Advanced Instructions

Preface

Inside Xinje TP series program tool, system's advanced instructions are included. These advanced instructions are open for those advanced users! This is equally the second development based on TP's current functions. This will make the user more easily to use more functions and more closely to the application! In the following chapters, we will mainly describe advanced instructions.

Basic part:

I. Familiar with advanced mode

System's defaulted program mode is common mode (primary mode)! To use advanced instructions, you should first open advanced functions!

Open the "TouchWin" installation path, generally it is: C:\Program Files\XINJE\TouchWin, find a configure file named "option.ini" in this folder, open is, add two sentences at the end of this file, then save and close!

Start the advanced functions:

[software]

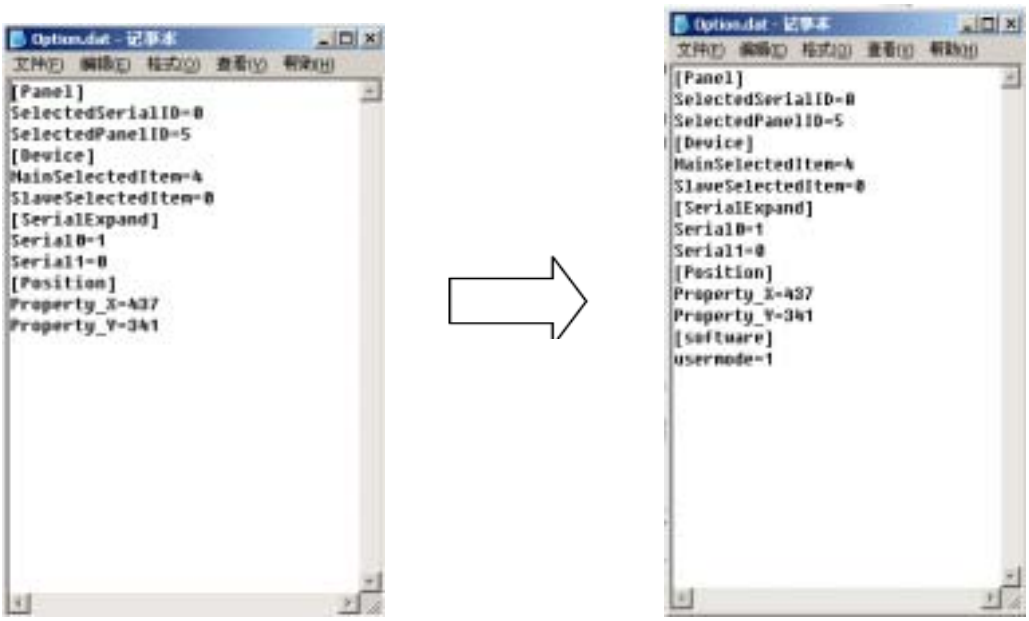
usermode=1

Close the advanced functions:

[software]

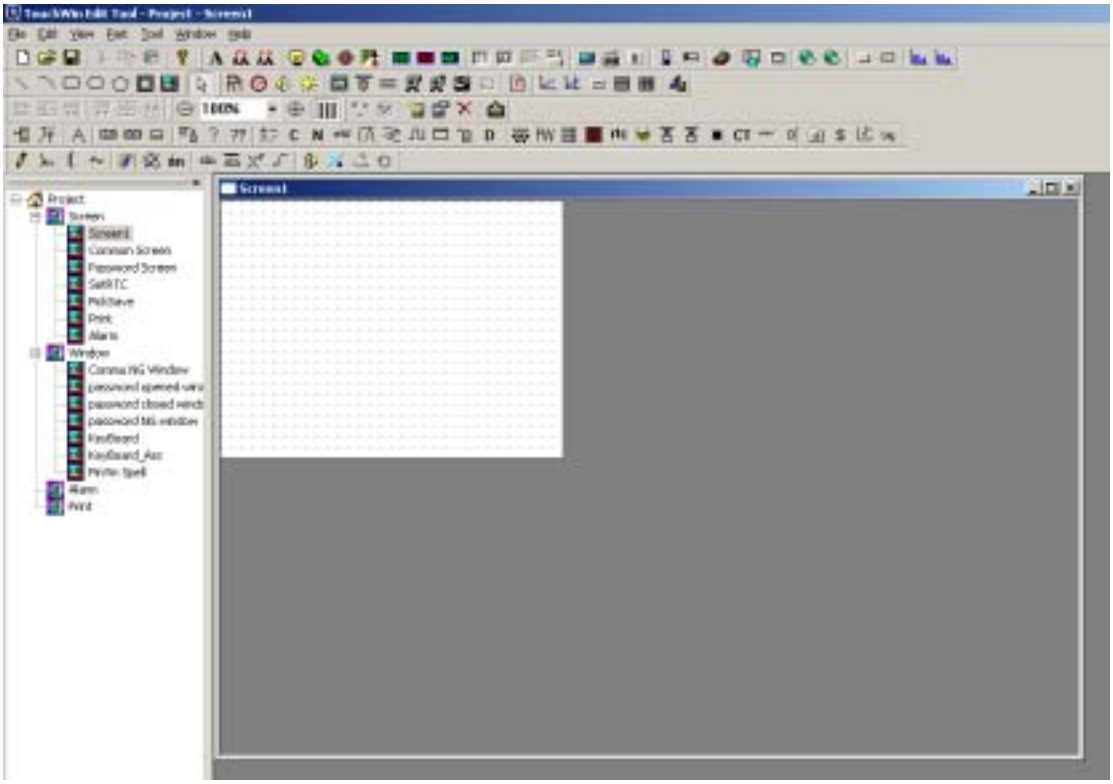
usermode=0

See the following chart:



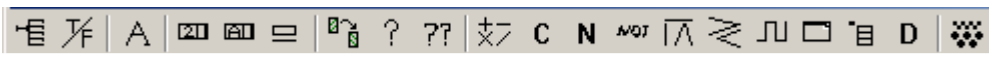
The following, we open the software. We could see the edit environment changed! Let's compare TouchWin software including advanced application and common TouchWin software!
Open TouchWin edit tool, new create a project. We could see in the software, "Screen" part there are already 5 basic screens: screen 1、Common Screen、Password Screen、SetRTU、PickSave、Print and Alarm. We take these screens as system screens. In the common program mode, we couldn't see these screens. In the "Window" part, also 5 basic windows are created: Commu NG Window、password opened window、password closed window、password NG window、KeyBoard and open password window. We treat these windows as system windows. Just as system screens, we can not see them in the common mode. On the base of them, carry on twice development on the base of the system. This will highly fulfill our actual requirement.

