Mindman

CONTROLLER



CK10 series

User Manual

Position Table

Ver. 2301

Contents

Before Getting Started **3**
1. Windows of Position Table **3**
1.1 Loading Position Table Data 3
1.2 Main Window of Position Table 4
1.3 Position Table Editor 5
2. Position Table Item **6**
2.1 Explanation of Position Table Item 6
2.2 Type of Command 8
3. Execution of Position Table **9**
3.1 How to start Position Table 9
3.2 Example for general operation 9
3.3 Operation Modes 10
3.3.1 Normal 10
3.3.2 Single Step 11
3.4 Teaching Function 12
3.4.1 Teaching by user program 12
3.5 Input Condition Jump 13
3.5.1 Automatic Jump 13
3.5.2 Jump by External Signal 14
3.6 Loop Condition Jump 15
3.6.1 Specifying Loop 15
3.6.2 Loop Counter Clear 16
3.7 Start/Pass/End Signal Function 17
3.7.1 Start/End Signal 17
3.7.2 Pass Signal 18
3.8 Push Motion Function 19
3.8.1 Setting 19
3.8.2 Push Motion Function 20

Before Getting Started

Presented "CK10_UserManual_Position_Table" explains position table functions of CK10. Here are "UserManual_ Text", "UserManual_Communication" in this manual.

Please utilize our product afterward understanding about proper usage method with reading these contents carefully.

The word as "Position Table" can be presented as PT (Position Table) from the following text.

In particular, Please don't forget to memorize whole matters that requires attention about safety in "User Manual_ Text" and should try to understand properly. Besides please be safe to do not use the products improperly in any case. At worst, serious damage can be occurred as like death.

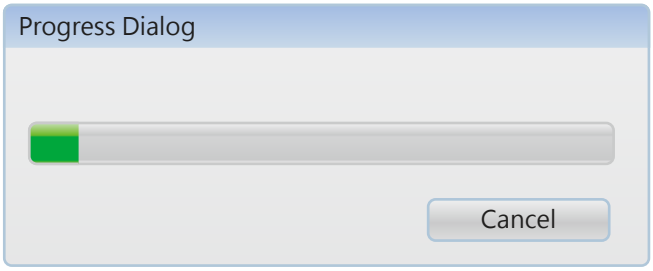
We provide this instruction manual and other instruction manual as well. Please keep these manuals in appropriate place whenever you need to find and read comfortably.

This manual is used for CK10.

1. Windows of Position Table

1.1 Loading Position Table Data

When click the "Pos Table" button on main menu of User Program (GUI), then the system displays the following message box and loads data saved in RAM area of drive.



Functions of Position Table allows to process motions in the orders that were predefined by user. In the case of this CK10, up to 128 steps can be saved.

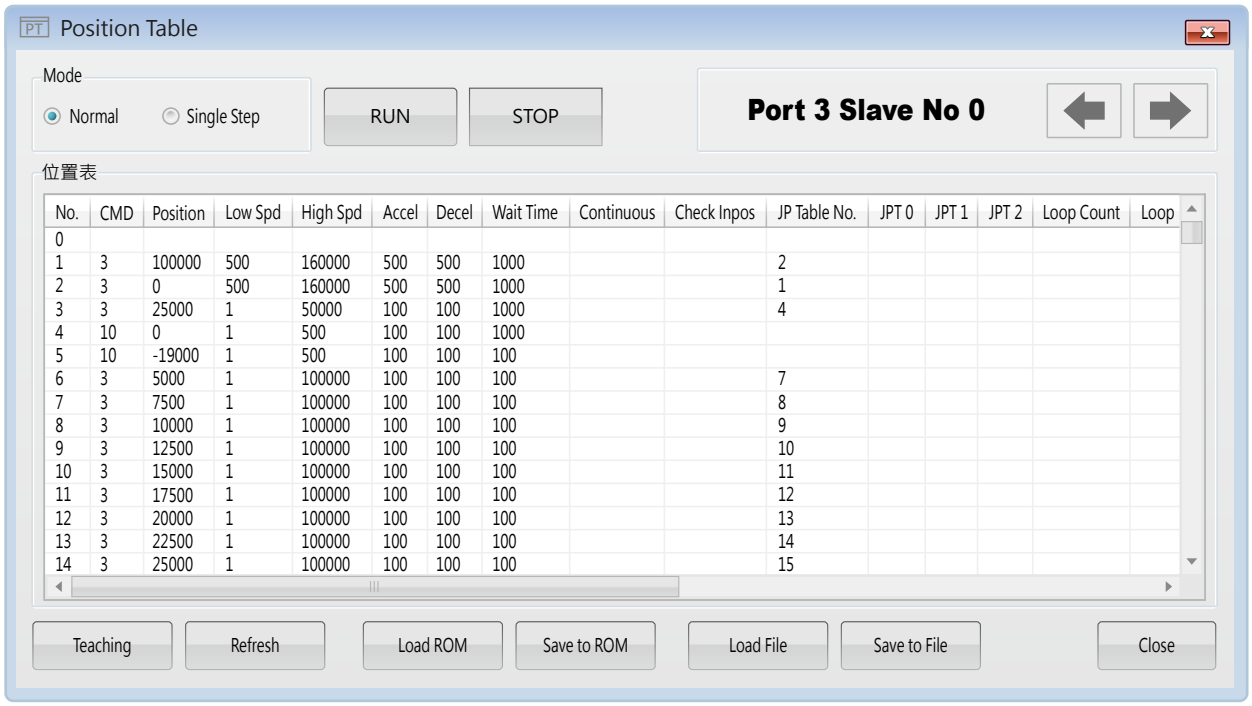
Major functions for saving items are shown as following:

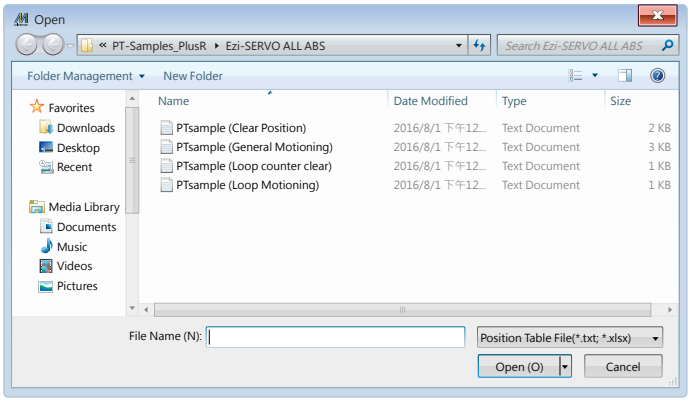
1. Editing function of Motion step (Input/Edit/Delete/Copy)
2. Start and Stop function of Motion order at User Program (GUI)
3. Start and Stop Motion function by signal input from outside drive
4. Teaching function
5. Functions to save Motion steps as file and to load them from file
6. View function of current Position Table order under execution status

When electric power is supplied to drive, the Position Table data saved in ROM area of drive is copied to RAM area and once click the "Post Table" button, then the system loads the data saved in RAM area of drive.

1.2 Main Window of Position Table

The following window describes windows and buttons which execute the position table function.

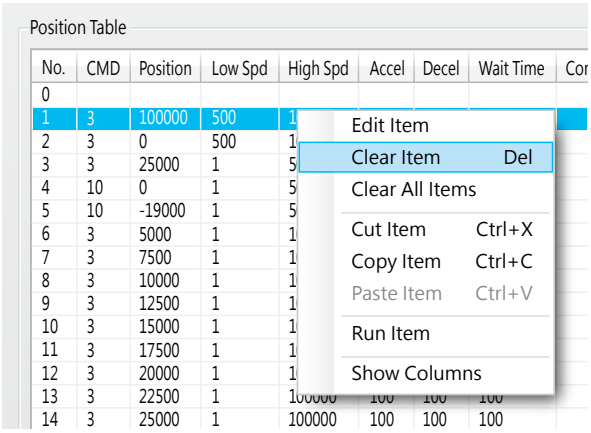


Button	Description
Normal / Single Step	The user can select modes to execute the position table. Normal: All position commands are in order executed according to conditions saved in the position table. Single Step: Only single position command is executed.
Run / Stop / Next	To run/stop items at the defined position table
Teaching	Teaching is executed by either using external input signal or user program. By clicking this button, the user can easily use teaching function at the user program window. For more information, refer to "3.4 Teaching Function".
Refresh	To display the position value measured by the teaching function. For more information, refer to "3.4 Teaching Function".
Save to ROM	To save current position table data in ROM drive.
Load ROM	To open position table data saved in ROM drive
Save to File	To save current position table data to an external file (It is saved to a folder defined by the user with a file name defined by the user. The extension are “txt” and “xlsx”.)
Load File	To read position table data saved in external file. 

