



Delta Products

DVP Series

Overview

Maple Systems' **Silver Series Plus** Operator Interface Terminals (Maple OITs) communicate with Delta Products DVP Series PLCs using the Delta Modbus ASCII protocol. When configured with EZware, the Maple OIT is the master in a point-to-point single-master, single-slave format. Please refer to the *Silver Series Plus Operation Manual* for information on connecting multiple Maple OITs to a single PLC port.

Compatible PLCs	
Family	Model
DVP Series	DVP-14ES, DVP-24ES, DVP-32ES, DVP-60ES

Communications Cable

Connect the Maple OIT to the RS-232 programming port on the PLC.

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.

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

PLC Settings

The RS-232 port must be set to 9600, even parity, 7 data bits and 1 stop bit.

Accessible PLC Memory

Register Memory

The following table lists the PLC's register memory ranges that the Maple OITs are able to access. Please note that your PLC's memory range may be *smaller* or *larger* than that supported by these OITs. The following register memory can be displayed in 16-, 32-, or 64-bit format on the Maple OIT.

PLC Register Type	Address Range	Format	PLC Register Description
D	0 - 599 1000 - 1143	dddd (decimal)	General data registers
CV	0 - 127	ddd	Counter registers - current value
CV2	232 - 255	ddd	High speed counter registers - current value
TV	0 - 127	ddd	Timer registers - current value

Discrete Memory

The following table lists the PLC's discrete memory ranges that the Maple OITs are able to access. Please note that your PLC's memory range may be *smaller* or *larger* than that supported by these OITs. The following discrete memory is displayable in single-bit format on the Maple OIT.

PLC Bit Type	Address Range	Format	PLC Bit Description
X	0 - 177	ooo (octal)	External Input - Bit Registers
Y	0 - 177	ooo	External Output - Bit Registers
M	0 - 1279	dddd (decimal)	Internal Contacts
S	0 - 127	ddd	Special Auxiliary Contacts
T	0 - 127	ddd	Timer Contacts
C	0 - 127 232-255	ddd	Counter Contacts

Important Memory Considerations

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

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

EZware Settings

The following table lists the communications settings that must be configured in EZware. Find these settings in the Edit-Set System Parameters menu under the Device tab. Please note:

- The **Recommended Settings** column provides the recommended setting based upon the default settings most commonly used in the Delta Products DVP Series PLC.
- The **Options** column lists EZware's options; your PLC may not support every option.

Name	Recommended Settings	Options	Important Notes
Name:	Delta DVP Series		Description label
HMI or PLC	PLC		
Location	Local	Local, Remote	Select local if PLC directly connected to OIT, remote if PLC connected thru another OIT
PLC type	Delta DVP Series		
PLC I/F	RS232	RS-232, RS-485 2W, RS-485 4W, Ethernet	Must match the PLC port setting
PLC default station no.:	1	0-255	Must match the Port No assigned to the PLC.
Settings: COM:	COM 1	COM1-COM3	Serial port of OIT connected to PLC
Settings: Baud rate:	9600	9600,19200, 38400,57600, 115200	Must match the PLC's port setting. Use the fastest baud rate supported by the PLC.
Settings: Data bits	7	7 or 8	Must match the PLC's port setting
Settings: Stop bits:	1	1 or 2	Must match the PLC's port setting
Settings: Parity:	Even	Even, Odd, None	Must match the PLC's port setting
Settings: Timeout (sec)	1.0	0.1 to 25.5	Adjust if longer timeout is required
Settings: Turn around delay (ms)	0	0-1000	Timeout period between OIT polls
Settings: Reserved 1:	0		Not Applicable
Settings: Reserved 2:	0		Not Applicable
Settings: Reserved 3:	0		Not Applicable
Settings: Reserved 4:	0		Not Applicable
Interval of block pack (words):	5	0-512	See <i>Silver Series Plus Operation Manual</i>

Max. read-command size (words):	32		Not Adjustable
Max. write command size (words):	32		Not Adjustable