Program interface under the advanced mode:



Advanced applications not only show on this point, but also in the toolbar, there appears advanced draw toolbox. See the following chart:

Display number:



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



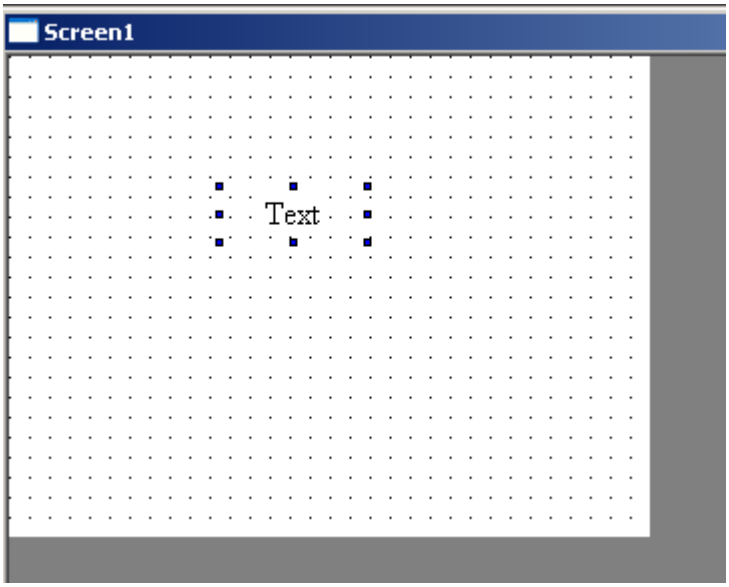
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35



36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

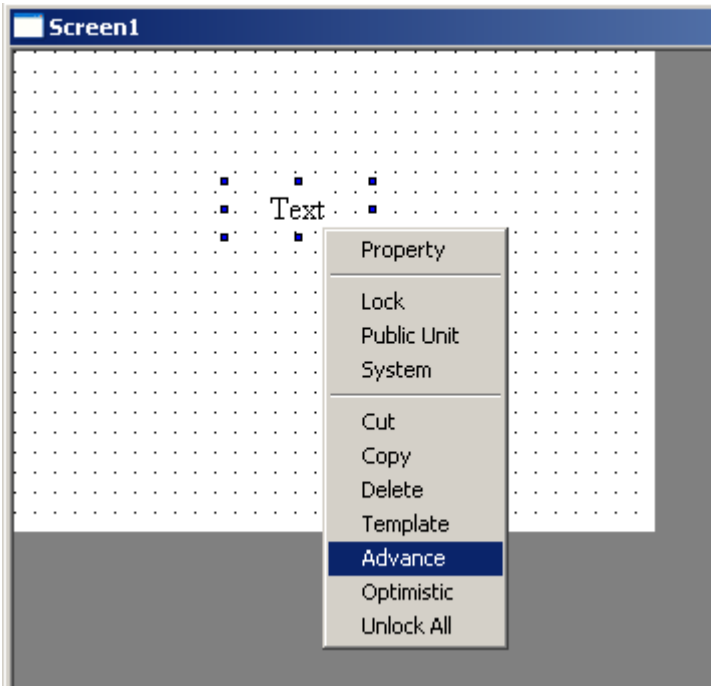
1. Switch
2. If
3. Base text unit
4. User input
5.
6. Input data
7. Screen jump
8. Password
9. Open password
10. +,-,*,/
11. Call
12. Nop
13. Line
14. And,Or,Not
15. Compare
16. Edge
17. Windows
18. Window position
19. Data
20. Convert
21. Range
22. Array
23. User input
24. RTC
25. Special Function
26. Read
27. Write
28. Block
29. Count
30. Pulse
31. LED
32. Print
33. Assign
34. Locate input
35.
36. Record
37. Pick
38. Location
39. Search
40. Trend Map
41. Struct
42. Spell
43. Trigonometric
44. Antitrigonometric
45. Pow Function
46.
47. Beep
48. LCD
49. Com Send
50. For

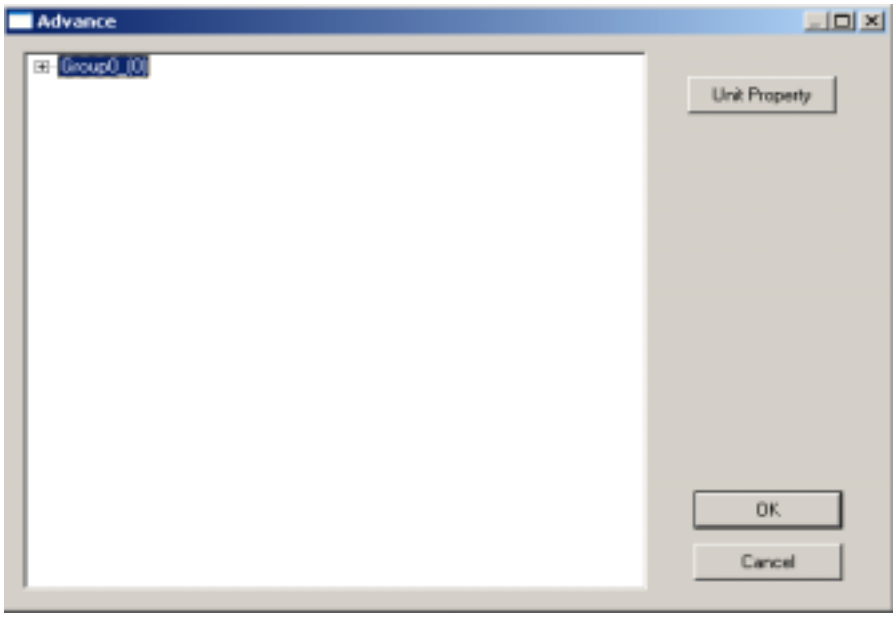
After knowing these devices, we could find that elements in components toolbox are all composed by these advanced draw units and preceding draw units. The following, we take one element such as “Text” to show its content.



