

Electrical Installation Requirements

Care should be taken to separate the power and signal cables to prevent electrical interference and possible damage due to inadvertent connection.

CE Conformance

This unit conforms with the relevant EU standards when installed according to the JTL Installation Requirements for this product.

Description

JTL plant control interfaces are designed to be used with JTL plant controllers. The IF52 comprises 4 voltage inputs. A JTL maintenance unit is required to configure this product.

Use of Maintenance Unit

The interface can be checked and the operation adjusted using a JTL portable maintenance unit which plugs into the interface. Each item of information has an item number. The more important items are listed in the tables overleaf. Examples:

To read item 30 press:

To set item 30 to 2 press:

To correct errors press:

To select next or previous items press: and

Maintenance Features

In addition to address configuration, the maintenance unit enables the user to look at various items for diagnostic purposes.

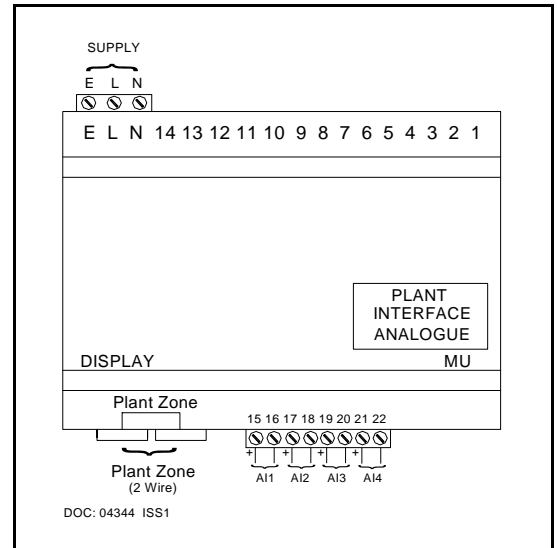
Raw ADC codes can be examined on items 21-24 for channels 1-4 respectively.

ADC spread (an indication of how much electrical noise is present) can be checked on items 1x8, where x is replaced by the channel number.

Two LEDs are located in the top left hand corner of the unit. These are for diagnostic purposes.

WD (Green) = Watchdog, blinks if board is healthy

TX (Red) = Illuminated when interface is transmitting data to plant controller



JTL Network Communications

The JTL network port is arranged for 2 wire (half duplex) communications and supports Modbus ASCII and Modbus RTU protocols.

Connection to the IF52 plant zone use JTL cables type CAB60. Communications speed should be set to 9600 baud by setting item 36=24. The plant controller should be set to 9600 baud also.

Note all network products must be connected in parallel without cross connections.

Functionality & Configuration

The interface is designed to require very little configuration beyond network address, communication speed and communication protocol.

Voltage Reporting

Voltage of each channel can be read on item 1x1 (1mV resolution) and 1 x 3 (10mV resolution) where x is replaced by channel number. Item 1 x 3 is required as 10.000 + is too long to fit on the maintenance unit display.

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ADJUSTABLE PARAMETERS		
Item	Function	Range
30	Modbus ID	1 - 254 (0 reserved)
36	Communications baud rate	1=1200 2=2400 3=4800 4=9600 (default) 5=19200
37	Communications protocol	0=Modbus ASCII 1=0 reserved 2=reserved 3= Modbus RTU (default)
111	Channel 1 voltage (1mV res)	
121	Channel 2 voltage (1mV res)	
131	Channel 3 voltage (1mV res)	
141	Channel 4 voltage (1mV res)	
113	Channel 1 voltage (10mV res)	
123	Channel 2 voltage (10mV res)	
133	Channel 3 voltage (10mV res)	
143	Channel 4 voltage (10mV res)	


OTHER USEFUL DIAGNOSTIC ITEMS	
Item	Function
21	Channel 1 Raw ADC code
118	Channel 1 ADC code spread
22	Channel 2 Raw ADC code
128	Channel 2 ADC code spread
23	Channel 3 Raw ADC code
138	Channel 3 ADC code spread
24	Channel 4 Raw ADC code
148	Channel 4 ADC code spread

Supply Requirements and Input/Output Specification

230 V ac 48-52 Hz
 Supply 3 VA maximum
 Analogue inputs 0-10V

Full operating manuals and item number information can be obtained from your supplier or JTL Systems.

Technical documentation can also be obtained from our website www.jtl.co.uk.

 This unit conforms with the relevant EU standards when fitted in accordance with its installation instructions.

Applicable Documentation

Item Numbers	Doc No. 04338
Firmware Variations	Doc No. 04339
Connections Diagram	Doc No.
Installation Requirements	Doc No. 02777

Application Drawings

Doc No.04192