



孕龍科技股份有限公司
ZeroPlus Technology Co., Ltd.

SPECIFICATION

MODEL: B08007-LAP-NEC PD6122-M

PART NO: _____

VERSION: V1.11

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to ZeroPlus Technology after signing.

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1 Software Download

Please install the software as the following steps:

Remark: We won't have additional notice for you, when there is any modification of the module specification. If there is some unconformity caused by the module version upgrade, users should take the module software as the standard.

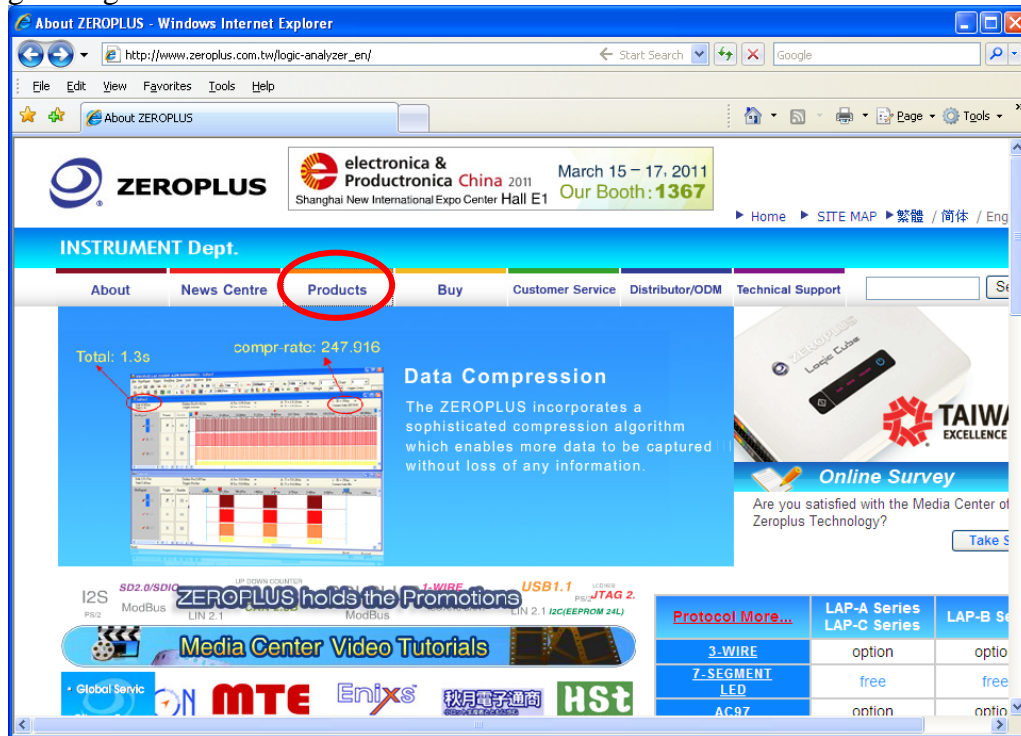
STEP 1. Visit the website of ZeroPlus: <http://www.zeroplus.com.tw>.

STEP 2. Click the **English** in the Instrument Division part on the Homepage.

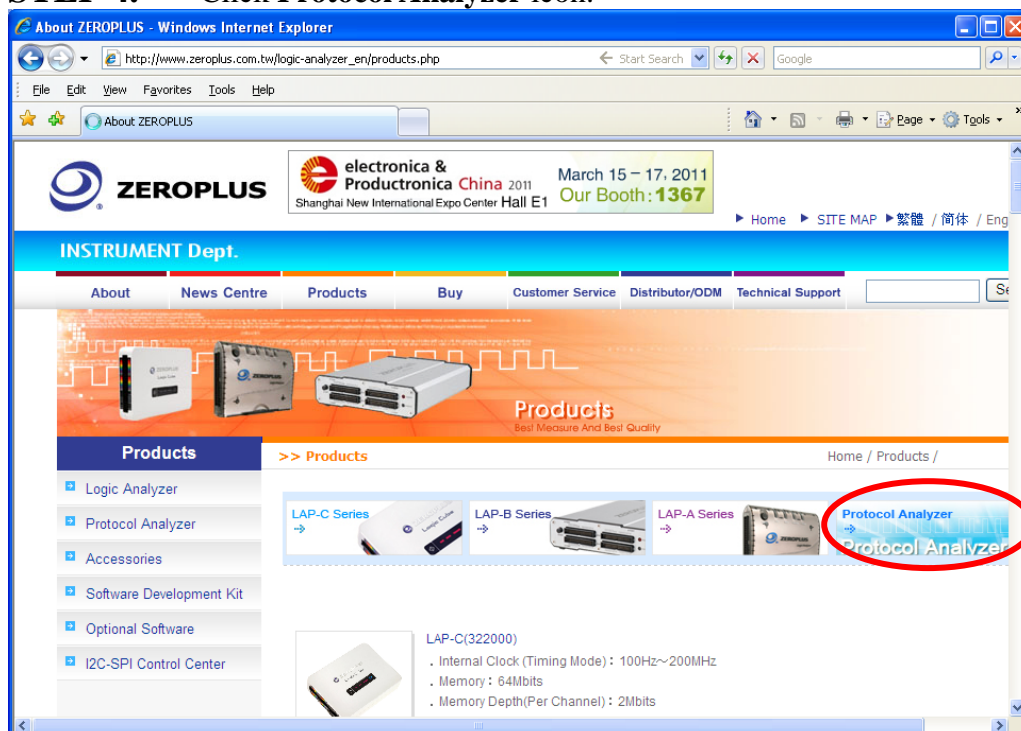




STEP 3. Click **Products** menu or select **Protocol Analyzer** item from its pull-down menu to go straight to STEP 5.

