



1044 Voltage and Current Calibrator

Time Electronics

Calibration, Test & Measurement

- **Source and Measure Current and Voltage**
- **3 Voltage Ranges: 0 – 20V**
- **3 Current Ranges: 0 – 20mA**
- **0.05% Accuracy**
- **Portable with carry case**



The **1044** is an accurate, low cost portable calibrator designed for use in a wide range of applications. High performance and ease of use make it suitable for test engineers, R&D, service, and calibration technicians.

Offering both versatility and practicality the 1044 can source and measure voltage and current. The 0.05% accuracy is ideal for simulation and calibration in most engineering applications.

The 1044 combines the advantages of digital accuracy with analog controls. Progressing from the familiar functions of the Time Electronics 1030 calibrator, the 1044 offers more ranges, better accuracy and the ability to measure as well as source.

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 also 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.

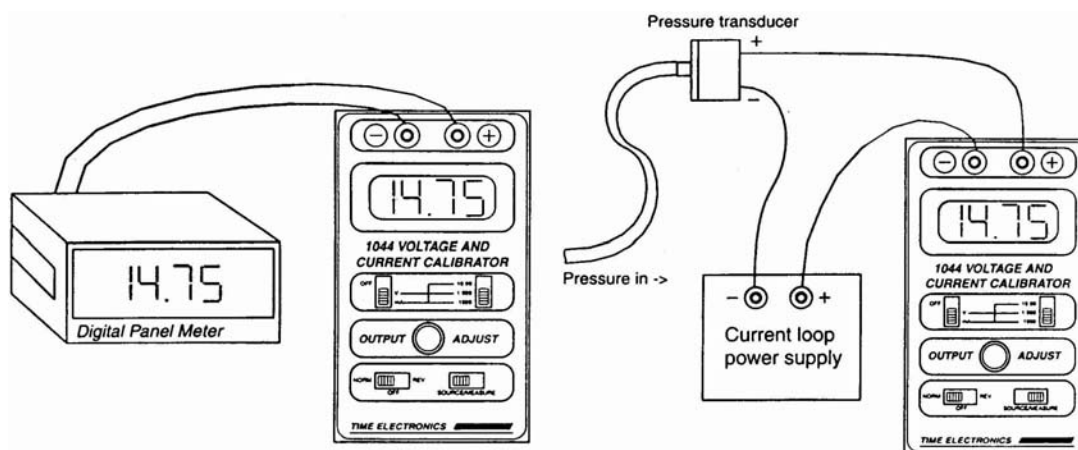
The 1044 is housed in a pocket sized, ABS case and comes with a leatherette carry case containing a compartment for storing test leads. Connections are by standard 4mm plugs or by simply clamping the wires under the terminals.

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

1044 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.



1044 Technical Specifications

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

General Specification

Dimensions:	142mm (5.6") x 78mm (2.9") x 50mm (2.0")
Weight:	0.28kg (0.6lbs)
Optional Extras:	External Power Unit: 230/240V 50/60Hz mains power supply Calibration Certificates – traceable to N.P.L. and UKAS

Ordering Information

Code	Description
1044	Voltage and Current Calibrator
7643	230V AC 50/60Hz Mains Power Supply
7652	110V Mains Power Supply
9156	Factory (NPL Traceable) Calibration Certificate
9133	UKAS Calibration Certificate (ISO 17025)

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.