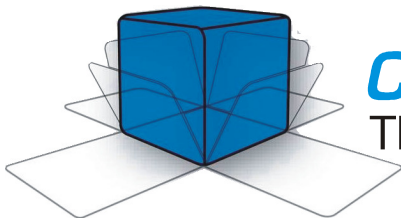


GFM-200A

Instruction Manual



COMPLIANCE WEST USA

The blue box that tests. And tests.

Dear Customer:

Congratulations! Compliance West USA is proud to present you with your new Tester. Your instrument features a groundbreaking circuit design and ergonomic front panel and represents the latest in high current production line testing.

To fully appreciate all the features of your new meter, we suggest that you take a few moments to review this manual. Compliance West USA stands by your instrument with a full one-year warranty. If the need arises, please don't hesitate to call on us.

Thank you for your trust and confidence.

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Section 1

Introduction

This manual contains complete operating, maintenance and calibration instructions for the Compliance West USA Model GFM-200A Ground Bound Tester.

The instrument is a bench-type ground circuit tester.

The GFM-200A features the variac knob, current and voltage meter, always operate with precaution.

The GFM-200A meets all safety agency criteria for ground bound testers.

Your tester is warranted for a period of one year upon shipment of the instrument to the original purchaser.

Specifications

Specifications for the GFM-200A are listed in Table 1-1.

GFM-200A Specifications	
ELECTRICAL	
Output	0-200 Amps ac $\pm 3\%$ into any load - short circuit to 12.5 milliohms
Voltage	5 volts max. open circuit
Meters	0-6 V ac, $\pm 3\%$ full scale 0-200A ac, $\pm 3\%$ full scale
ENVIRONMENTAL	
Operating Temperature	15-40°C
Relative Humidity Range	0-90% non-condensing
GENERAL	
Input power requirements	90-127 or 180-254 volts, 50/60 Hz
Dimensions	11.250(W) x 4.250(H) x 12.000(L) in.
Weight	30 lbs

Table 1-1. GFM-200A Specifications

Section 2

Operation

This section describes how to set up and operate your tester. We recommend that you read the entire section carefully so that you can use all of the features of your Tester.

Setting up your tester

Your tester is shipped in a special protective container that should prevent damage to the instrument during shipping. Check the shipping order against the contents of the container and report any damage or short shipment to Compliance West USA. The container should include the following:

- The GFM-200A Tester
- An 18 AWG Line Power Cord
- This Instruction Manual

If reshipment of the instrument is necessary, please use the original shipping container. If the original shipping container is not available, be sure that adequate protection is provided to prevent damage during shipment. We recommend that the instrument be surrounded by at least one inch of shock-absorbing material on all sides of the container.

Remove the Tester from its container and place it on a test bench.

AC Line Voltage Requirements

AC line voltage requirements for your Tester are noted on the rear panel of the instrument. Do not connect the instrument to a different voltage source.

Fuse Replacement

There is a user-replaceable fuse located on the rear panel of the instrument. The fuse rating is noted on the rear panel. Do not attempt to replace it with a fuse of any other rating.

Use the following procedure to replace the fuse F1:

1. Turn the power switch to the OFF position.
2. Unplug the instrument from the source of supply.
3. Remove the fuseholder.
4. Replace the fuse with a new one of the correct rating.
5. Replace the fuseholder.

Front Panel Features

Before using your Tester, take a few minutes to become familiar with the use of its controls, indicators and connectors. The front panel features of the GFM-200A are shown in Figure 2-1 and described in Table 2-1.

