

**Instructions for use**

Connect 14V (minimum) to 20V (maximum) to the device using the supplied lead (white striped core is +positive). The green LED will now light.

The precision 10V will now be present on the red (positive) and black (negative) 4mm binding posts. The output voltage will fall slightly if the load exceeds 0.1mA, the maximum current you may draw is 10mA.

**Notes**

- Removal of the hologram sticker on the rear of the 389-2, or disassembly of the unit will void calibration and warranty.
- The case, 0V output (black 4mm binding post) and the sleeve of the DC input jack are all the same potential.
- Best results will be obtained when the unit is at the calibration temperature (usually 20C +/- 1C), powered from a clean 15V DC and allowed to stabilise for at least 15 minutes.
- The reference is protected against reverse polarity by an internal blocking diode.
- No damage will occur if the outputs are shorted together, however, the output voltage will need several minutes to settle when the short is removed (due to internal heating of the reference IC).

**Electrical & connections**

Input:	14V to 20V, DC @ 20mA (maximum)
Connector:	2.1mm centre +ve barrel jack socket, supplied with 1.8M DC lead (bare tails)

Output:	10V +/- 0.003% at maximum load of 0.1mA (100Kohm load) @ 20C +/- 1C
Maximum Load:	10mA
Temp Coeff:	2.5ppm per °C
Operating:	5-80% RH, 10-40°C*, sea level to 2KM
Connector(s):	2x 4mm binding posts (RED and BLACK)

*\*calibration is only guaranteed at 20C +/- 1C*

**Physical**

Dimensions:	(L) 70mm x (W) 64mm x (H) 31mm
Weight:	0.15 Kg
Construction:	Aluminium extrusion with stainless steel front and rear panels

**Calibration & adjustment**

Calibration & adjustment carried out during manufacture using procedure: **PROC389-2\_1**  
Each 389-2 is aged for 200+ hours during manufacture.

**Warranty**

24 months return-to-base warranty. Calibration is warrantied for 12 months.

**Regulatory**

Meets all requirements for RoHS and CE.

Made in the UK by Electron Plus Design Limited  
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