PM Designer

Version 2.0.3.0

Product Release Notes

Cermate Technologies Inc.

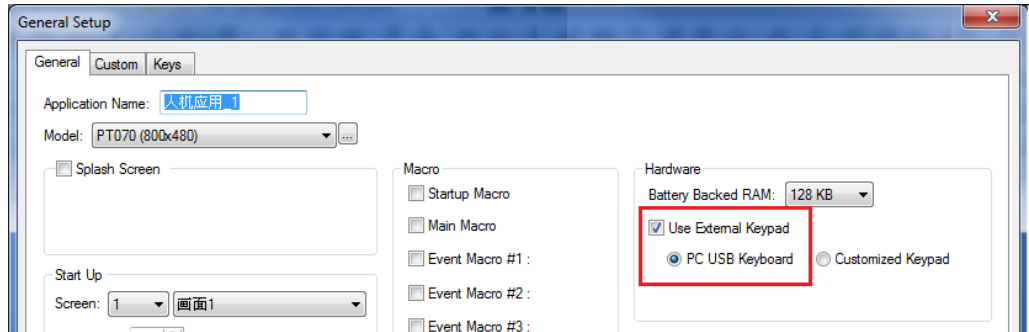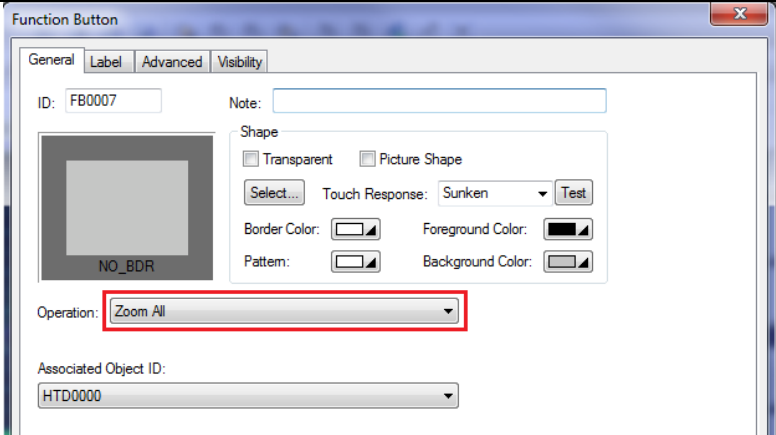Copyright 2013

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PM Designer Version 2.0.3.0

PM Designer 2.0.3.0 delivers fixes and corrections that have been made since the release of version 2.0.2.2. This release notes document highlights the features and corrections made in version 2.0.3.0.

New Features and Enhancements

Editor

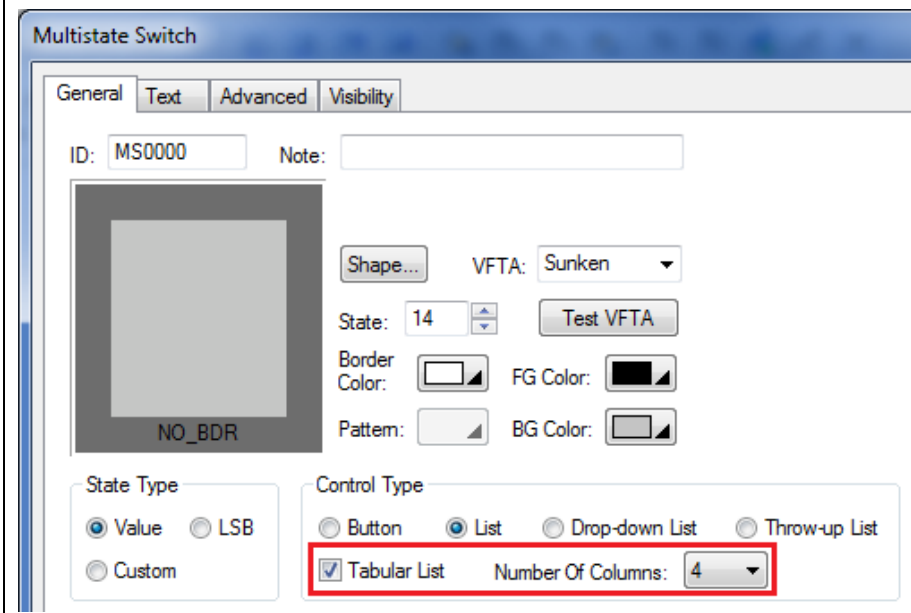| No.	Related To	Feature/Enhancement Description
A1	Printer	The BIXOLON SRP-350 thermal receipt printer is supported.
A2	External Keypad	You can use a PC's USB keyboard as the external keypad for your HMI unit. The touch operation is still supported when the external keypad is used, so you can operate the HMI unit with the touch screen and the USB keyboard at the same time. To move the cursor to the desired object, use Up, Down, Left, Right, and Tab keys. To activate a button, move the cursor to the button and press Enter key. To enter numbers and characters, move the cursor to the associated object and use the keyboard to enter the data directly.
A3	Zoom All, Function Button, Historic Trend Graph	A historic trend graph is able to automatically zoom in or out of its view to show all the collected data altogether in its display area. You need a function button with the operation Zoom All to request a historic trend graph to do so. The option of Support Zoom must be selected for the historic trend graph.

