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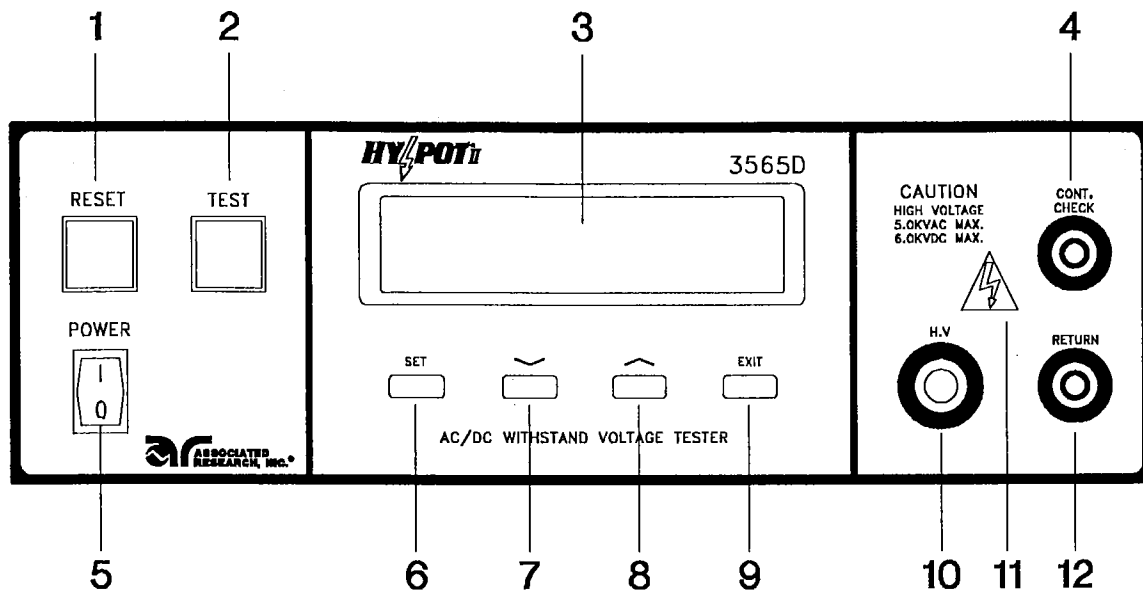
Model 3500D, 3505D, 3565D and 3570D
Functional Specifications

Unless otherwise stated, accuracy's are relative to a laboratory standard measurement.

