

Sequence Creation and Control Software Setup Guide

SD032-PCR-WE Wavy for PCR-WE Ver 6.x

Thank you for purchasing the Sequence Creation Software SD032-PCR-WE Wavy for PCR-WE.

SD032-PCR-WE Wavy for PCR-WE is used to create and execute sequences for Kikusui PCR-WE series and PCR-WE2 series (including the PCR-WE2R, a model with a regeneration function) AC power supplies.

- You can create and edit sequences easily by using a mouse.
- During sequence execution, the software indicates the point being executed.
- You can monitor the voltage and current, and save the monitored data to a file.
- The software displays the monitored data as a real-time monitor graph.

■ Package contents

The Wavy for PCR-WE package contains the following items.

- Program CD-ROM
- SD032-PCR-WE Wavy for PCR-WE Setup Guide (this guide)

■ Applicable version

This guide applies to version 6.x of SD032-PCR-WE Wavy for PCR-WE. To find out the version of the Wavy, click on the Help menu and select About Wavy.

Wavy for PCR-WE applies to PCR-WE series and PCR-WE2 series (including the PCR-WE2R, a model with a regeneration function) with firmware version 1.26 and later. For instructions on how to view the firmware version, see the AC power supply manual.

■ Trademarks

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■ Notations Used in This Manual

- In this guide, Sequence Creation Software SD032-PCR-WE Wavy for PCR-WE is referred to as Wavy for PCR-WE or Wavy.
- In this guide, the PCR-WE series and PCR-WE2 series (including the PCR-WE2R, a model with a regeneration function) AC power supply is also referred to as the "PCR-WE."
- "PC" in this guide is a generic term for personal computers and workstations.
- In this guide, operations on Windows 10 are described when explaining operations related to the OS.
- The following markings are used in this guide.

NOTE Indicates information that you should know.

- > Indicates the menu command you need to select. The menu command to the left of ">" is the higher level command.

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The newest version of the operation manual can be downloaded from Download service of Kikusui website.



Safety precautions

Before using Wavy, carefully read the AC power supply manual.

Be sure to connect and handle the device properly. Improper connections or handling may lead to serious accidents, injury, and fire.

System requirements

- Core2 or higher
- Windows 10^{*1}, Windows 8.1, or Windows 7
- 2 GB RAM^{*2} (Minimum)
- 10 GB or more of free hard-disk space
- A display that supports 1024 x 768 or higher resolution (96 DPI)
- CD-ROM drive
- Mouse
- RS232C, USB, LAN, or GPIB (depending on the interface to use)
- VISA library

^{*1} Pro Edition is recommended. See “Windows Update settings” ([p. 5](#)).

^{*2} If you want to use the software continuously over an extended period, expanding the RAM to 4 GB is recommended.

Installation

An administrator account is required for the following installation.

Installing the VISA library

To use Wavy, VISA library needs to be installed on your PC.

VISA (Virtual Instrument Software Architecture) library is a standard specification for measurement instrument connection software, which was developed by VXIplug&play Systems Alliance. One of the following VISA libraries is required.

- NI-VISA by National Instruments (Ver.4.0 or later)
- Keysight VISA by Keysight Technologies (Keysight IO Libraries Suite14.2 or later)
- KI-VISA Ver 5.1.2 or later

KI-VISA is an original VISA library developed by Kikusui Electronics Corporation, which supports IVI VISA 5.0 specification. You can download the latest version of this library through our website (<http://www.kikusui.co.jp/download/>).

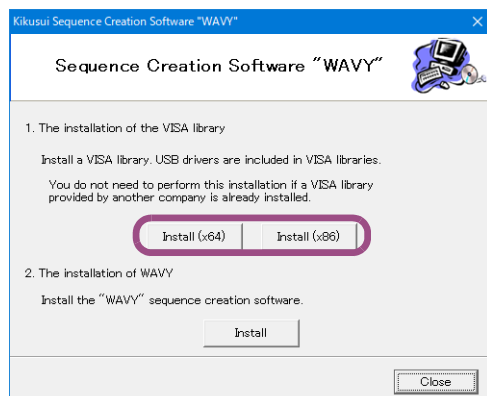
If NI-VISA or Keysight VISA is already installed on your PC, you do not need to install KI-VISA.

