

PMC-5141 Flash HMI Tools Quick Start

[Version 2.4.7]



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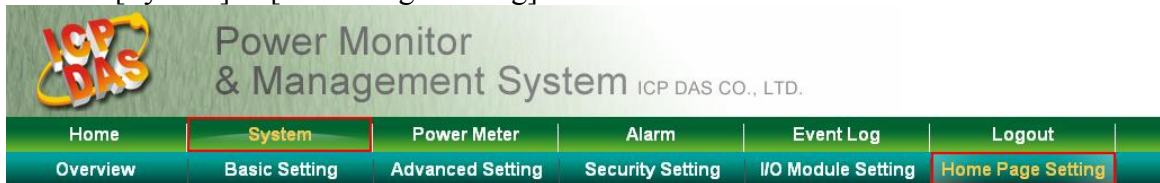
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1 Flash HMI Tools Introduction

Flash HMI Tools are designed for user to quickly implement specific HMI interfaces for power monitoring applications by browser. After implementing the Flash HMI project specifically designed for the application, it can be set as the default home page to replace the original default system home page of PMC-5141. The process could be simple and easy; no programming required.

1.1 Start the Flash HMI Tool

Select “[System] →[Home Page Setting]” to start the Flash HMI tool.



1.2 The menu of Flash HMI Tool

Following is the items of the Tool menu.

Menu	Description
Update List	Update the project list
New Project	Initialize the new HMI project
Home Project Setting	Assign the HMI project for the system home page.
About Flash HMI Tools	Version information, copyright announcement, disclaimer website, etc.

1.3 Start a new project

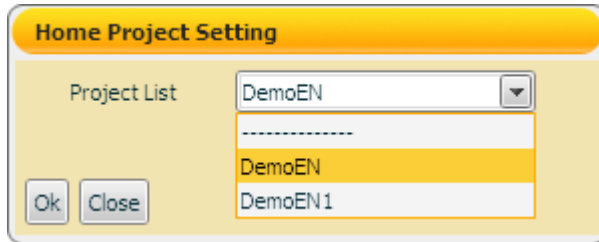
After click the “New Project”, the Project Setting window will be shown. Please refer to the following for the detailed description.

IP List	Port	ID	Timeout	Scan rate
<input checked="" type="checkbox"/> IP - 0: 192 . 168 . 100 . 165	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 1: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 2: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 3: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 4: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 5: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 6: 127 . 0 . 0 . 1	502	1	300 ms	200 ms
<input type="checkbox"/> IP - 7: 127 . 0 . 0 . 1	502	1	300 ms	200 ms

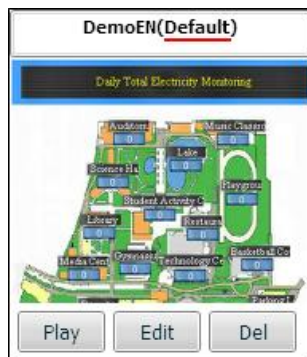
Project Name	Input the name of the project (Note: supports English file name only, do not input symbols)
IP	Allows to set up the IP address, port, Modbus ID, Timeout and Scan rate for up to 16 PMC-5141 controllers. Please click on the checkbox in front of the IP list to add IP connections.
Finish	Finish the settings of the project and get into the editing mode
Cancel	Cancel the settings of the project and close the project setting window.

1.4 Home Project Setting

After click the “Home Project Setting”, the Home Project Setting window will be shown. Please refer to the following for detailed description.



This function is used to set up the default Flash HMI project page to be loaded when the general users login into the system. To cancel the home page project setting, select “-----” from the dropdown list. After the settings are completed, the words “(default)” will be appended to the name of the project and will be displayed in the Project List, as shown below:



1.5 Project Management

After the projects are completed, the system administrator can select to Play/Edit/Delete specific projects. Currently the system allows to store up to 5 projects. If the previous editing wasn't closed appropriately and didn't return to the project list page (didn't finish and leave the edit session normally), the project will be locked, and click [Unlock] to continue the management operations of the project.

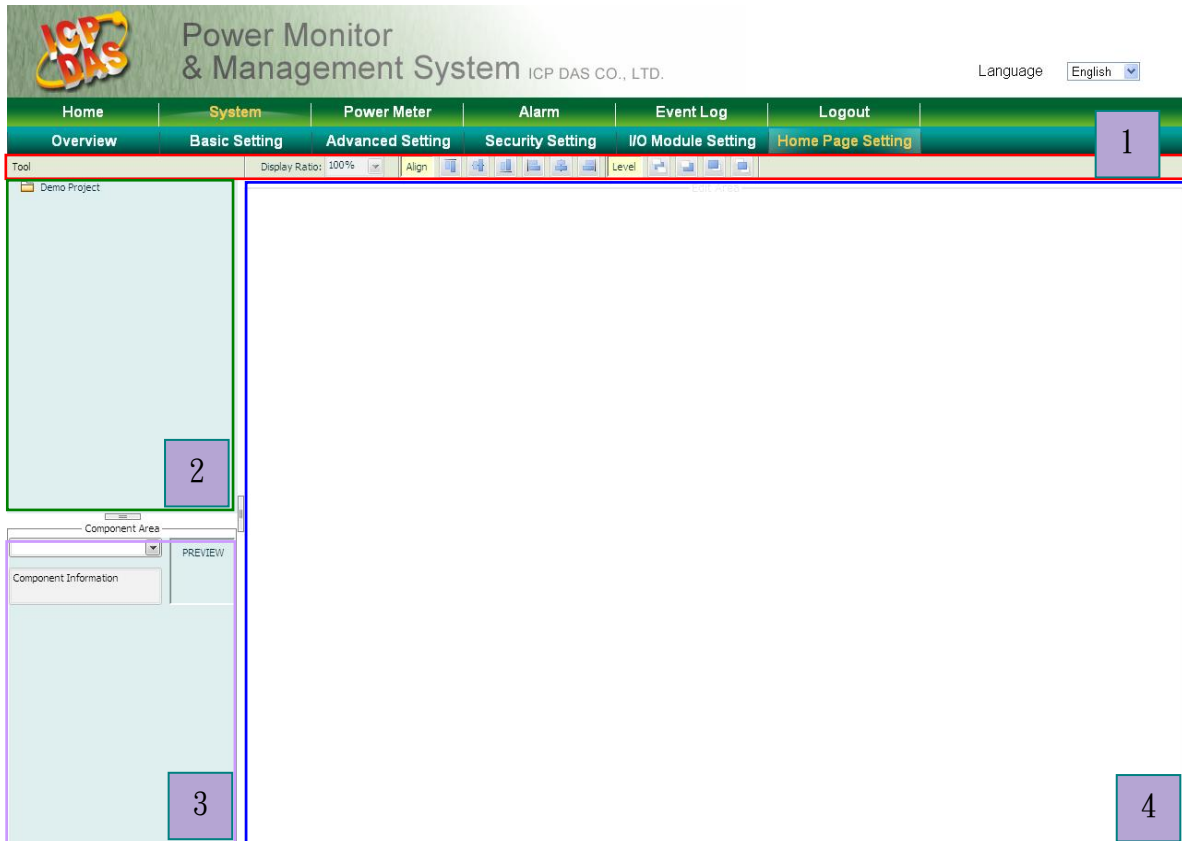


2 Flash HMI Editor

Click on “New Project” on the Tool menu or select the “Edit” button of the specific project to enter the Flash HMI Editor. The detailed description of the tool is as below.

2.1 Editor Interface

The Flash HMI Editor mainly includes four areas, as shown below:



The first area is the **Tool menu**. It includes the file management, system message display, display ratio arrangement, Alignment/Level arrangement and return to the project list.

The second area is the **Project Management area**. It allows to perform HMI page management operation for the HMI project.

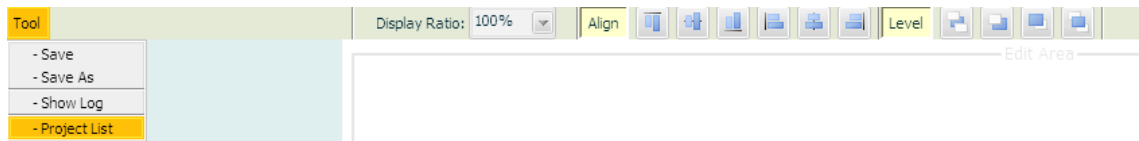
The third area is the **HMI Component Area**. It lists all Flash HMI components which you can use in the HMI pages.

The fourth area is **HMI page editor area**. It allows to edit and design the HMI pages.

Please refer to the following sections for detailed function description for each area.

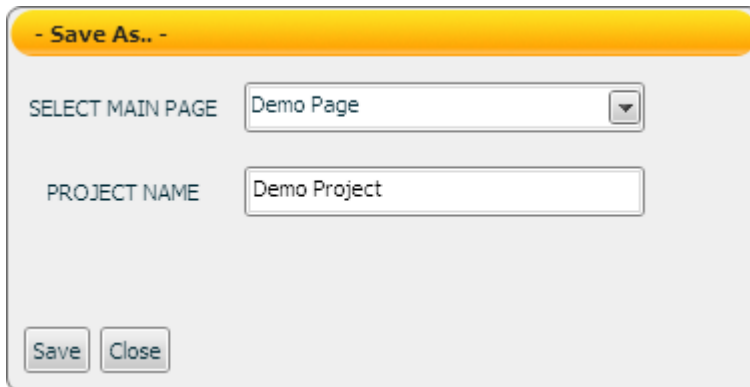
2.2 Tool menu

The Tool menu includes the following functions:



Menu	Description
Save or Save As	Save the project file to PMC
Show Log	Display the system information and error messages.
Display Ratio	Specify the display ratio of the editing HMI page
Align	Set up the alignment of the components
Level	Set up the level of the components
Project List	Quit the edit mode and return to the project list page. Note: After finish and save the HMI project, please remember to return to the project list page to avoid the project being locked due to inappropriate termination the editing session.

2.2.1 Save/Save As



Select the Save/Save items in the Tool menu, and the Project Save window will be displayed. To save a project, please select the main page; the main page will be the default HMI shown page when the project is loaded to the system.

2.2.2 Show Log







Display the system information and error messages.

2.2.3 Display Ratio

Specify the display ratio of the editing page(200%, 100%, 75%, 50%, 25%, 5%)





2.2.4 Align

Set up the alignment of the components

	Top	Align the tops of the selected components with the top of the tallest component in the line.
	Horizontal Middle	Align the horizontal middles of the selected components with the middle of the tallest and lowest components.
	Bottom	Align the bottoms of the selected components with the bottom of the lowest component in the line.
	Left	Align the lefts of the selected components with the left margin of the leftmost component in the line.
	Vertical Middle	Align the vertical middles of the selected components with the middle of the leftmost and rightmost components.
	Right	Align the rights of the selected components with the right margin of the rightmost component in the line.

2.2.5 Level

Set up the level of the components

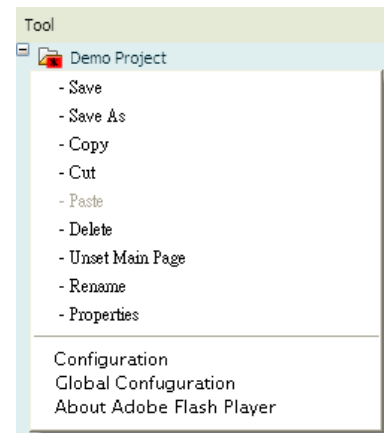
	Bottom	Move the selected component to the bottom level to make the selected component located beneath all other overlapped components.
	Lower	Move the selected component to one lower level
	Upper	Move the selected component to one upper level
	Top	Move the selected component to the top level to make the selected component located on the top of all other overlapped components.

2.3 Project Management Area

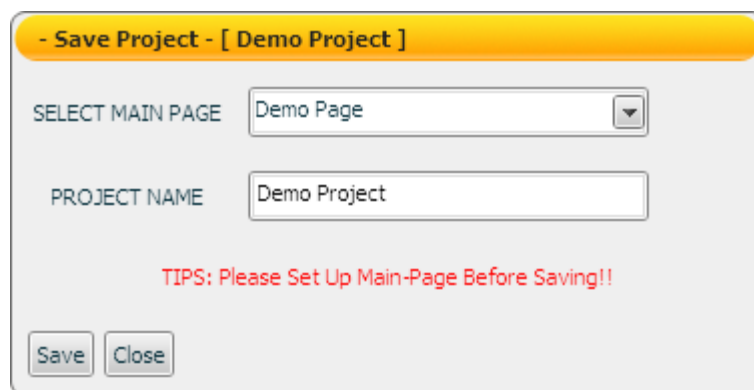
The Project Management area provides Flash HMI project management functions, right click on the project to bring out the function menu, more detailed information will be given in later sections.

- **Save:** Save the HMI project.
- **Save As:** Save the HMI project to a new project.
- **New Sub-Project:** Create a new group for the HMI pages.
- **New Page:** Create a new HMI page.
- **Paste:** Paste the content of a existed HMI page or Sub-Project to a new HMI page or new Sub-Project.
- **Rename:** Rename the project.
- **Properties:** Bring up the“Project Setting” window to set up IP, Port and Timeout interval, Scan rate, etc.

Configuration / Global Configuration / About Adobe Flash Player: Configuration and version information of Adobe Flash Player

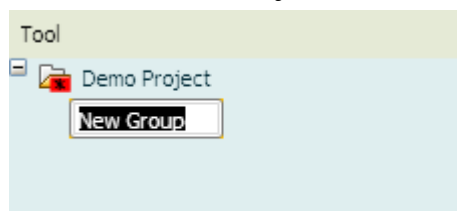


2.3.1 Save/Save As



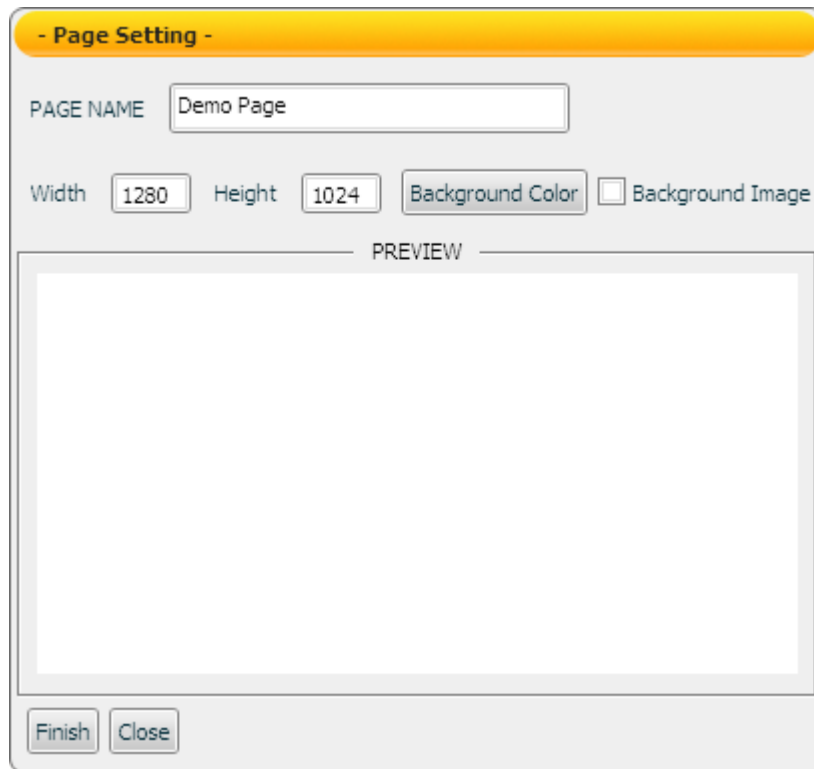
Before saving the project, please select the main page for the project, the main page will be the default page to be displayed when the project is loaded.

2.3.2 New Sub-Project



Right click on the project or group, select “New Sub-Project” to create a new sub-project under the project or group. The sub-project is for easy categorization and management of the edited HMI pages, when the project is played, the sub-project and groups will not be shown.

2.3.3 New Page



Right click on the project or group, select “New Page” to bring out the Page Setting window to create a new HMI page under the project or group. The settings are as follow:

Page Name: Input a name for the HMI page.

Width: Set up the width for the HMI page. The min. page width is 50 Pixel and the max. page width is 2880 Pixel. Default value will be the width of the display resolution.

Height: Set up the height for the HMI page. The min. page height is 50 Pixel and the max. page height is 2880 Pixel. Default value will be the height of the display resolution.

Background Color: Set up the background color for the HMI page.

Background Image: To put an image in the background, check the Background Image box and a file dialog box will be brought up. Browse through the file dialog box to select the image file. Currently supported image format are: JPEG/GIF/PNG. (Please note: Avoid using image files with the same file name; the images may not be correctly displayed due to unexpected overwriting files may occur. When you finish page setting, make sure you click on “Finish” to apply changes to the page.)

Finish: Complete the settings and leave the Page Setting window.

Close: Close the project.