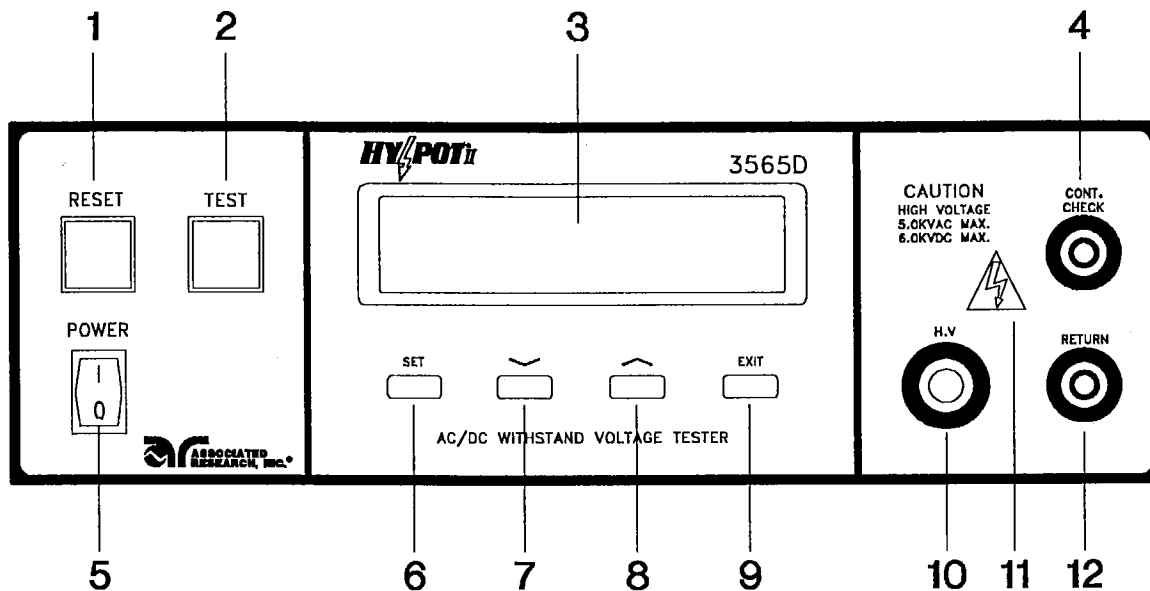
DIELECTRIC WITHSTAND TEST MODE	
Descriptions	Specifications
INPUT VOLTAGE	115 / 230V selectable, $\pm 15\%$ variation 47 - 63 Hz
FUSE	115 VAC, 230VAC -- 3.15A fast acting 250VAC
OUTPUT	Rating AC 0 - 5000V, 2V / step, 12mA DC 0 - 6000V, 2V / step, 5mA (DC mode on 3565D and 3570D only) Regulation : $\pm (1\% \text{ of output} + 5V)$
VOLTAGE SETTING	0V - Max output rating, 10 volts/step Accuracy : $\pm (2\% \text{ of Setting} + 5V)$ (relative to displayed output) Can be adjusted during operation via UP and DOWN arrow keys.
OUTPUT FREQUENCY	3500D, 3505D : 50 / 60 Hz selectable 3565D and 3570D : DC and 50 / 60 Hz selectable
WAVE FORM	Sinewave, Distortion : $< 2\%$ THD
RIPPLE	$< 5\%$ at 6KVDC / 5mA (3565D and 3570D only)
DWELL TIME SETTING	0 and 0.2 - 999.9 seconds, 0.1 second / step "0" for continuous running
RAMP TIME SETTING	Model 3505D, 3565D and 3570D 0 and 0.2 - 999.9 seconds, 0.1 second / step 0 ramp setting = 0.1 seconds fixed ramp Model 3500D and 3505D Ramp = 0.1 seconds fixed
FAILURE SETTINGS	AC mode High limit : 0.10 - 12.00 mA, 0.01 mA / step Low limit : 0.00, 0.10 - 12.00 mA, 0.01 mA / step (0= OFF) (3505D, 3565D and 3570D only) Accuracy : $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$ DC mode High limit : 0.02 - 5.00 mA, 0.01 mA / step Low limit : 0.00, 0.02 - 5.00 mA, 0.01 mA / step (0= OFF) (3505D, 3565D and 3570D only) Accuracy : $\pm (2\% \text{ of setting} + 0.02 \text{ mA})$

Descriptions	Specifications
METERING	Voltmeter (4 digits) Range : AC 0.00 - 5.00 KV : DC 0.00 - 6.00 KV Resolution : .01 KV Accuracy : \pm (2 % of reading + 10 V) Ammeter (4 digits) Range : AC 0.10 - 12.00 mA : DC 0.02 - 5.00 mA Resolution : 0.01 mA Accuracy : \pm (2 % of reading + 0.02mA)
TIMER DISPLAY	Range : 0.0 - 999.9 seconds Resolution : 0.1 second Accuracy : \pm (0.1 % of reading + 0.05 seconds)
DISCHARGE TIME	\leq 300 ms The maximum capacitive load vs output voltage : 0.20 μ F --- < 1KV 0.050 μ F --- < 4KV 0.10 μ F --- < 2KV 0.040 μ F --- < 5KV 0.06 μ F --- < 3KV 0.015 μ F --- < 6KV
GROUND CONTINUITY CHECK	Current : DC 0.1 A \pm 0.01A, fixed Max. ground resistance : 1 Ω \pm 0.1 Ω , fixed
INSULATION RESISTANCE TEST MODE	
Output Voltage	Range: 100 - 1000 Volts DC Resolution: 10 volt/step Accuracy: \pm (2% of reading + 5 volts)
Voltage Display	Range: 0 - 1000 V Resolution: 10 volt/step Accuracy: \pm (2% of reading + 2 counts)
Resistance Display	Range: 1 - 1000 M Ω (4 Digit, Auto Ranging) Resolution: 500VDC 1000VDC M Ω M Ω M Ω 0.01 1.00 - 40.00 1.00 - 80.00 0.1 35.0 - 999.9 75.0 - 999.9 Accuracy: \pm (3% of reading + 2 counts) at test voltage > 500V \pm (7% of reading + 2 counts) at test voltage \leq 500V

