

WindLDR



Welcome to WindLDR!

WindLDR is a Windows application software for IDEC PLCs. It's the most intuitive and easy-to-use ladder programming software. WindLDR supports OpenNet, MicroSmart (FC4A), MicroSmart Pentra (FC5A) and SmartAXIS (FT1A) PLCs.

WindLDR highlights:

Detailed Help references file is available under Help topic. It's like having an entire library of PLC manuals at your fingertips.

WindLDR features a multi-level undo and redo option which is limited only by available memory.

With flexible Find String features, WindLDR searches for a variety of text in a number of ways, making it easier to handle large ladder files.

Use the context-sensitive right mouse button menus for convenient access to the most commonly used commands.

Tag Editor dialog is a powerful way to access and edit all your coil data in one convenient place.

No longer do you need to remember obscure codes and abbreviated commands? With WindLDR, it's just a simple click and click operation to create any instruction.

PLC Status dialog provides valuable information at a glance, without remembering all those complicated function codes.

WindLDR is compatible with Windows XP (32-bit), Windows Vista (32-bit), and Windows 7 (32-bit / 64-bit) so transferring files across different platforms is quick and easy.

Along with IDEC's quality, you get the service and support you expected.

Notes – WindLDR

There are the following notes when you use WindLDR version 7, please following the instruction.

Windows 7 (64-bit)

Modem communication cannot be used on Windows 7 (64-bit).

Supported PLC

WindLDR version 7 supports OpenNet Controller (FC3A), MicroSmart series PLCs (FC4A), MicroSmart Pentra series PLCs (FC5A) and SmartAXIS series (FT1A).

Print

When the number of ladder lines exceeds 1500, Print/Print Preview may fail.

New file format

The older versions of WindLDR save the project data in multiple files as follows,

- ▶ *.ldr: ladder diagram file
- ▶ *.sym: symbol file
- ▶ *.bmk: bookmarks file
- ▶ *.cus: custom monitor data
- ▶ *.pcv: print settings data
- ▶ *.obu: device data list
- ▶ *.cod: binary data to PLC transferred

WindLDR version 6 stores the project data in a single file (*.pjw), which contains all project data.

Compatibility

- 1) The files created with WindLDR version 6 cannot be read with earlier versions of WindLDR.
- 2) WindLDR version 6 can read the files created with WindLDR version 4 or later. However, the following files cannot be read.
 - ▶ Files whose PLC type is not FC5A, FC4A, or OpenNet
 - ▶ Files containing instructions of unsupported PLCs, such as FA Series PLC

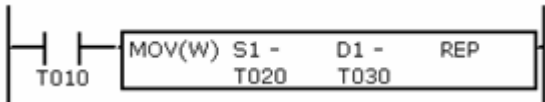
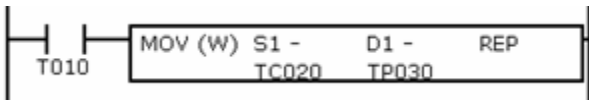
One project at a time

Only one project can be opened with WindLDR version 6 at a time. To create or open another project, you have to close the current project.

Current value, Preset value, and Contact of Timers and Counters

WindLDR version 6 supports individual device type for current value, preset value, and contact of Timer and Counter whereas earlier versions of WindLDR have only one device type for all. You can assign Tag Names and comments to each device.

The table below shows how Timer and Counter are used in WindLDR version 5 and 6.

WindLDR version 5	WindLDR version 6
T (Timer)	T (Timer Contact)
	TC (Timer Current)
	TP (Timer Preset)
C (Counter)	C (Counter Contact)
	CC (Counter Current)
	CP (Counter Preset)
<p>Example:</p> <p>The symbol T is used for Timer contact, current value and preset value.</p> 	<p>Example:</p> <p>The symbol T is used for the contact, TC is used for the current value, and TP is used for the preset value.</p> 

When a file created with an earlier version of WindLDR is opened with WindLDR version 6, T (Timer) is converted to T (Timer Contact), TC (Timer Current), and TP (Timer Preset), and C (Counter) is converted to C (Counter Contact), CC (Counter Current), and CP (Counter Preset) according to how T and C are used in the program.

Shortcuts

The shortcut keys of the following shortcuts have been changed.

	WindLDR version 5	WindLDR version 6
Invert NO/NC	Shift+I	Ctrl+Shift+I
Show/hide Mnemonics	Shift+M	Ctrl+Shift+M

Find Instruction	Shift+F	Ctrl+Shift+F
Select Rung	Shift+R	Ctrl+Shift+R
Incremental Paste	Shift+V	Ctrl+Shift+V

DPI

The dialog boxes of WindLDR are not shown properly when the display DPI of Windows is bigger than 125%. Set the display DPI to 100% or 125% when using WindLDR.

WindLDR Ver. 7.25

<Application Software>

The following functions are introduced in WindLDR 7.25

- ▶ User account is supported.
- ▶ Windows 8.1 is supported.

Bugs Fixed

The following problems have been fixed:

- ▶ Device address for the input connector shown on Property Sheet may not be removed if the corresponding FB is connected through Plug & Socket and it is removed.
- ▶ Paste for Tag Name/Comment may not work on Tag Editor.
- ▶ Description for Reminder on Script Editor dialog box is not correct.
- ▶ Display of comments may be duplicated on ladder editor.
- ▶ Save dialog box may not be opened when project for FBD is saved with 'Save' button.
- ▶ Project file in which Part Protect function is used cannot be opened properly.
- ▶ When PLC type is changed from OpenNet to FT1A series, error message for Part Protect function may not be displayed.

WindLDR Ver. 7.24

<Application Software>

The following functions are introduced in WindLDR 7.24

- ▶ When Start/Stop button on Ribbon menu is clicked, confirmation message is displayed.
- ▶ Cut, Copy, and Paste functions between Tag Editor and Microsoft Excel are supported.
- ▶ Undo and Redo functions are supported in FBD.

Bugs Fixed

The following problems have been fixed:

- ▶ If the same device address is configured to multiple devices on Data Settings dialog box for ZRN/ARAMP FB, multiple FBs of the same device address are created on FBD editor.
- ▶ If FB is pasted and the device address of pasted FB is out-of-range, wire connection information of the FB becomes invalid.
- ▶ If a wire is divided on FBD editor, display of socket may be duplicated.
- ▶ When Data Settings dialog box of FB is opened after connected wire is divided on FBD editor, invalid device address is displayed on the dialog box.
- ▶ If invalid wiring is tried on FBD editor, display of function block diagram on FBD editor and actual connections between FBs may not be conformed.
- ▶ Cut, Copy and Paste functions in context menu on FBD editor may be disabled.
- ▶ When a wire is selected on FBD editor, it can be deleted by pressing Ctrl+X.
- ▶ When a wire is selected and the paste is executed on FBD editor, WindLDR crashes.
- ▶ When a project file containing bookmarks between No.10 and 255 is opened, project file may not be opened properly.
- ▶ When multiple tag names or comments including blank cells are pasted on Tag Editor, those blank cells are removed.
- ▶ The behavior of AND or OR circuit in ladder program simulation may not be conformed with the behavior of actual FT1A series PLC.
- ▶ When the ladder program is converted, the ladder program size is not checked properly.
- ▶ If the programming mode is changed from FBD to LAD and subroutines are used in the ladder program, saving project may fail.
- ▶ If an invalid string is input to Execution Status of DLOG/TRACE FB on Property Sheet, displayed device address in [Address] is deleted.
- ▶ If tag name is used with D1 of DLOG/TRACE instruction, the program conversion fails.
- ▶ If "U" + number (e.g. U1) is used as S1 (folder name) for DLOG/TRACE instruction, the folder name is changed when a device address is assigned to an Unallocated Tag on Tag Editor.
- ▶ If project file is opened by double-clicking on [Open] dialog box, the location of an FB may be changed.
- ▶ When PLC type is FT1A and a ladder program containing User Communication instructions is converted, the port number of user communication instructions is not checked properly.

