Instructions for use:

The Multi Watt Nav Light system is designed to supply your scale model with the ultimate in lighting essentials. There are 3) 1-3 Watt strobe outputs, 3) 1 watt landing light outputs, 2 each, 1 watt red/ green wingtip light outputs, 5 additional 1 watt fixed lighting outputs and 4 Standard High Output Led ports for low level lighting, ie: (cockpit lighting). The controller comes with a 3 CFM cooling fan and 3) 5 amp LDO regulators.

Programming Features include: 2 separate strobe rate outputs, fully adjustable thru the 2 trimmer pots, one rx input port usually connected to the landing gear receiver output via a "Y" connector to control the on/off feature of the landing lights. One programmable servo output connected to the input with it's own directional and ATV output controls (fully programmable). This feature is useful for lowering retractable landing lights with a servo or valve/servo/piston combo.
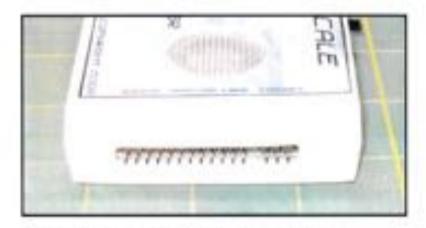The Nav light system is designed to operate from 1) 2200 MAH 2 cell (7.2volt) Li Po battery. A 12amp Molex connector M/F pair is included with the system. The separate female pigtai is for charging the batteries.

READ ALL INSTRUCTIONS BEFORE CONNECTING ANY WIRES TO THE CONTROLLER!!!

Controller Connections:

Each set of High Watt lighting connector pins (right side of controller) are polarized with the positive (colored wire) on the upper pin with the (white) negative terminal on the lower pin of each set. The port outputs are as follows:

RIGHT SIDE OF CONTROLLER:

Each port is a pair of vertically aligned pins
(positive/colored lead goes on top, ground/white lead goes on bottom)
Ports 1-4: 1 watt wingtip lighting (this port is for red and green lights only)
Ports 5-9: 1 watt fixed white lighting (always on)
Ports 10-12: 1 watt landing lights (enabled using retract input programming)

3 Ports on far right: 1-3 watt strobe lights (adjustable timing using the 2 adjust pots)

RIGHT SIDE OF CONTROLLER:

Left Port: The first set of 6 pins on the left is the RX input and RX output ports. The first set of 3 pins is the RX input with the signal lead being the 3rd pin. (orange, yellow or white) The second set of 3 pins is the RX output pins signal lead is again the 3rd pin in the set.

Right Port: These are the standard power lighting ports. There are 4) 2 pin set ports. The positive (non-white lead) is on the left of each set of 2 pins. *These ports are for standard led lighting and MUST NEVER be used for the HIGH 1 watt leds. DAMAGE WILL OCCUR IF THE HIGH WATT LEDS ARE PLUGGED INTO THESE PORTS!!!*

TOP EDGE OF CONTROLLER:

These are the programming block pins. Pins set #1 is on the right when viewing the controller from this end (the programming block is plugged into pin set #3. This set of pins is for programming the retract switch RX IN for the landing lights. Pin set #2 (middle 2 pins) is for programming the ATVs on the SERVO OUT. Pin set#3 is the program lock pin. Install the block here to prevent programming changes.

Programming the landing light digital switch:

Plug a male to male connector into the RX IN port, the opposite end into a "Y" from the retract channel on the receiver with the signal lead (white, yellow or orange) facing down (3rd pin to right on the top set of 3 pins when viewed from side). Place the shorting block onto pin set#1. Plug in the lighting controller. The green programming light should now be flashing. Press and release sw2 on

...ie controller. The light should now be blinking red slowly. Turn on the transmitter and then the receiver. Move the retract switch to the "UP" position and then press sw1 on the controller. The red light will go out and the green light come on briefly and then go out. The red light will now be blinking more quickly. Move the retract switch to the "DOWN" position and then press sw2. The red light will go out and the green light come on briefly once again. Once programming is complete for the retract switch, the green light will go out and the red light will come back on blinking quickly. If your are going to have an output servo, press sw2 and proceed to the output servo setup programming below. If no servo is being used, press sw1 to exit the switch setup.

If you pressed sw1 the green light will now be blinking quickly. If your done programming, remove the shorting block and plug the block into the programming lock pin set. You may now make adjust the strobe outputs using the strobe instructions.

Programming the output servo ATVs:

The programming light will now be on steady red. Adjust the trimmer pot in either direction to adjust the ATV on the output servo then press sw1 to set the first ATV endpoint. The red light will go out and the green light will come on briefly. You may now set the second ATV using the adjust pot. Turn the pot to the second ATV endpoint and press sw2. The red light will go out again and the green light will come on briefly and go out. This completes the output servo programming. Move the shorting block to the programming lock pin set#3. Cycle the power on the receiver and the lighting controller to complete setup. You may now proceed to the strobe adjust section below.

Adjusting the strobe rate:

NOTE:***Turn both trimmer pots all the way to the right until they stop before connecting the strobes.***

Begin by turning the left (strobe pot) counter-clockwise until the strobe starts to blink slightly, the farther the left pot is turned to the right, the longer the strobe light stays on. Now, gradually turn the right pot counter-clockwise until the lights start strobing. The right pot controls the duration the lights stay off between pulses. Fine turn each pot until the desired effect is achieved. *NOTE: NEVER TURN BOTH STROBE ADJUST POTS ALL THE WAY COUNTER-CLOCKWISE, THUS LEAVING THE LIGHTS ALL THE WAY ON. The strobe ports are VERY HIGH OUTPUT PORTS (1+ amps each), designed only for strobes. If left on, the LED's will overheat and fail VERY quickly!!!*

"ALWAYS" KEEP THE CONTROLLER AT LEAST 4-6" AWAY FROM THE RECEIVER and ANTENNA LEADS. FAILURE TO DO SO MAY CAUSE INTERFERENCE.

If you have any questions or need help setting up your Multi Watt lighting system. Please contact us using the information below.

Thank You,

Dan Gill

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