



# ARCAL

DIGITAL RADIO CONTROL

Allows pilots to activate and manage the intensity of airfield lights on approach. Ideal for unmanned airfields and control towers.

### Compliance with Standards

- FAA:** L-854 AC 150/5345-49 (Current Edition)  
ETL Certified
- ICAO:** Aerodrome Design Manual, Part 5 para. 3.4.6
- FCC:** 47 CFR, Part 15:2007 (Class A)
- Canada:** TP 312 - Aerodromes Standards and Recommended Practices

The Carmanah ARCAL system provides air-to-ground (Type I) radio control of Carmanah solar airfield products. Pilots can remotely activate and change intensities of our products by simply keying the microphone button of their standard VHF communication transmitter.

Airport operators benefit from maximum runway usage while minimizing energy expenditure and increasing the performance capabilities of our solar airfield products.

- Designed for outdoor, unattended all-weather operation
- Eliminates costly trenching and installation of control lines to remote facilities
- No special airborne equipment or adapters required
- Lights are activated remotely from the air and remain on at the selected intensity for a period of 15 minutes. Additional timer settings of 1, 30, 45 and 60 minutes are available
- Receiver may be programmed to operate on any frequency in the specified VHF range between 118.0 to 136.0 MHz
- Selectable decoder enable/disable prevents multiple relay operation during normal daytime operations
- Optional Remote Maintenance Module (RMM) available
- Configurable to Type J or Type K ARCAL via DIP switch selection (Canada)



### SPECIFICATIONS

Receiver	Single-conversion superheterodyne design. Adjustable sensitivity from 1 to 30 microvolts permitting a control range of 1.6 to 32 km (1 to 20 miles).		
Commands	Three intensity settings controlled by a series of 3, 5 or 7 microphone button clicks from the pilot		
Power	Input	Voltage	Maximum VA
		12 VDC	11 <sup>1</sup>
		120 VAC	15 <sup>2</sup>
		240 VAC	18 <sup>2</sup>
	<sup>1</sup> Typical standby power is 4 VA at 12 VDC for calculating solar power autonomy.		
	<sup>2</sup> 120 or 240 VAC, ±10%,		
	Output:	3 A relay contact rating, 0 to 3 amps	
Frequency	118.0 to 136.0 MHz VHF. Digital control electronics allow operating frequency to be easily reprogrammed by the user.		
Construction	Nema 4 (indoor/outdoor) enclosure		
	Built-in speaker with volume control		
	Omnidirectional ground-plane antenna with an additional 50 feet of cable for remote mounting		
Operating Temperature	-55 to 55 °C (-67 to 131 °F)		
Humidity	0 to 100%		
Altitude	0 to 2000 m (0 to 6,600 ft)		
Dimensions	305 x 254 x 203 mm (12 x 10 x 8 in)		
Weight	9.5 kg (21 lbs)		

### CONFIGURATION

MODEL	POWER ▼	ANTENNA ▼
ARCAL	12 VDC 120 VAC 240 VAC	TOP MOUNT REMOTE MOUNT

### REPRESENTED IN YOUR REGION BY:



The management system governing the manufacture of this product is ISO 9001:2008 certified.

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