

BIXOLON®

SAMSUNG mini printers

USER MANUAL

Bluetooth Interface

Federal Communication Commission Interference Statement

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 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.
- Consult the dealer or an experienced radio/TV technician for help.

• **FCC Compliance Information**

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received. Including interference that may cause undesired operation.

CAUTION : Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



FCC RF EXPOSURE INFORMATION

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

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antennas or transmitters. Please maintain 20 cm separation distance from the antenna to meet FCC RF exposure compliance requirements.



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1. Manual Information

This Bluetooth Connection Manual provides information on the connection of Bluetooth enabled devices (PDAs, PCs, etc.) with the printer (IFX-BT).



2. Precautions

- (1) To connect the printer with another device via Bluetooth, the devices must be within 100m of one another. The connection is broken if the distance between devices exceeds 100m.
- (2) The maximum separating distance may be shortened if transmission obstacles, such as cement walls, are present.
- (3) If a device (such as a microwave oven, wireless LAN, etc.) that uses the same frequency is present, transmission may be interrupted. Separate the printer and Bluetooth-enabled device from such interrupting devices by a distance of at least 5m.

3. Bluetooth Interface for each Printer

Interface	Printer	Adapter	Interface Card
IFA-BT	SRP-270 SRP-280 SRP-350 SRP-370 SRP-372 SRP-350plus	 IF-BT	 IFA-BT
IFC-BT	SRP-275 SRP-500	 IF-BT	 IFC-BT

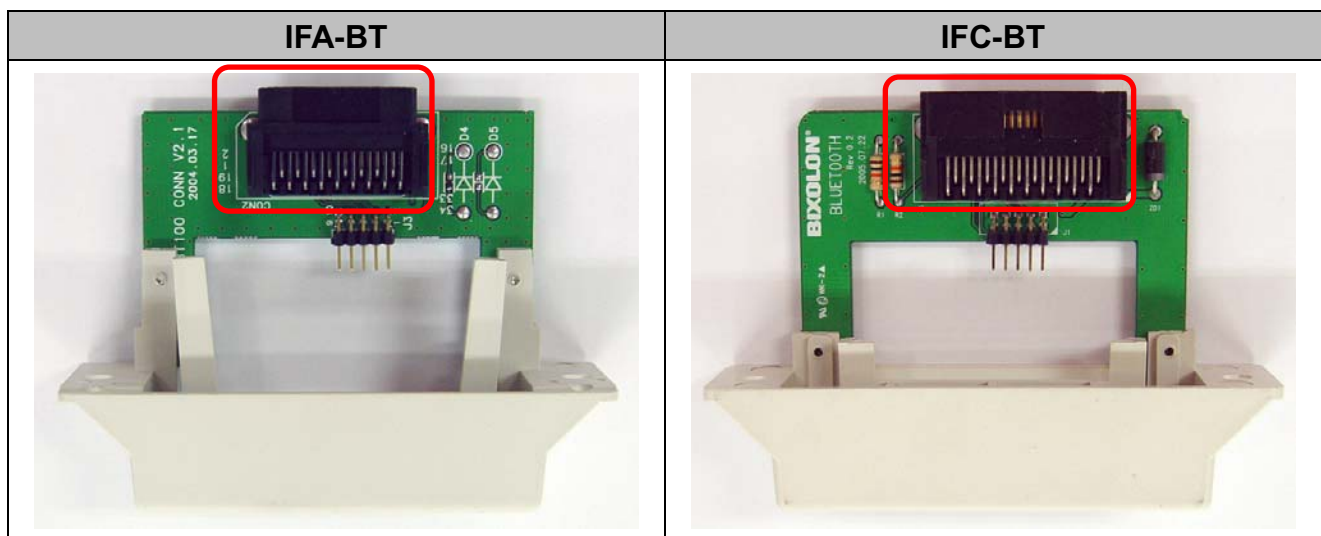
4. Bluetooth Interface Card

Model	Communication Method	Adapter	Cable	Power
IFM-BT	USB	 IF-BT	 USB Cable	Not Used

5. Product Feature

(1) Difference between IFA-BT and IFC-BT.

The difference is Connector shape.



(2) Configuration Tool

With using "BlueWin.exe", configuration can be easy.

Bluetooth Interface

(3) Detail Information of Interface.

Feature	Implementation
Bluetooth Core version	V2.0
Chipset	CSR BC04-ROM
Frequency	2.400~2.4835 GHz (79 Channel)
Range (Open load)	Max 100 m (Class 1)
modulation	GFSK
TX Power	12dBm
Network Support	Simultaneous printing = N:1 (max = 8)
Printer Profile Support	SPP (Serial Port Profile)
Rx/Tx Buffer	Rx / Tx Buffer : 4K
Flow control (RS-232C or UART)	Hardware(RTS/CTS)
Serial communication speed (bps)	19200, 57600, 115200 (reference*)
Interface Port	USB, Serial
Virtual Port Support	Virtual Com driver Support
Size (W x L x H)(mm)	70 x 45 x 11

*** Reference**

- SRP-350 : 57600 bps (MAX)
- SRP-350plus / 370 / 372 : 115200bps (MAX)
- SRP-275 / 270 / 280 / 500 : 19200bps (MAX)

6. PC to Printer Connection

(1) Printer(Interface) configuration

- 1) Connect Bluetooth Adapter to PC. (reference : 7 Page)



- 2) Configure Bluetooth Adapter using Utility. (reference : 10 Page)

- Printer model, Connection mode, Device name, PIN Code.

- 3) Separate Bluetooth Adapter from PC.

- 4) Connect Bluetooth Adapter to Printer.



- 5) Check the LED of Bluetooth Adapter.

- LED ON : Power ON

- LED blinking (1 second intervals) : connection successfully

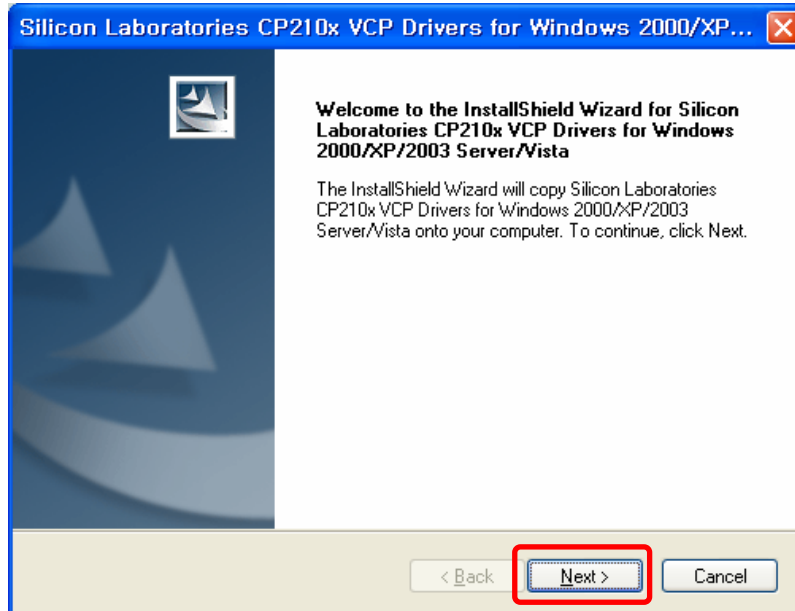
* PC(POS), Printer connection structure



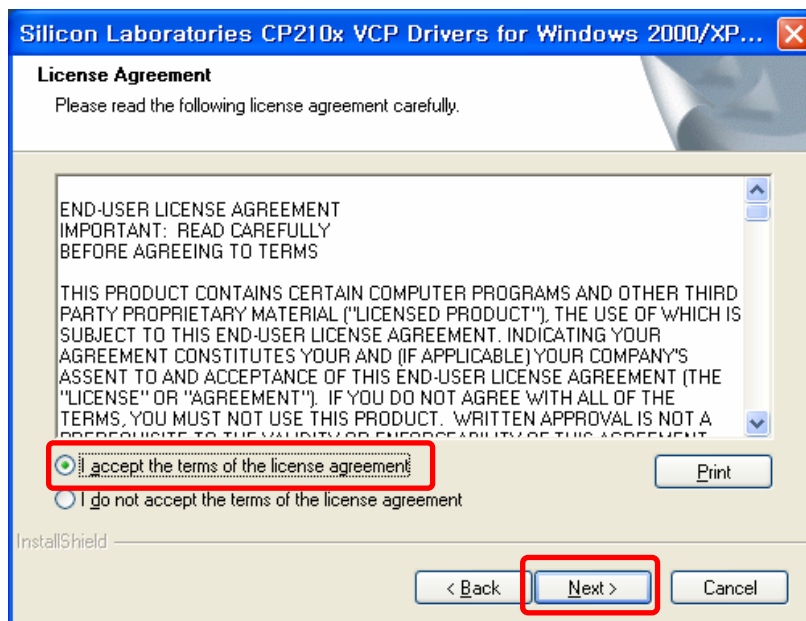
7. Install CP210x USB to UART Bridge Controller

(1) Execute “CP210x_VCP_Win2K_XP_S2K3.exe”.

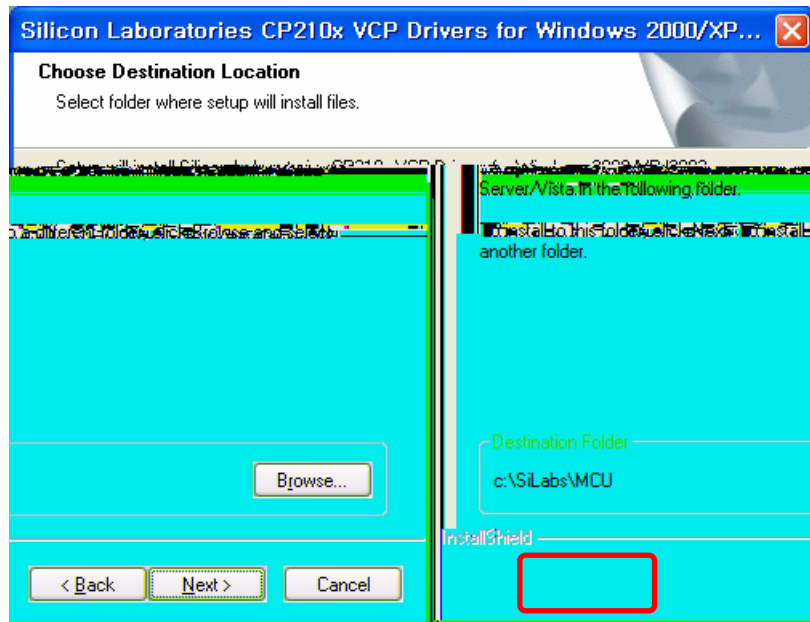
(2) Click “Next”.



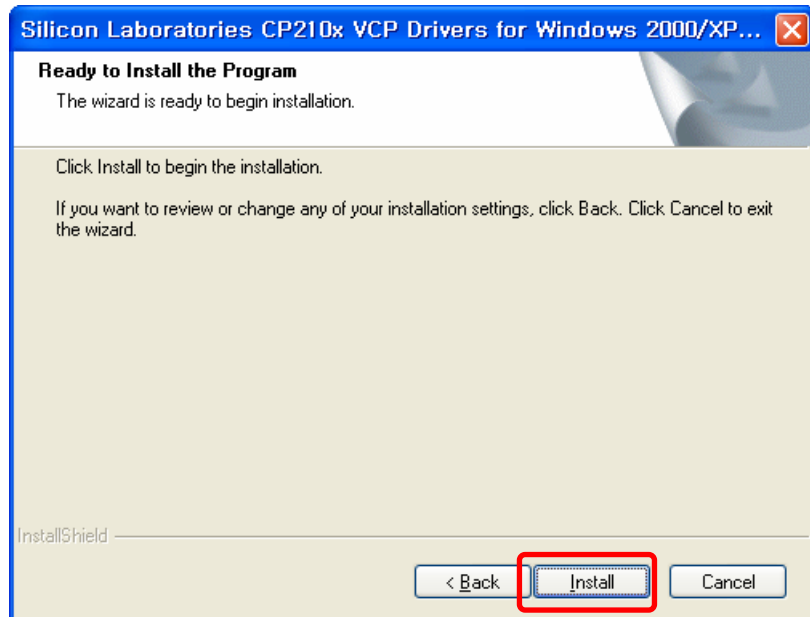
(3) Choose “I accept the terms of the license agreement” and click “Next”.



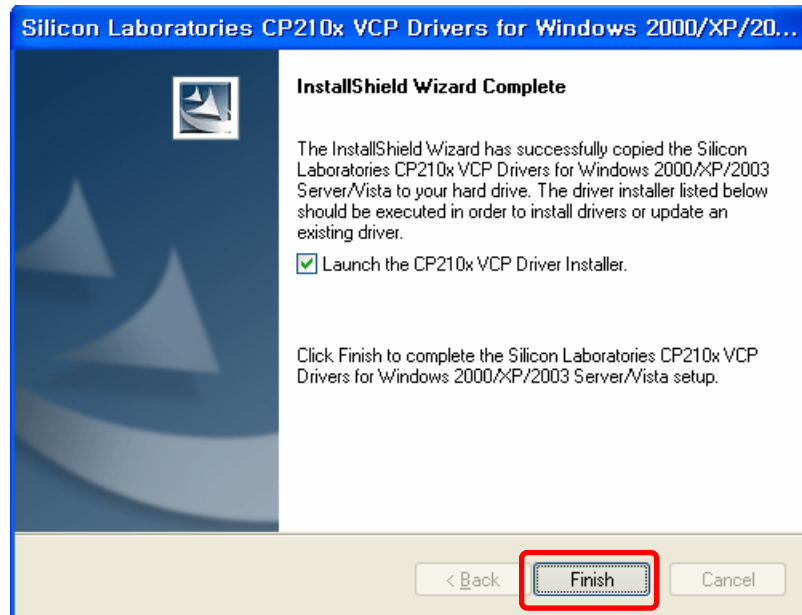
(4) Click **“Next”**.



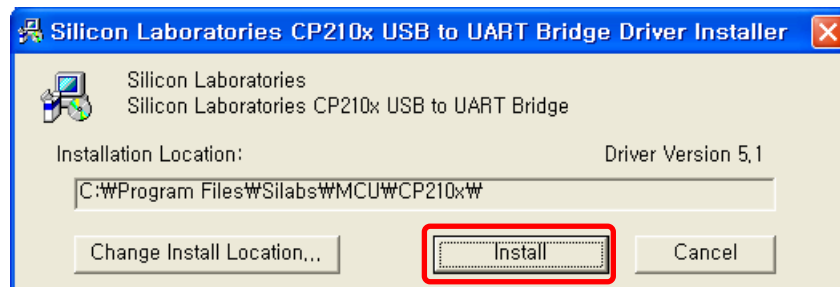
(5) Click **“Install”**.



(6) Check “**Launch the CP210x VCP Driver Installer**” and click “**Finish**”.

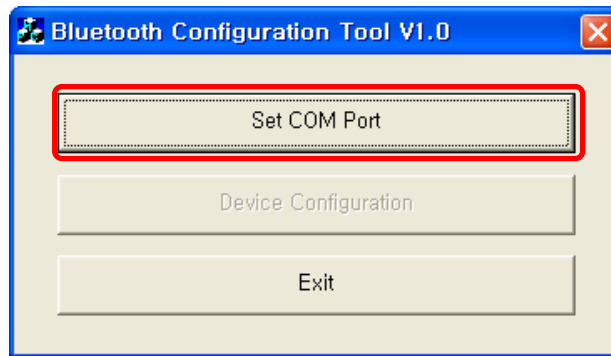


(7) Click “**Install**” and restart PC when Install is complete.



8. Bluetooth Interface card Configuring

(1) Execute “BlueWin.exe” and click “Set COM Port”.

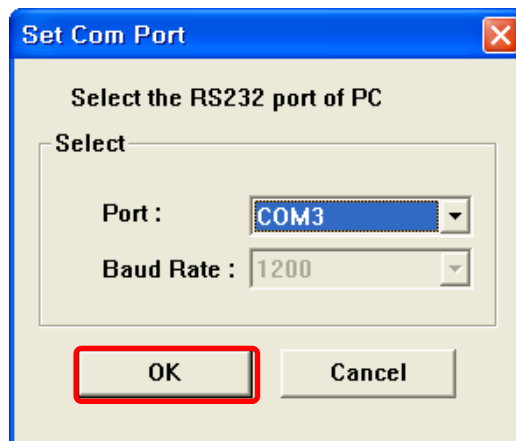


(2) Confirm Virtual Port(COMX) in Device Manager and choose the Port.

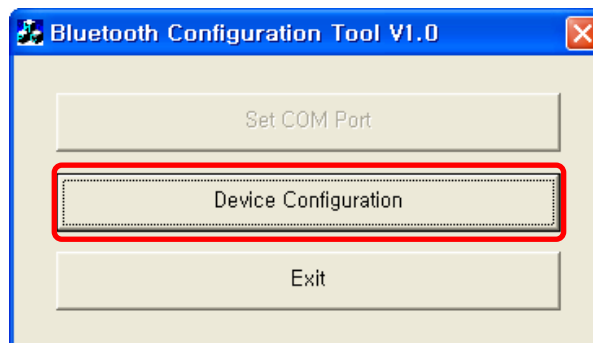
Ex) In the case, Virtual Port is confirmed as COM3.

[Note]


Device Manager > Ports(COM / LPT) > Silicon Labs CP210x USB to UART Bridge(COM3)



(3) Click “Device Configuration”.



(4) Change the configuration and click “OK”.



1) Device Name: Enter the bluetooth device name for searching.

