

**NEW**



Quality and reliability is our tradition

**KYORITSU**

# Multifunction Tester KEW 6016

*The most User Friendly Multifunction  
Tester complete with Anti-Trip Technology*



**10 in 1**

CONTINUITY

INSULATION

LOOP

PSC

PFC

RCD

EARTH

PHASE ROTATION

VOLTS

FREQUENCY

KYORITSU ELECTRICAL INSTRUMENTS WORKS,LTD.

<http://www.kew-ltd.co.jp>

## KEW 6016 Multifunction tester makes 'Ease of Use' it's top priority with such features as:



**Advanced Anti-Trip Technology (ATT) to avoid RCDs to trip during loop testing.**



**A single rotary dial to make your selection and a fine Dot Matrix display gives multiple information on one screen.**

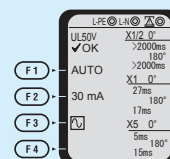


**Slim remote probe with test button as well as a lockdown option on the instrument for the most convenient hands free testing.**



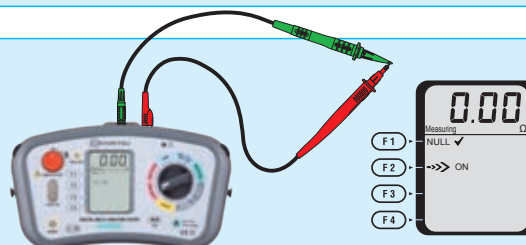
### Auto test (RCD Measurement)

Auto test enables complete testing of RCD (6 tests) while you simply stand by and reset the RCD. All the results are displayed on one screen. No need to scroll.



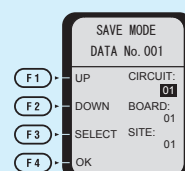
### Null facility (Continuity Measurement)

When you press Null (F1) button, the test leads resistance will be eliminated and the display will read zero ohm. The nulled value will be stored, even if the instrument is switched off, unless the nulling is cancelled.



### MEMORY and PC SOFTWARE

KEW6016 has a memory of up to 1000 results and it is supplied with a comprehensive PC software that allows preparing complete reports with 3 levels of description for every stored result such as Circuit number, Board number and Site number.



# Friendly Multifunction Tester complete with Anti-Trip Technology

## Continuity Measurement

Continuous testing can be carried out by use of the test button lockdown feature. A selectable buzzer gives instantaneous indication of continuity. Null facility eliminates the test lead resistance from the results. Live circuit warnings are given by a flashing LED, buzzer and indication on the display. 200mA test current complies with IEC61557.

## Insulation Measurement

3 selectable test voltages : 250V, 500V, 1000V. Measurement up to 2000M $\Omega$  (auto ranging) with quick testing. Auto discharge function ensures that circuits are not hazardous after testing. A red LED gives warning of high voltage output during testing and discharging of the circuit. Live circuit warnings are given by a flashing LED, buzzer and indication on the display. High test current complies with IEC61557.

## Loop Impedance Measurement

A patented (ATT) low current loop impedance test enables high accuracy loop measurements (resolution 0.01 $\Omega$ ) and quick testing without tripping RCDs rated at 30mA or more.

A high current alternative is selectable for even higher accuracy and instantaneous results. The KEW6016 allows also for phase to phase loop tests from 100 to 500V and 2-wire or 3-wire measurements.

## PSC / PFC Measurement

Prospective Short Circuit Current (PSC) and Prospective Fault Current (PFC) are automatically calculated and shown on the display in auto ranging. As loop testing, the function has low and high test current options, phase to phase tests from 100 to 500V and 2-wire or 3-wire measurements.

## RCD Measurement

KEW6016 has a comprehensive RCD test feature for RCD type AC (Alternative Current), RCD type A (Pulsating Direct Currents), General and Selective (delayed).

Measures at 1/2 x, 1x, 5x of nominal RCD current. It also has Ramp test and Auto test functions where all results are shown on one screen. Touch voltage limit can be selected for 25V or 50V depending on application.

