CONTROLLER INFORMATION SHEET

Texmate

TEX-ICC400 PLC Controllers

Overview

Maple Systems' **BLU300 Series** Operator Interface Terminals (Maple OITs) communicate with Texmate Controllers using the Modbus RTU protocol. The BLU300 Series uses **MODBUS RTU Master** protocol driver, to allow the Maple OIT to act as the master in a point-to-point single master, multiple slave format. RS485 networking is supported to connect multiple Texmate Controllers to a single Maple OIT.

Compatible Controllers	
Family	**Model**
PLC Controllers	TEX-ICC400 TEX-ICC480

Communications Cable

The Maple OIT should be connected to the device's Modbus port.

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 OIT or loss of communications can result.

Controller Settings

The serial mode of the controller must be set to Modbus RTU Slave. ($SERIAL_MODE*n* = 1, where *n* is the Texmate controller's serial port number)
The Modbus Station Number must be set to the same value as the *Net Addr* set in the BlueLeaf software. ($SERIAL_ADDRESS*n* = *x*, where *n* is the Texmate controller's serial port number and *x* is the desired station number)
The Baud Rate must match the setting in BlueLeaf. ($BAUDRATE*n* = x, where *n* is the Texmate controller's serial port number and x is the Baud Rate selection – consult the Texmate documentation for details)

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The following Texmate macro sets the Texmate controller's COM2 port as Modbus Slave, Station 1, and 19200 baud:

```
RESET_MACRO:
   MEM &SERIAL_MODE2 = 1       // Modbus RTU Slave
   MEM &SERIAL_ADDRESS2 = 1    // Modbus Station Number
   MEM &BAUDRATE2 = 1          // 19200 Baud
END
```

Accessible PLC Memory

Register Memory

PLC Register Type	Address Range	Format	PLC Register Description
4x	0-9999	ddddd (d=decimal)	Variables and Parameters

Note: The Texmate controller provides 8-, 16-, and 32-bit data. For 32-bit data, be sure to use a 32-bit display object in BlueLeaf. On the object's configuration dialog, set the *Size* to 32.

Discrete Memory

The Texmate controllers do not provide access to discrete data.

BlueLeaf Communication Settings

The following table lists the communications settings that must be configured in BlueLeaf software. These settings can be found in the Tools...HMI-PLC Communications Settings menu.

- The **Recommended Settings** column provides recommended settings based upon the default settings most commonly used in the Texmate controller
- The **Options** column lists BlueLeaf's options; your controller may not support every option.

Name	Default	Options	Important Notes
PLC Type	Modbus RTU Master (Modicon, etc.)		
Com Port	RS232	RS232, RS485 (2-wire only)	Tools...Set HMI-PLC Port
Baud Rate	115200	115200, 57600, 38400, 19200, 9600, 4800	Must match the controller's port settings. Use the fastest baud rate supported by both.

Name	Default	Options	Important Notes
Data bits	8	7, 8	Must match the controller's port settings
Stop bits	1	1, 2	Must match the controller's port settings
Parity	None	Even, Odd, None	Must match the controller's port settings
Net Addr:	1	0-255	Must match the controller’s port setting (configure in each object attribute).