

## 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

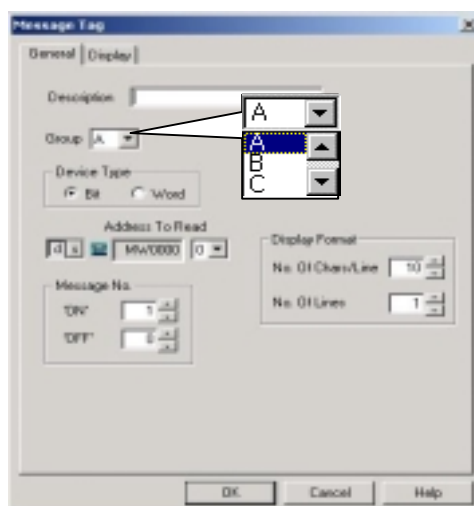
1) Group : Select message group to be displayed (A~Z)

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'



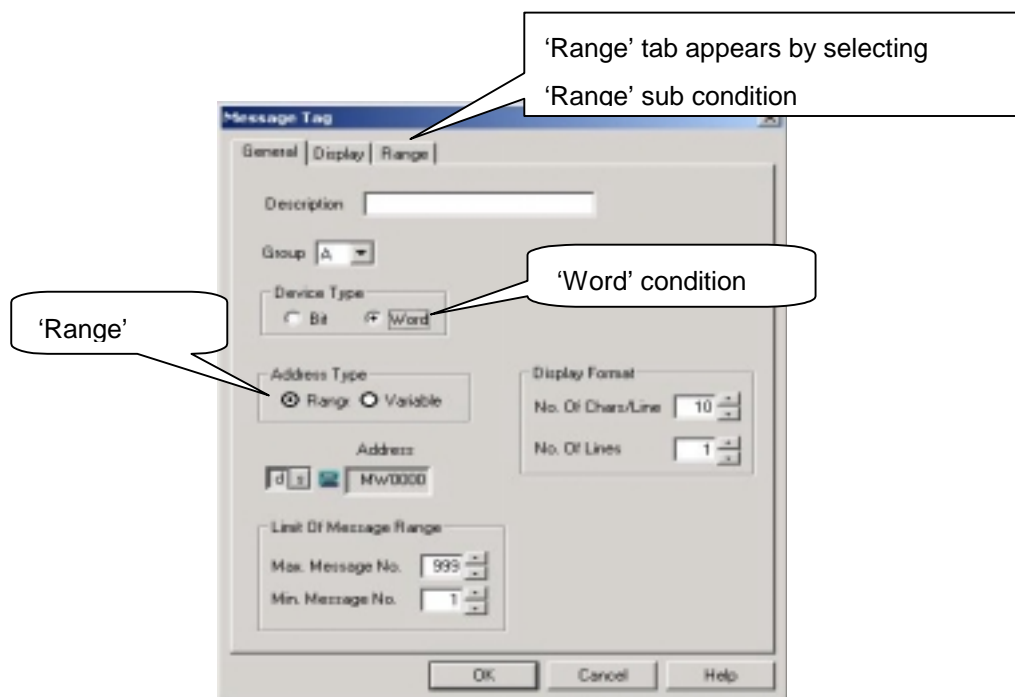
Display Format : Determines 'No. of character/line' and 'No. of line' to be displayed

