

# Chapter 4

## Alarm screen

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## Chapter 4 Alarm screen ( Screen that displays alarm generating conditions of device )

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# 4.1

## Alarm screen

A list of active alarm is displayed and the method of display with alarm message is explained in this chapter.



## What is Alarm Screen

### • Why is it used?

The alarm screen displays a list of alarms for the systems or machines on the screen using lamp or messages and one can create a screen displayed with alarm message. There are 2 methods for displaying alarm, namely the method displaying only active alarms and the method that displays history of alarms that occurred in past. (For details of display of alarm history refer to chapter 7.)

### • Precautions to be taken during display

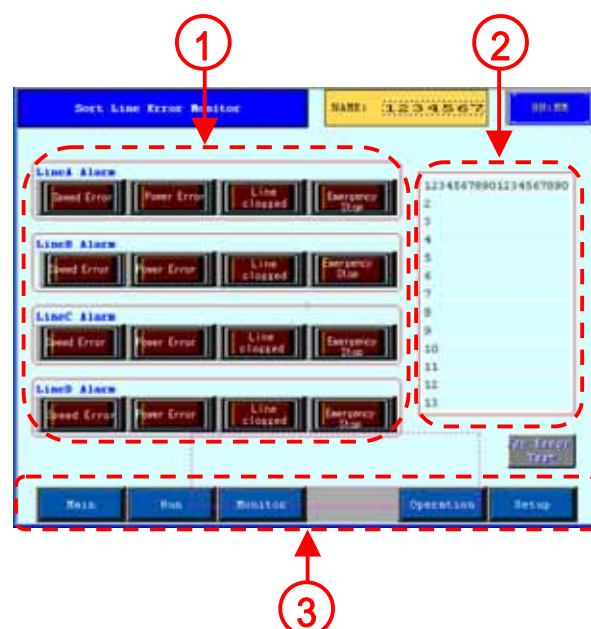
Alarm message are displayed by the moving messages under the entire screen. In case there are switches below the screen, then messages may overlap on them and it becomes difficult to operate those switches. Therefore, when using alarm messages, keep the part of the message that is displayed, blank.

### • Alarm screens

Alarm contents of each line are displayed by setting a label to the lamp.

All alarms are displayed in a list using alarm summary.

All line alarms are displayed through alarm messages.



# 4.2

## Alarm Summary Display

The method of displaying alarm summary is explained in this chapter.



解説

## Different methods of alarm summary display

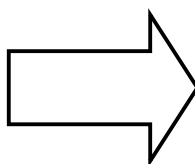
- Alarm summary display gives a list of active alarm messages .  
When the alarm is restored, the display clears.  
The method of using the simplest alarm parts is explained below.
- ( For the method of getting alarm history, refer to [Chapter 7 Alarm history screen])

### Procedure of setting alarm summary display

Alarm monitoring bits or messages etc. are registered in Alarm Editor.



Summary for displaying alarm are placed on screen.



Screen data is transferred to GP.

- When alarm is generated, the message is displayed in a list. When alarm is restored, message is cleared.





## (Method of displaying alarm summary (Registration of alarm))

- The method of registering alarm is explained below.

### (1) Selection of Alarm Editor

Select [Create/Edit Alarm] from [Screen/Setup] of menu bar.




OR  
Click on [Alarm] icon.



### (2) Settings of Alarm Editor (Message/Summary)

Select type of alarm.  
The location of message registration changes according to part/tag that displays alarm.