## Earth Measurement

Using the classical Volt-Amper method with two auxiliary earth spikes and without external power source. All test leads and spikes are supplied as standard accessories.

## Phase Rotation

KEW6016 can check the phase rotation of three phase lines with clear indication of the sequence on the display.

## Voltage Measurement

In addition to the voltage measurement from 25 to 500V AC and DC, this function gives also the Frequency of the voltage under test.



## WE OFFER MORE.....

### Demo Panel KEW 8205A

This panel demonstrates all the functions of KEW6016. Also, other Kyoritsu single function testers like Insulation, Continuity, Loop, RCD or Earth testers can be demonstrated with this panel. Useful for trainings, seminars, exhibitions and schools of electrical engineers.

### A PRACTICAL GUIDE TO THE MEASUREMENTS ON ELECTRICAL INSTALLATIONS

In accordance with IEC 60364-6 standard

With KEW6016 and the practical guide, you can test in accordance with IEC 60364-6.

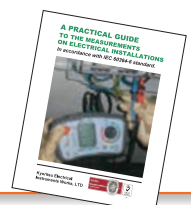
You may download the guide from Kyoritsu web-site: <http://www.kew-ltd.co.jp>

### Multi Languages

6 languages (English, French, Italian, Spanish, Russian, Polish) are available for LCD display, Instruction manual and PC software.



► PRACTICAL GUIDE



## ● KEW 6016 SPECIFICATIONS

<b>Continuity</b>	
Range	20/200/2000Ω (Auto-ranging)
Open circuit voltage (DC)	5V±20% <sup>(1)</sup>
Short circuit current	> 200mA
Accuracy	±0.1Ω (0-0.19Ω) ±2%rdg+8dgt (0.2-2000Ω)
<b>Insulation resistance</b>	
Range	20/200/2000MΩ (Auto-ranging)
Open circuit voltage (DC)	20/200/2000MΩ 250V+25% -0% 500V+25% -0%, 1000V+20% -0%
Rated current	20/200MΩ 1mA or > @ 250kΩ 20/200/2000MΩ 1mA or > @ 500kΩ, @ 1MΩ
Accuracy	20/200MΩ ±2%rdg+6dgt (0-19.99MΩ) ±5%rdg+6dgt (20-200MΩ) 20/200/2000MΩ ±2%rdg+6dgt (0-199.9MΩ) ±5%rdg+6dgt (200-2000MΩ)
<b>Loop impedance</b>	
Function	L-PE, L-PE (ATT), L-N / L-L
Rated voltage	L-PE, L-PE (ATT): 100-260V (50/60Hz) L-N: 100-300V (50/60Hz) L-L: 300-500V (50/60Hz)
Nominal test current at 0Ω external loop: Magnitude/Duration <sup>(2)</sup>	20Ω: 6A/20ms 200Ω: 2A/20ms 2000Ω: 15mA/500ms L-N: 6A/60ms N-PE: 10mA/approx. 5s
Range	20/200/2000Ω Auto-Ranging (L-N < 20Ω)
Accuracy	L-PE, L-N / L-L: ±3%rdg+4dgt <sup>*3</sup> ±3%rdg+8dgt <sup>*4</sup> L-PE (ATT): ±3%rdg+6dgt <sup>*3</sup> ±3%rdg+8dgt <sup>*4</sup>
<b>PSC (L-N/L-L) / PFC (L-PE)</b>	
Function	PSC, PFC, PFC (ATT)
Rated voltage	PSC: 100-500V 50/60Hz PFC, PFC (ATT): 100-260V 50/60Hz
Nominal test current at 0Ω external loop: Magnitude/Duration <sup>(5)</sup>	PSC: 6A/20ms PFC: 6A/20ms, 2A/20ms, 15mA/500ms PFC (ATT): L-N: 6A/60ms, N-PE: 10mA/approx. 5s
Range	2000A/20kA Auto-Ranging
Accuracy	PSC/PFC accuracy is derived from measured loop impedance specification and measured voltage specification
<b>RCD</b>	
Function	X1/2, X1, X5, Ramp, Auto, Uc
Trip current setting	X1/2, X1, Uc: 10/30/100/300/500/1000mA X5: 10/30/100mA Ramp: 10/30/100/300/500mA

