

GPIB ↔ Universal Serial Bus (USB) Controller

GPIB-USB

GPIB-USB

TNT4882 ASIC

Complete IEEE 488.2 compatible
Talker/Listener/Controller
Controls up to 14 GPIB instruments
Compact Size and lightweight
No DIP switches – plug and play
configuration
Pull speed 12 Mbits/s USB signaling
No external power required
No GPIB cable required to
connect to instruments

NI-488.2M Software

Windows 98/95

Application Software

LabVIEW
LabWindows/CVI
ComponentWorks



GPIB Instrument
Control

Overview

The compact GPIB-USB transforms any computer with a Universal Serial Bus (USB) port into a full-function, plug and play, IEEE 488.2 Controller that can control up to 14 programmable GPIB instruments. The small size and light weight of the GPIB-USB make it ideal for portable applications using a laptop computer or other applications where the computer has no available internal I/O slots. The GPIB-USB works with PC-compatible computers that have a USB port.

The GPIB-USB is easy to install and use because there are no external DIP switches and no requirement for you to restart your computer for the system to recognize your IEEE 488.2 interface. The GPIB-USB is a plug and play interface that is automatically recognized and configured by the operating system as soon as it is physically attached to the USB port on the computer. With the GPIB-USB, you can get up and running quickly so you can focus on developing your instrument control applications.

Using the TNT4882C Talker/Listener/Controller IEEE 488.2 ASIC, the GPIB-USB implements the full range of GPIB Controller functions including those required and recommended by IEEE 488.2. It also implements normal and extended Talker and

Listener, serial and parallel polling, service requests, and pass/receive control functions. By drawing power directly from the USB port, the GPIB-USB requires no external power input.

Connecting the GPIB-USB to Your Instruments

The GPIB-USB does not require a GPIB cable for connecting to your instruments. Simply attach it directly to the GPIB port on your instrument and then connect the USB cable to the USB port on your computer. If you have multiple instruments in a daisy chain or star cable configuration, attach any cables that connect to the other instruments first and then piggyback the GPIB-USB as the last connector in the stack.

Ordering Information

GPIB-USB and NI-488.2 Software for

Windows 98/95777631-01

Includes USB cable.

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GPIB-USB

Specifications

USB Port

Full-speed USB signaling (12 Mbps)

IEEE 488 Compatibility

Compatible with IEEE 488.1 and IEEE 488.2

External Indicators

USB configured, USB active

Power Requirement

USB self-powered device

maximum power consumption 200 mA

Physical

Dimensions 8.6 by 6.4 by 2.3 cm
(3.4 by 2.5 by .9 in.)

I/O connectors

GPIB port IEEE 488 standard 24-pin

USB port USB standard series B receptacle

Operating Environment

Temperature 0 to 55 °C

Relative humidity 10% to 90%, noncondensing

Storage Environment

Temperature -20 to 70 °C

Relative humidity 10% to 90%, noncondensing

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