1. Safety Warnings

This instrument has been designed, manufactured and tested according to the following standards.

IEC 61010-1, IEC61010-2-033 Measurement CAT Ⅲ 300V Pollution degree 2
IEC 61010-031
IEC 61326-1, 61326-2-2 (EMC)

This instruction manual contains warnings and safety rules which must be observed by the user to ensure safe operation of the instrument and retain it in safe condition. Therefore, read through these operating instructions before using the instrument.

⚠️ WARNING
● Read through and understand instructions contained in this manual before starting using the instrument.
● Save and keep the manual handy to enable quick reference whenever necessary.
● This instrument should only be used by suitably trained person and be sure to follow measurement procedures described in the manual. Kyoritsu assumes no responsibility for damage and injury caused by misuse or not following instructions in the manual.
● Be sure to understand and follow all safety instructions contained in the manual.

Be sure to observe the above instructions.
Failure to follow the above instructions may cause injury, instrument damage and/or damage to equipment under test.
Kyoritsu is by no means liable for any damage resulting from the instrument in contradiction to this cautionary note.

The symbol ⚠️ indicated on the instrument means that the user must refer to related parts in the manual for safe operation of the instrument. Be sure to carefully read the instructions following each ⚠️ symbol in the manual.

⚠️ DANGER is reserved for conditions and actions that are likely to cause serious or fatal injury.
⚠️ WARNING is reserved for conditions and actions that can cause serious or fatal injury.
⚠️ CAUTION is reserved for conditions and actions that can cause injury or instrument damage.

⚠️ DANGER
● Never make measurement on the circuit in which electrical potential to ground over 300V AC/DC exists.
● Do not attempt to make measurement in the presence of flammable gasses. Otherwise, the use of the instrument may cause sparking, which can lead to an explosion.
● Be sure to keep your fingers behind the Protective figeguard part of test lead.
● Never attempt to use the instrument if its surface or your hand is wet.
● Do not open the battery cover and the instrument case when making measurement.
● Do not exceed the maximum allowable input of any measurement range.

The instrument should be used only in its intended applications or conditions. Otherwise, safety functions equipped with the instrument do not work, and instrument damage or serious personal injury may be caused.

⚠️ WARNING
● Never attempt to make any measurement if any abnormal conditions are noted, such as broken case, cracked test leads and exposed metal parts.
● Do not turn the Function Selector Switch with test leads connected to the instrument.
● Do not install substitute parts or make any modification to the instrument.
● Do not try to replace the batteries if the surface of the instrument is wet.
● Make sure to disconnect test leads from the device under test when opening the Battery cover for battery replacement.
● Always attach the Cap onto the tip metal parts when using the test lead in the Measurement Category III. (CAT. III) or higher environments.
● When the test leads are connected to the instrument, the lower category (voltage) either of them belongs to is applied.
● Stop using the test lead if the outer jacket is damaged and the inner metal or color jacket is exposed.
2. Features

This instrument, KEW1012, is a Digital Multimeter which designed for making measurement of the low-voltage equipment.

(1) Designed to international safety standards
   IEC 61010-1, IEC61010-2-033 Measurement CAT III 300V Pollution degree 2
   IEC 61010-031 (Requirements for the hand-held probe)
(2) Accurate true RMS readings of AC current and voltage
    regardless of the waveform.
(3) REL function to check the difference of measured values
(4) Auto power off function to save battery consumption
(5) Data hold function
(6) Diode and Continuity check function
(7) Auto-ranging function
(8) Frequency measurement function
(9) DUTY measurement function
   (Express Pulse width / Pulse period as a percentage)
(10) Current function is protected by fuse
(11) Instrument is protected from mechanical shock by holster

3. Specification

- Measuring ranges and accuracy (23±5°C, under the 45% ~ 75%RH)

