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eec

QUICK START GUIDE

EEC-30 Series

HIPOT TESTERS

Model: EEC-31

CE

SAFETY CHECKLIST

[S] urvey the test station. Make sure it is safe and orderly.

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

[F] amiliarize yourself with safety protocols in the event of an issue.

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

[T] rain operators to connect the return lead first and never touch clips directly.

[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.

TESTER 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 standard NEMA-style line power cord into the input power receptacle on the rear panel of the tester. Plug the male end of the cord into a grounded power source.

2 Connect the Interlock Disable Key into the Signal Input connector on the rear panel of the tester.
This is required to run a test.

3 Turn the POWER switch ON. Upon start up, an initial screen will appear briefly. After two seconds, the Home screen will appear as shown below. Tests are performed from the Home screen.

Home Screen

SETTING TEST MEMORIES

If you wish to have multiple test setups, you will need to begin by choosing a Memory Location (M1 - M3) for each test. There are up to five optional memories available.

PROGRAM A MEMORY

1. 

Home Screen.

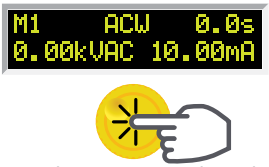
2. 

Turn the yellow rotary knob to scroll to **M1** to edit Memory 1. (M2 = Memory 2, etc.)

3. 

When **M1** is selected, press the rotary knob to recall Memory 1.

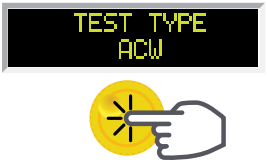
EDIT TEST PARAMETERS

1. 

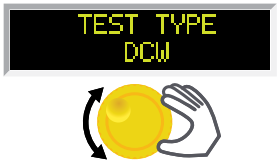
From the Home screen, begin by pressing the yellow rotary knob.

2. 

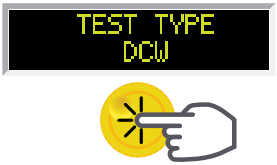
Turn the rotary knob to scroll to the desired parameter to edit: **TYPE, VOLT, HI-L, LO-L, RAMP, DWELL, CONT, FREQ, CONN.**

3. 

When the parameter is selected, press the rotary knob to edit the parameter. The options will blink.

4. 

Turn the rotary knob to change the options for the parameter.

5. 

Confirm each value by pressing the rotary knob. Continue this process for each parameter.

6. 

Turn the rotary knob to **BACK** and press the rotary knob to return to the Home screen. Alternatively, press the red **RESET** button to return Home.

PERFORM A HIPOT GROUND CONTINUITY TEST

You can easily perform an AC/DC Withstand test with a ground continuity check. Test Class I products by using an adapter box (P/N 36544) and a ground return lead. To enable this function, you will need to set the tester to run either an AC or DC hipot test.

1. 

From the Home screen, begin by pressing the yellow rotary knob.

2. 

Turn the yellow rotary knob to scroll to **TYPE.**

3. 

When the parameter is selected, press the rotary knob to edit the parameter. The options will blink.

4. 

Turn the rotary knob to change the parameter to either **AC or DC.**

5. 

Confirm by pressing the rotary knob.

6. 

Turn the rotary knob to **CONT** and press the knob to select.

7. 

When **CONT** is selected, press the rotary knob to edit the Continutiy setting. The options will blink.

8. 

Turn the rotary knob to change the Continutiy setting to **ON.** Confirm by pressing the rotary knob.

9. 

When done, you will be promted to enter a value for HI-L.

10. 

Then enter a value for LO-L.

11. 

Then enter a value for Offset.

12. 

When done, select **BACK** to return to the previous menu. Alternatively, press the red **RESET** button to return to the Home 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. **If using an adapter box,** follow these instructions to safely connect a device under test (DUT).

