



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 F	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
В	0x	DDDDD	1 ~ 65535	Output bit
В	0x_single_Bit	DDDDD	1 ~ 65535	
В	0x_multi_coils	DDDDD	1 ~ 65535	
В	0x_8bits_write	DDDDD	1 ~ 65535	
В	1x	DDDDD	1 ~ 65535	Input bit (read only)
В	1x_single_Bit	DDDDD	1 ~ 65535	
В	3x_bit	DDDDDdd	100 ~ 6553515	Input Register bit(read only)
В	4x_bit	DDDDDdd	100 ~ 6553515	Output Register bit
В	6x_bit	DDDDDdd	100 ~ 6553515	Output Register bit
В	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	DDDDD	1 ~ 65535	Convert the Central Europe
	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...

Image: Section of the Nonter Section Se	
1 2 3 4 5 6 7 8 9 10 11 1 Start Button Stort Button Pront Goard Back Goard Motor Run 1 Image: Stort Button 1.1 Image: Stort Button Image: Stort Button Image: Stort Button Image: Stort Button 1.2 Image: Stort Button Image: Stort Button Image: Stort Button Image: Stort Button 2 Image: Stort Button Image: Stort Button Image: Stort Button Image: Stort Button	
1 Start Dutton Stop Button Pront Guard Motor Run 1.1 Image: Start Dutton Start Dutton Start Dutton 1.2 Image: Start Dutton Start Dutton 1.2 Start Dutton Start Dutton 1.2 Start Dutton Start Dutton 2 Start Dutton Motor Starp 2 Start Dutton Motor Starp 2 Start Dutton Motor Starp	
1 (SET) 1.1 Motor Supply Contactor 1.2 (SET) 2 Sap Button 2 Motor State	
1.1 Motor Supply Contactor 1.2 (SET) 1.2 Sop Button Start Button 2 Motor Stopp 2 (SET)	
1.1 1.2 Sop Button Start Button 2 Sop Button Start Button Sop Start Button Start	
1.2 RUN FLAG (SET) Stop Button Start Button 2 Motor Stop (SET)	
1.2	
2 Stop Button Motor Stop	
2 91	
Prote Guard Back Guard Mittor Run	
2.1 Note Single Contactor	
2.2 (BT)	
RUNFLAG	
2.3 (RST)	
PLIN FLAG TIMEP	_
3 Time Up Preset Value Preset Current Value Cu	ment
Donn Allow motion and the second seco	
3.1 Time Down > Preset Greater	
Run Hul	
3.2 Rest	

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.

File	Edit	Setup CPU 1	Tools Windo
	3	Undo	Ctrl+Z
Apple	2	Redo	Ctrl+Y
8	+	Cut	Ctrl+X
	3	Сору	Ctrl+C
		Paste	Ctrl+V
		Tag Database	
6-1		R Tag Database	Ctrl+K
		Select Rung	>
		Insert	>
		Delete	>
		Force	>
-		Erase with Cursor	>
T	3.	Find / Replace	Ctrl+F
		Wire	>
		Go To	Ctrl+G



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

Show All	Decrete	inputs	Analog Input		System Da	ta (j	Booleans) arch	e testo	-10	2	cher te	nto:		
Jourt.	Depete	Outputs	Analog Outpu	its 🗌 Pilets	Strings	C	Unused [/0	P	rente	et texts		2	ther to	ote -		
	Module S	tetus	Stuctures					R	Seard	h Tag Names (Only					
Editor																
Nane	Type	Sty T	System ID	1/O Address	Rovis		Nun Chars	Rein	10	Mod	Med End	P.o.	£	L.,	+++ +++	Lee
Start Button	Discrete Input		00-0.1.1.1	01-0.1.1.1												51 .
Stop Button	Discrete Input		DI-0.1.1.2	01-0.1-1.2								ň	ň	E.	Ĩ.	2
Jog Forwa	Discrete Input		00-0-1-1-3	01-0.1.1.3								ī		E.	ñ	- Ti -
Jog Bades	Discrete Input		D0-0.1.1.4	DE-0.1.1.4								10		- Ei	ä	
Front Guard	Decrete Input		00-0.1.1.5	01-0.1.1.5								1 H	n	8	ñ	- M
Back Guard	Decrete Input		00-0.1.1.6	DI-0.1.1.6								ī	n	- Ti	ñ	22
Clean Button	Discrete Input		DI-0.1.1.7	DI-0.1.1.7								Ĭ	ň	E .	ă	- Fill
Purge But	Discrete Input		D0-0.1.1.8	01-0.1-1.0								Ē	Ē	E.	ñ	1
Motor Run	Discrete Out		00-0.1.2.1	00-0.1.2.1								Ö		6		12
Motor Step	Discrete Out		00-0.1.2.2	00-0.1.2.2								0		10	a	123
Motor For	Discrete Out		00-0.1.2.3	DO-0.1.2.3								10	10	- E		101
Motor Rev	Discrete Out		DO-0.1.2.4	00-0.1.2.4								Ē		- E	ă	10 H
Alarm Sou	Discrete Out		DO-0.1.2.5	00-0.1.2.5								Ĩ		E.		1 E I
Motor Sup	Discrete Out		00-0.1.2.6	00-0.1.2.6												1
Warning L	Discrete Out		00-0.1.2.7	00-0.1.2.7												
Purge Pul	Discrete Out		00-0-1-2-8	DO-6.1.2.8												0
RUN FLAG	Boolean		C-000001						D							2
Current	Driteger, 32.88		\$32-000001						0					0	E -++	2
Equal	Boolean		C-000002													2
Granter	Replacet		C-000001	-		-		-			_	n	1			No. Y