<table>
<thead>
<tr>
<th>Function</th>
<th>Ranges</th>
<th>Measuring range</th>
<th>Accuracy</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCV</td>
<td>600.0mV</td>
<td>0 ~ 600V</td>
<td>± 0.5%rdg ± 2dgt</td>
<td>Overload protection: 600V DC or AC rms</td>
</tr>
<tr>
<td></td>
<td>6.000V</td>
<td>(5 Auto ranging)</td>
<td></td>
<td>Impedance: 10MΩ</td>
</tr>
<tr>
<td></td>
<td>60.00V</td>
<td></td>
<td>± 0.8%rdg ± 3dgt</td>
<td>(Only 600.0mV range is approx 100MΩ)</td>
</tr>
<tr>
<td></td>
<td>600.0V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>600V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function</td>
<td>Ranges</td>
<td>Measuring range</td>
<td>Accuracy</td>
<td>Note</td>
</tr>
<tr>
<td>----------</td>
<td>--------</td>
<td>-----------------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Capacitance</td>
<td>40.00nF</td>
<td>0.01nF ~ 4000 μF</td>
<td>± 3.0%rdg ± 10dgt</td>
<td>It can not display bar graph on capacitance range</td>
</tr>
<tr>
<td></td>
<td>400.0nF</td>
<td></td>
<td>± 2.5%rdg ± 5dgt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.000 μ F</td>
<td></td>
<td>± 5.0%rdg ± 10dgt</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40.0 μ F</td>
<td>(6 Auto ranging)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4000 μ F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>10Hz</td>
<td>1Hz ~ 10MHz</td>
<td>± 0.1%rdg ± 5dgt</td>
<td>It can not display bar graph on frequency range</td>
</tr>
<tr>
<td></td>
<td>100Hz</td>
<td>(7 Auto ranging)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10kHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100kHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000kHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10MHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DUTY</td>
<td>0.1 ~ 99.9%</td>
<td>± 2.0% rdg ± 2dgt</td>
<td>Overload protection: 600V DC or AC rms</td>
</tr>
<tr>
<td></td>
<td>(Pulse width/Pulse period)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**
- ± 1.5%rdg ± 5dgt (50 / 60Hz)
- ± 1.8%rdg ± 5dgt (40 ~ 400Hz)
- ± 1.2%rdg ± 3dgt (50 / 60Hz)
- ± 1.5%rdg ± 3dgt (40 ~ 400Hz)
- ± 1.5%rdg ± 5dgt (50 / 60Hz)
- ± 1.8%rdg ± 5dgt (40 ~ 400Hz)
- ± 1.2%rdg ± 3dgt
- ± 2.0%rdg ± 5dgt
- ± 2.2%rdg ± 5dgt(50/60Hz)
- ± 2.5%rdg ± 5dgt(40 ~ 1kHz)
- ± 1.0%rdg ± 2dgt
- ± 2.0%rdg ± 3dgt
- ± 1.0%rdg ± 5dgt
- ± 2.0%rdg ± 3dgt
- ± 0.1%rdg ± 5dgt
- ± 2.0% rdg ± 2dgt
- ± 0.1%rdg ± 5dgt
- ± 2.0% rdg ± 2dgt
- ± 0.1%rdg ± 5dgt
- ± 2.0% rdg ± 2dgt
- ± 0.1%rdg ± 5dgt
● Standards

IEC61010-1, IEC61010-2-033 Measurement CAT III 300V, pollution degree 2 / Measurement CAT II 600V, pollution degree 2
IEC61010-031
IEC 61326-1, 61326-2-2 (EMC)

● Environmental standard

EN50581 Monitoring and control instruments

● Mode of operation

ΔΣ mode

● Indication

LCD maximum value 6000 (ACV/A, DCV/A, Ω) / maximum value 9999 (Hz) / maximum value 4000 (F), units, symbols

● Over range display

"OL" symbol is displayed on the LCD.
"OL" displayed when exceeding the measuring ranges. (except for AC/DC 600V ranges and AC/DC 10A ranges.)

● Auto-ranging

Range shifts to upper range when indicated value is more than 640.0.
Range shifts to lower range when indicated value is less than 560.

