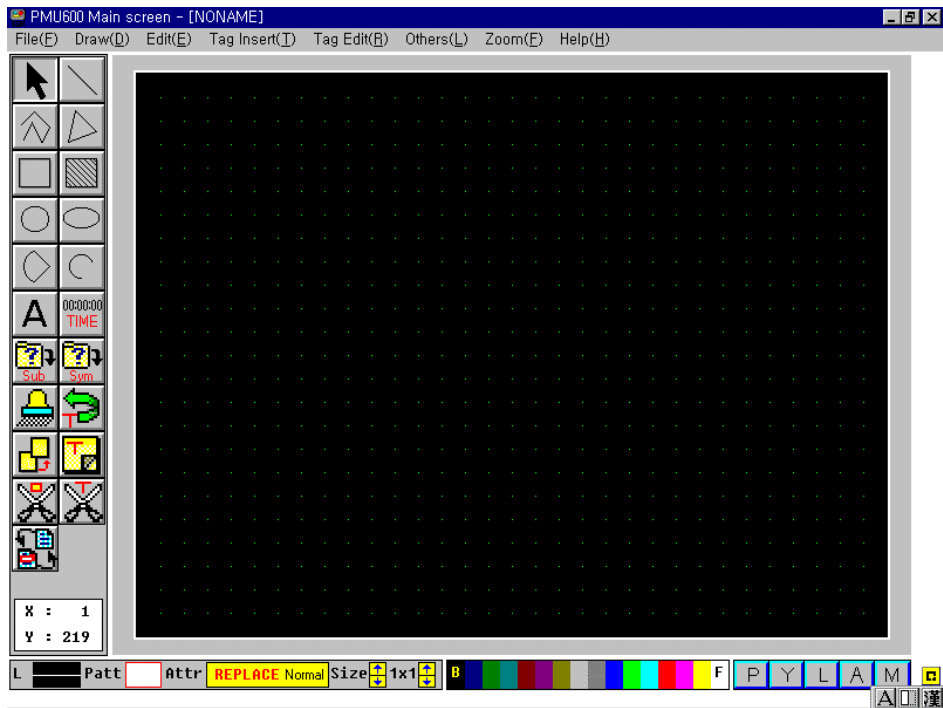# Chapter 4.   Screen Editor Structure and Function

■ This software package is to operate the main screen and to create the sub screen.

■ You are able to draw figures such as Straight Lines, Rectangles, Circles, Ovals, Painted Rectangles, Arcs, Pies and Continuous lines.   (Warning: There might be a slight difference in what figures you may draw according to the PMU-Type.)   (See 3-8 Edit Tool)

■ You can register tags to be used in run on the main screen and the sub screen.
   (See 3-4 Tag Insert)
  PMU-200:   11 for main screen and 1 for sub screen
  PMU-300:   20 for main screen and 16 for sub screen
  PMU-600:   20 for main screen and 16 for sub screen

■ While creating the main screen, before sending the created screen to the main machine you can do a test run or Simulation(simulation).
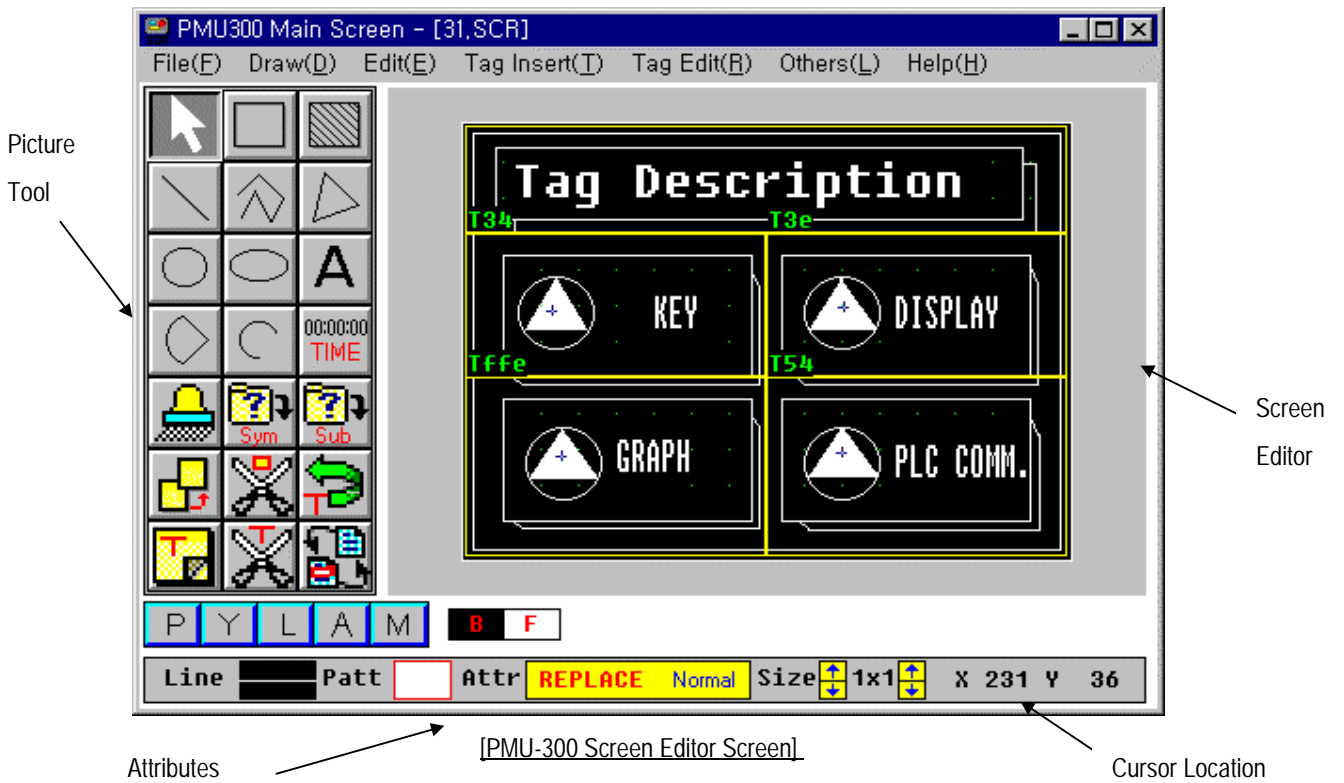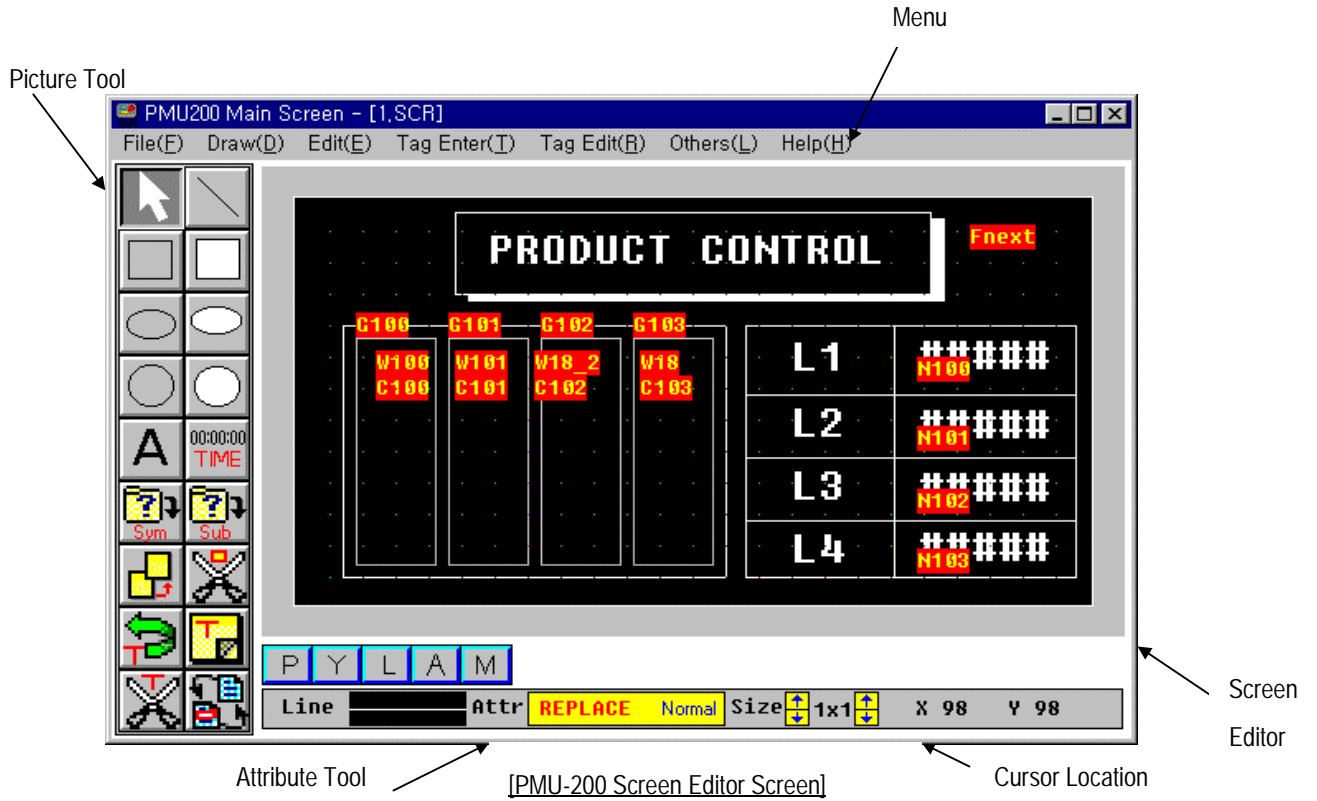
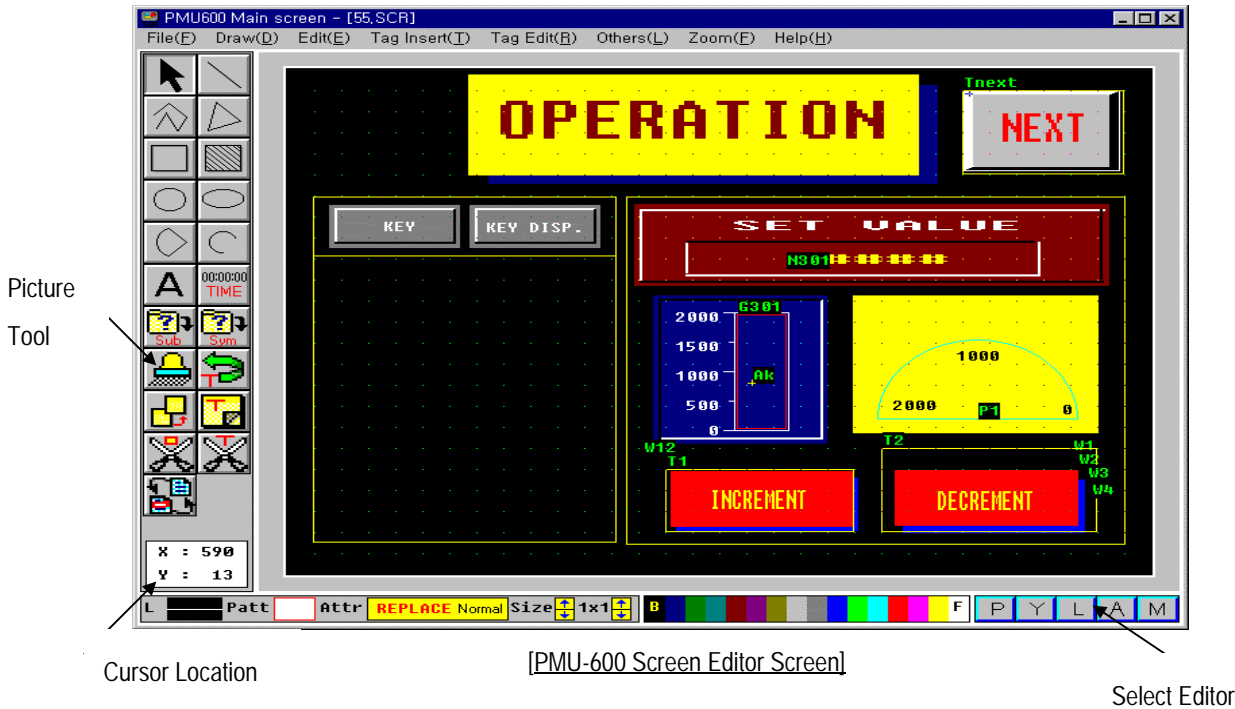■ You may edit the files of the Main Screen (*.SCR) and Sub Screen (*.SUB).