* Up to 128 position table commands can be input and saved for CK10.
* By using each position table command, the user can edit the file such as edit, copy, paste and delete.

1.3 Position Table Editor

When click right mouse button on a selected Position Table data line, then the following popup menu is activated.



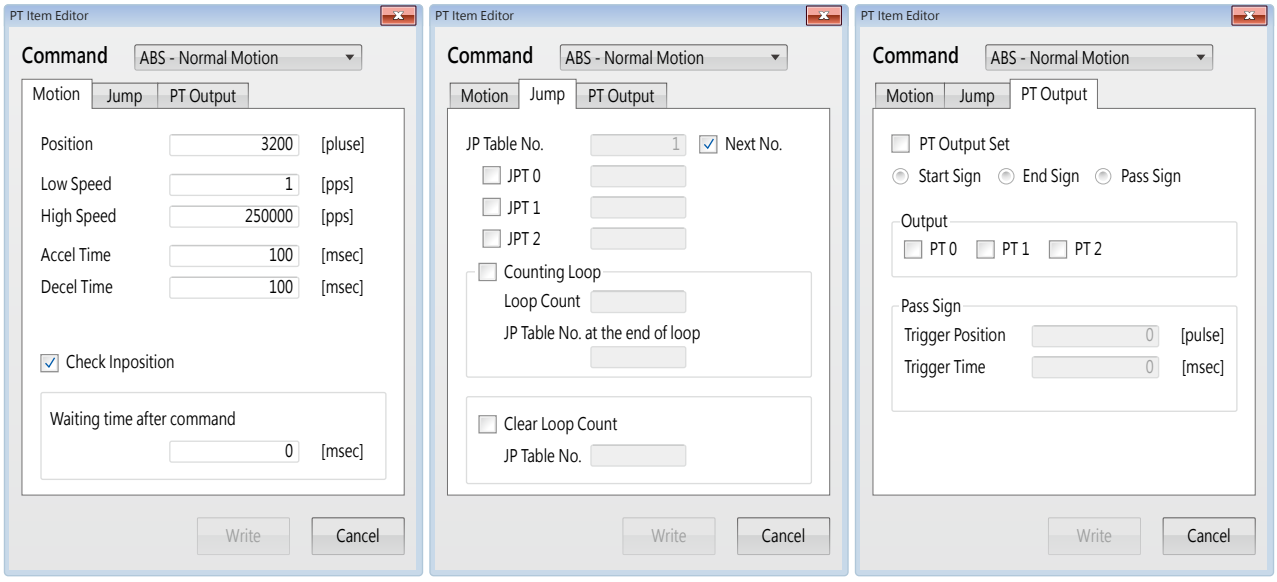
1. Edit Item : You can edit data on the following dialog box shown as below.
2. Clear Item :All the items of selected PT are cleared. After executing this function all the items are shown as blank.
3. Clear All Item : While above function "Clear Item" clears data for one selected order, this function clears data for all the orders of 256 Position Table.
4. Cut Item : Used to cut selected item data of PT in order to paste on other position.
5. Copy Item : Used to copy selected item data of PT in order to paste on other position.
6. Paste Item : Paste the copied data to clipboard by "Cut" or "Copy" to other selected position.
7. Run Item : Execute motion order from the selected No. of Position Table.

Double click on selected line of Position Table data or click the "Edit Item" from popup menu button shown above figure, then the dialog box shown right is activated.

Once complete editing of each item, and then you move and select other items to edit by using right/left arrow key.

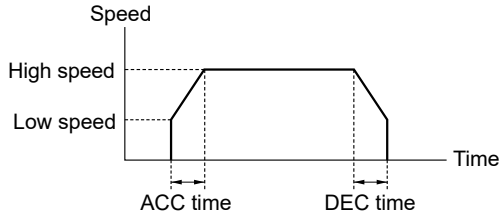
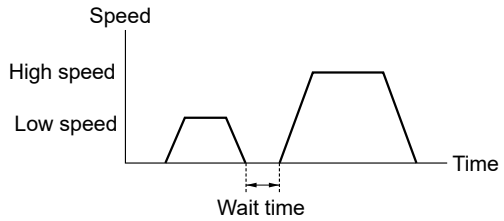
After complete editing of all data completely, click "Save" button to save data to RAM.

In order to save data to ROM area, click Save to ROM button on main screen of Position Table.



2. Position Table Item

2.1 Explanation of Position Table Item

Designated	Description	Unit	Lower limit	Upper limit
Command	Specifies type of motion. For more details, refer to "2.2 Command".	–	0	9
Position	Specifies position/movement scale by number of pulse.	pulse	-2,147,483,648	+2,147,483,647
Low Speed	Specifies low speed by number of pulse in accordance with type of motion. For more details, refer to "2.2 Command".	pps	1	35,000
High Speed	Specifies high speed by number of pulse in accordance with type of motion. For more details, refer to "2.2 Command".	pps	1	500,000
Accel Time	Specified acceleration time by msec when starting motion.	ms	1	9,999
Decel Time	Specified acceleration time by msec when stopping motion.	ms	1	9,999
				
Wait Time	Specifies waiting time by msec for starting motion of next PT when specifying PT No. for jump/skip. If JP Table No is specified as blank, this is ignored.	ms	0	60,000
 Even if Wait Time is specified as 0[ms], the system waits for the completion signal of position setting (INP signal) or motor stop signal before starting next Position Table.				
JP Table No	When this item specified, the system jumps to JP Table No and execute it after completing action of current position. If Position No is specified as 10XXX, system jumps to Position No XXX as soon as "JPT Start" begins, one of the input digital signal from controller to outside, becomes ON. For program exit, specify as blank. For more details, refer to "3.5 Input Condition Jump".	–	0	127
			10,000	10,127

