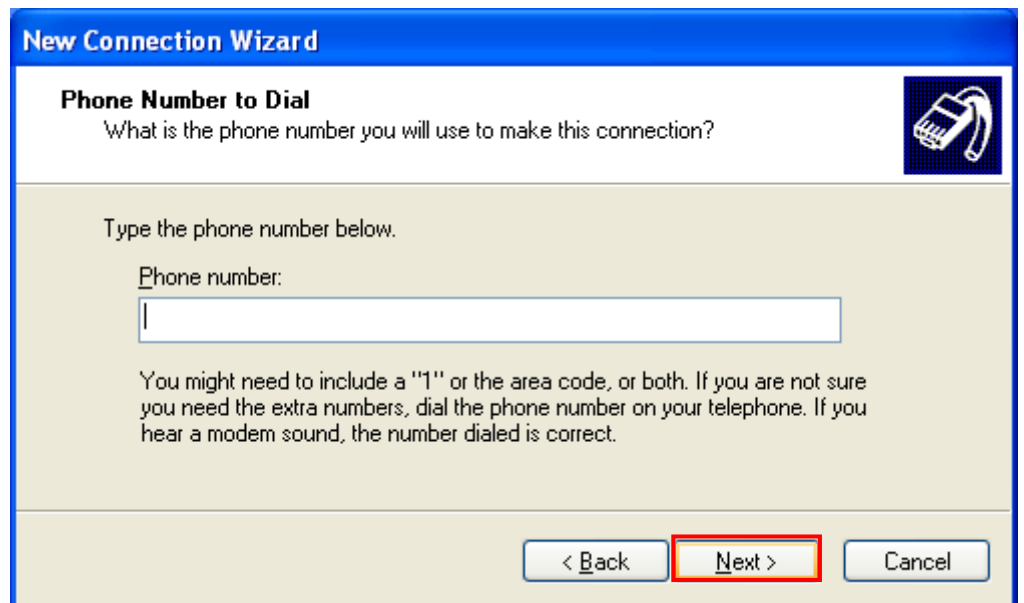


INSERT "COMPANY NAME" AS YOU WANT.

PRESS THE NEXT BUTTON.



INSERT "PHONE NUMBER" LIST IN YOUR INTERNET ACCESS KIT AND PRESS THE NEXT BUTTON.



YOU CAN SEE A COMPLETING MESSAGE IN NEXT WINDOW.

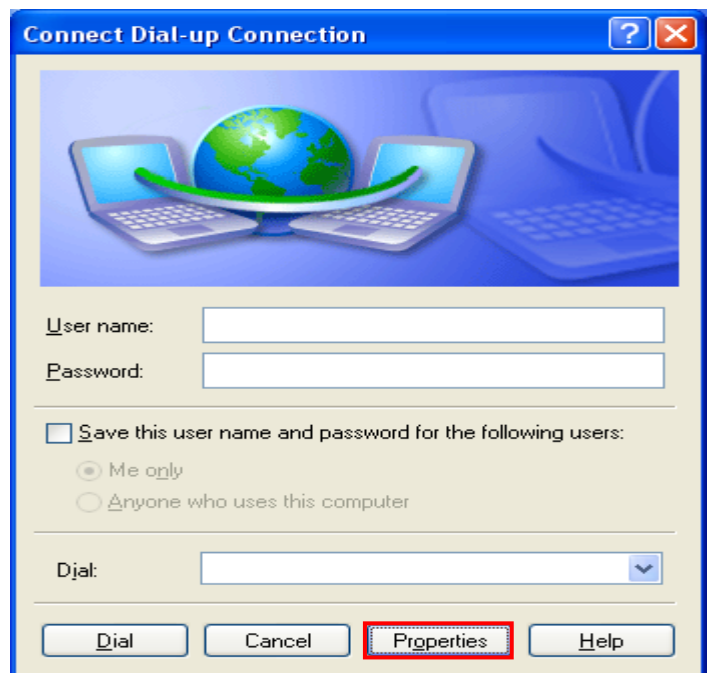
### 5. CONNECT INTERNET

GO TO THE "NETWORK CONNECTIONS" MENU.

