MYPRO TOUCH

0

Compressor Package Control System





PREFACE

While installing and mounting The MYPRO TOUCH Type-S, check the following points:

A. Is the MYPRO TOUCH Type-S factory-option variation specified? MYPRO TOUCH Type-S is available in 6 factory-option variations:

The format for specification is;



B. Are all necessary items supplied?

Check the items in the package against the packaging list. The standard version MYPRO TOUCH Type-S should be provided with a set of the following items: CPU chassis kits (CPU board; 2 analog input boards; digital input/output board; CPU-AD harness; AD-AD harness; CPU-digital input/output harness; power harness) Touch panel (12.1") 16 Analog input connectors 16 Digital input/output connectors.

C. Are the settings in the following screens correct?

Be sure to confirm the following settings in the corresponding screens before putting MYPRO TOUCH into service. System Configuration: Are the settings for each item appropriate for the compressor unit. Analog Input Scaling: Is the scaling setting for each sensor correct? Alarm/Failure LIMITS: Are the settings for each alarm appropriate?

NOTE: Base panel will be built and distributed by Mayekawa USA

CONNECTING POWER TO THE MYPRO TOUCH



1.

2.

CONNECT MYPRO TOUCH TO NETWORK

NOTE: TO BE ABLE TO PERFORM ANY COMMUNICATION WITH THE MYPRO TOUCH PANEL VIA ETHERNET CONNECTIVITY THE FOLLOWING STEPS MUST BE PERFORMED. IF YOU DO NOT KNOW WHAT IP ADDRESS TO USE FOR YOUR PANEL PLEASE CONTACT YOUR NETWORK ADMINISTRATOR OR IT DEPARTMENT.

WARNING: MAKING UNNECESSARY CHANGES IN THE OFFLINE MENU MAY ALTER IMPORTANT SETTINGS OF YOUR HMI THAT MAY DISABLE OR CORRUPT FEATURES OF THE HMI PANEL. FOR A LIST OF THE ITEMS THAT SHOULD NOT BE ALTERED PLEASE VISIT THE MYPRO TOUCH OFFLINE MANUAL.



1. Connect Ethernet cable to MYPRO Touch as shown in Figure 1.

Figure 1: Connecting Ethernet Cable

2. Access the SYSTEM MENU by touching the corners of the touch screen as shown in Figure 2.





2 a) Touch one corner release then touch the other corner within 0.5 seconds of each touch.

3. When the following system menu appears, touch [OFFLINE] button as shown in Figure 3.



4. The panel will reboot. When prompted for a password, enter 1313 to go to the offline mode.

5. Once the panel boots into offline mode, the following screen will appear. If language is in Japanese change to English via the dropdown menu under OFFLINE LANGUAGE: (Figure 4)

	Home	Main Unit Settings	Peripheral Settings	Password Settings	Initialization Menu
	Maintenance Menu	Transfer	External file operation		
	OFFLINE LANGUAGE	:	ENGLISH	•	
Offline Language	System Version:		3 12 0		
	Driver Version:		0.12.0		
	MODBUS SLAVE		V1. 1	7.08	
	MODBUS SLAVE		V1. 1		
	General MODBU	JS SIO Master	V1. 1	3. Ø3	
	EtherNet/IP		V1. 1	8. 19	
	Sub System Versi	ion:	3. 12. Ø		
	Device Monitor Monitor	Version:	V1. 04. 05		→
	Save	Exit	Cancel		2014/04/02 11:38:54

Figure 4: System Configuration Window

6. Touch [Main Unit Settings] on the top menu banner.

6 a) Once the settings selection buttons appear, touch [Ethernet Local Settings] to set the MYPRO Touch IP address as shown Figure 5.

Home	Main Unit Settings	Peripheral	Password Settings	Initialization Menu	
Maintenance Menu	Transfer	External file operation			Main Unit Settings
Se	oneen Settings		System Area Se	ttings	
Ope	ration Settings		Ethernet Local S	ettings	
Di	splay Settings		Logic Settii	No.	
Menu	and Error Settings		Extended Sett	ings	
W	indow Settings		Remote Viewer Se	ettings	Ethernet Local Settings
Save	Exit	Cancel		2014/04/02 11:39:24	

Figure 5: Ethernet Local Settings

7. On the [Ethernet Local Settings] screen configure the IP address settings for the MYPRO Touch panel as it is provided by your network administrator or IT department.