- ▶ E-mail address which starts with 'D' or 'd' cannot be imported on E-mail Address Book dialog.
- ▶ Host name which starts with 'D' or 'd' cannot be registered on Remote Host List dialog.

WindLDR Ver. 7.23

<Application Software>

Bugs Fixed

The following problem has been fixed:

- ▶ When the ladder program is converted, conversion error message for ladder program may be not displayed.

WindLDR Ver. 7.22

<System Software – FT1A-12, -24, -40, and -48>

The following function is introduced in FT1A system software version 2.21.

- ▶ MSG instruction and MSG FB can display floating-point values as decimal notation.

Bugs Fixed

The following problem has been fixed:

- ▶ When the network settings are obtained by a DHCP server, FT1A Pro/Lite cannot communicate with hosts located beyond the default gateway.

<Application Software>

The following function is introduced in WindLDR 7.22

- ▶ When you search instructions or strings in Ladder, once the search reaches the end of the program, the search continues from the top of the program until the original cursor position.

The following function is added to FC5A

- ▶ External PV mode for PID module is supported.

Bugs Fixed

The following problems have been fixed:

- ▶ When the data type of CVXTY instruction is Integer (I), the data type of S2 is handled as Integer (I) in simulation mode.
- ▶ If the data type for BTOA or ATOB instruction is Double (D) and constant is assigned to S2, the value of S2 is not restored after the program is uploaded.
- ▶ Specific tag name may not be recognized on Property Sheet of FBD.
- ▶ Constant can be assigned to address on Property Sheet for AI and MSG FBs.
- ▶ When in monitor or simulation mode, if Monitor Notation is Hexadecimal, the value of AI FB is not displayed properly on FBD editor.
- ▶ When you divide wire between FBs and change the Block number of one of the FBs, the connection may be changed incorrectly.
- ▶ When project file is saved after [Divide the selected wire] function is used on FBD editor, project file may be corrupted.
- ▶ When the wire between Timer/Counter FB and another FB is divided and they are copied and pasted, WindLDR is crashed.
- ▶ When WindLDR is launched with English version, the string of Process High Alarm is not displayed properly on PID Module Configuration dialog box.
- ▶ When PLC type is FC5A-C24R2X, the number of slots on ANST instruction dialog box is incorrect.
- ▶ When slot 5 to 7 are configured in ANST instruction and PLC type is changed from slim to

all-in-one type, the settings of those slots are not displayed in ANST instruction dialog box.

- ▶ After PLC type is changed from slim type to all-in-one type, if you open ANST instruction dialog box and disable slot 5 to 7, the settings of slot 2 to 7 may be moved or copied to slot 1 to 4.
- ▶ The range of occupied data registers for "Use data registers to configure E-mail settings" is not displayed properly on E-mail Settings tab of Function Area Settings dialog box.
- ▶ Digital Input FB turned on by I/O Force function on FBD editor cannot be turned off with Batch Monitor dialog box.
- ▶ If more than seven expansion modules are connected to FC5A series, PID module settings cannot be written to or read from the PID module.
- ▶ When PID module type is changed, the settings of unsupported functions are not cleared.
- ▶ When the force function is enabled, the devices that are not registered on Force List dialog box are forced on by double-click.
- ▶ When the language of WindLDR is German or Spanish, periods are displayed as the decimal point instead of commas on PID module configuration dialog box.
- ▶ When the PLC type is FC5A or FT1A, and the delimiter is configured with Hex in Variable (DR) for RXD/ERXD instruction, RXD/ERXD instruction may not be executed properly.

WindLDR Ver. 7.21

<Application Software>

The following functions are introduced in WindLDR 7.21

Bugs Fixed

The following problem has been fixed:

- ▶ Undo and Redo functions are disabled on FBD editor because those functions may not work properly on FBD editor so FBD program may incorrectly be modified.

WindLDR Ver. 7.20

<System Software – FT1A-12, -24, -40, and -48>

The following functions are introduced in FT1A system software version 2.20.

Improvements

- ▶ Data Register ROM Backup is supported.
- ▶ The menu language setting is retained in the ROM.

<System Software – FC5A-D12>

The following functions are introduced in FC5A-D12 system software version 131.

Bugs Fixed

The following problem has been fixed:

- ▶ When proportional band is selected as proportional term in PID instruction, Integral start coefficient does not work.
- ▶ D8054 (transmission wait time) does not function in Modbus RTU Master communication on Port 2.

<System Software – FC5A-C10, -C16, -C24, -D16, and -D32>

The following functions are introduced in FC5A system software version 246.

Bugs Fixed

The following problem has been fixed:

- ▶ When proportional band is selected as proportional term in PID instruction, Integral start coefficient does not work.

<Application Software>

The following functions are introduced in WindLDR 7.20.

Improvements

- ▶ When Find String dialog box is opened, device address at ladder cursor is set as default target string.
- ▶ When Find Instruction dialog box is opened, instruction at ladder cursor is set as default target instruction.

The following functions are added to FT1A

- ▶ Default values of local host port number on Maintenance Communication Server are

standardized to 2101.

- ▶ Default values of local host port number of User Communication Server for connection 1 to 3 are changed to 2102, 2103 and 2104.

The following function is added to FC5A

- ▶ "Proportional Band (Enable integral start coefficient)" is added in Proportion setting on PIDST dialog box.

Bugs Fixed

The following problems have been fixed:

- ▶ Configure buttons of Special Inputs settings in Function Area Settings dialog box for FT1A series are not enabled/disabled properly.
- ▶ When the PLC type is FT1A series and the programming method is changed from ladder to FBD, unnecessary error messages are displayed.
- ▶ Duplication of local host port numbers for Maintenance Communication Server in Function Area Settings for FT1A series is not checked correctly.
- ▶ When the comment size exceeds the maximum user program size, the program comparison cannot be executed.
- ▶ When you enable "Move Comment" option and replace devices, comments may be deleted.
- ▶ When you convert the program, all tabs for subroutines may be closed.
- ▶ Constants used in instructions on ladder editor may not be incremented/decremented.
- ▶ When all part of an instruction is selected on ladder editor, device addresses may not be incremented/decremented.
- ▶ When some instructions are selected on ladder editor, device addresses may not be incremented/decremented.
- ▶ When ladder program is printed, characters in rung comments may be printed unclearly.
- ▶ Pasting ladder program might take time.
- ▶ When PLC type is FC5A-C10R2X or FC5A-C16R2X, the program conversion fails after you configure the function area settings.
- ▶ Program conversion for communication macro instruction of FC4A is not executed properly.
- ▶ When you enable ladder program monitoring on FT1A LCD, subroutine IDs used are not consecutive numbers starting with 0, and the program is converted, WindLDR crashes.
- ▶ When programming mode is FBD, menus for unsupported functions are displayed in Application menu > Listing.
- ▶ Help button on context menu for instructions is not displayed.
- ▶ When data type is "Float (F)" and the floating point value which contains more than or equal to 4 digit integral part is described in Script Editor dialog box, the floating point value is handled as 0.
- ▶ If FBD program contains WEEK FB, Compare function cannot be executed.

