

Chapter **1**

INSTALLATION AND SAFETY INSTRUCTIONS

1 INSTALLATION AND SAFETY INSTRUCTIONS

1.1 SAFETY INSTRUCTIONS

Upon delivery from the factory the instrument complies with the required safety regulations (see Appendix, Section 6A). To maintain this condition and to ensure safe operation, carefully follow the instructions below.

1.1.1 Maintenance and Repair

Failure and excessive stress:

If the instrument is suspected of being unsafe, remove it from operation immediately and secure it against any unintended operation. The instrument is considered to be unsafe when any of the following conditions exist:

- It shows physical damage.
- It does not function.
- It is stressed beyond the tolerable limits (e.g., during storage and transportation).

Disassembling the Instrument:

WARNING

Calibration, maintenance, and repair of the instrument must be performed only by trained personnel who are aware of the hazards involved. To avoid electric shock, do not remove the cover unless you are qualified to do so.

Before removing the cover, disconnect the instrument from all power sources. The capacitors in the instrument may remain charged for several seconds after all power has been disconnected.

1.1.2 Grounding (Earthing)

Before any other connection is made, the instrument must be connected to a protective earth conductor via the three-wire power cable.

The power plug shall be inserted only into a grounded outlet.

Do not defeat the protective action by using an extension cord without a grounded conductor.

Do not connect a protective ground conductor into the measurement contacts on the front panel, the four contacts of the connector to which the circuit ground is applied, the external contact of the connector plug, or the connectors on the rear panel.

WARNING

Any interruption of the protective ground conductor inside or outside the instrument or disconnection of the protective ground terminal is likely to make the instrument dangerous. Intentional interruption is prohibited.

1.1.3 Connections

The circuit ground potential is applied to four of the eight contacts of the front panel connector and to the DC Bias (-) connector. It also is connected to the instrument case via parallel-connected capacitors and a resistor. The external contact of the front panel connector is connected to the instrument case. This avoids ac ground loops while providing good RF grounding.

If the circuit ground potential in a measurement setup is different from the protective ground potential, make sure that the contacts of the connectors are not live.

1.1.4 Line Voltage Setting and Fuses

Before plugging in the power cable, make sure that the instrument is set to the correct line voltage.

WARNING

To avoid injury or death, changing fuses and modifying power cables to local power must be done by qualified service personnel who are aware of the hazards involved.

On delivery from the factory, the instrument is set to one of the following line voltages:

Type	Code No.	Line Voltage	Delivered Power Cable
PM6306	9452 063 06xx1	220 V	Universal Europe North America England (U.K.) Switzerland Australia
PM6306	9452 063 06xx3	120 V	
PM6306	9452 063 06xx4	240 V	
PM6306	9452 063 06xx5	220 V	
PM6306	9452 063 06xx8	240 V	

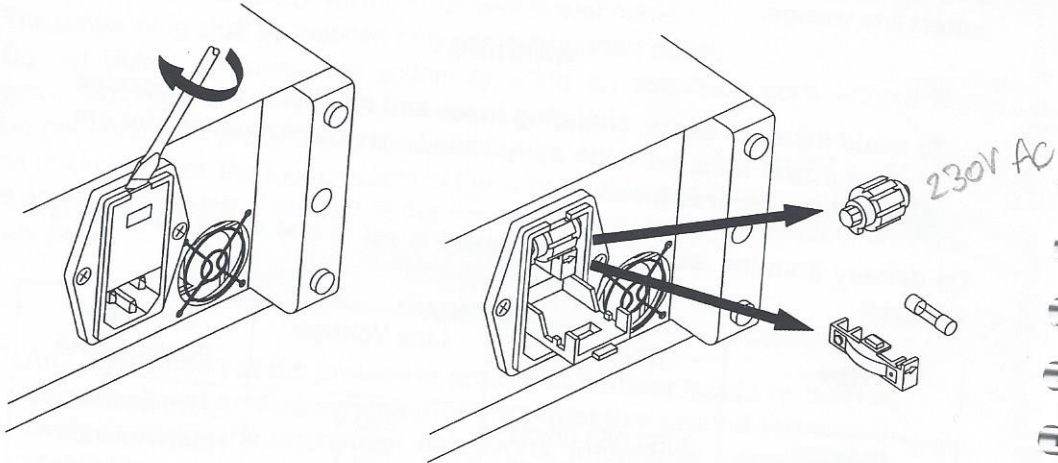
The line voltage setting and the corresponding fuse specification are indicated on the rear panel.

Make sure that replacement fuses are of the type and current rating specified. The use of repaired fuses and/or the short-circuiting of fuse holders are prohibited. Do not defeat this important safety feature.

The instrument can be set to the following line voltages: 100 V, 120 V, 220 V and 240 V ac. These nominal voltages can be selected by means of the voltage selector, located on the rear panel next to the line voltage connector. The fuse is located in a holder at the same place. For line voltage selection or replacement of the fuse, remove the power cable and pry open the compartment with a small screwdriver (see illustration).

taki just

Turn the selector to select the appropriate voltage range. If necessary, insert the specified fuse (T250mA or T500mA according to IEC127 or CSA/UL198G) that matches the line voltage setting into the fuse holder.



1.2 OPERATING POSITION OF THE INSTRUMENT

The instrument can be operated on a horizontal surface in a flat position or with the tilt bale extended. Ensure that the ventilation holes are free of obstruction. Do not position the instrument in direct sunlight or on any surface that produces or radiates heat.

1.3 RADIO INTERFERENCE SUPPRESSION

Radio interference of the instrument is suppressed and checked carefully. If radio frequency interferences occur in connection with other deficient suppressed instruments, further suppression actions may be required.