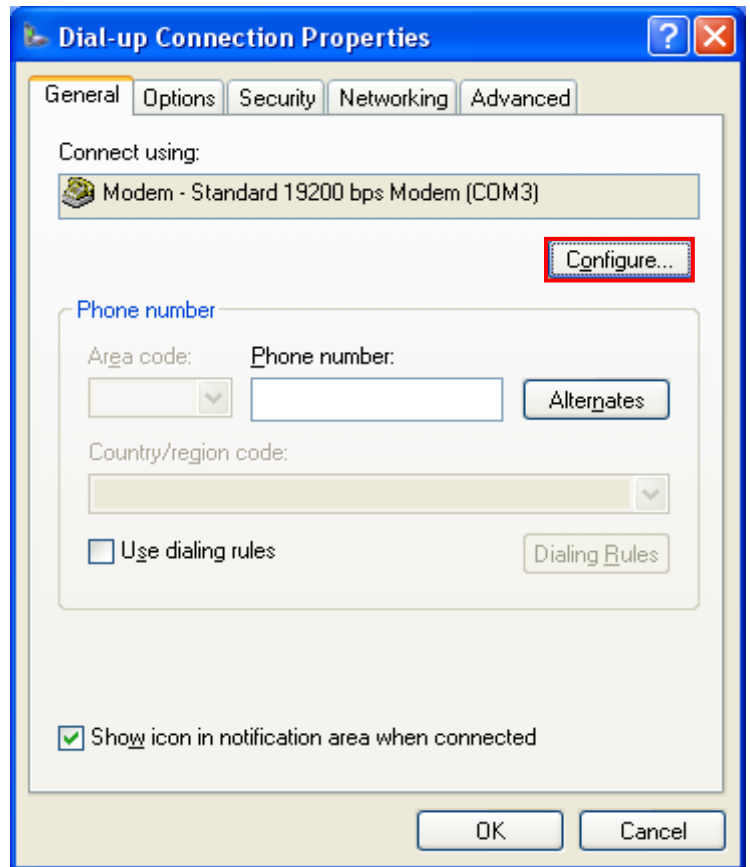
START BUTTON > CONTROL PANEL > NETWORK AND INTERNET CONNECTION > NETWORK CONNECTIONS

AND CHOOSE THE CONNECTION NAME WHICH WAS CREATED IN THE DIAL-UP CONNECTION.

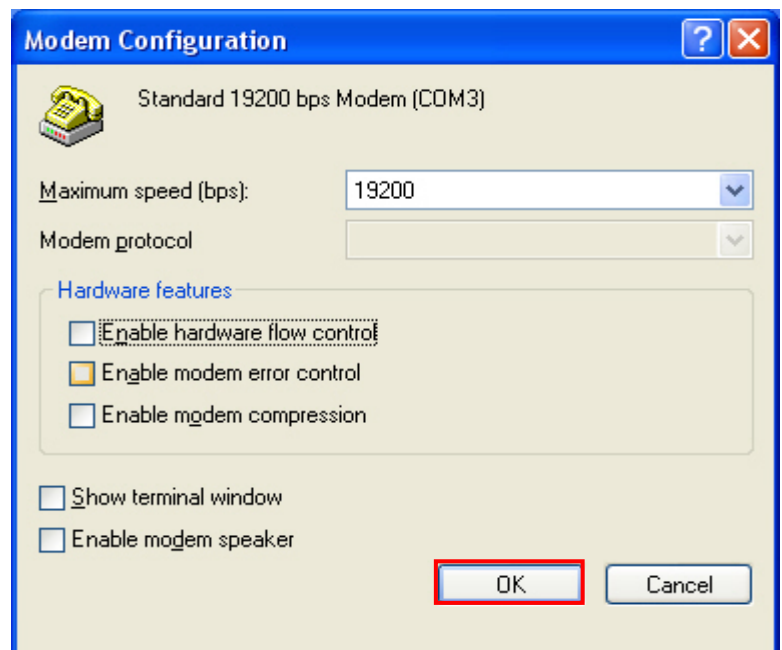
SELECT "PROPERTIES".



SELECT "CONFIGURE..." OF GENERAL TAB MENU.

