14. Shape Library and Picture Library

This chapter explains how to build Shape Library and Picture Library.

14.1.	Overview	
14.2.	Building Shape Library	
14.3.	Building Picture Library	
14.4.	Immediate Modification and Preview	14-15



EasyBuilder Pro V6.05.01

14.1. Overview

EasyBuilder Pro provides Shape Library and Picture Library for visual effects on objects. Picture Manager provides two modes: [Project] and [Library]. Pictures in [Project] mode will be stored in .emtp project file. Pictures in [Library] mode will be stored in EasyBuilder Pro libraries, or the user-defined directory.

Each Shape or Picture includes up to 256 states. This chapter explains how to build Shape Library and Picture Library.

For more information about using libraries while creating an object, see "9 Object General Properties".

14.2. Building Shape Library

Shapes are vector graphics constructed by lines, curves or polygons. A Shape can have more than one state, and each state includes two parts: frame and inner, as shown in the following figure.



14.2.1. Shape manager

An object can use frame, inner or both. Click [Project] » [Shape], and the [Shape manager] dialog box appears.







Setting Description	
Project	The Shape edited here will be saved in .emtp. Up to
	1000 Shapes can be added.
Library	The Shape edited here will be saved to the library
	directory on PC and will not be saved to .emtp
	project file.
	Include existing .plb shape library files or create a
🕙 New library	new one. To create an empty library, enter a new
	file name and click [Open]. Up to 40 library files can
	be added.
🔞 Unattach library	Exclude currently selected library.
I	Copy the selected Shape to [Project]. Only the
墜 Copy to project	shapes that do not belong to the System Libraries
	can be copied. Shapes in System Frame/System
	Button/System Lamp/System Pipe cannot be
	copied.
Background	Select and preview the background color of the
	Shape. The color is only displayed in [Shape
	manager] dialog box, and is not displayed when
	placing the object in the screen.
More options	Set the color and style of [Inner], [Frame], and

EasyBuilder Pro V6.05.01

	[Pattern].	
	Move the Shape to the previous / next state.	
📧 Сору	Copy the selected Shape.	
Paste	Paste the copied Shape.	
Insert transparent state	Insert a blank state after the selected state.	
Delete	Delete the selected state of the shape.	
Clean	Delete all the states of the selected shape.	
ОК	Confirm to save the edited Shape.	
Cancel	Cancel the editing event.	
Help	Open help files.	

Note

The color of [Inner] and [Frame] can be selected in Shape Library. The selection of [Pattern Style] is only available in System Frame / System Button Library.

General Security Shape Label Profile	
Shape	
Shape Library	
Inner ▼	
Frame	
Interior pattern : Pattern Style	
Duplicate these attributes to every state	

CMT Series supports using gradient patterns in [Pattern Style], as follow:

Pattern Style
Solid Gradient Left to right : Top to bottom : Top-left to bottom-right : Top-right to bottom-left : Radial :
ОК

14.2.2. Steps to Build Shape Library

The following explains how to create a new Shape Library and add a Shape with two states into



the library.

1. Click [New library] and enter the name of the new Shape Library, for example, "new_lib".



- 2. Click [Open], a popup dialog appears; click [Yes] to create the file.
- 3. A new Shape Library [new_lib] is added in [Shape manager], and its directory is shown below the name. This library is empty now as shown in the following figure.

Shape manager		—
Project Library		Inner 📝 Display
c:\ebpro\library\new_lib.plb		Frame
0 1 States : 0 5states : 0		Display
Objects : 0 Image: Construction of the second		
States : 0 States : 0 Objects : 0 Image: Construction of the states in	More options	
4 5 States : 0 States : 0		
Objects : 0 Ø 6 7 Ø Ø		
Background :	Delete Clean	
	OK Cancel Help	

4. Add a state to the selected Shape. First, use the drawing tools to draw a frame and inner in the window and select the frame to add to the Shape Library.



EasyBuilder Pro : EMTP2 - [
Eile Edit View Optio	n <u>D</u> raw <u>O</u> bjects <u>L</u> ibrary <u>T</u> ools <u>W</u> indow <u>H</u> elp	_ 8 ×
🕴 🗅 🚅 🔛 🖌 🖓 🛍 🛍 🚅	: 으ㅣ플 💡 😢 🙀 🔟 🖉 🐺 🛠 🕎 😨 🖳 🖉 🖫 🖉 🖓 🖉 🖉 👘 🖉 🖷	i 🗄 🚺 🖓 🖓 📓 📔
N 8 X 8 X CO) (C) (C) 🚓 📇 🕰 🔄 💡 📲 💾 🗒 🍫 🤜 🖝 📟 📟 📟 🖳 🛞 🔛 🔚 🔛	💠 💱 🛍 🕐 💹 🥅
		• • • • • • • • • • • •
Object list		
		n i i i i i i i i i i i i i i i i i i i
3 : Fast Selection		
4 : Common Windo		
5 : PLC Response	the second se	
- 6 : HMI Connection		
- 7 : Password Restrict		
8 : Storage Space In		
9 : Backup		
*10 : WINDOW_010		
11		
13		
		E
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
- 27		
- 28 · · ·		-
位址 視窗 網頁		•
(56, 81) - (157, 149)	eMT3105 (800 x 600) Width : 102 Height : 69 X = 223 Y =	10 CAP NUM SCRL

- Click [Project] » [Shape] » [Save to shape] button in the toolbar, select [new_lib], and select a number in this library. The selected number is highlighted yellow.
- 6. Save the Shape as [Frame], select [Insert], and click [Save].

Inner 📝 Display	
Frame V Display	
Save to library	
Save as : Frame Insert options :	() Inner
Insert	C Replace

Setting	Description	
Inner Displays the inner of the Shape.		
Frame	Displays the frame of the Shape.	
Save to library	Save as Frame	
	Saves the Shape as a frame.	
	Save as Inner	
	Saves the Shape as inner.	



Insert

Inserts the Shape to be a new state.

Replace

Replaces a state with this Shape.

Save Saves the settings above.

7. The following shows that a state of the Shape is added, and is defined as a frame.



8. Create the shape to be saved as inner. Select the shape drawn in the window.

E EasyBuilder Pro : EMTP2 - [10 - WINDOW_010]
Eile Edit View Option Draw Objects Library Tools Window Help
: D 🛎 🖬 ふ 🖻 🗈 🗠 刍 ያ 😢 👒 ∠ 🏢 本 ! 🛠 🧝 壑 🕾 🖉 🖓 🖩 😡 🌽 😳 🖬 😓 🖓 👘 🖆 🖼 🕨 🚳
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Object list
- 3 : Fast Selection
4 : Common Windo
- 5 : PLC Response
- 0 : mui connection - 7 : Password Restrict
- 8:Storage Space In
9: Backup
*10 : WINDOW_010
11
- 12
- 13
14
- 18
19
21
- 22
- 23
24
- 25 - 26
- 27
-28 -
· · · · · · · · · · · · · · · · · · ·
位北 視窗 網頁 ()
(188, 85) - (286, 150) eMT3105 (800 x 600) Width : 99 Height : 66 X = 262 Y = 11 CAP NUM SCRL

 Click [Save to Shape Library] button in the toolbar, select [new_lib], and select the same number as in creating the frame in this library. The selected number is highlighted yellow.

Project Library		
	ites : 0 Image: Constraint of the second secon	States : 0 Objects : 0

10. Save the Shape as [Inner], select [Replace], and click [Save].



Inner	
Display	
,	
Frame	
V Display	
Save to library	
Save as :	
Frame	Inner
Insert options	
Insert	Replace
	Save

11. A state of a Shape can include [Inner], [Frame], or both. The state 0 of the Shape shown in the following figure includes both frame and inner. Click [OK], the state 0 of the Shape is created.



12. Follow the steps of creating state 0 and insert a new state set to state 1 as shown in the following figure. The Shape now has two states, click [OK] to finish setting.

Shape manager			
Project Library	• 🕅 🔞		Inner 🕼 Display
0 States : 2	States : 0		Frame I Display
2 3	Objects : 0		Save to library
States : 0 Objects : 0	States : 0 Objects : 0	Place More options	
4 5		0 Inner,Frame	
States : 0	States : 0 Objects : 0	1 Inner,Frame	Save as : Frame Inner Insert options :
6 7 Kitalar + 0	Stater • 0	Delete Clean	Insert Replace Save
	Background :	OK Cancel Help	





14.3. Building Picture Library

14.3.1. Picture manager

Click [Project] » [Picture] button in the toolbar and the [Picture manager] dialog box appears.

) 🕒 📭 🐧 🔛 🛛	
Call up Picture Library	
Pictures manager	
Project Library	789 Clr Esc
Image: States : 1 Image: States : 1	4 5 6 BS Del
Objects : 1 0 Enter Objects : 1	1234
2 Image: Constraint of the second secon	Export Modify
4 5 Fates : 1 5 States : 2	0 BMP 267x207 166482 bytes
Objects : 1 Objects : 1 6 7 Image: Comparison of the second se	
Ktater · ? More picture libraries Background :	New Delete Clean OK Cancel Help

Setting	Description
Project	The Picture edited here will be saved in .emtp. Up
	to 1000 Pictures can be added.
Library	The Picture edited here will be saved to the library
	directory on PC and will not be saved to .emtp
	project file.
[7]	Add the existing .flbx and .flb picture library files.
🕙 New library	To add a new library that does not exist, enter a
	new file name and click [Open], an empty library
	file is created. Up to 40 library files can be added.
\delta Unattach library	Delete the currently selected library.



Browse	Search for path and view the pictures in the path.				
libraries					
🐼 Copy to project	Copy the Picture to [Project].				
Background	Select the background color of the Picture. The				
	color is only displayed in [Picture manager] dialog				
	box, and is not displayed when placing the object in				
	the screen.				
More picture	Log in to Weintek Official Website to download				
libraries	more libraries.				
Export	Export the selected Picture.				
Modify	Modify the settings of the selected Picture.				
	Move the Picture to the previous / next state.				
🔳 Сору	Copy the selected Picture.				
The second secon	Paste the copied Picture. The Picture copied to the				
Paste	clipboard can be imported to the library by pasting.				
Insert	Insert a blank state after the selected state.				
transparent state					
New	Add a new Picture.				
Delete	Delete the selected Picture.				
Clean	Delete all the Pictures listed here.				
ОК	Confirm to save the edited Shape.				
Cancel	Cancel the editing event.				
Help	Open help files.				



The supported picture formats are .bmp, .jpg, .gif, .dpd, .svg and .png. When adding a gif animation file in Picture Library, the loop times of this animated Picture can be set.

	Resolution :	214	×	15
	Size :	104	30	Bytes
	and the second se			
	Loope			
		()	1	
	Loops O GIF default	(Infinite)	
]	
Background	O GIF default]	



14.3.2. Steps to Build Picture Library

The following example explains how to create a new Picture Library and add a Picture with two states into the library.

1. Click [New library] and enter the name of the new Picture Library.



- 2. Click [Open], a popup dialog appears; click [Yes] to create the file.
- 3. A new Picture Library [new_lib] is added in [Picture manager]. This library is empty as shown in the following figure.

Pictures manager							×
Project Library							
new_lib			-	Ö 🚳			
	States : 0 Objects : 0	1	States : 0 Objects : 0]			
2	States : 0 Objects : 0	3	States : 0 Objects : 0		Export	Modify	
4	States : 0	5	States : 0	1			
	Objects : 0		Objects : 0	9			
6	Rtator + 0	7	Rtates + 0		New	Delete	Clean
More picture libraries			Background :		OK	Cancel	Help

4. Draw the two pictures below to represent state 0 and state 1 respectively.



 Select [new_lib], and select a number in this library. The selected number is highlighted yellow.



- 6. Click [New], and select the picture for state 0.
- 7. When the following dialog box is shown, select [Enable] check box to use transparent color. Set to RGB (121, 121, 121), the corresponding color in the picture below will be transparent. Or, click on a desired area with mouse to be the transparent area, the system will show the RGB of the clicked area automatically.

💽 Open					×
Look in:	📃 Desktop		•	3 🕸 📂 🎞 -	
Recent Places	Librari System	es n Folder	12	user System Folder	
Desktop	Comp System	uter n Folder		Network System Folder	
	File fol	der		TW File folder	
Libraries	1.bmpBitmap29.3 KB	o image		2.bmp Bitmap image 29.3 KB	
Computer					
Network	File <u>n</u> ame:	1.bmp		-	Open
	Files of type:	All image file:	8	•	Cancel
			Transparent color	0 x 100 30054 Bytes	
Bad	kground :				

8. The Picture of state 0 is created. Follow the steps of creating state 0 to create state 1 by clicking [New] as shown in the following figure.



Project Library							
new_lib				1			
0	States : 2 Objects : 1	1 States Object					
2	States : 0 Objects : 0	3 States Object			Export	Modify BMP 100x100	
4	States : 0 Objects : 0	5 States Object			0	30054 bytes BMP 100×100 30054 bytes	
6	Ktater + 0	7	• •	•	New	Delete	Clean

9. When finished, a complete Picture is created, click [OK]. In [Picture manager] dialog box it shows that the newly added Picture Number 0 is a bitmap picture with two states.

14.3.3. Steps to Import Picture by Pasting

The following example explains how to import a Picture into the library by pasting the picture from the clipboard.

1. Copy the following picture to the clipboard.



2. Click the Paste icon on the right side.

Picture Manager		X
Project Library		
Dbjects : 1	Dijects : 1	
4 5tates : 1 Objects : 1	5 States : 2 Objects : 1	
6 States : 2 Objects : 1	7 States : 2 Objects : 1	Export Modfy
8 States : 1 Objects : 1	9 States : 0 Objects : 0	· New Delete Clean
More picture libraries	Background :	OK Cancel Help



3. The Pictur can be easily imported to the library.



Pasting a picture directly from the clipboard into the project editing window is possible.

1. If the picture below is already in the clipboard.



2. Pressing Ctrl+V key in the editing window will open the following dialog box.



- 3. The picture will be pasted into the editing window after clicking OK.
- 4. Double clicking the picture and open Picture Library, the picture can be found in the



Project tab in Picture Manager.

roject Library			
1 2 3 4 States: 1 1 2 3 4 Objects: 1	4 5 0 51 States : 1 1 2 3 Far 0 Fater Objects :		4
40 States : 4 Objects : 2	41 States : 2 Objects :	WE!NT	EK
42	43 States : 2 Objects :	Export Modify PNG 113x102 7018 bytes	
44 States : 1 WE!NTEK			
	Background :	New Delete	Clean

Note

Transparent color can only be set for .bmp, .dpd, and .jpg picture files.

14.4. Immediate Modification and Preview

Shape Library / Picture Library settings windows are opened in the editing window. The user can immediately change the picture used by an object or multiple objects, and certain libraries support immediate color change.



📧 EasyBuilder Pro : EBProject1 - [10 -	WINDOW_010]					- d -
File 🔜 🐟 🤌 🗸 Home	Project Ob	ject Data/History View	Tool				- 8 × *
🗹 Common Window 🗹 Object Addr	ess 🗸 Rule	Address Grid 🗸 Shape	🛞 🕀 ZoomIn	💽 Open Window			
🗹 Underlay Window 🗹 Comment	Grid	✓ Windows Tree ✓ Picture	Zoom Q ZoomOut	🔁 Cascade			
☑ Object ID	✓ Snap	Veb Window 🗌 Sound	75% - 🕂 Center View	🔡 Title			
Display	Positioni	ng Toolbar	Zoom	Window			
Windows 👻 🗙	4 10 - V	MNDOW_010 ×			Þ	Picture Library	▼ X
Object list 👻	0					[Project]	▼
3 : Fast Selection - 4 : Common Window 5 : PLC Response 6 : HMI Connection 7 : Password Restriction 8 : Storage Space Insufficient 9 : Backup 10 : WINDOW (010) 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 20 31 32 33 34 35 36 37 38 20 21 22 33 <td>· · · · · · · · · · · · · · · · · · ·</td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td>	· · · · · · · · · · · · · · · · · · ·			+			

14.4.1. Replacing a Picture

- 1. Click the object or objects whose picture is to be replaced.
- Locate a new picture in Picture Library window and click the lower-right corner of that picture.



14.4.2. Replacing a Color

The [Color] drop-down list appears when the selected library supports immediate color change.



Picture Library			×
System 02 Flat-b	utton		•
System 02 Flat-b	utton		
		2	•
3	4	5	
6		8	Ţ
C Set to all s	olor 📃 🗖	to	

- Select an object or objects whose color is to be replaced. 1.
- Select a color from the Color drop-down list. 2.

Picture Library			×	
System 02 Flat-but	ton		•	
System 02 Flat-but	ton			
		2	^	
3	4	5		
6		8	Ŧ	
,		-0		
Color				

3. Click the lower-right corner 🕜 of the new picture to apply.

Setting	Description	
Set to all states	Apply the selected color to all states of the object	
	that use the same picture.	
Auto	Automatically execute [Set to all states].	



14.4.3. Extended Features

• In the settings window, dragging the slider leftward or rightward can make the thumbnail of the pictures smaller or bigger.

Picture Library			▼ X		
System Backg	ound - Standa	rd	- [
System Backg	ound - Standa	rd			
_ 0	1	2			
3	-4	5			
		_			
6					
	-0				
	-				
Set to all states Auto					
Shape Library Picture Library					

- Immediate preview can be achieved by:
- 1. Select an object.
- 2. Press and hold the Shift key on the keyboard.
- **3.** Select a picture in the library to preview, and release the Shift key to return to current picture.





14.4.4. Docking a Window

Users can drag the Shape / Picture Library window to a desired destination position. When dragging the window, a semi-transparent outline of the window shows where the window will be docked when releasing the mouse cursor at that point.



