

Stand-alone Motion Controller



CMC Series



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A	M	S	H	STA 1		1	2	3
V	R	J	0	STA 2		4	5	6
P	STOP	RE-SET	CLR	STA 3		7	8	9
MODE	SLEW ←	SLEW →	—	STA 4		*	0	ENTR

Keypad Lay-out

A

Setting Acceleration

Pressing the **A** key allows the user to enter the acceleration values for each motor.

- 1) Press **A**.
- 2) The controller displays "Select Axis:1 thru 3.
- 3) Press 1 for X axis, 2 for Y axis and 3 for Z axis.
- 4) The controller displays "Enter Value"
- 5) Using the numeric keypad enter the acceleration value for the selected axis, then press **ENTR**.
- 6) To cancel the operation, press **CLR**.

V

Setting Velocity

Pressing the V key allows the user to enter the velocity values for each motor.

- 1) Press V .
- 2) The controller displays "Select Axis:1 thru 3.
- 3) Press 1 for X axis, 2 for Y axis and 3 for Z axis.
- 4) The controller displays "Enter Value"
- 5) Using the numeric keypad enter the velocity value for the selected axis, then press ENTR .
- 6) To cancel the operation, press CLR .

P

Setting Position

Pressing the **P** key allows the user to enter the position values for each motor.

- 1) Press **P**.
- 2) The controller displays "Select Axis:1 thru 3.
- 3) Press 1 for X axis, 2 for Y axis and 3 for Z axis.
- 4) The controller displays "Enter Value"
- 5) Using the numeric keypad enter the position value for the selected axis, then press **ENTR**.
- 6) To cancel the operation, press **CLR**.

MODE

Mode Selection

Pressing this key enables the second function of each other key.

M

Coordinated Move

Pressing the **M** key moves all motors to the last entered / selected position. The default setting is zero.

When this key is pressed the controller displays “Coordinated Move”.

R

Relative Move

Pressing the R key moves the motor by last value of the entered position.

When this key is pressed the controller displays "Relative Move".

A small, rectangular button with the word "STOP" written in black capital letters on a light-colored background.

Stop All Axes


Pressing this key initiates all motors to stop.


When this key is pressed the controller displays "Stopping All Axes".



Jog in Negative Direction

Pressing this key jogs the selected motor in the negative direction.

Pressing **1** then  will jog the X-axis motor in the negative direction.

Pressing **2** then  will jog the Y-axis motor in the negative direction.

Pressing **3** then  will jog the Z-axis motor in the negative direction.

When this key is pressed the controller displays "Jogging Neg. Dir '*axis-name*'".

axis-name = X, Y, Z


S

Spare – 1

For the future use.

J


Joystick Enable

The joystick operation is disabled when the keypad is used to make a motor to move. The  key should be pressed in order to enable the joystick operation.

When this key is pressed the controller displays “Joystick Is On”.



Reset Position Counters to Zero


Pressing the  key resets the value of all position counters to zero.


When this key is pressed the controller displays "Position Counters = 0".



Jog in Positive Direction

Pressing this key jogs the selected motor in the negative direction.

Pressing **1** then  will jog the X-axis motor in the positive direction.

Pressing **2** then  will jog the Y-axis motor in the positive direction.

Pressing **3** then  will jog the Z-axis motor in the positive direction.

When this key is pressed the controller displays "Jogging Pos. Dir '*axis-name*'".

axis-name = X, Y, Z

H

Home all Axes

Pressing the **H** key initiates a homing sequence for the selected axis.

1. Press **H**.
2. The controller displays "Select Axis:1 thru 3.
3. Press 1 for X axis, 2 for Y axis and 3 for Z axis.
4. The controller displays "Homing-'axis'"

axis = X, Y, Z

Please consult the hardware reference manual for switch wiring and specifications.

0

Go to Position Zero

Pressing the 0 key moves all motors to position zero.

When this key is pressed the controller displays “Go to Position Zero”.


CLR

Cancel Data Entry Operation

Pressing the CLR key cancels the last data entry operation.


STA
1

STA-1

Pressing the  key adds the displayed point to the position list.


STA
2

STA-2

Pressing the  key saves the position list to the non-volatile memory.

STA
3

STA-3

Pressing the  key retrieves the position list from the non-volatile memory.

STA
4

STA-4

Reserved for learn mode.

1 2 3


Axis Selection and Data Entry Keypad


Pressing **1**, **2** and **3** selects the desired axis, when not in data entry mode. The default setting is the X-axis.


When the **1** key is pressed the controller displays “X-axis Selected”.


When the **2** key is pressed the controller displays “Y-axis Selected”.


When the **3** key is pressed the controller displays “Z-axis Selected”.

Pressing **1** then  will jog the X-axis motor in the negative direction.

Pressing **2** then  will jog the Y-axis motor in the negative direction.

Pressing **3** then  will jog the Z-axis motor in the negative direction.

Pressing **1** then  will jog the X-axis motor in the positive direction.

Pressing **2** then  will jog the Y-axis motor in the positive direction.

Pressing **3** then  will jog the Z-axis motor in the positive direction.



Data Entry Keypad

These keys are used for data entry.



Spare – 3

For the future use.