Continue

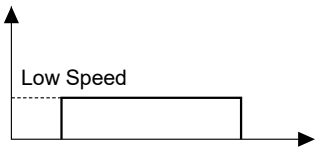
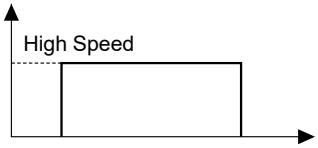
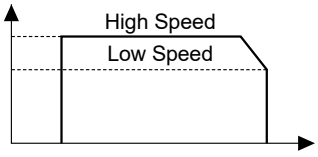
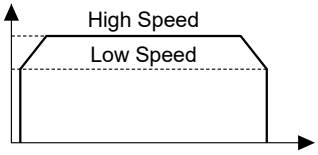
<table>
<tr><th>Designated</th><th>Description</th><th>Unit</th><th>Lower limit</th><th>Upper limit</th></tr>
<tr><td rowspan="2">JPT 0</td><td rowspan="6">If any of these items is checked and there are corresponding input signals of JPT input0, JPT input1 or JPT input2, system
jumps to JPT 0, JPT 1 or JPT 2 accordingly regardless of specified "Jump Table No".
For more details, refer to "3.5 Input Condition Jump" .</td><td rowspan="2">–</td><td>0</td><td>127</td></tr>
<tr><td>10,000</td><td>10,127</td></tr>
<tr><td rowspan="2">JPT 1</td><td rowspan="2">–</td><td>0</td><td>127</td></tr>
<tr><td>10,000</td><td>10,127</td></tr>
<tr><td rowspan="2">JPT 2</td><td rowspan="2">–</td><td>0</td><td>127</td></tr>
<tr><td>10,000</td><td>10,127</td></tr>
<tr><td colspan="5"><table>
<tr><th>Input Signal</th><th>Corresponding Input Jump Position</th></tr>
<tr><td>JPT Input 0</td><td>Input Jump Position No 0</td></tr>
<tr><td>JPT Input 1</td><td>Input Jump Position No 1</td></tr>
<tr><td>JPT Input 2</td><td>Input Jump Position No 2</td></tr>
</table></td></tr>
<tr><td>Loop Count</td><td rowspan="3">If these item are specified, system repeats action of the position under specified times (Loop Count) and after then jumps to corresponding position to Loop Jump Table No regardless of specified "Jump Table No". For more details, refer to "3.6 Loop Setting" .</td><td>–</td><td>0</td><td>100</td></tr>
<tr><td rowspan="2">Loop Jump Table No.</td><td rowspan="2">–</td><td>0</td><td>127</td></tr>
<tr><td>10,000</td><td>10,127</td></tr>
<tr><td>PT Set</td><td>Specifies output signals such as PT Output0, PT Output1, PT Output2 in order to confirm the start, pass or end of motor operation for each position.
0,8,16: Not use output signal.
1~7: Specifies output function when starting operation.
9~15: Specifies output function when completing operation.
17~23: Specifies output function when the position reach to "Trigger Position"
For more details, refer to "3.7 Start/Pass/End Signal Function" .</td><td></td><td>0</td><td>23</td></tr>
<tr><td>Loop Counter Clear</td><td>If this item is checked, Loop Count of specified no of PT is to be cleared. For more details, refer to "3.6 Loop Setting" .</td><td>–</td><td>0</td><td>127</td></tr>
<tr><td>Check Inpos</td><td>If this item is checked, stop condition is recognized as Inposition finishes.</td><td>–</td><td>0</td><td>1</td></tr>
<tr><td>Trigger Pos</td><td>Specifies position where the PT Output0, PT Output1, PT Output2 signal is ON in case of "PT set" is 17~23. For more details, refer to "3.7 Start/Pass/End Signal Function" .</td><td>pulse</td><td>-2,147,483,648</td><td>+2,147,483,647</td></tr>
<tr><td>Trigger Time</td><td>Specifies pulse width where the PT Output0, PT Output1, PT Output2 signal is ON in case of "PT set" is 17~23. For more details, refer to "3.7 Start/Pass/End Signal Function" .</td><td></td><td>0</td><td>65535</td></tr>
<tr><td>Push Ratio</td><td>Specifies motor torque ratio for push Motioning.
For more details, refer to"3.8 Push Motion Function" .</td><td></td><td>20</td><td>90</td></tr>
<tr><td>Push Speed</td><td>Specifies motion speed of push motioning. (max 200 [rpm])</td><td></td><td>1</td><td>33,333</td></tr>
<tr><td>Push Position</td><td>Specifies absolute target position of push motioning.</td><td></td><td>-2,147,483,648</td><td>2,147,483,647</td></tr>
<tr><td>Push Mode (Pulse Count)</td><td>Specifies the push mode : Stop mode(0) or Non-stop mode (1~10,000). For more details, refer to "3.8 Push Motion Function" .</td><td></td><td>0</td><td>10,000</td></tr>
</table>

2.2 Type of Command

Item "Command" specifies type of action pattern to be executed for each position and the followings in the table are list of commands.

Command Name	Specified Value	Remark
ABS-Only Low Speed	0	The value in the item "Position" is value for absolute position. "Teaching" function can be used. "Continuous Action" feature is not supported yet.
ABS-Only High Speed	1	
ABS-High Speed and Decel	2	
ABS-Normal Motion	3	
INC-Only Low Speed	4	The value in the item "Position" is value for relative position. "Teaching" function is not supported. "Continuous Action" feature is not supported yet.
INC-Only High Speed	5	
INC-High Speed and Decel	6	
INC-Normal Motion	7	
Move Origin	8	Execute the command to move to origin based on the specified current parameters specified.
Clear Position	9	Reset "command position" value and "actual position" value based on current position and clears the values as 0.
Push ABS Motion	10	Executes the command to push motion.
Stop	11	Stops the operation of the push motion when in non-stop mode. For more details, Please refer to the "3.8 Push Motion Function".

The following table shows speed patterns for each action of command.

Command Name	Specified Value	Speed Pattern
ABS-Only Low Speed	0	
INC-Only Low Speed	4	
ABS-Only High Speed	1	
INC-Only High Speed	5	
ABS-High Speed and Decel	2	
INC-High Speed and Decel	6	
ABS-Normal Motion	3	
INC-Normal Motion	7	

3. Execution of Position Table

When installing User Program(GUI), the following files are saved in the folder named as
\\MINDMAN\MEC Motor Editor V6\PT_Samples_PlusR\Ezi-SERVO ALL
as sample files to test Position Table.

1. General Motioning.txt 2. Loop Motioning.txt
3. Loop counter clear.txt 4. Clear Position.txt

3.1 How to start Position Table

Position Table operation is executed by input signal or communication command. The followings are example of Position Table operation by input signal to be explained step by step.

In the case of Position Table operation by communication command, the system is executed by sending the communication commands corresponding to the control input signal.

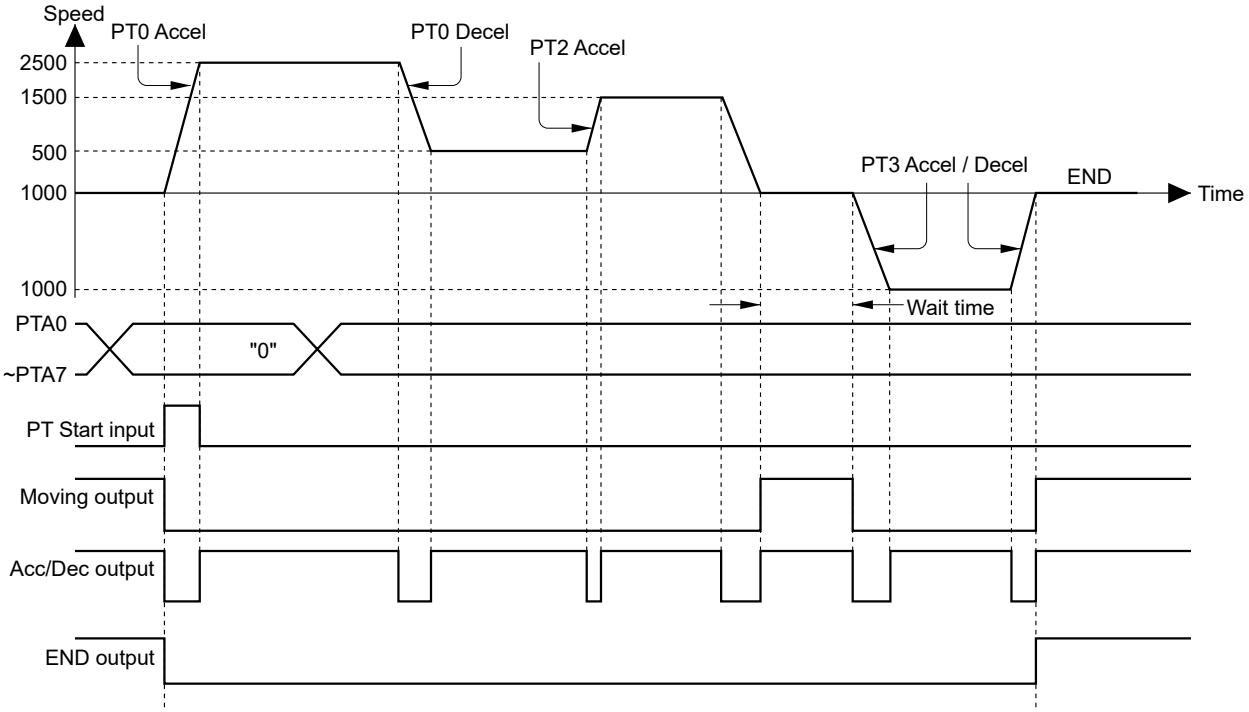
1. Specify Position Table No (0~127) operated by PT A0~PT A6.
2. If the motor is Servo OFF, click Servo ON.
3. Signal ON of PTStart input to start operation.

3.2 Example for general operation

Specify PT No through input data for PT A0 ~ PTA6 and then input "PT Start" signal to start speed control operation.

