U-20 Data Collection Software (U-20 Win32) Operation Manual

1 Introduction
This software allows you to save data measured with U-20 Series Multi Parameter Water Quality Monitoring System as CSV format files. In using this software with personal computer, Prepare U-20 instrument, sensor, and expansion unit until U-20 and RS-232C cable. See operation manual of U-20 Series and Expansion Unit about functions of U-20 and PC command.

This software has two specifications: English and Japanese. The following describes how to install and use this software with English specification.

Required PC environment
- PC: IBM/AT compatible computer with Windows 95, Windows NT, Windows 98, Windows 2000 or Windows XP operating system.
- Memory: 8 MB or more
- Drive: CD-ROM drive
- Hard disk: 10 MB or more
- Graphic resolution: 800 x 600

This software can be used with 1024 x 768 and higher resolution monitors, though the pictures will move to the upper left.

Font size: small

2 Installation
Installation requires the obtained setup CD.
1. Install the software as follows.
   1. Turn ON your PC.
   2. Set setup CD to the CD-ROM drive.
   3. Double-click “_wizard.exe” in the “English” folder of the setup CD drive.
   4. When the screen “Welcome to the U-20 sample software installation Wizard” appears, check that other applications are not open and click the “Next.”

3 Connections
1. Connect your PC to the system with an RS-232C cable and an expansion adaptor if necessary.
   (See “4 RS-232C Communication Setting” in the Expansion Unit Operation Manual.)
2. Turn ON the U-20 instrument.
3. Simultaneously press the “SET” and “POWER” keys on the U-20 instrument.
4. Release the “POWER” key but keep the “SET” key held down. “< E 24 >” will appear in the instrument display.

4 Software Startup
Selection of “all” program of “start” menu → “HORIBA U-20” → “U-20” starts software.

5 Main Window
- Measurement results

Graph Operating Toolbar
- XY Scaling
  - Scale Style
  - Graph Zooming
  - Lock button
  - Unlock
  - Pan/tilt
  - Zoom tool
  - Pop-up menu

5. Specify the folder of installation place and click the “Next.” It is installed in C:\Program Files\U-20Win32 in initial setting.

6. Click the “Next” again...

7. When the screen “U-20 sample software has been successfully installed.” appears, click the “Finish” installation finished.

6 Displaying the Measuring Data
1. Select “Data” in the main menu, select “Display” in the measuring value area.

Notes: If an error is displayed, the following may have happened.
- The cable is disconnected.
- “< F377 >” is not displayed on the U-20 instrument.
- In both cases, redo the procedure in 3. Connections.
- When the port is not connected to U-20, it is not displayed.

2. Select “Stop” from the MEASURE menu to stop measurements.

3. Storing manually measuring data
- Select “Save Data” from the MEASURE menu during the measurement.
- To save measured data as a file, select “Save File” from the FILE menu.
- All data which has been measured will be saved.
7 Storing Automatically Sampling Data

To Start
1. Select "Auto Data In Start" from the SENSOR menu.

2. Set the Interval, Wait and Term as with the instrument itself.
   (See "4.2 Automatic data storage" in the V. 20 Entries Operation Manual)
3. Click on the "OK" button.
   The sensor probe will start storing data.

Notes: Setting beyond the usable range will cause an error.

To Stop
1. Select "Auto Data In Stop" from the SENSOR menu.
2. Click on the "OK" button in the confirmation box. Data storing will stop.

8 Reading Data from the Sensor Probe

You can read data (manually/automatically) stored in the sensor probe's memory and save it as a file.

1. Select "OPEN Data" from the SENSOR menu. The currently stored data will be displayed.

2. Jorjücke on the data file that you want to read. The data with the last UKA No. in the data file will be displayed.

Correlated - The displayed Data No. shows the No. in the sensor probe's memory.
- Several data files can be read at once as you select several data files with pressing the SHF key.

Notes: When reading data in one session of automatic storage, all data is read. Each data will take approximately 1 second to read. For example, it takes approximately 10 seconds to read one data file with 10 data.
3. Auto stored data can be selected and displayed as graphs. Select graph terms to display graphs. It is also possible to select data for display, measured values by inputting a Data No.
4. Select "CLOSE" from the UKA menu to return to the main window. The selected data and graph will be displayed on the main window.
5. To save data as a file, select "SAVE FILE" from the FILE menu.

Correlated - All the data read from the data files are treated as one data group when several data files are read at once. Therefore, read the graph is displayed by the combination of several data files. The data is saved in one file.

9 Reading Data from Files

Select "OPEN" from the FILE menu.

1. Select "OPEN" from the FILE menu.
   - Select file. The selected data will be displayed.
2. Select "CLOSE" from the DATA menu.

10 Data Graph

This sample software allows you to display data graph per data file read from the sensor probe.

The graph display can be selected from the following two types:

- X-Y graph (Graph of change by time)
- COLOR Graph (Depths based Color graph)

11 Printing Windows

You can print windows in which FILE menu can be accessed.

1. Select "PRINT SETUP" from the FILE menu to set up the printer if necessary.
2. Select "PRINT WINDOW" from the FILE menu. The currently displayed window will be printed out.

Windows™ is a trademark of Microsoft Corporation.
Specifications are subject to change without any obligation on the part of the manufacturer.