

## Foreword :

The whole system's advanced instructions are described for two parts. In the preceding chapter, we introduced the basic part, not refer to the application. The purpose is to make the user have an initial understanding. In this chapter, we mainly introduce how to use them. Also we give some examples for your reference.

# Application Part

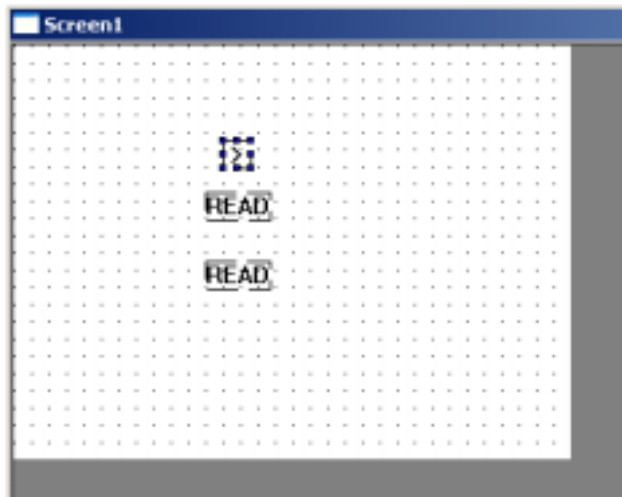
## I : Case solution

E.g.1 . Input two data, compare them, output the larger one (Take TP560-L as the example)

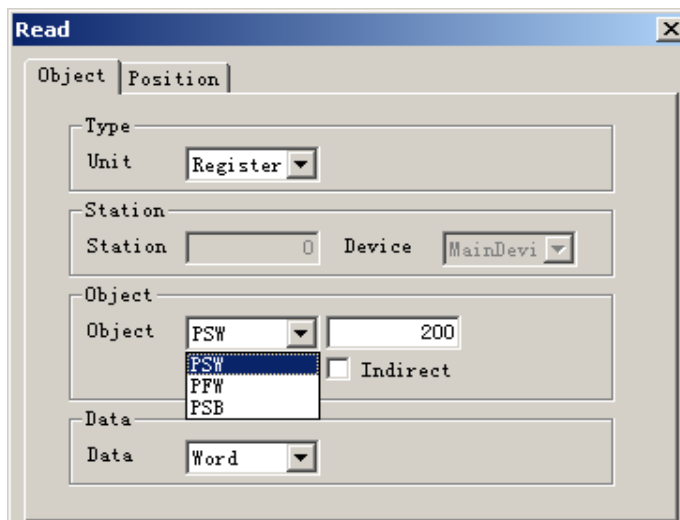
**Units that should be used :**

**One “Text” unit, four “Read” units, one “Compare” unit, one “IF” unit, two “Data Input” units, one “Data Display” unit.**

- 1、 Create a new project. First place two “Read” units and a “Compare” unit in the screen.

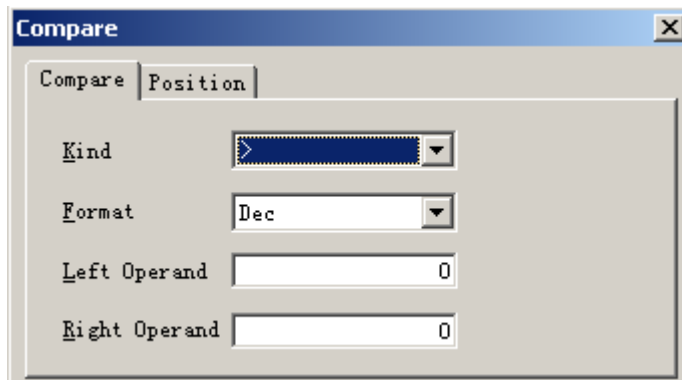


- 2、 Modify the property of first “Read”, see the following chart. Here the modify type is register, object is PSW200. Modify the second “Read”, make it point PSW301.

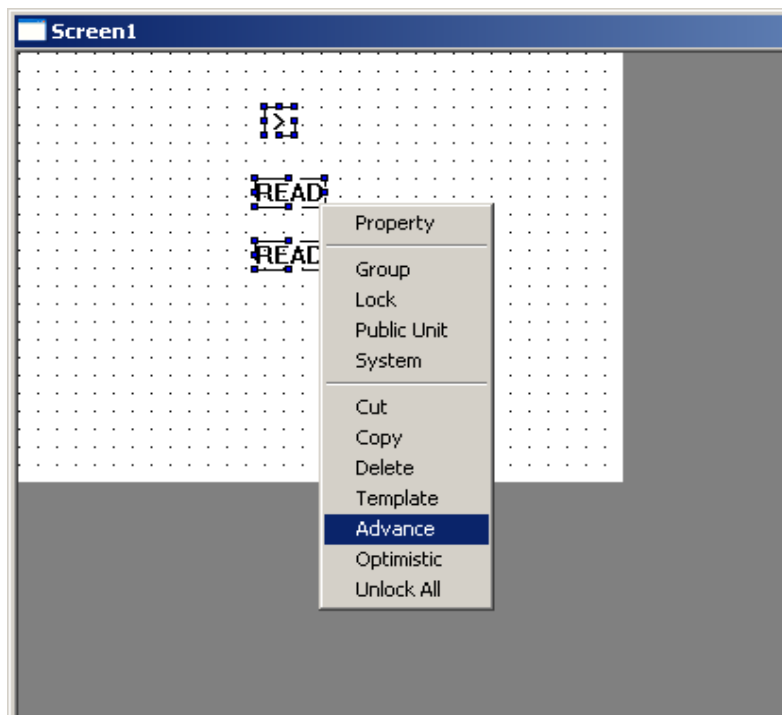


- 3、 Double click “Compare” element, open it's property, default the compare type as “(>)). It

means the left operand is larger than the second operand or not.



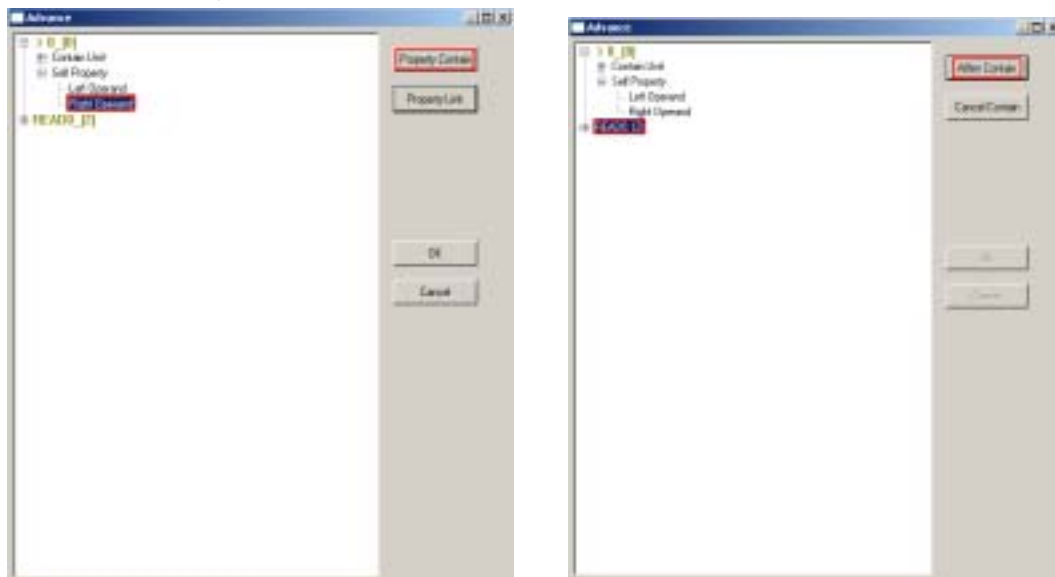
4、 Choose the three unit together, click the right key and choose “Advance”.



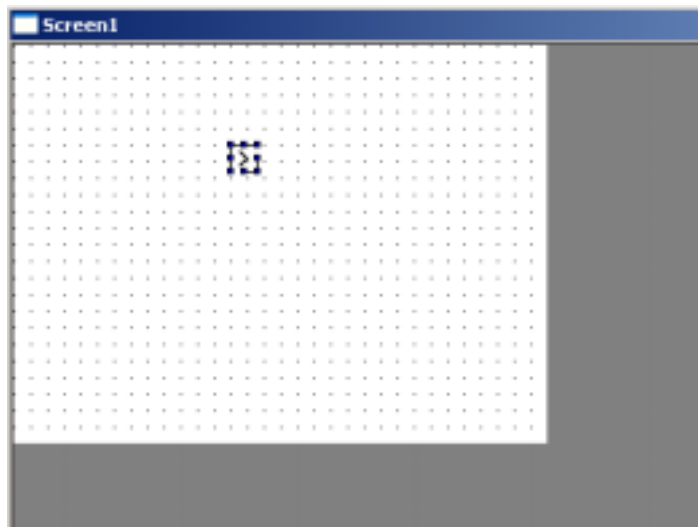
5、 Open the advanced property, open compare unit's self property (Left operand and right operand appear). Choose left operand.



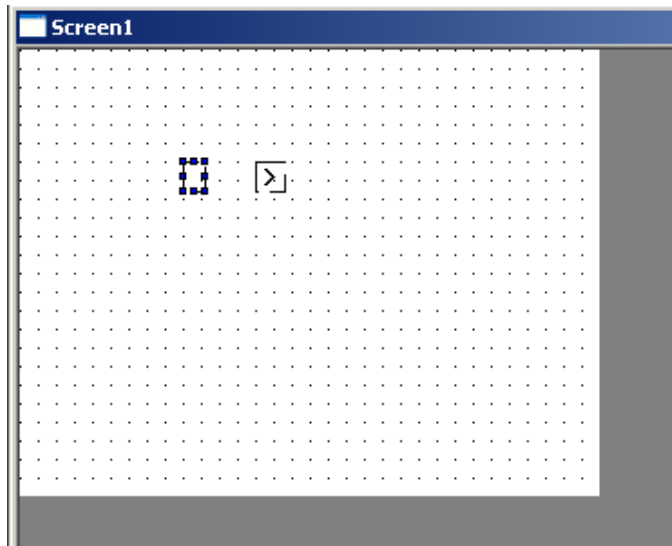
- 6、 Click “Property contain” in the right, then choose READ0\_1], pay attention to the changing of buttons in the right.



- 7、 Click “ Affirm Contain”, which means compare unit’s left operand corresponds with the first “READ” unit’s register. Do the same operation with the right operand, make it point to the second “READ” unit’s correspond register. Click OK to finish the new screen:



8、 In the screen, add “IF” unit.



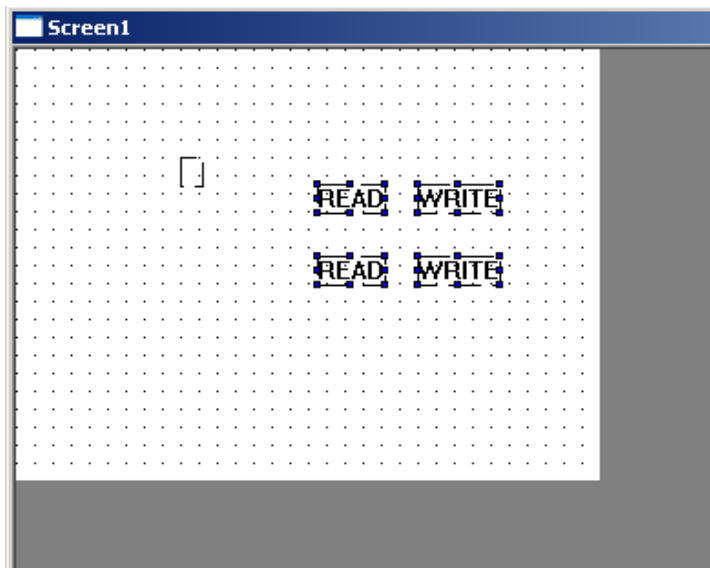
9、 Choose IF and “Compare” units together, open the advance property, see the following chart.  
 There is a “Current Value” item in IF unit IF0\_(3), this item is the judge condition of IF0\_(3).  
 When true (value is 0), false (value is 1).



10、 Choose “Current Value”, click “Property Contain” in the right. Choose the compare unit, click “Affirm Contain”, see the following chart. (here in IF unit IF0\_(3) there is an extra “Contain Unit”), after finish, click “OK”.



11、 In the screen, add two “Write” and two “Read” units.



12、 Modify two “Write” units’ property, the type is register, object is PSW302, see the following chart.

 A screenshot of a dialog box titled "Write". It has two tabs: "Object" and "Position". The "Object" tab is selected. The dialog contains the following fields:
 

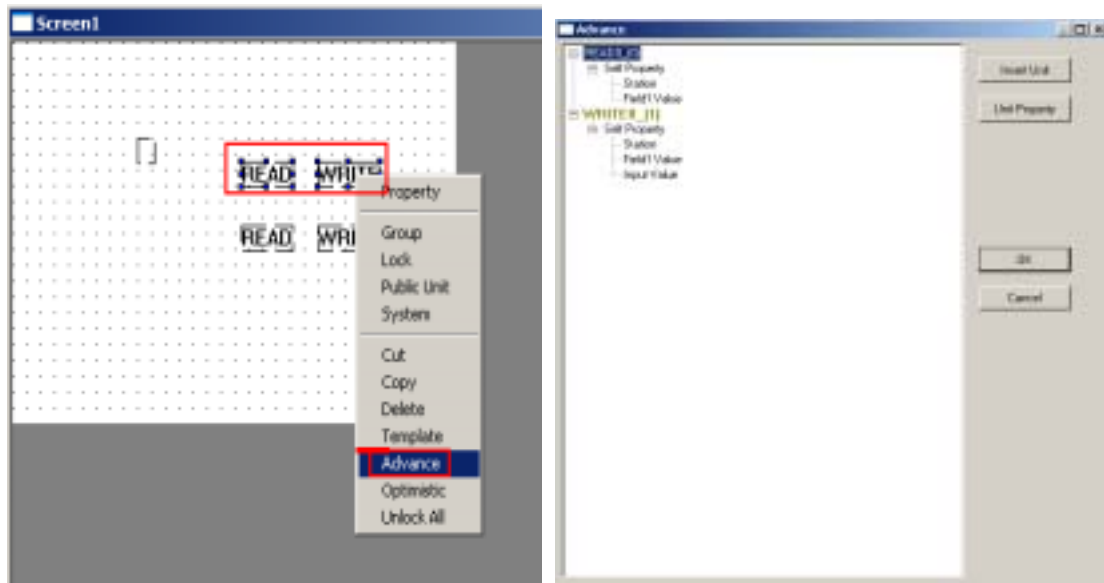
- Type:** A dropdown menu with "Unit" selected.
- Station:** A text box containing "0".
- Device:** A dropdown menu with "MainDevi" selected.
- Object:** A dropdown menu with "PSW" selected, followed by a text box containing "302".
- Indirect:** A checkbox that is currently unchecked.
- Data:** A dropdown menu with "Word" selected.
- Set Data:** A text box.

13、 Modify the two “READ” units’ property, point separately to PSW300 and PSW301

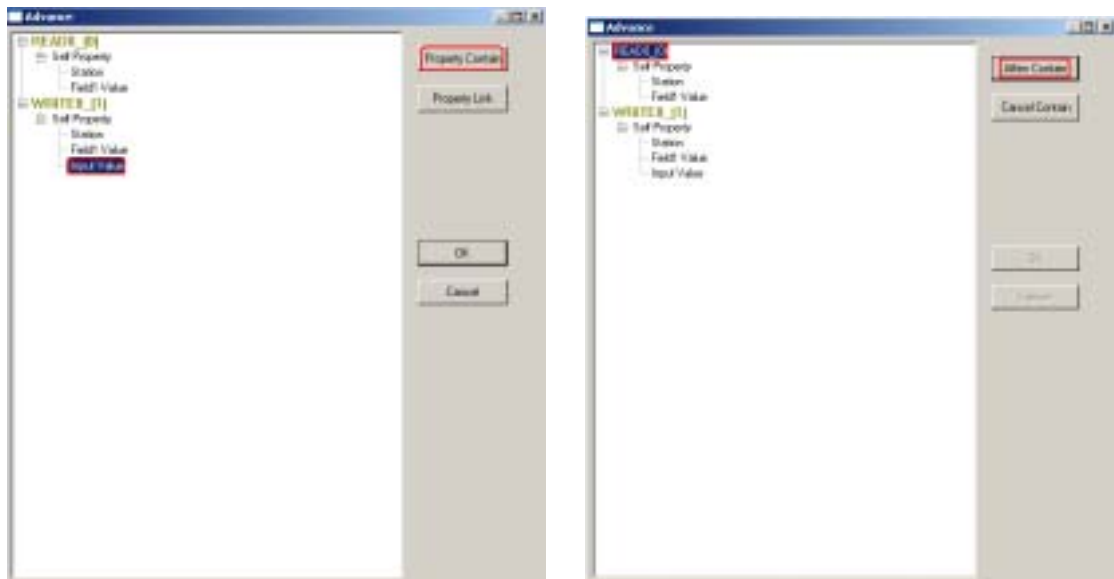
 A screenshot of a dialog box titled "Read". It has two tabs: "Object" and "Position". The "Object" tab is selected. The dialog contains the following fields:
 

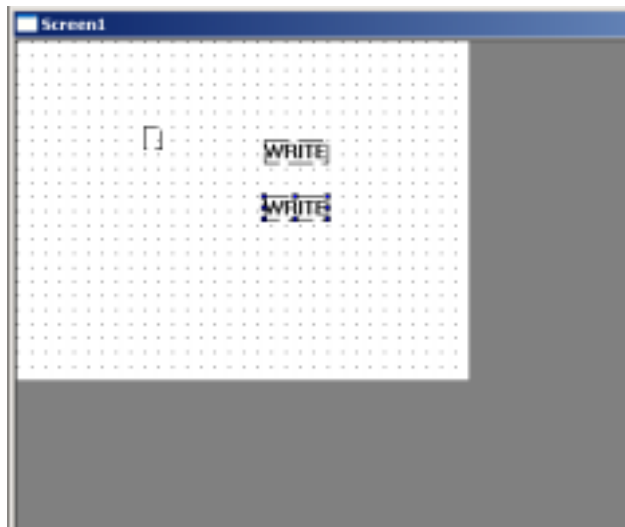
- Type:** A dropdown menu with "Unit" selected.
- Station:** A text box containing "0".
- Device:** A dropdown menu with "MainDevi" selected.
- Object:** A dropdown menu with "PSW" selected, followed by a text box containing "300".
- Indirect:** A checkbox that is currently unchecked.
- Data:** A dropdown menu with "Word" selected.

14、 Choose the preceding “READ” and “Write” units, open the advance property.

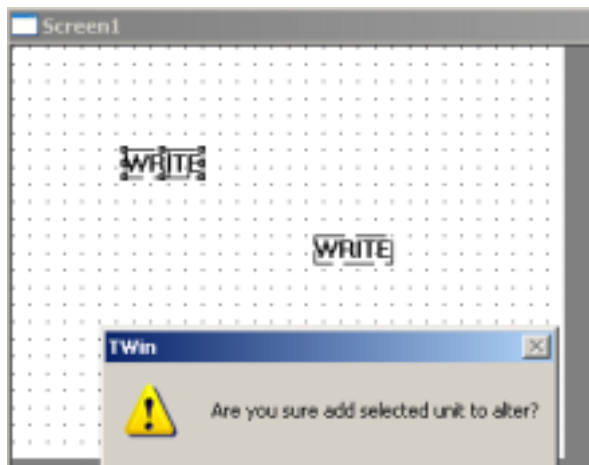


15、Choose “Write” unit WRITE0\_(0): “Input Value”→click “Property Contain”→choose READ0\_0→ click “Affirm Contain”—OK. The action is to write value in PSW300 to PSW302  
Do the same operation with the left READ unit and Write unit, the action is write the value in PSW301 to PSW302



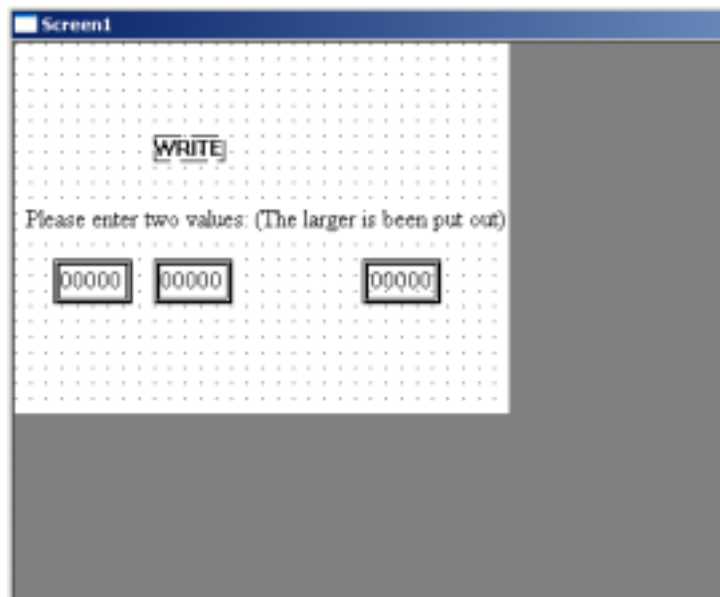


16、 Drag the two “Write” units into IF unit, in the pop out dialog box, click “OK”.