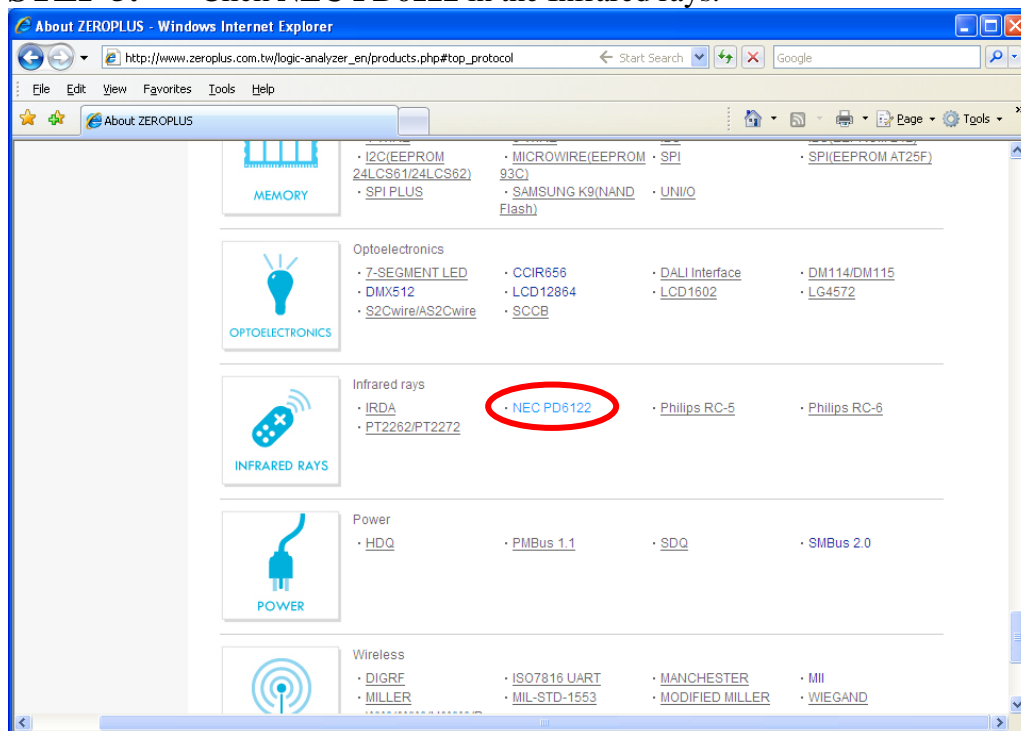


STEP 4. Click **Protocol Analyzer** icon.

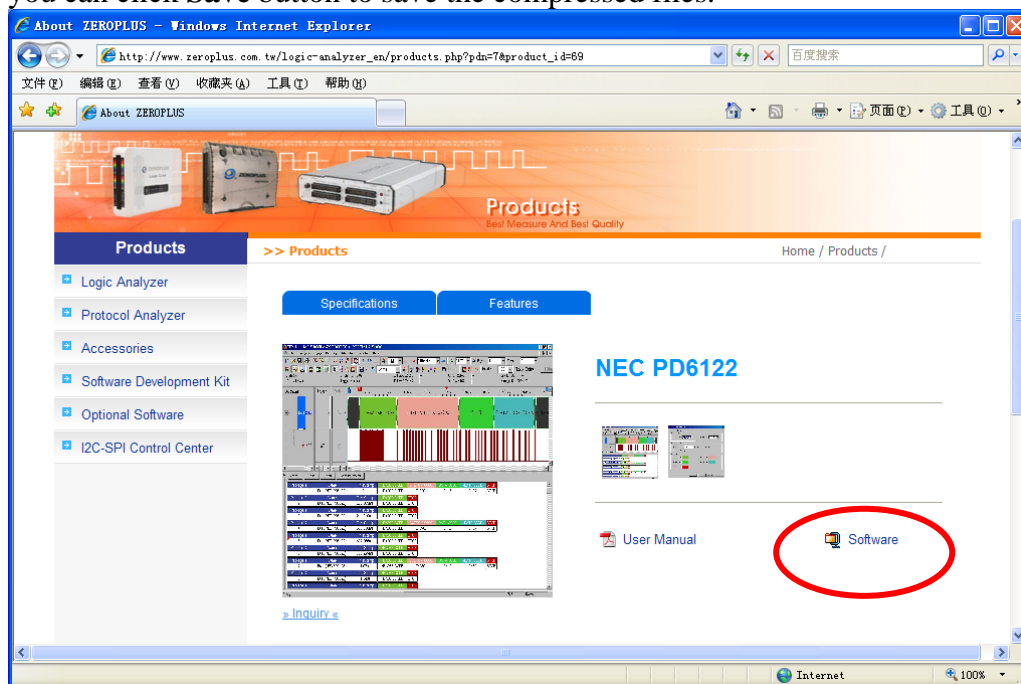




STEP 5. Click **NEC PD6122** in the Infrared rays.



