## 7.6 Message Tag

Displays a message of 'Message' file on determined condition. To register message tag, first of all, create 'Message' file. Refer 'Chapter 6.1. Message File.

#### (1) Registration

Select message tag menu or message tag icon.

- Select operation condition (Bit/Word), write address and click 'OK' button.
- On 'Bit' condition, determine 'ON' message No. and 'OFF' message No.
- On 'Word' condition, it is possible to display different message for different range.

## 7.6.1 Setting

#### (1) General

1) Group : Select message group to be displayed (A~Z)

#### 2) 'Bit' Device Type Condition

Click 'Bit' and write 'Address to read'.

Message No. of 'ON' : Select message number to be displayed in case the bit is '1'

Message No. of 'OFF' : Select message number to be displayed in case the bit is '0'



Display Format : Determines 'No. of character/line' and 'No. of line' to be displayed

#### 3) 'Word' Device Type Condition

There are two kinds of sub-condition, 'Range' and 'Variable'.

Range

- Displays different message for different range of the device's value.
  For example, if device's value is between '0' and 100, it displays message #1. And if the value is between '101' and '150', it displays message #2.
- And it is also possible to display different color for each range.
- Max. number of range is 8.

Message To		'Range' tab appear 'Range' sub conditi	s by selecting on
'Range'	a isplay   Range   ion   A ▼ Type   Type   I Type   Moretage   Address Address Address   Mw0000 Message No. 999 = I = I = I = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =	'Word' condition	
	05		1

Variable

Displays message corresponding to the device's value.

- Selects device address. That is, device's value becomes message number directly.
- If the device's value is not between Max. message number and Min. message number or if message number does not exist or if the device's value is NULL(0), no message is displayed.

ssage Tag	
Description Group A I	
Address Type O Range O Variable Address d a m Mev0000	No. Of Charz/Line 10
Link Df Message Range Max. Message No. 993 - Min. Message No. 1 -	
01	Cancel Help

- Limitation of Message Range

On 'Word' condition, maximum available message number is '999', and minimum '1'.

- Display Format

Determines format of 'No. of lines' and 'Characters/line' to be displayed

#### (2) Display

Determine 'Font Pixel, Font Type, Character Size, Text Color, Background Color'

1) Message Color

In case of 'Bit' condition and 'Variable' condition, determine Text Colors and Background Colors(ON/OFF).

Ford Paul	Fonk Type G Gothia	
Overator Size		
Hessage Color DN Text Color		
Big. Color		

#### (3) Range

- On 'Range' condition,
- Determines each (Text and Background) colors for different each range.



1) Number of Range : Maximum 8 ranges are available

2) Message Number : Determine message number to be displayed for each range.

- 3) Determine Text color
- 4) Determine Background color
- 5) Determine minimum value and maximum value of each range.

## 7.6.2 Examples

#### (1) On 'Bit' Condition

Register a message tag which

- changes a message when bit '9' of MW0 is reversed by touching the tag
- displays No. '1' message of group 'A' while bit '9' of MW0 is '1(On)'
- displays No. '2' message of group 'A' while bit '9' of MW0 is '0(Off)'
- In case of 'On', Text color is Blue and background color is white.
- In case of 'Off', Text color is yellow and background color is blue.
- is displayed in a line and Max. characters per line are '10'.

- 1) First at all, create message file
  - A Group :

Content of Message #1 is 'ABC'.

Content of Message #2 is 'DEF'.

Content of Message #10 is '1234'.

