

GSM GPRS QUAD BAND FWT with ANALOG & DIGITAL G3 FAX

User Manual - GD850T and GD850TF

TYLER OH

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REVISION HISTORY

| Version | Change Summary | Date | Author |
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| 0.0 | Draft version created | 05/07/2007 | TYLER.OH |
| 2.1 | Add and Changes some Features | 02/10/2007 | ALVIN. KIM |
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APPENDIX A – HOW TO SETUP DATA CONNECTION FOR CSD FAX/DATA AND GPRS DATA

Welcome to your GD850T

GD850T 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 (INTERNET OVER CSD/GPRS, DIGITAL FAX)
- SMS USING PC
- ANALOG FAX (GD850TF)

For your safety

Here is important information for safe and efficient operation.

Please read this information before using your GD850T.

For optimal performance, install this indoors. When specially used in an outdoor area, it may not work in below 0°C or over 50°C.

Install GD850T on hard, flat surface for proper ventilation.

Avoid using GD850T in high temperature or near a source of fire or gas.

Avoid storing GD850T in cold areas.

Do not expose GD850T to moisture or dust.

Do not use GD850T in the hospital. It will interfere with medical electronic equipments such as a peace maker.

Do not use harsh chemicals, cleaning solvents to clean GD850T. And wipe with a soft, clean, dry cloth to clean it.

Do not knock, drop, and shake GD850T to avoid breaking the case.

Use only the supplied or approved replacements

Do not use GD850T with a car battery.

Do not touch the antenna when GD850T is being used.

Do not use GD850T with a damaged antenna. Have your antenna replaced by a qualified technician immediately.

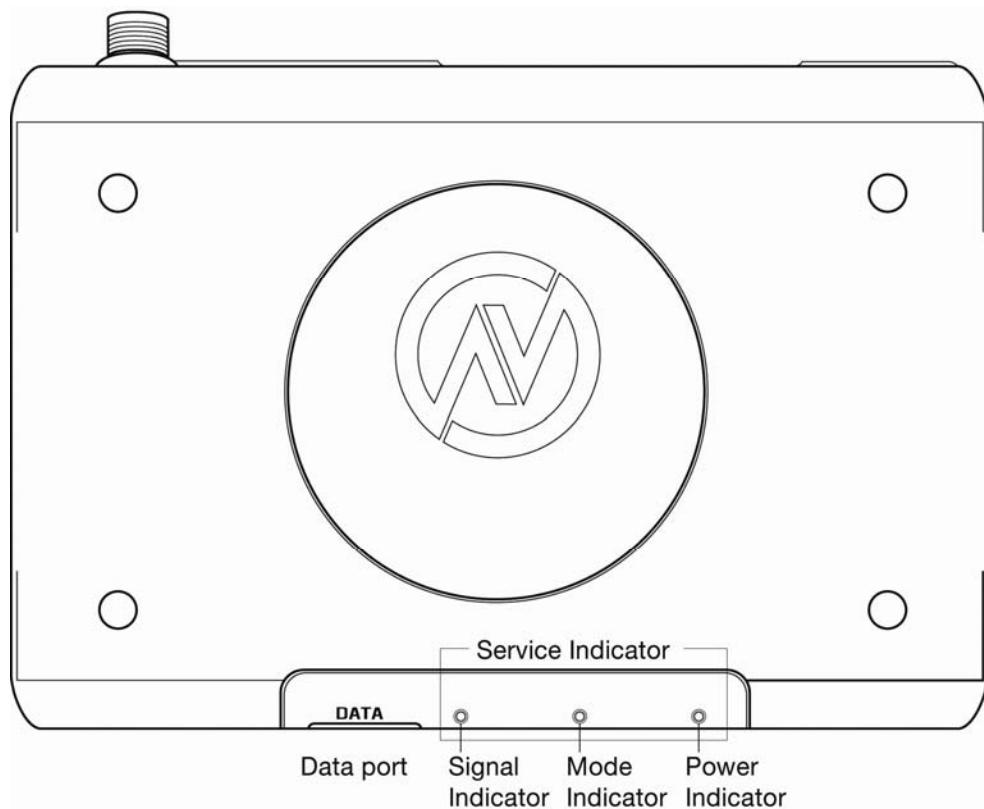
Use only the provided antenna. Do not use the provided antenna for any other purpose.

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

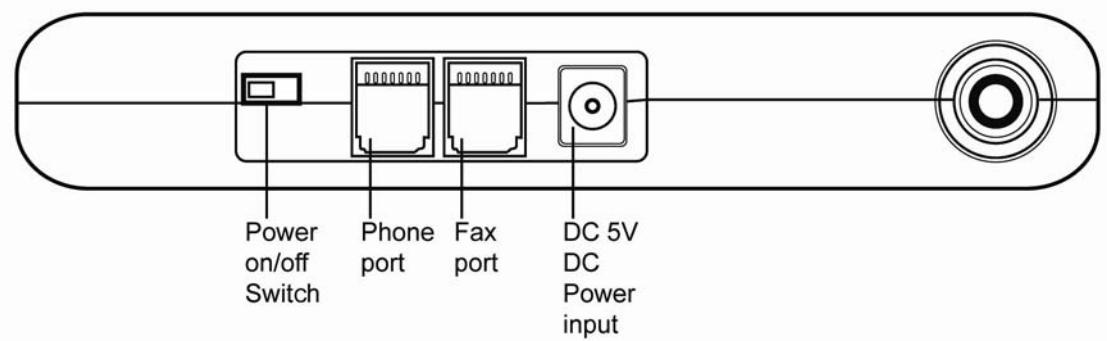
If GD850T fails to work for any reason, do not attempt to disassemble.