WindLDR Ver. 7.16

<System Software – FT1A-12, -24, -40, and -48>

The following problems have been fixed in FT1A system software version 2.11.

Bugs Fixed

The following problems have been fixed:

- ▶ Receive Timeout setting for the Ethernet communication is not applied correctly.

<Application Software>

The following functions are introduced in WindLDR 7.16

Bugs Fixed

The following problem has been fixed:

- ▶ When you un-dock Tag Editor window from WindLDR main window or change Device Type on Tag Editor, WindLDR might crash.
- ▶ When you monitor PLC and open Batch Monitor dialog box, if you disconnect and connect cable, some part of values on Batch Monitor dialog box are not displayed correctly.
- ▶ Download of system software version 130 for FC5A-D12X1E is not executed correctly..
- ▶ The system software version of the connected PLC is not checked when E-mail is configured to attached a CSV file and the user program is downloaded.
- ▶ Program name, rung number, and line number are not displayed in conversion error messages for instructions.

WindLDR Ver. 7.15

<Application Software>

The following functions are introduced in WindLDR 7.15

Bugs Fixed

The following problem has been fixed:

- ▶ Downloading the system software version 130 for FC5A-D12X1E is not executed correctly.

WindLDR Ver. 7.14

<System Software – FT1A-12, -24, -40, and -48>

Improvements

The following functions are introduced in FT1A system software version 2.10.

- ▶ An option to update the communication error for Modbus Master (RTU) and Modbus TCP communication is added.
- ▶ Certified with shipping standards (ABD, LR, DNV and NK).

Bugs Fixed

The following problems have been fixed:

- ▶ FT1A Lite may obtain inputs status as OFF regardless of actual input status after it is powered up.
- ▶ If upper/lower limit of data register is configured as source device of BMOV instruction, a user program execution error occurs.
- ▶ When you write values to devices in FT1A Pro/Lite with the maintenance communication over Ethernet, storing values in devices of the FT1A and sending replies from the FT1A may delay.

<System Software – FC5A-D12>

Improvements

The following function is introduced in FC5A-D12 system software version 130.

- ▶ An option to update the communication error for Modbus Master (RTU/ASCII) and Modbus TCP communication is added.
- ▶ Configuration for remote host with data register is supported.
- ▶ Configuration for e-mail address with data register is supported.
- ▶ Configuration for e-mail settings with data register is supported.
- ▶ CSV file can be attached to the e-mail.
- ▶ Monitoring of strings is added in web server function.
- ▶ Special internal relays (M8230 to M8232) to disconnect connection for client communication are added.

Bugs Fixed

The following problems have been fixed:

- ▶ When FC5A-D12 sends a retransmission packet, FC5A-D12 might continue to send same retransmission packets even after the communication is recovered.

<System Software – FC5A-C10, -C16, -C24, -D16, and -D32>

Improvements

The following function is introduced in FC5A system software version 245.

- ▶ An option to update the communication error for Modbus Master (RTU/ASCII) communication is added.

<Application Software>

Improvements

The following functions are introduced in WindLDR 7.14.

The following functions are added to FT1A

- ▶ An option to update the communication error for Modbus Master (RTU) and Modbus TCP communication is added.

The following functions are added in FBD editor.

- ▶ Comparison of comments is supported.
- ▶ Print settings are added. Footer can be specified.
- ▶ When a terminal FB device, such as Input or Output, is entered on the Property Sheet but the corresponding FB does not exist on the editor, that FB is automatically inserted to the editor.
- ▶ Simulation can be executed even if FBD program has errors. Only valid FBs are simulated.
- ▶ While WindLDR is in monitor/simulation mode, you can change terminal FB status with Enter key.
- ▶ Connecting and dividing of wire between FBs is supported.

The following functions are added to FC5A-D12

- ▶ An option to update the communication error for Modbus Master (RTU/ASCII) and Modbus TCP communication is added.
- ▶ Configuration for remote host with data register is supported.
- ▶ Configuration for e-mail address with data register is supported.
- ▶ Configuration for e-mail settings with data register is supported.
- ▶ CSV file can be attached to the e-mail.
- ▶ Monitoring of strings is added in web server function.

The following function are added to FC5A Slim type (except FC5A-D12) and All-In-One type.

- ▶ An option to update the communication error for Modbus Master (RTU/ASCII) communication is added.

Bugs Fixed

The following problems have been fixed:

- ▶ If you insert DLOG/TRACE and specify the repeat greater than or equal to 10 and save the project, the saved project cannot be opened.
- ▶ Incremental paste for bit device may not be executed correctly.
- ▶ Start address of mnemonics is not printed correctly.

- ▶ Menu commands on Customize tab of WindLDR Options dialog box are not displayed.

WindLDR Ver. 7.13

<System Software – FT1A-12, -24, -40, and -48>

The following functions are introduced in FT1A system software version 2.03.

- ▶ Downloading FBD editor text is supported.

<Application Software>

The following functions are introduced in WindLDR 7.13.

- ▶ Online helps (German/Chinese) for FT1A FBD programming are added.
- ▶ Windows 8 is supported.
- ▶ In Script editor, devices that have a space between symbol character and address number, such as [D 0100], can be accepted.

The following function is added to FT1A.

- ▶ Programming method can be changed between Ladder and FBD on the status bar.
- ▶ Tooltip on the ribbon menu is revised.

The following functions are added in FBD editor.

- ▶ Texts can be described on the FBD editor.
- ▶ Existing wire can be re-wired to another FB connector.
- ▶ Multiple FBs can be arranged.
- ▶ Detailed parameters of each FB can be shown in the program comparison.

Bugs Fixed

The following problem has been fixed:

- ▶ Device information of Tag Editor is not updated when a project file is opened.

WindLDR Ver. 7.12

<System Software – FC5A-D12>

The following changes are made in FC5A-D12 system software version 122.

Bugs Fixed

The following problem has been fixed:

Once the PLC is powered up, MOV(D) or MOV(L) does not function properly according to 32-bit data storage setting. Even if "From Lower Word" is selected, "From Upper word" is applied to those instructions.

WindLDR Ver. 7.11

<System Software – FT1A-12, -24, -40, and -48>

Bugs Fixed

The following problems have been fixed in FT1A system software version 2.02.

- ▶ For YEAR instruction and YEAR FB, even if yearly or monthly setting is enabled, a date for the ON setting may not exist depending on the year and the month. In this case, the output should turn on at 0:00 on the first day of the following month, but it does not turn on when the pulse output is enabled.
- ▶ For XYFS instruction, when integer (I) is selected as data type and a negative number is set for the Y coordinate, CVXTY and CVYTX instructions for the XYFS instruction cannot convert the value assigned by device S2 correctly.
- ▶ If the TCP client that communicated with FT1A in Ethernet communication did not properly disconnect the TCP connection, FT1A may not be able to discard the server connection which is no longer needed. In this case, it can not reuse the server connection.

<Application Software>

The following functions are introduced in WindLDR 7.11.

- ▶ All instructions/FBs are displayed on Toolbox window when you launch WindLDR.

The following function is added to FT1A.

- ▶ "End of month" option is supported in YEAR instruction/FB.
- ▶ Remote I/O slave button is moved to Configuration tab.