[Specifying Position Table]

No.	CMD Type	Position	Low Speed	High Speed	Accel Time	Decel Time	Wait Time	Continus Action	JP Table No
0	3	10000	1	2500	50	300	0	1	1
1	3	1000	1	500	-	-	0	1	2
2	3	5000	1	1500	50	300	300	0	3
3	3	-2500	1	1000	300	300	0	0	-



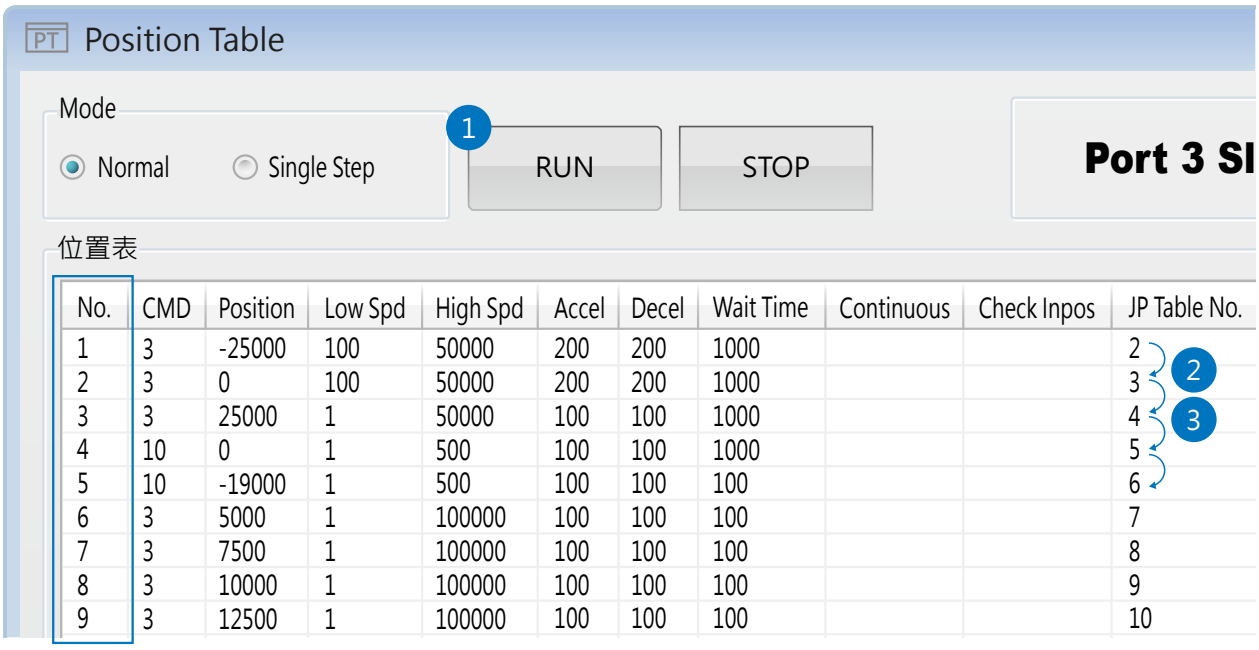
* Refer to the sample file for testing Position Table, "PT Sample (General Motioning).fpt"

3.3 Operation Modes

Position Table commands can be executed by two modes as follows.

3.3.1 Normal

Select "Normal" at the main window of position table, and all commands will be executed in order by conditions already loaded in PT data.

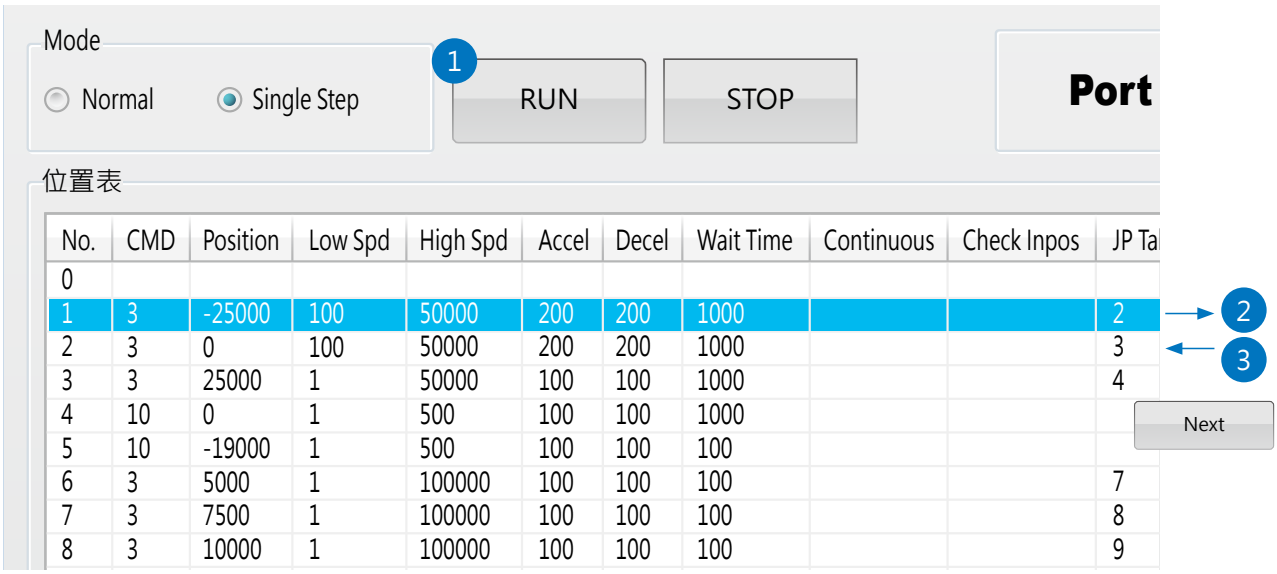


No.	CMD	Position	Low Spd	High Spd	Accel	Decel	Wait Time	Continuous	Check Inpos	JP Table No.
1	3	-25000	100	50000	200	200	1000			2
2	3	0	100	50000	200	200	1000			3
3	3	25000	1	50000	100	100	1000			4
4	10	0	1	500	100	100	1000			5
5	10	-19000	1	500	100	100	100			6
6	3	5000	1	100000	100	100	100			7
7	3	7500	1	100000	100	100	100			8
8	3	10000	1	100000	100	100	100			9
9	3	12500	1	100000	100	100	100			10

1. While Normal mode is selected, the user sets PT number to 0 and click "Run" and then PT 0 is executed.
2. PT 1 is executed by PT data jump conditions.
3. PT 2 is executed by PT data jump conditions.
4. As mentioned above, next PT number is automatically executed by position data jump conditions.
5. Click "Stop" to stop operating.

3.3.2 Single Step

Select "Single Step" at the main window of position table, and only corresponding PT command will be executed and next PT commands will be on stand-by. This mode can be easily used when the user executes testing for each position command. And it is available for User Program(GUI) only.



1. While Single Step Mode is selected, the user sets PT number to 0 and click "Run" and then PT 0 is executed.
2. After execution is stopped, "Run" icon is changed into Next and next command is on stand-by.
3. Click "Next" button, and PT 1 will be executed.
4. When pressing each "Next" button, one PT command is executed.
5. Click "Stop" to stop operation. After operation is stopped, the user can set new PT number and click "Run" button to start the program again.

3.4 Teaching Function

Teaching signal functionalizes that the position value [pulse] being working can be automatically inputted into a "position" value of a specific position table.

The following table shows type of commands and whether teaching function can be used or not.

Command Name	Value	To be used or not
ABS-Only Low Speed	0	"Teaching" can be used.
ABS-Only High Speed	1	
ABS-High Speed and Decel	2	
ABS-Normal Motion	3	
INC-Only Low Speed	4	"Teaching" cannot be used.
INC-Only High Speed	5	
INC-High Speed and Decel	6	
INC-Normal Motion	7	
Move Origin	8	
Clear Position	9	

3.4.1 Teaching by user program

When click "Teaching" button on Position Table screen, the following dialog box is activated.



1. Select Position Table No, the figure shows that no 6 of PT is selected among 128 Position Tables.
2. Specify position of motor where to teach and move it.
3. Turn ON or OFF of Servo during teaching.
4. Displays current position information and the value displayed in "Actual Position" is to be teaching value.
5. When clicking this "Teaching" button, current value displayed in "Actual Pos" will be saved in the item "Position" of the current PT (No 6 above case). The values are to be saved on RAM and click "Save to ROM" button in order to save on ROM.
6. In order to move to the next position, select PT no by using arrow keys.

3.5 Input Condition Jump

Among the items to be specified, "JP Table No.", "JPT 0", "JPT 1" and "JPT 2" are used to specify next PT no. to be executed. Specified next PT no. to be executed, there are two different methods depending on the control signal as followings:

3.5.1 Automatic Jump

This is the method to specify next action pattern (PT No.) by input condition. System jumps to next PT No. to be executed automatically according to procedure.

For example as shown in the following figure, when PT No. 14 is executing, Fig 1 if there is no input signal, next action pattern is to be executed by PT No. 15 as shown in figure Fig 1. However, if any of input signal is ON such as JPT Input0, JPT Input1 or JPT Input2 during the operation of PT No. 14, then system jumps to JPT 0, JPT 1 or JPT2 accordingly and execute it that is specified in the Position Table data as shown in the figure Fig 2 ~ 4.

Data for PT No.14

PT No. (CMD)	Position Table No to jump (JP Table No)	Input Jump Position No 0 (JPT 0)	Input Jump Position No 1 (JPT 1)	Input Jump Position No 2 (JPT 2)
14	15	115	116	225

Fig 1

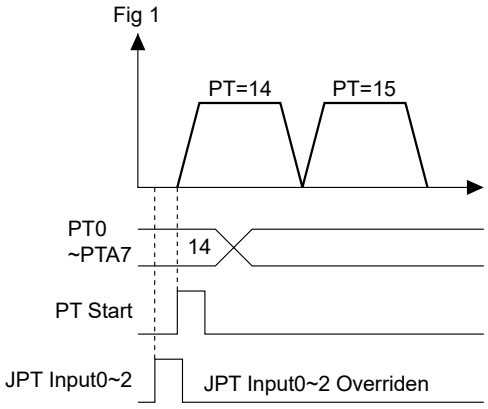


Fig 2

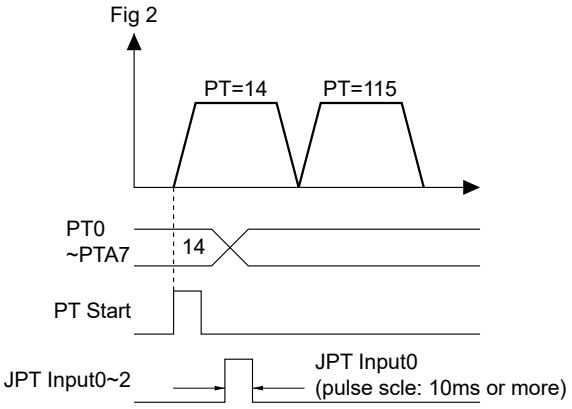


Fig 3

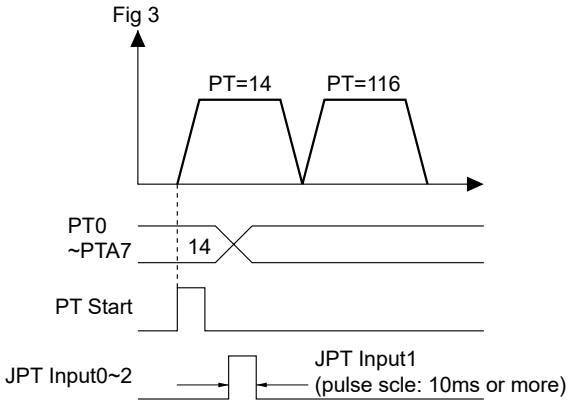
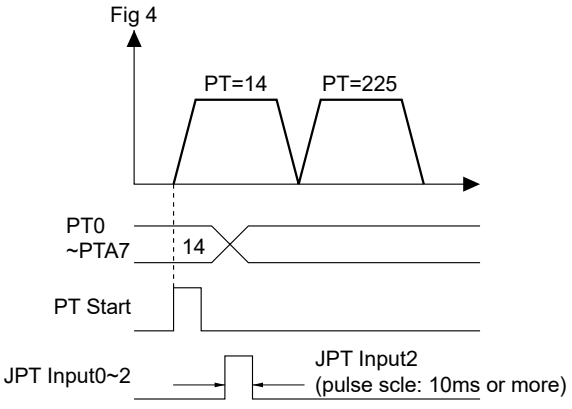


Fig 4



* Refer to the sample file for testing Position Table, "PT Sample (Loop Motioning).fpt"

3.5.2 Jump by External Signal

This is the method to specify next action pattern (PT No.) by input condition.

However, system does not jump to next PT No. to be executed automatically according to procedure, but executed by external signal ("JPT Start").

Difference from the function in "section 3.5.1" executed by input signal JPT Input0 ~ Input2

1. Jump Position No to jump need to have the format of 10XXX and
2. "JPT Start" needs to be [ON] in order to execute the next action.

If specified "Wait Time" of PT data is more than 0, then the next action is to be executed after the specified time from the external signal.

Data for PT No.14

PT No. (CMD)	Wait Time (Wait Time)	Position Table No to jump (JP Table No)	Input Jump Position No 0 (JPT 0)	Input Jump Position No 1 (JPT 1)	Input Jump Position No 2 (JPT 2)
14	0	15	115	116	225

Fig 1

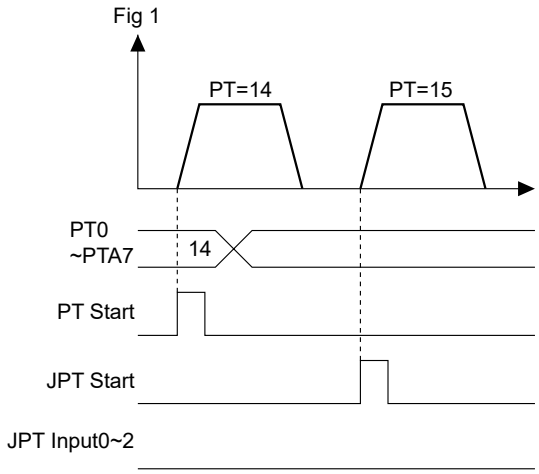


Fig 2

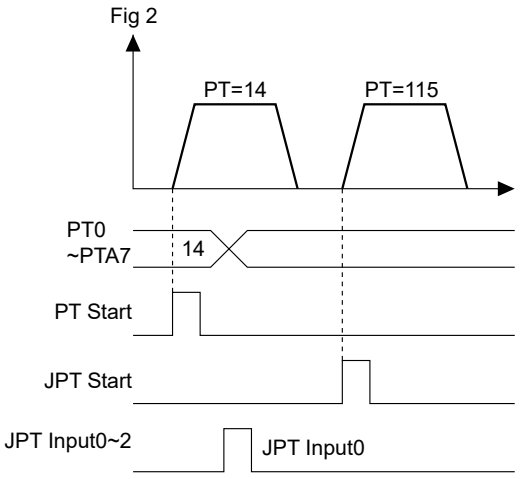


Fig 3

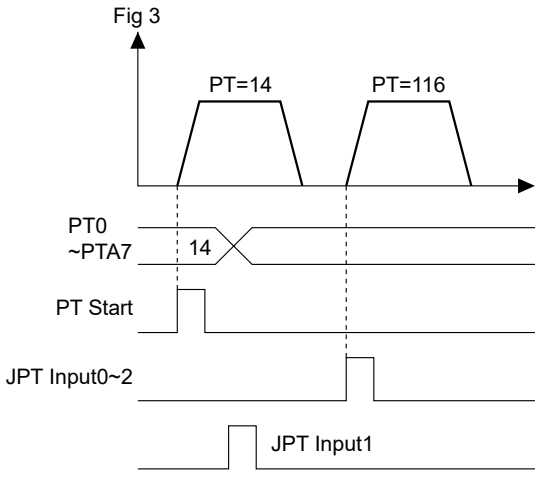
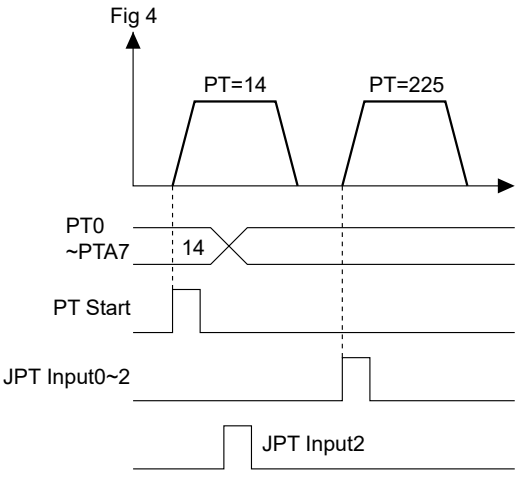


Fig 4



* If more than 2 signals become [ON] of 3 "Input Jump Position No0 ~ Input Jump Position No2", the lower number (JPT0 > JPT1 > JPT2) has the high-priority and will be executed.