1. Installation guide

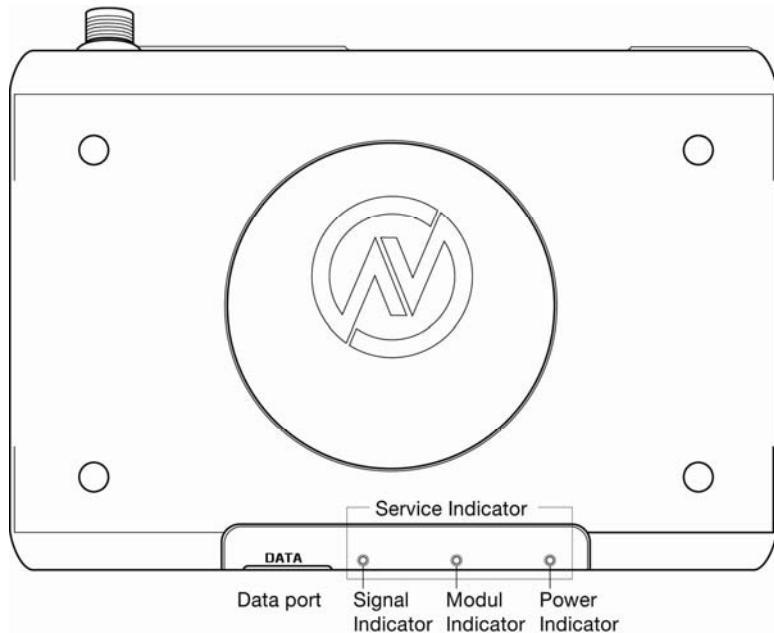
1.1 Front, Side and Rear View of GD850T



[FRONT VIEW]



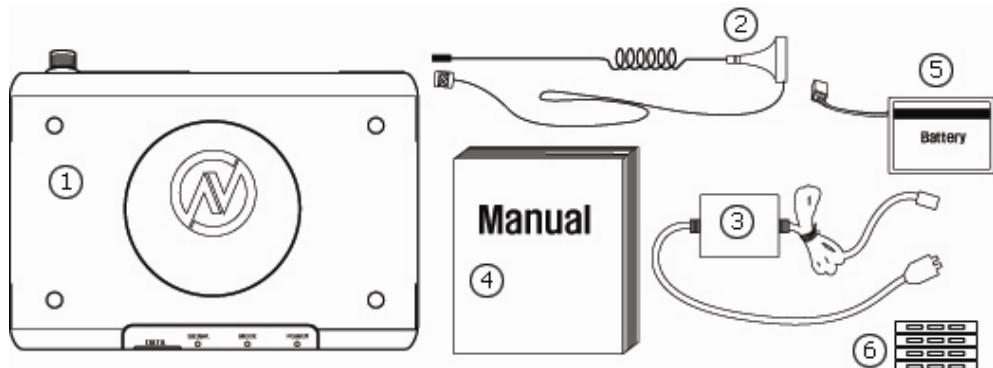
[SIDE VIEW]



[REAR VIEW]

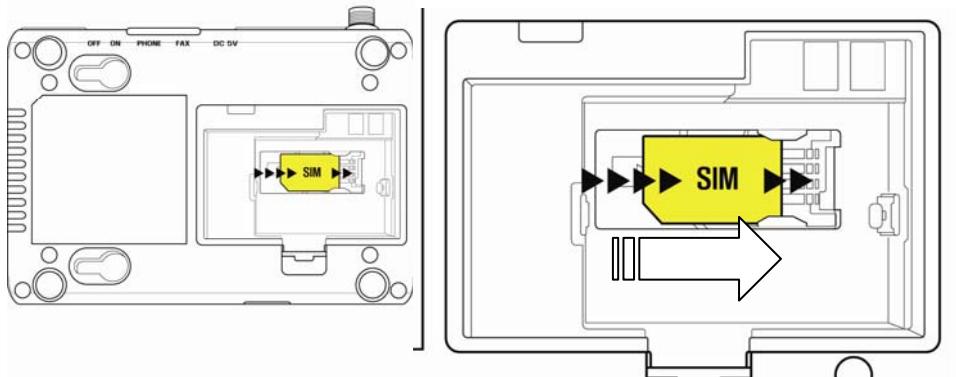
1.2 Checking the components

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
3. DC POWER ADAPTER
4. USER MANUAL.
- 5 .LI-ION BACKUP BATTERY
6. 4 LEG STACKING
7. STAND

1.3 SIM card installation

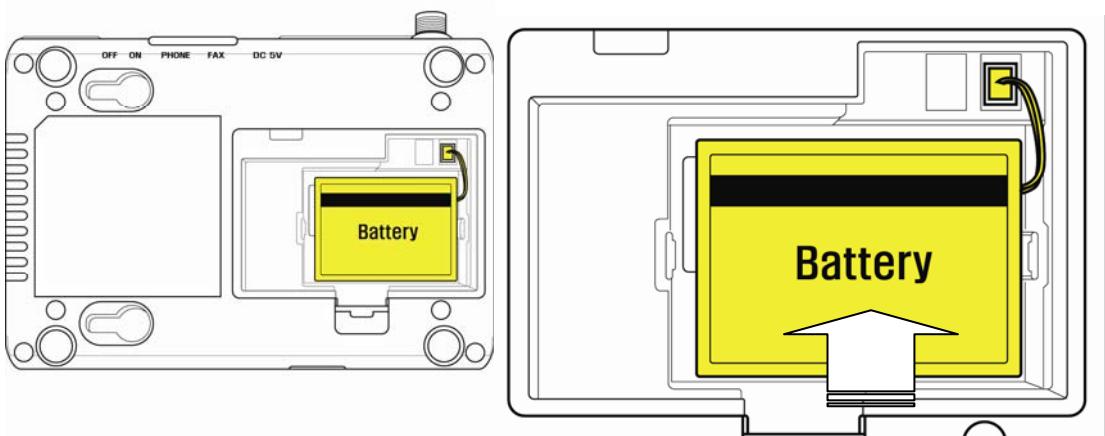


1. Disconnect the power supply.
2. Open battery cover on the bottom side of the GD850T.
3. Disconnect the DC power cable to GD850T
4. Take out the battery pack in the right position between the hold bars
5. Insert the SIM card into the socket as shown in the picture.