1 Insert the CD-ROM to your CD-ROM drive.

A setup window appears. Otherwise, double-click “AutoRun.exe” included in the CD-ROM.

2 Click Install under 1. The installation of the VISA library for using the USB or LAN.

Click Install (x64) for 64-bit OS or Install (x86) for 32-bit OS.



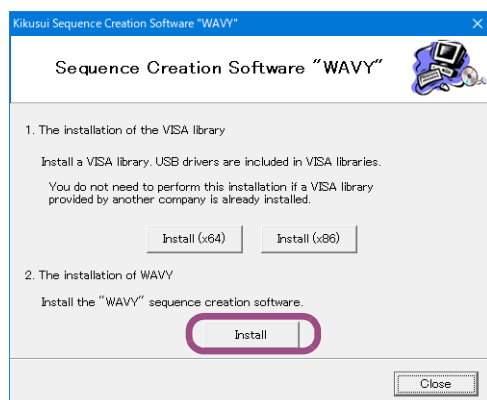
The VISA library installation initiates. In case that a VISA library has already been installed, the VISA library and its version are displayed. Do not install multiple VISA libraries on a single PC.

Installing Wavy

1 Insert the CD-ROM to your CD-ROM drive.

A setup window appears. Otherwise, double-click "AutoRun.exe" included in the CD-ROM.

2 Click Install under 2. The Installation of WAVY.



3 Follow the instructions until the installation is complete.

4 Click Close.

Uninstalling Wavy

Right-click Windows Start, and select > Apps & Features > Kikusui SD032-PCR-WE > Uninstall.

About Windows updates (Windows 10 only)

Unlike the older versions of Windows, Windows 10 is provided as Windows as a Service (WaaS) in order to continuously update the OS. It is said that updating privileges would be lost unless it is used in an Internet connected environment and Windows Update is periodically executed (currently 18 months).

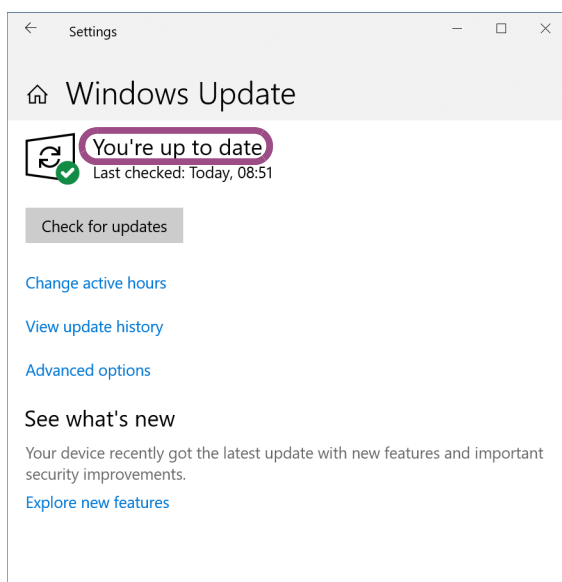
If you want to stably run a sequence using Wavy over an extended period, you need to be careful about the auto update function of Window 10.

Familiarize yourself with the matter explained below, and construct the most stable OS environment possible before running a sequence.

■ Running Windows Update

Run Windows Update to update the OS to the latest condition (in which “You’re up to date” is shown).

When the downloading of the update file is complete, Windows will be in an installation-wait state or restart-wait state after installation. If you run a sequence in this state, Windows may restart automatically even when the PC is not connected to the Internet. Be sure to select Install Now or Restart Now to complete the installation of the update program.