### 3) 'Word' Device Type Condition

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

#### Range

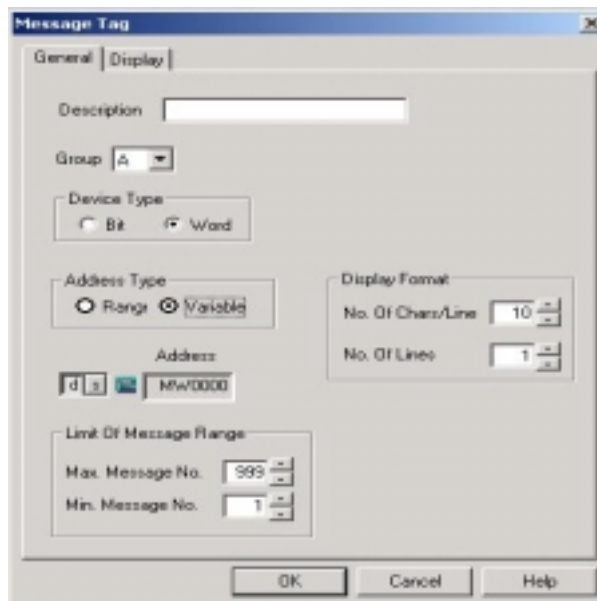
- Displays different message for different range of the device's value.  
For example, if device's value is between '0' and 100, it displays message #1. And if the value is between '101' and '150', it displays message #2.
- And it is also possible to display different color for each range.
- Max. number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



#### 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.



- Limitation of Message Range

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

- Display Format

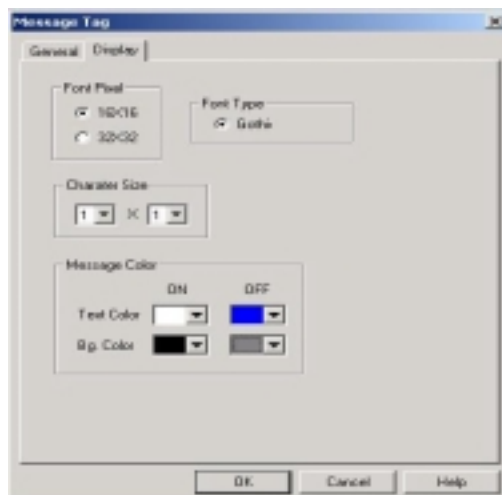
Determines format of 'No. of lines' and 'Characters/line' to be displayed

**(2) Display**

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

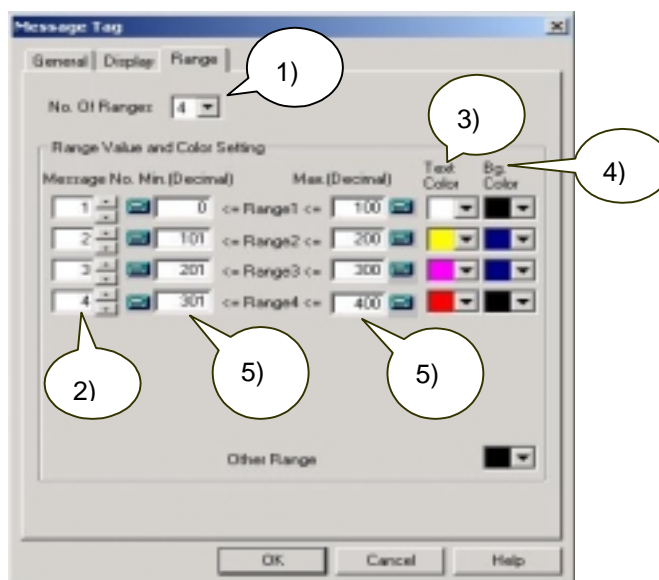
1) Message Color

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



**(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'.

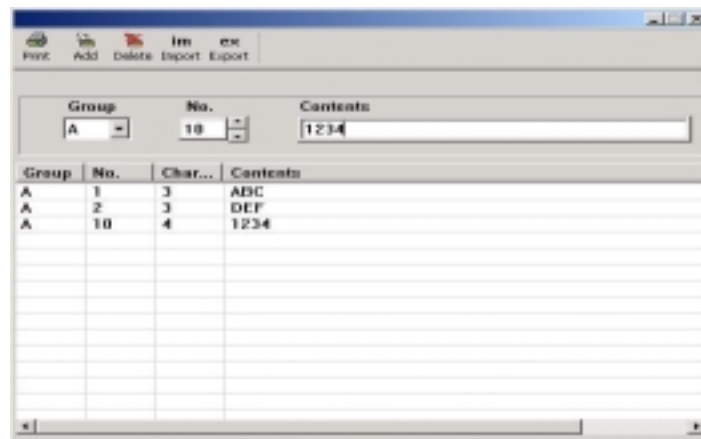
## 1) First at all, create message file

- A Group :

Content of Message #1 is 'ABC'.

