

# DO4A

## Rugged, portable digital ohmmeter with digital calibration and 4,000 count

The DO4A is a practical instrument for low resistance measurement, ideal for use in the workshop, field or test facilities.

It is of rugged construction contained in an aluminium case with tilt handle. The DO4A has many advanced features, digital calibration and long scale length (4,000 count).

The rechargeable sealed lead acid battery means real portability with more than 14 hours continuous operation. Full measurement capability is maintained while charging. For ease of operation the control functions have been kept to a minimum and are clearly marked.

It is of course direct reading, warning LEDs illuminate when an open circuit lead condition is detected. Over range and low battery indication is also provided. The DO4A is supplied ready for immediate use with battery, mains cord and measuring leads, no extras are normally necessary.

The 15mm LCD provides easy viewing and the instrument can be used in any position for many and varied applications. The test leads provided have a length of 1m with spade tags for connection to the ohmmeter terminals.

They are terminated in combined current and potential probes that will accept conductor diameters up to 6mm.



### Key Features

- True 4 wire measurement eliminates lead resistance errors
- 6 push button ranges 40m $\Omega$  - 4k $\Omega$  with long scale length
- 10 $\mu\Omega$  resolution on 40m $\Omega$  range
- Zero control thermal E.M.F. compensation
- Digital calibration
- Mains/rechargeable battery operation
- Open circuit lead warning
- Rugged industrial maintenance free design
- Universal mains supply 100/200/220/240V +10% - 13%

### Ideal For

- Aerospace
- Drivers and electrical machines
- Military
- Manufacturing
- Utilities, electrical, water and gas

[www.seaward.co.uk/DO4A](http://www.seaward.co.uk/DO4A)

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## Technical Specifications

Range	Resolution	Typical Current	Accuracy @ 20°C±5°C 1 year	Temperature Coefficient (°C)
4kΩ	1Ω	100μA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
400Ω	100Ω	1mA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
40Ω	10Ω	10mA	±(0.05% Rdg +0.02% FS)	30ppm Rdg + 1ppm FS
4Ω	1mΩ	10mA	± (0.05% Rdg +0.03% FS)	30ppm Rdg + 4ppm FS
400mΩ	100μΩ	10mA	± (0.05% Rdg +0.05% FS)	30ppm Rdg + 25ppm FS
40mΩ	10μΩ	100mA	± (0.05% Rdg +0.05% FS)	30ppm Rdg + 25ppm FS

### Measurement

4 terminal Kelvin/Thomson principle eliminates errors due to lead resistance

### Display

15mm LCD 4000 count with automatic decimal point and polarity indication

### Ranges

6 push button selected with LED indication

### Terminals

4mm binding posts accept spade tags and 4mm banana plugs

### Mains Supply

100/120/220/240V +10% to 13%  
47 - 63Hz 20VA

### Safety

EN 61010-1 EMC 61326

### Calibration

Digital security key protected

### Auto Zero

Permits the automatic zero of amplifiers and external circuits, eliminating errors due to thermal E.M.F.

### Battery

6V 2.8Ah sealed lead acid battery with built-in charger. 14 hour typical operating time on lowest range, 28 hours typical on other ranges. Internal charger and automatic switch off.

## General Specifications

DO74A Plus Optional Accessories		
Code	Item	Part Number
MTS2	Calibration standard	930241
LS06	Lead set with 1m leads terminated in miniature Kelvin clips type KC2	190007
C03	1m cable clamp with water bath for the precise measurement of 1m cable samples 1–1000mm <sup>2</sup>	930419
HS01	Duplex handspikes with 3m lead length	190082
HS02	Duplex handspikes with 3 and 15 m lead length	190055
LS03	Lead set with 2 x 3m leads terminated in large Kelvin clips type KC3	190042
LS04	Lead set with 3 and 15m lead length terminated in large Kelvin clips type KC3	190046
LS05	Lead set with 4 x 1m leads terminated in banana plugs, 4 x crocodile clips, 4 x test probes and 2 x Kelvin clips type KC1	190004

### Dimensions

15 x 250 x 88mm / 0.5 x 9.8 x 3.5" (w x d x h) approx  
1/2 19" rack 2U high  
467 x 374 x 216mm / 18 x 15 x 8.5" (w x d x h) packed in carton

### Mass

3.5kg / 8lbs approx. 4.5kg / 10lbs packed in carton

### Working Temperature

0 to +40°C re. humidity 80% max. non-condensing

### Storage Temperature

-20 to +50°C

### Services

1 year warranty (subject to product registration with Seaward. Visit [www.seaward.co.uk/register-product](http://www.seaward.co.uk/register-product))

Service and calibration by Calibrationhouse.

Go to [www.calibrationhouse.com](http://www.calibrationhouse.com) for more information.

### Part Number

930127