There are three ways to bring up the “Page Setting” window for page configuration:

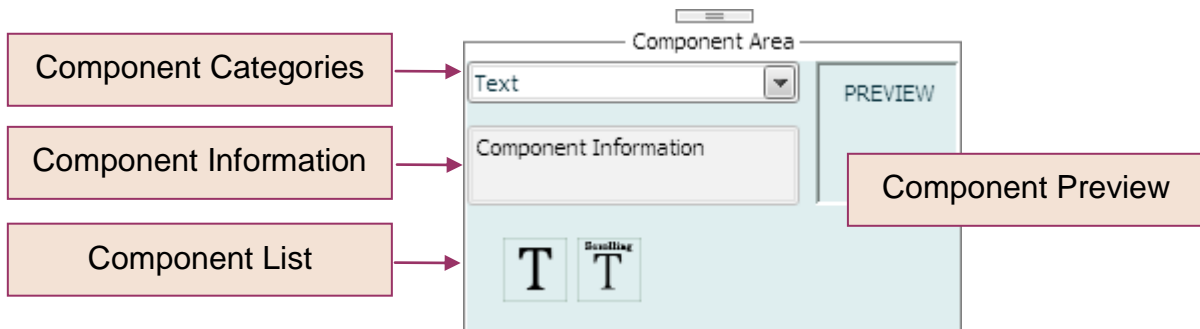
- ◆ In the **Project Management area**, right click on the page icon to bring up the menu, select “Properties” to bring up the “Page Setting” window.

- ◆ In the **HMI page editing area**, right click on the page to bring up the menu, select “Properties” to bring up the “Page Setting” window.








- ◆ In the **HMI page editing area**, double click anywhere on the page to bring up the “Page Setting” window.

2.4 HMI Component Area

The HMI Component Area allows to add Flash HMI components to the HMI pages. Select the component you want to use by clicking on the component, and the component will be added to the HMI page editor area.



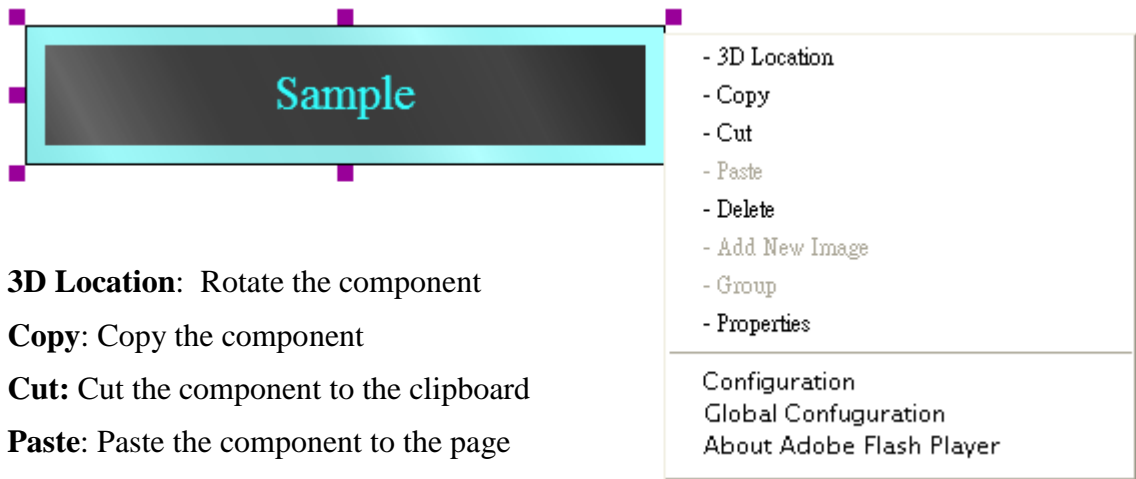
Select the component from the component categories, click on the component to add the component to the HMI page editor area. The current component categories are as follow:

- Indicator Component
 
- Switch Component
 
- Gauge Component
 
- Meter Component
 
- LED Component
 
- Text Component
 
- System Component
 

Please refer to [4.Flash HMI Component](#) for more detailed information of the HMI components.

2.5 HMI Page Editor Area

The HMI Page Editor area allows to edit the HMI page; in this area the user could freely add new HMI components or image pictures to the page, or cut/paste/copy the components or images to the page. To edit the component or page in the Editor area, right click on the component or the page to bring out the menu window to perform the following functions, for more detailed information, please refer to later sections.

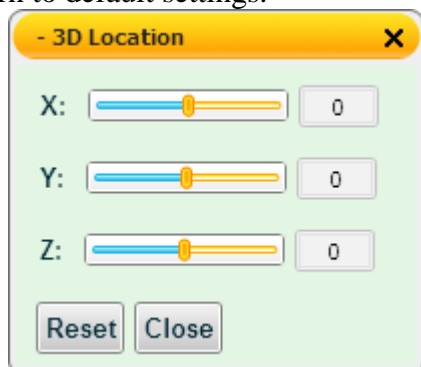


- **3D Location:** Rotate the component
- **Copy:** Copy the component
- **Cut:** Cut the component to the clipboard
- **Paste:** Paste the component to the page
- **Delete:** Delete the component
- **Add New Image:** Add a new image to the page
- **Group:** Group two or more components together as one unit
- **Properties:** Bring up the the “Project Setting” window of the HMI component.

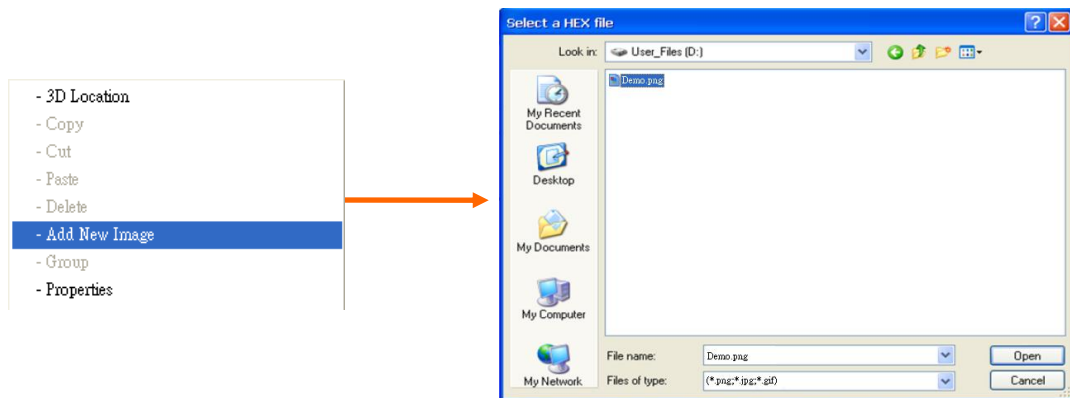
Configuration/Global Configuration/ About Adobe Flash Player: Configuration and version information of Adobe Flash Player

2.5.1 3D Location

The components or images can be rotated around X-axis/ Y-axis/ Z-axis. Click Reset to return to default settings.



2.5.2 Add New Image



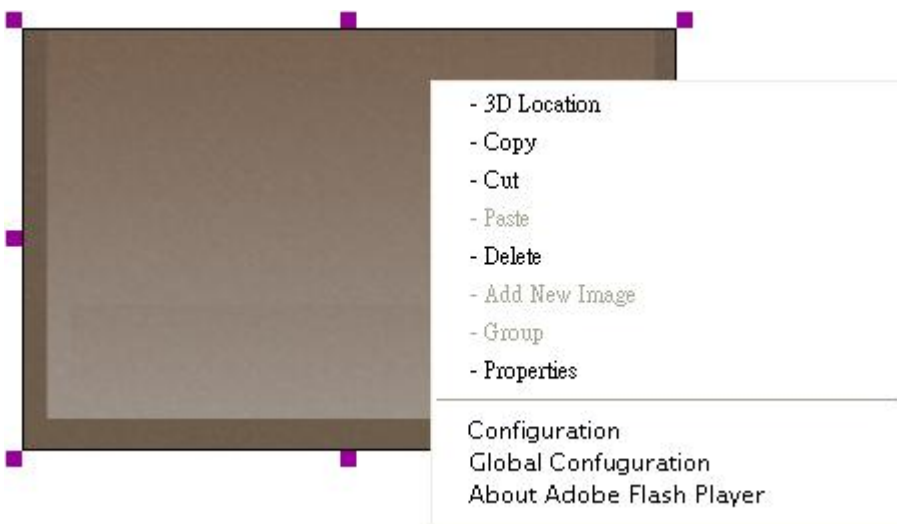
Right click on the HMI page, select “Add New Image” and browse through the file dialog box to select the image file. Click “Open” to add the new image to the HMI page.

Please note: Avoid using image files sharing with the same file name; the images may not be correctly displayed due to unexpected overwriting files may occur.

2.5.3 Group

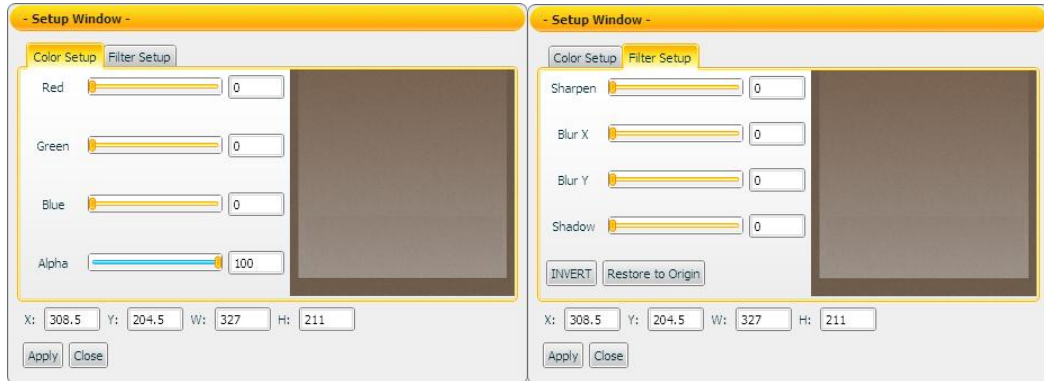
Two or more HMI components can be grouped together and behaved as one unit, for example: they can be moved together and resize together; the relative location of the individual elements will not be changed. The grouped components also can be copied, cut, deleted and arranged together. **(Please note: the grouped components can't be rotated.)**

2.5.4 Properties for Image



- Right click on the image and select “Properties”

- Click on the “Properties” option to bring up the Setup Window for “Color Setup” and “Filter Setup” for the image. You can modify the settings as follows to achieve various visual effects. After finish the settings, click on “Apply” to make the change take effect. To restore the image to original status, please click “Restore to Origin” to remove all changes previously made to the image.

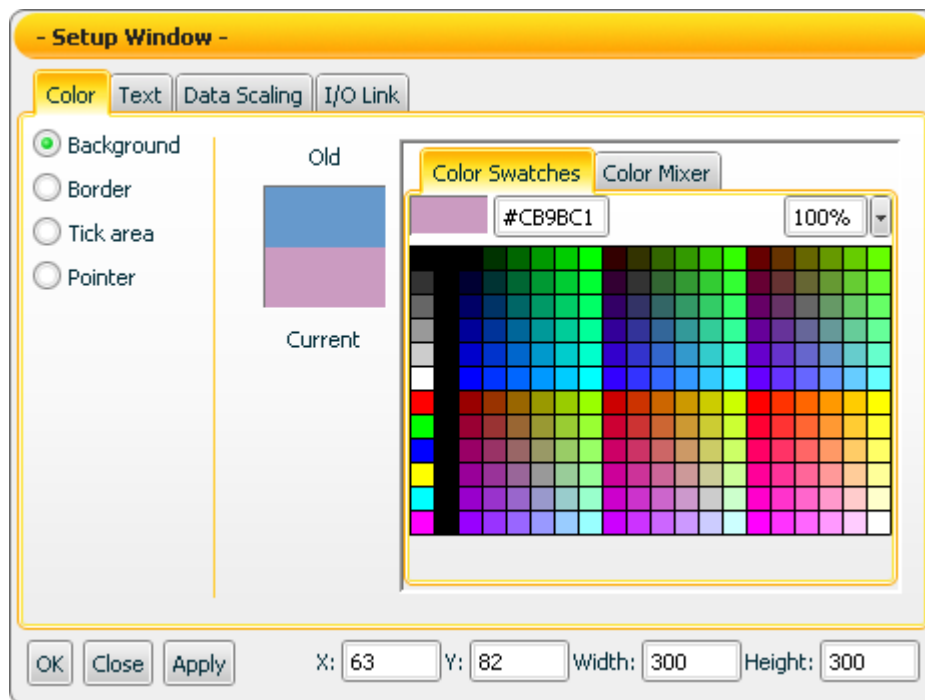


2.5.5 HMI Component Properties

This section will introduce the common settings of the HMI components, for more detailed information for each HMI components, please refer to [4.Flash HMI Component](#).

➤ General Setting (Using Meter as an example)

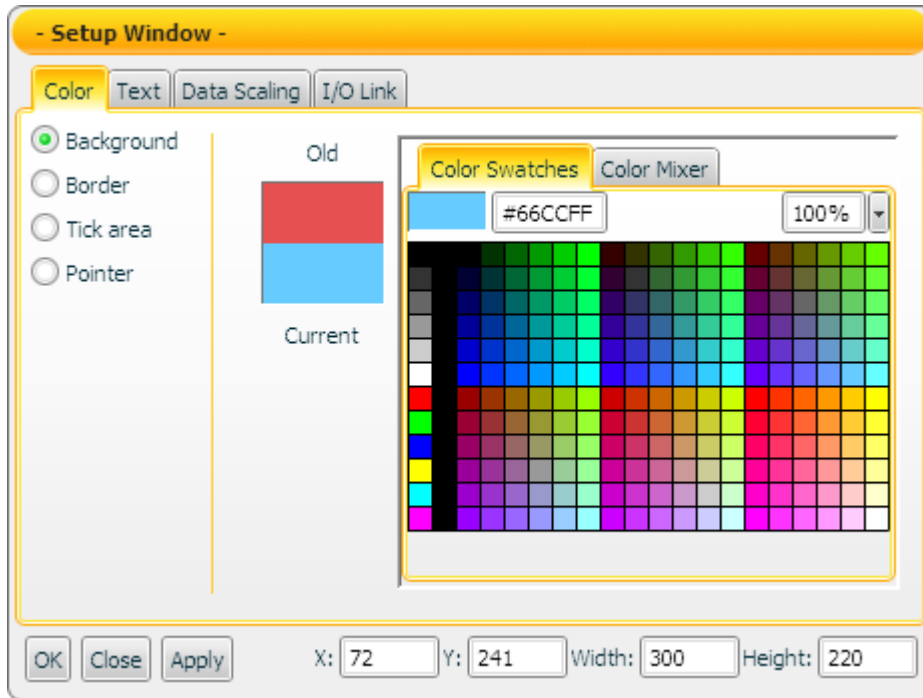
The General Setting allows to modify the Position, Width, Height and other setting of the component. To make the change take effect, please click on the “Apply” button each time after one change before continue to make other changes.



OK	Apply the settings to the component and close the Setup window
Apply	Apply the settings to the component
Close	Close the Setup window
X	X axis (leftmost value is 0, values increase from left to right, Units: Pixel)
Y	Y axis (topmost value is 0, values increase from top to bottom, Units: Pixel)
Width	The width of the component (Units: Pixel)
Height	The height of the component (Units: Pixel)

➤ Color Setting (Using Meter as an example)

The Color setting allows to modify the color settings of the component. To make the change take effect, please click on the “Apply” button each time after one change before continue to make other changes.



Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

➤ Text Setting (Using Meter as an example)

The Text setting allows to modify the text settings of the component. To make the change take effect, please click on the “Apply” button each time after one change before continue to make other changes.



Show text	Enable the Check box to display the text (Label or Status).
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type.</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type.</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label or Status.

➤ Data Scaling Setting (Using Meter as an example)

The Data Scaling setting allows to convert the input value to scaled value. Click on the “Apply” button to make the change take effect.

Enable	Click the check box to enable the data scaling function.
Displayed Data(Min.)	The minimum value of the component can display.
Displayed Data(Max.)	The maximum value of the component can display.
RAW Data(Min.)	The minimum raw of value the component can receive.
RAW Data(Max.)	The maximum raw of value the component can receive.
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Decimal Number(s)	Set up the number of the decimal place for the displayed value.

➤ I/O Link Setting

The I/O Link setting allows to set up the setting of the I/O data receive/send mode. Click on the “Apply” button to make the change take effect.

Data Receiving Setting

- Setup Window -

Color Text Data Scaling I/O Link

Server IP: IP - 0 : 192.168.100.69 ID: 1

Receive Setting

Mode: None HotKey

None
01 Read Coils
02 Read Discrete Inputs
03 Read Holding Registers
04 Read Input Registers

Send Setting

Mode: None HotKey

OK Close Apply X: 72 Y: 241 Width: 300 Height: 220

For components used to perform data receiving operations (such as: Meter); the “Data Receiving Setting” section allows to set up Modbus address for data receiving. Input the Start Address, you can also click on Hotkey, the Communication Setup window will be brought up, select the information from the dropdown list to specify data to be received, as shown below:

Communication Setup

Information Type: Power Meter Information

Modbus Address: 1

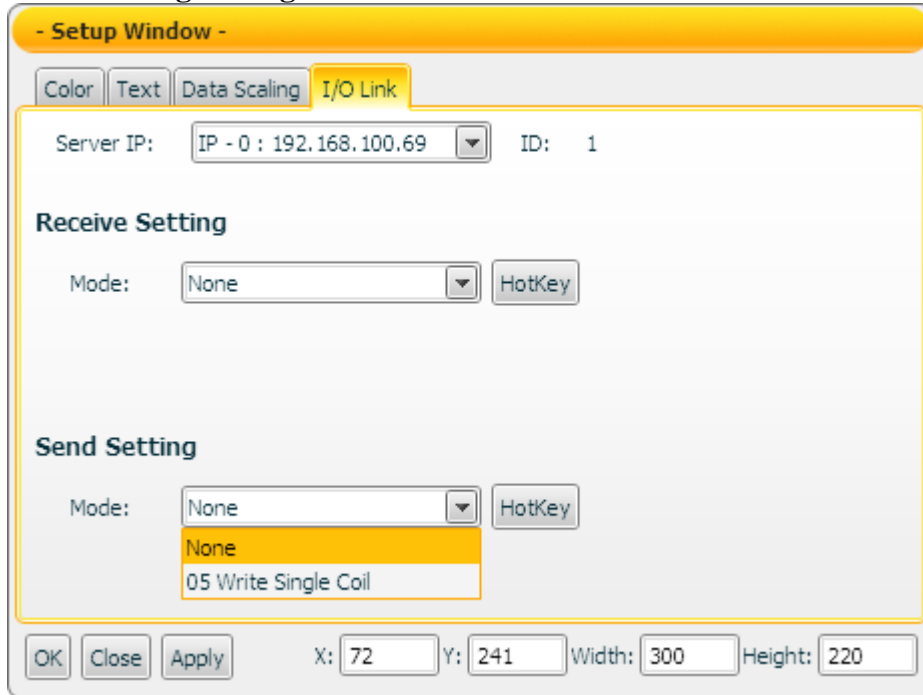
Channel/Other: CH 1 / Phase A

Information: V

Apply Close

After finish settings, click on “Apply”, the corresponding Start Address and settings will be filled in automatically.