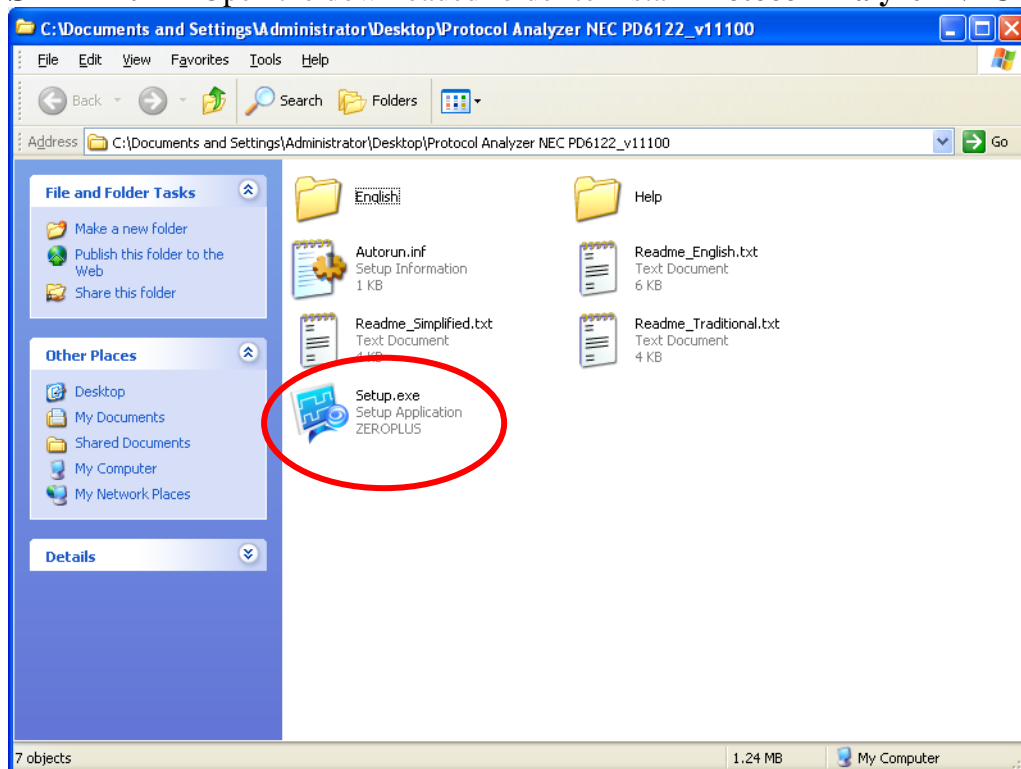
STEP 6. Click **Software** in the Products page. When the File Download dialog box appears, you can click **Save** button to save the compressed files.



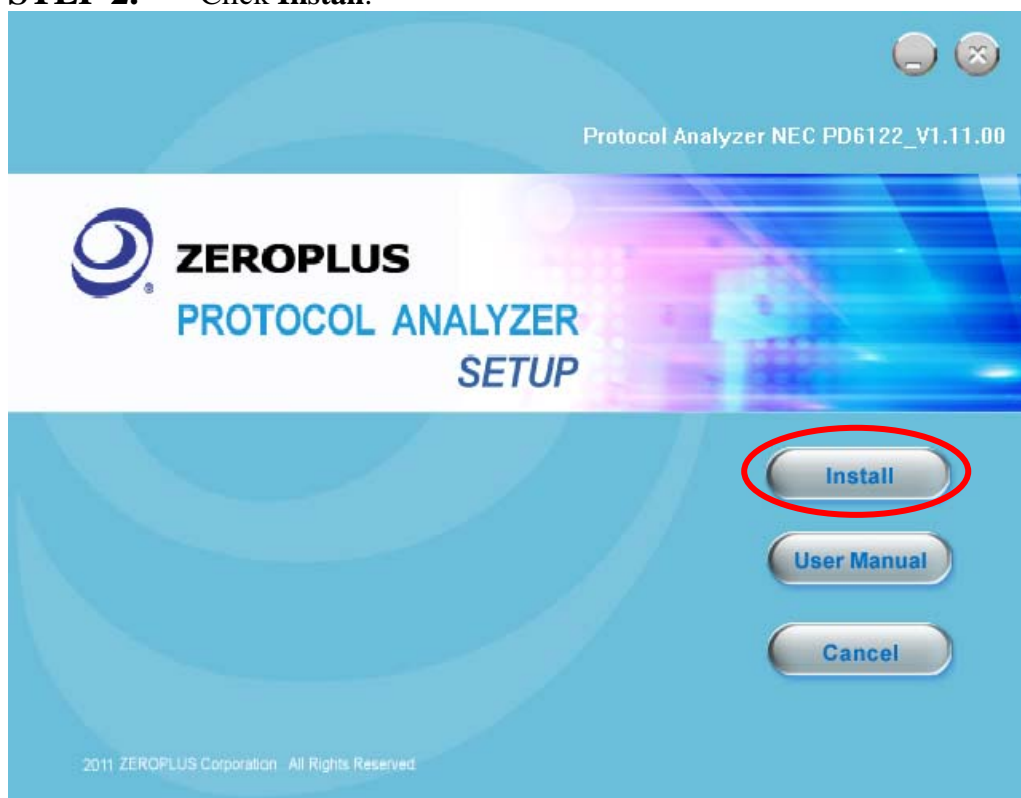


2 Software Installation

STEP 1. Open the downloaded folder to install **Protocol Analyzer NEC PD6122**.