**Message/summary text:** 

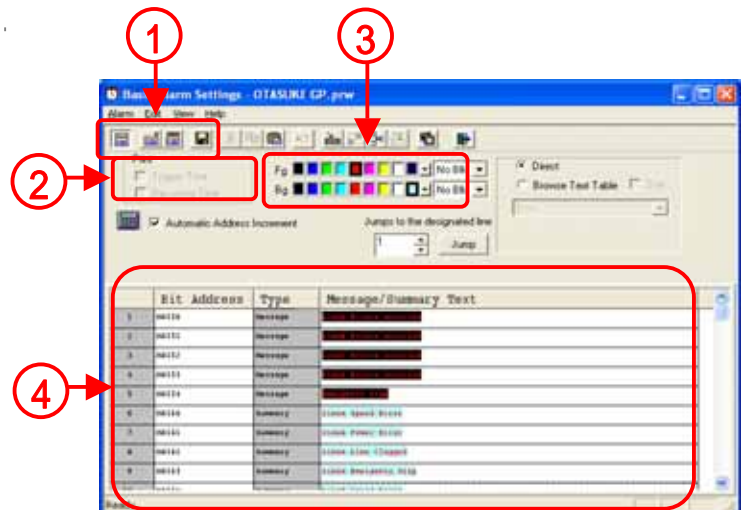
Create message for alarm message, alarm summary, "a" tag

**Bit log:** 

Create message for Q tag. (specify Bit)

**Word log :** 

Create message for Q tag. (specify Word)



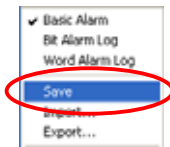
Print Function can be set only in case of [Message]. When alarm is reported /restored, history of report/restore is printed.

Set character color/background color for each message.

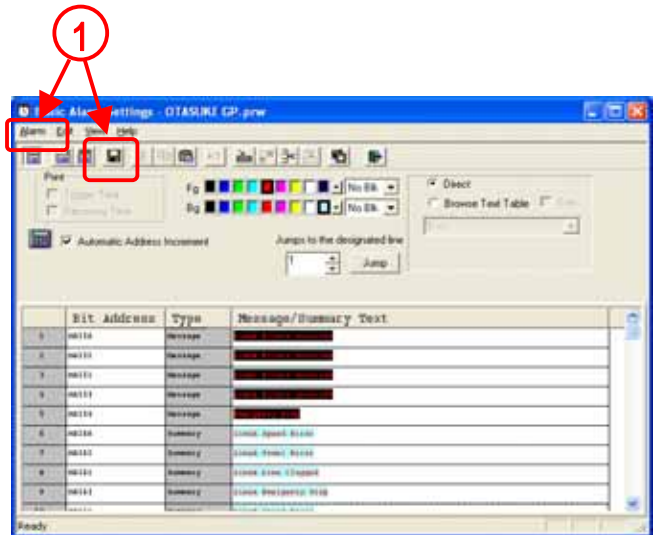
Monitor address, message and alarm type for all alarm.  
When alarm type is selected as [Message], it becomes alarm registration for alarm message and when changed to [Summary] it becomes registration for alarm summary/ 'a' tag.

### (3) Saving with Alarm Data

Select [Save] from [Alarm] of menu bar.



OR  
Click [Save] icon.







## How to display alarms summary (Setting alarm parts)

- The method of displaying alarm summary is explained below.

### (1) How to select alarm parts

Select [Alarm] from [Parts] of menu bar.



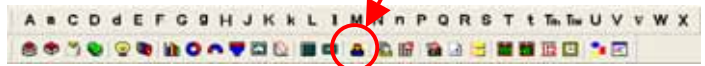
OR click on [Alarm] icon.



#### • Menu bar



#### • Parts tool bar

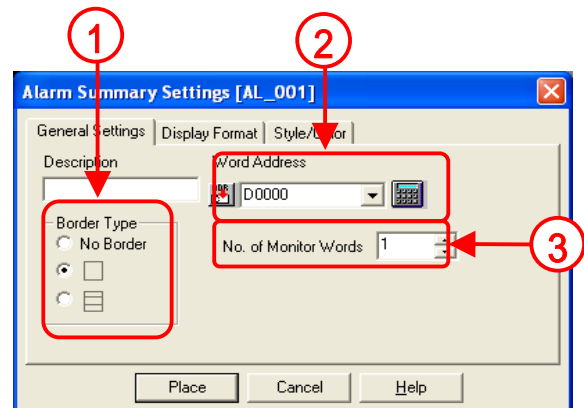


### (2) General Setting

The Border Type is set.

