

YM-4010K Users Manual

(For Windows 95/98/ME)

FCC RF EXPOSURE INFORMATION

WARNING! Read this information before using your phone



In August 1996 the Federal Communications Commission (FCC) of the United States with its action in Report and Order FCC 96-326 adopted an updated safety standard for human exposure to radio frequency electromagnetic energy emitted by FCC regulated transmitters. Those guidelines are consistent with the safety standard previously set by both U.S. and international standards bodies. The design of this phone complies with the FCC guidelines and these international standards.



Operating Requirements

To satisfy FCC RF exposure compliance requirements for a mobile transmitting device, this device and its antenna should generally maintain a separation distance of 20 cm or more from a person's body.

For more information about RF exposure, please visit the FCC website at www.fcc.gov

PRODUCT CONSTITUTION

FREEWING-RS Internal

SYSTEM REQUIREMENTS

Windows 95SE/98/ME/2000/CE

SAFETY INFORMATION

Rated power should be used.

Do not expose the set to direct sunlight or to
heat sources.

Do not use the set near high temperature and
humidity. Rain or drinking water spilled
on the set can result in hazards.

Do not use the set near the equipment having
magnetic force.

Do not use or spill the inflammables on the set.

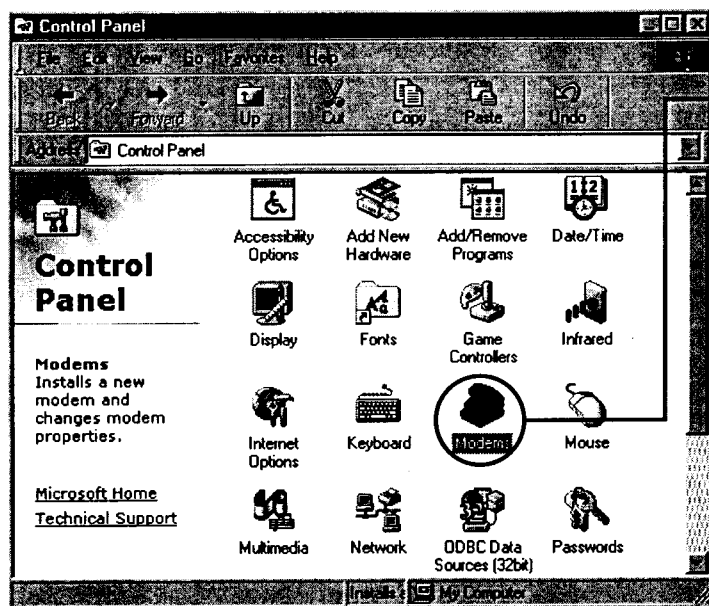
Do not expose the set to vibration or
excessive shock. Keep the set in a safe place.

Do not disassemble or service the set without
permission.