						-
HINT A	dd Delet	im in import i	ex			
G	noup	No.		Contents		
A	-	10	÷	1234		 
-	Ma	L Char	Centre			
arand p	1	3	ABC			
	2	3	DEF			
	10	4	1234			

- 2) Register Message Tag
  - Group : 'A'
  - Bit Condition
  - Device address to read : 'MW0'
  - Bit : '9'
  - Message No. of 'On' : '1'
  - Message No. of 'Off' : '2'
  - No of Character/Line : '10'
  - No. of Lines : '1'

General   Display	×
Description Group A Device Type C Bit C Word	
Address To Read	Display Fornat No. 0f Chars/Line 10 No. 0f Lines 1
OK.	Cancel Help

7.6-5

- Font : 16x16, Gothic
- Text Color of 'On' : 'Blue'
- Text Color of 'Off' : 'Yellow'
- Background Color of 'On' : 'White'
- Background Color of 'Off' : 'Blue'

Message Tag General Display	×
Font Pixel Font Type C 32/32 Font Type	
Charater Size	
Message Color ON DFF	
Bg Color	
DK. Cancel	Help

- 3) Register Touch Tag for bit 'On'/'Off' Operation.
  - Operation Address : 'MW0', #9 bit
- Operation Type : 'Reverse'

such Tag		
General	Display Operation	1
Operat © D	ion Type t O Word O F	ler O Special
4	Address to Opera	
Operat C Of	ion 1 on Touch/ C OM	C OFF @ Reverar
		Add Del Mod
Type	Device	Operation OPN1
88	D:MW0000-9	Revesse
1.1		
-		<u>.</u>
		<u> </u>



=> On S/W('M' means Message Tag.)

Touch tag is touched (On)

=> Displays message #1 of group 'A'.

Touch tag is touched again(Off)

ABC

=> Displays message #2 of group 'A'.

## (2) On 'Variable' Condition

Register a message tag that

- MW0's value is message number of group 'A'.
- Min. message No. is 10 and Max. message No. is 90.
- Text color is black and background color is blue.

1) Use the message file created on 'Bit' condition example.

- 2) Register message tag.
  - Group : 'A'
  - Word Condition
  - Address Type : Variable
  - Device address to read : 'MW0'
  - Max. Message No. : '90'
  - Min. Message No. : '10'
  - No of Character/Line : '10'
  - No. of Lines : '1'

General Display	
Description Group A	_
C Bit (* Ward	
Address Type	Display Fornat
O Range @ Valiable	No. 01 Chara/Line 10
Address D III MWT000	No. DI Lines
Linit Of Message Range	
Max Message No. 90	
Min. Message No. 10	

- Text Color : Black
- Background Color : Blue
- Font : 16 x 16, Gothic
- Character Size : 1 x 1

Message Tag	2
General Display	
Fort Piel Fort Type Fort Type Fort Type Fort Type Fort Type	
Character Size	
Message Color	
Text Color	
Bg Color	
	1
UK Carcel	nep



#### (3) On 'Range' Condition

Register a message tag that

- displays message #10 of 'C' group when the value of MW0 is between '0' and '500'
- displays message #20 of 'C' group when the value of MW0 is between '501' and '999'
- Text color is black and background color is yellow.

#### 1) Create message file

		im	DK	
Print A	dé Delet	e import E	profit	
6	reep	No.	Contents	
C	*	20	LSJOFA	
			a <u>.</u>	
Group	No.	Cher	Contents	
C	10	5	NUVAT	
c	20	6	LSJOFA	
•				

- 2) Register Message Tag
  - Group : 'C'
  - Device Type : Word
  - Address type: Range
  - Address : 'MW0'

Message Tag		×
General Display Range		
Description Group C 💌 Device Type C Bit (7 Word		
Addess Type	Display Format	
Range O Variable	No. Of Dhars/Line 10 +	
Address	No. Of Lines	
Linit Of Message Range		
Max. Message No. 995 + Min. Message No. 1 +		
OK	Cancel Help	

- No. of Ranges : 2
- Range of Message # 10 : 0~500, Text Color is black and background color is yellow.
- Range of Message # 20 : 501~999, Text Color is black and background color is yellow.
- Other ranges : Background color is black.