<b>RCD</b>		
Trip current Duration	X1/2:	2000ms
	X1:	G:550ms / S: 1000ms
	X5:	410ms
Rated voltage	Ramp:	Goes up by 10% from 20% to 110% G:300ms/S:500msX10 times
	X1/2, X1, X5, Ramp, Uc:	230V+10%-15% 50/60Hz
Auto:	Depending on the accuracy at each function. Measurement sequence: X1/2 0°→X1/2 180°→X1 0°→X1 180°→X5 0°→X5 180° Measurements with x5 are not carried out for RCDs with nominal current of 100mA or more.	
Accuracy	Trip current	AC Type X1/2: -8%~-2%, X1, X5: +2%~-+8%, Ramp: ±4% A Type X1/2: -10%~-0%, X1, X5: 0%~-+10%, Ramp: ±10% Uc: +5%~-+15%rdg±8dgt
<b>Earth</b>		
Range	20/200/2000Ω Auto-Ranging	
Accuracy	20Ω:	±3%rdg+0.1dgt
	200/2000Ω:	±3%rdg+3dgt (Auxiliary earth resistance 100±5%)
<b>Phase Rotation</b>		
Rated Voltage	50-500V 50/60Hz	
Remarks	Correct phase sequence: are displayed "1.2.3" and ⌚ mark Reversed phase sequence: are displayed "3.2.1" and ⌚ mark	
<b>Volts</b>		
Function	Volts	Frequency
Rated voltage	25-500V, 45-65Hz	
Measuring range	25-500V	45-65Hz
Accuracy	±2%rdg+4dgt	±0.5%rdg+2dgt
<b>General</b>		
Applicable standards	IEC 61010-1 CAT. III 300V(500V L to L) Pollution degree 2 IEC 61010-031, IEC 61557-1, 2, 3, 4, 5, 6, 7, 10 IEC 60529(IP40), IEC 61326(EMC)	
Power source	LR6 × 8	
Dimensions	136(L) × 235(W) × 114(D)mm	
Weight	1350g (including batteries.)	
Accessories	7218(Mains cord) <sup>(6)</sup> 7196(Remote test lead) 7188(Distribution board fused test leads) 7228(Earth test leads) 8032(Auxiliary earth spikes) 8212-USB(USB adaptor with KEW Report(Software)) Cord case, 9142(Carrying Case), 9121(Shoulder strap), Buckle, Battery, Instruction manual	
Optional	8212-RS232C(RS232C adaptor with KEW Report(Software))	

\*1: Voltages are output when measurement resistance is under 2100 ohm.

\*2: at 230V

\*3: 230V+10%-15%

\*4: Other voltages except for \*3

\*5: at 230V

\*6: 7187(Main cord [UK]), 7221(Main cord [SA]), 7222(Main cord [AU])

## EVERYTHING YOU NEED ....

KEW6016 comes complete with everything you need for testing an electrical installation according to the IEC 60364-6.

A full set of new fused test leads is included. The practical slim leads offer hands free operation via a test button located within the probe itself. The safety test leads have an overmould for maximum grip and are extremely robust.

Two auxiliary spikes and test leads for earth measurements, PC software for downloading and interpreting of data and interface cable are included.

The instrument also comes in a soft carry case, a quick reference guide locates inside the integrated case lid, and it is supplied with a calibration certificate.



## ! Safety Warnings :

Please read the "Safety Warnings" in the instruction manual supplied with the instrument thoroughly and completely for correct use. Failure to follow the safety rules can cause fire, trouble, electrical shock, etc. Therefore, make sure to operate the instrument on a correct power supply and voltage rating marked on each instrument.

■ For inquires or orders :



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●The contents of this leaflet are subject to change without notice.

KEW6016-1E Sep. 08 AD