   When you create a new screen whether it is a Main Screen or Sub Screen, select either 'Main   Screen' , 'Sub Screen' from the <Other> menu.

■The basic three tool boxes are opened at the bottom of the window, and the file name will also appear on the title bar.

   The buttons on the left of the screen are Picture Tools which you can easily select figures or the   edit menu and the tools at the bottom of the screen are Attribute Tools which you can create and establish Line Type, Pattern Type, and Character Enlargement.

■The location of the cursor co-ordinates the location of the mouse cursor on the present
main screen or the sub screen.

Picture Tool

Menu

PMU200 Main Screen – [1,SCR]

File(F) Draw(D) Edit(E) Tag Enter(T) Tag Edit(R) Others(L) Help(H)

PRODUCT CONTROL

Fnext

G100 G101 G102 G103

W100 W101 W18_2 W18
C100 C101 C102 C103

L1 ##### N100
L2 ##### N101
L3 ##### N102
L4 ##### N103

A 00:00:00 TIME
Sym Sub

P Y L A M

Line Attr REPLACE Normal Size 1x1 X 98 Y 98

Screen Editor

Attribute Tool

[PMU-200 Screen Editor Screen]

Cursor Location

PMU300 Main Screen – [31,SCR]

File(F) Draw(D) Edit(E) Tag Insert(T) Tag Edit(R) Others(L) Help(H)

Picture Tool

A

00:00:00 TIME
Sym Sub

Tag Description
T34 T3e

KEY DISPLAY
Tffe T54

GRAPH PLC COMM.

P Y L A M B F

Line Patt Attr REPLACE Normal Size 1x1 X 231 Y 36

Screen Editor

Attributes

[PMU-300 Screen Editor Screen]

Cursor Location

Picture
Tool

Cursor Location

[PMU-600 Screen Editor Screen]

Select Editor

4-1. File

Its function is to manage the Main/Sub Screen, which the user is able to Open a New File, Save a File, save as, Print, and much more.

File(F)

New(N)
Open...(O)
Save(S)
Save as...(A)

Print...(P)

Exit(X)
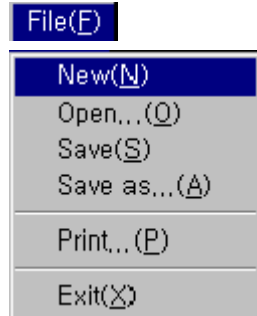
New (N)   ▶ When you choose New File, it allows you to create a new main screen or sub screen.

While creating a new screen, you choose New File, the computer will ask if you would

like to save.

If you choose "Yes[Y]", a dialogue box will appear on screen.   If you enter the name,

(*.scr), the main screen will be saved as "*.scr".

If you choose "No[N]", be aware that the data you have been working on may be lost.

If you choose "Cancel", the new file menu will be canceled.

▶When opening a new file, if the Title Bar indicates Main Screen then you may create a main screen otherwise, if the Title Bar indicated Sub Screen, you may create a sub screen.

▶When changing each Editor mode (main screen Editor/sub screen Editor), you may do this in the Menu <Other>.

Open (O)   ▶When you choose Open, you may open a main screen (*.scr) or a sub screen (*.sub) file.
While creating a screen, you choose New File, the computer will ask if you would
like to save.
If you choose "Yes[Y]", a dialogue box will appear on screen.   If you enter the name,
(*.scr), the main screen will be saved as "*.scr".
If you choose "No[N]", be aware that the data you have been working on may be lost.
If you choose "Cancel", the new file menu will be canceled.

Save (S)   ▶Save is the menu which to save the screen being edited.
When you decide to save after choosing New File, the menu 'Save as' will appear.   You must
name your file before saving.
If your file is named already, when choosing the Save menu, your file will be saved automatically.

▶The screen created under the main screen Editor mode must be saved as a (*.scr)
file, where as the screen created under the sub screen Editor mode must be saved
as a (*.sub) file.
It is impossible to save a main screen under a sub file and a sub screen under a
main file.   Therefore, before creating a new file, you should check the main/sub
screen

▶<u>A file must be saved as a number</u>.
After the file name is saved as a number, the user may write a brief description of the
file under the "File Description" box.
Once the file has been named, it will be saved automatically.

Save as (A)   ▶When you choose Save as …,   the menu box will be shown where you

may change the file name and path before saving.

Be careful that you do not save main screen as (*.SUB) and sub screen as (*.SCR).

Print (P)   ▶ If you choose to print, on the screen the option box will be indicated, which the user

may choose screen/tag print and the range of which to print.
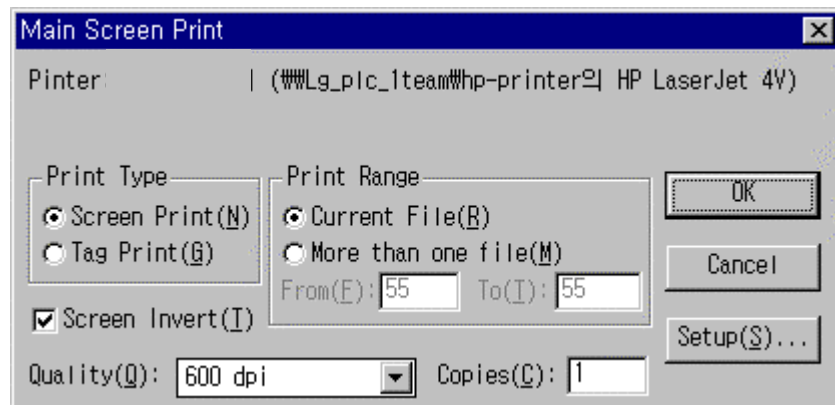
Exit   ▶ When you choose Exit, you are exiting the screen editor function.

If you choose Exit, while you are creating a file, it will ask if you would like to save.

If you choose "Yes[Y]", a dialogue box will appear on screen.   If you enter the name,

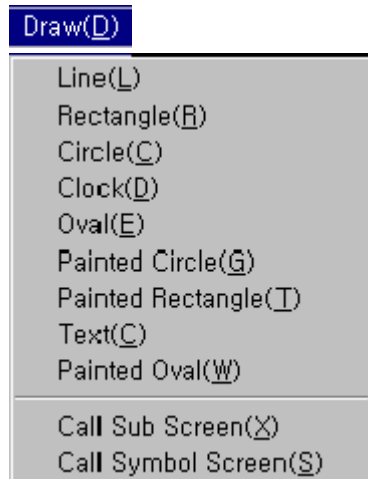(*.scr), the main screen will be saved as "*.scr".

If you choose "No[N]", be aware that the data you have been working on may be lost

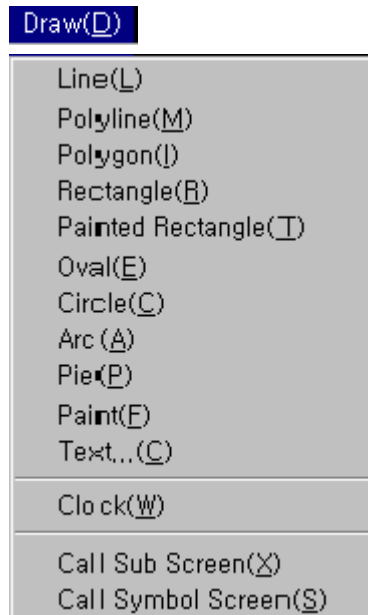If you choose "Cancel", the new file menu will be canceled.

4-2. Draw

PMU-200 Screen Edit Draw Menu

From the menu, you may choose many options such as Line, Rectangle, Painted Circle and Oval and
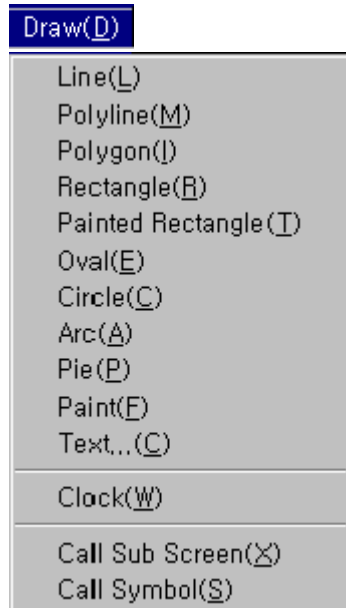
you may draw different kinds of shapes.

Draw(D)
```
Line(L)
Rectangle(R)
Circle(C)
Clock(D)
Oval(E)
Painted Circle(G)
Painted Rectangle(T)
Text(C)
Painted Oval(W)

Call Sub Screen(X)
Call Symbol Screen(S)
```

PMU-300 Screen Edit Draw Menu

From the menu, you may choose many options such as Line, Polylines, Rectangle, Arc,

Pie, Paint and draw different kinds of shapes.