Message Tag
General Display Range
No. D/ Ranges 2 ¥
- Range Value and Color Setting
Message No. Mis. [Decimal] Mas. [Decimal] Color Color
10 📩 🔜 0 (= Ranget (= 500 🔛 🗮 💌
20 📩 🔤 901 (= Range2 (= 999 🔤 🗨 💌
Other Plange
OK Cancel Help

## 3) Results



# 7.7 Alarm Tag

Displays a relevant alarm message of alarm file when an event occurs.

To register alarm tag, first of all, create alarm file.

Refer 'Chapter 6.2. Alarm File' .

## (1) Registration

- 1) Create alarm file.
- 2) Select alarm tag menu or alarm tag icon.
- 3) Determine alarm type, group, font, color, etc and click 'OK' button.

## 7.7.1 Setting

## (1) General

#### 1) Alarm Type

- Current Alarm : Displays current occurred alarm
- Alarm History : Displays the list of alarms which has occurred

#### 2) Group

Select alarm group which has the alarm message to be displayed (A~Z).

Alarm	
General Display	
Description	
Alam Type O Current Alam O Alam History	
Group A	
I⊽ Use of Basic Prome	
OK. Cancel	Help

#### 3) Use of Basic Frame

Basically, provides basic frame of alarm list which has 'PgUp/PgDn' button and 'Clear' button. To use this frame and buttons, check 'Use of basic frame'.

But if user doesn't want to this frame, it is possible to create PgUp/PgDn/Clear buttons by use of Touch tag specified as 'Special' operation.

4) Column Order (Only when 'Alarm history'):

It is possible to determine column order of items to be displayed. There are 5 items (Occurrence Date, Occurrence Time, Content, Clearance Date, Clearance Time).

- 5) Date Type : Select Date type(yyyy/mm/dd, mm/dd/yyyy, dd/mm/yyyy)
- 6) Max Length of Content : Maximum 80 is available.

General Display
Description
Alarm Type O Current Alarm
Group A 💌
Use of Basic Frame     Display Order Designation
Column 1 Column 2 Column 3 Column 4 Column 5
INUS - TrgTin - Conter - CirOab - CirTim -
Date Type yyyy/mm/dd -
Max Length Of Content 20

#### (2) Display

Determine 'Font Pixel, Font Type, Character Size, Text Color, Background Color, Scroll size'.

'Scroll size' is Alarm row number to scroll over(Jump Over) by clicking PgUp/PgDn button.

General Diploy	
Fort Paul F (\$20%) C 3250	Scroll size
Chancin Scoll Sco	
Display Date	
Teat Calor 💌 Rg. Calor 🔤 💌	
DK Carcel	Halp

## 7.7.2 Examples

Create Alarm file and register an alarm tag which displays relevant alarm message of alarm file when an event occurs.

Set 'Scroll Over No.' as '1'

(1) Create alarm file by selecting 'Alarm File' in file menu.

Print	Add I	🎽 im e Delete Import Ex	pert				
Ga	×	No.		۸ (200 🖬	ddrees 19960 🛛 🖃		
Ce	ndition			Contents			
	ON	0.044		No1 tani	ĸ		
Gre	No.	Addr	Bit	Cond	Chars	Contents	
A	1	CI0860008		ON		No1 tenk	
1	_						1

(2) Register Alarm Tag

- Alarm Type : Current alarm
- Group : 'A'
- Use of basic frame : checked

Alarm	×
General Dispiny	
Description	
Alam Type © Current Alam O' Alam History	
Group A	
P Use of Basic Prane	
OK Cancel Help	ī

- Font Pixel : 16 x 16
- Font type : Gothic
- Character Size : 1 x 1
- Color : Text Color is red and background color is blue
- Scroll Over No. : 1

Alarm	×
Beneral Display	
Fort Pixel (* [16:116] (* 32:032 (* Gothic	
Character Size Scrott Size	
Display Color Test Color	
Bg. Color	
-	
OK Cancel	Help

## (3) Results



## 7.8 Key Display Tag 📟

Key Display tag is

- A tag operates as Numeric Tag usually-[Read mode],
- A tag used as key pad under 'key display condition'-[Write mode].

