

GAA

GasApps Australia P/L

Capillary Timer

Box

#750035

Manual

Prepared By GasApps Australia P/L 5/8/05.

Contents

- General Description
- General Specifications
- Installation Instructions
- Drawings
- Warranty

General Description

The Capillary Timer Box is suitable for the dispensing of BOC Envirosol products. These products include Deodourgas, Ripegas and Bactigas. Other dispensing systems i.e. the Multitimer system c/w solenoid valves can be used to dispense Pestigas, Deodourgas, and Bactigas in certain cases, however the MKIII Spacecontroller is the only BOC approved dispensing equipment for use with Insectigas. Although limited approval is given to the use of solenoid valves for the automatic dispensing of Envirosols other than Insectigas, it is essential that only approved solenoid valves and timers are used.

WARNING !

DO NOT USE
WITH PURE
ETHYLENE GAS

General Specifications

Control Box

Dimensions	: 110mm wide x 110mm high x 88mm deep
Weight	: 1.05kg.
Power Requirements	: 240VAC 50Hz
Protection	: IP55
Timer	: On/OFF Cycling, Electronic (range 0.1s – 100days)
Temperature Range	: 0°C to +30°C
Capillary Dose Rate	: 0.4 g/s (grams per second)
Solenoid	: EnviroSol Compatible 240VAC x 6W
Pressure Rating	: 5000kPa
Mounting	: Cylinder Mount Only

Installation Instructions

Mounting the Control Box

The Control Box is a weatherproof system, however it is recommended that the system be installed undercover and in a well ventilated secured area. This unit is designed to mount directly onto a cylinder, which should be secured to a wall using a cylinder strap [No. 730008].

All Envirosol supply cylinders must be located out of direct sunlight and away from other sources of heat to ensure that the temperature of equipment and cylinders does not rise above 30°C, otherwise, design pressure of equipment will be exceeded.

Power Supply

The 240VAC power supply should be plugged into a 240VAC 10AMP, 50Hz power-outlet socket situated away from sunlight and rain.

WARNING

Always disconnect the mains power supply before removing the front cover.

Adjusting The Times

The Asymmetrical **Cycle Timer** controls the length of time in which the solenoid valves are ON and OFF. Both the ON and OFF times can be adjusted independently from 0.1 second to 100 days. The top two wheels marked “**(t1) WORK**” are used to adjust the length of time in which the solenoid valves will switch ON (energise) for. The bottom two wheels marked “**(t2) PAUSE**” are used to adjust the length of time in which the solenoid valves will switch OFF (de-energise) for.

It is important not to cycle the solenoid too frequently as both the timer and valve have a limited life in terms of cycles. It is recommended to program the ON time for 1 second or more and the OFF time for 5 seconds or more.

The diagram shows the TM PL timer control box with four wheels for adjusting times. The top two wheels are labeled (t1) WORK ON and the bottom two are labeled (t2) PAUSE OFF. Each wheel has a scale from 1 to 10. The top wheel of each pair has a scale from 10m to 100d. The bottom wheel of each pair has a scale from 1 to 10. The top wheel of the (t1) WORK ON pair is labeled ON and the bottom wheel is labeled (t1) WORK. The top wheel of the (t2) PAUSE OFF pair is labeled ON and the bottom wheel is labeled (t2) PAUSE. The top wheel of the (t2) PAUSE OFF pair is labeled ON and the bottom wheel is labeled (t2) PAUSE. The top wheel of the (t1) WORK ON pair is labeled ON and the bottom wheel is labeled (t1) WORK. The top wheel of the (t2) PAUSE OFF pair is labeled ON and the bottom wheel is labeled (t2) PAUSE.

