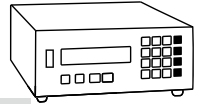


M-MATE I AC Servo Controller



- Easy operation, saving space of machine shop.
- Connecting with-CNC Rotary Table to M-Code of CNC M/C for equal division indexing machining.
- The best solution for conventional M/C which could not retrofitted 4th axis.
- Program capacity = 9 sets, minimum increment 0.001°

Suitable Rotary Table :

CNC-120R	CNC-200RB	CNC-400R	CNCMT-200
CNC-170RB	CNC-250R	CNC-500R	CNCMT-320
CNC-170R	CNC-250RB	CNC-630R	NCF-250
CNC-200R	CNC-320R	CNC-800R	

ITEM	SPECIFICATION	ITEM	SPECIFICATION
Min. Increment	0.001°	Key-Lock Function	Set Parameter #7 to (0)
Programmable Angle	0-+/-359.999°		
Max. Equal Dividing	0-+/-359.999°		
Emergency Stop	Whole system stop		
Input System	key board or RS232C	Mode Selection After Power On	Program mode / Run mode
Zero Return	Can be compensated by hardware / software	Backlash Adjustment	Parameter number # 10
Feed rate	1~999.9 deg / sec	Previous Step Display Function	Pushing "↑" key
Program Capacity	10 Programs, 99 steps for each program	Next Step Display	Pushing "↓" key
Jump Function	Jump to sub-program	Standard Parameter	Parameter PA01-26, PA50-66 can be set easily
Loop Count	Up to 999 times per step	Compensation Function of Encoder	Optional PA48=2

Example

Step 1	Turn (Power) switch on.	Step 5	Push PROG to feed-rate (F), input "30"
Step 2	Push and hold PROG and release display becomes blinking	Step 6	Push FUNC to loops (L), input "4"
Step 3	Push and hold CLR for 5 sec. or "00" display	Step 7	Push PROG display become no blinking
Step 4	Key in "9000"	Step 8	Push START table start rotating 4 times

NO.	SPECIFICATION	
1	Program step display : Preasent the step number	
2	Data display : To show either position, step angle, feedrate or count	
3	Led Indicator : There are 8 LED indications on the control panel.	
4	"STEP/PROG" KEY : During either run or program mode this key is used touches other programs. Press this key and the "Program" & "Step" number flash.	
5	"Mode KEY" : This key toggles the control between run and program mode.	
6	"INS" KEY (INSERT) Insert a program step into memory in program mode.	
7	"→" RIGHT ARROW KEY : This key has the following functions: a. In both run and program mode it changes the control display from "P"-"S"-"F"-"L"-"P"-"S"....Entries. b. In program mode for parameter entry it scrolls display through parameter settings. c. Scrolling or directing programmer or parameter access.	
8	"↑" THE UP ARROW KEY : Scrolls the program up through steps or up through parameters.	
9	"↓" THE UP ARROW KEY : Scrolls the program up through steps or through parameters.	
10	NUMERIC KEYS(0 to 9) : Data entered has the numeric or mathematical face value of key pressed. "+/-" KEY (PLUS / MINUS) : this key has 2 functions: a. Sets the motor running direction in program mode for an incremental move. b. Selects the alpha "Op Code" (a through d) during program mode. During op code selection press the "+/-" key scrolls the program from op code A to op code D.	
11	"STOP KEY" : Press this key stops program execution or motor running. During motor running press the "STOP" key once-motor stops and the stop "LED" lights. Press the "Start" key to continue the remaining unexcited portion of this step. But, if another key is pressed or the "STOP" key is pressed again the unexcited portion of the step is lost. Press the "Start" key now executes the current full-programmed step again.	
12	"START KEY" : This key is functional only in the "RUN" mode. When this key is pressed the current step shown on display will be executed. For the duration of the motor running or program executing the "LED" above the "Start" key is illuminated. This "Start" key and the "Remote Start" signal perform the same function-that is initiating a motor moving.	
13	"Home KEY" : The home functions are defined in parameters PA11, PA12 and PA13. (See the parameter section). parameter 04 establishes the "ZERO" or "HOME" speed and parameter 01 establishes the home acceleration or deceleration values.	
14	"Zero KEY" : Pressing this key returns the motor to the absolute zero position. Parameter 04 establishes the "ZERO" or "HOME" speed and parameter 01 establishes the "ZERO" acceleration or deceleration values.	
15	"+JOG" AND "-JOG" KEY : Holding either of these 2 keys down causes the motor rotate in the corresponding direction. Parameter 03 establishes the jog speed and parameter 02 establishes the jog acceleration or deceleration values.	

NO.	SPECIFICATION	
1	Motor Connection : The motor connector is 14 pin MS type with part no MS3-102A-20-27S.	
2	Encoder Connection : The motor connector is 10 pin MS type with part no MS3-102A-18-1P.	
3	Interface Signal : The interface connector is 17 pin MS type with part no MS-3102A-20-29P.	
4	Hand Wheel Connection : Please also see PA24 for further detail about the hand wheel control.	
5	RS232C Connection : The RS232C connector is a 9 pin D type connector. pin 2 and pin 3 / pin 7 and pin 8 are exchanged inside the controller. So ,please use a one to one connection cable for this connector.	
6	Faceplate Encoder Connection : The faceplate encoder is an option only for those models, which have dual feedback feature.	
7	Brake Solenoid (DC24V)	
8	AC Power Input : Please supply 110V/220 VAC with minimum 10 Amp to this power socket.	
9	Fuse 10A/15A : Please use a 10A/15 Amps rating current / 3 cm / slow blow main fuse for this controller.	
10	FG	