

**AUTOMATIC DOSING UNIT SETTING AND FAULT FINDING.****SPECIFICATION.**

UNIT IS COMPLIANT WITH CURRENT EMC STANDARDS.

The unit is designed & programmed to deliver 300ml of Actimatic liquid to a drain line at a user-determined time (normally 2 hours after the kitchen closes). Details of setting dosing time will be covered later in these instructions.

**Enclosure:**

Suitable for wall mounting and made from flame retardent polystyrene with removable cover.

Sealed to IP66

Dimensions 180L x 110W x 90D.

**Pump:**

Peristaltic type with 12V DC motor delivering 110ml of liquid /min.

**Switches:**

External push button for pump primer situated on underside of enclosure.

3 internal push buttons for programming purposes.

**Visual Indicators:**

LCD display (flashes "EMPTY" to indicate liquid level low).

**Audible Alarm:**

Audible alarm will only activate between the hours of 10.00am & 8.00pm, after low liquid is detected, thus eliminating noise nuisance to neighbours at unsocial hours. (Audible alarm can be disabled, see sheets 5 & 7 for details).

**Automatic Dosing Unit:**

Programmable 24 hour timer with rechargeable battery, 180 day standby back up.

NOTE: Battery will only maintain timer settings, it will not run the pump, display or alarm.

**Low Liquid Level Sensor:**

Low voltage inline sensor located on the inlet side of the pump.

**Electrical Supply Required:**

210-250v ac 50-60Hz single phase. Fuse rating 3amp. (Internally protected by 1.6amp fuse).

**Ancillary items:**

Liquid container, 10-litre capacity, contains enough liquid for 30 days operation. The container is made from high-density polythene and has a screw cap and carrying handle. Dimensions: Octagonal 229mm across corners x 381mm high.

**Optional extras:**

Liquid Container Wall Mounting Bracket: Manufactured in grade 304 stainless steel, with large radiused corners to facilitate easy cleaning when installed in hygiene sensitive areas.

## **INSTALLATION:**

### **PARTS:**

The installation kit comprises;

1 no: - Automatic Dosing Unit.

1 no.- Liquid container with cap.

1 no.- Nylon tube 5 metres long complete with stiffener tube and base connector.

1 no.- Adjustable pipe connector.

1 no.- Stainless steel container wall bracket (optional)

### **Fixing:**

Remove enclosure cover and spot through the 4 cover securing holes into wall. Secure enclosure to wall using suitable screws.

### **Plumbing:**

#### **Inlet:**

From the underside, feed free end of clear 8mm tubing through the liquid container cap. Cut tube to a suitable length to reach the Autodosing Module and connect to the short length of tubing protruding from underside of enclosure.

#### **Outlet:**

Using the remaining length of 8mm tubing connect pump outlet to drain run.

### **Drain Run:**

#### **For pipe sizes up to 50mm:**

Drill 5mm dia. hole in a suitable pipe leading to the Grease Converter. Fit adjustable pipe connector and connect free end of tubing by simply pressing onto fitting.

#### **For pipe sizes over 50mm:**

Drill and Tap M5 hole, remove and discard the plastic strap from adjustable connector and screw the remaining nipple into the hole.

NOTE: The hole MUST be located after the last trap and in the top of the pipe if the run is horizontal.

### **Wiring:**

Remove cover. Thread 3-core mains cable through the cable gland situated on the underside of the enclosure.

Connect live & neutral cables to the green terminal block to the left of the circuit board marked L and N (see sheet 7). Connect earth cable to the earth tag situated on the motor gearbox assembly. Connect mains supply via a suitable isolator.

Replace cover and switch on mains, check that LCD display is working, if not recheck wiring.

Warning: Alarm will activate as liquid is not present at this stage. If not commissioning unit immediately then switch off power.

NOTE: A suitably qualified electrician should install all wiring.

## COMMISSIONING

Mix Actimatic solution carefully following safety instructions on the small jerrican containing the Actimatic concentrate and the mixing instructions on the large container. Fill liquid container and replace cap.

Switch on power and prime the pump by pressing and holding the pump primer button on underside of Automatic Dosing Unit until liquid appears on the outlet side of the pump.

## PROGRAMMING THE TIMER

Ensure power is on & remove cover. When following programming instructions care should be taken not to touch electrical connections.

Check that display reads "GO" and time of day.

### **To set clock to current time:**

Press button 1 (MODE) until display reads "set clock" with time.

Press button 2 (MOVE CURSOR) to toggle cursor position between hours and minutes.

Press button 3 (CHANGE NUMBER) to increase the hours or minutes depending on cursor position.

