Automation Direct Productivity Series

Supported Series: Automation Direct Productivity Series

Website: https://www.lamonde.com/

HMI Setting:

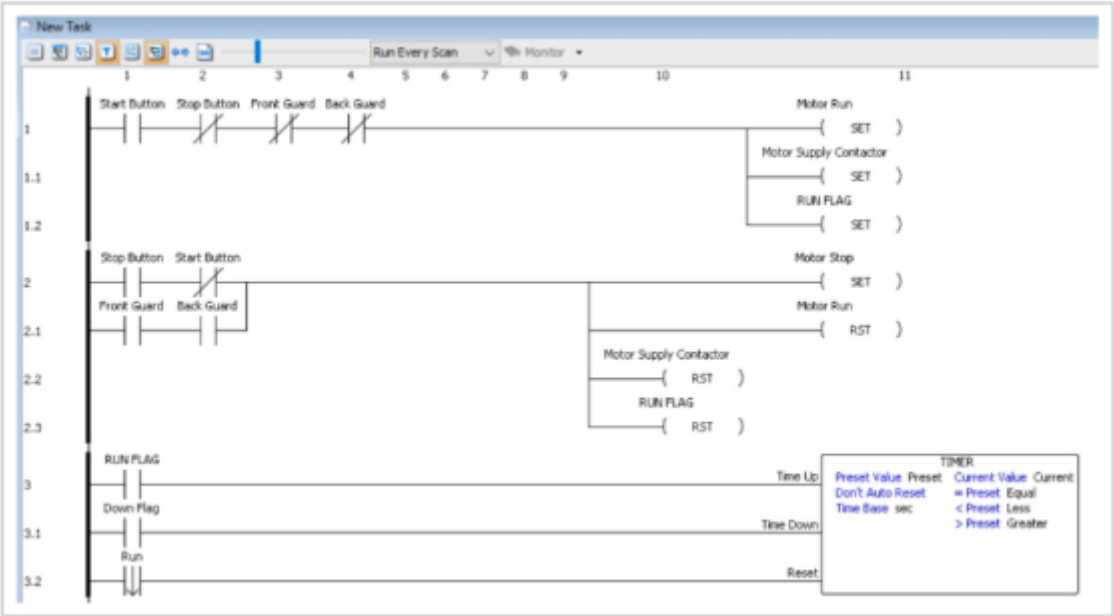
Parameters	Recommended	Options	Notes
PLC type	Automation Direct Productivity Series		
PLC I/F	RS485 2W	RS232 / RS485 2W / Ethernet	
Baud rate	9600		
Data bits	8		
Parity	Even		
Stop bits	1		
PLC sta. no.	1		

Device Address:

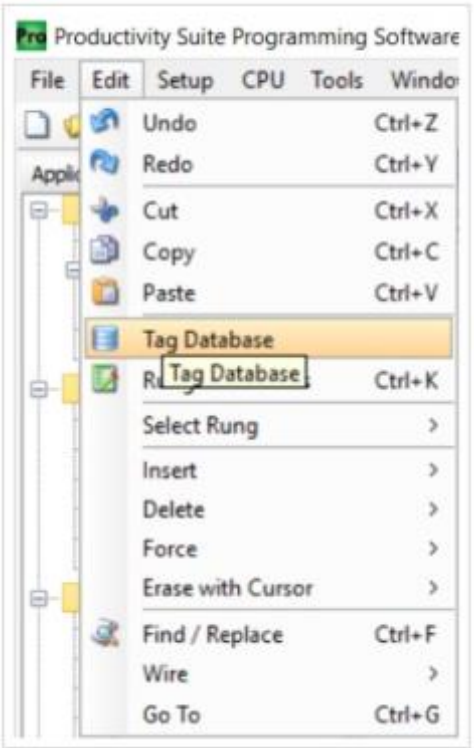
Bit/Word	Device type	Format	Range	Memo
B	0x	DDDDD	1 ~ 65535	Output bit
B	0x_single_Bit	DDDDD	1 ~ 65535	
B	0x_multi_coils	DDDDD	1 ~ 65535	
B	0x_8bits_write	DDDDD	1 ~ 65535	
B	1x	DDDDD	1 ~ 65535	Input bit (read only)
B	1x_single_Bit	DDDDD	1 ~ 65535	
B	3x_bit	DDDDDdd	100 ~ 6553515	Input Register bit(read only)
B	4x_bit	DDDDDdd	100 ~ 6553515	Output Register bit
B	6x_bit	DDDDDdd	100 ~ 6553515	Output Register bit
B	0x_multi_coils	DDDDD	1 ~ 65535	Write multiple coils
W	3x	DDDDD	1 ~ 65535	Input Register
W	4x	DDDDD	1 ~ 65535	Output Register
DW	5x	DDDDD	1 ~ 65535	4x double word swap
W	6x	DDDDD	1 ~ 65535	4x single word write
DW	3x_Double	DDDDD	1 ~ 65535	*Note1
DW	4X_Double	DDDDD	1 ~ 65535	*Note1
W	4x string central europe	DDDDD	1 ~ 65535	Convert the Central Europe ASCII to Unicode.
W	4x string central europe (rev)	DDDDD	1 ~ 65535	

