

## DR series Meg Ohm Meter User Manual

Thanks a lot for selecting products!  
Before operating this instrument, please carefully read this manual and fully understand its contents. If have problems, please contact our sales or distributors whom you buy from. This manual is subject to change without prior notice.

### Warning

Please do not turn on the power supply until all of the wiring is completed. Otherwise electrical shock, fire or malfunction may result.  
Do not wire when the power is on. Do not connect the unused terminals. Do not turn on the power supply when cleaning this instrument. Do not disassemble, repair or modify the instrument. This may cause electrical shock, fire or malfunction may result.  
Use this instrument in the scope of its specifications. Otherwise fire or malfunction may result.  
The use life of the output relay is quite different according to it capacity and conditions. If use out of its scope, fire or malfunction may result.

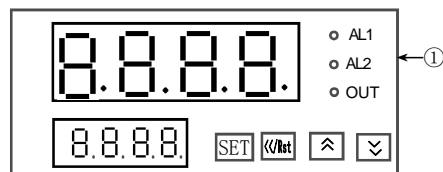
### Caution

This instrument should be installed in a domestic environment. Otherwise electrical shock, fire or malfunction may result. The operating temperature environment should between 0 (32F) to 50 (122F).  
To avoid using this instrument in environment full of dust or caustic gas.  
To avoid using this instrument in environment of strong shock or concussion.  
To avoid using this instrument in environment of overflow water or explosive oil.  
The instrument has the recovable protection parts.It can prevent damages in case of short circuit.

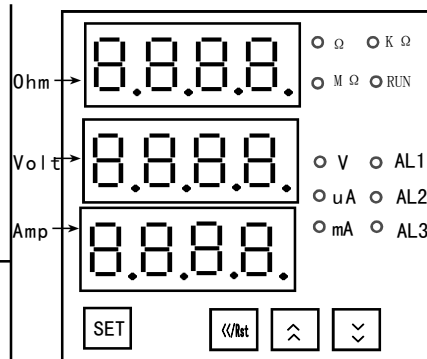
### Application

Professional measurement for various resistance with rapid inspection, good linearity & precise. Various output controls enable the instrument to apply with auto inspection for qualified product, & to act as electronic rules for position control. What's more, it can act as not only meg ohmmeter with inbuilt excitation voltage(100-500V) for insulation material, but also conductivity analyzer by changing inner calculate mode. In addition, RS485 communication will realize remote control by connect with PC/PLC.

### Name of parts



DR8



DR9

SET: Parameters select/confirm key

</ Rst: Shift/Clear/Reset key. When measuring, press >2s to star/stop measurement. If stop, the instrument keep the value until next measurement

^ : UP key

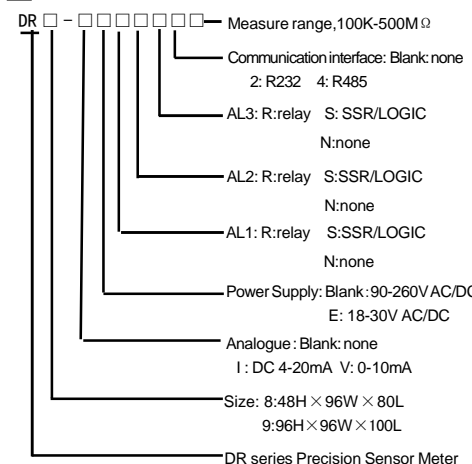
v : DOWN key

AL1 AL2 AL3: the indicate lamps for alarms

Ω /K Ω /M Ω : the indicate lamps for Ohm units

V /mA/uA: the indicate lamps for added volt/amp units

### Code Illustration

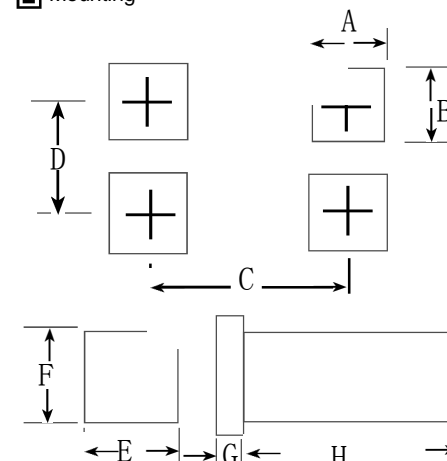


☆ Eg. DR9-INN4500M: Meg Ohm meter, 4-20mA output, RS485 communication, without alarm, measure range: 0-500M, size: 96\*96\*100mm, 80-260V AC/DC power supply.

### Specifications

Power	80-260V AC 50/60Hz or 12-30V AC/DC
Inspected	Various resistance, conductivity, insulation resistance, etc.
Excitation voltage	Voltage: 24V 100V 200V 500V, etc.
Short circuit protection	Auto current curcuit protection
Accuracy	± 0.5%FS ± 2digit
Output	0-10V/4-20mA, configurable by software.
Alarm	RELAY: NO 250V AC 3A or 30V DC 3A COSφ=1
Communication	RS232/RS485 interface, MODBUS RTU protocol

### Mounting



尺寸 型号	A	B	C	D	E	F	G	H
DR8	43.5±0.5	91±0.5	65	115	96	48	12	80
DR9	91±0.5	91±0.5	115	115	96	96	12	100

### Parameters setting

- Alarm setting: In the displaying estate, press and hold SET key for more than 3 seconds, enter alarm mode parameters setting menu. Press < </RST key, LED flashes, press ^ v key to modify, and then press SET key to confirm. Press SET key to read the following parameters one by one.
- The instrument will return to the measuring estate without any operation for 25 seconds.