Data Sending Setting



- Setup Window -

Color Text Data Scaling I/O Link

Server IP: IP - 0 : 192.168.100.69 ID: 1

Receive Setting

Mode: None HotKey

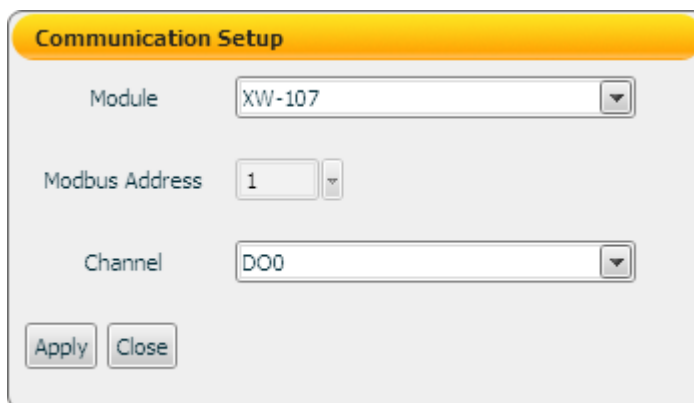
Send Setting

Mode: None HotKey

None
05 Write Single Coil

OK Close Apply X: 72 Y: 241 Width: 300 Height: 220

For components used to perform control operations (such as: Switch); the “Data Sending Setting” section allows to set up Modbus address for data sending. Input the Start Address, you can also click on Hotkey, the Communication Setup window will be brought up, select the information from the dropdown list to specify data to be sent, as shown below:



Communication Setup

Module XW-107

Modbus Address 1

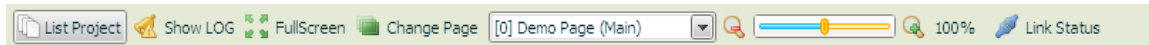
Channel DO0

Apply Close

After finish settings, click on “Apply”, the corresponding Start Address and settings will be filled in automatically.



3 Flash HMI Player

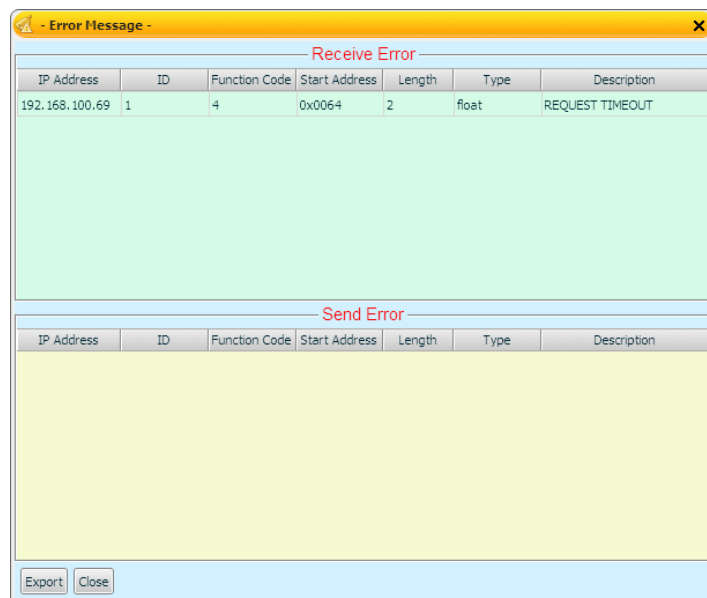
3.1 Player Menu



The menu of HMI player for **administrator** is shown as above. They provide the following functions:

- Project List:** Return to project list (this feature only apply to administrator)
- Show Log:** Display system information and error messages (this feature only apply to administrator) .
- FullScreen:** Set the HMI page to be full screen mode.
- Change Page:** Select the display page
- Display Ratio:** Specify the display ratio of the HMI page
- Link Status:** Show current connection status

When the  icon is shown, indicates an error is occurred during the Data receiving/sending process. Click on the icon for more detailed information and the error information can be exported to a file, as shown below (this feature  only apply to administrator)

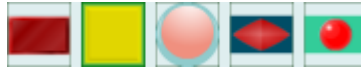


The menu of HMI player for general user is shown as below.



4 Flash HMI Component

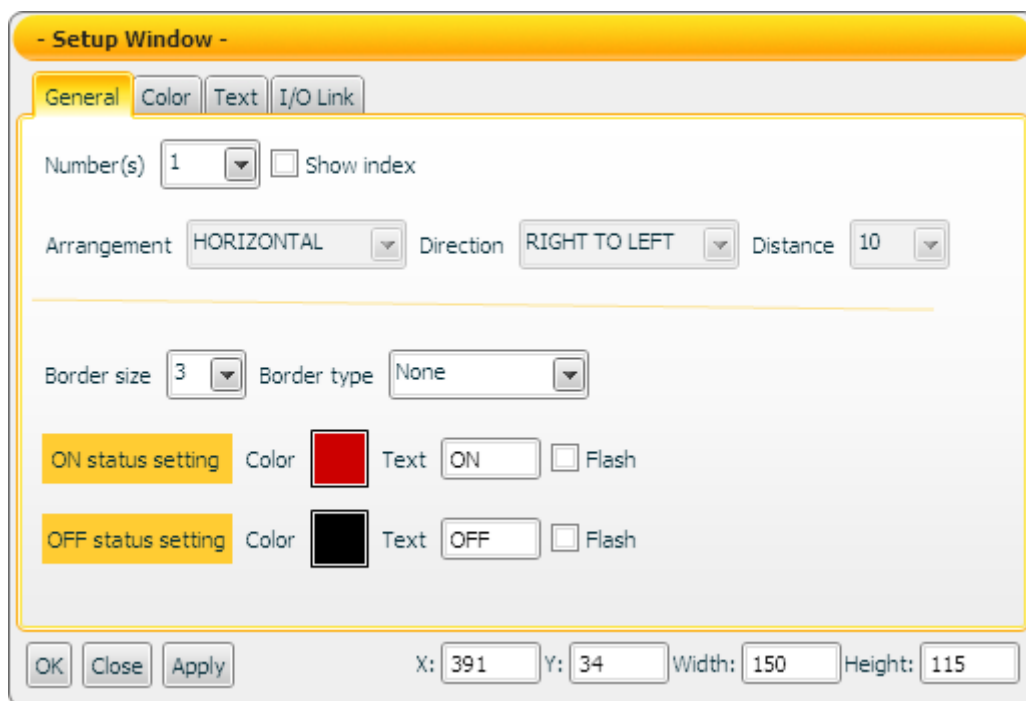
4.1 The Indicator Component



The Indicator component is used to receive the I/O channel data and display its corresponding status. In the component property page, there are properties such as Color, Text and I/O data link...etc. for user to set up. After complete the setting of the component properties, the component will show the status or value it receives. The properties setting page of the Indicator component is shown as below.

【General Setting】

In “General Setting” tab, you can setup the properties of the Indicator component as below. After finish the setting, please click “Apply” button.

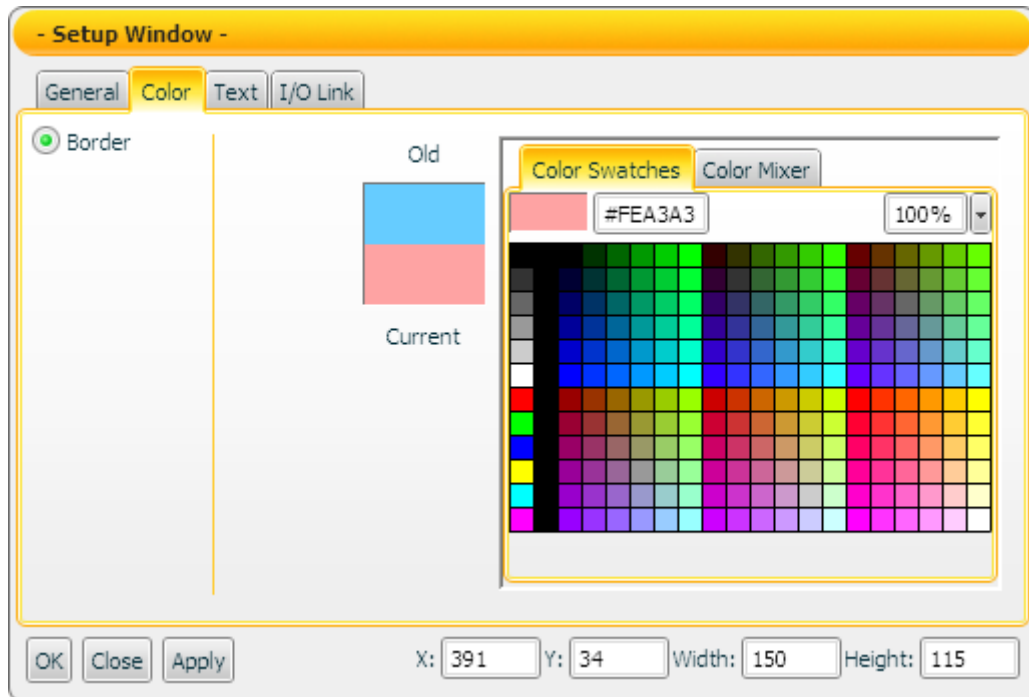


Number(s)	This component features Group function. Assign a number in the field, a group of the component items will be created, they can be used to display the Binary format value the component receives.
Show Index	If the total amount (Number) is 2 (or more), click the check box will show the index number for the component. The index number starts from 0.
Arrangement	If the total amount (Number) is 2 (or more), you can set up the arrangement of the components to be “Horizontal “or

	“Vertical”.
Direction	<p>If the total amount (Number) is 2 (or more), you can set up the arrangement direction of the components.</p> <p>If the arrangement type of the component is “HORIZONTAL”, then the direction can be arranged as “Left to Right” or “Right to Left.” If the arrangement type is “Vertical”, then the direction can be arranged as “Up to Down” or “Down to Up”.</p>
Distance	If the total amount (Number) is 2 (or more), you can set up the distance between the components. The unit is Pixel.
Border Size	Assign the border size of the component. The unit is Pixel.
Border type	Assign the border type of the component. There are three options as “None”, “Raised” and “Lowered”.
ON Status Setting	<p>Color : Set up the color to be shown when the component is in ON status.</p> <p>Text : Set up the text to be shown when the component is in ON status.</p> <p>Flash : Set up when the component is in ON status, the component will flash or not. Click the checkbox to enable the Flash operation.</p>
OFF Status Setting	<p>Color : Set up the color to be shown when the component is in OFF status.</p> <p>Text : Set up the text to be shown when the component is in OFF status.</p> <p>Flash : Set up when the component is in OFF status, the component will flash or not. Click the checkbox to enable the Flash operation.</p>

【Color Setting】

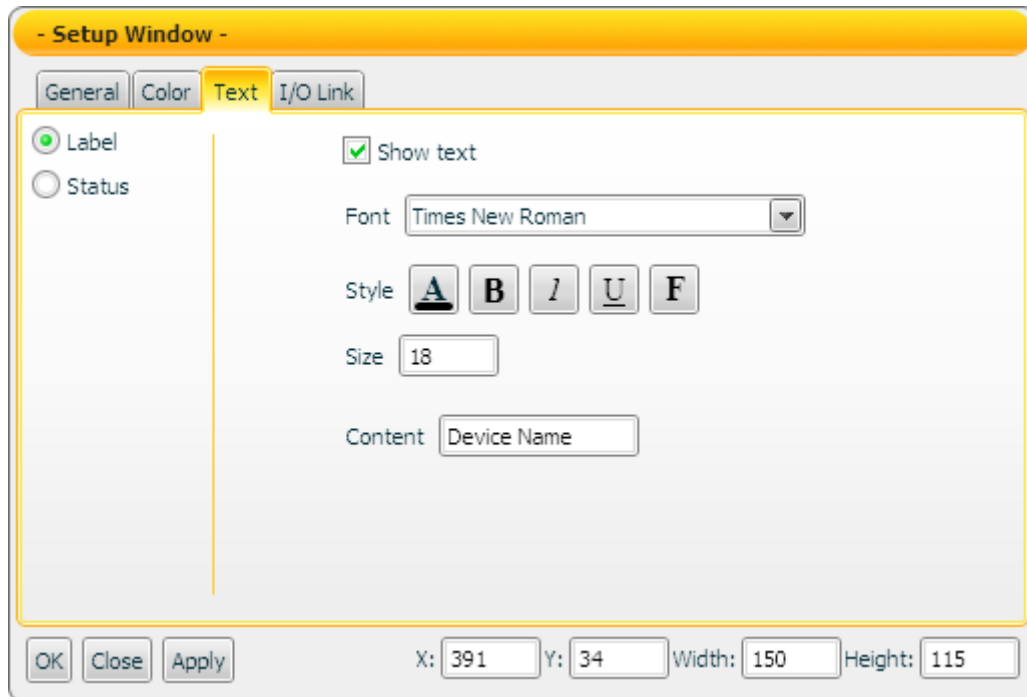
In “Color Setting” tab, you can setup the color of the Indicator component as below. After finish the setting, please click “Apply” button.



Border	Select the color of the Border.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】

In “Text Setting” tab, you can setup the text properties of the Indicator component as below. After finish the setting, please click “Apply” button.



Label	Set up the Label text for the component ◦
Status	Set up the ON or OFF Status text for the component. Note : This section is only for the Color/Font properties setting of the text to be shown in ON status or OFF status. For the status text setting of the ON or OFF status, please go to “General Setting”.
Show text	Enable the Check box to display the text (Label or Status).
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Indicator component as below. After finish the setting, please click “Apply” button.

Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Assign the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Assign the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

In the General Setting section, if the total amount “Number” is assigned to be 1, then the data the component receives will be treated as a Boolean value. If the value the component receives is greater than (or equal to) 1, it will be in ON status; otherwise it will be in OFF status. If the data the component receives is not a number, then the data will be ignored and the status will not be modified.

If the total amount “Number” is assigned to be 2 (or more), then the data the component receives will be treated as a binary value. If the value the component receives is greater than the maximum binary value that the component is able to process, the value will be treated as the maximum binary value. If the value the component receives is smaller than

the minimum binary value that the component is able to process, the value will be treated as the minimum binary value. If the data the component receives is not a number, then the data will be ignored, and the status will not be modified.

【Example 1】 : If the total amount “Number” is assigned to be 4, then there are 4 Indicators in the component. The index numbers for the Indicators will be Index0, Index1, Index2 and Index3. If the component receives a value 3, then the Index0 Indicator and the Index1 Indicator will be in ON status, the Index2 Indicator and the Index3 Indicator will be in OFF status.

【Example 2】 : If the total amount “Number” is assigned to be 4, then there are 4 Indicators in the component. With 4 Indicators, the data range the Indicator component can process is from 0 to 15. Therefore if the data the component receives is greater than 15; the value will be treated as 15. If the value the component receives the data is smaller than 0, the value will be treated as 0.

4.2 Switch Component



The Switch component is a status switchable component. It can be used to switch the TRUE/FALSE、YES/NO、ON/OFF status in HMI project. There are two operation modes for the Switch component: ON/OFF and PUSH. When the operation mode is in ON/OFF mode, you can click on the Switch component to change its status. If the component is in OFF status now, you can click on it to change to ON status, click on the component again, the component will return to OFF status. If the operation mode is set as PUSH mode, you can click on and hold down the button of the Switch component to change its status. If you hold down the button, it will remain in the new status until you release the button to return to its original status.

This component can be used to control physical devices or other UI components for DO operations. The properties setting page of the Switch component is shown as below.