Screen Settings	Operat Settin	i on Igs		Disp Sett	lay Ings	Menu a Error Set	nd tings	W Se	indow			
System Area Settings				Log Setti	ic ings	Extend Settin	ed gs	Remot				
Local Name:					MYPRO							
IP Address:					192	168	1		20			
Subnet Mask:	-		CLR	ESC	255	255	255		0		Enter desired IP	
Port:		5	8						8000		address settings	J
Gateway:	4	2	0	ENT	192	168	1		1			
MAC Address:	. 0	+/-	BS		00	01 23	10	1B	30			
Speed Settings:	·				Enac100M	l I	G 10M	adie				
Duplex Settings:					€ Half		O Ful					
	Exit					Back		2014/ 11:4	04/02 0:29			



7a) Use the dropdown keypad to make necessary changes. Creating a local name for each panel makes it easier to identify when there are multiple panels in the network.

8. To configure the IP address of the PLC communicating with the MYPRO Touch, select [Peripheral Settings] at the top menu bar.



8a) After the peripheral settings screen appears, select [Device PLC Settings] as shown in Figure 7.

Figure 7: Peripheral Settings screen

9. From Device PLC Settings screen select Rockwell Automation from the list. See Figure 8.



Figure 8: Device PLC Settings screen

Comm.	Device				
EtherNet/IP			[TCP]	Page 1/1	
	Port No.	• Fixed	 Auto 1024 		Device
	Timeout(s) Retry Wait To Send(ms)				
	Exit		Back	2014/04/02 11:41:31	

10. On the first page that appears select [Device] as illustrated in Figure 9.

Figure 9: Select [Device]

11. Select the device communicating with the MYPRO Touch. PLC4 = Control/CompactLogix, PLC5 = MicroLogix. Reference Figure 10.

Comm,			levice								
										-	
EtherNet/1P							[TCP]		Page 1/1		
Dev	ice/Pl	C Nam	e	PL 0	5						Select between PLC 4
		-		CLR	ESC					Π	or PLC 5
	IP	7	8	9		MicroLogix	68 1	30	[
	Tac	4	5	6	ENT	• Disable	C Enable	0			
	18	1	2	3	LINI						
		0	+/-	BS							
											Enter IP address of AB PLC
			Exit				Back		2014/04/02 11:42:24		

11 a) Enter IP address of the PLC.

Figure 10: Selecting Device

12. After completing the necessary network settings, touch [Exit] then [Save Changes and Exit] to reboot panel to normal mode.

SETTING UP THE DEVICES IN THE RSLOGIX 5000/500

1. For a Compact/ControlLogix controller, open or create the RSLogix 5000 file that will be downloaded to the processor. (If using RSLogix500, skip to step 4)

1 a) Create controller tags with appropriate dimension by following the File and Slave Number tab of the excel file provided. The dimension of each file shall match exactly to the Ethernet IP CompactLogix Device List 3.14.14_RELEASE COPY.

1 b) Ver. 106 communication driver software – Integer tags associated to the word registers shall have a dimension of 384 and Boolean tags associated to the two coil registers per machine should have a dimension of 0.

1 c) Figure 11 shows a setup to communicate with 3 MYPRO Touch controllers.]

NOTE: These tag names are for reference only. Create tags with familiar structure will help with the development of the program.

cope: 🛐 MYPRO_TOUCH 👻 Show: All	Tags			▼. Enter N.	ame Filter		
Name	Alias For	Base Tag	Data Type 📰 🗸	Description	External Access	Constant	Style
HOLDING_REGISTER_MT3_1			INT[384]		Read/Write		Decimal
HOLDING_REGISTER_MT2_1			INT[384]		Read/Write		Decimal
HOLDING_REGISTER_MT1_1			INT[384]		Read/Write		Decimal
COILS_MT3_2			INT		Read/Write		Decimal
COILS_MT3_1			INT		Read/Write		Decimal
+-COILS_MT2_2			INT		Read/Write		Decimal
+-COILS_MT2_1			INT		Read/Write	1	Decimal
COILS_MT1_2			INT		Read/Write		Decima
⊞-COILS_MT1_1			INT		Read/Write		Decima