Import Tag:

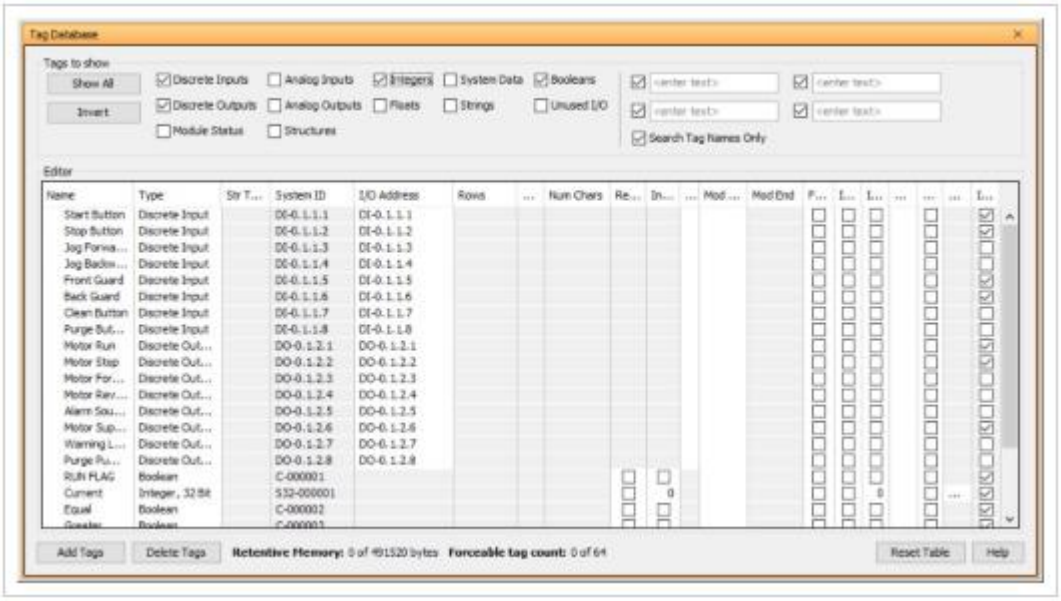
1.First write your Productivity Controller program in Productivity Suite…



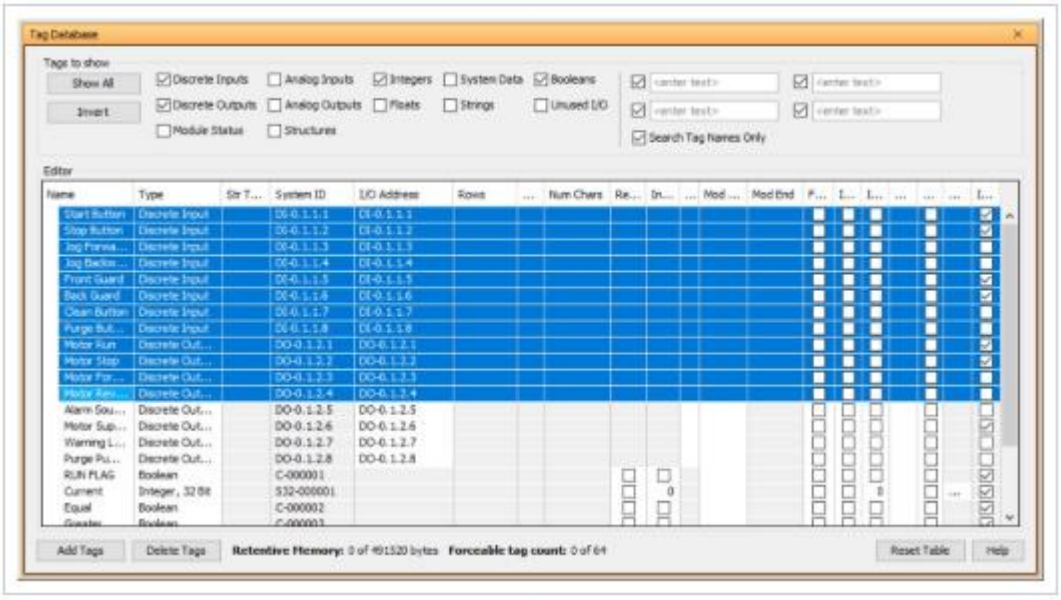
2.If you're familiar with Productivity Suite, you no doubt know that you can define tags for your i/o, registers, timer values etc as you go making it a very intuitive controller to use. The Productivity tag database is accessed from the edit menu.