【General Setting】

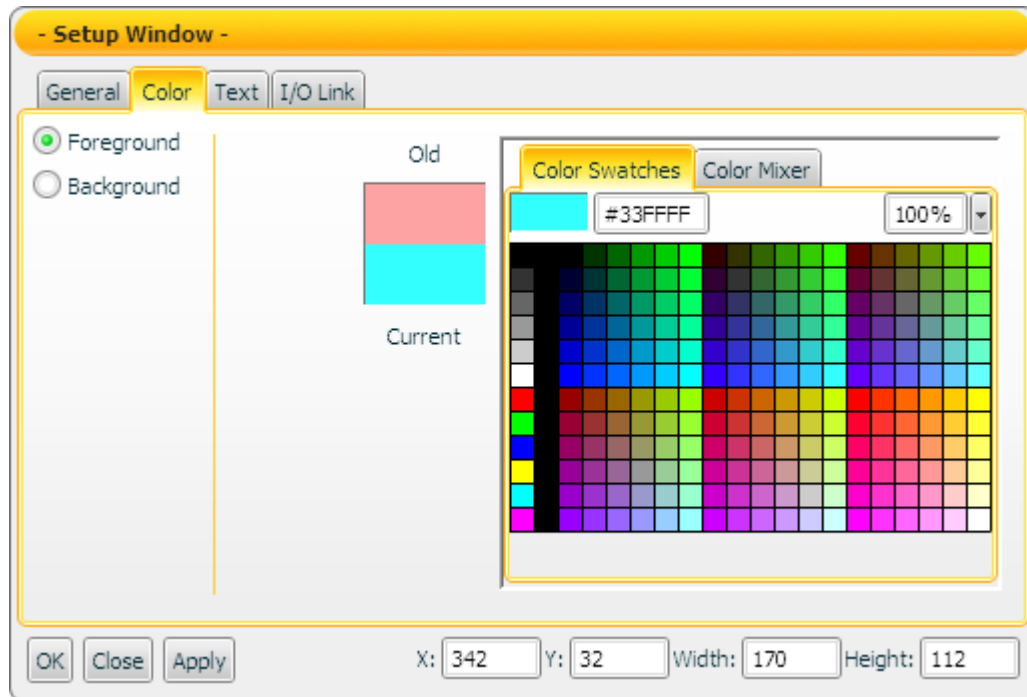
In “General Setting” tab, you can setup the properties of the Switch component as below. After finish the setting, please click “Apply” button.

Number	This component features Group function. Assign a number in the field, a group of the component items will be created, they can be used to display the Binary format value the component sends.
Show Index	If the total amount (Number) is 2 (or more), click the check box will show the index number of the component. The index number starts from 0.

Arrangement	If the total amount (Number) is 2(or more), you can set up the arrangement of the components to be “Horizontal “or “Vertical”.
Direction	If the total amount (Number) is 2(or more), you can set up the arrangement direction of the components. If the arrangement of the component is “Horizontal”, then the direction can be arranged as “Left to Right” or “Right to Left.” If the arrangement is “Vertical”, then the direction can be arranged as “Up to Down” or “Down to Up”.
Distance	If the total amount (Number) is 2(or more), you can set up the distance between the components. The unit is Pixel.
Mode	There are two operation modes” ON/OFF and PUSH. Please refer to ” Data Sending description” for the detailed information.
”ON” text	Set up the text to be shown when the component is in ON status.
”ON” Value	If the total amount (Number) is 1, you can assign the value, and the value will be sent when the component is in ON status. Note : If the total amount (Number) is 2(or more), you can’t set up the value. Please refer to “Data Sending description“ for the detailed information.
”OFF” text	Set up the text to be shown when the component is in OFF status.
”OFF” Value	If the total amount (Number) is 1, you can assign the value, and the value will be sent when the component is in OFF status. Note : If the total amount (Number) is 2(or more), you can’t set up the value. Please refer to “Data Sending description“ for the detailed information.

【Color Setting】

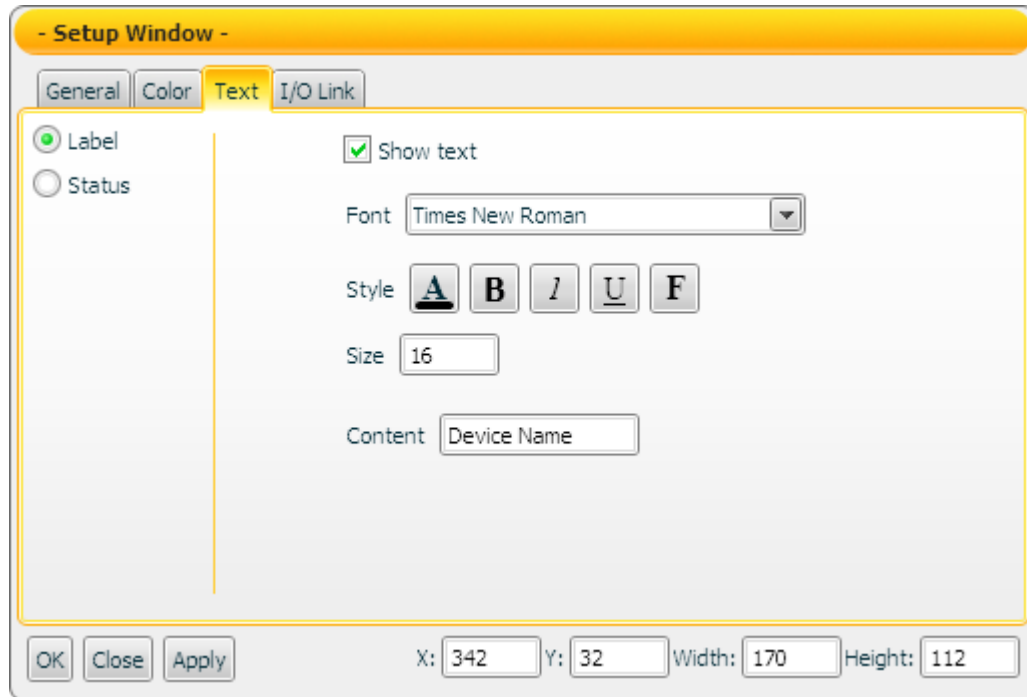
In “Color Setting” tab, you can setup the color of the Switch component as below. After finish the setting, please click “Apply” button.



Foreground	Select the color of the Foreground.
Background	Select the color of the Background.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】

In “Text Setting” tab, you can setup the text properties of the Switch component as below. After finish the setting, please click “Apply” button.



Label	Set up the Label text for the component ◦
Status	Set up the properties for ON or OFF Status text of the component. Note : This section is only for the Color/Font properties setting of the text to be shown in ON status or OFF status. For the status text setting of the ON or OFF status, please go to “General Setting”.
Show text	Enable the Check box to display the text (Label or Status).
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Switch component as below. After finish the setting, please click “Apply” button.

Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data sending description

In the General Setting section, if the total amount “Number” is assigned to be 1, the data the component receives must be exactly the same as the ”ON” Value or the ”OFF” Value pre-set in “General Setting” for the component to switch its status. If the data the component receives is not exactly the same as the ”ON” Value or ”OFF” Value setting, the data will be ignored and the status will not be modified.

If the total amount “Number” is assigned to be 2 (or more), then the data the component receives will be treated as a binary value. If the value the component receives is greater than the maximum binary value that the component is able to

process, the value will be treated as the maximum binary value. All Switches will be in ON status. If the value the component receives is smaller than the minimum binary value that the component is able to process, the value will be treated as the minimum binary value. All Switches will be in OFF status. If the data the component receives is not a number, then the data will be ignored, and the status will not be modified.

【 Example 1 】 : If the total amount “Number” is assigned to be 4, then there are 4 Switches in the component. The index numbers for the Switches will be Index0, Index1, Index2 and Index3. If the component receives a value 3, then the Index0 Switch and the Index1 Switch will be in ON status, the Index2 Switch and the Index3 Switch will be in OFF status.

【 Example 2 】 : If the total amount “Number” is assigned to be 4, then there are 4 Switches in the component. With the 4 Switches, the data range the Switch component can process is from 0 to 15. Therefore if the data the component receives is greater than 15; the value will be treated as 15. If the data the component receives is smaller than 0, the value will be treated as 0.

Data Sending description

【 ON/OFF 】 Mode

In the General Setting section, if the total amount “Number” is assigned to be 1, then you can click on the Switch component to change its status, and the component will send out the ”ON” Value or ”OFF” Value based on its current status. The component will stay in current status until you click the component again, then the component will return to its original status and will send out the ”ON” Value or ”OFF” Value corresponding to its status.

If the total amount “Number” is assigned to be 2 (or more), then you can click on the Switch component to change its status, and the component will send out the binary value of the component for its corresponding status. The status of the component will stay in current status until you click the component again, and then the component will change its status and send out the new binary value of the component.

For example, if the total amount “Number” is assigned to be 4, then there will be 4 Switches in the component. The index numbers for the Switches will be Index0, Index1, Index2 and Index3. If you click the Index1 Switch and Index3 Switch to be ON status, then the binary format value of the component will be “1010”, and the decimal value of “1010” is 10. Therefore the value “10” will be sent out.

【 PUSH 】 Mode

In the General Setting section, if the total amount “Number” is assigned to be 1, then you can click on the Switch component to change its status. and the component will send out the ”ON” Value or ”OFF” Value based on its new status. If you hold down

the mouse, the new status will stay in current status until you release the mouse, the component will be returned to its original status automatically, and will send out the corresponding "ON" Value or "OFF" Value.

If the total amount "Number" is assigned to be 2 (or more), then you can click on the Switch component to change its status, and the component will send out the binary value corresponding to its new status. If you hold down the mouse, the new status will stay in current status until you release the mouse, the component will be returned to its original status automatically, and send out the corresponding binary value.

For example, if the total amount "Number" is assigned to be 4, then there will be 4 Switches in the component. The index numbers for the Switches will be Index0, Index1, Index2 and Index3. If you click the Index3 Switch to ON status, and hold down the mouse, then the binary format value of the component will be "1000", and the decimal value of "1000" is 8. Therefore the value "8" will be sent out. If you release the mouse, then the binary format value of the component will be "0000", and the decimal value of "0000" is 0. Therefore the value "0" will be sent out.

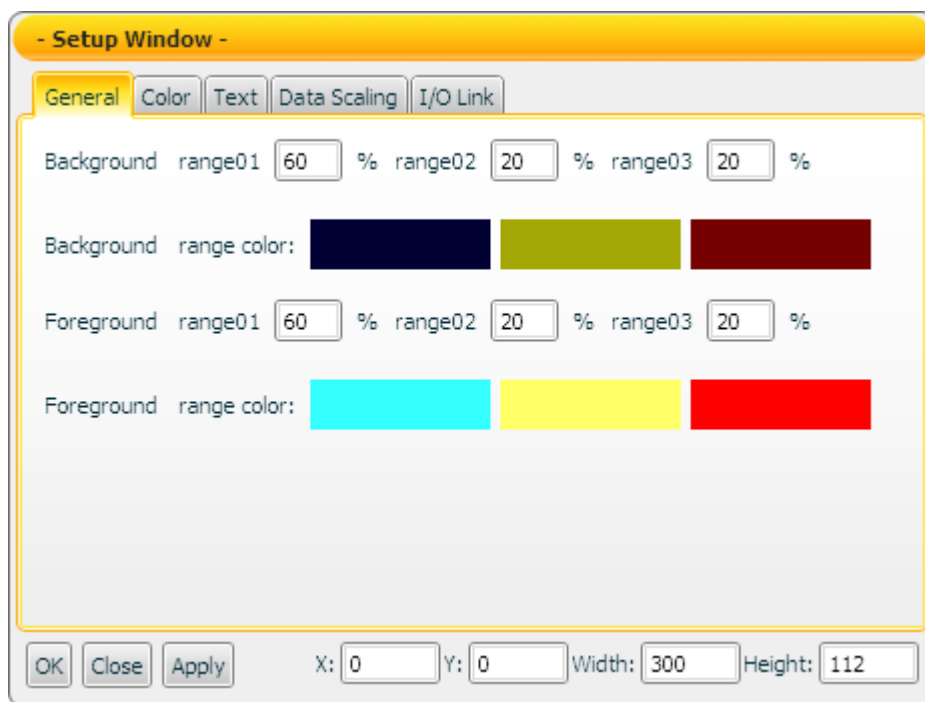
4.3 Gauge Component



The Gauge component is used to receive the AI (Analog Input) data from device. It is suitable for most SCADA applications. In the component property page, there are properties such as Maximum value, Minimum value, Color and I/O data link...etc for user to set up. After complete the setting of the component properties, the component will display the value it receives. This component is suitable for the display of AI (analog input) data. The properties setting page of the Gauge component is shown as below.

【General Setting】

In “General Setting” tab, you can setup the properties of the Gauge component as below. After finish the setting, please click “Apply” button.

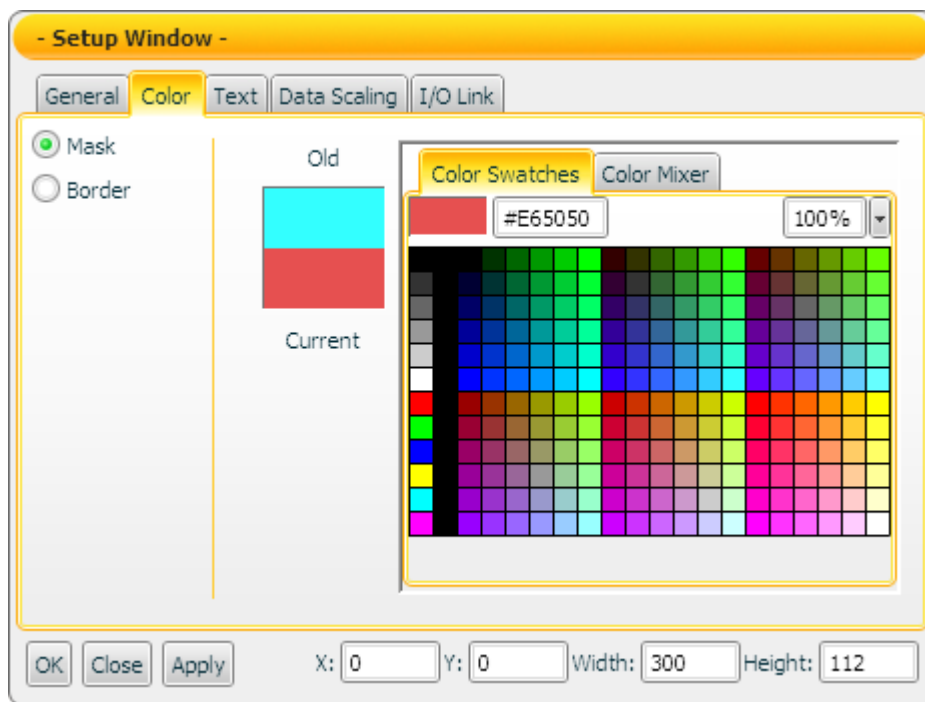


Background range 01	Assign the length for the percentage of “Background range 01” area.
Background range 02	Assign the length for the percentage of “Background range 02” area.
Background range 03	Assign the length for the percentage of “Background range 03” area.
Background range color	Select the color for the “Background range 01”, “Background range 02” and “Background range 03” area.
Foreground range 01	Assign the length for the percentage of “Foreground range 01” area.

Foreground range 02	Assign the length for the percentage of “Foreground range 02” area.
Foreground range 03	Assign the length for the percentage of “Foreground range 03” area.
Foreground range color	Select the color for the “Foreground range 01”, “Foreground range 02” and “Foreground range 03” area.

【Color Setting】

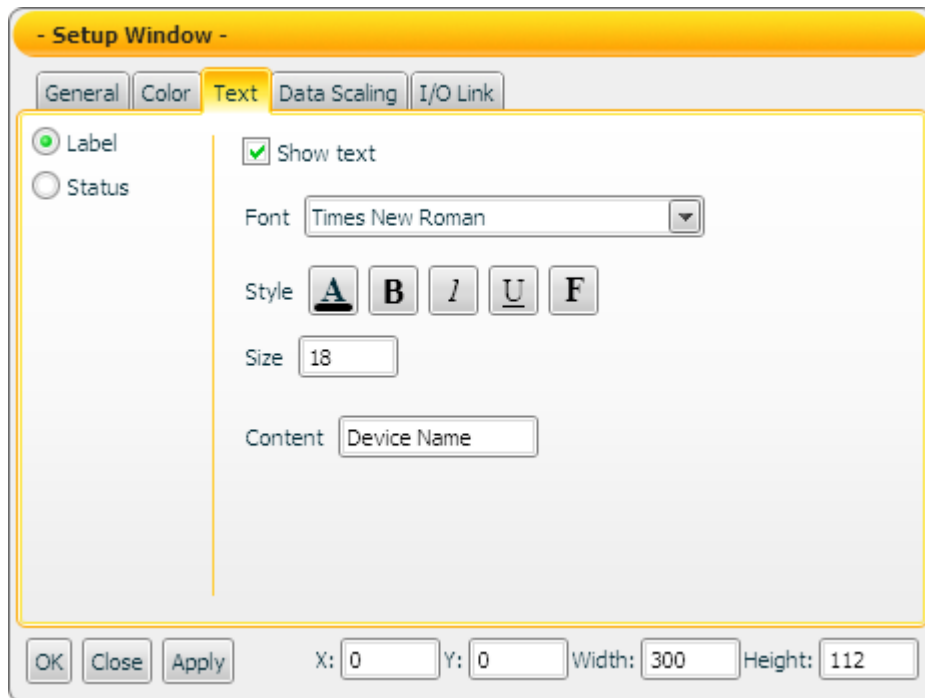
In “Color Setting” tab, you can setup the color of the Gauge component as below. After finish the setting, please click “Apply” button.



