Spectrum PC Software

Software for the GSP-8000 Spectrum Analyzer

QUICK START GUIDE

REVISION 1.0.0.0 NOV 2024

ISO-9001 CERTIFIED MANUFACTURER

GW INSTEK

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Good Will Instrument Co., Ltd.

No. 7-1, Jhongsing Rd., Tucheng Dist., New Taipei City 236, Taiwan.

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SOFTWARE INSTALLATION

Before running "**Spectrum PC Software**", first install the NI-488.2 software. You can download the NI-488.2 software from the National Instruments website.

Please Visit: http://www.ni.com

GSP-8000 Series spectrum analyzer users can download "**Spectrum PC Software"** from the official GW Instek website.

Please Visit: http://www.gwinstek.com/

"Spectrum PC Software" allows you to use simple mouse-controlled tools to work with the GSP-8000 Series Spectrum Analyzer.

The software can be run with any PC using Windows 11/10/8 (32/64 bit), Windows 7 (32/64 bit) operating systems.

To install **"Spectrum PC Software"**, select the exe file. The Setup Wizard will guide you through the installation process.

REMOTE CONTROL INTERFACE SETTING

GSP-8000 spectrum analyzer has two different remote control interfaces: LAN, and USB.

The remote control interface can be set by pressing:

For USB interface, when NI-VISA is installed, the USB Address will be automatically captured.

For LAN interface, Configure IP settings in System → Setting (F2) → LAN.

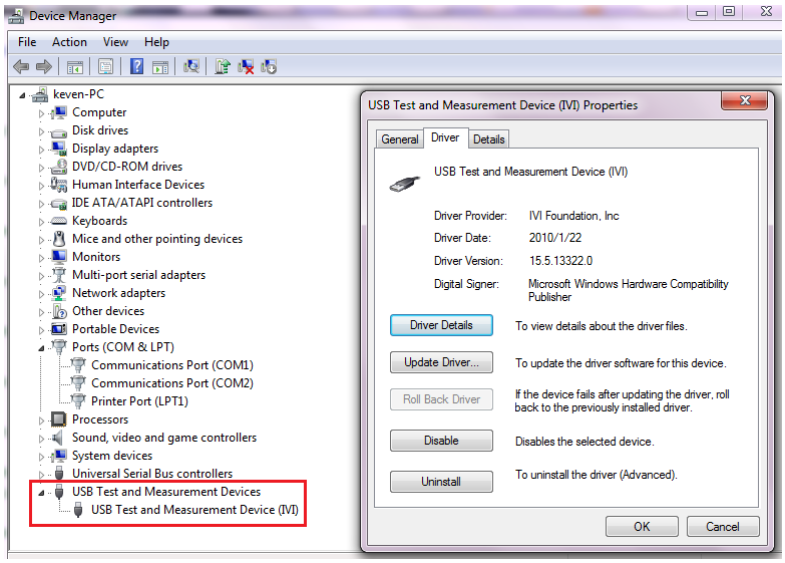
This will allow you to set up the LAN IP Address and USB Mode.

You can follow the following instructions to ensure that the spectrum analyzer is successfully recognized by the PC.

USB Interface

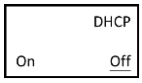
To control remotely through the USB interface, you only need to install NI-VISA and then connect the USB Cable to the machine and PC for control.

You can check that the spectrum analyzer IVI driver is recognized by the PC by going to the Windows Device Manager via the Windows Control Panel.