Figure 11: Tags for MYRPO Touch in RSLogix5000

2. Go to Logic then Map PLC/SLC Messages. See Figures 12 & 13.



RSLogix 5000 - MYPRO_TOUCH [1769-L32E 20	.12] - [Controller Tags - MYPRO_TOUCH(controller)]		
🎽 File Edit View Search Logic Commu	unications Tools Window Help		_ 8 ×
🎦 😅 🖬 🎒 🐰 🛍 🛱	Mode 🗸 🚜 强 📴 📝 🖲	र् 🔍 🔍 Select a Language	- 🧶
Offline 📴 🗸 🗖 RUN Monitor Ta	95 c AB_ETHIP-1\192.168.4.151\Backplane\	0*	▼ 品
No Forces	1		
No Edits A Function Produced 1	ſags ⊣ ⊣⊢ ⊣⊢ -()()()()	Select Map PLC/SLC	
Map PLC/S	LC Messages	Messages	Compare / Compute/Math / Maua
Controller Organizer	Scope: TOMYPRO_TOUCH - Show:	All Tags	Enter Name Filter
Controller MYPRO_1 I/O Forcing	Name	Value	t ^)
Controller Fault	g ▶E-COILS_MT1_1		0
Power-Up Handl Online Edit	s E-COILS_MT1_2		0
Tasks	COILS_MT2_1		0
🖨 🤯 MainTask	± COILS_MT2_2		0
🔬 🕞 MainProgram	+ HOLDING_REGISTER_MT1_1		{}
Unscheduled Programs / Phases	HULDING_REGISTER_MT2_1		{}

Figure 13: Map PLC/SLC Messages...

3. Start mapping the tags created according to the File and Slave Number tag of the excel file provided as shown in Figure 14 & 15.

File Numb	er 🛆	Name	<u></u>	Cancel
0	-	HOLDING_REGISTER_MT1_		
1		COILS_MT1_1		Нер
2		COILS_MT1_2	=	
3		HOLDING_REGISTER_MT2_		
4		COILS_MT2_1		
5		COILS_MT2_2		
6		HOLDING_REGISTER_MT3_		
7				
		Delete Map		

Figure 14: Mapping the appropriate tags to file number

These tags names are example only. You may change the name to something that will be easier for you to use. What is important to match is the correlation of the FILE NUMBER to the type of data you are getting (WORD or COIL) and to the slave number of the MYPRO Touch, starting slave number will determine starting File number: **EXPLANATION:** FILE 0 = WORD data for SLAVE 1 FILE 6 = WORD data for SLAVE 3 FILE 1 = COIL data for SLAVE 1 FILE 7 = COIL data for SLAVE 3 FILE 2 = COIL data for SLAVE 1 FILE 8 = COIL data for SLAVE 3 FILE 3 = WORD data for SLAVE 2 FILE 9 = WORD data for SLAVE 4

FILE 4 = COIL data for SLAVE 2 FILE 5 = COIL data for SLAVE 2 FILE 10 = COIL data for SLAVE 4 FILE 11 = COIL data for SLAVE 4 etc. until you reach slave number 8.

Figure 15: File number to Slave node number mapping

4. For a MicroLogix controller, create or open the RSLogix 500 file that will be downloaded to the processor. (If using RSLogix 5000, use step 1 through 3 on pages 8 & 9)

4 a) Create the data files necessary according to the [Ethernet IP MicroLogix Device List 3.14.14 RELEASE COPY].

4 b) For the Ver. 106 communication driver software, create two Integer (N) data files with 250 elements for the data associated with the word registers. In addition the program will require one Bit (B) type data file with 2 elements to receive the data associated with the coils/bits in the MYPRO Touch.

4 c) Figure 16 shows data file sample to communicate with **two** MYPRO Touch controllers.



Figure 16: Setting up Data Files in RSLogix500

5. After completing the setup in the RSLogix 5000 or RSLogix 500 project file, download the new file to the processor.

TURNING THE COMMUNICATION ON THE MYPRO TOUCH

AFTER ENSURING THAT BOTH THE MYPRO TOUCH AND THE AB PLC ARE IN THE SAME NETWORK AND SUBNET PERFORM THE FOLLOWING STEPS TO RUN THE COMMUNICATION FROM THE MYPRO TOUCH.