Draw(D)
```
Line(L)
Polyline(M)
Polygon(I)
Rectangle(R)
Painted Rectangle(T)
Oval(E)
Circle(C)
Arc (A)
Pie(P)
Paint(F)
Text...(C)

Clock(W)

Call Sub Screen(X)
Call Symbol Screen(S)
```

PMU-600 Screen Edit Draw Menu

From the menu you may choose many options such as line, Poly Lines, Rectangle, Arc, Pie,

Paint and draw different kinds of shapes.

Draw(D)
| Line(L) |
| Polyline(M) |
| Polygon(I) |
| Rectangle(R) |
| Painted Rectangle(T) |
| Oval(E) |
| Circle(C) |
| Arc(A) |
| Pie(P) |
| Paint(F) |
| Text...(C) |
| Clock(W) |
| Call Sub Screen(X) |
| Call Symbol(S) |

Line ▶ It is the menu to draw a line.

From the place you want to draw a line, click the left mouse button then drag it to the

place where you want your line to end.

If you want to cancel while drawing, click the right mouse button.

If you want to exit the Line Menu also click the right mouse button.

If you want to choose other kinds of lines click the Line Type button located in the Tool

Box on the bottom of the screen

Polyline ▶ It is the menu to draw more than one line. [Only applicable for PMU-300/600.]

To draw one line, from the place you want to draw a line, click the left mouse button

then drag it to the place where you want your line to end.

To draw a continuous line, click the left mouse button.

If you want to cancel while drawing, click the right mouse button.

If you want to exit the Line Menu also click the right mouse button

To choose other kinds of lines click the Tool Box at the bottom of the screen, where you

may choose six different kinds of lines.

Polygon	▶ It is the menu to draw Polygon. [Only applicable for PMU-300-600.]

To draw one line, from the place you want to draw a line, click the left mouse button
then drag it to the place where you want your line to end.

To draw a continuous line, click the left mouse button.

If you want to cancel while drawing, click the right mouse button.

If you want to exit the Line Menu also click the right mouse button

If you are done with drawing you may double click the last portion of your line.   This
will complete the drawing and automatically exit.

When you have completed drawing your lines, double click the last portion of your line.
It will connect with the beginning of the line to complete a pair of many lines.
When complete, it will close.

To choose other kinds of lines click the Tool Box at the bottom of the screen, where you
may choose six different kinds of lines.

<u>Circle</u>	▶ It is the menu to draw a circle.

With the mouse, click the screen then drag.   As you drag the mouse, a circle will be
drawn.   Once satisfied with the size of the circle, click the mouse again and a circle
will be completed.

<u>Oval</u>	▶ It is the menu to draw an oval.

Click the mouse button at the beginning of an oval, then drag the mouse to the position
you want the oval to be drawn.   Once the oval has been drawn, click the mouse again
and an oval will be drawn.

<u>Painted</u> <u>Circle</u>	▶ It is the menu to draw a painted circle. [Only applicable for PMU-200]

With the mouse, click the screen then drag.   As you drag the mouse, a circle will be
 drawn.   Once satisfied with the size of the circle, click the mouse again and a circle
will be completed.

If you would like to Paint the circle black, the Pattern should be in its reverse turn.

Arc   ▶ It is the menu to draw an arc.

The method to draw an arc is to click the mouse button upon the arc's three points.
First choose each end of an arc and a arc will appear on screen.
Using the mouse, shape the arc into one's desire.   When you click the mouse button
again, your arc will be completed.
This screen Editor does not support an oval arc.

Pie   ▶ It is the menu to draw a fan shape.

The method to draw a pie is the same as the method to draw an arc.
First select the two end points of the arc, then move the mouse to make the fan shape
you desire.   If you are satisfied, click the mouse button again.

Rectangle   ▶ It is the menu to draw a rectangle.

Click the left mouse button and drag till the size is of your desire.   Once you are
satisfied with the size, click the button again, then a Rectangle will be completed.

Painted   ▶ It is the menu to draw a Painted Rectangle.
Rectangle   You may also draw patterns inside the Rectangle.
The method to draw a painted rectangle is the same as to drawing a non-painted
rectangle.   To draw a pattern, use the Pattern Tool located at the bottom of the screen.

Paint   ▶ It is the menu to paint templates

To paint by pattern, choose the pattern from Paint Tool Box and choose the foreground
and background color using the left and right mouse button.
To execute the painting, click the territory of which you wish to paint.   Then, on
screen, "Paint is being executed" will appear.
Be careful that the territory can only be painted in black.   And it can be registered
within the territory.

You can not execute the menu Paint for the area that is not black.   Therefore, do not

register the cross mark and the grid point in the middle of the sub screen.

Text   ▶ It is the menu to insert characters.

                            To input a character:

                            If you click the area in which you wish to insert a character, a menu will appear,

                            where you may enter the character in the blank space.   Once this is done, press

                            "Ok", then the inserted character will appear.
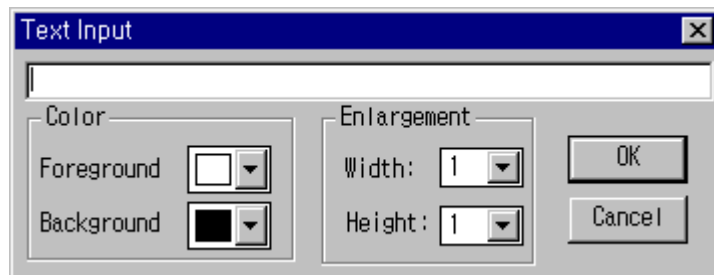
you can give the character:

                            To give your character pattern and doubling, before you click the mouse button

                            choose from the Paint Tool then insert a character for the pattern and volume to be applied.

                            You may also designate the pattern by using the menu above, which can be applied to

                            the entered character.

                            For patterns, there are Normal, Blink, Toggle, Reverse, Reverse & Toggle, and for doubling, you

                            may double up to eight times.

                            After you have inserted a character and you wish to change the doubling, click the mouse button

                            to drag the sides in order to change the size of the character.

Clock   ▶ It is the menu to indicate the time on the main screen.

                            You may specify and designate the time on the screen of your desired area.

                            This is done by clicking the mouse button.

                            The screen's foreground and background color will indicate "00:00:00" (hr:min:sec).

                            You may designate the pattern and size of the clock.

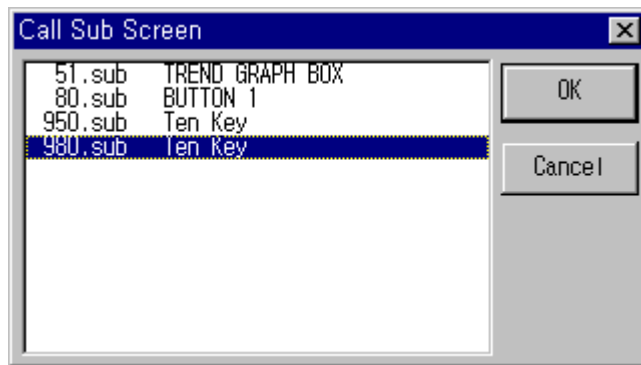   You can only designate one clock per screen.

Call
Sub Screen

▶ It is the menu to call up the existing creation sub screen into the main screen.

Click the mouse button at the area you desire then select the sub screen.   Then, the

screen will show the sub screen file names.

Next to the file names, the file explanation will be shown.

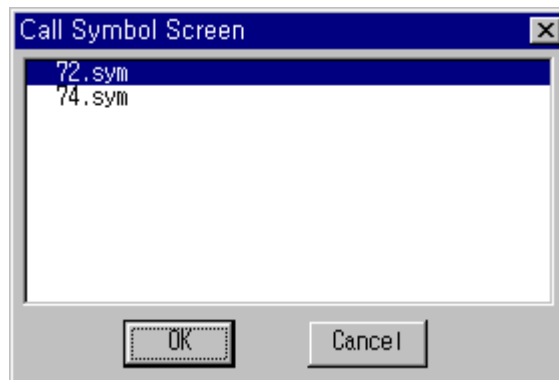While the screen is being operated, the name will not be shown on the sub screen.

When calling up the sub screen, the area in which you click the mouse button will be the area.

Call
Symbol

▶ It is the menu to call written up symbols.

A menu will appear at the area in which you click the mouse button.

Using this menu, you may call up a symbol.

You may then click the mouse button, which the symbol's lowest left point will appear at a certain

point.

4-3. Edit

From the menu, you can edit the Straight Line, Rectangle, Painted circle, Oval, Painted Rectangle

on the screen.

Edit(E)

Copy(C)
Delete(D)
Delete All(A)
Change Attribute(E)
Redraw(R)
Modify Text(S)
Bring to forth
Send to back

Copy onto Clipboard
Paste onto Clipboard

Align(A)
Grid(G)

Show Name(V)
Undo(U)
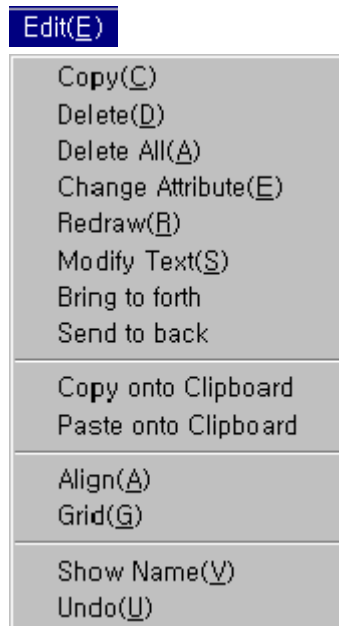
It is the menu to edit characters or figures drawn on the main screen.

The below items are not included in the menu, however they are supported functions in the main   screen.Select

From the Draw mode, if you click the right mouse button you are able to select and

change to Move mode

From this mode, you can paint the boarder line of Straight Line, Rectangle and Circle,

for Rectangle, Arc and Pie you can choose by clicking the left mouse button.

Where there is no picture, click the left mouse button and drag then let go.

You will be able to select all the drawing in the inside.   If there is a tag you can also

choose a tag.

Also while pressing the 'Ctrl' key you wish to choose the above actions, you can choose from

many drawings.