2) PIN Code(Pass Key) : Enter PIN Code to use for connection.(Default : 0000)

3) Product Selection : Select Product to use

4) Authentication

① ENABLE : connection to a device can be done with PIN Code.

② DISABLE : connection to a device can be done without a PIN Code.

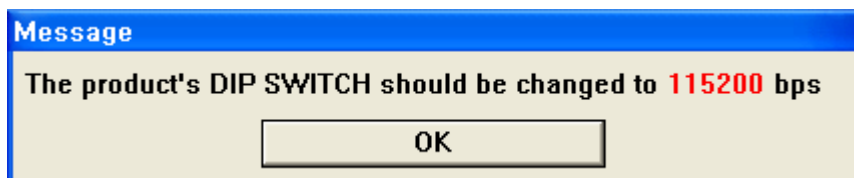
5) Connection Mode

① MODE1 : Connection possible only with the recently paired device.(Search possible)

② MODE2 : Connection with all Bluetooth enabled devices possible via use of a PIN Code.
(Search possible)

③ MODE3 : Connection possible only with the recently paired device.(Search impossible)

(5) Confirm the baud rate.



9. Bluetooth TEST

(1) General Sequence for Bluetooth Connections

Bluetooth connection methods vary by device. The following is the general sequence for Bluetooth connections, provided for reference purposes.

- 1) Turn on power of each device.
 - PDAs, PCs (Bluetooth Dongle), printers, etc.

- 2) Run a Bluetooth connection program on the PDA or PC.

- 3) Search for the peripheral with which to establish the connection.
 - Search for the printer.

- 4) Register this Printer (IFX-BT) from the search results.
 - If a security setting is enabled, register after entering the PIN Code.
(PIN Code=Pass Key: password of the Bluetooth device)

- 5) Test the connection.
 - When connected, confirm the designated COM port of fixed COM port and print.

(2) Bluetooth Connection Instructions

This manual focuses on the use of the following devices.

Please use this manual as a guide when using devices other than those listed here.

- Intermec PDA (Device: CN2B, OS: Pocket PC 4.20.0)
- SYMBOL PDA (Device: SYMBOL MC70, OS: Windows Mobile 5.0)
- HP PDA (Device: iPAQ hx2700, OS: Windows Mobile 5.1.1702)
- Mobile Compia PDA (Device: M3, OS: WinCE 5.0)
- InnoTeletek PDA (Device: MC3000, OS: WinCE 4.2)
- Bluetooth Dongle (BlueSoleil IVT Stack, Widcomm Stack, Toshiba Stack)

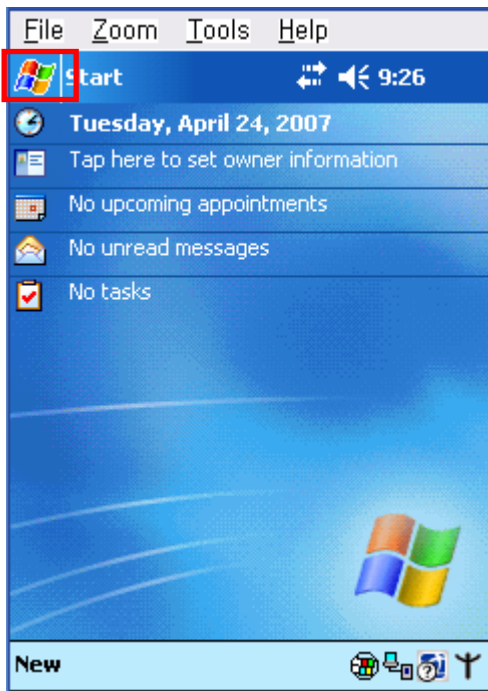
After turning on the power of all Bluetooth devices, perform the connection process.

- PDA, PC (Bluetooth Dongle), printers (IFA-BT), etc.

Bluetooth Interface

(3) Connecting with an Intermec PDA (DEVICE: CN2B, OS: Pocket PC 4.20.0)

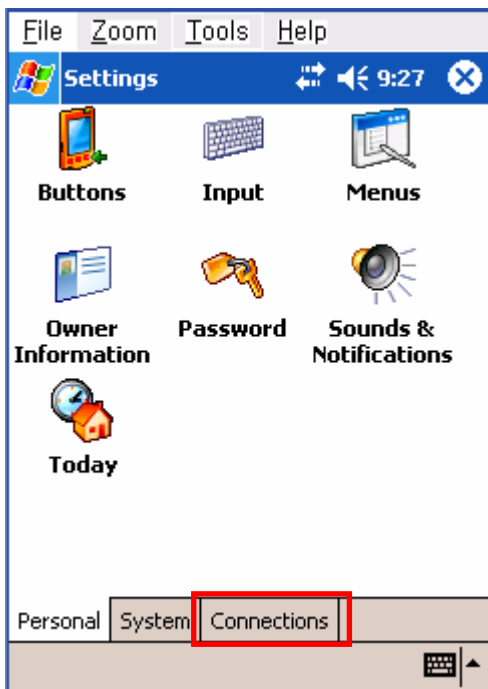
1) Click the  icon. .



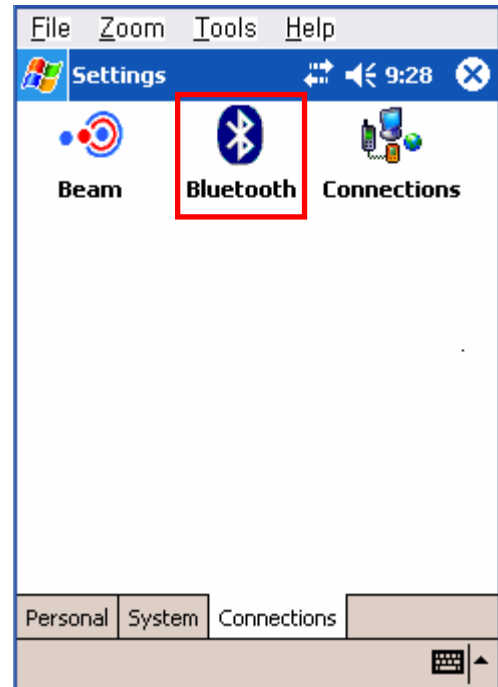
2) Click "Settings".



3) Click "Connections".

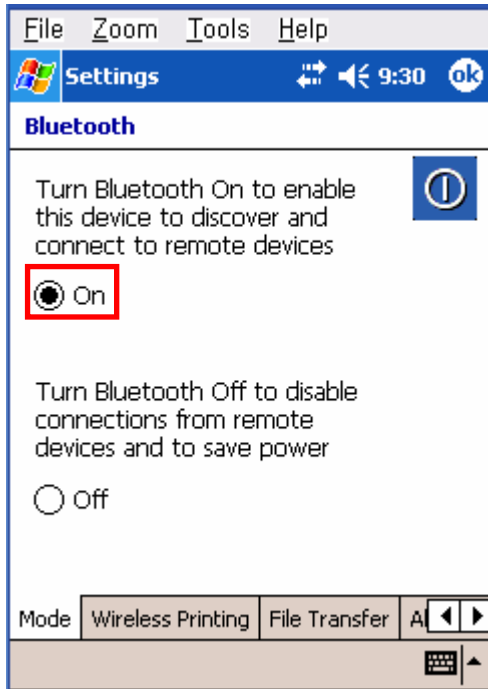


4) Click the "Bluetooth" icon.

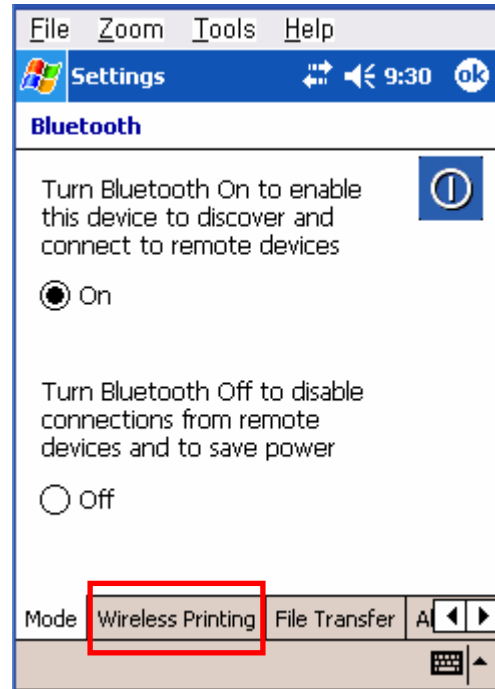


Bluetooth Interface

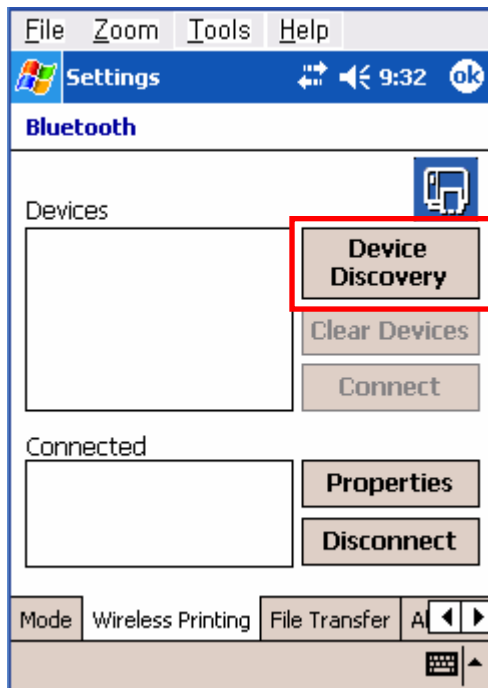
5) Click to check the “On” option.



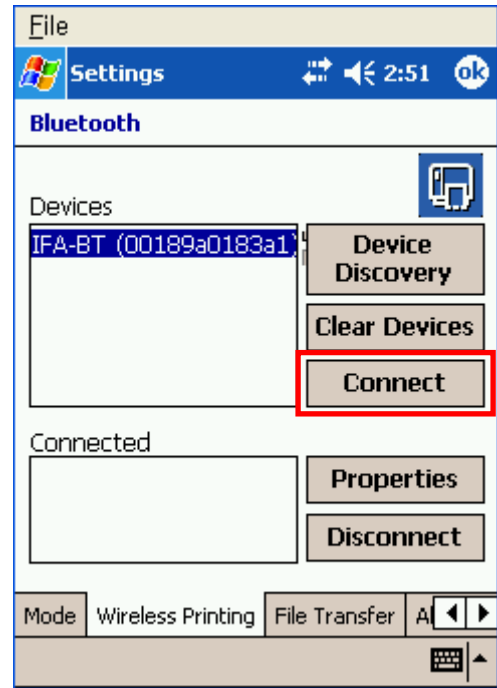
6) Click the “Wireless Printing” menu bar



7) Click the “Device Discovery” button.

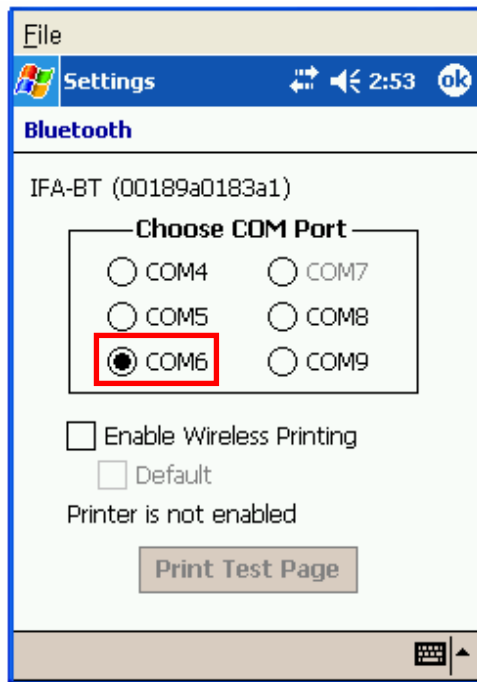


8) Select Devices of the IFX-BT, and click the “Connect” button.

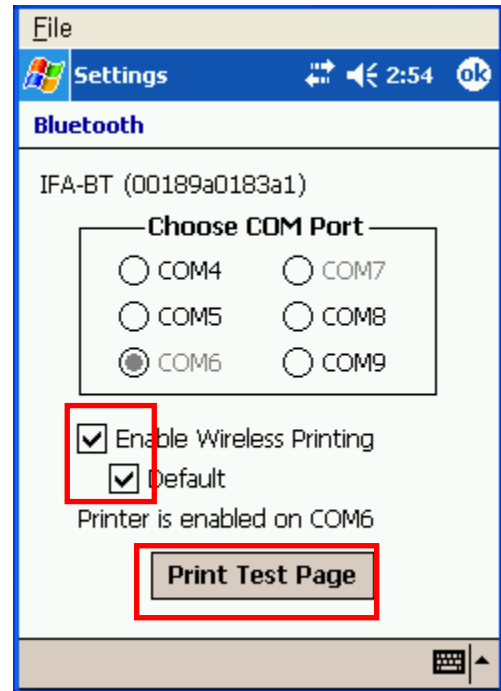


Bluetooth Interface

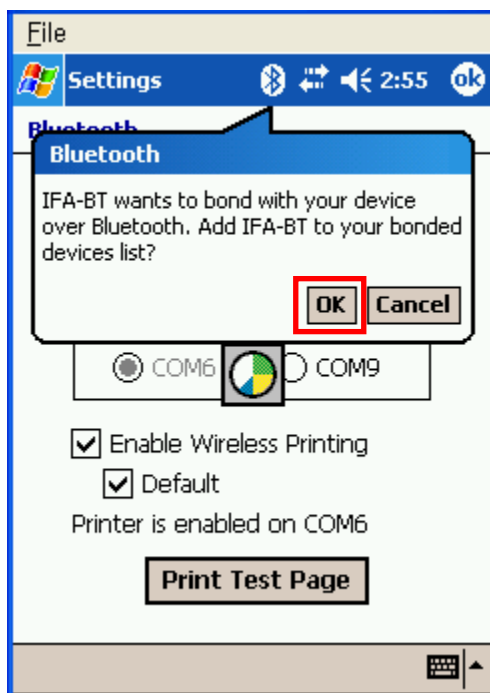
9) Select the COM port to be used.



10) Check the “Enable Wireless Printing” and “Default” checkboxes, and click the “Printer Test Page” button.



11) Click the “OK” button.



12) The PIN Code(Device PIN) window appears (if the security function is enabled)

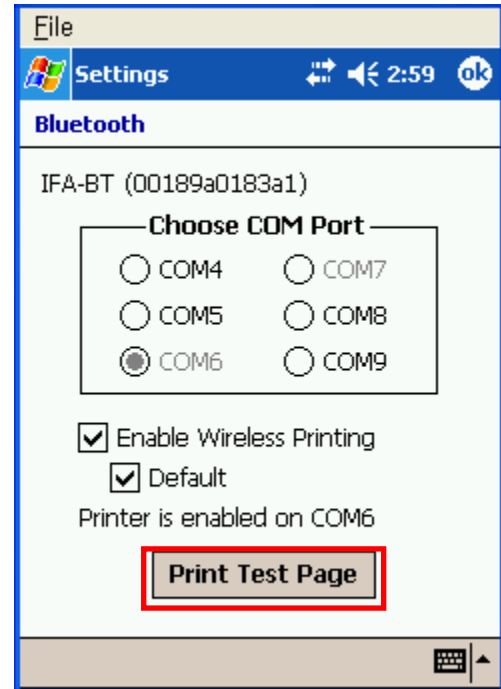


Bluetooth Interface

- 13) Input the PIN Code(Device PIN)
and click "Next". (Default code: 0000)

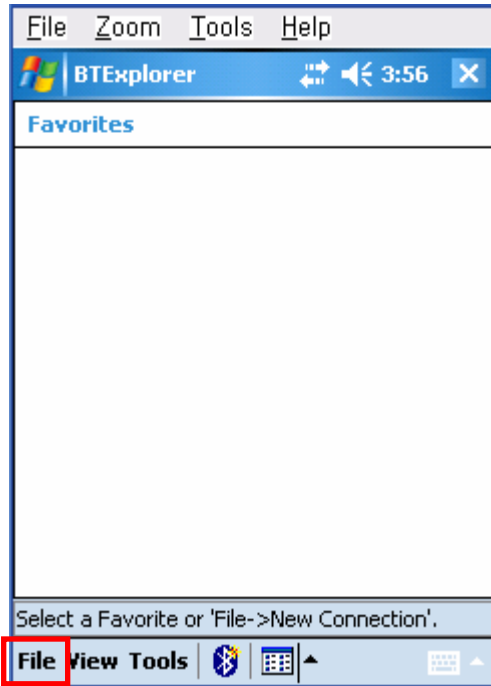


- 14) If after pressing the "Print Test Page" button, test printing is performed, the connection is complete.

