

## Quick Start Guide

### HypotULTRA<sup>®</sup>

for the following models: 7800, 7820, 7850



## 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 & 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](mailto:INFO@ARISAFETY.COM) FOR MORE INFO ON HOW TO GET TRAINED ON ELECTRICAL SAFETY TESTING.

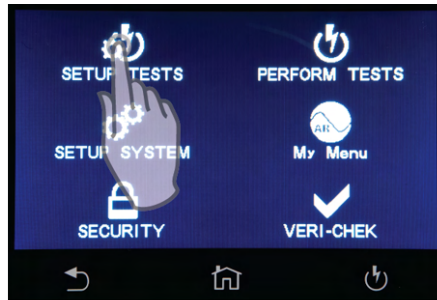
# TOUCH SCREEN OPERATIONS



-  Back
-  Home
-  Test Screen

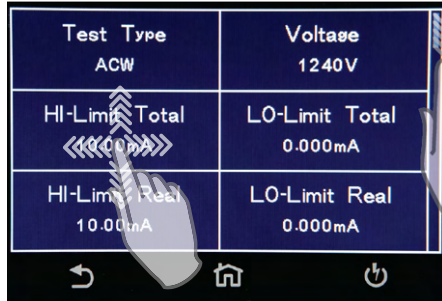
## TOUCH

Tap the virtual buttons to open various functions.



## SWIPE UP, DOWN, LEFT & RIGHT

Simple gestures allow you to quickly move through screens & parameters.



## DRAG & DROP

Simply touch and hold the test file, test step, or parameter and drag the file to the appropriate location.

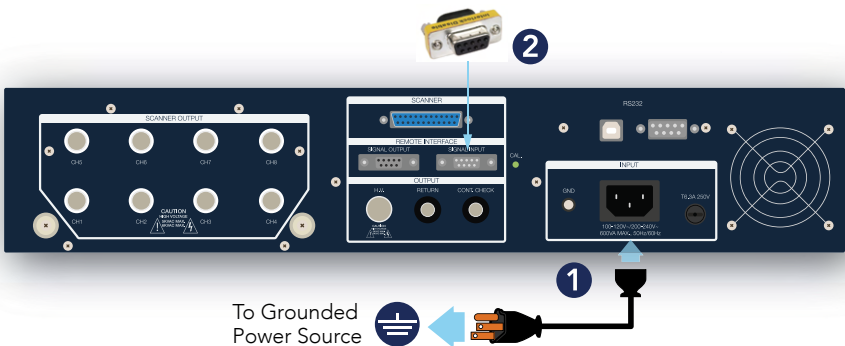


# INSTRUMENT SET UP



**WARNING:** LOCATE A SUITABLE TESTING AREA WITH A CLASS I GROUNDED OUTLET. BE SURE THAT THE CLASS I GROUNDED OUTLET HAS BEEN TESTED FOR PROPER WIRING. MAKE SURE YOU READ THE SAFETY CHECKLIST OF THIS GUIDE BEFORE USING THE INSTRUMENT.

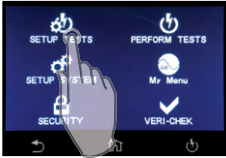
- 1 Connect the female end of the standard NEMA style line power (mains) cord into the input power receptacle on the rear panel of the instrument and plug the male end of the cord into a grounded power source.
- 2 Connect the Interlock Disable Key to the Signal Input connector on the back panel of the instrument if you're not utilizing a DUT enclosure (P/N 39064 or 39656) or other safety device. This is required in order to run a test.
- 3 Turn the instrument power switch ON.



# TEST SET UP

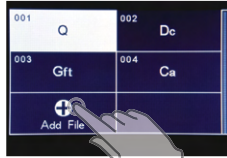


PRESS POWER



TAP SETUP TESTS

Home Screen




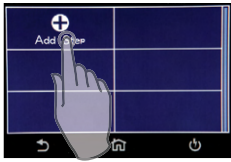
TAP ADD FILE

File Screen



ADD FILE NAME

Tap the ENTER (  ) key to save your selection



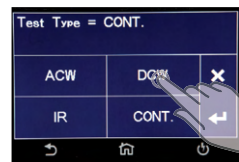
TAP ADD STEP

Add Step




TAP TEST TYPE

Test Parameter Screen




SELECT TEST TYPE

Tap the ENTER (  ) key to save your selection



VIEW PARAMETERS

Swipe left or right to scroll through parameters and tap parameter values to edit. After you adjust the parameters, tap the ENTER (  ) arrow key to save changes.

