



**Instruction Sheet**  
**IVP-1 VOLT PEN**  
**Non Contact Voltage Indicator**



**Safety Information**

Read and understand this instruction manual completely before using this instrument. Failure to observe the warnings and cautions in this instruction manual may result in injury, death or damage to the instrument and other equipment of property.

If this instrument is used in a manner not specified in these instructions, the protection provided by the instrument may be impaired.

**Warning**

- Examine the instrument before use. Do not use the instrument if it is wet or damaged

- Test on a known live source within the rated ac voltage range of the instrument, both before and after use to ensure that the unit is in good working condition
- Use caution with voltages above 30Vac RMS, 42Vac, or 60Vdc. These voltages pose a shock hazard
- Wear suitable personal protective equipment when working around or near hazardous live conductors which could be accessible
- Use extreme caution when working around bare conductors or bus bars. Contact with the conductor could result in electric shock
- Do not use the instrument in a hazardous area or around explosive gases or vapours
- Only touch the instrument handle above the tactile barrier when carrying out tests. Do not touch the tip of the instrument while testing.
- The instrument may only be used within the operating ranges as specified in the specifications section.
- The instrument can only be used in properly grounded electrical installations.

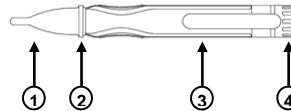
**Symbols**

The following symbols may appear on the instrument or in the instruction manual.

⚠	Risk of electric shock
📖	Refer to Instruction Manual
⎓	Direct Current (dc)
⚡	Equipment protected throughout by double or reinforced insulation
🔋	Battery
⚡	Fuse
⚡	Earth
~	Alternating Current (ac)
CE	Conforms to applicable EU directives

**Description of Parts**

1. Probe tip
2. Tactile Barrier
3. Clip
4. Battery case cover



**Operation**

- Apply the probe tip to any connection point or move it along an insulated cable
- When an AC voltage is detected, the red indicator in the probe tip will flash and the internal sounder will activate. The pulse rate of the indicator and sounder is proportional to the strength of the electric field detected

**Warning**

- If there is no indication, voltage could still be present. Electrostatic fields of sufficient strength must be generated to allow the instrument to function correctly. Some factors that may cause weak field strengths include: cable shielding, thick cable insulation, recessed receptacles in sockets. If in any doubt, the voltage should be measured with a suitable instrument
- In 3 phase applications, make sure that all machines are disconnected before testing fuses; if a three-phase machine is connected to the supply and one of the fuses ruptures, the voltage is conducted back to the defective fuse through the other phases and may give a faulty indication of the fuse condition
- This instrument does not provide any indication of the type and level of the voltage present. In case of doubt, the voltage should be measured with a voltage measuring instrument
- When testing mains connected cables for interruptions, the user must ensure that the line under test is connected to a suitable phase (live) supply before testing.

## Battery replacement



- Unscrew the battery cover
- Remove discharged battery and insert new one, respecting the correct polarity.
- Close the battery cover carefully.
- If the instrument is likely to remain unused for a long period it is advised to remove the batteries.
- Dispose of the removed batteries in accordance with local regulations.

Note: The condition of the battery should be checked prior to use and changed if necessary.

## Maintenance

Do not attempt to repair this instrument. It contains no user-serviceable parts. Repair or servicing should only be performed by qualified personnel.

## Cleaning

Periodically wipe the VOLT PEN with a dry cloth, do not use abrasive or solvents.

## Specifications

Voltage range: 100 V~1000 VAC  
Sensitivity (illuminates at 4mm distance from wire) : 240VAC  
Frequency : 45 ~ 60 Hz  
Overvoltage category : CAT IV 1000 V  
Altitude : up to 2000 metres  
Operating Temperature range : 0 ~ +40°C  
Humidity : < 80%  
Power supply : 2x AAA, 1.5 V LR03  
Dimensions : 152 x 22 x 18 mm  
Weight : approx. 40 gram (incl. batteries)

**Measurement Category I** is for measurements performed on circuits not directly connected to mains. Examples include: Measurements on battery powered equipment and specially protected (internal) mains-derived circuits.

**Measurement Category II** is for measurements on circuits directly connected to the low voltage installation. Examples include: Household appliances, portable tools and similar equipment.

**Measurement Category III** is for measurements performed in the building installation. Examples include measurements on distribution boards, junction boxes, socket-outlets and wiring and cables in the fixed installation.

**Measurement Category IV** is for measurements performed at the source of the low-voltage installation. Examples include measurements on primary over current protection devices and electricity meters.

**Africa**  
**RS Components SA**  
P.O. Box 12182, Vorna Valley, 1686  
20 Indianapolis Street,  
Kyalami Business Park,  
Kyalami, Midrand  
South Africa  
[www.rs-components.com](http://www.rs-components.com)

**Asia**  
**RS Components Pte Ltd.**  
31 Tech Park Crescent  
Singapore 638040  
[www.rs-components.com](http://www.rs-components.com)

**China**  
**RS Components Ltd.**  
Suite 23 A-C, East Sea Business Centre  
Phase 2, No. 618 Yan'an Eastern Road  
Shanghai, 200001  
China  
[www.rs-components.com](http://www.rs-components.com)

**Europe**  
**RS Components Ltd.**  
PO Box 99, Corby,  
Northants. NN17 9RS  
United Kingdom  
[www.rs-components.com](http://www.rs-components.com)

**Japan**  
**RS Components Ltd.**  
West Tower (12th Floor),  
Yokohama Business Park,  
134 Godocho, Hodogaya,  
Yokohama, Kanagawa 240-0005  
Japan  
[www.rs-components.com](http://www.rs-components.com)

**U.S.A**  
**Allied Electronics**  
7151 Jack Newell Blvd. S.  
Fort Worth, Texas 76118  
U.S.A.  
[www.alliedelec.com](http://www.alliedelec.com)

**South America**  
**RS Componentes Limitada**  
Av. Pdte. Eduardo Frei M. 6001-71  
Centro Empresas El Cortijo  
Conchali, Santiago, Chile  
[www.rs-components.com](http://www.rs-components.com)