The following functions are added in FBD editor.

- ▶ Redo is supported.
- ▶ "None" option is added to Grid Settings in WindLDR Options dialog box.
- ▶ Context menu for terminals when WindLDR is in monitor/simulation mode is added.
- ▶ Tooltip for FB connectors is supported.
- ▶ FB connector can be inverted with mouse double-click.
- ▶ Show/hide option for comments is added in Ribbon menu.
- ▶ 3 menus buttons Terminal, Basic, and Advanced are added to the context menu so that you can insert an FB at the cursor position.
- ▶ Online helps for FT1A FBD (Japanese and English) are added.
- ▶ AI (Analog input) can be monitored as read-only on Custom Monitor dialog box.
- ▶ FBs can be moved with the cursor keys on the keyboard.
- ▶ Shortcut keys Ctrl+Mouse wheel is supported to zoom in/out the editor.
- ▶ Dec/Hex selection on the status bar is supported in monitor/simulation mode.
- ▶ Wire crank locations can be adjusted according to your preference.
- ▶ Dot mark is shown at the location where wires are branched.

- ▶ When you select a wire, the selected wire is highlighted.

Bugs Fixed

The following problems have been fixed:

- ▶ Default color settings of FBD editor are incorrect.
- ▶ When Script Editor dialog box is closed, comments of the devices used in the dialog box are removed.
- ▶ "Snap to grid" is always enabled when WindLDR is launched.
- ▶ Conversion error details may be not displayed when there are more than 4 lines in circuits.
- ▶ WindLDR crashes when a user program is uploaded from FC5A with pass-through.
- ▶ Remote I/O slave configuration file cannot be opened.

WindLDR Ver. 7.10

<System Software – FT1A-12, -24, -40, and -48>

The following functions are introduced in FT1A system software version 2.01.

- ▶ Function block diagram (FBD) is supported.
- ▶ Remote I/O is supported.
- ▶ Script (SCRPT instruction/FB) is supported.
- ▶ A maximum of 10 YEAR or WEEK instructions can be used in a user program.
- ▶ Not only FT1A is started running, the High speed counter preset value is updated when the gate input is turned on.

Bugs Fixed

The following problems have been fixed:

- ▶ A syntax error does not occur when invalid data register is configured as control registers in the Function Area Settings.

<Application Software>

The following functions are introduced in WindLDR 7.10.

The following functions are added to FT1A

- ▶ Function block diagram (FBD) is supported.
- ▶ Remote I/O is supported.
- ▶ Script (SCRPT instruction/FB) is supported.
- ▶ A maximum of 10 YEAR or WEEK instructions can be used in a user program.

For details about the functions and how to program in WindLDR, please refer to the corresponding user's manuals.

Bugs Fixed

The following problems have been fixed:

- ▶ Non-retentive data registers and special data registers can be configured as the control register of high-speed counter.
- ▶ Preview in ARAMP instruction dialog box may not be correct when showing the preview for interrupt input.
- ▶ When the PLC type is FC5A-C10, -C16, or -C24, LC>=(D) instruction does not function.
- ▶ When WindLDR communicates with FC5A system version 241 using HGxG pass-through, host communication is not restarted after the program upload from the FC5A is completed.

WindLDR Ver. 7.03

<System Software – FT1A-12, -24, -40, and -48>

The following functions are introduced in FT1A system software version 1.13.

- ▶ Network settings can be configured on the SmartAXIS LCD. (FT1A Pro only)

Bugs Fixed

The following problems have been fixed:

- ▶ The number of scans traced by TRACE instruction is incorrect.
- ▶ When a LCAL instruction is used to call a subroutine, the instructions connected to the LCAL in parallel are not executed properly.

<Application Software>

The following functions are introduced in WindLDR 7.03.

Bugs Fixed

The following problems have been fixed:

- ▶ The number of scans shown in Editing TRACE instruction dialog box is incorrect.
- ▶ When PLC type is FC5A-D12 and you change a server connection to 'Unused' in Function Area Settings dialog box, the same change is applied to a client connection.
- ▶ PIDST and ANST dialog box may not function properly.

WindLDR Ver. 7.02

<Application Software>

The following functions are introduced in WindLDR 7.02.

1. Improvements

The following improvement has been made:

- ▶ Show a warning message when the device ranges of the configured expansion data registers and of the device data list are duplicate.

2. Bugs Fixed

The following problems have been fixed:

- ▶ When the PLC type is FC5A-D12, timeout setting of Modbus TCP cannot be changed.
- ▶ Some dialog boxes of WindLDR are not fully shown when the display DPI of Windows is made bigger.
- ▶ Unallocated tags assigned to instructions are cleared when you assign tag names to those unallocated tags.
- ▶ The user program in FC5A all-in-one type cannot be uploaded when a different type of PLC is selected in WindLDR.
- ▶ When subroutines are programmed, the ladder program may not be displayed properly on the LCD of FT1A Pro/Touch.

WindLDR Ver. 7.01

<System Software – FT1A-12, -24, -40, and -48>

Bugs Fixed

The following problem has been fixed in FT1A system software version 1.12.

- ▶ When MSG instruction is executed, Two special characters, left and right arrows, are shown opposite on the FT1A Pro LCD.

<Application Software>

The following functions are introduced in WindLDR 7.01.

1. Improvements

The following improvement has been made:

- ▶ German and Chinese versions of online help files for FT1A are added.

2. Bugs Fixed

The following problem has been fixed:

- ▶ System software download fails when WindLDR is running on German or Spanish operating system.

WindLDR Ver. 7.00

<System Software – FC5A-C10, -C16, -C24, -D16R, and -D32>

The following function is introduced in FC5A system software version 241.

- ▶ Modbus RTU Pass-Through (Slave)

Bugs Fixed

The following problem has been fixed:

- ▶ When the port 2 of PLC is configured as Data Link slave and it is powered up after the Data link master, the slave PLC may not receive initialization requests from the master.

<System Software – FC5A-D12>

The following function is introduced in FC5A-D12 system software version 121.

- ▶ Modbus RTU Pass-Through (Master)

Bugs Fixed

The following problems have been fixed:

- ▶ Downloading a user program may fail when a 128 KB memory cartridge is installed on FC5A-D12 and the size of the user program is bigger than or equal to 120 KB.
- ▶ The slave address of port 3 through 7 cannot be changed with special data registers D8040 through D8044.
- ▶ When more than three analog modules are mounted to PLC and the port 2 is configured as Modbus RTU slave, the PLC may not be able to receive incoming requests from the master.

The following changes are made in FC5A-D12 system software version 116.

Bugs Fixed

The following problems have been fixed:

- ▶ Mode 1 of pulse instructions (PULS, ZRN, and RAMP) does not function properly.
- ▶ "15 Force Multiple Coils" of Modbus RTU Master does not function.

<System Software – FT1A-12, -24, -40, and -48>

The following functions are introduced in FT1A system software version 1.10.

- ▶ FT1A Pro
- ▶ System menu on FT1A Pro
- ▶ Ladder program monitor on FT1A Pro

- ▶ Data File Manager to manage SD memory card
- ▶ MSG instruction to create screens shown on the FT1A Pro LCD
- ▶ Other improvements
 - SDHC memory card (32GB maximum) is supported.
 - Initial execution speed of DLOG/TRACE instructions when an SDHC memory card is used is improved.