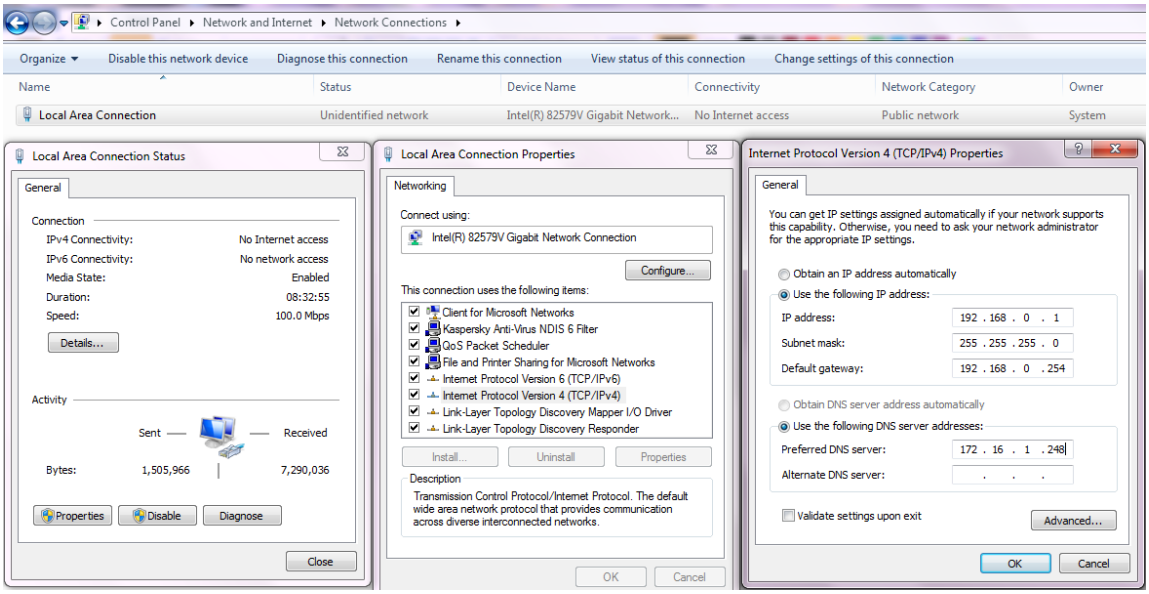
LAN Interface

If you need to control the spectrum analyzer using the LAN interface, the IP address must be set first. By default, the IP address setting is set to Manual IP.

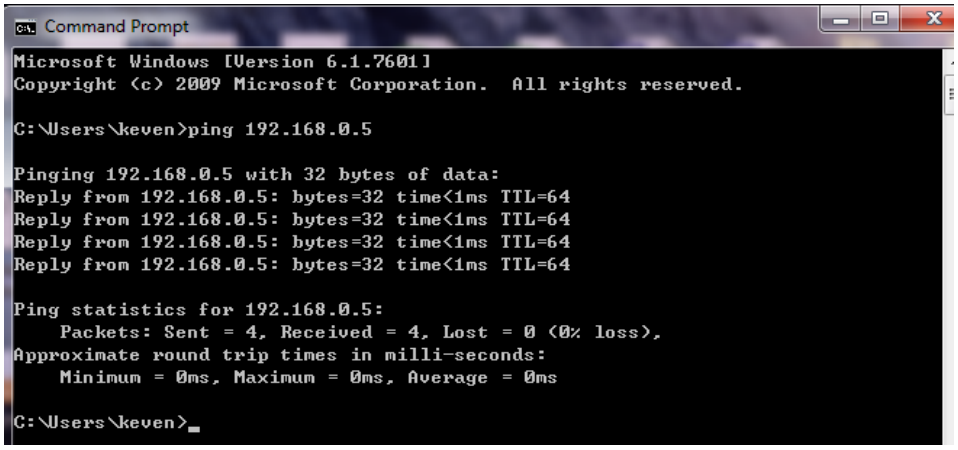


If you need to manually set the IP address to directly connect with a computer, please follow the figures shown above. After setting the spectrum analyzer IP, Mask, Gateway, Press Enter to finish the setup.

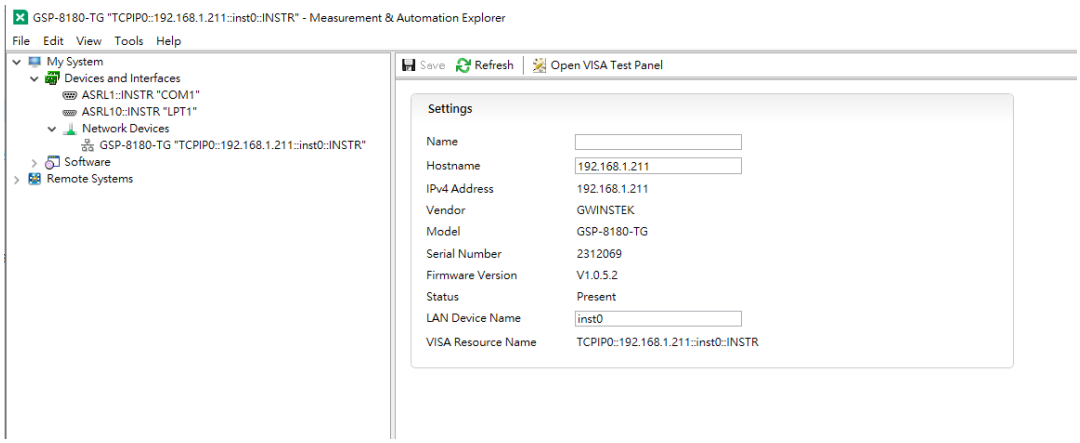
Besides manually setting up spectrum analyzer IP address, the IP address on the PC should be under the same domain, please refer to the figure below.



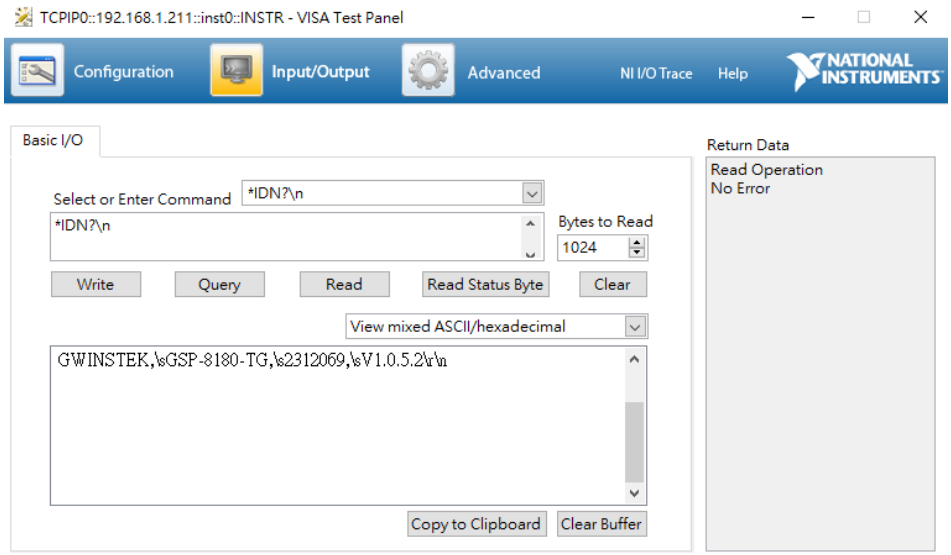
You can ping the IP to verify whether the connection is successful or not. Please refer to the diagram below that shows a successful connection.



You can also use NI 488.2 software to verify whether the connection has been completed. Please refer to the diagram below.