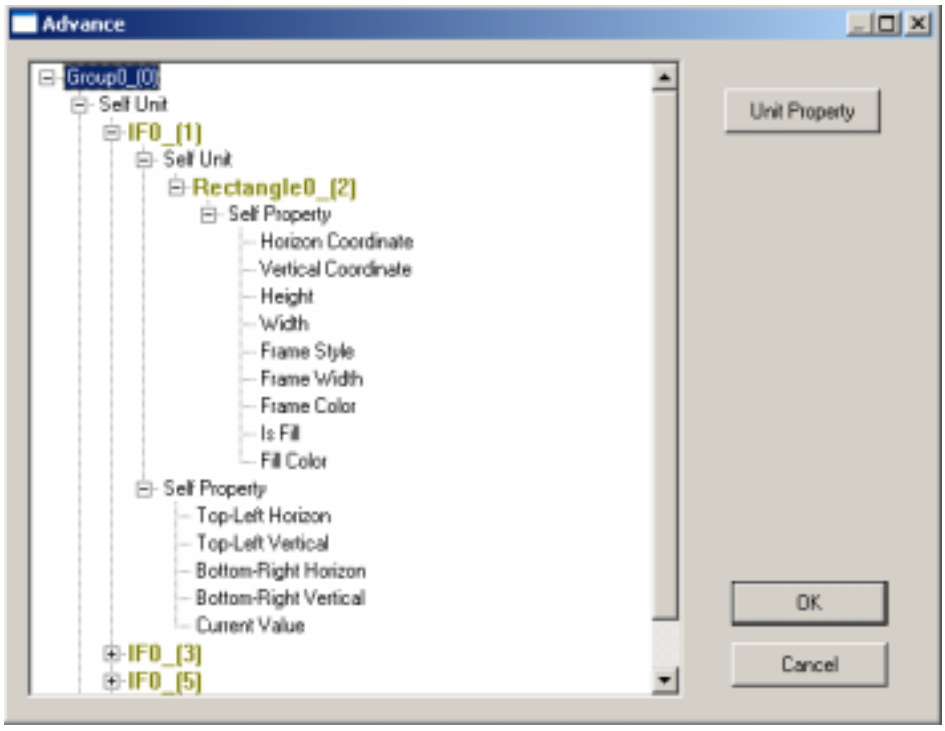
Place “Text” on the screen

Click right key, in the pop manual, choose “Advance”





Open each level of “group 0”, we could see that group 0 is constituted by self units and self property, self property means the basic units to compose this component.



In this example, we could see that “text” component is actually IF0, IF1, IF2 and display unit. If open other components, we could see nearly all components are composed by advanced units via a serial operation. Via these basic units, we could get all components we want. But this process is not the simple compose, the certain operation is necessary.

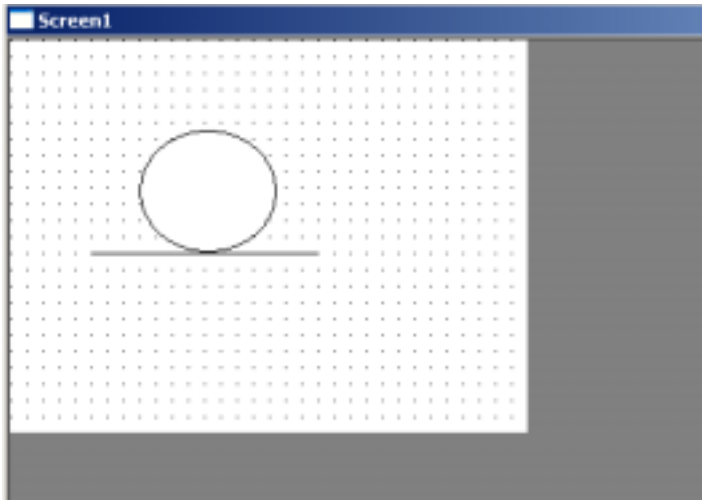
II、Operations under advanced mode

This including: property floating up, include and connection.

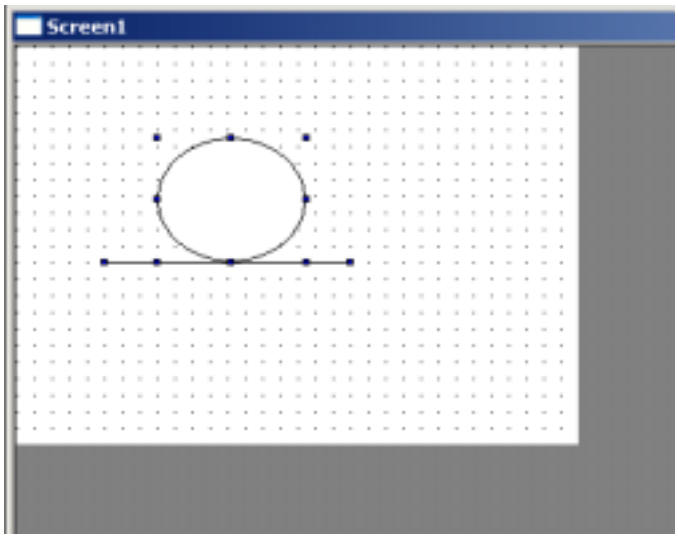
(1) Property floating up

Take a simple example, we need to draw a graph includes a circle and a line, also need the circle and the line always have the same color. According to the preceding method, first draw a circle and a line separately, the set color in their property to be the same! However, if we repeatedly draw this type of graph, apparently this method is too trivial. In the advanced application, these operations are not needed. Our method is: combine this two graphs together, upgrade the circle's color and the line's color as this integrator's color. Then we only need to set this integrator's property. The detailed steps are the following:

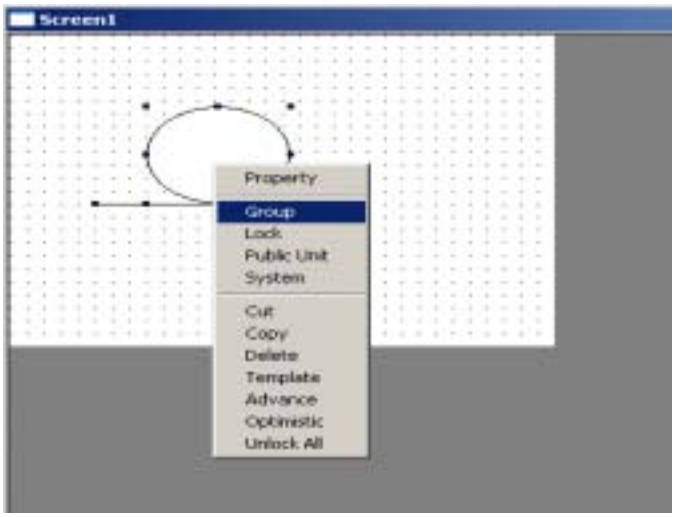
1. Draw a circle and a line in the screen.