<u>Zoom In</u> <u>and Out</u>	After selecting a drawing, a rubber band will be shown. Drag the mouse, of the corners, to enlarge and reduce to the size you wish. For Character, Clock and Symbol, you are able to enlarge and reduce by using the Doubling.
<u>Move</u>	From the selected drawings, choose one. By clicking the mouse button you can move the drawing and by clicking again, the move will be completed. While moving, once 'Show Name' is selected and Tag is selected you are able to move the Tag function.
<u>Undo</u>	▶ You can cancel the following functions: Draw, Copy, Delete, Move, Delete All, Tag Insert, Move Tag, Copy, Delete
<u>Copy</u>	▶ First select a figure, then click the shape you wish to copy. If you click and drag the shape and click again, copy will be completed.
<u>Delete</u>	▶ After selecting a figure, you choose this menu a message asking if you wish to delete will appear on screen. If you select "Ok" the shape will be deleted, if you select "Cancel" the shape will not be deleted.
<u>Delete All</u>	▶ If you choose this menu, a message asking you if you wish to delete all will appear on screen. If you select "Ok" everything will be deleted and if you select "Cancel" it will not be deleted.
<u>Change</u> <u>Attribute</u>	☞ Only applicable for PMU-200.

PMU-200   ▶ It is the menu to change the pattern of the already drawn object or text on screen.
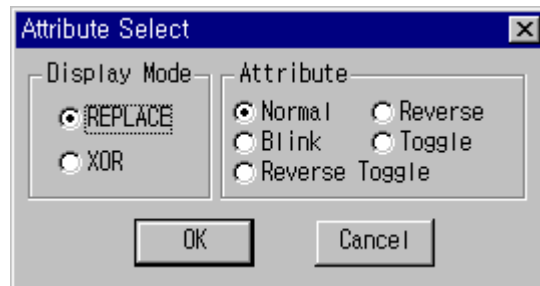
For selecting the Display mode and Attribute.

Replace is when a selected individual is over-drawn above the background and XOR is
When the background is exclusive-OR for the selected individual to be drawn.

          Replace   Xor
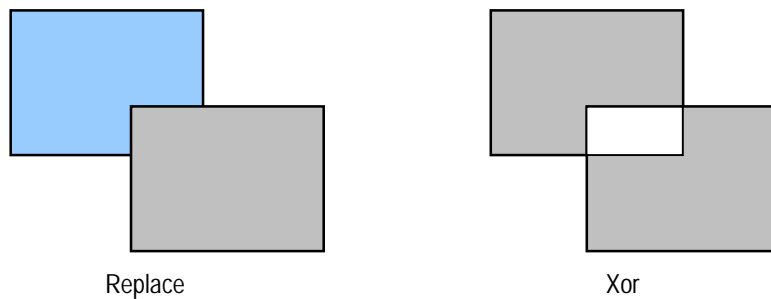
Blinks when the object or character is in white then changed into black and repeated.
Toggle is when the white character or symbol with its black background is changed
- white background, black character or symbol.
Reverse is when the black figure or character or symbol is shown as its attribute and
 Reverse & Blink is when the Reverse is Aligned.

Normal   Reverse   Blink

Toggle   Reverse Toggle
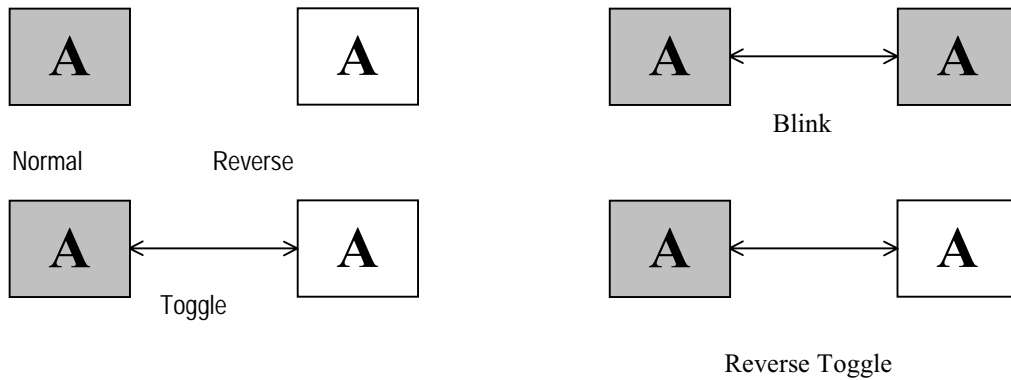
Attribute   ☞ Only applicable for PMU-300/PMU-600.

Change

PMU-300   ▶ It is the menu to change the attribute of the object or character already drawn.

PMU-600   First select an individual then the below menu will appear to change the attribute.
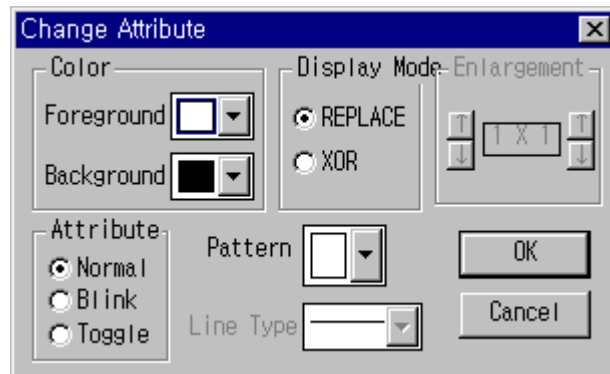
Object such as Rectangle, Circle, Arc, Pie, Oval, and Lines, by changing
the foreground color you change the line color.

Object that can be filled with patterns such as Painted Rectangle, Painting, you change the color
of the pattern by changing the color of the foreground and the background and
you can change the pattern type.
You can select eight different kinds of line type for Straight line.
For Character, you can change the foreground and background color, thus the character's color
and the character's background territory color will be changed.
To change the size, use the Size Enlargement function.

For Symbol, use the foreground and background color to change the symbol's line color and background color.   Use the Double Establishment to change the size. (This is only included for the Symbol File, not the Image File.)

Replace is when a selected individual is drawn above the background and XOR is when the background is merged for the selected individual to be drawn.
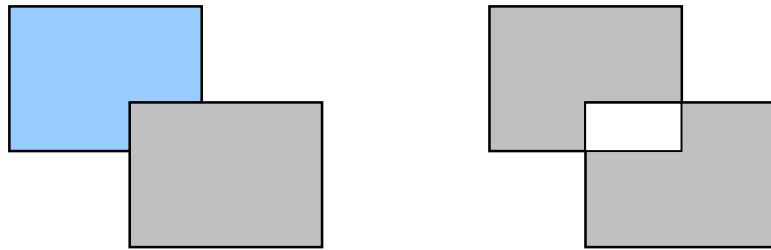
Blink is when the foreground color is buried into the background color.

Toggle is when the foreground color and the background color is exchanged.

A   Normal

A ←→ **A**

Toggle

A ←→

Blink
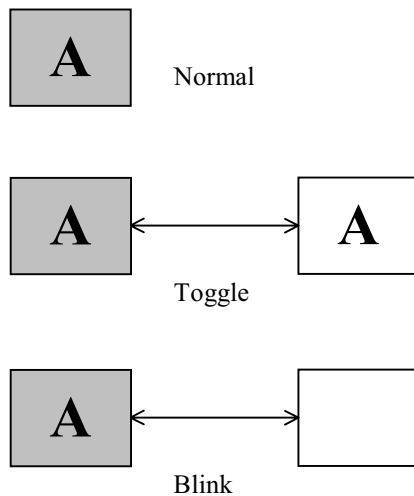
Redraw   ▶ It is the menu to re-load the contents on screen.

This is capable only if an after image of the registered or deleted figures, characters or tags are shown.

Text   ▶ It is the menu to revise characters on screen.

Input   You must choose the character you wish to revise using the mouse. (You may double click the mouse to select also.)   After selection, the below menu will appear on screen.

PMU-200 Character Revision Screen
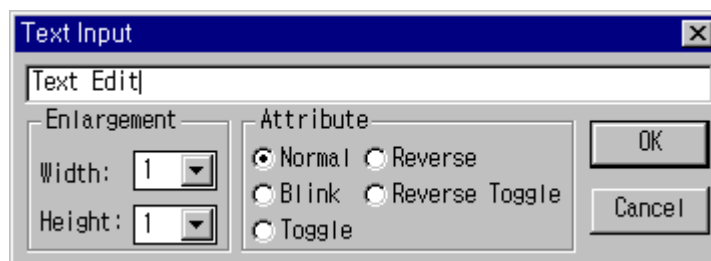
PMU-300/600 Character Edit Screen

If you revise the character here, the revised character will appear on screen.

Bring to forth ▶ It is the menu to move the selected individual to the utmost top of the screen.

This menu is used when more than one drawing is overlapping.

In the Edit mode, what you draw first appears at the top of the screen.   Thus, the
drawings appear from top to bottom.

This menu is helpful when you want to go to the top.

The way to use it is to select an individual then select the Top menu.

Send to back ▶ It is the menu to move the selected individual to the bottom of the screen.

This menu has the opposite function of the Bottom menu.

Copy onto ▶ It is the menu to copy onto the clipboard figures or characters.

Clipboard

This menu is useful when you wish to use the contents from this screen onto another
screen.   Once you saved the contents onto a clipboard you can still save when you open

a new main screen or a sub screen.

How to use:

① Select the drawings you wish to copy onto the clipboard

② Choose the "Copy onto Clipboard" menu

③ The contents to be copied can be used by "Paste onto Clipboard"

<u>Paste onto</u>   ▶It is the menu to call up the contents that are copied onto the clipboard.
<u>Clipboard</u>

If wish to call up the saved contents, choose the Paste onto Clipboard menu and you will be able to bring up the saved contents.

Hints:

When you operate the Paste onto Clipboard menu, you are able to bring up figures or characters. However, you cannot copy tags onto the clipboard.

<u>Align</u>   ▶It is the menu to align more than one individual.

You may select individuals using the mouse by dragging the mouse over the territory or you may press the *Ctrl* key with the mouse to select more than one individual.
After you have selected a menu, such as below will appear.
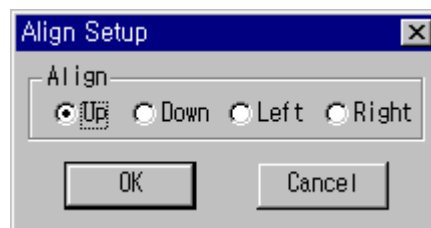
From the above menu, if you choose Top, Bottom, Left, Right, the selected drawings will be aligned accordingly.

<u>Grid</u>   ▶It is the menu to show on screen the grid points or to establish the cursor's snap shot's existence.

If you choose the grid menu, the below menu will appear on screen.   Here, you are able to establish the height and width size.

If you click the Show Grid, grid points with the interval of such will appear on screen.

If you wish to establish snap accordingly click the Snap.