Note! Unit operates on a 24-hour clock.

### **To set dosing time:**

Press button 1 (MODE) until display reads "ON at hour" with a number indicating the hour at which dosing is to take place.

Press button 3 (CHANGE NUMBER) to increase the hour to suit dosing start time.

Finally press button 1 (MODE) until display reads "GO" and current time of day. In this mode the unit is ready to dose at the programmed time.

Note! To reset unit to starting display, press and hold button 2 (MOVE CURSOR) for 5 seconds.

Programming is now completed and dosing will take place at time indicated. This dosing cycle will then repeat at 24-hour intervals.

**OPERATING INSTRUCTIONS:**

When low liquid level is indicated, the liquid container should be re-filled.

A full container should last for approx. 30 days.

In the event of a power failure, the battery back-up system will maintain program time, but will not show the display or run the pump.

**MAINTENANCE:**

Every 30 days check fittings and joints for leaks.

Every 6 months check pump internal tubing for signs of wear.

**WADE AUTOMATIC DOSING UNIT TROUBLE SHOOTING GUIDE.**

PROBLEM	POSSIBLE CAUSE	SUGGESTED ACTION
UNIT NOT WORKING	NO POWER TO UNIT  FUSE BLOWN	CHECK MAINS IS ON  SWITCH OFF POWER AND REMOVE FRONT COVER REPLACE FUSE, REPLACE COVER AND RESTORE SUPPLY
LIQUID NOT BEING USED *	INPUT / OUTPUT TUBES REVERSED  SUPPLY TUBE NOT SET LOW ENOUGH IN DRUM	CHECK THAT TUBE FROM LIQUID CONTAINER GOES TO THE SHORT TUBE PROTRUDING FROM THE BASE OF THE UNIT.  ADJUST TUBE
PUMP NOT LIFTING LIQUID FROM CONTAINER *	CONTAINER EMPTY  AIR BEING SUCKED IN ON INLET SIDE OF PUMP.  TUBE WITHIN PUMP WORN OR PUNCTURED	RE-FILL CONTAINER  CHECK PUMP CONNECTIONS  OBTAIN REPLACEMENT FROM WADE, & REFER TO FITTING INSTRUCTIONS ON SHEET 8.
UNABLE TO STOP LOW LEVEL ALARM SOUNDING.	AIR LOCK AT LIQUID SENSOR  UNIT SENSITIVITY REQUIRES ADJUSTMENT.	RE-FILL CONTAINER IF NEEDED AND PRIME TO ENSURE LIQUID IS PRESENT AT SENSOR.  FOLLOW 'LOW LEVEL ALARM FAULT FINDING' ON FOLLOWING PAGE.

\* **NOTE:** It may be necessary to prime the pump in these instances.

Prime the pump by pressing and holding the pump primer button until liquid appears on the outlet side of the pump.

