Keysight Waveform Download Assistant Software

Notice: This document contains references to Agilent. Please note that Agilent's Test and Measurement business has become Keysight Technologies. For more information, go to www.keysight.com.

Installation Guide

KEYSIGHT
TECHNOLOGIES

Waveform Download Assistant Installation Guide

This installation guide covers the following:

— Instrument Requirements

— PC Requirements

— Setting Up the GPIB or LAN Interface

— Installing the Waveform Download Assistant Software

Instrument Requirements

— ESG, PSG, or MXG signal generator

    — Arbitrary waveform baseband generator option

NOTE	It is recommended that you use the latest firmware revision. (See Downloading the Signal Generator Firmware.)

CAUTION	Before upgrading your firmware, click **View** on the firmware release page for information on how the current revision will affect other instrument related software you are using.

Downloading the Signal Generator Firmware

You may need to upgrade the firmware in your signal generator to run the Waveform Download Assistant software. To load the latest version of firmware, go to http://www.keysightcom/find/upgrade assistant and follow the instructions for your signal generator.

PC Requirements

Waveform Download Assistant	Version 1.7	Version 2.0
Operating System	Windows XP, NT 4.0 (Service Pack 4 or later recommended), or Windows 2000	Windows XP
Processor	Pentium PC, 200 MHz or better	Pentium PC, 200 MHz or better
RAM	64 MB (128 MB for Windows 2000)	1 GB
Disk Space	50 MB free	1 GB total
MATLAB®	MATLAB 6.1 (R13) to 7.7 (R2008b)	MATLAB 7.8 (R2009a) or later
MATLAB Instrument Controller Toolbox	Not Required	Version 2.9 or later
Keysight IO Libraries	Suite 15.5 or later	Only required if using an Keysight GPIB interface card
GPIB IO interface card or LAN interface card	Required (see GPIB Interface Requirements or LAN Interface Requirements below)	Required (see GPIB Interface Requirements or LAN Interface Requirements below)

NOTE	For service packs, contact Microsoft directly, or go to: http://www.microsoft.com

NOTE	To use the Help system you must have Internet Explorer 4.01 service pack 2.0 or later.

GPIB Interface Requirements

To install a GPIB interface card, follow the installation instructions supplied by the GPIB interface card manufacturer. Once the GPIB interface card is installed, you must install an I/O library on your computer. The I/O library is typically supplied along with the GPIB interface card. The I/O libraries can be obtained from the manufacturer of the interface card.

The GPIB and its associated interface protocols are defined in the ANSI/IEEE standard 488.1-1987 and ANSI/IEEE standard 488.2-1992. For more information on these standards, refer to the IEEE website.

Installation of an Keysight GPIB interface card usually includes installation of the Keysight IO Libraries. If the National Instrument's GPIB interface card is installed, the NI-VISA libraries are usually installed on the PC. The difference between Keysight VISA and NI-VISA are the lower level libraries used; SICL and NI-488.2 respectively.

LAN Interface Requirements

— A local area network (LAN) interface card

Most computers have a LAN interface card as part of the hardware configuration. If your computer does not have a LAN card, you can get one from Keysight Technologies or another manufacturer.

— A 10Base-T cable (to connect the PC to the LAN)

The LAN and its associated interface protocols are defined in the IEEE standard 802. For information on this standard, refer to the IEEE website.

Installing Keysight IO Libraries

Use the latest version of Keysight IO Libraries with the Waveform Download Assistant version 1.7 software (not required for version 2.0 or later unless you are using an Keysight interface card). Keysight IO Libraries are included with most Keysight interface products, or you can download the latest version from the Keysight website free of charge.

NOTE	If you are using a National Instruments GPIB interface card and have the NI-VISA libraries installed, you still must install Keysight IO Libraries to use the Waveform Download Assistant version 1.7 software. Both libraries can reside on your computer.
	If you use the Keysight IO libraries default values, your GPIB interface card will be configured to work with the Waveform Download Assistant software. The default values will allow you to install and use the Keysight VISA card without affecting the use of your NI-VISA card.

Go to http://www.keysight.com/find/iolib. Click Download Latest Release (IO Libraries Suite XX.X) and follow the installation procedure.

If you have problems with the installation, or if you want to customize the installation, go to http://www.keysight.com/find/iolib. From the Technical Support dropdown menu, click FAQs for additional configuration and installation information.

Setting Up the GPIB or LAN Interface

The Waveform Download Assistant can use a general purpose interface bus (GPIB) or a LAN interface (not applicable to E4430-37B ESG models) for instrument control.

Configuring the GPIB Interface

If you have a GPIB interface card and have completed the Keysight IO Libraries installation as previously described in this guide, use the Keysight Connection Expert to set up the IO Libraries to communicate with the GPIB card. For detailed instructions, see the Keysight IO Libraries Connectivity Guide.

NOTE	ESG, PSG, and MXG software uses the Keysight IO Libraries. If you have a National Instrument's GPIB interface card and National Instruments libraries on your computer, the Keysight IO library InstallShield Wizard will allow for both National Instruments and Keysight libraries to reside on your PC.

For Waveform Download Assistant version 2.0, if you installed another vendor's GPIB card and IO libraries, you are not required to install the Keysight IO Libraries. For instructions on setting up the GPIB interface, see the documentation provided with your GPIB card.

Configuring the LAN Interface

If you have a LAN interface and have completed the Keysight IO Libraries installation as previously described in this guide, use the Keysight Connection Expert to set up the IO Libraries to communicate with the LAN. For detailed instructions, see the Keysight IO Libraries Connectivity Guide.

For Waveform Download Assistant version 2.0, if you installed another vendor's IO libraries, you are not required to install the Keysight IO Libraries. For instructions on setting up the LAN interface, see the documentation provided with your IO libraries.

Installing the Waveform Download Assistant Software

1. Go to www.keysight.com/find/downloadassistant and follow the download instructions.

2. Waveform Download Assistant Version 1.7 is an executable. If you install the software and accept the default, a shortcut to Help for the Waveform Download Assistant software is placed in **Start › All Programs › Keysight Signal Generators › Waveform Download Assistant**.

3. Waveform Download Assistant Version 2.0 is a zip file. If you unzip the file and select the default, the M-file functions are located in the Matlab workspace.