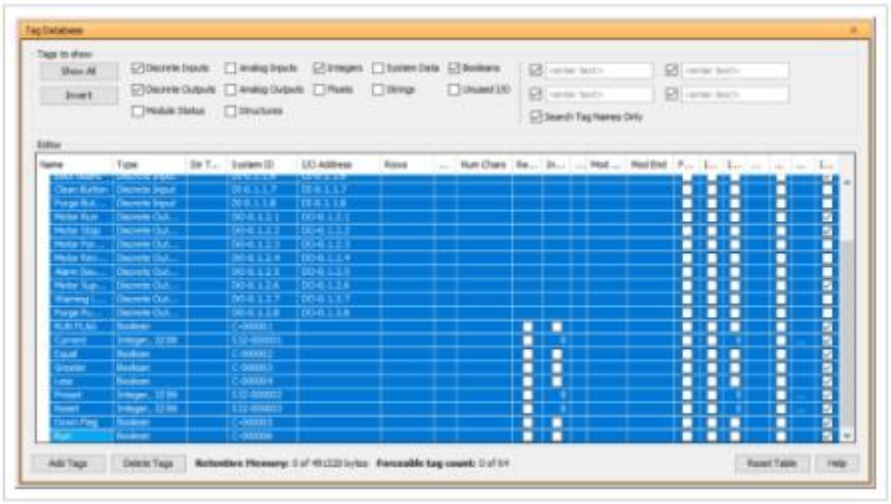
3.In this example, we're only looking at Discrete i/o, Integers & Booleans…



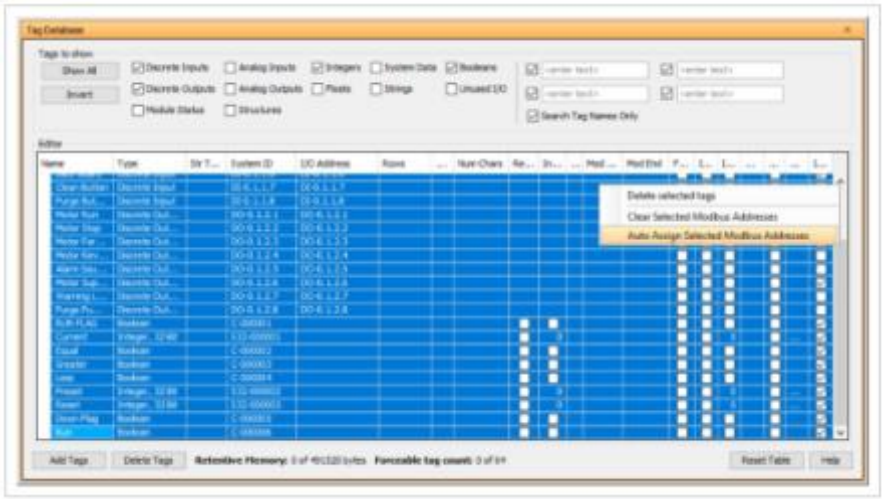
4. You can manually assign Modbus addresses to the required elements…
Or you can select them all and Auto-assign them. Select the first line, hold down "Shift" and use the down arrow to select…



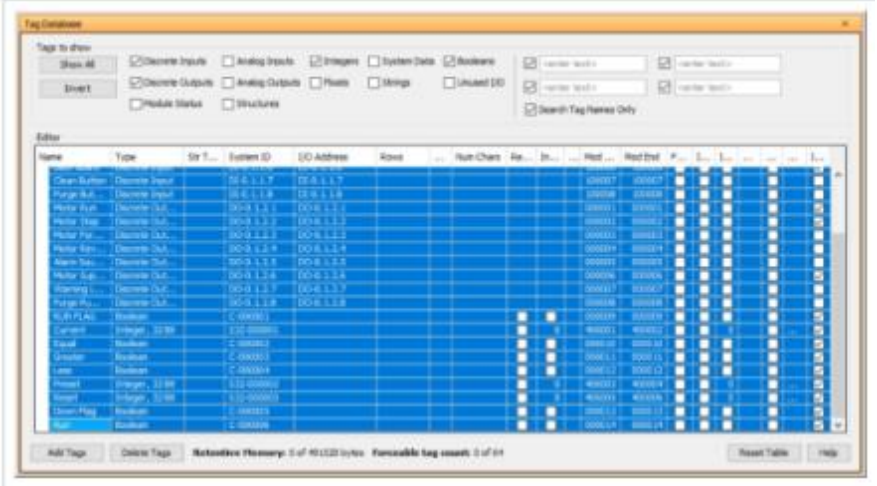
5. To quickly select all a useful shortcut is to use CTRL, Shift and down arrow…. or use “CTRL” + “A”.