Content of Message #2 is 'DEF'.

Content of Message #10 is '1234'.



## 2) Register Message Tag

- Group : 'A'

- Bit Condition

- Device address to read : 'MW0'

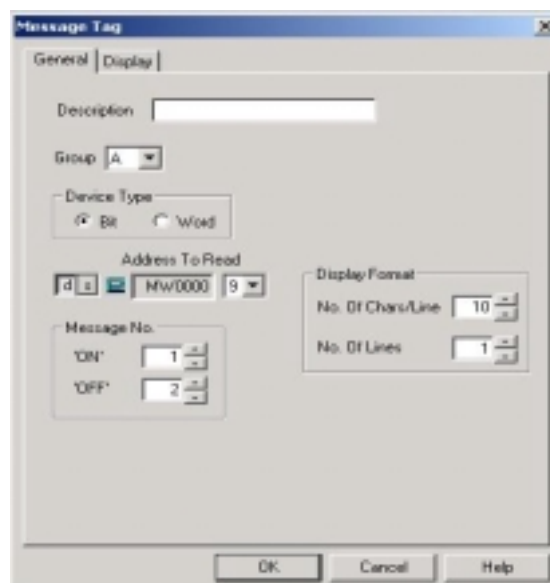
- Bit : '9'

- Message No. of 'On' : '1'

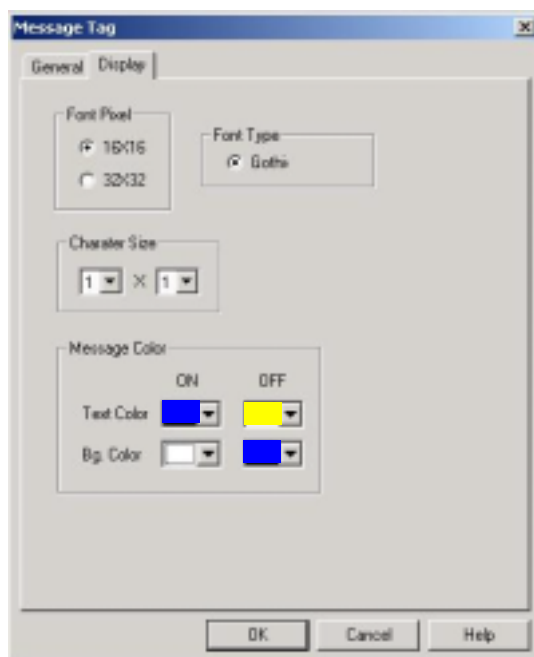
- Message No. of 'Off' : '2'

- No of Character/Line : '10'

- No. of Lines : '1'

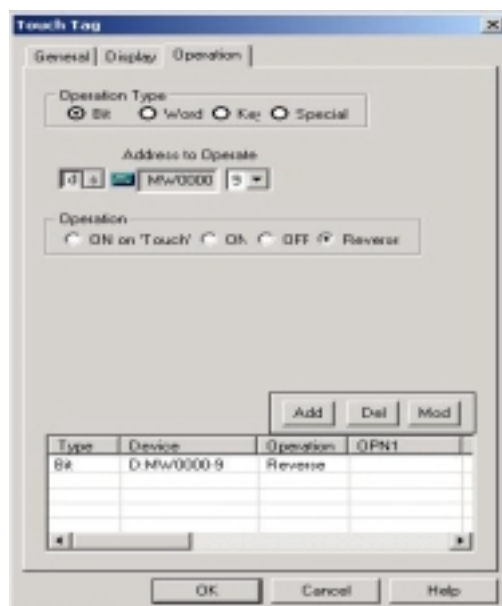


- Font : 16x16, Gothic
- Text Color of 'On' : 'Blue'
- Text Color of 'Off' : 'Yellow'
- Background Color of 'On' : 'White'
- Background Color of 'Off' : 'Blue'