USER MUST BE LOGGED IN TO PANEL TO PERFORM THESE MANIPULATIONS.

(_		
		XYZ	LEVEL: 2	Ø		
TOP SCREEN MAIN	I VIEW 🔪				03/18/1	4 (Tue) 16:33
CURRENT CONDITION			MAIN PV			1
	43.	4 osi	SP	43.4 psi	S T	31.1°F
CONTROL TARGET			DP	139 psi	DT	124 °F
			OP	285 psi	01	88 °F
SV PERCENTAGE	2.	1 %	AFP	138 psi		
			MA	0.0A		
CUT IN	43.	5 psi	dOP	146 psi	SSH	2.5 °F
	14		dFP	1 psi	DSH	44 °F
001 001	14.	o psi	LS¥	2.1%	D/S	2.65
COMP STATE	ST	OP	S¥P	2.1%		3
OPERATION MODE	LOC	AL-OFF	CAPA.	VFD	EGO.	EXP V.
TIMER	() SEC	CONTRO	LS		
RUN TIME HRS	1	D HOURS	CONTROL	SET POIN	т	
ALARM / FAILURE					•	29.U psi
		(())				0.0 %
CONFIG	SETTINGS	ALARM	CONTROL	GRAPH	MONI	TOR CLEAR ALARM
🐼 🐼 💽 🔀		N	IENU			

1. Touch "MENU" and then "CONTROL" button.

Figure 17: Main Screen Menu

2. Touch the left side arrow to flip screen as shown in Figure 18.

	XYZ	l	EVEL: 2	1/3 💮
SET POINTS		×	OPERATION MODE	×
CU IN CC A.CONT. PRESS. C PA.CONT. TENP. C T OUT	43.5 (psi 29.0 (psi 14.5 (psi]]]	OPERATION AUTO START/STOP DI/O TEST OPERATION	IOCAL Yes No
CAPACITY CONTROL		×	ANTI CYCLE	\mathbf{x}
ONTROL TARGET ONTROL SET POINT 'ID OUT(NV)%	49.5 [psi 29.0 [psi 0.0 [%]]	ANTI CYCLE TINE Interval tine	900 [SEC] 900 [SEC]
APACITY CONTROL LBT			HIGH STAGE CAPACITY (MONITOR)	
CONTROL TARGET Control set point Pid out(NY)%		=	INTERMEDIATE PRESS. Control set point Pid out(NY)%	
VFD COMPRESSOR CONTROL			ECONOMIZER/INTERCOOLER SV	
CONTROL TARGET Control set point Revolution			INTER SUPERHEAT Control set point Pid out(NY)%	
VFD COMPRESSOR CONTROL LBT			AUTO VI CONTROL (MONITOR)	
CONTROL TARGET Control set point Pevolution			CURRENT Vi CALCULATED Vi	

Figure 18: Control Summary Screen 01

3. Select "Communication Setup", see Figure 19.



Figure 19: Communication Setup 01

4. Configure MYPRO Touch HMI Communications.

4 a) Select master communication device from menu.

4 b) Select the slave address number of MYPRO Touch on the network. If only one MYPRO Touch is in the network, simply set it to 1.

4 c) After performing all these settings turn the communication to RUN.

		AB PLC Type
COMMUNICATION SETUP	04/02/14 (Wed) 16:42	Abriertype
NYPRO TOUCH CPU CON2	NYPRO TOUCH HMI	
CONMUNICATION STOP Address O	DEVICE	
RATE 19200bps	ADDRESS 1	Enter slave address of MYPRO Touch
PROTOCOL AUTO STAGE	COMMUNICATION STOP	
RESPONSE	STOP	
ERROR COUNT 20		



5. If all settings are performed properly the communication with the PLC should be established.

REV#	DATE	W BY	R BY	COMMENT
1	04/02/14	HT		FIRST VERSION OF DOCUMENT CREATED
2	04/03/14	HT	РК	FIRST REVISION ON MANUAL
3	02/03/15	HT	RS	REVISION OF NODE/FILE ADDRESSING