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. 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	тос	"Table of Contents" will be displayed, enabling you to navigate to the desired page.
Exit the learning	x	Exit the learning. Window such as "Contents" screen and the learning will be closed.

#### **Safety precautions**

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

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



The following diagram shows configuration of the learning equipment.

Learning equipment list - 1

Photo/illustration	Name	Application/setting
TITTELLINKK	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.
Anter MISSOFT OF Works T	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)
Aster GR Rest GR Rest GR D Market Mar	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)
19	USB cable	Connects the GOT and the personal computer. (Model: GT09-C30USB-5P)
	PLC	Used to run the sequence programs. (Model: R04CPU)
$\bigcirc$	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).

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)
Cont	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.

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)
- 2.2 Settings of the alarm type, the number of alarms, and the alarm display method
- 2.3 Settings of popup display positions and items to be displayed
- 2.4 Settings of the operation when the alarm popup display is touched
- 2.5 Text format settings
- 2.6 Popup display setting check

### 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]  $\rightarrow$  [Alarm]  $\rightarrow$  [User Alarm Observation] to display [User Alarm Observation List]. Select [Alarm 1] and click

(2) Select [Common]  $\rightarrow$  [Alarm]  $\rightarrow$  [Oser Alarm Observation] to display [Oser Alarm Observation List]. Select [Alarm 1] and click [Edit].

User Alarm Ob	servation List		Х	
Alarm ID	Alarm Name	New		
-			(2)	Click
		Edit		

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

User Alarm Observation	$\times$
Basic V Device V File Save V Extended V External Output	
Alarm ID: 1 Alarm Name: Alarm 1	
Collection Mode:	
(3) Select	

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

Con	mon Figure Object Communication Diagnostics Tools Window	Alarm Popup Display X
8	GOT Type Setting 📲 📰 🖼 🖼 🖼 🚱 🗗 🗗	Basic Settings Advanced Settings
Ģ	GOT Environmental Setting → • ⊕ ⊖ 🐼 16 • 🔤 • [	Base / Text Style / Extended / External Output
	GOT Setup	Disclay Alarm: User Alarm System Alarm
E,	GOT Ethernet Setting	Display Number:   Multiple  One
-	Controller Setting	Display Type: Road V Switching Cycle: 1 🗘 (Sec.)
Ь	Peripheral Setting	
N	GOT Network Interaction	Display Position Switching:   Switch  None  None
6	GOT Mobile Setting Alarm	Contents: Disnley Attribute Data Correct
-	I/F Communication Setting REST. CHECK	Date of Occurrence 22/06/28 17:23
6	Label	Comment
9	Comment	Display Order: 🖛 👄
1	Alarm      Alarm Common Setting	Date of Occurrence Comment
a	Logging (1) Select Alarm Observation	Display detailed system alarm information
Ш.	Recipe Construction Alarm Observation	Initial Display Hierarchy: Basic 🗸
Ę	Script	Touch Mode: None 🗸
		Destination Screen:  Base Screen  Overlap Window1
		1 🛟
		OF Cased

(2) Select [Use Alarm Popup Display].

ľ	Alarm Popup Display					×
	Basic Settings Basic Text Style	Advanced Set	tings al Output			
	Use Alarm Popup Display	0				
	Display Alarm:	User Alarm	Syst	tem Alarm		
	Display Number:	Multiple	One			
	Display Type:	Flow	$\sim$	Flow Rate:	Medium $\sim$	
		Close up the	space betwe	en alarm comments	;	

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

Aları	n Popup Display					×
	Basic Settings Basic Text Style	Advanced Sett Extended Externa	ings I Output			
	Use Alarm Popup Dis	play 🚹		(3)	Select	
	Display Alarm:	User Alarm	Syst	tem Alarm		
	Display Number:	Multiple	One			
	Display Type:	Flow	$\sim$	Flow Rate:	Medium $\sim$	
		Close up the	space betwe	een alarm comme	nts	

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

Alarm Popup Display						×
Basic Settings	Advanced Sett tended Externa	tings I Output				
Use Alarm Popup Display	e 🚯					
Display Alarm:	User Alarm	Syst	tem Alarm			
Display Number:	Multiple	One			(4) Select	
Display Type:	Flow	$\sim$	Flow Rate:	Medium	~	