* Note: Make sure the SIM card is aligned properly with the directional arrow on the holder.

6. Connect the DC power cable to GD850T.
7. Insert the battery pack in the right position between the hold bars.
8. Close the battery cover.
9. Connect the power supply to GD850T.

1.4 Battery installation



1. Disconnect the power supply.
2. Open battery cover on the bottom side of GD850T.

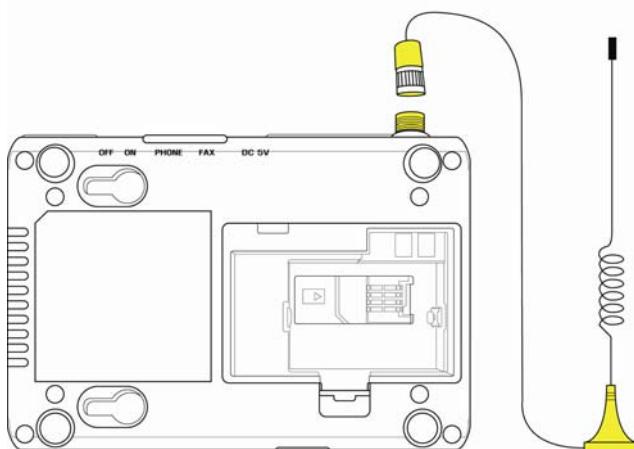
3. Connect the DC power cable to GD850T.
4. Close the battery cover.
5. Connect the power supply to GD850T.

1.5 Desktop installation

Before you select a location to place GD850T, 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.

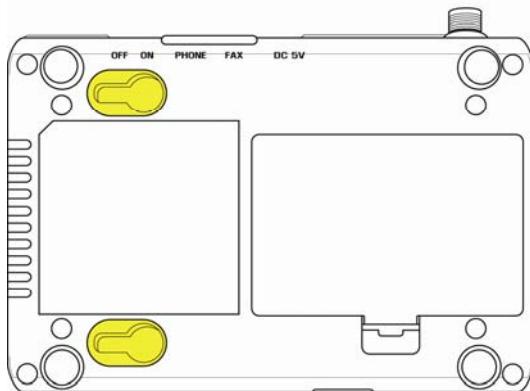
1. Connect the antenna to GD850T and locate it as far as it can reach
* Note : finger-tighten the antenna.
2. Connect a wire telephone to GD850T using phone cord
3. Connect the barrel connector of the power supply to DC Adaptor
4. Plug the DC Adaptor into the power supply.
5. Plug the DC Adaptor into 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 RJ11 port located at the side of GD850T.
8. If you use G3 FAX machine, connect your line cord of G3 FAX to the RJ-11port located at the side of GD850TF.



1.6 Wall mounting

1. Mark two mounting hole locations to match the screw hole in the back of GD850T.

2. Drill two holes at the marked locations.
3. Tighten the screws until the head is about 3~5mm from the wall.
4. Hang GD850T on the screw using the two holes in the back.
5. Push GD850T down until the unit is firmly locked into place.



2. Getting To Know GD850T

2.1 LED Status Indicator

When your GD850T is powered on, the LED Status Indicators show operation of the indicators and the modes.

When your GD850T 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 |
| AMBER | Continuous | Unread SMS message remains |
| AMBER | Flashing | SMS memory full |
| 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 ** |

* 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 GD850T 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 GD850T.
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 |
|---------------------|---------------------|---------------|

4.2 Dial Delay Time

You can set dial delay time that your GD850T waits after the phone number is dialled before automatically sending the number.

| | | |
|---------------------|---------------------|----------------------|
| Set Dial Delay Time | # * 101 * <DELAY> # | DELAY : 3-20 SECONDS |
|---------------------|---------------------|----------------------|

The 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 #

4.5 CID Format

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

| | | |
|-------------|---------------|--|
| SDMF format | # * 106 * 1 # | |
| MDMF format | # * 106 * 2 # | |

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

4.6 SMS Indication

The GD850T can inform that you received SMS, using Mode LED (Amber Color).

(See 1. LED Status Indicator 'Mode' section)

| | | |
|------------|---------------|---------|
| Activate | # * 107 * 1 # | |
| Deactivate | # * 107 * 0 # | Default |

4.7 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, | # * 108 * 3 # | |

| | | |
|-----------------|--|--|
| GSM850, PCS1900 | | |
|-----------------|--|--|

4.8 Equipment Lock

The lock code prevents GD850T 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 GD850T is turned on. (See 2.1 LED Status Indicator section)

| | | |
|------------------|--|---------------------|
| Activate | # * 109 * 1 # | |
| Deactivate | # * 109 * 0 # | Default |
| Enter Lock Code | # * 109 * 2 * <PASSWORD> # | password : 4 digits |
| Change Lock Code | # * 109 * 3 * <OLD PASSWORD> * <NEW PASSWORD> # | |

4.9 PIN Lock

The SIM card has a PIN to prevent GD850T 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 every time the GD850T is turned on.

You have 3 chances to enter the PIN. If incorrect PIN is entered 3 times consecutively, the SIM card will be locked.

To unlock the phone, you must enter the PUK using 'Enter PUK' string.