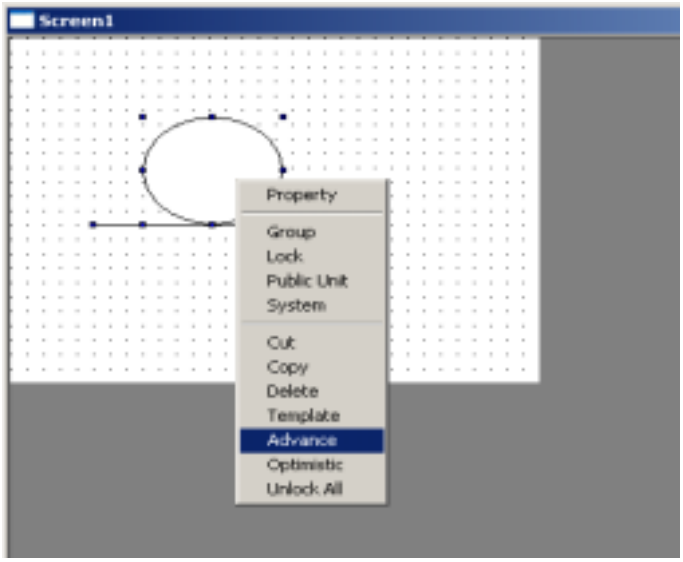
2. Choose both circle and line together



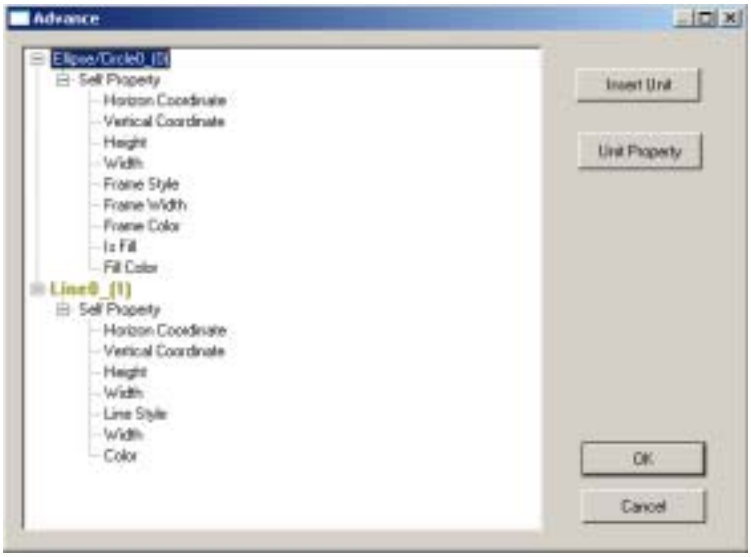
3. Click the right key, in the pop-out menu, click "Group", then the circle and the line become an integrator.



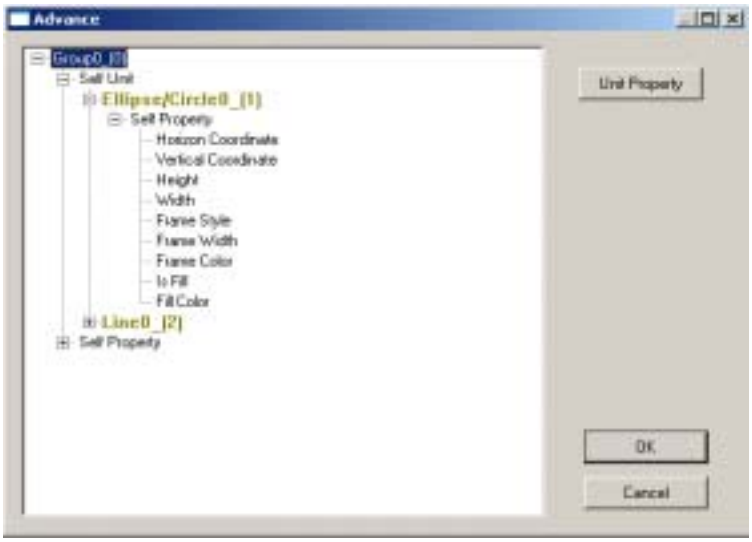
4. Choose this group, click the right key, in the pop-out menu, choose “Advance”.



5. There will pop-out a advanced window, we could see, group 0 includes an ellipse/circle and a line.

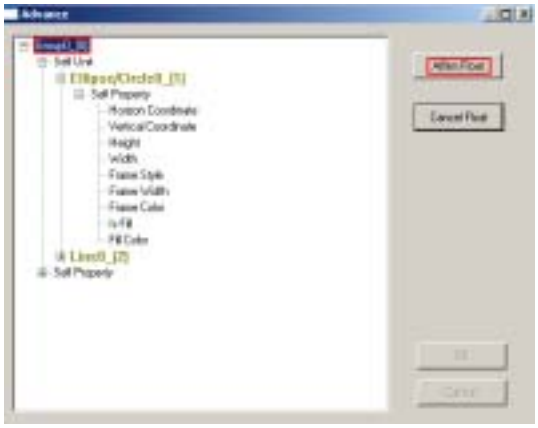


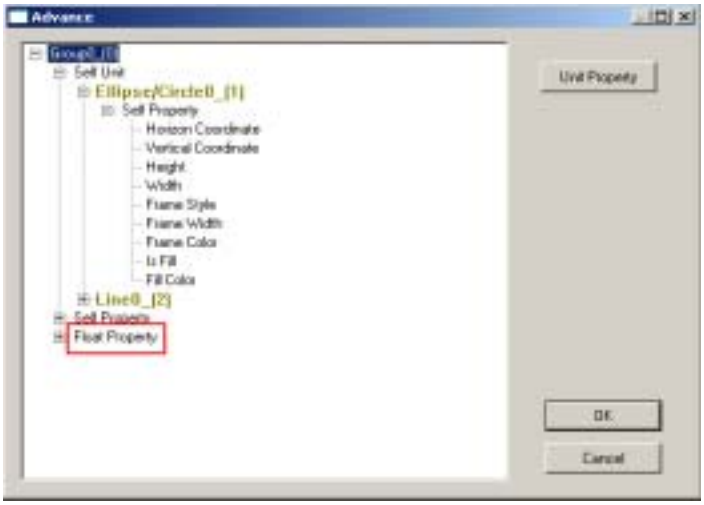
6. Further open Ellipse/Circle0 and Line0, we could see in Ellipse/Circle property there is “Frame Color”, In Line0, there is “Color”, these items are what we want as the same property.



