Operation Guide

WX1000 DAQWORX Installation & Operation Guide

vigilantplant.®

YOKOGAWA ◆
Yokogawa Electric Corporation

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Product Registration

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http://www.yokogawa.com/ns/reg/

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Foreword

Thank you for purchasing DAQWORX. This guide covers the following topics.
- Installing and uninstalling DAQWORX.
- Examples of how to use DAQLOGGER to easily acquire data from Yokogawa Green series temperature controllers, the WT1600, and the MX100.

To ensure correct use, please read this manual thoroughly before beginning operation. After reading the manual, keep it in a convenient location for quick reference in the event a question arises. See the user's manuals for the individual DAQWORX software components for the functions and operating procedures of those products. After reading this manual, keep it in a convenient location for quick reference in the event a question arises.

Note

- The contents of this manual are subject to change without prior notice as a result of improvements in the software's performance and functions. Display contents illustrated in this manual may differ slightly from what actually appears on your screen.
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Revisions

- 1st Edition   2003 July
- 2nd Edition   2003 December
- 3rd Edition   2004 September
- 4th Edition   2005 February
- 5th Edition   2006 March
- 6th Edition   2006 July
- 7th Edition   2007 June
- 8th Edition   2008 March
- 9th Edition   2009 Junuary

Checking the Contents of the Package

Unpack the box and check the contents before operating the instrument. If some items are missing or otherwise inconsistent with the contents description, please contact your dealer or nearest Yokogawa representative.
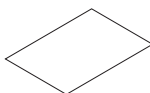
Package Contents

The DAQWORX installation CD and user's manual CD are only included if the /CD option was specified at the time of purchase.

WX1000 DAQWORX
Installation and Operation Guide (this manual)
(only with the /CD1 option) 1

IM WX1000-01

DAQWORX installation CD
(only with the /CD1 option) 1

Product number: B9991WD

License sheet 1

DAQWORX user's manual CD
(only with the /CD1 option) 1

Product number: B9991WE

Storing the CDs
Please store your original CDs carefully. Install the products on your hard disk, and run the products from your hard disk during actual use.

CD Handling Guidelines

Make sure to take the following precautions.

CAUTION

- Do not store the product near large amounts of refuse or dust.
- Do not touch the surface of the CD with no printed characters.
  Dirt or sweat from fingertips can damage the CD. Do not write anything on the CD.
- Pencil lead or residue from erasers can damage the CD.
- Do not bend or scratch the CD.
  Doing so can cause it to become unreadable.
- Never place anything on top of the CD.
  Doing so can cause deformities that can render the CD useless.
- Do not drop the CD from high locations as doing so can cause damage or deformities.
- Do not place the CD in direct sunlight or near heat sources.
- Never allow solvents such as alcohol, benzene, or Freon to come into contact with the CD.
- Take care when placing the CD into the CD-ROM drive.
- While the CD is being accessed, do not remove the CD from the CD-ROM drive, cut the power to the PC, or reset the computer.
- Store the CD in its original jewel case.
  Do not leave the CD in the CD-ROM drive after use. It can become deformed or damaged unless it is kept in its case.

Overview of DAQWORX Installation

The DAQWORX installer lets you do the following:

- Install the software
- Add or delete software
- Modify or repair a previous software installation
- Install software upgrades

It is recommended that you uninstall any previously installed DAQWORX components before reinstalling. During installation, only the applications that you specify are installed in the DAQWORX folder.

The DAQWORX folder can be installed in any location, but changing the structure of the DAQWORX subdirectories may cause problems when adding, upgrading, or deleting components.

When using Windows Vista, the software will not function normally if installed in a subfolder of the Program Files folder. Also, when using Windows XP or Windows 2000, please do not upgrade to Windows Vista if the DAQWORX software is installed in a subfolder of the Program Files folder.

Your license numbers are recorded on the license sheet. Refer the numbers you purchased when adding or changing software. Please keep your license numbers in a safe place.

Note

Following message is shown when installer used in previous installation doesn't support OS language.

"The language between OS and installer is different. If you continue installation, language used in software is not changed. If you want to adapt these language, please uninstall software and install this software again."

In order to adapt language of software to OS, please uninstall any previously installed DAQWORX components and install again, otherwise language of software is not changed.

Installing the Software

One or more license numbers is required during installation. Please have your license numbers ready before beginning. Your license numbers are recorded on the license sheet.

1. Place the DAQWORX installation CD in the CD-ROM drive.

The installer starts. However it will not start if your CD-ROM'S Autoplay function is turned OFF. In that case, double-click the CD-ROM icon under My Computer, then double-click the Setup.exe program.

2. Click Next.

The License Agreement dialog box is displayed.

3. After reading the entire contents of the license agreement, click I accept the terms of the license agreement or I do not accept the terms of the license agreement.

If You Click *"I do not accept the terms of the license agreement"*

4. Click Cancel to end the installation. You may not install the software.

If You Click *"I accept the terms of the license agreement"*

4. Click Next.

The user information dialog box is displayed.

5. Enter the user name and company name.

Note

The user name and company name entered here can be confirmed along with the version information when choosing **Help > About** in any DAQWORX software application.

6. Click Next.

The Choose Destination Location window is displayed.

7. Confirm that you accept the default installation destination. To change the installation destination, click Browse and select a new destination using the browser. When using Windows Vista, please do not install the software in a subfolder of the Program Files folder. If installed within the Program Files folder, the software will not function normally.

8. Click Next.

The Base software installation screen is displayed.

9. Enter the license numbers for the applications you wish to install.

10. Click Next.

The Add software installation screen is displayed.

11. Enter the license numbers for the applications you wish to install. If you are not installing any Add software, leave the boxes blank and continue on to the next step.

12. Click Next.

The license number entry screen for Gate software is displayed.

13. Enter license numbers for only the number of applications you wish to use. If you are not installing any Gate software, leave the boxes blank and continue on to the next step.

14. Click Next.

The Gate software selection screen is displayed. If no license numbers were entered in step 13, this screen is not displayed.

15. Select the check boxes of the Gate software applications you wish to install.

16. Click Next.

The installation confirmation screen appears.

17. Click Next.

The installation begins.

When installation is complete, the Finish dialog box appears.

18. Click Finish.

The dialog box closes.

Upgrading the Software

To upgrade the software, you must have a separate license number for the upgrade version as well as the license number for the older version.

1. Carry out steps 1 to 7 in "Installing the Software" (page 11–13).

If an earlier version of DAQWORX is installed, the windows below is displayed.

If an earlier version of the software is not installed, continue on to step 3.

2. Click Next.

Any free upgrades that are available will be automatically installed.

