

Robo Cylinder Controller Teaching Pendant

Operating Manual



Intelligent Actuator, Inc.

This publication was written to assist you in better understanding this part of your IA system. If you require further assistance, please contact IA Technical Support. For Central and East Coast Time Zones, please call our Itasca, IL office at 1-800-944-0333 or Fax 630-467-9912. For Mountain and Pacific Time Zones, please call our Torrance, CA office at 1-800-736-1712 or Fax 310-891-0815; Monday through Friday from 8:30AM to 5:00PM.



Intelligent Actuator, Inc.

U.S. Headquarters
2690 W. 237th Street
Torrance, CA 90505
310-891-6015 / 310-891-0815 FAX

Intelligent Actuator, Inc.

Midwest Regional Office
1261 Hamilton Parkway
Itasca, IL 60143
630-467-9900/ 630-467-9912 FAX

www.intelligentactuator.com

© March 2001 Intelligent Actuator, Inc. All rights reserved.

No portion of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, recording, or otherwise, without the prior written permission of Intelligent Actuator, Inc.

Disclaimer

The information and technical data contained herein are subject to change without notice. Intelligent Actuator, Inc. assumes no responsibility for any errors or omissions regarding the accuracy of the information contained in this publication.

Table of Contents

1. Foreword	1
2. Before You Begin	2
3. Safety Precautions	3
4. Warranty and Scope of Warranty	4
5. Application Environment	5
6. Teaching Pendant Functions and Specifications	6~10
6-1 Specifications	6
6-2 External Diagram	7
6-3 Parts	8
7. Connection with the Controller	11
7-1 Connection with the Teaching Pendant	11
7-2 How to Disengage the Teaching Pendant	11
8. Operation	12~61
8-1 Initial Screen During Power-UP	13
8-2 Controller Selection (when using multiple units)	14
8-3 Operation Mode Selection	15
8-4 Edit/Teaching	16
8-5 Position Table Content	18
8-5-1 The Relationship Between the Push Power During Stop and Current Restriction Value	20
8-5-2 Data New Input	22
8-5-3 Data Modification	22
8-5-4 Add • Delete	43
8-5-5 Move	52
8-6 Monitor	57
8-7 Error List	58
8-8 User List	58
8-9 User Adjustment	60
8-10 Exit	61
9. Message Area	62~65
9-1 Error Codes	62
9-2 Teaching Pendant Message Label Error	63
9-3 Error Codes	63

1. Forword

Thank you very much for purchasing the Teaching Pendant for the Robo Cylinder Controller. Without having the prior knowledge of how to correctly use or operate the teaching Pendant, not only will the user be unable to take full advantage of all the functions built into this product, but the user might also inadvertently cause damage to the Controller or shorten its life. Please carefully read this manual as well as other manuals pertaining to the product to acquire an understanding of the proper method of handling and operating the controller. Keep this manual handy so that you can refer to the appropriate sections as the need arises.

* All precautions have been taken to ensure the accuracy of the contents of this manual. However, if you become aware of any inaccuracies or discrepancies, please contact your IAI sales representative or technical service department.

2. Before You Begin

! A word of Caution

- (1) Please read this manual carefully to operate the controller properly.
- (2) You are not allowed to reproduce this manual or any portion thereof without permission.
- (3) We cannot accept any responsibility for possible damage resulting from the use of this manual.
- (4) We reserve the right to change the information contained in this manual without prior notice.

! Emergency Procedures

If hazardous conditions arise while using the controller, immediately turn OFF all power switches for the controller and any devices connected to it, or pull all the power plugs from the electric outlet (“Hazardous condition” refers to excessive heat, smoke or flames coming from the controller or any conditions which might lead to fire or cause damage to the controller).

3. Safety Precautions

Please read the following carefully in order to gain an understanding of safety precautions.

This product was developed as components for driving automated equipment and is not designed to produce greater torque or speed than is necessary. However, strictly observe the following items to prevent any accidents from occurring:

1. As a rule, any handling or operating methods not described in this manual should be viewed as things that should not be attempted. Please contact the company if any portion of the contents of this manual are unclear.
2. Use only the products specified for wiring between the actuator and controller.
3. Stand clear of the operating range of the machine when it is in motion or is ready to operate. Surround the system with safety partitions if there is a possibility that people can enter the area where the machine is being used.
4. When assembling, adjusting, or performing maintenance on the machine, always disengage the power supply to the controller. During work, display a sign stating work in progress where it is readily visible. Also, keep the power cable close to the operator so that another person cannot inadvertently switch on the power.
5. When more than one person is working on the system, agree on signals beforehand to ensure everyone's safety before beginning work. In particular, when doing work involving axis movement, always call out for everyone's safety regardless of whether power is ON or OFF, or the axis is to be mechanically driven or manually moved.
6. When the user needs to lengthen the cables, check the wiring carefully to make sure it is correct before turning the power ON since miswiring can lead to misoperation.
7. Do not change the controller parameters without first consulting with an Intelligent Actuator representative. Any alternation to the parameters not suggested by IA technical staff will void the user warranty and lead to damage of equipment.

4. Warranty and Scope of Warranty

The Teaching Pendant undergoes stringent testing before it is shipped from our factory. IAI provides the following warranty.

(1) Warranty Period

The warranty period is 12 months from the date the unit is shipped to the customer.

(2) Scope of Warranty

If within the period specified above, a breakdown occurs while operating the controller under normal conditions and is clearly the responsibility of the manufacturer, IAI will repair the unit at no cost. However, the following items are not covered by this warranty.

- Faded paint or other changes that occur naturally over time.
- Consumable components that wear out with use (battery, etc.).
- Unit seems to be noisy or similar impressions that do not affect machinery performance.
- Damage resulting from improper handling or use.
- Damage resulting from user error or failure to perform proper maintenance.
- Any alterations not authorized by IAI or its representatives.
- Damage caused by fire and other natural disasters or accidents.

The warranty pertains to the purchased product itself and does not cover any loss that might arise from a breakdown of the product. Any repairs will be done at our factory.

(3) Service

The purchase price of the product does not include programming or expenses for sending technicians to the customer's site. Even if the product is still under the warranty period, separate charges will be assessed for the following services.

- Assistance with unit installation or trial operation.
- Inspection and maintenance.
- Technical training on controller operation, wiring or programming.
- Any other services or work for which IAI normally assesses separate charges.

5. Application Environment

- In order to avoid breakdown, please do not apply any type of machinery impact onto the Teaching Pendant.
- Always hold onto the entire Teaching Pendant Body so that the teaching Pendant Cable does not get pulled by unwanted cables.

Caution:

This Teaching Pendant is designed exclusively for the IAI RC Controller, and should not be used to connect with other devices.

- Application Environment

Ambient Temperature: 0~40°

Humidity: Under 85% RH (no condensation)

Ambient Environment: No corrosive gas, especially avoid dust.

- Storage Environment

Ambient Environment: 25°C

Humidity: Under 85% RH

Ambient Environment: No corrosive gas, especially avoid dust.

Caution regarding controller connection:

Please turn the controller front side port switch OFF before connecting to the controller.

6. Teaching Pendant Functions and Specifications

This Teaching Pendant was created exclusively for the RC Controller.

Through the communication between the controller, the RC Controller is designed to function as the Display Operation Unit to edit or display the data (common data, move point data, etc.,) that is stored inside the controller, as well as to execute teaching without using the PC Interface Software.

Utilizing a large liquid crystal display kit, the display will show each description simultaneously for easy operation. In addition, for quick reference, a manual card is stored inside the Teaching Pendant body.

Large type LCD ••••• Horizontal 21 characters Vertical 16 columns

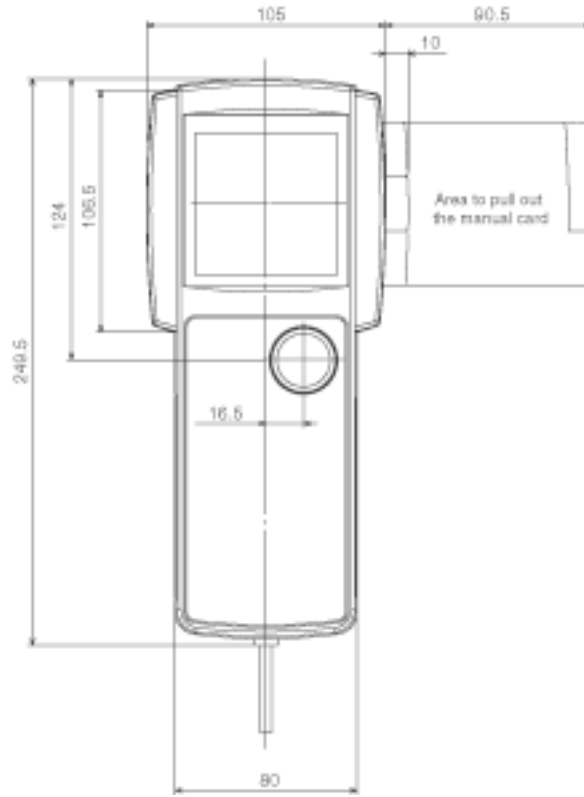
Manual card storage ••••• Up to 3 cards

6-1 Specifications

Item	Specifications
Ambient Temperature, Humidity	Temperature 0~40° C RH Humidity under 85% RH *RH relative humidity
Ambient Environment	No corrosion, especially avoid dust.
Weight	500g
Cable Length	5m

6. Teaching Pendant Functions and Specifications

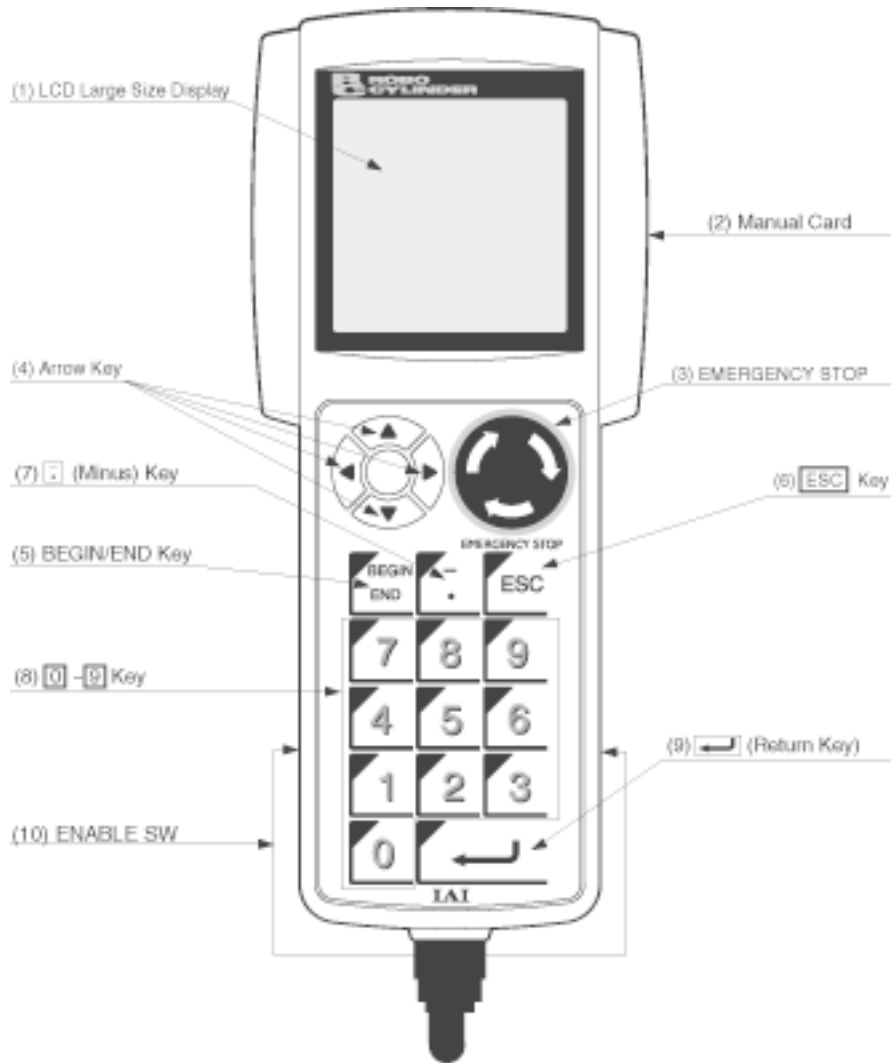
6-2 External Diagram



(Teaching Pendant external dimensions)

6. Teaching Pendant Functions and Specifications

6-3 Parts



(Teaching Pendant part names)

6. Teaching Pendant Functions and Specifications

(1) LCD Display

This is a liquid crystal display with a range of 62.69 X 62.69mmm with a maximum of horizontal: 21 characters per column, and vertical: 16 columns per row.

(2) Manual Card

This is a simplified operational instruction printed on 3 pages. You may observe the instruction by pulling out the Manual Card from the right side of the Teaching Pendant during operation. When not in use, the Manual Card may be stored inside the Teaching Pendant Body.

(3) EMERGENCY STOP (Emergency Stop Push Button Switch)

This switch connects serially with the controller emergency stop signal line. Once pushed down, this switch will be in an emergency stop status and the power supply to the motor will be cut off (normally, closed: b contact).

(* For information on the Emergency Stop Line and its status, please refer to the RC Robo Cylinder Operating Manual.)

(4) Arrow Key:

Every time you press the cursor key of the Selection Display Column Selection and the cursor Move Key of the Position Display Table Main Display Area, the cursor will move to the first item. When pressed for more than one second, the cursor will move consecutively. When the content display is composed of more than two screens (position table and monitor display), these keys scroll to the next screen.


In the farthest right row, push down right arrow key: Next page
In the farthest left row, push down left arrow key: Previous page
In the bottom row, push down arrow key: Next page
In the top row, push down top arrow key: Previous page

(5) Key

- By pressing this key for more than 2.5 seconds, the screen will change into the “BEGIN/END” screen, and you will be able to reconnect the axis and execute Teaching Pendant configuration.
- If entering data via key pad, you may cancel midway using this key.
- You may clear error warning.
- When an error occurs, a message for this error will appear at the very bottom of the display screen. Use this key to clear the error and to clear this message.
- Stop Key during consecutive movement:
Although the consecutive movement functions as a test run for several consecutive positions, during this motion, this key will cause a Stop Command. Once the position move command completes, it will stop.

(6) Key



- Although Teaching Pendant operation is composed of several screens, using this key will return the user to the previous screen.

Note: When you don't understand the operation, undo the operation by returning to the previous using the  Key.

- Stop Switch during consecutive movement:
Although the consecutive movement functions as a test run for several consecutive positions, during this motion, this key cause a Stop Command immediately.

6. Teaching Pendant Functions and Specifications

(7) (Minus) Key

- Switches between Relative Coordinates and Absolute Coordinates. Move the cursor to the position table “No” and press the Minus key. “=” will be displayed between “No” and position to indicate it is Relative Coordinates. By pressing the Minus key one more time, “=” disappears to indicate it is in Absolute Coordinates mode.
- Position Table Column: When you push this in an area such as positioning width which allows minus input, the key functions as the “-” (minus), and the rest as “.” (point). When you input either  or  in the beginning of the number, in the proper area, the key will automatically recognize it as 0. This key is used during cursor move within the Mode Select Screen and Sub-Display Screen (e.g. continuous, step, etc.).

(8) ~ Key

- This key is used for numeric input.

(9) (Return) Key

- This is used for data input and operation confirm.

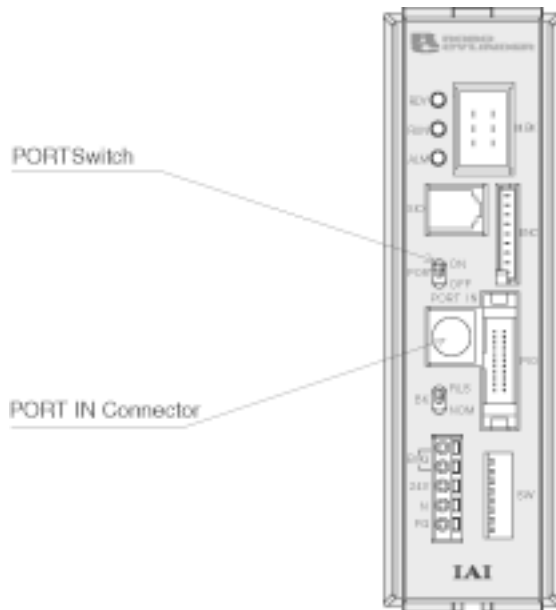
(10) DEADMAN SWITCH (Servo Enable Switch) * Option Setting

The switch mounted on both sides of the Teaching Pendant is connected serially with the Emergency Stop Switch, and causes e-stop when not pressed (normally, this switch is a “open: a-contact”).

7. Connection with the Controller

7-1 Connection with the Teaching Pendant

- (1) Connect the Teaching Pendant Cable to the “PORT IN” connector which is located on the front of the controller. Always turn OFF the controller Port Switch first before connecting.



- (2) After connecting, turn the controller PORT Switch ON (if the Deadman SW is attached as an option then execute while the Deadman SW button on both sides are pressed.)

7-2 How to Disengage the Teaching Pendant

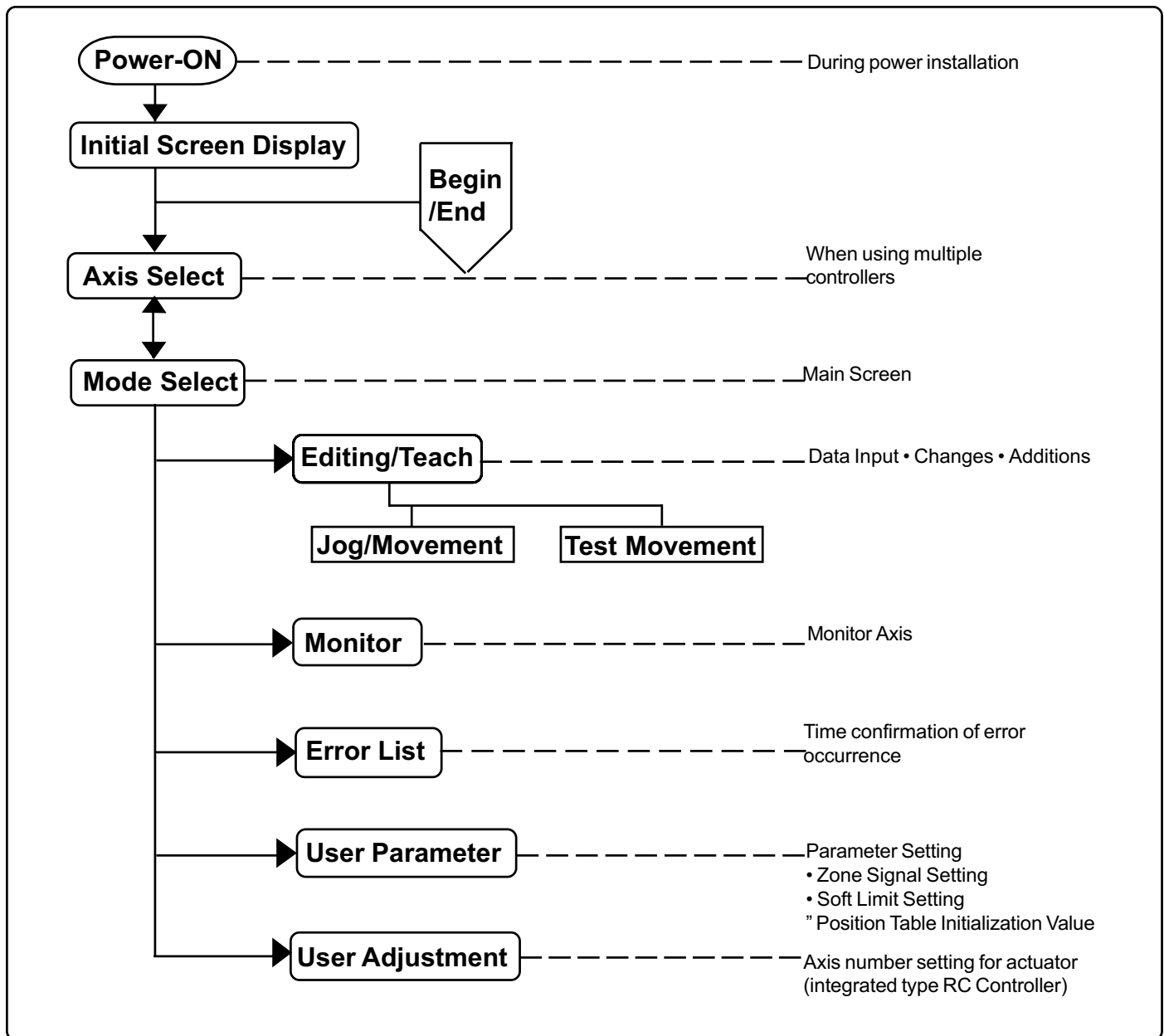
Hold down the BEGIN/END Key which is located in the upper left corner of the key pad. Select “Complete” to finish. Afterwards, turn the controller front SW side to OFF, and remove the teaching pendant connector.

Operation:

1. Hold down the BEGIN/END Key for more than 2.5 seconds.
2. Use the Arrow Key to select “Complete” Screen, and then press the Return Key.
3. Turn the RC Controller PORT SW OFF.
4. Remove the teaching pendant connector.

8. Operation

The Teaching Pendant operation is composed of the following structure. You will need to press the ESC Key each time you wish to return to the previous screen.



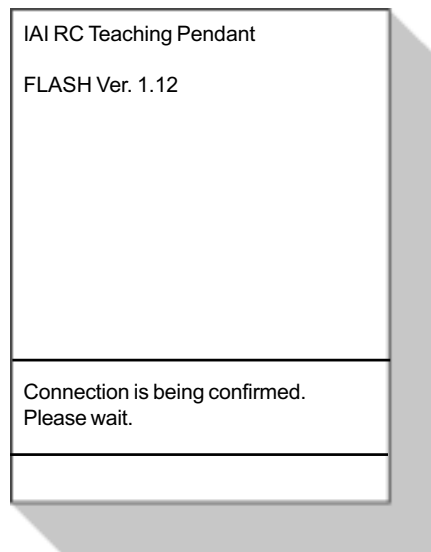
Operational Map

8. Operation

8-1 Initial Screen During Power - UP

Once power is connected to the RC Controller and the controller PORT Switch is ON, power will be supplied to the teaching pendant and operation will begin.

Once the power is installed, the LCD Display screen will display the latest teaching pendant software version number.

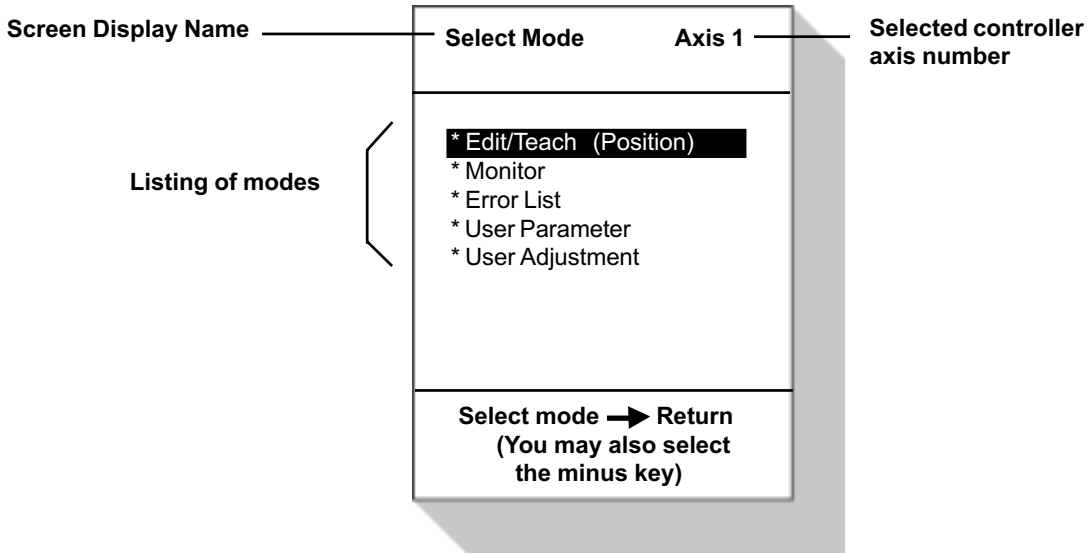


Initial Screen during power installation

During this time, RS485 serial connections between controllers will occur. Once the controller connection completes, the screen will automatically move onto the next selection screen.

