Human Machine Interface (HMI) GOT

Alarm Display (Popup Display)

This training course is intended for those who use the alarm display of GOT2000 Series HMI for the first time.

L(NA)00249ENG

Introduction

Purpose of the Course

In this course, we will learn how to pop up alarms using the screen design software GT Designer3.

For how to set alarms such as those for user alarm observation, refer to the Alarm Display (Display and Storage) course.

As prerequisites for this course, you should have already completed the following courses or possess the equivalent knowledge in:

- FA Equipment for Beginners (HMIs)
- GOT2000 Basics (GOT Introduction)
- GT Works3 (GT Designer3) Basics (Screen Design Introduction)
- GT Works3 (GT Designer3) Basics (Elementary Screen Design)
- Alarm Display (Introduction)
- Alarm Display (Display and Storage)

Introduction Course Structure

The contents of this course are as follows.
We recommend that you start from Chapter 1.

Chapter 1 Overview

We will learn the alarm popup function.

Chapter 2 Alarm Popup Settings

We will learn how to pop up alarms.

Chapter 3 Alarm Popup Display Check on the GOT

We will learn how to check the alarm popup display set in Chapter 2 on the GOT screen.

Final Test

Passing grade: 60% or higher.

Introduction How to Use This e-Learning Tool

Following is an explanation of how to use the graphical user interface.

Go to the next page		Go to the next page.
Back to the previous page		Back to the previous page.
Move to the desired page		"Table of Contents" will be displayed, enabling you to navigate to the desired page.
Exit the learning		Exit the learning. Window such as "Contents" screen and the learning will be closed.

Cautions for Use

Safety precautions

When you learn based on using actual products, please carefully read the safety precautions in the corresponding manuals.

Chapter 1 Overview

In this course, we will learn how to pop up alarms on the GOT2000 Series HMI using the screen design software GT Designer3.

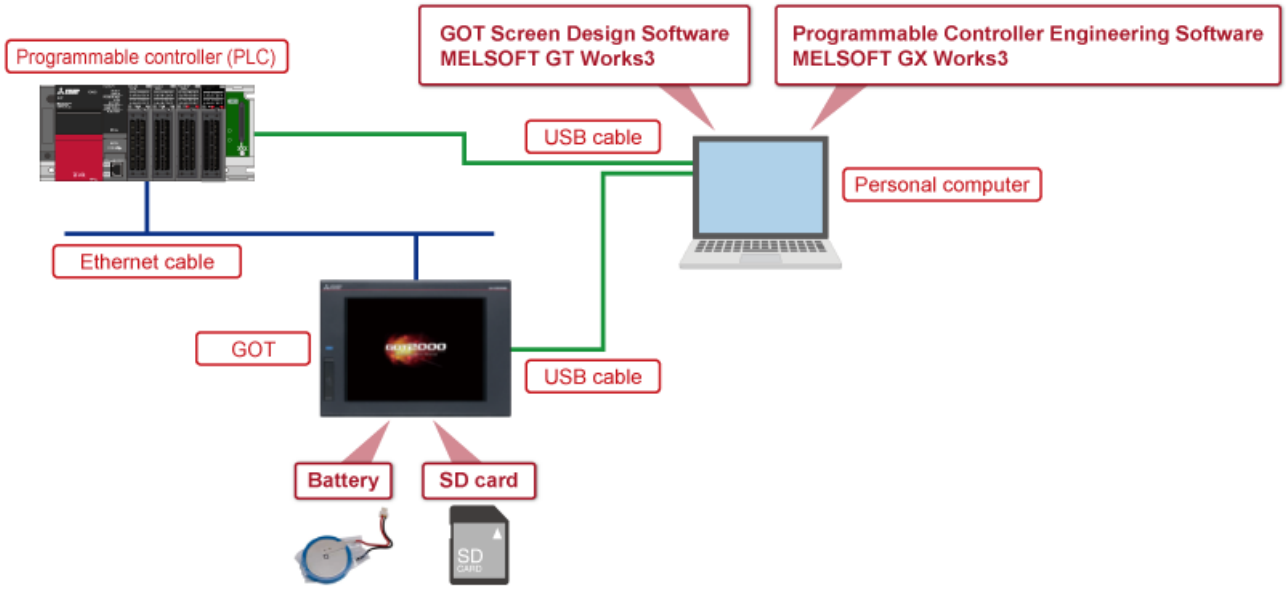
1.1 Configuration of the learning equipment

1.2 Learning equipment list

1.3 Alarm popup display

1.1 Configuration of the learning equipment

The following diagram shows configuration of the learning equipment.



1.2 Learning equipment list - 1

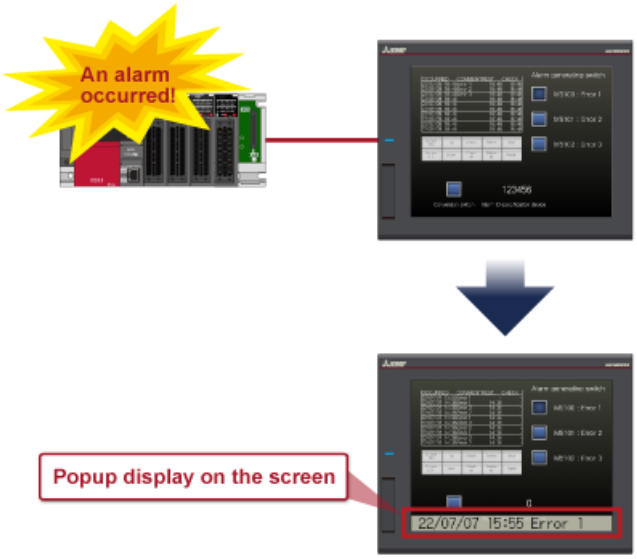
Photo/illustration	Name	Application/setting
	Personal computer	Used to create GOT project data and transfer the data to the GOT. Also used to create sequence programs to check the operation of the created GOT project data, and write the programs to the PLC.
	GOT Screen Design Software MELSOFT GT Works3	Includes GT Designer3 (software for creating project data) and GT Simulator3 (software for simulating the GOT). Install GT Designer3 on the personal computer. (Model: SW1DND-GTWK3-E)
	Programmable Controller Engineering Software MELSOFT GX Works3	Engineering tool for configuring settings, programming, debugging, and maintenance for PLCs including the MELSEC iQ-R/MELSEC iQ-F series. Install the software on the personal computer.
	GOT	Displays the created project data on the screen to monitor or operate PLCs. (Model: GT2710-VTBD)
	USB cable	Connects the GOT and the personal computer. (Model: GT09-C30USB-5P)
	PLC	Used to run the sequence programs. (Model: R04CPU)
	Ethernet cable	Connects the GOT and the PLC. * Use a commercially available Ethernet cable that meets the 100BASE-TX standard (recommended to use Category 5 or higher shielded cable).

1.2 Learning equipment list - 2

Photo/illustration	Name	Application/setting
	SD card	Stores alarm data. Install it on drive A of the GOT. (Model: NZ1MEM-16GBSD)
	Battery	Used to keep the alarm data stored in the buffering area even while the GOT power supply is turned off (power failure backup). (Model: GT11-50BAT) If the alarm data is used for the popup display only and data backup is not necessary, the battery is not required.

1.3 Alarm popup display

When an alarm occurs, the alarm popup display function is used to pop up the alarm on the GOT screen regardless of the layout of other on-screen items. In this course, we will learn how to pop up the alarm display.



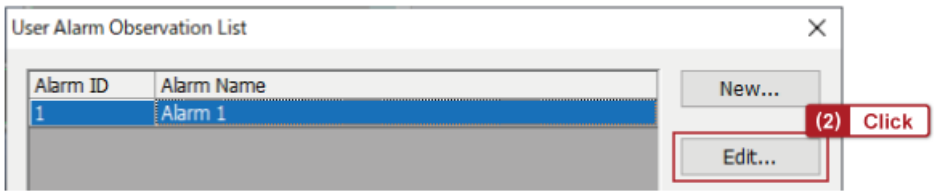
Chapter 2 Alarm Popup Settings

In this chapter, we will learn how to pop up alarms.

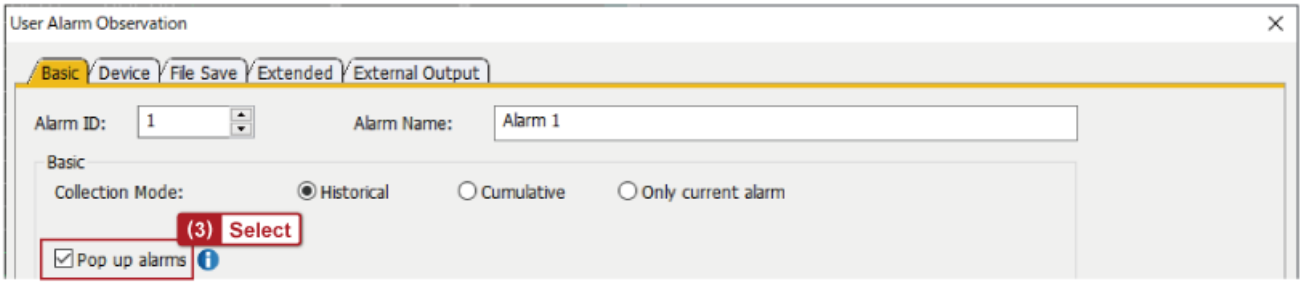
2.1 Settings to use the alarm popup display (user alarm observation)

Start GT Designer3 to display the [User Alarm Observation] dialog.

(1) Start GT Designer3 and open the project created in the Alarm Display (Display and Storage) course.
(2) Select [Common] → [Alarm] → [User Alarm Observation] to display [User Alarm Observation List]. Select [Alarm 1] and click [Edit].

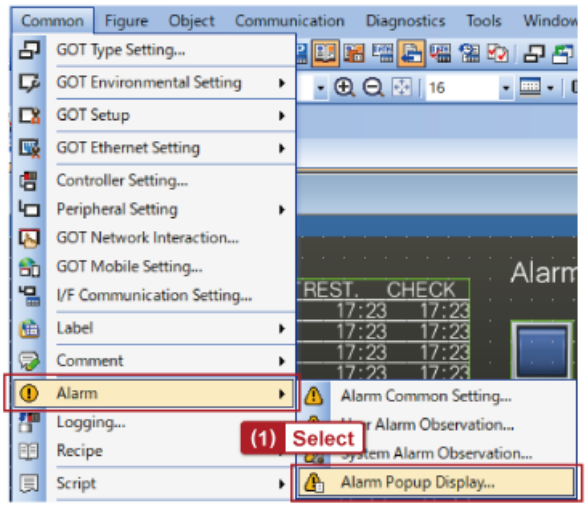


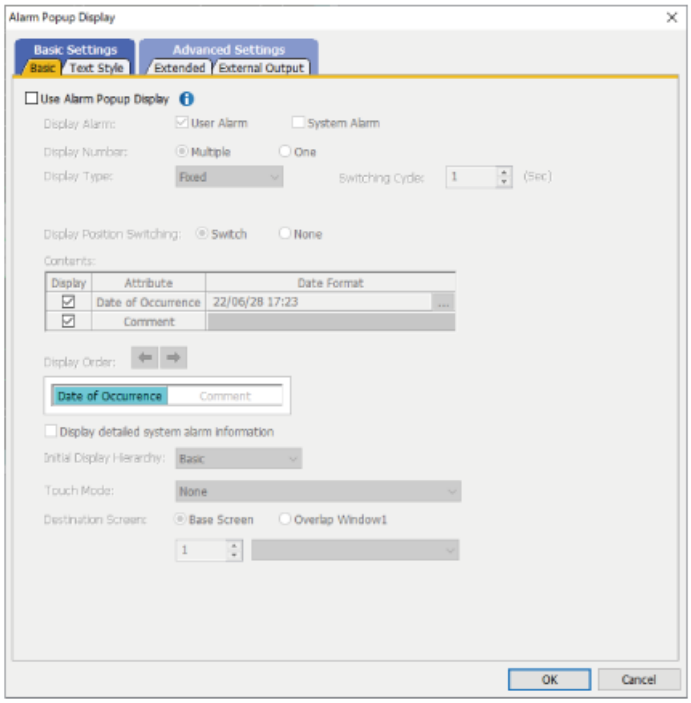
(3) Select [Pop up alarms] in the [User Alarm Observation] dialog, and click the [OK] button to close the dialog.