Time Ranges	
1s	0.1...1s
10s	1...10s
1m	6s...1min
10m	1...10min
1h	6min...1h
10h	1...10h
1d	0.1...1day
10d	1...10days
30d	3...30days
100d	10...100days

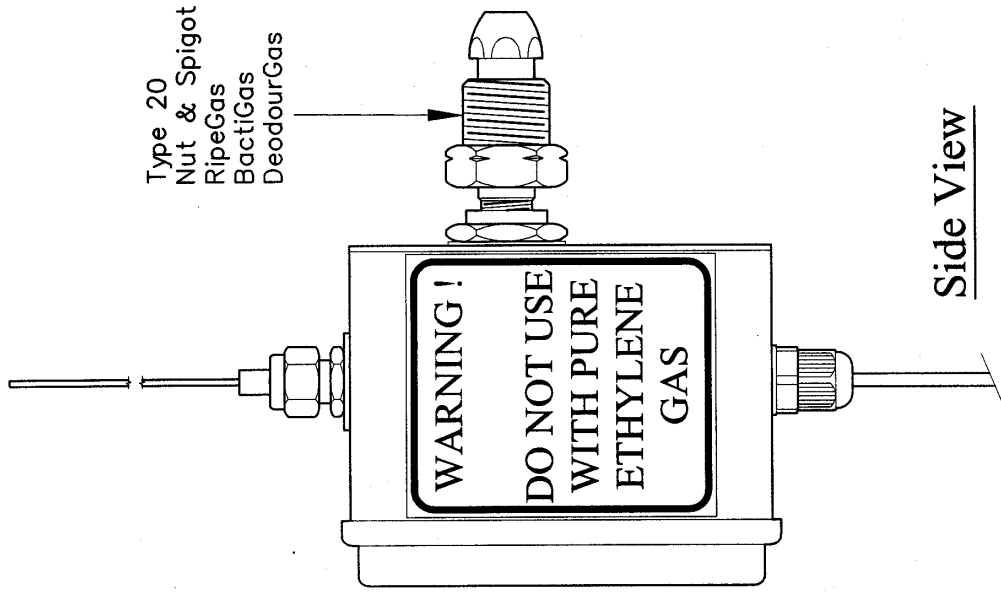
Setting Examples For Cycle Timer

Required Time	Required Wheel Settings			
	Solenoid ON Time		Solenoid OFF Time	
	RANGE (t1 work)		RANGE (t2 pause)	
	top Wheel 1	second Wheel 2	third Wheel 3	fourth Wheel 4
8 seconds ON	1s	8	0.1h	3
18 minutes OFF				
2 seconds ON	1s	2	60s	8
8 minutes OFF				
12 seconds ON	6s	2	60s	2
2 minutes OFF				
0.5 seconds ON	0.1s	5	6s	5
30 seconds OFF				
1 minute ON	60s	1	1h	2
2 hours OFF				

