



Application Note for Using the Operator Station HE500TIU050/10X/11X/20X with the Yamatake DMC10 Multi-Channel Controller

Protocol File Name

HE500TIU050 = CPL_R?.0xx
 HE500TIU1xx = CPL_R?.1xx
 HE500TIU2xx = CPL_R?.2xx
 (The “?” = the TIU firmware revision)

Configuring the Operator Station

To verify the Automated Equipment type the Operator Station is setup for, watch the screen of the Operator Station on power up. The first screen message details the setup of the Operator Station. To configure the Operator Station for particular Automated Equipment, select the Automated Equipment in the Communication Settings from the Configure menu in **CBREEZE** software. Select the appropriate Manufacturer and the appropriate Remote Equipment Model. Then from the File menu select Update Protocol, the appropriate file name will appear in the file name field. The programmer may need to point to the correct folder name/location. If further information is required see the manual or **CBREEZE** help on update/change protocol.

Protocol Revisions

Version 1.00 Supports master only operation to the DMC10 supporting WORD register ranges.

Serial Port Format

The DMC10 operates by default with the following serial port configuration :

Status	Baud Rate	No. Data bits	Parity	No. Stop Bits
Factory Setting	19200	8	Even	1
Optional settings	2400 4800 9600	8	None	2

Table 1. Serial Port settings

Connection to the DMC10 is via the DIN rail mounting base module which implements a two wire RS485 interface.

Node Address.

This must be in the range of 1 to 15, and is set using the hex switch on the front of the DMC10. Unpredictable results will occur if two or more nodes on the network share the same node address.

Register Type Specification

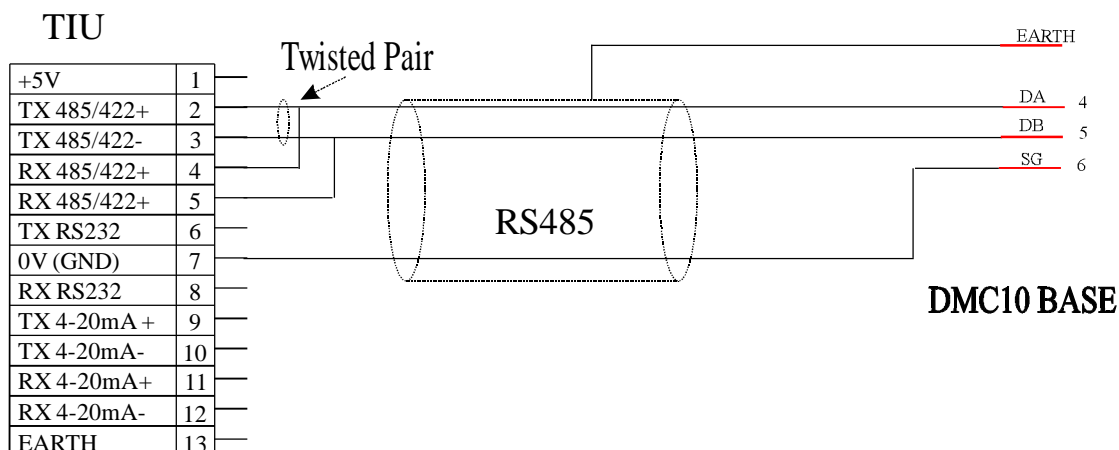
Only one type of Register is supported by the DMC10 CPL protocol : Word

Word Types

- Ram data
- Eprom data
- Error values

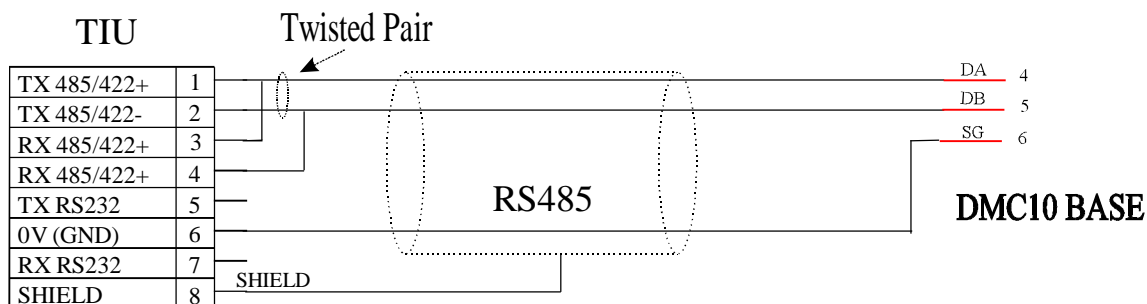
For details of the Ram and Eprom parameters see the DMC1 User's Manual. The error value is an embedded field which may be used on the Operator station to show particular communication errors which may occur depending upon the Parameters or Values read or written to the DMC10, the error codes and their meanings are explained in detail in the DMC10 User Manual.

CONNECTING THE OPERATOR STATION TO A YAMATAKE DMC10 MULTI_CHANNEL CONTROLLER



TIU100/TIU110 TO A DMC10 MULTI_CHANNEL CONTROLLER

Cable Screened Twisted Multipair
Beldon 9503
One Pair Tx/RXData, One Pair for 0V
Connect Screen to earth at DMC10 end



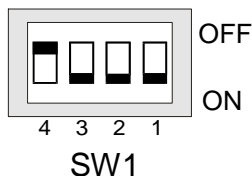
TIU050/TIU200/TIU101/TIU102 TO DMC10 MULTI_CHANNEL CONTROLLER

Configuration Bank

Switch	ON	OFF
1	Pull-up	No Pull-up
2	120 termination	No termination
3	Pull-down	No Pull-down
4	Reserved for future use	

NOTE: Switch 1 and 3 must be used together.

Ensure TIU-PLC Serial Port switch settings reflect any resistors on the TIU side



Rev	Date	EO #	Description of Change	By
1.0	03/12/01		Initial Release	D.T.

HORNER ARG	Unit 1 Centrepoint, Centre Park Rd., Cock, Ireland.
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Doc. # APP0395	
Title Cable Dwg, TIU - Yamatake DMC10 Multi-Channel Controller	
Drawn By: D.T.	Rev 1.0
Current EO #	Sheet 1 Of 1