The grid spacing is fixed at 20 by 20 dots(PMU200/300/600) and 40 by 40 dots

Show Name ▶ This menu, if selected by toggle will show/not show the Tag Name, Symbol Screen

Name, Sub Screen Name.

4-4. Tag Enter

■ This Edit supports the Tag Enter menu, and you are able to establish Tags in the main screen and the sub screen.

■ Choose each menu, then click the area in which you wish the Tag to be, the selected tag menu will appear on screen.

Notice) Tag's that have territories (Broken Line, Touch, etc) when registered on top of each other will not operate properly.

The user may establish the contents then press "Ok" for the Tag name to be establish in a certain   area.

To establish a Tag refer to the Tag User Manual.

MENU	MENU CONTENTS
Tag Enter	PMU-200 Series Main Screen: Numeric, Symbol, Auxiliary, Level Graph, Buffer Write, Message, Lamp, Delay, Operation, Function Key, String Sub Screen: Key Indicator PMU-300 Series Main Screen: Numeric, Touch, Function Key, Buffer Write, Auxiliary, Window, Symbol, Block, Delay, Operation, Message, Precision Adjust, Move, Territory Move, Pie Graph, Statistic Graph, Level Graph, Trend Graph, Lamp, String, Window (With the exception of Key and Key Indicator Tag) Sub Screen: Numeric, Touch, Function Key, Buffer Write, Delay, Precision, Message, Precision Adjust, Pie Graph, Statistic Graph, Level Graph, Trend Graph, Lamp, String, Key, Key Indicator Tag (With the exception of Support, Symbol, Move, Territory Movement, Window Tag) PMU-600 Series Main Screen: Numeric, Touch, Function Key, Buffer Write, Auxiliary, Window, Symbol, Block, Delay, Operation, Message, Precision Adjust, Move, Territory Move, Pie Graph, Statistic Graph, Level Graph, Trend Graph, Lamp, String (With the exception of Key, Key Indicator Tag) Sub Screen: Numeric, Touch, Function Key, Buffer Write, Delay, Precision Adjust, Message, Precision Adjust, Pie Graph, Statistic Graph, Level Graph, Trend Graph, Lamp, String, Key, Key Indicator Tag

Tag Insert(T)

Numeric(N)
Function Key(F)
Buffer Write(W)
Auxiliary(A)
Symbol(S)
Delay(D)
Computation(C)
Message(M)
Level Graph(G)
Lamp(L)
String(Q)

PMU-200 Tag Enter Menu

When you select the menu on the left,

you are able to enter tag functions on the main screen.

Below is the sub screen Tag Enter function menu.

Tag Insert(T)

Key Display(V)

Tag Insert(T)

Numeric(N)
Touch(T)
Function Key(F)
Buffer Write(W)
Auxiliary(A)
Window(H)
Symbol(S)
Block(B)
Delay(D)
Computation(C)
Message(M)
Precision Adjust(I)
Move(J)
Territory Move(R)
Pie Graph(P)
Statistic Graph(E)
Level Graph(G)
Trend Graph(X)
Lamp(L)
Sting(Q)

PMU-300 Tag Insert Menu

When you select the menu on the left, you are able to enter tag

functions on the main screen.

Below is the sub screen Tag Enter function menu.

Tag Insert(T)

Numeric(N)
Touch(T)
Function Key(F)
Buffer Write(W)
Delay(D)
Computation(C)
Message(M)
Precision Adjust(I)
Pie Graph(P)
Statistic Graph(E)
Level Graph(G)
Trend Graph(X)
Lamp(L)
String(Q)
Key(K)
Key Display(V)

Tag Insert(T)

Numeric(N)
Touch(T)
Function Key(F)
Buffer Write(W)
Auxiliary(A)
Window(H)
Symbol(S)
Block(B)
Delay(D)
Computation(C)
Message(M)
Precision Adjust(I)
Move(J)
Territory Move(R)
Pie Graph(P)
Statistic Graph(E)
Level Graph(G)
Trend Graph(X)
Lamp(L)
String(Q)

PMU-600 Tag Insert Menu

When you select the menu on the left, you are able to

enter tag functions on the main screen.

Below is the sub screen Tag Enter function menu.

Tag Insert(T)

Numeric(N)
Touch(T)
Function Key(F)
Buffer Write(W)
Delay(D)
Computation(C)
Message(M)
Precision Adjust(I)
Pie Graph(P)
Statistic Graph(E)
Level Graph(G)
Trend Graph(X)
Lamp(L)
String(Q)
Key(K)
Key Display(V)

4-5. Tag Edit

Tag Edit(R)
- Modify(E)
- Delete(D)
- Move(M)
- Copy(C)
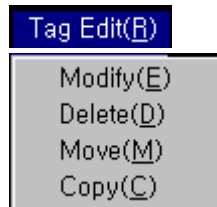
If you select the left menu, you will be able to edit the Tag registered on screen.

Modify ▶ It is the menu to establish the contents that which the Tag is registered on screen

After choosing this menu, when you use the mouse to select, an identical menu will appear where you may change the entered content, which will establish a tag.
When the tags appear on the identical area, double click the area with the mouse.
A tag list will appear where you may select the desired tag to establish.

Delete ▶ It is the menu to delete registered tags.

Tags can only be deleted by the following menu.   You are not able to delete a tag by the Edit function.
When the tags appear on the identical area, double click the area with the mouse.
A tag list will appear where you may delete the desired tag.

Move ▶ First select the Move menu, then move a tag one by one.

Copy ▶ It is the menu to copy tags that are already registered on screen.

First select the following Tag Copy menu then clicking the mouse button on the tag you wish to copy. Then you are able to move the tag to another area.
You may not use a tag with the same name on one screen, once the move is completed an Establish menu will appear for that tag.
Change the name of that tag, and if wished you may change the contents of establishment.

4-6.   Others
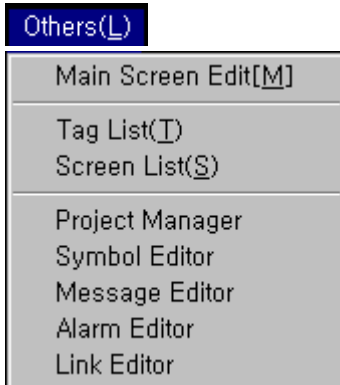
If you select the left menu, you are able to do the following functions: Main/Sub Screen Edit, Tag List, Screen List, Simulation (only in Main Screen Editor mode), and other programs.

Sub Screen Edit (Main Screen Edit)

▶ The following menu is to convert the screen into Sub Screen Editor or Main Screen Editor simultaneously.
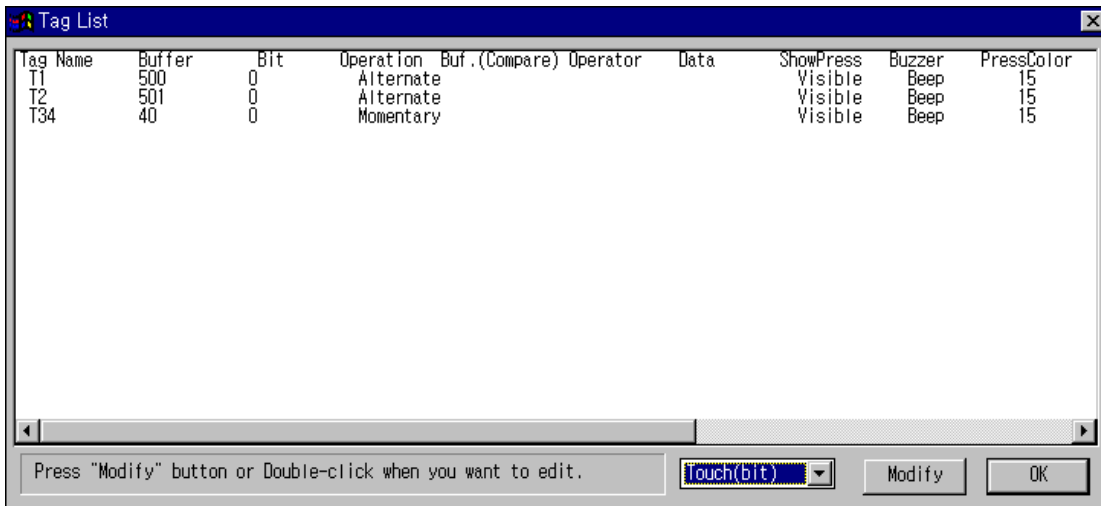
When you are operating under the Main Screen Editor Mode, the Title Bar will indicate Main Screen and when you are operating under the Sub Screen Editor Mode, the Title Bar will indicate Sub Screen.
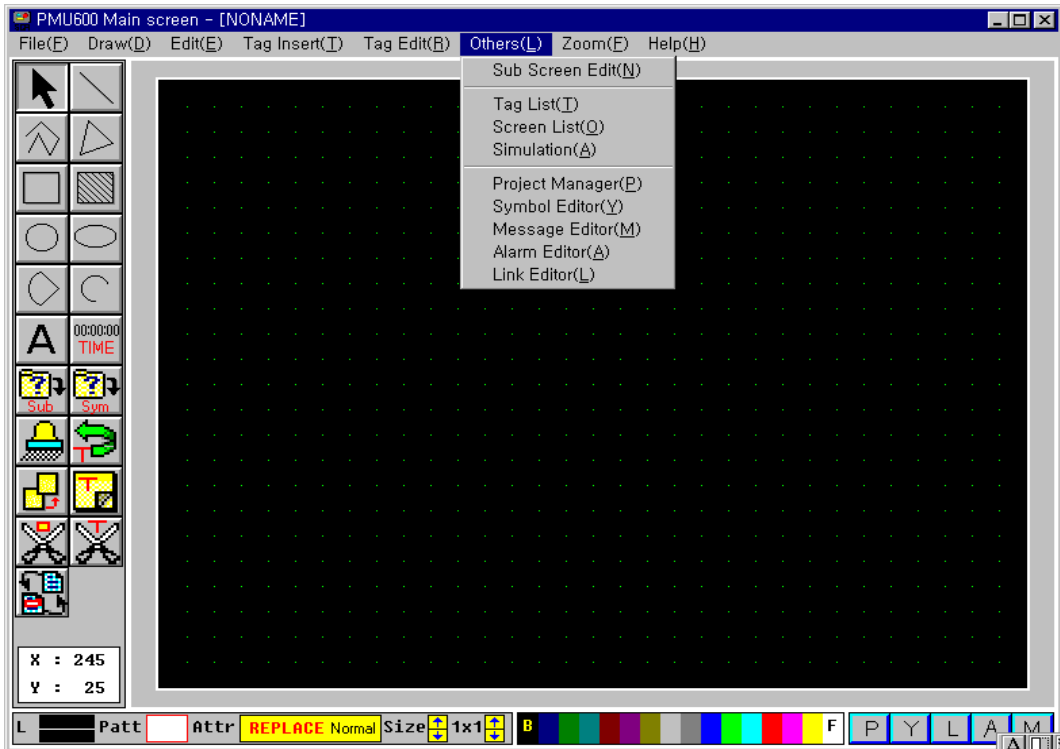
Tag List   ▶ It is the menu to show the tag list used when editing the main screen.

