



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

SPECIFICATION

MODEL: B12003-KNX

PART NO: _____

VERSION: V1.00

Approver		Check	Design
GM	PM		

Customer Confirm

*Please fax the file to ZeroPlus Technology after signing.

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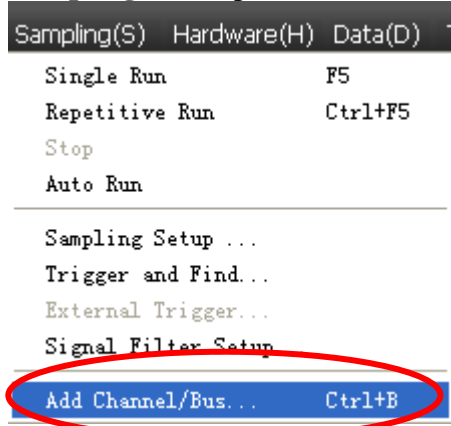
1 Software Register

Please register the software as the following steps:

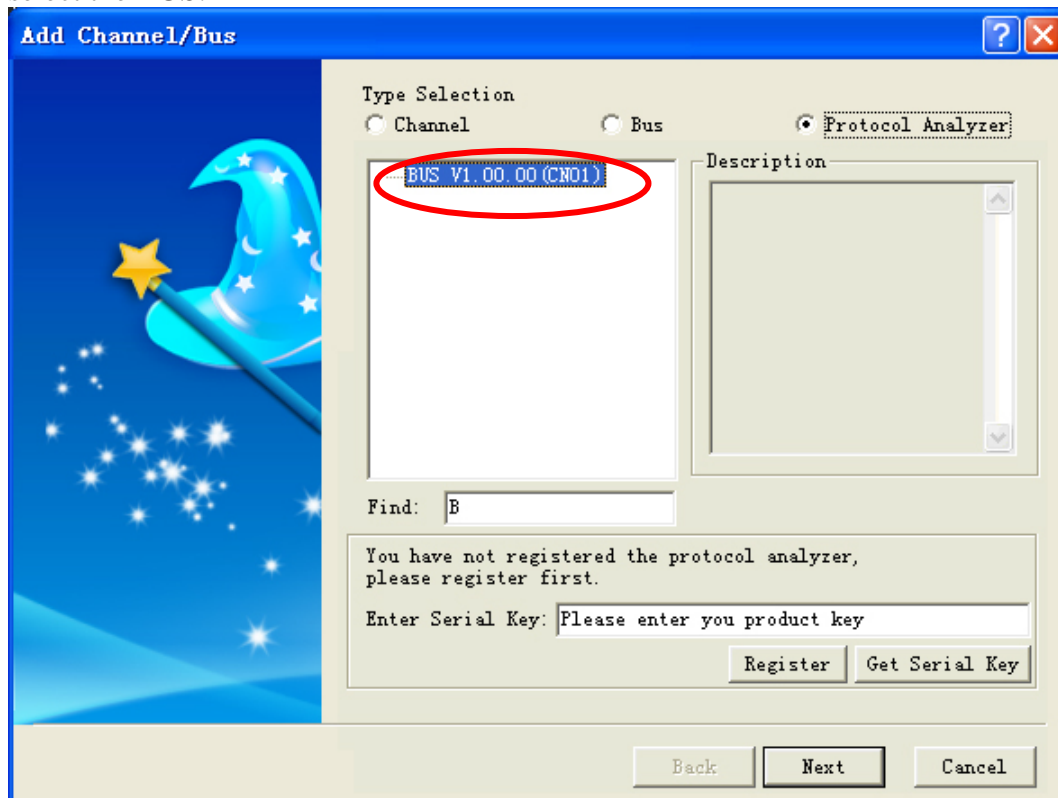
※ Remark1: The registration steps for all protocol analyzers are the same; you can complete the registration by following procedures. Following is an example on how to register the Protocol Analyzer BUS.

※ Remark2: 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. Open the Logic Analyzer and select the **Add Channel/Bus** item on the pull-down menu of the **Sampling(S)** to open the **Add Channel/Bus** dialog box.

