

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.

Inputs and Supply

Input and supply connections are made through CON1. CON2 is provided for through connections if required.

Inputs are electrically (optically) isolated. A line must be connected for signal present. The line voltage **MUST BE** on the same phase as the unit supply.

Use of Maintenance Unit

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

To read item 70 press: **ITEM** **7** **0** **ENTER**

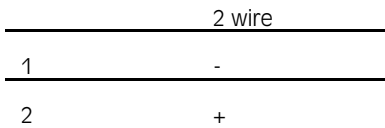
To set item 30 to 15 press: **ITEM** **3** **0** **ENTER** **SET** **1** **5** **ENTER**

To correct errors press: **CANCEL**

To select next or previous items press: **+** and **-**

JTL Network Communications

The JTL network port (connectors 3, 4 & 5) is 2 wire (half duplex) communications. The wiring of the port is:



Note all network products must be connected in parallel without cross connections. The Rx connections must be connected to the Tx connections at the network controller.

The communications data rate is set for 4800 baud.

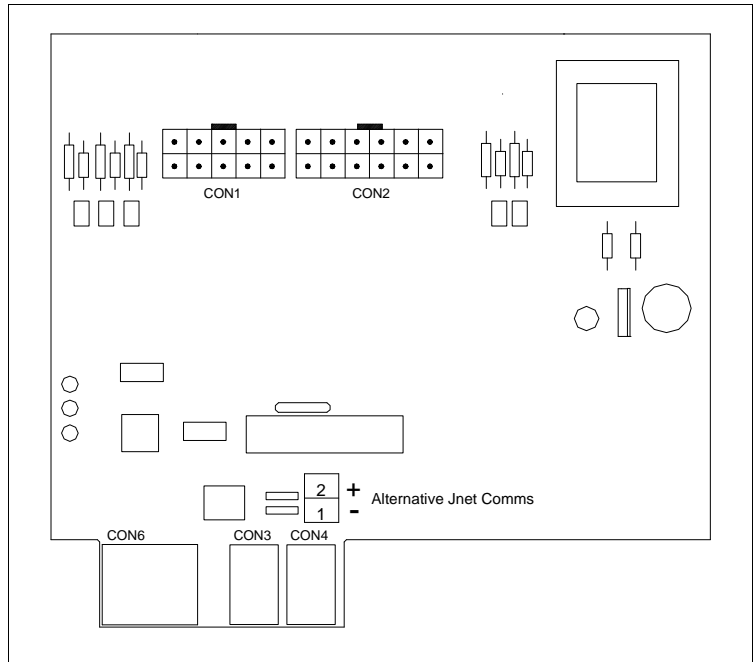
Initial Commissioning

The monitor has a set of data built in to its program for use during commissioning. This can be accessed setting item 9 to 1. This loads into the monitor a standard set of data. Adjustments should then be made as necessary. The range over which the settings can be adjusted shown overleaf.

The unit number for the JTL communications network should be set on item 1.

Alarms

Boiler overheat and lockout alarms are monitored and reported as critical alarms after an adjustable delay. Fans running status is indicated on the network. Boiler running high and low are also indicated and run hours in each state are also logged in tens of hours.



Maintenance Features

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

Logical inputs (the inputs the internal logic sees) are displayed on item 71 in binary coded form. These input values can be forced to read differently by setting a non-zero value on item 78. The physical inputs however, are always displayed on item 100.

The binary coding works as follows:

- 1 = Input 1 Boiler overheat
- 2 = Input 2 Boiler lockout
- 4 = Input 3 Fans running
- 8 = Input 4 Boiler on low
- 16 = Input 5 Boiler on high

If more than 1 input or output is active then the code is added arithmetically. Eg., input 1 & 3 active = 1 + 4 = 5.

Forced functions remain forced whilst the maintenance unit is plugged in. They are cancelled automatically 30 minutes after the maintenance unit is unplugged.

Three LEDs are located on the top left hand side of the PCB. These are for diagnostic purposes.

- L (yellow) = Low voltage (lit if supply voltage is too low)
- W (Green) = Watchdog, blinks if board is healthy
- H (Green) = Illuminated when interface processor is healthy

ADJUSTABLE PARAMETERS			
Item	Function	Range	Units
1	Jnet unit number	0.1 to 899.8	
30	Alarm delay time	1 - 60	mins

OTHER USEFUL ITEMS	
Item	Function
51	Boiler low run hours
52	Boiler high run hours
71	Logical inputs (as seen by monitor)
78	Forced input status (for maintenance purposes)
100	Input status (actual)

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

Supply and Input Requirements

230 V ac 48-52 Hz

Supply 6 VA maximum

Inputs 2 mA maximum



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

Applicable Documentation

Item Numbers Doc No. 03002

Firmware Variations Doc No. 03003

Installation Requirements Doc No. 03018

Application drawings:

For use with Wessex 100 Boiler Doc No. 02988

As general boiler monitor Doc No. 02990