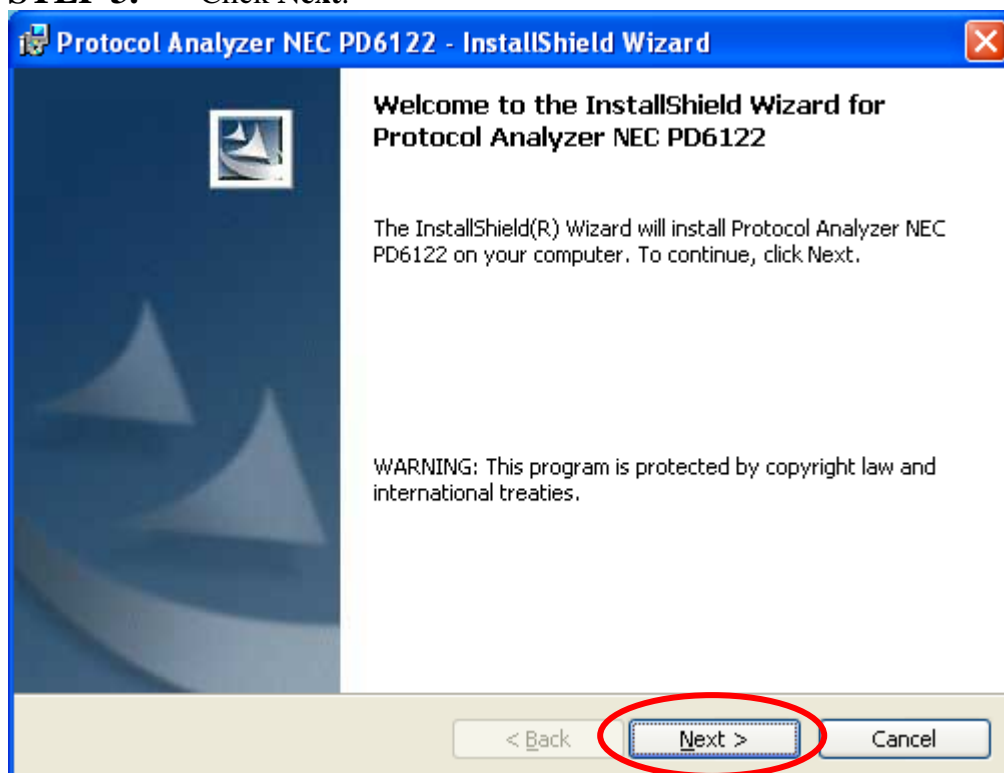


STEP 2. Click **Install**.

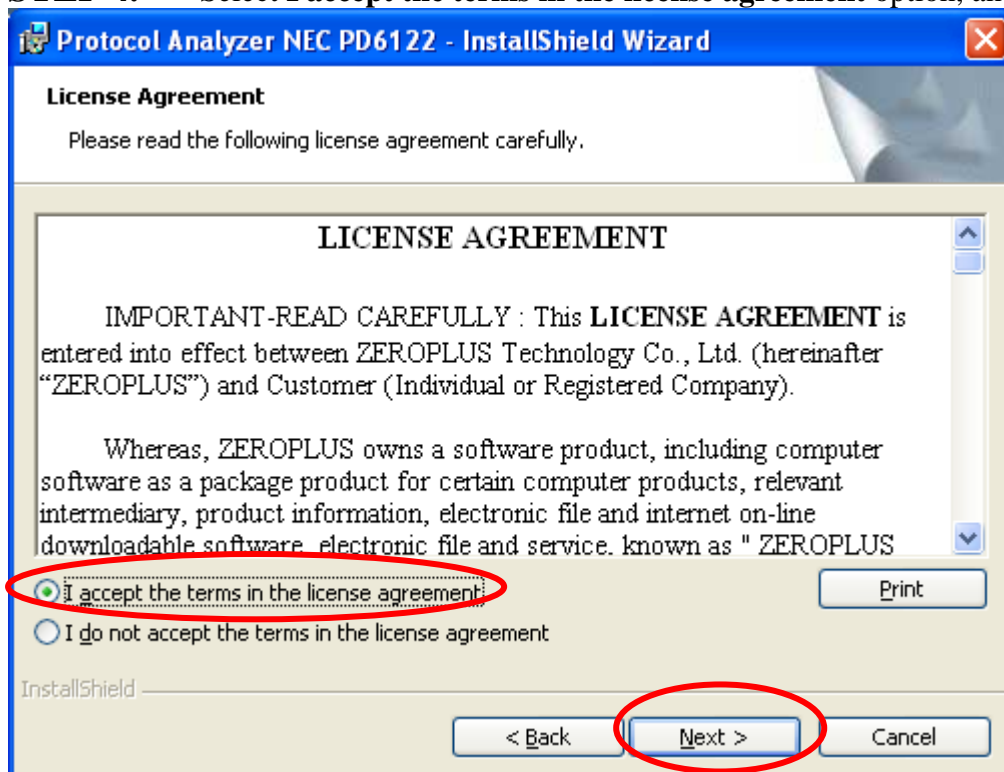




STEP 3. Click Next.



STEP 4. Select **I accept the terms in the license agreement** option, and then press Next.





STEP 5. Fill in users' information in the below dialog box and then click **Next**.