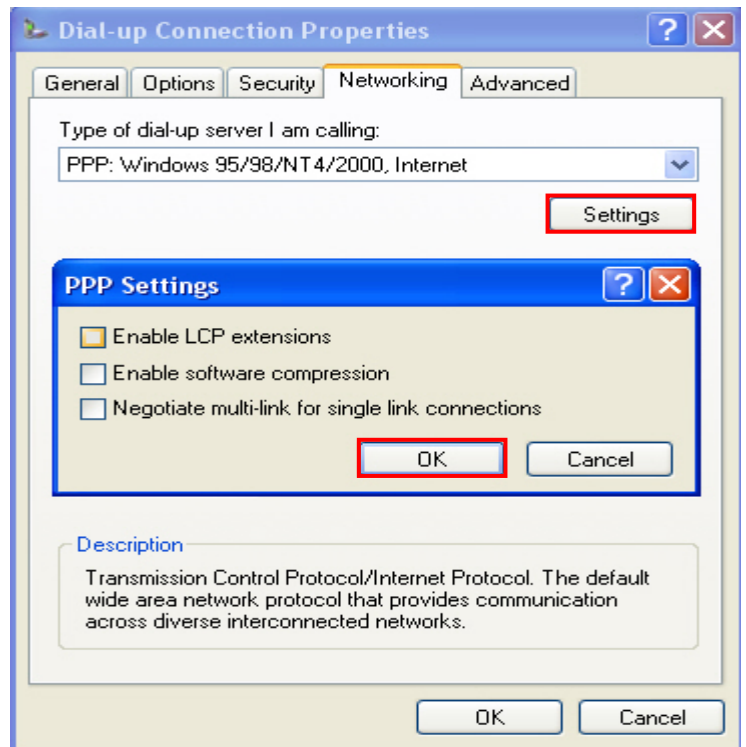


SET AS BELOW WINDOW. AND PRESS THE OK BUTTON.

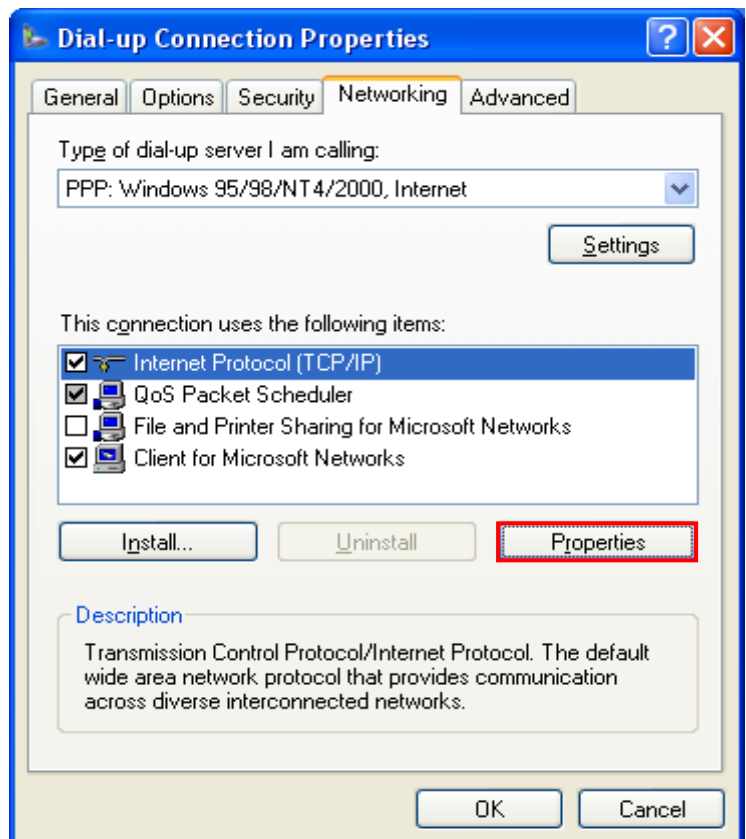


SELECT "SETTINGS" OF NETWORKING TAB MENU.

AND SET AS BELOW WINDOW. AND PRESS THE OK BUTTON.



