



Delta Products

DVP Series

Overview

Maple Systems' OIT Family Operator Interface Terminals (Maple OITs) communicate with Delta Products DVP Series programmable logic controllers (PLCs) using the Delta PLC Modbus communications protocol. The Maple OIT is the master in a point-to-point single-master, single-slave format.

Compatible Controllers	
Family	Model
DVP Series	DVP-14/24/32/60-ES00R
	DVP-14/24/32/60-ES00T

Communications Cable

The Maple OIT should be connected to the communications port located on the Delta 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 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 PLC Memory

Register Memory

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

PLC Register Type	PLC Register Description	Access
T0 to T255	Timer word register	Read/write
C0 to C255	Counter word register	Read/write
D0 to D1279	Data word register	Read/write

Discrete Memory

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

PLC Register Type	PLC Register Description	Access
S0 to S1023	Step transition bit register	Read/write
X0 to X377	Input relay bit register	Read only
Y0 to Y377	Output relay bit register	Read/write
M0 to M1279	Internal relay bit register	Read/write
T0 to T255	Timer bit register	Read/write
C0 to C255	Counter bit register	Read/write

Important Memory Considerations

If your PLC's memory range is smaller than the range supported by 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.

PLC communication address: the data register D1121 is used to save the PLC address and the default value is 1 (set by Delta).

Accessing the X input relay: although the OITware-200 configuration software allows the programmer to select read/write access for X memory, this PLC memory area is designed to be read only.

OITware-200 Settings

The following table lists the communications settings that must be configured in OITware-200.

Please note:

- The Default column lists OITware-200's default setting; your PLC's default may be different.
- The Options column lists OITware-200's options; your PLC may not support every option.
- If you are using the Delta Products WPL Editor to program your Delta PLC, you must close this application before you can download a project to the Maple OIT from OITware.

Name	Default	Options	Important Notes
Baud rate	9600	19200, 9600, 4800, 2400, 1200, 600, 300	Must match the PLC's port setting. Use the fastest baud rate supported by the PLC.
Parity	Even	Even, Odd, None, Mark, Space	Must match the PLC's port setting
Data bits	7	7 or 8	Must match the PLC's port setting
Stop bits	1	1 or 2	Must match the PLC's port setting
Status coils (optional)	M0	M0-M1279	Must be within the PLC's supported memory range
Address	1	0-255	Must match the PLC's port setting
Source, destination	N/A		
Message request register (optional)	D1	D0-D1279	Must be within the PLC's supported memory range
Current message register (optional)	D0	D0-D1279	Must be within the PLC's supported memory range
Function key coils (optional)	M15	M0-D1279	Must be within the PLC's supported memory range
Screen-dependent function key coils (optional)	M79	M0-M1279	Must be within the PLC's supported memory range. Applies to OITs with screen-dependent function keys.
Control key coils (optional)	M64	M0-M1279	Must be within the PLC's supported memory range
Status LED coils (optional)	M47	M0-M1279	Must be within the PLC's supported memory range. Applies to OITs with status LEDs.
Function key LED coils (optional)	M31	M0-M1279	Must be within the PLC's supported memory range. Applies to OITs with function key LEDs.