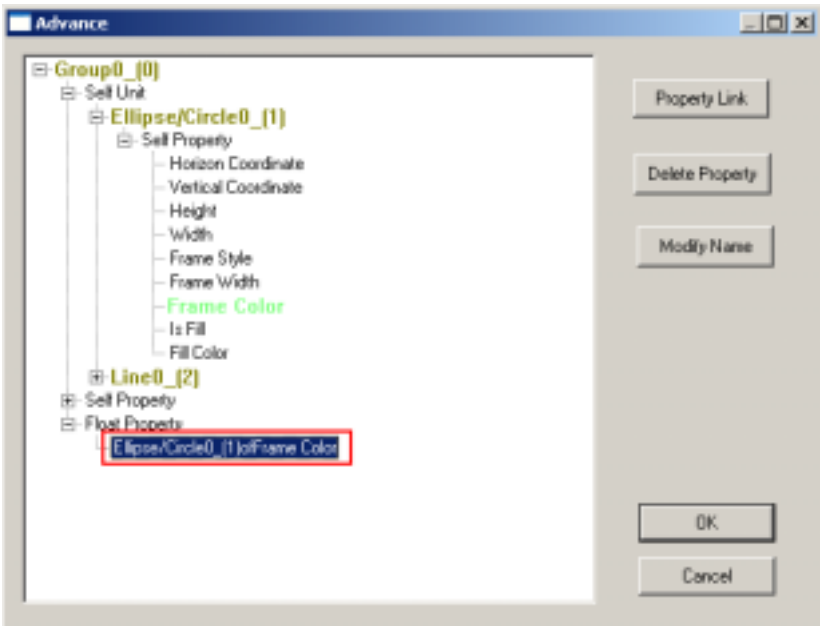
7. Click “Frame Color” to make it display in the opposite color→Click “Property Float” in the right→Click Group [0] (means the property float to group 1)→click “Affirm Float” in the right. Now you could see in Group 0, there are one extra “Float Property”.



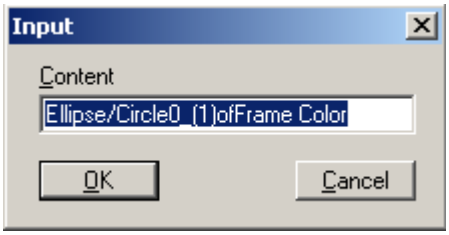




8. Open “Float Property” lower level menu, in which “Ellipse/Circle_(1) of Frame Color”. Click this item, its correspond Ellipse/Circuit 0 self property display with the different color. Also this name could be modified. Refer “Modify Name” in the left!



9. Click “Modify Name” button in the right, then there will come out an edit frame. In the “Content” item, you could modify the name.

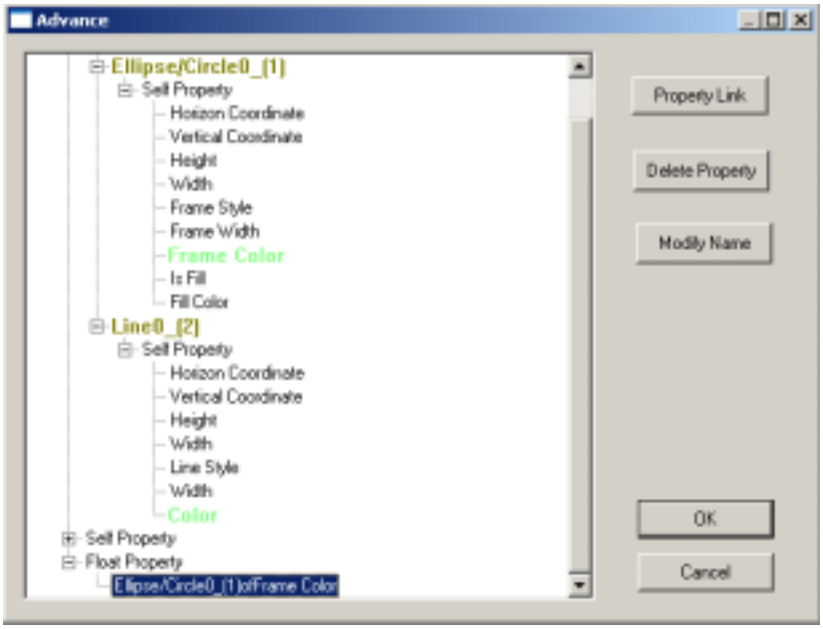


10. The following thing is to make the line’s property float, then combine with the “Ellipse/Circle_(1) of Frame Color”. The operation is the following:





Folder Line0's self property→choose "Color"→Click "Property Float"→then click "Ellipse/Circle_(1) of Frame Color" in "Float Property", then click "Affirm Float" in the right.