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...

Show All	Discrete	Inputs	Analog Input	s 🛛 Integers	System 0	ieta 🖂	Booleans		carcher tes	de .		etter 1	et>		
Smert	Decrete	Outputs Setue	Analog Outp	uts [] flaets	Strings	C	Unused L/O	N N	Search Tag	to Nones Only	0	order 1	ati (
Editor															
Name	Type	Str 7	System ID	L/O Address	Rove		Num Chwrs	Re	in	Mod Mod	End P	L	L		Lee
Start Rotters	Decrete Input		06-0.1.1.1	01-0.1.1.1										1	P
Stop Button	Discrete Stput		06-0-1-1-2	01-0.1.1.2										M	PI
Top Preva	Discription Install	1	0040.1.1.3	01-0.1.1.3											
Jog Backer	Discrete Input		00-0.1.1.4	01-0.1.1.4				-							
Front Guard	Discrete Input		00-0-1-1-3	01-0-1-1-5											
Back Guard	Discrete Input		D0-0.1.1.8	00-0-1-1-6											
Cean Button	Discrete Input		00.0.1.1.7	010117											
Furge But	Discrete Pour		DG-0.1.1.8	01-01.18											
Noter Furt	Discreter Out		00-0.1.2.1	DG-6.1.2.1											P
Motor Step	Danete Out		0040.1.2.2	00-0.1.7.7											2
Note For	Danete Out		0048.1.2.3	00-6.1.3.3											
Holor Rev	Distrete Out		DO-0.1.2.4	00-0.1.2.4											
Alarm Sou	Discrete Out		00-0.1.2.5	00-0-1-2.5							1 6				
Motor Sup	Discrete Out		00-0.1.2.6	DO-0.1.2.6							0				12
Warning L	Discrete Out		00-0.1.2.7	DO-0.1.2.7							- C		0		107
Purge Pul	Decrete Out		00-0.1.2.8	DO-0.1.2.8							10				
RUN PLAG	Doolean		C-000001								0				12
Current	Integer, 32 Bit		532-000001						0					-++	
Equal	Boolean		-C-000002												E.
Greater	Rivelent.		C-000001	1			_	-	-					-	27



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".

Dan M Dan M	Dente 1	Inpute Canadaga Outpute Canadaga Natura Canadaga Natura Canadaga	ava ⊇toqui Nava ⊡tura N	Dates Date	Convertion		nin hala nin hala nih Tag Nama	∰ -eneriest
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and the second second	Discourse Data	800111	10161123				-	Char Sencing Modeus Addresss
and the second second	Dennie Ora	10010 112	006131					Auto Assign Selected Medicus Addresses
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ALC: UNK	Desire Out	201011	006123					
No. of Concession, Name	Internation Co.d.	1015112	006144					
Stateday 1	Manufer Dut.	100111	004117					
Form Pro-	Desire D.A.		004138					
BUBHILING.	Billion .						3 10 1000	
Caract	Tringer, LTHE							
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						-	the second se	

7. Populated Tag address table...

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

File	Edit Setup CPU Tools Window Help	
1	New Project	J 🕲 Run 💮 Stop 🌒 Debu
)	Open Project	
	<u>C</u> lose Project	n 🗸 🦚 Monitor •
3	Save Project Ctrl+S	7 8 9
	Save Project As	
5	Import >	
2	Export >	Tags
6	Compile Project F8	Rung Comments
	Transfer Project >	Connections

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

o File mationDirect\Productivity	Cuite Weink	The rest of the local division of the local	
Add denotes the back of the set of the fact back of the back of th	Suite wente	k Tags.csv	Browse
Include I/O Tags			

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.