(See 2.1 LED Status Indicator section)

| | | |
|------------|--------------------------------------|--|
| Activate | # * 110 * 1 * PIN # | |
| Deactivate | # * 110 * 0 * PIN # | |
| Enter PIN | # * 110 * 2 * PIN # | |
| Enter PUK | # * 110 * 4 * PUK * NEW PIN # | |

4.10 Polarity Reverse

This feature is provided for metering or PBX.

| | | |
|------------|----------------------|--|
| Activate | # * 111 * 1 # | |
| Deactivate | # * 111 * 0 # | |

4.11 Loop Current Disconnect

This feature is provided for metering or PBX.

| | | |
|----------|----------------------|--|
| Activate | # * 112 * 1 # | |
|----------|----------------------|--|

| | | |
|------------|---------------|--|
| Deactivate | # * 112 * 0 # | |
|------------|---------------|--|

4.12 DTMF tone generation

This feature is provided for specific PBX.

| | | |
|---------------|---------------|---------|
| By GD850T | # * 113 * 1 # | |
| By wire phone | # * 113 * 0 # | DEFAULT |

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 | * * 21 * <NUMBER> # FLASH | |
| Deactivate & deregister number | # # 21 # FLASH | |
| Activate | * 21 # FLASH | |
| Deactivate | # 21 # FLASH | |

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 | ** 61 * <NUMBER> * 10 * <DELAY> # FLASH | Delay : 5 – 30 Seconds |
| Deactivate & deregister number | ## 61 # FLASH | |
| Activate | * 61 * <NUMBER> # FLASH | |
| Deactivate | # 61 # | |

3) Unreachable

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

| | | |
|------------|--------------------------|--|
| Activate | ** 62 * <NUMBER> # FLASH | |
| Deactivate | ## 62 # FLASH | |

4) Busy

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

| | | |
|------------|--|--|
| Activate | * * 67 * <NUMBER> # FLASH | |
| Deactivate | # # 67 # FLASH | |

5) All Types

To deactivate all type of 'Call Forwarding' feature,

| | | |
|------------|-----------------------|--|
| Deactivate | ## 002 # FLASH | |
|------------|-----------------------|--|

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 | * 33 * PIN # FLASH | |
| Deactivate | # 33 * PIN # FLASH | |

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 | * 331 * PIN # FLASH | |
| Deactivate | # 331 * PIN # FLASH | |

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 | * 332 * PIN # FLASH | |
| Deactivate | # 332 * PIN # FLASH | |

4) Bar all outgoing calls

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

| | | |
|------------|----------------------------|--|
| Activate | * 333 * PIN # FLASH | |
| Deactivate | # 333 * PIN # FLASH | |

5) Bar all Incoming Calls

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

| | | |
|----------|---------------------------|--|
| Activate | * 35 * PIN # FLASH | |
|----------|---------------------------|--|

| | | |
|------------|---------------------------|--|
| Deactivate | # 35 * PIN # FLASH | |
|------------|---------------------------|--|

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 | * 351 * PIN # FLASH | |
| Deactivate | # 351 * PIN # FLASH | |

7) Bar all calls

Does not allow all incoming or outgoing calls.

| | | |
|------------|----------------------------|--|
| Activate | * 350 * PIN # FLASH | |
| Deactivate | # 350 * PIN # FLASH | |

8) Bar all incoming calls

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

| | | |
|------------|----------------------------|--|
| Activate | * 353 * PIN # FLASH | |
| Deactivate | # 353 * PIN # FLASH | |

9) Deactivate all call barring

| | | |
|------------|----------------------------|--|
| Deactivate | # 330 * PIN # FLASH | |
|------------|----------------------------|--|

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 | * 43 # FLASH | |
| Deactivate | # 43 # FLASH | |

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 | 0 FLASH | Release all held calls or set User Determined User Busy for a waiting call |
| End active call and switch to | 1 FLASH | Release all active calls and accept the |

| | | |
|--|-----------------------------|--|
| held or waiting call | | held/waiting call |
| End a specific call | 1<N> FLASH | n = call number release a specific active call |
| Hold active call and retrieve held or waiting call | 2 FLASH | Place all active calls on hold and accept the held/waiting call |
| Hold all active calls and except one | 2<N> FLASH | n = call number Place all active calls on hold except call <n> |
| Add held call into active call | 3 FLASH | Add a held call to the conversation |
| Hold active call and place outgoing call | <NUMBER> FLASH | Place all active calls on hold and make a call to a specified number |

5.4 SIM Security Codes

The SIM card has a PIN to prevent GD850T from being used by unauthorized person without your permission. You can set this features and also change SIM card PIN, and SIM card PUK. Ask your service provider for more information.

| | |
|---------------------|--|
| Change SIM Card PIN | ** 04 * OLD PIN * NEW PIN * NEW PIN # |
| Change SIM Card PUK | ** 05 * OLD PUK * NEW PUK * NEW PUK # |

5.5 Caller ID

1) Outgoing (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 GD850T 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) GD850TF 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 *GD850TF* to RJ-11.

And before sending faxes, you need to setup *GD850TF* to fax-mode as below.

| FEATURE | MODE | STRING | DESCRIPTION |
|--------------------|----------------------|---------------------|--|
| Bypass Mode | Voice | #* 300 * 0 # | Outgoing Call is whether Voice or Fax. |
| | Fax | #* 300 * 1 # | |
| | Fax Once | #* 300 * 2 # | |
| Fax Port Selection | Serial port(Digital) | #* 301 * 0 # | Incoming fax call is where to be routed. |
| | RJ-11(Analog) | #* 301 * 1 # | |

Note: After failure of sending faxes due to network problem or not working fax line, *GD850TF* 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.

