

Model 7512DT Functional Specifications

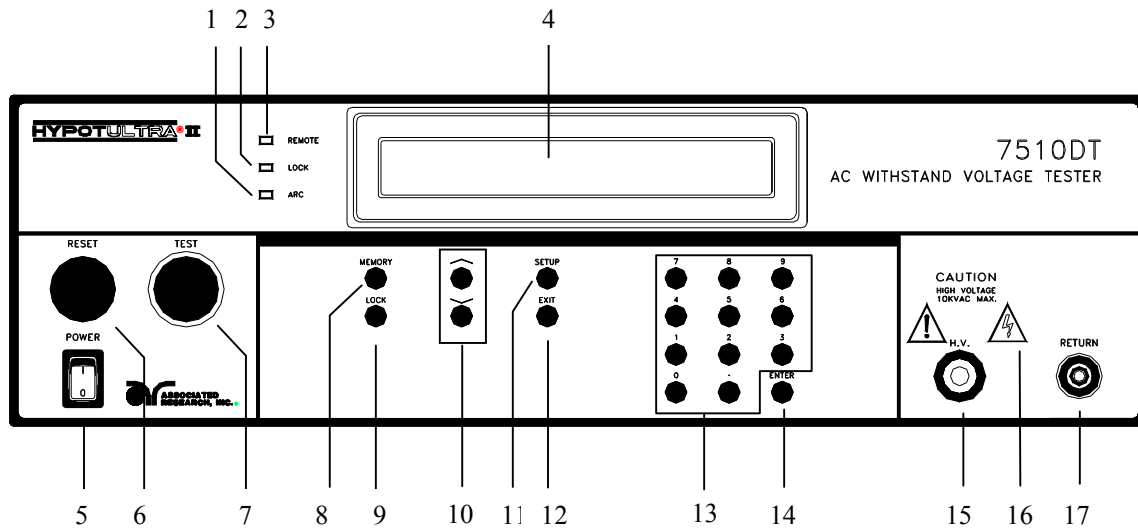
INPUT	
Voltage	115/230 VAC \pm 10%, Single Phase, User selection
Frequency	47 - 63 Hz
Fuse	5 Amp 250V Slo-Blo
DIELECTRIC WITHSTAND TEST MODE	
Output Rating	12 KV DC @ 5 mA
Output Adjustment	Range: 0 - 12 KV DC Resolution: 10 volt/step Accuracy: \pm (2% of setting + 10 volts)
Ramp-HI	10mA peak maximum, 5mADC, ON/OFF selectable
Charge-LO	Range: 0.0 - 350.0 μ A DC or Auto set
HI-Limit	Range: 0 - 5000 μ A Resolution: 1 μ A/step Accuracy: \pm (2% of setting + 2 counts)
LO-Limit	Range: 0.0 - 999.9 μ A Resolution: 0.1 μ A/step Accuracy: \pm (2% of setting + 2 counts)
Arc Detection	Range: 1 - 8
Failure Detector	Audible and Visual
Voltage Display	Range: 0.00 - 12.00 KV Full Scale Resolution: 10 volt/step Accuracy: \pm (2% of reading + 2 counts)
Current Display	Range 1: 0.0 μ A - 350.0 μ A Resolution: 0.1 μ A/step Range 2: 300 μ A - 3500 μ A Resolution: 1 μ A/step Range 3: 3000 μ A - 5000 μ A Resolution: 10 μ A/step Accuracy: \pm (2% of reading + 2 counts)

Model 7512DT cont.

