INSTRUCTION MANUAL

GPIB TO USB ADAPTER

GUG-001

■ **About Brands and Trademarks**

"TEXIO" is the product brand name of our industrial electronic devices.

All company names and product names mentioned in this manual are the trademark or the registered trademark of each company or group in each country and region.

■ **About the Instruction Manual**

Permission from the copyright holder is needed to reprint the contents of this manual, in whole or in part. Be aware that the product specifications and the contents of this manual are subject to change for the purpose of improvement.

CONTENTS

USING THE PRODUCT SAFELY

■ Preface

To use the product safely, read instruction manual to the end.
Before using this product, understand how to correctly use it.
If you read the manuals but you do not understand how to use it, ask us or your local dealer.
After you read the manuals, save it so that you can read it anytime as required.

■ Pictorial indication

The manuals and product show the warning and caution items required to safely use the product.
The following pictorial indication is provided.

<Pictorial indication>	
⚠	Some part of this product or the manuals may show this pictorial indication. In this case, if the product is incorrectly used in that part, a serious danger may be brought about on the user's body or the product. To use the part with this pictorial indication, be sure to refer to the manuals.
⚠ **WARNING**	If you use the product, ignoring this indication, you may get killed or seriously injured. This indication shows that the warning item to avoid the danger is provided.
⚠ **CAUTION**	If you incorrectly use the product, ignoring this indication, you may get slightly injured or the product may be damaged. This indication shows that the caution item to avoid the danger is provided.

Please be informed that we are not responsible for any damages to the user or to the third person, arising from malfunctions or other failures due to wrong use of the product or incorrect operation, except such responsibility for damages as required by law.

USING THE PRODUCT SAFELY

WARNING **CAUTION**

■ Do not remove the product's covers and panels

Never remove the product's covers and panels for any purpose.
Otherwise, the user's electric shock or fire may be incurred.

■ Warning on using the product

Warning items given below are to avoid danger to user's body and life and avoid the damage or deterioration of the product.   Use the product, observing the following warning and caution items.

■ Warning items on power supply

● Power supply voltage (Using the AC power supply)

The rated power supply voltages of the product are 100, 120, 220 and 240VAC. The rated power supply voltage for each product should be confirmed by reading the label attached on the back of the product or by the "rated" column shown in the instruction manual.   The specification of power cord attached to the products is rated to 125VAC for all products which are designed to be used in the areas where commercial power supply voltage is not higher than 125VAC.   Accordingly, you must change the power cord if you want to use the product at the power supply voltage higher than 125VAC. If you use the product without changing power cord to 250VAC rated one, electric shock or fire may be caused.   When you used the product equipped with power supply voltage switching system, please refer to the corresponding chapter in the instruction manuals of each product.

● Power cord
(IMPORTANT)   The attached power cord set can be used for this device only.
If the attached power cord is damaged, stop using the product and call us or your local dealer.
If the power cord is used without the damage being removed, an electric shock or fire may be caused.

● Protective fuse

If an input protective fuse is blown, the product does not operate.   For a product with external fuse holder, the fuse may be replaced.   As for how to replace the fuse, refer to the corresponding chapter in the instruction manual.
If no fuse replacement procedures are indicated, the user is not permitted to replace it.   In such case, keep the case closed and consult us or your local dealer.   If the fuse is incorrectly replaced, a fire may occur.

■ Warning item on Grounding

If the product has the GND terminal on the front or rear panel surface, be sure to ground the product to safely use it.

■ Warnings on Installation environment

● Operating temperature and humidity

Use the product within the operating temperature indicated in the "rating" temperature column.
If the product is used with the vents of the product blocked or in high ambient temperatures, a fire may occur.
Use the product within the operating humidity indicated in the "rating" humidity column.
Watch out for condensation by a sharp humidity change such as transfer to a room with a different humidity.
Also, do not operate the product with wet hands.   Otherwise, an electric shock or fire may occur.