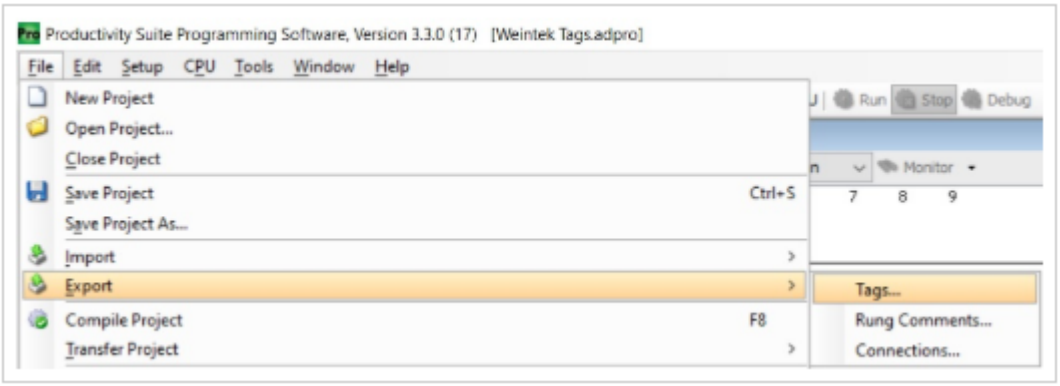
6. To Auto Assign Modbus addresses, right click in the “Mod Start” column and select “Auto Assign Selected Modbus Addresses”.