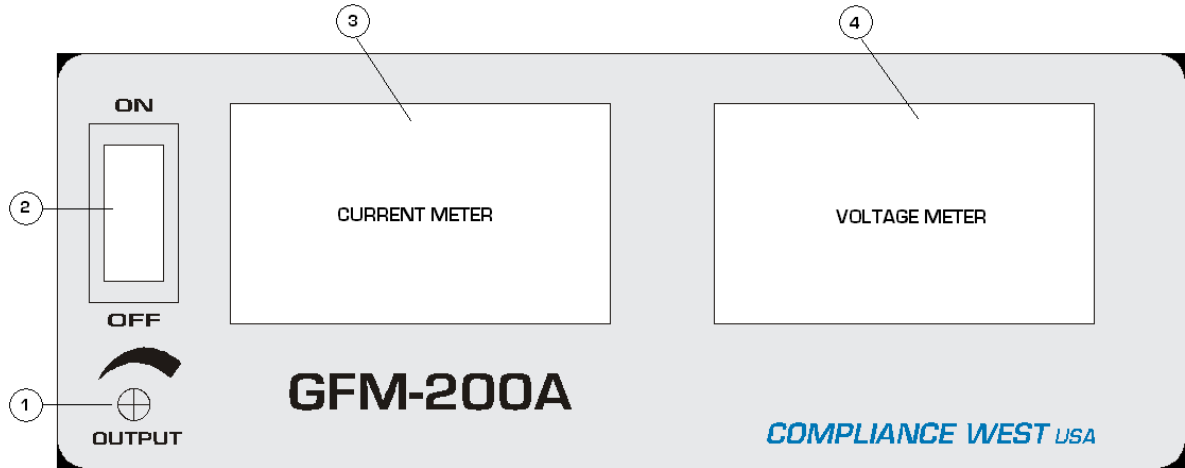


Figure 2-1. Controls, Indicators, Connectors - Model GFM-200A Front Panel

Front Panel Description

ITEM NO.	NAME	FUNCTION
1	Variac Knob	The Variac knob increase or decrease the current output of the GFM-200. Before operating the tester turn down the knob to the minimum..
2	ON/OFF Switch	The ON/OFF Switch allows to operate the unit, always turn OFF the unit when not operated.
3	Current Meter	The Current Meter show the current that is flowing thru the output of the GFM-200A.
4	Voltage Meter	The Voltage Meter show the voltage that is on the output of the GFM-200A.

Table 2-1. Controls, Indicators, Connectors - Model GFM-200A Front Panel

Rear Panel Features

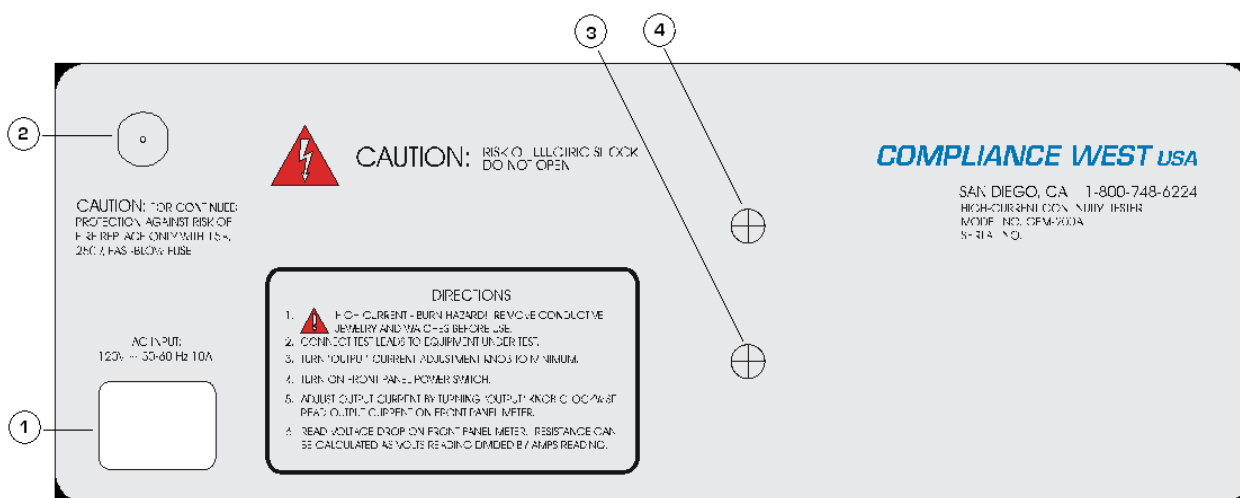


Figure 2-2. Control, Indicators, Connectors - Model GFM-200A Rear Panel

Rear Panel Description

ITEM NO.	NAME	FUNCTION
1	AC Input	Use supplied cordset to connect the GFM-200A tester to an appropriate source of supply.
2	Fuse	Fuse holder provides access for Fuse replacement.
3	Output	Tester Output is located in the back, use the cable attached to test.
4	Output	Tester Output is located in the back, use the cable attached to test.