2.2 Settings of the alarm type, the number of alarms, and the alarm display method - 1

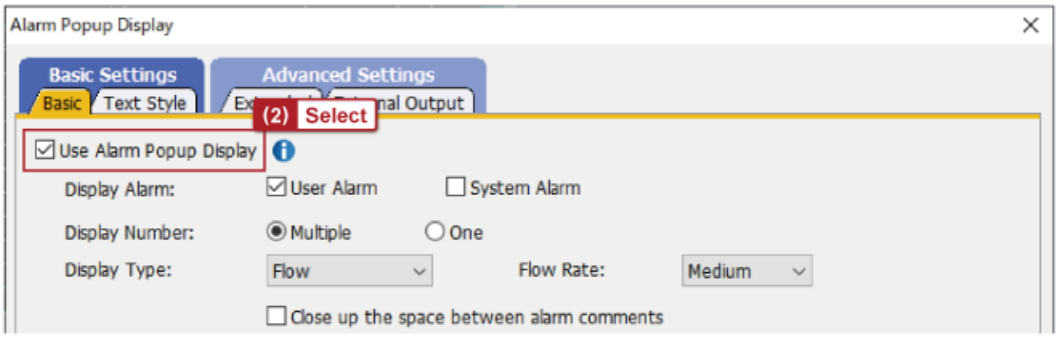
(1) Select [Common] → [Alarm] from the menu bar. Click [Alarm Popup Display] to display the [Alarm Popup Display] dialog.



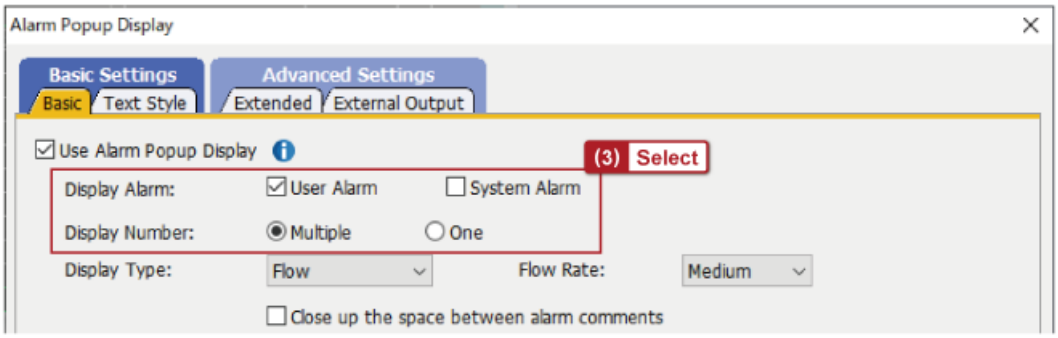


2.2 Settings of the alarm type, the number of alarms, and the alarm display method - 2

(2) Select [Use Alarm Popup Display].

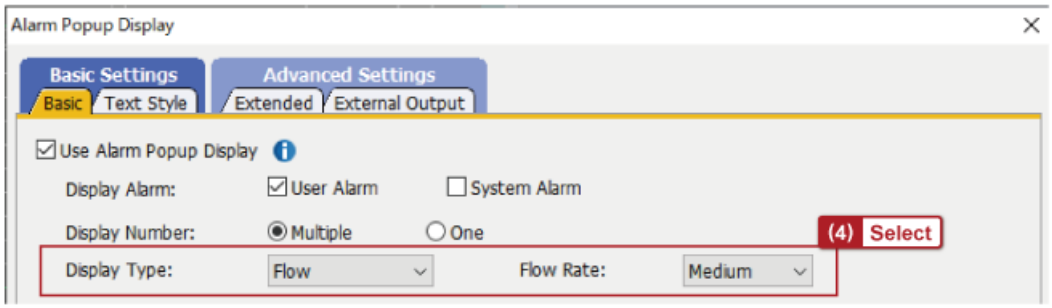


(3) Set the alarm type and the number of alarms to be displayed.



2.2 Settings of the alarm type, the number of alarms, and the alarm display method - 3

(4) Set [Display Type]. Select one of the two display types.