GD850TF 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) GD850T supports

- Max 9.6kbps

GD850T can be used with any fax-software application on PC. Before using fax capability, you should verify GD850T was plugged in PC. After then choose the right COM-Port for GD850T on your application.

When you answer faxes, you should set up GD850T to digital-mode as below.

| | | |
|----------------------|---------------------|--|
| Serial port(Digital) | #* 301 * 0 # | |
| RJ-11(Analog) | #* 301 * 1 # | |

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

8. SMS Service Features

You can send and receive SMS (Short Message Service) using a Personal Computer.

To do this, you need a PC connected to the GD850T serial port. The GD850T supports the GSM AT command set defined in GSM 07.05 for Short Message Service (SMS).

The following table describes generally used SMS AT Command.

| FEATURE | AT COMMAND | DESCRIPTION |
|-----------------------|---|--|
| Change Message Format | AT+CMGF = 1 | Text Mode |
| Read Message | AT+CMGR = <INDEX> | Index: SIM memory index. Available index check : AT+CMGD=? |
| List Message | AT+CMGL = "REC READ" | Received unread message |
| | AT+CMGL = "REC UNREAD" | Received read message |
| | AT+CMGL = "STO SENT" | Stored unsent message |
| | AT+CMGL = "STO UNSENT" | Stored sent message |
| | AT+CMGL = "ALL" | All messages |
| Send Message | AT+CMGS="DIAL NUMBER"<CR> >TEXT IS ENTERED<CR> >....<CTRL-Z/ESC> | |
| Delete Message | AT+CMGD = INDEX | Index: SIM memory index. |

| | | |
|--|--|--------------------------------------|
| | | Available index check : AT+CMGD=? |
|--|--|--------------------------------------|

9. General Information

9.1 Specifications

MAIN UNIT

| ITEM | GD850T/GD850TF |
|-------------------|---|
| 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) | 160*158*26 |
| Weight | About ±268g with a standard battery |
| Working condition | Environment temperature: -10°C ~ 50°C 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 |
|----------|------------------------------|

9.2 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 GD850T

Do not touch the antenna unnecessarily when your GD850T is in use, as this will affect call quality and may cause GD850T 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 GD850T and for your own safety, you should use your GD850T only in the normal operating position.

NON-IONIZING RADIATION (EXPOSURE TO RADIO FREQUENCY SIGNALS)

Your GD850T 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 GD850T. 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 GD850T and a pacemaker to avoid potential interference with the pacemaker. Users with pacemakers:

Always keep your GD850T at least 20 cm (6inches) from your pacemakers when the GD850T is switched on.

Switch off your GD850T 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 GD850T is switched off .

OPERATING ENVIRONMENT

Remember to follow any special regulations in force in any area, and always turn off your GD850T wherever it is forbidden to use it, or when it may cause interference or danger.

EXPLOSIVE ATMOSPHERES AND MATERIALS

Turn your GD850T 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 GD850T without the battery in place.

Please use only approved batteries and chargers.

9.3 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 GD850T powered on properly. Check any equipment connected to the GD850T 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 GD850T 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 GD850TF |
| GPRS service isn't Connected. | Check the cable connection Contact the GPRS service provider whether you have service on the account. |

10. Conformance Statements

INFORMATION TO USER:

This equipment has been tested and found to comply with the limits for a Class B digital device, Pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a

residential installation.

This equipment generates, uses and can radiate radio Frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

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.

RF EXPOSURE GUIDELINES:

During transmitter operation, in order to meet RF Maximum Permissible Exposure Safety Guidelines, a minimum distance of 20Cm shall be maintained between antenna and personnel.

CE USER INFORMATION:

Hereby, **Brightstar Corporation** declares that this **Terminal** (M/N: **GD850T**) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

EU directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE):

Brightstar Corporation is focused on developing a compliance program for the European Union (“EU”) Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC. Under the EU WEEE Directive, manufacturers of covered electronic equipment are obligated to take back such products at the end of their useful life. We are committed to meeting or exceeding environmental standards in the production of all products and is engaged in a comprehensive, company-wide effort towards full compliance with the EU WEEE Directive.

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 INCLUDING A CIRCUIT SWITCHED DATA, FAX FACILITY AND 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 DOWNLOAD ALSO AVAILABLE ON THE VCP(VIRTUAL COM PORT) DRIVER MANUFACTURER'S HOMEPAGE:HTTP://WWW.SILABS.COM/TGWWEBAPP/PUBLIC/WEB_CONTENT/PRODUCTS/MICROCONTROLLERS/USB/EN/MCU_VCP.HTM

2. LAUNCH THE "CP210X_VCP_WIN2K_XP_S2K3.EXE" FILE. THEN, MANY FILES ARE INSTALLED IN "C:/SILABS /MCU" DIRECTORY (DEFAULT DIRECTORY).

3. EXECUTE BELOW FILE FOR INSTALLING DRIVER.

"C:/SILABS/MCU/CP210X/WINDOWS_2K_XP_S2K3_VISTA/CP210XVCPINSTALLER.EXE"



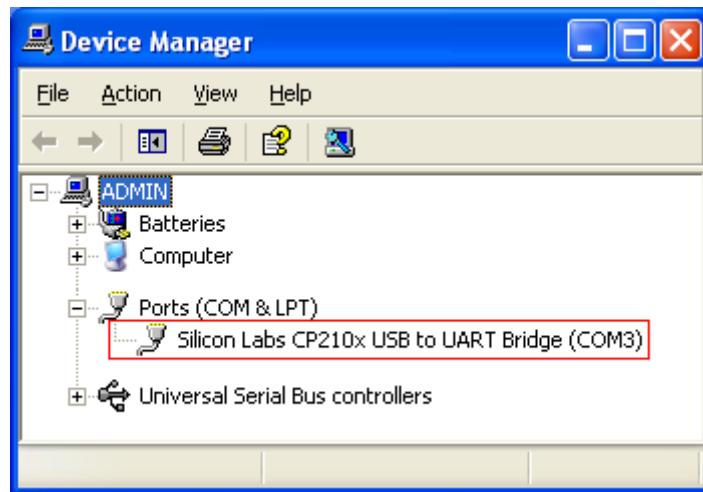


NOTE AFTER INSTALLING DRIVER FILE, YOU COULD NEED TO REBOOT THE PC.