Table 2-2. Control, Indicators, Connectors - Model GFM-200A Rear Panel

Initial Checkout Procedure

The following procedure will allow you to verify that the Tester is working correctly before use. The only test equipment required is the unit itself.

CAUTION

High current. Risk of burns. Remove any conductive jewelry before using the Tester.

1. Make sure switch is on the OFF position.
2. Remove other objects from the work area to avoid shock.
3. Plug your Tester to a correctly rated source of supply.
4. Turn Variac Knob to the minimum.
5. Connect a Voltage meter at the output.
6. Turn the power switch to the I or ON position.
7. Increase the voltage by turning the variac knob clockwise and confirm voltage meter in the front panel is in accordance with the Voltage meter connected at the output, current meter should not move, significantly.
8. Decrease the voltage knob to minimum and turn O or OFF the power switch.
9. Short circuit the output leads and connect a current clamp meter at one of the leads.
10. Turn the power switch to the I or ON position.
11. Increase the current by turning the variac knob clockwise and confirm current meter in the front panel is in accordance with the current clamp meter, voltage meter should not move significantly.
12. Turn variac knob to minimum and turn OFF the power switch.

Operating Techniques

The following paragraphs describe how to operate your GFM-200A Tester. In the following sections, EUT means Equipment Under Test.

1. Make sure switch is on the OFF position.
2. Plug your Tester to a correctly rated source of supply.
3. Turn Variac Knob to the minimum.
4. Connect the output clamp leads to the EUT, making sure the alligator clamp makes as much conductor contact as possible. This avoids extra resistance.
5. Turn the power switch to the I or ON position.
6. Adjust the desired current / voltage level by increasing the voltage knob.
7. When test is finish, decrease the voltage knob to minimum and turn OFF the tester.

Section 3

Technical Assistance

Technical Assistance from Compliance West USA is available:

Phone: (800) 748-6224

Hours: 8:30 AM - 4:30 PM Pacific Time.

Also available on our web site at: **www.compwest.com**

Contact:

Compliance West USA
650 Gateway Center Way, Suite D
San Diego, CA 92102

Phone: (619) 878-9696

FAX: (619) 794-0404

Section 4

Maintenance and Calibration

WARNING

MAINTENANCE AND CALIBRATION INSTRUCTIONS ARE FOR QUALIFIED PERSONNEL ONLY. TO AVOID ELECTRIC SHOCK, DO NOT PERFORM ANY SERVICING OTHER THAN THE CONTAINED IN THE OPERATING INSTRUCTIONS.

Introduction

This section of the manual contains maintenance information for the GFM-200A tester. A 1-year calibration cycle is recommended to maintain the specifications of the factory. The test equipment required for the performance test is digital meter and a current meter.

Service Information

The MegaPulse tester is warranted to the original purchaser for a period of 1 year. This warranty does not cover problems due to misuse or neglect. Malfunctions which occur within the limits of the warranty will be corrected at no charge. Mail the instrument post paid to the manufacturer. Dated proof of purchase is required for all in-warranty repairs. The manufacturer is also available for calibration and / or repair of instruments that are beyond their warranty period. Contact the manufacturer for a cost quotation. Ship the instrument and your remittance according to the instructions given by the manufacturer.

General Maintenance

To avoid contaminating the PWB with oil from your fingers, handle it by the edges or wear gloves. If the PWB becomes contaminated, refer to the cleaning procedures given later in this section.

WARNING

Dangerous voltages exist when energized. Exercise extreme care when working on an energized circuit.

Cleaning

Clean the front panel and case with a mild solution of detergent and a damp sponge.

CAUTION

Do not use aromatic hydrocarbons or chlorinated solvents for cleaning. These solutions will react with the plastic materials used in the instrument.

Calibration Information

The Calibration Procedure should be performed annually and any time the instrument has been repaired.

The calibration procedure should be performed at an ambient temperature of $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ($73.4^{\circ}\text{F} \pm 9^{\circ}\text{F}$). The procedure consists in the verification and calibration of the meter reading. The Calibration procedure must be performed by qualified personnel, for more information contact Compliance West USA.