● Sampling rate

approx. 400ms

● Operating Environmental conditions

− indoor use
− altitude up to 2000m

● Temperature & Humidity range (guaranteed accuracy)

23℃ ±5℃ Relative humidity: less than 75%

● Operating Temperature & Humidity range

0℃～+40℃ Relative humidity: less than 80%

● Storage Temperature & Humidity range

−20℃～+60℃ Relative humidity: less than 90%

● Insulation Resistance

It should be more than 100MΩ/DC1000V between electrical circuit and enclosures.

● Withstand Voltage

It should be more than AC3470V/ for five seconds between electrical circuit and enclosures.

● Overload Voltage

Resistance function : 600V (RMS) 10seconds
Capacitance function : 600V (RMS) 10seconds
Frequency function : 600V (RMS) 10seconds
Current function : μA, mA : Protected by 600V 0.8A fuse
A : Protected by 600V 10A fuse

● Dimensions / Weight

approx. 161(L) x 82(W) x 50(D) mm / approx. 280g(including batteries, holster installation)

● Power source

Two R6P(AA)1.5V or equivalent

● Accessories

Test lead 1set / R6P (AA) 2p.c.s / Holster 1 / Instruction manual 1

● Fuse

F600V/800mA (fast acting type), φ6.3 x 32mm / F600V/10A(fast acting type), φ6.3 x 32mm

⚠️ CAUTION

● The voltage shown above is the overload protection(overvoltage protection) for the instrument. Make sure not to exceed the value of voltage shown above.
● In locations subject to radio frequency interference, the product may malfunction and it will recover automatically after the test.
4. Instrument Layout

![Instrument Layout Diagram]

- ① Function Selector Switch
- ② Display
- ③ MIN/MAX Key
- ④ SELECT Key
- ⑤ RANGE Key
- ⑥ REL Key
- ⑦ HOLD Key
- ⑧ Hz/DUTY Key
- ⑨ Measuring terminal (V/Ω/Hertz)
- ⑩ Measuring terminal (10A)
- ⑪ Test Leads
- ⑫ Protective fingerguard

- ⑬ Measuring terminal (COM)
- ⑭ Measuring terminal (mA)
- ⑮ Holster
- ⑯ Cap

Protective fingerguard: provides protection against electrical shock and ensuring the minimum required air and creepage distances.

Cap: Choose and use the test leads and caps that are suitable for the measurement category. When the instrument and the test lead are combined and used together, whichever lower category either of them belongs to will be applied.

5. Preparation

5-1 Checking Battery Voltage
Set the Function Selector Switch to other positions except the OFF position.
Battery Voltage is enough if indication is clear and symbol is not indicated in this bout.
If symbol is indicated or no indication on the display, follow to the Battery.
Replacement procedures shown in section 9 in this document and replace with new batteries.

6. Measurements

6-1 Voltage Measurement (DCV, ACV)

⚠️ DANGER
- To avoid the danger of getting electrical shock, never make measurement on a circuit over 600V AC/DC. (electrical potential to ground 300V AC/DC)
- Do not operate the Function Selector Switch during measurement.
- Do not make measurement when opening the battery cover and the instrument case.
- Keep your fingers and hands behind the Protective fingerguard during a measurement.

6-1-1 DC Voltage Measurement (DCV)
(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "V" position. (Then, "DC", "Auto", and "mV" symbols are indicated on the display.)
(3) Connect the black test lead to the negative side of the circuit under the test and the red test lead to the positive side of the circuit, then the measured value is indicated on the display. If you connect the test leads the other way, "－" symbol is indicated on the display.

6-1-2 AC Voltage Measurement (ACV)
(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "V" position. (Then, "AC", "Auto", and "V" symbols are indicated on the display.)

(3) Connect the test leads to the circuit under test. Measured value is indicated on the display.

Note) When you make measurement of the voltage less than 0.1V at the AC6V range, the measurement value cannot be indicated correctly. Even if short-circuit the input line at the range of AC6V, 1 ~ 3dgt may remain indicated. In that case, by pressing "REL" Key, "0" will be indicated.