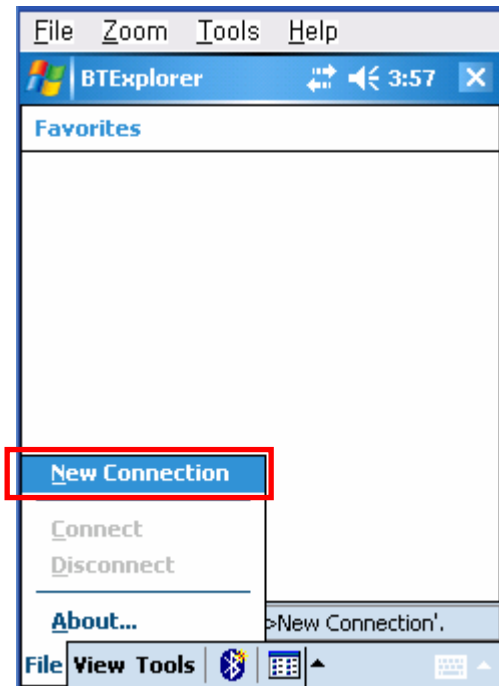


Bluetooth Interface

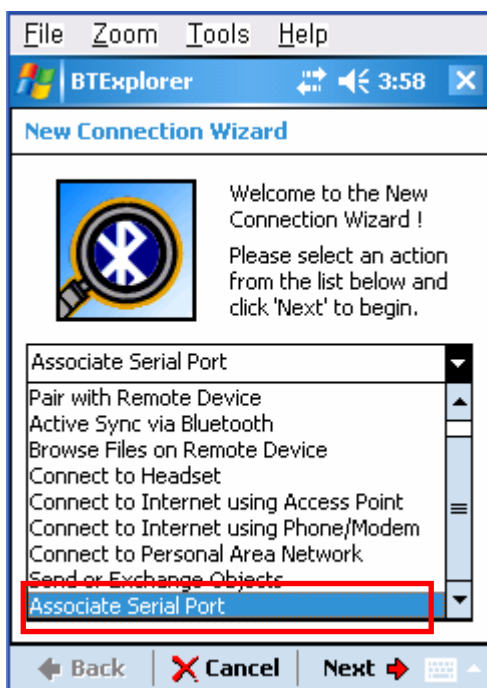
5) Click "File".



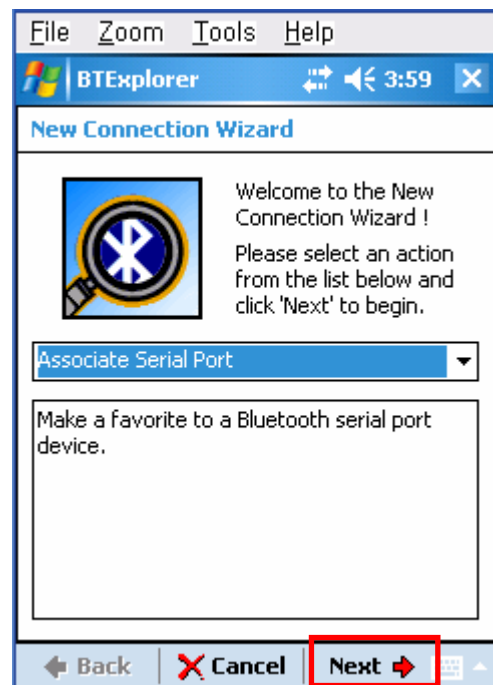
6) Click "New Connection".



7) Click "Associate Serial Port".

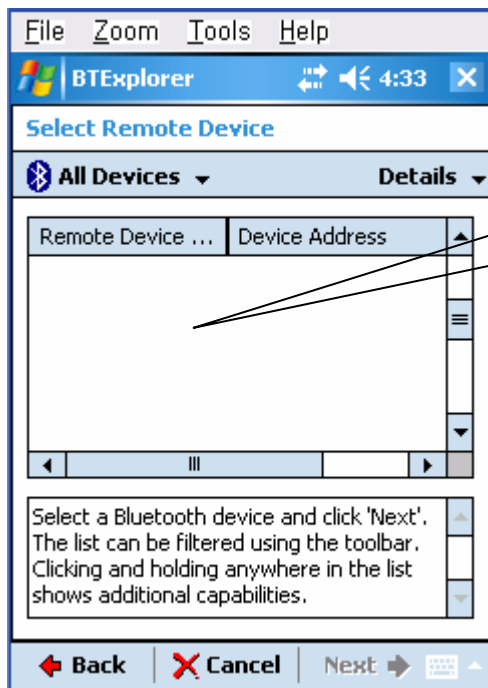


8) Click the "Next" button.

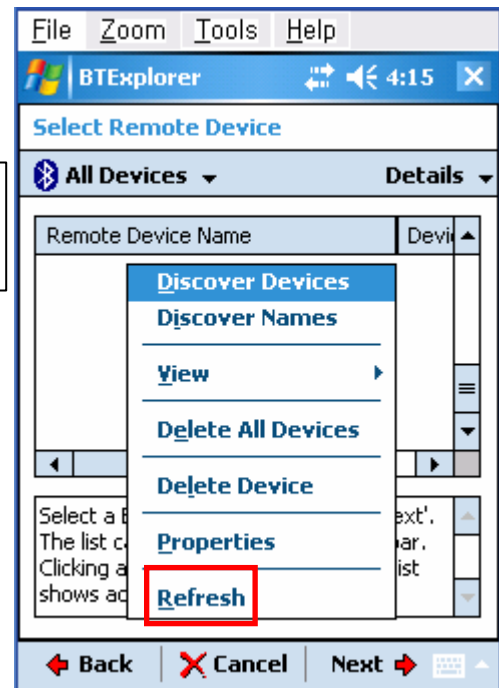


Bluetooth Interface

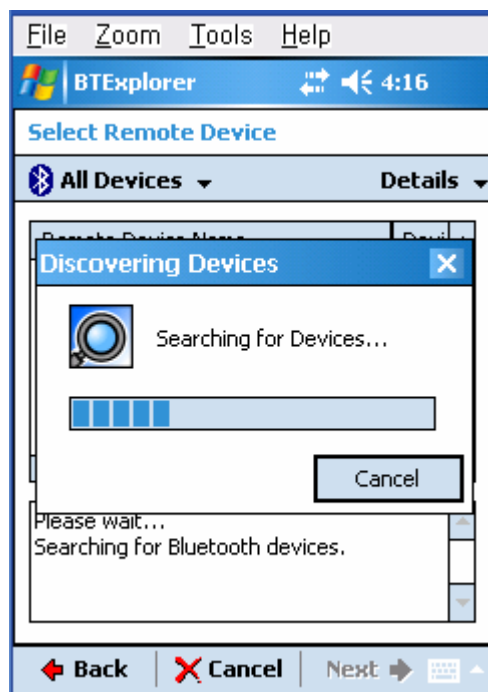
9) Click the List window for 2 seconds and the function folder appears.



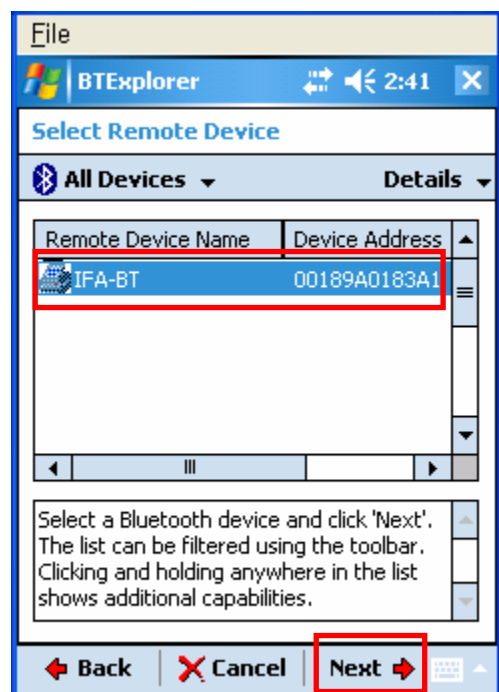
10) Click "Refresh"..



11) Bluetooth devices in the proximity are discovered.

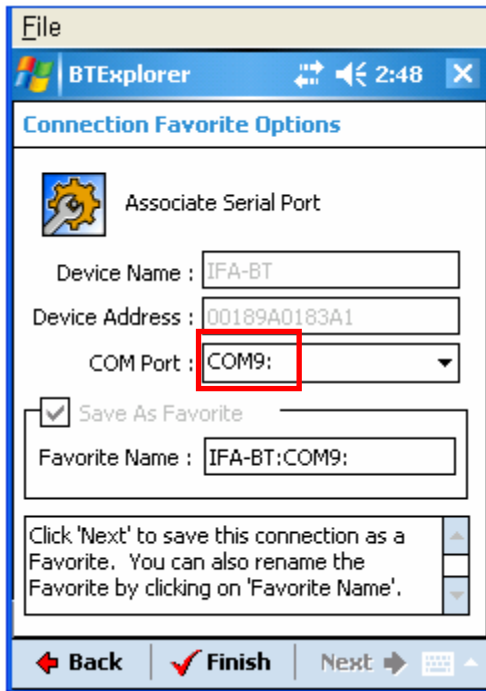


12) Select the Device Address of the IFX-BT, and click the "Next" button.

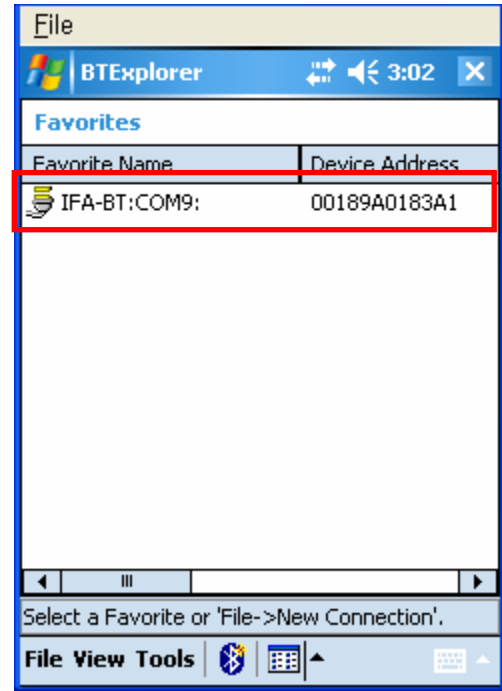


Bluetooth Interface

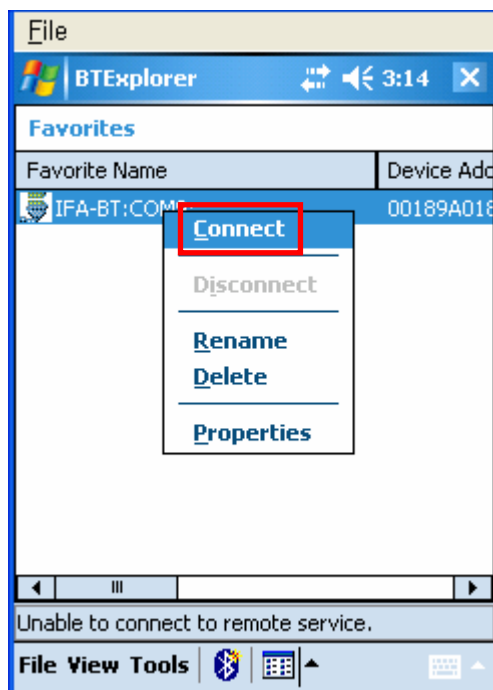
13) The Serial port is registered as COM9.



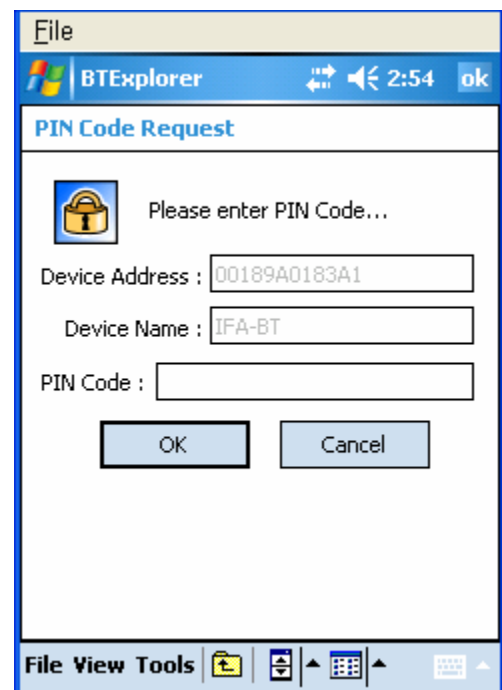
14) Click the IFA-BT name for 2 seconds.



15) Click "Connect".

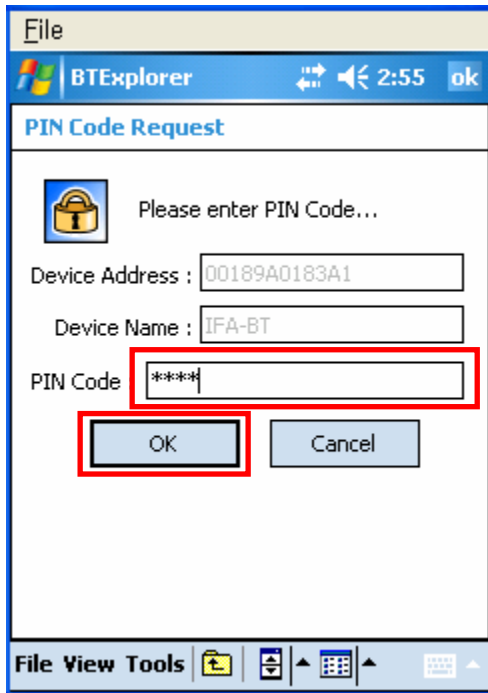


16) The PIN Code window appears (if the security function is enabled)

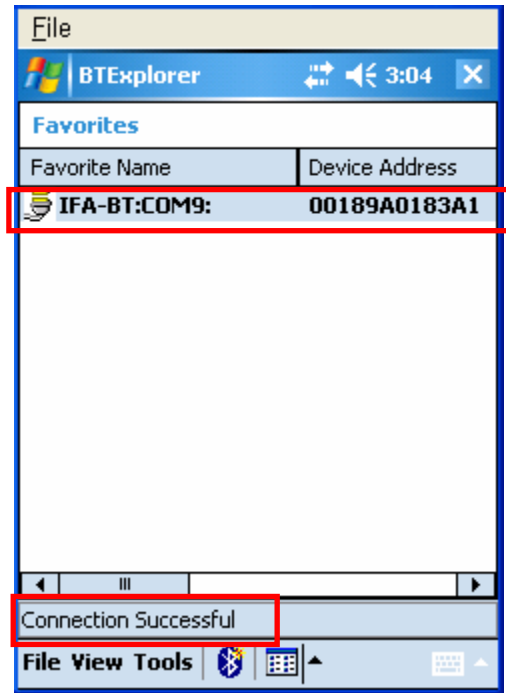


Bluetooth Interface

- 17) Input the PIN Code and click "OK".
(Default PIN Code: 0000)




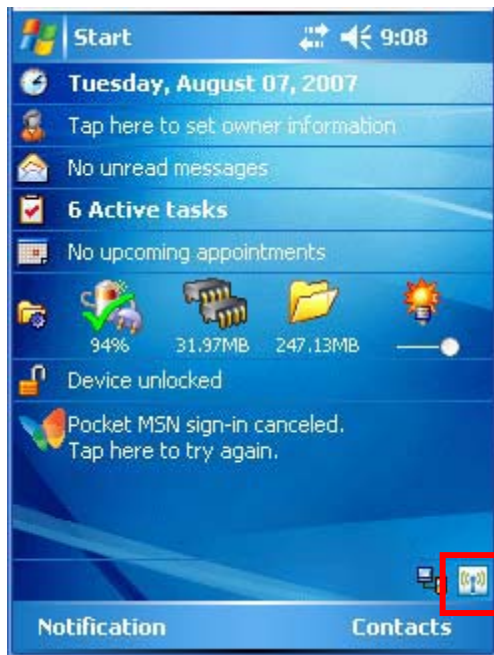
- 18) the connection is complete when
the "Connection Successful" message
appears.



Bluetooth Interface

(5) Connecting with an HP PDA (DEVICE: iPAQ hx2700, OS: Windows Mobile 5.1.1702)

1) To run Bluetooth, first click the  icon at the lower right of the screen.



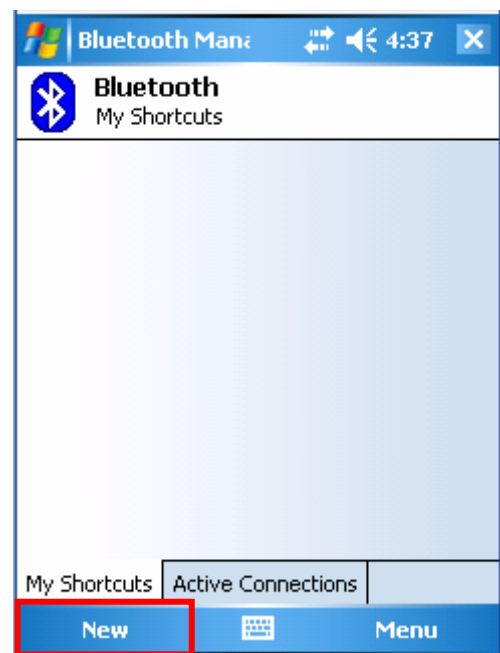
2) Click the Bluetooth logo button to activate the Bluetooth function



3) When activated, the Bluetooth button turns green. Click the "Manager" button to connect to the IFX-BT.

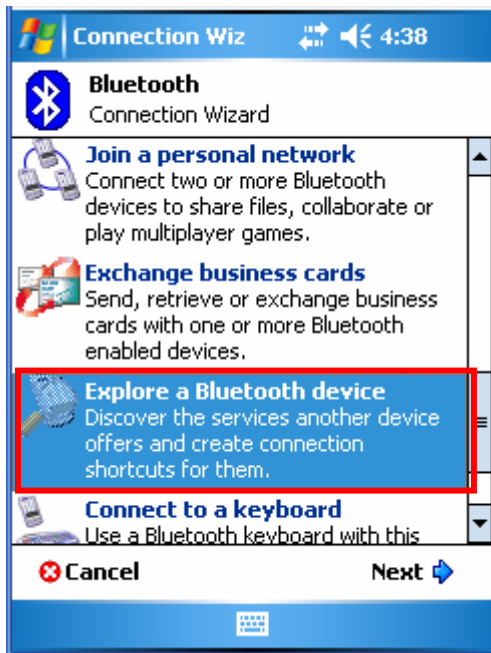


4) Click "New Connection".



