
ZigBeeProg v2.0 Manual

(December 10, 2010)



ZigBeeProg (www.zigbeeprog.com)
Seniorcom. Co. Ltd.(www.seniorcom.co.kr)



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1. ZigBeeProg v2.0 Product Components

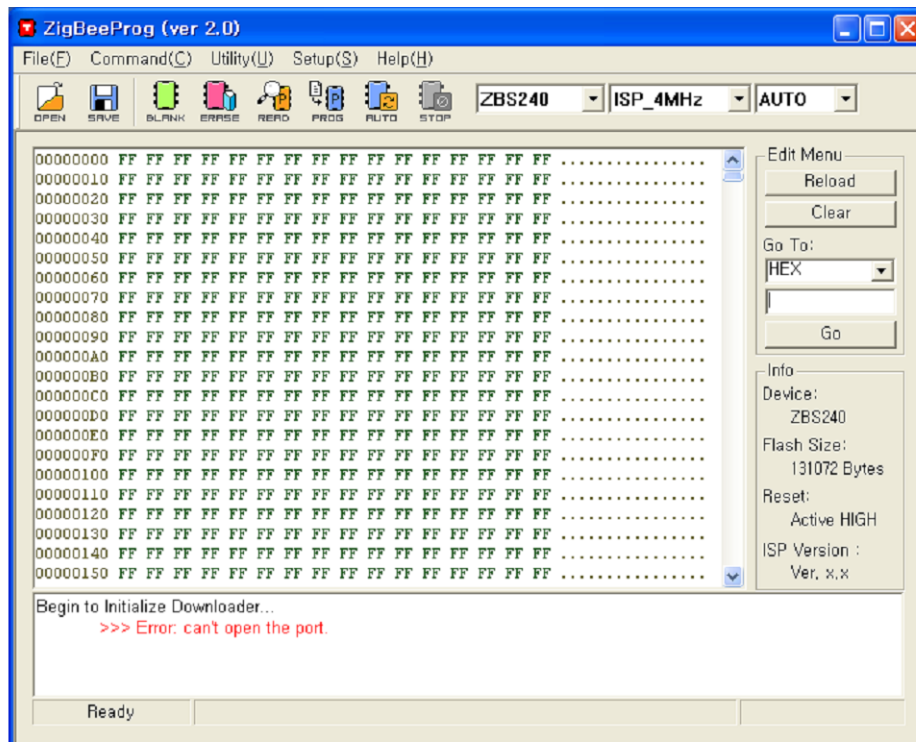
- ZigBeeProg can read/write the inner program memory and information memory area of Samsung Electrical ZigBee SoC's (ZBS240, ZBS241, ZBS242 etc.).
- USB Driver can be downloaded at www.zigbeeprog.com and www.seniorcom.co.kr



ZigBeeProg main body



USB 2.0 Cable



ZigBeeProg program

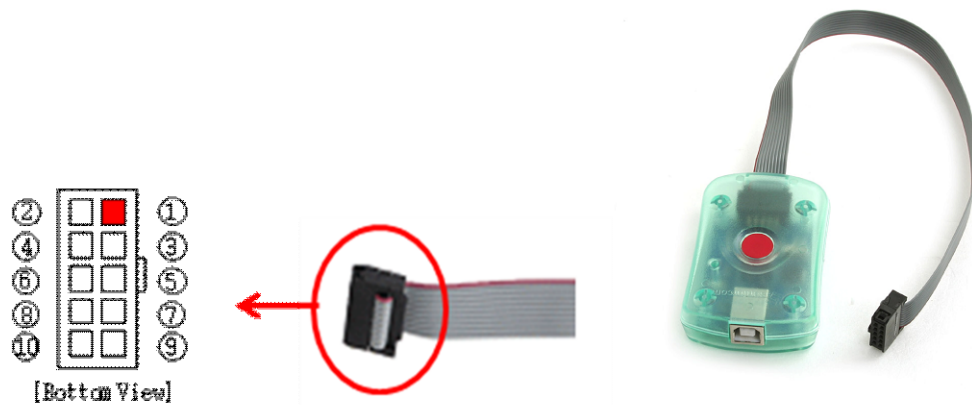
2. ZigBeeProg v2.0 Key Features

- Read/Write support for the inner part memory of Samsung Electrical ZigBee SoC's
- Firmware Update support function through ZigBeeProg
(Soc's can be added afterward through firmware updates)
- Auto Light function can be activated by using the red button in the middle
(This function is possible when Key Enable is set.)
- Fast speed download and download speed setup is available (Max 8MHz)
- Auto Activation is performed when ZigBeeProg is connected and run
- USB Connection: Product failure can be prevented when ESD Protector Device is installed
- Supporting 10 pin connectors
- ZigbeeProg v2.0 Or later : VDD_3V Pin voltage 2.9~3.1V, Max 300mA Output
- Supporting OS's: Win2000, Win2003, XP, Vista, Win7