Bugs Fixed

The following problems have been fixed:

- ▶ FT1A may be reset during serial communication if the processor inside is highly loaded.
- ▶ FT1A is reset when the network settings are configured with a DHCP server.
- ▶ Even when you select Unused for a connection, the change is not applied in FT1A.
- ▶ YEAR instruction may not work properly when the settings are configured in multiple tabs.
- ▶ FT1A does not reply when it is configured as a Modbus RTU slave and request messages from the master are received in short time.

<Application Software>

The following functions are introduced in WindLDR 7.0.

1. FT1A Pro Support

The FT1A Pro is supported and the following new functions are added.

- ▶ Data File Manager to manage SD card memory inserted in the FT1A.
- ▶ MSG instruction to configure a screen for FT1A Pro LCD.
- ▶ Backlight setting is added in Function Area Settings dialog box.
- ▶ An option to enable ladder program monitoring on FT1A is added in Function Area Settings dialog box.

2. ARAMP preview

How FT1A outputs the pulses can be previewed in the editing dialog box for ARAMP instruction.

3. Auto Comment Import improvements

- ▶ Comments of special internal relays and data registers can be automatically imported when the PLC is changed or a user program is uploaded from a PLC.
- ▶ Comments of special internal relays and data registers can be excluded from the comment download.

4. PLC Status dialog box improvement

The display format of date & time of the operating system is automatically used to display the date & time on the dialog box.

5. Other improvements

The following improvements have been made:

- ▶ An option to automatically synchronize the PLC clock with the PC clock is added in Download dialog box.
- ▶ Simulation for WEEK instruction is supported.

6. Bugs Fixed

The following problem have been fixed:

- ▶ If the user program size is bigger than 64 KB and containing expansion data register settings, the user program cannot be uploaded from PLC.
- ▶ An error message is displayed when a user program is compared with a PLC and then the Function Area Settings dialog box is opened.
- ▶ Cross reference list may not output depending on user programs created.
- ▶ Device Editing dialog box is not opened at correct location when the user program is large.
- ▶ Dialog box, such as E-mail Editor or E-mail Address Book, is shown outside the screen when those dialog boxes are once opened in the secondary screen and the secondary screen is disconnected.

WindLDR Ver. 6.50

<FT1A System Software>

Bugs Fixed

The following problem has been fixed in FT1A system software version 1.02.

- ▶ YEAR instruction does not update the device assigned as D1 properly when the configured On/Off dates do not exist in every year.
Example: 5th Thursday of every month

<Application Software>

The following functions are introduced in WindLDR 6.50.

1. FT1A Lite Support

The new PLC series FT1A are supported in WindLDR V6.50.

- ▶ USB port is available in all FT1A series PLCs.
- ▶ Built-in Ethernet port is available in FT1A-24, -40, and -48.
- ▶ New calendar and timer instructions, YEAR and WEEK, are supported.
- ▶ Logging data to SD memory cartridge with DLOG and TRACE instructions is possible in FT1A-40 and -48.
- ▶ RAMP pulse output with a configuration table is possible with ARAMP instruction.

2. Property Sheet

Property Sheet window to modify the parameters of the selected instruction is added.

3. PLC Status dialog box Improvement

PLC Status dialog box is upgraded for FC5A-D12. Network settings and connection settings can be monitored on the dialog box.

4. Print Improvement

The following improvements have been made:

- ▶ Printer Setup dialog box is removed and Printer to use can be configured in Print dialog box.
- ▶ Pages to print can be specified on Print dialog box.

5. Other improvements

The following improvements have been made:

- ▶ Default button to revert all settings of WindLDR to the factory default settings is added in WindLDR Options dialog box.

- ▶ Rung Comments can be exported to/imported from a text file in Rung Comment dialog box.
- ▶ Indicator showing the communication status is added in status bar.
- ▶ A maximum of 255 bookmarks can be set in a main program/subroutine.
- ▶ Two additional characters “-” and “_” can be used as the file name of ZLD files.

6. Bugs Fixed

The following problems have been fixed:

- ▶ PLC program of FC5A-D12 cannot be downloaded from HG touch screen.
- ▶ Device range was not checked correctly for DIV and MUL instructions.
- ▶ When uploading user program is protected with ‘Prohibit’ option and the user program is downloaded to FC4A, the user program syntax error occurs on the FC4A.

WindLDR Ver. 6.47

<Application Software>

The following functions are introduced in WindLDR 6.47.

Bugs Fixed

The following problem has been fixed:

- ▶ When a folder named user exists in the root folder of a drive and a project is saved with WindLDR, all folders/files in the user folder are deleted.

WindLDR Ver. 6.46

<Application Software>

The following functions are introduced in WindLDR 6.46.

1. Improvements

The following improvement has been made:

- ▶ Comments for special internal relays and data registers are automatically added when a new project is created.

2. Bugs Fixed

The following problems have been fixed:

- ▶ Key matrix settings are not removed even after they are disabled in Function Area Settings dialog box.
- ▶ Leading and trailing spaces (0x20) are omitted when you configure the header and footer for printing the ladder diagram.
- ▶ An error is displayed when the user programs of FC5A-D12 and another FC4A PLC are compared.
- ▶ The range of data registers used in Modbus TCP client are not properly checked when the project is converted.
- ▶ The number of connections becomes 1 after you enable Maintenance communication server despite the default number is 3.
- ▶ Print margins are not restored when WindLDR is launched.
- ▶ Comments are not property moved when devices are replaced in Replace dialog box.
- ▶ The program upload from FC5A PLCs may fail when CMP instructions are used.

WindLDR Ver. 6.45

<FC5A System Software>

Bugs Fixed

The following problems have been fixed in FC5A system software version 235.

- ▶ The watchdog timer error occurs when the source device of CMP(F) contains invalid floating-point values.

The following problems have been fixed in FC5A-D12 system software version 113.

- ▶ The watchdog timer error occurs when the source device of CMP(F) contains invalid floating-point values.
- ▶ MicroSmart sends wrong communication requests to the Modbus TCP servers after timeout error occurs in Modbus TCP Client communication.

WindLDR Ver. 6.44

<Application Software>

The following functions are introduced in WindLDR 6.44.

1. Improvements

The following improvements have been made:

- ▶ Error clear bit of D8005 for FC5A is supported in Simulation mode.
- ▶ Tag name list is outputted in alphabetical order.
- ▶ Leading and trailing spaces (0x20) are not omitted when you enter Constant (Character) for S1 of TXD/RXD instruction.
- ▶ Even when a large program is opened, the scroll length of the vertical scroll bar of Ladder editor is adjusted properly.

2. Bugs Fixed

The following problems have been fixed:

- ▶ When PLC type is FC4A and a project is saved and opened, the communication speed of data link is changed from 38400 bps to 9600 bps.
- ▶ When the first rung of a subroutine is disabled and that subroutine is called with LCAL instruction, a user program execution error occurs.
- ▶ Device data list data is not saved properly when multi-byte characters such as Japanese are used as the filename of those data.
- ▶ When a large program is opened, "fix no. of columns" setting may not be restored correctly.
- ▶ When Delete key is pressed while you edit a comment in Tag Editor, the entire comment is deleted.
- ▶ When WindLDR is launched from WindCFG, Print menu is disabled.
- ▶ Comments modified in NSET and WKTBL instruction dialog boxes are not reflected to Ladder editor.
- ▶ When PLC type is FC5A-C24, RXD instructions for port 3 to 5 are not executed in Simulation mode.
- ▶ When only Constants (Characters) are configured as S1 of RXD instruction, RXD instruction may not function properly in Simulation mode.