Descriptions	Specifications
High Resistance Limit	Range: 0 - 1000 M Ω (0 = Off)
Low Resistance Limit	Range: 1 - 1000 M Ω
Delay Timer	Range: 0, 0.5 - 999.9 sec (0 = Constant) Resolution: 0.1 sec/step Accuracy: \pm (0.1% + 0.05 sec)
GENERAL	
REMOTE CONTROL AND SIGNAL OUTPUT	The following input and output signals are provided through the 9 pin D type connector; 1. Remote control : test and reset 2. Outputs : pass, fail and test in process
PROGRAM MEMORY SECURITY	5 Sets (3505D, 3565D and 3570D only)
LINE CORD	Lockout capability to avoid unauthorized access to test set-up program.
TERMINATIONS	Detachable 7 ft. (2.13m) power cable terminated in a three prong grounding plug.
MECHANICAL	5ft.(1.52m) high voltage and return leads (2) with clips and a standard U.S. style (NEMA 5-15) remote receptacle box for testing items terminated with a line cord. International receptacles also available.
ENVIRONMENTAL	Tilt up front feet. Dimensions: (W x H x D) 11 x 3.5 x 14.56 in. (280 x 89 x 370 mm) Weight: 20 lbs (9 Kgs)
CALIBRATION	Operating Temperature : 32° - 113°F (0° - 45°C) Relative Humidity - 0 to 95%
	Traceable to National Institute of Standards and Technology (NIST). Calibration controlled by software. Adjustments are made through front panel keypad in a restricted access calibration mode. Calibration information stored in non-volatile memory.

FRONT PANEL CONTROLS


1. **RESET SWITCH:** This is a momentary contact switch. If an out-of-range reading is detected during a hipot test or an IR test or if continuity failure occurs, the red failure lamp within the switch will light. To reset the system for the next test, press and release this switch. This switch may also be used to abort a test in progress.
2. **TEST SWITCH:** This is a momentary contact switch. Press the green switch to turn on the high voltage output when in test mode. The indicator lamp within the switch will light when continuity is “good”, if continuity mode is enabled.
3. **LCD DISPLAY:** The Liquid Crystal Display is the main readout for the operator and programmer of the test settings and test results.
4. **CONTINUITY CHECK OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) black return test lead or three prong receptacle adapter box. This jack is always used when performing a continuity test. Please refer to page 41 for details on connecting the adapter box between Hypot II and the device under test.
5. **POWER SWITCH:** Rocker-style switch with international ON (|) and OFF (0) markings.
6. **SET KEY:** Use this key to advance forward through the setup menus.
7. **DOWN ARROW (∨):** Use this key to decrement numeric values in the setup mode. This key also used to toggle ON/OFF functions. Also may be used to decrease output voltage during a test in 10 volt increments.

FRONT PANEL CONTROLS


8. **UP ARROW (^):** Use this key to increment numeric values in the setup mode. This key also used to toggle ON/OFF functions. Also may be used to increase output voltage during a test in 10 volt increments.
9. **EXIT KEY:** Use this key when you desire to enter the **Run Mode** to initiate a test.
10. **HIGH VOLTAGE OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) red 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.
11. **HIGH VOLTAGE ARROW (LED INDICATOR):** This indicator flashes to warn the operator that high voltage is present at the high voltage output terminal.
12. **RETURN OUTPUT JACK:** For the connection of the detachable 5 foot (1.52 m) black return test lead. This lead is always used when performing a test.