3. ZigBeeProg v2.0 Cable Connection Method

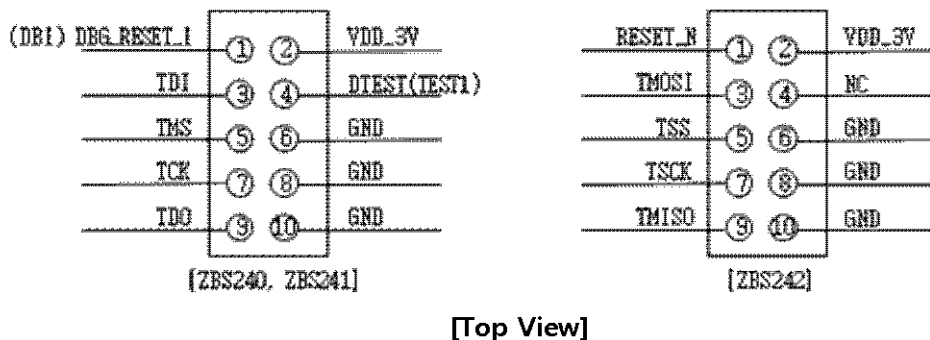
1) ZigBeeProg Cable

- Red button of ZigBeeProg indicates the number 1 Pin of a 10 pin flat cable



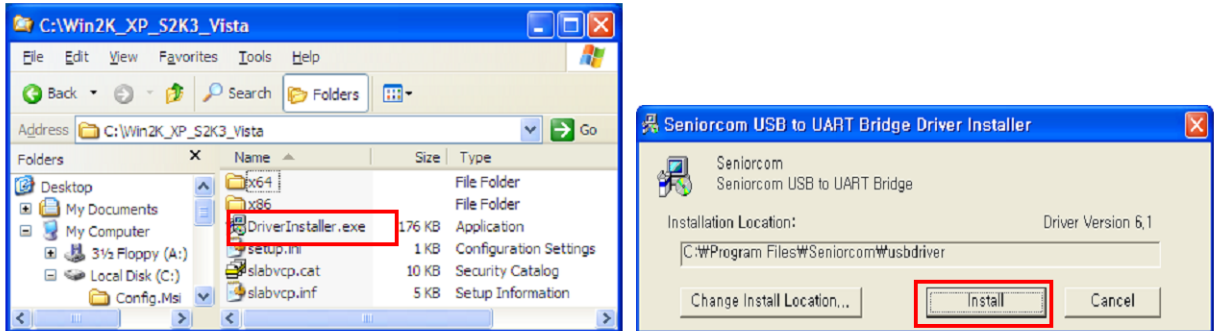
2) ZigBee SoC (Target Board) Connector

- 10 pin ZigBee SoC board connector connection method

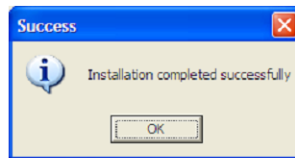


4. Driver Installation

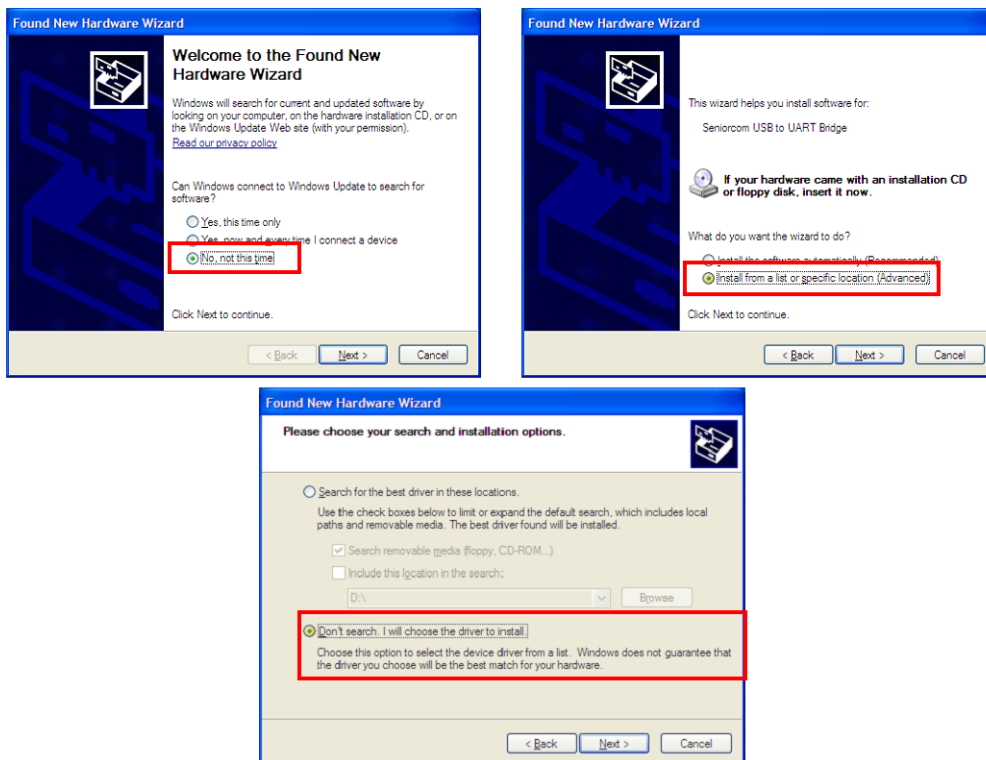
- 1) USB Driver (ZigBeeProg Win2000, Xp, Win2003, Vista, Win 7) can be downloaded at the homepage (www.zigbeeprog.com). Run DriverInstaller.exe and click install when it appears.



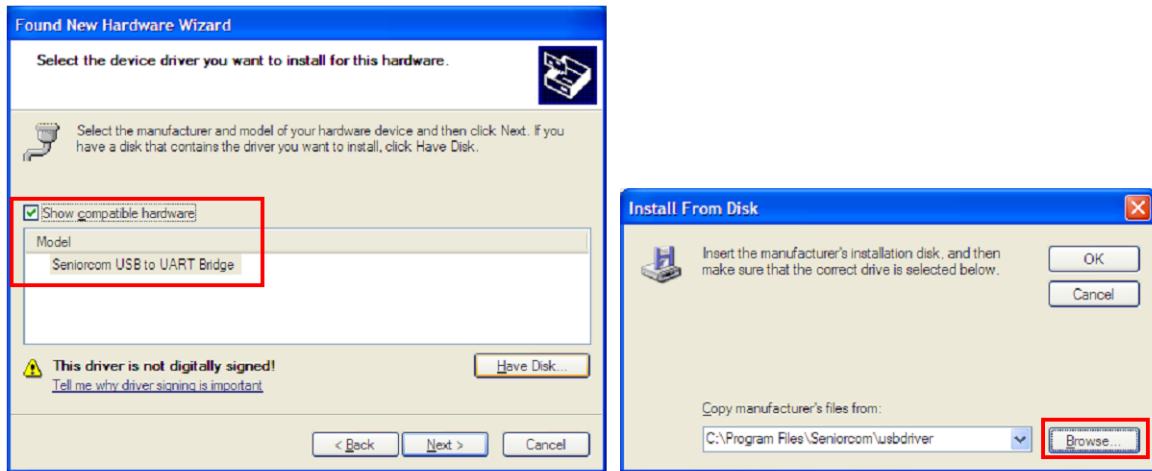
- 2) When driver installation is completed, if reboot message appears, the computer need to be restarted (Depending on OS's, there are cases that computer needs not to be restarted).



