



# **OMNIA® II**

Models 8204/8254, 8206/8256, 8207/8257





# SAFETY CHECKLIST

Survey the test station. Make sure it is safe & orderly.

 $ilde{\mathsf{A}}$ lways keep unqualified/unauthorized personnel away from the test area.

Familiarize yourself with safety protocols in the event of a problem.

Exercise caution and never touch products or connections during a test.

Train operators. Never touch clips directly and always connect the return lead first.

You 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 CLASS I GROUNDED OUTLET. BE SURE THAT YOUR CLASS I 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 standard NEMA style 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.



To Grounded Power Source



2 Connect the interlock disable key to the signal input connector on the rear panel of the instrument. This is required to run a test.

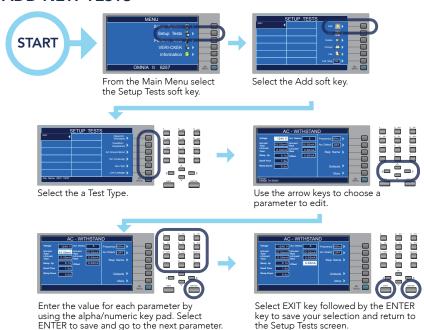


3 Turn the POWER switch to ON.



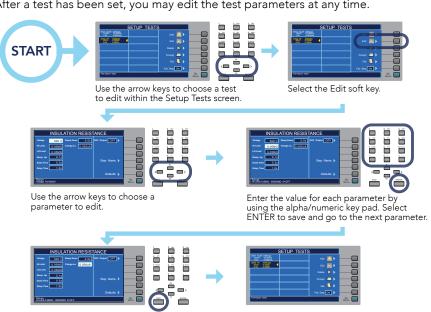
# **TEST SETUP**

### **ADD NEW TESTS**



## **EDIT TEST PARAMETERS**

After a test has been set, you may edit the test parameters at any time.



Select EXIT kev.

You will return to the Setup Tests screen.

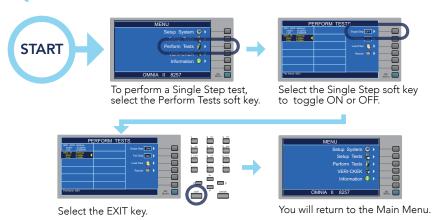
# **TEST SETUP**

## **SET TEST SEQUENCES**

Adding multiple tests to the same screen automatically creates a multiple step test sequence.

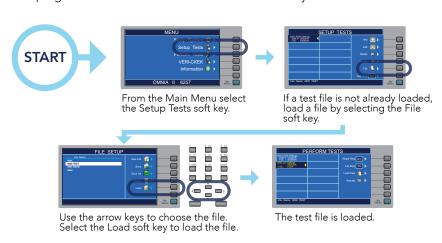


**Note:** The test will run in a sequential order unless Single Step control is set to ON.

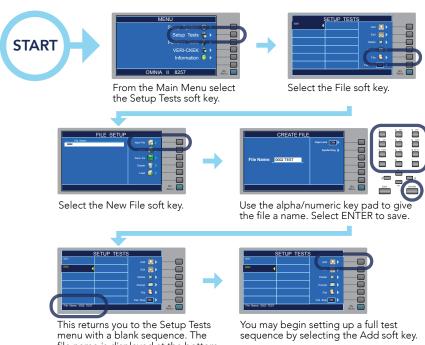


# **SET TEST SEQUENCES**

Test programs can be saved and loaded as files for easy recall of test conditions.

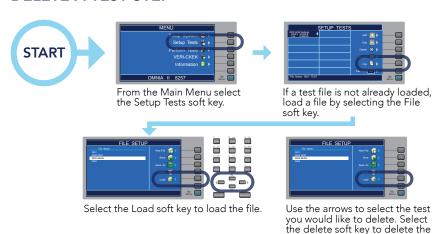


## **CREATE A NEW TEST FILE**



file name is displayed at the bottom.

## **DELETE A TEST STEP**



Test Step.

# **TEST CONNECTIONS**

### ADAPTER BOX CONNECTIONS (8204/8254)

The adapter box (P/N 38482) provides an easy way to connect the OMNIA II 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.

- Using the output ports on the rear panel, plug the black high voltage lead in the High Voltage terminal.
- 2 Plug the sense lead into the Sense (+) terminal. Plug the high current test lead into the Current terminal. These two red leads act as the ground connection.
- Connect the ground return clip (P/N 38490) to the dead metal on the chassis of the DUT. Plug the sense lead into the Sense (-) terminal. Plug the return lead into the Return terminal. Always check to make sure a good connection is made between the DUT and the return clip.

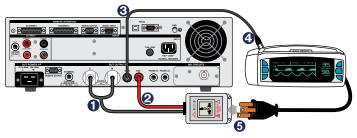
Plug the power cord of the DUT into the adapter box receptacle.



## ADAPTER BOX CONNECTIONS (8206/8256 & 8207/8257)

**Note:** Use the rear output terminal for connecting the adapter box (P/N 38578) on the 8206/8256 and 8207/8257 models.

- Using the DUT output ports on the rear panel, plug the line lead from the adapter box into the L terminal and the neutral lead into the N terminal.
- Attach the red ground lead from the adapter box to the GND terminal.
- 3 Attach the black case return (P/N CBLHC40-10TL) lead into the case terminal.
- 4 Connect the ground return clip to dead metal on the chassis of the DUT.
- 5 Plug the line power cord from 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**

If you want you can use test leads to connect the OMNIA II to the DUT.

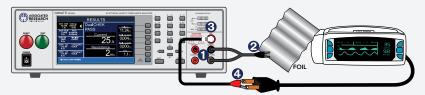
- 1 Plug the black return lead (P/N 38490) into the Return terminal. Plug black sense lead into the Sense (-) terminal.
- 2 Attach the clip-terminated end of the return lead to the dead metal on the chassis of the DUT.
- 3 Connect the high voltage lead (P/N 4040A-08) into the High Voltage terminal on the front panel of the instrument.
- 4 Attach the high voltage lead to the current-carrying conductors of the DUT.

#### Class I Product



**Did you know?** When performing a **Ground Bond test** on a **Class I product** connect the red high current lead (P/N 38489) into the current terminal and red sense lead into the sense (+) terminal. The clip at the other end will connect to the ground pin of the DUT plug.

#### 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.

# **RESULTS**

View the results from performed tests. Results include test type, reason for failure, and test parameters.



From the Perform Tests screen, use the arrow keys to choose the file to see the test results.

Select the Results soft key.



Results include test type, reason for failure and test parameters.



Select the EXIT key to return to the Perform Tests screen





For additional information about these and other key features of the OMNIA® II, please consult the full Operation and Service Manual or call us toll-free 1-800-858-TEST (8378) or +1-847-367-4077 ©2022 Associated Research • arisafety.com

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