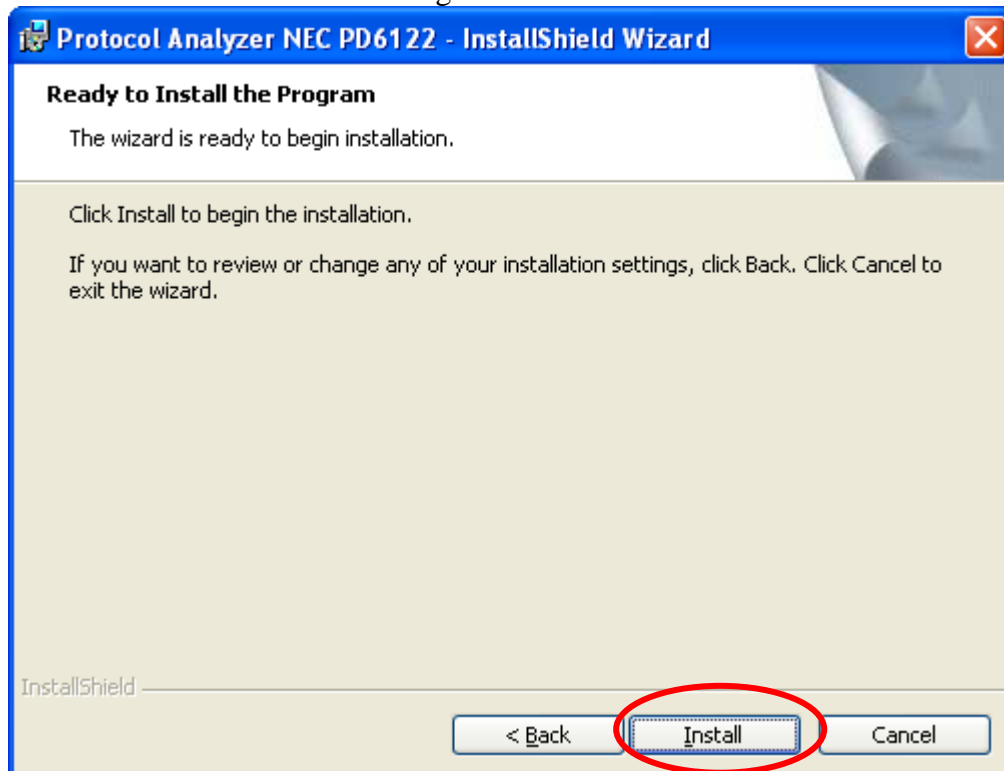
The dialog box is titled "Protocol Analyzer NEC PD6122 - InstallShield Wizard". It has a "Customer Information" section with the instruction "Please enter your information." Below this are two text input fields: "User Name:" containing "Microsoft" and "Organization:" containing "User". There is a section "Install this application for:" with two radio button options: "Anyone who uses this computer (all users)" (which is selected) and "Only for me (Microsoft)". At the bottom, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.

STEP 6. Select **Complete** and then click **Next**.

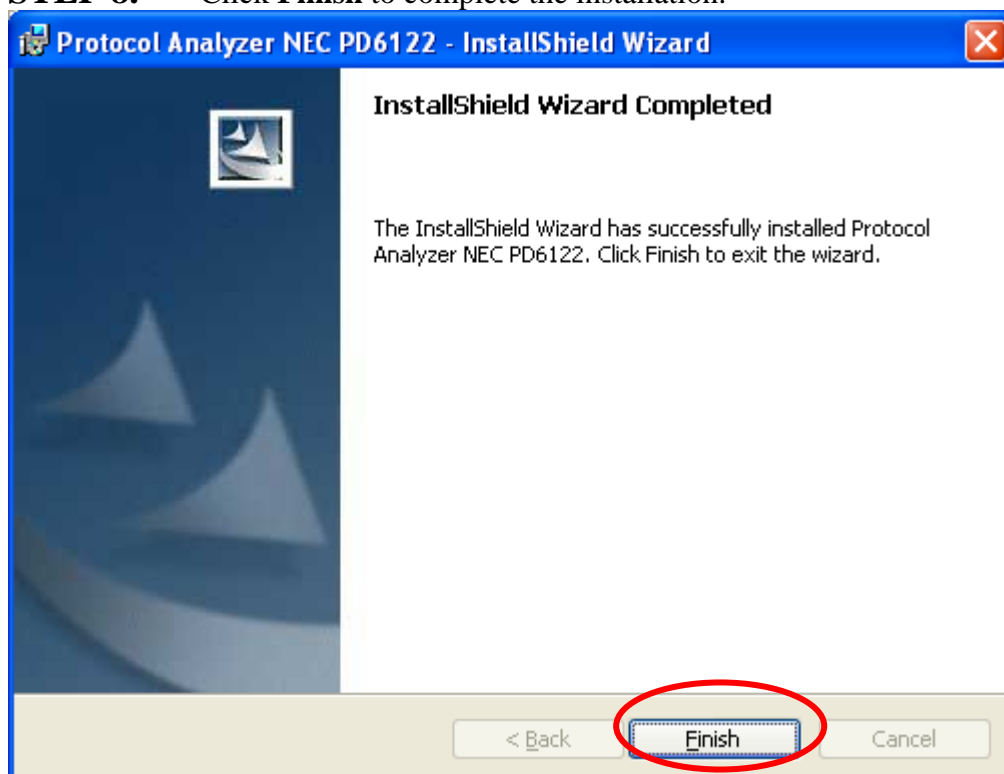
The dialog box is titled "Protocol Analyzer NEC PD6122 - InstallShield Wizard". It has a "Setup Type" section with the instruction "Choose the setup type that best suits your needs." Below this is the text "Please select a setup type." There are two radio button options: "Complete" (which is selected) and "Custom". The "Complete" option has a description: "All program features will be installed. (Requires the most disk space.)" and is accompanied by an icon of a computer with a red 'X'. The "Custom" option has a description: "Choose which program features you want installed and where they will be installed. Recommended for advanced users." and is accompanied by an icon of a computer with a red 'X'. At the bottom, there are three buttons: "< Back", "Next >" (which is circled in red), and "Cancel". The "InstallShield" logo is visible in the bottom left corner.