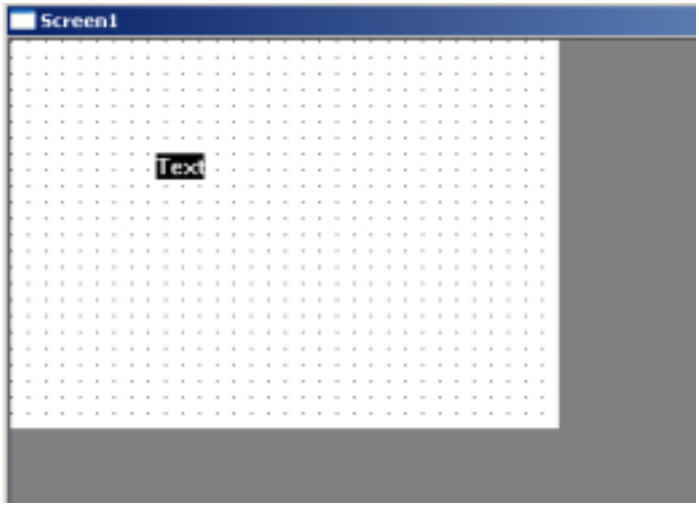


From the graph, we could see that "Ellipse/Circle0 of frame color" correspond both circle's frame color and line's frame color (When click "Ellipse/Circle0 of frame color" in the "Float Property", circle's frame color and line's color appear other color), this means frame and line's color have been upgraded to be the group's frame color.

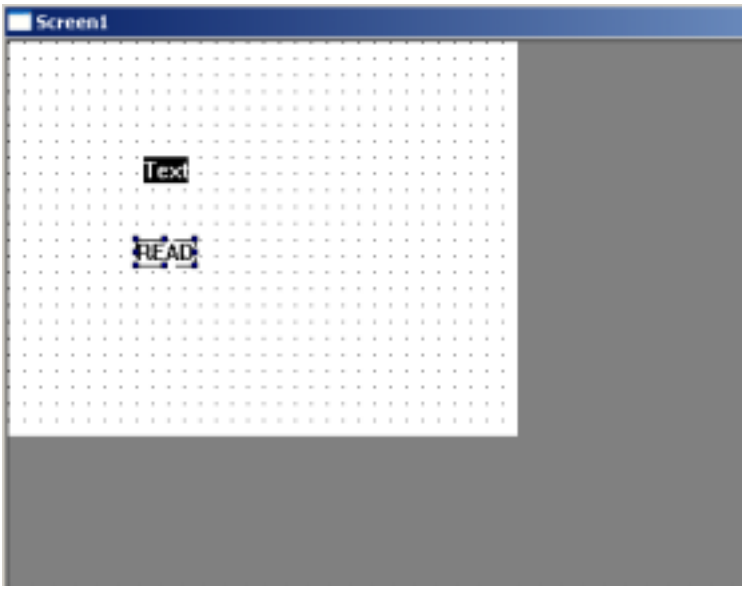
(2) Including:

A single display unit, its display content can only be the pre-set information. They couldn't dynamic change according to our requirement. We could use advanced instructions to define. Let's refer to the following examples:

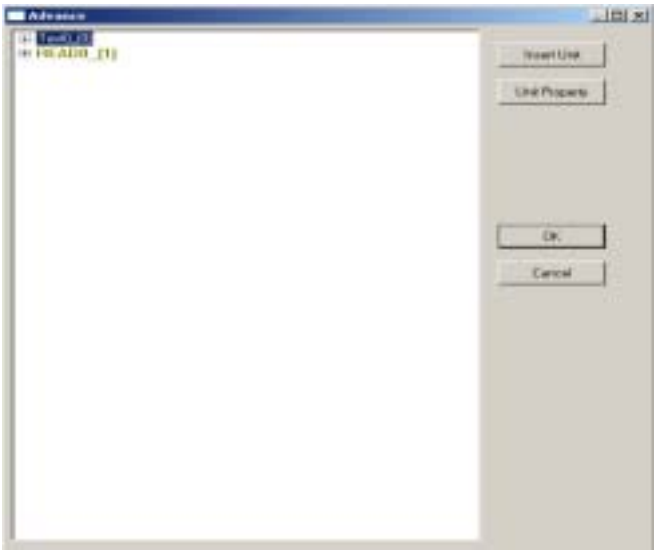
1、Click  in the advanced draw tool, place it in the screen.



2、Add a "Read"  unit in the screen, too. Since we want to display the read information via this screen.



3、Choose both these two units at the same time, click the right key, choose “Advance” in the pop-out menu, open “advance screen”.



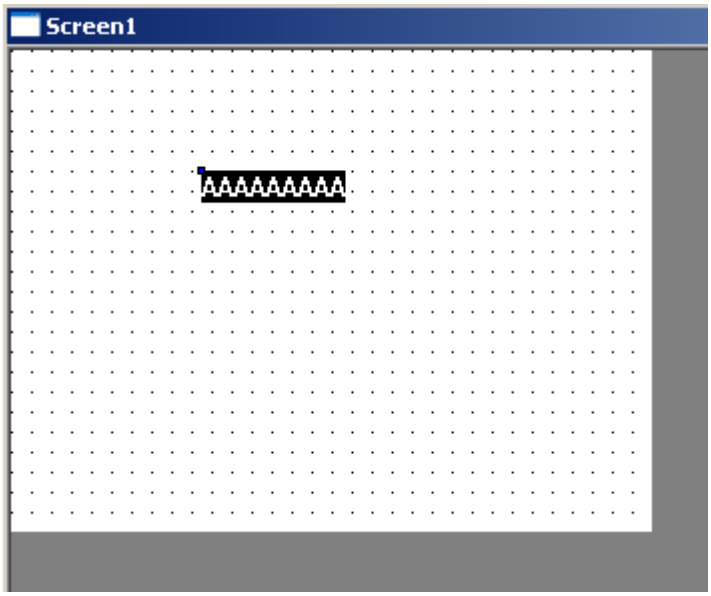
4、To make the display unit display the read information, then display unit should include “READ0”. Open TEXT0’s property, click “Display Content”, then click “Property Contain” in the right, then click the unit you want to include. Here, we click READ0 (pay attention to the button’s change). Then click “Affirm Contain”.





5、At last, click “OK” to realize contain operation.

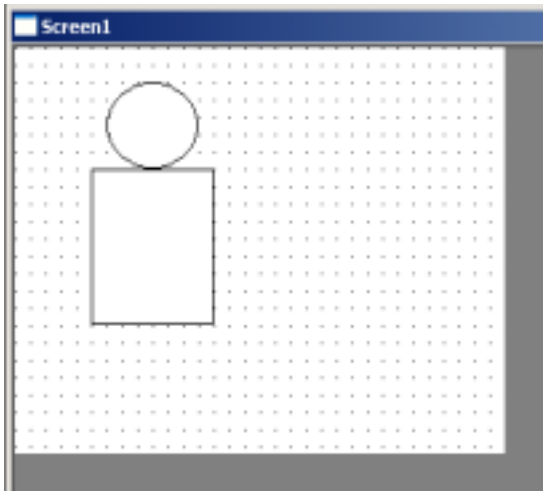
Now let’s see the screen’s change, refer to the following graph, that is, the current read data is AAAAAAAAA.