#### (1) Registration

- 1) Select key display tag in tag menu or Key Display Tag icon on toolbar
- 2) Determine 'Operation Condition', 'Selection bit' and 'Key Pad Type' in 'General' tab.
- 3) Select 'Output address' and 'Display Format', etc in 'Operation' Tab.
- 4) Select 'Font Pixel, Character size and Color, etc' in 'Display' tab.
- 5) Click 'OK' button.
- 6) Register at any position of screen by clicking left button of mouse.

## 7.8.1 Setting

#### (1) General

Determine 'Operation Condition' of key display tag and 'Keypad Type'.

1) Determine 'Operation Condition'.

cyDisplay	
General Operation Display	
Description	
Operation Condition	
@ On Touch C On Selection Bit 'ON'	
Seletion BR	
10 s mwacao o -	1
. KeePad Tare	
@ Numeric C Text	

- 1. On Touch : Activates the key display tag when this tag is touched.
- 2. On Selected Bit 'On' : Activates the key display tag when selected bit is '1'
- \* 'Activate' means that key display tag turns into *read mode*.

Operation Condition	
On 'Touch O On Selection Bit 'ON Selction Bit	Address of selected bit
ds 🖬 MW0000 0	2

2) Determine 'Key pad Type', 'Numeric' or 'Text'.

## Note

#### Numeric Key Pad

If key display tag is 32 bit data and external controller device is 16 bit (word data device), lower word of 32bit(16bit) are written in the selected output address, and higher word of 32bit(another 16bit) are written in the next device.

Ex.) To display '12345678h' in 'MW0', '1234h' is saved in 'MW1', and '5678h' is saved in 'MW0'.[Only when "Data size" is 32bit]

## Text Key Pad

If text length of key display tag is 6 and external controller device is 16 bitsized(word data device),

the first left character of the text is saved in the higher byte of the device,

second character of the text is saved in the lower byte of the device,

third character of the text is saved in the higher byte of the next device,

fourth character of the text is saved in the lower byte of the device.

Ex.) To display "ABCD" to 'MW0', "AB" is saved in MW0 and "CD" is saved in MW1.

## (2) Operation

Determine 'Output Address, Data Size, Data Type, Display Format.

- Output Address : Select device address to write the value of keypad
- In case of Numeric Key Pads

Determine +/-(sign), Data Size, Data Type, No. of total digit, Decimal Places. Please refer to Numeric Tag for details.

KeyPad Type           ● Numeric         C         Text	KeyDisplay General Operation Display	×
Blocking is possible by using 'Use input limit'. That is, input value over range(Lower< <upper) is="" protected.<="" td=""><td>Output Address  Output Address  Data Size  O 16 Bit O 32 Bit  Data Type  O DEC O HEX O BCD  Code+/-  Display Format  No, of Display Digits, 5  Decimal Places  Decimal Places  Decimal Places  Decimal Places  Code+/-  Code+/-  Display Signat  Code+</td><td></td></upper)>	Output Address  Output Address  Data Size  O 16 Bit O 32 Bit  Data Type  O DEC O HEX O BCD  Code+/-  Display Format  No, of Display Digits, 5  Decimal Places  Decimal Places  Decimal Places  Decimal Places  Code+/-  Code+/-  Display Signat  Code+	

## - In case of Text Key Pad

Determine the number of character in key pad.

KeyPad Type	KeyDisplay	×
O Numeric 💽 Text	General Operation Display	
	Dutput Address	
	[d] z] 🔛 [ MW0000	
	Display Format	
	No. of Deeplay Digits. 10	
	OK Cancel	Help

## (3) Display

- 1) Determine Font Pixel, Character Size, Text Color, Background Color and Touch color.
- 2) 'Touch' color shows XORed color with background color when the key display tag is touched.