STEP 7. Click **Install** to begin the installation.



STEP 8. Click **Finish** to complete the installation.





3 User Interface

In the configuration dialog box, please refer to the below images to select options of setting **NEC PD6122 Module**.

NEC PD6122 Configuration dialog box

Item	Color	Data Format
Header	[Green]	Default
Data	[Green]	Default
Stop	[Red]	Default
Custom	[Red]	Default
/Data	[Teal]	Default

Pin Assignment:

Channel: The NEC PD6122 only needs one channel to decode the signals, and the default is A0.

Transmission Direction: Set the Direction to LSB->MSB or MSB->LSB.

Carrier Period: Set the Carrier Period in the range from 0.1 to 560us when the Carrier Decoding is enabled.

Carrier Decoding: Set the Decoding Mode to Carrier Decoding when the Carrier Decoding is enabled.

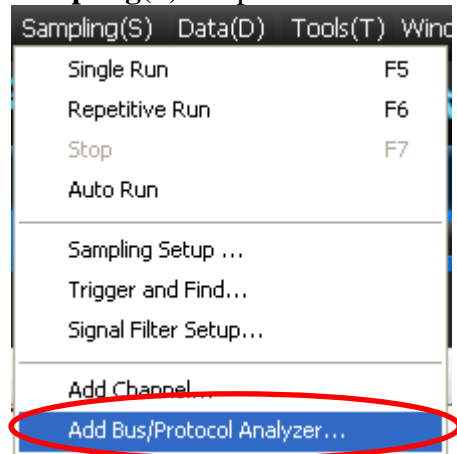
Protocol Analyzer Format:

The Color of each Item can be varied as the users' requirements. The Items (Custom, Data and /Data) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the Data Format of these Items (Custom, Data and /Data) in the Waveform Display Area and Packet List is controlled by the Protocol Analyzer. The default Data Format is controlled by the main program and the Data Format of these items (Custom, Data and /Data) is the Default.

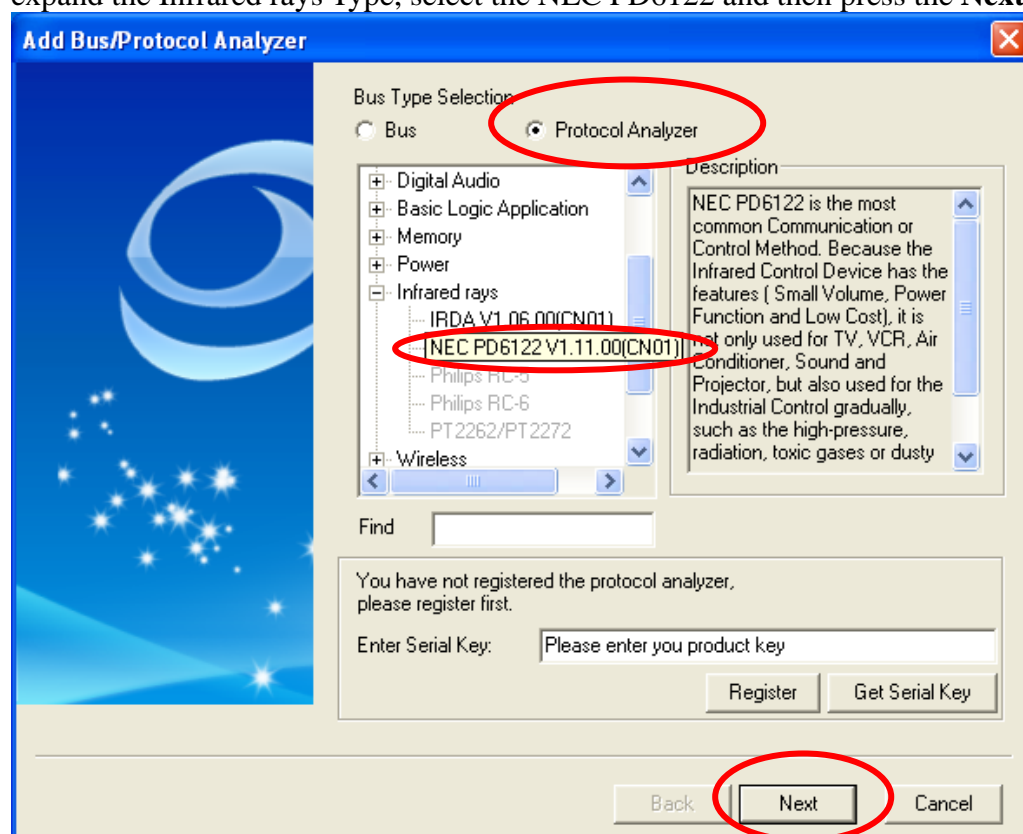


4 Operating Instructions

STEP 1. Select the **Add Bus/Protocol Analyzer** item on the pull-down menu of the **Sampling(S)** to open the **Add Bus/Protocol Analyzer** dialog box.