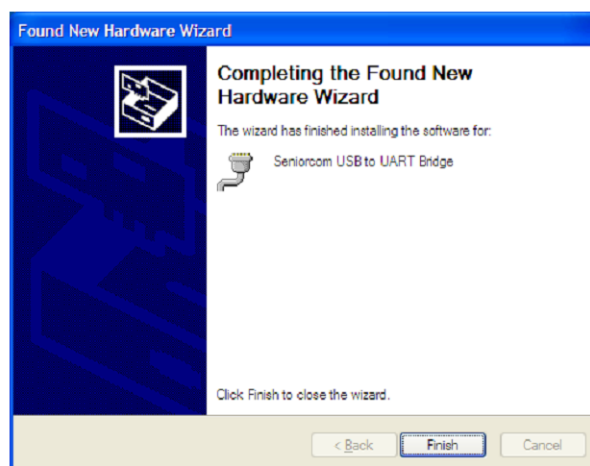
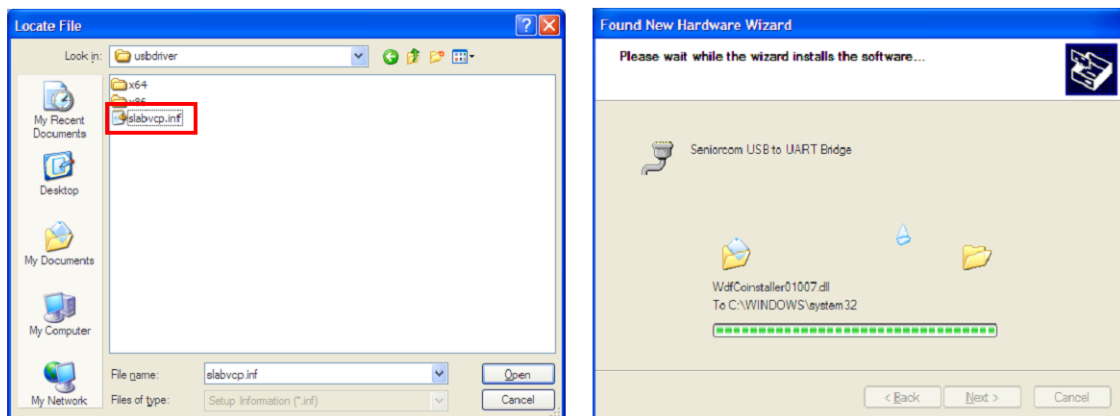
- 3) If ZigBeeProg is connected to a USB port, "Found New Hardware Wizard" window will appear. Choose install and click 'Next'. Click 'No' at Search and Install option. After that click 'Next'



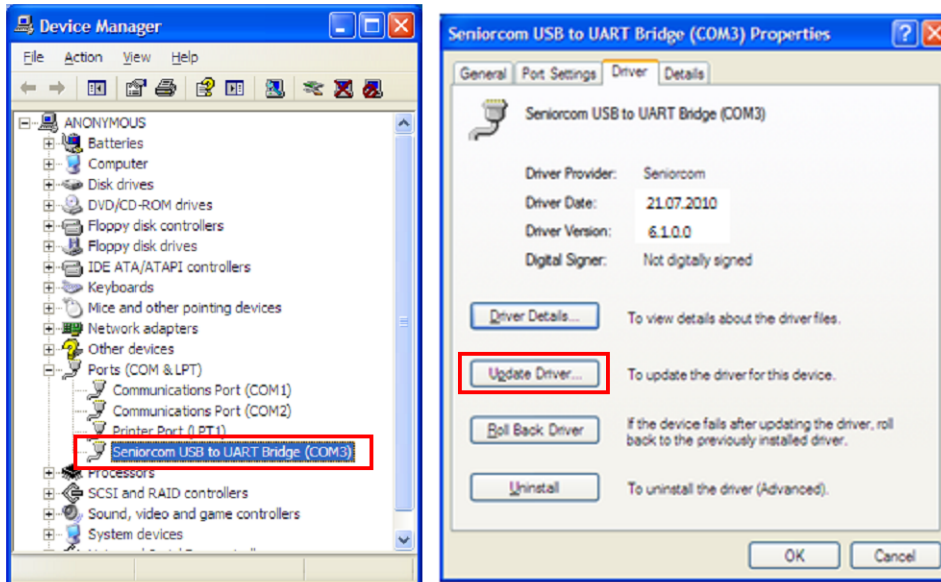
4) If you click 'Have Disk', Disk Install window will appear and choose 'Find'.



5) After Driver been downloaded, choose the folder with downloaded driver and open slabvcp.inf. If click 'Next', driver installation will be started.



- 1) After driver installation is complete, ZigBeeProg can be connected to a USB port. If auto port was setup but could not find one, click My Computer->Properties->Hardware->Device Manager, When the below window appears, double-click on PORT. "Seniorcom USB to UART Bridge " should be installed. And double-click to find Driver version, if driver version is 6.1.0.0 or later, the driver installation is complete.

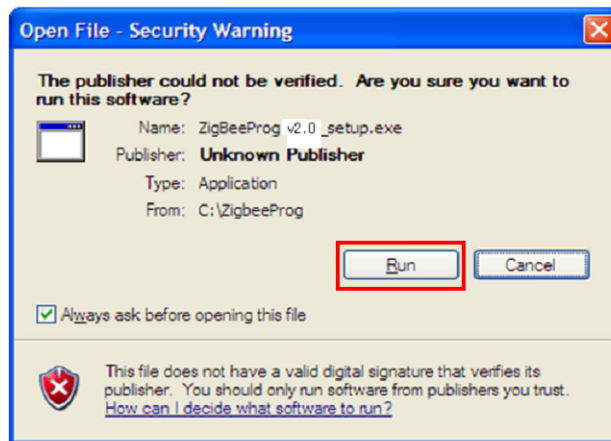


- 2) If "CP210X...." etc had been found, double click that part and choose driver and click "Driver Update". "Found New Hardware Wizard" or similar window will appear. Then update can be done with the same method as driver installation.

