HTC INSTRUMENTS 6350-IN Digital Insulation Resistance Tester Instruction Manual

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HTC INSTRUMENTS 6350-IN Digital Insulation Resistance Tester

General Introduction

This instrument can be used to test 5k V insulation resistance. As a new generation electrical measurement instrument which we have successfully developed recently, It is aimed by the nice and fashionable design, stronger functions, easier to use and more reliable. The instrument and accessories are all in the toolbox, suitable for field application.

Safety Rules

1. Be sure to read this user manual carefu lly before using this instrument.
2. Do not use this instrument when the rear cover is not in place, otherwise you may get electrica r shock.
3. Be sure to check the insulation layel of the probe is good and free of any damage before using this instrument.
4. To prevent electrical shock, be sure not to touch electric lead and circu it when the test is in process.
5. Be sure to confirm the range selector has been set in the appropriate range before testing.
6. Confirm the plug of the wire has been tightly inserted in the terminal.
7. Be sure not to use the instrument when it is moist.
8. Be sure not to turn the function selector when the test is in process.
9. Do not test in inflammable environment since spark may lead to explosion.

10. Stop using the instrument r in case of any metal is exposed caused by the shell o test wire is broken when the test is in process.
11. Be sure that the test wire has been removed from the test termina and the function range r selector r in the “OFF” position when l you remove the rea cove to replace battery.
12. Do not replace battery when the instrument is moist.
13. Be sure to set the function range selector at the “OF F ” pos ition r when your work is overr .
14. Remembe to remove the batte y when you are not going to use the instrument for a llong period of time.
15. Replace battery immediate y to ensure the accuracy of measurement when the instrument displays

Features

1. Low power consuming CMOS dual integral A/D conversion IC, automatic zero
2. **LCD:** 31/2 display, maximum reading 1999
3. Data holding function
4. Low Battery indication
5. LCD backlight function
6. automatic range
7. **LCD dimension:** (65×48}mm (dig it is 29 mm)
8. **Power:** 8×1 .5V (R6 AA} battery
9. **Size:** 190x155x75mm
10. **Weight:** approx 900g(including batteries}
11. 11. The instrument and accessories can be packed in one toolbox
12. 12. Environment conditions

- **Operating temperature:** 0°C~40°C
- **Relative humidity:** <80%
- **Storage temperature: –**1 o•c -so•c
- **Relat ive humid city:** <80%

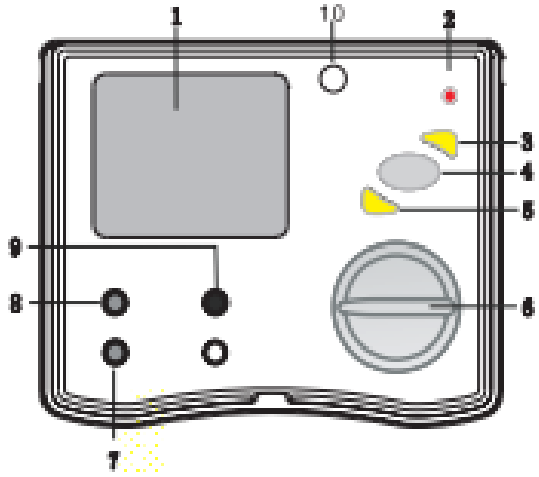
Electrical Specification

Accuracy: (%reading+digit) the warranty is one-year Environment temperature: 23 C±5 C
Relative humidity: <75%

1. **Insulation Resistance**

Testing Voltage	I 00 V/250V/500V/ I 000V/2500V/5000V
Output voltage	90%-110% ofthetest voltage
Range	0.1 M -20G for I 00/250V/500V
	0.1 M -200G for I000V/2500V/5000V
Resolution	O.OIMQ
Accuracy	0.1MQ -200 MQ ±(3%rdg +5dgt)
	200 MQ-IOGQ±(5%rdg +IOdgt)
	IOGQ -200GQ±(10%rdg +5dgt)

Front Panel



1. LCD
2. High voltage LED indicator
3. Data holding button
4. Test button
5. Back-light button
6. Function rotatory selector
7. “E” input socket
8. “G” input socket
9. “L” input socket
10. DC 12V charge socket

If necessary insert another black wire with small crocodile clamp into the “G” socket, The clamp connect to earth wire to eliminate the measurement error caused by the leak current in the surface of the product, and ensure the accuracy of the test and reading stability.

Test Voltage selection

Select the test voltage you need to measure the insulation resistance by turning the selector to the relevant voltage class.

Test Operation

Connect the other terminal of the wire to the object under test. Press the “Test/Stop” button, the red LED indicator turns on, indicating the high voltage generated. When the test has started, the LCD of the instrument displays some readings. The value displayed by LCD is the insulation resistance of the object under test. If load Rx is greater than maxi mun range, the LCD will display “l”.

Turn off

When the test is over, press the “Test/Stop” button, the red indicator turns off, indicating the test high voltage has been disappeared. set the selector at “OFF” position, LCD displays nothing. For capacitive load, be sure to discharge the residual charges in the object under test before you remove the test wire.

Operation Instruction

Safety Precautions

CD Be sure to confirm the high voltage on the object under test has been discharged, be careful of the high voltage shock after the insulation resistance test is over.
Do not touch the object under test when the test is in process otherise you should get electrical shock.
The object under test shall not be live and be sure toconfirm the object under test is securely earthed when you test the insulation resistance. Short the two test terminals of the object under test to discharge before you start the test.
Do not lead any external voltage into the test loop
when you test the insulation resistance. Be sure to confirm the selector is in right position and the test wire is firmly connected before you start the test.
Up to 5000V high voltage is generated between “L”
terminal and “E” terminal when the high voltage button has been pressed. Be sure not to touch any exposed part of instrument and the object under test, otherwise you may get an electrical hazard.
Battery Voltage Inspection
Turn on the instrument, if the LCD does not display icon, it indicates the battery is good. If LCD displays nothing or display “l=il” icon, replace the batteries as described in the user manual.
Insulation Resistance measurement CD Connection of Test Terminals Insert the red test lead into the “L” socket of the instrument and the plug of the black test lead with flat crocodile clamp into the “E” socket of the instrument.
Test connection
The wiring of the “E” socket of the instrument is the earth wire; The wiring of the” L” socket of the instrument is the line wire. The “G” terminal socket of the instrument is the shield wire to test the high insulation resistance.

Maintenance

This instrument is a precision electronic instrument, be sure to maintain ii well.

1. To replace battery, remove the probe and power off the instrument first. Unscrew the screws of the battery cover and remove the battery cover. Be sure to replace the battery according to the specification requirement.
2. Do not forget to remove the battery if you are not going to use the instrument for a long period of time. Place the instrument at a dry and well ventilated environment.
3. Do not change any internal circuit of this instrument.

Accessories

1. 1 manual.
2. 1 toolbox.
3. 1 sets of test wires
4. 81.5V(R6P) AA batteries

Warning

This user manual includes warning and safety specifications, which shall be strictly followed to ensure safety. Please be sure to read through this user manual before operating this instrument.

Documents / Resources

	HTC INSTRUMENTS 6350-IN Digital Insulation Resistance Tester [pdf] Instruction Manual 6350-IN, Digital Insulation Resistance Tester, 6350-IN Digital Insulation Resistance Tester, Insulation Resistance Tester, Resistance Tester, Tester