



Baldor

MINT Series

Overview

Maple Systems' **Silver Plus Series** Operator Interface Terminals (Maple OITs) communicate with Baldor Motion Controllers using the Host Comms Protocol (HCP or HCP2). When configured with EZware-5000, the Maple OIT is the master in a point-to-point single master, single slave format. Please refer to the *Silver Plus Series Installation and Operation Manual* for information on connecting multiple Maple OITs to a single port.

Compatible Controller Models
NextMove BX ^{II} , NextMove ST, NextMove ES, NextMove ESB, ESB-2, Mint Drive ^{II} , Flex+Drive ^{II} , SmartMove

Communications Cable

The Maple OIT should be connected to the serial port on the controller.

A list of communications cables offered by Maple Systems as well as cable assembly instructions to assist you in assembling your own communications cable are available on our website at www.maple-systems.com/cables.htm.

WARNING: If your communications cable is not wired exactly as shown in our cable assembly instructions, damage to the Maple OIT or loss of communications can result.

Accessible Controller Memory

Register Memory

The following table lists the Controller's register memory ranges that the Maple OITs are able to access.

Memory Type	Range	Details
CommsArrayInt	1 - 255 ¹	Comms() array element as an Integer value
CommsArrayFloat	1 - 255 ²	Comms() array element as a Floating Point value
Error	0 - 1	0 = No Error, 1 = Error
ControllerType	0 - 1	0 = Servo, 1 = Stepper

Discrete Memory

The following table lists the Controller's discrete memory ranges that the Maple OITs are able to access.

Memory Type	Range	Details
CommsArrayBit	1.00 - 255.15 ³	Bit within an element of the Comms() array

NOTES:

1. On the Object Attribute's *Numeric Format* tab, set the Data Format to 16-bit signed or unsigned, or 32-bit signed or unsigned. This setting affects how the OIT stores the data internally, and does not affect how many elements are read from or written to the controller's Comms() array.
2. On the Object Attribute's *Numeric Format* tab, set Data Format to Single Float. After entering a value, a slightly different value may be displayed. This is due to the drive's conversion of the data to its internal data format. If a high degree of precision is required, use the CommsArrayInt type, and scale the value. If Floating Point values are not displayed correctly, the drive's firmware may need updating.
3. The bit number must be specified to 2 digits. For example, bit 7 in Element 50 would be entered as 50.07. Only the first 16 bits (00-15) are supported.

Important Memory Considerations

If your Controller's memory range is smaller than the range supported by the Maple OITs, it is possible to configure the OIT to monitor a Controller memory address which does not exist. Since this can cause unpredictable results, when you configure the OIT please ensure that all selected Controllers memory addresses are valid for your Controller model.

Do not configure the OIT to write to any Controller memory address which should only be written to by the Controller.

Note that the PLC Control Object will not work as stated in the manual with this controller. Contact Maple Systems for additional information.

EZware-5000 Settings

The following table lists the communications settings that must be configured in EZware-5000. These settings can be found in the Edit-Set System Parameters menu under the PLC tab. Please note:

- the **Recommended Settings** column provides the recommended setting based upon the default settings most commonly used in Baldor Controllers.
- the **Options** column lists EZware-5000's options; your Controller may not support every option

Name	Recommended Settings	Options	Important Notes
Name:	Baldor Mint		Description label.
HMI or PLC	PLC		
Location	Local	Local, Remote	Select local if controller directly connected to OIT, remote if controller connected through another OIT
PLC type:	Baldor Mint		
PLC I/F:	RS232	RS-232, RS-485 2W, RS-485 4W, Ethernet	Must match the controller port setting
PLC default station no.:	1	0-255	Must match the node address assigned to the controller
Setting: COM:	COM1	COM1-COM3	Serial port of OIT connected to controller
Settings: Baud rate.:	19200	9600, 19200, 38400, 57600, 115200	Must match the port setting. Use the fastest baud rate supported by controller
Settings: Data bits:	8	7 or 8	Must match the port setting
Settings: Stop bits:	1	1 or 2	Must match the port setting
Settings: Parity:	None	Even, Odd, None	Adjust if longer timeout is required
Settings: Timeout (sec)	1.5	0.1-25.5	Adjust if longer timeout is required
Settings: Turn around delay (ms):	0	0-1000	Timeout period between OIT polls
Parameter 1:	0 or 1	0=HCP, 1=HCP2	Select which protocol to use
Parameter 2:	0		Not Applicable
Parameter 3:	0		Not Applicable
Parameter 4:	0		Not Applicable
Interval of block pack (words):	5	0-512	see <i>Silver Plus Series Installation and Operation Manual</i>

Name	Recommended Settings	Options	Important Notes
Max. read command size (words):	32		Not Adjustable
Max. write command size (words)	32		Not Adjustable