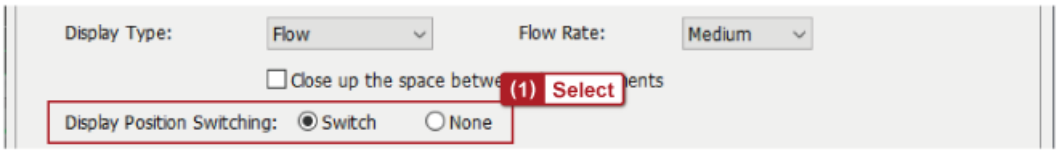


Display method	Description
Fixed	· The alarm on the screen is fixed and not scrolled. · When the width of the alarm comment is longer than that of the screen, the part of the comment that extends off the screen is not displayed. · When multiple alarms exist, they are displayed in turn in the specified cycle.
Flow	· The alarm on the screen is scrolled. Three scroll speeds are available. · Even when the width of the alarm comment is longer than that of the screen, users can read the comment to the end as it is scrolled. · When multiple alarms exist, the second alarm is displayed after the first one.

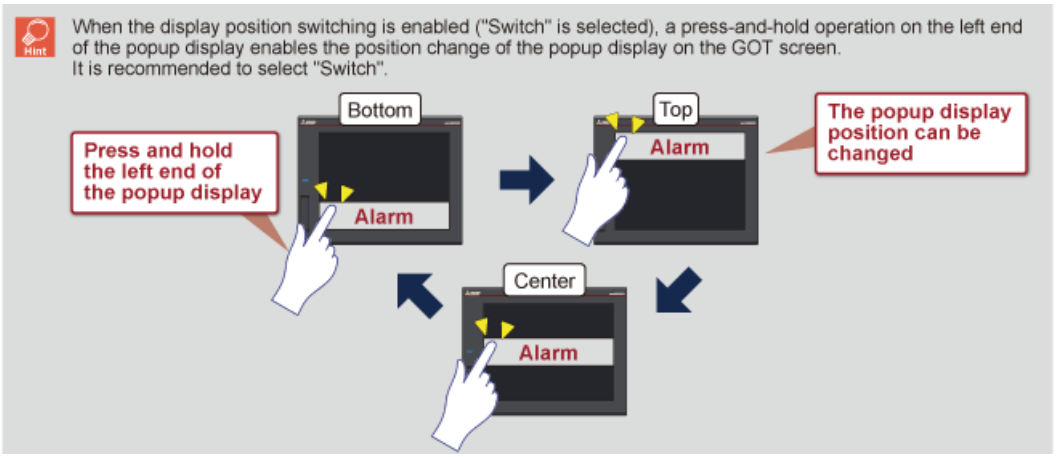
Item	Setting example
Alarm type	User alarm
Number of displayed items	Multiple
Display method	Flow (medium speed)

2.3 Settings of popup display positions and items to be displayed - 1

(1) Set whether to enable or disable [Display Position Switching].

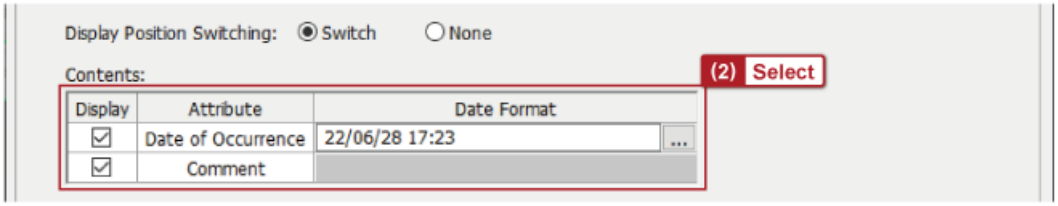


Item	Setting example
Display position switching	Switch

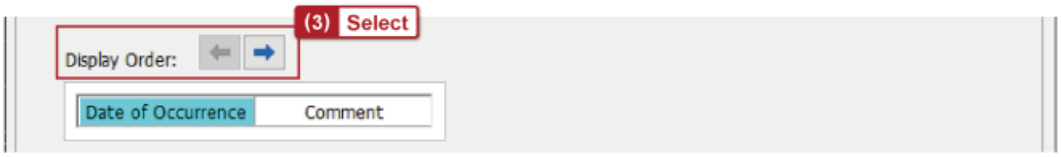


2.3 Settings of popup display positions and items to be displayed - 2

(2) Select the item to be displayed in the [Contents] list.