Display method	Description
Fixed	<ul> <li>The alarm on the screen is fixed and not scrolled.</li> <li>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.</li> <li>When multiple alarms exist, they are displayed in turn in the specified cycle.</li> </ul>
Flow	<ul> <li>The alarm on the screen is scrolled. Three scroll speeds are available.</li> <li>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.</li> <li>When multiple alarms exist, the second alarm is displayed after the first one.</li> </ul>

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

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

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



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

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

isplay Po	osition Switching: 🖲	Switch O None	
ontents	:		(2) Select
Display	Attribute	Date Format	
$\checkmark$	Date of Occurrence	22/06/28 17:23	
$\checkmark$	Comment		

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

ltem	Setting example
Contents	Date of occurrence and comment
Display Order	<b>→</b>

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.

Initial Display Hierarchy:	Basic ~	(1)
Touch Mode:	None	~
Destination Screen:	Base Screen Overlap Window1	
	1	$\sim$

ltem	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.

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



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

Screen Property		×
Basic Key Window Basic Set	tting $\gamma$ Key Window Advanced Setting $\gamma$ Dialog Window $\gamma$ Option Selection Window	
Screen No.:	1	
Screen Name:		
Screen Type:	Base Screen	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	7
Option		-
Switch Station No.		
Switch buffer r (2) Chec	kp.	
🗹 Pop up alarms: 🚺	Display Position: Bottom 🗸	
Target for exclusive contro	l of operational authority	

# 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
- 3.2 Connecting the GOT and a PLC with an Ethernet cable
- 3.3 Checking the popup display by generating an alarm

## Data transfer to the GOT

Transfer the created GOT project data to the GOT.



## Connecting the GOT and a PLC with an Ethernet cable

Connect the GOT and a PLC with an Ethernet cable.



# 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.

		1	2	3	4	5	6	7	8	9	10	
Retry	Final Test 1	<ul> <li>Image: A second s</li></ul>	1	<ul> <li>Image: A second s</li></ul>	X							Total questions: 28
	Final Test 2	<ul> <li>Image: A second s</li></ul>	1	1	1							Correct answers: 23
	Final Test 3	<ul> <li>Image: A second s</li></ul>										
	Final Test 4	<ul> <li>Image: A second s</li></ul>	1									Percentage: 82 %
	Final Test 5	<ul> <li>Image: A second s</li></ul>	<b>√</b>									
Retry	Final Test 6	<ul> <li>Image: A second s</li></ul>	X	X	X							
	Final Test 7	<ul> <li>Image: A set of the set of the</li></ul>	1	<b>√</b>	1			-				
	Final Test 8	<ul> <li>✓</li> </ul>	1	×	×	1		To pass the test, 60% of correct				
	Final Test 9	<ul> <li>Image: A second s</li></ul>						an	swe	rs is	requ	uired.
Retry	Final Test 10	$\sim$						<u> </u>				

Test	Final Test 1	
Complete There are t is the [Q2]	the following sentence. wo types of alarm popup display: one is the [Q1] type to display the alarm fixed on the screen, and the ot type to display the scrolling alarm on the screen.	her
Q1	Fixed	
Q2	Flow	

Test	Final Test 2	
Complete	he following sentence.	•
When the operation of	display position switching is enabled ("Switch" is selected) for the alarm popup display, a press-and-hold on the [Q1] of the popup display enables the position change of the popup display.	
		•
Q1	Left end 📀	

Test	Final Test 3	$\supset$
Complete t	the following sentence.	
To display	the alarm details on the alarm popup display, change the settings of the [Q1].	
		•
Q1	Touch Mode	

Test	Test Score											
You have cor To end the Fi	npleted the Final Test. You resu inal Test, proceed to the next pa	lts area age	as foll	OWS.								•
		1	2	3	4	5	6	7	8	9	10	
	Final Test 1	✓	<ul> <li>✓</li> </ul>									Total questions: <b>4</b>
	Final Test 2	<ul> <li>✓</li> </ul>										Correct answers: 4
	Final Test 3	$\checkmark$										Percentage: 100 %
												Percentage.
												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