A4	Character Entry, Character Display	The "Null Terminated" is a new member of the properties of these two kinds of objects.
		When Null Terminated is not selected, the object will display all the characters in the associated memory up to the specified length. For the character of code 0, the object will display a space instead.
		When Null Terminated is selected, the object will display all the characters in the associated memory up to the specified length if there is no character of code 0. If there is a character of code 0, the object will not display the character of code 0 and the remaining characters after it.
A5	Allen Bradley CompactLogix and ControlLogix PLCs	You can import the data types of a PLC application from an L5X file created by RSLogix 5000 software.
A6	Time Macro #2	Time interval of 0.5 second is available now.
A7	Time Macro #3	Time intervals of 0.5 second (1/120 minute) and 1 second (1/60 minute) are available now.
A8	Time Macro #4	Time intervals of 0.5 second (1/7200 hour) and 1 second (1/3600 hour) are available now.
A9	Eject Micro SD Card Safely, Function Button	To assure all the file operations concerning the micro SD card are done before removing it from the HMI unit, it is recommended that the operator presses a function button with the operation Eject Micro SD Card Safely when the operator intends to remove the card. The operator is allowed to remove the card after the message "Safe to remove micro SD card" is displayed.
A10	Eject USB Memory Stick	To assure all the file operations concerning the USB memory stick are done