7. Populated Tag address table…

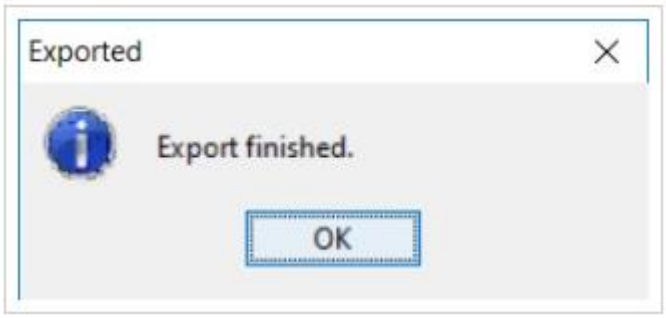


8. To use these in a Weintek HMI project, first export the Tags…



9. Browse to your chosen location and assign a name. Click Export…

10. Success message:

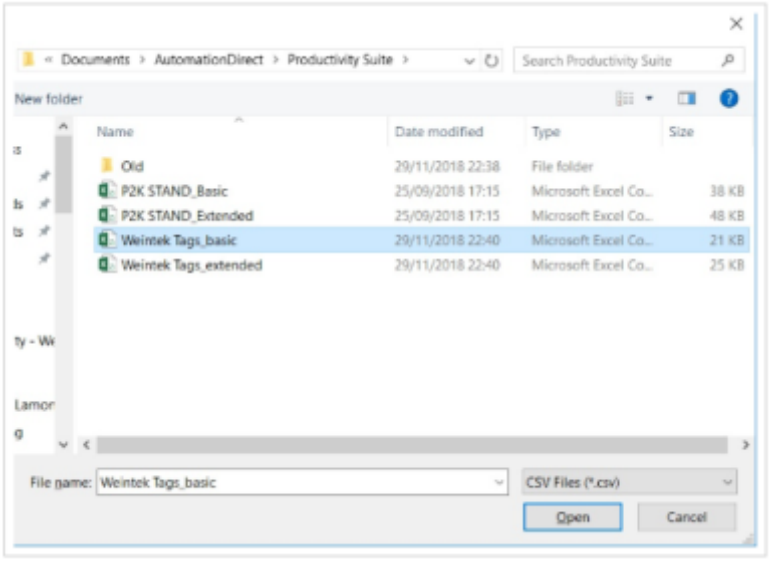


11. Using Productivity Series Tags in Weintek HMI…

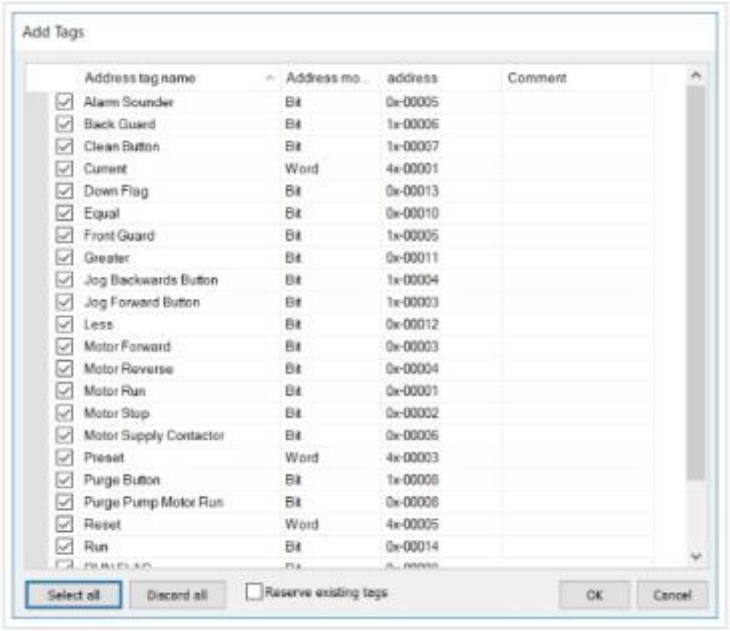
Select the Automation Direct Productivity Series driver and set up Communication parameters – RS232, RS485 or Ethernet.

12. Click “Import Tags…”

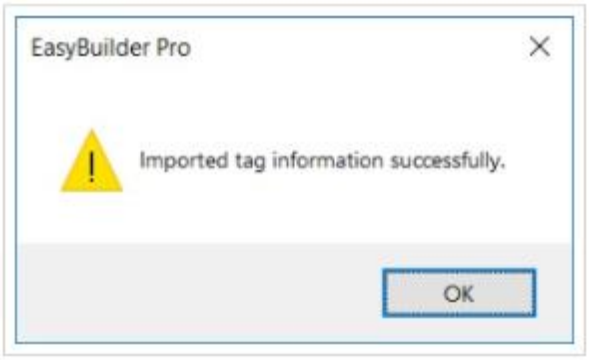
13. Browse to the location of your tag csv export. Select & Open:



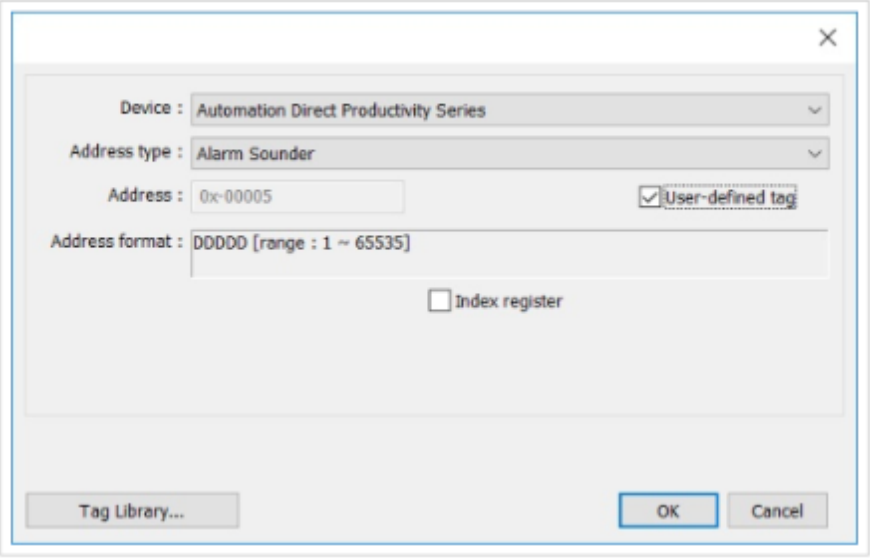
14. Either “Select All” or cherry pick the required tags, click “OK”



15. Success message:



17. To use the imported tags, select the Device and tick “User-defined tag”:



18. The tag can be selected and used.

Wiring Diagram:

Diagram 1

RS-232

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

HMI		PLC
Link		RS232 9P D-Sub Female
Rx	⟷	2 TXD
Tx	⟷	3 RXD
GND	⟷	5 GND

Diagram 2

RS-485 2W

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

HMI		PLC
Link		RS485 2W 9P D-Sub Female
Data-	⟷	8 Data-
Data+	⟷	3 Data+
GND	⟷	5 GND

Diagram 3

Ethernet cable: