

# SA9002

## TEST FIXTURE

### Instruction Manual

HIOKI

EN

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SA9002A960-00 22-06H

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#### Warranty

Warranty malfunctions occurring under conditions of normal use in conformity with the Instruction Manual and Product Precautionary Markings will be repaired free of charge. This warranty is valid for a period of three (3) years from the date of purchase. Please contact the distributor from which you purchased the product for further information on warranty provisions.

#### Introduction

Thank you for choosing the Hioki SA9002 Test Fixture. To ensure your ability to get the most out of this instrument over the long term, please read this manual carefully and keep it available for future reference.

#### Overview

The SA9002 is a test fixture for the Slurry Analytical System with which the SA9001 Electrode Cell can be mounted. The Test Fixture can be installed to the IM3536 LCR Meter, IM3536-01 LCR Meter, and IM3570 Impedance Analyzer. See the Slurry Analytical System Instruction Manual for detail information including the precautions for use of the system.

#### Symbols and Abbreviations

**Safety**  
This manual classifies seriousness of risks and hazard levels as described below.

	<b>DANGER</b>	Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.
	<b>WARNING</b>	Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.
	<b>CAUTION</b>	Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury or potential risks of damage to the supported product (or to other property).
		Indicates a prohibited action.
		Indicates a mandatory action.

#### Symbols for standards

	Indicates that the product complies with standards imposed by EU directives.
	Indicates that the product is subject to the Waste Electrical and Electronic Equipment (WEEE) Directive in EU member nations. Dispose of the product in accordance with local regulations.

#### Checking Package Contents

- SA9002 Test Fixture ..... 1
- Compensation shorting plate ..... 1
- Instruction Manual (this document) ..... 1

#### Precautions for Use

- Do not use the device to measure samples that exceed its ratings or specifications.**  
Doing so could cause damage to the device or overheating, resulting in serious bodily injury.
- Inspect the device and verify proper operation before use.**  
Use of the device while malfunctioning could result in serious bodily injury. If you find any damage, contact your authorized Hioki distributor or reseller.

#### WARNING

Do not install the device in locations such as the following:

- In locations where it would be subject to direct sunlight or high temperatures
- In locations where it would be exposed to corrosive or explosive gases
- In locations where it would be exposed to powerful electromagnetic radiation or close to objects carrying an electric charge
- Close to inductive heating devices (high-frequency inductive heating devices, IH cooktops, etc.)
- In locations characterized by a large amount of mechanical vibration
- In locations where it would be exposed to water, oil, chemicals, or solvents
- In locations where it would be exposed to high humidity or condensation
- In locations with an excessive amount of dust  
Doing so could damage the device or cause it to malfunction, resulting in bodily injury.



#### Cleaning

#### CAUTION

- If the device becomes dirty, wipe the device clean with a soft cloth moistened with water or a neutral detergent.
- Never use solvents such as benzene, alcohol, acetone, ether, ketone, thinners or gasoline. Doing so could deform and discolor the instrument.

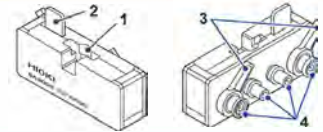


When the electrode of the device is stained, gently wipe it using a soft cloth with a small amount of alcohol.

#### Specifications

Measurable frequency	DC to 10 MHz
Connectible sample	SA9001 Electrode Cell
Residual impedance	Residual resistance during short circuit 200 mΩ or less (reference for 100 Hz) Inter-electrode stray capacitance 0.2 pF or less (reference for 1 MHz)
Dimensions	Approx. 98W × 38H × 24D mm (3.86"W × 1.50"D × 0.94"H, excluding protruding parts)
Weight	Approx. 210 g (7.4 oz.)
Connection method	BNC connector
Operating temperature and humidity range	23°C ±5°C (73°F ±9°F) 80% RH or less (non-condensing)
Storage temperature and humidity range	-10°C to 50°C (-14°F to 122°F) 80% RH or less (non-condensing)
Operating environment	Indoors, altitude up to 2000 m (6562 ft.)
Accessories	Instruction Manual, shorting plate for compensation
Product warranty duration	3 years

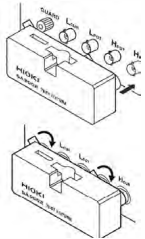
#### Parts Names



No.	Name	Function
1	SA9001 mounting part	Used to mount the SA9001 Electrode Cell.
2	Compensation shorting plate	Used to perform short compensation.
3	Lever	Used to fix the SA9002 Test Fixture to the IM3536.
4	Connection terminals	Used to connect the Test Fixture to the measurement terminals of the measuring instrument.

#### How To Install the Test Fixture

- 1 Check that the main power switch (rear) of the measuring instrument is set to off (○).
- 2 Face up the SA9001 mounting part of the device, and insert the device into the measurement terminals of the measuring instrument.
- 3 Turn the levers on the left and right sides of the device clockwise to fix the device to the measuring instrument.

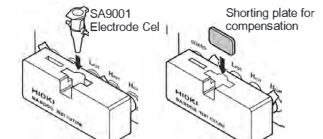


#### Open Compensation, Short Compensation

Performing open compensation and short compensation is recommended after the measuring instrument is turned on. See "3.3 Correcting Errors (Open Compensation, Short Compensation)" in the Slurry Analytical System Instruction Manual for more details.

**Open compensation**  
Use the SA9001.

**Short compensation**  
Use the shorting plate for compensation.



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