	Safely, Function Button	before removing it from the HMI unit, it is recommended that the operator presses a function button with the operation Eject USB Memory Stick Safely when the operator intends to remove the memory stick. The operator is allowed to remove the memory stick after the message "Safe to remove USB memory stick" is displayed.
A11	Tabular List, Multi-state Switch	The multi-state switches now support tabular list for List, Drop-down List, and Throw-up List. An example of tabular lists: An example of drop-down lists with tabular form
A12	Macro names on the	The macro name list shown on the project tree can be sorted by name.
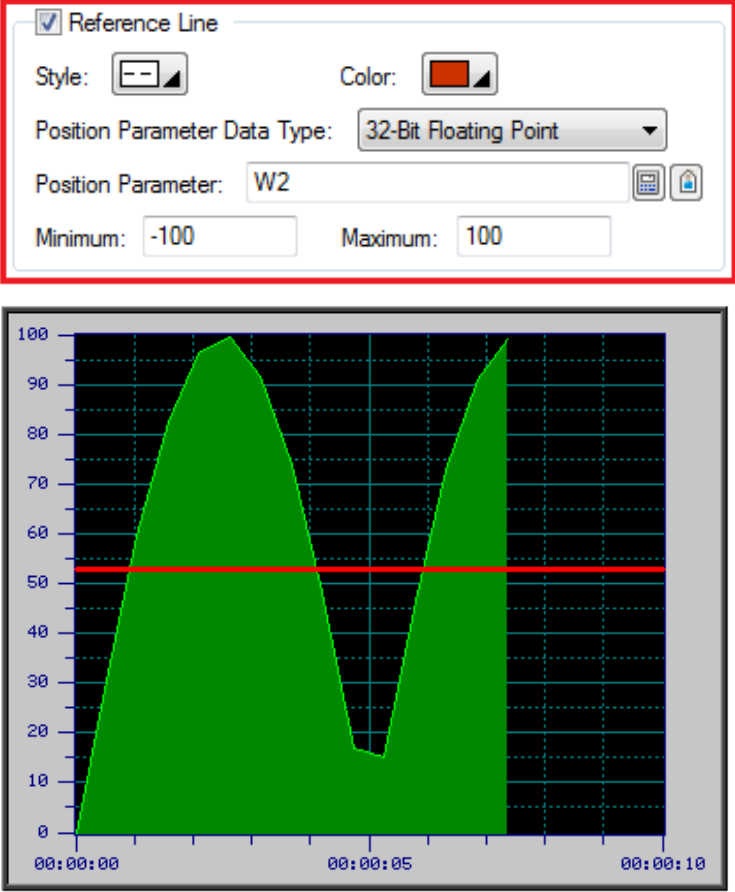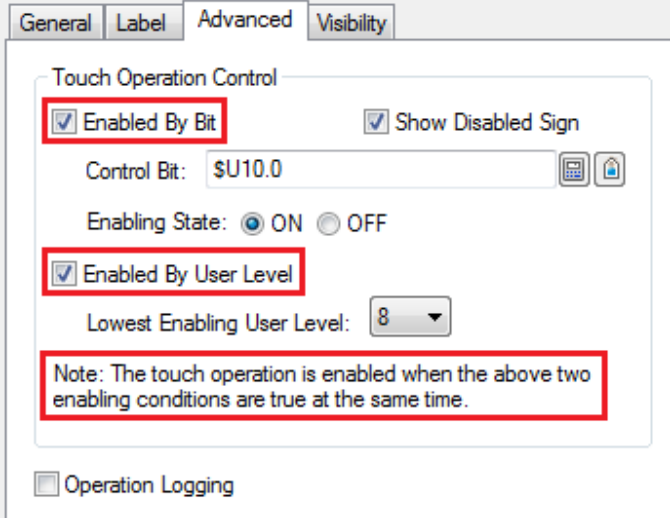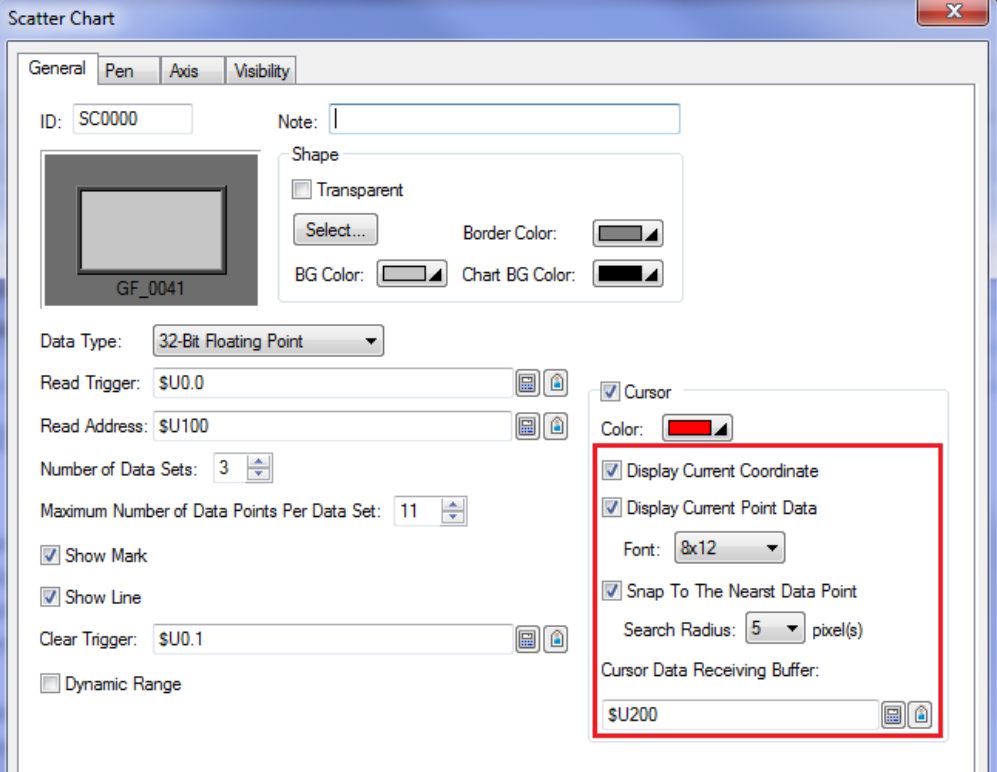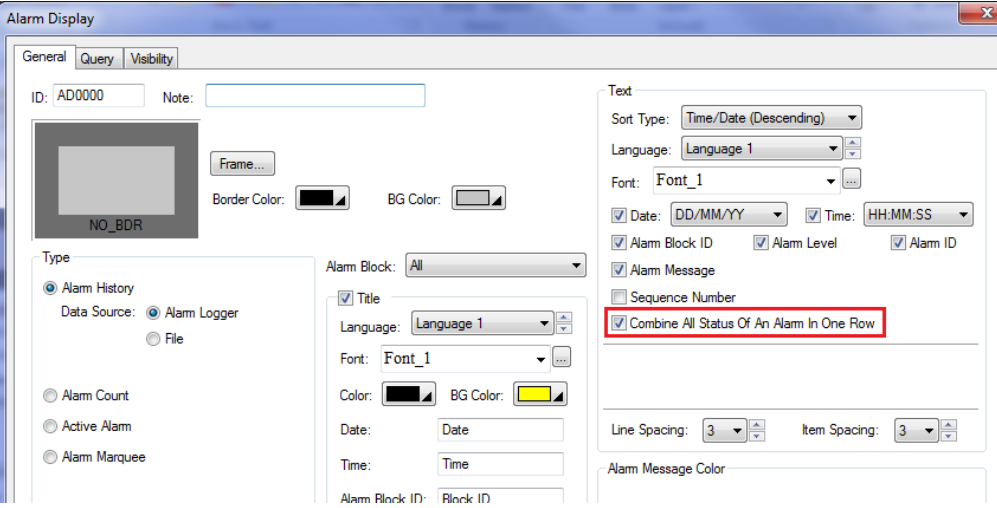
	project tree	
A13	Calibrate Touch Panel	You can press a function button with the operation "Calibrate Touch Panel" to start the calibration process. This makes it possible for the operator to calibrate the touch panel without entering Panel Setup.
A14	Reference Line, Historic Trend Graph	The historical trend graph can display a reference line at the position specified by a designated variable.
A15	Touch operation enabled by both conditions	You can configure the touch operation of the following objects to be enabled only when both the specified bit and user level meet the specified conditions: Bit Button, Toggle Switch, Screen Button, Function Button, Slide Switch, Word Button, Multistate Switch, Radio Button Group, Step Button, Numeric Entry, Advanced Numeric Display, Character Entry, Recipe Selector, and Schedule Setting Table.

