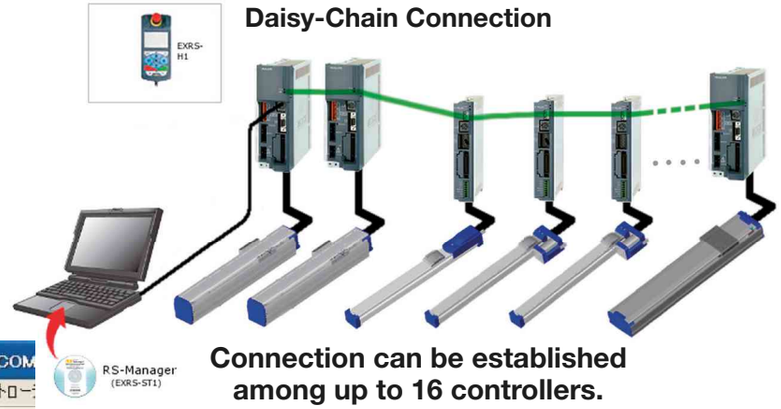
See notes on CE Marking. P.456

■Daisy-chain

Multiaxis easy editing by connecting multiple controllers with daisy-chain

Parameters of controllers of multiple PCs can be edited from one PC by merely switching the Station Address on the RS-Manager screen.

Daisy-Chain Connection



Connection can be established among up to 16 controllers.

Edit the controller to be selected by switching the Address that is automatically allocated to each controller.

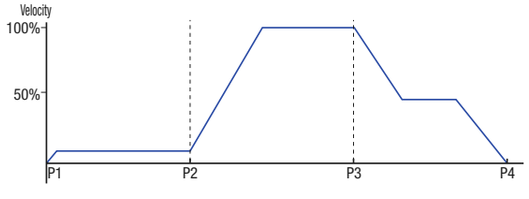
■Sequence Operation

Simple sequence and loop sequence can be realized by "Branch"

Speed change during the Effective Stroke ranges is performed by "ABS connection" or "INC connection".

■Point Data Setup Example

Point No.	Operation Type	Position (mm)	Velocity (%)	Acceleration (%)	Deceleration (%)	Branch
P1	ABS	0	100	100	100	2
P2	ABS Connection	100	10	100	100	3
P3	ABS Connection	200	100	100	100	4
P4	ABS Connection	300	40	100	100	1

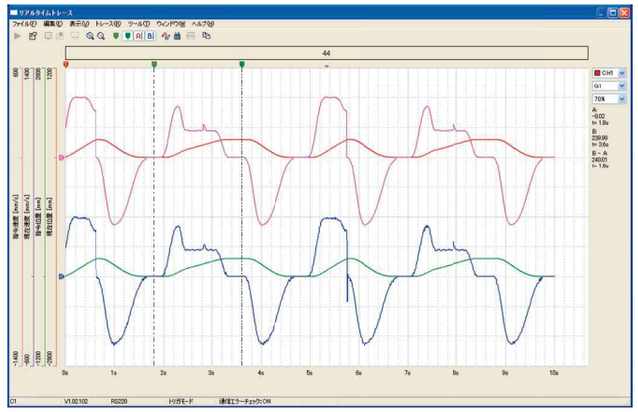


- When point data as shown on the left is entered, the slider makes the moves as shown on the line diagram below left.
- When positioning is complete at P4, the slider begins moving to 0mm position (P1) in reverse and complete a full circle sequence.
- The loop sequence continues even if started from any arbitrary point (P1 to P4).
- When started from P1 while the P4 Branch is set to "0", the motion is completed when the slider reaches 0mm position (P4) as a simple sequence.
- The above fact enables Loop operations just by specifying the positioning point once instead of specifying every point from PLC and etc., reducing communication loads.

■Tracing Functions

Visualize the running state of Single Axis Robot by "Real-Time Tracing" Functions of Support Software

Various information about Single Axis Robot can be monitored in real time.
Saving each item data will assist in scheduled maintenance, as well as helpful in event of unexpected troubles to analyze by comparing with data under normal conditions.



Real-Time Tracing Items (Simultaneous monitoring on 4 items at a max.)

- Voltage
- Current Value
- Commanded Speed
- Current Speed
- Commanded Current Value
- Present Current Value
- Motor Load Factor
- Internal Temp.
- Word I/O Status
- I/O Status

■Updating Parameters Dynamically

Speed and acceleration data can be updated on an as-needed basis by using the field network communication function

Usually the running parameters of point data are written in EEPROM that is built-in the controller. Controller performs prescribed operations based on the written information. However, at times, it may be necessary to update the positioning points on a frequent basis. EEPROM is degraded ever time when information is re-written and hence frequent parameter re-writing can shorten the life of the controller.

MISUMI's Single Axis Robot Controllers have the function to write data in the on board RAM.

For example, in case of controller equipped with CC-LINK communication, the parameters that change frequently as shown in the following chart, can be written in the RAM and executed. With this function, not only can the Single Axis Robots be operated dynamically, but degradation of EEPROM in the controller is also prevented.

■CC-LINK Command and Data Table

Command	Command Options		Unit		Data Write Destination
(WIN0)	Point No.	Data	Standard Settings	Custom Settings	ROM
0200h	1~255	Operation Type	-		RAM
0201h		Position	0.01mm		RAM
0202h		Velocity	%	0.01mm	RAM
0203h		Acceleration	%	0.01m/s²	RAM

For details, please see the Instruction Manual.
RAM write function is available in COM1 port (RC232C communication) as well.