3. Enter the upgrade license number.
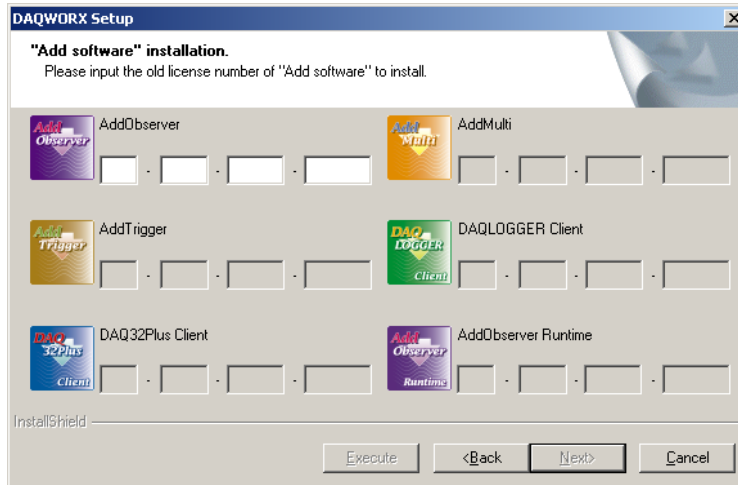
Installation Guide

4. Click Next.

When a License Number for a Previous Version Exists

The license number entry screen for Add software is displayed.

Go to step 5.

When a License Number for a Previous Version Does Not Exist
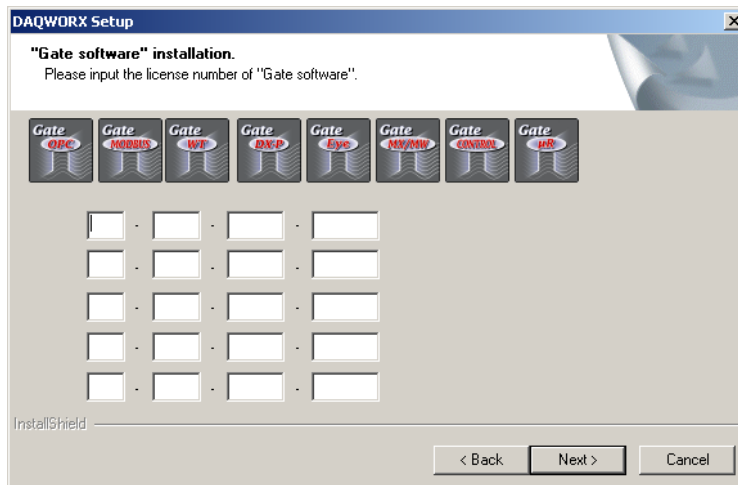
A screen such as the one below is displayed.

5. Enter the old license number.

If the old license number is a 3-numeric block combination, enter the old license number in the box leaving the second block blank.

6. Click Next.

The Add software installation screen is displayed.

7. Enter the upgrade license number.

8. Click Next.

When a License Number for a Previous Version Exists

The installation screen for Gate software is displayed.

Go to step 10.

When a License Number for a Previous Version Does Not Exist

A screen such as the one below is displayed.

9. Enter the old license number.

If the old license number is a 3-numeric block combination, enter the old license number in the box leaving the second block blank.

10. Click Next.

The installation screen for Gate software is displayed.

11. Perform steps 16 through 18 under "Installing the Software" on pages 15.

Modifying, Repairing, or Deleting Software

To modify, repair, or delete software, enter maintenance mode
by performing the following procedure.
- Rerun the DAQWORX installation CD.
- Select Change or Delete under Add/Remove Programs.

1. The program enters maintenance mode.

The Welcome dialog box opens.

2. Select Modify, Repair, or Delete.

Modify: Select when adding software that was not purchased originally, deleting individual software applications that you no longer need, or performing a free/fee-based upgrade.

Repair: Select to use a program on the CD to overwrite executable files CD that may have become corrupt or deleted from the hard disk accidentally after installation.

Delete: Select to uninstall DAQWORX.

3. Click Next.

The Base software dialog box opens.

Note

The license numbers of the installed applications are displayed.

4. Enter the license numbers of applications to be added or upgraded, and select the check boxes of any applications that you wish to delete.

Delete: Uninstall applications that have been previously installed.
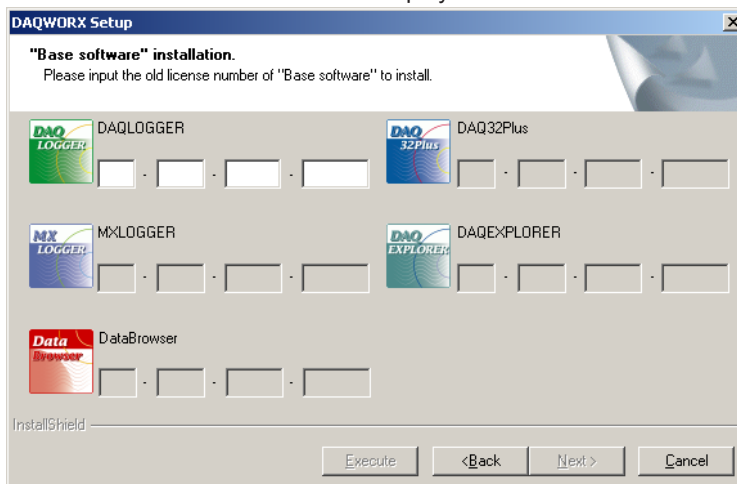
5. Click Next.

When Entering Upgrade License Numbers

• **When a License Number for a Previous Version Exists**

The license number entry dialog box for Add software is displayed.

Go to step 8.

• **When a License Number for a Previous Version Does Not Exist**

A screen such as the one below is displayed.

6. Enter the old license number.

7. Click Next.

The license number entry dialog box for Add software is displayed.

Note

The license numbers of the installed applications are displayed.

8. Enter the license numbers of applications to be added or upgraded, and select the check boxes of any applications that you wish to delete.
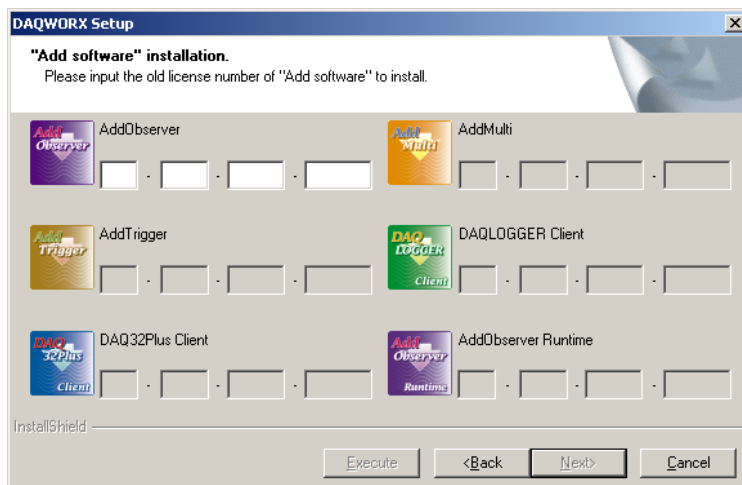
When Entering Upgrade License Numbers

• **When a License Number for a Previous Version Exists**

The license number entry dialog box for Gate software is displayed.