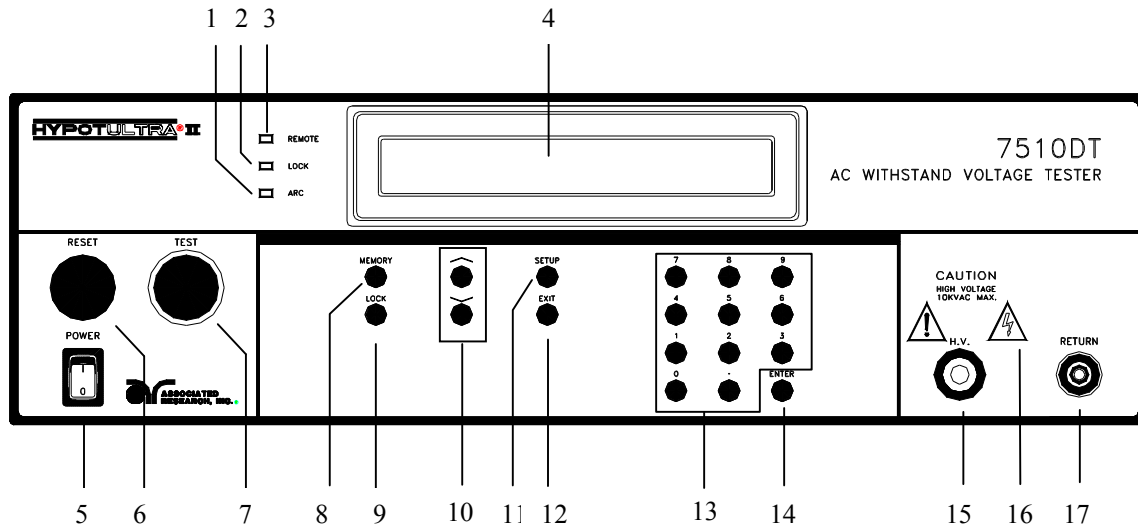
DC Output Ripple	≤ 4% Ripple RMS at 6 KV DC @ 3.5 mA, Resistive Load
Output Regulation	± (1 % of setting + 5 volts) from no load to full load
Dwell Timer	Range: 0, 0.3 - 999.9 sec (0 = Constant) Resolution: 0.1 sec increments Accuracy: ± (0.1% + 0.05 sec)
Ramp Timer	Range: 0.4 - 999.9 sec Resolution: 0.1 sec increments Accuracy: ± (0.1% + 0.05 sec)
GENERAL SPECIFICATIONS	
PLC Remote Control	Input - Test, Reset, Recall memory # 1, # 2 and # 3 Output - Pass, Fail, Test-in-Process
Memory	Allows storage of up to 50 different test programs.
Security	Programmable password lockout capability to avoid unauthorized access to test set-up program.
LCD Contrast Setting	9 ranges set by the numeric keys on the front panel.
Buzzer Volume Setting	10 ranges set by the numeric key on the front panel.
Calibration	Software and adjustments are made through front panel.
Mechanical	Bench or rack mount with tilt up front feet.
Dimension	(W x H x D) 17 x 5.8 x 12 in. (432 x 147 x 305 mm)
Weight	42 lbs (19 Kgs)

KEY FEATURES & BENEFITS SUMMARY: MODELS 7510DT & 7512DT

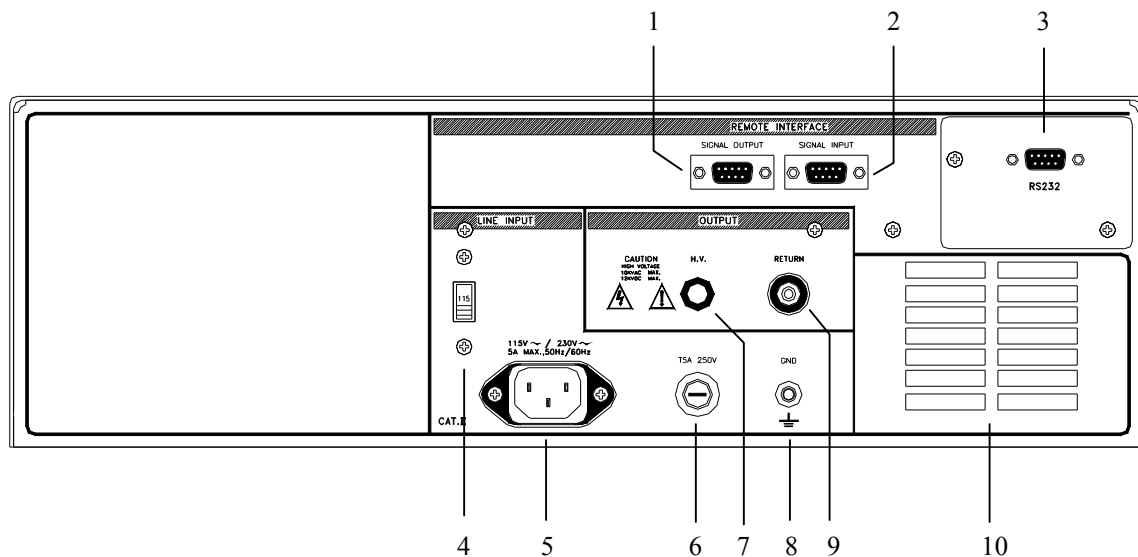
- **RS232 interfaces as standard features** All the functions of the instrument can be programmed over the interface which makes the instrument adaptable to any type of automated production environment.
- **A single 2 x 20 LCD display provides a clear indication of all test results and setup parameters** This single easy-to-view and simple-to-interpret LCD display allows the operator to monitor all test activity.
- **All setup parameters can be adjusted through a simple menu driven program** The operator is provided with an easy and safe way to set trip currents and output voltages since all parameters are set without high voltage activated.
- **Storage of up to 50 setups** A real benefit for manufacturers that test different products. Each memory can be configured to perform any of the safety tests.
- **Exclusive CHARGE LO and RAMP HI testing features allow for more effective DC Hipot testing (Model 7512DT)** The RAMP HI feature allows the user to set a higher trip rate during the ramp to allow for quick charging of the product without nuisance tripping thereby increasing throughput when testing with DC. The CHARGE LO provides the user with the capability to ensure that the device under test is connected correctly.
- **Programmable security password system** Avoids tampering with settings by only allowing authorized personnel with a user programmable security password to change test parameters.
- **Line and Load regulation** Maintains the output voltage to within 1% of setting even if the load or the line voltage varies. This ensures that the test results remain consistent and within safety agency requirements.
- **PLC remote inputs & outputs** This allows the instruments to be remotely monitored and set up completely through simple PLC control.
- **Digitally controlled arc detection system** Allows the operator to select whether low level arcs should be detected and provides the operator with the ability to digitally select and program multiple sensitivity levels.

FRONT PANEL CONTROLS 7510DT, and 7512DT


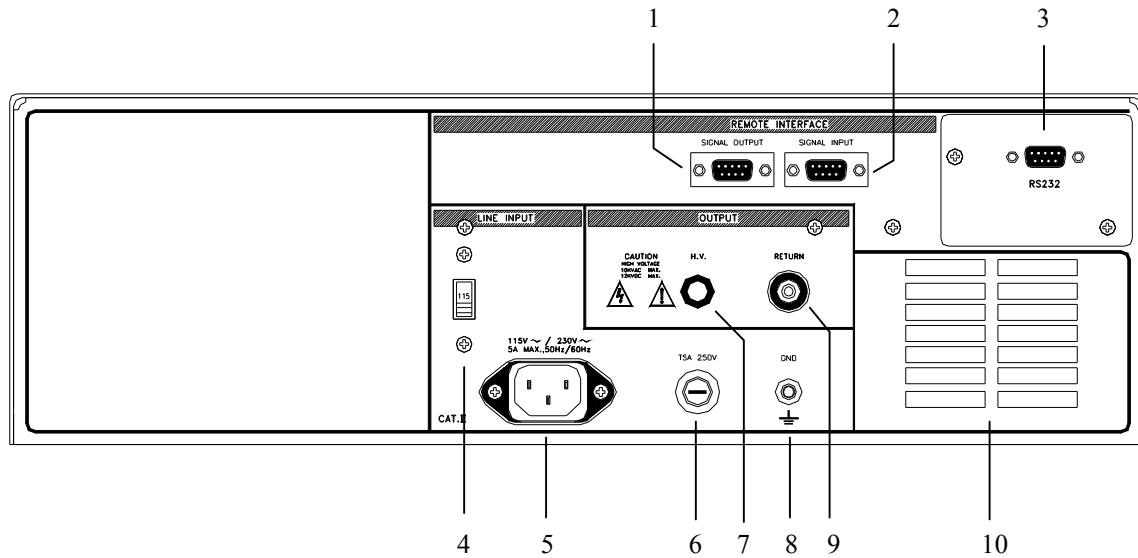
1. **ARC LED:** This indicator will illuminate when the Arc Detector has detected an arcing condition. This indicator will function even when the Arc Fail has been disabled.
2. **LOCK LED:** When the Lock LED is on, the "password" software lockout has been enabled. This means that the users will be unable to access the "program" mode of the instrument to change any settings. When Memory-Lock is OFF the user can change memory locations.
3. **REMOTE LED:** This indicator will light when the instrument is in the Remote Control mode. When the Remote LED is ON the instrument is able to send and receive signals across the RS-232 bus.
4. **LCD DISPLAY:** The 2x20 character display indicates test function, memory location, test parameter and failure type as well as test measurements during a test.
5. **POWER SWITCH:** Rocker-style switch with international ON (|) and OFF (0) markings.
6. **RESET BUTTON:** This is a momentary contact switch. If an out-of-range leakage current condition, an arc breakdown, HI-limit, or LO-Limit you will need to reset the system before you can proceed to the next test. Press and release the red RESET button.
7. **TEST BUTTON:** This is a momentary contact switch. Press the green button to turn on the high voltage output. Also illuminates to indicate a Pass condition.
8. **MEMORY:** Use this key to select one of the 50 memories to modify or run stored test parameters.



