

PrintCapture & Prologix GPIB-USB Setup

Prologix (www.prologix.biz) has developed two versions of a GPIB-USB Controller that works well with PrintCapture. Their new device, GPIB-USB Controller 4.2, and their legacy device, Legacy GPIB-USB Controller, require setup so they can be used with PrintCapture. It is highly recommended that you review the online manual for your flavor of Prologix GPIB-USB Controller and use the recommended device driver from FTDI (www.ftdichip.com).

Both devices use a device driver from FTDI that creates a virtual COM port on your PC. The virtual COM port can be used by PrintCapture to receive the printer/plotter data sent by your oscilloscope, logic analyzer, or spectrum analyzer.

Many customers have purchased the Prologix GPIB-USB Controller to use with PrintCapture and then run into trouble configuring Prologix and PrintCapture to work together. Hopefully this document will get you started. The information in this document is from the Prologix User's Manuals and is simply paraphrased here to aid our customers.

Common Setup information

You must determine the GPIB address your source device (oscilloscope, logic analyzer, spectrum analyzer, etc.) expects for its printer or plotter. Generally this is in the source device's menu setup or its documentation. Note that the default GPIB address for most HPGL plotters is 5, but your source device may be different.

GPIB-USB Controller 4.2

Setup GPIB-USB Controller

Make sure you have access to the manual for this device. It is online at www.prologix.biz. You should print it for easier viewing.

This GPIB-USB Controller uses on-board memory to configure the interface,

1. Make sure you have downloaded the device drivers for the FT245R from the FTDI website at www.ftdichip.com/Drivers/VCP.htm
2. Make sure you have downloaded the device driver installation guide from the FTDI website at www.ftdichip.com/Documents/InstallGuides.htm.
3. Connect the GPIB-USB Controller to the computer with a USB cable.
4. Install the FTDI device driver according to the FTDI installation guide.
5. Plug the GPIB-USB Controller directly, or using a GPIB cable, on to the GPIB connector of the source device.
6. Start the HyperTerminal program. When you do you will probably have to select a name and icon for the connection. "Prologix" is a good name and easy to remember.
7. In the "File | Properties" dialog box, select the virtual COM port created by the USB driver. Click "OK".
8. Select the "Properties" dialog box, select the "Settings" tab and click "ASCII Setup...".
9. In the "ASCII Setup" dialog box, check "Send line ends with line feeds" and "Echo Typed characters locally". Click "OK" twice.
10. Type "++mode o" (without the quotation marks) and hit ENTER.
11. Type "++mode". You should get an "o" back. This verifies that the Controller is in DEVICE mode (o).
12. Type "++addr <addr>", where <addr> is the GPIB address that your source device expects for the plotter, and hit ENTER.

13. Type "++addr". You should see <addr>. This verifies that the Controller now has the correct GPIB address.
14. Close HyperTerminal.

Setup PrintCapture

To setup PrintCapture's serial port parameters go to Setup> Configuration> Serial Port.

1. Set Port to the virtual COM port assigned by the device driver for the GPIB-USB Controller 4.2.
2. Set Baud Rate to 115200.
3. Set Word Size to 8.
4. Set Parity to NONE.
5. Set Stopbits to 1.
6. Set Flow Control Handshake to RTS/CTS and Automatic.
7. Set End-of-Data Processing Timeout to about 5 seconds.

Legacy GPIB-USB Controller

Setup GPIB-USB Controller

Make sure you have access to the manual for this device. It is online at www.prologix.biz. You should print it for easier viewing.

The Legacy GPIB-USB Controller uses dipswitch settings and some hard-coded information to setup the device.

1. Make sure you have downloaded the device drivers for the FT232BM from the FTDI website at www.ftdichip.com/Drivers/VCP.htm.
2. Make sure you have downloaded the device driver installation guide from the FTDI website at www.ftdichip.com/Documents/InstallGuides.htm.
3. Set dip switches SW1-SW5 to set the GPIB address that your source device expects to see on the GPIB. Refer to <http://prologix.googlepages.com/manual#mozToclD050> for switch settings for all valid address.
4. Set dip switch SW6 OFF to enable Device Mode.
5. Connect the GPIB-USB Controller to the computer with a USB cable.
6. Install the FTDI device driver according to the FTDI installation guide.
7. Plug the GPIB-USB Controller directly, or using a GPIB cable, on to the GPIB connector of the source device.

Setup PrintCapture

The Legacy GPIB-USB Controller has its serial port parameters hard-coded into its firmware. To setup PrintCapture's serial port parameters go to Setup> Configuration> Serial Port:

1. Set Port to the virtual COM port assigned by the device driver for the Legacy GPIB-USB Controller.
2. Set Baud Rate to 115200.
3. Set Word Size to 8.
4. Set Parity to NONE.
5. Set Stopbits to 1.
6. Set Flow Control Handshake to RTS/CTS and Automatic.
7. Set End-of-Data Processing Timeout to about 5 seconds.