8. Operation

8-3 Operation Mode Selection



Operation Mode Selection Screen

For the modes, select one of the 5 options as it appears on the above screen.
To select, move the cursor to the mode desired and confirm using the return key.

Category of Modes

1. * Edit • Teach (Position) Teach and Edit function for position table
2. * Monitor RC Controller status display
3. * Error list Alarm content detailed display
4. * User Parameter Setting of axis zone signal output range and axis
5. * User Adjustment Executing homing and axis number setting of integrated RC controller series


8. Operation

8-4 Edit/Teaching

When “*Edit • Teach (Position) mode is selected, the content of the position data table saved in the RC controller will be displayed.

Edit/Teach Axis 0			
No	Position mm	Speed mm/s	Acc./Dec. G
0	*	*	*
1	*	*	*
2	*	*	*
3	*	*	*
4	*	*	*
5	*	*	*
6	*	*	*
7	*	*	*
Add/Delete: No Return			
Teach/Play: (Ten Key Match)			
Position Return			
[Servo ON Location 0.00]			

Position Data Table Display Screen

Caution: Use the arrow keys (▲▼◀▶) to move the cursor within the main display area. When the cursor is located inside the sub display area, use  to move the cursor.

Screen Display Description:


The screen display is divided into the following 5 category for use:

- Title Display Area: Displays the current mode and the selected controller axis number
- Main Display Area: Displays the position data saved in the controller
- Sub Display Area: Used for sub command assignment such as position add and delete
- Status Display Area: Displays servo status and current location
- Error Display Area: Displays messages during an error condition

8. Operation

The position table main display area is divided into 4 screens and is displayed as below.
 You can change the screens by using the arrow keys is (▲▼◀▶).

No	Position mm	Speed mm/s	Acc./Dec.	Push	Range or Width	Only Acc. MAX
0	*	*	*	*	*	*
1	*	*	▶	▶	*	*
2	*	*	▶	▶	*	*
3	*	*	*	*	*	*
4	*	*	*	*	*	*
5	*	*	◀	◀	*	*
6	▼	▲	*	*	▲	▼
7	▼	▲	*	*	▲	▼
8	▼	▲	*	*	▲	▼
9	▼	▲	◀	◀	▲	▼
10	*	*	*	*	*	*
11	*	*	*	*	*	*
12	*	*	*	*	*	*
13	*	*	▶	▶	*	*
14	*	*	*	*	*	*
15	*	*	*	*	*	*

When the position table main screen cursor is turned OFF, press the BEGIN/END Key simultaneously with  the to switch between the left/right screens (by pressing the BEGIN/END Key for more than 2 seconds, the screen will change to the “Start • Exit” Screen).

8. Operation

8-5 Position Table Content

The columns for the position table are No, Position, Velocity, Acc/Dec, Push %, Range and ACC MAX displayed in 4 screens.

- (1) **No**
 - Indicates the position data number.
 - To specify relative coordinates, move the cursor here and press the minus key. “=” sign will appear between No and position.
 - By pressing the minus key again, “=” disappears and the screen changes to absolute coordinates.

- (2) **Position**
 - The desired move location from home in millimeters.
 - Absolute Coordinates: Inputs desired location by determining the distance between original point and desired position. Negative value cannot be inputted.
 - Relative Coordinates: Inputs desired location by determining the distance between current position and desired position. Negative value can be inputted if coordinates are in negative direction).

Caution: *There are cases when the input value may be rounded off to the least common denominator multiple of the controller.*

- (3) **Velocity**
 - The speed when moving the actuator (mm/sec).
 - Initial value will depend on the actuator type.

- (4) **Acc/Dec**
 - The acceleration/deceleration setting for the move to the corresponding position (in G's).

- (5) **Push**
 - Selects the positioning mode or push mode.
 - The initial value will vary according to the actuator type.
 - 0: Positioning Mode (normal movement)
 - Besides 0: Push Mode (%)

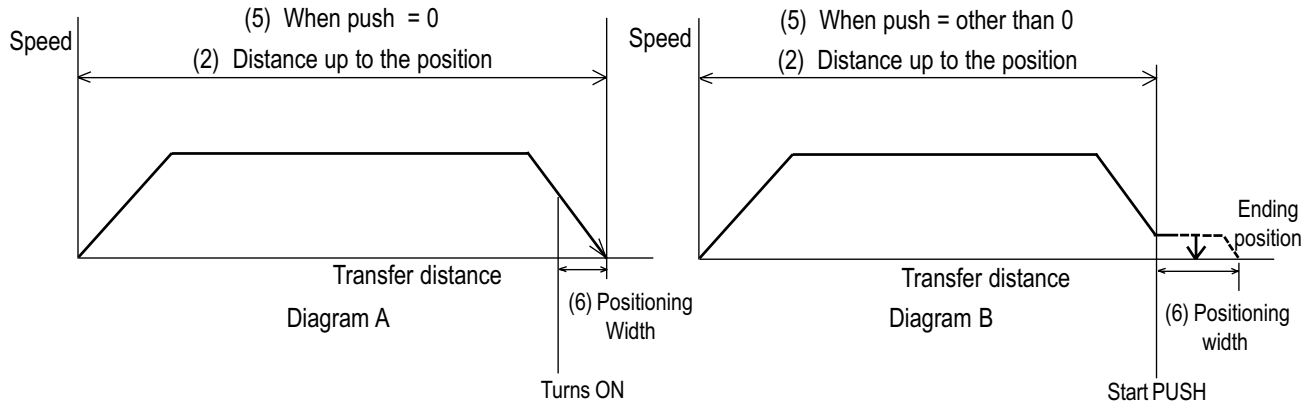
 - In case of push mode, data number is the servo motor current control value during push.
 - Uses a value that matches the actuator that match the actuator with a maximum value of 70%.

Caution:
For your information, the relationship of “current control value” and “push power during stop” is listed on Page 20~21. Please be sure to refer to these two pages.

8. Operation

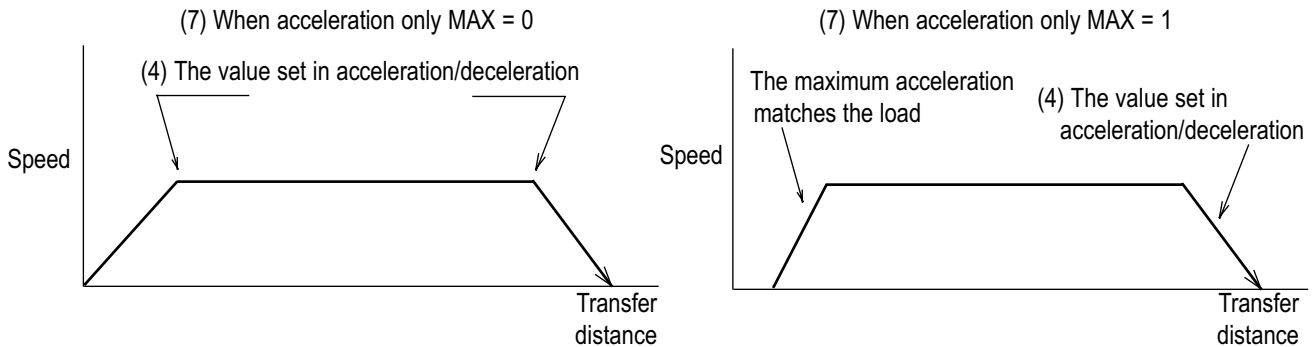
(6) Positioning Width

- As for the range, depending on the setting in the push as either 0 or other than 0, this function will vary.
- **(A) Push = 0 (Positioning Mode)**
- The positioning mode uses range value as a location to turn ON the position complete output prior to reaching the actual data.
- The default value is set as 0.1mm (see diagram A).
- **(B) Push = besides 0 (Push Mode)**
- The push mode uses the range value as a location to start the push. This is a distance based on the position data +/- the range value.
- When the push direction is a minus direction from the displayed coordinate, a “minus” sign should be placed in the range column.



(7) Acceleration only MAX

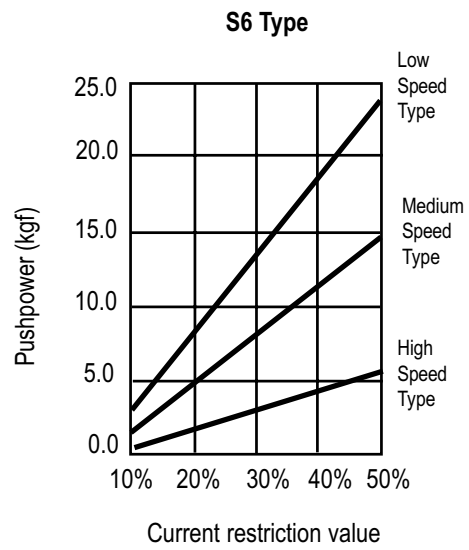
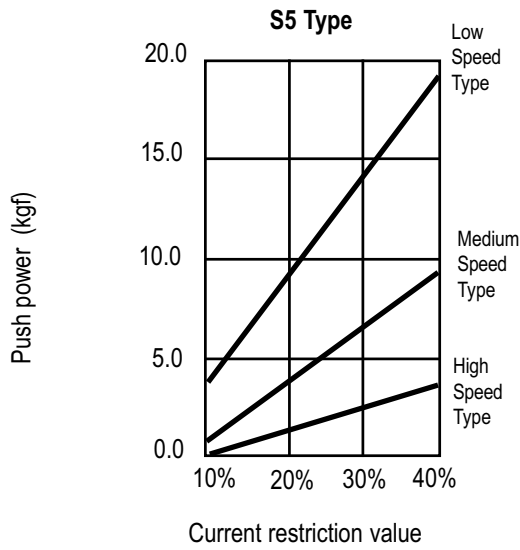
- Selects either the assigned acceleration or the maximum acceleration. Inputs are either 1 or 0. The default value is set as 0.
- 0: Assigned acceleration
The value placed in (4) will be used as the actual acceleration value and deceleration value.
- 1: Maximum acceleration
This will automatically utilize the maximum acceleration matched to the load. Deceleration remains as the assigned value in (4).



8. Operation

8-5-1 The Relationship Between the Push Power During Stop and Current Restriction Value

When executing the push mode, place the current restriction value as a “% of max” column into the “push” column of the position data table. Based on the push power required during stop a push towards work, determine the current restriction (in %) using the tables below. The diagram below shows the relationship between the current restriction value and push power for each actuator type.



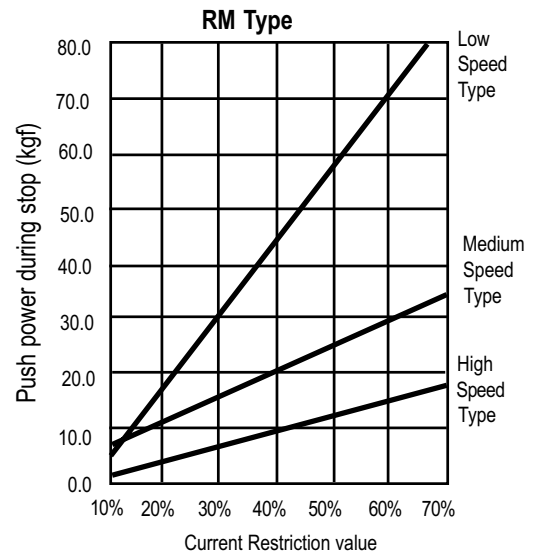
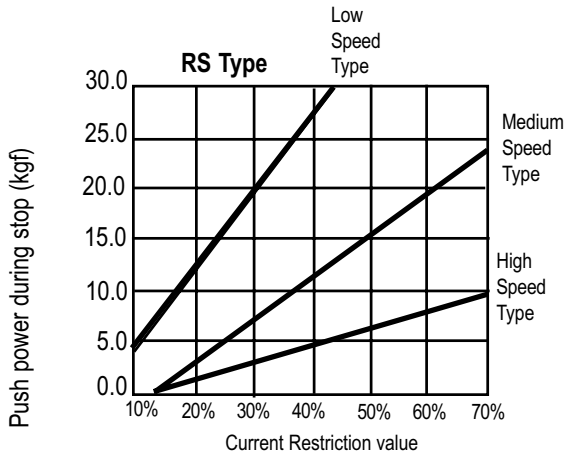
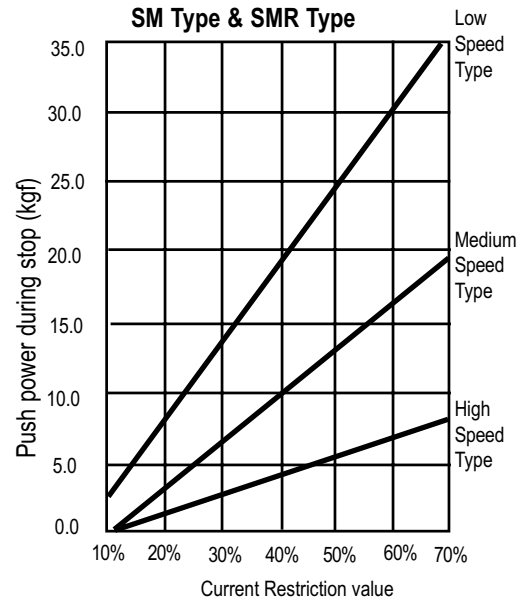
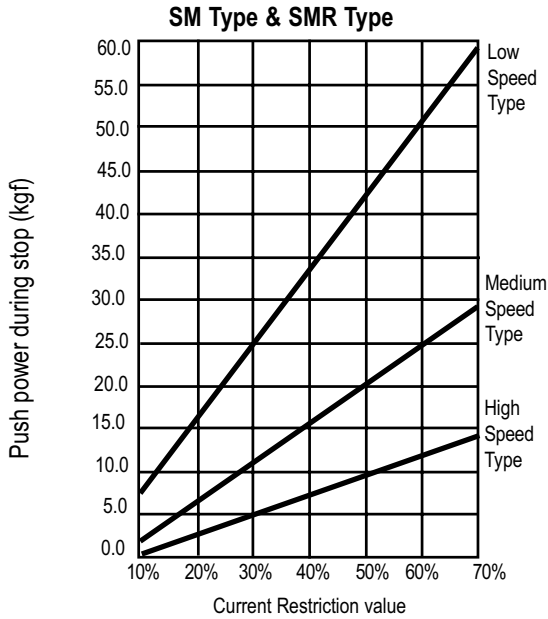
Caution:

Please be aware that the push power is a standard, and is not guaranteed. When the push power is too small, push malfunction may occur due to driven resistance, so please be careful. The maximum amount of the current restriction value is listed in the table below:

Lead \ Type	S5
Low Speed Type	40% or less
Middle Speed Type	40% or less
High Speed Type	40% or less

Lead \ Type	S6
Low Speed Type	50% or less
Middle Speed Type	50% or less
High Speed Type	50% or less

8. Operation



Note: Please be aware that the push power during stop is standard, and is not guaranteed. When the push power is too small, push malfunction may occur due to driven resistance, so please be careful. The maximum amount of the current restriction value is listed in the tables below:

Lead	Type	SS • SSR
Low Speed Type		70% or less
Middle Speed Type		70% or less
High Speed Type		70% or less

Lead	Type	SM • SMR
Low Speed Type		70% or less
Middle Speed Type		70% or less
High Speed Type		70% or less

Type	RSA•RSW RS(W)•RSGB RSGS•RSGD
Low Speed Type	45% or less
Middle Speed Type	70% or less
High Speed Type	70% or less

Type	RMA•RMW RM(W)•RMGB RMGS•RMGD
Low Speed Type	65% or less
Middle Speed Type	70% or less
High Speed Type	70% or less

8. Operation

8-5-2 Data New Input

There are the following 4 ways to input new position data:

- 1) **Manual Input** Manually enter the position data directly from teaching pendant key pad.
- 2) **Direct Teach** Turn the servo controller OFF, manually move the slider to match to the desired location, and reads and commands that location into the position table.
- 3) **Jog** Use the arrow key to jog move the desired location, and read that location into the position table.
- 4) **Increment** Use the arrow key to incrementally move and match the desired location, and read that location.

Caution:













When first entering position data using the above Direct Teach, Jog and Increment methods, if just powering up or clearing alarm codes.

Jog and Increment movement prior to homing incomplete status is possible up to the slider end. Please be sure to operate carefully in this mode!

8. Operation

Examples of each operation will be explained as follows.

1) Homing

	Operation	Screen	Reference																																				
1.	Select the *Edit/Teach Screen and press the Return Key.	<p>Mode Select Axis 1 * Edit/Teach (Position) * Monitor * Error List * User Parameter * User Adjustment</p> <hr/> <p>Mode Select --> Return Key (You may also select with Minus Key).</p>	Cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the position. The number can be anywhere.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Data unregistered position data will display "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the Return Key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For numeric values, press just the return key.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use the  key for the cursor and move to home.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>*Direct Teach (Servo OFF) *Jog *Increment *Home (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor in the subdisplay area.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.	Press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>██████████</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Direct Teach (Servo OFF) * Jog *Increment Home * Move *Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	██████████	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Automatically executes home.
No	Position mm	Vel mm/s	Acc G																																				
0	██████████	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	Press the ESC Key will turn the mode into Ten Key Card Mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>██████████</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Add/Delete: No--> Return * Teach/Play * Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	██████████	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	██████████	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

2) Numeric Input (Example: 2 point continuous loop move 30mm \leftrightarrow 250mm, Speed 300mm/sec

	Operation	Screen	Reference																																				
1.	Select the Edit/Teach and press the Return Key	<p>Mode Select Axis 1</p> <p>* Edit/Teach (Position)</p> <p>* Monitor * Error List * User Parameter * User Adjustment</p> <hr/> <p>Mode Select --> Return (You may also select the minus key).</p>																																					
2.	Match the cursor to the position of the position number column you wish to input. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Any remaining data will be written over.</p> <p>Data unregistered position data will display "*" sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Input 30 here, and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>In order to stop 1/2 way during numeric input, press the BEGIN/END key to cancel the input.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.		<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>█ 100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	█ 100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>During new position data registration, input is done automatically.</p> <p>This value is the initial value set in the user parameter 8-8.</p> <p>In the left screen, the initial value is set as 100mm/sec, 0.05G.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	30.00	█ 100	0.05																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																								
5.	Input 300 here, and press the return key again (the cursor automatically moves. If change is not needed, press the return key again.)	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="586 352 919 552"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>300</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Add/Delete: No--> Return * Teach/Play * Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	300	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*					
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	300	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
6.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="586 730 919 930"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>300</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Add/Delete: No--> Return * Teach/Play * Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	300	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*					
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	300	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
7.	Input 250 here, and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="586 1108 919 1308"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>300</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Add/Delete: No--> Return * Teach/Play * Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	300	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	In order to stop during numeric input , press the BEGIN/END Key to cancel the input.				
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	300	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
8.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="586 1493 919 1692"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>300</td> <td>0.05</td> </tr> <tr> <td></td> <td>250.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Add/Delete: No--> Return * Teach/Play * Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	300	0.05		250.00	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The cursor will automatically move to speed.
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	300	0.05																																								
	250.00	100	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								

8. Operation

	Operation	Screen	Reference																																				
9.	Input <input type="text" value="3"/> <input type="text" value="0"/> <input type="text" value="0"/> here, and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00 250.00</td> <td>300 300</td> <td>0.05 0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00 250.00	300 300	0.05 0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	30.00 250.00	300 300	0.05 0.05																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

(Example 2: 2 point continuous loop move 10 mm position $\overleftarrow{\quad} > 80\text{mm}$, (Push width 5mm))

	Operation	Screen	Reference																																				
1.	Select the Edit/Teach and press the Return Key	<p>Mode Select Axis 1</p> <p>* Edit/Teach (Position)</p> <p>* Monitor * Error List * User Parameter * User Adjustment</p> <hr/> <p>Mode Select --> Return (You may also select the minus key).</p>																																					
2.	Match the cursor to the position of the position number column you wish to input. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Any remaining data will be written over.</p> <p>Data unregistered^d position data will display "*" sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█	100	0.05																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Input <input type="text" value="10"/> here, and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█10</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█10	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>In order to stop 1/2 way during numeric input, press the BEGIN/END key to cancel the input.</p> <p>Example: With the left operation, by pressing the <input type="text" value="10"/> upon inputting with the BEGIN/END Key, the status will return to the "*" display.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█10	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.		<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>█100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	█100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>During new position data registration, input is done automatically.</p> <p>This value is the initial value set in the user parameter 8-8.</p> <p>In the left screen, the initial value is set as 100mm/sec, 0.05G.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	30.00	█100	0.05																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation



	Operation	Screen	Reference																																				
9.	Input the current value during push. In this example, input 3 0 and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Push %</th> <th>Range mm</th> <th>Acc MAX</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0 30</td> <td>0.10 0.10</td> <td>0 0</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Push = 0:PTP else Push Push, Range >0: Forward <0: Backward [Srv OFF Pos 0.00]</p>	No	Push %	Range mm	Acc MAX	0	0 30	0.10 0.10	0 0	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	In regards to "push control," please refer to the RC Controller Operating Manual.
No	Push %	Range mm	Acc MAX																																				
0	0 30	0.10 0.10	0 0																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
10.	Input the maximum push load during push into the positioning. In this example, input 5mm. Input 5 , and then press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0 30</td> <td>0.10 5.00</td> <td>0 0</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Push = 0:PTP else Push Push, Range >0: Forward <0: Backward [Srv OFF Pos 0.00]</p>	No	Position mm	Vel mm/s	Acc G	0	0 30	0.10 5.00	0 0	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	0 30	0.10 5.00	0 0																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
11.	Press the return key if there are no changes.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0 30</td> <td>0.10 5.00</td> <td>0 0</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	0 30	0.10 5.00	0 0	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	In regards to "push control," please refer to the RC Controller Operating Manual.
No	Position mm	Vel mm/s	Acc G																																				
0	0 30	0.10 5.00	0 0																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

(Example 3: Relative Coordinates pitch movement 30mm → 40mm → 50mm)

	Operation	Screen	Reference																																				
1.	Select the Edit/Teach and press the Return Key	<p>Mode Select Axis 1</p> <p>* Edit/Teach (Position)</p> <p>* Monitor</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode Select --> Return (You may also select the minus key).</p>																																					
2.	Match the cursor to the position of the position number column you wish to input. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█*</td> <td>100*</td> <td>0.05*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█*	100*	0.05*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Any remaining data will be written over.</p> <p>Data unregistered position data will display "*" sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█*	100*	0.05*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Input <input type="text" value="30"/> here, and press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█30</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█30	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>In order to stop 1/2 way during numeric input, press the BEGIN/END key to cancel the input.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	█30	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	The cursor moves automatically to the velocity. If there are no changes, press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>█100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	█100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>During new position data registration, input is done automatically.</p> <p>This value is the initial value set in the user parameter.</p> <p>In the left screen, the initial value is set as 100mm/sec, 0.05G.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	30.00	█100	0.05																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																								
5.	Press the return key. Then, press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*					
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	100	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
6.	Press the ◀ key to move the cursor to No.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*					
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	100	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
7.	Press the  key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	100	0.05	1	*	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Relative coordinate mode.
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	100	0.05																																								
1	*	*	*																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
8.	Press the ▶ key to place the cursor to Position.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Push %</th> <th>Range mm</th> <th>Acc MAX</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Push %	Range mm	Acc MAX	0	30.00	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The "=" sign will be displayed between No and position to indicate that it is relative coordinates. By pressing  key, "=" disappears and returns the mode to absolute coordinate mode.				
No	Push %	Range mm	Acc MAX																																								
0	30.00	100	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								













8. Operation

	Operation	Screen	Reference																																								
9.	Press [1] [0] and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>10.00</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	100	0.05	1	10.00	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Relative repositioning rate plus 10mm are inputted.</p> <p>To input relative repositioning rate in negative direction, press the [.] key prior to numeric input.</p>
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	100	0.05																																								
1	10.00	*	*																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								
10.	If no change, press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>30.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>10.00</td> <td>100</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	30.00	100	0.05	1	10.00	100	0.05	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The cursor will move automatically to the Velocity.</p>
No	Position mm	Vel mm/s	Acc G																																								
0	30.00	100	0.05																																								
1	10.00	100	0.05																																								
1	*	*	*																																								
2	*	*	*																																								
3	*	*	*																																								
4	*	*	*																																								
5	*	*	*																																								
6	*	*	*																																								
7	*	*	*																																								

8. Operation

3) Direct Teach



(Method: Manually moving the actuator, matching to the desired position, and teaching that position into the position table) Example: 2 point continuous loop Point A --> Point B, speed 300mm/sec

	Operation	Screen	Reference																																				
1.	Select the *Edit/Teach and press the return key.	<p>Mode Select Axis 1</p> <p>* Edit/Teach (Position)</p> <p>* Monitor * Error List * User parameter * User Adjustment</p> <hr/> <p>Mode Select --> Return Teach/ Play: (Before 10 key) Position --> Return (Servo ON Position 0.00)</p>	Use the arrow key or  key to move the cursor.																																				
2.	Match the cursor to the position of the position number column. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>For any remaining data, write over.</p> <p>For any unregistered position data, the display will show ""* sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The numeric value will input the return key only.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor , and then select *Direct Teach and press the return key (upon pressing the return key, status will be in servo off). The diagram on the right shows display before pressing.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Direct Teach (Servo OFF)</p> <p>* Jog * Increment * Home * Move * Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

Caution:

If you disconnect the teaching pendant during servo off status, the servo will remain as OFF, and thus, PIO movement is not possible. For homing, either reconnect the teaching pendant or cycle the controller power.

	Operation	Screen	Reference																																				
5.	Manually move the slider and match to the desired position.	Edit/Teach Axis 1 <table border="1" data-bbox="613 474 943 674"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Direct Teach (Servo OFF) Return --> Acquire (Servo OFF Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█*	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The controller status will be displayed on the bottom row of the screen. Servo Control: OFF Position: 100.00 Use the ▲▼ Key to move the cursor of the main screen and change the inputting position number.
No	Position mm	Vel mm/s	Acc G																																				
0	█*	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	Use the  key to move the cursor to * No. Press the return key again.	Edit/Teach Axis 1 <table border="1" data-bbox="613 863 943 1062"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>█*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Acquire No.0 * NO * Yes (Servo OFF Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	█*	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	█*	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	Manually move the slider and match to the next desired position. Press the return key again.	Edit/Teach Axis 1 <table border="1" data-bbox="613 1272 943 1482"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100.00 █*</td> <td>300*</td> <td>0.10*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Direct Teach (Servo OFF) Return --> Acquire (Servo OFF Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	100.00 █*	300*	0.10*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The position data number will automatically select the next number (auto increment). As for the speed and Acc/Dec value, the initial value set in the user parameter will automatically input. In the left example, the initial value is 300mm/sec, 0.10G (only during new position data input).
No	Position mm	Vel mm/s	Acc G																																				
0	100.00 █*	300*	0.10*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
8.	Use the  key to move the cursor to * No. Press the return key again.	Edit/Teach Axis 1 <table border="1" data-bbox="613 1661 943 1871"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100.00 █*</td> <td>300*</td> <td>0.10*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Position No 0=Acquire No.1? * NO * Yes (Servo OFF Position 30.00)</p>	No	Position mm	Vel mm/s	Acc G	0	100.00 █*	300*	0.10*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	100.00 █*	300*	0.10*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation










	Operation	Screen	Reference																																				
9.	Press the ESC key twice.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="576 394 909 604"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>100.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>30.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>2</td> <td>█*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play: Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	100.00	300	0.10	1	30.00	300	0.10	2	█*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The screen will return to the Edit • Screen. At this time, the servo control will turn ON.
No	Position mm	Vel mm/s	Acc G																																				
0	100.00	300	0.10																																				
1	30.00	300	0.10																																				
2	█*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
10.	Press the ESC key again.	<p>Mode Select Axis 1</p> <p>* Edit Teach (Position) █</p> <ul style="list-style-type: none"> * Monitor * Error List * User Parameter * User Adjustment <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The screen will return to the mode select screen.																																				

8. Operation






















4) Jog Teach

(Method: Tagging the actuator, matching to the desired position, and teaching that position into the position table)

Example: 2 point Continuous loop move Point A --> Point B, speed 300mm/sec

	Operation	Screen	Reference																																				
1.	Select the *Edit/Teach screen and press the return key.	<p>Mode Select Axis 1</p> <p>* Edit/Teach (Position)</p> <p>* Monitor * Error list * User parameter * User adjustment</p> <hr/> <p>Mode Select --> Return Teach/ Play: (Before 10 key) Position --> Return (Servo ON Position 0.00)</p>	Move the cursor using the arrow key or  key.																																				
2.	Match the cursor to the position of the position number column. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>For any remaining data, write over.</p> <p>For any unregistered position data, the display will show "***" sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Move the cursor with the  key, Then select jog and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>*Direct Teach (Servo OFF) *Jog *Increment *Home * Move * Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.	<p>Select speed with the  key. Move the slider with the  key and match it to the desired position.</p> <p> : Plus direction of display coordinates</p> <p> : Minus direction of display coordinates</p> <p>Press the return key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="630 365 959 562"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Jog (<- · -> Key) Speed 1 2  4 5 -> Fast Return --> Acquire (Servo ON Position 500.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>: Speed select</p> <p>Using the  key, move the main screen cursor to change the inputting position number.</p>
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	<p>Use the  key to move the cursor to * Yes. Press the return key again.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="639 812 969 1010"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Acquire No.0? *No *Yes (Servo ON Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	<p>Match to the next desired position.</p> <p>Press the return key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="630 1205 964 1415"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>500 </td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Jog (<- · -> Key) Speed 1 2  4 5 -> Fast Return --> Acquire (Servo ON Position 500.00)</p>	No	Position mm	Vel mm/s	Acc G	0	500 	300	0.10	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The position data number will automatically select the next number (auto increment). As for the speed and Acc/Dec value, the initial value set in the user parameter will automatically input. The initial value for the left example is 300mm/sec, 0.10G.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	500 	300	0.10																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
8.	<p>Use the  key to move the cursor to * Yes. Press the return key again.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="630 1591 959 1801"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>500 </td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Acquire No. 1? * No * Yes (Servo ON Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	500 	300	0.10	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	500 	300	0.10																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				













8. Operation

	Operation	Screen	Reference																																				
9.	Press the ESC key. Then Press the ESC again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>500.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>2</td> <td>█*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	500.00	300	0.10	1	100.00	300	0.10	2	█*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The screen will return to the Edit • Screen. At this time, the servo control will turn ON.
No	Position mm	Vel mm/s	Acc G																																				
0	500.00	300	0.10																																				
1	100.00	300	0.10																																				
2	█*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
10.	Press the ESC key.	<p>Mode Select Axis 1</p> <ul style="list-style-type: none"> * Edit Teach (Position) █ * Monitor * Error List * User Parameter * User Adjustment <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The screen will return to the mode select screen.																																				





















8. Operation

5) Increment

(Method: Incremental movement using arrow key, matching to the desired position, and teaching that position into the position table) Example: 2 point continuous loop Point A --> Point B, speed 300mm/sec

	Operation	Screen	Reference																																				
1.	Select the *Edit/Teach screen and press the return key.	<p>Mode Select Axis 1</p> <p>* Edit Teach (Position)</p> <p>* Monitor * Error list * User parameter * User adjustment</p> <hr/> <p>Mode Select --> Return Teach/ Play: (Before 10 key) Position --> Return (Servo ON Position 0.00)</p>	Move the cursor using the arrow key or  key.																																				
2.	Match the cursor to the position of the position number column. The mode will automatically turn into the ten key input mode.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>For any remaining data, write over.</p> <p>For any unregistered position data, the display will show "***" sign.</p>
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play: Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Move the cursor with the  key, Then select jog and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>*Direct Teach (Servo OFF) *Jog *Increment *Home * Move * Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.	<p>Select speed with the  key. Move the slider with the  key and match it to the desired position.</p> <p> : Plus direction of display coordinates</p> <p> : Minus direction of display coordinates</p> <p>Press the return key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="667 390 997 585"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Increment -> Jog (<- • -> Key) Distance 0.03 0.10 0.05 Return --> Acquire (Servo ON Position 500.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>: Increment distance select When  is pressed for more than 2 seconds, jog movement is possible. (upon that, speed moves up after each second). When the desired position is far, move close to this function, and release the arrow key once, and return to the increment for detail adjustment.</p>
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	<p>Use the  key to move the cursor to * Yes. Press the return key again.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="667 888 997 1083"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Clear all position data? * No * Yes (Servo ON Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0		*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	<p>Match to the next desired position.</p> <p>Press the return key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="667 1251 997 1455"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10.00 </td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>* Increment -> Jog (Movement Key) Distance 0.03 0.10 0.05 Return --> Acquire (Servo ON Position 500.00)</p>	No	Position mm	Vel mm/s	Acc G	0	10.00 	300	0.10	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The position data number will automatically select the next number (auto increment). As for the speed and Acc/Dec value, the initial value set in the user parameter will automatically input. The initial value for the left example is 300mm/sec, 0.10G.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	10.00 	300	0.10																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
8.	<p>Use the  key to move the cursor to * Yes. Press the return key again.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="667 1644 997 1848"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10.00 </td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Clear all position data? * No * Yes (Servo ON Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	10.00 	300	0.10	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	10.00 	300	0.10																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
9.	Press the ESC key. Then Press the ESC again.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="511 380 841 583"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>1</td> <td>90.00</td> <td>300</td> <td>0.10</td> </tr> <tr> <td>2</td> <td>█</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play: Position --> Return (Serve ON - Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	10.00	300	0.10	1	90.00	300	0.10	2	█	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The screen will return to the Edit • Screen.
No	Position mm	Vel mm/s	Acc G																																				
0	10.00	300	0.10																																				
1	90.00	300	0.10																																				
2	█	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
10.	Press the ESC key.	<p>Mode Select Axis 1</p> <p>* Edit Teach (Position)</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The screen will return to the mode select screen.																																				

8. Operation

8-5-3 Data Modification

You may write over all of the position data. Similar to new input, there are the following 4 type of cases:

- 1) **Manual Input** Manually enter the position data directly from teaching pendant key pad.
- 2) **Direct Teach** Turns the servo controller OFF, manually move the slider and match to the desired location, and read that location into the position table.
- 3) **Jog** Use the arrow key to jog move and match the desired location, and read that location into the position table.
- 4) **Increment** Use the arrow key to incrementally move and read that location into the position table.

Caution during data modification:

- * *As for manual input, the column data entered will erase the old data.*
- * *The position will be updated only when the return key is pressed to read in the current location in others areas (direct teach, jog, increment).*
- * *Once the position data is cleared, the previous data will not remain.*
- * *Clear the columns assigned position data accordingly. When accordingly, always check all of the position data and input the necessary data.*








8-5-4 Add • Delete

In this section, we will give specific examples of how to add, delete and clear data in the position table.

- 1) **Add** Adds the position data into the assigned position data number location
- 2) **Delete** Deletes the position data of the present row
- 3) **Clear** Resets the position data of the present row
- 4) **All Clear** Resets all of the 16 position data locations

8. Operation

- 1) Add
 (Operation: To enter position data between existing position data)
 Example: Insert empty row into position table number 2

	Operation	Screen	Reference																																				
1.	Press the ESC key. Then Press the ESC again.	Mode Select Axis 1 * Edit/Teach (Position) * Monitor * Error List * User Parameter * User Adjustment Mode select --> Return (you may also select with the minus key).	The cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the incorporating position number.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0		*	*	1	100.00	100	0.01	2	200.00	100	0.01	3	300.00	100	0.01	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For any unregistered position data, the display will show "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	100.00	100	0.01																																				
2	200.00	100	0.01																																				
3	300.00	100	0.01																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.01	2	200.00	100	0.01	3	300.00	100	0.01	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.01																																				
2	200.00	100	0.01																																				
3	300.00	100	0.01																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor. Select * Add and press the return key.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return * Add * Delete * Clear * All Clear (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.01	2	200.00	100	0.01	3	300.00	100	0.01	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area. Use the  key to move the cursor of the main screen and change the inputting position number.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.01																																				
2	200.00	100	0.01																																				
3	300.00	100	0.01																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="626 417 959 642"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Add * Delete * Clear * All Clear (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.01	2	*	*	*	3	200.00	100	0.01	4	300.00	100	0.01	5	*	*	*	6	*	*	*	7	*	*	*	<p>Add 1 row to the unregistered row prior to the cursor row. although all data upon cursor row will drift one row at a time, if there is already a data in No. 15, then, this would become an input error. Use the BEGIN/END key to release the error. In this case, first check and release No. 15 before executing the addition.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.01																																				
2	*	*	*																																				
3	200.00	100	0.01																																				
4	300.00	100	0.01																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="626 848 951 1066"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.01	2	*	*	*	3	200.00	100	0.01	4	300.00	100	0.01	5	*	*	*	6	*	*	*	7	*	*	*	<p>The screen will return to the edit • teaching main screen.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.01																																				
2	*	*	*																																				
3	200.00	100	0.01																																				
4	300.00	100	0.01																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				









Caution: If you press the return key consecutively in the 5th operation screen, the row will add consecutively.

8. Operation


2) Delete

(Method: To delete the row of assigned position data number)

Example: Delete the row of position data number 2 and incorporate the data in the following row.





	Operation	Screen	Reference																																				
1.	Press the ESC key. Then Press the ESC again.	Mode Select Axis 1 * Edit Teach (Position) * Monitor * Error List * User Parameter * User Adjustment Mode select --> Return (you may also select with the minus key).	The cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the deleting position number.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0		*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For any unregistered position data, the display will show "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0		*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	In order to stop 1/2 way during numeric input, press the BEGIN/END key to cancel the input.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor. Select * Delete and press the return key.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return * Add  * Clear * All Clear (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area. Use the  key to move the cursor of the main screen and change the inputting position number.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation


	Operation	Screen	Reference																																				
5.	Confirm the screen display. If you wish to delete, move the cursor to * Yes using the  key and press the return key.	Edit/Teach Axis 1 <table border="1" data-bbox="630 478 959 705"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> Delete all position data? * No * Yes (Servo ON Position 100.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	When the screen switches to this screen, the cursor will be at * No.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.		Edit/Teach Axis 1 <table border="1" data-bbox="630 852 959 1079"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> Add/Delete: No --> Return * Add * Delete * Clear * All Clear (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The cursor row will clear (unregistered status).
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	Press the ESC key.	Edit/Teach Axis 1 <table border="1" data-bbox="630 1234 959 1461"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The screen will return to the Edit • Teaching main screen.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

- 3) Clear
 (Method: To clear the position data of assigned location)
 Example: Clear the row of position data number 2.






	Operation	Screen	Reference																																				
1.	Select *Edit/Teach and press the return key.	Mode Select Axis 1 * Edit Teach (Position) * Monitor * Error List * User Parameter * User Adjustment Mode select --> Return (you may also select with the minus key).	The cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the deleting position number.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*****</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play: (Before 10 keys) Position --> (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*****	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For any unregistered position data, the display will show "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0	*****	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor. Select * Clear and press the return key.	Edit/Teach Axis 1 <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.01</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> Add/Delete: No --> Return * Add * Delete * Clear All Clear (Servo ON Position 0.00)	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.01	2	200.00	100	0.01	3	300.00	100	0.01	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Use the  key to move the cursor inside the sub display area. Use the  key to move the cursor of the main screen and change the inputting position number.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.01																																				
2	200.00	100	0.01																																				
3	300.00	100	0.01																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation


	Operation	Screen	Reference																																				
5.	<p>Confirm the screen display. If you wish to delete, move the cursor to * Yes using the  key and press the return key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="607 373 935 596"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Clear Position No. 2? <input checked="" type="checkbox"/> *Yes <input type="checkbox"/> *No (Servo ON Position 100.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>When the screen switches to this screen, the cursor will be at * No.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="607 743 935 966"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Add/Delete: No --> Return * Add * Delete <input checked="" type="checkbox"/> *Clear * All Clear (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The cursor row will clear (unregistered status).</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	<p>Press the ESC key.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="607 1127 935 1350"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The screen will return to the Edit • Teaching main screen.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

- 4) All Clear
(Operation: To clear all position data)

	Operation	Screen	Reference																																				
1.	Press the ESC key. Then Press the ESC again.	<p>Mode Select Axis 1</p> <p>* Edit Teach (Position)</p> <p>* Monitor</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the position number.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>-</td> <td>-</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>5</td> <td>500.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>6</td> <td>600.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>7</td> <td>700.00</td> <td>100</td> <td>0.30</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0		-	-	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	-	-	-	5	500.00	100	0.30	6	600.00	100	0.30	7	700.00	100	0.30	The position can be any where.
No	Position mm	Vel mm/s	Acc G																																				
0		-	-																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	-	-	-																																				
5	500.00	100	0.30																																				
6	600.00	100	0.30																																				
7	700.00	100	0.30																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>5</td> <td>500.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>6</td> <td>600.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>7</td> <td>700.00</td> <td>100</td> <td>0.30</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Return Position --> (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	-	-	-	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	-	-	-	5	500.00	100	0.30	6	600.00	100	0.30	7	700.00	100	0.30	
No	Position mm	Vel mm/s	Acc G																																				
0	-	-	-																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	-	-	-																																				
5	500.00	100	0.30																																				
6	600.00	100	0.30																																				
7	700.00	100	0.30																																				
4.	Use  key to move the cursor. Select * All Clear and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>5</td> <td>500.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>6</td> <td>600.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>7</td> <td>700.00</td> <td>100</td> <td>0.30</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return * Add * Delete * Clear All Clear (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	-	-	-	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	-	-	-	5	500.00	100	0.30	6	600.00	100	0.30	7	700.00	100	0.30	
No	Position mm	Vel mm/s	Acc G																																				
0	-	-	-																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	-	-	-																																				
5	500.00	100	0.30																																				
6	600.00	100	0.30																																				
7	700.00	100	0.30																																				

8. Operation

	Operation	Screen	Reference																																				
5.	Confirm the screen display. If you wish to delete, move the cursor to *Yes using the  key and press the return key.	Edit/Teach Axis 1 <table border="1" data-bbox="695 485 1024 695"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>500.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>6</td> <td>600.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>7</td> <td>700.00</td> <td>100</td> <td>0.30</td> </tr> </tbody> </table> <p data-bbox="695 726 1000 814"> Clear all position data? * No * Yes (Servo ON Position 100.00) </p>	No	Position mm	Vel mm/s	Acc G	0	-	-	-	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	500.00	100	0.30	6	600.00	100	0.30	7	700.00	100	0.30	When the screen switches to this screen, the cursor will be at *o.
No	Position mm	Vel mm/s	Acc G																																				
0	-	-	-																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	500.00	100	0.30																																				
6	600.00	100	0.30																																				
7	700.00	100	0.30																																				
6.		Edit/Teach Axis 1 <table border="1" data-bbox="695 856 989 1056"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>2</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>3</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p data-bbox="695 1083 979 1197"> Add/Delete: No --> Return * Add * Delete * Clear * All Clear (Servo ON Position 0.00) </p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	*	*	*	2	*	*	*	3	*	*	*	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The cursor row will clear (unregistered status).
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	*	*	*																																				
2	*	*	*																																				
3	*	*	*																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

8-5-5 Move

You may move towards a position registered in the position data table (1 step move) and consecutively move through the consecutive position data. In this section, the move will differ from jog and increment move used with the arrow key. This will be move towards a position that was registered in the position data table within the controller.

1. Move

1 step move from the current position to the assigned position number position registered in the position table.

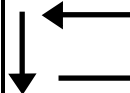
2. Consecutive Move

Consecutive operation from the assigned position data number to the consecutive position data number until an empty location is reached.

What is consecutive move?

In case of the position data similar to the table below, when a consecutive move command is executed from the position No., the place where data exists consecutively will operate as one group (Example: Position No.2 → No. 3 → No. 1 → No.2 and so on).

No	Position mm	Vel mm/s	Acc G
0	*	*	*
1	100.00	20	0.05
2	200.00	33	0.11
3	333.33	100	0.22
4	*	*	*
5	555.55	333	0.22
6	666.66	444	0.11
7	777.77	777	0.07







Caution: Once positioning mode and push mode both complete the move, the position complete output will turn ON. After cycling power or clearing alarm codes, the slider will home first if given a move or consecutive move command.

8. Operation



1) Move

(Operation: Registered position data number assigned move)

Example: Current position → move towards position number 2 • 3

	Operation	Screen	Reference																																				
1.	Press the ESC key. Then Press the ESC again.	<p>Mode Select Axis 1</p> <p>* Edit Teach (Position)</p> <p>* Monitor</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The cursor will move either by the arrow key or  key.																																				
2.	Match the cursor to the deleting position number.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.000</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.000	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For any unregistered position data, the display will show "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.000	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.000</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.000	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Input only the return key and not the numeric value.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.000	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor. Select * Move and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.000</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>*Direct Teach (Servo OFF) *Jog * Increment *Home *Move* Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.000	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Use the  key to move the cursor inside the sub display area.</p> <p>Use the  key to move the cursor of the main screen and change the inputting position number.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.000	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.	Select speed using the  key, and press the return key.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="621 348 951 569"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Move (1 position) Speed 10% 50% 100% Return --> Position Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Speed is divided into 3 levels and can be selected using the  key. Move to the position No.2 position. The cursor will automatically move to No.3 position.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	When moving towards No.3 position consecutively, press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="621 728 951 949"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Move (1 position) Speed 10% 50% 100% Return --> Position Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	The cursor will automatically move to the No. 1 position.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	Press the ESC Key twice, and return to the edit • teach screen.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="621 1106 951 1327"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Move (1 position) Speed 10% 50% 100% Return --> Position Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
8.		<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="621 1484 951 1705"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Add/Delete: No -->Return Teach/Play Position --> Return (Servo ON Position 300.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

Caution when moving towards position in push mode:




When the actuator pushes the work after position complete output turns ON, the actuator will stop. The work will not continue to be pushed. When the actuator moves using PIO, the work will continue to be pushed.

8. Operation



2) Consecutive Move

(Operation: Registered position data number assigned consecutive move)

Example: Current position → Consecutive move towards position number 1 • 3

	Operation	Screen	Reference																																				
1.	Press the ESC key. Then Press the ESC again.	<p>Mode Select Axis 1 * Edit Teach (Position)</p> <ul style="list-style-type: none"> * Monitor * Error List * User Parameter * User Adjustment <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The cursor will move by the arrow key.																																				
2.	Match the cursor to the deleting position number.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="613 863 946 1060"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	For any unregistered position data, the display will show "*" sign.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
3.	Press the return key again.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="613 1249 946 1446"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>Add/Delete: No --> Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	Input only the return key and not the numeric value.
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
4.	Use  key to move the cursor. Select * Consecutive Move and press the Return Key.	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="613 1629 946 1827"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>1</td> <td>100.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>2</td> <td>200.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>3</td> <td>300.00</td> <td>100</td> <td>0.30</td> </tr> <tr> <td>4</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>5</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>6</td> <td>*</td> <td>*</td> <td>*</td> </tr> <tr> <td>7</td> <td>*</td> <td>*</td> <td>*</td> </tr> </tbody> </table> <p>*Direct Teach (Servo OFF) *Jog * Increment *Home * Move * Consecutive Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Use the  key to move the cursor inside the sub display area.</p> <p>Use the  key to move the cursor of the main screen and change the inputting position number.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				

8. Operation

	Operation	Screen	Reference																																				
5.	<p>Select speed using the  key, and press the return key.</p> <p>Consecutive move begins, and in the right example, consecutively executes position numbers 1~3.</p> <p>The cursor moves to the position currently moving.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="641 373 971 564"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Consecutive Move Speed 10% 50% 100% Return --> Position Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Speed is divided into 3 levels and can be selected using the  key.</p> <p>Consecutive stop: Start/End.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
6.	<p>When moving towards No.3 position consecutively, press the return key again (to consecutive move again, press the Return Key). Stops after reaching the position currently moving. While moving, press the ESC Key to stop immediately.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="641 758 971 949"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Consecutive Move Speed 10% 50% 100% Return --> Position Move (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>Continue pressing the Begin/End Key to change the screen to Start/End.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				
7.	<p>Press the ESC Key twice.</p>	<p>Edit/Teach Axis 1</p> <table border="1" data-bbox="641 1142 971 1333"> <thead> <tr> <th>No</th> <th>Position mm</th> <th>Vel mm/s</th> <th>Acc G</th> </tr> </thead> <tbody> <tr><td>0</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>1</td><td>100.00</td><td>100</td><td>0.30</td></tr> <tr><td>2</td><td>200.00</td><td>100</td><td>0.30</td></tr> <tr><td>3</td><td>300.00</td><td>100</td><td>0.30</td></tr> <tr><td>4</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>5</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>6</td><td>*</td><td>*</td><td>*</td></tr> <tr><td>7</td><td>*</td><td>*</td><td>*</td></tr> </tbody> </table> <p>Add/Delete: No -->Return Teach/Play Position --> Return (Servo ON Position 0.00)</p>	No	Position mm	Vel mm/s	Acc G	0	*	*	*	1	100.00	100	0.30	2	200.00	100	0.30	3	300.00	100	0.30	4	*	*	*	5	*	*	*	6	*	*	*	7	*	*	*	<p>The screen will return to the Edit/Teach Screen.</p>
No	Position mm	Vel mm/s	Acc G																																				
0	*	*	*																																				
1	100.00	100	0.30																																				
2	200.00	100	0.30																																				
3	300.00	100	0.30																																				
4	*	*	*																																				
5	*	*	*																																				
6	*	*	*																																				
7	*	*	*																																				


Caution when moving towards position in push mode:

When the actuator pushes the work after position complete output turns ON, the actuator will stop. The work will not continue to be pushed. When the actuator moves using PIO, the work will continue to be pushed.

8. Operation

8-6 Monitor

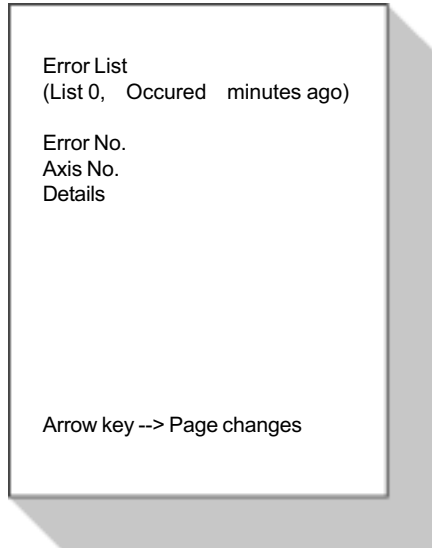
The RC controller I/O status that is connected via the RS485 busline and current location will be displayed. The status for multiple axes will be displayed on the screen, and by using the arrow key, you can switch between axes.

	Operation	Screen	Reference																																				
1.	Select *Monitor and press the return key.	<p>Mode Select Axis 1</p> <p>* Monitor</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>	The cursor will move either by the arrow key or  key.																																				
2.	The status of the current selecting controller will display.	<table border="1"> <tr> <td>Axis</td> <td>0</td> <td>1</td> </tr> <tr> <td>Position</td> <td>0.00</td> <td></td> </tr> <tr> <td>Servo</td> <td>1</td> <td></td> </tr> <tr> <td rowspan="4">In</td> <td>Start</td> <td>0</td> </tr> <tr> <td>Position No</td> <td>0</td> </tr> <tr> <td>--</td> <td>1</td> </tr> <tr> <td>* STP</td> <td>1</td> </tr> <tr> <td></td> <td>0</td> <td>(No axis)</td> </tr> <tr> <td rowspan="4">Out</td> <td>Position No</td> <td>0</td> </tr> <tr> <td>PE/H</td> <td>1 1</td> </tr> <tr> <td>Zone</td> <td>1</td> </tr> <tr> <td>*ALM</td> <td>1</td> </tr> <tr> <td>Error No.</td> <td>000</td> <td></td> </tr> <tr> <td colspan="3">Arrow key --> Axis Change</td> </tr> </table>	Axis	0	1	Position	0.00		Servo	1		In	Start	0	Position No	0	--	1	* STP	1		0	(No axis)	Out	Position No	0	PE/H	1 1	Zone	1	*ALM	1	Error No.	000		Arrow key --> Axis Change			Monitor is composed of 2 axis/1screen. Non-connecting axis will display, "no axis."
Axis	0	1																																					
Position	0.00																																						
Servo	1																																						
In	Start	0																																					
	Position No	0																																					
	--	1																																					
	* STP	1																																					
	0	(No axis)																																					
Out	Position No	0																																					
	PE/H	1 1																																					
	Zone	1																																					
	*ALM	1																																					
Error No.	000																																						
Arrow key --> Axis Change																																							
3.	Select the axis using the ▲▼ key.	<table border="1"> <tr> <td>Axis</td> <td>0</td> <td>1</td> </tr> <tr> <td>Position</td> <td>0.00</td> <td></td> </tr> <tr> <td>Servo</td> <td>1</td> <td></td> </tr> <tr> <td rowspan="4">In</td> <td>Start</td> <td>0</td> </tr> <tr> <td>Position No</td> <td>0</td> </tr> <tr> <td>--</td> <td>1</td> </tr> <tr> <td>* STP</td> <td>1</td> </tr> <tr> <td></td> <td>0</td> <td>(No axis)</td> </tr> <tr> <td rowspan="4">Out</td> <td>Position No</td> <td>0</td> </tr> <tr> <td>PE/H</td> <td>1 1</td> </tr> <tr> <td>Zone</td> <td>1</td> </tr> <tr> <td>*ALM</td> <td>1</td> </tr> <tr> <td>Error No.</td> <td>000</td> <td></td> </tr> <tr> <td colspan="3">Arrow key --> Axis Change</td> </tr> </table>	Axis	0	1	Position	0.00		Servo	1		In	Start	0	Position No	0	--	1	* STP	1		0	(No axis)	Out	Position No	0	PE/H	1 1	Zone	1	*ALM	1	Error No.	000		Arrow key --> Axis Change			
Axis	0	1																																					
Position	0.00																																						
Servo	1																																						
In	Start	0																																					
	Position No	0																																					
	--	1																																					
	* STP	1																																					
	0	(No axis)																																					
Out	Position No	0																																					
	PE/H	1 1																																					
	Zone	1																																					
	*ALM	1																																					
Error No.	000																																						
Arrow key --> Axis Change																																							
4.	Monitor ends. Press the ESC key.	<p>Mode Select Axis 1</p> <p>* Edit/Teach Position</p> <p>* Monitor</p> <p>* Error List</p> <p>* User Parameter</p> <p>* User Adjustment</p> <hr/> <p>Mode select --> Return (you may also select with the minus key).</p>																																					

8. Operation

8-7 Error List

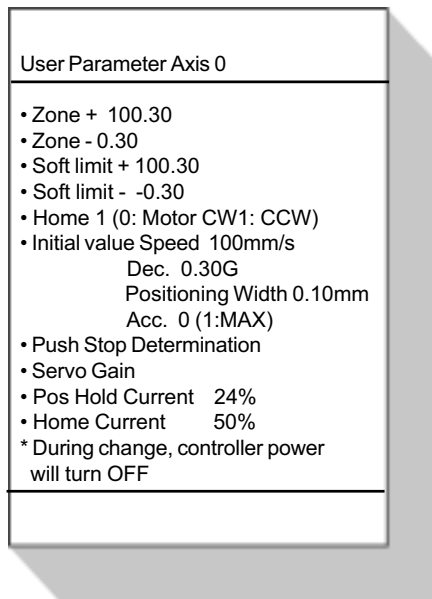
As long as the teaching pendant is connected, this display will show the content of the controller error. With the arrow key, you may scroll through the error log. The error will clear when the axis reconnects.



Caution: Errors in the code number 100 rank will not be recorded since they are all minor errors.

8-8 User Parameter

The User Parameter assigns zone and soft limit ranges, actuator attributes and home direction. Zone and soft limit territory are set within ± 9999.99 (input unit: mm). Home and servo parameters are determined by the actuator. Each setting for initial setting value parameters is the registered default value for position data during teaching.



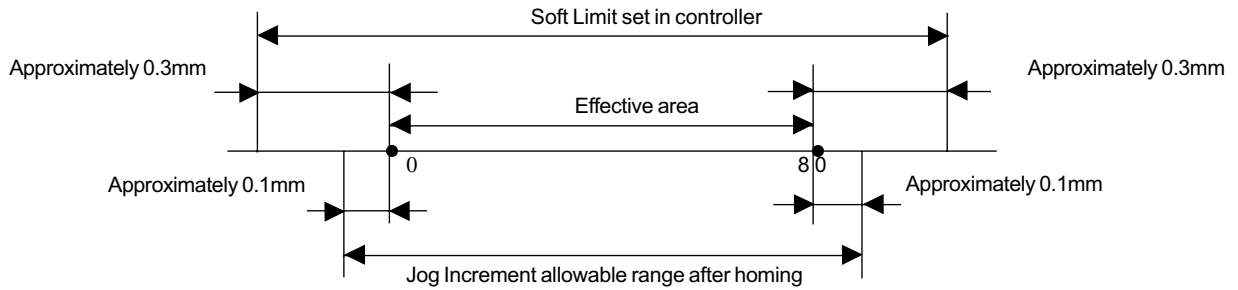
8. Operation

- When soft limit is modified at the customer site, please set a value which extends 0.3mm outside of the effective area.

Example: When setting the effective area between 0mm~80mm

Soft limit + side: 80.3

Soft limit - side: -0.3



- After changing the homing direction, all saved position data will be cleared. As needed, please re-enter the data.
- Reversed homing direction may not be done on the Rod Type Actuator (RS • RM).
- Homing direction setting is reversed on the In-Line Type Actuator (0: Correct, 1: Reversed).

Caution:

Please cycle the controller power after making parameter changes.

Although pressing the emergency switch or port switch ON/OFF will rewrite the parameter, there may be ones that will not be changed.

* Regarding parameter, please refer to the RC Controller Operating Manual.