(3) In the [Display Order] field, select the order of "Date of Occurrence" and "Comment".

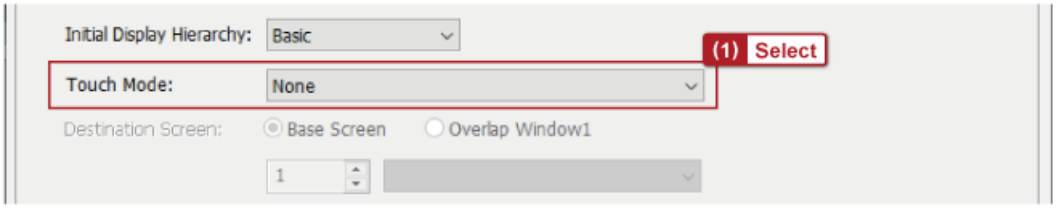


Item	Setting example
Contents	Date of occurrence and comment
Display Order	➡

2.4 Settings of the operation when the alarm popup display is touched

Set the operation when the alarm popup display is touched.

(1) Select the operation when the alarm display is touched in the pull-down list.



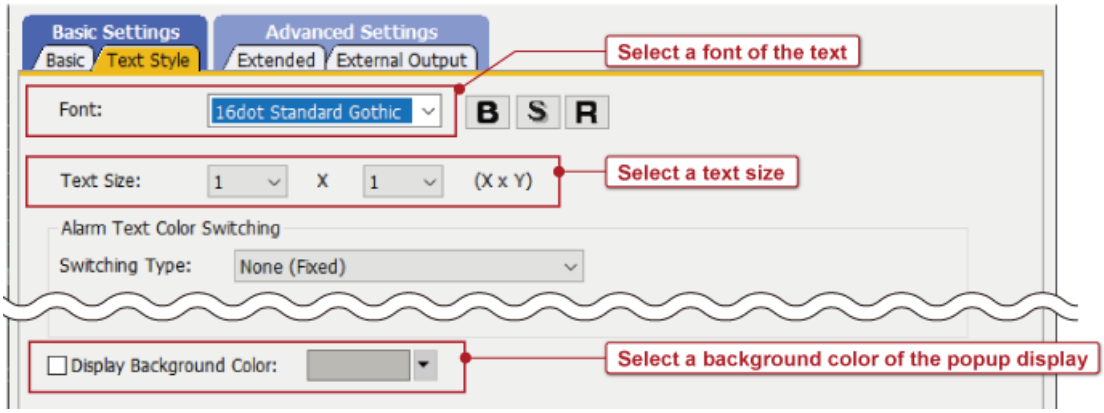
Item	Setting example
Touch Mode	None

Touch Mode settings

- None
  Disables touch operations.
- Screen Switching
  Displays the base screen with the screen number set for [Destination Screen] or the overlap window 1.
- Stage Hierarchy Switching/Detail Display
  Switches levels in the hierarchy and displays the detail screen.
  When upper alarms or middle alarms are displayed, the display is switched to a lower level in the alarm hierarchy.
  When basic alarms are displayed, the detail screen is displayed.