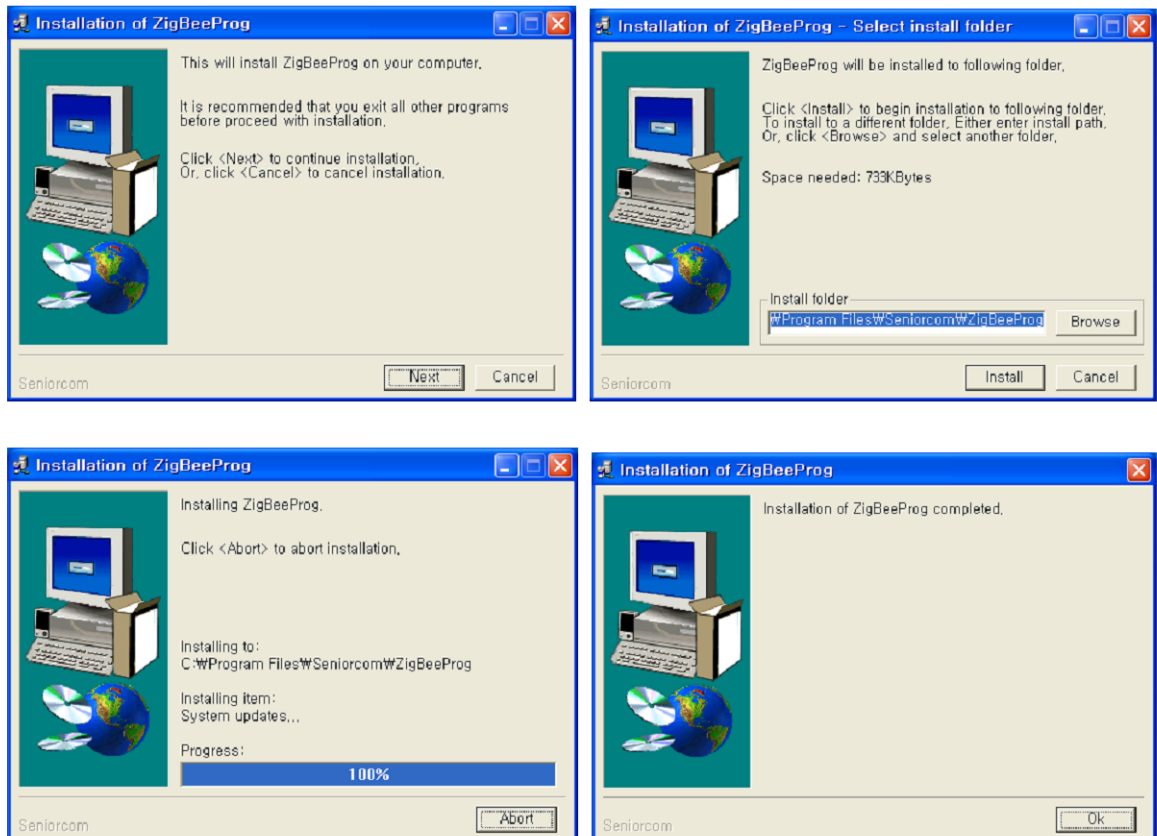


5. ZigBeeProg Installation Program

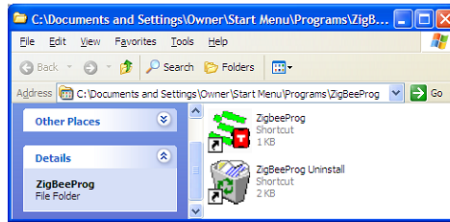
- 1) ZigBeeProg installation program ([ZigBeeProg v2.0_setup.exe](#)) can be downloaded at the firmware homepage www.zigbeeprog.com.
- 2) If you run the downloaded file, the below window appears. Click Run.



- 3) When the installation window appears, the installation procedure begins. Follow the instruction on the monitor.



4) Once the installation is complete, at start menu zigbeeprog folder will appear.



6. ZigBeeProg Program Usage

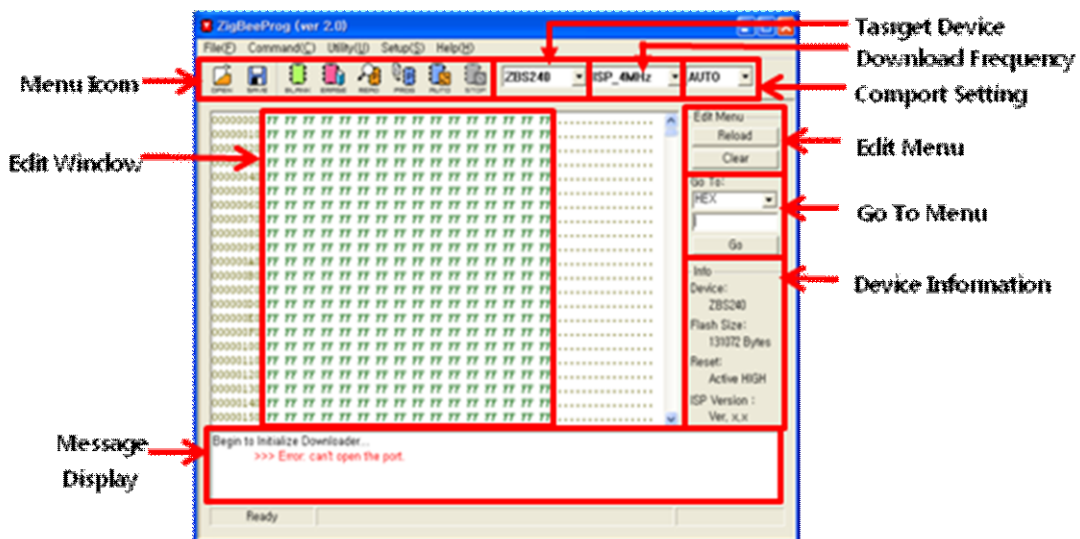
1) ZigBeeProg USB connection

If ZigBeeProg is successfully connected to a USB port, GREEN LED will turn on and ZigBeeProg run normally. If there is a problem on ZigBeeProg or firmware, RED LED will turn ON. In this case user has to update firmware to solve the problem.