A16	Default file folder	You can specify the default folder for the file operations performed by macros and the command block.
A17	Byte access to PLC registers/memory	Byte access is supported for the following PLCs: 1) Simatic S7-200 (PPI; 1-to-1) 2) Simatic S7-300 (MPI Port) 3) Simatic S7-300 Ethernet Module (CP343) 4) Simatic S7 (Ethernet) 5) S7-200 SMART (Ethernet) 6) VIPA 100V/200V MPI Port
A18	Scatter Chart	The scatter chart supports: 1) Displaying the coordinate of the cursor 2) Displaying the values of the data point selected by the cursor 3) Snapping the cursor to the nearest data point 4) Writing the values of the selected data point to a designated memory block

A19	Alarm Display	The historic alarm display can combine the three different status' message of one alarm in a single row.
A20	Add/Subtract operations, Word Button	You can associate a word button with Add or Subtract operation to a numeric entry. With the association, you can see the change of the value while you are pressing the word button. Also you can enter a number directly for the variable that the word button controls.

The following is an example of one numeric entry associated with four word buttons.
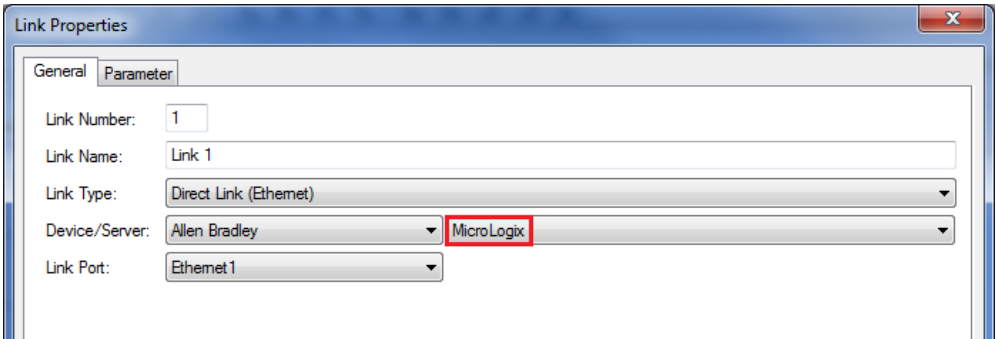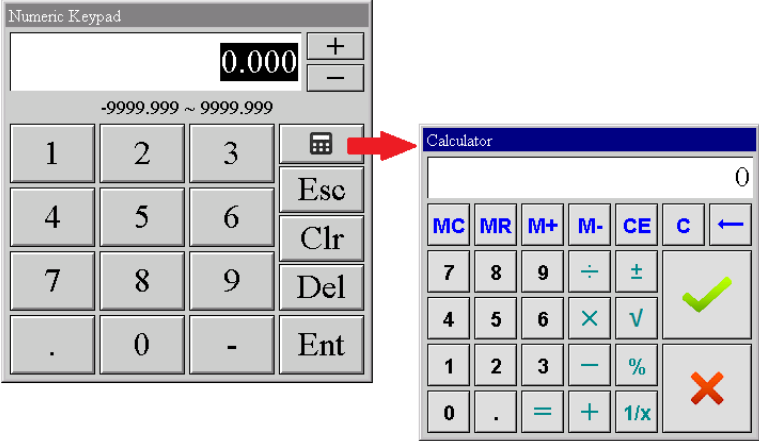
A21	Time/date Data Type, Clock	One new data type shown as "7 BCD bytes (8 bytes I/O)" is supported for the I/O of time/data information. The data type was originally requested for synchronizing the HMI unit with an Omron CJ2M PLC. The data has seven bytes totally as shown in the following but the I/O operation actually takes 8 bytes.

Byte No.	Description
0	Second (BCD 00-59)
1	Minute (BCD 00-59)
2	Hour (BCD 00-23)
3	Day (BCD 01-31)
4	Month (BCD 01-12)
5	Year (BCD 00-99)
6	Day of week (BCD 00-06 starting from Sunday)
7	Value 0 is output

