



## AC/DC/IR HIPOT TESTER MODEL : 19071/19073

### Complete Dielectric Testing Solution

The Chroma Hipot Tester 19070 series provide 3 models for choice. The 19071 for AC Hipot testing, the 19073 which combines both AC and DC Hipot with insulation resistance (IR) measurements into a single compact unit. The front panel of the testers make them easy to operate. The digital display and user friendly control allow test parameters and limits to be set easily without activating the high voltage.

The 19070 series electrical safety tester are advanced digital hipots with load and line regulation to ensure the measurement integrity. Multi-step capability allows users to perform up to two tests in a sequence such as AC hipot followed by IR.

The 19071 AC Hipot Tester performs AC dielectric withstand (hipot) tests. The test voltage can be programmed in the range of 50V AC to 5kV AC with a resolution of 1V. Its maximum total output current is 15mA.

The 19073 AC/DC/IR Hipot Tester has all the features of the 19071 plus measurement of insulation resistance. The IR measurement range is from 1MΩ to 10GΩ with test voltages from 50 to 1000V DC.

### Ground Fault Interrupters (GFI)

GFI is required by the National Electrical Code in wet locations. Such devices automatically interrupt power when a ground

current >0.5mA exists for more than a few milliseconds to protect users.

### Quick Discharge

In DC hipot and IR the device under test is discharged back through the HV transformer. This technique results in a rapid and safe discharge.

### Ground Continuity Check

All of the 19070 Series testers have a ground continuity check feature to determine that the resistance, that is between the ground blade of power cord and any exposed metal on the product, is less than 1Ω.

### Arc Detection

The 19070 series are sensitive enough to monitor 10μsec current spikes even if they do not exceed the maximum trip current level.

### Large LCD display

Users can easy to operate instrument with great view of setting functions and test result .

## MODEL 19071 19073

### Key Features :

- Ground fault interruption shutdown the instrument when imbalance current > 0.5mA , provide the highest protection capability
- TUV approved
- CE Certified
- Programmable output voltage up to 5kV AC and 6kV DC
- Insulation resistance measurements from 1MΩ to 50GΩ
- Ground continuity check with 1Ω limit
- Arc detection with programmable limit
- Front panel lockout
- Large LCD display (240 x 64dot matrix) can supply great view of test result and setting functions
- Programmable ramp and test times
- Programmable high and low limits
- Cost effective solution for Hipot and IR
- Quick discharge of DUT in IR and DC Hipot
- Storage of 10 test setups with 60 steps per setup
- Remote control
- Easy to use



