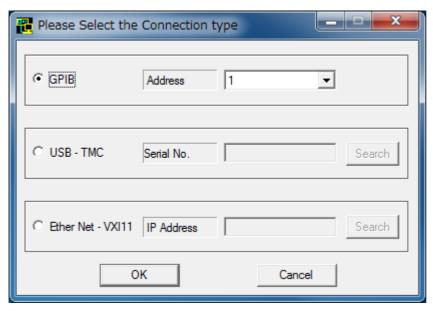# Using the PX8000 Sample Program

Microsoft Visual Basic 6.0, Microsoft Visual C++ 6.0,
VisualStudio2005/2008/2010/2013/2015/2017
(Visual Basic.Net, Microsoft Visual C++, Microsoft Visual C#)

Note: This sample is a free software and therefore no guaranteed and support is offered.。

Operating Procedure

1. 1. Install any one of the below program on the PC.

• Microsoft Visual C++ 6.0 (hereinafter VC) or

• Microsoft Visual Basic 6.0 (hereinafter VB) or

• Microsoft VisualStudio 2005/2008/2010/2013/2015 (hereinafter VS).

2. Download a sample program from our Web site and decompress/unzip it.

3. Double-click the dsw, vbp or sln file for VC, VB or VS respectively to start the software.

4. The program starts with a ! for VC or a right - pointed triangle for VB/VS displaying the window shown in figure 1.

< Figure 1: Communication setting menu >

•The connection information file(PX8000.ini) is available at the start. This will provide the details of communication setting screen with respect to each setting status. If this file is not available then the item will not be set.

When connection information file is created and updated after the communication is successfully established with the instrument, press the OK button.

In addition, the button to the right of the USBTMC and EtherNet - VXI11 not only checks if the instrument is connected physically to the PC but also determines if the instrument is supported by the sample program and the result is displayed on the settings of the input unit.

If there are multiple instruments, set the input selection to combo box and select from the results list.

*This program uses the TMCTL proprietary communication library by Yokogawa Test & Measurement Corporation. Download TMCTL from the website and read the "tmctl read me" file.

  https://tmi.yokogawa.com/library/search/#?s=d&t=6

Enter the settings for the connection interface and communication conditions, and then click OK.

GP-IB connection

Input the GP - IB address of the PX unit to be connected (1 to 30)

*National Instruments GP - IB card is required.

Network connection

Input the IP address of the PX unit to be connected.

USB connection

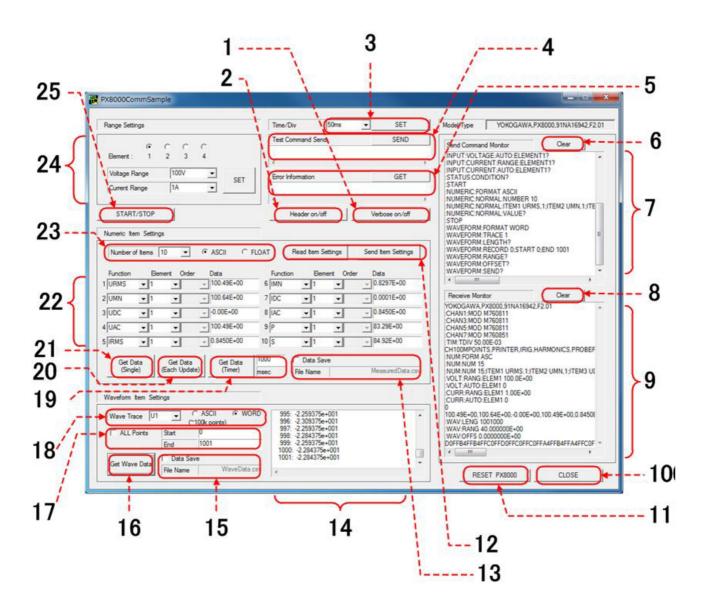Input the serial number of the PX unit to be connected.

Also, the USB driver (YKMUSB) is required for the connection.

*This program uses the USB driver (YKMUSB) by Yokogawa Test & Measurement Corporation which can be downloaded from the Website.

  https://tmi.yokogawa.com/library/search/#?s=d&t=6

After you select, please press the **OK** button to go into the configuration screen (figure 2).

< Figure 2: Sample program screen >

Ref No	Description
1	Turn abbreviations of sent commands ON and OFF.
2	Turn headers ON and OFF.
3	Set the Time/Div and press SET.
4	Command line to enter parameters such as scaling that are not available on the setting screen. Click SEND to send the data after entering the command.
5	Setting errors and other information.
6	To clear the contents of the command line.
7	To monitor sent commands. For example, when setting the voltage and current the actual sent commands are displayed allowing to confirm and to refer it.
8	To clear the contents of the command line.
9	To monitor the received data. Displays the data and other items that the instrument returns in response to inquiry commands.
10	To close the program screen.
11	To reset the settings on the instrument.
12	To load the numeric item settings that has been set in the instrument.
13	To send the numeric item settings displayed on the screen to the instrument.
14	To save the numeric measured data using the input file name.
15	Displays the received waveform data. If the number of data points is large, it displays the receiving progress every 1000 points.
16	To save the waveform data using the input file name.
17	To receive the waveform data.
18	To set the start/end point of the receiving waveform data. When all data points, check the "ALL Points". In this sample software, when the data format is ASCII, the number that can be received at one time is up to 100,000 points.
19	To select the trace and the format of the receiving waveform data.
20	To continuously receive the numeric measured data for each set timer time.
21	To continuously receive the numeric measured data for each update.
22	To receive the numeric measured data once.
23	To set the functions, elements and orders for loading numeric measured data.
24	To select the number of numeric data to acquire. Up to 10 items can be measured using this sample software. The format of the acquired measured data can be switched (ASCII/FLOAT).
25	Set the voltage range and press SET. Also, for current, set the direct input range or external input range and press SET.
26	Starts and stops waveform acquisition.