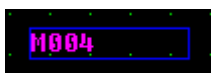


3) Register Touch Tag for bit 'On'/'Off' Operation.

- Operation Address : 'MW0', #9 bit
- Operation Type : 'Reverse'



## 4) Results



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

Touch tag is touched (On)



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

Touch tag is touched again(Off)



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

**(2) On 'Variable' Condition**

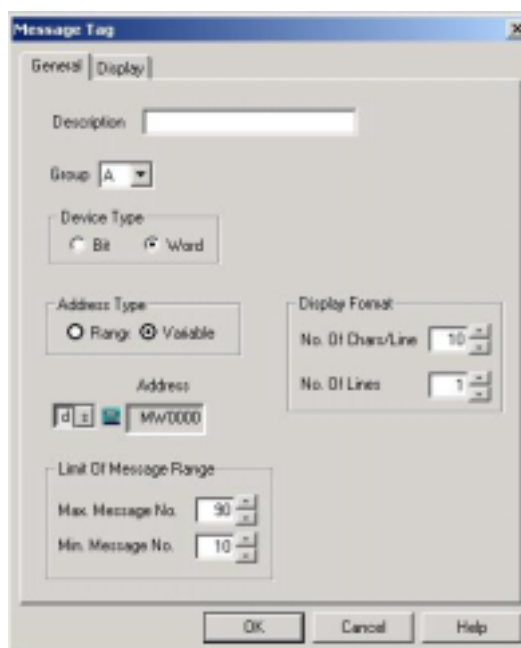
Register a message tag that

- 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'



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



### 3) Results



=> On S/W



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=> On Panel while the value of 'MW0' is 10(DEC).

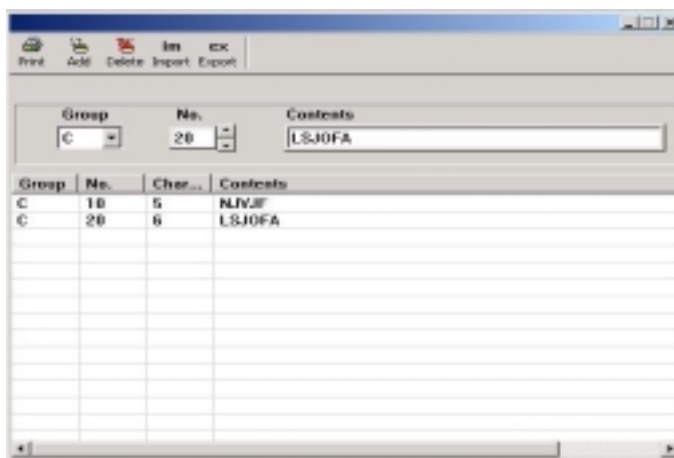
### (3) On 'Range' Condition

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.