If you choose the following menu, a dialogue box, such as below will appear on screen.

The box on the lower right side is a box showing the different sorts of tag names.

Here you are able to see the selected established tag contents.   If you double click the

tag contents, to establish it, a Tag Editor box will appear where you are able to edit.

Screen List   ▶ It is the menu to show the list for the Sub Screen and the Symbol Screen that are

being used in the main screen.

If you choose the following menu, a dialogue box, such as below will appear on screen.
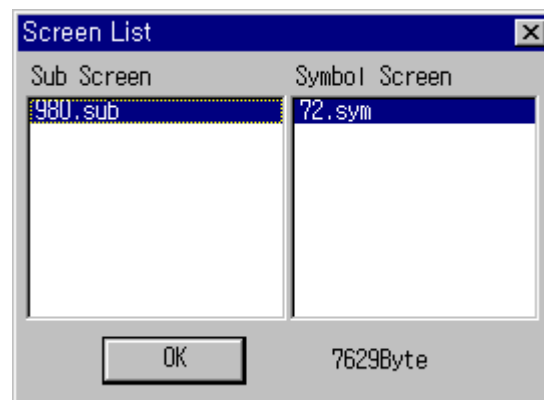
The left side of the box shows the Sub Screen List and the right side of the box shows
the Symbol Screen List.

Execute   ▶ It is the menu in which, while editing the screen, other Editing Executions (Project

Other Editor   Manager, Symbol Editor, Message Editor, Alarm Editor, Link Editor) can be used.
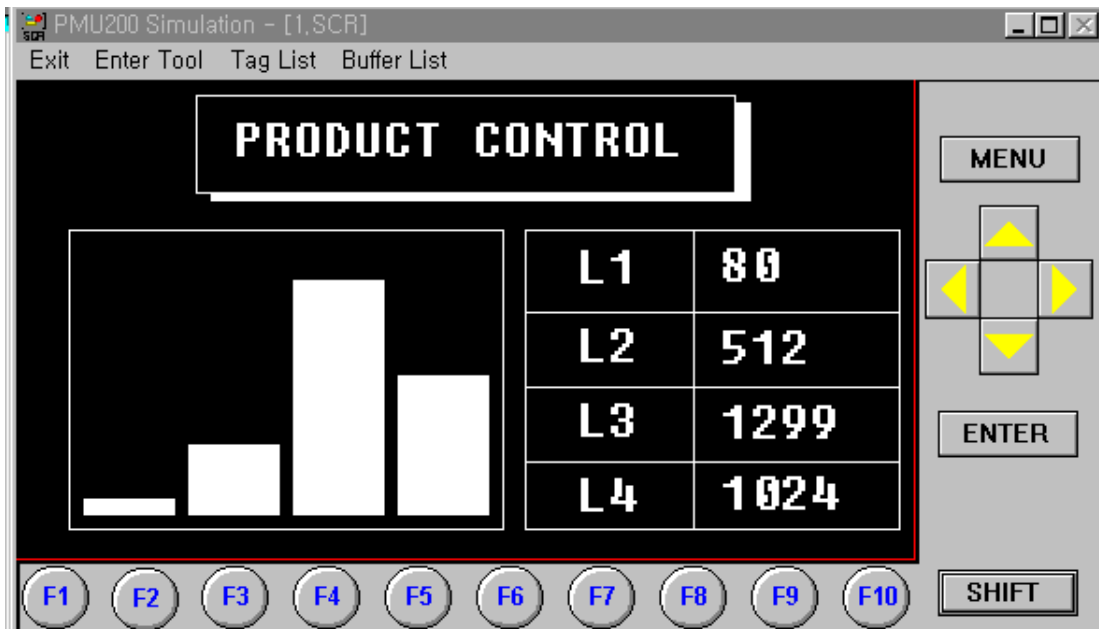
4-7. Simulation

Others(L)

| Sub Screen Edit(N) |
| Tag List(T) |
| Screen List(O) |
| Simulation(A) |
| Project Manager(P) |
| Symbol Editor(Y) |
| Message Editor(M) |
| Alarm Editor(A) |
| Link Editor(L) |
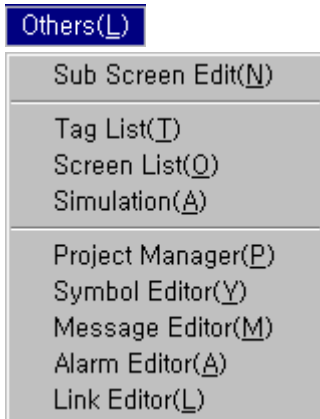
From the left menu, you are able to execute
the Simulation function (only in the Main Screen Editor Mode)
Before it is operated on the machine, this function is a test run on the PC.

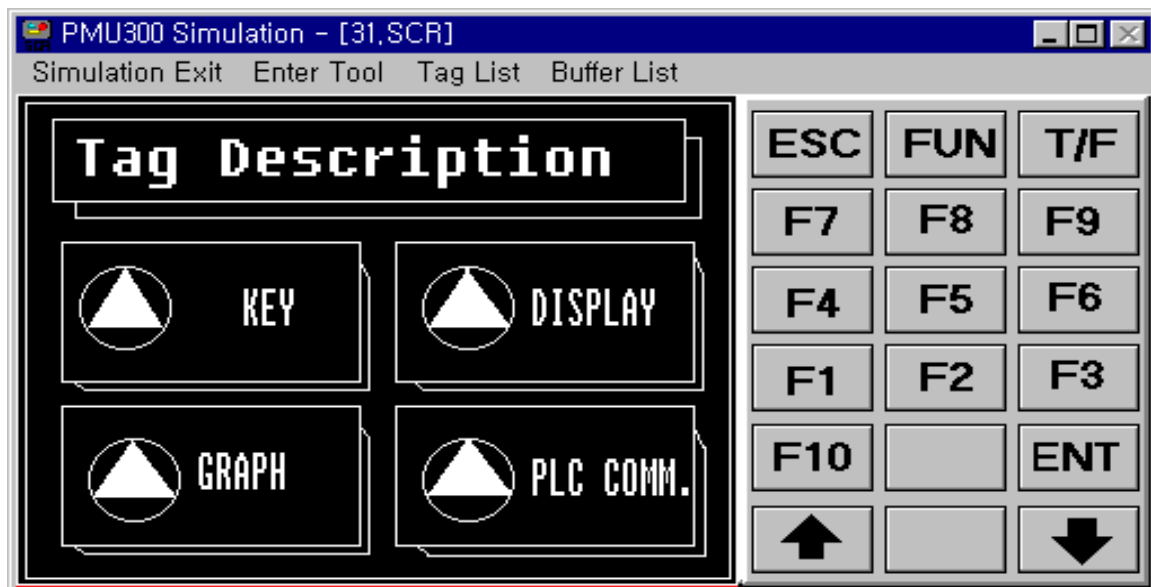Simulations are only capable during the Main
Screen Editor mode.

The Simulation is included in the Other menu of the main screen Editor mode, and once you go into
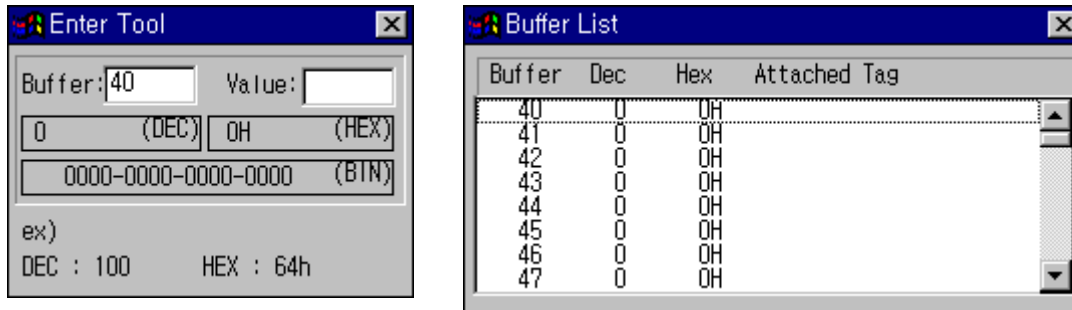the Simulation mode, the menu at the bottom of the screen will change as the picture below.

Also, on screen an Enter Tool will open which the Simulation's Enter Tool, Window, Function
Key will be operated by the mouse.

PMU-200 Simulation Screen

PMU-300/600 Simulation Screen

Enter Tool

```
Enter Tool                    [X]

Buffer:[40]   Value:[    ]

[0        (DEC)] [0H      (HEX)]

[   0000-0000-0000-0000  (BIN)]

ex)
DEC : 100      HEX : 64h
```

Buffer List

Buffer	Dec	Hex	Attached Tag
40	0	0H	
41	0	0H	
42	0	0H	
43	0	0H	
44	0	0H	
45	0	0H	
46	0	0H	
47	0	0H	

Enter Tool   ▶ When the Simulation is operating, the following Enter Tool will appear.

When you change the buffer's data value, the operation situation will change according to the changed value.

Thus, the Simulation can change or save the buffer data that can be a operation Condition as well as enter the data value for the buffer operation directly.

If you wish to see the data values under the options that are saved under Buffer, enter the Buffer number, which the 'Value' will appear.   Then on the left side of the Enter Tool, the data contents will be shown as such,   (HEX),   (BIN),   (DEC).

