

# **RIGOL**

## **User's Guide**

English

中文

# **USB-GPIB-L Adapter**

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**RIGOL TECHNOLOGIES, INC.**

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# Guaranty and Declaration

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## Product Certification

**RIGOL** guarantees that this product conforms to the national and industrial standards in China as well as the ISO9001:2008 standard and the ISO14001:2004 standard. Other international standard conformance certifications are in progress.

## Contact Us

If you have any problem or requirement when using our products or this manual, please contact **RIGOL**.

E-mail: [service@rigol.com](mailto:service@rigol.com)

Website: [www.rigol.com](http://www.rigol.com)

## General Safety Summary

Please review the following safety precautions carefully before putting the adapter into operation so as to avoid any personal injury or damage to the adapter and any product connected to it. To prevent potential hazards, please follow the instructions specified in this manual to use the adapter properly.

### **Do Not Operate Without Covers.**

Do not operate the adapter with covers or panels removed.

### **Avoid Circuit or Wire Exposure.**

Do not touch exposed junctions and components when the unit is powered on.

### **Do Not Operate With Suspected Failures.**

If you suspect that any damage may occur to the adapter, have it inspected by **RIGOL** authorized personnel before further operations. Any maintenance, adjustment or replacement especially to circuits or accessories must be performed by **RIGOL** authorized personnel.

### **Provide Adequate Ventilation.**

Inadequate ventilation may cause an increase of temperature in the adapter, which would cause damage to the adapter. So please keep the adapter well ventilated and inspect the air outlet and the fan regularly.

### **Do Not Operate in Wet Conditions.**

To avoid short circuit inside the adapter or electric shock, never operate the adapter in a humid environment.

### **Do Not Operate in an Explosive Atmosphere.**

To avoid personal injuries or damage to the adapter, never operate the adapter in an explosive atmosphere.

### **Keep Product Surfaces Clean and Dry.**

To avoid dust or moisture from affecting the performance of the adapter, keep the surfaces of the adapter clean and dry.

### **Prevent Electrostatic Impact.**

Operate the adapter in an electrostatic discharge protective environment to avoid damage induced by static discharges. Always ground both the internal and external conductors of cables to release static before making connections.

**Plug in and Pull Out Properly.**

Do not plug in or pull out the adapter when it is in an operating state.

## Safety Notices and Symbols

### Safety Notices in this Manual:

**WARNING**

Indicates a potentially hazardous situation or practice which, if not avoided, will result in serious injury or death.

**CAUTION**

Indicates a potentially hazardous situation or practice which, if not avoided, could result in damage to the product or loss of important data.

### Safety Terms on the Product:

**DANGER**

It calls attention to an operation, if not correctly performed, could result in injury or hazard immediately.

**WARNING**

It calls attention to an operation, if not correctly performed, could result in potential injury or hazard.

**CAUTION**

It calls attention to an operation, if not correctly performed, could result in damage to the product or other devices connected to the product.

### Safety Symbols on the Product:



Hazardous  
Voltage



Safety  
Warning



Protective Earth  
Terminal



Chassis Ground



Test Ground

## Care and Cleaning

### Care

Do not store or leave the adapter where it may be exposed to direct sunlight for long periods of time.

### Cleaning

Clean the adapter regularly according to its operating conditions using the method below.

1. Disconnect the adapter from the **RIGOL's** instrument.
2. Remove the loose dust on the exterior of the adapter with a lint- free cloth (with mild detergent or water).



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**CAUTION**

To avoid damage to the adapter, do not expose it to caustic liquids.

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**WARNING**

To avoid short-circuit resulting from moisture or personal injuries, ensure that the adapter is completely dry before using it.

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# USB-GPIB-L Adapter Overview

**RIGOL** USB-GPIB-L Adapter, as shown in Figure 1, is used to connect **RIGOL**'s instrument (e.g. DL3000 series electronic load) that is equipped with USB Host interface but without GPIB interface to a GPIB controller. It is also a module that expands the GPIB interface for **RIGOL**'s instrument that is not configured with the GPIB interface, and enables the **RIGOL**'s instrument to be controlled remotely through commands over the GPIB interface.

## Features of USB-GPIB-L Adapter:

- Enable GPIB control of **RIGOL**'s instrument through its USB Host interface.
- Assign the GPIB address of **RIGOL**'s instrument through the GPIB host instrument.
- Powered by USB Host interface, without being connected to an external power supply.
- Show power status through the LED indicator.
- Plug and play.



Figure 1 USB-GPIB-L Adapter

## Basic Operations

### Connection Method (refer to Figure 2)

1. Connect the USB interface of the adapter to the USB Host interface of the **RIGOL's** instrument.
2. Connect the GPIB interface of the adapter to the GPIB bus controller.



Figure 2 Diagram of the Connection Method of USB-GPIB-L Adapter



### CAUTION

To ensure that the adapter works normally, please connect the adapter according to the above procedures.

### Tip

You can view the power status of the adapter through the LED indicator. If you connect it to the **RIGOL's** instrument properly, but the LED indicator does not shine, please contact **RIGOL** to locate the problem. Do not disassemble it by yourself.

### Set the GPIB address

You can set the GPIB address through **RIGOL's** instrument or the remote controller. The default GPIB address of the adapter is 16.

## System Requirements

Each adapter controls only one instrument and does not support using the USB hubs to control several instruments simultaneously.

# Specifications

## Working Environment

<b>Operating Temperature</b>	0°C to 40°C
<b>Storage Temperature</b>	-40°C to 70°C
<b>Humidity</b>	5% to 80% RH (without condensation)
<b>Altitude</b>	Below 2,000 m

## General Specifications

<b>Dimensions</b>	74.9 mm (W) x 27.8 mm (H) x 88.6 mm (D)
<b>Weight</b>	0.05 kg



English **Warranty**

**RIGOL** TECHNOLOGIES, INC. (hereinafter referred to as **RIGOL**) warrants that the product will be free from defects in materials and workmanship within the warranty period. If a product proves defective within the warranty period, **RIGOL** guarantees free replacement or repair for the defective product.

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