3. INSTALL NEW MODEM

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

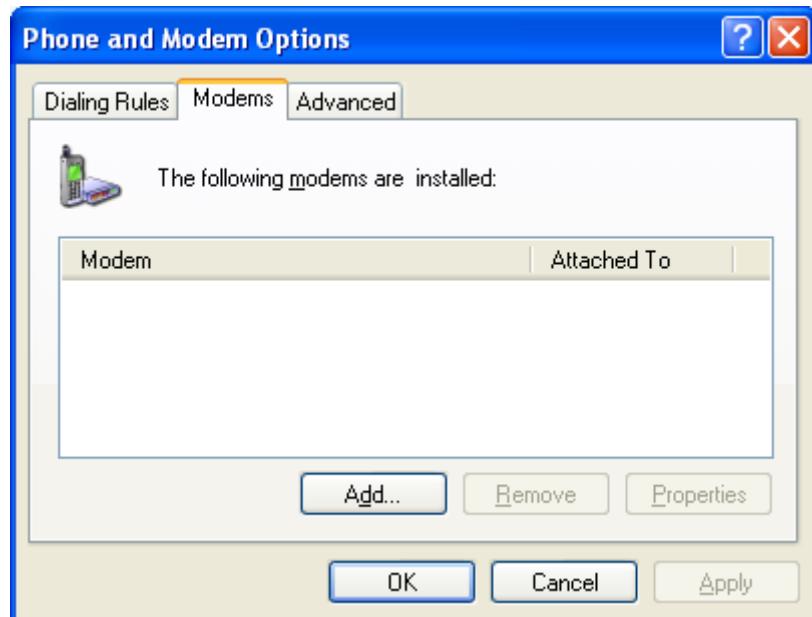
AFTER INSTALLING YOU CAN SEE NEW PORTS (COM & LPT) IN A DEVICE MANAGER WINDOW.



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

GO TO THE "NETWORK CONNECTIONS" MENU.

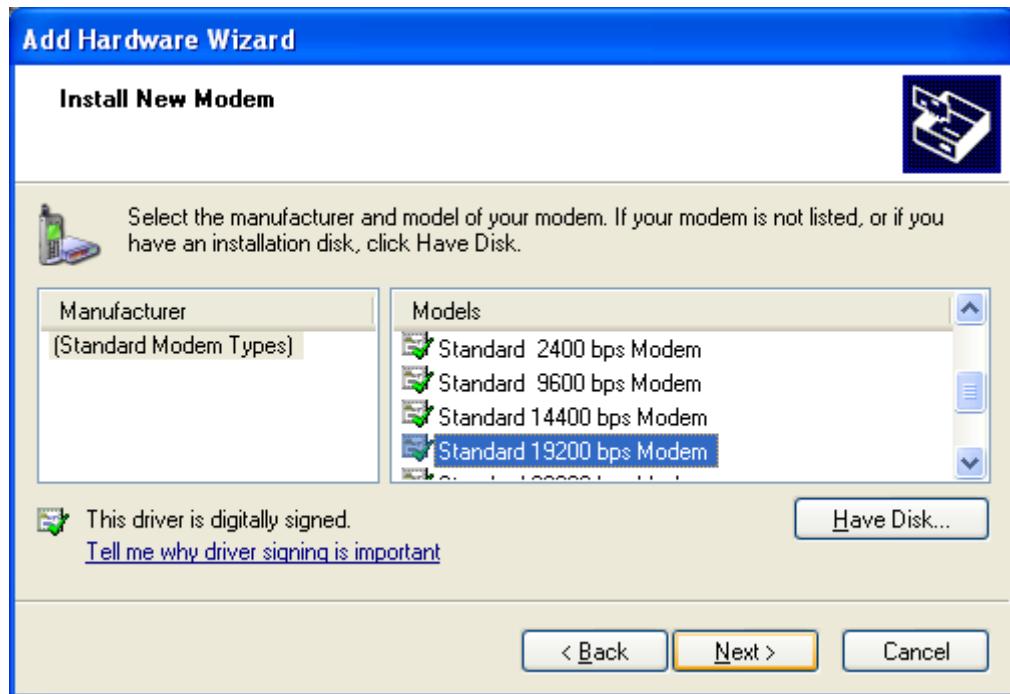
START BUTTON > CONTROL PANEL > PRINTER AND OTHER HARDWARE > PHONE AND MODEM OPTIONS AND SELECT THE ADD BUTTON FROM MODEMS FROM TAP MENU.