● Use in gas

Use in and around a place where an inflammable or explosive gas or steam is generated or stored may result in an explosion and fire.   Do not operate the product in such an environment.
Also, use in and around a place where a corrosive gas is generated or spreading causes a serious damage to the product.   Do not operate the product in such an environment.

● Installation place

Do not insert metal and inflammable materials into the product from its vent and spill water on it.
Otherwise, electric shock or fire may occur.

USING THE PRODUCT SAFELY

■ Do not let foreign matter in

Do not insert metal and inflammable materials into the product from its vent and spill water on it.
Otherwise, electric shock or fire may occur.

■ Warning item on abnormality while in use

If smoke or fire is generated from the product while in use, stop using the product, turn off the switch, and remove the power cord plug from the outlet.　After confirming that no other devices catch fire, ask us or your local dealer.

■ Input / Output terminals

Maximum input to terminal is specified to prevent the product from being damaged.
Do not supply input, exceeding the specifications that are indicated in the "Rating" column in the instruction manual of the product.　Also, do not supply power to the output terminals from the outside.
Otherwise, a product failure is caused.

■ Calibration

Although the performance and specifications of the product are checked under strict quality control during shipment from the factory, they may be deviated more or less by deterioration of parts due to their aging or others.
It is recommended to periodically calibrate the product so that it is used with its performance and specifications stable.
For consultation about the product calibration, ask us or your local dealer.

■ Daily Maintenance

When you clean off the dirt of the product covers, panels, and knobs, avoid solvents such as thinner and benzene.
Otherwise, the paint may peel off or resin surface may be affected.　To wipe off the covers, panels, and knobs, use a soft cloth with neutral detergent in it.
During cleaning, be careful that water, detergents, or other foreign matters do not get into the product.
If a liquid or metal gets into the product, an electric shock and fire are caused.
During cleaning, remove the power cord plug from the outlet.

Use the product correctly and safely, observing the above warning and caution items.
Because the instruction manual indicates caution items even in individual items, observe those caution items to correctly use the product.

If you have questions or comments about the manuals, ask us or E-Mail us.

1. GETTING STARTED

The Getting Started chapter introduces the features, functions and appearance of the GUG-001 GPIB to USB adapter.
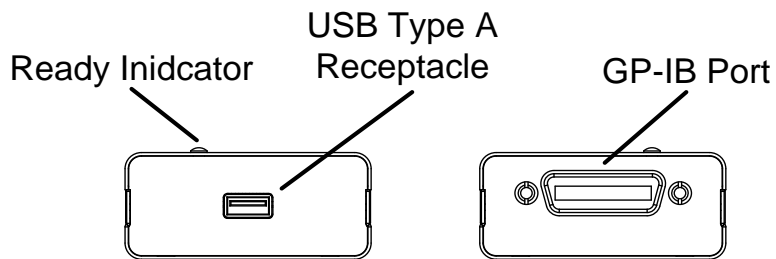
1.1. Main Features

The GPIB to USB adapter is used to connect a GP-IB controller to the USB B receptacle on a PSW series power supply.

- No power adapter, all power requirements from USB.
- The GP-IB primary address can be assigned via the PSW series.

1.2. Accessories

CD(User manual),   USB type A-B cable(GTL-246).

1.3. Instrument Overview

Item	Description
GP-IB Port	24 pin female GP-IB port.
USB Type A Receptacle	Connect the USB cable in PSW series.
Ready Indicator	The ready indicator lights when the adapter is ready to use.

2. OPERATION

2.1. Set Up

2.1.1. Connection Procedure

This section describes how to set the GUG-001 for use with the PSW.