Warning)   *On screen, if none of the tag in the simulation screen , even though you change the value of 20th buffer, the screen will not be converted.*

20th buffer : buffer to save the current screen number
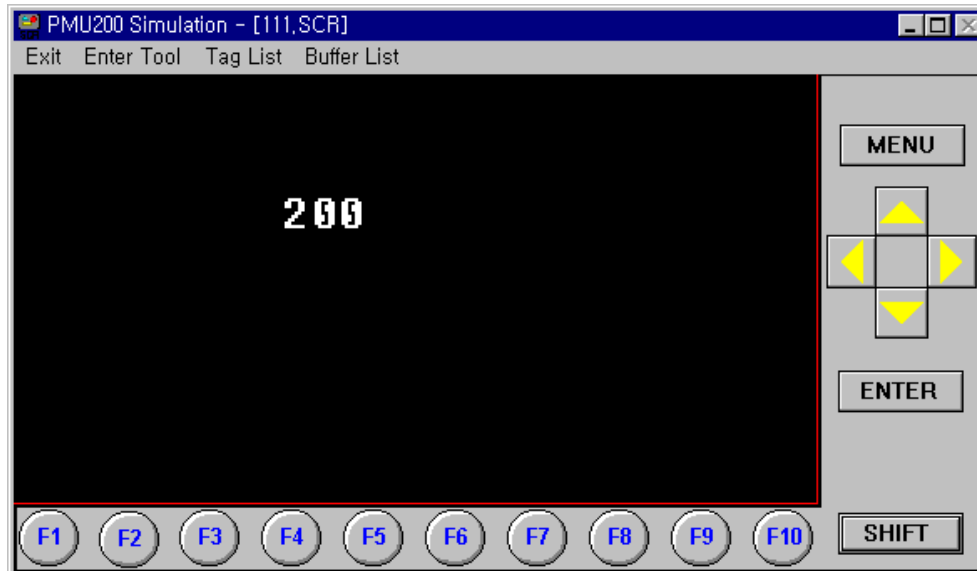
Function   ▶ The following buttons will appear on screen when the Simulation is being

Key   operated.

<u>PMU-200 Function Key</u>   The followings are the Function Keys to test the operation

There are 10 on the bottom of the screen and six on the left. The bottom Function

Keys F1-F10 are Tool menu and Tag Enter's Function key Tag will be appointed accordingly.

The 'Menu" key on the right is to run and simulate the bottom function keys,

which can be used with the following roles.

When you press the 'Menu' key, at the left top T/K LED will be lighted, and the bottom function key will

have the function of TEN Key.

When you press the 'Menu' key again, the T/K LED light will be turned off and the function key tag will   have   the

function.

You may also enter the Hexa value by using the Shift and the association of A-F.

<u>PMU-300 Function Key</u>

The following are the Function Key to test the operation.
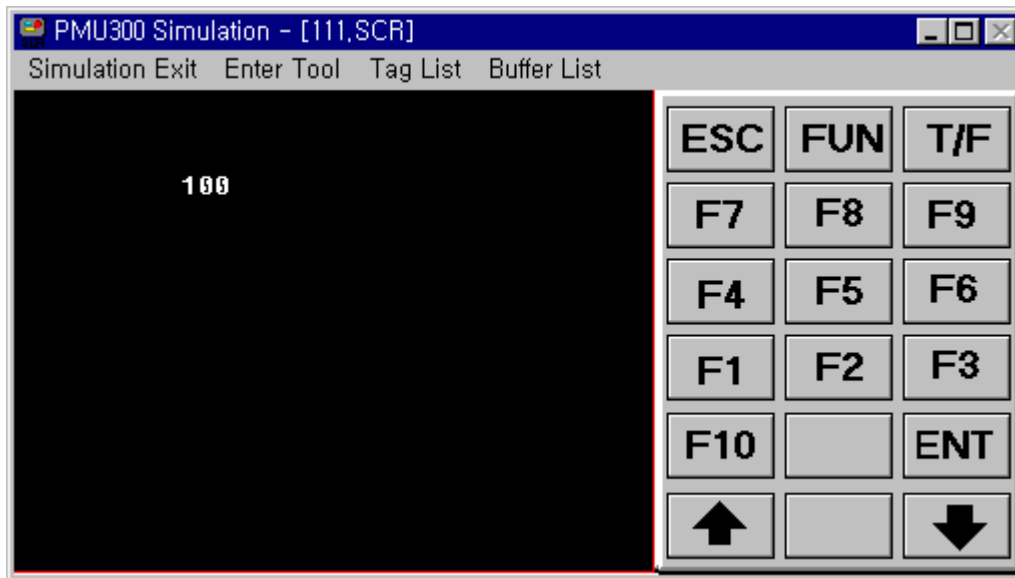
The screen not only has the Touch Territory, but the Function Key has the use for both the Operation and the Simulation. This the is the function key tool used to test the operation.

There are 16 functions and they are as follows:

ESC	It is used when you wish to cancel the menu execution or to go back to the menu before.
FUN	It has many special functions while in operation. F1: Calling Previous Screen F2: Calling Original Screen F3: S/W reset F4: Alarm Summary F5: Exit Operation
T/F	Can choose between the Ten Key Mode or Function Key Mode (Toggle) While the TK LED is ON then the mode is Ten Key Mode.
ENT	While using the menu, to Save or Operate it becomes the Enter Key Operation, for the Ten Key Mode you can enter the value of the key Operation, for the Function Mode, it is used as the Function Key
↑	While using the menu, it has the UP function (when it is the LIST Screen) While in Operation, it has the use of the Function Key
↓	While using the menu, it has the DOWN function (when it is the LIST Screen) While in Operation, it has the use of the Function Key
0 - 9	Operation, for the Ten Key Mode, you can enter the value of the key In the Function Key Mode it is used as the Function Key

PMU-600 Function Key

The following is the tool to test the operation of the Function Key
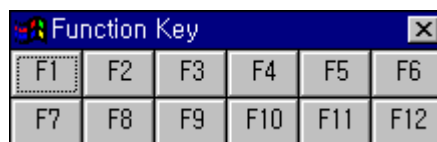
If you choose the Function Key menu, a tool such as the above will appear on screen.
There are 12 different keys, each having a different function.   Each Attribute menu
will be established according to the function key tag.

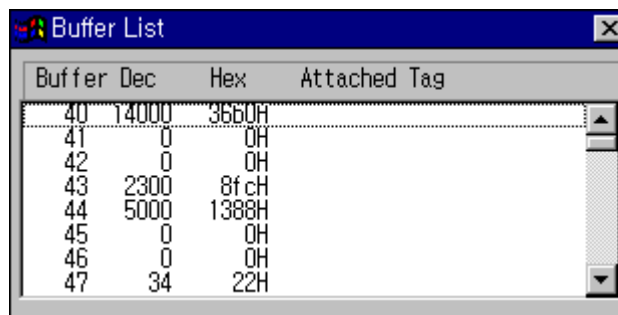Tag List   ▶ It will show the tag list category of the Simulation screen.

This Tag List is similar to the of the Main Screen Editor mode's Other menu Tag List.

Using the Enter Tool, you may change the value of the Buffer, but you must know

Thus, when you have the Tag List out on screen to refer to, it is useful.

Buffer List   ▶ Currently under Simulation it shows the connection with the Tag on screen.

Thus, it shows what number Buffer is connected to what Tag.

If you wish to use the Enter Tool to enter, like the Buffer List, open the menu on screen

for easy access.

You can view the Buffer value in one eye while in Operation.

Buffer	Dec	Hex	Attached Tag
40	14000	36b0H	
41	0	0H	
42	0	0H	
43	2300	8fcH	
44	5000	1388H	
45	0	0H	
46	0	0H	
47	34	22H	

Touch Enter   ☞ Only applicable for PMU-300/600 Series.

▶ You may use the mouse instead to enter Touch.

On the Main machine, there is a Touch Panel, which the Touch Tag, Precision Adjust

Tag can be operated by the Touch Enter.   This Touch key is used a lot in the actual Operation.

You can use the mouse instead by clicking the area of the corresponding territory while

it is in Simulation.

Exit

▶ It is the menu to exit or end the Simulation.   By exiting the Simulation

mode, you will be able to edit the main screen.

For example, if you began the Simulation while you were in Main Screen 1,

you may convert back to that screen.

When you exit during the Main Screen 2 conversion, and you comeback to the main screen

Editor mode, the main screen that will be opened is the Main Screen 2.

4-8.   Zoom

☞ *Only applicable for PMU-600 Series*

The following menu is to enlarge the screen to edit.
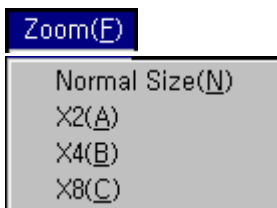
Edit Screen Enlargement Function

▶ To Enlarge...

Choose the size you want in the menu - Normal size/x2/x4/x8.

Using the point you wish as the middle, double click the right button to select the

desired size.

▶ To Scroll the enlarged screen...

While pushing the right mouse button, the screen will automatically scroll in the direction you wish.

When drawing an object or while moving or while copying, if the mouse is located at the

middle of the screen, the screen will automatically scroll for you to move the desired point.
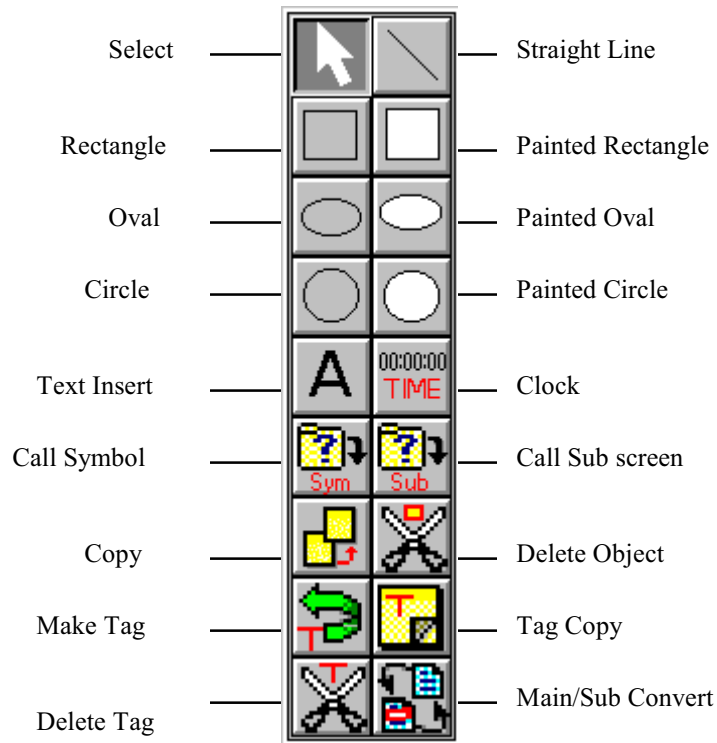
Caution) When enlarged, the screen will not scroll when it is in the Tag's territory establishment mode.

4-9.　About Edit Tools...

For Edit Tools, there are Picture Tools, Color Tools, and Cursor Location.

Picture Tool　　　▶ A Picture Tool is located on the left of the screen.　Each function is such as the drawings and the detail functions are similar to the menu Draw, Edit, Tag Edit.