Name :	Automation Direct Produ	ctivity Series			
	O HMI @ Device	(
Location :	Local 🗸 🔤	-spense			
Select Local for a HML	device connected to this	HMG, or Rema	te for a device o	connected thro	rugh anot
Device type :	Automation De	rect Productiv	ity Series		
	Device ID : 559, V.2.30, F	MODBUS_RTU.	e30		
1)/⊨ :	Ethernet		Open Davice	Connection 0	ilide _
P	192.146.1.100, Port=503	z am Protocol)		Set	angs
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P	192.148.1.100, Port=300 Use UDP (User Dotage evice default station no. 1 Default station no. 938	am Protocol) [1 station no. va] Irratile	Set	tings
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12. Click "Import Tags..."

Chora to care	Network	Franker	Sackup Server	Time Sync./0	15T e4	tai .	Racipe Database
Device	Hodel	General	System Setting	Renat	e Secur	ity .	Extended Memory
Device Fat:							Whet's my B
	Name	Lecation	Device Type	interface.	1/F Protocol	500	on No.
Local HMI	Lacel HMC	Local	MT6050E (480 x 272	0 -		0	
LOOP D	Autom_	Lacal	Adomation Dend P.	. Ethernet	TCP/IP	1	
		3	How Device	0ei	de		Settings
	3mpi	t Tags	How Device	Del	ete		Settings
Project descrip	3mpi	ıt Tags	Kow Device	0e	ete		Settings
Praject descrip	impi tor:	i Tags	Kew Device	Del	ete		Settings
Project descrip SCADA softwar Server first an	Simps toes: re can india d anable (N	ectly access	Hew Device	Del BUS TCP/JP S	ete ierver on 4841,	(Add a	Settings
Project descrip SCADA software Server first as	3mps toos: ne can india d amable (N	ectly access cobeus tro	ew benze	Del RUS TCP/IP (5 dels Mapping T SCADA	ere over on skill, obs	(Add a	Settings



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

w folder			lii •	
A	A	Provide and		
	Name	Date modified	type	Size
	J Old	29/11/2018 22:38	File folder	
1	P2K STAND_Basic	25/09/2018 17:15	Microsoft Excel Co	38
	P2K STAND_Extended	25/09/2018 17:15	Microsoft Excel Co	48
*	Weintek Tags_basic	29/11/2018 22:40	Microsoft Excel Co	21
*	Weintek Tags_extended	29/11/2018 22:40	Microsoft Excel Co	25
• We				
~ 4	K			

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

	Address tag name	 Address mo 	address	Comment	
2	Alarm Sounder	Bit	0x-00005		
2	Back Guard	Bł	1x-00006		
	Clean Button	Bit	1x-00007		
\square	Current	Word	4x-00001		
	Down Flag	Bit	0x-00013		
\square	Equal	Bit	0x-00010		
2	Front Guard	Bit	1x-00005		
\square	Greater	Bit	0x-00011		
\square	Jog Backwards Button	Bt	1x-00004		
\square	Jog Forward Button	B#	1x-00003		
2	Less	Bit	0x-00012		
1	Motor Ferward	Br	0x-00003		
\square	Mator Reverse	Bit	0x-00004		
2	Motor Run	Bit.	0x-00001		
2	Motor Stop	Bit	0x-00002		
2	Motor Supply Contactor	Bit	0x-00006		
1	Preset	Word	4x-00003		
\square	Purge Button	Bit	1x-00006		
	Purge Pump Motor Run	Bit	0x-00006		
\square	Reset	Word	4x-00005		
	Run	Be	0x-00014		
CR	PR.84171.525	F14			

15. Success message:





 WEINTEK
 PLC C

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

		×
Device :	Device : Automation Direct Productivity Series	
Address type :	Alarm Sounder	~
Address :	0x-00005	User-defined tag
Address format :	DDDDD [range : 1 ~ 65535]	
	Index	register
Tag Library		OK Cancel

18. The tag can be selected and used.

Alarm Sounder	
Back Guard	
Clean Button	
Down Flag	
Equal Erect Cuard	
Sreater	
log Backwards Button	
log Forward Button	
less	
Motor Forward	
Motor Reverse	
Motor Run	
Motor Stop	
Motor Supply Contactor	
Purge Button Purge Button Motor Run	
RUN FLAG	
Run	
Start Button	
Stop Button	
Warning Lamp	



Wiring Diagram:

Diagram 1

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>		RS232 9P D-Sub Female
Rx	<>	2 TXD
Тx	<>	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.

НМІ		PLC
<u>Link</u>		RS485 2W 9P D-Sub Female
Data-	<>	8 Data-
Data+	▶	3 Data+
GND	<>	5 GND

Diagram 3

Ethernet cable:

