ASSOCIATED RESEARCH

# Quick Start Guide

## Hypot® III

3705, 3765, 3770, 3780


## SAFETY CHECKLIST

**S**urvey the test station. Make sure it is safe & orderly.

**A**lways keep unqualified/unauthorized personnel away from the test area.

**F**amiliarize yourself with safety protocols in the event of a problem.

**E**xercise caution and never touch products or connections during a test.

**T**rain operators. Never touch clips directly and always connect the return lead first.

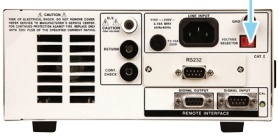
**Y**ou should always know when a test is being performed.

WARNING: THIS GUIDE WAS CREATED FOR OPERATORS HAVING SOME FAMILIARITY WITH ELECTRICAL SAFETY TESTING. AN ELECTRICAL SAFETY TESTER PRODUCES VOLTAGES AND CURRENTS THAT CAN CAUSE HARMFUL OR FATAL ELECTRIC SHOCK. TO PREVENT ACCIDENTAL INJURY OR DEATH, THESE SAFETY PROCEDURES MUST BE STRICTLY OBSERVED WHEN HANDLING AND USING A TEST INSTRUMENT. CONTACT US AT INFO@ARISAFETY.COM FOR MORE INFO ON HOW TO GET TRAINED ON ELECTRICAL SAFETY TESTING.

# INSTRUMENT SETUP

WARNING: LOCATE A SUITABLE TESTING AREA WITH A THREE-PRONG, GROUNDED OUTLET. BE SURE THAT YOUR THREE-PRONG OUTLET HAS BEEN TESTED FOR PROPER WIRING. READ THE SAFETY CHECKLIST OF THIS GUIDE BEFORE STARTING TO TEST.

1. Select the correct input line voltage on the rear panel of the instrument, either 115 VAC or 230 VAC.



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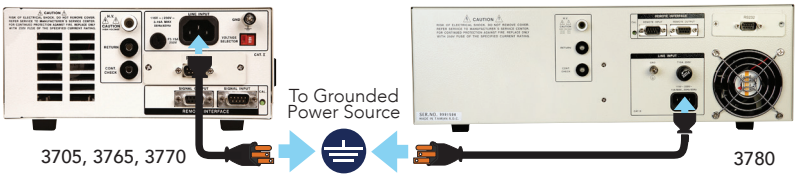
3780: Automatic Selection

2. Connect the female end of the standard NEMA style line power cord into the input power receptacle on the rear panel of the instrument. Plug the male end of the cord into a grounded power source.

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3. Connect the Interlock Disable Key into the signal input connector on the rear panel of the instrument. This is required to run a test.

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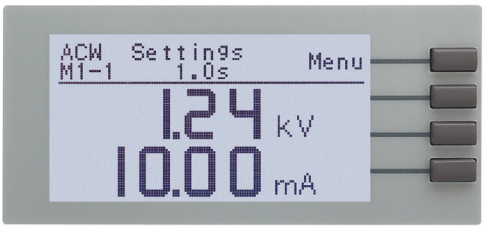
4. Turn the instrument power switch ON.

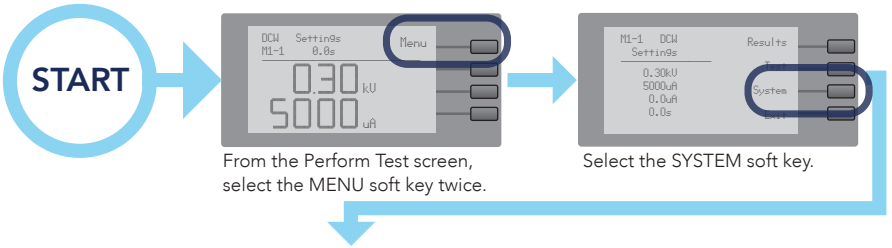
The initialization screen will appear. After three seconds the Perform Test screen will appear as shown below.




Perform Test Screen

# EDIT SYSTEM PARAMETERS

Configure the instrument system parameters to your preferences. The instrument system parameters are global and will affect all tests that you perform regardless of memory location and memory step.




From the Perform Test screen, select the MENU soft key twice.

Select the SYSTEM soft key.