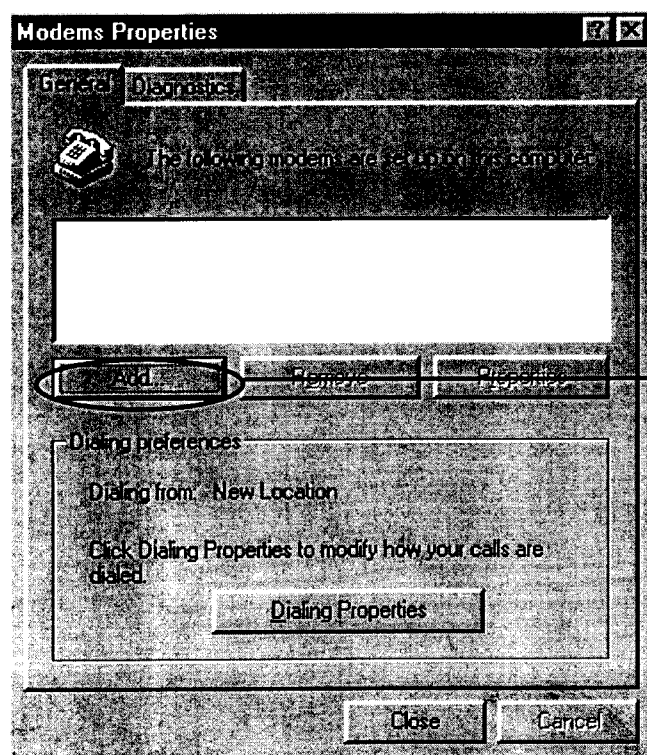


ENVIRONMENT SETUP

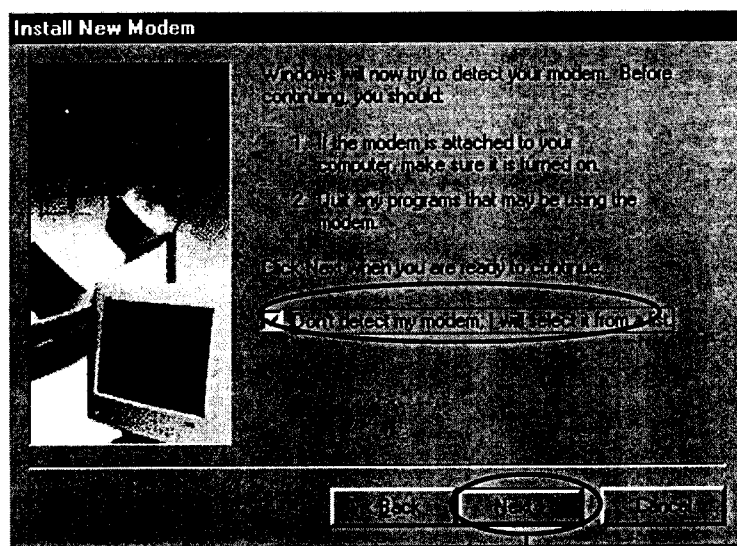
Modem setting



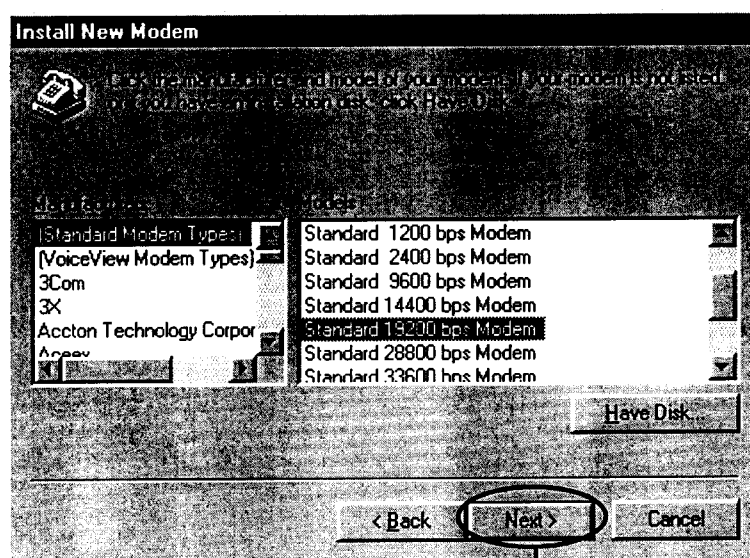
① Select 'Modem' in Control Panel menu of Windows 95/98.



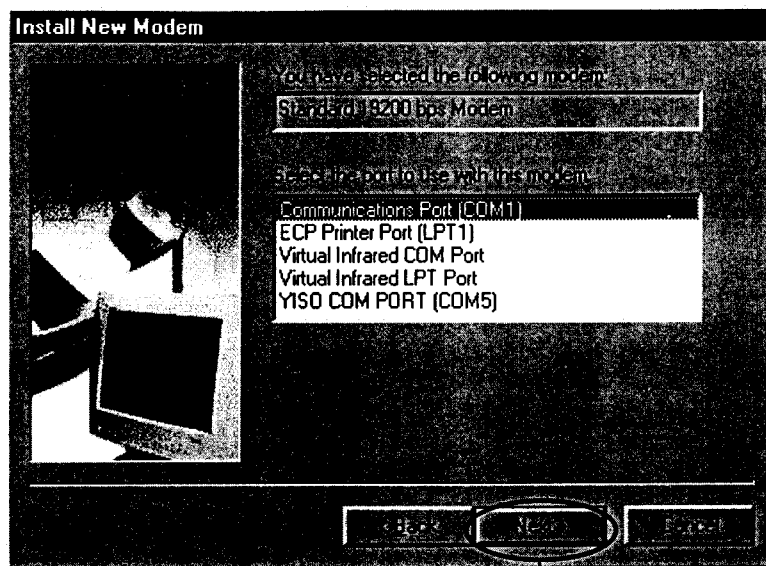
② click [Add].