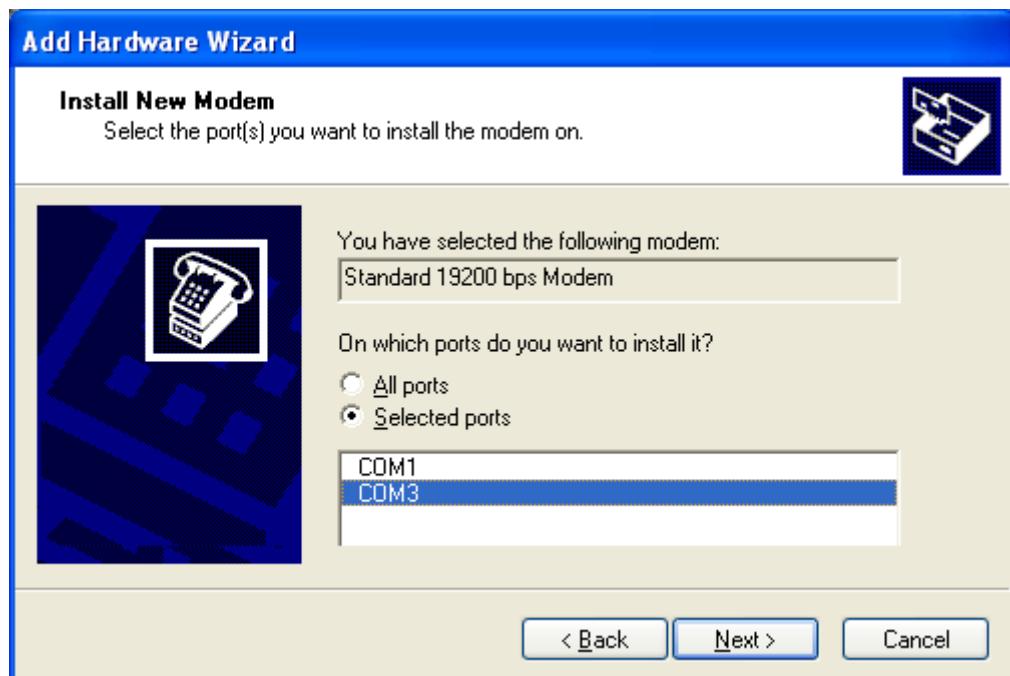
SET AS SHOWN BELOW. AND PRESS THE NEXT BUTTON.



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.



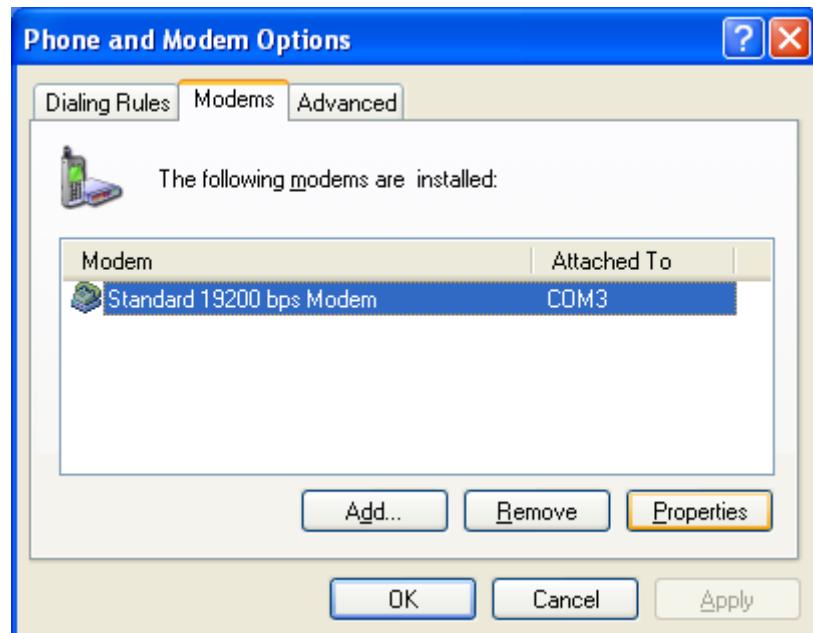
NOTE IN THE COM3, COM PORT NUMBER COULD BE DIFFERENT ON THE PC ENVIRONMENT.

IF YOU SEE BELOW WINDOW, MODEM IS INSTALLED SUCCESSFULLY.

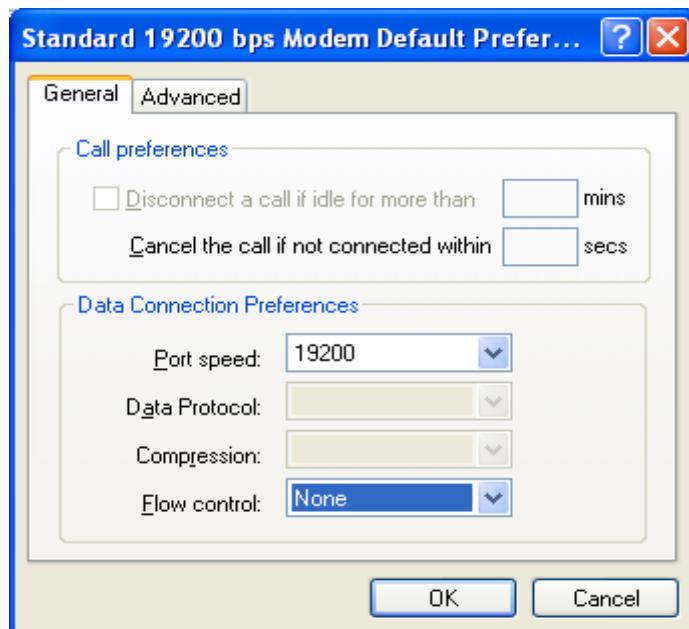


NEW MODEM IS LISTED IN BELOW WINDOW.

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



SELECT "ADVANCED" MENU. AND SET AS BELOW WINDOW. AND PRESS THE OK BUTTON.