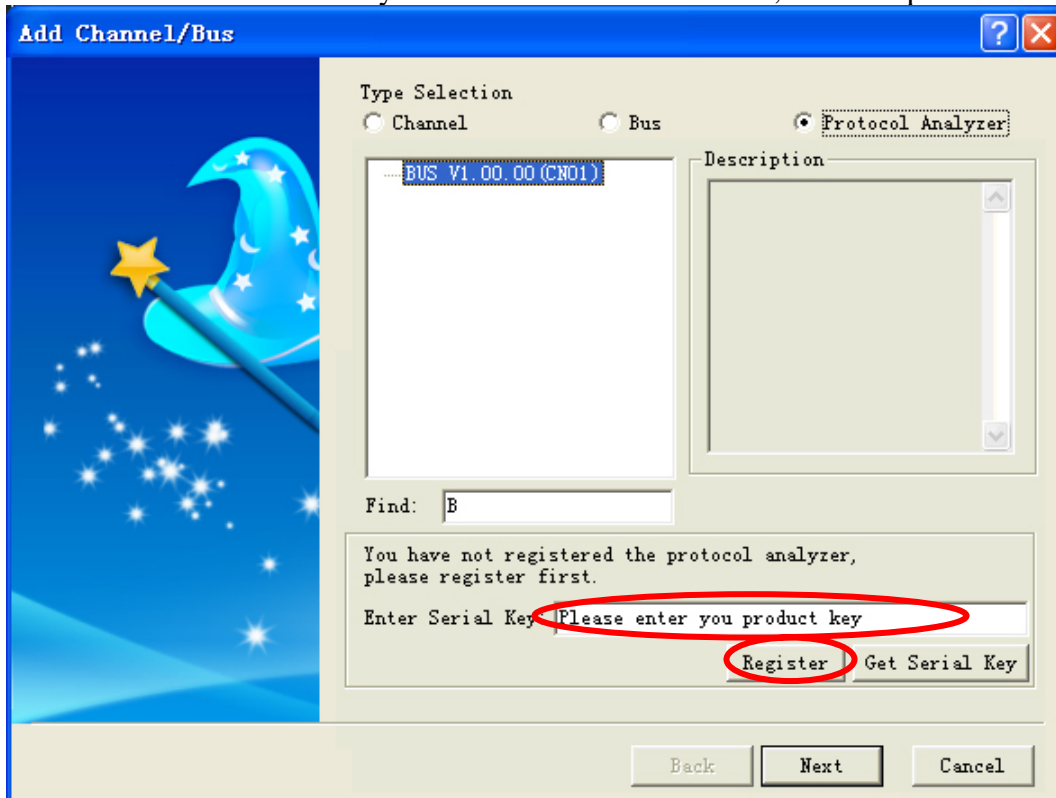


STEP 2. Select Protocol Analyzer item in the Add Channel/Bus dialog box, expand the Other Type, and select the BUS.

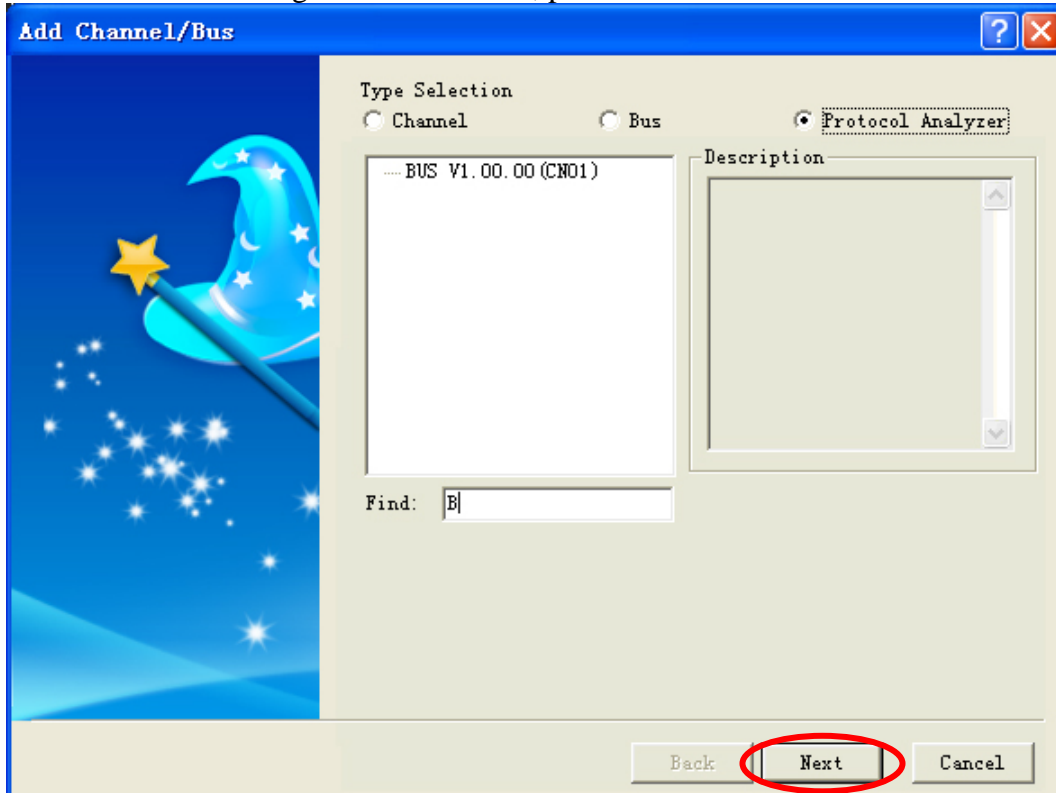




STEP 3. Enter the Serial Key of the BUS under this Model, and then press the **Register**.



