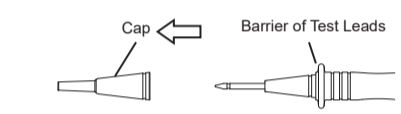
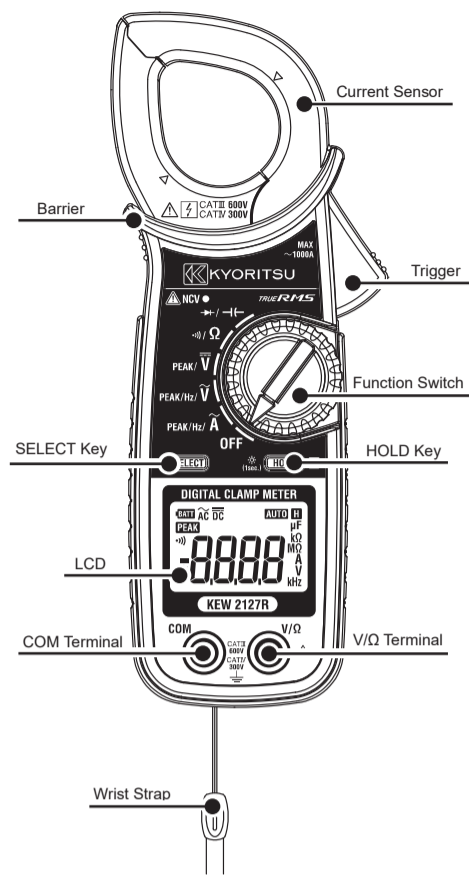


DIGITAL CLAMP METER

KEW2127R



KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.

1. Safety Warnings

This instrument has been designed, manufactured and tested according to IEC 61010: Safety requirements for Electronic measuring apparatus...

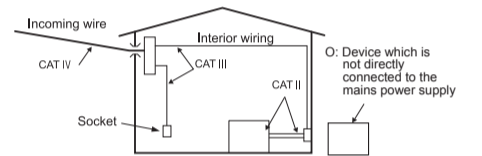
- WARNING: Read through and understand the instructions contained in this manual before using the instrument. Keep the manual at hand to enable quick reference whenever necessary.

The symbol Δ indicated on the instrument means that the user must refer to the related parts in the manual for safe operation of the instrument.

- MARKS LISTED BELOW ARE USED ON THIS INSTRUMENT: User must refer to the manual. Instrument with double or reinforced insulation. Indicates that this instrument can clamp on bare conductors when measuring a voltage corresponding to the applicable measurement category...

- MEASUREMENT CATEGORY: CAT I Circuits which are not directly connected to the mains power supply. CAT II Primary electrical circuits of equipment connected to an AC electrical outlet by a power cord.

This instrument is designed for CAT IV 300V/ CAT III 600V. Test leads M-7066A with the supplied caps are designed for CAT IV 600V/ CAT III 1000V and without the caps are for CAT II 1000V.



- DANGER: Never make measurements under the circumstances exceed the designed measurement category and the rated voltage of the instrument and the test leads. Do not attempt to make measurement in the presence of flammable gasses.

- Never attempt to use the instrument if its surface or your hand is wet. Do not exceed the maximum allowable input of any measuring range. Never open the Battery cover during a measurement.

- WARNING: Never attempt to make measurement if any abnormal conditions, such as broken case and exposed metal parts are found on the instrument or test leads. Verify proper operation on a known source before use or take action as a result of the indication of the instrument.

- CAUTION: Use of this instrument is limited to domestic, commercial and light industry applications. Strong electromagnetic interference or strong magnetic fields, generated by large currents, may cause malfunction of the instrument.

- NOTE: The LCD shows some digits at the ACV and the DCV ranges even while the test leads are open. In addition, the LCD shows some digits instead of 0 when short-circuiting the test leads.

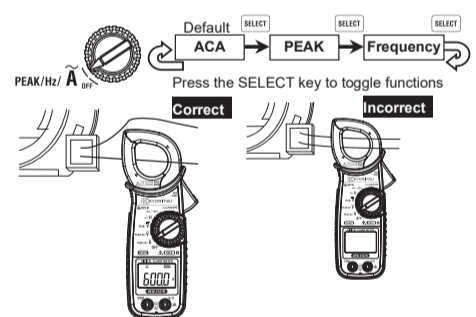
2. Specification

Temperature: 23 ± 5°C, Humidity: 45 - 75%
Table with columns: Range, Display Range, Accuracy (sine wave) for ACA/RMS, ACV, and Hz Frequency - AC measurement.

3. ACA (PEAK / Frequency) Measurement

- DANGER: Disconnect the test leads from the instrument when performing a test. Do not exceed the rated voltage (600V) and the category ratings of the instrument.

- (1) Set the Functions switch to ACA position. For PEAK or frequency measurement, set the switch to ACA and press the SELECT key.

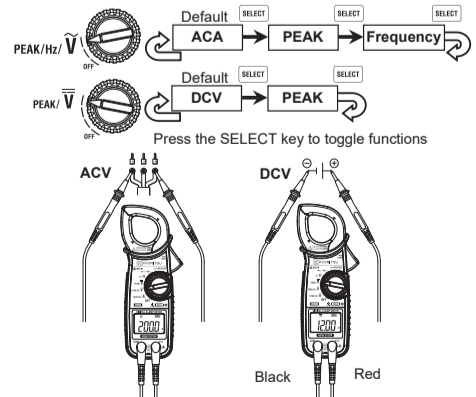


NOTE: Measurement accuracy is guaranteed when the measured object is placed at the center of the Current Sensor.

4. ACV / DCV (PEAK / Frequency) Measurement

- DANGER: Before starting a measurement, ensure that the Function switch is set to the appropriate position. Do not exceed the rated voltage (600V) and the category ratings of the instrument.