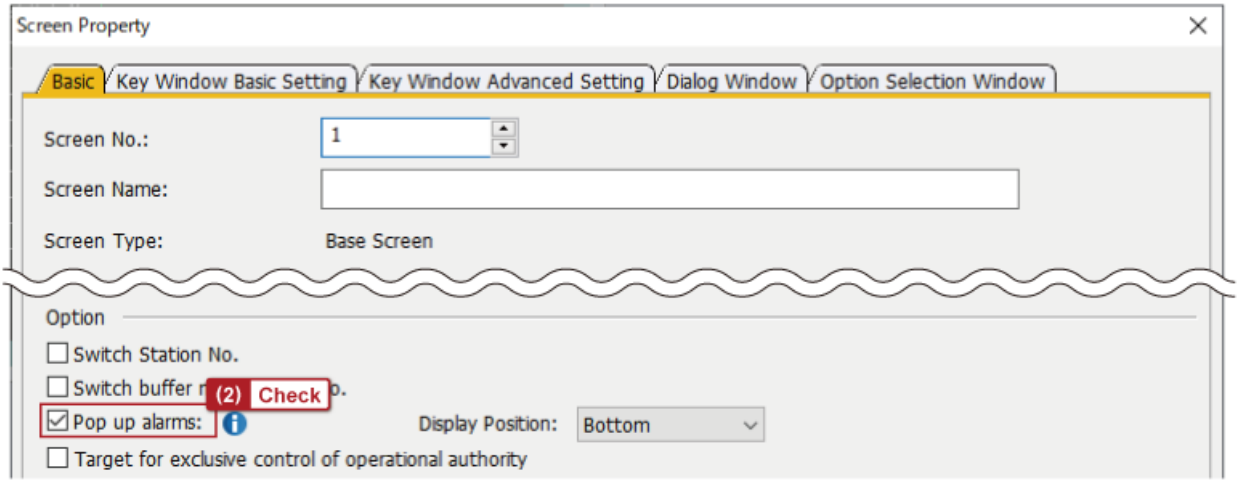
2.5 Text format settings

In the [Text Style] tab, the format and the size of the text can be set for the alarm popup display.



2.6 Popup display setting check

(1) Select [Screen] → [Screen Property] from the menu to display the [Screen Property] dialog.
(2) Check that [Pop up alarms] is selected.

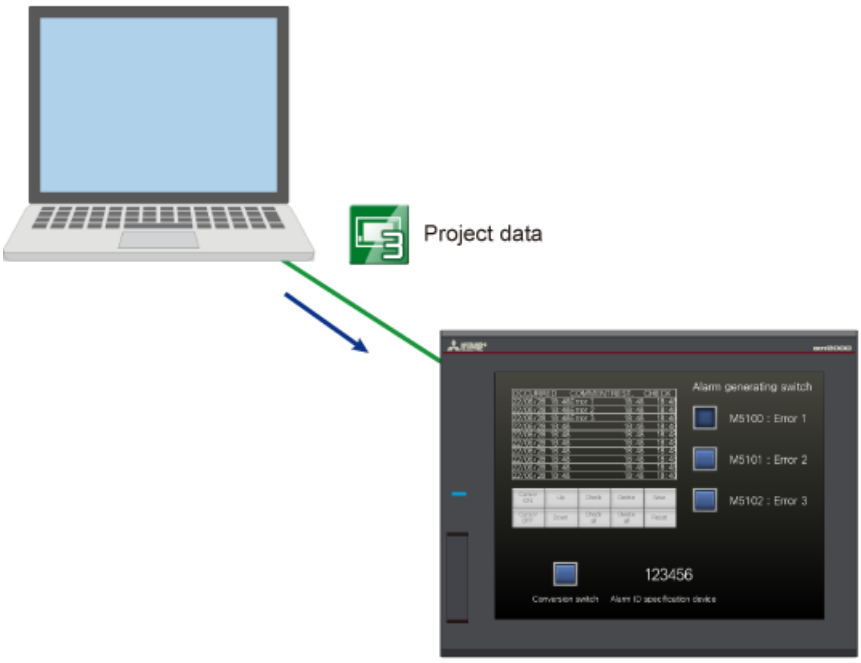


Chapter 3 Alarm Popup Display Check on the GOT

In this chapter, we will check the alarm popup display set in Chapter 2 on the GOT.