Bluetooth Interface

5) Click "Explore a Bluetooth device".



6) Click the IFA-BT icon from the Bluetooth devices displayed in the search results.



7) Select BIXOLON-SPP and click "Next".



8) Click "Finish".



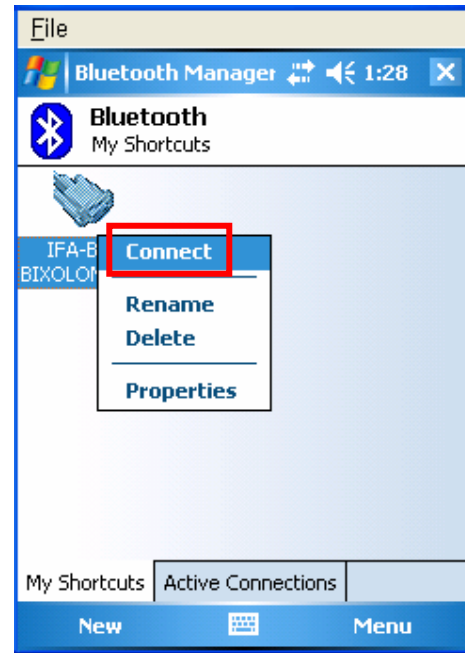
Bluetooth Interface

9) The IFX-BT shortcut is produced.

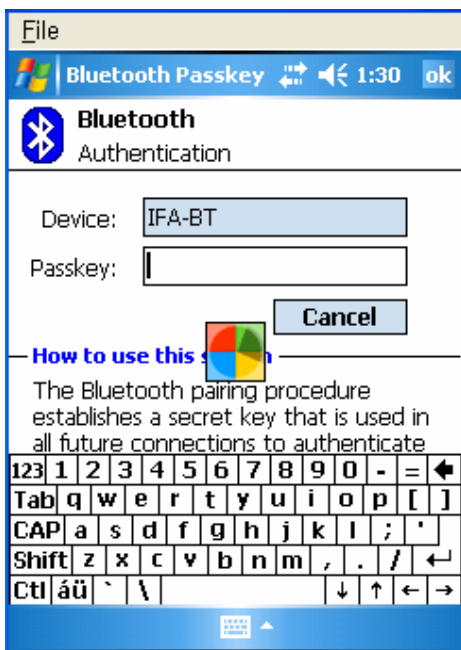
Click for 2 seconds.



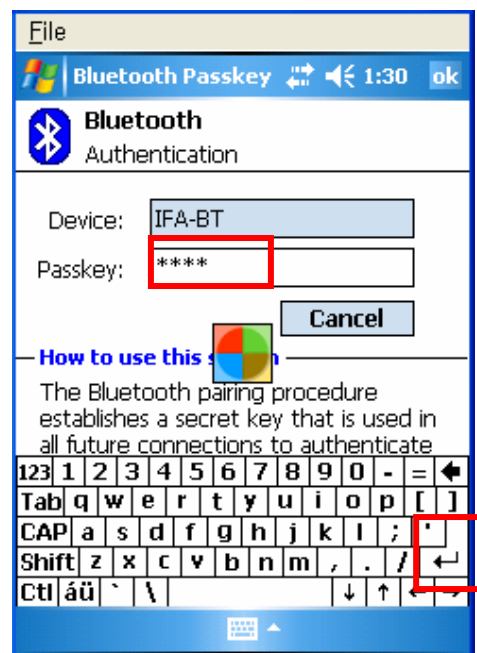
10) Clicking the shortcut for 2 seconds brings up the function folder. Click "Connect".



11) The Pass Key window appears (if the IFX-BT security function is enabled)

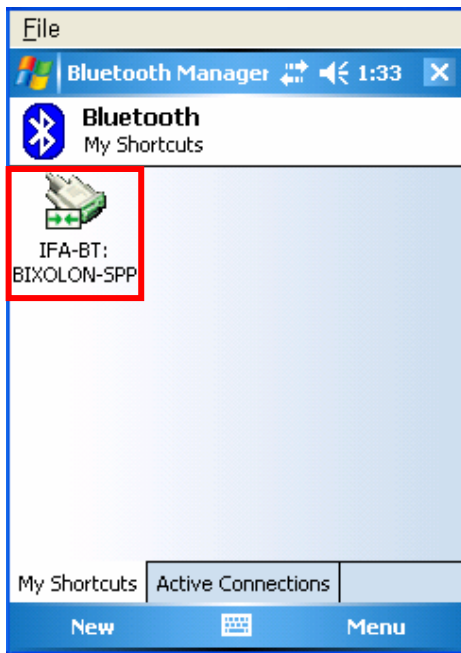


12) Input the Pass Key and click "Enter" (Default Pass Key: 0000)



Bluetooth Interface

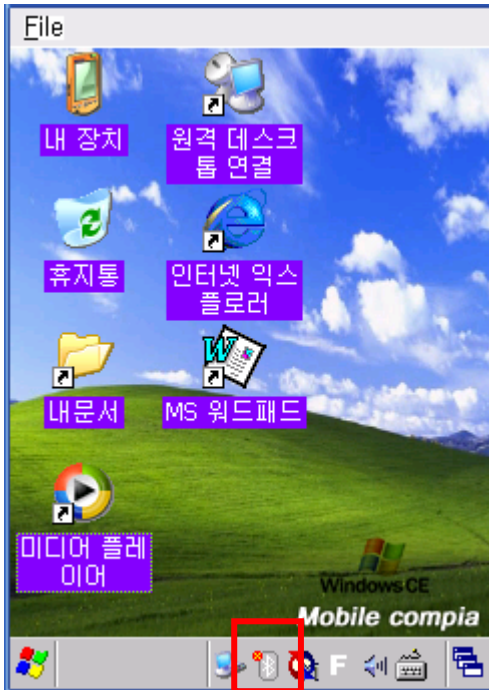
- 13) The connection is complete when the shortcut changes to show a green indicator as shown below.



Bluetooth Interface

(6) Connecting with a Mobile Compia PDA (DEVICE: M3, OS: WinCE 5.0)

1) Click the  icon.



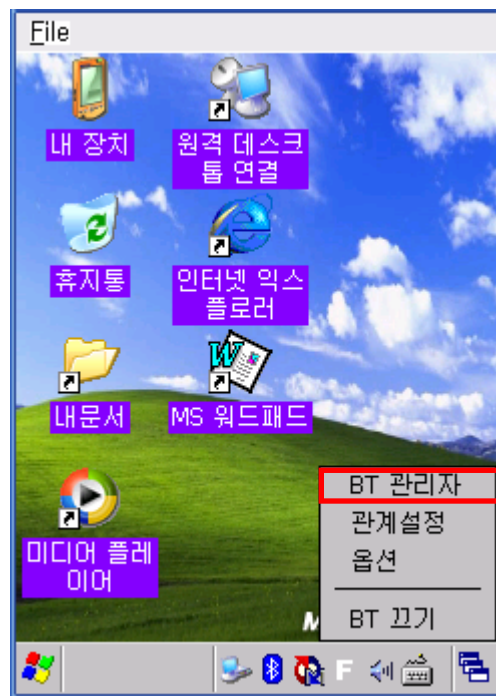
2) Click "BT On".



3) Click the  icon.



4) Click "BT Manager".

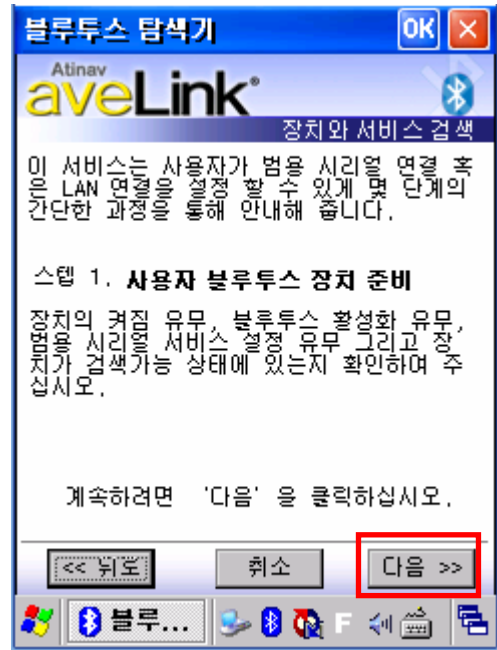


Bluetooth Interface

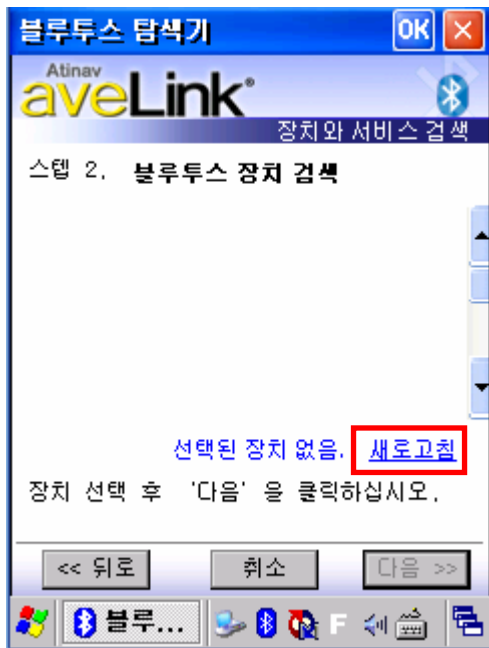
5) Click "Find All Devices".



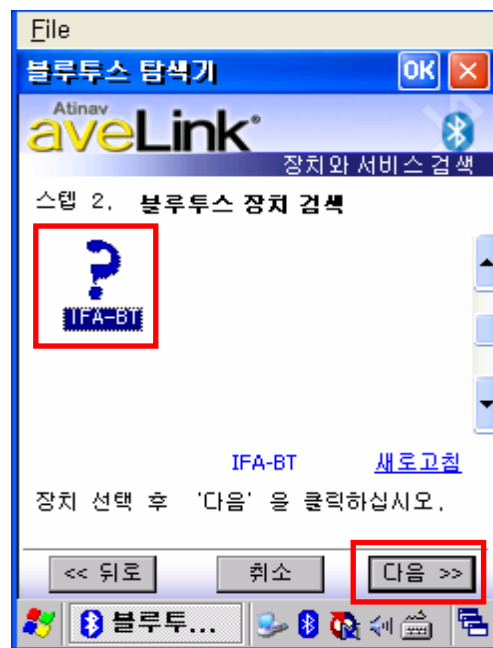
6) Click the "Next" button.



7) Click "Refresh".

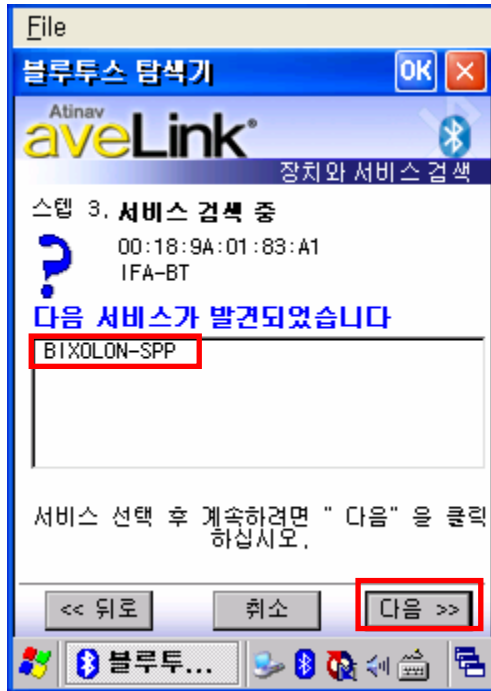


8) Click the IFX-BT from the Bluetooth devices in the search list, and click "Next".

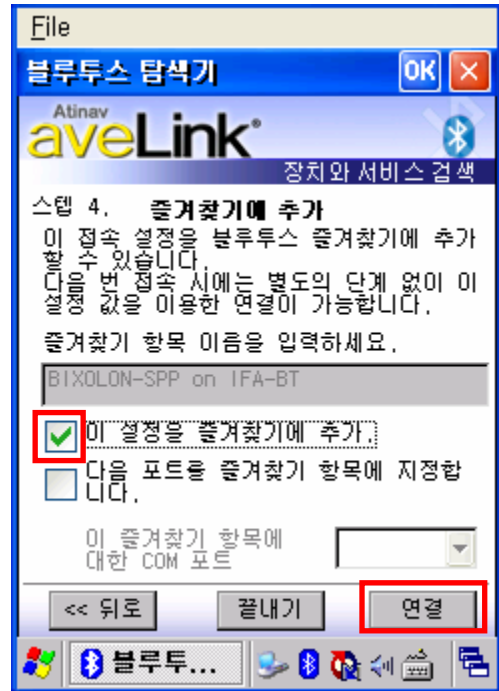


Bluetooth Interface

9) Select BIXOLON-SPP and click "Next".



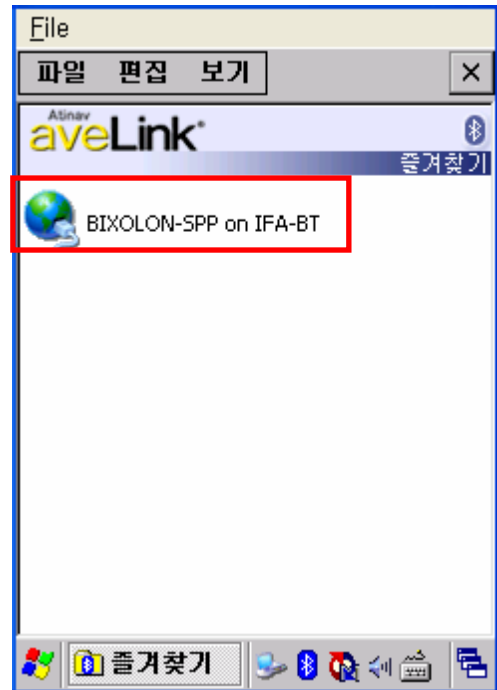
10) Check favorite and Click "Connect".



11) Click "My favorite device".

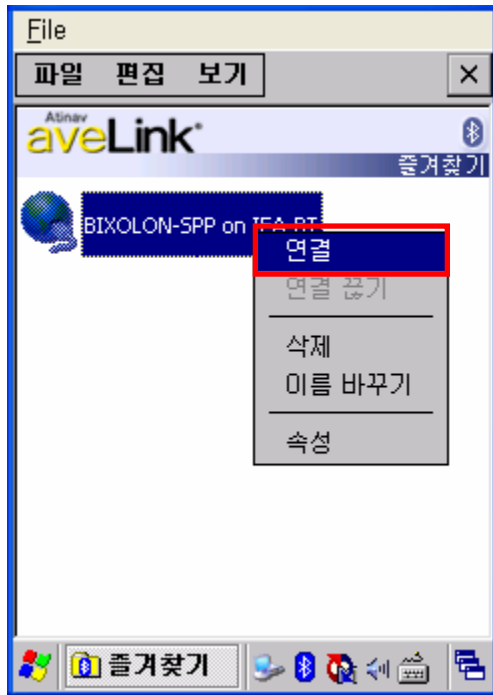


12) Clicking the shortcut for 2 seconds brings up the function folder. Click "Connect".

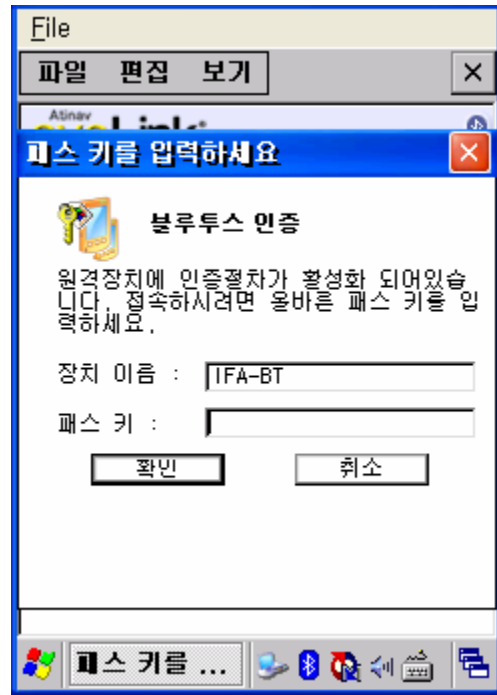


Bluetooth Interface

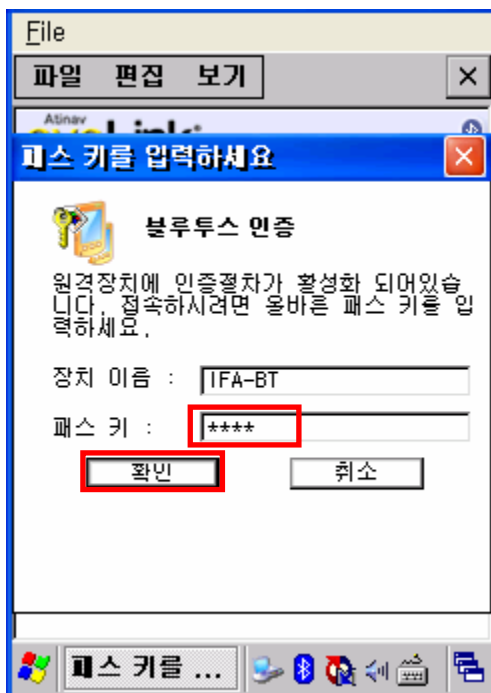
13) Click "Connect".