# ADAPTOR BOX CONNECTIONS



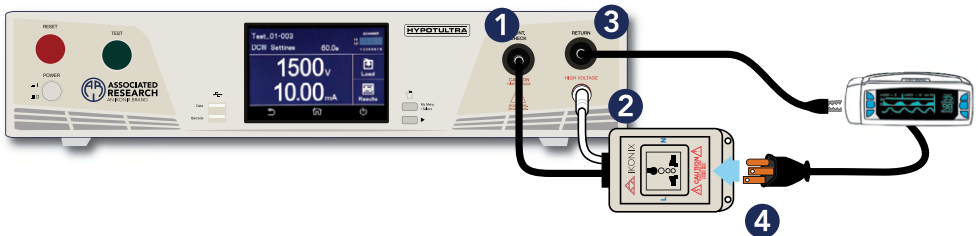
DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

The adapter box provides an easy way to connect the HypotULTRA to a device under test (DUT) terminated in a two- or three-prong power cord. The following diagram shows how to connect the adapter box to the HypotULTRA and to the DUT.

**Note:** If you need to perform a Ground Continuity test, be sure you enable the Ground Continuity test type before moving forward.

- 1 Plug the black cord from the adapter box (P/N 36544) into the continuity output terminal located on the front panel.
- 2 Plug the white cord from the adapter box (P/N 36544) 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 output terminal and connect the other end of the lead to the dead metal on the chassis of the DUT. Always check to be sure a good connection has been made between the DUT and the return clip.
- 4 Plug the line cord of the DUT into the adapter box receptacle.

**Note:** You may also use the rear output terminals on the back of the HypotULTRA instead of the front panel output terminals.



# TEST LEAD CONNECTIONS

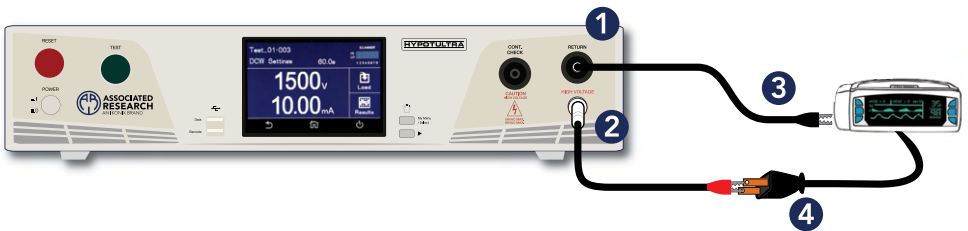


DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

If there is no ground circuit on your DUT, you may use the test leads to connect the HypotULTRA to your DUT. Turn off the Continuity function for this connection.

- 1 Plug the black ground return lead (P/N 2100A-13) into the Return terminal on the front panel of the instrument.
- 2 Connect the high voltage lead (P/N 4040A-08) into the High Voltage terminal on the front panel of the instrument.
- 3 Connect the black ground return lead (P/N 2100A-13) to the dead metal on the chassis of the DUT. Always check to be sure a good connection has been made between the DUT and the return clip.
- 4 Attach the high voltage lead (P/N 4040A-08) to the current carrying conductors of the DUT.

After you make the proper connections, you can initiate a test from the front panel of the HypotULTRA by pressing the green TEST button. Press the red RESET button to abort a test in process.

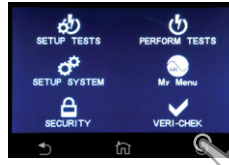


# PERFORM TESTS



TAP PERFORM TESTS

OR



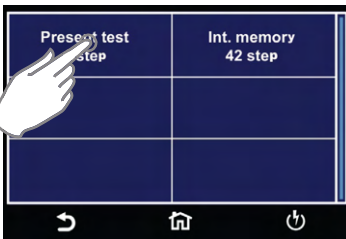
TAP TEST SCREEN  
BUTTON AT THE  
BOTTOM OF THE  
TOUCH SCREEN



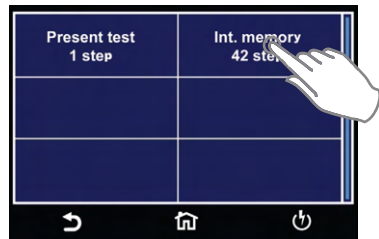
PUSH THE  
TEST BUTTON

# RESULTS

After a test has completed, the Results icon will be available on the screen. Tap RESULTS to view your test results.



Tap "Present test step" to view the results of the last test step.



Tap "Int. memory" to view the previously performed steps.



