

1044 Voltage and Current Calibrator

- **Source and Measure
Voltage & Current**
- **3 Voltage Ranges
0 – 20V**
- **3 Current Ranges
0 – 20mA**
- **0.05% Accuracy**



Introduction

The 1044 has been designed to offer solutions in many applications from the R&D lab to the process/service engineer, in fact anywhere an accurate and low cost calibrator is needed.

We have used our experience in designing instrumentation to bring you the most versatile and practical calibrator yet. The 1044 can source and measure voltage and current in one compact unit and the 0.05% accuracy is ideal for simulation and calibration in most engineering applications.

Being virtually foolproof in operation, the 1044 combines the advantages of digital accuracy with analog controls. Progressing from the familiar functions of our popular 1030 calibrator, the 1044 offers more ranges, better accuracy and the ability to measure as well as source, making it even more of an asset.

The large, easy to read LCD display shows the actual output, even when the connected load exceeds the specifications. This important feature eliminates the risk of large errors when connecting to unknown loads. The display even shows if the battery becomes low.

In the source mode, voltage up to 20V and current up to 20mA may be generated in three ranges. When in current source mode the 1044 has a high 24V compliance voltage which is ideal for powering process control loops.

In the measurement mode, the range and function can be easily selected with the measured input accurately shown on the LCD display, operating in a similar way to a multimeter.

The 1044 is housed in a pocket sized, rugged ABS case and comes with a leatherette carry case containing a compartment for storing test leads. Connections are by standard 4mm plugs or by simply clamping the wires under the terminals

A single 9V battery powers the unit or an external 12V D.C. power supply may be used which disconnects the internal battery.

Calibration certificates traceable to UK national standards and UKAS are also available.



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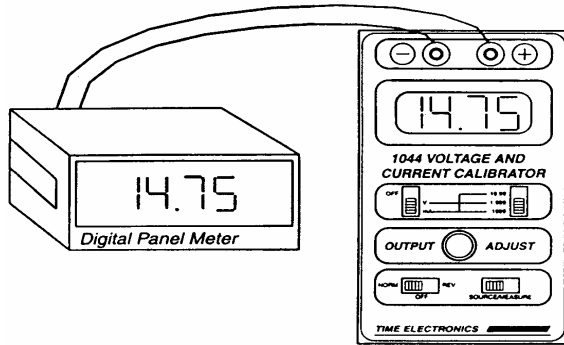
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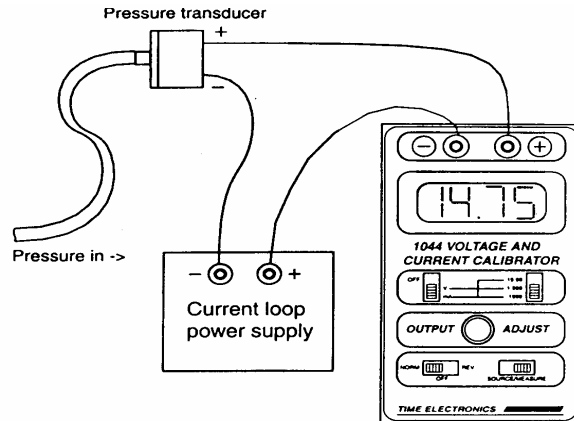
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Applications

In the source mode, the 1044 may be used to calibrate meters, thermocouple indicators, data loggers, for signal injection, semiconductor characterisation or as a backing off source.



In the measure mode, the 1044 may be used in the same way as a multimeter.



Specification

VOLTAGE SOURCE

Ranges: 0 – 200mV / 100uV resolution
 0 – 2V / 1mV resolution
 0 – 20V / 10mV resolution
Accuracy: 0.05% of full scale + 2 Counts
Output Current: 20mA Max
T / C & Noise: 150ppm/°C Noise <30ppm

VOLTAGE MEASURE

Ranges : 0 – 200mV / 100uV resolution
 0 – 2V / 1mV resolution
 0 – 20V / 10mV resolution
Accuracy : 0.05% of full scale + 2 Counts

CURRENT SOURCE

Ranges: 0 – 200uA / 100nA resolution
 0 – 2mA / 1uA resolution
 0 – 20mA / 10uA resolution
Accuracy : 0.05% of full scale + 3 Counts
Output Voltage: 24V Nominal
T / C & Noise: 200ppm/°C Noise <50ppm

CURRENT MEASURE

Ranges : 0 – 200uA / 100nA resolution
 0 – 2mA / 1uA resolution
 0 – 20mA / 10uA resolution
Accuracy : 0.05% of full scale + 3 Counts

Dimensions / Weight Length 142mm (5.6") x Width 78mm (2.9") x Height 50mm (2.0") 280(0.6lbs)
Optional Extras **External Power Unit:** 230/240V 50/60Hz mains power supply.
Calibration Certificate: traceable to N.P.L. and UKAS

Ordering Information

Description	Order Code
Voltage and Current Calibrator	1044
230/240V A.C. 50/60Hz Mains Power Supply	7643
N.P.L. Calibration Certificate	9156
UKAS Calibration Certificate	9133