(3). Link

See the following graph, in the screen there is a circle and a rectangle, if we want the rectangle’s color changing with the circle’s color, then relationship is necessary. Relationship mainly means the relation of property. Here our operation is to connect the rectangle’s color property and circle’s color property. The detailed operation is:

1. Add a circle and a rectangle, then combine the circle and the rectangle together.
2. Click the “Advance”, then open it one by one





3. Float the circle's color and rectangle's frame color. First choose the ellipse/circle's color, clock "Property Float" key in the right, then click "Group 0", then "Affirm Float". By then ellipse/circle's color realize float. Next, set the rectangle frame color to float, the operation is the same with ellipse/circle.



4. Set the relationship between the two items in "Float Property". Click the item you want to connect (Ellipse/circle 0 of float color)→click "Property Link" in the right→click the item to connect (Rectangle 0 of float color)→click "Affirm Link" in the right.



5. Click “OK” key to finish.

By now we introduced property float, include, Link and their relative operation. In the actual operation, we could note to use property float and link, combine operation is necessary, while “Include” don’t need combine operation. At the same time, please note that you couldn’t see the effect of some operations, but if you download to the touch screen, you could see the effect.

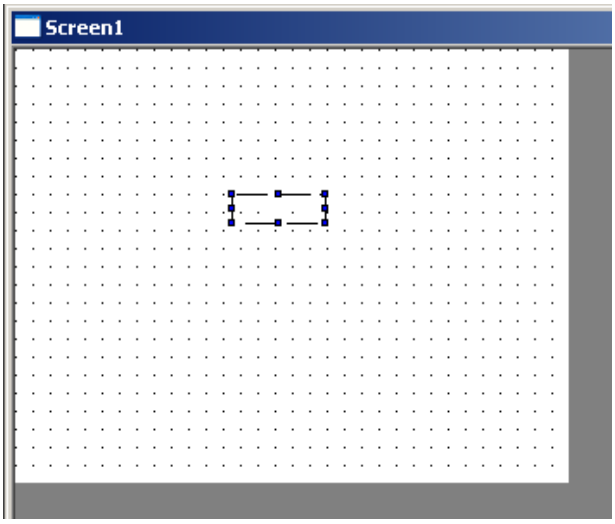
III、Using advanced units

The following, we will describe advanced units in details.

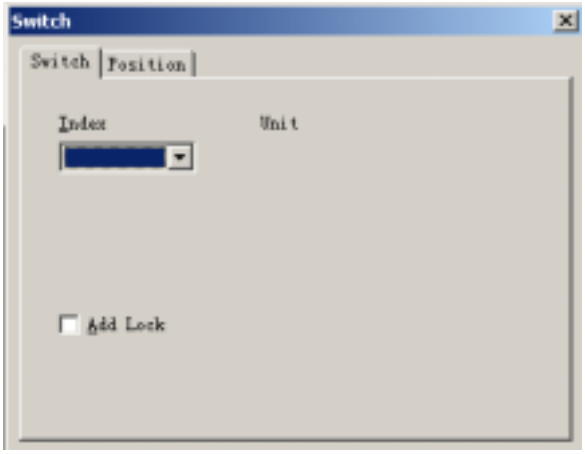
(1)  Switch

It equals switch (case) sentence in out program language

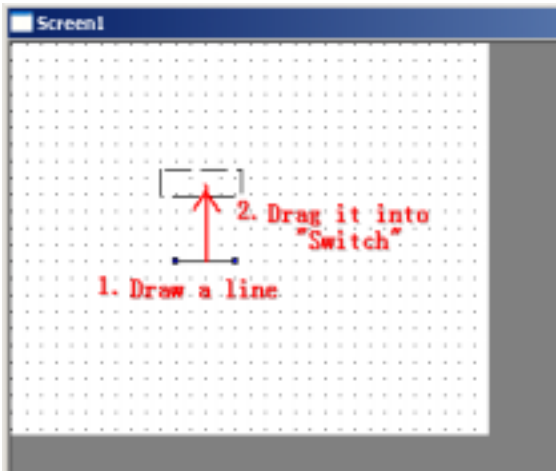
Add this unit in the screen

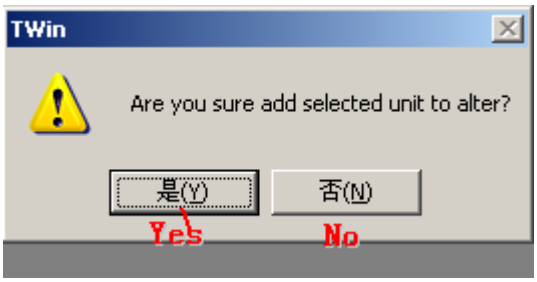


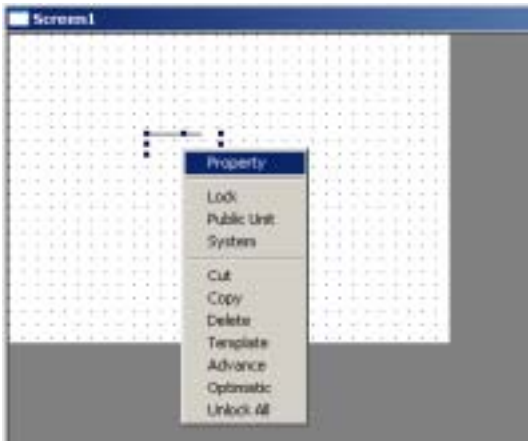
Click the right key to open its property