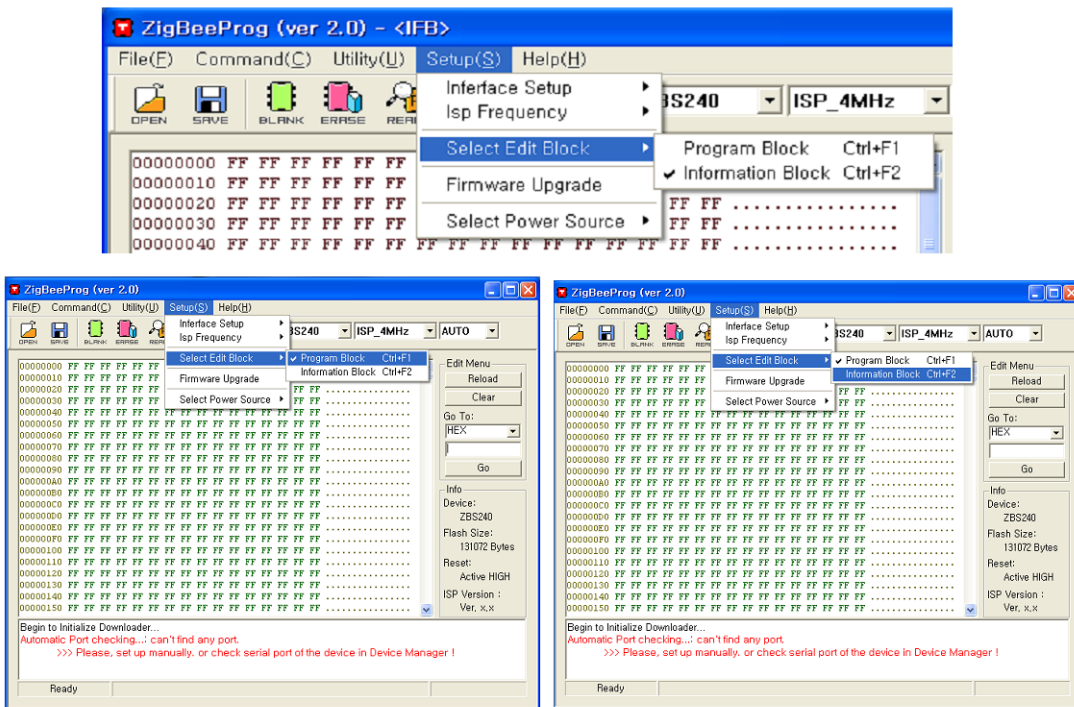
2) ZigBeeProg execution

When ZigBeeProg runs, it uses the prior settings. Device, ISP Frequency, and Comport will be set and device information data will be displayed.



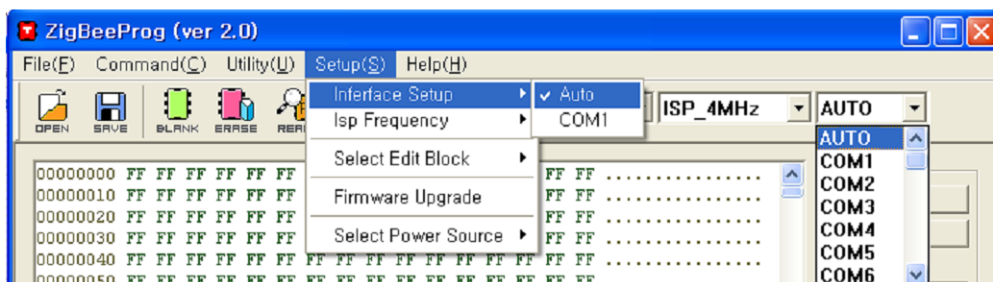
3) Memory Area Selection (Program Block, Information Block)

- Choose from Menu -> Setup -> Select Edit Block.
- Program Block : Memory area where the program that operates ZigBee SoC's is stored. The Edit window is in green like color. The operations including Erase, Write, and Read can be done in Program Block.
- Information Block : Memory area where the data chosen by a user is stored. The user can save any data such as setting values. The Edit window is in red like color. The operations including Erase, Write, and Read can be done in Information Block.



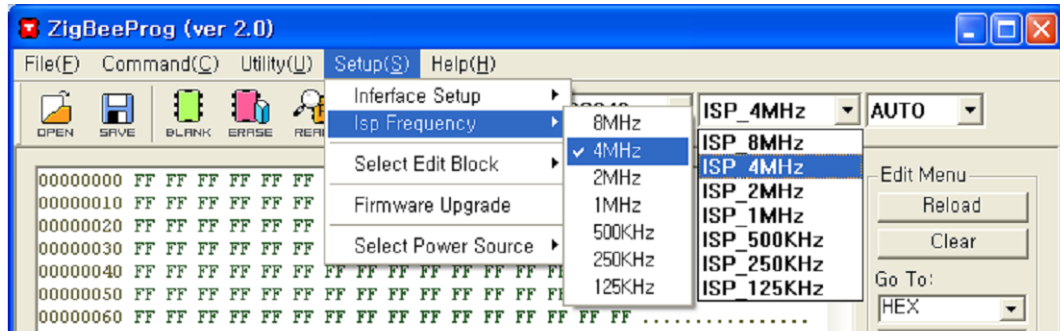
4) Comport Setup

- Choose from Menu -> Setup -> Interface Setup or the list bar.
- At Menu bar, comports that are currently connected to a PC are displayed.
- Auto Setup : ZigBeeProg searches the connected comports automatically.
- Manual Setup : A comport can be chosen manually. (Select a comport from Properties Administrator.)



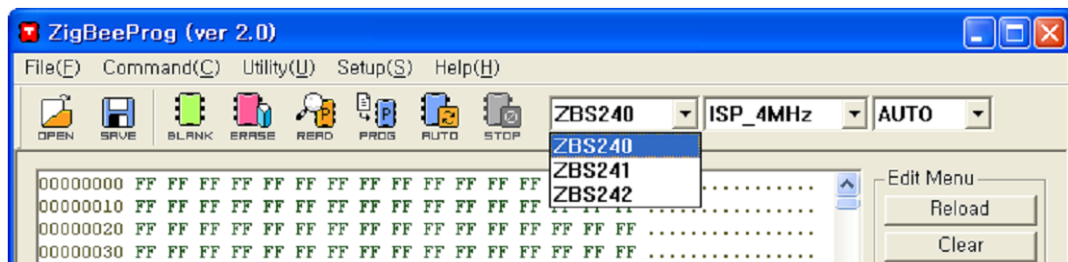
5) ISP download frequency setup(data read/write frequency setup)

- Select a frequency from Menu->Setup-> ISP Frequency or the list bar.
- Available frequencies are 125KHz, 250KHz, 500KHz, 1MHz, 2MHz, 4MHz, and 8MHz.
- Higher ISP frequency makes the data reading and writing speed faster.