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

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12/2022



# Quick Start Guide

## HypotULTRA®

Models 7804 and 7854



### SAFETY CHECKLIST

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- 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.
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# INSTRUMENT SETUP

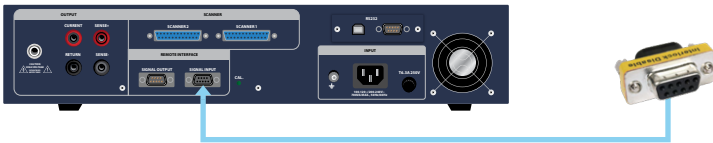


WARNING: LOCATE A SUITABLE TESTING AREA WITH A THREE-PRONG, GROUNDED OUTLET. BE SURE THAT YOUR THREE-PRONG OUTLET HAS BEEN TESTED FOR PROPER WIRING. READ THE SAFETY CHECKLIST OF THIS GUIDE BEFORE STARTING TO TEST.

- 1 Connect the female end of the power input plug into the rear of the instrument and plug the male end of the cord into a grounded power source.

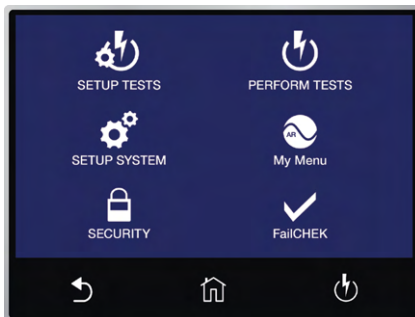


- 2 Plug the Interlock Disable Key into the signal/input connector on the rear panel of the instrument.



- 3 Push the POWER button to turn instrument ON.

The initialization screen will appear first, then after three seconds the home screen will appear as shown below.



Home Screen

# TOUCH SCREEN OPERATIONS



Back



Home



Test Screen

## TOUCH

Tap the virtual buttons to open various functions.



## SWIPE UP, DOWN, LEFT & RIGHT

Simple gestures allow you to quickly move through screens & parameters.



## DRAG & DROP

Simply touch and hold the test file, test step, or parameter and drag the file to the appropriate location.



# TEST SET UP



**TAP SETUP TESTS**  
Home Screen



**TAP ADD FILE**  
File Screen



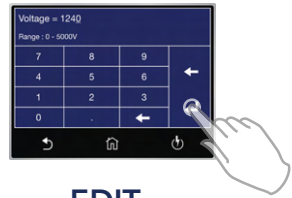
**ADD FILE NAME**  
Tap the ENTER (  ) key to save your selection.




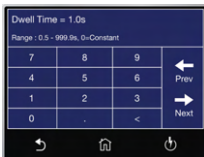
**TAP ADD STEP**  
Add Step



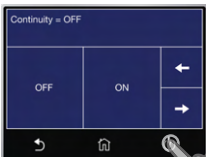
**TAP TEST SETTING**  
Tap the test parameter you would like to edit. Swipe up and down to scroll through test parameters.



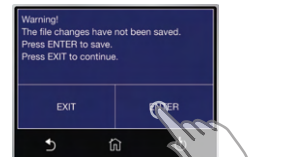
**EDIT PARAMETERS**  
Tap parameter values to edit individually. After you adjust each parameter, tap ENTER (  ) arrow key to save changes.



**ADJUST PARAMETERS**  
Scroll through each parameter to adjust values based on your application.



**EXIT PARAMETERS**  
Press the Test Screen button to exit out of Parameters.




**SAVE FILE CHANGES**  
Press ENTER to save your file changes. You will be redirected to the Test Screen.

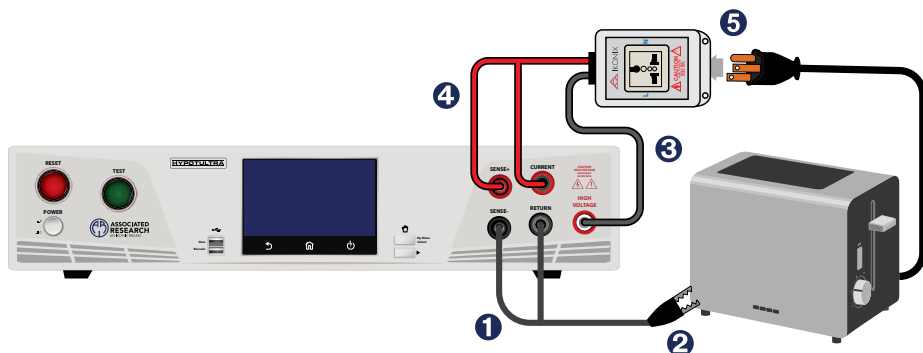
# TEST CONNECTION

## ADAPTER BOX CONNECTIONS (7804/7854)

The adapter box (P/N 38482) provides an easy way to connect the HypotULTRA® to a device under test (DUT).