Go to step 11.

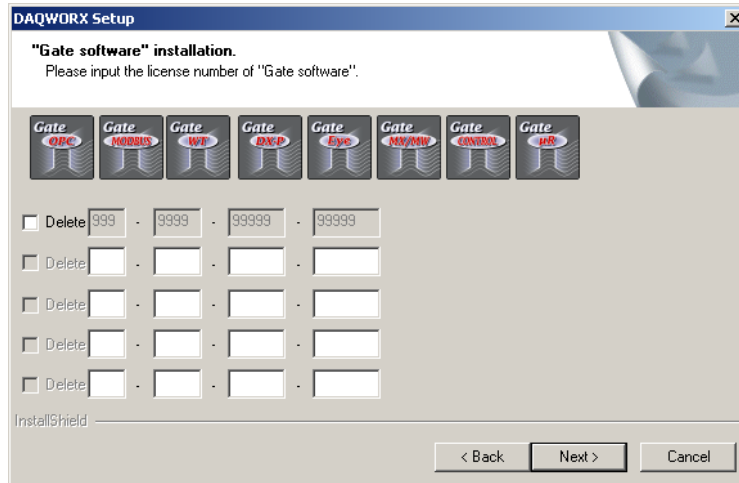**When a License Number for a Previous Version Does Not Exist**

A screen such as the one below is displayed.

9. Enter the old license number.

10. Click Next.

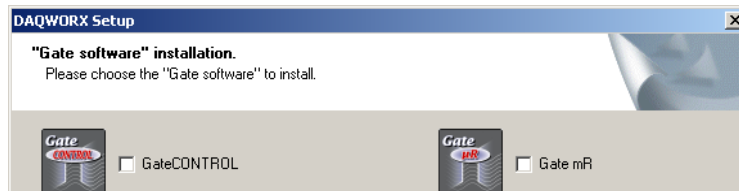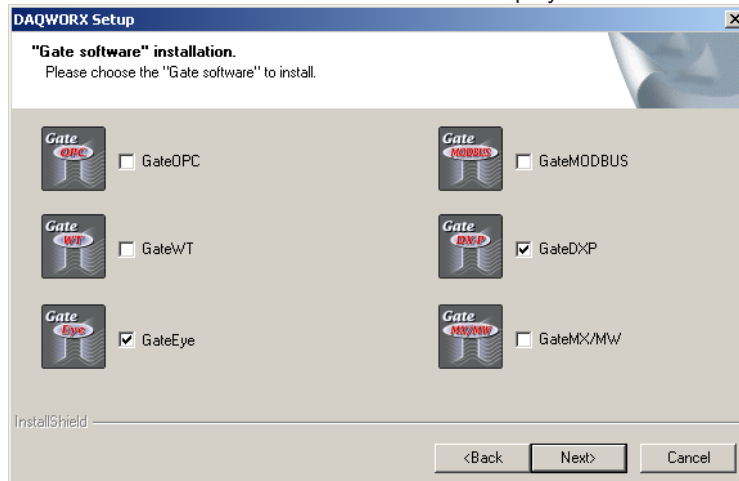The license number entry dialog box for Gate software is displayed.

11. If you have new license numbers to add, enter them in the boxes. If you wish to delete licenses, select the appropriate Delete check boxes.

Note

The license numbers of the installed applications are displayed and can be edited.

12. Click Next.

The Gate software addition check boxes are displayed.

13. Select the Gate software applications you wish to add.

14. Perform steps 13 through 18 under "Installing the Software" on page 14 and 15.

Viewing the User's Manual

List of User's Manuals

The DAQWORX user's manual CD contains the following manuals in PDF format. Please read the appropriate manuals for the applications you plan to use.
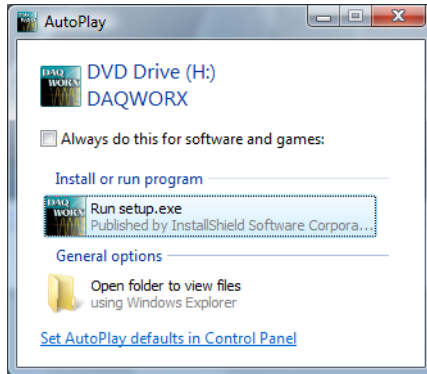
Base Software	Add-on software	Gate Software
DAQLOGGER	AddObserver	GateEye
DAQ32Plus	AddMulti	GateWT
MXLOGGER	AddTrigger	GateDX-P
DAQEXPLORER	DAQLOGGER Client	GateOPC
	DAQ32Plus Client	GateMODBUS
	AddObserver Runtime	GateMX/MW
		GateCONTROL
		Gate μR
DataBrowser (file searching and waveform comparison software)		

Opening a User's Manual

1. Insert the DAQWORX User's Manual CD into the CD-ROM drive. If using Windows 2000 or Windows XP, the user's manual selection screen opens. However, if the auto-play feature of the CD-ROM drive is turned OFF, the user's manual selection screen will not open automatically. In this case, double-click the CD-ROM icon under My Computer.

If you move the mouse cursor to the product name and click, the user's manual is displayed.

When using Windows Vista, the following screen appears. Click **Run startup.exe.** The user's manual selection screen opens.

2. Double-click the name of the manual you wish to use. The selected user's manual is displayed.

Note

To display a user's manual, Adobe Acrobat Reader 7.0 or later must be installed on your PC. If Acrobat is not installed, click the [Get ADOBE READER] button to install it.

3. Click OK.

The dialog box closes.

Overview of DAQWORX

DAQWORX allows users to assemble a data acquisition system using Yokogawa recorders, data loggers, the temperature controllers, measuring instruments without the need for programming. For adding functionality, DAQWORX offers an integrated data acquisition software system, allowing customers to connect high added-value software to their existing data acquisition systems to easily expand the range of supported applications.

DAQWORX consists of three software component groups plus the DataBrowser software program. Users can construct data acquisitions systems that are ideal for their specific application by combining various software packages from the lineup of each of the components.

1. Data Acquisition Component Group: Base Software
The "Base" software components require neither technical expertise nor programming, enabling easy setup of various kinds of data acquisition hardware, a rapid system setup time, and easy settings for analysis of data.