17、 Now we finish the interior process of compare operation. Now let’s make the alternate interface. Add a “Text” unit in the screen, two “Digital Input” units, one “Digital Display” unit. Modify the text display content as “Please enter two values: (The larger is been put out)”, modify two “Digital Display” units, make their object separately point to PSW300 and PSW301, modify “Digital Display” unit’s object to point PSW302. See the following chart:





- 18、 Now please download to the touch screen, run in the touch screen. Input two values, compare them, the larger one will be output.

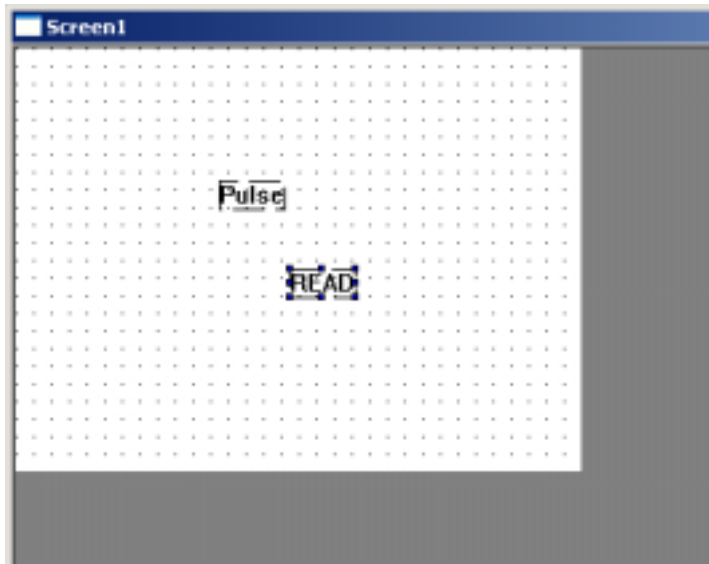
E.g.2 . Clock simulate. (Take TP560-L as the example)

Note : As the example, we here only simulate the running condition of time—Second. If you have the interests, you could expand the stopwatch's function, clock function etc.

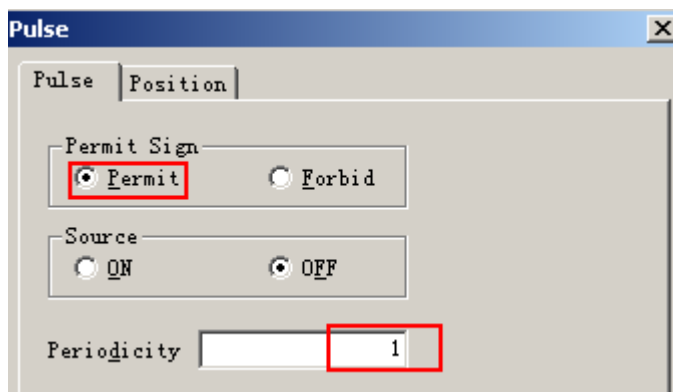
**Units to use:**

**One “Text”, one pulse unit, three read unit, one arithmetic unit, one compare unit, two IF units, one digital display unit.**

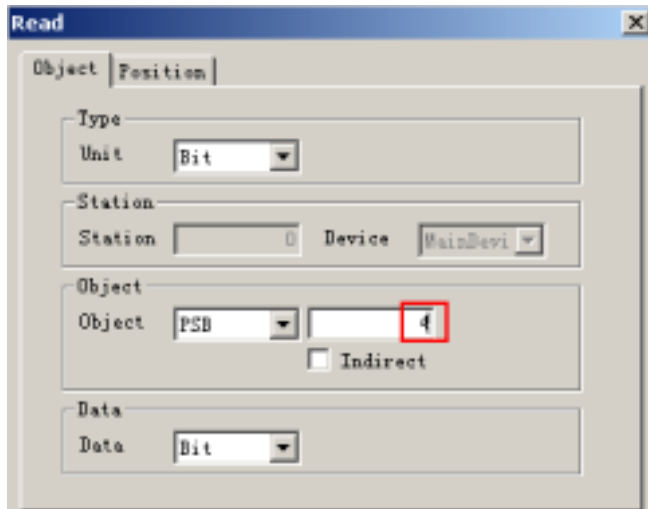
1、 Create a new project. First place a pulse unit and a read unit in the screen, see the following chart:



2、 Open “Pulse” property, modify the permit sign as “Permit”, the period is 1, see the following chart:



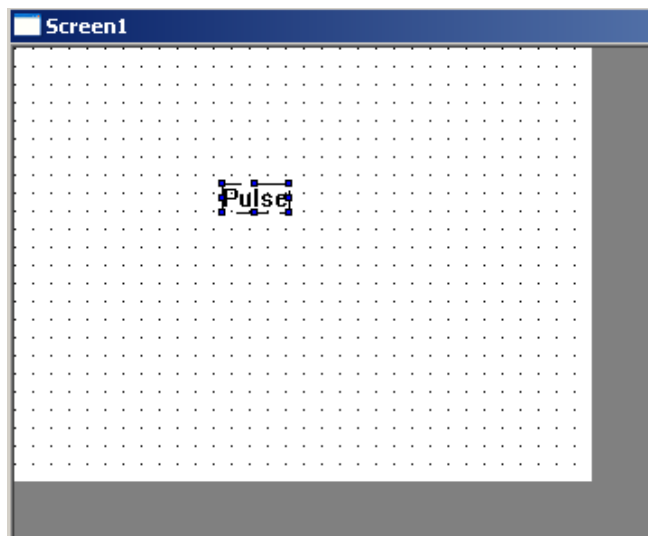
3、 Double click to open “Read” unit's property, modify the type as “Bit”, the object bit is PSB4.