3.6 Loop Condition Jump

3.6.1 Specifying Loop

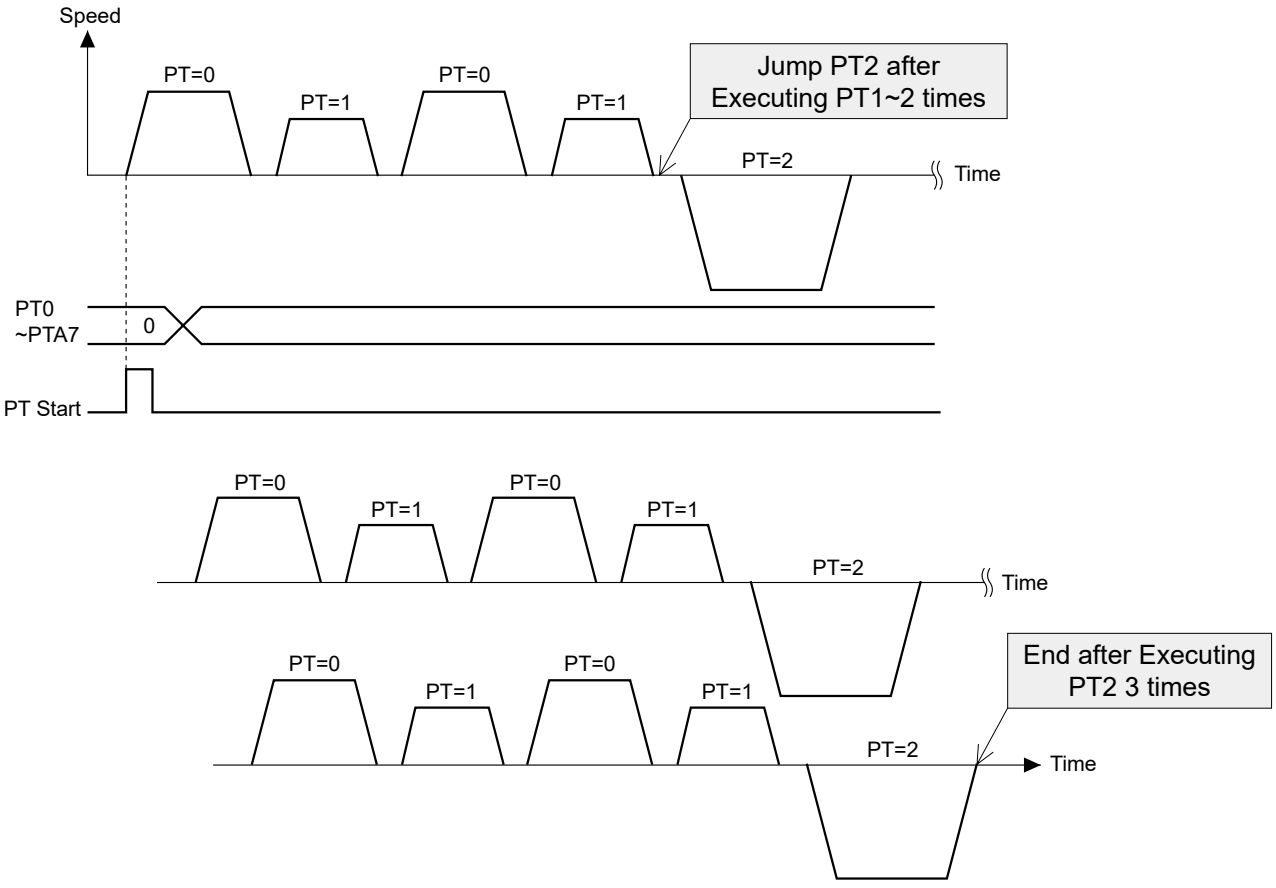
If "Loop Count" and "Loop Jump Table No" are specified, system repeats the action of position specified times (Loop Count) and then jumps to corresponding position to "Loop Jump Table No." regardless of specified "Jump Position No", that is, "Jump Position No" is ignored.

There are rules in specifying loop as following:

1. If "0" is specified for "Loop Count", loop function is cancelled.
2. If system needs to jump before repeating the specified times, it jumps to JP Table No.
3. If "blank" is specified for "Loop Jump Table No", system exits in execution.
4. If "Loop Jump Table No" is specified in the form of 10XXX, next action is executed by the external signal "JPT Start".

Following Table is one of example for specifying loop.

PT No. (CMD)	Movement Scale (Position)	Position Table No to jump (JP Table No)	No of Loop (Loop Count)	Position Table No to jump after completing loop (Loop Jump Table No.)	Loop Counter Clear (Loop Counter (Clear Loop Count)
0	8000	1	0	0	–
1	4000	0	2	2	–
2	0	0	3	–	1



* Refer to the sample file for testing Position Table, "PT Sample (Loop Motioning).fpt."

3.6.2 Loop Counter Clear

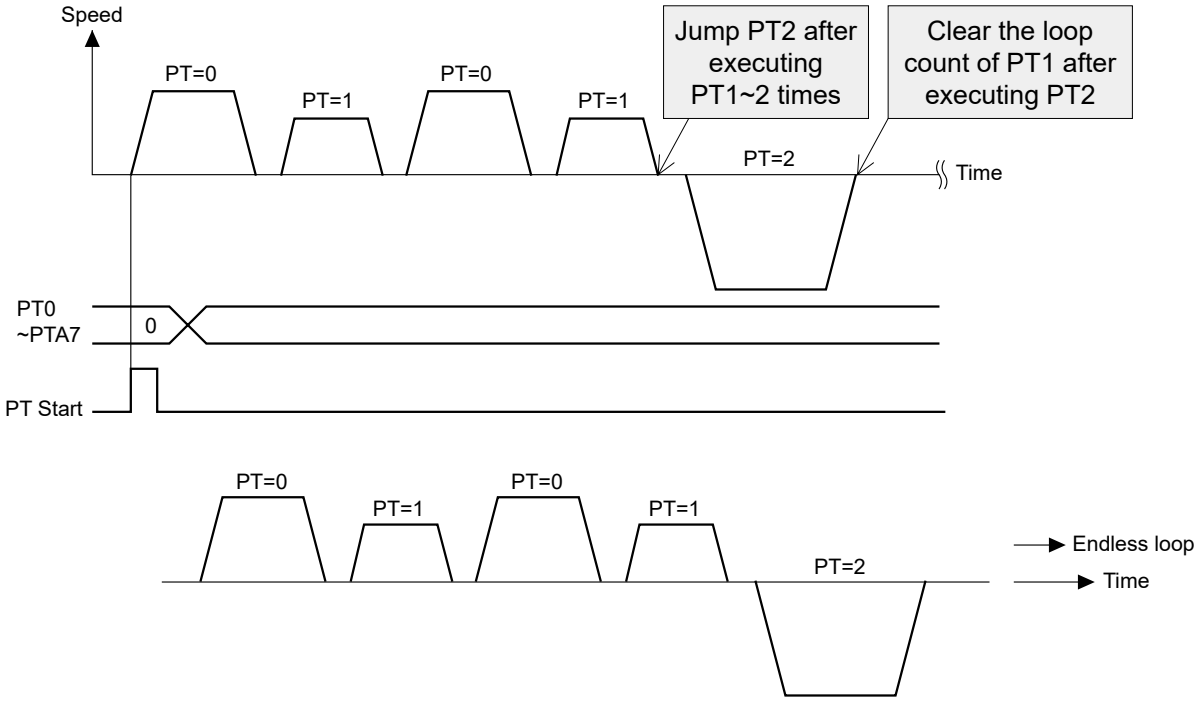
"Loop Counter" is internal counter in drive to compare no. of repeat with the no. specified in the item "Loop Count" of PT data.

