



# Magic Gadgets

## FLICKER DC OPERATING INSTRUCTIONS

PROVIDE ADEQUATE VENTILATION. *HEAT SINKS CAN GET VERY HOT DURING NORMAL OPERATION. USE EXTREME CAUTION IN AUTOMOBILES, ETC. AS SOME MATERIALS MAY MELT IF LEFT IN CONTACT.* USE ONLY AGC 10 FAST BLOW TYPE FUSES. INPUT RANGE 6.5 - 28 VOLTS DC. OUTPUT 12V (APPX), 10 AMPS AVERAGE CONSTANT LOAD. WIRING CODE AT TERMINAL BLOCK (BEST TO USE LUGS CRIMPED TO WIRES): I = POWER SOURCE POSITIVE INPUT, O = POSITIVE LOAD OUTPUT. BOTH REQUIRE HEAVY GAUGE WIRE SUCH AS # 10 STRANDED. G = GROUND REFERENCE (LIGHT GAUGE WIRE OK IF NOT IN LOAD CIRCUIT). VERY LONG RUNS MAY REQUIRE HEAVIER WIRE. CONNECT LOAD NEGATIVE (ALSO # 10 WIRE) DIRECTLY TO POWER SOURCE MINUS. POLARITY OF THE POWER INPUT IS IMPORTANT BUT REVERSE POLARITY WILL NOT DAMAGE THE UNIT; IT WILL JUST NOT OPERATE.

THE BLUE LED LAMP INDICATES POWER PRESENT AT INPUT. THE RED LED LAMP INDICATES ACTIVITY AT OUTPUT. THE POWER SWITCH TURNS THE UNIT ON/OFF. THE DIMMER CONTROL VARIES THE LAMP BRIGHTNESS SMOOTHLY FROM FULLY DIMMED (APPX. 1.5 VOLTS MAXIMUM) TO FULLY ON (APPX. 12 VOLTS MAXIMUM). DIMMER KNOB TRAVEL IS BASED ON INPUT VOLTAGE. THE SPEED CONTROL ADJUSTS THE FLICKER SPEED. THE DAMPING CONTROL ADJUSTS FLICKER SMOOTHNESS.

AS A CONTROL STARTING POINT FOR SETUP SET DAMPING FULLY CCW (COUNTERCLOCKWISE), DIMMER CONTROL FULLY CW, SPEED CONTROL FULLY CW. TURN SPEED SLOWLY CCW UNTIL FLICKER IS SEEN AT OUTPUT. SLIGHTLY DIMMING THE LAMP WILL MAXIMIZE THE FLICKER EFFECT. DAMPING WILL SMOOTH (MINIMIZE) THE FLICKER EFFECT AND TOO HIGH (CW) A DAMPING SETTING MAY NEUTRALIZE THE FLICKER EFFECT ALTOGETHER. THESE CONTROLS ARE SOMEWHAT INTERACTIVE AND SHOULD BE ADJUSTED SLOWLY AS THE EFFECT IS OBSERVED FOR A PERIOD OF TIME BEFORE MAKING FURTHER ADJUSTMENT.

OPERATING TIME WITH ANY BATTERY WILL DEPEND ON BATTERY TYPE AND CONDITION. POWER IS BEING CONSUMED EVEN WHEN THE DIMMER CONTROL KNOB IS TURNED ALL THE WAY DOWN AND THE LAMP APPEARS EXTINGUISHED.

### TYPICAL APPLICATION