Mask	Select the color of the Mask.
Border	Select the color of the Border.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】

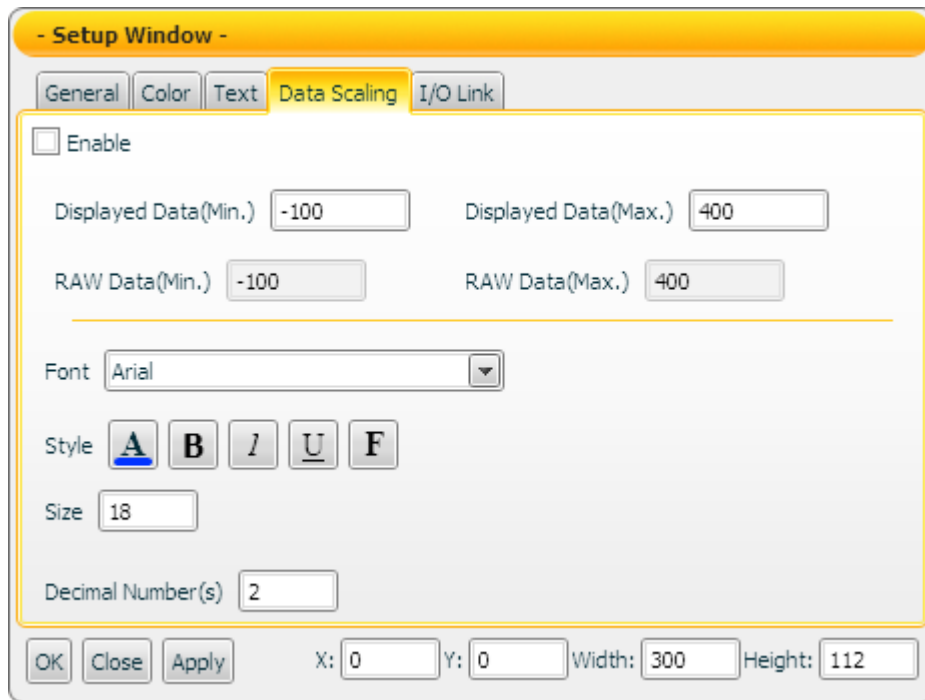
In “Text Setting” tab, you can setup the text properties of the Gauge component as below. After finish the setting, please click “Apply” button.








Label	Set up the Label text for the component.
Status	Set up the properties for Status text of the component. Note: The setting in this section is only for the Color/Font properties setting of the text that the component receives through the I/O Link section setting. You can't input the Status text in the text field.
Show text	Enable the Check box to display the text (Label or Status).
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.

【Data Scaling Setting】

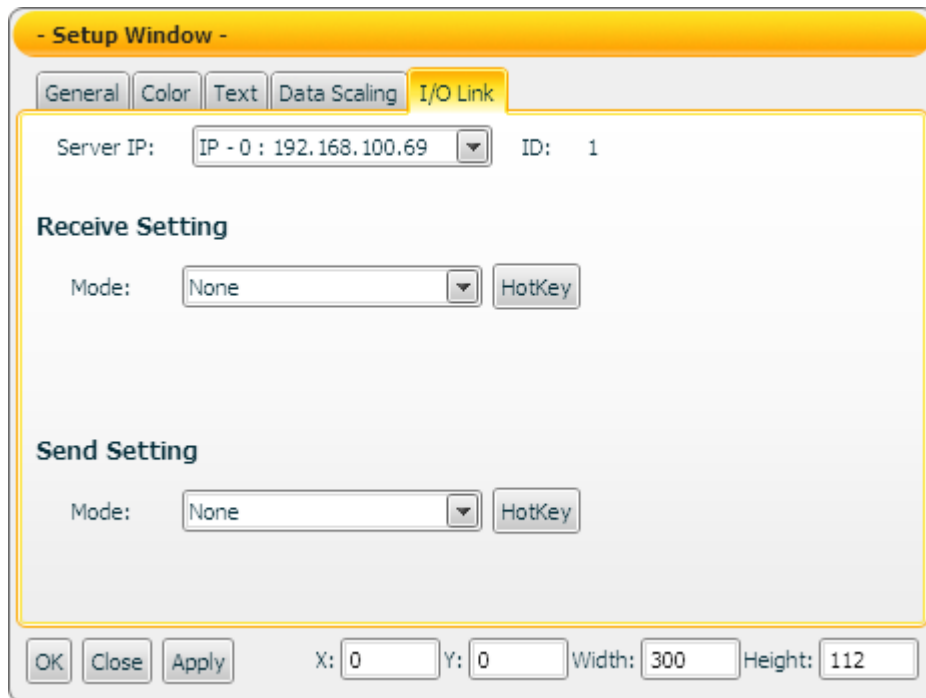
In the “Data Scaling Setting” tab, you can setup the data scaling properties for the Gauge component as below. After finish the setting, please click “Apply” button.



Enable	Click the check box to enable the data scaling function.
Displayed Data(Min.)	The minimum value the component can display.
Displayed Data(Max.)	The maximum value the component can display.
RAW Data(Min.)	The minimum raw value the component can receive.
RAW Data(Max.)	The maximum raw value the component can receive.
Font	The Font setting for the text.
Style	<p> : Select the color for the text</p> <p> : Set the text in bold type</p> <p> : Add the underline for the text</p> <p> : Set the text in italic type</p> <p> : Set the text with aureole effect</p>
Size	Assign the size for the text.
Decimal Number(s)	Set up the number of the decimal place for the displayed value.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Gauge component as below. After finish the setting, please click “Apply” button.



Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

This component only receives data that is number, and shows the data in string format. The initial string is N/A. If the data the component receives is smaller than the value of “Displayed Data(Min.)”, then it will display the value of “Displayed Data(Min.)”. If the data the component receives is greater than the value of “Displayed Data(Max.)”, then it will display the the value of “Displayed Data(Max.)”. If the data the component receives is not a number, then the data will be ignored, and the status will not be modified.

For example, If the value of “Displayed Data(Max.)” is 400, and the value of

“Displayed Data(Min.)” is -150 :

1. If the data the component receives is 410, the component will display 400.
2. If the data the component receives is 350, the component will display 350.
3. If the data the component receives is -200, the component will display -150.

You can click the “Enable” check box in the “Data Scaling Setting” tab to enable the data scaling function. If the data the component receives is greater than the value of “RAW Data(Max.)”, then the data the component receives will be the value of “RAW Data(Max.)”. If the data the component receives is smaller than the value of “RAW Data(Min.)”, then the data the component receives will be the value of “RAW Data(Min.)”.

For example, if the measured raw data from the physical device is 0~65535 and you want the value to be shown in the range of 0~100 through linear interpolation, then you can complete the following setting.

- The value of Displayed Data(Max.) is 100.
- The value of Displayed Data(Min.) is 0.
- The value of RAW Data(Max.) is 65535.
- The value of RAW Data(Min.) is 0

Now the component will display the scaling value from the raw data of the physical device based on your setting. The following gives some examples:

1. If the data the component receives is 65600, the component will display 100.
2. If the data the component receives is 65535, the component will display 100.
3. If the data the component receives is 32767.5, the component will display 50.
4. If the data the component receives is 0, the component will display 0.
5. If the data the component receives is -10, the component will display 0.

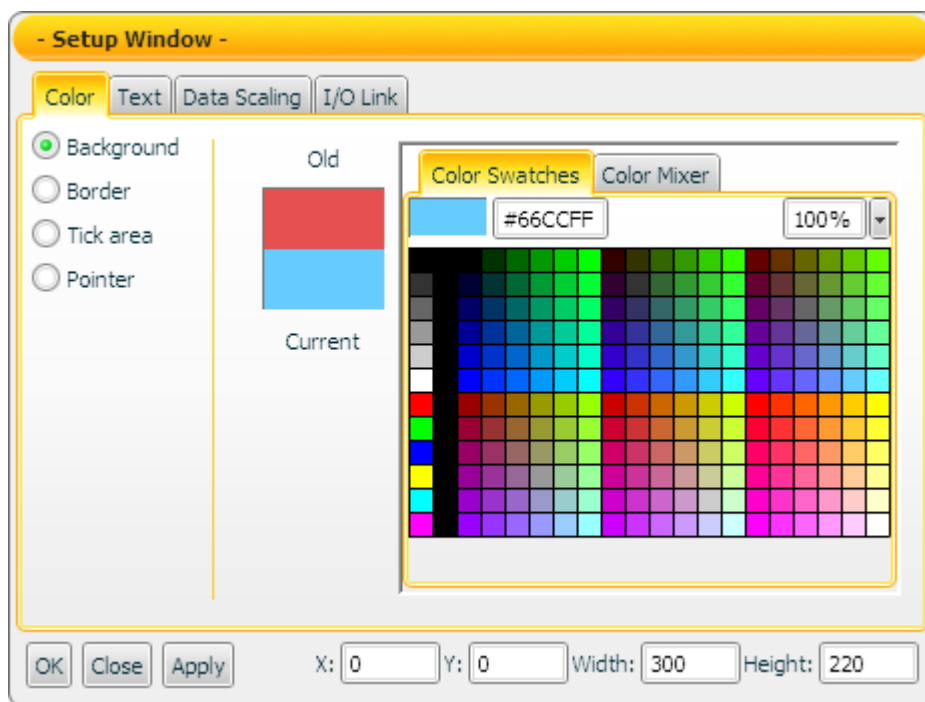
4.4 Meter component



The Meter component is used to receive the AI (Analog Input) data from device. It is suitable for most SCADA applications. In the component property page, there are properties such as Maximum value, Minimum value, Color and I/O data link...etc for user to set up. After complete the setting of the component properties, the component will show the value it receives. This component is suitable for AI (Analog Input) data display. The properties setting page of the Meter component is shown as below.

【Color Setting】

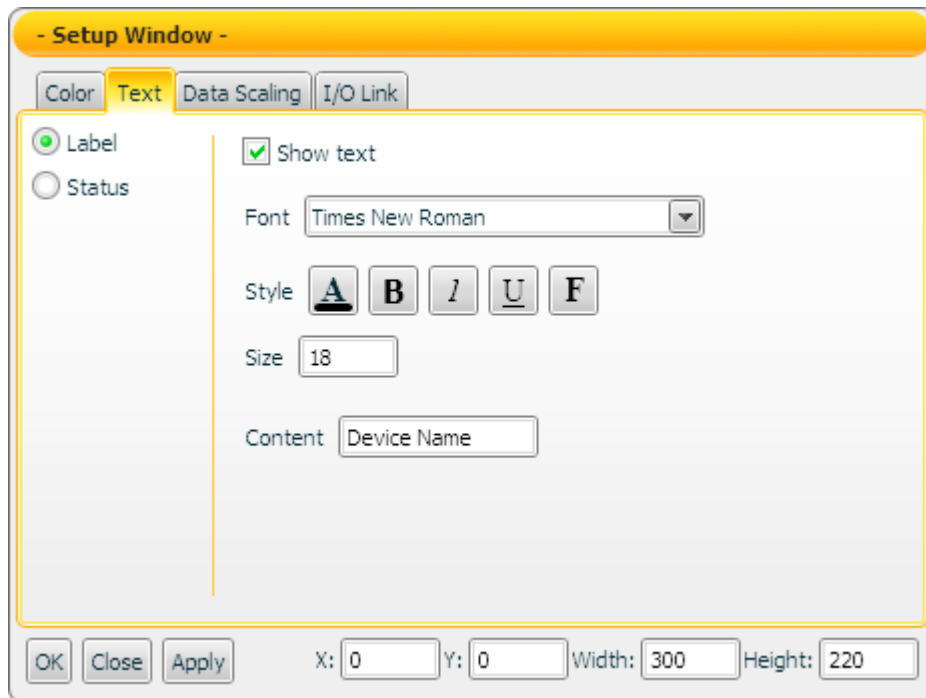
In “Color Setting” tab, you can setup the color of the Meter component as below. After finish the setting, please click “Apply” button.



Background	Select the color of the Background.
Border	Select the color of the Border.
Tick area	Select the color of the Tick area.
Pointer	Select the color of the Pointer.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】






In “Text Setting” tab, you can setup the text properties of the Meter component as below. After finish the setting, please click “Apply” button.



Label	Set up the Label text properties of the component.
Status	Set up the properties for Status text of the component. Note: The setting in this section is only for the Color/Font properties setting of the text that the component receives through the I/O Link section setting. You can't input the Status text in the text field.
Show text	Enable the check box to display the text (Label or Status).
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.

【Data Scaling Setting】

In the “Data Scaling Setting” tab, you can setup the data scaling properties for the Meter component as below. After finish the setting, please click “Apply” button.

Enable	Click the check box to enable the data scaling function.
Displayed Data(Min.)	The minimum value the component can display.
Displayed Data(Max.)	The maximum value the component can display.
RAW Data(Min.)	The minimum raw value the component can receive.
RAW Data(Max.)	The maximum raw value the component can receive.
Font	The Font setting for the text.
Style	<p> : Select the color for the text</p> <p> : Set the text in bold type</p> <p> : Add the underline for the text</p> <p> : Set the text in italic type</p> <p> : Set the text with aureole effect</p>
Size	Assign the size for the text.
Decimal Number(s)	Set up the number of the decimal place for the displayed value.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Meter component as below. After finish the setting, please click “Apply” button.



Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

This component only receives data that is number, and shows the data in string format. The initial string is N/A. If the data the component receives is smaller than the value of “Displayed Data(Min.)”, then it will display the value of “Displayed Data(Min.)”. If the data the component receives is greater than the value of “Displayed Data(Max.)”, then it will display the value of “Displayed Data(Max.)”. If the data the component receives is not a number, then the data will be ignored, and the status will not be modified.

For example, If the value of “Displayed Data(Max.)” is 400, and the value of “Displayed Data(Min.)” is -150 :

1. If the data the component receives is 410, the component will display 400.
2. If the data the component receives is 350, the component will display 350.
3. If the data the component receives is -200, the component will display -150.

You can click the “Enable” check box in the “Data Scaling Setting” tab to enable the data scaling function. If the data the component receives is greater than the value of “RAW Data(Max.)”, then the data the component receives will be the value of “RAW Data(Max.)”. If the data the component receives is smaller than the value of “RAW Data(Min.)”, then the data the component receives will be the value of “RAW Data(Min.)”.

For example, if the measured raw data from the physical device is 0~65535 and you want the value to be shown in the range of 0~100 through linear interpolation, then you can complete the following setting.

- The value of Displayed Data(Max.) is 100.
- The value of Displayed Data(Min.) is 0.
- The value of RAW Data(Max.) is 65535.
- The value of RAW Data(Min.) is 0

Now the component will display the scaling value from the raw data of the physical device based on your setting. Following is some examples.

1. If the data the component receives is 65600, the component will display 100.
2. If the data the component receives is 65535, the component will display 100.
3. If the data the component receives is 32767.5, the component will display 50.
4. If the data the component receives is 0, the component will display 0.
5. If the data the component receives is -10, the component will display 0.

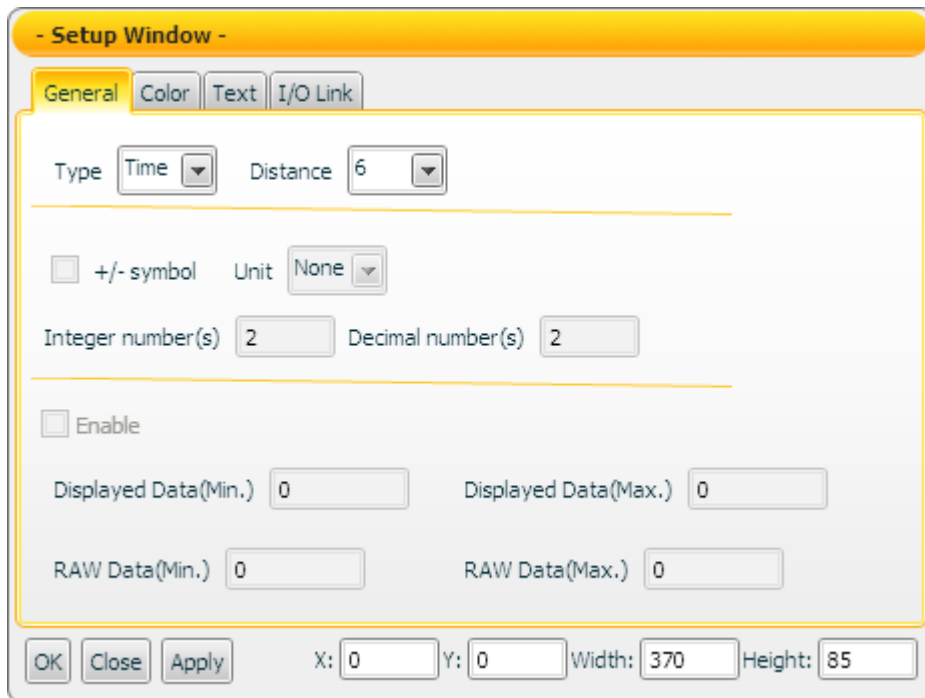
4.5 LED Type Component

There are three display modes for LED component as Date (Year/Month/Day), Time (Hour: Minute: Second) and Text.

In the Date and Time mode, the component will display the local Date and Time information retrieved from the machine that the Flash HMI tools is launched. In the Text mode, the component will display the value it receives. The properties setting page of the LED component is shown as below.

【General Setting】

In “General Setting” tab, you can setup the properties of the LED component as below. After finish the setting, please click “Apply” button.