2. High Added-Value Component Group: Add-on Software
"Add" components can be added to Base components to construct a high added-value data acquisition system. Add software includes applications for customized and network-based remote monitoring, data acquisition and saving by group, and monitoring of measured data for triggered data acquisition.

3. Interface Component Group: Gate Software
"Gate" applications let you easily connect not only to data loggers, but also power measuring instruments, industrial instrumentation, data via OPC servers, and images from network cameras-all without programming.

4. DataBrowser Software
DataBrowser performs searches of data files saved by data acquisition units such as DAQSTATION and data acquisition software programs such as DAQLOGGER, DAQEXPLORER, and MXLOGGER, allowing you to display and compare any found waveforms on a single screen.

The next section describes how common components from each group are typically connected.

Operation Guide

Introduction to Functions

The following sections provide a brief explanation of how GateMODBUS can be used to acquire data from the UT351 temperature controller on DAQLOGGER, how GateWT can be used to acquire measured data from Yokogawa's WT1600 on DAQLOGGER, how GateMX/MW can be used to acquire measured data from Yokogawa's MX100 Data Acquisition Unit, how measured data from Yokogawa recorders can be acquired on DAQLOGGER, and how AddMulti software can be used to acquire and save data on DAQLOGGER on a group-by-group basis.

DAQLOGGER

DAQLOGGER acquires measured or calculated data from recorders connected to other recorders or PCs. Also, Gate software* (GateWT, GateMODBUS, GateMX/MW etc.) can be connected allowing data acquisition from measuring instruments including digital power meters (such as the WT1600), Modbus devices (such as Yokogawa's UT351/UT551 temperature controllers), and data acquisition units (such as the MX100).

   * The devices that can be connected differ depending on the Gate software installed.

AddMulti

AddMulti is a software program that allows you to connect data acquisition software such as DAQLOGGER and simultaneously perform acquisitions under different logging conditions. This function is called multilogging. For example, data acquired from the WT1600 Digital Power Meter, data from a Modbus device (the UT351 temperature controller), and data from recorders can be divided into several groups on DAQLOGGER, then each group can be logged and saved to a designated folder at a specified timing. You can also mix data from the WT1600, Modbus device (UT351), and recorders in a single group.

GateWT

GateWT is a software program that acquires data from WT series instruments and transfers it to DAQLOGGER.
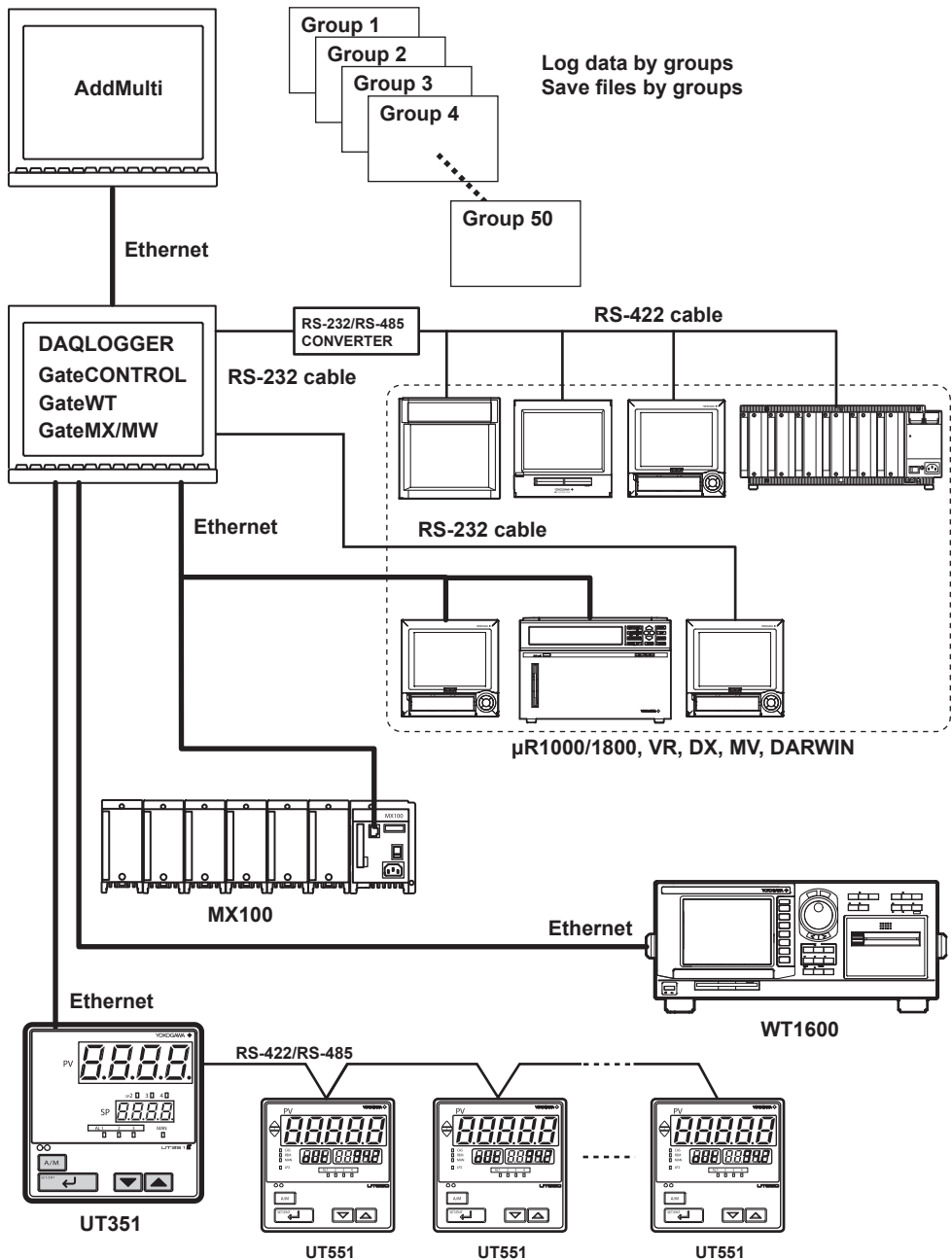
GateCONTROL

GateCONTROL is a software program that acquires data from temperature controllers and signal converters that support data output via the Modbus/RTU and Modbus/TCP protocols, and transfers the data to DAQLOGGER.