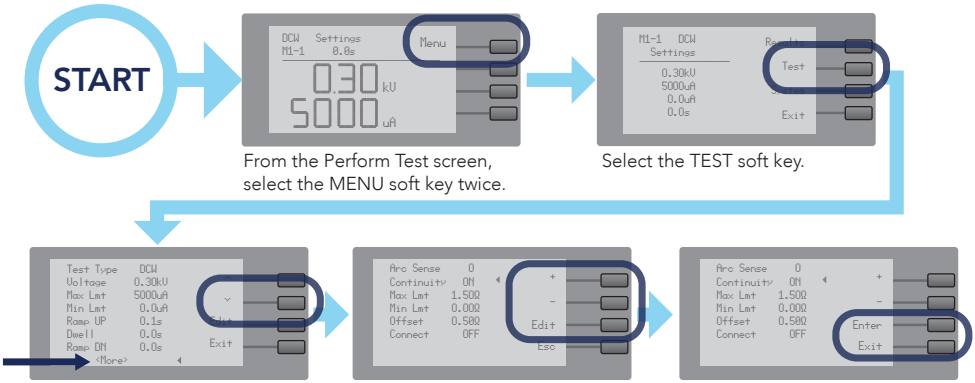
Select a parameter to edit by scrolling with the ^ and v soft keys. Select the + soft key to change the parameter.

Select EXIT twice to save changes and return to the Perform Test screen.

# PERFORM A GROUND CONTINUITY CHECK

You can easily perform a Ground Continuity check on Class I products through the use of the adapter box (P/N 36544) provided with the instrument and ground return lead. To enable this function, you will need to set the instrument to run either an AC or DC Hipot test.

**Note:** If you need to preform a Ground Continuity check on your DUT, be sure to enable the Ground Continuity test before moving forward.




From the Perform Test screen, select the MENU soft key twice.

Select the TEST soft key.

Use the v arrow key to select CONTINUITY on the next screen.

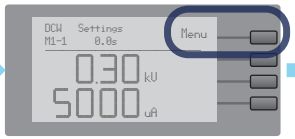
Select Edit soft key. Use the + and - soft keys to select ON.

Select ENTER to save changes. Select EXIT twice to return to the Perform Test Screen.

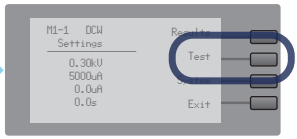
# EDIT TEST PARAMETERS

You may configure your test routine by following the outlined steps:

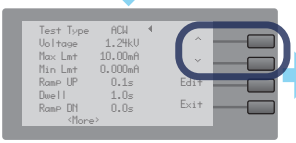
START



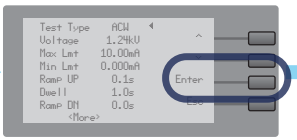

From the Perform Test screen, select the MENU soft key twice.



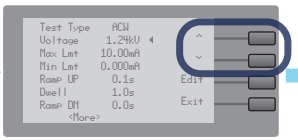

Select the TEST soft key.



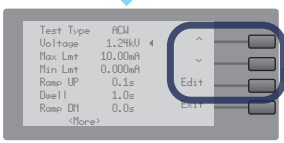

Test Type will be highlighted. Select EDIT and then use the "+" soft key to toggle between AC, DC, or IR.



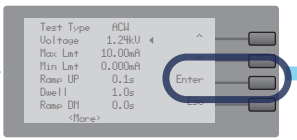

Select ENTER to save changes.



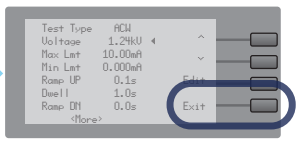

Use the ^ and v arrow keys to select another parameter to edit.




Select EDIT and then use the "+" and "-" soft keys to edit additional parameters.




Select ENTER to save changes for each parameter.




Once each test parameter has been edited, select EXIT twice to return to the Perform Test Screen.

# TEST CONNECTION

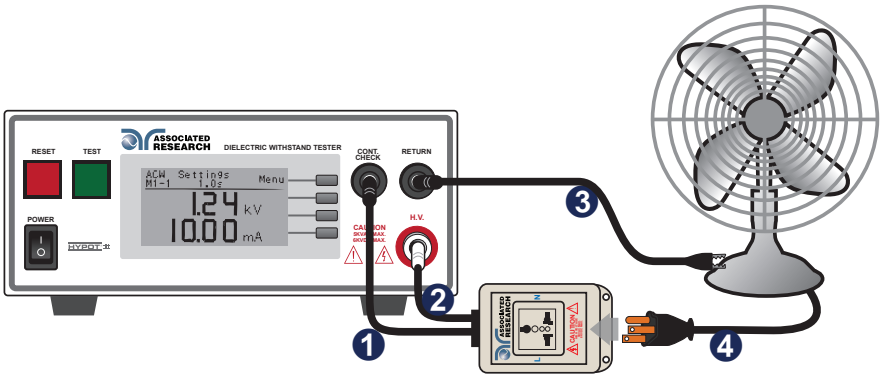
WARNING: DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

**Adapter Box Connections**

To increase operator safety, you may elect to use an adapter box for products terminating in either a two-prong or three-prong line cord.

