

Chapter 4

Alarm Screen

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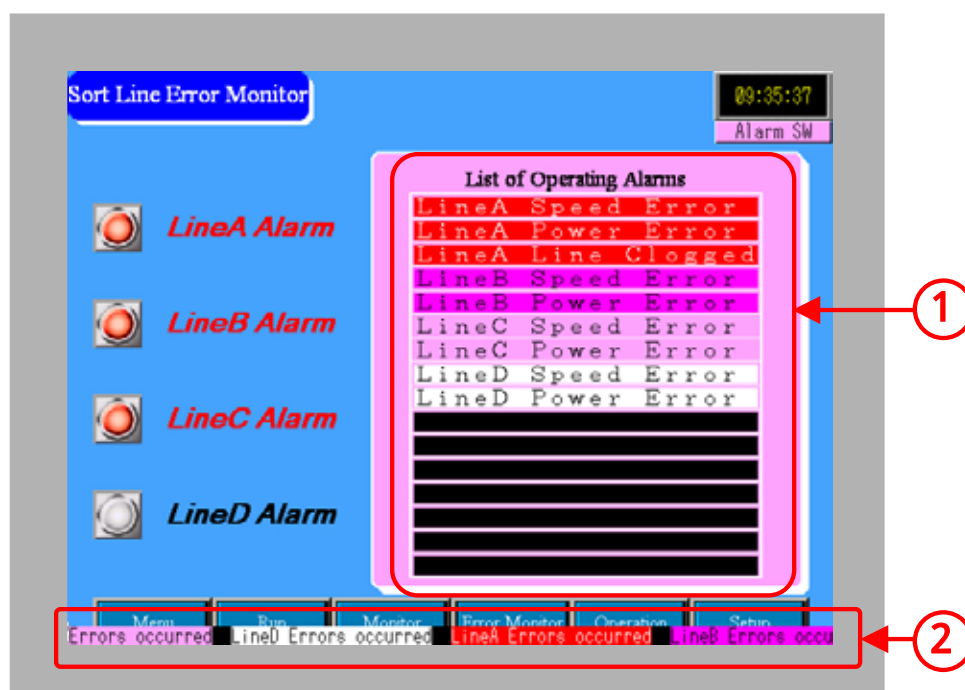
4.1

Alarm Screen



What's the Alarm Screen?

It puts the currently triggered alarms in priority order and displays them in a list and as a message banner at the bottom of the screen. The message disappears after recovery.



The triggered alarms are displayed in a list.

The priority order is decided from the registration order of those alarms and they are displayed. (->P.4-5 ~ for details)

List of Operating Alarms	
LineA	Speed Error
LineA	Power Error
LineA	Line Clogged
LineB	Speed Error
LineB	Power Error
LineC	Speed Error
LineC	Power Error
LineD	Speed Error
LineD	Power Error

The currently triggered alarms are displayed as a message banner on the bottom of the screen. The message banner is displayed on all screens. (P.4-11 ~ for details)



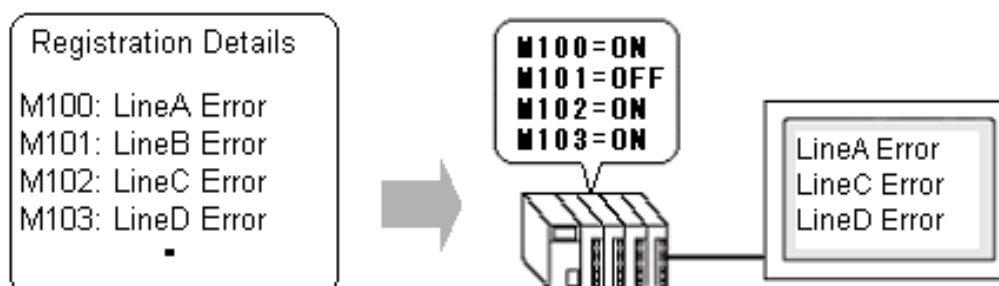
4.2

Alarm List Display



How to display alarms (Summary Display)

In order to put the currently triggered alarm messages in a priority order and display them in a list, [Summary Display] of [Alarm] is used.

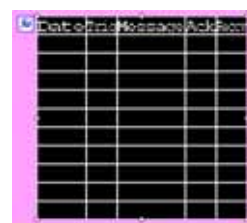


Setup Procedure


Click the [Alarm] icon.



