

KOGANEI

I/O Terminal YS9 Support Software

User's Manual

Ver.1.0

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2 Revision History

2 Revision History

Date of revision	Description of revision
June 30, 2026	First Printing

3 Software Overview

3-1 Overview

This software is a Windows application for configuring and displaying the status of our I/O Terminal YS9 series.

3-2 System Requirements

- Supported OS
 - Windows 10, Windows 11
- CPU
 - 1 GHz or higher 32-bit (x86) or 64-bit (x64) processor
- Memory
 - 2 GB or more
- Hard Disk
 - 500 MB or more of free space
 - * Excluding the free space required for .NET Runtime.
- Display
 - Resolution 1024 x 768 or higher
- Other
 - .NET Runtime 8.0 must be installed
 - Must have one or more USB Type-A ports

4 Preparation before Using the Software

4-1 Prerequisites

If .NET Runtime 8.0 is not installed on the PC where this software will be used, download it from the official Microsoft Download Center and install it by following the installer's instructions.

For inquiries regarding Windows and .NET Runtime, please contact Microsoft Support.

4-2 Obtaining and Installing the Required Software

- ① Download the software from our company website.
If you are unable to obtain the software (for example, if no network is available), please contact your nearest sales office or Overseas Group.

- ② Extract the downloaded file "YS9SupportSoft_xxxx.zip".

YS9SupportSoft_Vx.xx

- |— Driver
 - | └— CDM212364_Setup.exe
- |— Support Soft
 - | └— YS9SupportSoft_Setup.exe
- |— Manual
 - | └— YS9SupportSoft_Manual_E_V*.*.pdf

* Administrator privileges are required for each installation.

- ③ Installing the USB-RS485 Converter Driver

Not required if our USB-RS485 converter driver (IBM2A-H/EVPH1, etc.) is already installed.

- 1) Run the installer "CDM212364_Setup.exe" located in the Driver folder.
- 2) Installation of the USB-RS485 converter driver will begin; follow the on-screen instructions to complete the installation.

- ④ Installing the Support Software

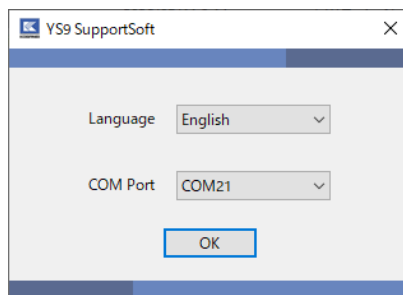
- 1) Run the installer "YS9SupportSoft_Setup.exe" located in the Support Soft folder.
- 2) The installer will launch and the installation will begin; follow the on-screen instructions to complete the installation.

5 How to Use

5-1 Flow at Software Startup

After the software is launched, the screens transition as shown below.

- Software Settings (Initial Screen)



When used in online mode

Select the COM port to which the I/O terminal is connected

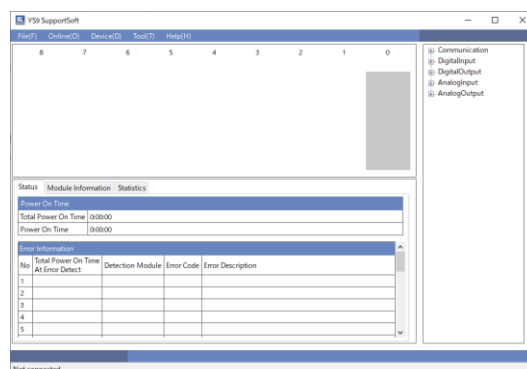
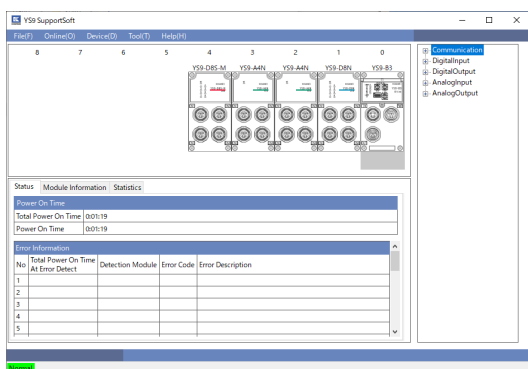