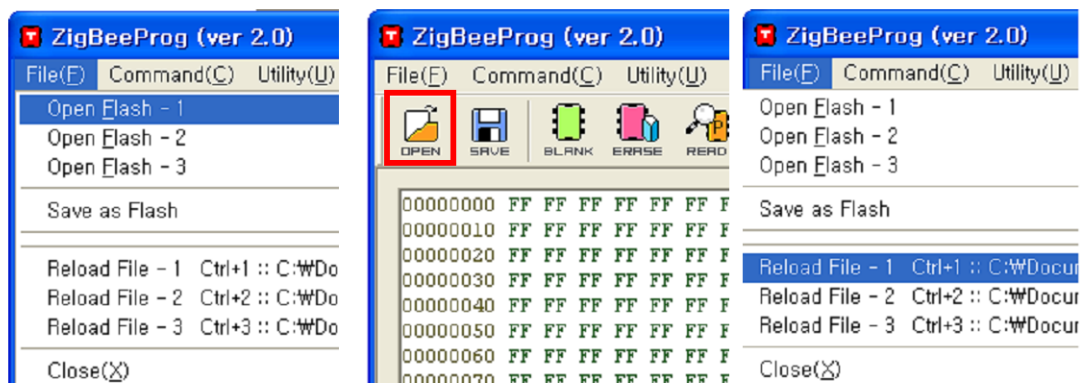
6) Target Device Selection

- Select Device from the list bar.



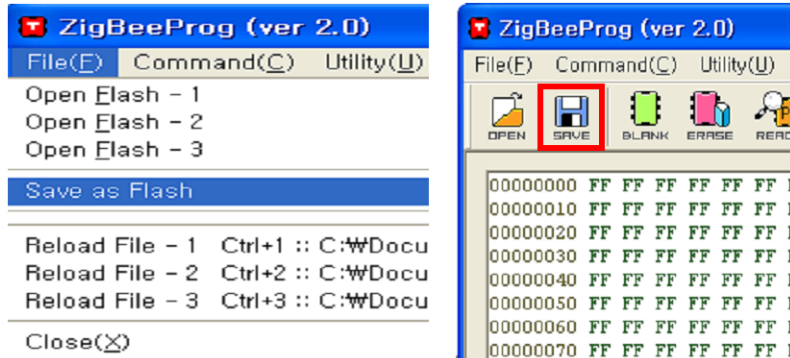
7) Open Flash File

- There are three types of Open Flashes that provide same functions. Open Flash is linked with Reload File.
- Open Flash-1 is linked with Reload File-1. This function is useful when you work with 3 Flash files.
- The below OPEN icon acts as Open Flash-1.



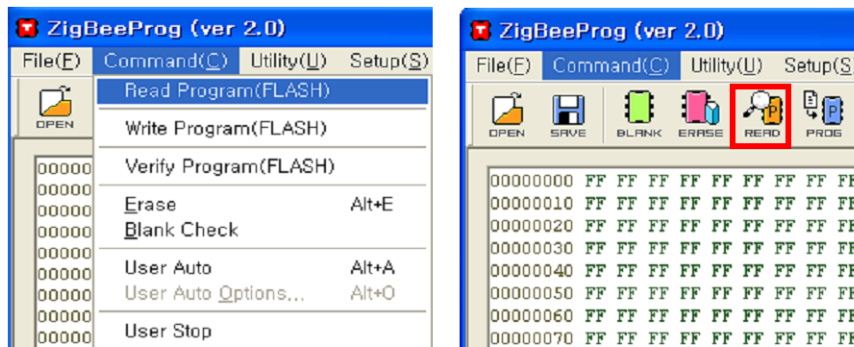
8) Save as Flash File

- Save as Flash saves currently open Flash File or edited data as hex file.
- The below Save icon acts as Save as Flash.



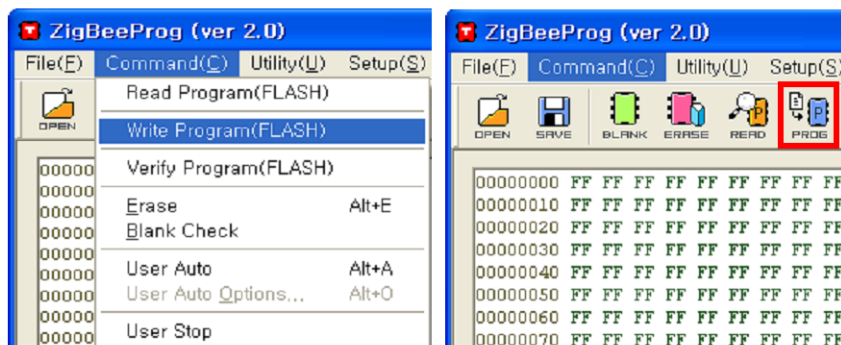
9) Read Flash Data from Device(Read Program)

- Read Flash data from the currently setup Program memory or Information memory.
- The below READ icon acts as Read Program(FLASH).



10) Write Flash Data to Device(Write Program)

- Write the data in current edit window to Device. The data can be from either Program memory or Information memory,
- The below PROG icon acts as Write Program(FLASH).



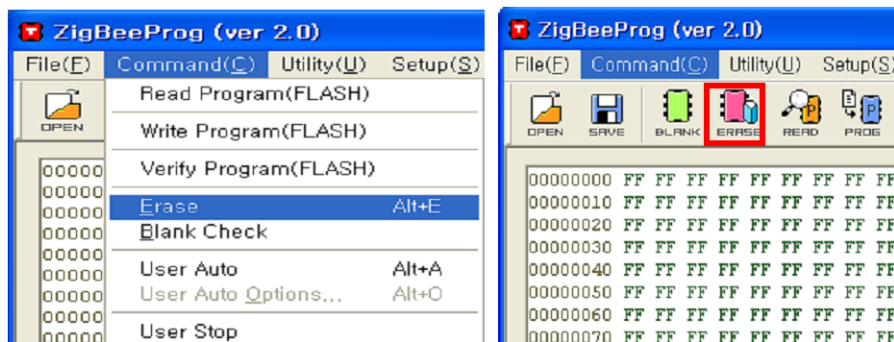
11) Compare Data(Verify Program)

- Compare the data in current edit window with the data in currently setup memory that is either Program memory or Information memory.