Drag the range.



Double-click the alarm after placing it and register monitoring bits and messages.

Common Settings		Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8
Text Color	<input type="text" value="7"/>	Blink	<input type="text" value="None"/>						
Background Color	<input type="text" value="0"/>	Blink	<input type="text" value="None"/>						
						<input type="button" value="Jump"/>		Auto Monitor	
No.	Bit Address		Message						
1	[PLC1]M0160		LineA Speed Error						
2	[PLC1]M0161		LineA Power Error						
3	[PLC1]M0162		LineA Line Closed						
4	[PLC1]M0163		LineA Emergency Stop						
5	[PLC1]M0164		LineB Speed Error						



Set the Display Format in [Summary].

Display Format	
Monitoring Start Word Address	[PLC1]M0160
No. of Monitoring Words	1
No. of Display Char.	10
Display Start Row	1
No. of Display Lines	16



Let's display each line's alarm in a list.

The method to draw an Alarm Display that shows each alarm in a list is described.

[Setup Flow]

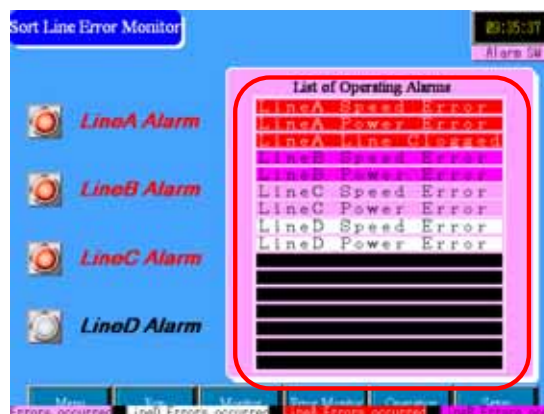
- 1 . Open the base screen [4].
- 2 . Select/Place [Alarm].
- 3 . Practice [Alarm Registration].
- 4 . Set [Alarm:Summary].

Open the base screen [4].

[For Exercise]



[Completed]

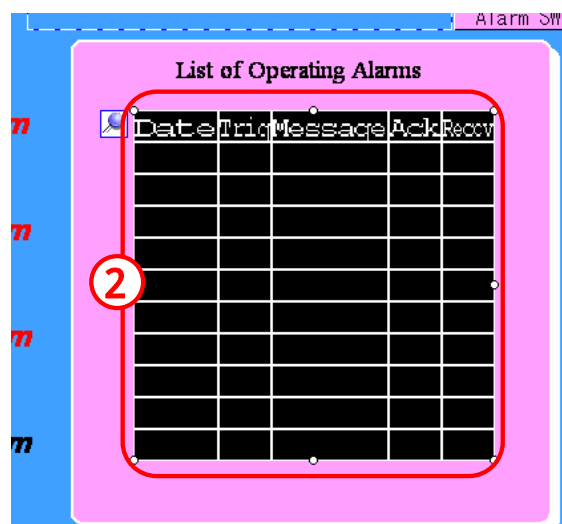
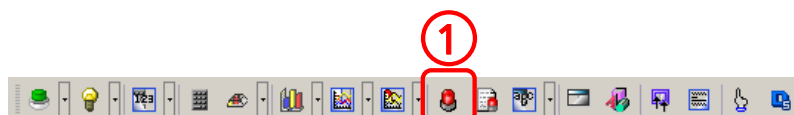


(1) Selecting/Placing Alarm

Click the [Alarm] icon from the Tool Bar.



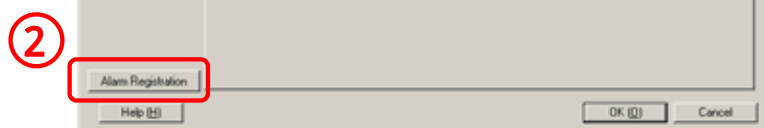
Drag the area for placement.



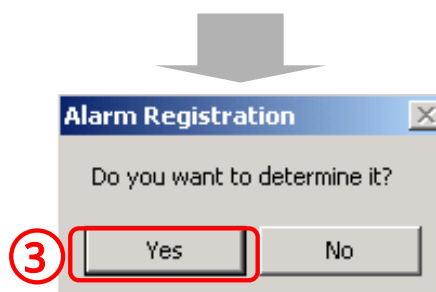
(2) Alarm Settings

Double-click the placed alarm.