This function clears "Loop Counter" to 0 (zero) of the specified PT data after completion of looping. If "Loop Count Clear" is specified as blank, this function is cancelled.

Following table shows an example of specifying Loop Counter Clear.

PT No. (CMD)	Movement Scale (Position)	Position Table No to jump (JP Table No)	No of Loop (Loop Count)	Position Table No to jump after completing loop (Loop Jump Table No.)	Loop Counter Clear (Clear Loop Count)
0	8000	1	0	0	-
1	4000	0	2	2	-
2	0	0	0	0	1

1. Specify "Loop Counter Clear" of PT No 2 as PT No "1".
2. Start operation from PT No 0. When starts operation, system reset all "Loop Count" values as 0 (zero).
3. After repeats the loop block PT No 0 ~ PT No 1 two times, the "Loop Counter" becomes 2 (two) same as specified "Loop Count" so system completes looping and jumps to PT No 2.
4. After executing PT No 2, system jumps to PT No 0. Before jumping to PT No 0, system clears "Loop Counter" the internal counter as 0 (zero).
5. Then paragraph 3 and 4 are repeated infinitely.
6. If the "Loop Counter Clear" of PT No 2 was not specified, "Loop Counter" increased continuously and so jumping to PT No 2 occurs only once at the first time and then repeats the loop block PT No 0 ~ PT No 1 infinitely because the internal counter "Loop Counter" value will never meet the specified "Loop Count" value.



* Refer to the sample file for testing Position Table, "PT Sample (Loop Counter Clear).fpt."

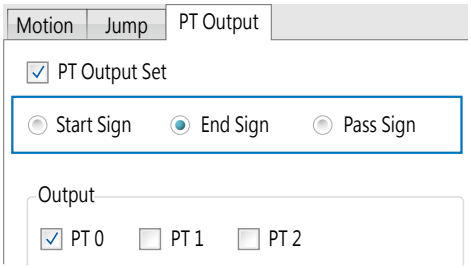
3.7 Start/Pass/End Signal Function

By specifying the item "Start/Pass/End Signal Function", user can recognize the status of Position Table whether operation started, is under pass operation, or completed operation through control signal output.

If you don't want to use "Start/Pass/End Signal Function", specify this item as 0,8 or 16.

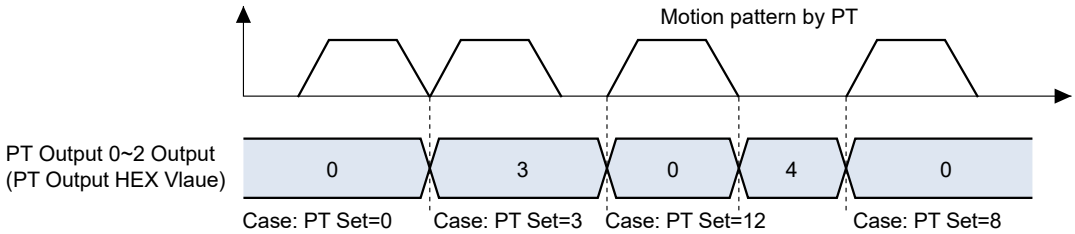
If other value is specified, the position performs following actions depending on specified value. This function is work on both absolute positioning and relative position motion.

3.7.1 Start/End Signal



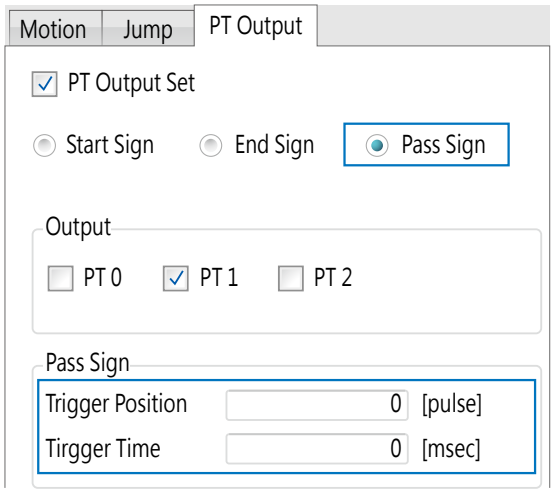
* If the value between 1 to 7(Start Sign) is specified for PT Set, PT Output HEX value is output through output of "PT Output 0 ~ PT Output 2" at the time of starting operation.
* If the value between 9 to 15 (End Sign) is specified for PT Set, PT Output HEX value is output through output of "PT Output 0 ~ PT Output 2" after completion of operation.

PT Set Value	PT Output2	PT Output1	PT Output0	PT Output HEX Value	Function
0	OFF	OFF	OFF	0	Disable PT Output 0~2.
1	OFF	OFF	ON	1	PT Output 0~2 signals turn to [ON] at the time of starting operation of the corresponding PT.
2	OFF	ON	OFF	2	
3	OFF	ON	ON	3	
4	ON	OFF	OFF	4	
5	ON	OFF	ON	5	
6	ON	ON	OFF	6	
7	ON	ON	ON	7	
8	OFF	OFF	OFF	0	Disable PT Output 0~2.
9	OFF	OFF	ON	1	PT Output 0~2 signals turn to [ON] after end of operation of the corresponding PT.
10	OFF	ON	OFF	2	
11	OFF	ON	ON	3	
12	ON	OFF	OFF	4	
13	ON	OFF	ON	5	
14	ON	ON	OFF	6	
15	ON	ON	ON	7	



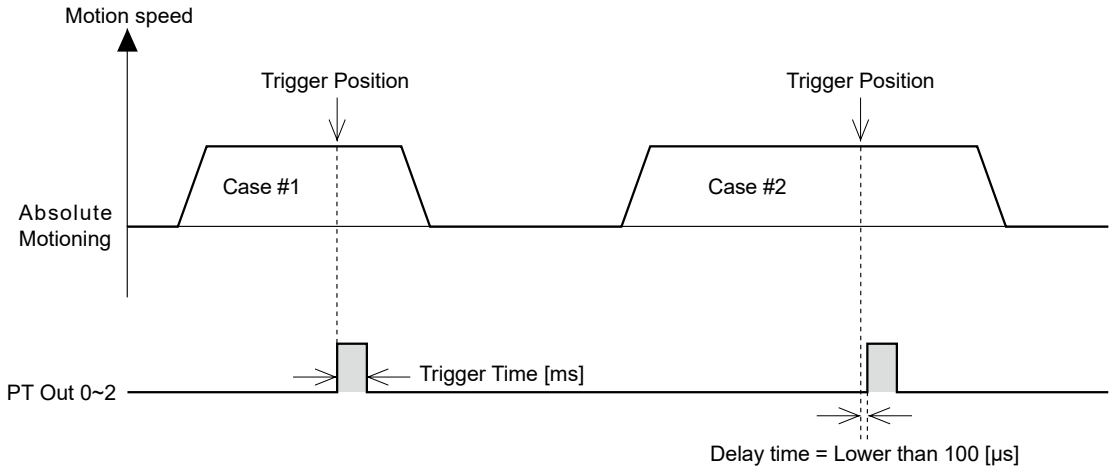
* PT Output signals are not working on next condition :
1. PT Set value : 9~15 2. at the same time using "Jump" function
3. at the same time set "Wait time = 0 [msec]"

3.7.2 Pass Signal



If the value between 17 to 23(Pass Sign) is specified for PT Set, PT Output HEX value is output through output of "PT Output 0 ~ PT Output 2" at the position of "Trigger Position".