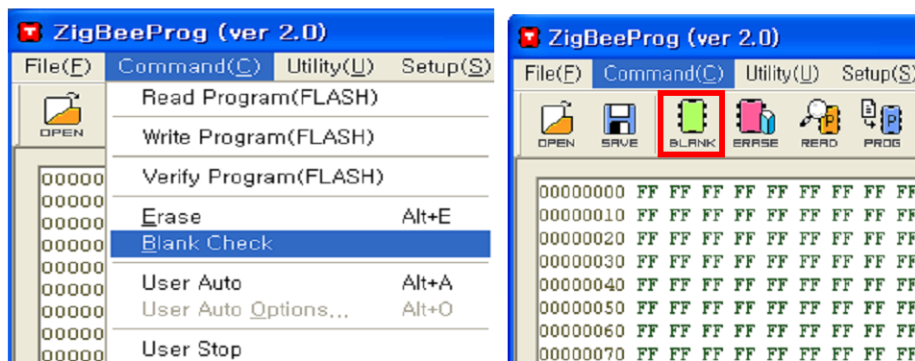
12) Erase Device(Erase)

- Erase the data in currently setup memory that is either Program memory or Information memory.
- Click ERASE icon to erase the data.



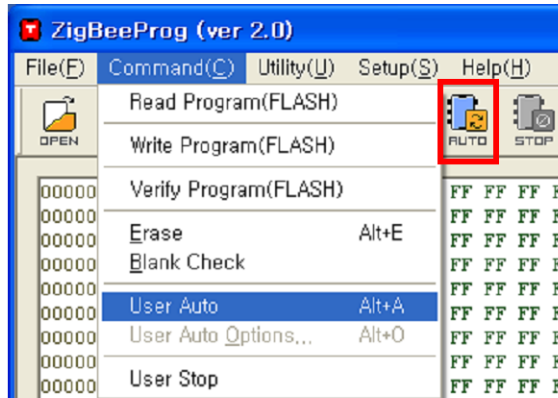
13) Blank Check

- Check if the data in currently setup memory that is either Program memory or Information memory is initialized (all data 0xFF).
- The below BLANK icon acts as Blank Check.



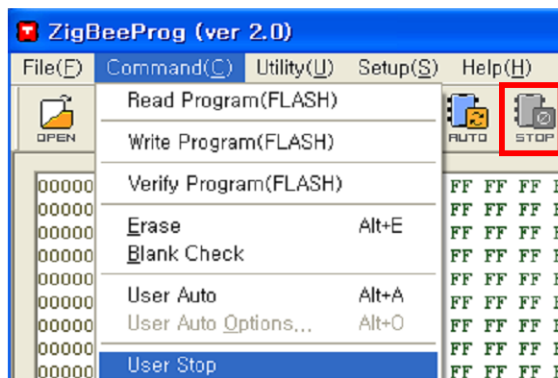
14) Automatic Use(User Auto)

- Execute Erase, Write Program, and Verify Program sequentially with the data in currently setup memory that is either Program memory or Information memory..
- The AUTO icon acts as User Auto.



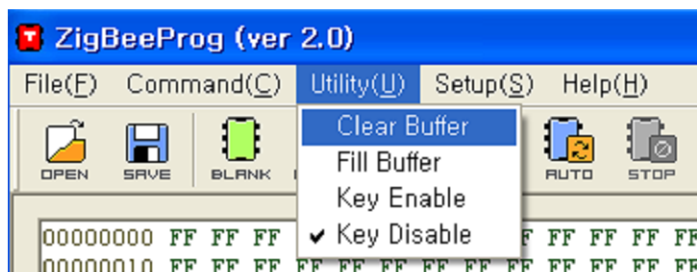
15) Stop (User Stop)

- Stop the current command.
- Select User Stop as shown in the below window.



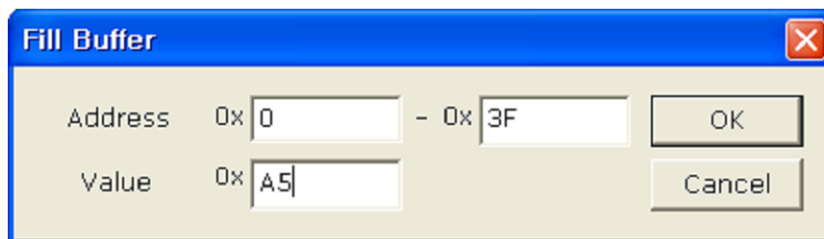
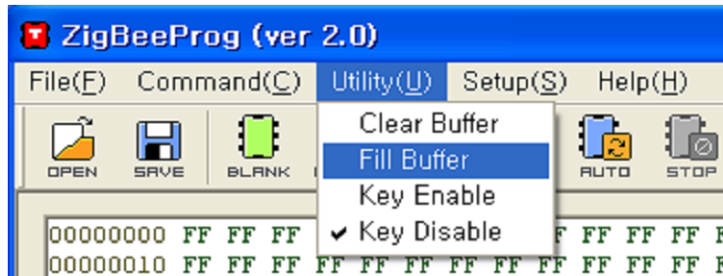
16) Clear Buffer (Clear Buffer)

- Clear the data in the current edit window. All value erase to 0xFF.



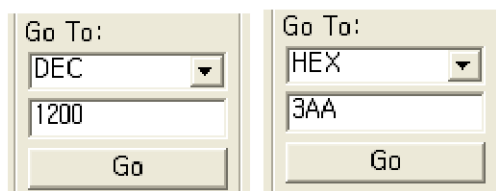
17) Fill Buffer (Fill Buffer)

- Fill buffer with user selected values.
- Click Utility→Fill Buffer. Fill the blanks with user selected values.



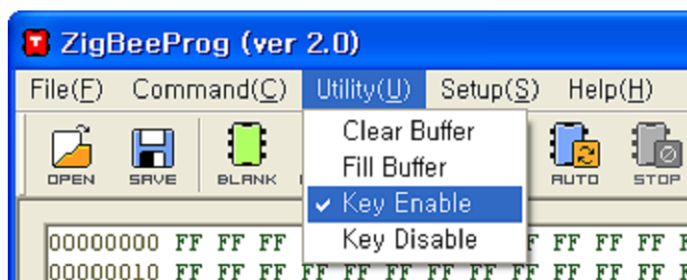
18) Go To Address(Go To)

- Use when a user wants to change the address.
- Select HEX or DEC format and put the address.