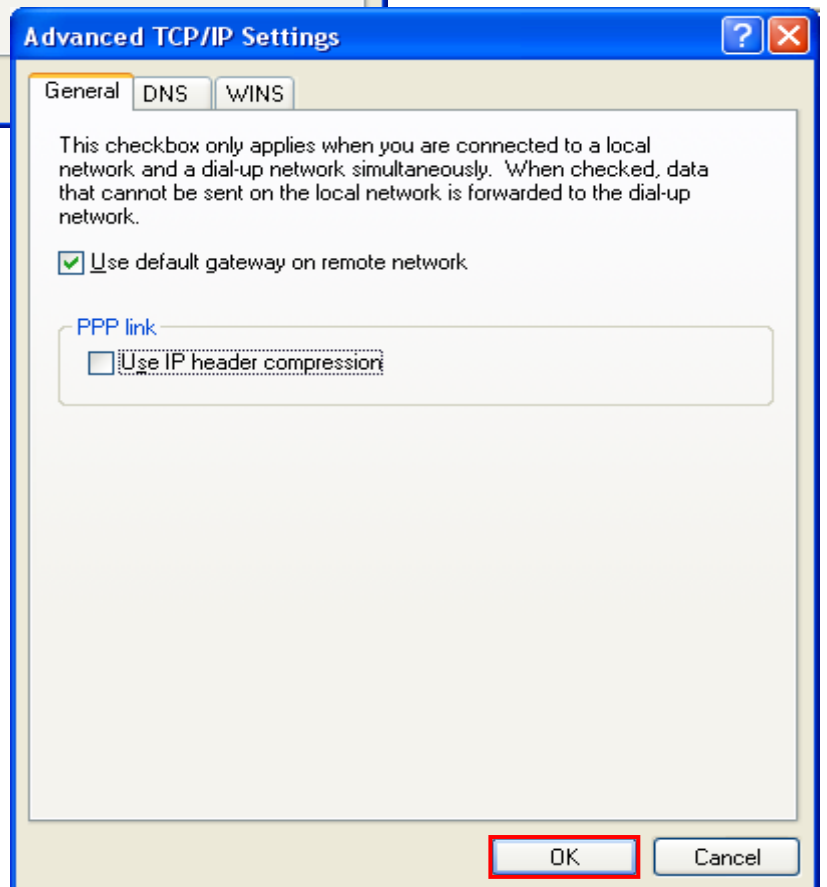
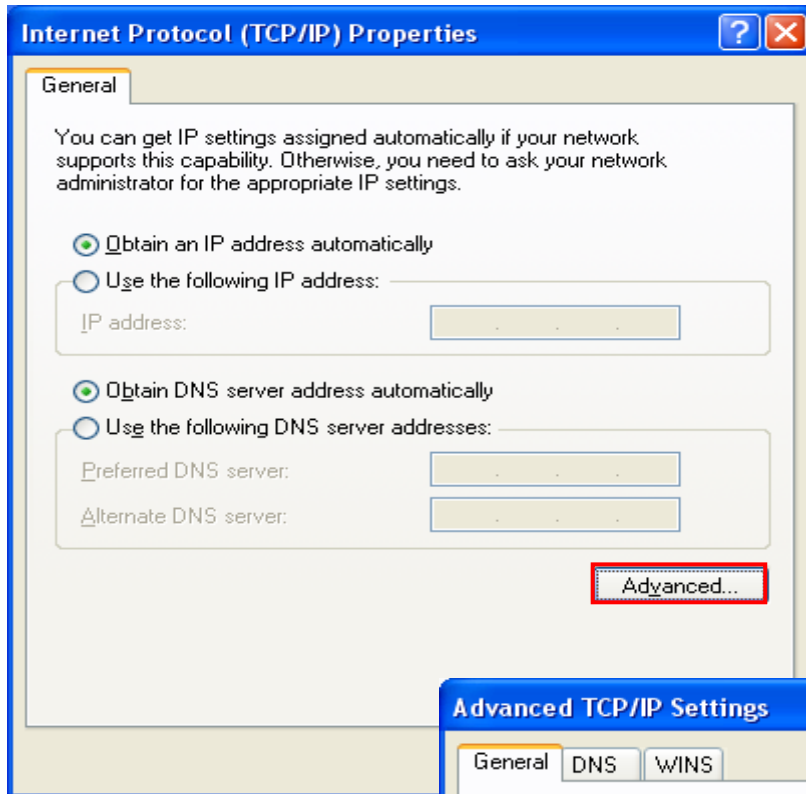
SELECT "PROPERTIES" OF INTERNET PROTOCOL (TCP/IP)





SELECT "ADVANCED...".

AND SET AS BELOW WINDOW. AND PRESS THE OK BUTTON.



PRESS OK BUTTON AND RETURN TO THE "CONNECT DIAL-UP CONNECTION" WINDOW.

**WHEN YOU WANT THE CSD (DIAL-UP) DATA CONNECTION,**

YOU CAN FIND USERNAME, PASSWORD, DIAL NUMBER FROM THE INTERNET ACCESS KIT THAT YOU PURCHASED. AFTER FILLING THOSE VALUES, PRESS THE DIAL BUTTON.

**WHEN YOU WANT THE GPRS DATA CONNECTION,**

IF YOUR NETWORK SERVICE PROVIDER HAS THE RECOMMEND SETTING OR THE ACCESS PROGRAM, YOU SHOULD USE THAT.

IF NOT, YOU DON'T NEED TO INPUT USERNAME, PASSWORD. JUST INPUT A DIAL NUMBER AS "\*99#". AND PRESS THE DIAL BUTTON.