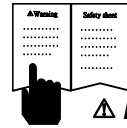
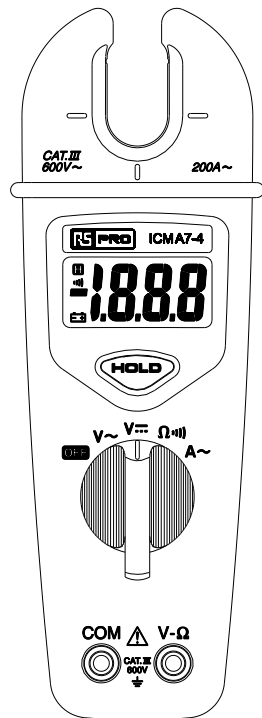




**Instruction Manual
ICM A7-4
Electrical Clamp-Multimeter**

EN



Read First

⚠ Safety Information

To ensure safe operation and service of this Clamp-multimeter, read these instructions completely before use and comply with them fully when using it. Failure to observe these warnings can result in severe **injury** or **death**.

- Avoid working alone, so assistance can be rendered if required.
- Do not use test leads or the instrument if they look damaged.
- Do not use the instrument if it is not operating properly or if it is wet.
- Use the instrument only as specified in these Operating Instructions, or the protection provided by the instrument may be impaired.
- Use extreme caution when working around bare conductors or bus bar. Contact with a hazardous live conductor could result in electric shock.
- Wear appropriate Personal Protective Equipment if working where hazardous live parts are accessible.
- Do not hold the instrument beyond the Tactile Barrier, or allow fingers to protrude past it. The purpose of the barrier is to provide adequate clearance between the operator and a hazardous live conductor.
- Use caution with voltages above 30 V ac rms, or 60 V dc. These voltages pose a shock hazard.

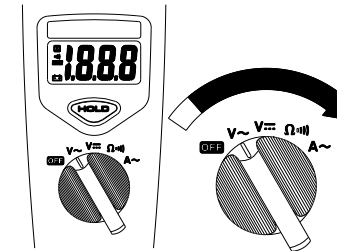
Symbols as marked on the instrument and instructions.

⚠	Risk of electric shock
⚠	Refer to operating instructions.
⎓	DC measurement
⊞	Equipment protected by double or reinforced insulation
🔋	Battery
⏚	Earth
~	AC measurement
CE	Conforms to EU directives
⚠	May be used on uninsulated Conductors.

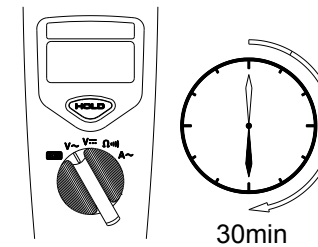
TEST EQUIPMENT RISK ASSESSMENT

Users of this equipment and or their employers are reminded that Health and Safety Legislation require them to carry out valid risk assessments of all electrical work so as to identify potential sources of electrical danger and risk of electrical injury such as from inadvertent short circuits. Where the assessments show that the risk is significant then the use of fused test leads constructed in accordance with HSE guidance note GS38 "Electrical Test Equipment for use by Electricians" should be used.

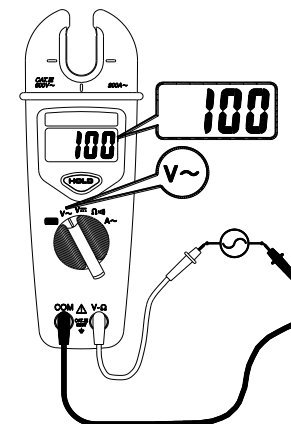
Off / On



Auto Power Off



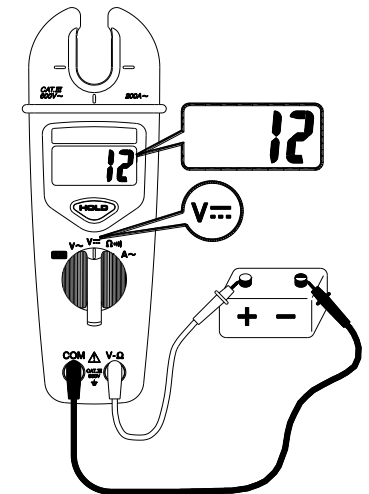
Volts AC



⚠ Warning

Do not apply more than 600V rms ac between the instrument terminals and earth ground .

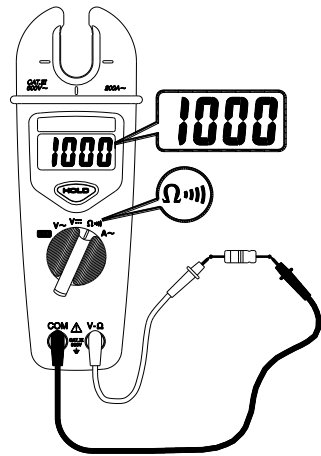
Volts DC



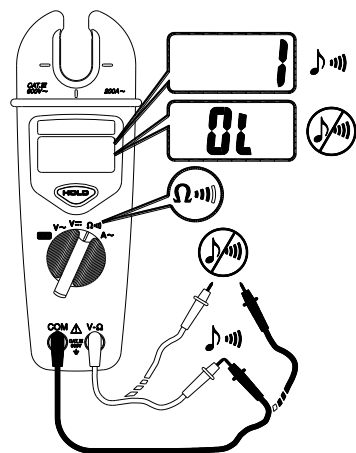
⚠ Warning

Do not apply more than 600V rms dc between the instrument terminals and earth ground .