1. Connect a GP-IB cable from a GP-IB controller to the GP-IB port on the adapter.

2. Connect the USB cable from the rear panel device port (type B port) on the PSW to the USB port (type A port) on the GPIB to USB adapter.
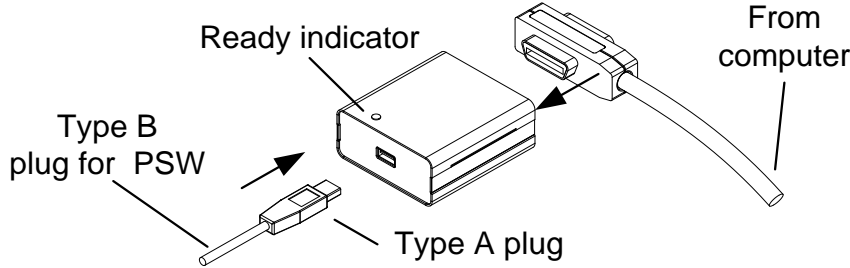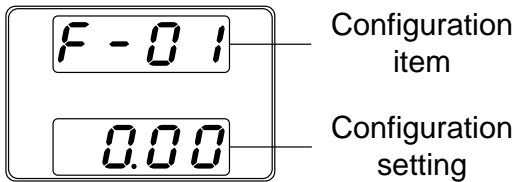
3. The Ready Indicator should be lit after the USB cable is connected.
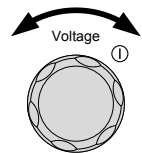
2.1.2. Configure GP-IB Address from the PSW

1. Press the Function key. The function key will light up.
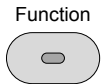
2. The display will show F-01 on the top and the configuration setting for F-01 on the bottom.

   Configuration item
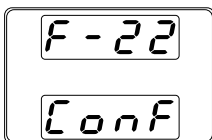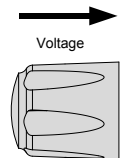   Configuration setting

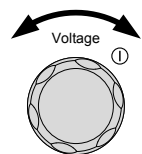3. Rotate the voltage knob to change the F setting to F-22 (USB Mode).

4. Rotate the current knob to set the F-22 setting to 1 (Mode: GPIB-USB adapter).
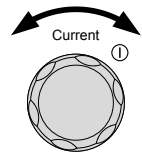
5. Press the Voltage knob to save the configuration setting. ConF will be displayed when successful.
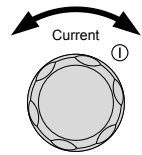
6. Rotate the voltage knob to change the F setting to F-23 (GP-IB address).
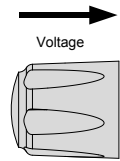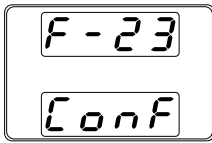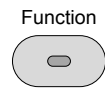
7. Rotate the current knob to set the F-23 setting between 0 and 30 (GP-IB address: 0~30).

Current

8. Press the Voltage knob to save the GP-IB address. ConF will be displayed when successful.

Voltage

```
F-23

ConF
```

9. Press the Function key again to exit the configuration settings. The function key light will turn off.

Function

2.1.3. Limitations

- GP-IB secondary addresses are not supported.

2.1.4. Trouble Shooting

If the Ready indicator will not come on:
- Check that the cables are correctly inserted.
- Check the settings of PSW function.

2.2. Function Check

To check that the GP-IB connection is working, National Instruments Measurement & Automation Explorer (MAX) can be used. For further information about National Instruments, please see the NI website at www.ni.com.

