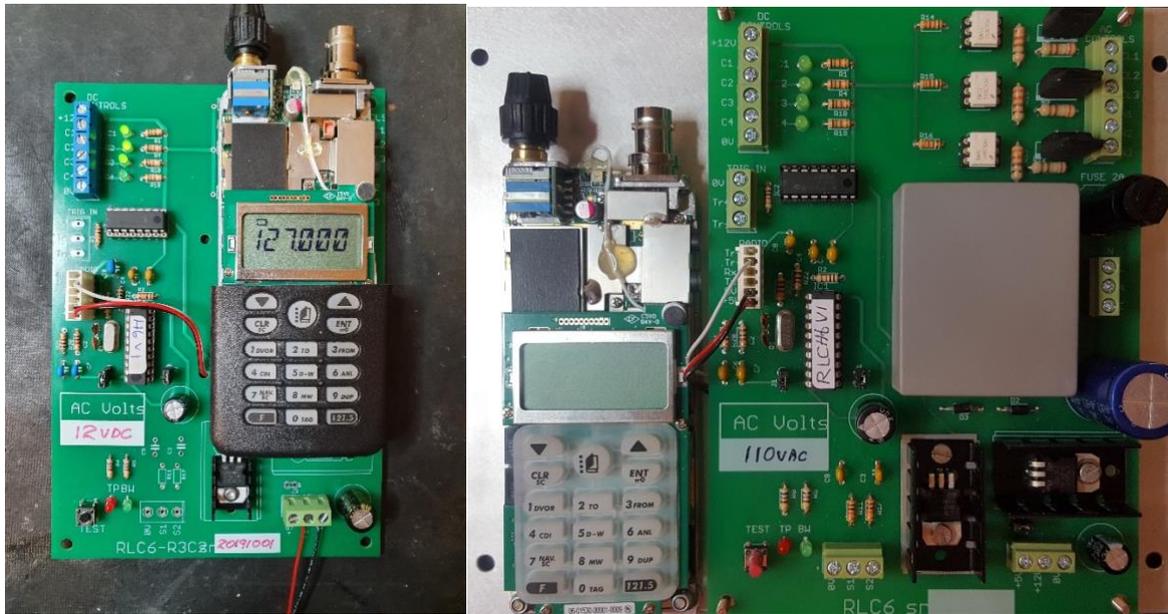


# RUNWAY LIGHTING CONTROLLER

With today's high energy costs, it pays to only switch runway lights on when they are needed. For unmanned night time operations, this requires a device to activate the lights on pilot command. In certain cases, eg PAPI approach lights and helpads, a system of selectable high, medium and dim light levels is required.



RLC 12VDC

RLC 110/220VAC

PJ Aviation has been manufacturing runway lighting controllers for over 12 years, as an alternative to expensive imported and unsophisticated units. Our Runway Lighting Controller comprises a digitally tuned airband receiver and circuit board with micro-controller on a chassis plate. A short antenna cable, bulkhead connector and rubber antenna completes the delivery.

The controller is designed to recognize a sequence of carrier wave pulses initiated by an incoming aircraft and to send a command to the airfield lighting control panel, to switch the runway lights on, control brightness, etc. The number of pulses and the lighting ON time is preset according to the specification FAA L 854.

---

## Receiver

The system uses a RHP-530 airband programmable synthesized receiver with keypad and LCD to enable user frequency selection. The RHP-530 has ICASA approval. A squelch control allows the user to ensure only the strongest signals are utilized when channels are shared by other nearby users. If power is lost, no receiver setup is lost.

---

## Controller

A micro-controller monitors the receiver logic output and checks the number of carrier wave pulses, pulse length and length of the pulse sequence. There are 3 accepted sequences, one with 3 pulses, another 5 pulses and finally 7 pulses. These all have to be received within 8

seconds. The successful completion of any sequence will activate a solid state AC power switch connected to the client's lighting distribution panel. The three different outputs may correspond for example to Dim, Medium and Bright on a helipad. Any new pulse sequence after 8 seconds, will enable a new output function. The output will automatically switch off after 15 or 30 minutes. A manual pushbutton on the circuit board allows testing and reset. LEDs on the circuit board indicate the status at any time.

A 12VDC version of the controller provides low current transistor outputs. Where one output is required for simple on-off switching, a single relay can be fitted onto the circuit board to isolate the load from the electronics.

## Power Supply

The circuit board includes a 110 or 220vac 0,1w power supply. As an option, the system could be operated from a nominal 12vdc supply.