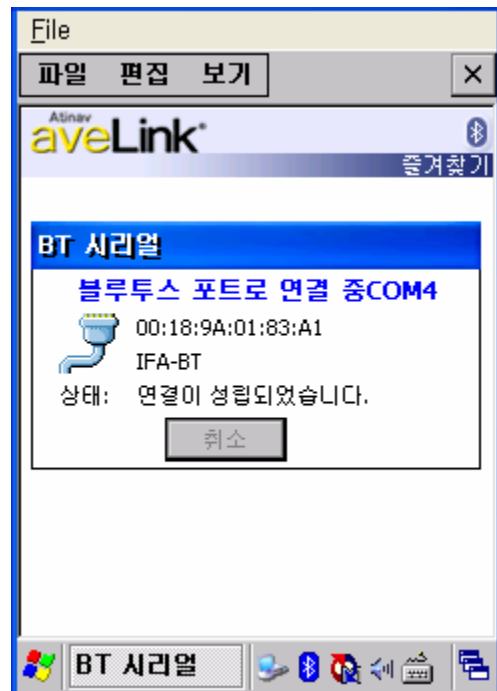
14) The Pass Key window appears (if the IFX-BT security function is enabled).



15) Input the Pass Key and click "Enter"..
(Default Pass Key: 0000)

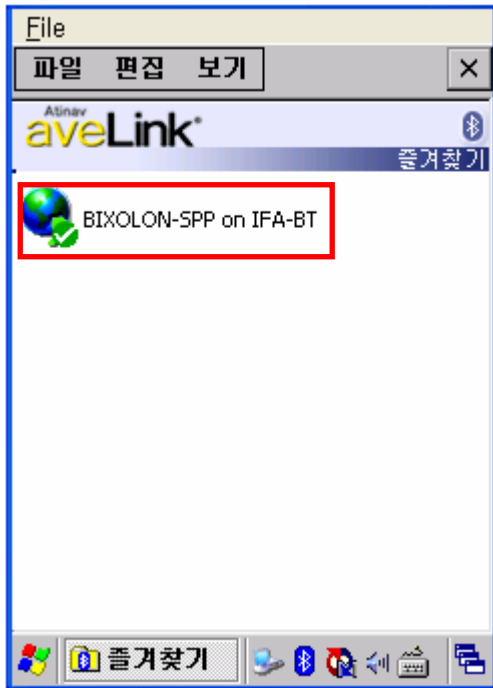


16) The "Connection Established" message appears.



Bluetooth Interface

- 17) The connection is complete when the shortcut changes to show a green indicator as shown below



Bluetooth Interface

(7) Connecting with an InnoTeletek PDA (DEVICE: MC3000, OS: WinCE 4.2)

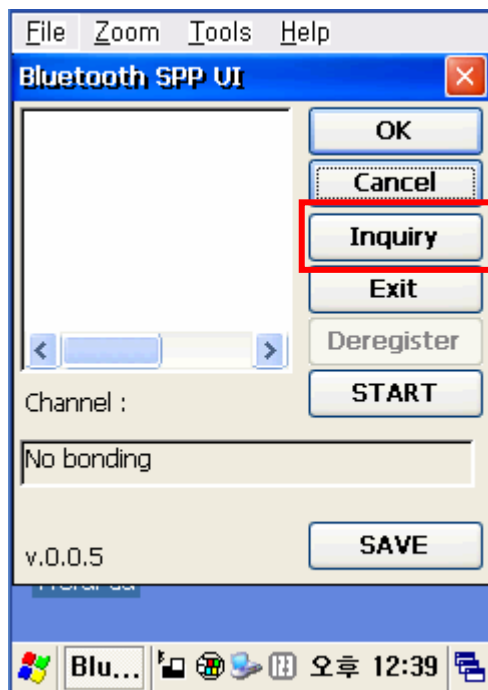
1) Click the "sppui" icon.



2) Click the Bluetooth icon.



3) Click the "Inquiry" button.

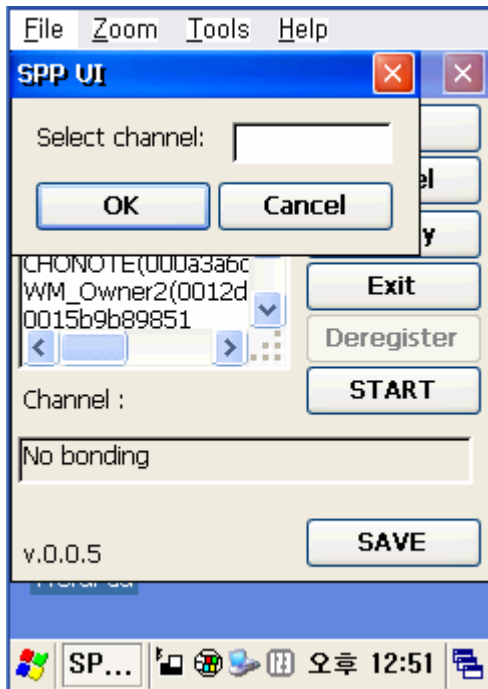


4) Select IFX-BT and click "OK" button.

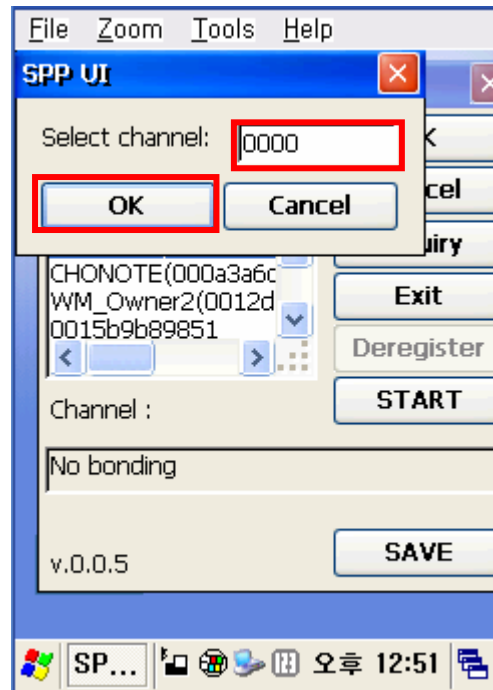


Bluetooth Interface

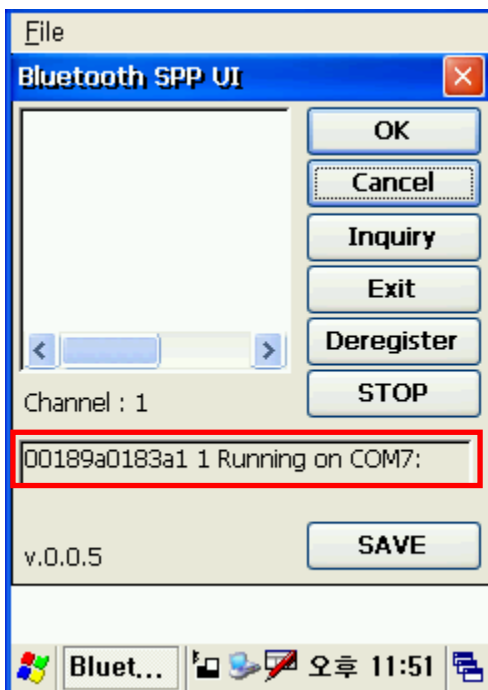
5) The PIN Code window(Select channel) appears (if the IFX-BT security function is enabled).



6) Input the PIN Code and click "Enter".
(Default: 0000)



7) The Serial port is registered as COM7.

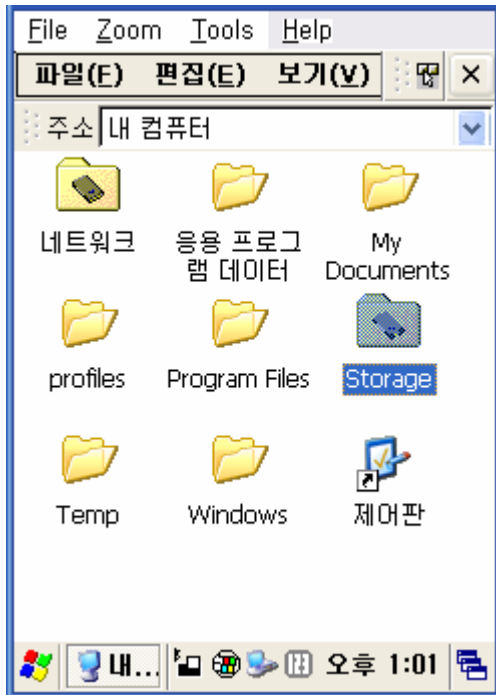


8) Click the "My Computer" icon.

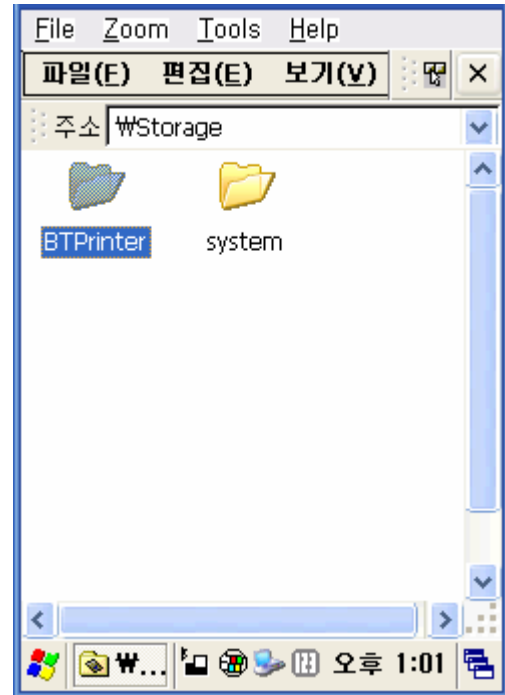


Bluetooth Interface

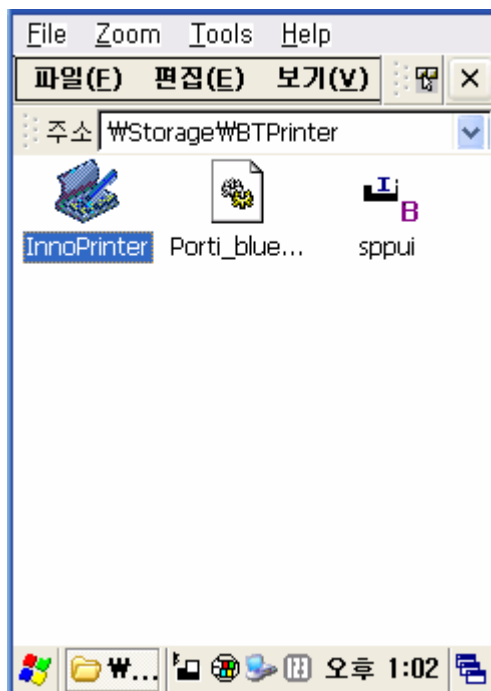
9) Click "Storage".



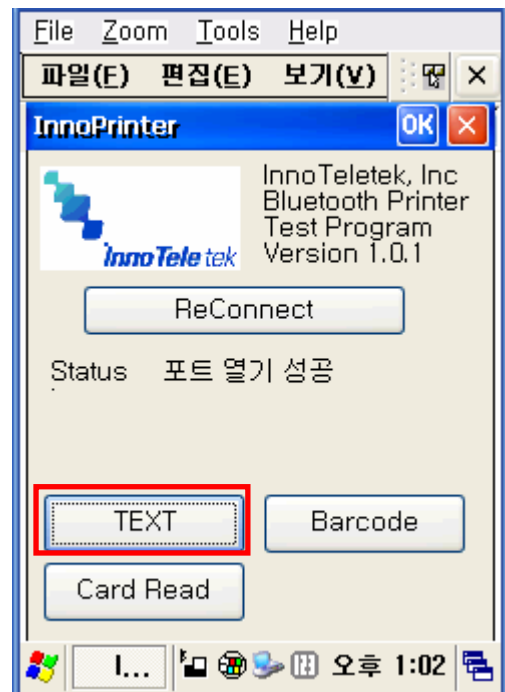
10) Click "BTPrinter".



11) Click "InnoPrinter".

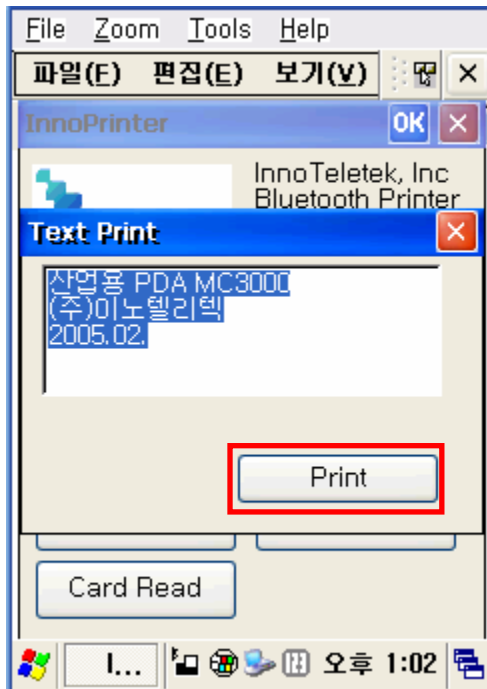


12) The connection is complete when the "Port Opened" Status message appears. Click the "TEXT" button.



Bluetooth Interface

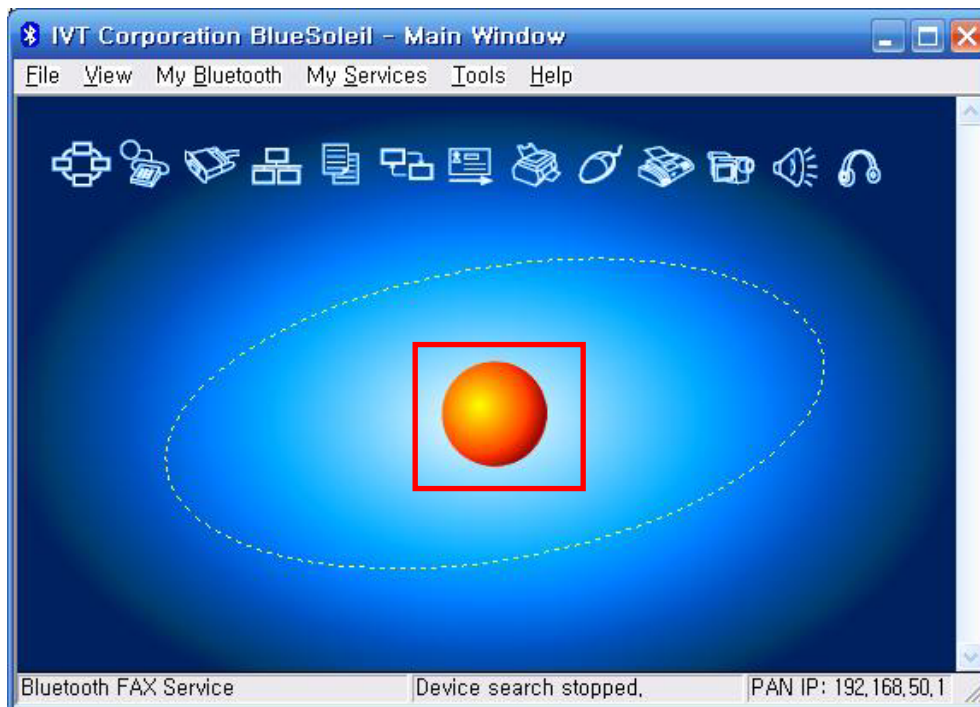
- 13) Enter text to be printed in the Text window and click the "Print" button. The text is printed by the Printer (IFX-BT).



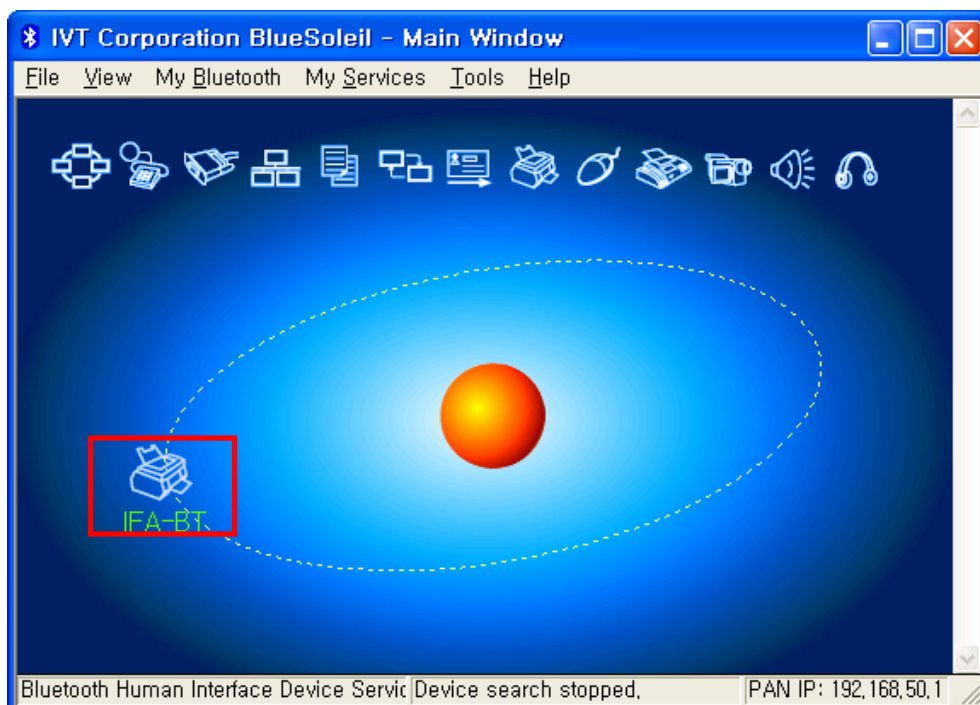
Bluetooth Interface

(8) Connecting with Bluetooth Dongle (BlueSoleil IVT Stack)

- 1) After purchasing Bluetooth Dongle, insert the CD in the PC and install Bluesoleil.
- 2) Connect Bluetooth Dongle to the USB port of the PC.
- 3) Click the Bluesoleil icon on the PC screen top.
- 4) Click the red sphere at the center of the Bluesoleil main screen.