- 3) 'Use as Password' : Use to encode key inputs. '\*' is displayed on screen.
- Display previous data : When it is checked, the current value of address is displayed as turning into write mode. And when it is unchecked, '0' is displayed.

KeyDisplay	×
General Operation Display	
Ford Poel (* 16/16) (* 32/32	
Character Size	
KeyPad Color Text Color  Use as Password Plate Color Display Previous Date	
on Touch When Selected	
XOR color by	
touching	
OK. Cancel Help	

## 7.8.2 Examples

#### (1) Example of Numeric Key Display Tag

Register a key display tag that

- writes decimal number in 'MW0'
- No. of total digit is 5, decimal places is 0, data type is DEC without +/- code, Data Size is 16bit,

- Color

When tag is not touched : Text is white, background is blue

When tag is touched : XORed red

- '0' is displayed when tag is not touched
- No use as password

## 1) General

- Operation Condition : On Touch

- Key Pad type : Numeric

KeyDisplay	×
General Operation Display	
Description	
Operation Condition	
IP On Touch C On Selection 8≵ ON*	
Sector B	
1 C C C C C C C C	
KeyPed Type C Naresis C Test	
OK. Cancel Heb	

- 2) Operation
  - Output Address : MW0
  - Data size : 16bit
  - Data Type : DEC
  - No. of Total Digit : 5
  - Decimal Places : 0

KeyDisplay
General Operation Display
Output Address
16 Bit C 32 Bit
Code+/- C DEC C HEX C BCD □ Code+/-
Display Format No. of Display Digits. 5 T Decimal Placeo 0 T
OK. Cancel Help

- 3) Display
  - Font Pixel : 16 x 16
  - Character Size : 1 x 1
  - Text Color : White
  - Background Color : Blue
  - Touch Color : Red
  - Alignment : Right
  - Use as Password : No use
  - Display Previous data : No use

KeyDisplay	×
General Operation Display	
Fort Pool F 16/16 C 32/32 Character Size 1 * 1 *	
KeyPad Color Test Color Plate Color Color on Touch	
DK Cancel Help	

#### 4) Results

Download to main module



Write decimal '123' by use of Ten Key(written by touch tag)

12<u>3</u>

'123' is written in MW0' by touching 'Enter' key.

#### (2) Example of Text Key Display Tag

Register a key display tag,

- Text length is 6.
- When bit 1 of 'MW9' is '1', key display tag is activated(turn into write mode)
- Writes values in 'MW0' by touching 'Enter' key
- Color

When tag is not touched : Text is blue, background is white

When tag is touched : XORed red

- '0' is displayed when tag is touched
- No use as password

1) General

- Operation Condition : On Selected bit 'ON', bit 1 of 'MW9'

- Key Pad type : Text

Display	
eneral Operation Display	
	_
Description	
Deeration Condition	
C On Touch (* On Selection Bit 'ON'	
Selction Bit	
d a MW0009 1	*
KeyPad Type	
C Numeric C Test	
	1.

- 2) Operation
  - Output Address : MW0
  - No. of Character : 6

KeyDisplay	×
General Operation Display	
Dutput Address	
[d] _ [ [ ] [ MW0000	
Display Format	
No. of Display Digits. 6	

- 3) Display
  - Font Pixel : 32 x 32
  - Character Size : 1 x 1
  - Text Color : Blue
  - Background Color : White
  - Touch Color : Red
  - Use as Password : No use
  - Display Previous data : No use

KeyDisplay	×
General Operation Display Fort Pixel C 15:C16 (F 32:C32 Character Size T = X T = KeyPad Color Text Color Plate Color Plate Color Color on Touch	
OK Cancel Help	

4) Results

Downloaded to Main module



Write 'ABCDEF' by use of Ten Key ( writitten by touch tag )



- \* "ABCDEF" is written in MW0~MW2 by touching 'Enter' key.
- \* Write "AB" and press 'Enter' key, then "AB" is saved in MW0, NULL is saved in MW1, MW2.