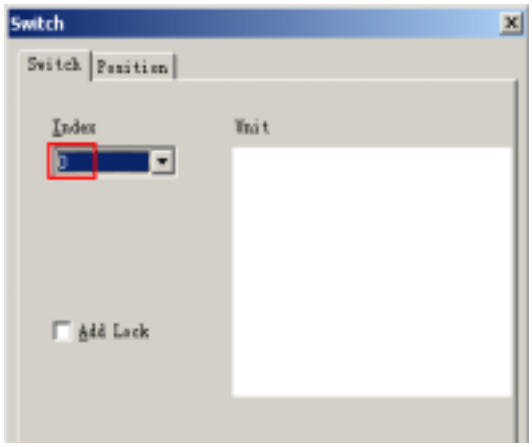


In the “Switch” option, it includes “Index”, number 0 means the current No.0 unit is been chosen. Here “unit” means the element which has been added into “Switch”. For example, we could add a line, an arc or a circle. The detailed method is: Draw a screen on the other place of the screen, then drag it into “Switch” unit, a dialog box will pop out. Click “Yes” to confirm the operation!
Refer to the following chart:







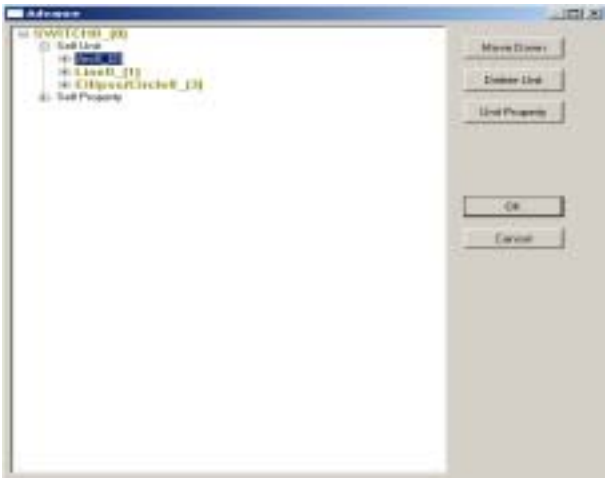


Now add an arc, a circle with the same method. Now click your right key and choose “Advance”, we could see in “Switch” unit, there are three elements. Also you change their order via “Move

Up", "Move Down" button in the right!







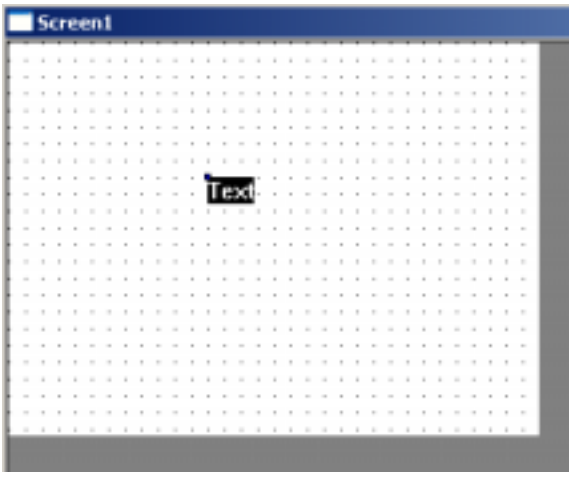
Here in the "Switch" property dialog box, if you choose 0, it means the chosen element in the screen is the arc. If choose 1, it means the chosen element is the line, if choose 2, it means the chosen element is the ellipse/circle. About "Position", it's similar with the primary using method.

2.  If unit

"IF" unit actually is a specialty of "Switch" unit, "Switch" could contain many branches, while "IF" unit could only contain two switches.

3.  Basic Test Unit (For display)

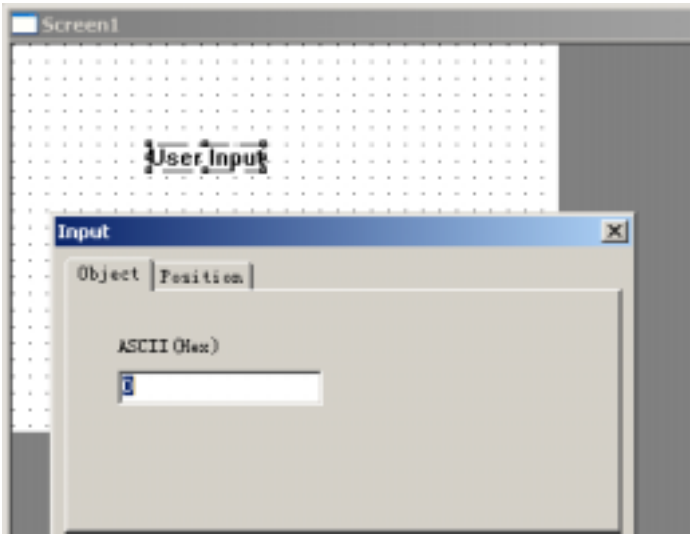
Basic Test Unit is used to display text or data, it's a very important unit in the touch screen software.



Click your right key to open the property dialog box.

4. User input

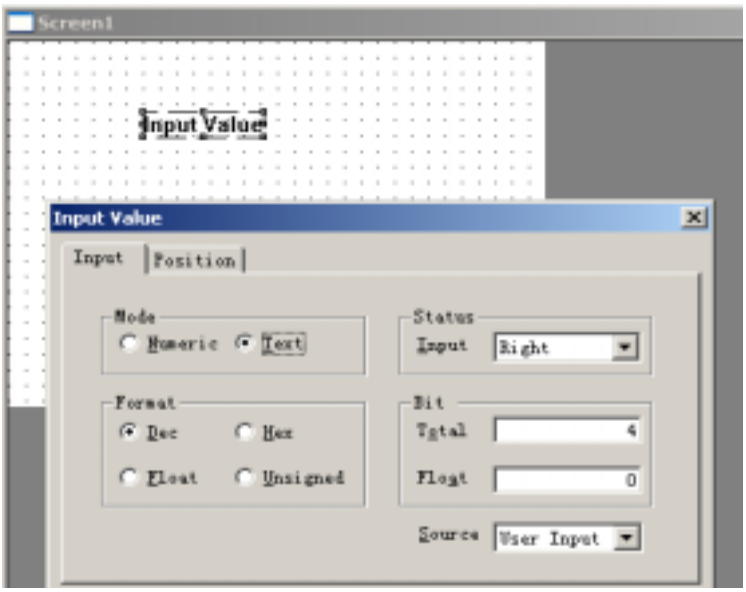
Place in your screen, open it's property dialog box with your mouse.



User Input usually use with button unit, set the value of which data the user input via setting of "Input ASCII"

5. Input Data

Place a "Input Data" unit in the screen, open its property dialog box.



For the other icons, you could check yourself!