Runtime

No.	Related To	Feature/Enhancement Description
B1	Data Transfer Helper, IP address of the target unit	It is allowed to enter the IP address of the target unit manually.
B2	Allen Bradley MicroLogix PLC	A new driver for AB MicroLogix PLCs is available. The driver supports the following versus the old driver: 1) I/O addresses over 15 2) Additional I/O cards (e.g. I:01/02) 3) Long integer 4) String (ST) 5) Simplified bit format (e.g. B33/2 opposed to B33:0/2) 6) Data File ASCII, MG, PD 7) Function File HSC
B3	Up key and Down key	In the past, the Up key and Down key of the external keypad could only move the cursor up and down. It was inconvenient for some kinds of applications. Now these two keys can move the cursor left and right too. When the Up key cannot move the cursor up further, it will try to move the cursor to the left. Also when the Down key cannot move the cursor down further, it will try to move the cursor to the right.
B4	N-to-1 communication server	The server can support up to 24 clients.
B5	Character Entry	For the applications that the operator needs to switch between the ASCII character keypad and the Pinyin keypad, the HMI unit can memorize the type of keypad that was used the last time and display the same type of keypad for the next character entry.

B6	Numeric Keypad	The numeric keypad can get you a simple calculator.
B7	Screen switching speed	The screen switching speed is improved significantly for the condition when some communication links are having problems.
B8	Communication driver of PanelMaster General Device	When the request size of using RX to get the received characters is larger than RX_CNT, the words that get no received characters will be reset to 0.
B9	Communication driver of DEIF A/S TCP/IP Modbus with sub-link support	The efficiency of dealing with multiple sub-links is improved by utilizing the cache capability of the Modbus gateway.

Fixes and Corrections

Editor
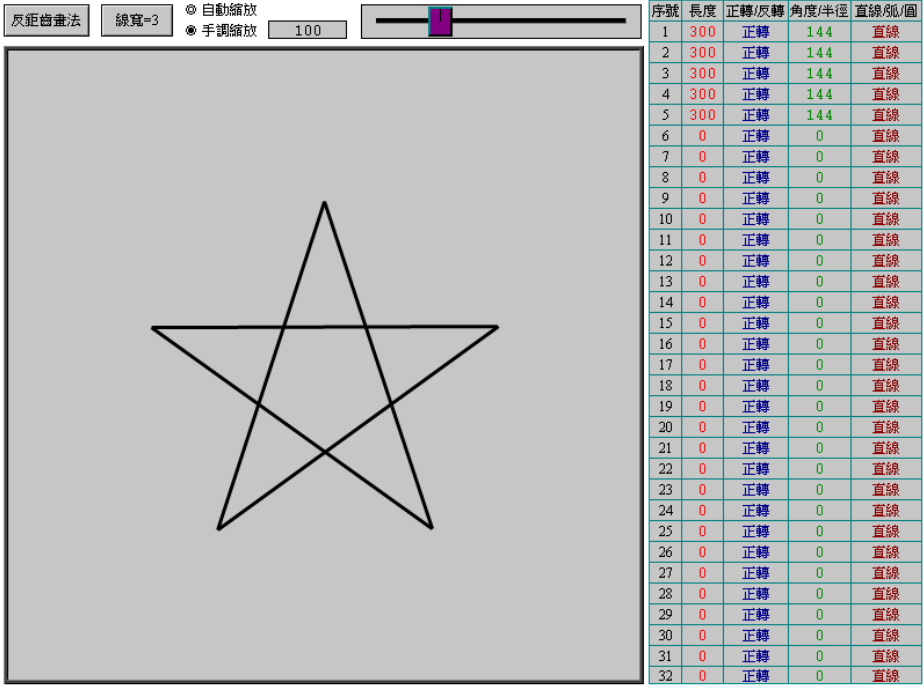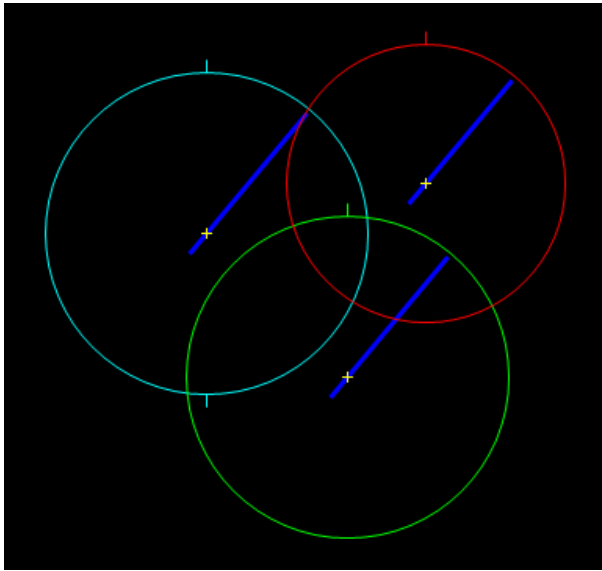
No.	Related To	Bug Description
C1	Character Entry	The Chinese character set was not present for selection in the dialog box for a newly created character entry.
C2	Character spacing of text in objects	The text was not drawn properly. The bug existed in PanelExpress only.
C3	Font	A font name with more than 15 characters entered/selected by the user would not be memorized correctly by the software.
C4	Address entry with 32-bit locations, Macro commands	It was impossible to enter the address of a 32-bit location for the parameters of a macro command that indeed needs 32-bit parameters.
C5	Compiler, Unspecified macros	The compiler would not report the error when a macro was needed but not specified. For example, the compiler would not report the error that an Open macro was needed for a screen but no macro was specified for the Open macro. The operation with unspecified macro will cause system crash at runtime when it is executed.
C6	Simatic S7 (Ethernet) driver settings	The setting data of Rack Number and Slot Number were reversed.
C7	Settings of Dimension in the Visibility property page	Modifying the settings had no effect on the object's profile. The following objects had this problem: Alarm Display, Historic Data Table, Historic Event Table, Historic Trend Graph, Historic Radar Chart, Operation Log Display, Recipe Table, and Sub-link Table
C8	Historic Trend Graph	The software would crash when drawing a historical trend graph with 16 curves.

