VXI 20K-35G

High Impedance HV Meter

USER MANUAL

Rev A

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Disclaimer

The information contained herein is believed to be accurate. This instrument is intended for professional end-users who have the skills required to evaluate and use the data properly. HVM Technology does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using the instrument.

General Safety Summary

Ensure proper connections

Refer to the connection section of this manual for proper usage. Improper connections can cause damage to this instrument and your device under test.

Avoid circuit or wire exposure

Touching exposed contacts or components when power is applied may cause serious shock and other health hazards. Do not operate the unit with covers or panels removed.

Use proper fuse

Only replace fuse with an identically rated fuse. Instrument damage may occur if improperly protected.

Use antistatic protection

Static electricity will cause damage to the instrument. Take necessary precautions to avoid any possibilities of antistatic shock by grounding your test station.

Avoid adverse environmental conditions

Keep the surface of the instrument clean and dry. Do not operate in wet or damp conditions. Do not operate in corrosive, flammable or explosive environments.

Getting Started

Back Panel

1. Power Plug

Nema C14 Receptacle for use with AC power cord.

2. Fuse

Time Delay 250V 500mA fuse (Bel 5ST[P]500-R or equivalent).

3. BNC Out

Allows for signal out to oscilloscope, probe setting to 1X.
2.5V offset, 1V:10000V ratio.

4. Power Switch

Turns the unit on/off. Will be lit when power is applied to instrument.

Connections

Front Panel

5. LCD Screen

The measured voltage will appear on this screen.

6. Circuit Return

Connect to circuit ground reference of device under test.

7. Earth Ground

Earth ground connection for device. Internally connected to circuit return.

8. High Voltage Input

Connection for HV clip/probe to device for voltage measurement.

Instrument Specifications

Input Power	**100VAC-120VAC**
Input Current	< 0.2A typical
Isolation	0V, Circuit Return is internally connected to Earth Ground.
Voltage Measurement Range	0VDC – ±20000VDC
Overvoltage Warning	±20200VDC
BNC Bandwidth	50kHz typical
Screen Bandwidth	8Hz
Input Resistance	35GΩ typical
Accuracy*	<0.1%

*After 30 minute warm-up period.

Troubleshooting

The power switch is dark.

If the power switch located on the back of the instrument is not lit, check to make sure the power cord plug is properly seated in the receptacle and to the wall socket. Check power cord for damage, replace if necessary. Check if power fuse has blown, replace if necessary.

The screen is dark.

If the liquid crystal display remains dark after engaging power, or goes dark at any time during operation, check if power switch is dark (see above). Recycle power. If problem persists, contact HVM Technology.

Overvoltage is displayed on screen.

Turn off device under test, discharge voltage, and disconnect instrument from circuit. The device under test is outputting a voltage beyond the ratings of this instrument.

The readings are unstable.

Check for firm connections on references and high voltage output line.

My problem is not listed here.

If you are experiencing any issues that are not covered in this section, contact a representative from HVM Technology.

Who we are

HVM Technology is the leading manufacturer of miniature high voltage products used in today's most advanced equipment. We design, manufacture and market high performance products for a variety of applications in the military, aerospace, scientific and analytic fields. Our expertise in high voltage miniaturization and measurement enables our customers to design the technology of the future.

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