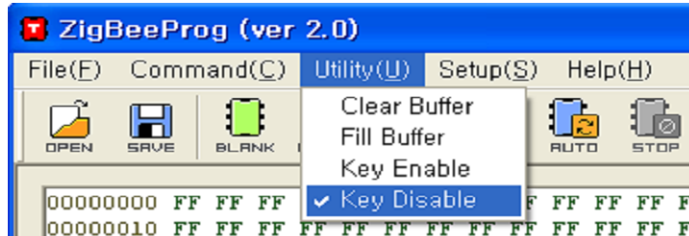
19) Enable Auto Command(Key Enable)

- Key Enable utility enables the red button on the ZigBeeProg device.
- Press the red button on the ZigBeeProg device for Auto Command. Erase, Write Program, and Verify Program will be executed sequentially.



20) Auto Command Disable(Key Disable)

- Key Disable utility disables the red button on the ZigBeeProg device.
- Pressing the red button on the ZigBeeProg device shows no effect at all.



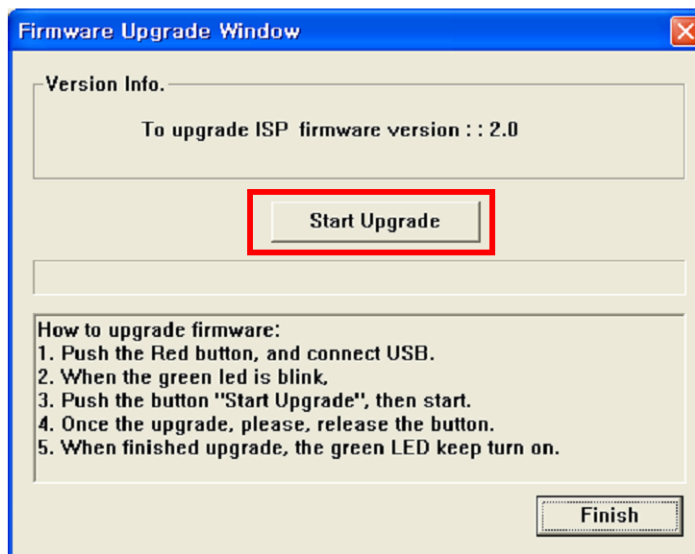
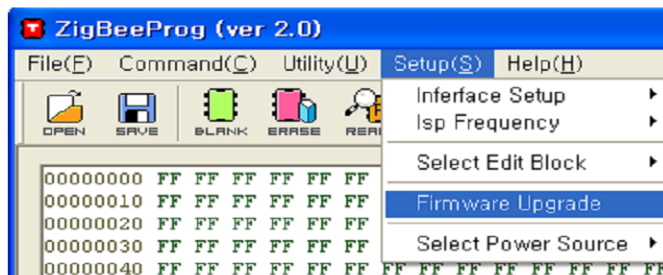
7. Firmware Update

1) Reason to Update

- New released firmware is available.
- The RED LED is ON when ZigBeeProg device is connected to USB,.

2) Update Method

- Click Firmware Upgrade after ZigBeeProg device is connected.

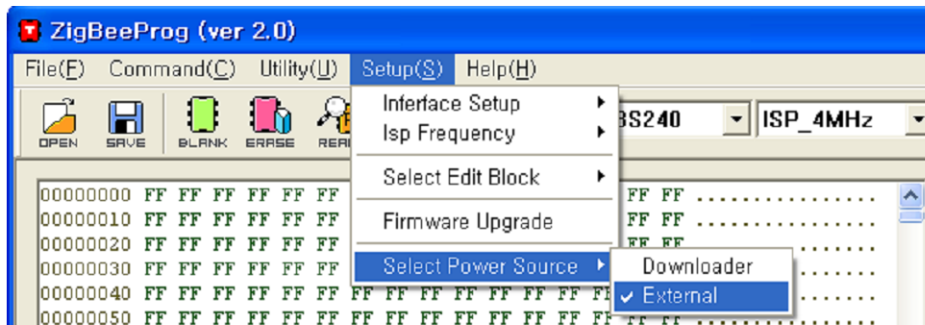


- Separate the ZigBeeProg device from the USB port. Press and hold the red button and connect the ZigBeeProg device to the USB port again. (GREEN LED will start to blink.)
- While GREEN LED is blinking, click the Start Upgrade button. Upgrade process will begin.
- Once the update started, release the red button.
- When Firmware Update is complete, GREEN LED turns ON.

8. Select power Source

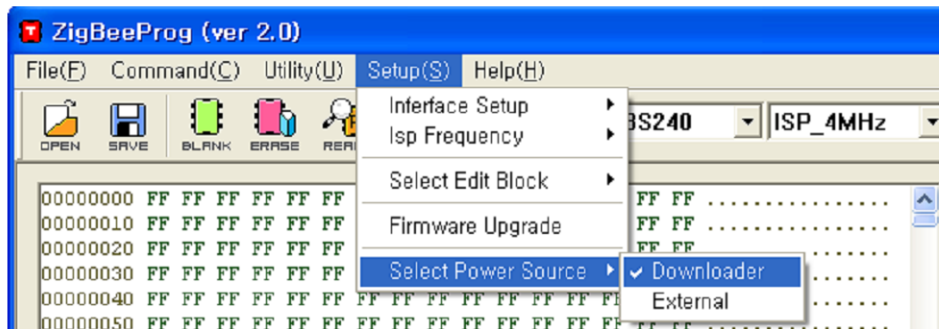
1) External Power Source

- Select a frequency from Menu->Setup->Select Power Source->External
- Target board's power must be supplied from an external power supply.
- Power LED (RED LED) turns OFF.



2) Downloader(ZigbeeProg) Power Source

- Select a frequency from Menu->Setup->Select Power Source->Downloader
- Target board's power is supplied from the downloader(ZigbeeProg).
- Power LED (RED LED) turns ON.



9. Error Message

- 1) Error: Initial connection test failed
 - The Device setup is not consistent with the connected Target board.
 - Target board is not connected.

- 2) Error: Can not open a port
 - ZigBeeProg device is not connected to a USB port.
 - USB driver is not installed properly
 - ZigBeeProg device connected to the USB port is not compatible with a comport.
(Select a comport manually after checking Installation Administrator.)

10. Technical Support and Maintenance

- Please visit www.zigbeeprog.com or www.seniorcom.co.kr for more information.
- For information about maintenance service, please visit our Q&A session from our website..
- For technical support, please contact adr@hanmail.net