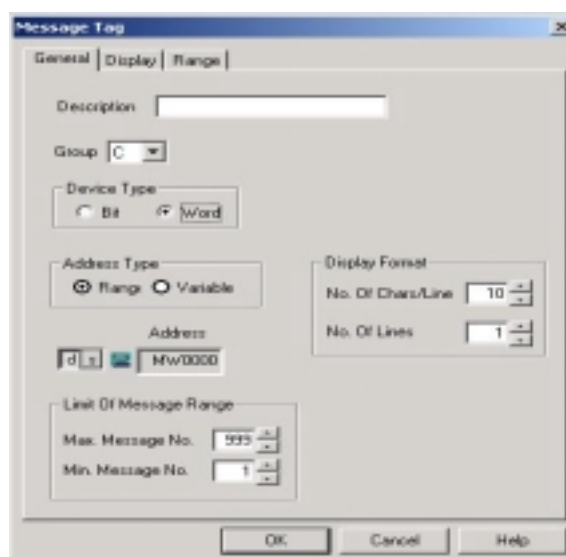


## 1) Create message file

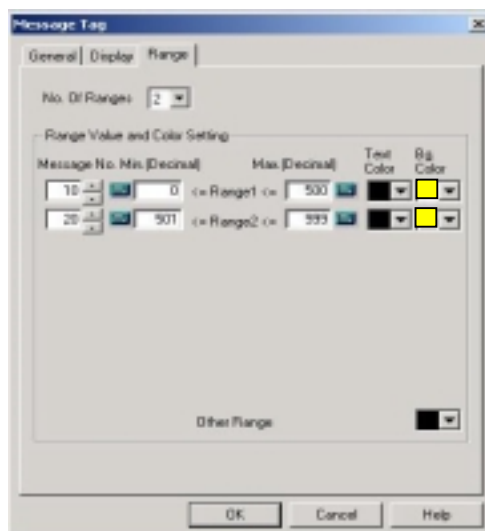


## 2) Register Message Tag

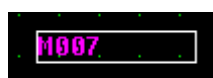
- Group : 'C'
- Device Type : Word
- Address type: Range
- Address : 'MW000'



- 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.



### 3) Results



=> On S/W



=> On Panel

(when the value of 'MW0' is 501~999)

## 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

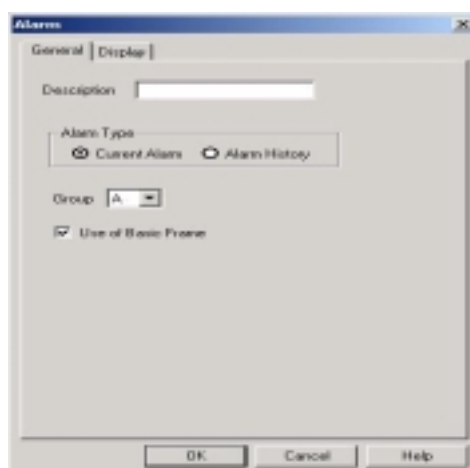
#### (1) General

##### 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).



### 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.

## (2) Display

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

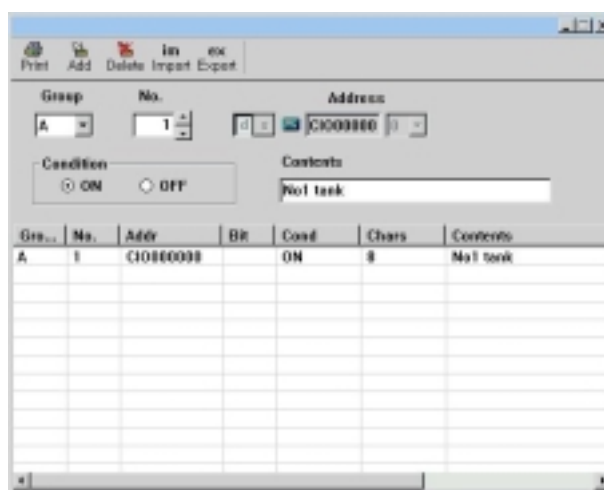
'Scroll size' is Alarm row number to scroll over(Jump Over) by clicking PgUp/PgDn button.