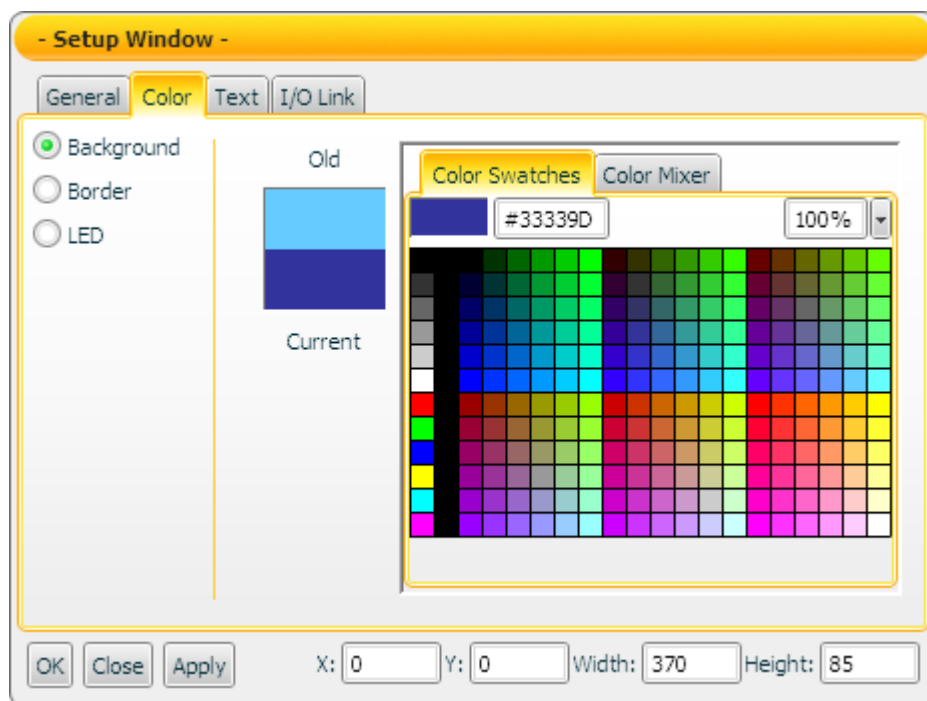


Type	There are three display modes for selection as Date (Year/Month/Day), Time (Hour: Minute: Second) and Text.
Distance	The distance between the number, unit and symbol. The unit is pixel.
+/- symbol	If you select Text mode in the “Type” field, then you can enable this item for the display of “+” or “-” symbol.
Unit	If you select the Text mode in the “Type” field, then you can select C (Cullen) ,K (Kelvin) ,V (Voltage) ,H (Henry) ,A (Ampere) or % as the unit for the value display. You can also select “None” to disable the unit

	display.
Integer number(s)	If you select the Text mode in the “Type” field, then you can assign the number of integer place to be displayed for the value.
Decimal number(s)	If you select the Text mode in the “Type” field, then you can assign the number of decimal place to be displayed for the value.
Enable	Click the check box to enable the data scaling function.
Displayed Data(Min.)	The minimum value the component can display.
Displayed Data(Max.)	The maximum value the component can display.
RAW Data(Min.)	The minimum raw value the component can receive.
RAW Data(Max.)	The maximum raw value the component can receive.

【Color Setting】

In “Color Setting” tab, you can setup the color of the LED component as below. After finish the setting, please click “Apply” button.

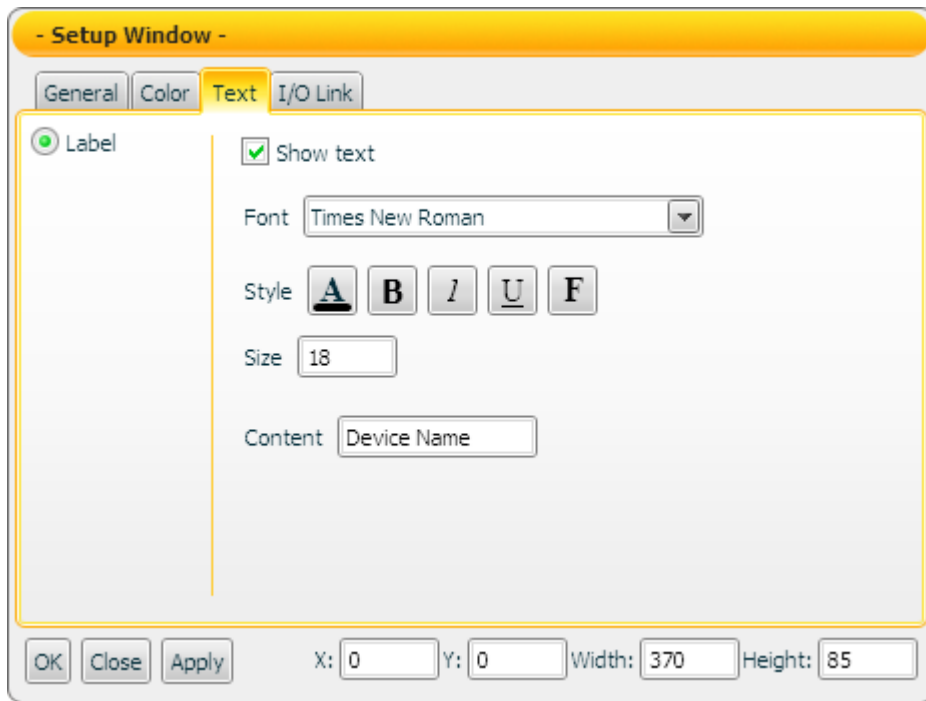


Background	Select the color of the Background.
Border	Select the color of the Border.
LED	Select the color of the LED.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.

Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】

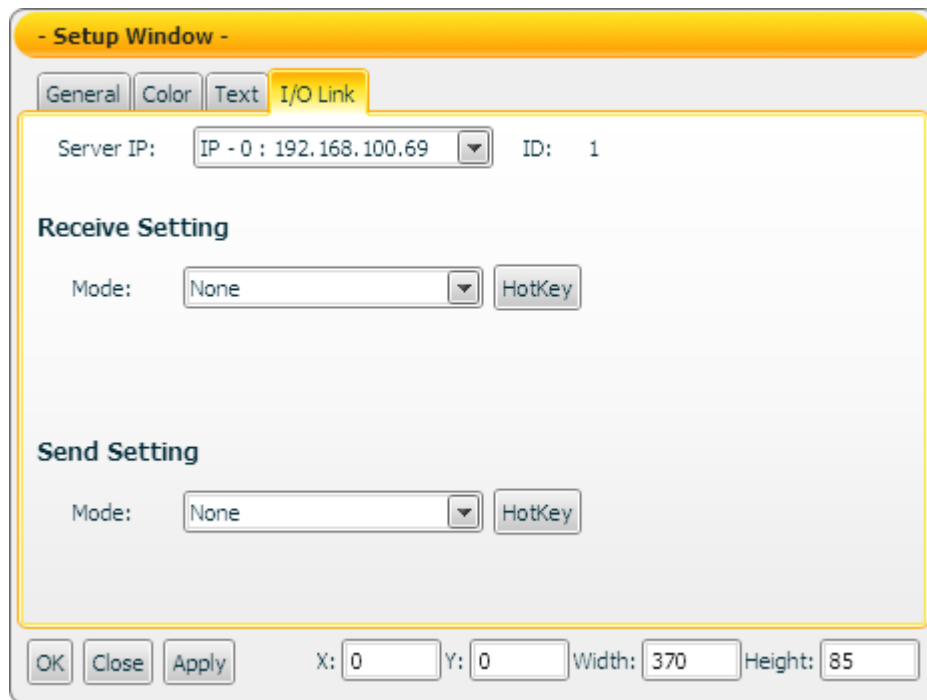
In “Text Setting” tab, you can setup the text properties of the LED component as below. After finish the setting, please click “Apply” button.



Label	Set up the Label text properties of the component.
Show text	Enable the check box to display the Label text.
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the LED component as below. After finish the setting, please click “Apply” button.



Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

If you select Text mode in the “Type” field, the data the component receives will be shown. If the data the component receives is smaller than the minimum value that the component can accept, it will display the minimum value that the component can accept. If the data the component receives is greater than the maximum value that the component can accept, then it will display the maximum value that the component can accept. If the data the component receives is not a number, then the data will be ignored, and the status will not be modified.

The definition of the minimum and maximum value the component can accept:

- If you click the check box of “+/- symbol” to enable the item, then the maximum value the component can accept will be “+Integer place number.Decimal place number” and the minimum value the component can accept will be “-Integer place number.Decimal place number”.
Therefore, if the Integer place number is 3 and Decimal place number is 2, then the maximum value the component can accept will be +999.99, and the minimum value the component can accept will be -999.99.
- If you disable the “+/- symbol” item, then the maximum value the component can accept will be “Integer place number.Decimal place number” and the minimum value which the component can accept will be 0.
Therefore, if the Integer place number is 3 and Decimal place number is 2, then the maximum value the component can accept will be 999.99, and the minimum value the component can accept will be 0.

You can click the “Enable” check box in the “General Setting” tab to enable the data scaling function. If the data the component receives is greater than the value of “RAW Data(Max.)”, then the data the component receives will be the value of “RAW Data(Max.)”. If the data the component receives is smaller than the value of “RAW Data(Min.)”, then the data the component receives will be the value of “RAW Data(Min.)”.

For example, if the measured raw data from the physical device is 0~65535 and you want the value to be shown in the range of 0~100 through linear interpolation, then you can complete the following setting.

- The value of Displayed Data(Max.) is 100.
- The value of Displayed Data(Min.) is 0.
- The value of RAW Data(Max.) is 65535.
- The value of RAW Data(Min.) is 0

Now the component will display the scaling value from the raw data of the physical device based on your setting. The following gives some examples.

1. If the data the component receives is 65600, the component will display 100.
2. If the data the component receives is 65535, the component will display 100.
3. If the data the component receives is 32767.5, the component will display 50.
4. If the data the component receives is 0, the component will display 0.
5. If the data the component receives is -10, the component will display 0.

Note : If the value of Displayed Data(Max.) exceeds the “+Integer number.Decimal number” or “Integer number.Decimal number”, then the actual Displayed Data(Max.) can't be displayed.



Example: If the Integer number is 2, then the maximum value the component can accept will be 99. Even you set the Displayed Data(Max.) as 100, the maximum value the component can show will be 99 instead of 100.

If you select Date and Time mode in the “Type” field of the “General Setting” tab, then the component will display the Date and Time information retrieved from the machine that the Flash HMI tools is launched and show the information.

4.6 Text component



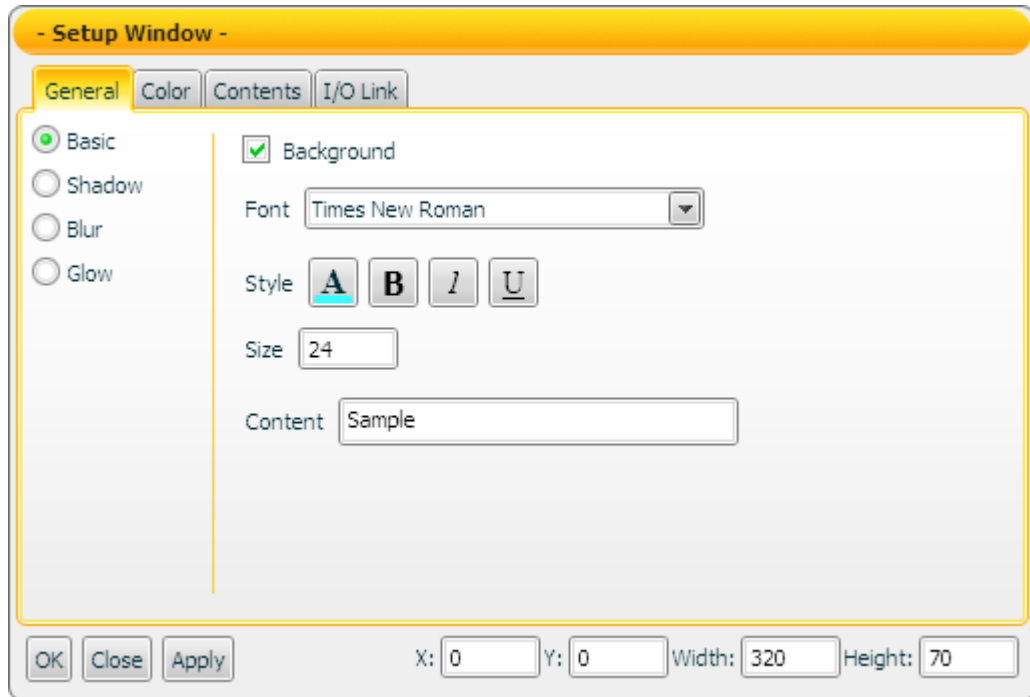
The Text component is used to receive and display the string or number data. You can assign different visual effect for the content of the Text component. There are two types of Text component as below. The properties setting page of the Text component is also shown as below.

	Static text	Static text component include the filter effect. It allows to modify the shadow, blur and glow effect for the component. When the component receives the new data, the new content will be updated and displayed immediately.
	Scrolling text	Scrolling text component features the filter effect as well. It allows to modify the shadow, blur and glow effect for the component. Scrolling text features advanced functions such as: keep the old message, adjust the component moving speed, and the component moving direction. These properties allow to flexibly display the content of the component and is able to give the users better visual effect.

4.6.1 Static Text component property **T**

【General Setting】 -> 【Basic Setting】

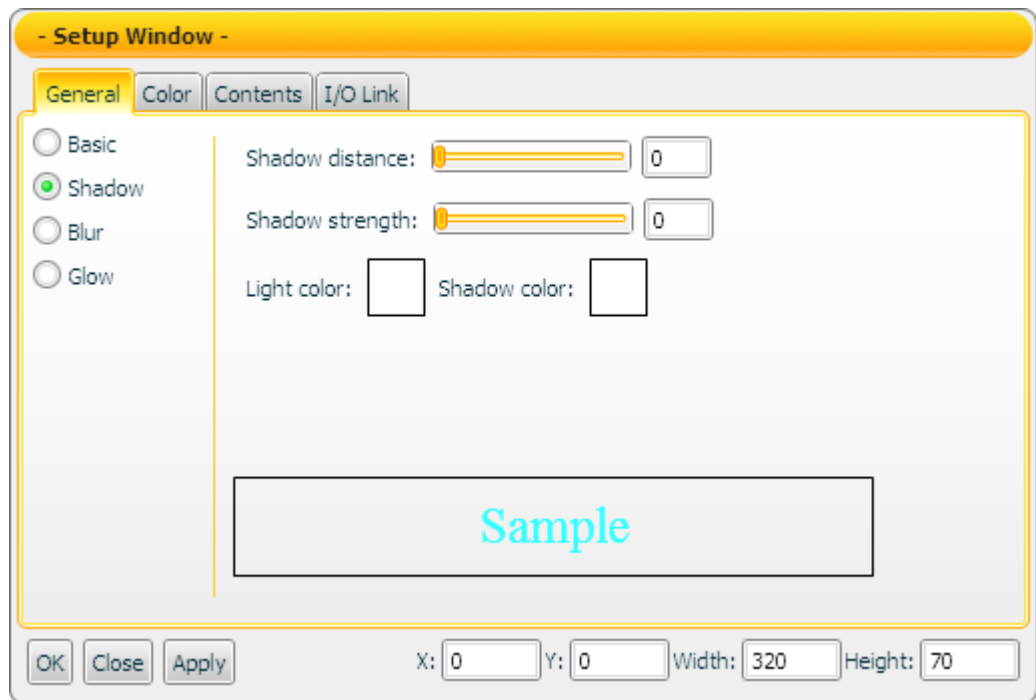
In the “Basic Setting” of the “General Setting” tab, you can setup the properties of the Static Text component as below. After finish the setting, please click “Apply” button.



Background	The default setting is to enable the display of the Background of the component. If you disable the function. The component will close the Background display function, and only display the content of the component.
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p><u>U</u> : Add the underline for the text</p> <p><i>I</i> : Set the text in italic type</p>
Size	Assign the size for the text.
Content	Input the text content.

【General Setting】 -> 【Shadow Setting】

In the “Shadow Setting” of the “General Setting” tab, you can setup the shadow properties of the Static Text component as below. After finish the setting, please click “Apply” button.

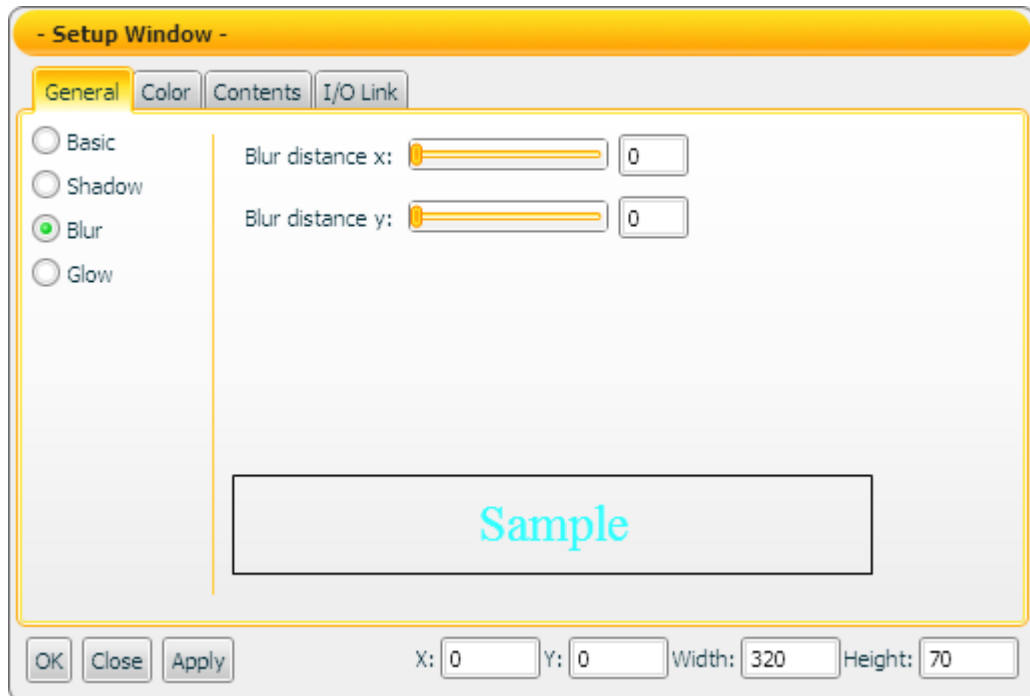


Shadow distance	Assign the distance between the shadow (or glow) effect text and the original text. The unit is Pixel.
Shadow strength	Assign the strength of the shadow (or glow) effect text.
Light color	Select the color of the light source.
Shadow color	Select the color of the shadow.