PMU-200 Edit Tool

Select		Straight Line
Rectangle		Painted Rectangle
Oval		Painted Oval
Circle		Painted Circle
Text Insert		Clock
Call Symbol		Call Sub screen
Copy		Delete Object
Make Tag		Tag Copy
Delete Tag		Main/Sub Convert

PMU-300 Edit Tool
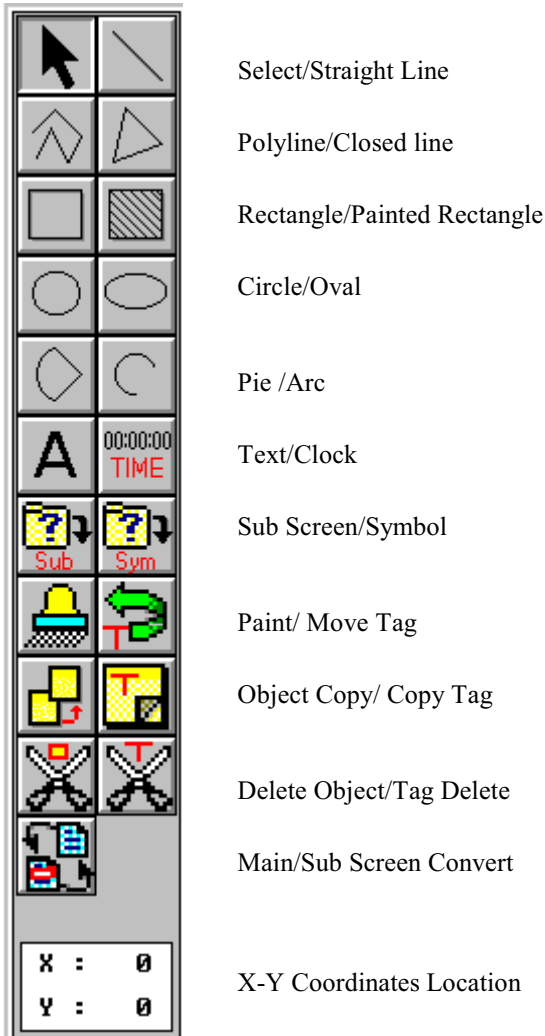
Select/Rectangle/Painted

Line/Polyline/Closed line

Circle/Oval/Text

Pie/Arc/Clock

Paint/Symbol/Sub Screen

Copy/Delete Object/Move Tag

Tag Copy/Tag Delete/Screen Convert

PMU-600 Edit Tool

Select/Straight Line	
Polyline/Closed line	
Rectangle/Painted Rectangle	
Circle/Oval	
Pie /Arc	
Text/Clock	
Sub Screen/Symbol	
Paint/ Move Tag	
Object Copy/ Copy Tag	
Delete Object/Tag Delete	
Main/Sub Screen Convert	
X-Y Coordinates Location	

Attribute Tool   Only applicable for PMU-200 Series

▶It is the tool to open and establish Attribute, Enlargement, and Line type.

Line type and Attribute can be established as the picture below.

Enlargement is when you enter a character or you call up a symbol, it is the ratio of the
width and length.

In order to change the ratio, click the mouse button on the arrows to change the length and width.

You can zoom up to eight times its size.
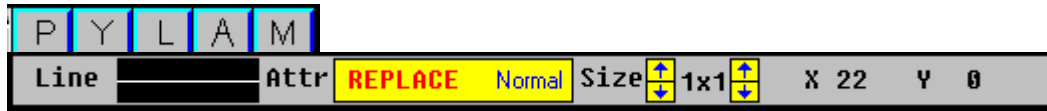
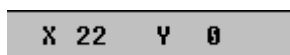Line Type   Attribute Select
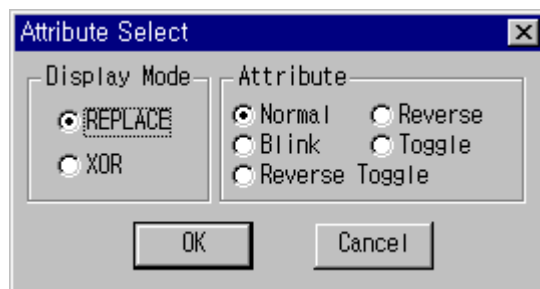
Project Manager

Symbol Editor

Link Editor

Alarm Editor

Message Editor

▶ It is the tool to show the mouse's coordinates.

The territory to draw in the Edit mode is width 240, height 128.

The cursor location is shown like the picture below, which is located on the lower left

side of the screen.

Only applicable for PMU-300 Series

▶ It is the tool to open and establish Attribute, Double, and Line type.

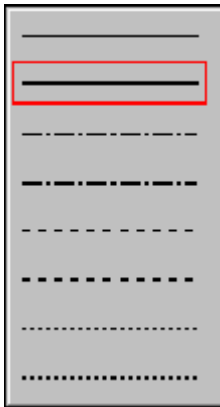Line type and Attribute can be established as the picture below.

Enlargement is when you enter a character or you call up a symbol, it is the ratio of the width length.

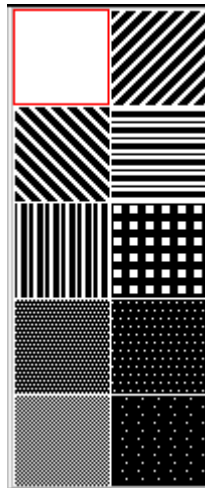In order to change the ratio, click the mouse button on the arrows to change the length and width. You can zoom up to eight times its size.
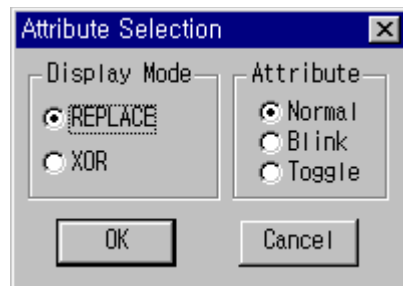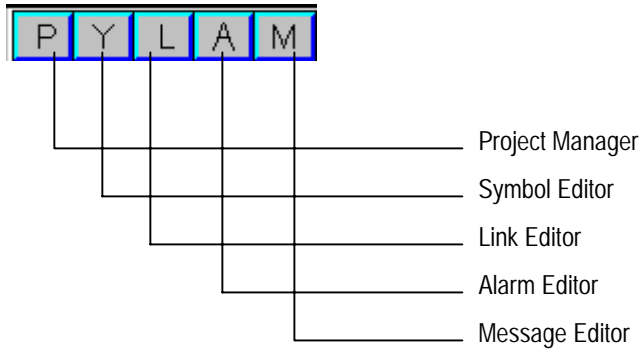

Line Type   Pattern   Attribute Selection

P Y L A M

——————————————— Project Manager

——————————————— Symbol Editor

——————————————— Link Editor

——————————————— Alarm Editor

——————————————— Message Editor

▶ It is the tool to show the mouse's coordinates.

The territory to draw in the Edit mode is width 320, length 240.

The cursor location is shown like the picture below, which is located on the lower left side of the screen.
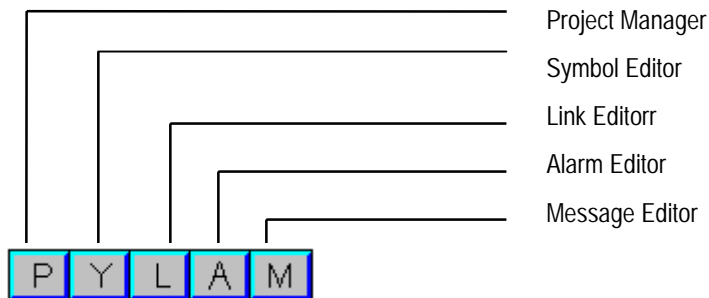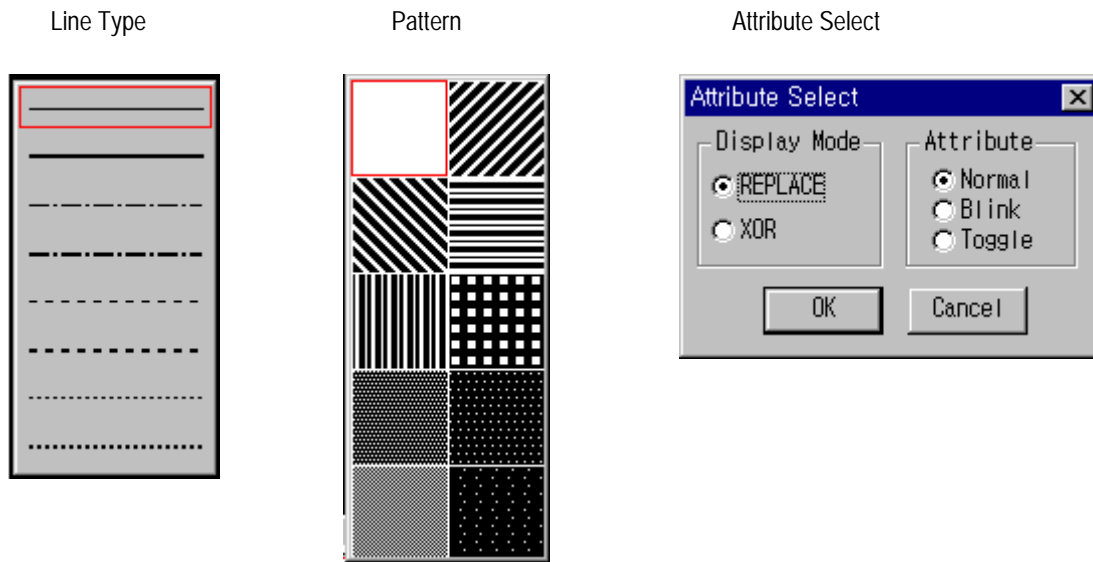
Only applicable to PMU-600 types

▶ It is a Tool menu that allows you to select styles, ratios, line types.

- Types of lines and styles are as the picture below.
- Enlargement is when you enter a character or you call up a symbol, it is the ratio of the width length.
- To change the ratio, with the mouse click the left and right set of arrows to indicate the changed horizontal and vertical ratios.
- The highest possible ratio is 8 times.

L ▬▬ Patt ▢ Attr **REPLACE** Normal Size ⬍1x1⬍ B █ █ █ █ █ █ █ █ █ █ █ F P Y L A M

Line Type   Pattern   Attribute Select

Project Manager

Symbol Editor

Link Editorr

Alarm Editor

Message Editor

P Y L A M

- This shows the Tool Box for the mouse.

- The area to draw a picture in Edit Tools is 640 in width and 480 in length.

- The table below shows the cursor location and appears at the bottom right of the Edit Tool Box.

X :   75
Y : 339