The first address of monitoring address set in alarm summary is set in word units.

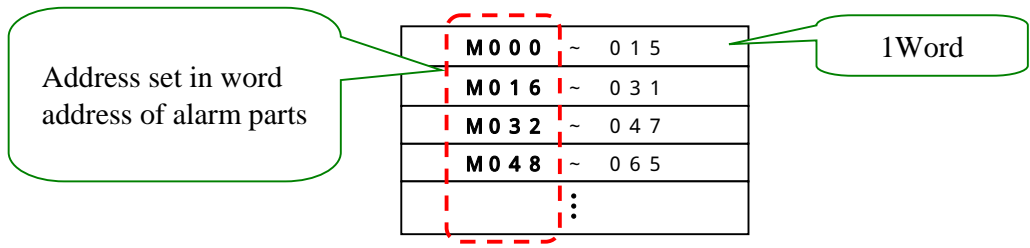
Monitoring address set in Alarm summary, sets the range of words from the address that is set in "word address".



**★ Hint**

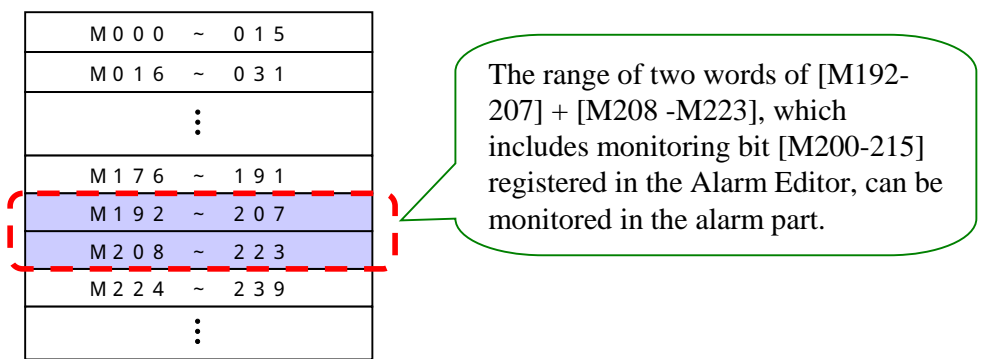
**Precaution to be taken in setting [Word Address] and [Monitoring word count]**

Alarm parts monitor the monitoring bits registered by Alarm Editor in word units. For monitoring Alarm Editor's monitoring bits in word unit, it is necessary to determine bit address by word units. When bit address is determined by word units, [1word=16bit] so it is as shown in the figure given below.



In word address of alarm parts, only the first address is set at every 16 bits (in short, only multiples of 16: M0,M16,M32,M48,M64...) can be set.

**Example :** When monitoring bits registered by Alarm Editor are M200~M215 , word address set in alarm parts becomes [M192] and monitoring word count becomes [2].



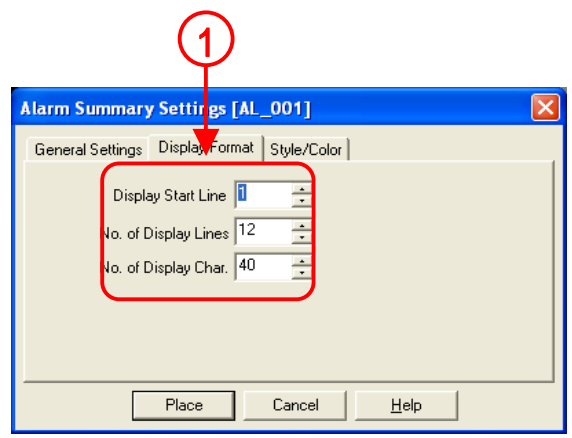
**(3) Display Format Setting**

**Display start line:** Set the message line for alarms to display at present.

**No. of Display Lines :**Set how many lines will be displayed.

Setup range is '1~50'.