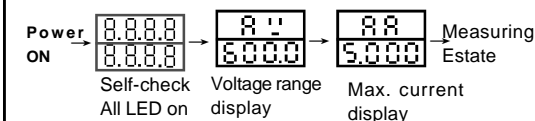
#### Special functions

- Megohmmeter: In the displaying estate, press < </RST>3s, RUN(OUT) lamp ON to enter the measuring estate. At the meantime, it clears the last value, display volt/ampere, and prepare for next measurement. When press < </RST key again, RUN(OUT) lamp OFF, no volt/ampere values display, but keep the last value measured.

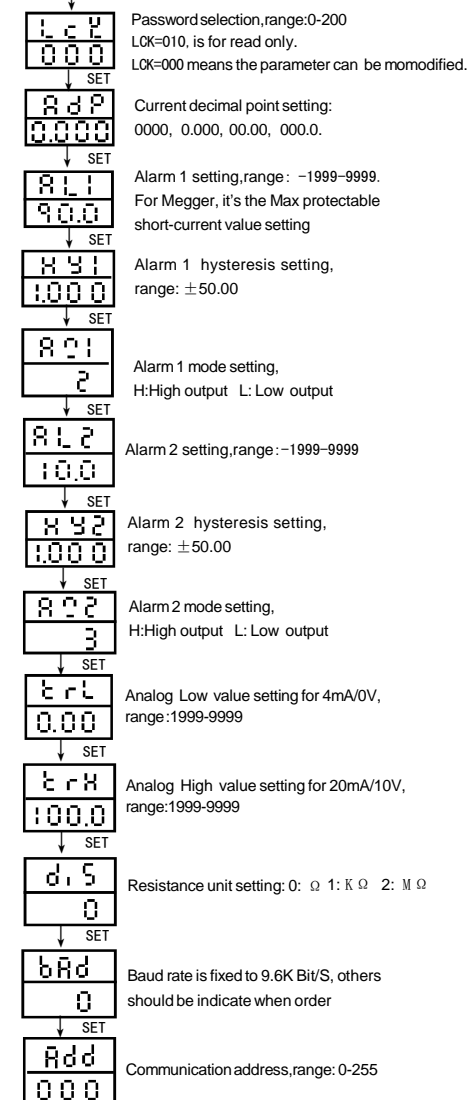
If OPEN displays, it means ampere <0.1uA or resistance >500M Ω

- For regular resistance measurement, the instrument can be set to a certain range to judge if the dynamic resistance is qualified automatically. External output is available.

### Operation process

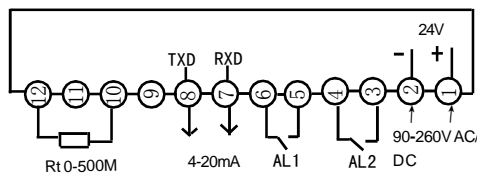


In displaying estate, press SET>3s to enter/quit setting estate

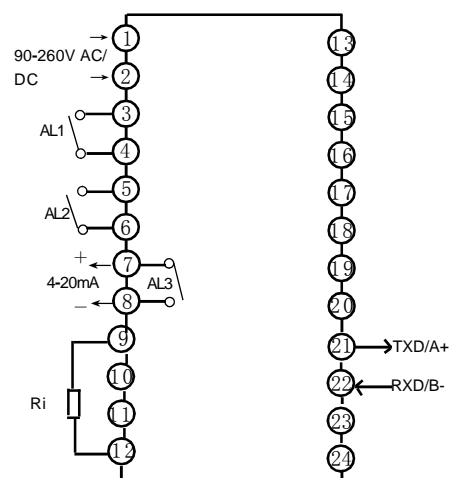




## ■ Connections (If any changed, refer the label on the meter).



DR8



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## ■ Malfunction estimate

- ① No Display : Check all the wire connection and power supply if it is correct. especially pay attention to the cables of input and signal & whether the output terminal is short circuited by large current.
- ② Incorrect Display: Check Parameters PVF if display value is wrong; Check TRL, TRH if output is wrong.
- ③ Incorrect Control : Check the output control connection if it is correct; Check the external load if the circuit is shorted/opened/wrong, which may lead to damage to the electronic components. If necessary, please take output of the PCB to see if the copper foil of output terminal/protection resistance for input/output is broken.

## ■ Complete products contains

- ★ 1 copy of user manual,
- ★ 1 inspection QC label,
- ★ 2 installing brackets,

We are responsible for the overall repairment for the failure of manufacturing quality within 12 months since the date of purchase. Repair fee will be charged accordingly for damage caused by improper use. The product has life-long warranty.

## ■ Main Products

- Timer
- Time relay
- Temperature controller
- Panel meter
- Frequency/Tacho/Line-speed meter
- Proximity sensor
- Photo-electrical sensor
- Transmitter
- Sensor meter
- Power adjustor