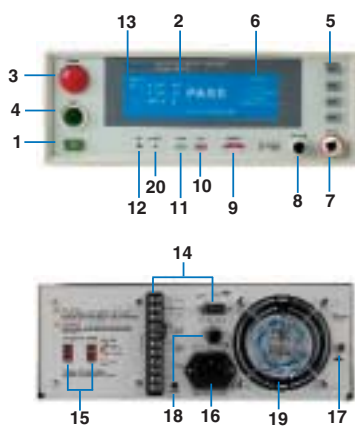
**Chroma**



## Specification

| Model                             | 19071   | 19073   |
|-----------------------------------|---|---|
| Mode                              | ACV   | ACV/DCV/IR  |
| <b>Withstanding Voltage Test</b>  |   |   |
| Output Voltage                    | AC : 0.05 ~ 5kV   | AC : 0.1 ~ 5kV , DC : 0.1 ~ 6kV   |
| Load Regulation                   | 1 % + 5V  |   |
| Voltage Resolution                | 2V  |   |
| Voltage Accuracy                  | 1% + 5 counts   |   |
| Cutoff Current                    | AC : 0.1~20 mA  | AC : 0.1~20 mA, DC : 0.01~5 mA  |
| Current Resolution                | AC : 1 $\mu$ A, DC : 0.1 $\mu$ A                              |   |
| Current Accuracy                  | 1.5% + 5 counts   |   |
| Output Frequency                  | 50/60Hz   |   |
| Test Time                         | 0.1 ~ 999 seconds, continue                                   |   |
| Ramp up Time                      | 0.1 ~ 999 seconds, off  |   |
| Wave Form                         | Sine wave   |   |
| <b>Insulation Resistance</b>      |   |   |
| Output Voltage                    | --  | DC : 50 ~ 1000V   |
| Voltage Resolution                | --  | 2V  |
| Voltage Accuracy                  | --  | 5% + 5 counts   |
| IR Range                          | --  | 0.1M $\Omega$ -50G $\Omega$   |
| IR Accuracy                       | --  | $\geq 500V : 1M\Omega -1000M\Omega \pm (4\% + 5 \text{ counts})$<br>$1G\Omega -10G\Omega \pm (7\% + 5 \text{ counts})$<br>$10G\Omega -50G\Omega \pm (12\% + 5 \text{ counts})$<br>$< 500V : 0.1M\Omega -1000M\Omega \pm (7\% + 5 \text{ counts})$<br>$< 500V : 0.1M\Omega -1000M\Omega \pm (10\% + 5 \text{ counts})$ |
| Continuity Check                  | Current 0.1A, 1 $\Omega$ $\pm$ 0.2 $\Omega$ , On/Off          |   |
| <b>Arc Detection</b>              |   |   |
| Setting Mode                      | Programmable Setting  |   |
| Detection Current                 | AC : 1mA ~ 15mA, DC : 1mA ~ 5mA                               |   |
| Minimum Pulse Width               | 10 $\mu$ s approx   |   |
| <b>Secure Protection Function</b> |   |   |
| Fast Output Cut-off               | 0.4 ms after NG happen  |   |
| Fast DC discharge                 | 0.2 sec.  |   |
| Ground Fault Interrupt (GFI)      | 0.5mA $\pm$ 0.2mA AC (Low), 5mA $\pm$ 2mA AC (High), Close    |   |
| Panel Operation Lock              | Present password  |   |
| Continuity Check                  | Current 0.1A, 1 $\Omega$ $\pm$ 0.2 $\Omega$ , On/Off          |   |
| <b>GO/ NG Judgment</b>            |   |   |
| Indication, Alarm                 | Go:Short sound ;NG:Long sound                                 |   |
| Data Hold                         | Last tests data memories                                      |   |
| Step Hold                         | Step signal trigger On/Off                                    |   |
| Memory Storage                    | 10 tests setups with 60 steps per setup                       |   |
| <b>General</b>                    |   |   |
| Operation Environment             | Temperature : 0 ~ 40 $^{\circ}$ C<br>Humidity : $\leq$ 80% RH |   |
| Power Consumption                 | No load : < 60W<br>With rated load : 300W max.                |   |
| Power Requirement                 | 100V/120V/ 220V AC $\pm$ 10%, 240V AC +5%~ -10%,<br>50/60Hz   |   |
| Weight                            | 12kg  |   |
| Dimension(W X H X D)              | 270 X 100 X 350mm   |   |

## Panel Description



1. LINE Switch
2. Window Display
3. Reset Button
4. Start Button
5. Function Keys F1~F4
6. Function Key Display Area
7. High Voltage Output Terminal
8. Common Test Terminal
9. Test Indicator
10. Fail Indicator
11. Pass Indicator
12. Calibration Switch
13. Status Line
14. Remote Control
15. LINE Voltage Selector
16. Power Cord Receptacle
17. Earth Ground Terminal
18. Continuity Check
19. Fan
20. Update Switch

## Application

- Production testing of appliances, instruments and information technology equipment in accordance with UL, IEC, TUV and other standards such as EN 60335, EN 60950, EN 61010, CSA C22.2 No.1010.1, UL 3111 and UL1950
- Transformer electrical safety testing
- Electric motor safety testing
- Variety of electrical components
- Testing of electronic components

## Order Information

- 19071 AC Hipot Tester  
 19073 AC/DC/IR Hipot Tester  
 A190701 Remote Control Box  
 A190702 40kV Test Probe



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