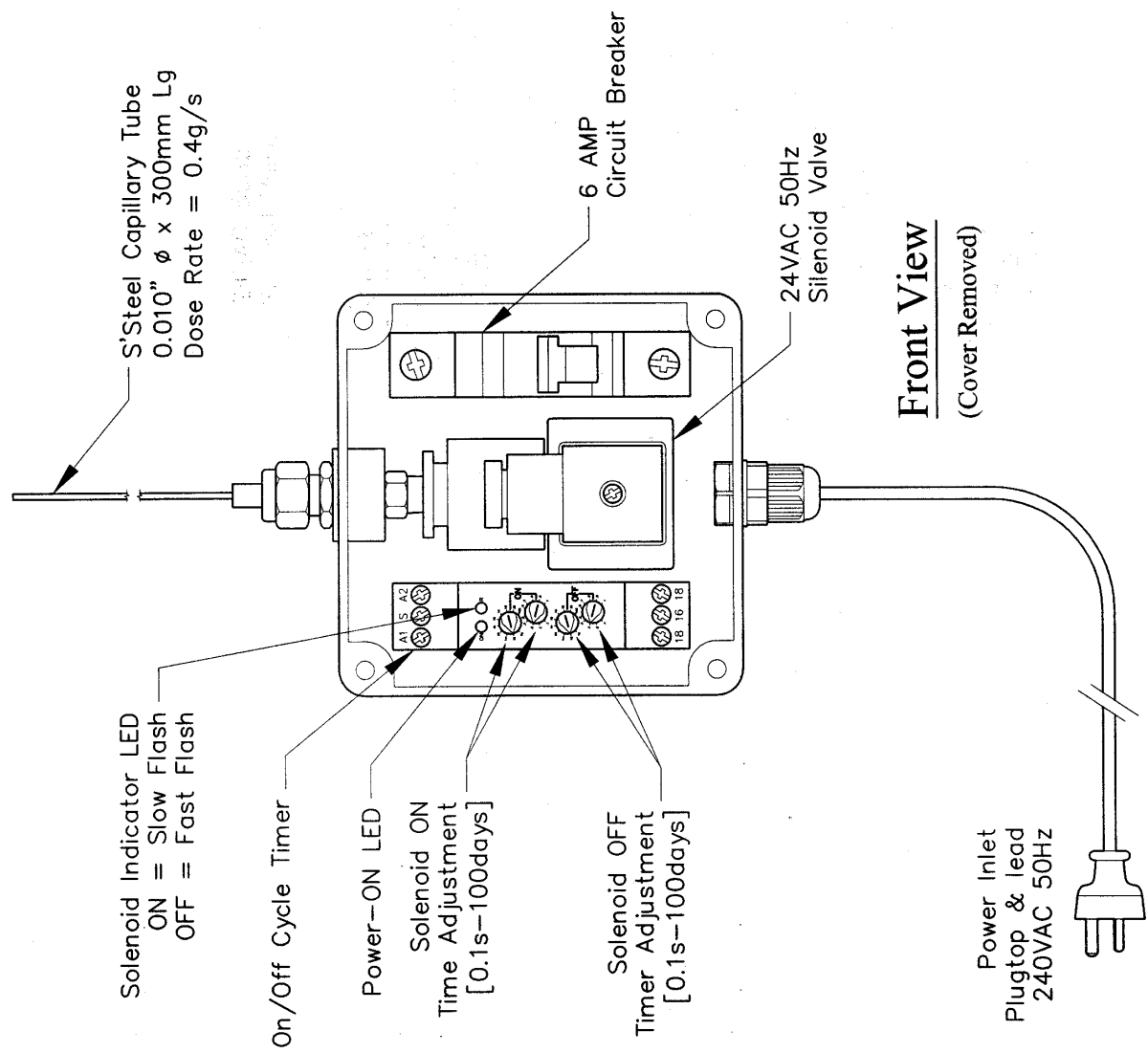
Capillary Nozzle

This tube is 300 mm long and has an inside diameter of 0.010” inches [0.25mm]. It is important to keep this nozzle/tube dirt-free, as it’s almost impossible to clean if blocked. There are two filters fitted to this unit, one in the inlet spigot and one in the gas outlet fitting. This nozzle/tube has a flow capacity of 0.4g/s if running full time. The throughput of this nozzle can be reduced even further by adjusting the internal timer.





Side View



Front View
(Cover Removed)

Capillary Timer Box

Part No: 730035 Rev B

WARRANTY

GasApps Australia Pty Ltd warrants the design of the Pulse Dispenser System for a period of 12 months from the date of invoice. GasApps will not accept any liability whatsoever for any alterations or modifications, made to any part of the equipment supplied, without written and signed authorisation from GasApps Australia Pty Ltd.

This Manual is supplied for the guidance of operators to enable them to understand and operate the equipment in accordance with its design specifications.

The long-term operation of the components and the unit as a whole depends highly on maintenance procedures and gas quality. This is solely dependent on the operator or buyer.

GasApps Australia Pty Ltd will not accept any liability for equipment failure due to poor quality gas and lack of maintenance.

Installation of electrical and gas connections must be made in accordance with BOC and GasApps specifications.

GasApps Australia Pty Ltd accepts no liability whatsoever for the consequences of any actions by persons other than GAA employees, which are not in accordance with the procedures set out in this Manual