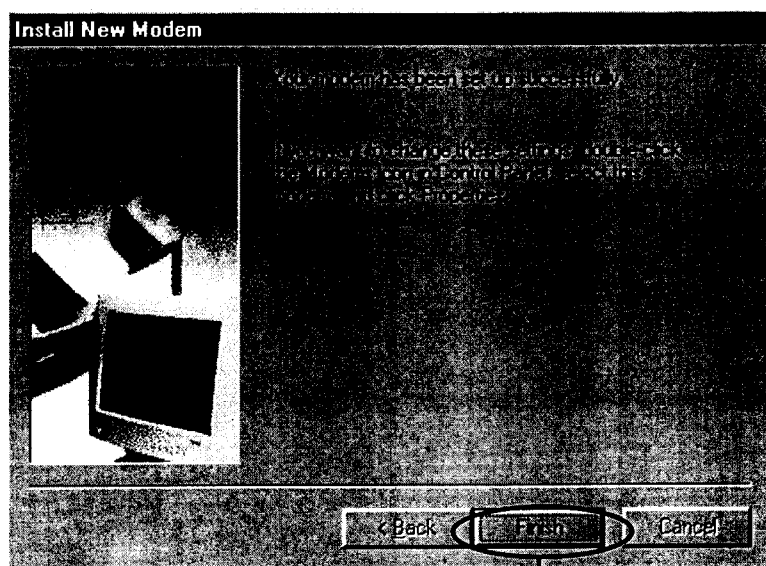
- ③ Select 'Don't run the Hardware Installation Wizard', then click [Next].



- ④ Select '(Standard Modem Types)' for manufacturers and 'Standard 19200 bps Modem' for models, then click [Next].

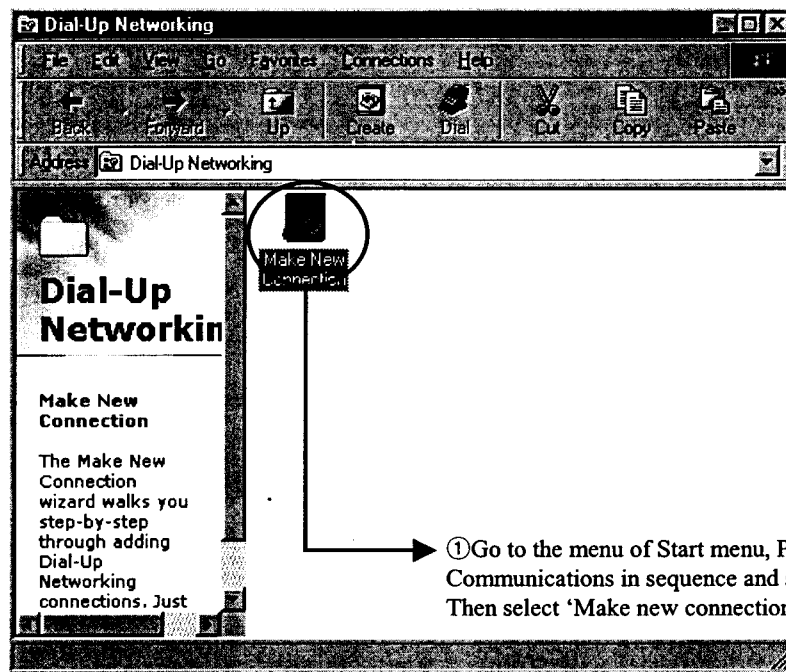


⑤ Select 'COM PORT (COM1)',
then click [Next].

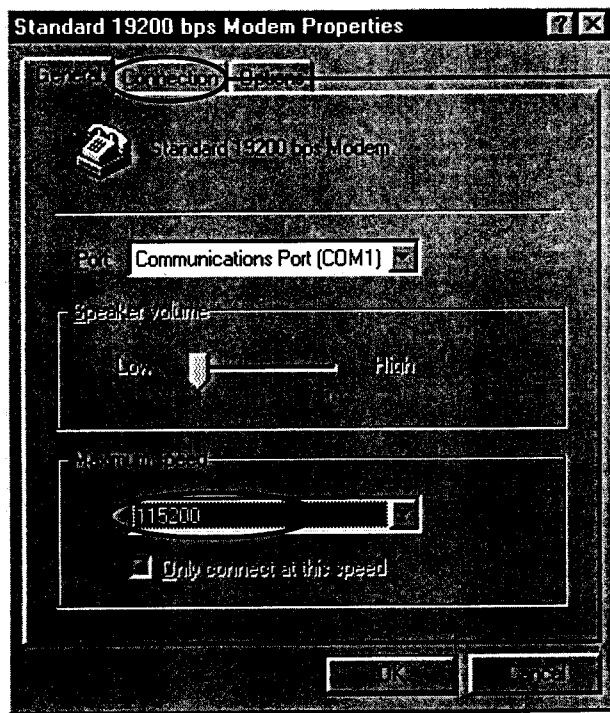


⑥ Modem installation has finished.