WindLDR Ver. 6.43

<FC5A System Software>

Bugs Fixed

The following problems have been fixed in FC5A-D12 system software version 111.

- ▶ Unknown errors occur when Modbus TCP client is used.
- ▶ ERXD instruction does not receive byte data bigger than or equal to 128 (80h) correctly.

<Application Software>

The following functions are introduced in WindLDR 6.43.

1. Improvements

The following improvements have been made:

- ▶ Text box to search e-mail address is added in E-mail Editor dialog box.
- ▶ Performance of starting print or opening Print Preview dialog box is improved.

2. Bugs Fixed

The following problems have been fixed:

- ▶ When FC4A-D20R/-D40 is selected, BMOV instruction is not displayed in Editing dialog box.
- ▶ When FC4A-D20R/-D40 is selected, CMP= instruction does not store the comparison results in special internal realys in simulation mode.
- ▶ Constant values in timer, counter, timer comparison, counter comparison, and data register comparison instructions cannot be replaced.
- ▶ The redirect target setting for FC5A-D12 is reverted to the default when the user program is uploaded from FC5A-D12.

WindLDR Ver. 6.42

<FC5A System Software>

Bugs Fixed

The following problems have been fixed in FC5A-D12 system software version 110.

- ▶ When the communication mode of server/client connections are changed, new settings may not take effect.
- ▶ When e-mail is sent, the data registers values in the e-mail body become invalid.
- ▶ When network settings are changed with special data registers, new network settings may not be applied.

<Application Software>

The following functions are introduced in WindLDR 6.42.

1. E-mail Address Book and Editor dialog boxes

The following improvements have been made:

- ▶ Dialog boxes can be resized.
- ▶ E-mail addresses can be imported/exported in E-mail Address Book dialog box.
- ▶ E-mail contents can be copied to other e-mails.
- ▶ Context menu to modify e-mail body is added.

2. Other Improvements

The following improvements have been made:

- ▶ Monitoring performance is improved.
- ▶ Communication performance of Ethernet is improved.
- ▶ When the user web page is converted, comments in htm/html are not removed.
- ▶ Tab key behavior in instruction dialog boxes are improved.
- ▶ Toolbox is changed to tree view.
- ▶ Show the timing chart smoothly on PID Module Configuration dialog box.

3. Bugs Fixed

The following problems have been fixed:

- ▶ Upload fails when the PLC type is FC5A and the program size is between 541 and 542.
- ▶ When the PLC type is FC4A, a value bigger than 10,000 cannot be used in RAMPST instruction.

WindLDR Ver. 6.41

<FC5A System Software>

The following function is introduced in FC5A system software version 231.

- ▶ Support for the PID module (FC5A-F2M2 and -F2MR2)

Bugs Fixed

The following problem has been fixed:

- ▶ When data link slave is configured on port 3 to 7, calendar/clock error or communication error may occur.

<Application Software>

The following functions are introduced in WindLDR 6.41.

1. FC5A web server CPU module (FC5A-D12K1E/-D12S1E)

The new PLC type (FC5A-D12x1E) is added in the PLC Selection dialog box, and the following functions are supported for the PLC.

- ▶ The basic parameters, such as the network settings and the communication settings, can be configured in the Function Area Settings dialog box.
- ▶ Web pages can be imported to the User Web Page in Project Window.
- ▶ Remote hosts to which the MicroSmart communicates can be configured in the Remote Host List dialog box.
- ▶ E-mail addresses can be managed in the E-mail Address Book dialog box.
- ▶ The contents of each e-mail can be configured in the E-mail Editor dialog box.

2. PID module (FC5A-F2MR2/-F2M2)

The support for PID module has been added. The PID module can be configured and monitored in the PID Module Configuration dialog box.

3. ANST macro instruction upgrade

The following improvements have been made:

- ▶ Analog output module (FC4A-K4A1) is supported.
- ▶ Analog input error settings are supported for FC4A-J4CN1 and -J8C1.

4. Subroutine

Subroutine function enables you to separate subroutine programs from the main program. Subroutines can be created and edited in different program tabs in WindLDR.

5. Other Improvements

The following improvements have been made:

- ▶ IME input for the device addresses can be disabled in WindLDR Options dialog box.
- ▶ CSV and Unicode text formats are supported with Import and Export on Modbus Master Request Table dialog box.

6. Bugs Fixed

The following problem has been fixed:

- ▶ Opening PJW file when the number of columns is fixed may fail.

<Manual>

The following manuals are added:

- ▶ FC5A Series MicroSmart Pentra User's Manual Basic Volume
- ▶ FC5A Series MicroSmart Pentra User's Manual Advanced Volume
- ▶ FC5A Series MicroSmart Pentra User's Manual Web Server CPU Module Volume
- ▶ FC5A Series PID Module User's Manual

WindLDR Ver. 6. 32

<Application Software>

Bugs Fixed

The following problems have been fixed:

- ▶ When the WindLDR project is opened, Tag names and corresponding comments are not read out if Tag name used in the project contains the character '&' or '<'.
- ▶ When PLC type is FC5A-C10R2X or -C16R2X, MODBUS/TCP Master (Client) on port 2 does not function.
- ▶ When WindLDR is running on Polish Windows, WindLDR files (*.LDR) created with WindLDR V5.x cannot be opened.
- ▶ When the program is printed on letter size papers, the right power rail may not be printed.
- ▶ When WindLDR is running on Windows 7 and the program is printed, advanced instructions may not be printed on the second or later pages.
- ▶ Watchdog timer error may occur on PLC if LDR file containing RXD instruction with Skip is opened and the program is downloaded to PLC.

WindLDR Ver. 6.31

<Application Software>

The following functions are introduced in WindLDR 6.31.

1. Improvements

The following improvement has been made.

- ▶ Restore the cursor position when a WindLDR project file (*.PJW) is opened.

2. Bugs Fixed

The following problems have been fixed:

- ▶ Forced I/O on WindLDR status bar cannot be hidden.
- ▶ SFTL(D) and SFTR(D) instructions are not automatically converted to upper-compatible instructions when the PLC type is changed from OpenNet to FC5A.

WindLDR Ver. 6.30

<Application Software>

The following functions are introduced in WindLDR 6.30.

1. HG3G USB Pass-Through Support

Support for HG3G USB Pass-Through has been added.

2. PLC Program for HG3G

PLC program can be saved and opened with WindLDR. You can download a PLC program in USB flash drive or SD card inserted to HG3G to the connected PLC. You can also upload a PLC program from the PLC and store it in the USB flash drive or the SD card.

3. Print Improvements

The following 2 improvements have been introduced:

- ▶ Ladder printing can be scaled to the range between 30 and 100%.
- ▶ Cross reference print format can be chosen.

4. FC5A System Program Download

FC5A System Program Download has been integrated in WindLDR. The specified FC5A system software can be downloaded to FC5A automatically before downloading the user program.

5. Other Improvements

The following improvements have been made.

- ▶ Slave address in Modbus Master Request Table can be displayed and edited in hexadecimal.
- ▶ Information to recover projects is also saved in Online Edit mode.
- ▶ All windows, such as Project Window or Toolbox, can be docked onto other windows.
- ▶ Read-only cells of the communication ports table are shown in gray in Communication Ports in Function Area Settings dialog box.

