

# **Rockwell CompactLogix - Free Tag Names**

Rockwell ControlLogix, CompactLogix, FlexLogix CH0 DF1. Website: <u>http://www.ab.com</u>

#### **HMI Settings:**

Parameters	Recommended	Options	Notes
PLC type	Rockwell Compact		
PLC I/F	RS232		
Baud rate	19200	9600, 19200, 38400	
Data bits	8	8	
Parity	None	Even, Odd, None	
Stop bits	1	1	
Turn around delay	10	10 ~ 100	*Note
HMI sta. no.	0		
PLC sta. no.	1	1-31	

\*Note : When communication is not stable, please adjust [Turn around delay].

#### **PLC Settings:**

Communication mode	DF1 No Handshake protocol 19200, None, 8, 1 (default)		
	Error Check: BCC, Station Address: 1		



Create new tags (Controller Tags and Program Tags supported).

Controller Organizer	👻 🖗 🗙 🥏 Controller Tags - TEST1(control	ler) ×				
0 °	Scope: 💯 TEST1 🗸	Scope: TEST1 V Show. All Tags V T. Enter Name Filter				
▲	Name	Base Tag	Data Type		Description	Extern ^
Controller Tags     Controller Fault Handler	► Local:1:1		AB:5000 DI16:I:0			Read/ Read/
Power-Up Handler	▶ Local:1:C		AB:5000 DI16:C:0			Read/
A 🖾 Tasks	▶ P1		Pump		Pump01	Read/
MainTask     MainProgram	▶ P2		Pump		Pump02	Read/
<ul> <li>Parameters and Local Tags</li> <li>MainRoutine</li> </ul>	F1 Keit Tags	/	Fluid <		Fluid01	Read/
Unscheduled A G Motion Groups	Program Parameters and Local Tag	ıs - MainProgram 🛛 🗙				
Ungrouped Axes	Scope: 5 MainProgram ~					
<ul> <li>Alarm Manager</li> <li>Assets</li> </ul>	Name	U	sage Value 🗲	Force Mask * Style	== - Data Type	^
he Logical Model	▶ tag		ocal {}	{}	STRING[5]	
<ul> <li>≤ I/O Configuration</li> <li>▶ = 5069 Backplane</li> </ul>	Pump_site	Lo	ocal {}	{}	Pump[5]	
<ul> <li>▹ ♣ A1, Ethernet</li> </ul>	PartName	Lo	cal {}	{}	STRING[10	
▶ 묾 A2, Ethernet	▶ ErrMessage2	La	ocal "	{}	STRING	
	ErrMessage1	La	cal "	{}	STRING	~
Controller Organizer     Logical Organizer	Monitor Tags (Edit Tags		<	(	-	>

There are two ways to get tags, one is by importing .L5X or .CSV files (click Import Tags...), another is by connecting PLC (click Get Tag Info...). After creating a project by one of these ways, please use the same way in future for maintenance to prevent compilation failure.

Recommended for PLC Offline: Import .L5X

Recommended for PLC Online: Get Tag Info

Comparison:

	L5X	CSV
Can Decription be Imported?	Yes	Yes
Need Adding Data Type?	No	Yes

\*Description is only supported for atomic tags. (Not supported for structure or array)



#### Import Tag (L5X):

1. Export .L5X file from RSLogix 5000 software. The path is: File -> Save as -> Logix Designer XML File (\*.L5X).

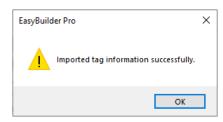
2. Add the driver in EasyBuilder Pro, click [Import Tags], select [Import Files] (\*.L5X), and then click [OK].

Import Tags	×
Importer type	Туре
Import Files (*.CSV)	Linear
Import Files (*.L5X)	Hierarchical
Import Files (*.CSV) EBPro	
<	>
Multiple tag importers are available for this protocol.Please select t appears.	he importer type
ОК	Cancel

3. View imported information and click the close icon [X] to leave.

Tag Manager			×
Select Configuration	Select Tags	Member Data	
	✓       ✓       Device_tags       ▲         ✓       ▲ Local:1:C       ▲       ▲         ✓       ▲ Local:1:I       ▲       F1         ✓       ➡ F2       ▲       ➡         ✓       ➡ P2       ➡       ➡ Prefefined_Alarm         ✓       ➡ Prefefined_Alarm       ➡       ➡ TagBool         ✓       ➡ Program:MainProgram       ➡       ➡ Arr_2D_DNT         ✓       ➡ Program:MainProgram       ➡ Arr_BOOL       ➡ Arr_DINT         ✓       ➡ Arr_DINT       ➡ Arr_DINT       ➡	Data Type Array Dimension String Length	DINT [010, 010]
	Select All Discard All		ОК

4. Click [OK] after tag information is imported successfully.



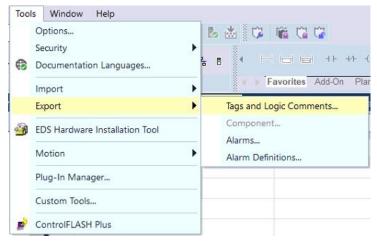


### Import Tag (CSV):

The tags edited using RSLogix5000 can be exported as a CSV file, and then imported in EasyBuilder Pro.