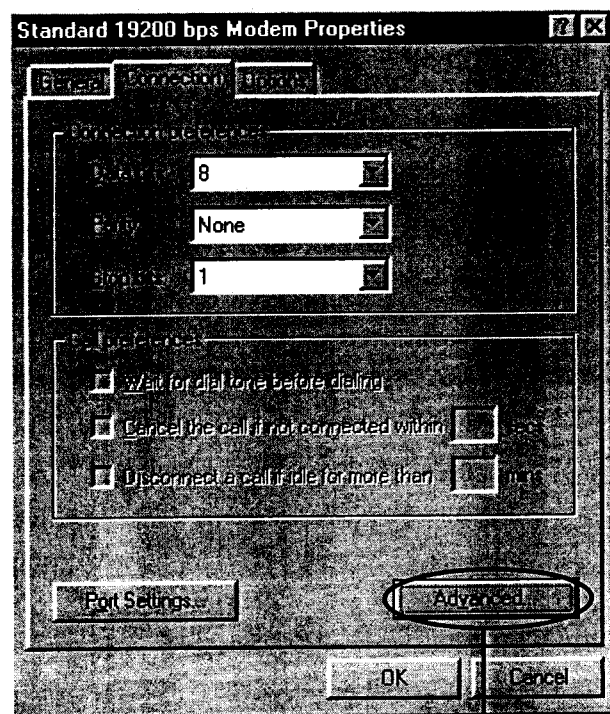
Dialup Networking



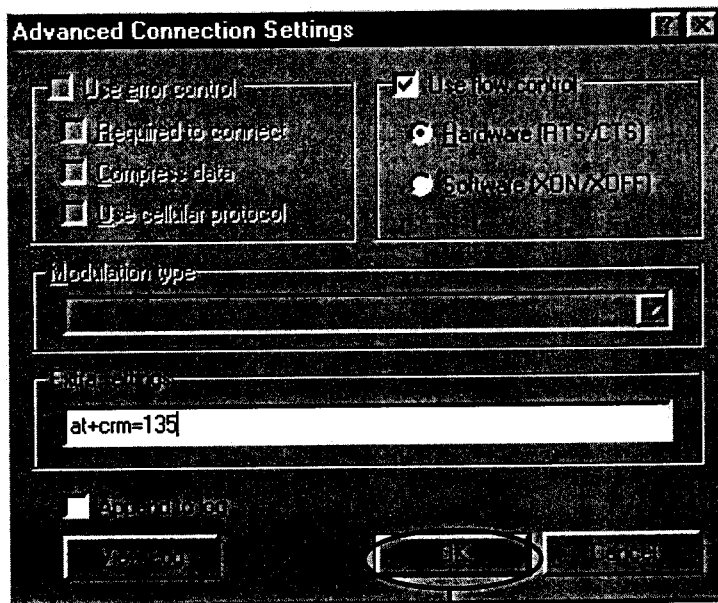
- ② Type the service company name to be used at 'Type a name for the computer you are dialing' and select 'Standard 19200 bps Modem' for 'Select a device', then click [Configure].



③ After confirming 'Communication Port (COM1)', select '115200' for 'Maximum speed(bps)', then go to 'Connection' folder.



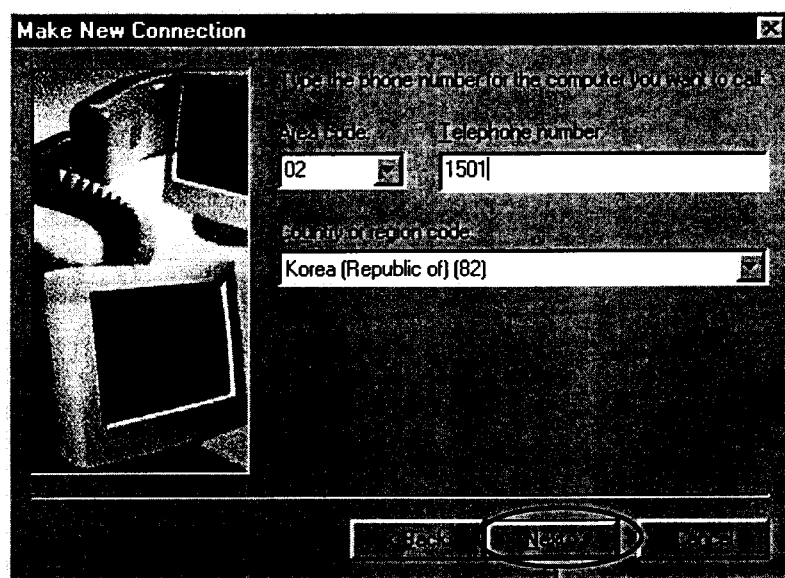
④ Click [Advanced].



