

WEINTEK IIOT LTD.

Dynamic Drawing

Demo Project

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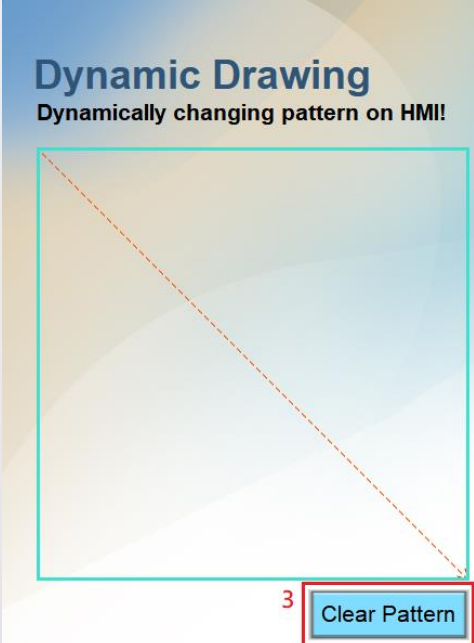
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1. Overview and Operation

Overview

This demo project shows how to use Dynamic Drawing objects. On an HMI, various shapes can be dynamically drawn using control addresses, including lines, rectangles, circles, and dots, with various styles and custom colors available.

Operation



Dynamic Drawing
Dynamically changing pattern on HMI!

3 Clear Pattern

Drawing parameters

2	0000	Attributes + 0: shape 0: none, 1: line, 2: rectangle, 3: circle, 4: dot, 5: ellipse, 6: ellipse from rectangle, 7: arc, 8: pie, 21: move origin
1	0001	Attributes + 1: arrow/shape style
	0001	Attributes + 2: line/fill style
	0006	Attributes + 3: inner color
	0000	Attributes + 4: interior pattern color (rectangle, circle)
	0000	Attributes + 5: X1
	0000	Attributes + 6: Y1
	0400	Attributes + 7: X2(circle/arc/pie radius), Rx(ellipse)
	0400	Attributes + 8: Y2, Ry(ellipse), Start degree(arc/pie)
	0000	Attributes + 9: End degree(arc/pie)

This demo project explains "drawing an angled line with an arrow." Here are the steps:

1. Enter the correct parameters based on the shape to be drawn. Include: a single-ended hollow arrow, a dashed line, line color, and the coordinates for the start and end points.

Refer to the table below for detailed settings of other shapes.

Attributes Address	Attributes Address+0	Attributes Address+1		Attributes Address+2	Attributes Address+3	Attributes Address+4
Default	0	Ones	Tens		Customizable	Customizable
Line	1	0: Non-arrow	0: Small	0: Solid line	Line color	
		1: Single-ended arrow (Hollow)	1: Large	1: Dashed line		
		2: Double-ended arrow (Hollow)		2: Dotted line		
		3: Single-ended arrow (Solid)		3: Dash Dot line		
		4: Double-ended arrow (Solid)		4: Dash Dot Dot line		
				5 and up: Solid line with thicknesses greater than 2		
Rectangle	2	0: Hollow		Drawn in Line mode	Rectangle color	Interior pattern color
		1: Solid		Drawn in Pattern mode		
Circle	3	0: Hollow		Drawn in Line mode	Circle color	Interior pattern color
		1: Solid		Drawn in Pattern mode		
Dot	4				Dot color	
Ellipse	5	0: Hollow		Drawn in Line mode	Ellipse color	Interior pattern color
		1: Solid		Drawn in Pattern mode		
Ellipse from Rectangle	6	0: Hollow		Drawn in Line mode	Ellipse color	Interior pattern color
		1: Solid		Drawn in Pattern mode		
Arc	7			Drawn in Line mode	Arc color	
Pie	8	0: Hollow		Drawn in Line mode	Pie color	Interior pattern color
		1: Solid		Drawn in Pattern mode		
Move Origin	21					

Attributes Address	Attributes Address+0	Attributes Address+5	Attributes Address+6	Attributes Address+7	Attributes Address+8	Attributes Address+9
Default	0					
Line	1	Start point X	Start point Y	End point X	End point Y	
Rectangle	2	Left-top point X	Left-top point Y	Right-bottom point X	Right-bottom point Y	
Circle	3	Center point X	Center point Y	Radius		
Dot	4	Dot X	Dot Y			
Ellipse	5	Center point X	Center point Y	Radius on the X axis	Radius on the Y axis	
Ellipse from Rectangle	6	Left-top point X	Left-top point Y	Width	Height	
Arc	7	Center point X	Center point Y	Radius	Start degree	End degree
Pie	8	Center point X	Center point Y	Radius	Start degree	End degree
Move Origin	21	New origin X	New origin Y			

- Once the parameters are set, select the drawing code for the shape to be created – for a line, use code 1.
- To clear the drawing, press the corresponding button. If not cleared, drawings will accumulate, with a maximum of 1,000 shapes in a single Dynamic Drawing object.

2. Object List

Key objects used in the project are listed below, please adjust as necessary.

Object	Description
Window 10	
Dynamic Drawing	Displays the dynamic drawing area.
Numeric	Used for setting and drawing shapes.
Toggle Switch	Clears the dynamic drawing.