Click [Alarm Registration] and register a monitor bit address and an alarm message.



Click [Yes].

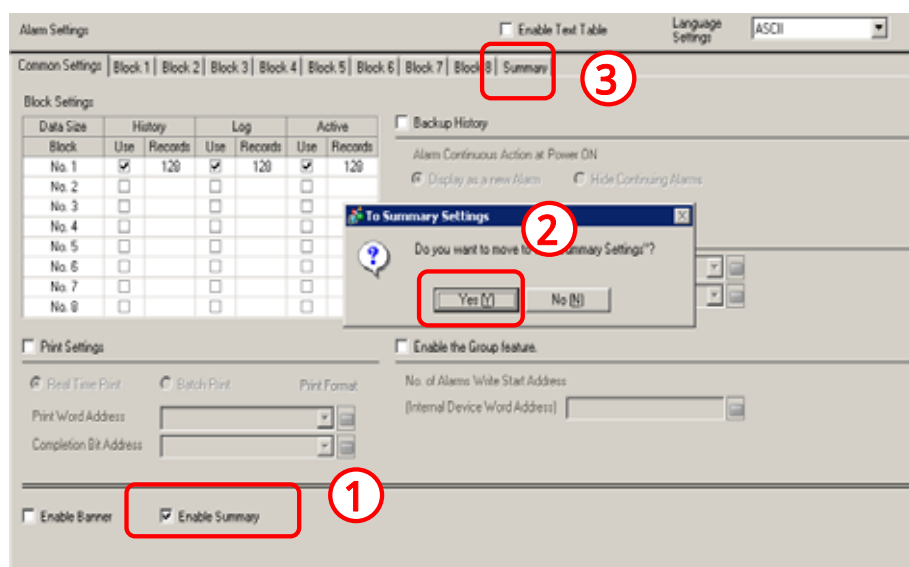


(3) Registering a monitor address and a message

Check [Enable Summary].

Click [OK].

The [Summary] tab will be displayed.



Set the character and background colors in [Text Color] and [Background Color]. Setting [Blink] causes each color to blink.


Set the monitor bit addresses for [Bit Address] column and the messages to display in the [Message] column.

As shown in the right figure, set [Bit Address] and [Message].

No.	Bit Address	Message
1	[PLC1]M0160	LineA Speed Error
2	[PLC1]M0161	LineA Power Error
3	[PLC1]M0162	LineA Line Clogged
4	[PLC1]M0163	LineA Emergency Stop
5	[PLC1]M0164	LineB Speed Error
6	[PLC1]M0165	LineB Power Error
7	[PLC1]M0166	LineB Line Clogged
8	[PLC1]M0167	LineB Emergency Stop
9	[PLC1]M0168	LineC Speed Error
10	[PLC1]M0169	LineC Power Error
11	[PLC1]M0170	LineC Line Clogged
12	[PLC1]M0171	LineC Emergency Stop
13	[PLC1]M0172	LineD Speed Error
14	[PLC1]M0173	LineD Power Error
15	[PLC1]M0174	LineD Line Clogged
16	[PLC1]M0175	LineD Emergency Stop

★ Hint!

Input bit addresses.

To input bit addresses, click 

Ex.) When inputting [M200],

[M] for Device
[200] for Address
Lastly, Click [Ent].

(4) Basic Settings

Open the base screen [4] and double-click the Alarm.

Click the [Basic Settings] tab and select [Summary].

Monitoring Start Word Address:

Set the start word address of the monitor bits registered in the Summary.

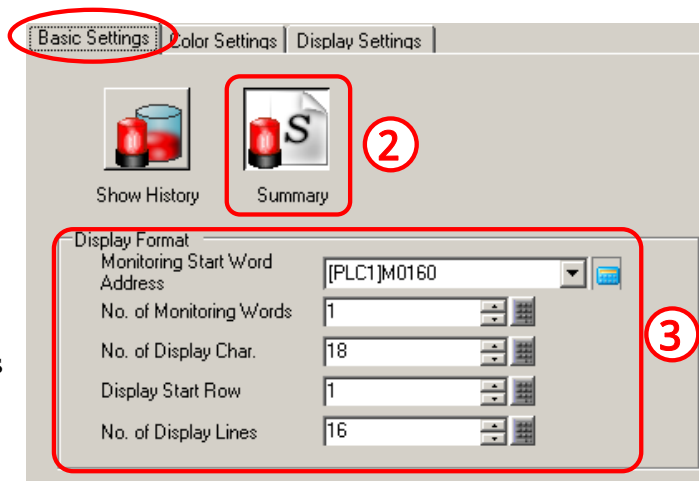
No. of Monitoring Words: Set how many words from the start address are monitored.

