
TOSHIBA EX

Application Note

This document describes how to configure a Paradigm operator interface terminal to allow communications with a Toshiba EX PLC. The communications protocol supports access to pertinent parameters. Please read this document carefully before attempting to configure communications with these devices.

Introduction

The configuration software has been designed to allow the user to enter a command mnemonic and number in a manner that should be familiar to the user of a device using the Toshiba EX PLC. The driver allows the exchange of data with the PLC.

Accessing Data

The following Register commands are supported:

C Added August 2003
 D
 R Added August 2003
 RW Added August 2003
 T Added August 2003
 X
 Y
 Z Added August 2003
 ZW Added August 2003

The programmer is responsible for selecting addresses appropriate to the model of EX PLC to be used. Invalid register selection may result in improper data transfer with valid registers.

Multiple PLC's can be connected. The programmer must ensure each PLC transmitter turns on only while that PLC is responding to a command.

Knowledge of Unit Operation Is Assumed

In all cases, the simple principle of 'pass-through' is maintained: there is no attempt to validate a value in terms of the end use of the unit: both familiarity with the PLC functions and knowledge of system operation are assumed.

Communications

RS422 Connection

Paradigm RS422 Port	IAI X-SEL
Pin 6 (TxA)	3 (RxA, Rx+)
Pin 7 (TxB)	4 (RxB, Rx-)
Pin 8 (RxA)	1 (TxA, Tx+)
Pin 9 (RxB)	2 (TxB, Tx-)
Pin 10 (Comm.)	5 (Sig. Ground)

Also, add a 1K resistor on the Paradigm between terminals 9 and 10.