**No. of Display Char. :** Set displayed character count per line. Range is [1~100] and it is in single byte.

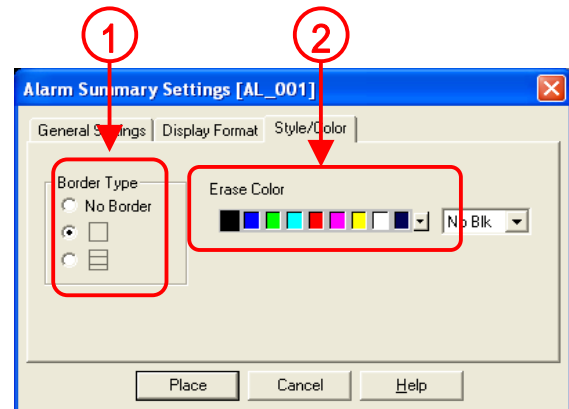


**(4) Style/color Setting**

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The display frame is set.  
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Display color is set for alarm restoration and clearing of message.

The color of characters, background color of message to be displayed is set in Alarm Editor.





## How to place alarm parts

The method of displaying the alarm summary is explained below.

[ Flow of setup ]

1. Open base screen [B4] .
2. Register monitoring address and alarm message.
3. Setup/ place alarm parts.

### (1) How to open Alarm Editor

Open project manager and click the [Alarm] icon.



### (2) How to set Alarm Editor

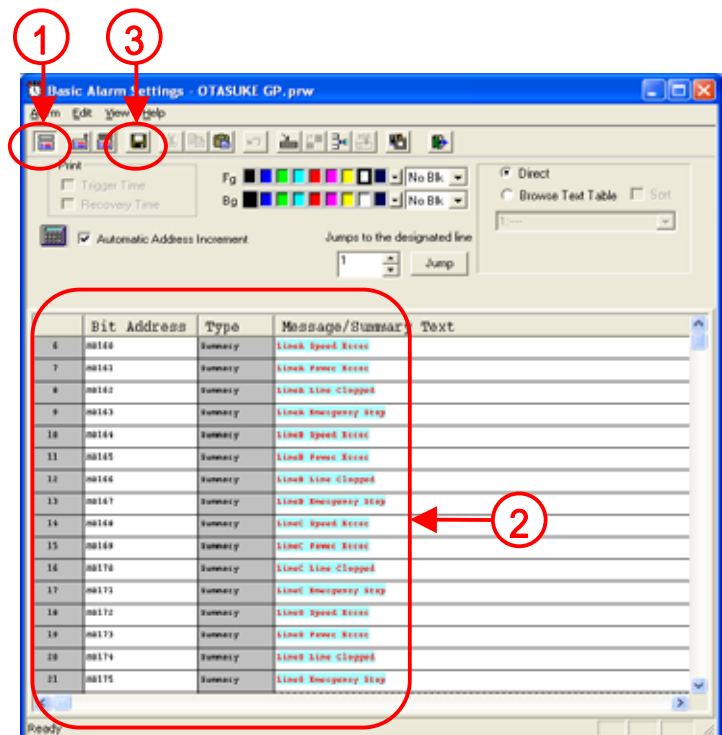
Select [Message/Summary]



Allocate the [Bit address] sequentially from [M160-M175]

Set all [Alarm type] to [Summary], and set [Messages] as shown in figure to the right.

Set the color for each message with 'Fg,Bg' as desired.

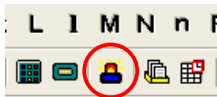


Click [Save] icon.