No. of Display Char.: Set the Number of display characters.

Display Start Row: Set from which line in the entire queue of triggered alarm messages the alarms will appear in the summary display.

No. of Display Lines: Set how many lines of alarm messages are displayed.

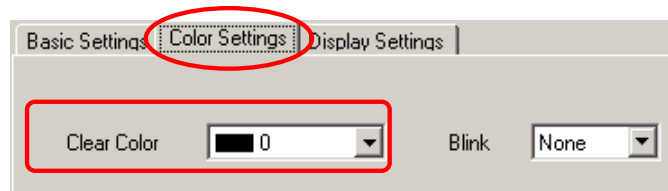
* For details of [Monitoring Start Word Address] and [No. of Monitoring Words], refer to P4-10.



(5) Color Settings

Set the background color in Clear Color.

Here, set the color as you like.



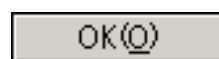
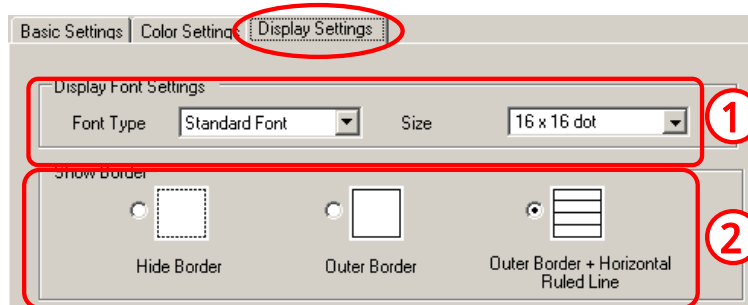
(6) Display Settings

In [Display Font Settings], set the font type and size of characters to display.

Here, set [Standard Font] for [Font Type] and [16x16 dot] for [Size].

Set the [Show Border] as you like.

Click [OK] and complete the settings.

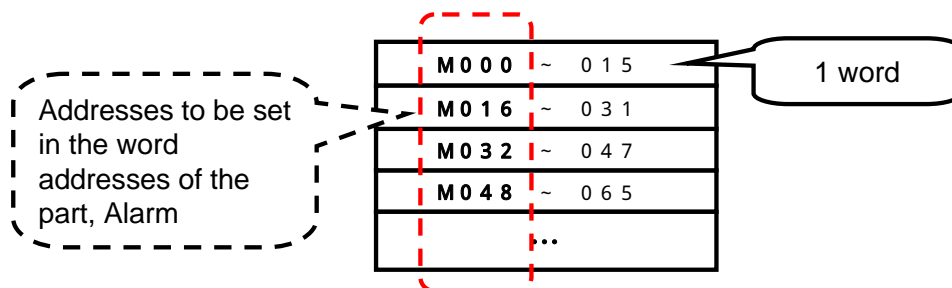




[Word Address] and [No. of Monitoring Words]

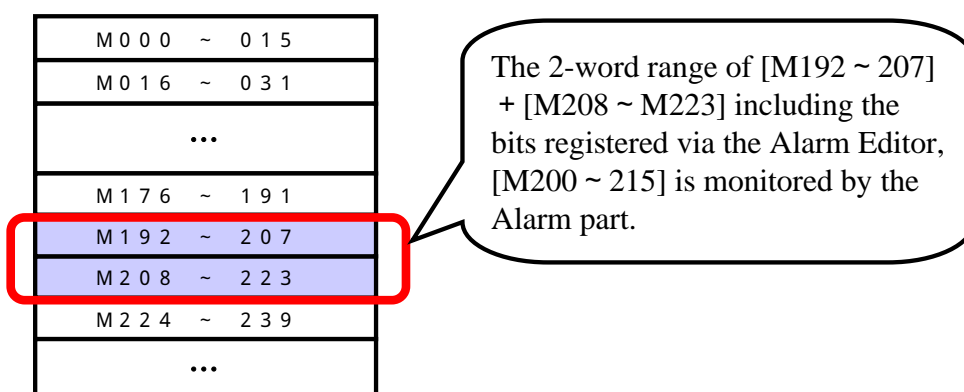
Bit addresses registered via the Summary tab of the Alarm Settings are monitored by the word.
For a PLC where [1 word = 16 bit], see the following figure.