9. **LOCK:** Use this key to select key lockout mode. A password may be used when setup in the calibration mode.
10. **UP-DOWN ARROW KEYS:** Use these keys to enter and move through the function parameter menu for test parameter setup.
11. **SETUP:** Use this key to enter the setup menu and view or change the display contrast, alarm volume, and PLC remote settings.
12. **EXIT:** Use this key to exit any menu or to clear an unwanted entry in a parameter field. Use this key when you wish to go from the Remote operation of the instrument to the Local mode
13. **DATA ENTRY KEYS:** Use these keys to input numeric parameters followed by the ENTER key.
14. **ENTER:** Use this key as an ENTER key to accept numeric data for parameter settings.
15. **HIGH VOLTAGE OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) high voltage test lead. The silicone rubber insulation is flexible for easy handling and is rated at 30KVDC. The jack is recessed for safety when the test lead is not being used.
16. **HIGH VOLTAGE ON INDICATOR:** This indicator flashes to warn the operator that high voltage is present at the high voltage output terminal.
17. **RETURN OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) return test lead. This lead is always used when performing a test.

REAR PANEL CONTROLS 7510DT and 7512DT


1. **REMOTE SIGNAL OUTPUT:** 9-Pin D subminiature female connector for monitoring PASS, FAIL, and PROCESSING output relay signals.
2. **REMOTE SIGNAL INPUT:** 9-Pin D subminiature male connector for remote control of test and reset functions as well as program memory selection 1, 2, or 3.
3. **BUS INTERFACE:** Standard connector for interconnection to the RS-232 interface.
4. **INPUT POWER SWITCH:** Line voltage selection is set by the position of the switch. In the up position it is set for 110-120 volt operation, in the down position it is set for 220-240 volt operation.
5. **INPUT POWER RECEPTACLE:** Standard IEC 320 connector for connection to a standard NEMA style line power (mains) cord.
6. **FUSE RECEPTACLE:** To change the fuse unplug the power (mains) cord and turn the fuse receptacle counter-clockwise. The fuse compartment will be exposed. Please replace the fuse with one of the proper rating.
7. **HIGH VOLTAGE OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) high voltage test lead. The silicone rubber insulation is flexible for easy handling and is rated at 30KVDC. The jack is recessed for safety when this lead is not being used.



- 8. CHASSIS GROUND (EARTH) TERMINAL:** This terminal should be connected to a good earth ground before operation.
- 9. RETURN OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) return test lead. This lead is always used when performing a test.
- 10. THERMAL COOLING FAN:** Runs continuously to cool the instrument.