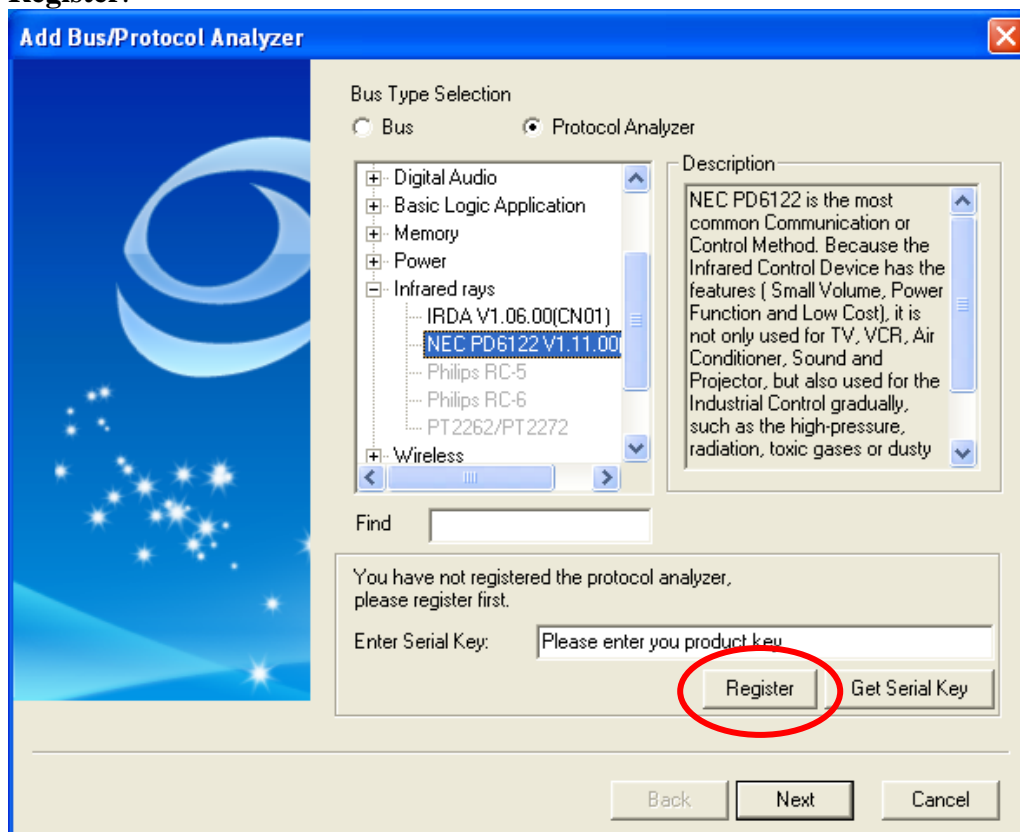


STEP 2. Select the Protocol Analyzer item in the Add Bus/Protocol Analyzer dialog box, expand the Infrared rays Type, select the NEC PD6122 and then press the **Next**.

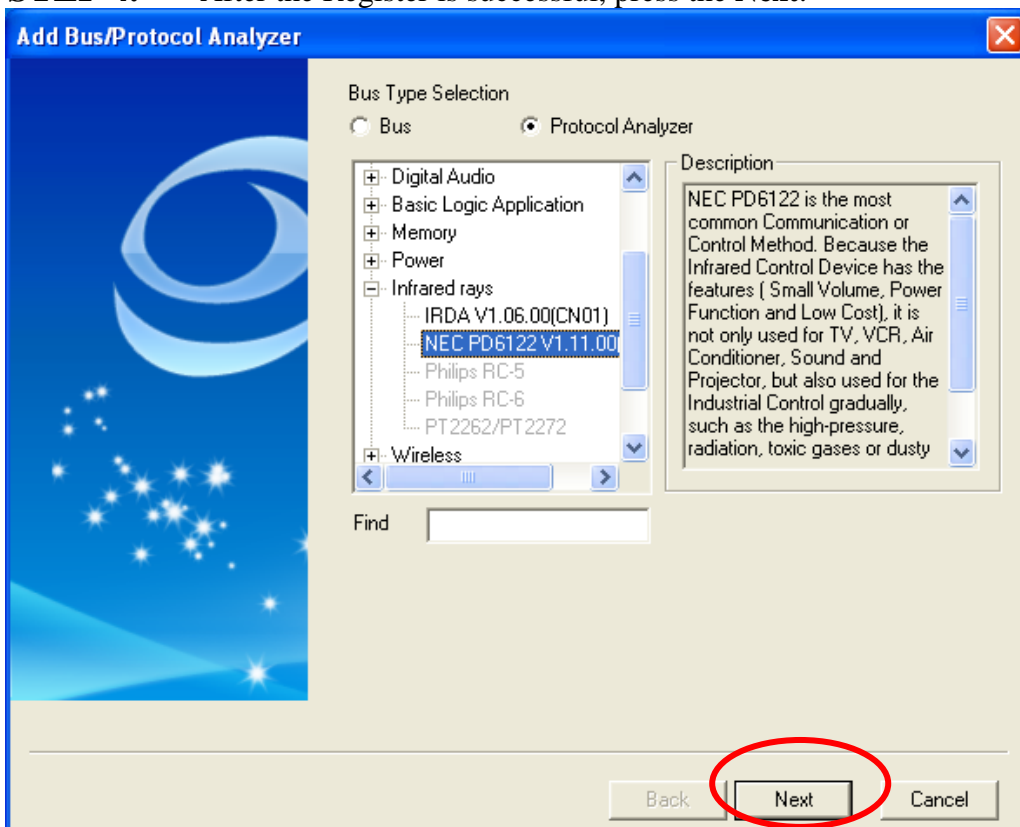




STEP 3. Enter the Serial Key of the NEC PD6122 under this Model, and then press the **Register**.



STEP 4. After the Register is successful, press the **Next**.