- (1) Set the Function switch to ACV or DCV position. For PEAK or frequency measurement, set the switch to ACV and press the SELECT key.

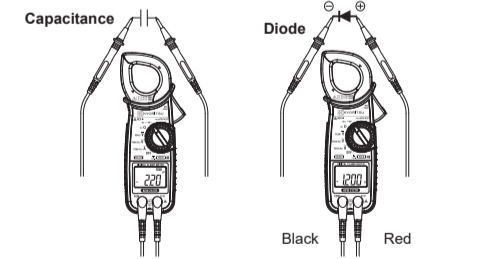
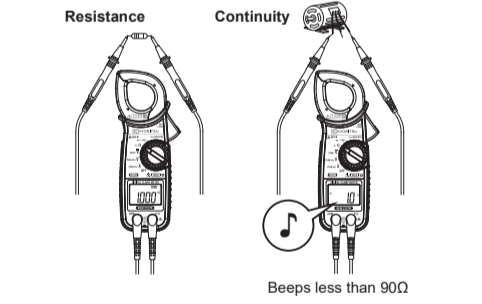
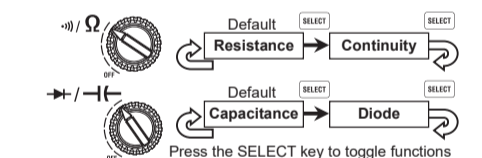


NOTE: If the connection is reversed, the LCD indicates the '-' mark (DCV measurement)

5. Resistance / Capacitance (Continuity / Diode) Measurement

- WARNING: Never use the instrument on an energized circuit. Discharge the capacitor before starting a capacitance measurement.

- (1) Set the Function switch to Resistance or Capacitance position. For Continuity measurement, set the switch to Resistance and press the SELECT key.



- NOTE: LCD shows "OL" when the test leads are open. The LCD shows "OL" if the test lead connection is reversed for diode measurement.

6. Other Functions

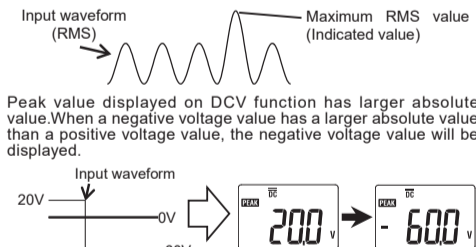
- Data Hold [HOLD]: Press the Hold key. The LCD shows "H" mark and the reading will be held. Backlight function: Press the HOLD key 1 sec or longer to turn on the backlight.

- Sleep Function: Automatically powers off the instrument in about 10min after the last switch operation. Buzzer beeps five times one minute before entering into the Sleep mode.

- PEAK Hold (PEAK) function: Press the SELECT key on ACA, ACV or DCV function to start PEAK measurement.

Table with columns: Function, Range, Display Range, Response time for ACA, ACV, and DCV.

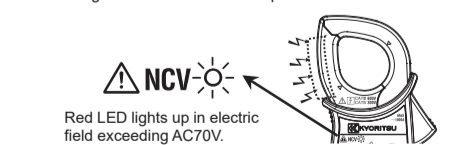
On ACA or ACV function, the displayed value is peak value. Therefore, when measuring a sine wave, the displayed value will be √2 of the rms PEAK value.



- NCV Function: Red LED for NCV lights up at All functions except for OFF when an electric field exceeding AC70V is detected by the sensor installed in Current Sensor.

- DANGER: The LED may not light up due to installation condition of electrical circuit or equipment. Never touch the circuit under test to avoid possible danger even if the LED for NCV doesn't light up.

NCV Sensor can detect electrical field only from the direction indicated in the below figure. Put the fixed element (left side) closer to the conductor under test.



DCV (Auto Range)

Table with columns: Range, Display Range, Accuracy for DCV measurements.

Guaranteed accuracy: 0V - ±600V ACV/DCV Input impedance: approx. 10MΩ

Resistance (Auto Range)

Table with columns: Range, Display Range, Accuracy for Resistance measurements.

Guaranteed accuracy: 0Ω - 40MΩ Open-loop voltage: less than 3V Measurement current: less than 1mA

Continuity

Table with columns: Range, Display Range, Accuracy for Continuity measurement.

Open-loop voltage: less than 3V Measurement current: less than 1mA

Capacitance (Auto Range)

Table with columns: Range, Display Range, Accuracy for Capacitance measurements.

Guaranteed accuracy: 0μF - 100μF

Diode

Table with columns: Range, Display Range, Accuracy for Diode measurement.

Guaranteed accuracy: 0V - 2V, Open-loop voltage: < 3.5V Measurement current: approx. 0.8mA (Vf = 0.6V)

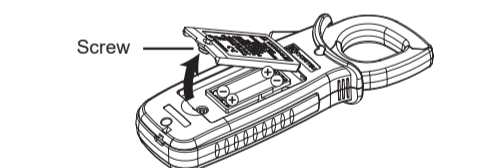
- Measuring method: ΔΣ modulation Over-range indication: OL Measurement cycle: 2.5 times per second Crest factor: less than 3 (45-65Hz) Add ±0.5%rdg±5dgt to above specified accuracies.

7. Battery Replacement

- WARNING: Replace the batteries when a Low Battery Voltage warning "BATT" mark is indicated on the LCD. Otherwise, precise measurement cannot be made.

- CAUTION: Do not mix old and new batteries. Install batteries in correct polarity as indicated in the Battery Compartment.

- (1) Set the Function Switch to "OFF" position. (2) Unscrew and remove the Battery Compartment Cover on the instrument.



DISTRIBUTOR

Kyoritsu reserves the rights to change specifications or designs described in this manual without notice and without obligations.

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