Ex. For Mitsubishi Electric MELSEC A1SJ,

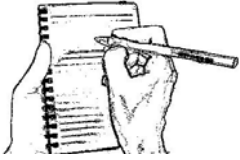


In the Alarm's word addresses, only set the start address (multiples of 16: M0,M16,M32,M48,M64...) of bits that are partitioned every 16 bits.

For example, when the bit addresses registered via the Alarm Editor are M200 ~ M215, the word address to be set in the Alarm part is [M192] and the [No. of Monitoring Words] is [2].



* How to treat device addresses differs depending on PLC.
For details, refer to the PLC's Manual.



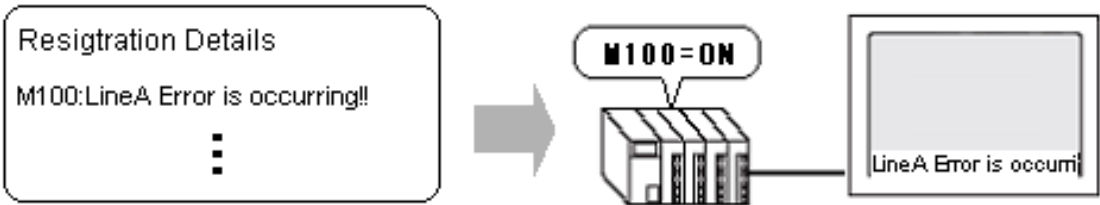
4.3

Message Banner Display



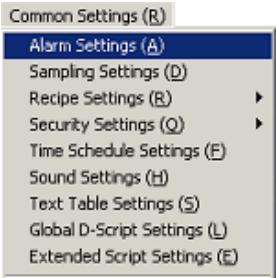
How to display messages in a banner (Message Banner)

In order to display the currently triggered alarms in a banner, the [Banner] tab of [Alarm Settings] is used. Registering monitor bit addresses and messages enables you to display messages in a banner on all screens.



Setup Procedure

Select [Alarm Settings] from the menu bar's [Common Settings].



Check [Enable Banner].



Register monitor bits and messages.

Text Color		<div><div></div>7</div>	Blink	High	Font	Standard Font	Size
Background Color		<div><div></div>4</div>	Blink	None		Jump	Auto Allotmer
No.	Bit Address	Message					
1	[PLC1]M0150	LineA Errors occurred					
2	[PLC1]M0151	LineB Errors occurred					
3	[PLC1]M0152	LineC Errors occurred					
4	[PLC1]M0153	LineD Errors occurred					



Let's display each line's alarm in a banner.

The following describes how to display each line's alarm in a banner.

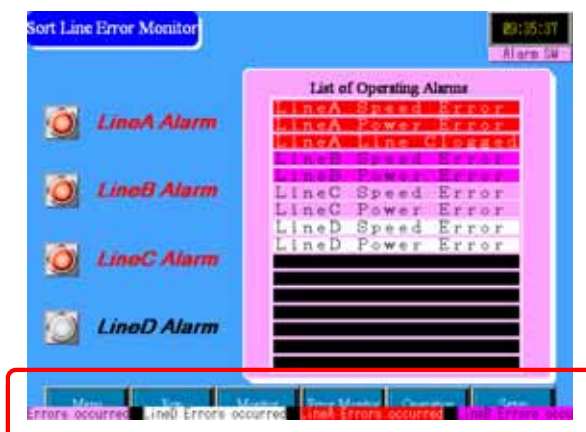
[Setup Flow]

- 1 . Open [Alarm Settings].
- 2 . Practice [Alarm Registration].

[For Exercise]

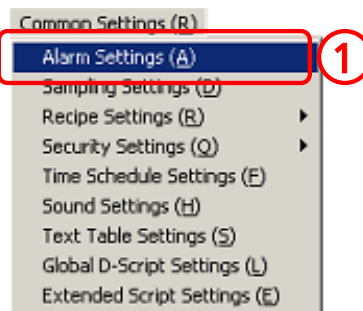


[Completed]



(1) Selecting Alarm Settings

Select [Alarm Settings] from the menu bar's [Common Settings].

