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IPC Irwin Dual Rail Regulated Power Supply

Part Number IPC-0572-P

User Instructions



INTRODUCTION.

The IPC Irwin Dual Rail Regulated Power Supply has been designed for use with electronic modules, transistors, amplifiers and many more applications, supplying both smoothed and regulated DC output voltages with a ripple typically less than 50mV. The power supply provides both positive and negative DC output voltages (dual rail), with the added benefit that the output voltages are protected against both overload and short-circuit by an internal electronic regulator.

DESCRIPTION.

The Dual Rail Regulated Power Supply can be selected via a rotary switch to provide dual rail DC output voltages ranging from +/- 5V, 6V, 9V, 12V and 15V, all with a current of up to 1 Amp. For example, when set to 15V the power supply will provide +15VDC (red socket) with respect to zero (blue socket) and -15VDC (black socket) with respect to zero (blue socket), therefore also allowing a supply of 30VDC across the red and black sockets. Both positive and negative output voltages may be drawn simultaneously each with a maximum current of 1 Amp.

Mounted on the rear of the unit is an illuminated (green) mains on/off switch and a mains input IEC socket containing an in-built protection fuse. Normally the unit is supplied with a separate UK plug to IEC plug 2.0m mains lead. The power supply itself is housed in a robust metal case with a durable powder coated finish.

IPC Irwin

Holker School, Cark in Cartmel, Grange over Sands, Cumbria LA11 7PQ, United Kingdom

Call: 015395 58555 **Email:** sales@ipcirwin.com



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INSTRUCTIONS.

To operate the power supply simply connect the unit to the mains supply, set the required DC dual rail voltage and switch the unit on using the green mains switch at the rear. Then using the red, blue and black 4mm sockets and a set of 4mm standard test leads connect the output voltages to the circuit or load.

Should the mains on/off switch fail to illuminate, then first check the F1A fuse at the rear of the unit (located in the mains IEC socket), if this is found to be intact then check the 5A fuse in the mains plug (if UK plug).

SPECIFICATIONS.

Electrical Supply	= 220-240VAC, 50-60Hz
Fuse Ratings	= IEC Socket Inlet: F1A (Fast Blow), UK Mains Plug: 5A
Dimensions	= 175 x 200 x 85mm overall
Mass	= 2.3kg
Voltage Range	= +/- 5V, 6V, 9V, 12V and 15V, (smoothed and regulated)
Max. Output Current	= 1 Amp (overload and short-circuit protected)

Please Note: This Equipment is for Education, Training, or research Purposes Only.

IMPORTANT - ELECTRICAL SAFETY NOTICE

Only connect the product to single phase mains electrical supply (with neutral nominally at each potential), also check that the supply voltage and frequency are within the products stated range. Before connecting to the mains electrical supply, examine the information on the products rating label (the value of the fuse fitted to the product is also stated), ensure that the mains plug or outlet circuit is fitted with an appropriate fuse of higher value.

WARNING: THIS PRODUCT MUST BE EARTHED

This product is designed for Electrical Safety Class 1.

If a mains lead is not fitted or supplied, connect the wires to a Standard UK, 3-pin plug as follows:-

Green/Yellow wire to the terminal marked: E (Earth) or coloured Green or Green/Yellow.

Brown wire to terminal marked: L (Live) or coloured Brown.

Blue wire to terminal marked: N (Neutral) or coloured Blue.

LIVE PARTS SHOULD NEVER BE EXPOSED UNLESS THE PRODUCT HAS BEEN SWITCHED OFF AND ISOLATED FROM THE MAINS ELECTRICITY SUPPLY.

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Declaration of Conformity (In Accordance with EN ISO 17050-1:2010).

Manufacturer: **IPC Irwin, Holker School, Cark-in-Cartmel, Grange-over-Sands, Cumbria, LA11 7PQ, United Kingdom.**

Product/Part No: **Dual Rail Regulated Power Supply (230V AC, 50Hz main voltage)/IPC-0572-P**

This conformity certificate approves the compliance of the product with the essential safety requirements of the following UK Standards and Regulations:

SI 2005 No.1803 General Product Safety Regulation (implements Directive 2001/95/EC).

SI 2016/1101 Electrical Equipment (Safety) Regulation (implements Directive 2014/35/EU.

EN 61010-1: 2010 Electrical Requirements for Laboratory Test & Measurement Equipment.

EN 61000-6-1: 2019 EMC, Generic Standards, Immunity for Residential, Commercial and Light Industrial Environments.

EN 61000-6-3: 2019 EMC, Generic Standards, Emission for Residential, Commercial and Light Industrial Environments.

SI 2012 No. 3032 Restriction on Hazardous Substances (RoHS) in Electrical and Electronic Equipment Regulation, (implements Directive 2011/65/EU).



Mark can be used only in the case of conformity assessment according to all relevant UK Standards and Regulations.

EU Declaration of Conformity (In accordance with European Parliament and Council Decision No: 768/2008/EC Annex III).

This conformity certificate approves the compliance of the product with the essential safety requirements of the following EC/EU Directives (Manufacturer, Product/Part No: as above).

2001/95/EU General Product Safety Directive.

2014/35/EU Low Voltage Directive (LVD).

2014/30/EU Electromagnetic Compatibility (EMC) Directive.

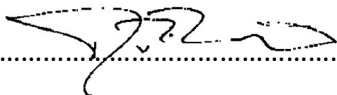
2011/65/EU Restriction on Hazardous Substances Directive (RoHS).

European harmonised Standards used for conformity assessment and declaration:

EN 61010-1: 2010 Electrical Requirements for Laboratory Test & Measurement Equipment.



Mark can be used only in the case of conformity assessment according to all relevant EC/EU Directives.

Dickon Knight (Director):  **Date of Issue: 24th May 2023.**

In the event of any correspondence concerning this product, please contact your supplying agent quoting the catalogue number and serial number shown on the apparatus rating label, together with the voltage and frequency of the mains electrical supply. This will help us to process your enquiry quickly. Any spare parts which may be required are supplied on the understanding that the replacement of those requiring the exposure of live electrical connections **will** be undertaken by an electrically qualified person.

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Thank you for choosing this IPC Irwin product, which has specifically been designed for education and we know it will bring you good service long into the future. This is just one product of a wide range of UK designed and manufactured products to enhance a STEM education. Please see www.ipcirwin.com website for more details on the products and service we provide to support teaching and learning in science and technology.

IPC Irwin also provide Portable Appliance Testers and a Calibration service, for more details please go to www.ipcirwin.com or call our sales and technical support line on 015395 58555.



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