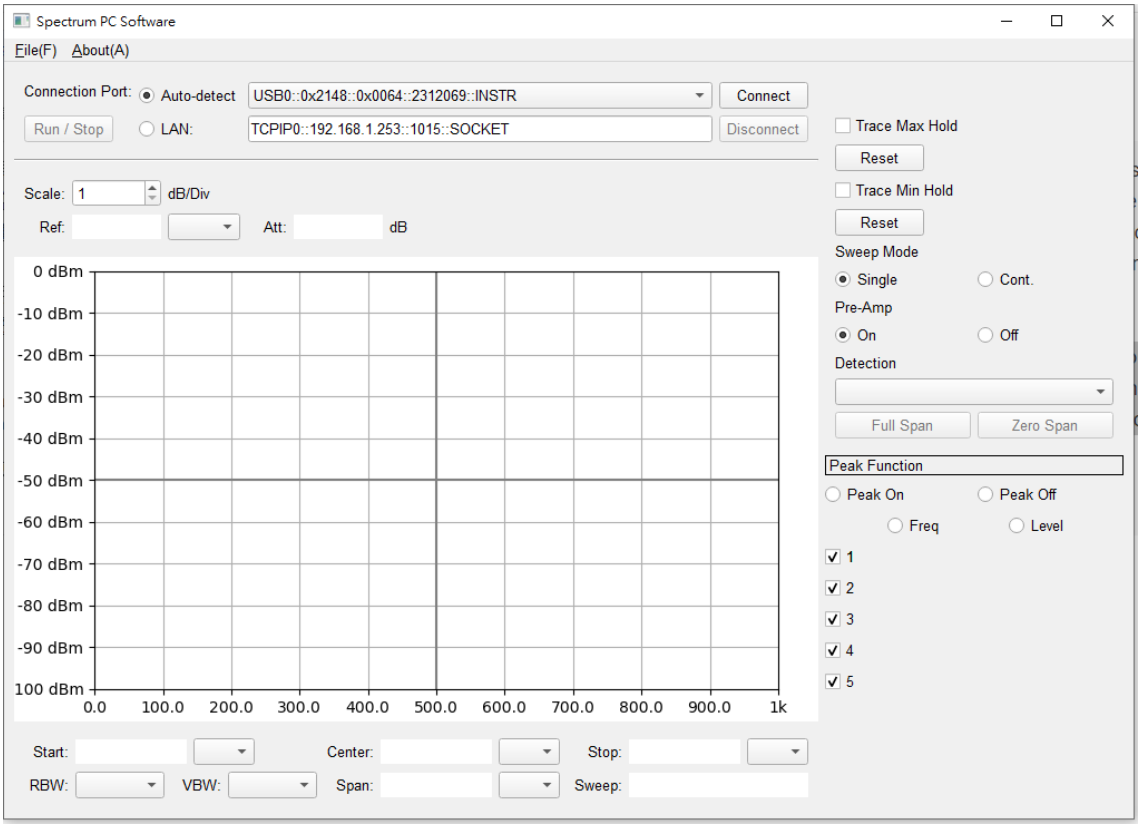


To check that data can be read from the spectrum analyzer, you can go to the NI 488.2 Input/Output setting and execute the *IDN?\n command.



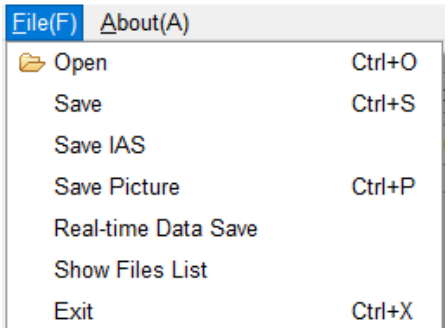
SPECTRUM PC SOFTWARE

Using this software, you can perform long-term monitoring, capture graphics, and set marker points, etc. It can be connected through USB or LAN interface. You can press the "Connect" button to connect.



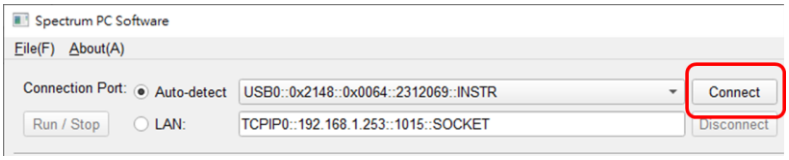
Before connecting, learn what types of files are stored.

- Open: Stored Trace values can be opened.
- **Save**: Save the data of Trace1 ~ Trace5, including header, the file format is csv
- **Save IAS:** Save Trace1 data, only the numerical part, the file format is csv
- **Save Picture:** Save the current picture, the file type is PNG
- **Real-time Save:** Save the current scene, you can set the interval to save continuously, 1 second, or 5 seconds. The file format is csv.
- **Show Files List:** Capture the Trace values stored in the machine

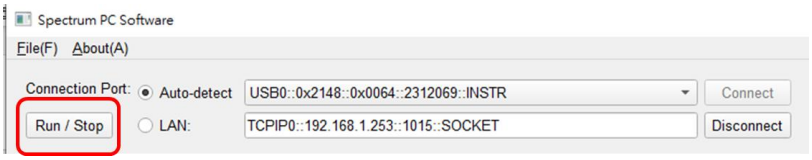


When the interface selection is completed, just press Connect to connect to the machine, and after pressing Run / Stop, the Trace on the machine can be captured on the software.

1. Connect:



2. View the Trace:



The software mainly has three areas, the main functional area, the Trace functional area and the Marker functional area.

- **Main Function Area**: The desired frequency range can be set by changing the frequency or span range, and the scale, reference level, attenuator, and RBW and VBW values can be set.
- **Trace Function Area**: Here you can set Max/Min Trace, Detector, scanning mode, and Pre-Amp On/Off.
- **Peak Function Area**: Up to five Peaks can be captured and sorted by Amplitude or frequency.