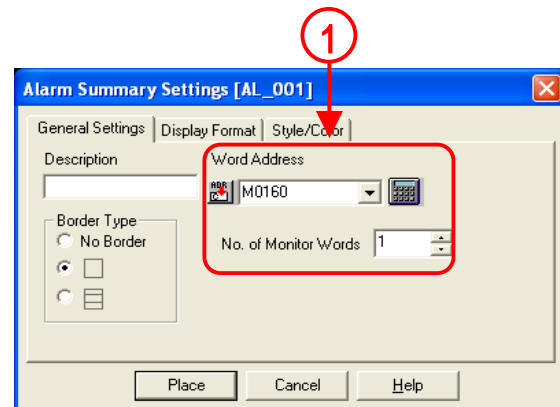
### (3)How to select alarm parts

Click icon of [Alarm parts]  
from parts tool bar.



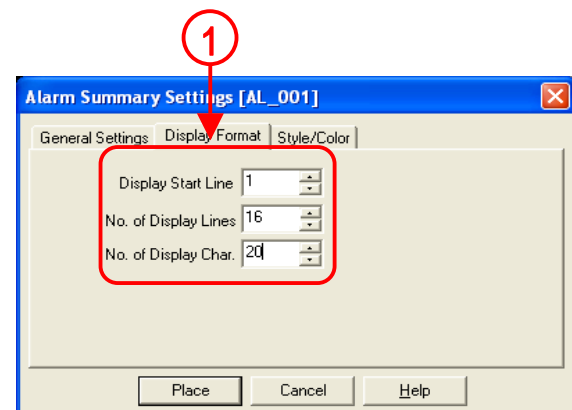
### (4) General Settings

Set [Word address] to [M160] and  
[No. of Monitor Words] to [1].



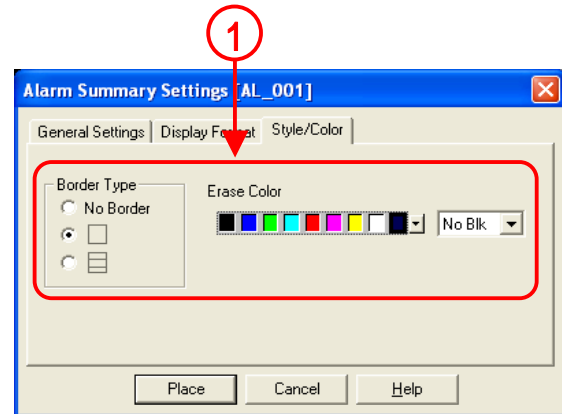
### (5)How to set display format

Set [Display start line to [1], [No. of Display Lines] to  
[16], [No. of Display Char.] to [20].



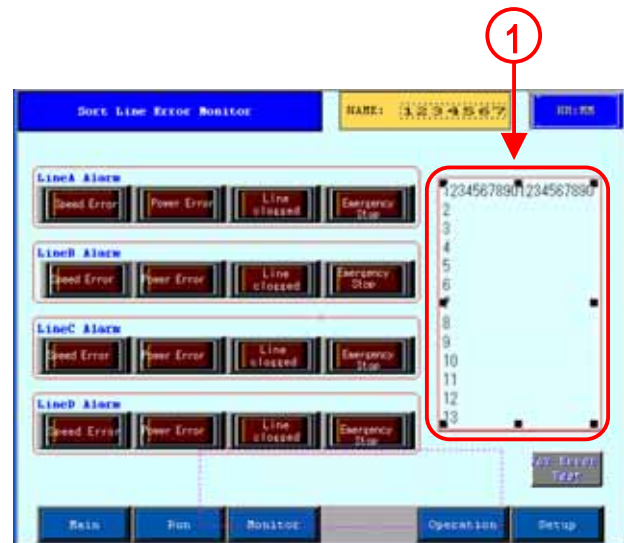
**(6) How to set color/style**

Set 'Border Type' and 'Erase Color' as desired.



**(7) How to place alarm**

Click [Place] and place on screen.



**(8) Check operation**

Alarm summary is displayed when monitoring bit address is ON.  
 Alarm summary is cleared when monitoring bit address is OFF.



# 4.3

## Alarm Message Display

This chapter explains the display of alarm message.