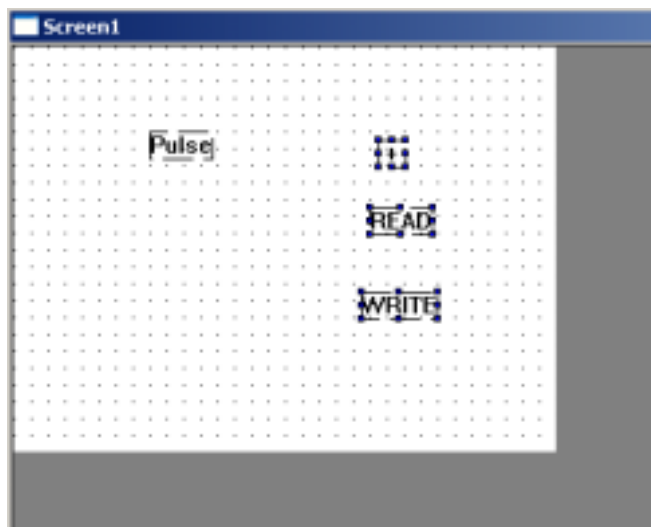
4、 Choose two units, open the advanced property, see the following chart:

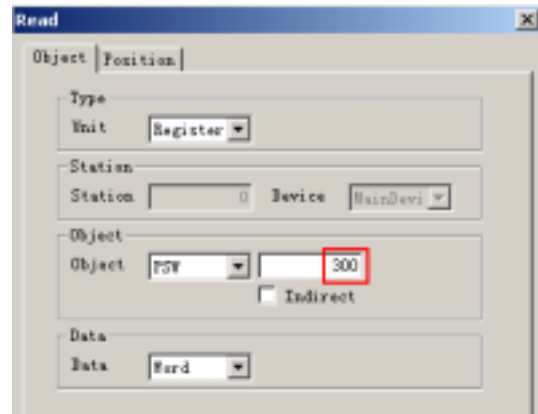
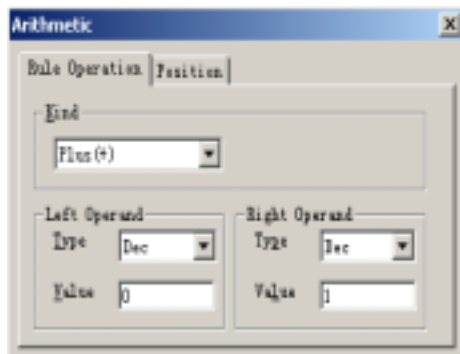


6、 Choose pulse unit--Pulse0\_0) “Source Signal” item→ click “Property Contain”→choose READ unit→click “Affirm Contain”→OK. See the following charts:



7、 Add a “Arithmetic” unit, a “Read” unit, a “Write” unit in the screen. Modify arithmetic operation as “+”, the right operand as 1, modify “read” property to make the object point PSW300, modify “write” property to make the object point PSW300.



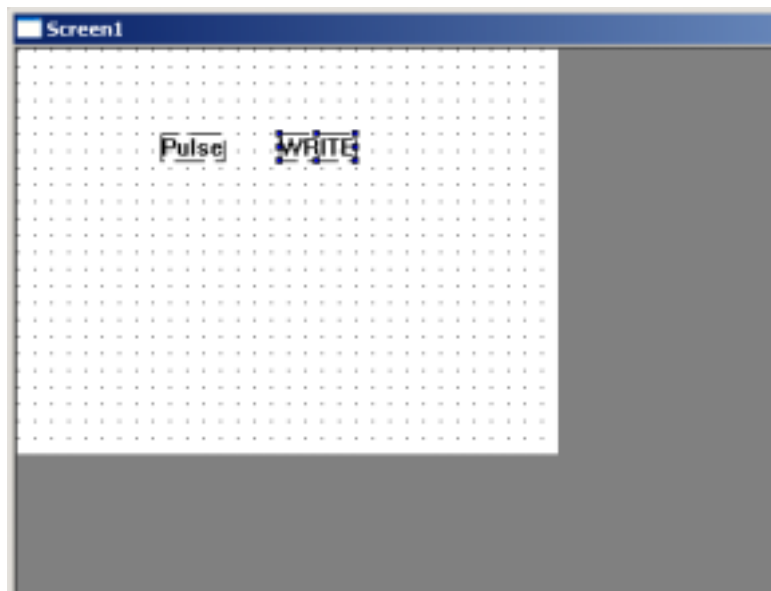
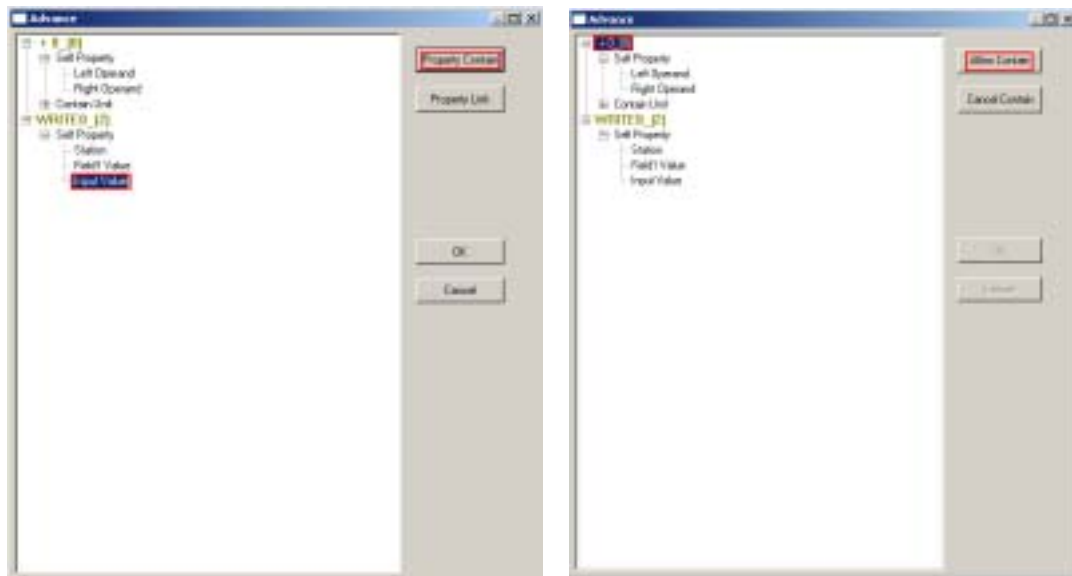


8、 Choose these three units, open the advance property. Make arithmetic operation unit's left operand contain "read" unit.

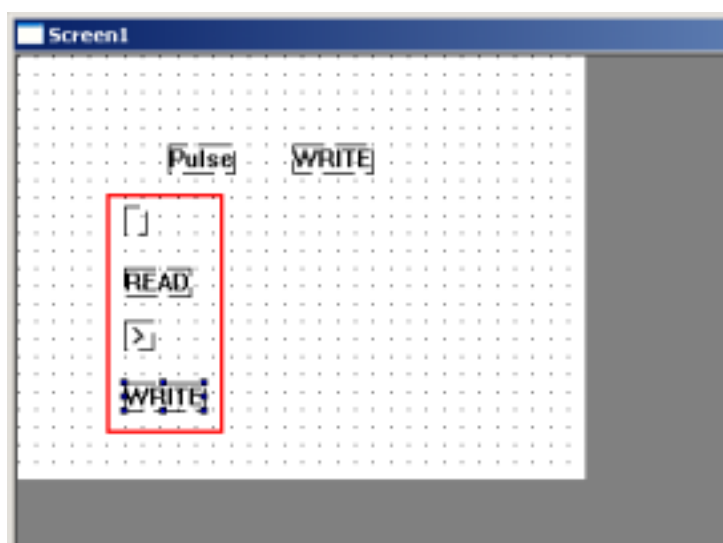
9、 Choose "Input Value", make it contain arithmetic operation unit.