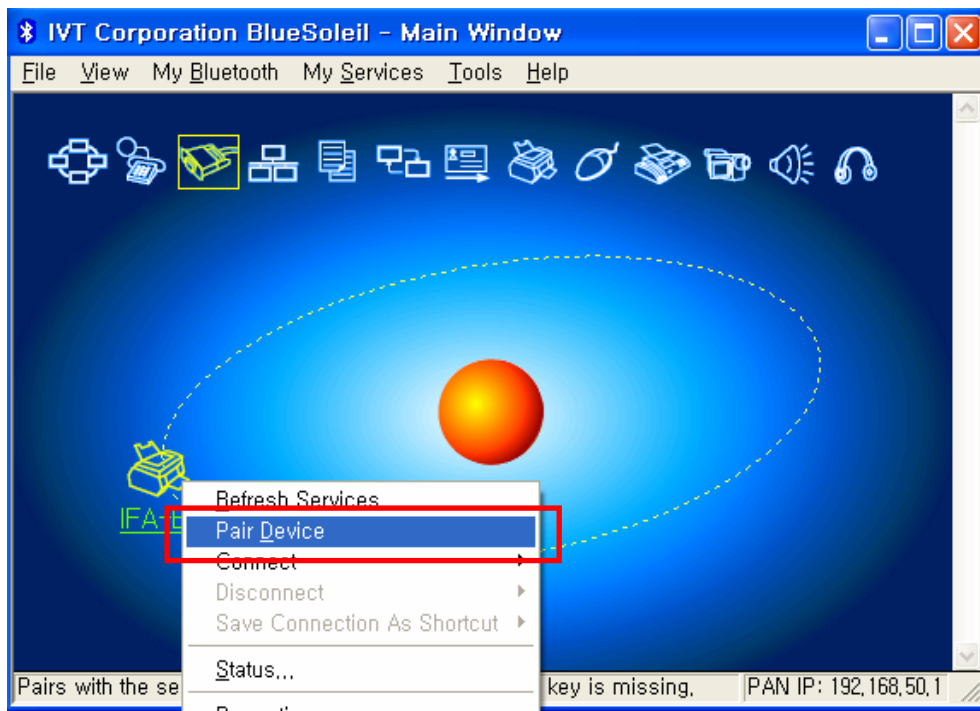


- 5) The program initiates a search for Bluetooth devices in the proximity.



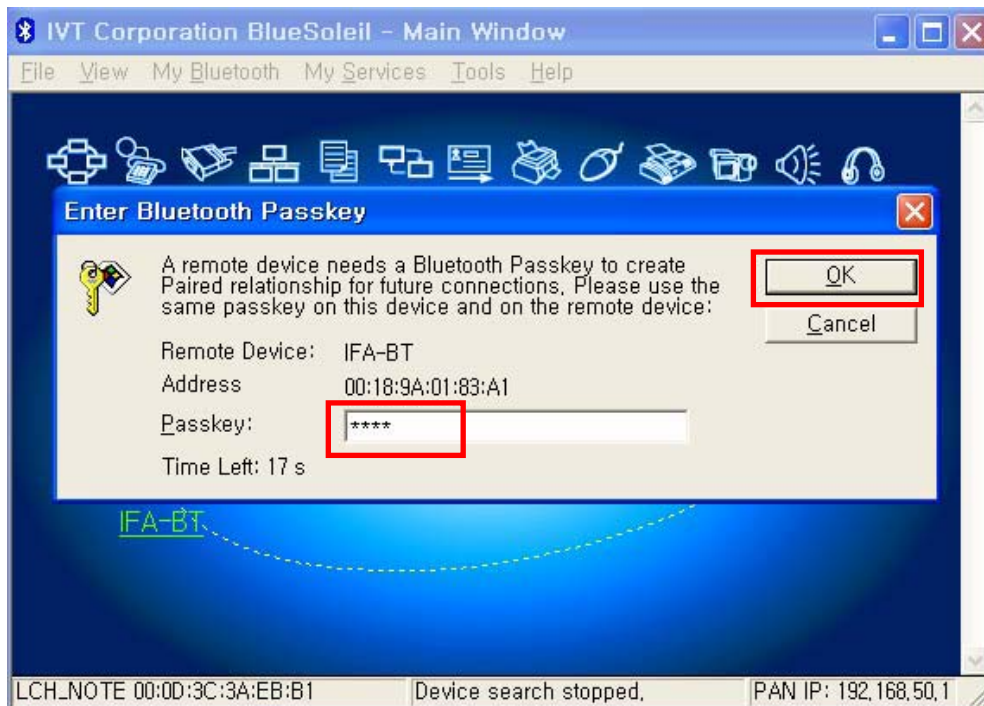
Bluetooth Interface

6) Click right button of the mouse above the "IFA-BT Icon" and select the "Pair Device".



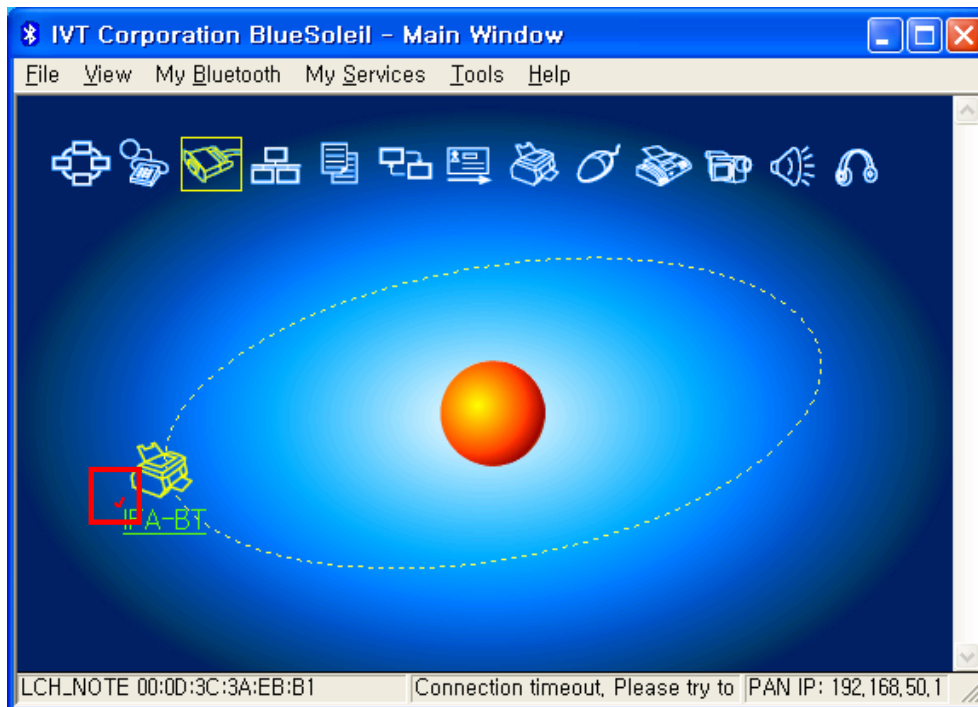
7) Enter the PIN Code in the Bluetooth Passkey window. Click "OK".

(Default Passkey: 0000)

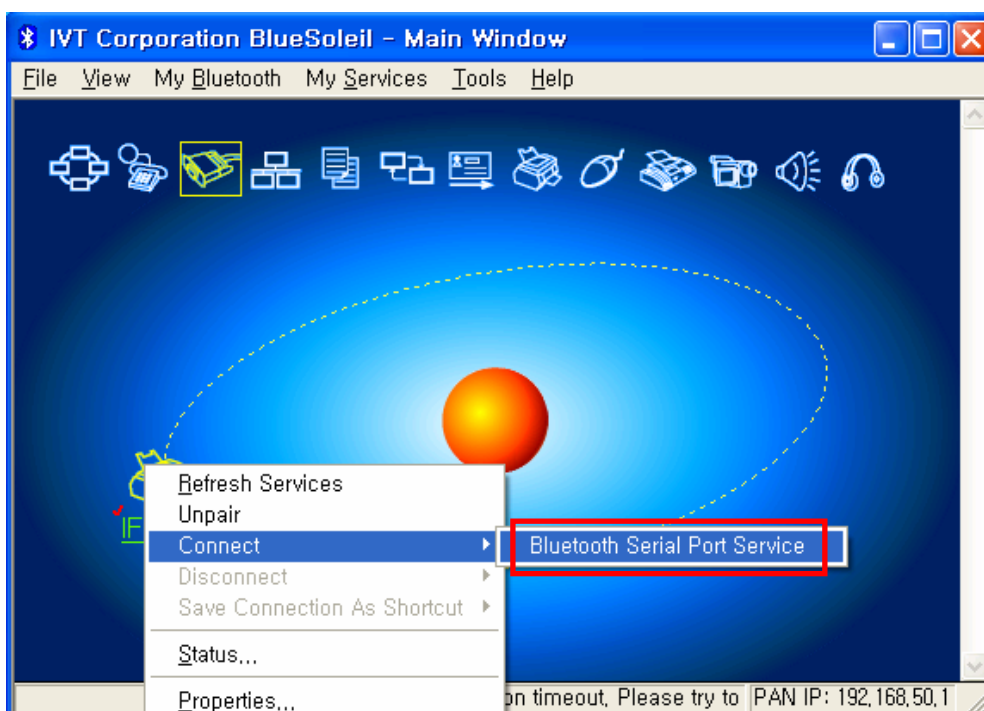


Bluetooth Interface

- 8) If the Passkey(PIN Code) is correct and pairing is completed, a red check symbol appears next to the "IFX-BT icon".

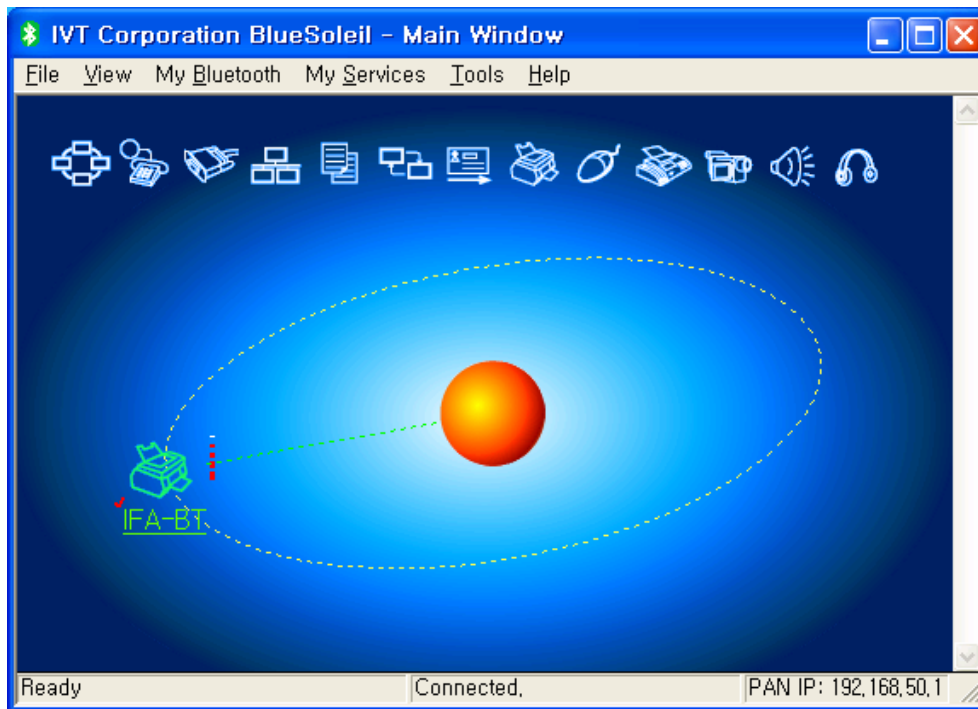


- 9) Click right button of the mouse above the "IFX-BT Icon" and select the "Connect > Bluetooth Serial Port Service".



Bluetooth Interface

- 10) When the connection is established, the icon turns green, and a green dotted line appears as shown in the image below.



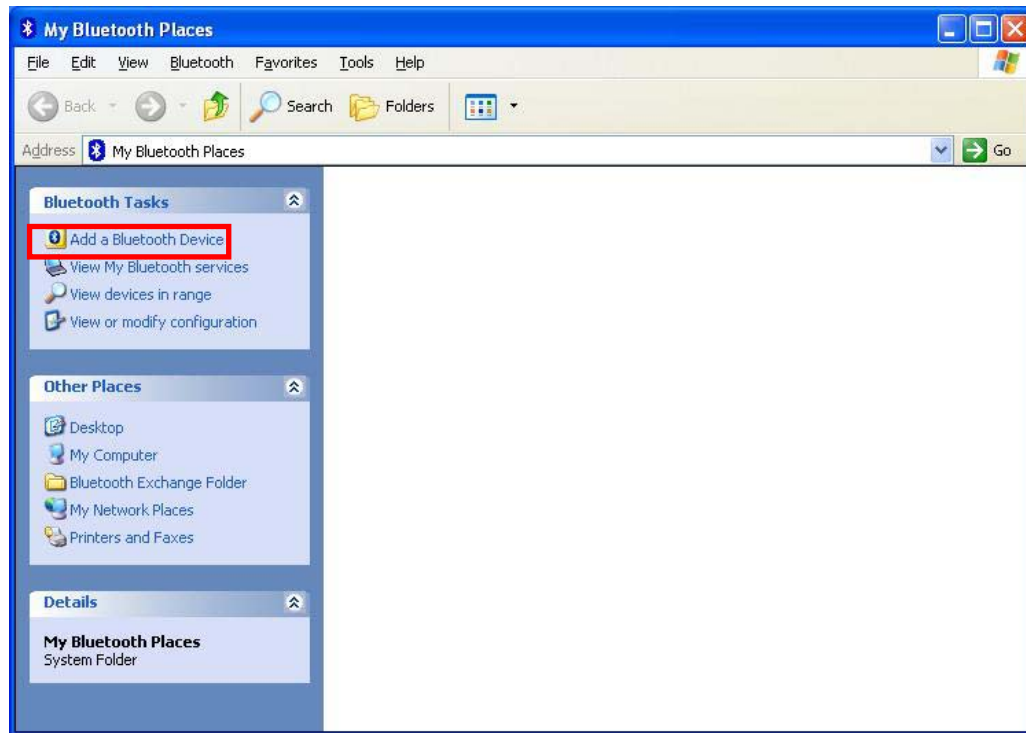
- 11) When the connection is complete, the message pictured below appears at the bottom right of the PC screen. The COM port number shown in the message indicates the COM port via which the IFX-BT and the PC are connected.

* My Bluetooth COM Port 4 (COM4) is connected to remote device.

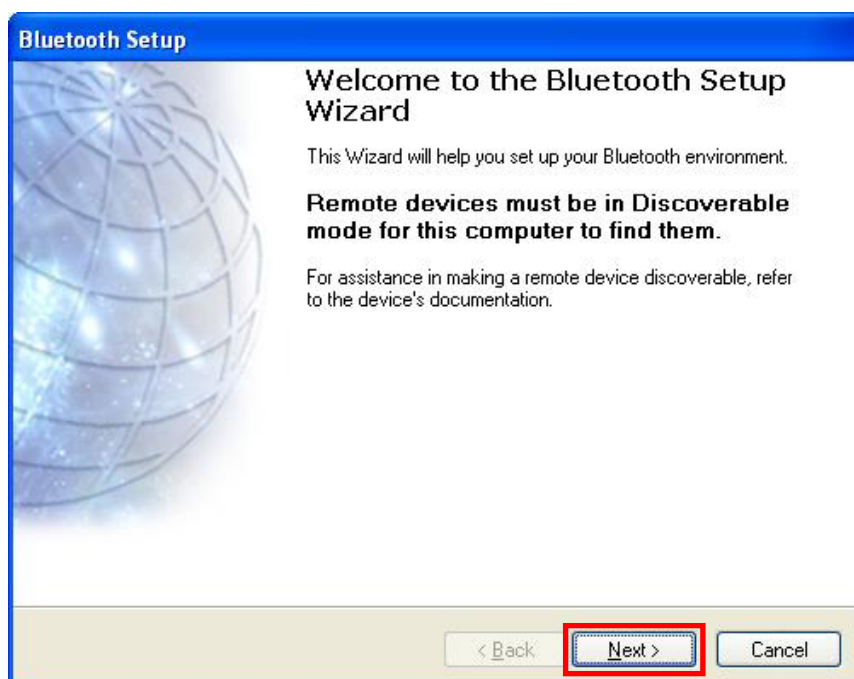
Bluetooth Interface

(9) Connecting with Bluetooth Dongle (Widcomm Stack)

- 1) After purchasing Bluetooth Dongle, insert the CD in the PC and install.
- 2) Connect Bluetooth Dongle to the USB port of the PC.
- 3) Click the My Bluetooth Places icon on the PC screen top.
- 4) Click "Bluetooth Tasks > Add a Bluetooth services".



