



Model 5402
Low-Noise Current
Preamplifier

Instruction Manual
1107364-A-MNL-B

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Company Names

SIGNAL RECOVERY is part of Advanced Measurement Technology, Inc, a division of AMETEK, Inc. It includes the businesses formerly trading as EG&G Princeton Applied Research, EG&G Instruments (Signal Recovery), EG&G Signal Recovery and PerkinElmer Instruments (Signal Recovery)

Table of Contents

General Safety Precautions ii

Chapter One, Description

1.1 Description 1-1
1.2 Options 1-1

Chapter Two, Initial Checks

2.1 Introduction 2-1
2.2 Equipment Needed 2-1
2.3 Procedure 2-1

Chapter Three, Operating Instructions

3.1 Introduction 3-1
3.2 Connectors & Controls 3-1
 3.2.01 Power Switch & Indicator 3-1
 3.2.02 Charge Connector & Indicator 3-1
 3.2.03 Input Connector 3-1
 3.2.04 Gain Button 3-1
 3.2.05 Low-pass Filter 3-2
 3.2.06 Output Coupling 3-2
 3.2.07 Output Connector 3-2
3.3 Operating the Model 5402 3-2
 3.3.01 Introduction 3-2
 3.3.02 Signal Gain & Output Voltage 3-2
 3.3.03 Output Filtering 3-2
 3.3.04 Battery Operation 3-2
 3.3.05 Battery Charging 3-3
 3.3.06 Battery Maintenance 3-3

Appendix A, Specifications

Appendix B, Model PS0112 External Power Supply

Appendix C, Model 5400/32 External Power Supply

Appendix D, Model 7210/50 Mounting Shelf

Warranty End of Manual

GENERAL SAFETY PRECAUTIONS

The equipment described in this manual has been designed in accordance with EN61010 "Safety requirements for electrical equipment for measurement, control and laboratory use", and has been supplied in a safe condition. To avoid injury to an operator or service technician the safety precautions given below, and throughout the manual, must be strictly adhered to whenever the equipment is operated, serviced or repaired. For specific safety details, please refer to the relevant sections within the manual.

The equipment is intended solely for electronic measurement and should be used for no other purpose. **SIGNAL RECOVERY** accepts no responsibility for accidents or damage resulting from any failure to comply with these precautions.

AC Supply Voltage

Never operate the Model PS0112 or Model 5400/32 power supplies from a line voltage or frequency in excess of that specified. Otherwise, the insulation of internal components may break down and cause excessive leakage currents and **POTENTIAL RISK OF ELECTRICAL SHOCK**. The Model 5400/32 supply must be used with an IEC 60799 compliant (or other suitable accredited approval) mains supply cord, rated for the correct voltage and power rating as detailed on the power supply case.

DC Supply Voltage

Never use a DC voltage greater than +9.5V to recharge the batteries in the Model 5402.

Fuses

The Model PS0112 power supply does not contain replaceable MAINS fuses, but the Model 5400/32 does. Refer to Appendix B for details of how to replace these.

Explosive Atmospheres

This equipment must **NEVER BE OPERATED** in a potentially explosive atmosphere. The equipment is NOT designed for use in these conditions and could possibly cause an explosion.

Safety Symbols

The Model 5402 product contains no safety symbols (not required).

The PS0112 power supply contains the following safety symbols:

<i>Symbol</i>	<i>Meaning</i>
	General safety hazard. CAUTION – Do not open PS0112 power supply case, risk of electric shock. This product is not internally serviceable.
	Electrical safety hazard. See above.

Accessories and Ancillary Equipment

Only use accessories and ancillary equipment either delivered as part of the system or pre-approved for use with the system directly by AMT. Use of unapproved accessories and ancillary equipment could cause damage and potentially form an electrical hazard.

Notes and Cautions

For the guidance and protection of the user, Notes and Cautions appear throughout the manual. The significance of these is as follows:

Notes highlight important information for the reader's special attention.

Cautions guide the reader in avoiding damage to the equipment.

Avoid Unsafe Equipment

The equipment may be unsafe if any of the following statements apply:

- Equipment shows visible damage.
- Equipment has failed to perform an intended operation.
- Equipment has been stored in unfavorable conditions.
- Equipment has been subjected to severe physical stress.

If in any doubt as to the serviceability of the equipment, don't use it. Get it properly checked out by a qualified service technician.

Live Conductors

The Model PS0112 or Model 5400/32 power supplies contain MAINS 'LIVE' conductors (internal). Their cases should not be opened by under any circumstances, and they contain no user serviceable parts.

Equipment Modification

To avoid introducing safety hazards, never install non-standard parts in the equipment, or make any unauthorized modification. To maintain safety, always return the equipment to your **SIGNAL RECOVERY** service provider for service and repair.

European WEEE Directive

This product is subject to Directive 2002/96/EC of the European Parliament and the Council of the European Union on waste electrical and electronic equipment (WEEE) and in jurisdictions adopting that Directive, is marked as being put on the market after August 13, 2005, and should not be disposed of as unsorted municipal waste. Please use your local WEEE collection facilities for the disposal of this product and otherwise observe all applicable requirements.

FCC Notice

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user is required to correct the interference.

DECLARATION OF CONFORMITY

The directives covered by this declaration

2014/35/EU Low Voltage Equipment Directive
2014/30/EU Electromagnetic Compatibility Directive

Product(s)

Model 5402 Current Preamplifier

Basis on which conformity is being declared

The product(s) identified above comply with the requirements of the EU directives by meeting the following standards:

BS EN61326-1:2013 Electrical equipment for measurement control and laboratory use - EMC requirements – Class A.
BS EN61010-1:2010 Safety requirements for electrical equipment for measurement, control and laboratory use.

Accordingly, the CE mark has been applied to this product.



Signed

For and on behalf of **SIGNAL RECOVERY**

Authority:

Product Manager

Date:

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