Note : After completing the color setting, please make sure to assign the Shadow distance and Shadow strength in this section as well. If the strength or distance is equal to 0, then the shadow effect will not take effect.

【General Setting】 -> 【Blur Setting】

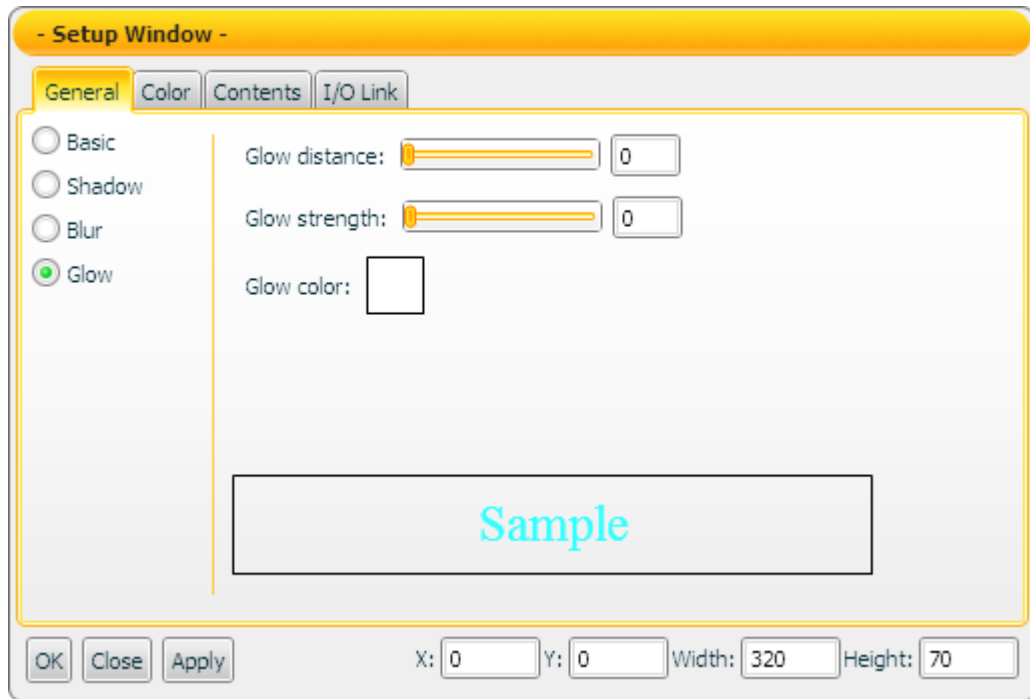
In the “Blur Setting” of the “General Setting” tab, you can setup the blur properties of the Static Text component as below. After finish the setting, please click “Apply” button.



Blur distance x	Assign the width of the blur effect in horizontal direction. The unit is Pixel.
Blur distance y	Assign the height of the blur effect in vertical direction. The unit is Pixel.

【General Setting】 -> 【Glow Setting】

In the “Glow Setting” of the “General Setting” tab, you can setup the glow properties of the Static Text component as below. After finish the setting, please click “Apply” button.

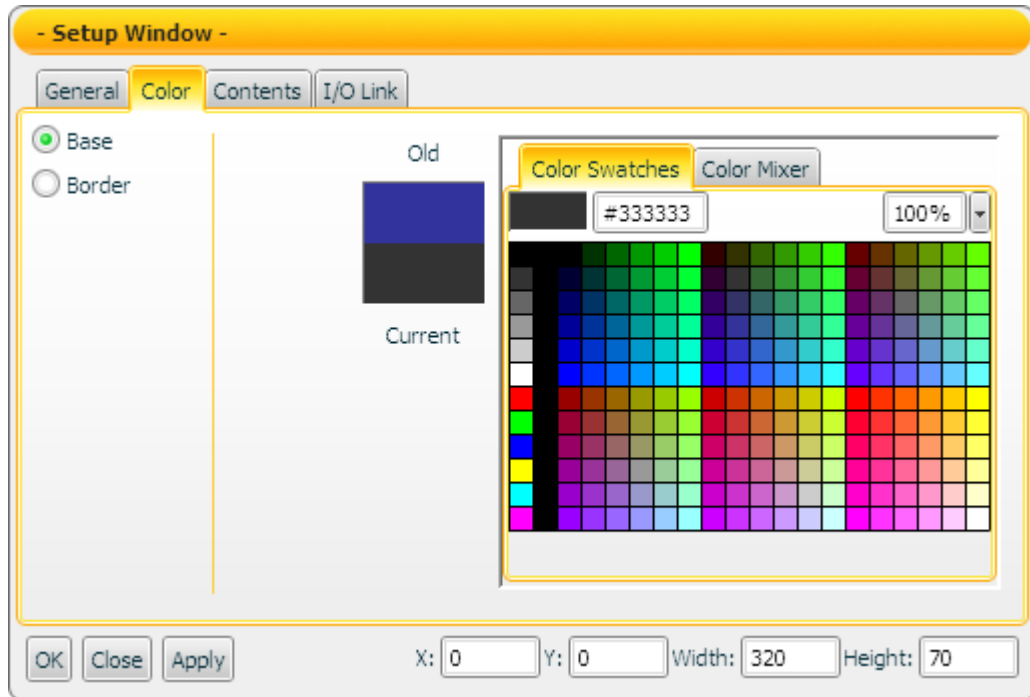


Glow distance	Assign the distance of the glow effect. The unit is Pixel.
Glow strength	Assign the strength of the glow effect.
Glow color	Select the color of the glow effect.

Note : After completing the color setting, please make sure to assign the glow strength and distance in this section as well. If the strength or distance is equal to 0, then the glow effect will not take effect.

【Color Setting】

In “Color Setting” tab, you can setup the color of the Static text component as below. After finish the setting, please click “Apply” button.



Base	Select the color of the Base.
Border	Select the color of the Border.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Contents Setting】

In “Contents Setting” tab, you can setup the display condition for the data contents of the Static text component as below. After finish the setting, please click “Apply” button.

Mode	There are two mode: “None” and “Value” for selection. Select “None” to disable this function.
Display	Input the text to be shown when the condition is TRUE.

Note : If “Value” in Mode field is selected, it is required to complete at least one condition setting. If there is no condition setting existed, the “Contents Setting” function will be disabled.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Static text component as below. After finish the setting, please click “Apply” button.

Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

If you select “None” in Mode field, then the “Contents Setting” function will be disabled. The data the component receives will be treated as the string type data, and will be displayed immediately.

If you select “Value” in Mode field, then the “Contents Setting” function will be enabled. The data the component receives will be treated as the value data. You can set up the conditions (Up to 10 rules) and the corresponding strings to be displayed. The data the component receives will be evaluated and when the condition is TRUE, the corresponding string will be shown.

Example: input “1” in the left side data field of the first rule, select “<=“ in the left side operator, and input “ON” in the text field of the first rule. And then input “1” in the right side data field of the second rule, select “<“ in the right side operator, and input “OFF” in the text field of the second rule.

1. When the data the component receives is 2, this component will display ON.
2. When the data the component receives is 1, this component will display ON.
3. When the data the component receives is 0, this component will display OFF.

Model

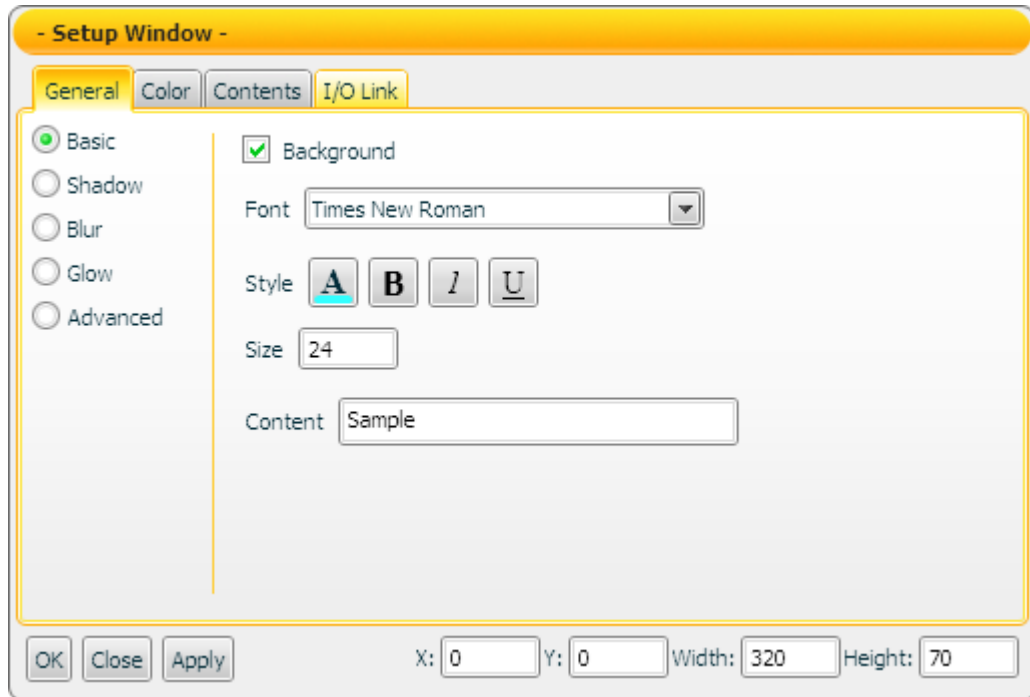
1:	<input type="text" value="1"/>	<input "="" type="text" value="<="/>	<input type="text" value="[Value]"/>	<input type="text" value="None"/>	<input type="text" value="0"/>	Display	<input type="text" value="ON"/>
2:	<input type="text" value="0"/>	<input type="text" value="None"/>	<input type="text" value="[Value]"/>	<input type="text" value="<"/>	<input type="text" value="1"/>	Display	<input type="text" value="OFF"/>





4.6.2 Scrolling Text component property



【General Setting】 -> 【Basic Setting】

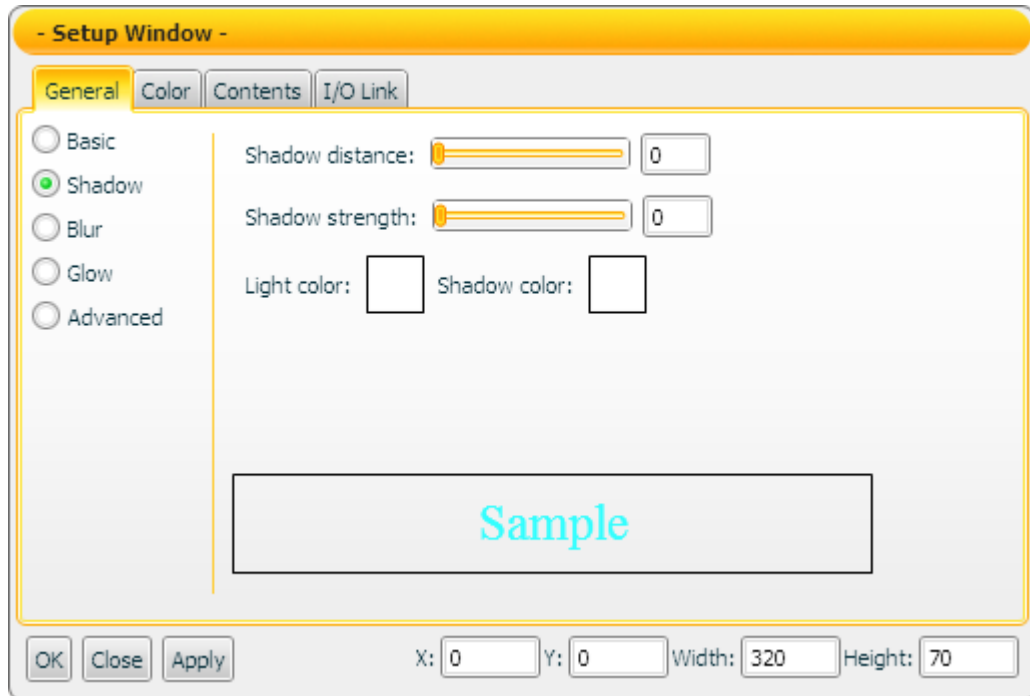
In the “Basic Setting” of the “General Setting” tab, you can setup the properties of the Scrolling text component as below. After finish the setting, please click “Apply” button.



Background	The default setting is to enable the display of the Background of the component. If you disable the function. The component will close the Background display function, and only display the content of the component.
Font	The Font setting for the text.
Style	 : Select the color for the text  : Set the text in bold type  : Add the underline for the text  : Set the text in italic type
Size	Assign the size for the text.
Content	Input the text content.

【General Setting】 -> 【Shadow Setting】

In the “Shadow Setting” of the “General Setting” tab, you can setup the shadow properties of the Scrolling text component as below. After finish the setting, please click “Apply” button.

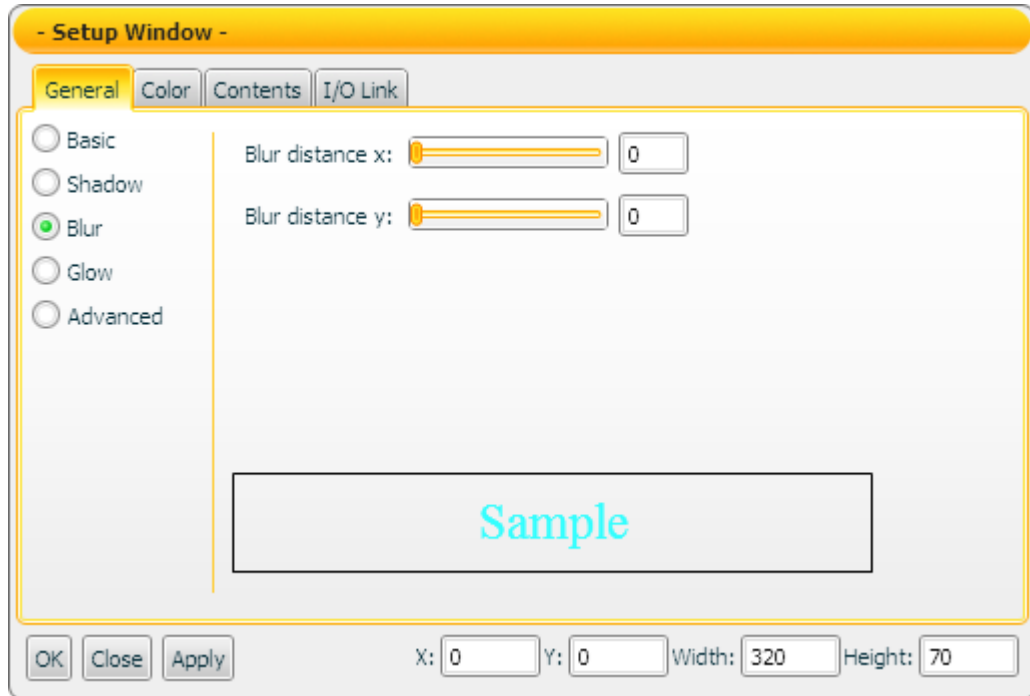


Shadow distance	Assign the distance between the shadow (or glow) effect text and the original text. The unit is Pixel.
Shadow strength	Assign the strength of the shadow (or glow) effect text.
Light color	Select the color of the light source.
Shadow color	Select the color of the shadow.

Note : After completing the color setting, please make sure to assign the Shadow distance and Shadow strength in this section. If the strength or distance is equal to 0, then the shadow effect will not take effect.

【General Setting】 -> 【Blur Setting】

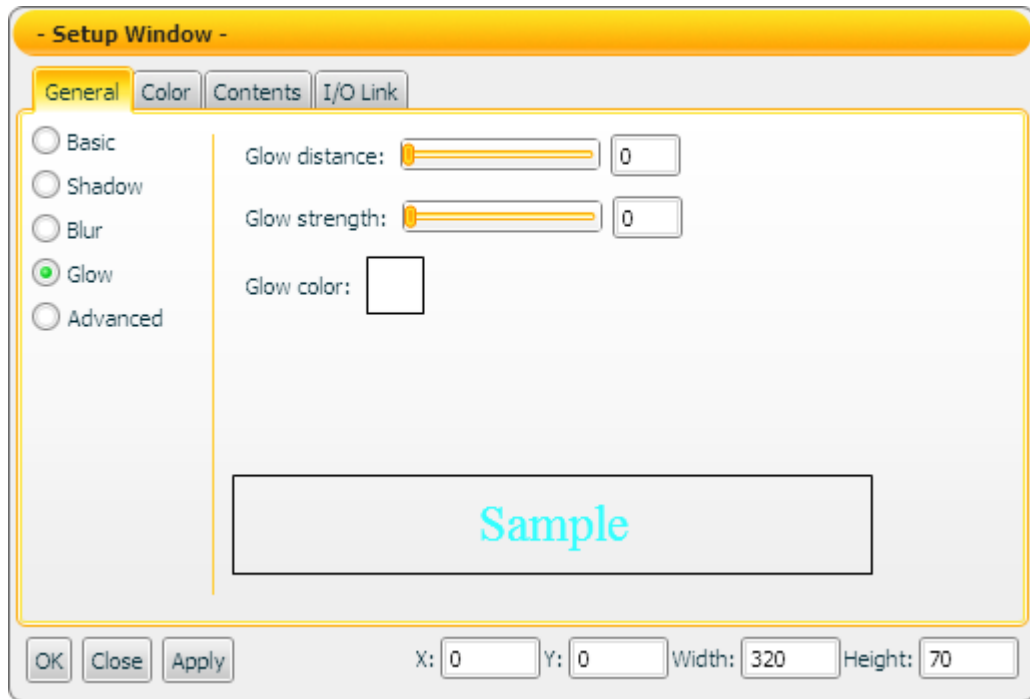
In the “Blur Setting” of the “General Setting” tab, you can setup the blur properties of the Scrolling text component as below. After finish the setting, please click “Apply” button.