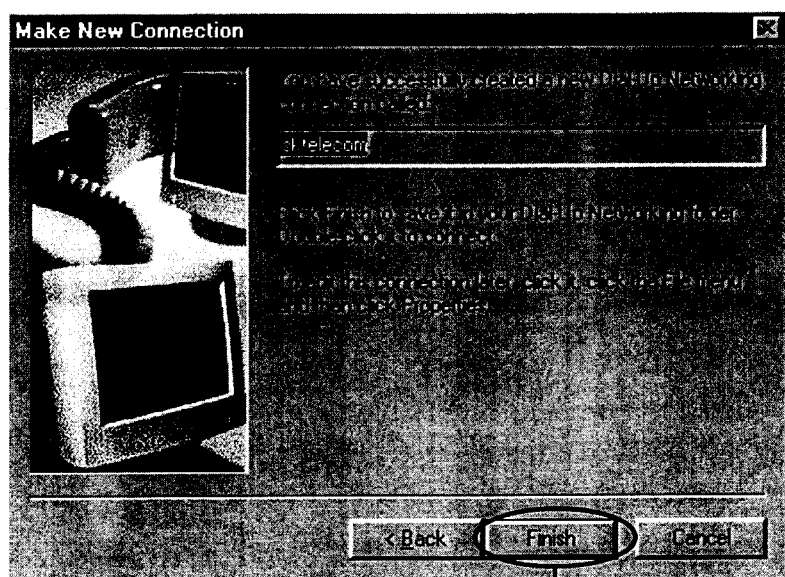
⑤ Type 'at+crm=135' at 'Extra settings', then click [OK] two times.



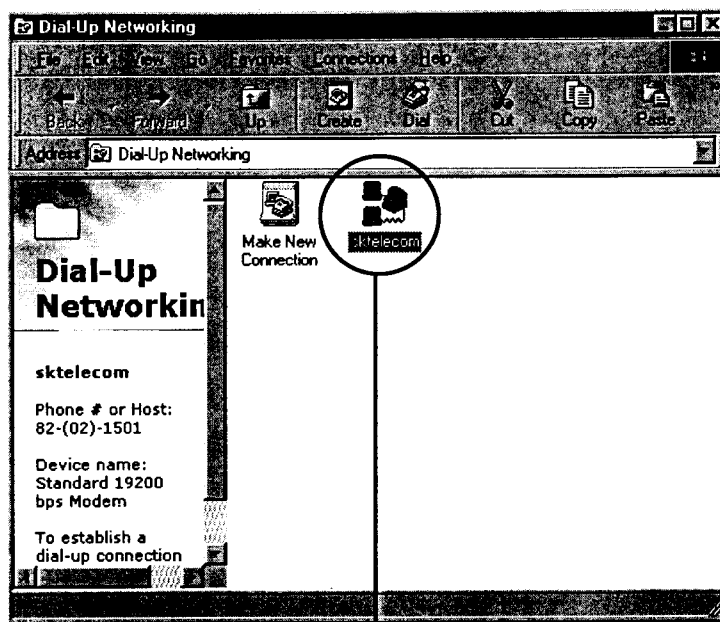
⑥ In 'Make New Connection' window, click [Next].