STEP 5. Open the PROTOCOL ANALYZER NEC PD6122 dialog box and set the **Channel**.

The screenshot shows the 'PROTOCOL ANALYZER NEC PD6122' dialog box. The 'Pin Assignment' section has a 'Channel' dropdown menu set to 'A0', which is circled in red. Below it, the 'Protocol Analyzer Property' section shows 'Transmission Direction' set to 'LSB->MSB' and 'Carrier Period' set to '26.3' us. The 'Protocol Analyzer Format' section contains two tables for configuring data items.

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Buttons at the bottom: Default, Back, Next, Cancel.

STEP 6. Set the **Transmission Direction** to LSB->MSB or MSB->LSB.

The screenshot shows the 'PROTOCOL ANALYZER NEC PD6122' dialog box. The 'Transmission Direction' dropdown menu in the 'Protocol Analyzer Property' section is circled in red and set to 'LSB->MSB'. The 'Channel' is still 'A0'. The 'Protocol Analyzer Format' section remains the same as in Step 5.

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Buttons at the bottom: Default, Back, Next, Cancel.



STEP 7. Set the **Carrier Period** in the range from 0.1 to 560us.

PROTOCOL ANALYZER NEC PD6122

Pin Assignment

Channel: A0

Protocol Analyzer Property

Transmission Direction: LSB->MSB

Carrier Period: 26.3 us
(Min: 0.1, Max: 560)

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Default Back Next Cancel

STEP 8. Set the **Carrier Decoding**.

PROTOCOL ANALYZER NEC PD6122

Pin Assignment

Channel: A0

Protocol Analyzer Property

Transmission Direction: LSB->MSB

Carrier Period: 26.3 us
(Min: 0.1, Max: 560)

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Default Back Next Cancel



STEP 9. Set the Color of each Item and the Data Format of the Items (Custom, Data and /Data).

Pin Assignment

Channel: A0

Protocol Analyzer Property

Transmission Direction: LSB->MSB Carrier Period: 26.3 us
☒ Carrier Decoding (Min: 0.1, Max: 560)

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Default Back Next Cancel

STEP 10. Press the **Next** to finish all settings.

Pin Assignment

Channel: A0

Protocol Analyzer Property

Transmission Direction: LSB->MSB Carrier Period: 26.3 us
☒ Carrier Decoding (Min: 0.1, Max: 560)

Protocol Analyzer Format

Item	Color	Data Format	Item	Color	Data Format
Header	Green	Default	Custom	Red	Default
Data	Green	Default	/Data	Teal	Default
Stop	Red	Default			

Default Back **Next** Cancel



STEP 11. Please enter the Bus Name, select **Yes, please delete** or **No, please reserve** and then press **Finish**.

Add Bus/Protocol Analyzer

Please input the Bus name

BUS

Do you want to delete the other Buses and channels in the software?

☐ Yes, please delete

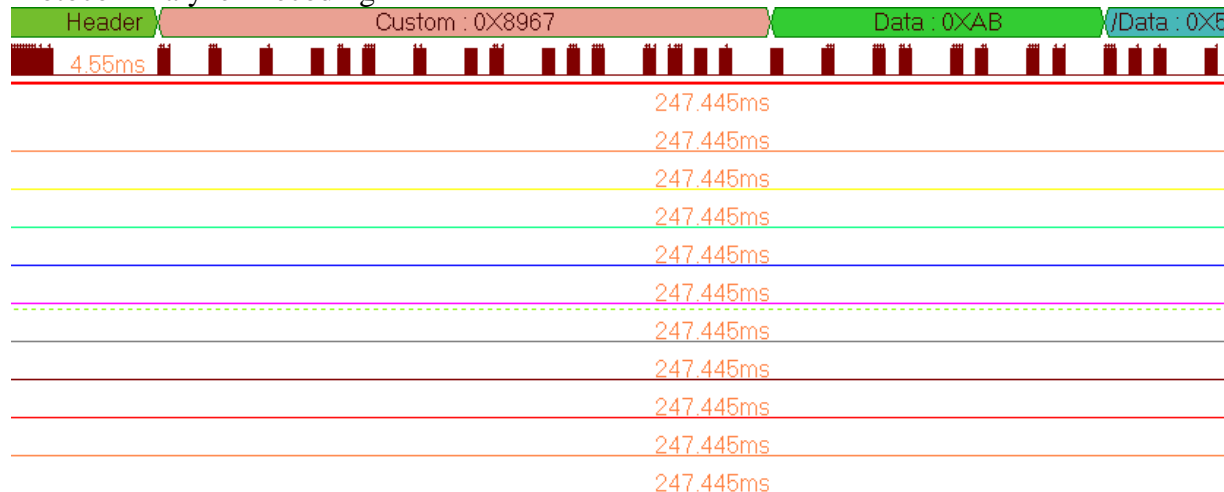
☒ No, please reserve

Back Finish Cancel



STEP 12. Following pictures show the completion of the protocol analyzer decoding and the packet list. The Trigger condition is set as Either Edge; the Memory depth is 64K; the Sampling frequency is 200KHz (the sampling frequency should be more than eight times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

Navigator Packet List Statistics Memory Analyzer							
Setting... Refresh Export... Synch. Parameter...							
Packet #	Name	TimeStamp	Header	Custom	Data	/Data	Stop
1	Bus1(NEC PD6122)	0ms	Header	8967	AB	54	Stop
Packet #	Name	TimeStamp	Header	Stop			
2	Bus1(NEC PD6122)	111.425ms	Header	Stop			