## 7.7.2 Examples

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

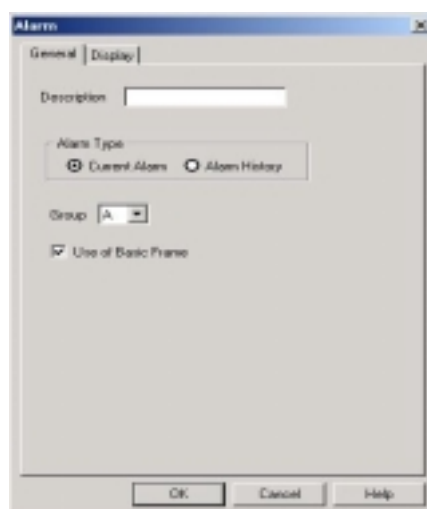
Set 'Scroll Over No.' as '1'

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

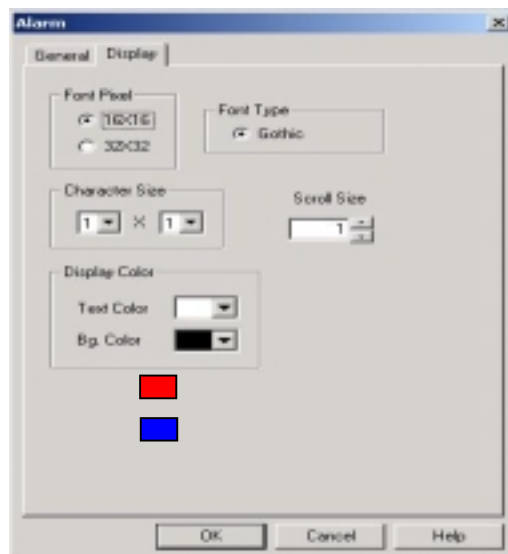


(2) Register Alarm Tag

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



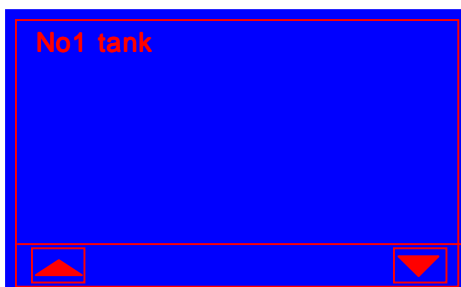
- Font Pixel : 16 x 16
- Font type : Gothic
- Character Size : 1 x 1
- Color : Text Color is red and background color is blue
- Scroll Over No. : 1



### (3) Results



⇒ On S/W



⇒ On Panel  
(when the bit address of 'CIO0' is ON)

## 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

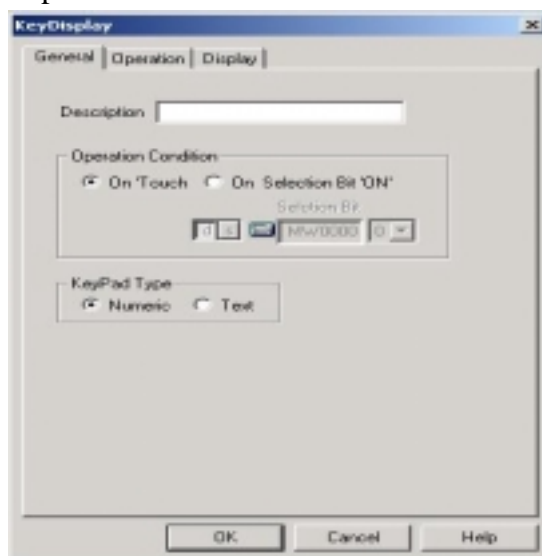
- 1) Select key display tag in tag menu or Key Display Tag icon on toolbar
- 2) Determine 'Operation Condition', 'Selection bit' and 'Key Pad Type' in 'General' tab.
- 3) Select 'Output address' and 'Display Format', etc in 'Operation' Tab.
- 4) Select 'Font Pixel, Character size and Color, etc' in 'Display' 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' .



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*.



- 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 bit-sized(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.