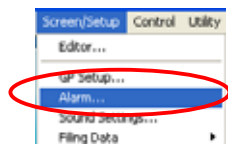


## How to display alarm messages

- The method of registering the flow message to be displayed as alarm is explained below.

### (1) How to select Alarm Editor

Select [Create /Edit Alarm] from [Screen/Setup] on menu bar.



OR Click on the [Alarm] icon.



### (2) Alarm Editor(Message/Summary) Settings

Select type of Alarm.

The location where message is registered changes according to parts/ tag displaying Alarm

#### Message/Summary:



Create message for flow display, alarm parts, 'a' tag.

#### Bit log:

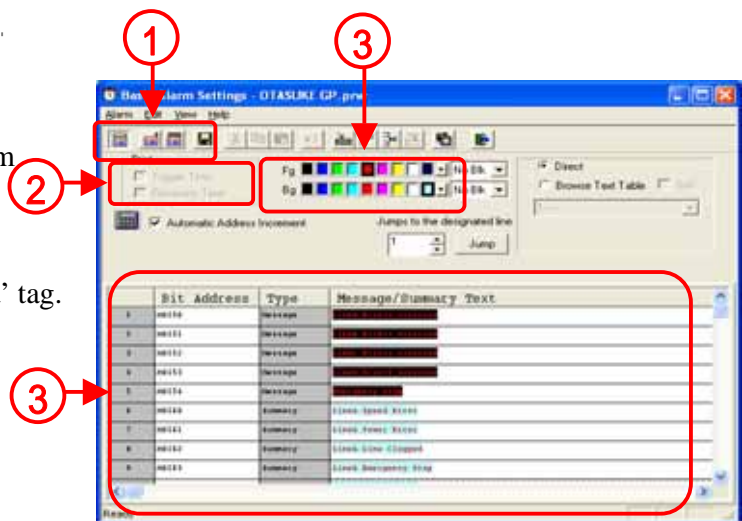


Create message for O tag (Specify bits)

#### Word Log:



Create message for O tag (Specify Words)



Alarm type can be specified only at the time of [Messages]  
 When Alarm is reported/restored the history of report/restore is printed.

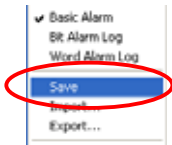
Set character color/background color for messages.

Monitoring address and message, alarm type is set.  
 When alarm type is selected from summary and message and changed to [Message], it becomes alarm registration for flow message and when changed to [Summary] it becomes registration for alarm parts/ 'a' tag.

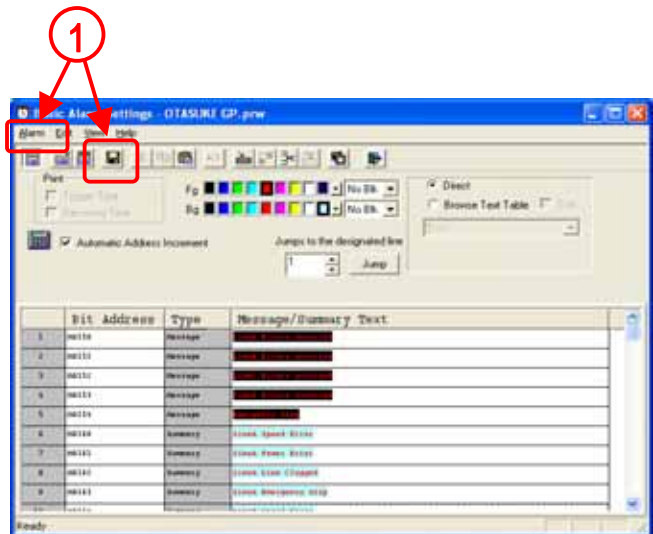


**(3) Saving with Alarm Editor**

Select [Save] from [Alarm] on menu bar.

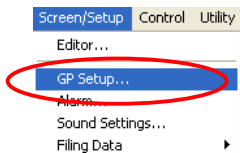


OR Click on [Save] icon and close Alarm Editor.