When used in offline mode

Select "Offline Use" as the COM port



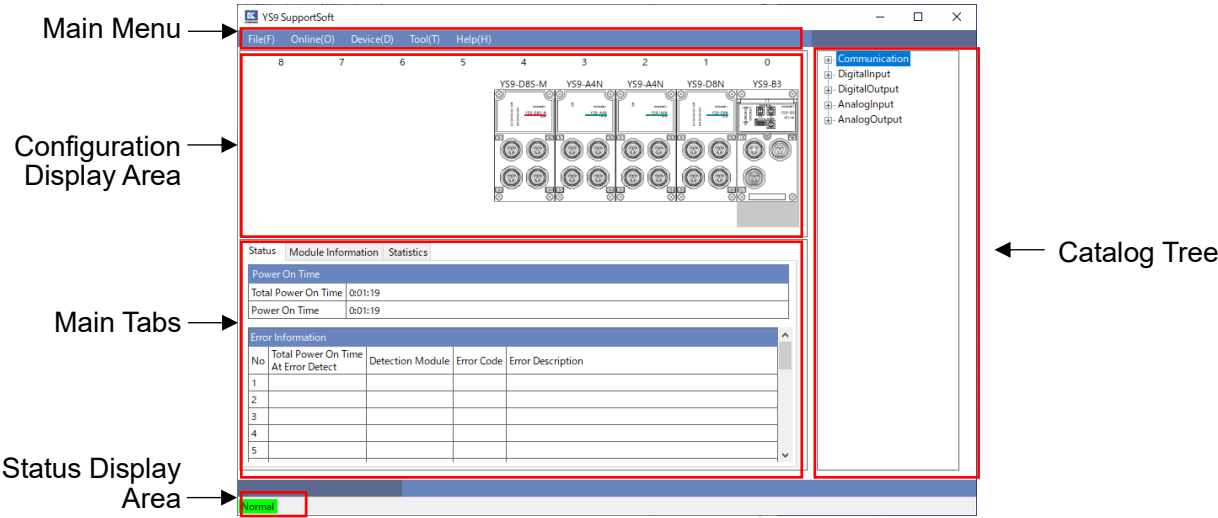
- Main Window



6 Main Window

6 Main Window

This is the main screen displayed while the YS9 Support Software is running.



6-1 Main Menu

The items shown in the pull-down menus and the operations available for each item are as follows.

6-1-1 File

Menu for performing file-related operations.

	<table><tr><th>Menu name</th><th>Description</th></tr><tr><td>New</td><td>Discards the current configuration and parameters and creates a new one.</td></tr><tr><td>Open</td><td>Opens a *.YS9 file and loads its configurations and parameters.</td></tr><tr><td>Save</td><td>Saves the current configuration and parameters as a *.YS9 file.</td></tr><tr><td>Exit</td><td>Closes the application.</td></tr></table>	Menu name	Description	New	Discards the current configuration and parameters and creates a new one.	Open	Opens a *.YS9 file and loads its configurations and parameters.	Save	Saves the current configuration and parameters as a *.YS9 file.	Exit	Closes the application.
Menu name	Description										
New	Discards the current configuration and parameters and creates a new one.										
Open	Opens a *.YS9 file and loads its configurations and parameters.										
Save	Saves the current configuration and parameters as a *.YS9 file.										
Exit	Closes the application.										

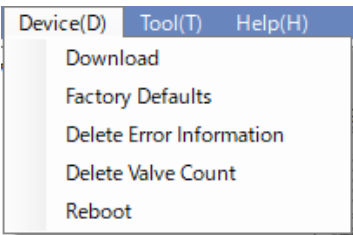
6-1-2 Online

Menu for performing operations related to connecting to the I/O terminal.

	<table><tr><th>Menu name</th><th>Description</th></tr><tr><td>Online</td><td>Connects to the I/O terminal and switches to the online state.</td></tr><tr><td>Offline</td><td>Disconnects from the I/O terminal and switches to the offline state.</td></tr></table>	Menu name	Description	Online	Connects to the I/O terminal and switches to the online state.	Offline	Disconnects from the I/O terminal and switches to the offline state.
Menu name	Description						
Online	Connects to the I/O terminal and switches to the online state.						
Offline	Disconnects from the I/O terminal and switches to the offline state.						

6-1-3 Device

Menu for performing operations on the connected I/O terminal.



Menu name	Description
Download	Downloads parameters to the I/O terminal.
Factory Defaults	Restores the I/O terminal to its factory-default state.
Delete Error Information	Deletes the error information recorded in the I/O terminal.
Delete Valve Count	Deletes the valve-ON count recorded in the I/O terminal.
Reboot	Reboots the I/O terminal.