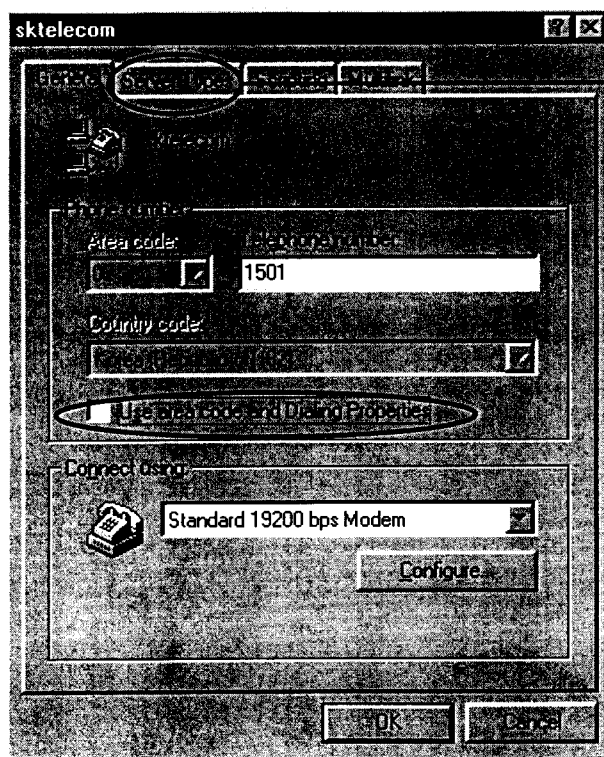
⑦ Type the telephone number (for Sktelecom, 1501), then click[Next].



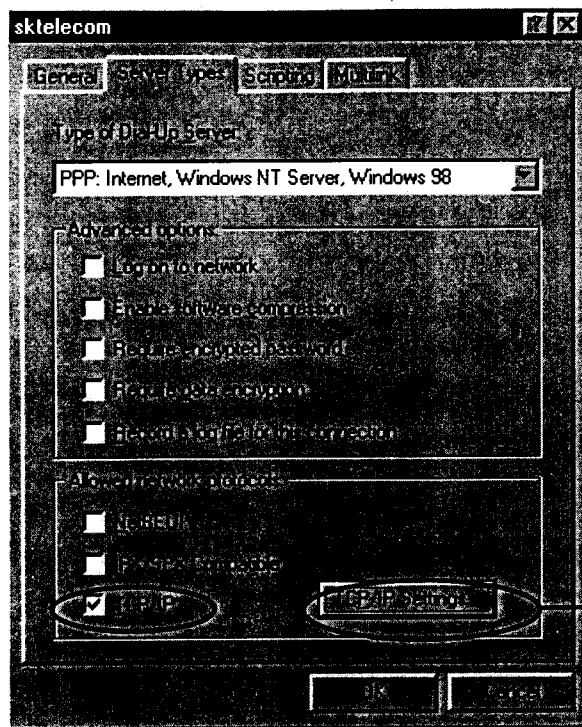
⑧ Click [Finish]. By these methods, setup has finished..



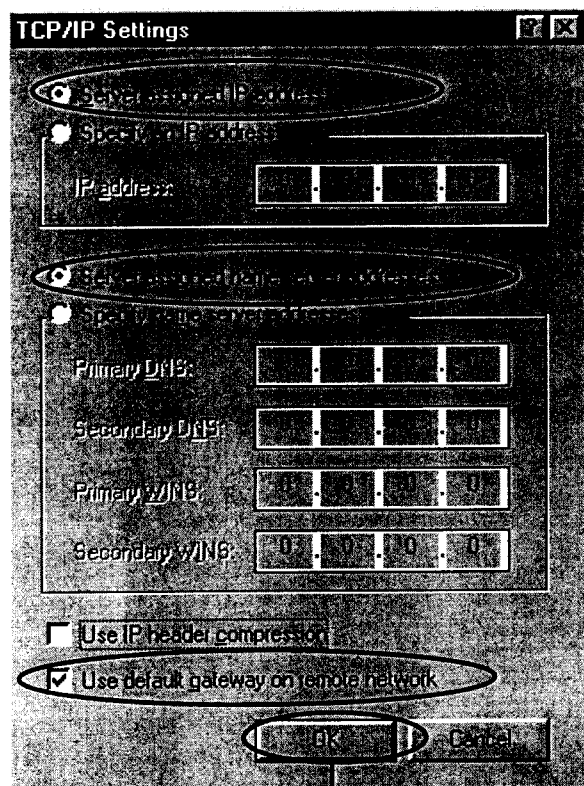
⑨ Click the 'Properties' of 'New' icon which is made in the 'Dial-up Networking' folder.