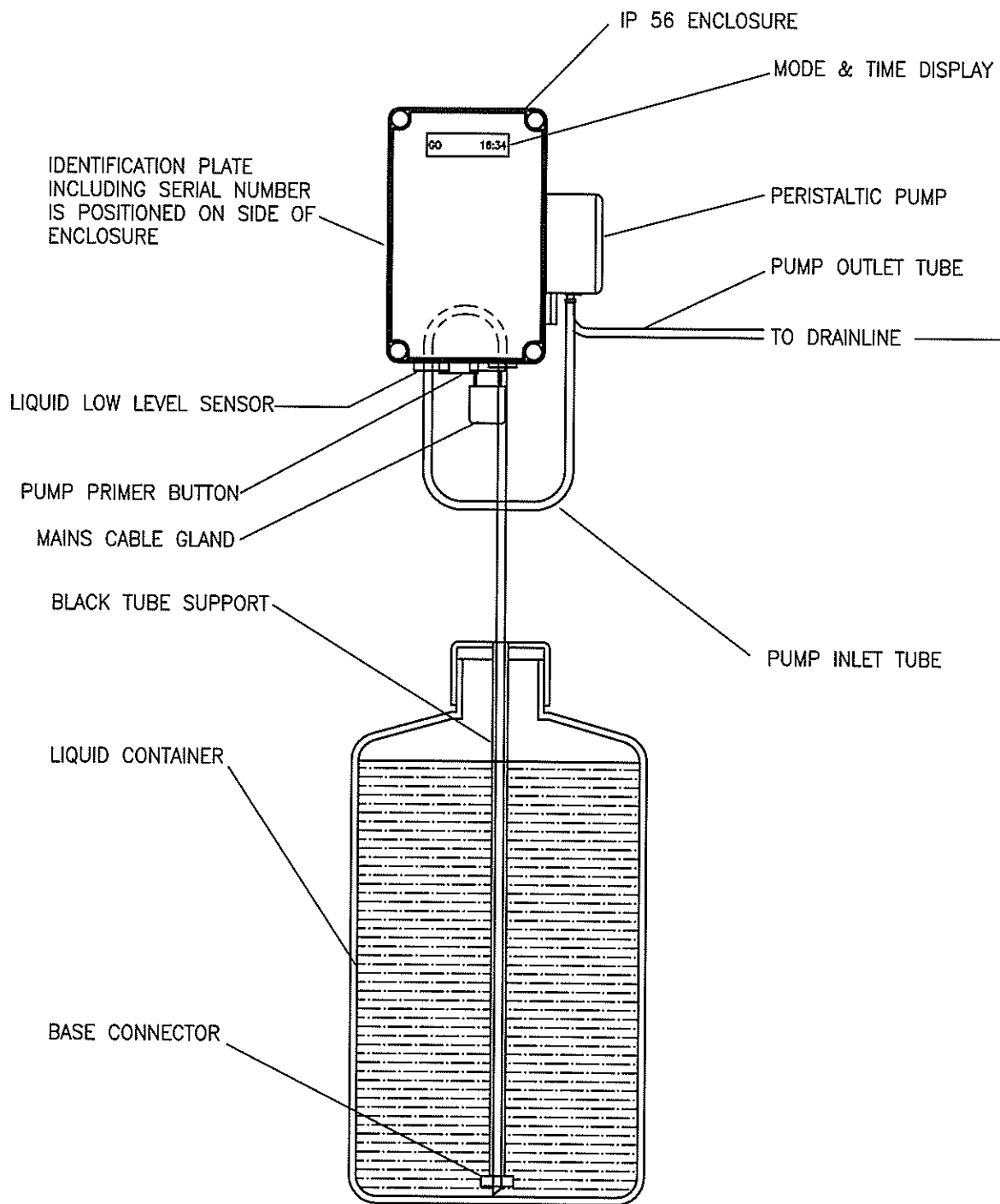
### **LOW LEVEL ALARM FAULT FINDING PROCEDURE.**

In the event that the ADU low level alarm flashes 'EMPTY' and audible alarm sounds when liquid is present, the following is the suggested order of checks to establish the cause.

1. Ensure that only Actimatic liquid, in the correct concentration, is being used. Other liquids may have a different conductivity and, therefore, not be recognised as being present at the sensor.
2. Check for air leaks in tubing, an air bubble present at the sensor would have the same effect as there being no liquid.
3. If both above are OK, then the next step is to remove the front cover and adjust the small potentiometer below the bottom right corner of the display, (next to the green connector block with two yellow wires connected to it, see illustration on sheet 7). Turn the small centre adjusting screw approximately one-eighth turn counter-clockwise using small electrical or jeweller's type screwdriver. Wait approx 5 seconds. Repeat until alarm ceases or the adjustment limit is reached. Ensure that liquid is present at the sensor during this adjustment procedure.
4. If, after attempting to adjust the unit, the alarm still sounds then this indicates a fault in either the wiring to the sensor or a fault on the circuit board. To determine which of these it may be, first disconnect the green connector block below the bottom right corner of the display (the one with two yellow wires). Two pins are now exposed on the circuit board, short these two pins with a screwdriver blade or other similar metallic object, taking care not to touch any other part of the circuit board. (Apart from the mains connections, all internal circuitry, including pump motor, is 12V DC). Hold this blade in position and after approx. 5 seconds the alarm should stop. If alarm stops then fault is in wiring to sensor, see step 5, if not then fault is in circuit board and unit will require repair / replacement.
5. If previous tests indicate a fault in the sensor wiring then, if possible, check the wiring connections at both ends. Ensure that, where wiring is attached at each end, the outer insulation is not clamped therefore breaking the circuit. If wiring appears to be connected correctly but alarm will not stop, then unit will need to be returned for repair / replacement.


In the event that the unit should require repair/replacement then the unit will still function and dose correctly with the audible alarm disabled. To disable the alarm disconnect the RED and BLACK wires from the connector on the circuit board marked 'ALARM'. If acceptable the unit can be left to operate in this state until it is either repaired or a replacement unit arrives.

If the low level alarm fails to flash 'EMPTY' or audible alarm does not sound then ensure that the tubing where it enters the ADU has no liquid present and follow above instructions but turn the potentiometer adjusting screw clockwise by one-eighth turn until display flashes 'EMPTY' or and/or alarm sounds.

