



## Using The TIU Terminal Range With a SIEI ArtDrive.

### Protocol Revisions

Version 1.00 Supports master only operation to the slave Drive using the Slink3 Protocol..

The link settings of 9600 baud, eight data bits and even parity with no handshaking and RS485 Two wire Communications are default in the terminal.

Communications is via the XS connector on the regulation card..

The Drive Device Number (network Address) must be set the same as the Device Address parameter.

### Parameter Specification

There are currently three data types implemented, Parameters, Status and Malfunction.

The Status and Malfunction Words are read only and conform to the Drivecom Specification. Refer to your Drivecom specification for details.

The parameters are a mixture of Read/Write (R/W), Read Only (R) and Read/Write Only When Disabled (R/Z).

The datatypes supported are 16bit, 32bit and single precision floating point. See the Art Drive manual for the parameter specifications, data types and access types.

Note if a floating point register is read e.g. having a value of 1.023 this will be represented as 1023 in the Tiu but may be formatted on the screen as 1.023. The reason for this is that the Tiu range do not currently support floating point variables and the floating point number has to be converted to a 32 bit integer before it can be used. This restricts the range of the data that can be entered but since all the parameter ranges are within a 32 bit integer range this should not cause any problems.

# Connecting The TIU to a SIEI ArtDrive

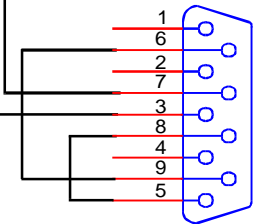
## TIU 100/110

+5V	1
TX 485/422+	2
TX 485/422-	3
RX 485/422+	4
RX 485/422-	5
TX RS232	6
0V (GND)	7
RX RS232	8
TX 20mA +	9
TX 20mA-	10
RX 20mA+	11
RX 20mA-	12
EARTH	13

Twisted Pair

SIEI ArtDrive  
XS Port

9 Pin Male  
D type (Rear)



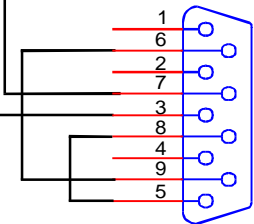
## TIU 50/101/102/111/112/20X

TX 485/422+	1
TX 485/422-	2
RX 485/422+	3
RX 485/422-	4
TX RS232	5
0V (GND)	6
RX RS232	7
SHIELD	8

Twisted Pair

SIEI ArtDrive  
XS Port

9 Pin Male  
D type (Rear)

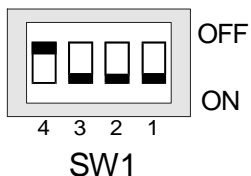


Cable Screened Twisted pair  
Beldon 9501

### 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.



The Xs serial interface is galvanically isolated and must be powered externally. The above drawing shows a one to one connection where the interface is powered from the Drive itself. This is only possible on a one to one link. The above link must be terminated by fitting links S5 and S6 on the ArtDrives Regulation board.