**See the following five graphs for the preceding two steps**

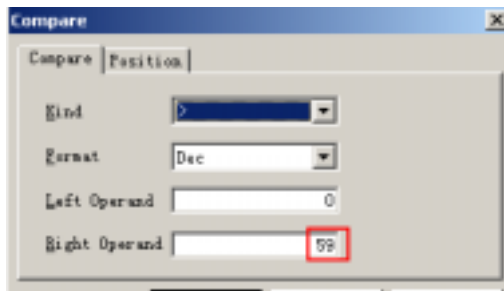




10、 Add a “IF” unit, a “READ” unit, a “Write” unit, a compare unit. See the following chart:

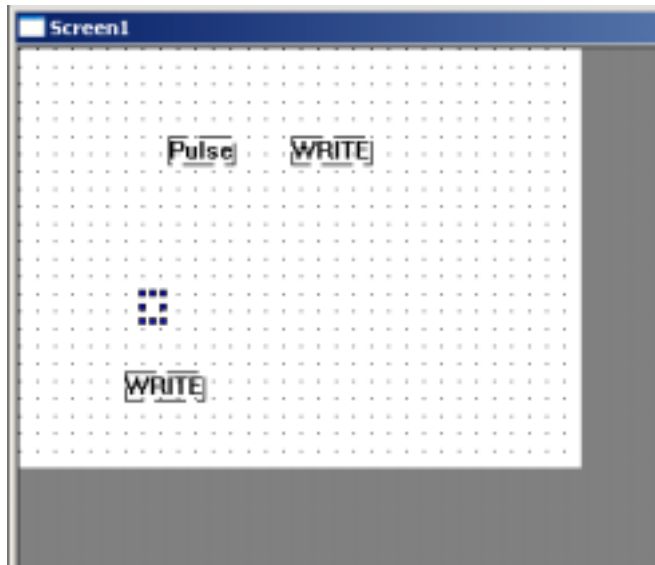


11、Modify “READ” unit’s property, its object is PSW300, modify “Write” unit’s property, its object is PSW300, Set data as 0. Modify compare unit’s right operand as 59. Choose the four units, open its advanced property.

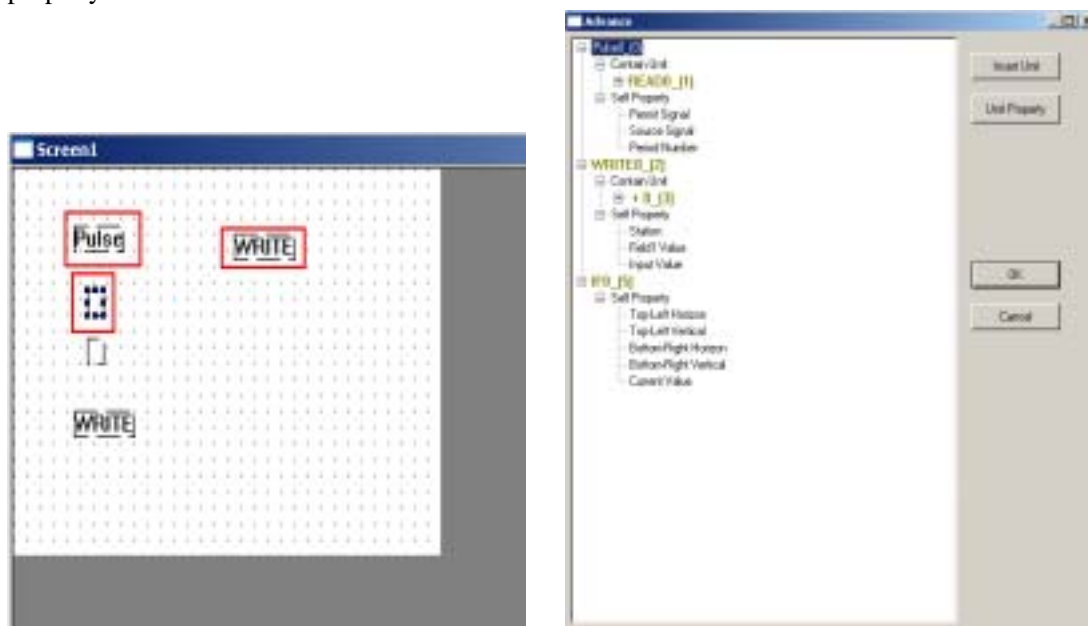


12、Open compare unit’s self property→left operand contain read unit; open IF unit’s self property→ the current value contain compare unit, choose write unit→click “Insert unit” in the right→choose IF unit→confirm insert—OK, see the following chart:





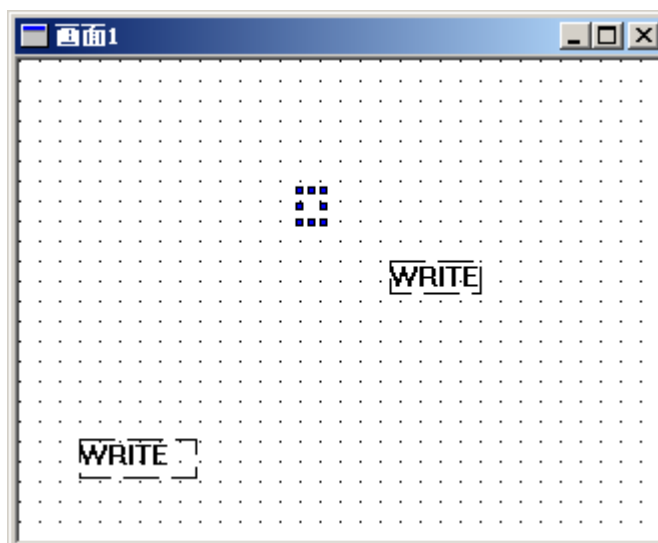
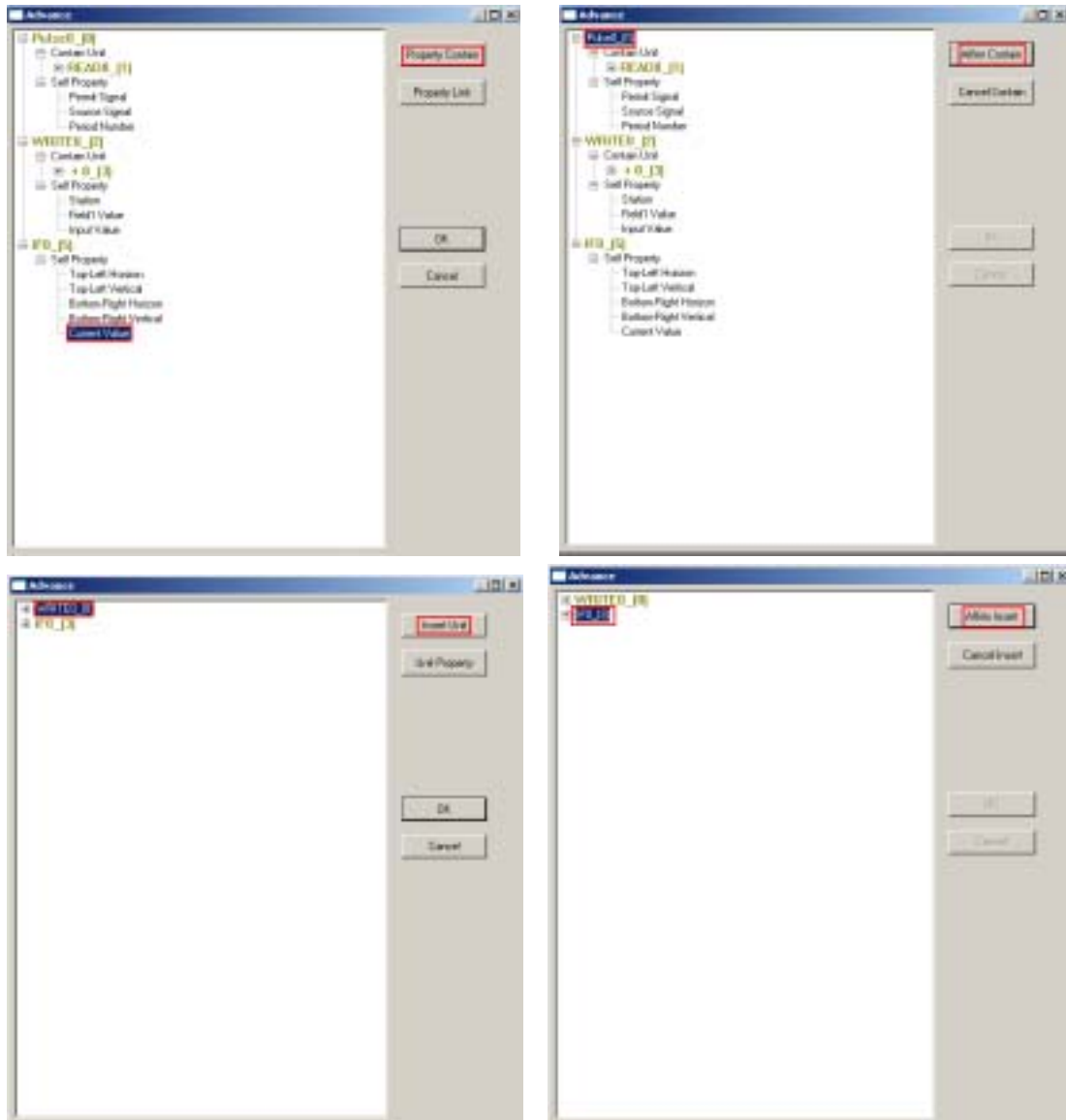
13、 Add another IF unit, choose IF unit、 pulse unit and the right write unit, open the advance property.



14、 Open Self property of IF unit - >Contain Pulse unit - >Choose write unit - >Click “Insert Unit” - >choose IF unit - >Click “Affirm Insert” - >OK.

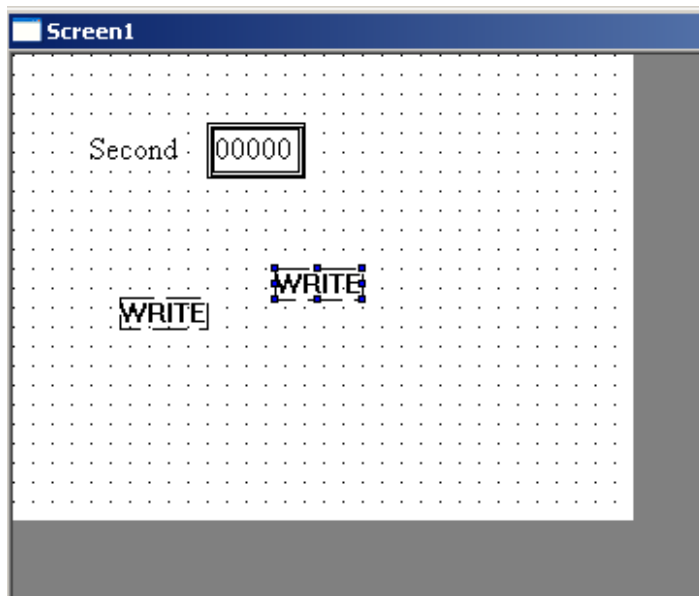
See the following chart :





15、Finish the interior operation, let's make the alternate interface. Add a "Text" and a "Digital display" unit in the screen, modify the display unit's content as "Second", digital display's object

is PSW300.



16、 Finish now. Download to the touch screen to simulate the running of second.

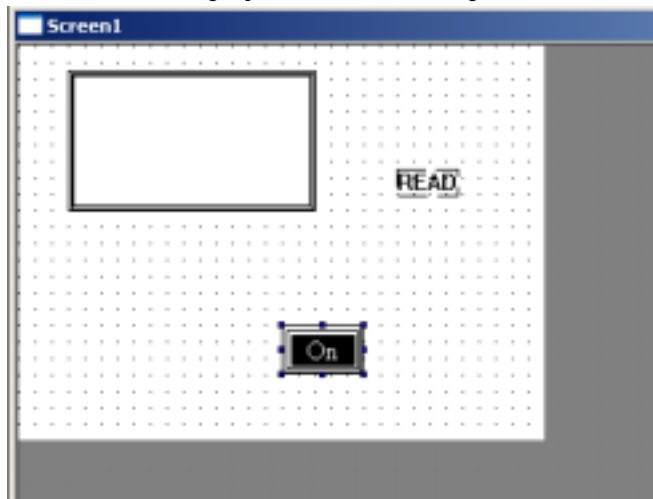
E.g.3 . Self-define light effect ( Take TP560-L as the example )

Note :The system offer a suit of indicate lamp template, but user sometimes wish he could define a light effect, then the template offered by the system couldn't fulfill the user's requirement. So combine with the advanced instructions, we could get easily the effect we want.

**Units we need :**

A rectangle、an indicate lamp button、a IF unit、a compare unit、two read units、two write units.

