

DEW HEATER CONTROLLER

www.awrtech.co.uk

DESCRIPTION

Connect this unit to nominal 12 Volt Power source (+ve to CENTRE) capable of supplying peak currents in excess of the total of the dew heater strips. The comprehensive range of measurements and indications will tell you the condition of the input, the output and the heater strip. The switch steps through the output power settings in an eleven step cycle. The 0% setting has the output LED OFF when the heater strip is connected (and the input is within working range). The Input LED is near the input cable and the Output LED is near the output sockets.

OPERATION

This product allows you to attach any standard Dew Heater up to the maximum wattage range suitable. It assumes the voltage rating is for 12 VOLT and measures the 100% power rating on the fly. It does not have to be dialled in. The push button control nudges the output to the next higher level, 0% to 100% in 10% steps, calibrated in percent of full power, and shows you the setting by the number of flashes. Eleven presses of the switch will take you back to zero. If you carry out power versus temperature rise experiments then you can dial in the exact temperature rise you need. Output of 0% for whatever reason has the OUTPUT LED OFF.

INPUT LED	OUTPUT LED	MEANING
GREEN		Input Working properly
	GREEN	Output Controlled
RED		Voltage out of range
	OFF	0% supplied
	RED	Open circuit output or Output Uncontrolled. Check Battery
RED FLASHING	RED FLASHING	Input polarity reversed, Output at FULL POWER
RED / GREEN alternating		Input power supply is drooping under load
	RED / GREEN alternating	Output Controlled then uncontrolled. Battery voltage too low.

The internal microprocessor keeps an eye on the voltage and current. The Input Voltage lamp will go RED if above 15V or below 11.0V when drawing power, at which point a lead-acid battery is nearly discharged. At the low input, DEWI avoids giving the battery any further discharge (and stopping any damage) by turning OFF the heater current and the OUTPUT LED OFF. In normal use the Output Monitor lamp is GREEN but will indicate RED if the output is uncontrolled or open circuit, or above the 60 Watt rating (possibly short circuit). The uncontrolled output can occur if you require high output but the input voltage is low so it cannot give the % output you have dialed in. A reversed battery

connection will apply full power to the heater but both lamps will be FLASHING RED indicating REVERSE INPUT FAULT. In this condition the output is Uncontrolled but at FULL POWER. The LED indications allow you to investigate properly, before a fuse blows or your image is spoiled by a loose or broken wire connection

The power circuit uses highly efficient PWM technology by microprocessor and so generates very little heat itself, resulting in a small but powerful unit. There are no batteries and as a bonus the circuits are fully protected from reverse polarity and do not emit RF interference to CCD cameras and other equipment. Because of the input voltage state monitoring it will take care of your battery or Power Tank and will not let it go completely flat.

Look after your battery by checking the LEDS now and again!

SPECIFICATION

INPUT	10 to 18 Volts DC up to 5 Amps
INPUT LEAD	Cigar plug, length 2 metres
FUSE	5 Amp fuse in Cigar plug
OUTPUT CONNECTOR	2 off RCA PHONO sockets
MAX POWER	Max 60 Watts (5 amps at 12 Volts)
OUTPUT CONTROL	0% to 100% in 10% Steps
DEW HEATER STRIPS	Any combination up to 60 Watts total
INPUT LED	Indicates OK, Reversed or voltage out of limits
OUTPUT LED	Indicates OK, open circuit, not powered
CE marked	

ACCESSORIES

PHONO/ADAP	PHONO output splitter, gold plated contacts. For an extra strip.
PSU3/DEW	Mains adapter 12V DC at 5 Amps with correct socket fitted.
DEW/XTN	2 metre Cigar extension lead at the power supply end fused 5 Amps.

UPDATES / FURTHER INFORMATION ON THE WEBSITE!

www.awrtech.co.uk

GUARANTEE

Units are guaranteed for 1 year from purchase against defective materials and assembly. Please keep an eye on the website for User Manual revisions.

In any query contact

alan@awrtech.co.uk

AWR Technology

The Old Bakehouse
Albert Road, DEAL, Kent CT14 9RD
01304 365918 +441304 365918

Manual V0.2 Feb 2009 part number 8060-09B