



Panasonic Factory Automation PerformArc Robotic Welding System

I/O Setup

System Configuration Setup :

The following section contains detailed information regarding the setup of the PerformArc 112S. Changes to these parameters could make significant impacts to the operation of the system. Do not change any of these parameters without careful consideration.

Some of the fields in the following tables have been left blank so that the end user can customize this manual. Please fill in the information specific to your system.

Note 1: Please check the Supplemental Section prior to making decisions or changes with respect to the information below. Some system options when installed and functional may change or add to the I/O setup listed below.

PerformArc 112S Mechanism Configuration

Mechanism #	Description	Parameter	Setting Value
1	Robot	Type	
		ID	
		Base Axis	None
		Mounting	Standard
		Tilt Angle	N/A
2	G4 Positioner	G4 Configuration Settings	
		ID	
		Type	
		Base Axis	
		Servo Parameter	
		Motion Parameters	
		Encoder Pulse	2048
		Valid Pulse Ratio	1/1
		Deceleration Ratio	1/300
		Maximum Speed	60 deg/sec
		Maximum Acceleration	200 deg/sec^2
		Loop Gain	15
		Motion Range	+181.00, -1.00
		Origin Data	
		Standard Position	
Origin Correction			

PerformArc 112S Input Configuration

Input Number	Label	Description	Usage	Signal Logic
1	Strobe	Strobe	Prog Start Method	Positive
2	Master	Program Select 1 (Prog0001.prg)*	Prog Start Method	Positive
3	Home	Program Select 128 (Prog0080.prg)*	Prog Start Method	Positive
4	Sweep A	Program Select 256 (Prog0100.prg)*	Prog Start Method	Positive
5	Sweep B	Program Select 512 (Prog0200.prg)*	Prog Start Method	Positive
6	Lt Ch 1	Light Curtain Channel 1 is not broken or faulted	User	Positive
7	Lt Ch 2	Light Curtain Channel 2 is not broken or faulted	User	Positive
8	Tip Rst	Tip Change Monitor Reset	User	Positive
9	Rsv Rst	Program Reserve Cancel	Prog Start Method	Positive
10	Tool AOK	The tooling on Side A is OK. Jumpered at shipment inside the robot controller from IP10 to Common.	User	Positive
11	Tool BOK	The tooling on Side B is OK. Jumpered at shipment inside the robot controller from IP11 to Common.	User	Positive
12	LDrOpen	The left side door is fully opened.	User	Negative
13	RDrOpen	The right side door is fully opened.	User	Negative
14	LDrClsd	The left side door is fully closed.	User	Negative
15	RDrClsd	The right side door is fully closed.	User	Negative
16	A@Robot	Side A is at the robot	User	Positive
17	B@Robot	Side B is at the robot	User	Positive
18	BCD 2	Dedicated position for purchased option	User	Positive
19	BCD 4	Dedicated position for purchased option	User	Positive
20	BCD 8	Dedicated position for purchased option	User	Positive
21	BCD 10	Dedicated position for purchased option	User	Positive
22	BCD 20	Dedicated position for purchased option	User	Positive
23	BCD 40	Dedicated position for purchased option	User	Positive
24	Ream_Clr	Dedicated position for purchased option	User	Positive
25	Panaln1	Dedicated position for purchased option	User	Positive
26	Panaln2	Dedicated position for purchased option	User	Positive

PerformArc 112S Output Configuration

Output Number	Label	Description	Usage	Signal Logic	Hold	E-Stop
1	@HOME	Robot at Home (Cube Monitor #1)	Cube Monitor	Positive	Keep	Keep
2	Clr Work	Robot Clear of Work (Cube Monitor #2)	Cube Monitor	Positive	Keep	Keep
3	Tip Chg	Tip Change Required	User	Positive	Keep	Keep
4	Tip Rst	Tip Change (Reset bit used internal to the robot)	User	Positive	Keep	Keep
5	Op Hold	Operation Hold (Used in PLC logic to bypass Strobe on restart if necessary)	OPR Hold	Positive	Keep	Keep
6	A@Robot	On when table A Facing Robot	Ext-Axis Position	Positive	Keep	Keep
7	B@Robot	On when table B Facing Robot	Ext-Axis Position	Positive	Keep	Keep

PerformArc 112S Global Positions and Global Variables

Type	Number	Label	Description	Mechanism
GA	GA001	Home	Robot's home position	1
GA	GA002	Tip Chg	Robot's tip change position	1
GA	GA003	TCP CHK	TCP Check pointer on wall	1
GP	GP001	A@Robot	Table Side A is at the robot	2
GP	GP002	B@Robot	Table Side B is at the robot	2
GP	GP003	Cur Pos	The current table position	2
GI	GI001	G4 Pos	The extracted position from GP003	N/A