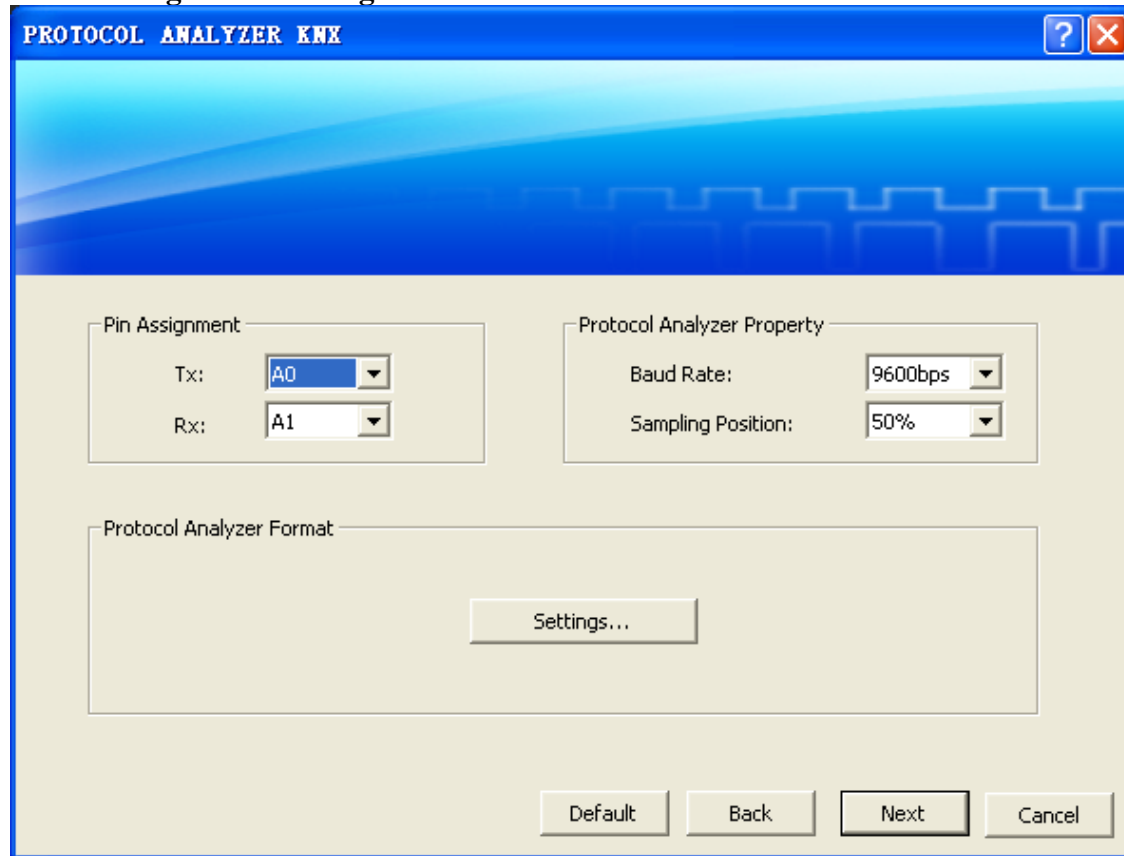
STEP 4. After the Register is successful, press the Next.



2 User Interface

Please refer to the below images to select options of KNX module.

KNX Configuration dialog box



The image shows a software dialog box titled "PROTOCOL ANALYZER KNX". It has a blue header bar with a question mark icon and a close button. The main area is divided into three sections: "Pin Assignment", "Protocol Analyzer Property", and "Protocol Analyzer Format". The "Pin Assignment" section has two dropdown menus: "Tx:" set to "A0" and "Rx:" set to "A1". The "Protocol Analyzer Property" section has two dropdown menus: "Baud Rate:" set to "9600bps" and "Sampling Position:" set to "50%". The "Protocol Analyzer Format" section is empty and contains a "Settings..." button. At the bottom, there are four buttons: "Default", "Back", "Next", and "Cancel".

Pin Assignment:

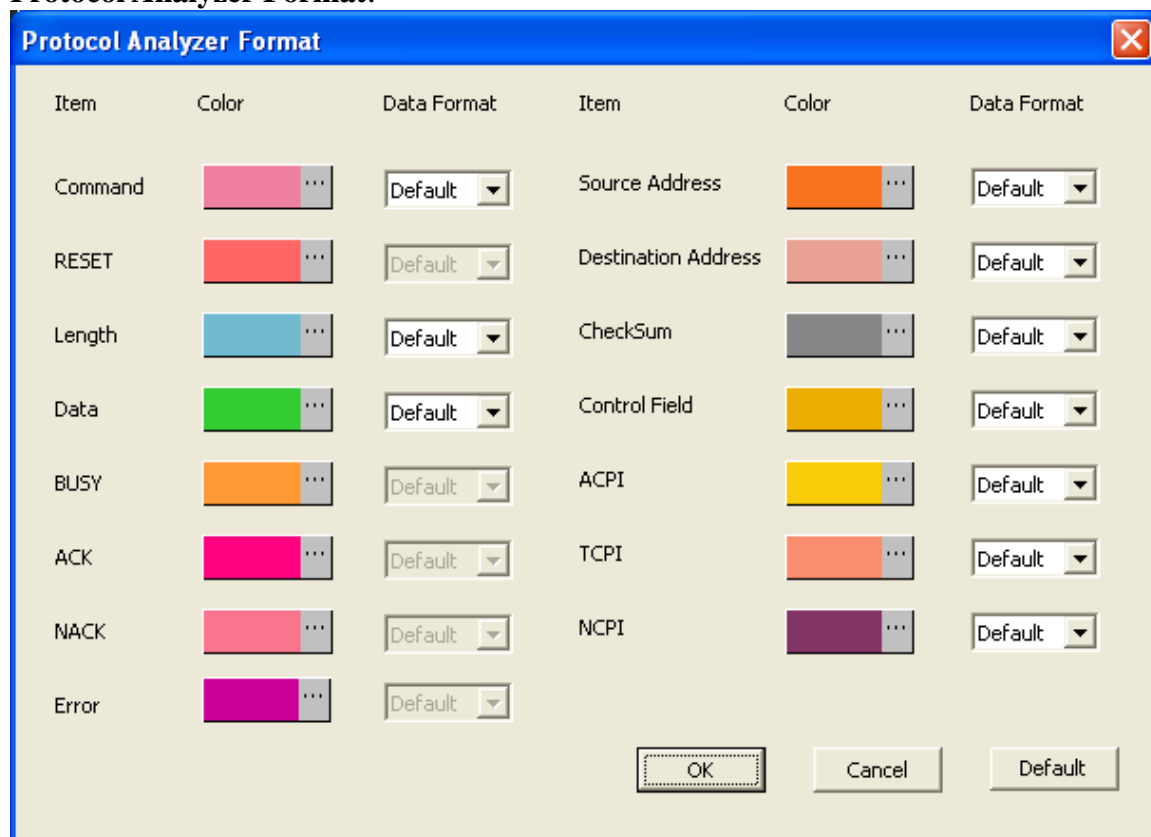
KNX needs at least 2 lines to decode. Tx is A0 and Rx is A1 by default.

Protocol Analyzer Property:

Baud Rate: 9600bps and 19200bps can be selected. It is 9600bps by default.

Sampling Position: There are 5%, 15%, 20%, 25%, 30%, 35%, 40%, 45%, 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95% and 100% to be selected; it is 50% by default.

Protocol Analyzer Format:



The dialog box titled "Protocol Analyzer Format" contains two columns of settings. Each row represents a different packet item, with a color selection box and a data format dropdown menu. The items and their default colors are: Command (pink), RESET (red), Length (light blue), Data (green), BUSY (orange), ACK (magenta), NACK (pink), Error (magenta), Source Address (orange), Destination Address (light red), CheckSum (grey), Control Field (yellow), ACPI (yellow), TCPI (light red), and NCPI (purple). All data format dropdowns are currently set to "Default". At the bottom right, there are three buttons: "OK", "Cancel", and "Default".

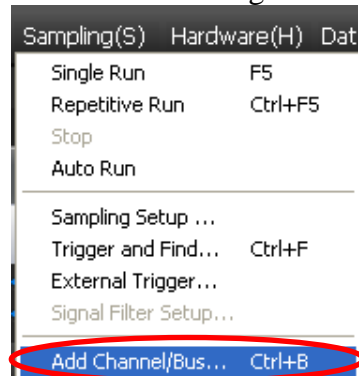
Item	Color	Data Format	Item	Color	Data Format
Command		Default	Source Address		Default
RESET		Default	Destination Address		Default
Length		Default	CheckSum		Default
Data		Default	Control Field		Default
BUSY		Default	ACPI		Default
ACK		Default	TCPI		Default
NACK		Default	NCPI		Default
Error		Default			

OK Cancel Default

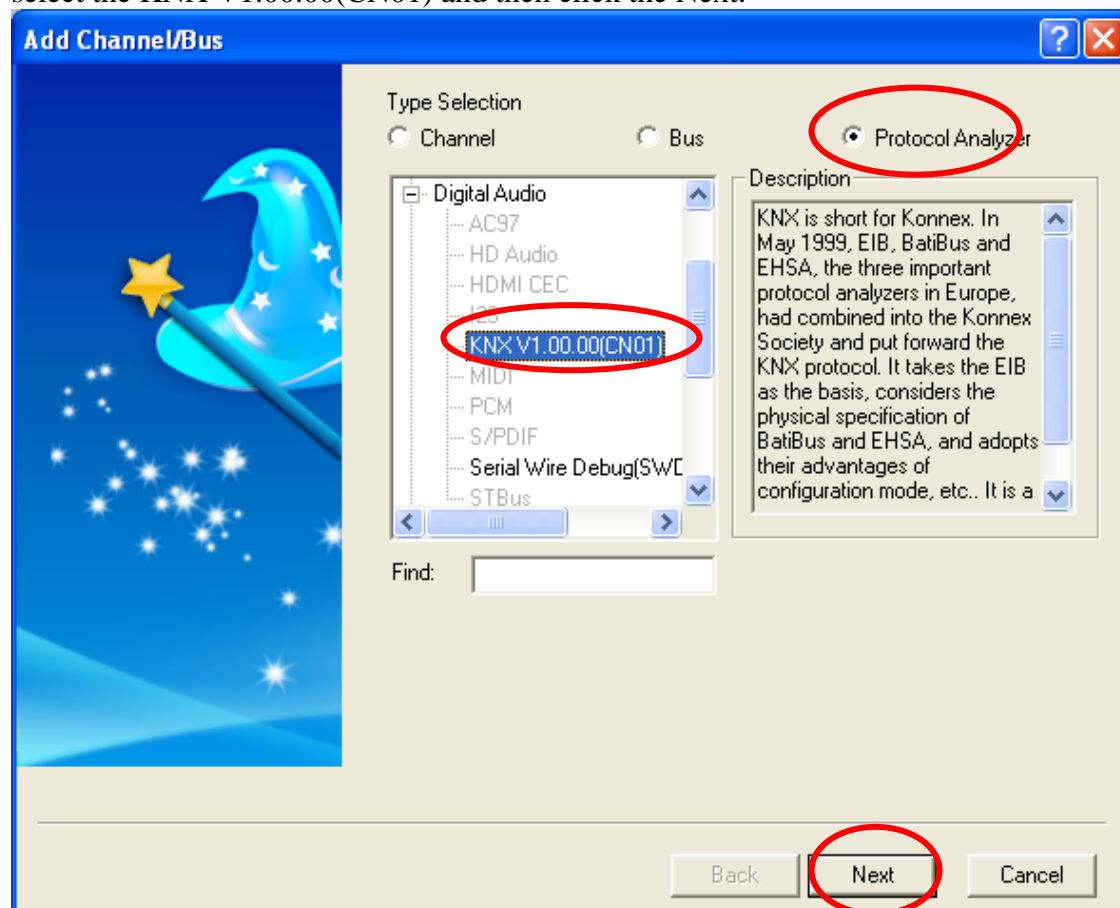
Users can set the color of the packet as their requirements. Items (Command, Length, Data, Source Address, Destination Address, CheckSum, Control Field, ACPI, TCPI, NCPI) can be set as Binary, Decimal, Hexadecimal, ASCII or Default. And the data format of these items in the Waveform Display Area and 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 is Default.

3 Operating Instructions

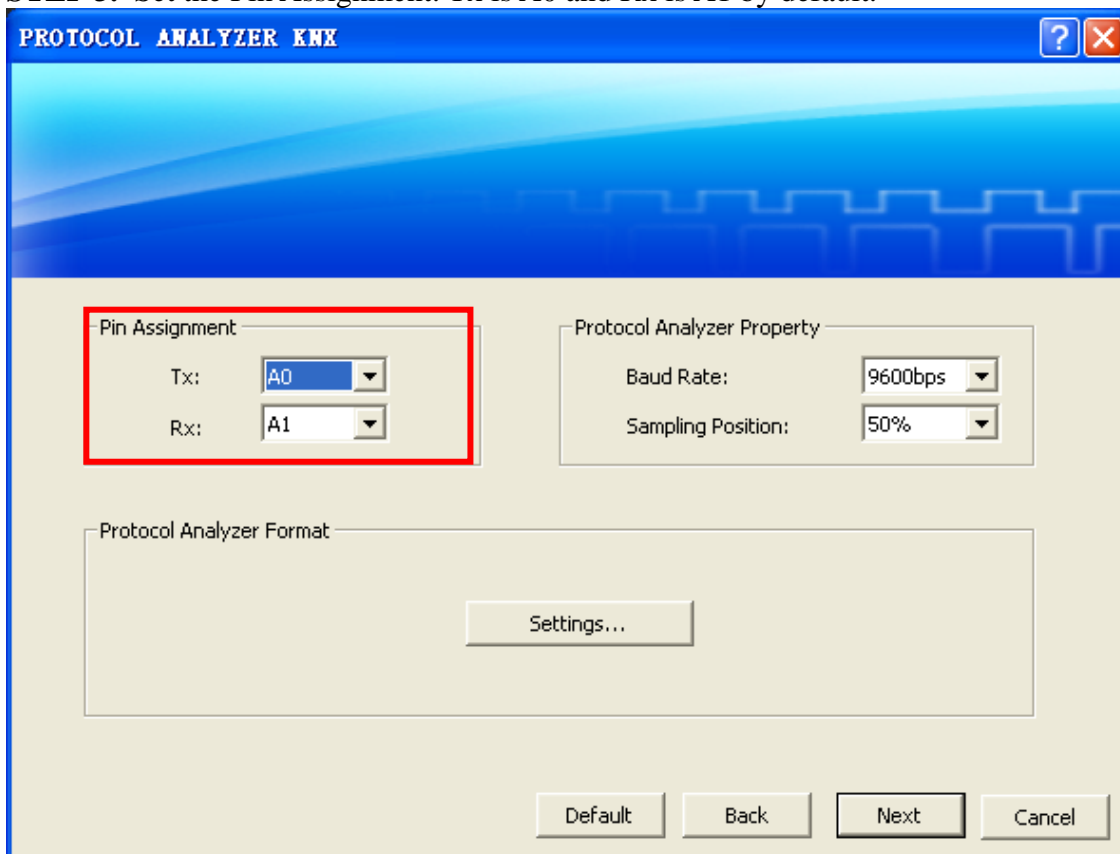
STEP 1. Select the Add Channel/Bus item on the pull-down menu of the Sampling(S) to open the Add Channel/Bus dialog box.



STEP 2. Select the Protocol Analyzer item in the Add Channel/Bus dialog box, expand the Digital Audio, select the KNX V1.00.00(CN01) and then click the Next.



STEP 3. Set the Pin Assignment. Tx is A0 and Rx is A1 by default.



PROTOCOL ANALYZER KNX

Pin Assignment

Tx: A0

Rx: A1

Protocol Analyzer Property

Baud Rate: 9600bps

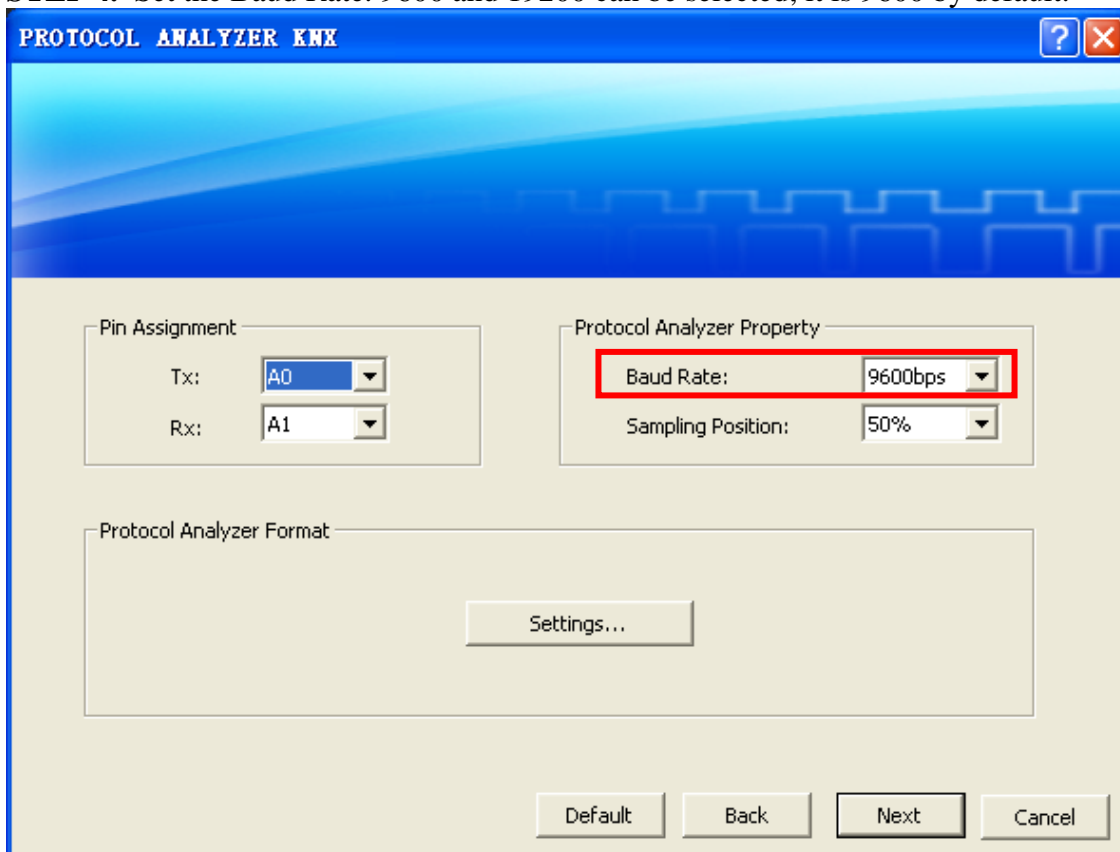
Sampling Position: 50%

Protocol Analyzer Format

Settings...

Default Back Next Cancel

STEP 4. Set the Baud Rate. 9600 and 19200 can be selected; it is 9600 by default.



PROTOCOL ANALYZER KNX

Pin Assignment

Tx: A0

Rx: A1

Protocol Analyzer Property

Baud Rate: 9600bps

Sampling Position: 50%

Protocol Analyzer Format

Settings...

Default Back Next Cancel



STEP 5. Set the Sampling Position. It is 50% by default.

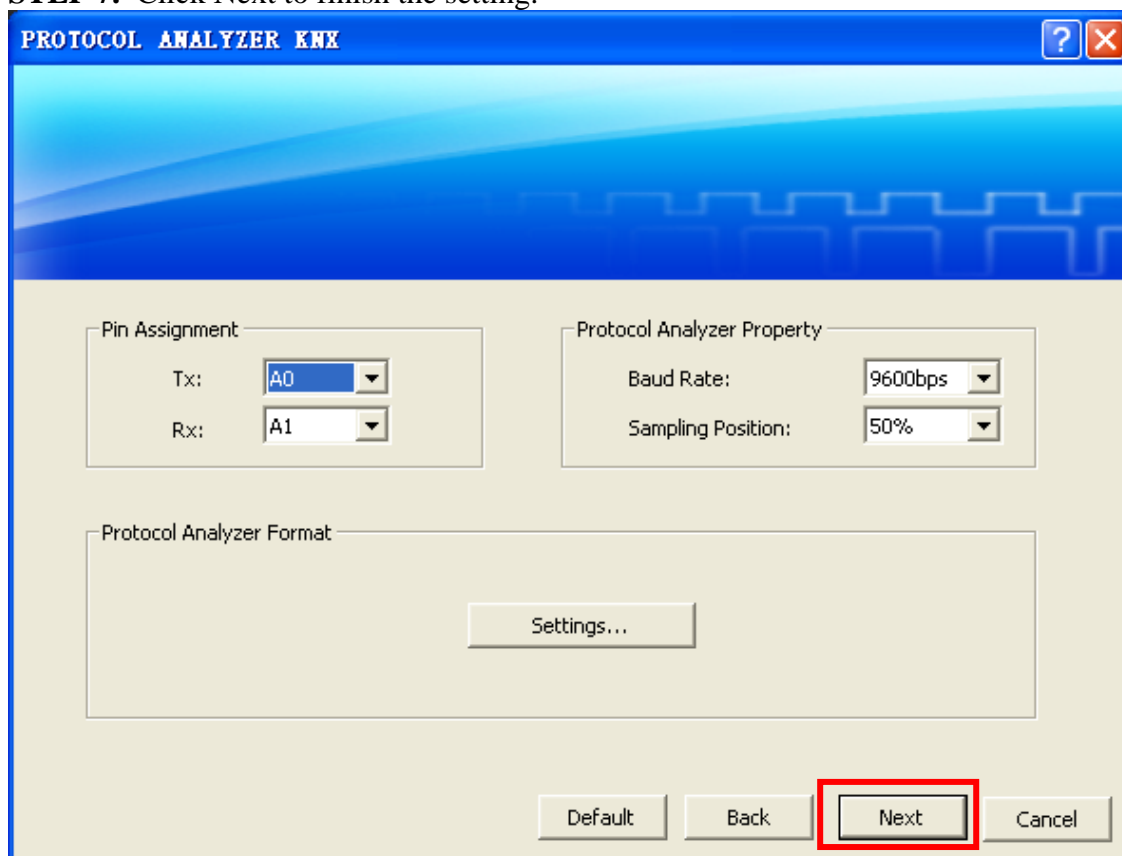
The screenshot shows the 'PROTOCOL ANALYZER KNX' dialog box. It has a blue title bar with a question mark and a close button. The main area is divided into three sections: 'Pin Assignment', 'Protocol Analyzer Property', and 'Protocol Analyzer Format'. In the 'Pin Assignment' section, 'Tx:' is set to 'A0' and 'Rx:' is set to 'A1'. In the 'Protocol Analyzer Property' section, 'Baud Rate:' is set to '9600bps' and 'Sampling Position:' is set to '50%'. The 'Sampling Position:' dropdown is highlighted with a red rectangle. Below these sections is a 'Settings...' button. At the bottom are 'Default', 'Back', 'Next', and 'Cancel' buttons.

STEP 6. Press the Settings button to set the Protocol Analyzer Format.

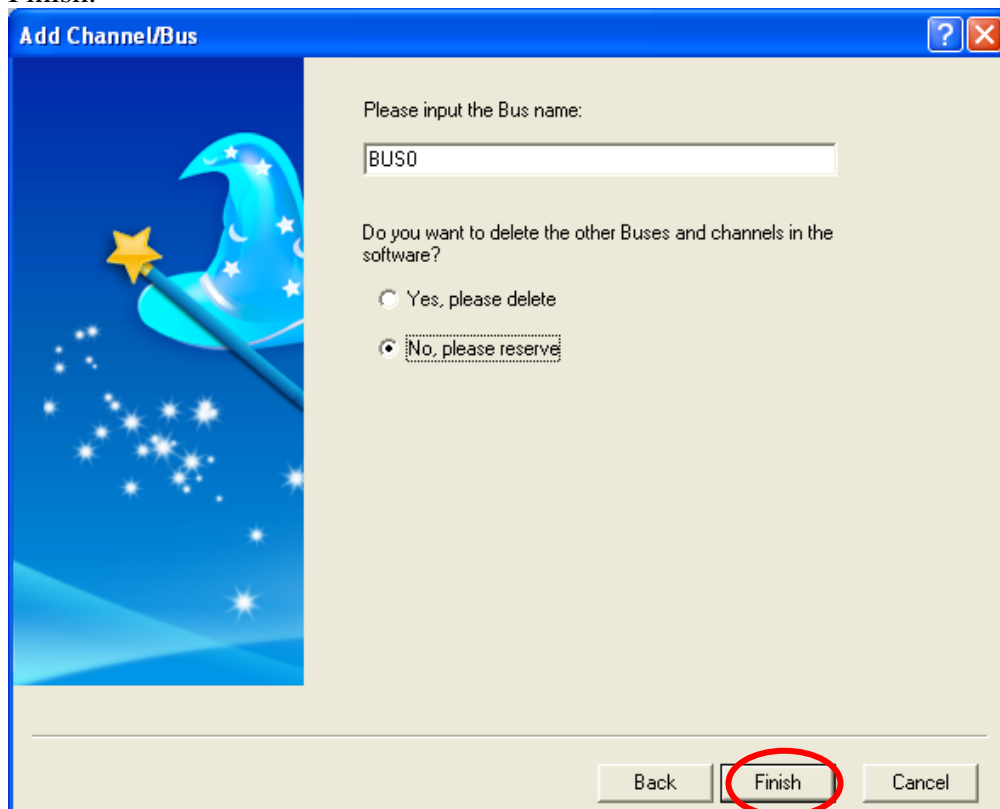
The screenshot shows the 'Protocol Analyzer Format' dialog box. It has a blue title bar with a close button. The main area contains a table with two columns of items, each with a color swatch and a 'Data Format' dropdown menu. The items are: Command, RESET, Length, Data, BUSY, ACK, NACK, Error, Source Address, Destination Address, CheckSum, Control Field, ACPI, TCPI, and NCPI. All 'Data Format' dropdowns are set to 'Default'. At the bottom are 'OK', 'Cancel', and 'Default' buttons.

Item	Color	Data Format	Item	Color	Data Format
Command		Default	Source Address		Default
RESET		Default	Destination Address		Default
Length		Default	CheckSum		Default
Data		Default	Control Field		Default
BUSY		Default	ACPI		Default
ACK		Default	TCPI		Default
NACK		Default	NCPI		Default
Error		Default			

STEP 7. Click Next to finish the setting.



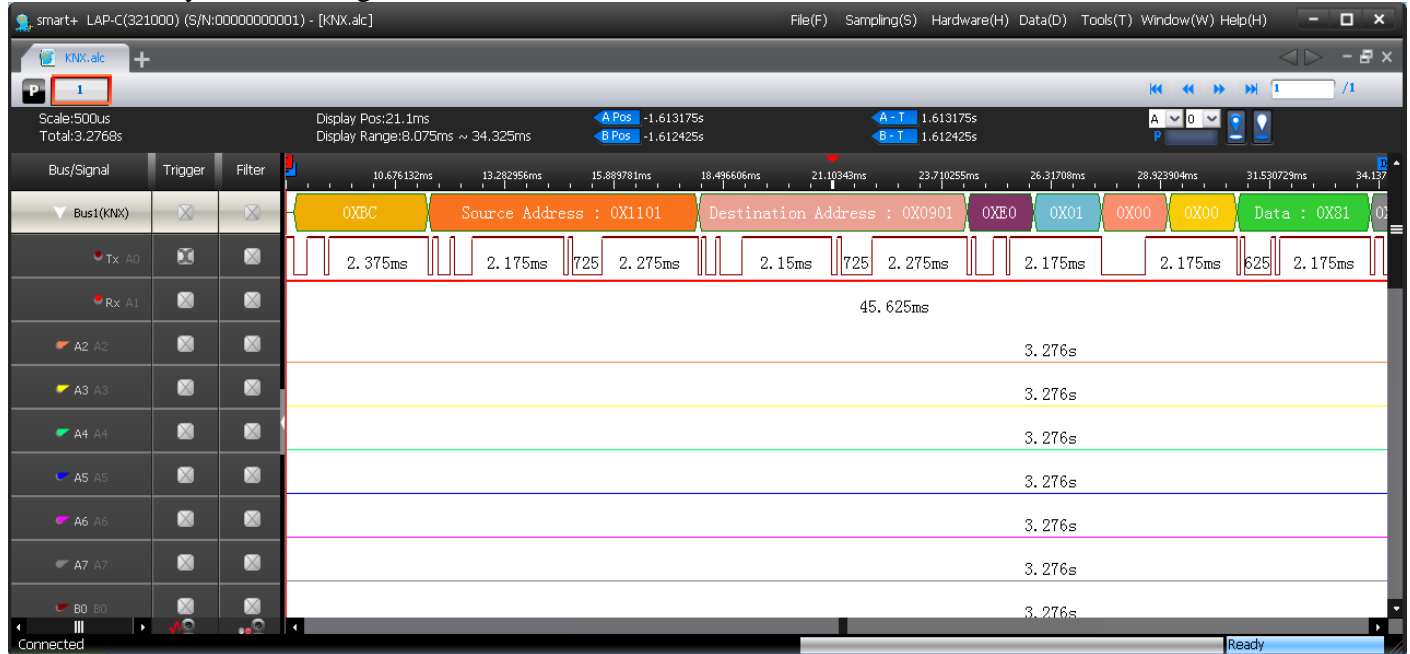
STEP 8. Please enter the Bus Name, select “Yes, please delete” or “No, please reserve” and then click Finish.





STEP 9. Following pictures show the completion of the protocol analyzer decoding and packet list. The trigger condition is set as Either Edge, the memory depth is 128K and the sampling frequency is 40KHz (the sampling frequency should be more than four times higher than the signal to be tested).

Protocol Analyzer Decoding



Packet List