8. Operation

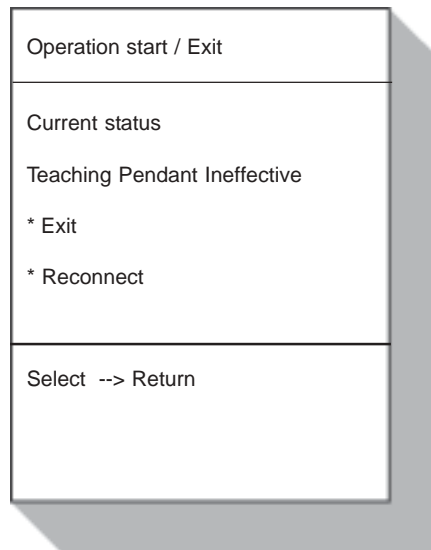
8-10 Exit

Execute exit in order to record each setting and saved content of the teaching pendant.
Please execute this exit whenever disabling the Teach Port of the RC controller.

Operation:

1. Press the key sheet BEGIN/END for more than 2.5 seconds.
2. Moving the cursor to “Exit,” press down the return key.

Afterwards, to remove, turn the controller port switch to OFF, then remove the Teach Pendant connector. You will be able to reopen the connection from the initial screen by selecting “reconnect” and pressing down the return key.



Caution:

When multiple axes are connected with a controller link cable, after cycling power of a controller that is not directly connected to the teaching pendant, please execute a reconnect.

8. Operation

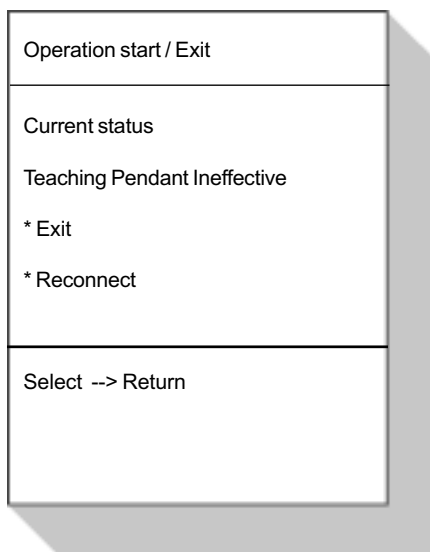
8-10 Exit

Execute exit in order to record each setting and saved content of the teaching pendant.
Please execute this exit whenever disabling the Teach Port of the RC controller.

Operation:

1. Press the key sheet BEGIN/END for more than 2.5 seconds.
2. Moving the cursor to “Exit,” press down the return key.

Afterwards, to remove, turn the controller port switch to OFF, then remove the Teach Pendant connector. You will be able to reopen the connection from the initial screen by selecting “reconnect” and pressing down the return key.



Caution:

When multiple axes are connected with a controller link cable, after cycling power of a controller that is not directly connected to the teaching pendant, please execute a reconnect.

9. Message Area

In the message screen, content during error and warning will be displayed.

Code No.	Error Label	Error Reset	Reference
000~07F	Controller Warning	Yes	Controller rejects command
080-0FF	Controller Error	Yes	Error inside the controller
100~1FF	TB* Message	Yes	Input error, guide message, etc.
200~2FF	TB* Movement Release	Yes	Movement continuation impossible
300~3FF	TV Cold Start Error	No	TB Power install or reconnect are not necessary.

9-1 Warning Label Error

Warning message is cleared by recovery procedure as follows:

Release operation:

1. First, confirm the cause of the warning and resolve the problem.
2. Press down BEGIN/END key of the key sheet.

Warning is probably due to the following possibilities:

- RS485 communication is delivered ated abnormality
- Teaching Pendant operational mistake

Cause: 1) RS 485 communication related abnormality

For example, when move command is delivered by PIO signal from teaching while communicating to other devices (PLC), “075h” will occur.

- 2) Influence by foreign noise or connections is not properly installed.
The teaching pendant and RC controller executes packet communication at all times. At this time, when data changes due to noise, the RC controller will determine that it is an incorrect data and will reject the data.

Solution: 1) Confirm the above causes. In the case of frequent warning occurrences, please remove the signal cable and power line.

9-2 Teaching Pendant Message Label Error

Teaching pendant operational mistake:

When you attempt to input an incorrect setting value, the message label error will occur.

Code No: 112h, 113h, 114h, 118h, 11Eh, 11Fh ••• Keypad input value is incorrect.

9. Message Area

An alarm detected from the controller side can be displayed. This is a serious error due to abnormality related to servo control and electricity. Please read though the RC Controller operating manual carefully for error compliance.

Code No: 0B0h, 0B1H, 0B9H, 0BBh, 0BCh, 0BDh, 0BEh
0C0h, 0C1h, 0D0h, 0D1h, 0D8h, 0E0h, 0E8h, 0E9h, 0EAh, 0F8h

9-3 Error Codes

The following list includes the error codes for our upcoming new RC Series.
Some of the error codes may not apply depending on the type of the controller.

Code	Error Description	Common Solutions
05A	Transmission Error	Abnormal Communication, Check for noise. Inspect all serial ports and cables involved.
05B	Transmission Framing Error	
05D	Start Text Error	
05E	End Text Error	
07F	BCC Error	
061	FNCCHR, W Address Error	Serial string needs to be formatted correctly.
062	1 Operand Error	Incorrect Data Command possibly an operation not allowed with the controller type).
063	2 Operand Error	Incorrect Data Command possibly an operation not allowed with the controller type). In case of another placed controller, there could be an initialization of rotation numbers which surpasses 200rpm against the SW7-ON, SW8-off against the controller. Incorrect Data Command Rejection (could be an operation not wlowed with the controller type).
064	3 Operand Error	Incorrect Data Command Rejection (possibly an operation not allowed with the controller type).
067	BCC Error	Incorrect Data Command Rejection. BCC includes characters other than 0-9 and A-F.
070	RUN-OFF, Transfer Command	Execution Requirement Incompatible Command Rejection (possibly due to External PIO command).
071	No homing, PTP	
073	Servo ON, Error Reset	
074	Communication Error	
075	During homing, movement command	When release is not possible with the controller power reinstalled, you will need to either a common parameter edit or initialize the controller.
0B0	Bank 30 Error (Parameter)	Execute a common parameter edit or initialize the controller.
0B1	Bank 31 Error (Point)	When release is not possible with the controller power installed, you will need to either execute common parameter edit or initialize the controller. 1. Cycle power to controller 2. Possibly, parameters need to be set correctly.

9. Message Area

Code	Error Description	Common Solutions
0B8	Communication Error 1	Please check the following: • Payload is within specification. • External power source works well - check motor encoder cable.
0B9	Communication Error 2	
0BB	ORG - Search C Error	Abnormal Z phase.
0BC	ORG - Search A, B Error	Abnormal A and B Phase
0BD	Speed prior to ORG Search Error	During homing, already moving over the rated speed.
0BE	Homing Time Out Error	Check the motor and encoder cables. Make sure that the slider is not jammed against the hard stop.
0C0	Over Speed	Please reduce the payload or lower the velocity and ACC/DEC.
0C1	Servo Error	
0C8	Excessive Power	Overload may have occurred. Turn the power Off and On again to clear the alarm.
0C9	Excessive Voltage	Please check for any functional restraint.
0CA	Over Heat	Check the surrounding temperature.
0D0	Excessive Main Power	Check the power source.
0D1	Excessive Circuit Voltage	Please check the payload or lower the velocity and ACC/DEC.
0D8	Deviation Over Flow	Please check for mechanical binding.
0E0	Over Load	Too much payload. Please check the mechanical binding.
0E4	Encoder Send Error	Possibility of noise or IC base may be damaged.
0E5	Encoder Receive Error	Possibility of noise or IC base may be damaged.
0E6	Encoder Count Error	Torque speed has exceeded 5000rpm.
0E7	No A, B, Z Phase Feedback	Please check the encoder cable.
0E8	No A, B Phase Feedback	
0E9	No A Phase Feedback	
0EA	No B Phase Feedback	
0EB	No C Phase Feedback	
0EC	No PS Phase Feedback	
0F8	Fixation Memory Brekage	Controller initialization is needed.
0F9	PLD Abnormality	Mulfuction of PDL connected to the base board.
0FA	CPU Abnormality	CPU mulfuction. Check for noise.
101	Over run error (s)	Check for noise. Inspect all serial ports and cables involved.
102	Framing Error (S)	Please check baurate • Sio Central station
104	SCI R-QUE OV (S)	Excessive data is being externally transmitted (duing update)
105	SCI S-QUE OV (S)	SCI Transmission QUE Over Flow (during update)
106	Termi R-BF OV (S)	External excess data reception (during update)
10A	Motorola S Sum Error	Abnormal program file (during update)
10B	Motorola S Record Error	Abnormal update program file (during update)

9. Message Area

Code	Error Description	Common Solutions
10C	Motorola S Address Error	Abnormal Update program file (during update)
10D	Motorola S File Name Error	Abnormal update program file (during update)
10E	Timing Limit (W) (S)	Please check the TB-CPU Board Flash ROM Address setting DIP-SW (during update).
10F	Timing Limite (E) (S)	Please check the TB-CPU Board Flash ROM Address setting DIP-SW (during update).
111	Timing Limit (P) (S)	Please check the TB-CPU Board Flash ROM Address setting DIP-SW (during update).
112	Input Incorrect Error	Input value is incorrect. Please input allowable data.
113	Input Under Error	Input value is too small. Please input allowable data.
114	Input Over Error	Input value is too big. Please input allowable data.
115	Homing Incomplete	Unallowable operation is being executed in the homoiing incomplete status.
116	Last Position Data Exists	During position add, please clear or delete the last position data.
117	No Move Data	Moving position data does not exist. Please assign an effective position data.
118	Non-connect Axis Select	Non-connecting axis is selected (this is not an error).
119	TB Paramater Rotation Over	The TB internal parameter change allowable rotation number exceeds after update.
11A	Flash Verify Error: S	Please check the TB-CPU Board Flash ROM Address setting DIP-SW (during update).
11B	Flash ACK Time Out: S	
11C	Flash Verify Error: M	
11D	Flash ACK Time Out: M	
11E	Pair Data Mismatch	Please input while being careful with othe relationship of the size of the opposing /small relationship.
11F	Absolute Value Error	The absolute value of the input value is too small.
120	Initialize factor error	Factor data input data during controller initialization is abnormal. Please input allowable data.
121	Push search end over	Push final destination point has an excessive stroke. Please modify the position or positioning width.
122	Allocate, multi-axes connect	Axis Number allocate must be done with 1 axis
180	Change to axis number OK	(Not an error)
181	Controller initilize OK	(Not an error)

9. Message Area

Code	Error Description	Common Solutions
182	Home Change All Clear	(No error).
201	Emergency Stop	(No error).
20A	During movement, Servo OFF	Servo turned OFF during movement.
20C	During movement, CSTR-ON	Start turned ON during movement.
20D	ILK-OFF during movement	STP turned OFF during movement.
301	Over Run Error (M)	Please check for noise. Inspect all serial ports and cables involved.
302	Framing Error (M)	Inspect cable shortage, all serial ports and cables that are involved.
304	SCI R-QUE OV (M)	External excessive data reception.
305	SCI S-QUE OV (M)	SCI transmission QUE over Flow (during central port)
306	Termi R-BF OV (M)	External excessive data reception.
307	Memory Command Reject	Command was rejected from the controller. In order to investigate the cause, record all error list before TB power is turned OFF.
308	Response Time Out (M)	Inspect all serial ports and cables involved.
309	Termi Light Address Error	Termi light address non-determined error.
30A	Packet R-QUE	External excessive data reception.
30B	Packet S-QUE OV	Packet transmission QUE overflow.
30C	No Connect Error	Inspect controller power and all serial ports and cables that are involved.

Intelligent Actuator, Inc.

2690 W. 237th Street
Torrance, CA 90505
310-891-6015 / 310-891-0815 (Fax)
www.intelligentactuator.com