GateMX/MW

GateMX/MW is a software program that monitors measured data from MX100 data acquisition units and transfers it to DAQLOGGER or remote monitors.
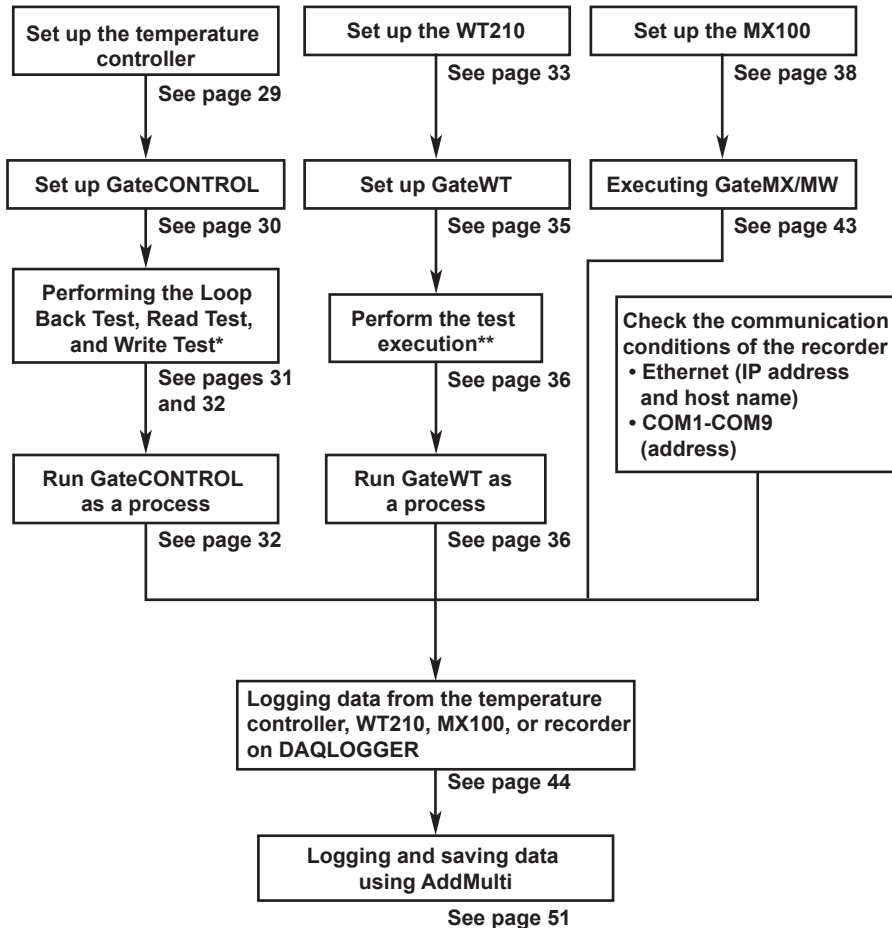
Flow Chart of Connections and Operation

The following is an example configuration for DAQWORX.

AddMulti

Group 1
Group 2
Group 3
Group 4

Log data by groups
Save files by groups

Group 50

Ethernet

DAQLOGGER
GateCONTROL
GateWT
GateMX/MW

RS-232/RS-485 CONVERTER

RS-422 cable

RS-232 cable

Ethernet

RS-232 cable

µR1000/1800, VR, DX, MV, DARWIN

MX100

Ethernet

WT1600

Ethernet

RS-422/RS-485

UT351

UT551

UT551

UT551

Operation Guide

The flow of procedures described in this operation guide is shown below. This flow assumes that all connections have been made.

```
┌─────────────────────┐    ┌─────────────────────┐    ┌─────────────────────┐
│ Set up the temperature │   │   Set up the WT210   │   │   Set up the MX100   │
│      controller      │    │                     │    │                     │
└─────────────────────┘    └─────────────────────┘    └─────────────────────┘
         See page 29              See page 33              See page 38
            │                         │                         │
            ▼                         ▼                         ▼
┌─────────────────────┐    ┌─────────────────────┐    ┌─────────────────────┐
│  Set up GateCONTROL  │    │    Set up GateWT    │    │ Executing GateMX/MW  │
└─────────────────────┘    └─────────────────────┘    └─────────────────────┘
         See page 30              See page 35              See page 43
            │                         │                         │
            ▼                         ▼                         │
┌─────────────────────┐    ┌─────────────────────┐    ┌─────────────────────┐
│  Performing the Loop │    │   Perform the test  │    │ Check the communication │
│ Back Test, Read Test,│    │     execution**     │    │ conditions of the recorder │
│   and Write Test*    │    │                     │    │ • Ethernet (IP address │
└─────────────────────┘    └─────────────────────┘    │   and host name)     │
   See pages 31 and 32          See page 36          │ • COM1-COM9          │
            │                         │               │   (address)          │
            ▼                         ▼               └─────────────────────┘
┌─────────────────────┐    ┌─────────────────────┐
│   Run GateCONTROL    │    │    Run GateWT as    │
│    as a process      │    │      a process      │
└─────────────────────┘    └─────────────────────┘
         See page 32              See page 36
```

Logging data from the temperature controller, WT210, MX100, or recorder on DAQLOGGER

See page 44

Logging and saving data using AddMulti

See page 51

* **GateCONTROL Loop Back Test, Read Test, and Write Test**
GateCONTROL allows you to perform loop back tests on any temperature controllers connected to it.
If the loop back test results in anything other than OK, it may indicate a problem in the wiring of the communication cable, or a mismatched baud rate, parity, or Modbus address.
Also, by performing a test acquisition you can determine whether the data set for each tag is correct.

** **GateWT Test Execution**
During GateWT's test acquisition, data is read from WT output channels assigned to each tag and displayed as digital values. This allows you to determine whether the communication settings for each tag are correct.

Setting Up the Temperature Controller

Connect the Yokogawa's UT351 temperature controller.

Enter settings on the UT350E as follows:

1. Hold down **SET/ENT** for three seconds or more to display $oP.PA$.

2. Use ▲ or ▼ to display $5EUP$.

3. Press **SET/ENT** once to display P^u_d .

4. Press **SET/ENT** once to display $FUnC$.

5. Press **SET/ENT** repeatedly (about twenty times) to display IPI .

6. Use ▲ or ▼ to enter the IP address.

7. Press **SET/ENT** to save the settings.

8. Repeat steps 6 and 7 to enter IP addresses 2–4, subnet masks 1–4, and default gateways 1–4.

IPI	**IP address 1**
$IP2$	**IP address 2**
$IP3$	**IP address 3**
$IP4$	**IP address 4**
$5n1$	**Subnet mask 1**
$5n2$	**Subnet mask 2**
$5n3$	**Subnet mask 3**
$5n4$	**Subnet mask 4**
$dG1$	**Default gateway 1**
$dG2$	**Default gateway 2**
$dG3$	**Default gateway 3**
$dG4$	**Default gateway 4**

Setting the IP address, Subnet mask, and Default gateway

	0 to 255	0 to 255	0 to 255	0 to 255
IP address	IP1	IP2	IP3	IP4
Subnet mask	SM1	SM2	SM3	SM4
Default gateway	DG1	DG2	DG3	DG4

9. Press **SET/ENT** to display $E5^u$ (Ethernet setting switch).

10. Use ▲ or ▼ to enter 1.

    After setting $E5^u$ to **1**, it automatically reverts to **0**.