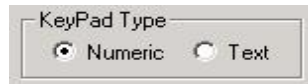
- Output Address : Select device address to write the value of keypad

- In case of Numeric Key Pads

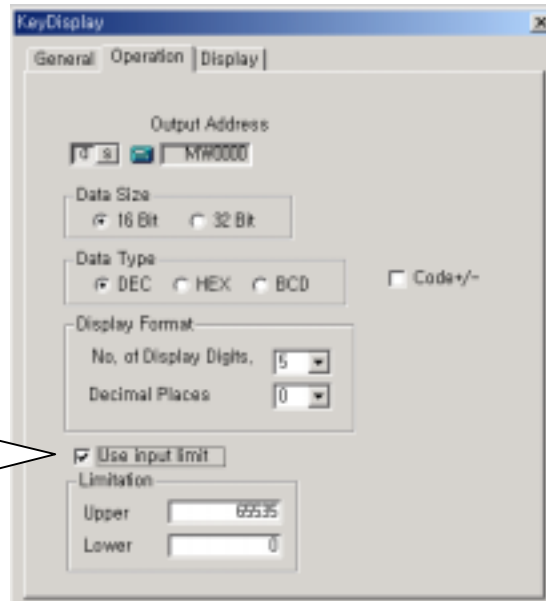
Determine +/- (sign), Data Size, Data Type, No. of total digit, Decimal Places.

Please refer to Numeric Tag for details.

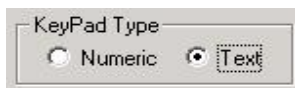




Blocking is possible by using 'Use input limit'. That is, input value over range(Lower< <Upper) is protected.



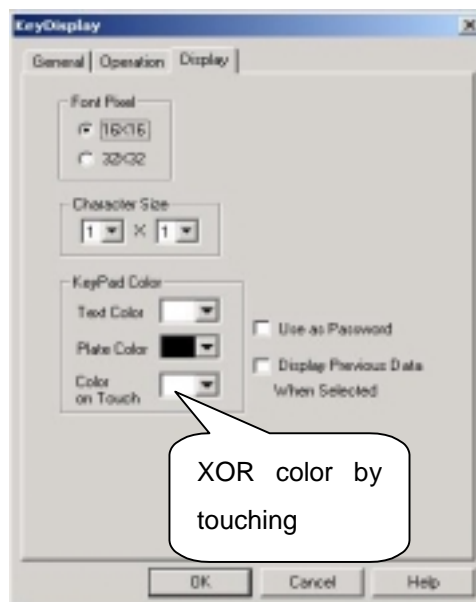
- In case of Text Key Pad  
Determine the number of character in key pad.