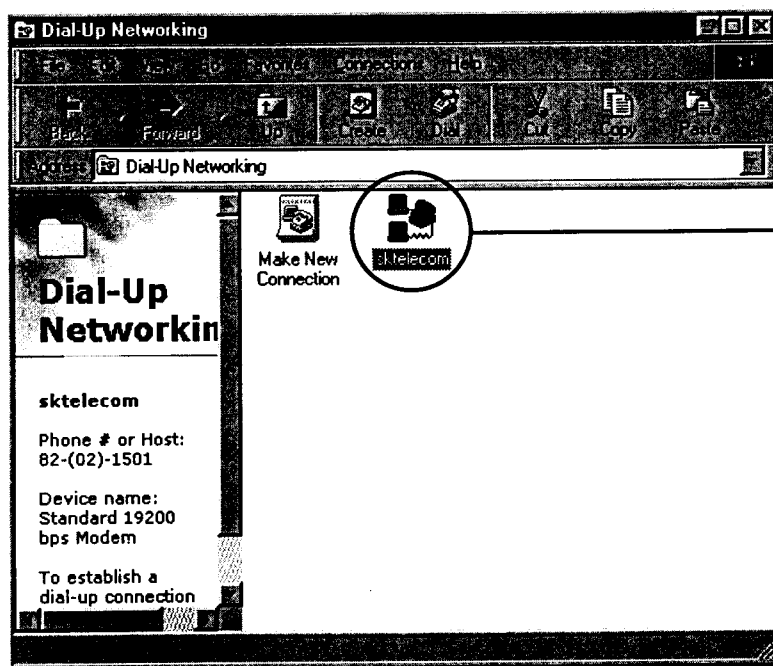
⑩ By clicking the right side of mouse, you can see 'Properties' menu. De-select 'Use area code and Dialing Properties' and go to 'Server Types' folder.



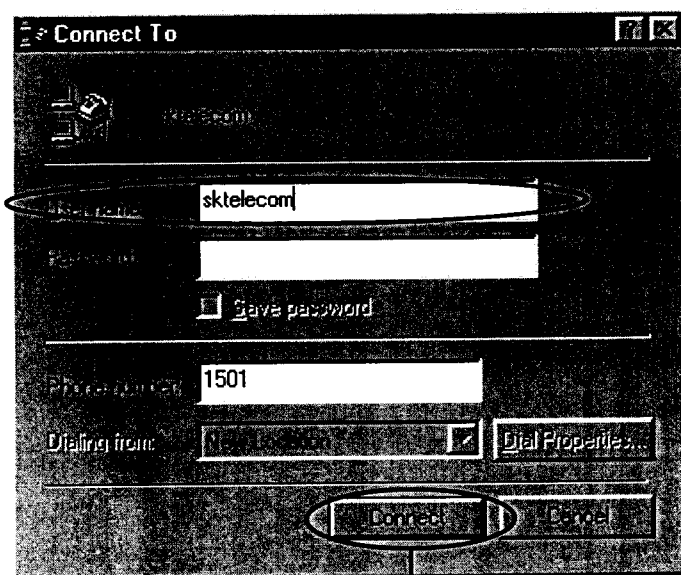
⑪ Select 'TCP/IP' for 'Allowed network protocols', then click [TCP/IP Settings...].



⑫ Select 'Server assigned IP address', 'Server assigned name server addresses' and 'Use default gateway on remote network'. Then click 'OK' two times.



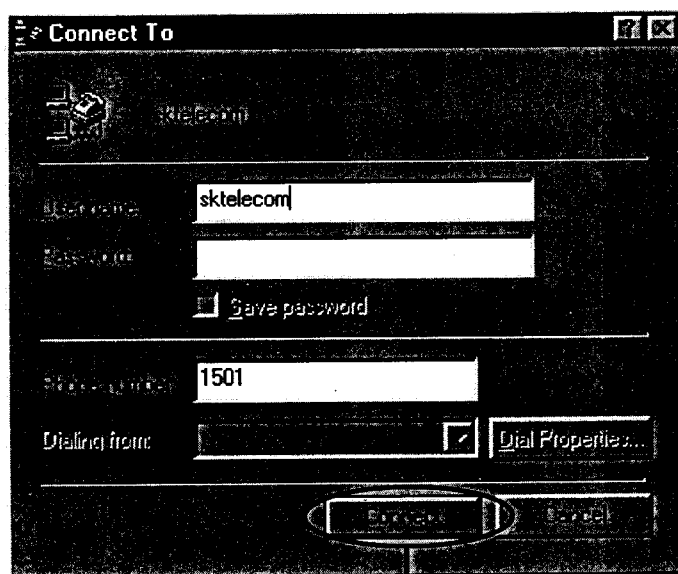
⑬ Double-click the new icon which is made in the 'Dial-up Networking' folder.



⑭ Type 'User name' and 'Password', then click 'Connect'.

