

Setup Guide

For GW Instek e-Load

USER MANUAL



ISO-9001 CERTIFIED MANUFACTURER

GW INSTEK

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Setup guide for e-Load

Risk of electric shock

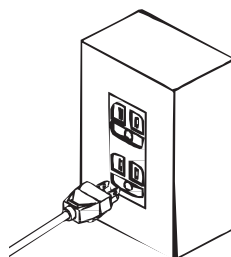
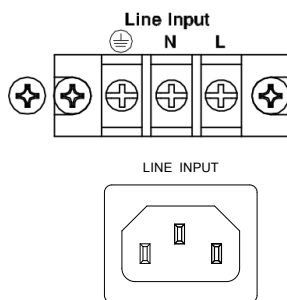


WARNING

- The AC/DC load conforms to IEC Safety Class I (equipment that has a Protective Conductor terminal). Be sure to earth ground the product to prevent electric shock.
 - The AC/DC load is grounded through the power cord ground wire.
 - Connect the protective conductor (PE) terminal to earth ground.
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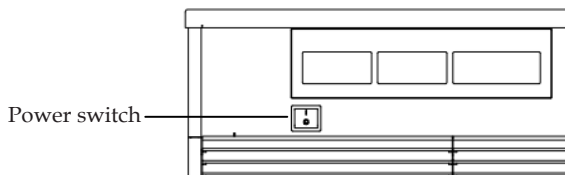
Installation and Preparation

- Step
1. Turn the power switch off.
 2. Check that the AC power line meets the nominal input rating of the AC/DC load.
 3. Connect the power cord to the AC input.
 4. Check that the power cord is connected correctly.
 5. Connect the power cord plug to a properly grounded outlet.



Connect to a properly grounded outlet.


Checking Whether the Power Is On or Off



Note

This is a schematic diagram, referring to all load products

Step

1. Check that the power cord is connected correctly.
2. Check that nothing is connected to the AC/DC input (load input) terminals on the rear panels.
3. Turn the power switch on.
4. If you notice strange sounds, unusual odors, fire, smoke around or from inside the AC/DC load, turn the power switch off, or remove the power cord plug from the outlet.
5. Press the power switch  to turn the power off.

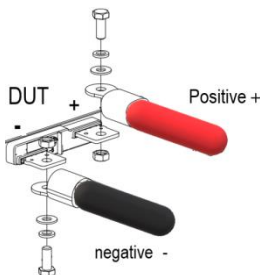
Connecting to the DUT

Risk of danger



CAUTION

- Do not connect the DUT to the load input terminals while the product's load is turned on.
 - Do not invert the polarity when connecting. If the polarity is reversed, overcurrent will be generated when the DUT activates the output and therefore, resulting in damage to the DUT or eLOAD.
 - To avoid overheating, observe the following precaution.
 - Use the supplied screws to connect the cables with wire terminals.
-



Note

This is a schematic diagram, referring to all load products.

Connecting to the load input terminals on the rear panel

Risk of electric shock

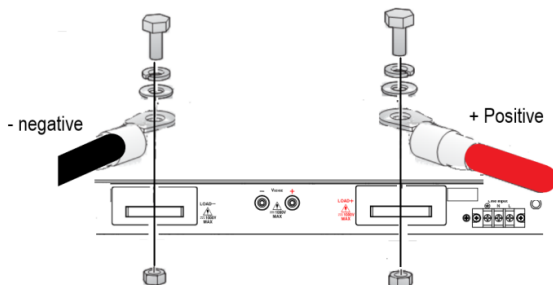


WARNING

Be sure to attach the cover for the load input terminals on the rear panel.

Step

1. Turn the load off.
2. Turn off the output of the DUT.
3. Connect the DUT to the load input terminals on the rear panel.
4. Connect the load cables to the load input terminals on the rear panel using the included load input terminal screw set.
5. Do not invert the polarity when connecting.
6. Connect the positive (+) input terminal on the load generator to the high Potential output of the DUT & Load unit, and connect the negative (-) polarity input terminal on the load generator to the low Potential output of the DUT & Load unit. This completes the connections.



Note

This is a schematic diagram, referring to all load products.

Wire/Cable Guide



CAUTION Load wiring has inductance (L). Please check the “Load Line Inductance” section of the user manual for the correct application.

The following table provides a guide to the current carrying capability (ampacity) of Both Metric and AWG sizes. Metric sizes are expressed as a cross sectional areas (CSA). If in any doubt of a cables ampacity it is recommended that you ask your Cable supplier.

Wire Size AWG	Ampacity (A)	CSA (mm ²)	Notes:
			Ratings for AWG-sized wires derived from MIL-W-5088B.
			Ratings for metric-sized wires derived from IEC Publication
22	5.0	---	Ampacity of aluminum wire is approximately 84% of that listed for copper wire.
20	8.33	---	
---	10	0.75	
18	15.4	---	When two or more wires are bundled together, ampacity for each wire must be reduced to the following percentages :
---	13.5	1	
16	---	---	
---	16	1.5	
14	31.2	---	
---	25	2.5	2 conductors 94 % 3 conductors 89 % 4 conductors 83 % 5 conductors 76 %
12	40	---	
---	32	4	
10	55	---	
---	40	6	
8	75	---	Maximum temperatures: Ambient = 50° C Conductor = 105° C
---	63	10	
6	100	---	
4	135	---	

Sequence Power ON / Off the Load and DUT

Power ON Sequence

- | | |
|------|--|
| Step | 1. Turn the power switch of the load on. |
| | 2. Turn the power switch of the DUT on. |

Power OFF Sequence

- | | |
|------|---|
| Step | 1. Turn the power switch of the load off. |
| | 2. Turn the power switch of the DUT off. |