- 5) Click "Next".



Bluetooth Interface

6) Select "Show all devices" and Click "Next".

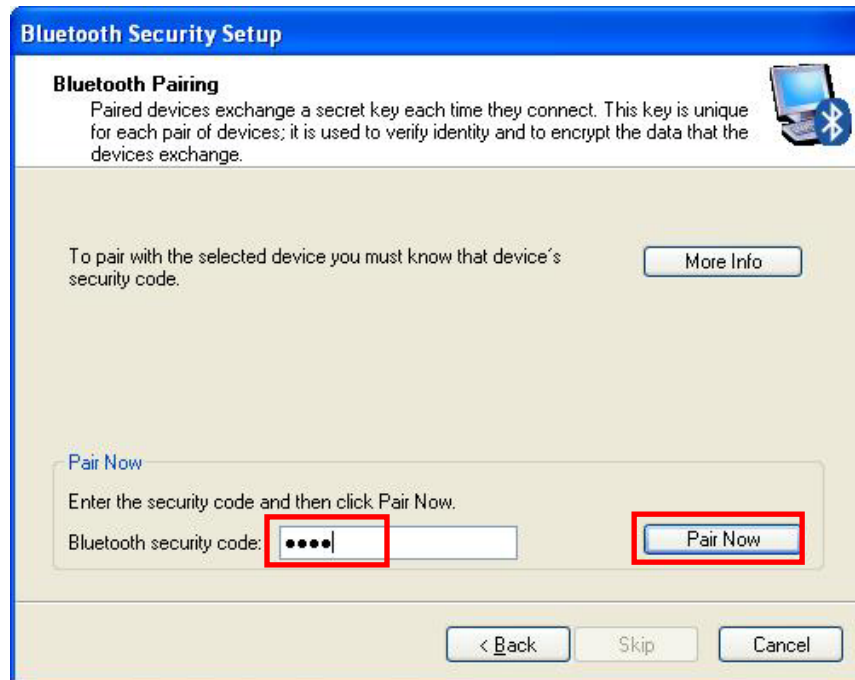


7) The program initiates a search for Bluetooth devices in the proximity. Click "Next".

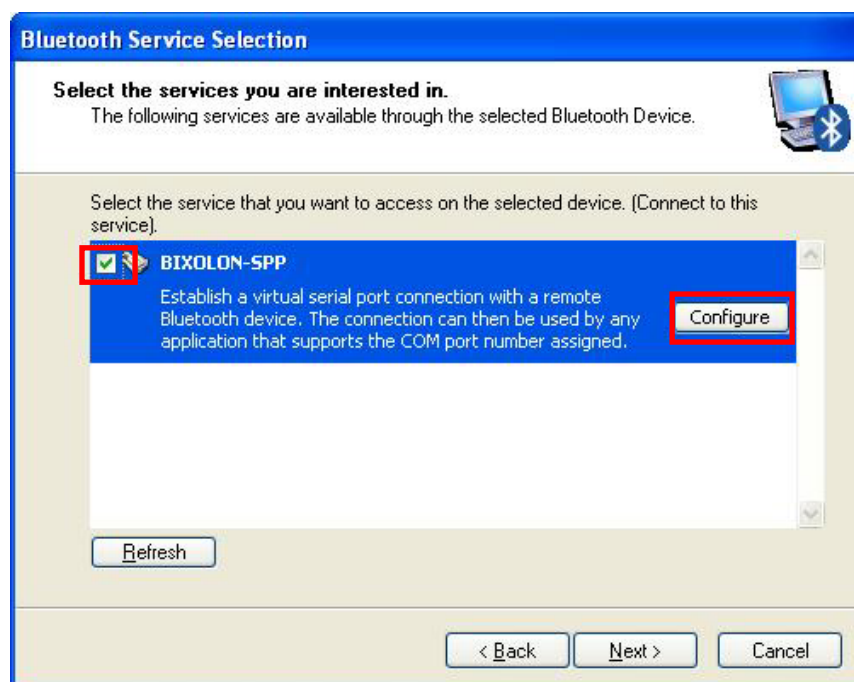


Bluetooth Interface

- 8) Enter the PIN Code in the Bluetooth Passkey window, then click "Pair Now".
(Default Passkey: 0000)

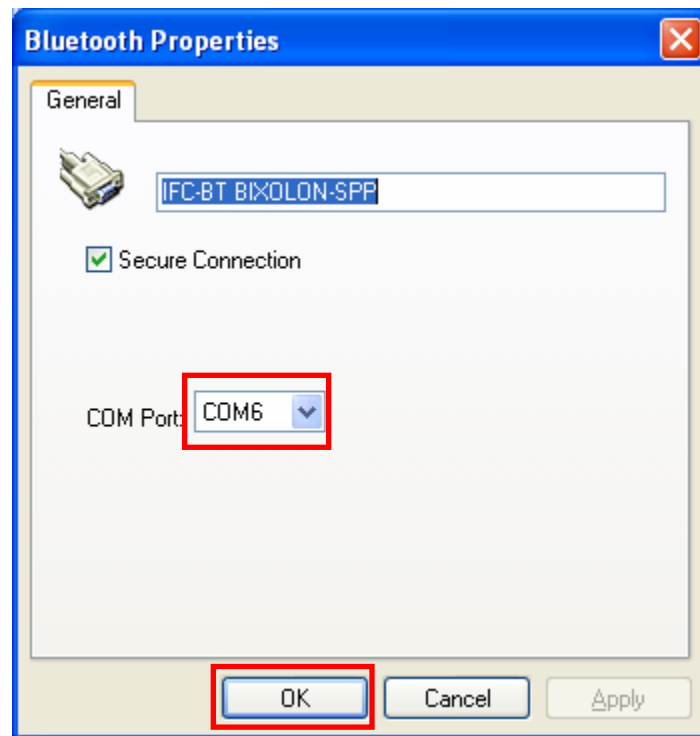


- 9) If the Passkey(PIN Code) is correct and pairing is completed, a green check symbol appears next to the BIXOLON_SPP icon. Click "Configure".

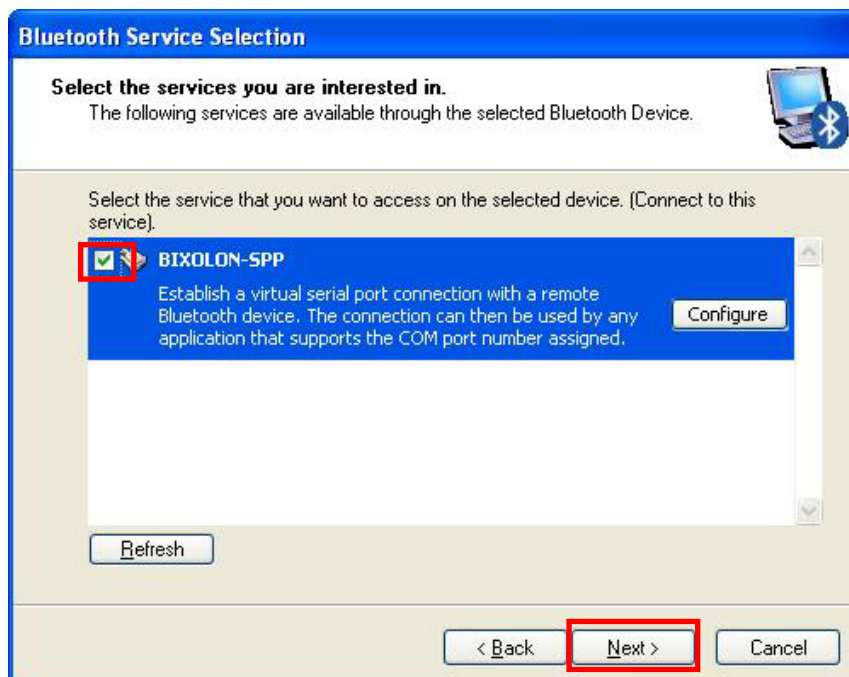


Bluetooth Interface

10) Check COM Port and click "OK".

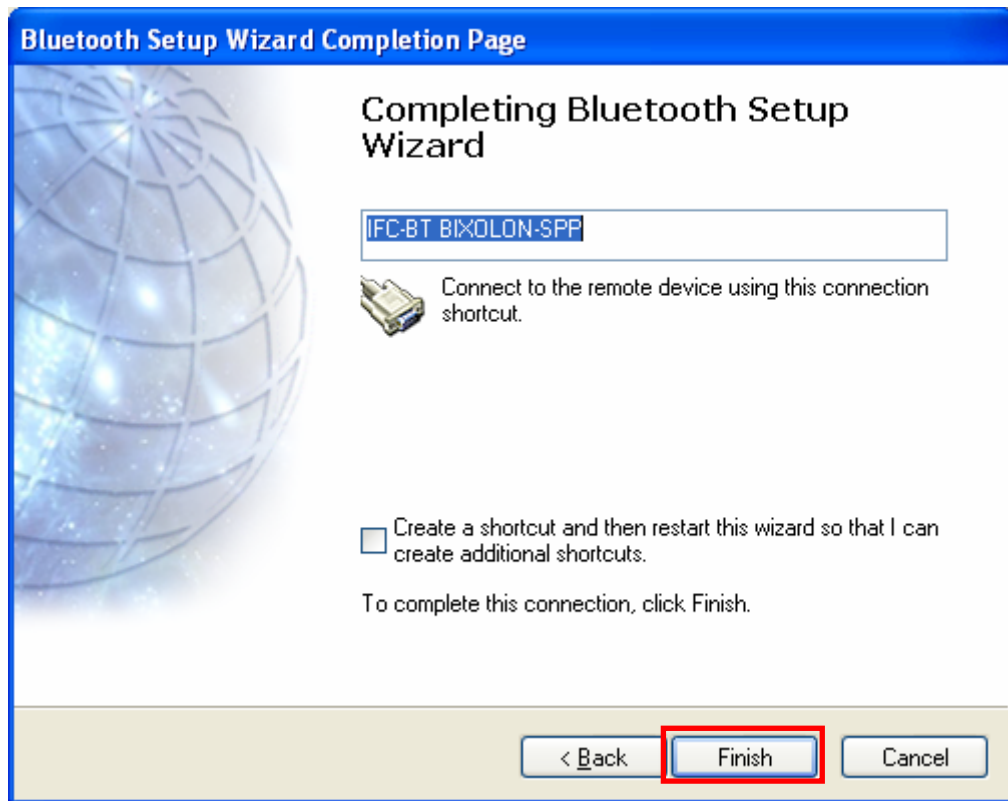


11) Click "Next".

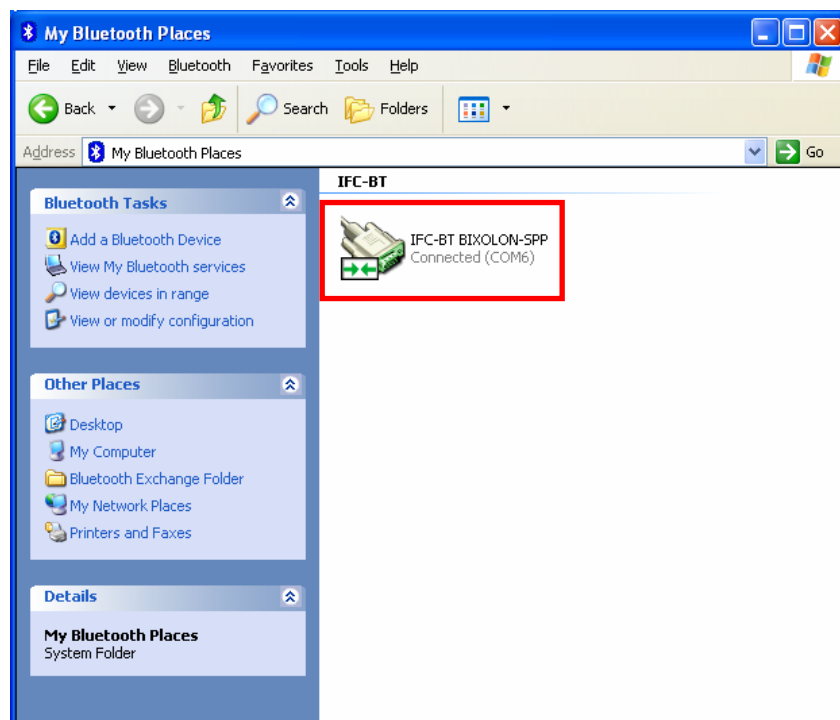


Bluetooth Interface

12) Click "Finish".

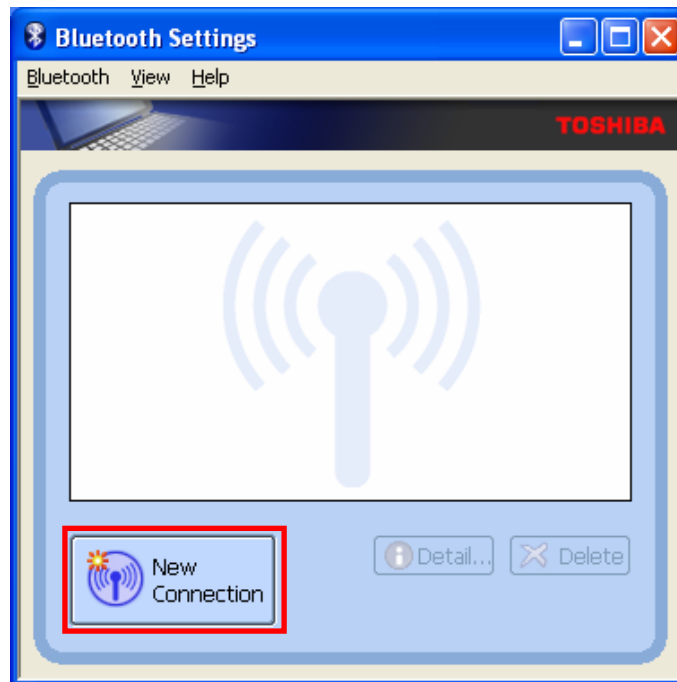


13) The connection is complete when the shortcut changes to show a green indicator as shown below.

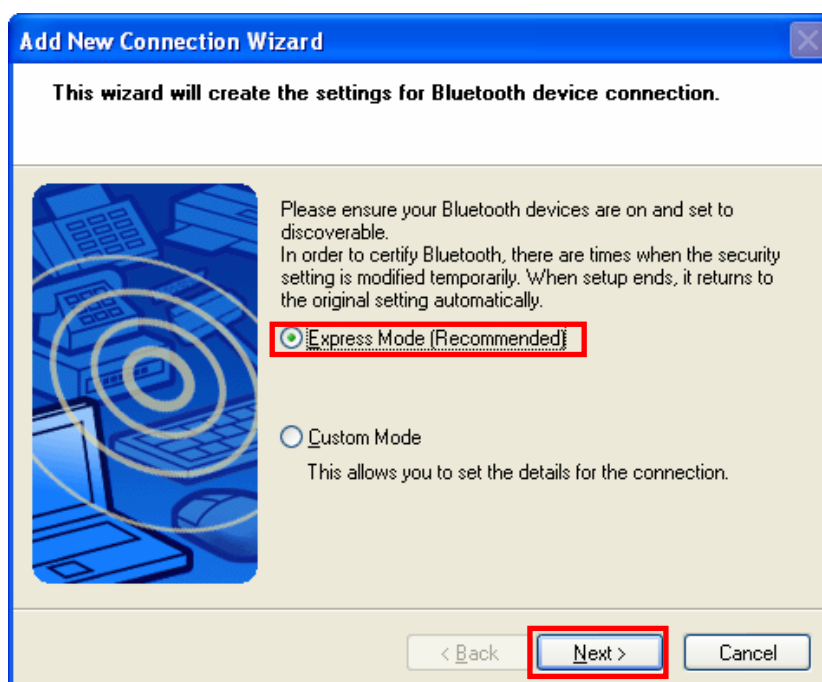


(10) Connecting with Bluetooth Dongle (Toshiba Stack)

- 1) After purchasing Bluetooth Dongle, insert the CD in the PC and install.
- 2) Connect Bluetooth Dongle to the USB port of the PC.
- 3) Execute Bluetooth.
- 4) Click "New Connection".

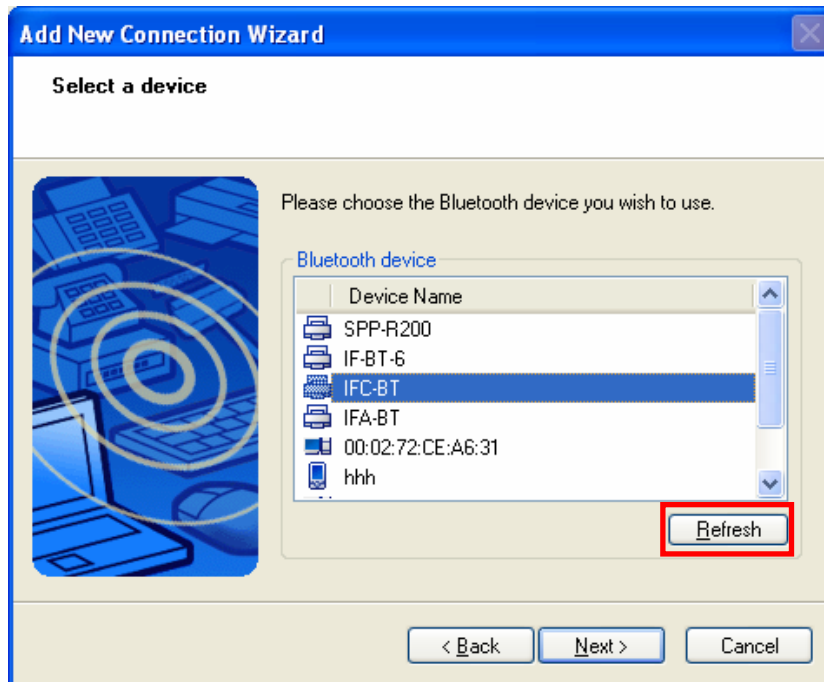


- 5) Choose Express Mode[Recommended] and click "Next".