11. Hold down SET/ENT for three seconds or more for numerical display.

Operation Guide

Setting Up GateCONTROL

Setting Up GateCONTROL

1. Enter the communication method and address settings as follows:

   Communication method :   Ether

   Host name :   IP address set on the temperature controller

   Modbus address :   Unknown

Click and select Ethernet from the menu

Click to display the Input Address dialog box

Enter the IP address set on the temperature controller

Click to display the Input Address dialog box
Enter the IP address set on the temperature controller

2. Enter settings in the Acquisition Settings tab. Enter the scan interval from the UT351, the timeout time, and number of retries.

3. Select number 01 in the Model Settings page.

4. Click the automatic model determination button.

   The UT351's control mode, control output, and option functions are displayed.

Performing the Loop Back Test

5. Click the Loop Back Test button in the Model Settings page.

The results of the loop back test are displayed in the Status box.

Loop back test result

The results of the loop back test are displayed in the Status box

Performing a Read Test

6. Click the Detail Settings button in the Model Settings tab page of the model on which you wish to perform the read test.

The Tag Setting dialog box opens.

Click to display the Tag Settings dialog box

Monitor execution results

Output test results

Specifies the output values during the output test

Drag to select the tag on which to perform the output test

Monitor start button

Monitor Stop and Output Test Buttons

Operation Guide

7. Click the Start monitor button.

The value of each tag from the instrument is loaded, and displayed in the loaded value column of the input tab sheet.

To quit monitor execution, proceed to step 11.

Performing a Write Test

8. Specify the Output Values of the tags on which you wish to perform the output test in the output tab page.

9. Select the tags on which to perform the output test

10. Click the Output Test button during the Read Test.

The output values are written to registers, then the values are acquired from the write registers and the loaded results are displayed in the loaded value column in the output tab page.

Stopping the Read Test

11. Click the Stop monitor button.

The Monitor Test/Read Test is concluded.

Launching GateCONTROL

12. Click the Start button in the Acquisition/Status tab.

Click to display the Error dialog box

The practice status is displayed using colors
Green: Normal (comm. open)
Red: Error (comm. stopped)
Yellow: Data lost, etc. (comm. open)
No display: Stopped

Reconnect button
Click here to reopen communications with the selected instruments

Start button

Error display example

Setting Up the WT1600

Setting Up the Ethernet Interface (TCP/IP)

With DHCP, the IP address, subnet mask, default gateway, and DNS are automatically configured.

Note

- The IP address, subnet mask, default gateway, and DNS can be automatically specified by using DHCP.
- To use DHCP, the network must have a DHCP server.
- Consult your network administrator to see if DHCP can be used.
- If you use DHCP, a different IP address may be assigned every time the WT1600 is powered up. You must be careful when using the FTP server function of the WT1600.

To exit the menu during operation, press **ESC**.

1. Press **MISC** to display the Misc menu.

2. Press the **Next 1/2** soft key to display the **Next 2/2** menu.

3. Press the **Network** soft key to display the **Network** menu.

Operation Guide

4. Press the **TCP/IP Setup** soft key to display the TCP/IP Setup dialog box.

```
  ___Network___    ┌─ESC─┐
┌──────────────┐   │     │
│    TCP/IP    │   │     │
│    Setup     │   └─────┘
├──────────────┤   ┌─────┐
│    User      │   │     │
│   Account    │   └─────┘
├──────────────┤   ┌─────┐
│    Mail      │   │     │
│    Setup     │   └─────┘
├──────────────┤   ┌─────┐
│   Net Drive  │   │     │
│    Setup     │   └─────┘
├──────────────┤   ┌─────┐
│   Net Print  │   │     │
│    Setup     │   └─────┘
├──────────────┤   ┌─────┐
│    Others    │   │     │
│              │   └─────┘
├──────────────┤
│   Connect    │
│   Log List   │
└──────────────┘
```

5. Turn the **jog shuttle** to select **DHCP**.

6. Press **SELECT** to select ON.

7. Turn the **jog shuttle** to select **DNS**.

8. Press **SELECT** to display the **DNS** selection box.

9. Turn the **jog shuttle** to select **OFF**.

```
┌──────────────TCP/IP Setup──────────────┐
│                                         │
│ DHCP   [ OFF  ON ]                       │
│                                         │
│   IP Address    [ 0 ].[ 0 ].[ 0 ].[ 0 ] │
│                                         │
│   Net Mask   [255].[255].[255].[ 0 ]    │
│                                         │
│   Gate Way   [ 0 ].[ 0 ].[ 0 ].[ 0 ]    │
│                                         │
│ DNS    [  OFF  ]                         │
│                                         │
│                                         │
│                                         │
│                                         │
│                                         │
└─────────────────────────────────────────┘
```

Note

If you changed settings related to the Ethernet network, the WT1600 must be power cycled.

Setting the User Name and the Password on WT1600

Entering the User Name and Password of the WT1600

Set the user name and password of the WT1600 on GateWT also.

    1. The procedure is the same as steps 1 through 3 of "*Setting Up the Ethernet Interface (TCP/IP).*"

    2. Press the **User Account** soft key to display the **User Account** dialog box.

```
 ___Network___      ┌─────┐
                    │ ESC │
  TCP/IP            └─────┘
  Setup             ┌─────┐
                    │     │
  User              └─────┘
  Account           ┌─────┐
                    │     │
  Mail              └─────┘
  Setup             ┌─────┐
                    │     │
  Net Drive         └─────┘
  Setup             ┌─────┐
                    │     │
  Net Print         └─────┘
  Setup             ┌─────┐
                    │     │
  Others            └─────┘
                    ┌─────┐
  Connect           │     │
  Log List          └─────┘
```

Setting the User Name

    3. Turn the **jog shuttle** to select **User Name**.

    4. Press **SELECT** to display the keyboard.

    5. Use the keyboard to enter the user name.

       When not restricting the access, specify anonymous. If you specify anonymous, you do not have to set the password.

Setting the Password

(If you set user name to anonymous in step 5, you do not have to set the password.)

    6. Turn the **jog shuttle** to select Password.

    7. Press **SELECT** to display the keyboard.

    8. Use the keyboard to enter the password.

```
 ___User Account___
 User Name    [ anonymous → ]
 Password     [            → ]  ── Set on GateWT
 Time Out(sec) [ 600 ]
```

Operation Guide

Setting Up GateWT

1. Enter the following settings on the WT Setting tab.

Communication type : ETHER

Address : The IP address, user name, and password set on the WT1600.