Runtime

No.	Related To	Bug Description
D1	Macro command FILE_IO_N	The system would crash when executing the command with the operation code 232 or 332 to append alarm records to a file if any of the alarms had designated data to be recorded too.
D2	Ethernet communication, Gateway address	The communication through Ethernet, such as application downloading and PLC communications would be unstable when the gateway address was not set properly or the gateway did not exist. To work around the problem temporarily, please do the following: 1) If a gateway is used and the gateway is working, set the gateway address to the address of that gateway. 2) If no gateway is used or the to-be-used gateway is not working, set the gateway address to 1.1.1.1.
D3	Macro command SAVE2LB	The time and date were not recorded with the data.
D4	Function Button, Pause, Historic Trend Graph	Stopping the real time update of a historic trend graph using a function button did not work when the query option of the historic trend graph was enabled.
D5	Bar Graph	The text of percentage display was not drawn properly.
D6	Function Button, Save Scatter Chart Data To File	Saving the data of a scatter chart using a function button could not be done successfully.
D7	Function Button, Save Line Chart Data To File	Saving the data of a line chart using a function button could not be done successfully.
D8	Recipe read/write	Writing/reading recipe data to/from a PLC using a function button could not work when the option of "Reverse the order of the high word and low word of 32-bit data" was checked.
D9	Macro command GET_VOL_INFO	When the command was executed, If other file operations were in progress at the same time, the file system's cache memory would be interfered and the data saved to files might be incorrect.
D10	Numeric Entry	The addresses of the maximum and minimum for the variable range check were processed reversely.

D11	Bar Graph	When a bar graph was re-drawn wholly or partially due to the removal of the window screen or menu screen that had blocked its view, its external label was not painted properly.
D12	Message Display	A message display with transparent background on a window screen might cause the screen background underneath the message display to be transparent too. This resulted in the content of the screen under the window screen could be seen through the message display.

Application Examples

No.	Case	Major Object
E1	Rebar Bending Machine	Path Display with anti-aliasing feature
E2	Anti-collision system for tower cranes	Meter