1. Complete the setup procedure described previously.

2. Start the Measurement and Automation Explorer (MAX) program. Using Windows7, press;
   Start>All Programs>National Instruments>Measurement & Automation
3. From the **Configuration** panel access;
   My System>Devices and Interfaces>GPIB0
   Press the **Scan for Instruments** button.
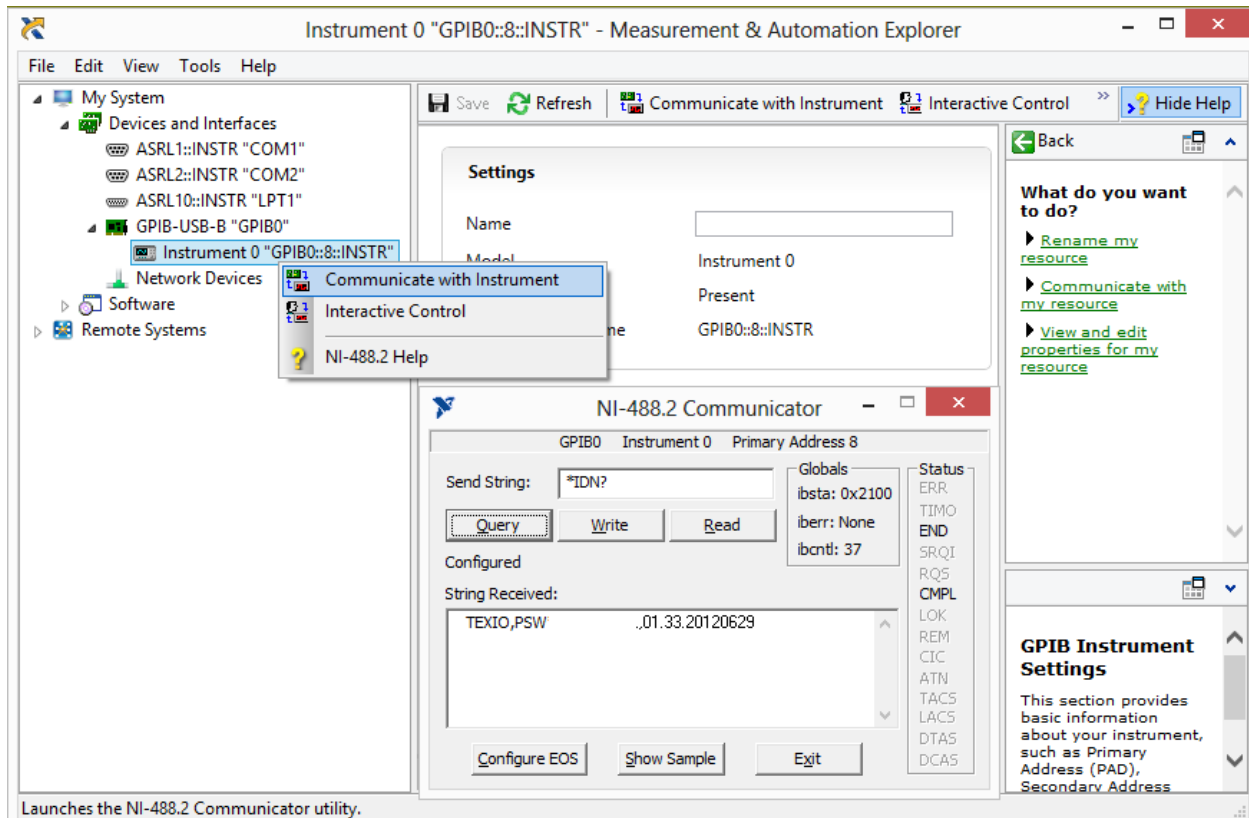
4. In the **Connected Instruments** panel the PSW should be detected as **Instrument 0** with the address the same as that configured on the PSW.
5. Right click the **Instrument 0** icon, Click on **Communicate with Instrument**.
6. In the **NI-488.2 Communicator** window, ensure **IND?* is written in the **Send String:** text box.
    Click on the **Query** button to send the **IDN?* query to the instrument.
7. The **String Received** text box will display the query return
   TEXIO, PSWXXX,PXXXXXX,V1.XX
   (manufacturer, model, serial number, version)
8. The function check is complete.

3. SPECIFICATIONS

3.1. USB Specification

USB Device	Partially to fully compliant USB 2.0 full speed device interface.

3.2. GP-IB Specification

GP-IB	IEEE-488.2 partial compatibility.

3.3. Miscellaneous

Current Consumption	Less than 0.5 ADC from 5V
Operating Environment	Ambient temperature: 0 ~ 50°C
	Relative humidity: ≤ 80%, 40°C or below
	≤ 45%, 41°C~50°C
Storage:	Storage Temperature: -10°C~60°C, no condensation
	Relative humidity: ≤ 93% @ 40°C or below
	≤ 65% @ 41°C~60°C
Altitude	Up to 2,000 meters
Dimensions	Approx. 86(D)×75(W)×33(H) mm

TEXIO

Test and Measurement Solutions