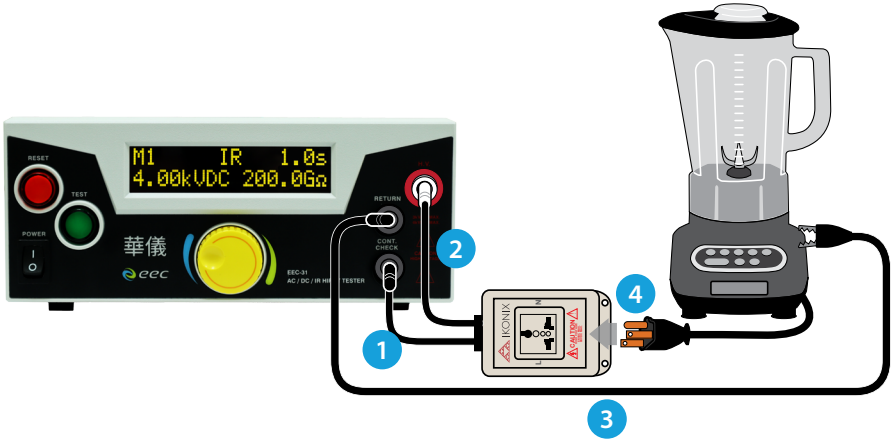
NOTE: Be sure to enable the ground continuity test before proceeding. See page 3.

1. Plug the black lead from the adapter box (P/N 36544) into the CONT. CHECK terminal located on the front panel.

2. Plug the white lead from the adapter box into the H. V. output terminal located on the front panel.

3. Plug the black ground return lead (P/N 02100A-13) to the front panel RETURN terminal. Connect the clip 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

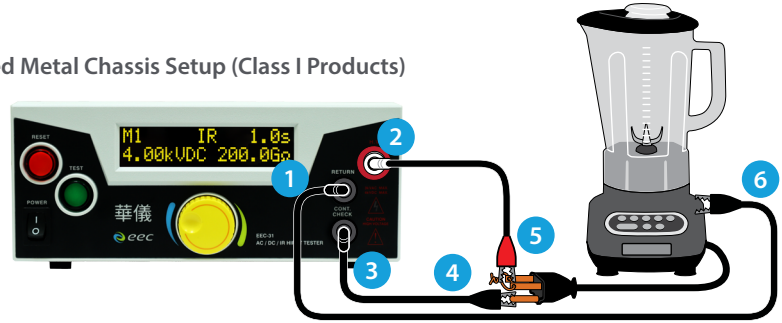
WARNING: DO NOT TOUCH THE DEVICE UNDER TEST ONCE YOU START THE TEST.

DUT Connections

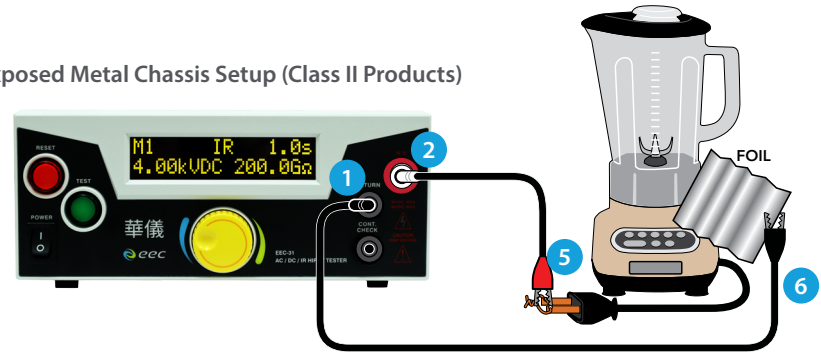
If you elect to use test leads, follow these instructions to safely connect a DUT.

1. Plug the black ground return lead (P/N 02100A-13) into the RETURN terminal located on the front panel of the tester.
2. Plug the high-voltage lead (P/N 04040A-08) into the H.V. terminal on the front panel of the tester.
3. Plug the continuity lead to the CONT. CHECK terminal on the front panel of the tester. *(Class I products only)*
4. Connect the clip end continuity lead to the ground pin of the DUT. *(Class I products only)*
5. Connect the clip end of the high-voltage lead to the current carrying the DUT's conductor circuitry.
6. Connect the clip end of the ground return lead to the exposed metal chassis of the DUT.

Exposed Metal Chassis Setup (Class I Products)



Non-Exposed Metal Chassis Setup (Class II Products)



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

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

1. Connect the Interlock Disable Key (P/N 38075) to the Signal Input connector on the rear panel of the tester. If you're not utilizing a DUT enclosure (P/N 39067) or other safety device, **the Interlock Disable Key is required in order to run a test.**

2. With the tester set to the desired test type and your DUT correctly connected to the tester, 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/Delay settings.

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. To stop the alarm, press the red RESET button.

Pass/Fail Indication Screen

If a failure occurs, a failure code will appear on the screen. Consult your product manual to determine the meaning of your failure code.

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