Note: For Tags that use Data Types such as User-Defined, Strings, Predefined, and Module-Defined, please click [Data Type...] to add necessary data types before importing the CSV file.

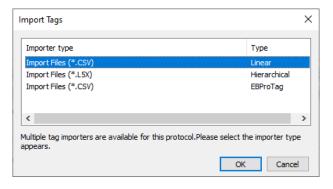
1. Export tag data to CSV file. ( [Tools] » [Export] » [Tags and Logic Comments] )



Note: The separator character in CSV file must be a comma ","; otherwise the file is invalid.

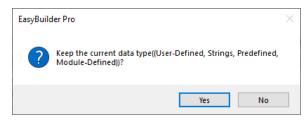
The directory for changing system settings: [Control Panel] » [Date, Time, Language, and Regional Options] » [Change the format of numbers, dates, and times] » [Customize] » [List separator]. Please select "," and export CSV file after setting.

2. In [System Parameters], click [Import Tags], select [Import Files] (\*.CSV), .and then click [OK].





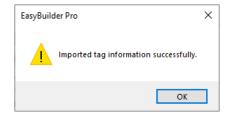
3. Decide whether to keep the current data type (User-Defined, Strings, Predefined, Module-Defined) or replace with default data type.



4. A Warning window appears when unsupported tags are used. Please check whether these tags use data types, and add the necessary ones.

Warning	×
Unable to use the following tags	:
Tag Name	Error Status
Local: 1:C	Unknown data type : AB:5000_DI16:C:0
Local: 1:I	Unknown data type : AB:5000_DI16:I:0
F1	Unknown data type : Fluid
F2	Unknown data type : Fluid
P1	Unknown data type : Pump
P2	Unknown data type : Pump
Program:MainProgram.Pum	Unknown data type : Pump[5]
To fix the error(s) : * Define structures or data typ structures or data types.	es for your tags first. Use [Data Type] to add necessary
* If you still get "Unknown stru does not support these tags.	cture" or "Unknown data type", it means EasyBuilder Pro . Do not use these tags.
Export	Exit

The following message pops up when the tags are successfully imported.



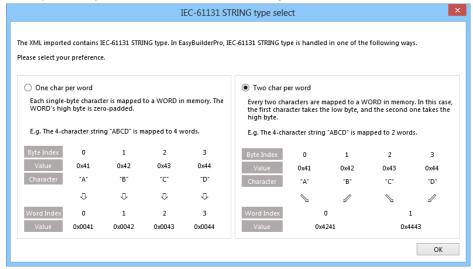


#### **Device Address:**

PLC Data Type	Bit/Word	EasyBuilder Data Format	Memo
BOOL	Boolean	Bit object	
BitArray			
SINT			-128 ~ 127
INT	Integer	16-bit signed, ASCII	-32768 ~ 32767
DINT	Double Integer	32-bit signed	$-2^{31} \sim (2^{31} - 1)$
REAL	Single Precision Float	32-bit float	IEEE 754
LINT	Long Integer	64-bit signed	*Note1
ULINT	Long Integer	64-bit unsigned	*Note1
LREAL	Double Precision Float	64-bit double	*Note1
STRING			*Note4

#### Note:

- 1. EBPro V6.03.02 or later supports 64 bits data type (cMT Series only), but please note that the address limit range is 48 bits in maximum.
- 2. Please avoid using "." in the Tag name because this may influence macro execution.
- 3. Shorter tag names are recommended for enhancing communication efficiency.
- 4. When importing, there are two modes of one/two char per word to choose from. When importing one char per word, choose Unicode data format for ASCII objects, and choose UTF-8 (Default) data format for two char per word.



5. Data format supported for Binary Access: INT, DINT, and SINT.



## Wiring Diagram:

#### RS-232

The serial port pin assignments may vary between HMI models, please click the following link for more information.

НМІ		PLC
<u>Link</u>		AB CPU CH0 RS232 9P D-Sub Female
Rx	←	3 TD
Tx	<>	2 RD
GND	<>	5 GND