#### ■GENERAL SPECIFICATION

Diaplay (LCD)	4100 count maximum reading 4100, 12mm high					
Operating Principle	∠ ∠ conversion					
Range Selection	Manual range					
Overload Warning	"OL" indication when exceeding 4200 count					
	(in comparator, "Hi" indication when exceeding 4000 count)					
Remaining Battery Level	"💷" indication at 60% or more					
Indications	"💶" indication from 30% to 59%					
	"Ca" indication from 10% to 29%					
	"⊂⊐" indication less than 10%					
Operating Voltage	Between approx. 8.5V and 12.8V					
Sampling Rate	2 times / second					
Display Hold	Hold indicating values by "DH" Key					
Comparator	Available with "COMP" Keys					
Zero Adjustment	Available with " $0 \Omega$ ADJ." Key					
Operating Temperature & Humidity	0℃ to 40℃, less than 80%RH in non-condensing					
Storage Temperature & Humidity	-20°C~60°C, less than 70%RH in non-condensing					
Temperature Coefficient	Accuracy at 23℃±5℃×0.1 / ℃					
Power Supply	1.5 V LR6 or R6P batteries 8 pcs.					
Power Consumption	300mA maximum (in m $\Omega$ measurement)					
Auto Power Off	Automatic turn off after approx. 10 minutes					
Continuous Measurement	up to 3 minutes					
Measurable Number of Times	m $\Omega$ range : approx. 40 times (continuous measurement up to 3 min., with manganese batteries)					
	$\Omega/k\Omega$ range : approx. 250 times (continuous measurement up to 3 min., with manganese batteries)					
Fuse	Fast-acting 0.5A / 600V ( $\phi$ 6.3×32mm) 1 pce. %KAISE model No. F22					
Safety Level	CE marking approved (EN61326-1)					
Test Lead Length	Approx. 1250mm (excluding the terminals and plugs)					
Dimensions & Weight	140mm (H) $\times$ 130mm (W) $\times$ 60mm (D) , approx. 600g (excluding batteries)					
Accessories	100-71 Test Leads, 1035 Carrying Case, Spare Fuse F22 (0.5A / 600V) 1 pce (contained in the rear ca					
	1.5V R6P Batteries 8 pcs, Instruction Manual					

#### ■MEASUREMENT SPECIFICATION

	Range	Accuracy	Resolution	Test Current	Maximum Applied Power	Open Circuit Voltage
LOW Ω / Ω	40.00mΩ		10μΩ	200mA	1.7mW	5V or less
	400.0mΩ		100μΩ		17mW	
	4.000Ω	$\pm$ 0.3%rdg $\pm$ 3dgt	1mΩ	2mA	17μW	
	40.00Ω		10mΩ		170 µ W	
	400.0Ω		100mΩ	1mA	420 μ W	
	4.000kΩ	$\pm$ 0.3%rdg $\pm$ 2dgt	1Ω	20 µ A	1.7μW	
	40.00kΩ		10Ω	10 µ A	4.2μW	









DISTRIBUTOR



# KAISE CORPORATION

422 Hayashinogo, Ueda City, Nagano Pref., 386-0156 Japan Telephone: +81-268-35-1601 Fax: +81-268-35-1603 E-mail : sales@kaise.com

www.kaise.com

# HANDY $m\Omega$ TESTER SK-3800 MEW

Ideal for Low Resistance Measurements of Hybrid and Electric Vehicles!

 $m\Omega$  Measurement for the Motors of **Hybrid and Electrical** Vehicles!

# Ideal for the Maintenance of Hybrid and Electrical Vehicles!

Low resistance measurement is required for hybrid vehicle motor and generator if the DTC code "P0A78 (Drive Motor "A" Inverter Performance) is detected.

In this testing, the resistance to be measured is very low around 100mΩ.

2-terminal measurement like normal Digital Multimeters is not suitable for this level of resistance due to the errors of impedance contribution of the wiring and contact resistances.

SK-3800 can eliminate such errors by 4-terminal measurement which assures the accurate testing.

# Automotive m $\Omega$ Tester focusing on testing Hybrid and Electric Vehicles

Specially designed measurement ranges and test current that are adapted to the measurement conditions specified in the general maintenance manuals of hybrid and electric vehicles.

#### For reference :

DH

Resistance between the all exposed electrically-conductive part and the electrical chassis should be less than  $0.1 \Omega$  when applying more than 0.2A of current.

# Handheld Unit Useful for Car Mechanics

### Rubber Holster for Shock Protection

Covered with rubber holster for slip-proof and to prevent scratching on the vehicle body.

### Accurate Testing with 4-terminal Method

Effective for eliminating the impedance contribution of the wiring and contact resistances to be able to ensure the accurate measurement. Also helpful in preventing the wrong insertion by color-coded test plugs.



### Large Backlit LCD

Large backlit LCD display with  $44(H) \times 95(W)$ mm. Easy-to-read even in a dark place.



#### Carrying Case Equipped

Enhanced portability that can pack the all items together.

## **CE Marking Approved**

Car Measurement with SK-3800

Low resistance measurement of hybrid vehicle motor

Measurement example with TOYOTA Prius \*Observe the procedures in the maintenance manual.

**O**Turn off the power switch of the vehicle.

Detach the minus terminal from auxiliary battery, then remove the service plug grip



#### 2 Remove the inverter cover.

ODisconnect the three-phase alternating current cable of the hybrid vehicle motor from the inverter.



Oset the measurement range of the SK-3800

GMake the zero-adjustment for SK-3800 (Press "MEASURE" Key with test lead tips short-circuit. Th press "0 Ω ADJ" Key.



#### Comparator Function

High/Low judgment by LCD display and buzzer comparing with the preset reference value.



#### Clip-on Test Lead Tips

Hands-free measurement without holding the test leads.



#### Display Hold Function

The function that can hold the display values. Useful for reading the fluctuating values.

**O**Connect the test leads to the three-phase alternating current cable terminals of the hybrid vehicle motor