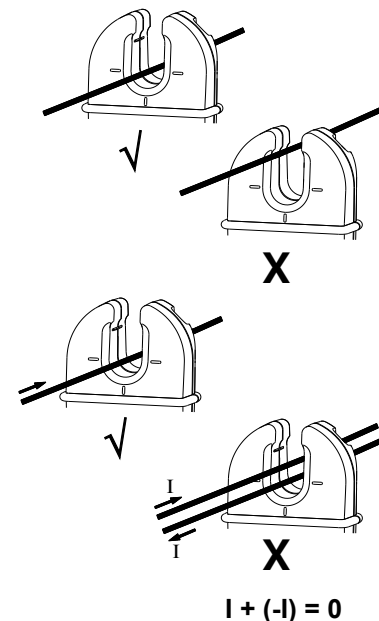
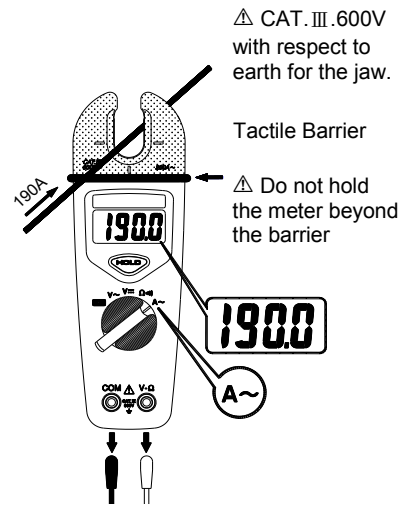
Resistance



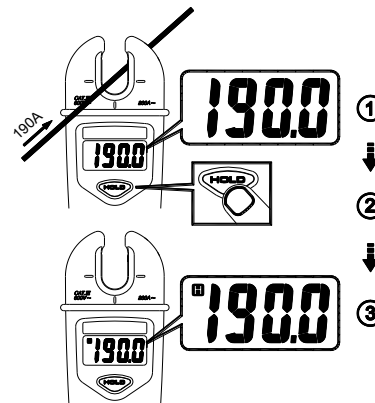
Continuity



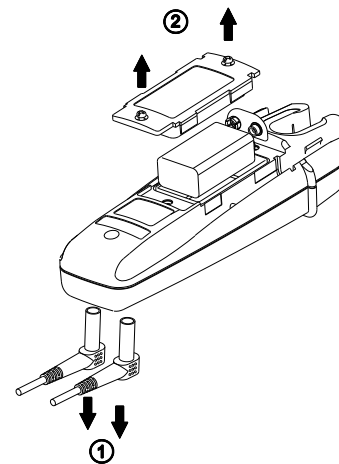
Amps AC



Display Hold



Battery Replacement



Cleaning

Periodically wipe the case with a dry cloth and detergent. Do not use abrasives or solvents.

SPECIFICATIONS

1-1 General Specifications

LCD display digits :

3 1/2 digit large scale LCD readout.

Display count : 2000 counts.

Measuring rate : 2.5 times / sec.

Overrange display :

“OL” is displayed for “A” and “Ω” functions, shows the real value for “V” function.

Automatic power off time :

Approximately 30 minutes after power on. To resume operation, turn the instrument off, then turn on again.

Low battery indicator :

⊖ is displayed. Replace the battery when the ⊖ indicator appears in the display.

Power requirement :

ALKALINE 9V battery.

Battery life :

ALKALINE PP3; 9V 250 hours.

Conductor Size : 16mm (0.63”) diameter.

1-2 Environmental Conditions

Indoor Use.

Calibration :

One year calibration cycle.

Operating temperature :

0°C ~ 30°C (≤80% RH)

30°C ~ 40°C (≤75% RH)

40°C ~ 50°C (≤45%RH)

Operating altitude : 2000m (6562 ft)

Overvoltage category :

IEC 61010-1 600V CAT. III.

CAT. III equipment is designed to protect against the transients in the equipment in fixed installations, such as distribution panels, feeders, short branch circuits and lighting systems in large buildings.

Pollution degree : 2

EMC : EN 61326-1

Shock vibration :

Sinusoidal vibration per MIL-T-28800E (5 ~ 55 Hz, 3g maximum).

1-3 Electrical Specifications

Accuracy is ±(% reading + number of digits) at 23°C ± 5°C < 80%RH.

Temperature coefficient :

0.2 x (Specified accuracy) / °C, < 18°C, > 28°C .

Voltage

Function	Range	Accuracy
V~	600 Vrms	±(1.5% + 3 dgt) 40Hz ~ 500Hz
V=	600 V	±(1% + 2 dgt)

Overload protection : 600 Vrms

Input impedance : 1MΩ // less than 100pF.

Resistance & Continuity

Function	Range	Accuracy
Ω ·)	2000Ω	±(1% + 2 dgt)

Overload protection : 600V rms

Max. open circuit voltage : 3V

Continuity check : The internal sounder activates if the resistance of the circuit under test is less than 25Ω.

It will then turn off if the resistance is increased beyond 400Ω.

AC Current

Function	Range	Accuracy
A~	200.0A	±(3% + 3 dgt)* 45Hz ~ 66Hz

Overload protection : 200A

* **Adjacent conductor influence :** <0.05 A/A

Limited Warranty

This instrument is warranted to the original purchaser against defects in material and workmanship for 3 year from the date of purchase. During this warranty period, RS Components will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction. This warranty does not cover fuses, disposable batteries, or damage from abuse, neglect, accident, unauthorized repair, alteration, contamination or abnormal conditions of operation or handling.

Any implied warranties arising from the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you.

For full terms and conditions, refer to the current RS Catalogue.

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