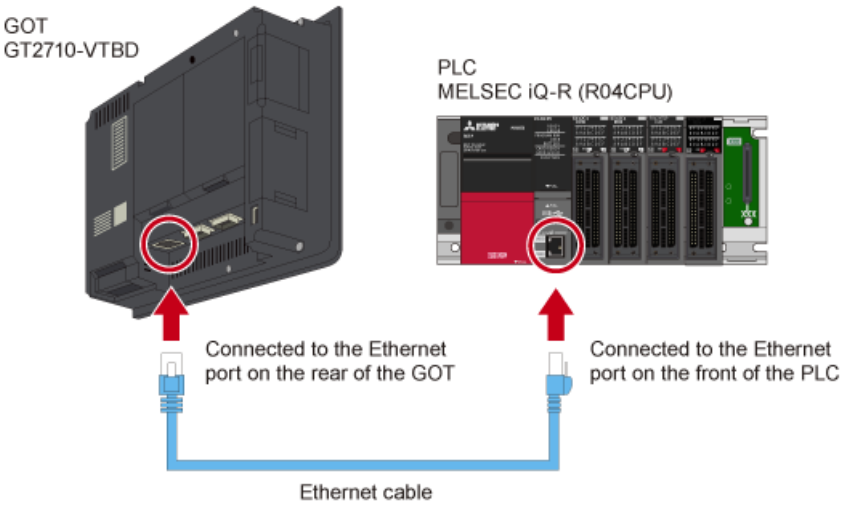
3.1 Data transfer to the GOT

Transfer the created GOT project data to the GOT.



3.2 Connecting the GOT and a PLC with an Ethernet cable

Connect the GOT and a PLC with an Ethernet cable.

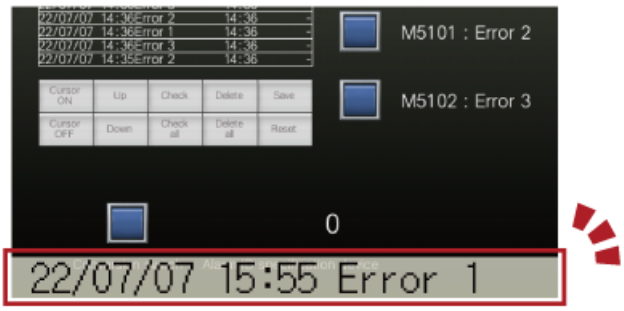


3.3 Checking the popup display by generating an alarm

Touch a bit switch to generate an alarm and check that the alarm display pops up.

(1) Touch a bit switch (any one of the three switches).

(2) The alarm pops up according to the specified cycle (two-second cycle).



Test | Final Test

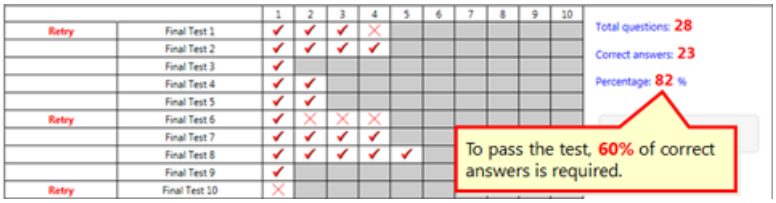
Now that you have completed all of the lessons of the **Alarm Display (Popup Display)** course, you are ready to take the final test. If you are unclear on any of the topics covered, please take this opportunity to review those topics.

There are a total of 3 questions (4 items) in this Final Test.

You can take the final test as many times as you like.

Score results

The number of correct answers, the number of questions, the percentage of correct answers, and the pass/fail result will appear on the score page.



Test **Final Test 1**

Complete the following sentence.

There are two types of alarm popup display: one is the [Q1] type to display the alarm fixed on the screen, and the other is the [Q2] type to display the scrolling alarm on the screen.

Q1 Fixed

Q2 Flow

Test **Final Test 2**

Complete the following sentence.

When the display position switching is enabled ("Switch" is selected) for the alarm popup display, a press-and-hold operation on the [Q1] of the popup display enables the position change of the popup display.

Q1 Left end

Test **Final Test 3**

Complete the following sentence.

To display the alarm details on the alarm popup display, change the settings of the [Q1].

Q1 Touch Mode

Test Score

You have completed the Final Test. You results area as follows.
To end the Final Test, proceed to the next page

		1	2	3	4	5	6	7	8	9	10
	Final Test 1	✓	✓								
	Final Test 2	✓									
	Final Test 3	✓									

Total questions: **4**

Correct answers: **4**

Percentage: **100** %

Clear

You have completed the Alarm Display (Popup Display) course.

Thank you for taking this course.

We hope you enjoyed the lessons and the information you acquired in this course will be useful in the future.

You can review the course as many times as you want.

Review

Close