6-1-4 Tools



Menu name	Description
I/O Allocation	Displays the I/O assignment map Clickable only when a communication module is present in the configuration display area.

6-1-4-1 I/O Assignment Map

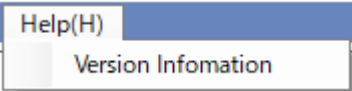
Displays the I/O assignment map corresponding to the communication module added to the configuration display area.
The following is the I/O assignment map when the communication module is YS9-B3 (CC-Link Ver. 1.0 compatible).

I/O Allocation Table							
Num. of occupied stations 2							
Remote Input (RX)64bit		Remote Output (RY)64bit		Remote Register (RW)8word		Remote Register (RWw)8word	
Link Device	Assignment	Link Device	Assignment	Link Device	Assignment	Link Device	Assignment
RX00	Mod1 ch1	RY00	Mod0 ch1	RWr0	Mod2 ch1	RWw0	Unused
RX01	Mod1 ch2	RY01	Mod0 ch2	RWr1	Mod2 ch2	RWw1	Unused
RX02	Mod1 ch3	RY02	Mod0 ch3	RWr2	Mod2 ch3	RWw2	Unused
RX03	Mod1 ch4	RY03	Mod0 ch4	RWr3	Mod2 ch4	RWw3	Unused
RX04	Mod1 ch5	RY04	Mod0 ch5	RWr4	Mod3 ch1	RWw4	Unused
RX05	Mod1 ch6	RY05	Mod0 ch6	RWr5	Mod3 ch2	RWw5	Unused
RX06	Mod1 ch7	RY06	Mod0 ch7	RWr6	Mod3 ch3	RWw6	Unused
RX07	Mod1 ch8	RY07	Mod0 ch8	RWr7	Mod3 ch4	RWw7	Unused
RX08	Unused	RY08	Mod0 ch9				
RX09	Unused	RY09	Mod0 ch10				
RX0A	Unused	RY0A	Mod0 ch11				
RX0B	Unused	RY0B	Mod0 ch12				
RX0C	Unused	RY0C	Mod0 ch13				
RX0D	Unused	RY0D	Mod0 ch14				

The I/O occupied by the module selected in the configuration display area is shown in gray.

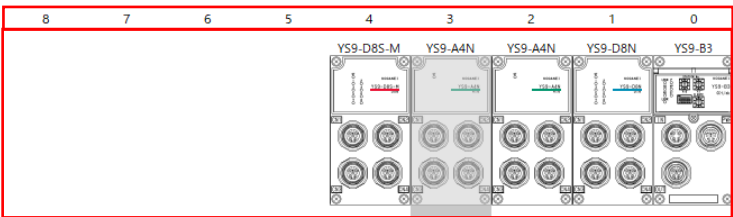
6 Main Window

6-1-5 Help

	Manu name	Description
	Version Information	Displays the version information of this software.

6-2 Configuration Display Area

Area that displays the module configuration of the connected I/O terminal or a module configuration created from the catalog tree.



Number of modules.

Only the communication module can be placed at position 0.

Position 1 to 8 can hold only I/O modules, and they are arranged right-aligned.

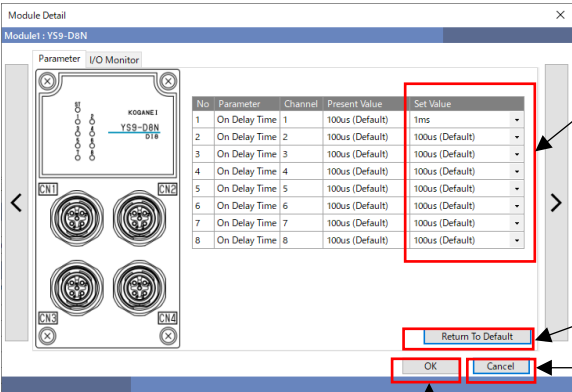
Module image

Clicking selects the module.

Double-clicking opens "6-2-1 Detail Dialog".

6-2-1 Detail Dialog

You can configure the parameters of each module and monitor the input/output status on the I/O Monitor tab (displayed only when online).



You can change the parameter setting values.

For how to apply parameters to the I/O Terminal, refer to "7 How to Apply Parameters to the I/O Terminal".

Resets all parameter setting values to their default values.