■ Windows Update settings

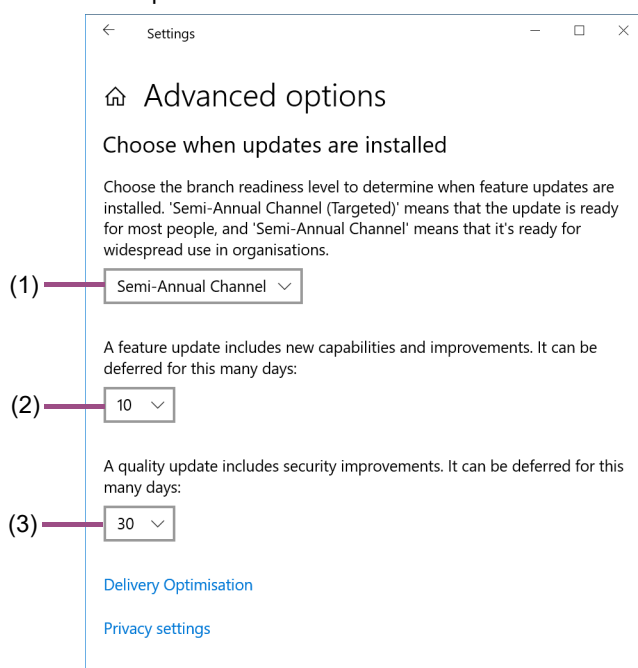
With the default Windows Update settings, when connected to the Internet, Windows 10 automatically runs Windows Update and restarts the PC using the update program. If Wavy is running, Windows will automatically restart while a sequence is running, and this will result in the loss of monitored data.

To prevent Windows from automatically restarting, we recommend you change the update program installation period settings. However, this is not possible on Windows 10 Home Edition. We recommend the Pro Edition for running Wavy.

Set the Windows Update advanced options as follows:

- Right-click Windows Start > Settings > Update & Security > Windows Update > Advanced Options > (scroll the window)

Example of Windows 10 Pro ver.1809



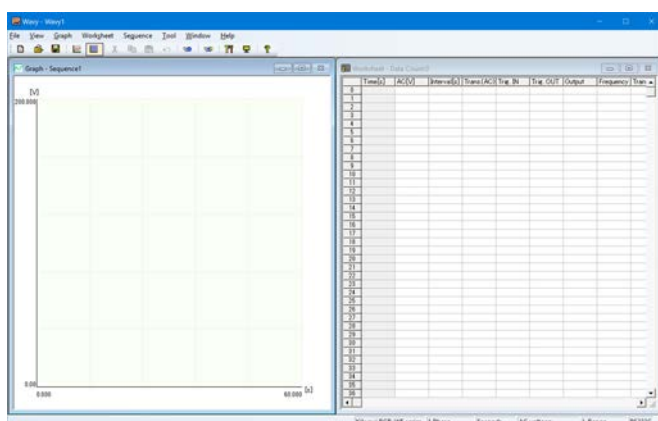
- (1) Branch readiness level
Select Semi-Annual Channel.
- (2) Feature update program deferral days
Select a number greater than the number of days you will be continuously running Wavy (possible up to 365 days).
- (3) Quality update program deferral days
Select the longest number of days (30).

Starting Wavy

NOTE

- Before starting Wavy, make sure that the power-saving mode and the screen saver are turned off and all the other applications are closed on your PC.
- When your PC supports either Advanced Power Management (APM) or sleep mode, turn off these functions.
- Changing the DPI setting may result in improper appearance of the display.

To start Wavy, from the Windows Start menu, select Kikusui SD032-PCR-WE > Wavy for PCR-WE.



Viewing the User's manual

The User's manual contain information on how to use Wavy and description of interface settings.

Manual is available in two versions: HTML help and PDF

Adobe Reader is required to view the operation guide in PDF format.

- To open the HTML help, click Help and then Help (English).
- To open the user's manual PDF file, from the Windows Start menu, select Kikusui SD032-PCR-WE > User's Manual (English).