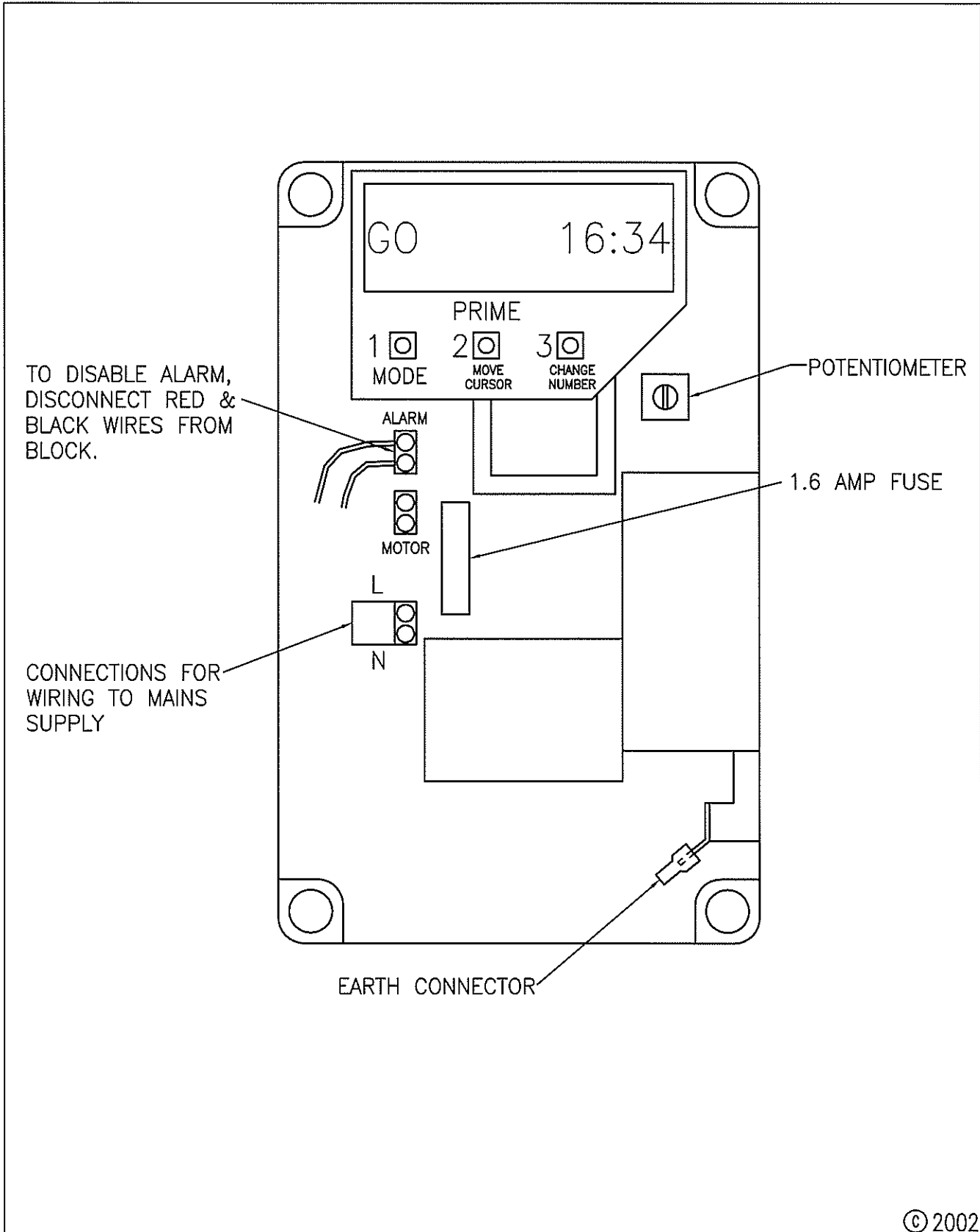


**NOTE!** CONNECT TO MAINS POWER SUPPLY VIA ISOLATOR.  
MUST BE CONNECTED BY A QUALIFIED ELECTRICIAN.


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ISS. No.	2	3		DRAWN	DC	19-9-02	TITLE AUTOMATIC DOSING UNIT INSTALLATION DIAGRAM	
C.N. No.	3262	3976		CHECKED				
DATE	04.11.03	13/5/08		APPRVD.				
		MATERIAL				SCALE NTS	DRG. No. <b>50910094</b> SHEET 6 OF 8	ISSUE No. 3

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ISS. No.	2	3		DRAWN	DC	20-9-02	TITLE AUTOMATIC DOSING UNIT INTERNAL DIAGRAM	
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