6. Bugs Fixed

The following problems have been fixed:

- ▶ Simulation cannot be started when repeat is configured in IBMV, IBMVN, or CVDT instruction.
- ▶ Keep output during stop option in Download dialog does not function.
- ▶ 32bit data storage setting for monitor/simulation is not initialized correctly when WindLDR is launched.
- ▶ Once the communication is established between WindLDR and PLC, communication type may not be changed between Serial and Ethernet even if it is changed in Communication

Settings dialog.

WindLDR Ver. 6. 22

<FC5A System Software>

Bugs Fixed

The following problem has been fixed:

- ▶ When a keep data error occurs on FC5A PLC or a user program is downloaded to FC5A PLC, values in special data registers D8100 and D8040 to D8044 are cleared.

<Application Software>

Bugs Fixed

The following problems have been fixed:

- ▶ Save does not function if expansion data register settings are disabled in Expansion Data Register Settings dialog right after the project is opened or saved.
- ▶ When a multi-input instruction, such as CNT, CDP, or SFR, is placed on right-most column and its editing dialog box is opened and closed with OK button, an error message is displayed and the circuit is corrupted.
- ▶ When the file extension of pjw files includes capital letters, such as Pjw or PJW, and the file is double-clicked to edit, an error message is displayed and the file cannot be opened.
- ▶ When a user program containing SOTD instructions is uploaded from FC5A-C10R2, WindLDR freezes.
- ▶ Previously used projects are not listed in Recent Projects in Application Menu.
- ▶ Undo does not work properly when an instruction is inserted along with continuation lines.
- ▶ WindLDR shows an error if a project is saved with a name containing comma and the saved project is opened.

WindLDR Ver. 6. 21

<Application Software>

Bugs Fixed

The following problems have been fixed:

- ▶ Projects may not be opened if the projects are saved after Expansion Data Register Settings dialog box is opened and closed.
- ▶ When a user program is uploaded from a PLC, the program is not restored correctly if the program contains contacts that are connected to multi-input instructions, such as CNT or SFR, and are programmed in multiple ladder lines using the continuation lines.
- ▶ When PIDST instructions are uploaded, the set points of those PIDST instructions are always restored as integer values even if the data types of those PIDST instructions are word.
- ▶ If MOV, SET, or RST instructions are programmed with PIDST instructions in parallel, those MOV, SET, or RST instructions are removed when the user program is uploaded from PLCs.
- ▶ T or C may not be converted to TC/TP or CC/CP automatically when it is entered in Edit Instruction dialog boxes.
- ▶ Device data list created with WindLDR V5.x may not be read in WindLDR V6.x.
- ▶ Program is not printed properly when landscape is selected.
- ▶ Non-ASCII characters can be entered as the password in Function Area Settings dialog boxes.

WindLDR Ver. 6. 20

<FC5A System Software>

The following functions are introduced in FC5A system software version 221

- ▶ FC5A-SIF4 expansion RS485 communication module.
- ▶ Data Link Communication and Modbus Master\Slave for Port 3 to 7.
- ▶ Communication speed of 57,600 and 115,200 bps for Port 3 to 7.
- ▶ Run/Stop selection at power up.
- ▶ Communication Refresh option for Port 3 to 7.

<Application Software>

The following functions are introduced in WindLDR 6.20.

1. FC5A System Version 221 Support

The support for the FC5A system version 221 has been added.

2. HG2G Ethernet Pass-Through Support

Support for HG2G Ethernet Pass-Through has been added.

3. Cross Reference dialog box

The following improvements have been made:

- ▶ Cross Reference dialog box is docked to WindLDR main window.
- ▶ The device address is automatically updated when the ladder cursor is moved.
- ▶ The width of the columns is saved and restored when WindLDR is launched.
- ▶ The show/hide status of the columns can be toggled from the shortcut menu.

4. Shortcuts

The following 3 shortcuts have been added to the ladder editor:

- ▶ F3/Shift+F3: The device address under the ladder cursor is searched downward/upward
- ▶ Ctrl+F3: All instructions using the device address under the ladder cursor are searched and listed in the Info Window.

5. Project Window

Shortcuts to open Function Area Settings dialog and Tag Editor have been added to Project Window.

6. Communication Settings dialog box

The following improvements have been made:

- ▶ Options to configure the communication packet size and the interval between packets for Download are added in Serial.
- ▶ PLC network settings to configure 1:N computer link communication are added in Ethernet.

7. Bugs Fixed

The following problems have been fixed:

- ▶ When the program size is large, Print/Print Preview may fail.
- ▶ When a period is contained in the project name, Print/Print Preview fails.

<Manual>

FC5A MicroSmart Pentra User' s Manual

Descriptions for FC5A-SIF4 expansion RS485 communication module and system program version 221 have been added.

WindLDR Ver. 6.11

<Application Software>

1. Performance Improvement

The overall performance of WindLDR has been improved. File opening, program conversion, and start up of WindLDR can be completed faster than the previous version of WindLDR.

2. Bugs Fixed

The following problems have been fixed:

- ▶ When a program is uploaded, rung comments are not restored if there are 6 rung comments in the program.
- ▶ When Tag Names are assigned to device addresses, the replacement for these device addresses on Tag Editor doesn't function.
- ▶ The user programs in which invalid communication speed is configured with WindCFG can be downloaded to FC5A PLCs, and those PLCs do not respond to WindLDR afterward.

WindLDR Ver. 6.10

<Application Software>

1. HG2G Pass-Through Support (Serial)

Support for HG2G Pass-Through has been added to WindLDR. Pass-Through Tool was required for WindLDR to communicate with PLCs via the connected HG2G. However, WindLDR 6.10 can communicate with the PLCs without using Pass-Through Tool.

2. Project Recovery

WindLDR 6.10 can recover the projects if WindLDR is terminated unexpectedly and the changes made to the projects were not saved.

When the project backup is enabled in WindLDR Option dialog, WindLDR backs up the project periodically. If WindLDR is not terminated properly, the list of projects can be recovered is displayed when WindLDR is launched next time. You can choose one of the listed projects and start editing from the point that it was backed up.

3. Zoom

A function to adjust the zoom ratio of the ladder editor has been added to WindLDR. Zoom ratio can be adjusted between 25% and 200%. The zoom ratio can be changed with Zoom slider on the right corner of the status bar. It can also be changed on Zoom dialog box. This function allows you to see and monitor more lines of the program in the screen.

4. Tag Editor Improvements

The following 2 improvements have been introduced:

- ▶ When WindLDR is launched from WindCFG, Tag Editor can be opened at both WindCFG and WindLDR.
- ▶ An option to hide Tag Name column in Tag Editor has been added. This option is available in Ladder Preference menu in WindLDR Options dialog.

5. Date & Time Option

An option to change the format of Data and Time has been added. The format can be changed in General menu in WindLDR Options dialog.

6. Bugs Fixed

The following problems have been fixed:

- ▶ When downloading or uploading the program, WindLDR cannot disable the password of the connected PLC if the PLC type is FC5A-D16RX1 or FC5A-D32X3.
- ▶ Texts written in languages other than English, German, Spanish, Chinese, and Japanese cannot be read and displayed properly on WindLDR when ladder programs (*.ldr) created with WindLDR prior than version 6 are read.
- ▶ The ladder programs (*.ldr) created with WindLDR version 4.7 or prior cannot be opened if

the ladder programs contain RXD, CDISP, and MACRO instructions.