Click to display a list, then make a selection

Click to display the Input Address dialog box

Enter the IP address of the WT1600
Enter the user name for the WT1600
Enter the password for the WT1600

2. Select number 01 (causing the number to turn red) then click the Automatic Model Determination button.

Automatic model determination button

Items selected here appear in red

3. Enter the following settings on the Scan Interval Setting tab.

Scan interval : 1000 msec

Retries : ON

Retry interval : 30 sec

Performing the Test Execution

4. Double-click number 01 on the WT Settings tab to display the Tag Setting dialog box.

5. Click the Test Execute button. The test result appears in the Value column.

Double-click

Click to stop the test execution

Click to start the test execution

Test execution results

Turn ON the tags to execute as a process or service

Running as a Process

6. After clicking the Test Execute button, click the tag numbers for execution as a process or service to turn them ON (displayed in blue), then click the OK button.

Operation Guide

7. Click the Process execution button or perform the following operation in the Execution/Status tab.

Execution Type : select Process

Click the Start button

Process execution button

When the process is run, Process appears

Click to select

Click to start

The practice status is displayed using colors
  Green: Normal
  Gray: Stopped
  Blinking red: Error

Setting Up the MX100

We assume that the CF card is installed in the MX100.

Connecting the MX100 Standard Software and the MX100

1. Click the Search button on the Connection screen of the MX100 Standard Software. An icon indicating the MX100 is displayed.

Click here —

2. Select the MX100 icon and then click the Connect button in the box containing the Edit Network setup button. The Monitor screen opens.

Select the MX100   **After selecting the MX100, click here**

Configuring the System

3. Click System. Then, configure and confirm the system on the System screen.

Unit Setup

Response check: Click the Check button and confirm that the MX100's 7-segment LED displays --CALL--.

Module Arrangement

Click Receive current configuration on the Actual Configuration tab.

Compact Flash information

Status: Check that it is Exists(Usable)

Click here   **Check the CF card status**
Click here to reconfigure the system

Setting the Acquisition Conditions

> ***4.*** Click Acquisition and enter settings as follows:
>
> Start Condition: On Record
>
> Stop Condition: Continuous
>
> Drag and drop the input module icons to appropriate interval groups.
>
> Monitor interval of interval groups : 50 msec, 100 msec, and 200 msec
>
> Record interval of interval groups : 1

Select these option buttons   Set to 1

Setting the Channels

> ***5.*** Click Channel. Then, select the check boxes for the channels you wish to record on the Meas. Channel tab.

Select the check boxes for the channels you wish to record

Click here to show the channels corresponding to the unit in red characters

(Sidebar, right margin:) **Operation Guide**

6. For the selected channels, set the mode, range, span, scale, difference input, RRJC, unit, tag number, tag comment, filter, burnout, RJC, alarm, etc.

7. Click the Math Channel tab and set the expression, unit, tag number, tag comment, alarm, timer, etc.

Disconnecting the MX100 Standard Software from the MX100

8. Click Connection. Click the Disconnect button on the Connection screen. The connection will be dropped.

Executing GateMX/MW

1. On the System tab, click the Search button. MX100 information such as the machine name, serial number, and address is displayed under MX100/MW100 nearby.

Click here

2. Drag the machine name from MX100 nearby onto the IP Address/Host box of No. 0 under MX100 unit list.

Drag and drop

3. Click the Get Info. button. The machine name is displayed.

Click here

4. Click the number under Unit No. on the Channel tab to check the channel settings. The channel information corresponding to the unit number is highlighted.

5. Click the Start Monitoring button or choose Start Monitoring from the Monitoring menu. The communication status is displayed on the Run tab.

Start monitoring button

Acquiring Data from the Temperature Controller, WT1600, MX100 or Recorder on DAQLOGGER

From DAQLOGGER, you can acquire data from the temperature controller, WT1600, MX100, or recorder via GateCONTROL, GateWT, and GateMX/MW.

1. Start the Configurator.

Click

Assigning GateCONTROL

2. Enter the following settings for number 01 on the Recorder Setting tab.
   Port : Ethernet
   Click the Address box.

Click to display the Input Address dialog box
Click to display a list, then make a selection

3. Enter the following settings in the Input Address dialog box.
   Port number: 50299 (the number set on GateCONTROL)
   System number: 0

Recorder Settings number

Click to select

Operation Guide

Assigning GateWT

4. Repeat steps 2 to 3 to enter the following settings for number 02.

Port :　　　　　Ethernet

Port number :　　50295 (the number set on GateWT)

System number : 0 (GateWT connected to number 01)

Assigning GateMX/MW

5. Repeat steps 2 to 3 to enter the following settings for number 03.

Port :　　　　　Ethernet

Port number :　50297 (the number set on GateMX/MW)

No system number (acquire the data from all the channels of the MX100 connected to GateMX/MW)

Recorder Settings number

Select the check boxes
Not necessary if multiple
Gate software programs or
multiple systems are not
running on the same PC.

Assigning Recorders

6. Assign the recorders to be connected starting form number 03. Match the port and address settings with those on the recorder.

Automatic Model Determination

7. On the recorder settings tab, drag to select the number of software applications and recorders to be connected, starting from number 01.

Automatic model determination button

Drag to select only those to be connected

8. Click the Automatic model Determination button.

The Communication Message dialog box is displayed. Confirm that the models were determined successfully.

Save button

The model name is displayed

9. Click the Save button, then close the configurator.

Entering Tag Settings

10. Start the tag setting software.

Click

11. Drag to select tag numbers.

Operation Guide

12. Click the Auto Assign button.

Automatic model determination button

Drag to select only those to be connected

Save button

The model name is displayed

13. Click the Save button, then close the tag setting software.

Setting Logging Conditions

14. Choose **Logger > Configuration** from the menu bar in the manager window.

15. Set data logging conditions from GateCONTROL, GateWT, and GateMX/MW, then click OK.

Data logging conditions　　　**Save settings then close the dialog box**

Start Data Logging

16. Click the SCAN button.

Click

Data is logged from GateCONTROL, GateWT, GateMX/MW, and recorders.

Operation Guide

The host name of the PC on which DAQLOGGER is being installed is displayed in GateCONTROL's Monitor/Status tab or GateWT's Execution/Status tab.

The host name of the PC driven by DAQLOGGER is displayed

The host name of the PC driven by DAQLOGGER is displayed

IM WX1000-01E

The host name of the PC that has DAQLOGGER installed is displayed on the Run tab of GateMX/MW.