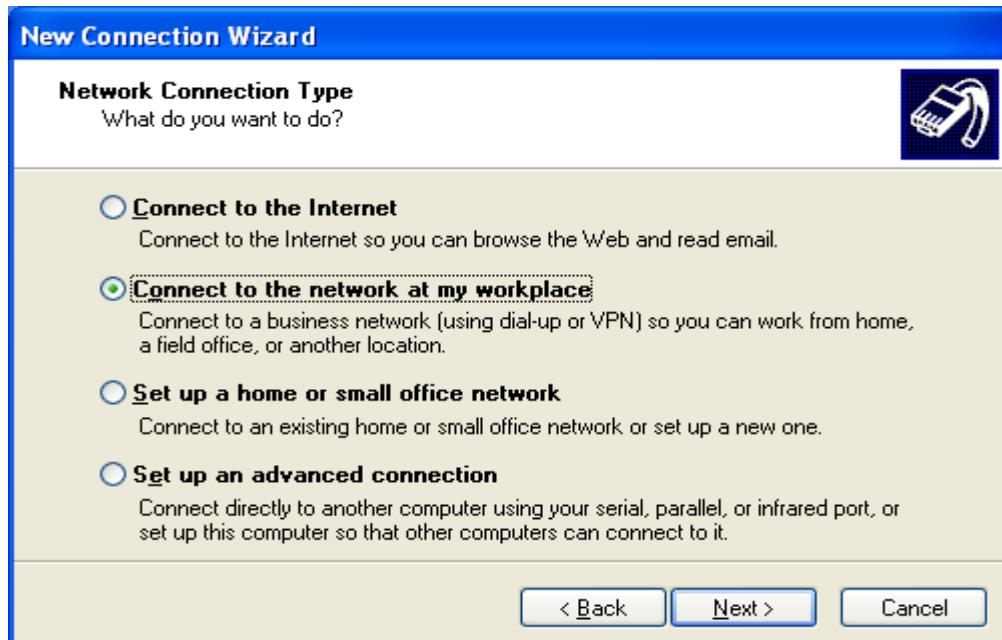


4. CREATE NEW NETWORK CONNECTION

GO TO THE "CREATE A NEW CONNECTION" MENU.

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

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

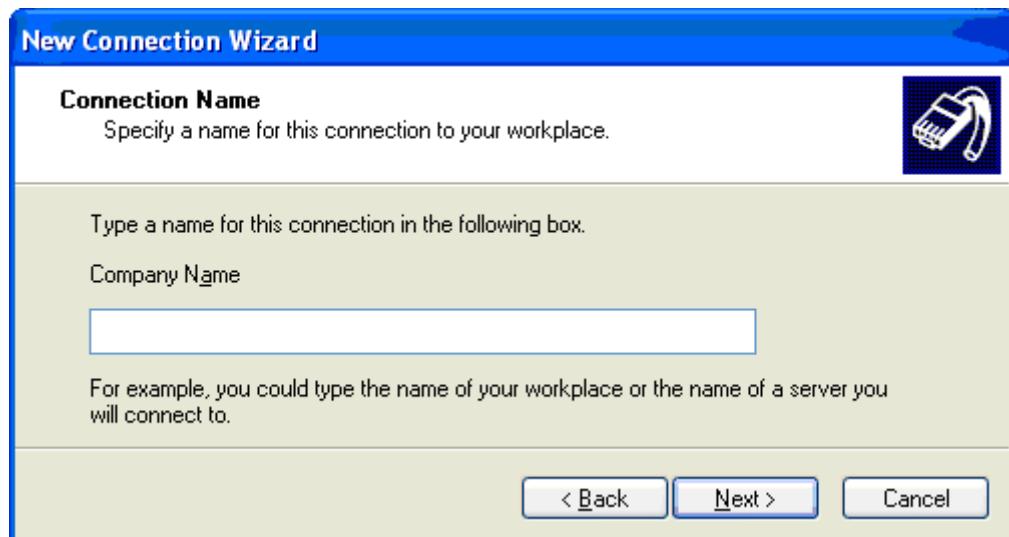


SELECT "DIAL-UP CONNECTION". AND PRESS THE NEXT BUTTON.

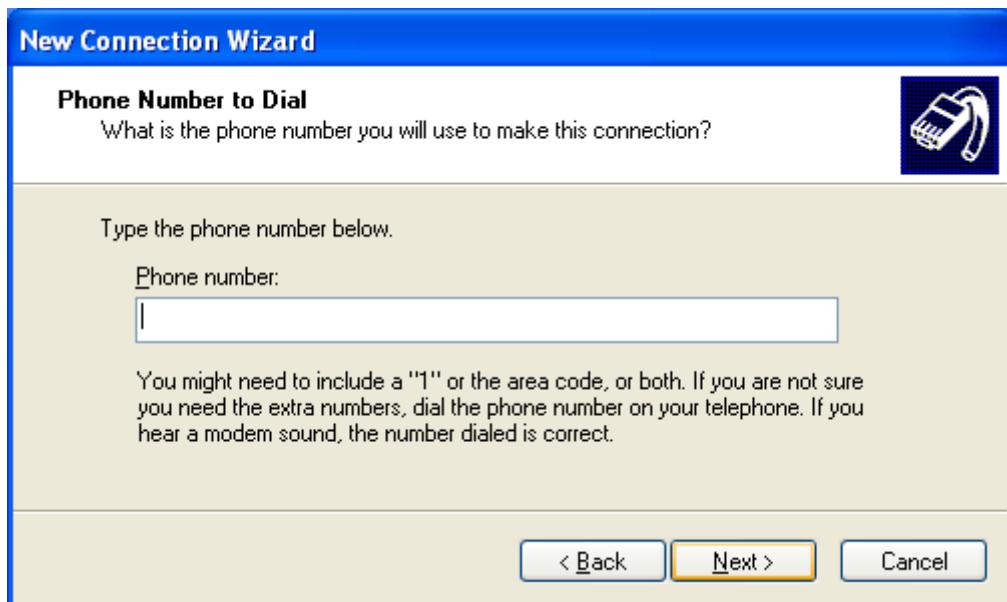


INSERT "COMPANY NAME" AS YOU WANT.

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.



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.