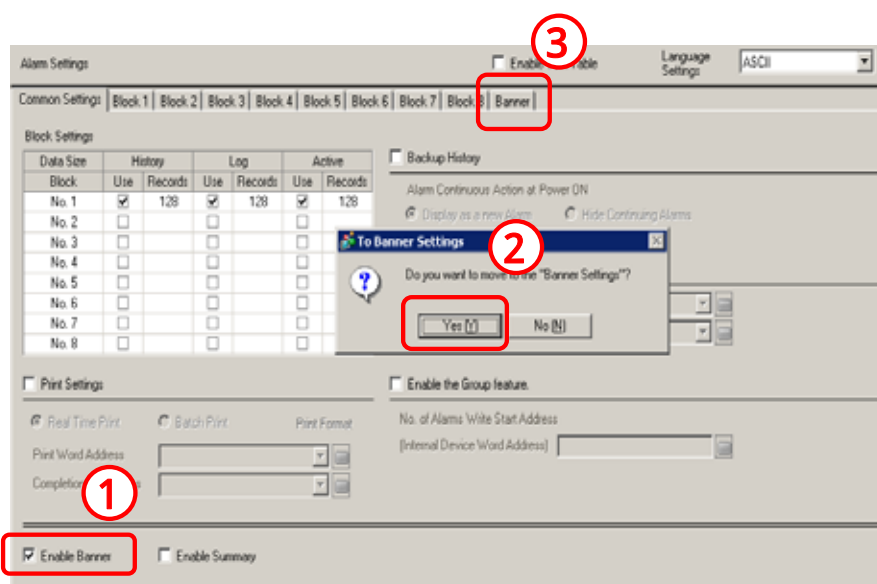


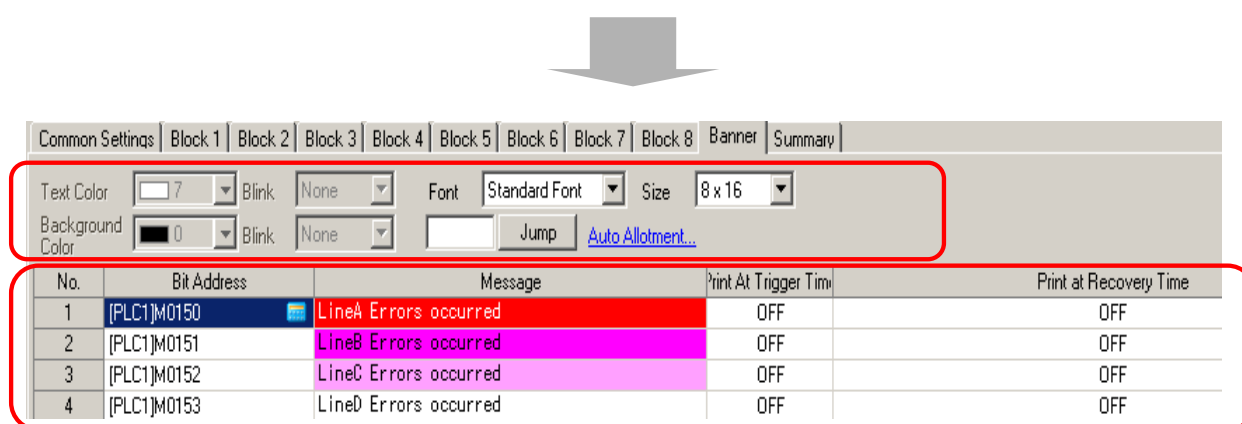
(2) Registering monitor addresses and messages

Check [Enable Banner].

Click [Yes].

The [Banner] tab will appear.
Select it.





In [Text Color], [Background Color], [Font], and [Size], set the color, the background color, the font, and the text size of the messages to display.

Setting [Blink] causes each color to blink at the selected speed.

Set the bit addresses to be monitored in [Bit Address] column and the messages to be displayed in [Message] column. When [Print at Trigger Time] or [Print at Recovery Time] is set to [ON], if the printer is connected to the display unit, the messages are printed out at the selected time.

As shown above, set each for [Bit Address], [Message], [Print At Trigger Time], and [Print At Recovery Time].

*For how to set addresses, refer to P4-8.

(3) Saving the settings

Click the [Save] icon from the Tool Bar to save the settings.



Caution!

During display of the message banner, the touch operation of the part covered by the message is disabled.

When placing switches etc. on the bottom part of the screen, be careful with the position and the size.