Discards the parameter edits and closes the dialog.

Saves the parameter edits and closes the dialog.

6-3 Main Tabs

The main tabs include the three tabs shown below.

6-3-1 Status

StatusModule InformationStatistics

Power On Time

Total Power On Time0:26:55

Power On Time0:09:10

Error Information

No	Total Power On Time At Error Detect	Detection Module	Error Code	Error Description
1	0:25:00	3	0x0104	Overcurrent.
2				
3				
4				
5				

Displays the operating status of the connected YS9 series.

The error occurrence information shows up to the 20 most recent error occurrences.

* Operating time and cumulative operating time are approximate values.

6-3-2 Individual Module Information

StatusModule InformationStatistics

Module No.0

Model codeYS9-B3

SpecificationCC-Link Ver1.10, Valve 32Point

IO InformationInput 0Byte, Output 4Byte

Width50mm

Height93mm

Depth61mm

Consumption CurrentInput 100mA, Output 10mA or less

Weight200g

Version1.0.10988

Serial Number3

Displays the individual information of the module selected on the configuration display screen.

6-3-3 Statistics

StatusModule InformationStatistics

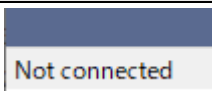
Valve No.	Count	Valve No.	Count
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	0
6	0	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0

Displays the valve-ON count recorded in the communication module.

Use this as a guideline for valve replacement timing.

6-4 Status Display Area

Area that displays the status of the I/O terminal. The display states are as shown below.

Display State	Description
	Offline state. To configure parameters or check status, switch to the online state from the Online menu.
	The I/O Terminal is operating normally.
	An error has occurred in the I/O Terminal but continued operation is possible. You can continue operation while tolerating the error. To clear the error, check the error occurrence information from Status and take action according to the error. For error countermeasures, refer to "8-1 Error Details and Countermeasures".
	An error has occurred in the I/O Terminal that prevents continued operation. The error must be cleared to restore normal operation. To clear the error, check the error occurrence information from Status and take action according to the error. For error countermeasures, refer to "8-1 Error Details and Countermeasures".

6-5 Catalog Tree

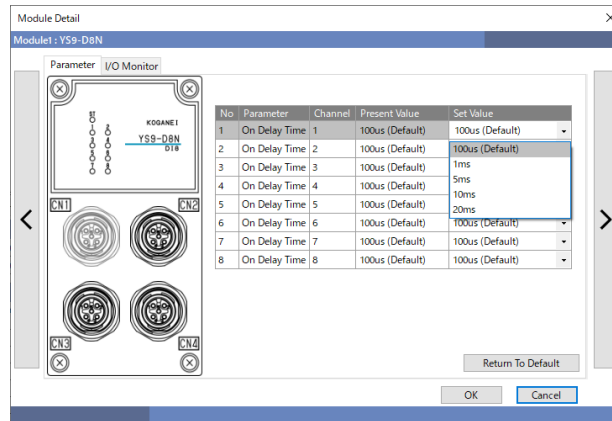
Used to create the module configuration while offline.

Add a module by double-clicking the module type shown in the catalog tree or by dragging and dropping it into the configuration display area.

7 How to Apply Parameters to the I/O Terminal

The following shows the flow for applying the parameters configured in this software to the I/O Terminal.

Configure the parameters of each module in the Detail Dialog.



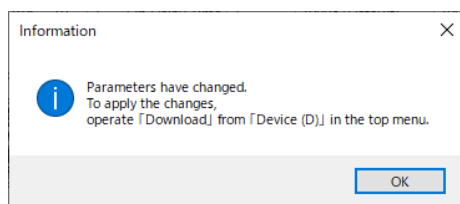
When configuration is complete, click the "OK" button.

When in the online state.

When in the offline state.



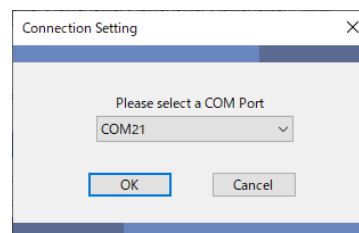
If a value different from the current value is set, an Information dialog appears; click the "OK" button.



From the Online menu, click "Online".



The COM port selection dialog appears; select the port to which the I/O terminal is connected.



* Confirm that the configuration being edited matches the I/O Terminal configuration. If they do not match, the edited parameters cannot be downloaded.