PT Set Value	PT Output2	PT Output1	PT Output0	PT Output Hex Value	Function
16	OFF	OFF	OFF	0	Not use output function of PT Output
17	OFF	OFF	ON	1	PT Output 0~2 signals turn to [ON] for the time of trigger condition of the corresponding PT.
18	OFF	ON	OFF	2	
19	OFF	ON	ON	3	
20	ON	OFF	OFF	4	
21	ON	OFF	ON	5	
22	ON	ON	OFF	6	
23	ON	ON	ON	7	



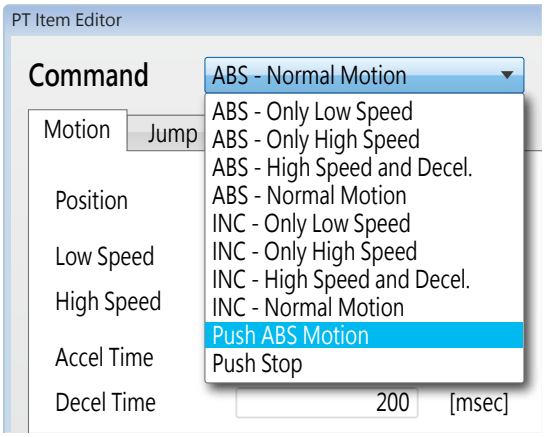
* The signal pulse width of PT Output is set by "Trigger Time" value.
* The "Trigger Position" is not the absolute position value, but the relative position value from the start position of that PT command.

3.8 Push Motion Function

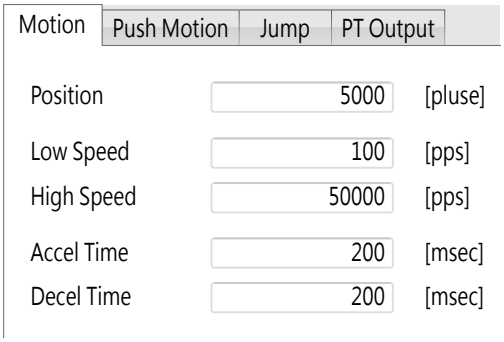
This function is used when the specified motor torque is needed during motioing and stop(only in Stop mode) status.

3.8.1 Setting

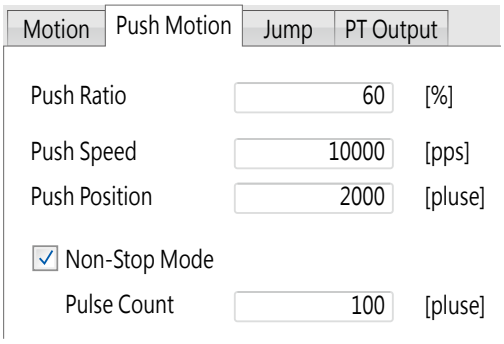
1. Select the command type to "Push ABS Motion".



2. Specifies the normal position motion command settings.

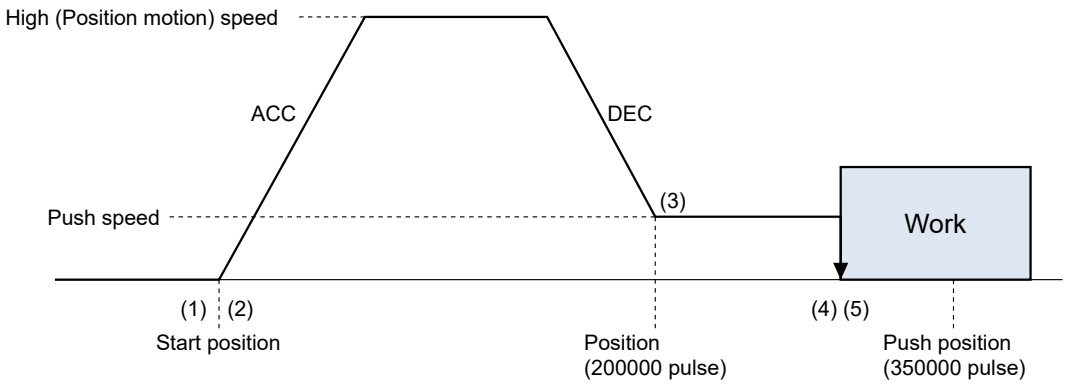


3. Specifies the Push motion command settings.



* This is for Non-stop mode and set backward position value to 100 [pulse] after stop procedure.

3.8.2 Push Motion Function



1. Start Push Motion command.
2. Normal position motion command is executed. (status : position mode)
3. Decelerate the speed from position motion to push motion. (push motion speed must be lower than 200[rpm].)
4. Push motioning until the work detected with specified motor torque. (status : push mode)
5. Base on this mode, there are two methods

When Push mode is "Stop":

After the work detected, the motor will stop but the motor torque will be maintained and the "inposition"/"PT Stoped"/"END"signal is effective. The maintained motor torque will be return to normal Servo ON status (release "push mode" and change to "position mode") by "stop" command.

The next PT data is a sample for simple "Stop mode" push function.

位置表

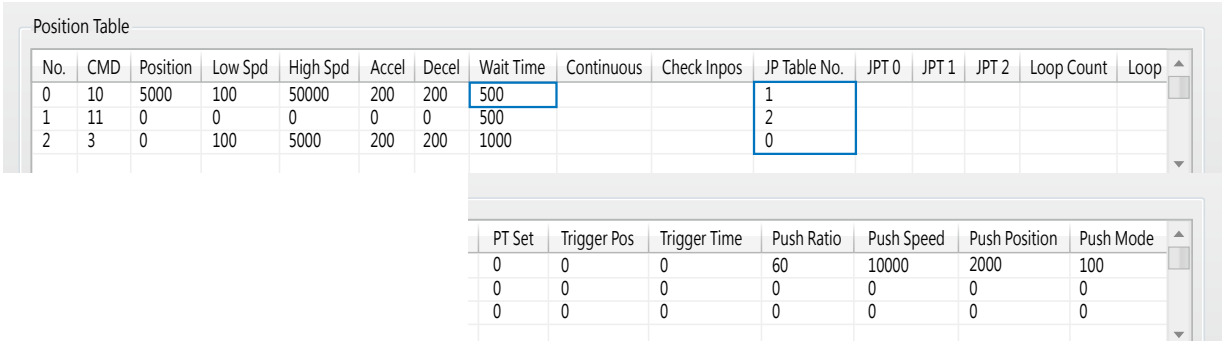
No.	CMD	Position	Low Spd	High Spd	Accel	Decel	Wait Time	Continuous	Check Inpos	JP Table No.	JPT 0	JPT 1	JPT 2	Loop Count	Loop
0	10	5000	100	50000	200	200	0								
1	11	0	0	0	0	0	0								

PT Set	Trigger Pos	Trigger Time	Push Ratio	Push Speed	Push Position	Push Mode
0	0	0	60	10000	2000	100
0	0	0	0	0	0	0

When Push mode is "Non-stop":

After the work detected, the motor maintain Non-stop mode during "wait time" [msec], and the motor will not stop and the motor torque will be maintained and the "inposition"/"PT Stoped"/"END" signal is effective. The "Stop" command must be executed before next motion command.

The next PT data is a sample for simple "Non-stop mode" push function.


Position Table

No.	CMD	Position	Low Spd	High Spd	Accel	Decel	Wait Time	Continuous	Check Inpos	JP Table No.	JPT 0	JPT 1	JPT 2	Loop Count	Loop
0	10	5000	100	50000	200	200	500			1					
1	11	0	0	0	0	0	500			2					
2	3	0	100	5000	200	200	1000			0					

PT Set	Trigger Pos	Trigger Time	Push Ratio	Push Speed	Push Position	Push Mode
0	0	0	60	10000	2000	100
0	0	0	0	0	0	0
0	0	0	0	0	0	0

As above example

1. If execute PT No.0, Push motioning during 500[msec] after work detect
2. And then execute PT No.1 (Stop function)
3. Move to start position and repeat push motioning again by executing PT No.2

Caution	
	Non-stop mode : must be execute the "Stop" command before next motion command in the work detect situation. If there is shock in mechanism, the time delay is needed after "Stop" operation. The "Wait Time" value of PT motioning can be used only "jump" operation like above examples. If the work is not detected, the push mode is finished and the PT jump motion Is also canceled.