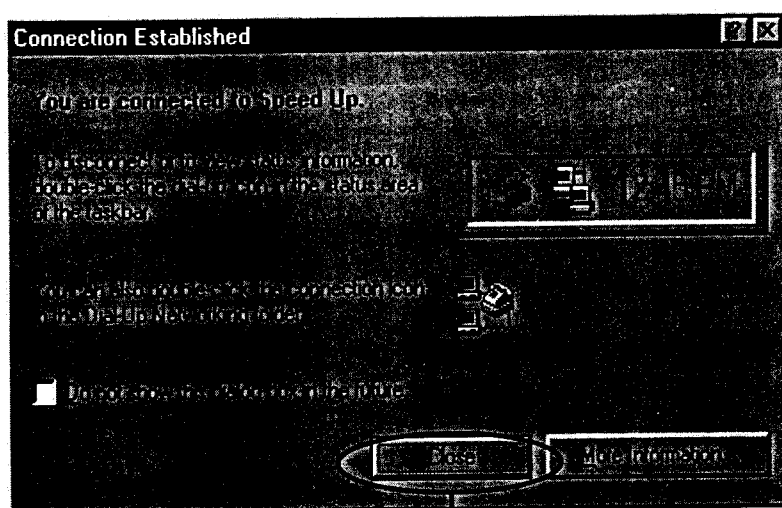
CONNECTION/DISCONNECTION

TO CONNECT



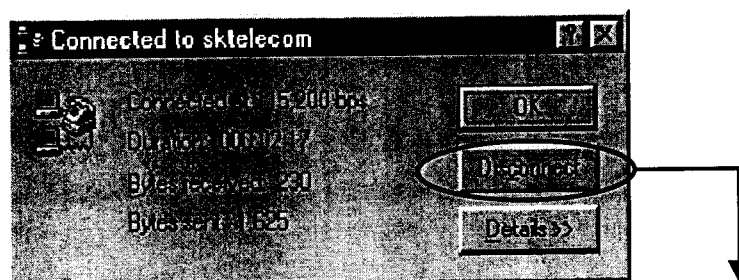
- ① Double-click new icon in [dial-up connection networking] at the right side of your mouse in background screen. In 'Connect' window, click [Dial].





② Press "Enter" after connection

TO DISCONNECT



① Click [connection] icon at the right side of your mouse in the right bottom of start bars in background screen, then select 'Disconnect' at the left side of your mouse.



YISO TELECOM

IDENTIFICATION LABEL

With regard to
The FCC Rule Part 2.983

According to the requirement section 2.925 and 2.926, the sample
Label shown below shall be permanently affixed at a conspicuous
Location on the device supplied to the user and be readily visible to
The purchaser at the time of purchase.

 CDMA CELLULAR MODULE MODEL : YM-4010K FCC ID : PC6YM-4010K Serial No. : (Pre-Production) MADE IN KOREA YISO TELECOM CO. LTD
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ATTACHMENT M – MPE MEASUREMENT

RF Exposure Measurement

1. Introduction

2.4 GHz frequency band is regarded specially as a dangerous band for its heating harmfulness to the human body. That's why microwave oven is operating in this frequency band. The manufacturer whose product is working in this frequency band is obligatory to prove the harmfulness of his product.

In this document, we try to prove the safety of radiation harmfulness to the human body. The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1210 is followed. The Gain of the antenna used in this product is measured by power meter. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

2. RF Exposure Limit

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits For Occupational / Control Exposures				
300-1500	...	...	F/300	6
1500-100,000	...	...	5	6
(B) Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	6
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. Friis Formula

Friis transmission formula : $P_d = (P_{out} * G) / (4 * \pi * r^2)$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

R = distance between observation point and center of the radiator in cm

P_d is the limit of MPE, 1 mW/cm^2 . If we know the maximum Gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

Ref.: David K. Cheng, Field and Wave Electromagnetics, Second Edition, Page 640, Eq. (11.133).

4 EUT Operating condition

A Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

5 Climate Condition

The temperature and related humidity: 22 C and 78% RH

6 Test Results

6.1 Output Power Into Antenna & RF Exposure Distance:

Channel	Channel Power (mW)	Output Power (mW)	Minimum Distance (cm)
1013	824.70	23	2.29
363	835.89	23	2.29
0777	848.31	23	2.29

The distance r (4th column) calculated from the Friis transmission formula is far more shorter than 20cm separation requirement. So, RF exposure limit warning or SAR test are not required.