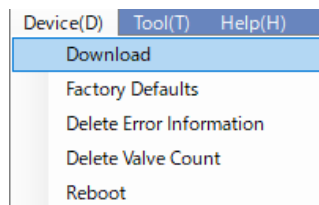
Perform the download operation. (P.12)

7 How to Apply Parameters to the I/O Terminal

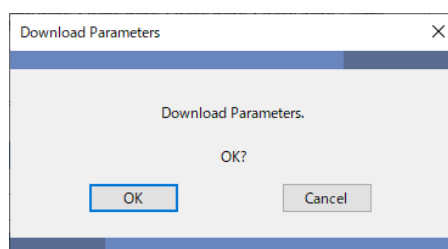
From "Perform the download operation" (P.11)



From the Device menu, click "Download".



Perform the download operation according to the displayed dialog.



* The download operation takes approximately 5 seconds.

During this time, do not turn off the I/O terminal's power or disconnect the USB-RS485 converter from the PC or I/O terminal.

Also, during parameter download, communication with the host controller is disconnected for safety.

During this time, the output state of the I/O terminal follows the Failure Reaction parameter setting of each output module.

8 Appendix

8-1 Error Details and Countermeasures

Error Number	Error Description	Details	Countermeasure
0x0101	System Error	An OS error or unexpected error has occurred.	Cycle the power OFF/ON and check whether the error recurs. If it occurs frequently, contact the Overseas Group.
0x0102	Decrease in Connected Modules	A decrease in the number of modules was detected during operation.	Turn the power OFF and check the module connection status.
0x0103	Increase in Connected Modules	An increase in the number of modules was detected during operation.	Turn the power OFF and check the module connection status.
0x0104	Overcurrent Detected	Overcurrent was detected in an I/O module.	Turn the power OFF and remove the cause of the overcurrent.
0x0105	I/O Module Communication Error	A communication timeout with an I/O module was detected.	Turn the power OFF and check the module connection status. If it occurs frequently, contact the Overseas Group.
0x0106	Memory Read/Write Error	An error occurred while reading from or writing to the non-volatile memory of the communication module.	Cycle the power OFF/ON and check whether the error recurs. If it occurs frequently, contact the Overseas Group.
0x0108	Major Revision Mismatch	A major-revision mismatch between the communication module and an I/O module was detected.	Disconnect any I/O module whose major revision differs from the communication module. Modules with different major revisions cannot communicate with each other.
0x0109	Module Count Exceeds Specification	The number of I/O modules connected to the communication module exceeds the specification.	Reduce the number of connected I/O modules to within the specified limit.
0x010A	I/O Module Configuration Mismatch	Occurs when the module configuration is changed after the configuration-mismatch detection mode of the communication module is turned ON.	Restore the configuration to what it was when the configuration-mismatch detection mode was turned ON. Or turn the configuration-mismatch detection mode OFF.
0x010B	Hardware Error	A communication abnormality with an internal IC was detected.	Cycle the power OFF/ON and check whether the error recurs. If it occurs frequently, contact the Overseas Group.

8 Appendix

Error Number	Error Description	Details	Countermeasure
0x0201	I/O Available Area Exceeded (DI)	A module is connected that exceeds the I/O area (digital input) available in the communication module.	Increase the I/O area available in the communication module. Disconnect the I/O module that is causing the issue from the communication module.
0x0202	I/O Available Area Exceeded (AI)	A module is connected that exceeds the I/O area (analog input) available in the communication module.	Increase the I/O area available in the communication module. Disconnect the I/O module that is causing the issue from the communication module.
0x0203	I/O Available Area Exceeded (DO)	A module is connected that exceeds the I/O area (digital output) available in the communication module.	Increase the I/O area available in the communication module. Disconnect the I/O module that is causing the issue from the communication module.
0x0204	I/O Available Area Exceeded (AO)	A module is connected that exceeds the I/O area (analog output) available in the communication module.	Increase the I/O area available in the communication module. Disconnect the I/O module that is causing the issue from the communication module.
0x0205	CC-Link Occupied Station Count Change	A change in the CC-Link occupied-station-count setting switch was detected while using YS9-B3.	Restore the setting that was in effect at power-on.
0x0206	Hold/Clear Switch State Change	A change in the Hold/Clear switch was detected.	Restore the setting that was in effect at power-on.

*For inquiries about the product, contact your nearest Koganei sales office or the Overseas Group noted below.



KOGANEI CORPORATION

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