 **Note:** If you are testing a Class I product, safety agencies may require you to perform a Ground Bond test on the ground circuit of the DUT along with the Hipot test.

- 1** Plug the black return lead (P/N 38490) into the Return terminal. Plug black sense lead into the Sense (-) terminal.
- 2** Attach the clip-terminated end of the return lead to the dead metal on the chassis of the DUT.
- 3** Connect the high voltage lead from the Adapter Box into the High Voltage terminal on the front panel of the instrument.
- 4** Plug the red sense lead from the Adapter Box into the Sense (+) terminal. Plug the red high current test lead into the Current terminal.
- 5** Plug the power cord of the DUT into the Adapter Box receptacle.



# TEST CONNECTIONS

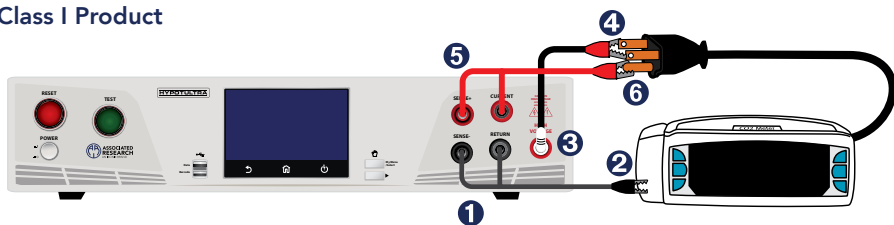


WARNING: DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

## TEST LEAD CONNECTIONS

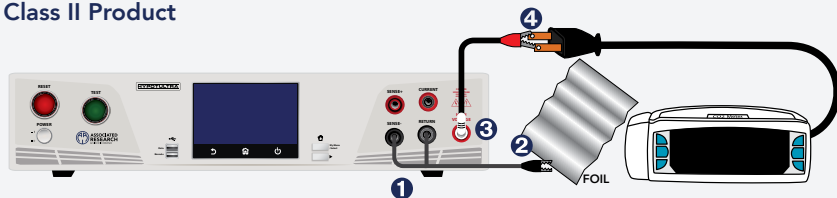
- 1 Plug the black return lead (P/N 38490) into the Return terminal. Plug black sense lead into the Sense (-) terminal.
- 2 Attach the clip-terminated end of the return lead to the dead metal on the chassis of the DUT.
- 3 Connect the high voltage lead (P/N 4040A-08) into the High Voltage terminal on the front panel of the instrument.
- 4 Attach the high voltage lead to the current-carrying conductors of the DUT.
- 5 Plug the red sense lead into the Sense (+) terminal. Plug the high current test lead into the Current terminal. These two leads act as the red high current output.
- 6 Clip the other end to the ground pin of the DUT plug.

### Class I Product



If there is no ground circuit present on the DUT, you can use test leads to connect the HypotULTRA® to the DUT.

### Class II Product



**Did you know?** If necessary, a 10 x 20 cm piece of foil can be attached to the enclosure to simulate a full hand contact to the DUT. This foil acts as the return point. The Return and Sense (-) terminal are attached to the foil. Always check to make sure you made a good connection between the DUT and the return clip.

# PERFORM TESTS



TAP PERFORM TESTS

OR



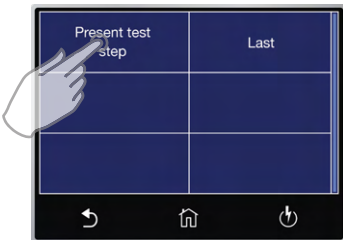
TAP THE TEST SCREEN BUTTON



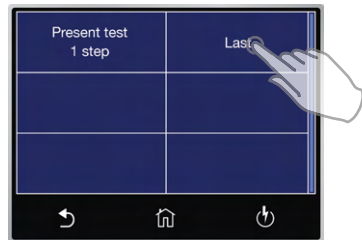
PUSH THE TEST BUTTON

# RESULTS

After a test has completed, the Results icon will be available on the screen. Tap RESULTS to view your test results.



Tap "Present test step" to view the results of the last test step.



Tap "Last" to view the previously performed steps.



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For additional information about these and other key features of the HypotULTRA®, 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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