- ▶ Values are not monitored on Batch Monitor when ASCII(W) or ASCII(D) is selected as the monitor type.
- ▶ The ladder diagrams containing LC instructions (LC=, LC<>, LC<, LC>, LC<=, and LC>=) are corrupted when the programs are uploaded from the PLC.
- ▶ When Variable (Data Register) is configured in S1 of TXD or RXD instructions, the range of used data register are not calculated correctly.
- ▶ When you replace devices of instructions in the selected range, the instructions may not be searched.
- ▶ While WindLDR is in Simulation mode, the clock data stored in D8008 to D8014 are not updated.
- ▶ While WindLDR is in simulation mode, the input condition to LCAL instruction is not restored after the corresponding subroutine of LCAL is executed.

WindLDR Ver. 6.01

<Application Software>

1. File

The following problems have been fixed:

- ▶ WindLDR sometimes shows an error message when started.
- ▶ Ladder program files (*.ldr) created with WindLDR version 4.0 through 4.7 cannot be opened.
- ▶ When the PLC type is FC4A, WindLDR projects cannot be opened if the following steps are taken.
 - ▶ Insert RUNA or STPA instructions.
 - ▶ Download the program to a PLC and upload the program from the PLC.
 - ▶ Save the program with any name and open the saved program.

2. Edit

The following problems have been fixed:

- ▶ When the data type of NDSRC instruction is Float (F), constant values cannot be assigned to S3 of NDSRC.
- ▶ When the PLC type is changed from OpenNet to FC5A, S2 of SUM instructions becomes empty.
- ▶ When Cross Reference information for CDISP instruction is displayed, the number of device addresses occupied by D1 is always 9 regardless of the settings of S1.
- ▶ If Advanced AT + PID action is configured for PIDST instruction and AT Set Point is out of the valid range, a user program execution error occurs on FC5A when the corresponding PID instructions are executed.

3. Configuration

The following problems have been fixed:

- ▶ Search Web Server Units does not function.
- ▶ 38,400 bps cannot be selected for RS485 port of OpenNet Controller.

4. Online

The following problems have been fixed:

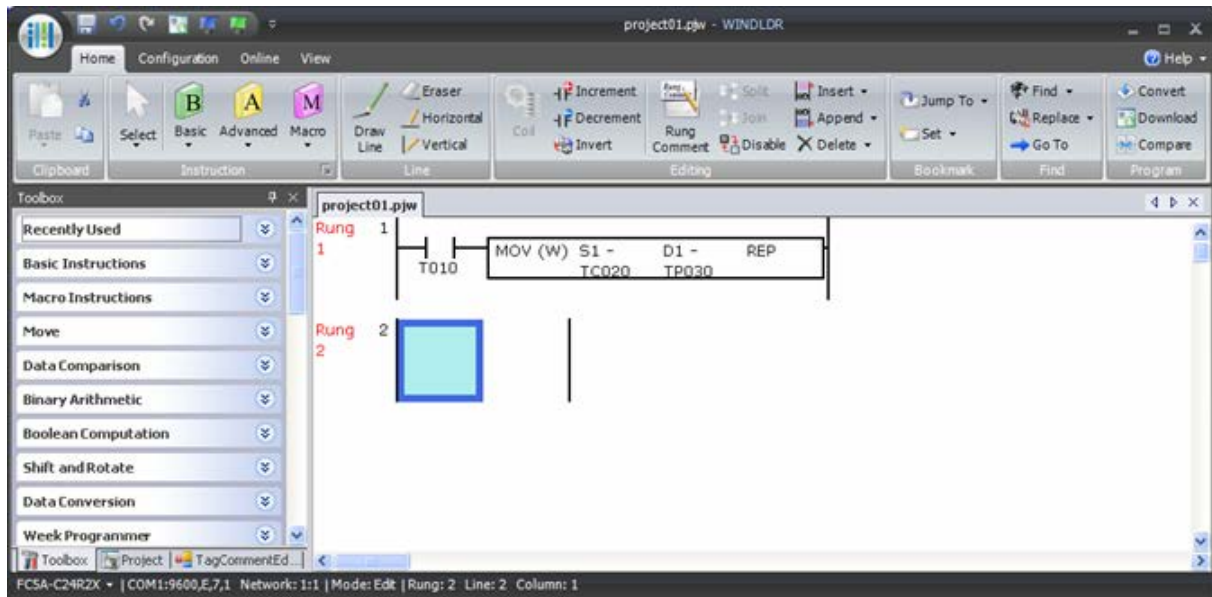
- ▶ All bookmarks set on the program are cleared when all modifications made to the program during Online Editing mode are canceled.
- ▶ If Download Comment option is selected in Download dialog, the comment data is always generated even when no comment data to download exist.

WindLDR Ver. 6.00

<Application Software>

1. Changed New GUI (Graphics User Interface)

Pull-down menu and Tool bars were changed to Ribbon Control and allows you to access frequently used commands with minimum steps.



2. Advanced Interactivity for WindCFG and WindO/I-NV2

WindCFG (New System Configuration Software) provides the advanced interactivity between WindLDR and WindO/I-NV2. Those two softwares can share the PLC device address information such as tag name and comments each other automatically.

3. Sharing cross reference info with WindO/I-NV2

The cross reference information is also shared by both projects. If you open the Cross Reference dialog and input a PLC device, you can see the list of instructions using the device in the WindLDR project and the list of parts using the device in the WindO/I-NV2 project.

4. Color preferences for the ladder editor

The colors of the ladder editor can be customized in Ladder Preference of WindLDR Options dialog. You can alter the color of variety of items of the ladder editor, such as the background color, line color, text color, and cursor color.

Default color:

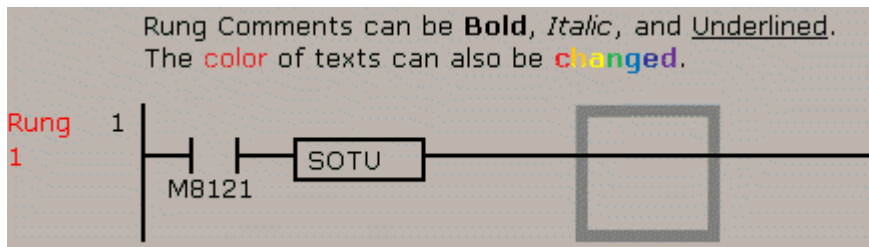


Customization Example:



5. Rich Rung comment format

You can now format rung comments in Rung Comment dialog. Rung comment texts can be bolded, italicized, and underlined, and the color of the texts can also be changed. Rung comment format can be downloaded to the PLCs so that the format is restored when the program is uploaded from the PLCs.



6. New file format

WindLDR version 6 introduces a new file format for the WindLDR projects. The new format consists of only 1 file containing all project data, such as the ladder diagram, symbol table, bookmarks, cover page, and custom monitors, which are contained in individual files with WindLDR version 5. In WindLDR version 6, all projects are saved with the new format (.pjw).

7. Toolbox

Toolbox window lists all available instructions of the selected PLC. You can input instructions to the ladder editor with Drag & Drop operation. Inputted instructions are added to the Recently Used folder in Toolbox so that you can access to the frequently used instructions easily.

8. Device editing dialog

Device editing dialog is introduced to WindLDR. You can make a small change to a device in the instructions using the dialog. Press the Space key on the keyboard to open the dialog box.