**Note:** Be sure to enable the Ground Continuity check before moving forward (see page 3).

1. Plug the black lead from the adapter box (P/N 365440) into the CONT. CHECK terminal located on the front panel.
2. Plug the white lead (P/N 4040A-08) from the adapter box into the high voltage output terminal located on the front panel.
3. Connect the black ground return lead (P/N 2100A-13) to the front panel return terminal and connect the other end of the lead to the dead metal on the chassis of the DUT. Check to ensure a solid connection is made between the DUT and the return clip.
4. Plug the line cord of the DUT into the adapter box receptacle.



# TEST CONNECTION

WARNING: DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

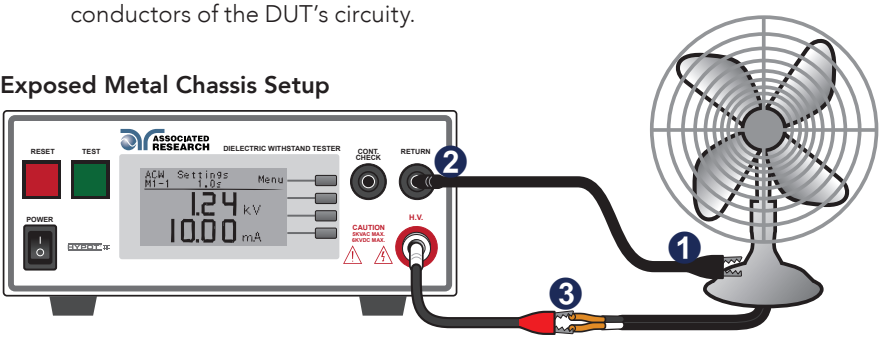
## DUT Connections

1. Connect the clip end of the return lead (P/N 2100A-13) to the exposed or dead metal of the chassis of the DUT. Always connect the ground return clip first and double check that it has a solid connection to the DUT.

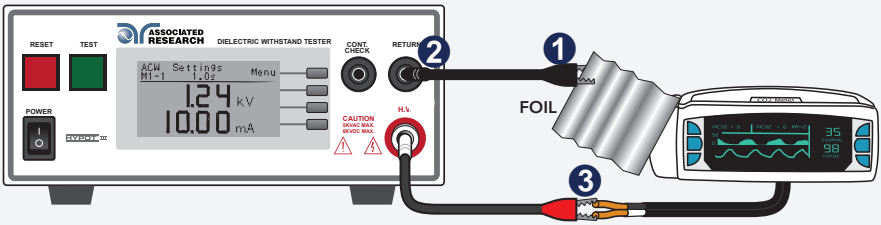
2. Connect the black ground return lead (P/N 2100A-13) to the Return terminal located on the front panel of the instrument.

3. Connect the red high voltage lead (P/N 4040A-08) to the H.V. terminal. Connect the clip end of the high voltage lead to the current carrying conductors of the DUT's circuity.

### Exposed Metal Chassis Setup




### Non-Exposed Metal Chassis Setup




If your chassis does not have any exposed metal, you can wrap the enclosure of the DUT in foil and then connect the return lead to the foil.

# CONDUCT A TEST

1. Connect the Interlock Disable Key (P/N 38075) to the signal input connector on the rear panel of the instrument. If you're not utilizing a DUT enclosure (P/N 39064 or 39656) or other safety device, the Interlock Disable Key is required in order to run a test.

2. With the instrument set to the desired test type and your DUT correctly connected to the instrument, you are now ready to start testing.

3. If the Continuity function is ON and the resistance of the ground circuit is less than the Max Resistance setting, the green TEST button will illuminate.

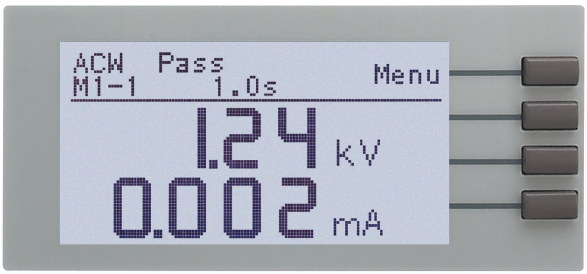
4. Push the green TEST button on the front panel. The DUT is tested for a duration equal to the Ramp and Dwell settings.

⚠ WARNING: DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

# TEST RESULTS

**PASS:** If the DUT passes the test, you will hear a short audible beep and the display will indicate the test results.

**FAIL:** If a failure occurs, you will hear a long audible alarm and the red flashing indicator will light up. Press the red RESET button to stop alarm.




Pass/Fail Indication Screen


Safety Is Our Only Focus®

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For additional information about these and other key features of the Hypot® III, please consult the full Operation and Service Manual or call us toll-free 1-800-858-TEST (8378) or +1-847-367-4077



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