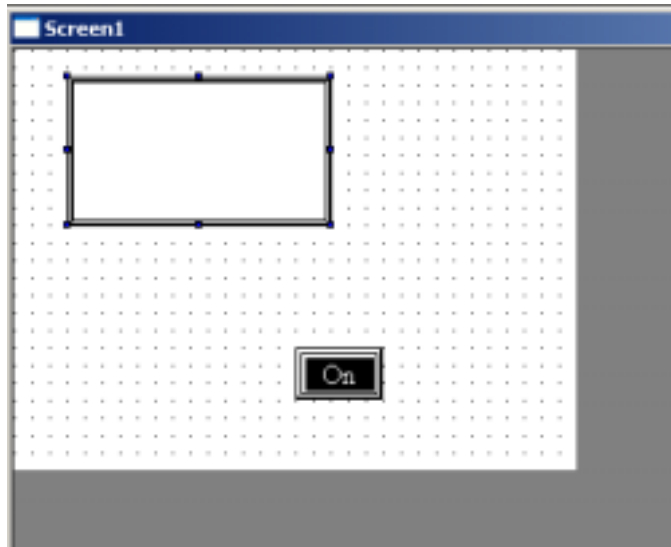
- 1、 Create a new project. First add a lamp button, a frame and a “read” unit in the screen.



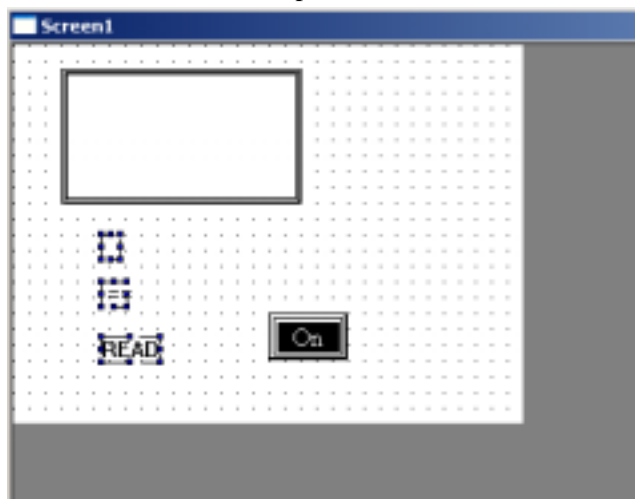
- 2、 Modify lamp button's property : in the object, modify the object as PSB300, in the “General”, modify the button's operation as “Inverse”, default the left. Modify “Read” unit's property, make its object as PSW300, click OK.
- 3、 Choose Read unit and Fame unit, open the advanced property, see the following chart:



- 4、 Open Frame unit's property→choose “Back Color”→click “Property Contain”→choose “READ”→Affirm Contain—OK. See the following chart:



5、 Add a IF unit、 a compare unit、 a read unit



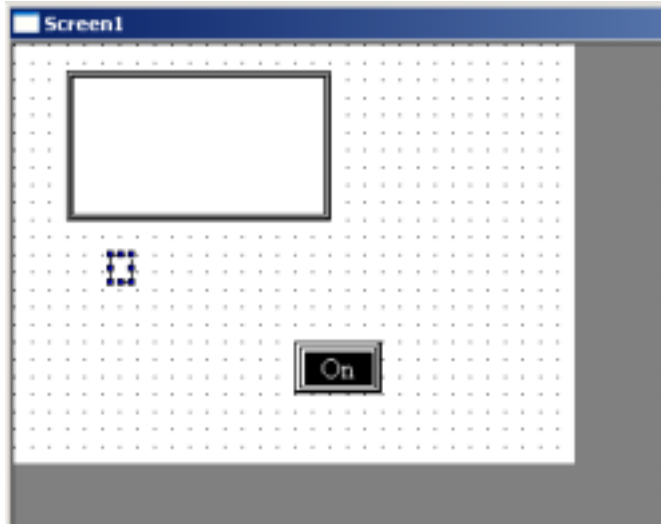
6、 Modify READ unit's property: Object is PSB300 ; compare unit's property : compare type is " = = ", the right operand is 1. Choose the three units, open the advanced property:



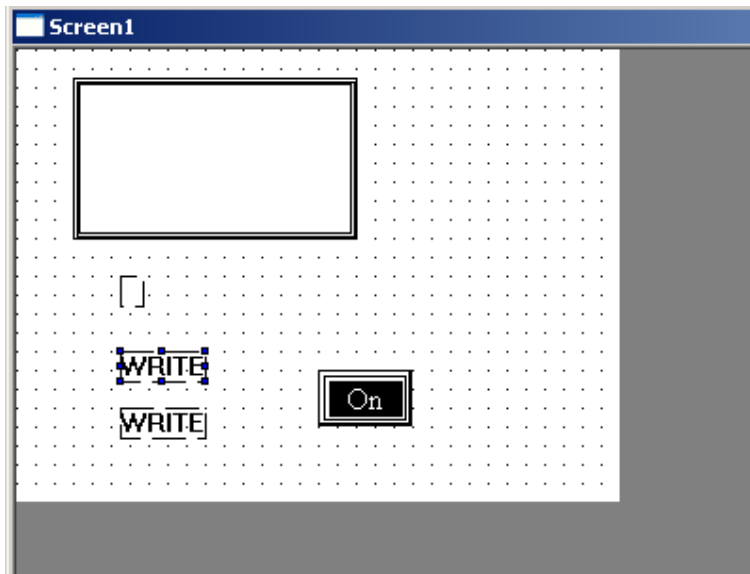
7、 Open self property of compare unit = = 0\_(2) - >choose the left operand - >click “Property Contain” - >Choose READ unit - >Click “Affirm Contain” in the right - >OK

Open self property of IF unit IF0\_(0) - >choose the current value - >Click “Property Contain” - >Choose compare unit - >Click “Affirm Contain” - >OK.

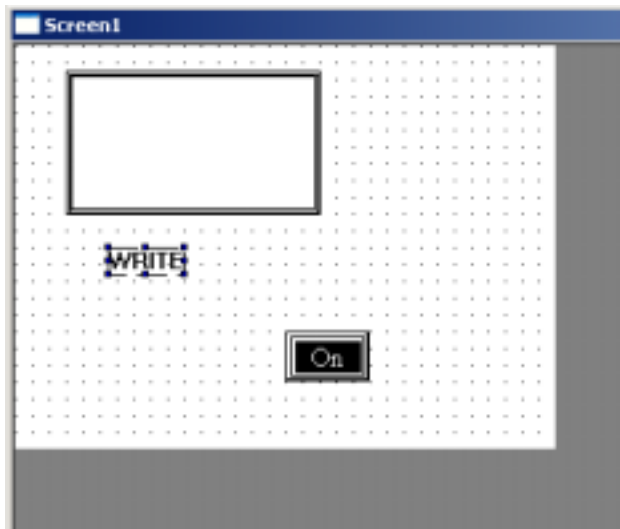
See the following chart:



8、 Add a write unit, modify its type as register, the object as PSW300、 Set data as 1. Copy one, set its data as 0



9、 Drag the two write units into IF unit, finish interior operation process



10、 Download to the touch screen, run it. Click the lamp button, see Frame's change.