Displays the host name of the PC running DAQLOGGER

System number whose communication is in progress is displayed in green

MX100 channels and monitor intervals specified on the MX100 Standard Software

Starting the Monitor Server

17. Click the monitor server icon.

Click

Operation Guide

Logging and Saving Data Using AddMulti

1. Click the Configuration button.

Click

Get Host Info/Recording Config button
When you click the Get Host Info button, information obtained from DAQLOGGER is displayed, and the button changes to the Recording Config button

Click to obtain information from DAQLOGGER

Click   **Enter 0**

2. Click the port number selection button, then select No. 2 (DAQLOGGER's port number).

Click

3. Enter a system number of 0.

4. Click Get Host Info.

Information is obtained from DAQLOGGER.

5. Click the Host Info button to check the settings of the connected DAQLOGGERs.

When you click, the acquisition setting screen switches, and the button changes to the Recording Config button

Connected server types are displayed

6. Click the Recording Config button on the 01 tab to set the acquisition conditions.

Click

Click to select

Acquisition channel : use the increment button to set W01-W10 to TAG0001-TAG0010.

Group name : Evaluation test 1

Operation Guide

Change the group name

Drag to select

Increment button

Acquisition channel numbers are filled from the first cell in the selection to the last, each channel being assigned a number +1 higher than the last.

7. Set groups 02, 03, and 04 in the same manner.

   Click OK to save the settings.

8. Click the SCAN button. Data is acquired from DAQLOGGER.

9. Start the monitor software. The specified group data is displayed in the monitor.

Click to start the scan

Click to display the monitor

10. Select several groups and start data acquisition on all of them.

Click the desired groups ▷ , then click the Record Start button.

To stop, click the Record Stop button.

To start or stop data acquisition on only one group, click the Start or Stop button for that group.

Record Start button
Record Stop button
Overview button

Click to display the Config dialog box

The recording status is displayed using colors
 Green: Recording
 Yellow: Scanning
 Red: Error

Clicking once changes the displayed color to blue, clicking once again changes it to gray

To start or stop data acquisition for individual groups, click the Start or Stop button for the group

Record Starts/Stops controls all groups displayed in blue

Click the Overview button to display the acquisition status by group.

Time of top data   **Data count**
Group name **Time of end data**
Group number
File number   **File name**

The data file list for the group selected here is displayed

Operation Guide

The recording status is displayed using colors Status displayed in red when an error occurs

Data is stored by group in the specified folder.

Default destination folder

Click a folder

Sequence number

File name specified in the Configuration dialog box

When scanning is started on AddMulti, the DQLOGGER monitor server screen displays the host name of the PCs on which AddMulti is installed.
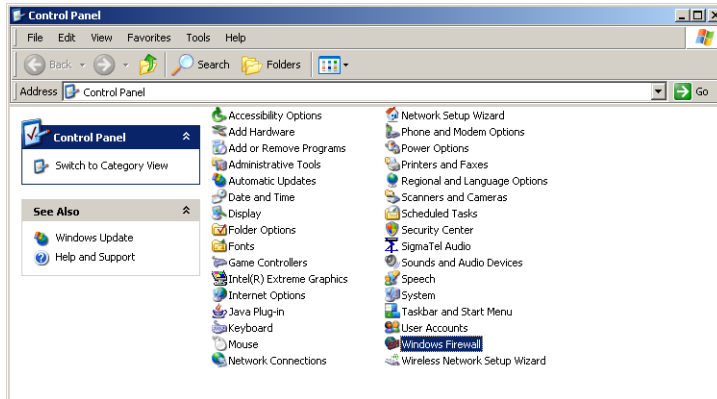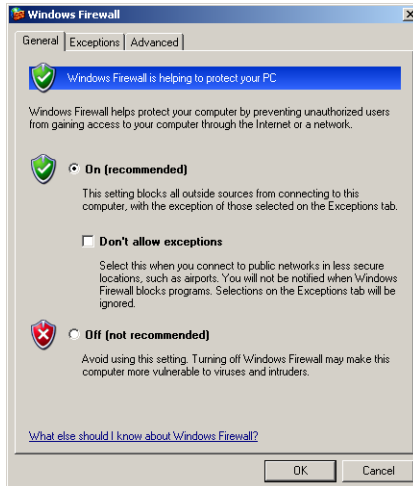
DAQLOGGER monitor server screen

Host names of PCs running AddMulti.

Removing the Firewall

The following is an example of how to add the DAQ32Plus Launcher as a firewall exception.
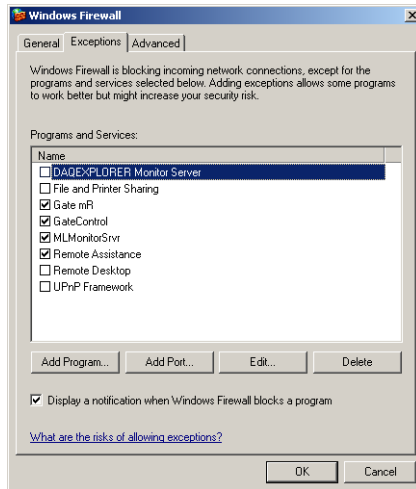
_1._ From the Start menu, choose Control Panel.

The control panel window appears.

_2._ Double-click Windows Firewall.
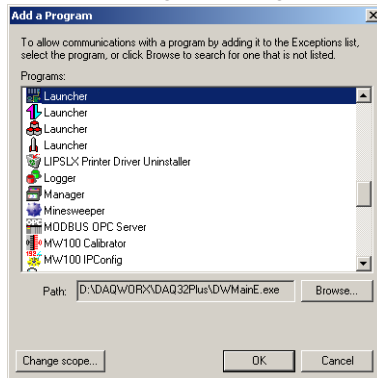

The Windows Firewall dialog box opens.

_3._ If the Off option button is selected, click Cancel to close the dialog box.

If the On option button is selected, clear the Don't allow exceptions check box and click the Exceptions tab.
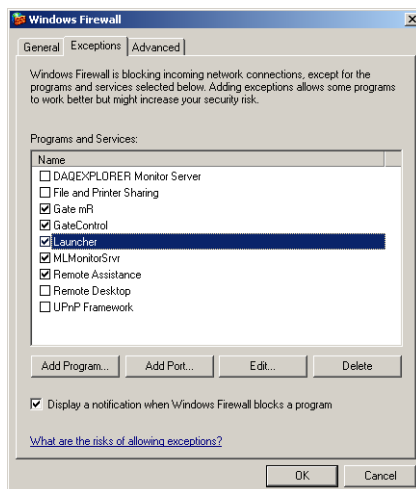
4. Click Add Program.

The Add a Program dialog box opens.

5. Select Launcher for DAQ32Plus and click OK.

6. Click the Exceptions tab, check that Launcher for DAQ32Plus has been added, select the Launcher for DAQ32Plus check box, and click OK.

Appendix