Blur distance x	Assign the width of the blur effect in horizontal direction. The unit is Pixel.
Blur distance y	Assign the height of the blur effect in vertical direction. The unit is Pixel.

【General Setting】 -> 【Glow Setting】

In “Glow Setting” of “General Setting” tab, you can setup the glow properties of the Scrolling text component as below. After finish the setting, please click “Apply” button.

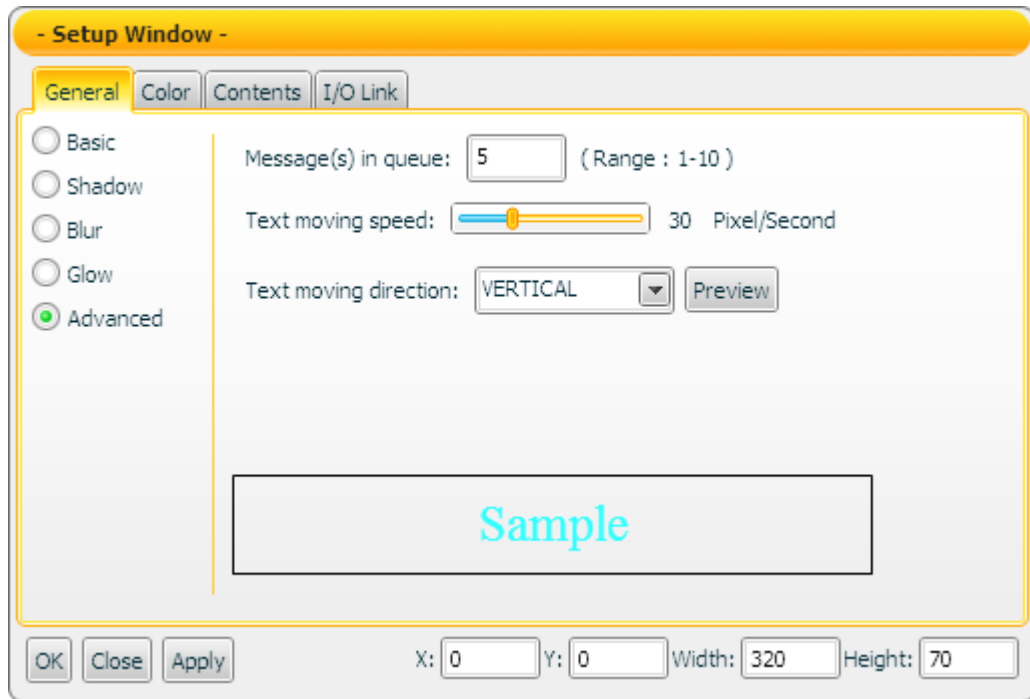


Glow distance	Assign the distance of the glow effect. The unit is Pixel.
Glow strength	Assign the strength of the glow effect.
Glow color	Select the color of the glow effect.

Note : After completing the color setting, please make sure to assign the glow strength and distance in this section. If the strength or distance is equal to 0, then the glow effect will not take effect.

【General Setting】 -> 【Advanced Setting】

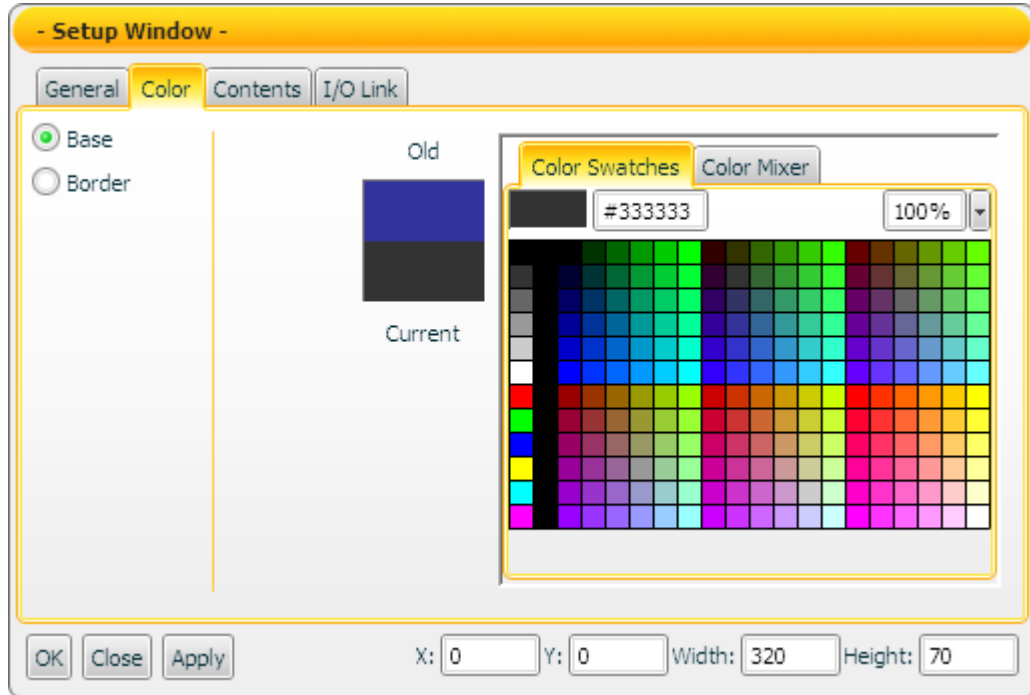
In the “Advanced Setting” of the “General Setting” tab, you can setup the advanced properties of the Scrolling text component as below. After finish the setting, please click “Apply” button.



Message(s) in queue	Assign the number of previous messages to be kept in the message queue. The latest message and the messages in the queue will be shown cyclically. Example: If you assign 2 in the field, then the message queue will keep previous two messages. There will be totally 3 messages (the latest message and previous two messages in the queue) and will be shown cyclically. If you assign 0 in the field, then the message queue will not keep any message. It will display the latest message only.
Text moving speed	Assign the text moving speed. The unit is Pixel/Sec.
Text moving direction	Select the text moving direction to be “Horizontal” or “Vertical”.

【Color Setting】

In “Color Setting” tab, you can setup the color of the Scrolling text component as below. After finish the setting, please click “Apply” button.



Base	Select the color of the Base.
Border	Select the color of the Border.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Contents Setting】

In “Contents Setting” tab, you can setup the display condition for the data contents of the Scrolling text component as below. After finish the setting, please click “Apply” button.

Mode	There are two mode: “None” and “Value” for selection. Select “None” to disable this function.
Display	Input the text to be shown when the condition is TRUE.

Note : If “Value” in Mode field is selected, it is required to complete at least one condition setting. If there is no condition setting existed, the “Contents Setting” function will be disabled.

【I/O Link Setting】

In the “I/O Link Setting” tab, you can setup the I/O link properties for the Scrolling text component as below. After finish the setting, please click “Apply” button.

Server IP	Input the IP of the Modbus TCP Server device that the component will send the I/O data to or receive the I/O data from.
Receive Setting	Input the I/O data receiving parameters of Modbus TCP protocol (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Send Setting	Input the I/O data sending parameters of Modbus (Such as: Mode, Start address & Length). You can use Hotkey for quick setting.
Please refer to Section 2.5.5 Component setting for more detailed information.	

Data receiving description

If you select “None” in Mode field, then the “Contents Setting” function will be disabled. The data the component receives will be treated as the string type data. When the component receives the data, the contents in the message queue and the latest message will be updated. These message strings will be shown cyclically.

If you select “Value” in Mode field, then the “Contents Setting” function will be enabled. The data the component receives will be treated as the value data. You can set up the conditions (Up to 10 rules) and the corresponding strings to be displayed. The data the

component receives will be evaluated and when the condition is TRUE, the corresponding string will be shown.

Example: Input “1” in the left side data field of the first rule, select “<=“ in the left side operator, and input “ON” in the text field of the first rule. And then input “1” in the right side data field of the second rule, select “<“ in the right side operator, and input “OFF” in the text field of the second rule.

1. When the data the component receives is 2, this component will display ON.
2. When the data the component receives is 1, this component will display ON.
3. When the data the component receives is 0, this component will display OFF.

Model

1:	<input type="text" value="1"/>	<input "="" type="text" value="<="/>	<input type="text" value="[Value]"/>	<input type="text" value="None"/>	<input type="text" value="0"/>	Display	<input type="text" value="ON"/>
2:	<input type="text" value="0"/>	<input type="text" value="None"/>	<input type="text" value="[Value]"/>	<input type="text" value="<"/>	<input type="text" value="1"/>	Display	<input type="text" value="OFF"/>

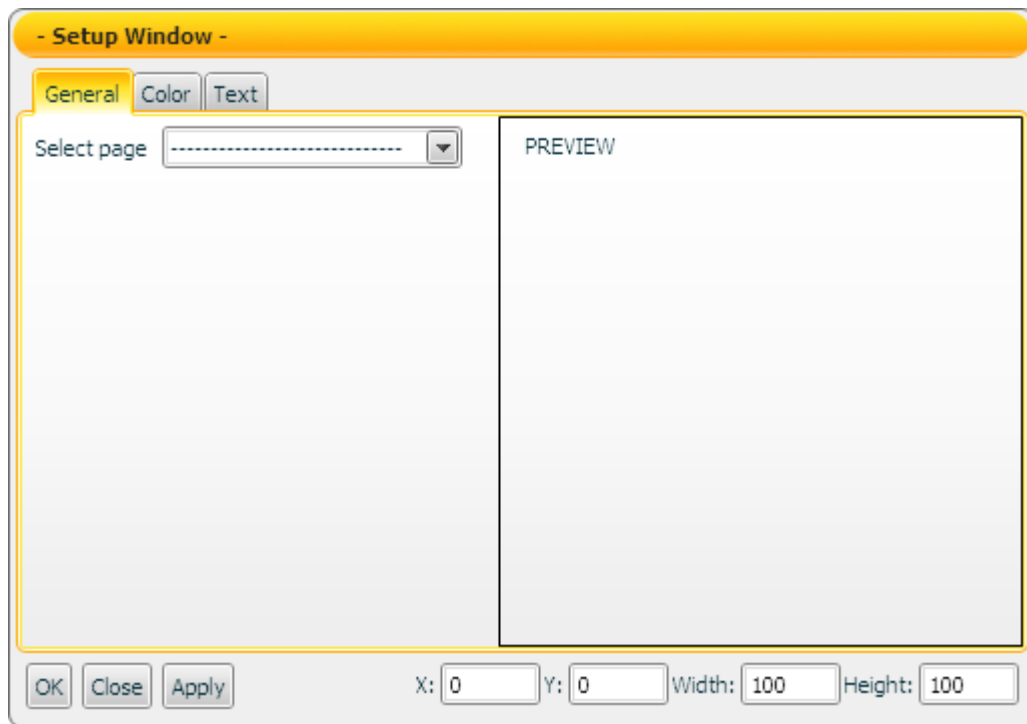
4.7 System Component



The System component is used to switch the screen page of the HMI project. You can click the component to switch to other screen pages depending on previous setting. The properties setting page of the System component is shown as below.

【General Setting】

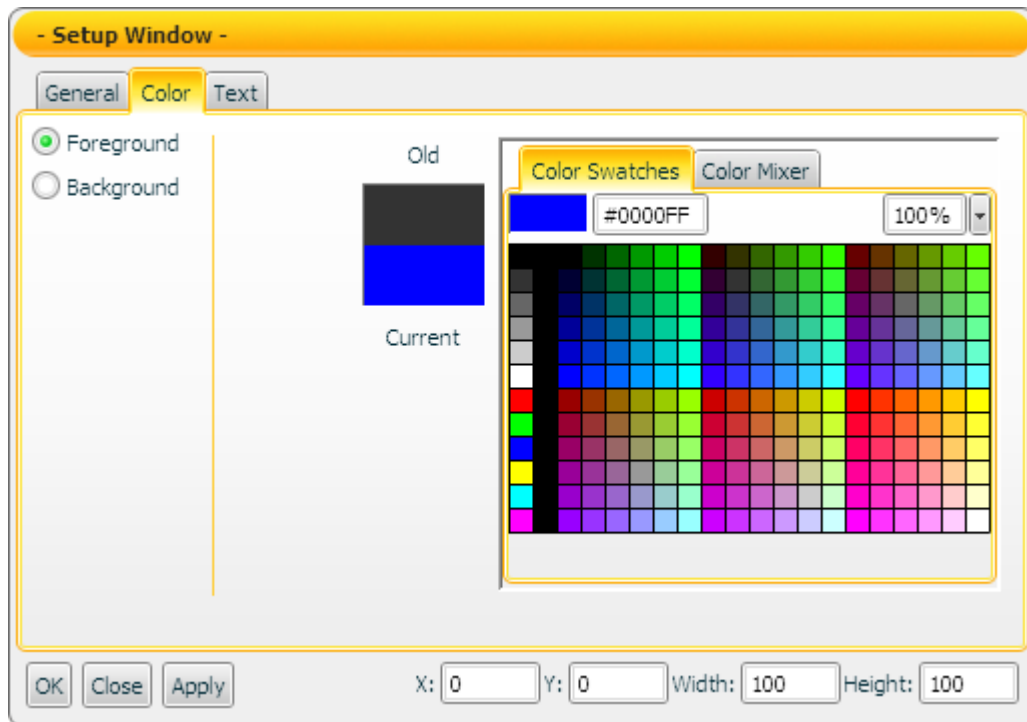
In “General Setting” tab, you can setup the properties of the System component as below. After finish the setting, please click “Apply” button.



Select page	Assign the link of the screen page for the component. Select the HMI screen page you want to link to from the dropdown list.
PREVIEW	After selecting the HMI screen page to link to, the PREVIEW area will show the image of the screen page.

【Color Setting】

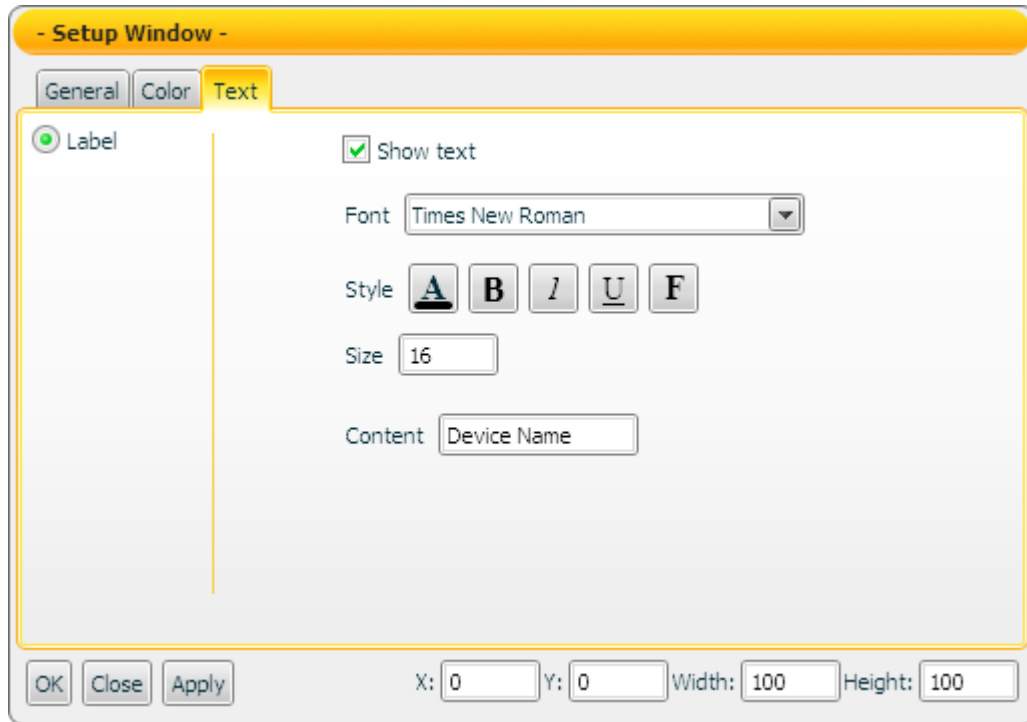
In “Color Setting” tab, you can setup the color of the System component as below. After finish the setting, please click “Apply” button.



Foreground	Select the color of the Foreground.
Background	Select the color of the Background.
Old	The color you select last time.
Current	The color you currently select. This color will be applied to the component after you click “Apply” button.
Color Swatches	Provide pre-defined color pattern for selection.
Color Mixer	Provide Color Mixer tool for color adjustment.

【Text Setting】

In “Text Setting” tab, you can setup the text properties of the System component as below. After finish the setting, please click “Apply” button.



Label	Set up the Label text properties of the component ◦
Show text	Enable the Check box to display the Label text.
Font	The Font setting for the text.
Style	<p>A : Select the color for the text</p> <p>B : Set the text in bold type</p> <p>U : Add the underline for the text</p> <p>I : Set the text in italic type</p> <p>F : Set the text with aureole effect</p>
Size	Assign the size for the text.
Content	Input the text content for Label.