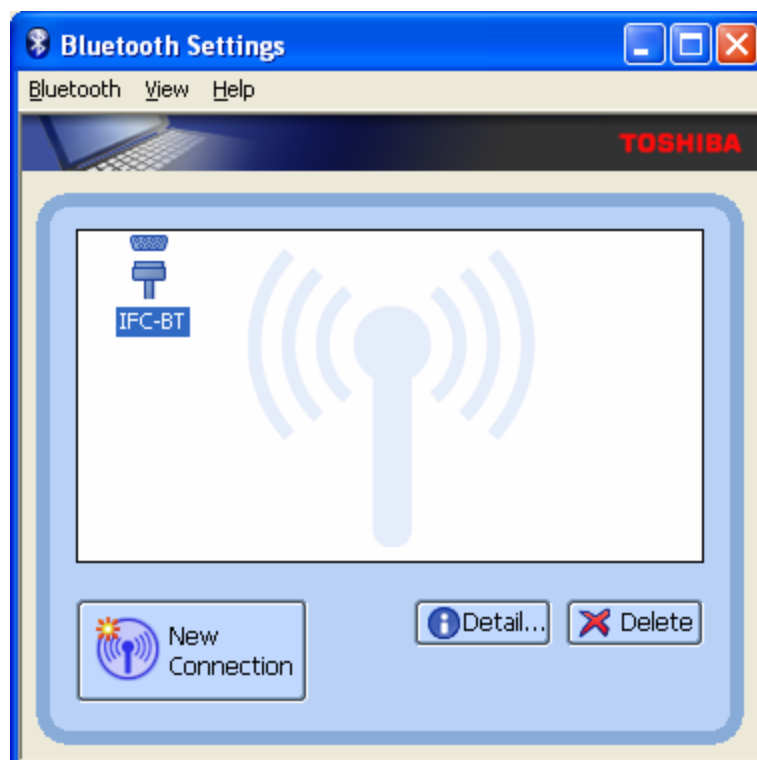


Bluetooth Interface

6) Select device and click “Next”. If the device not appeared, click “Refresh”

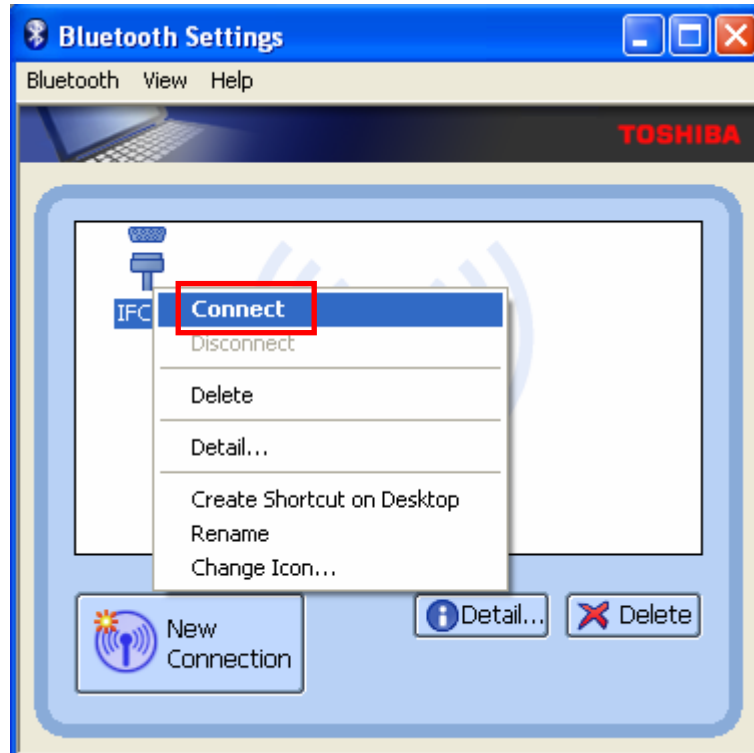


7) The device is appeared.



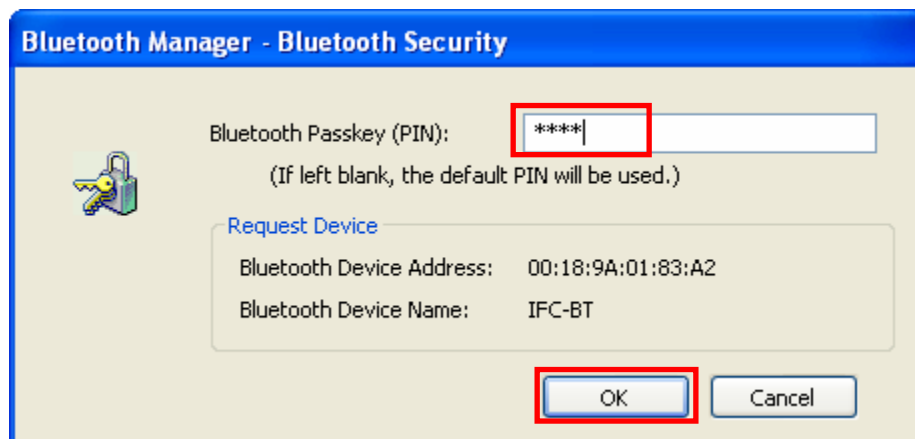
Bluetooth Interface

8) Click right button of the mouse above the "IFA-BT Icon" and select the "Connect".



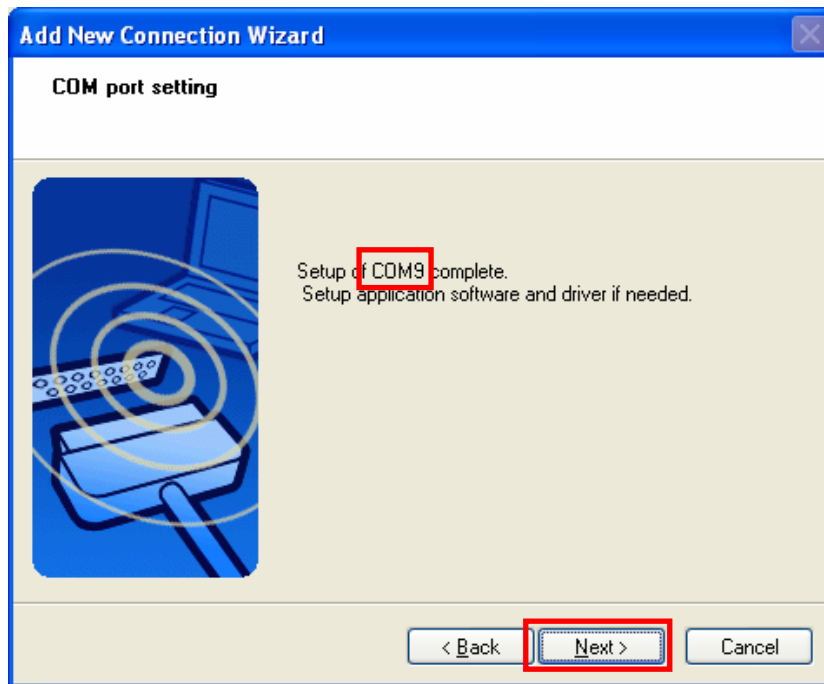
9) Enter the PIN Code in the Bluetooth Passkey window.

(Default Passkey: 0000)

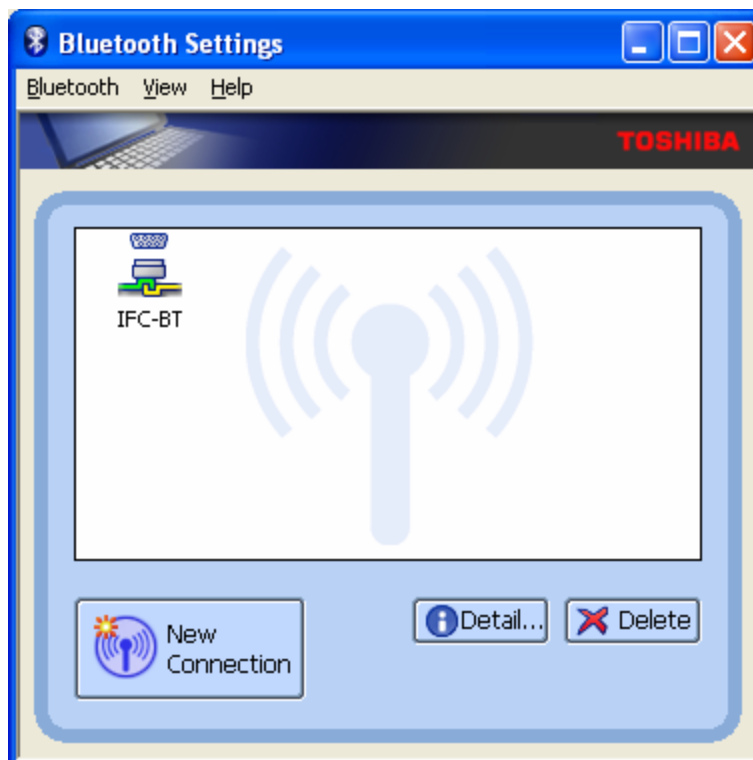


Bluetooth Interface


10) If the Passkey(PIN Code) is correct and pairing is completed, check COM port and click "Next".



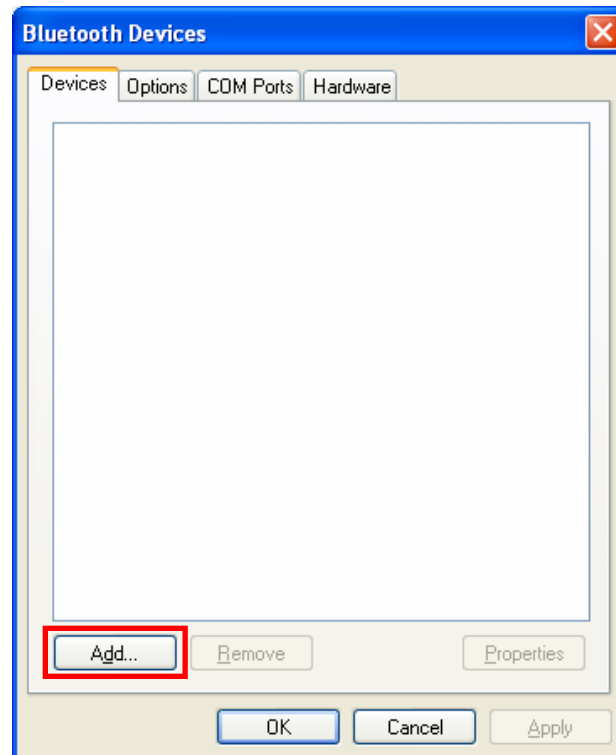
11) The icon is changed when The connection is complete.



(11) Connecting with Bluetooth Dongle (MS Stack)

- 1) After purchasing Bluetooth Dongle, insert the CD in the PC and install.
- 2) Connect Bluetooth Dongle to the USB port of the PC.
- 3) Open Start > Settings > Control Panel, Then click the “” icon.
- 4) Click “Add..”.

Bluetooth
Devices

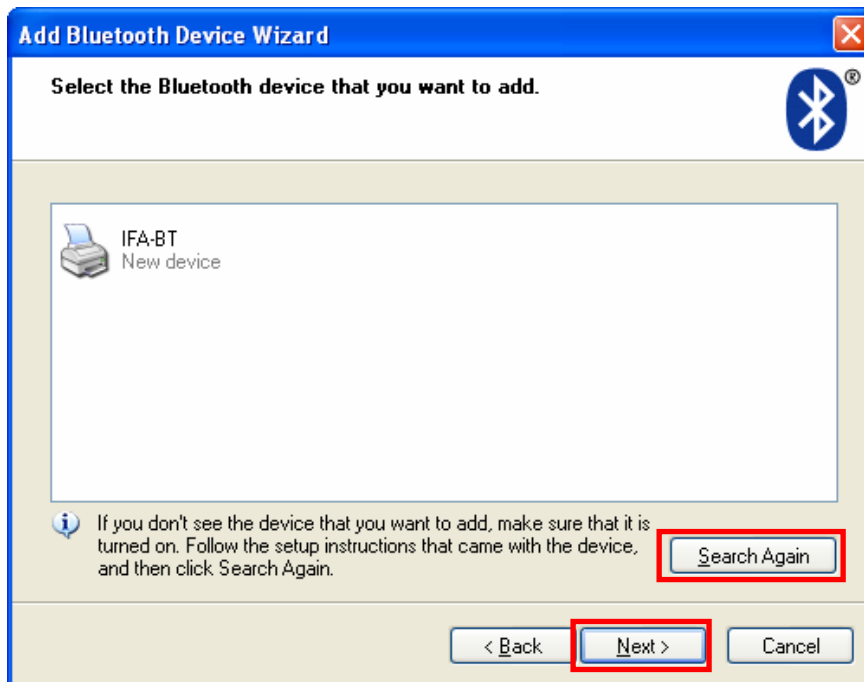


- 5) Check the checkbox and click “Next”.

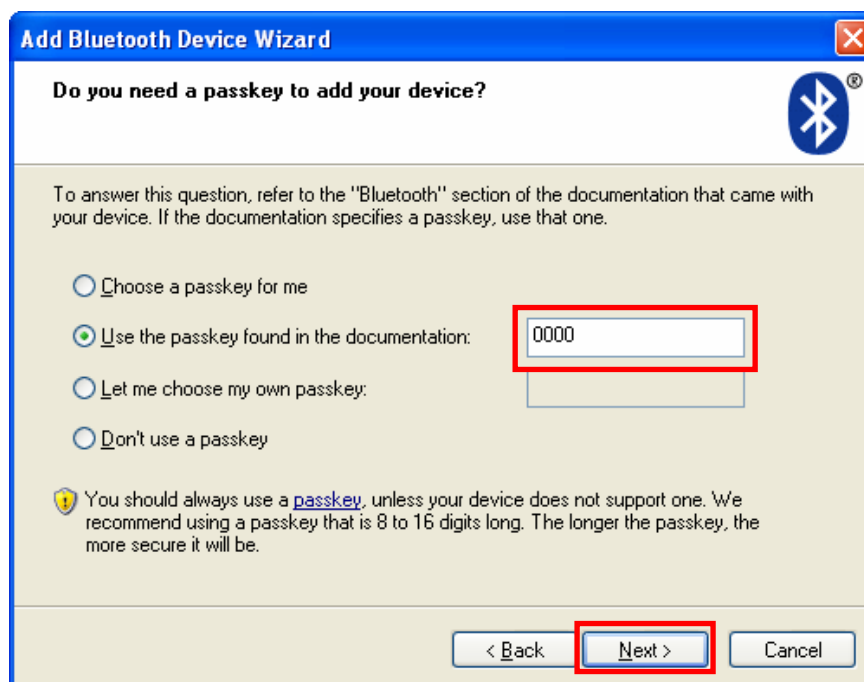


6) Select device and click "Next".

If device is not searched, click "Search Again".

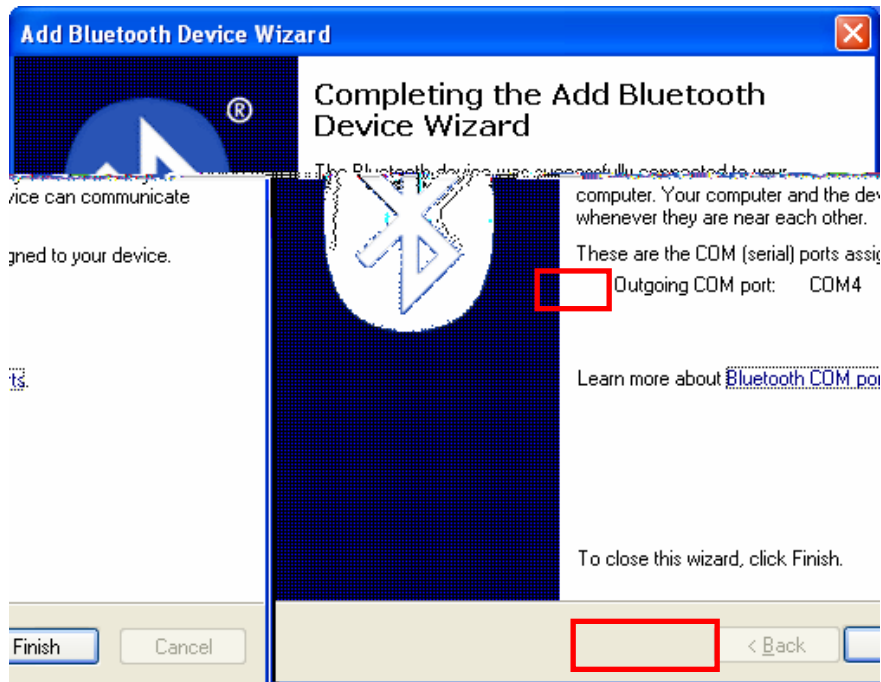


7) Enter the PIN Code and click "Next".



Bluetooth Interface

8) If the Passkey(PIN Code) is correct and pairing is completed, check COM port and click “Finish”.



9) If the connection is complete, the device appeared in the list as shown below.