**(4) Setting message character size**

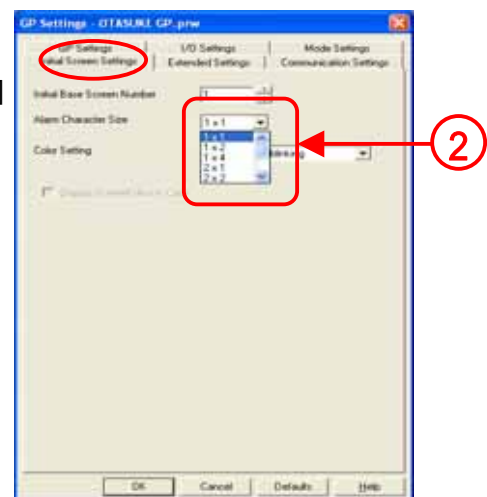
Display Project Manager.  
Select [GP Setup] from [Screen/ Setup] of menu bar



OR Click on [GP Setup] icon



Set character size of alarm messages with [Alarm Character size] of [Initial screen setup]  
Set character size in range of [1x1] ~ [4x4] by 1, 2, 4 times length/width.



**Hint**

When transferring screen data after finishing setup, check [GP system] in transfer settings and then transfer the data.



## How to display flow messages

The method of displaying alarm messages is explained here.

[Flow of settings]

1. Open Project Manager.
2. Register monitoring address and alarm messages.
3. Character size is setup.

### (1) How to open alarm Editor

Open Project Manager and click [Alarm] icon.



### (2) How to set the Alarm Editor

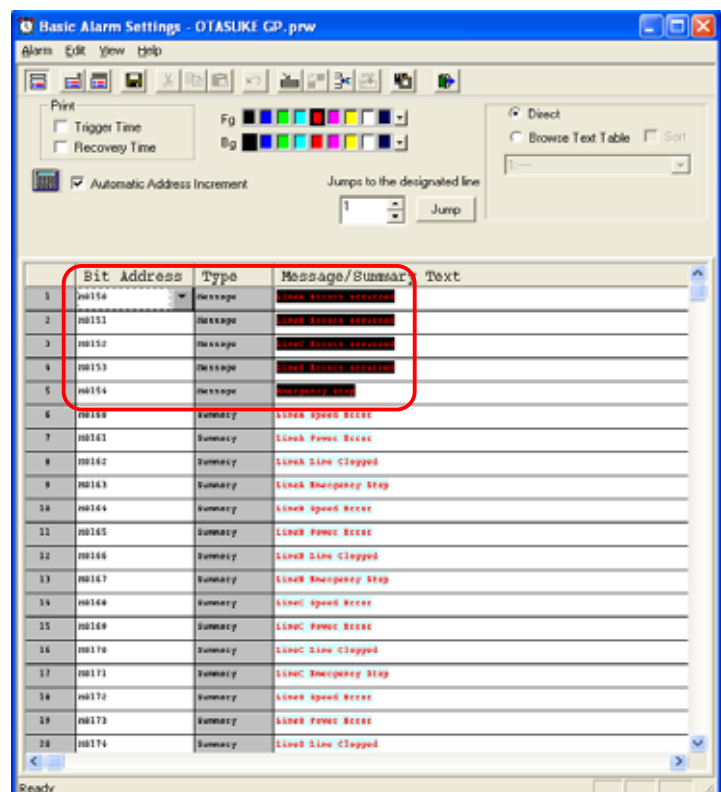
Select [Message/Summary]



Allocate the [Bit address] sequentially from [ M150 ~ M154].

Set [Alarm Type] in [Message] and [Message] is set as shown in figure at right.

Set the color for each message with [Fg, Bg] as desired.



Click on the [Save] icon.



**(3) Check operation**

When Monitoring Bit Address is ON, the alarm message is displayed in a flow in the lower part of the screen.

When Monitoring Bit Address is OFF, the alarm message is not displayed in a flow.





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