**(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.
- 4) 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.



## 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

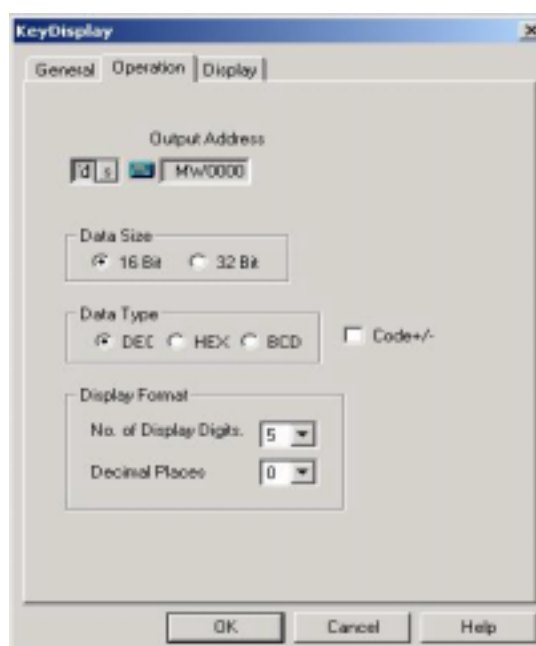
1) General

- Operation Condition : On Touch
- Key Pad type : Numeric



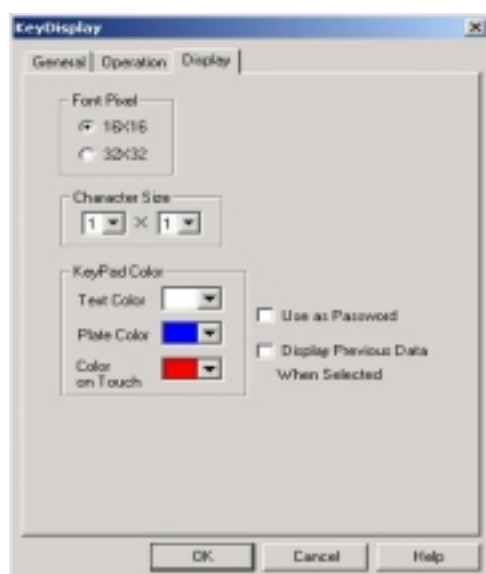
2) Operation

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



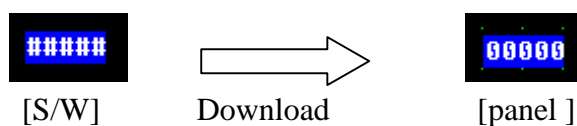
### 3) Display

- 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



### 4) Results

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Touched tag



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



'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

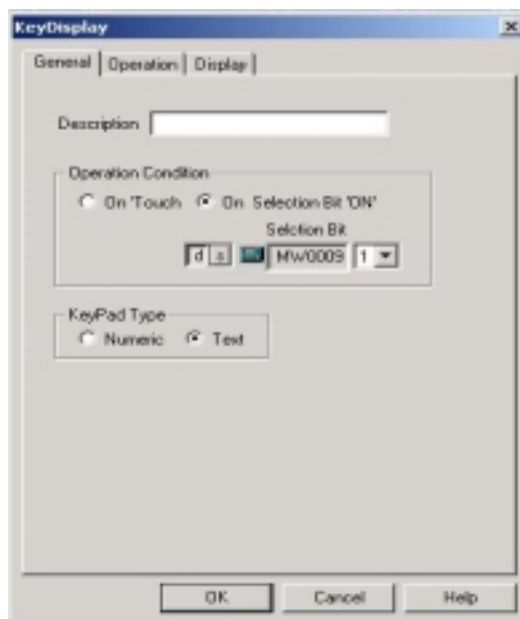
When tag is not touched : Text is blue, background is white

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



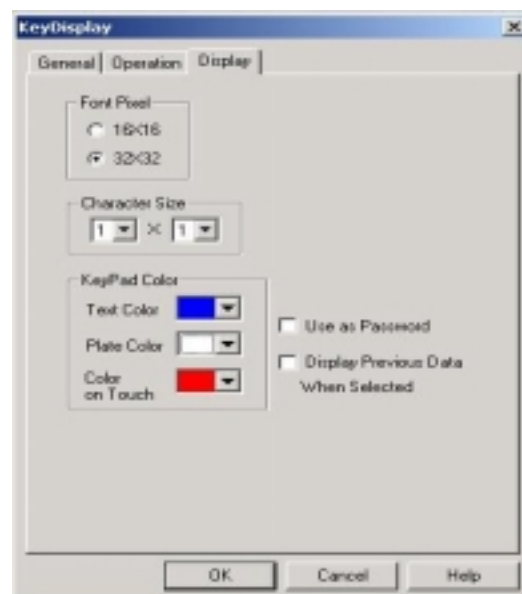
## 2) Operation

- Output Address : MW0
- No. of Character : 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

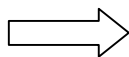


4) Results

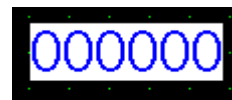
Downloaded to Main module



[S/W]



Download



[Panel]

Touched tag( on write mode )



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.