6-2 Current Measurement (DCA/ACA)

⚠️ DANGER
- Do not apply voltage to the current measuring terminals.
- To avoid the danger of getting electrical shock, never make measurement on a circuit over 600V AC/DC. (electrical potential to ground 300V AC/DC)
- Do not operate the Function Selector Switch during measurement.
- Do not make measurement when opening the battery cover and the instrument case.

6-2-1 DC Current Measurement (up to 600mA)

(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the mA terminal.

(2) Set the Function Selector Switch to the appropriate "uA" or "mA" position. In case that the measurement current is 6000uA or less, set the Function Selector Switch to "uA" position, and it is 600.0mA or less, set the Function Selector Switch to "mA" position. (Then, "DC", "Auto", and "uA" or "mA" symbols are indicated on the display.)

(3) Power off the circuit under test.

(4) Connect the black test lead to the negative side of the circuit under the test and the red test lead to the positive side of the circuit so the instrument is in the series with the circuit.

(5) Power on the circuit under test.

(6) Measured value is indicated on the display. If you connect the test leads the other polarity, "ー" symbol is indicated on the display.

6-2-2 DC Current Measurement (up to 10A)

⚠️ CAUTION
- For safety sake, the measuring time on 10A range should be 15 seconds or less. Interval time between 2 measurements should be greater than 15 minutes. If you carry on making measurement continuously over 15 seconds, or make measurement in short interval time, it may cause error of measurement and instrument damage.

(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the 10A terminal.

(2) Set the Function Selector Switch to the "A" position. (Then, "DC", "Auto", and "A" symbols are indicated on the display.)

(3) Power off the circuit under test.

(4) Connect the black test lead to the negative side of the circuit under the test and the red test lead to the positive side of the circuit so the instrument is in the series with the circuit.

(5) Power on the circuit under test.

(6) Measured value is indicated on the display. If you connect the test leads the other polarity, "ー" symbol is indicated on the display.

6-2-3 AC Current Measurement (up to 600mA)

(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the mA terminal.

(2) Set the Function Selector Switch to the appropriate "uA" or "mA" position. In the case of the measurement current is 6000uA or less, set the Function Selector Switch to "uA" position, and it is 600.0mA or less, set the Function Selector Switch to "mA" position. (Then, "DC", "Auto", and "uA" or "mA" symbols are indicated on the display.)

(3) Set the instrument to AC mode by pressing "SELECT" Key. (Then, "AC" symbol is indicated on the display.)

(4) Power off the circuit under test.
6-2-4  AC Current Measurement (up to 10A)

(5) Connect the test leads to the circuit under test so the instrument is in the series.
(6) Power on the circuit under test.
(7) Measured value is indicated on the display.

6-3  Resistance Measurement (Ω/ Diode check/ Continuity Check)

6-3-1  Resistance Measurement
(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "Ω" position. (Then, "AUTO" and "MΩ" symbols are indicated on the display.)
(3) Make sure that the "OL" symbol is indicated on the display at this point, then short the test lead tips and check "0" is indicated on the display.
(4) Connect the test leads to both ends of the resistance under test.
Measured value is indicated on the display.
Note) Even if short the test lead tips, indicated value may not be "0". But this is because of the resistance of test leads and not a failure. In that case, by pressing "REL" key, "0" will be indicated.

6-3-2  Diode Check
(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "Ω" position. (Then, "AUTO" and "MΩ" symbols are indicated on the display.)
(3) Press the "SELECT" Key twice and set the instrument to Diode Check mode.
(Then, "+" and "-V" symbols are indicated on the display.)
(4) Connect the black test lead to the cathode side of the Diode and the red test lead to the anode side of the Diode.
Make sure that the "OL" symbol is indicated on the display at this point, then short the test lead tips and check "0" is indicated on the display.
(5) Connect the black test lead to the anode side of the Diode and the red test lead to the cathode side of the Diode.
Normally, "OL" symbol is indicated on the display.
Conclusion : Diode is OK if the instrument complies with above items(4) and (5).
Note) Open-circuit voltage between measuring terminals is approx. 2.8V. (measuring current approx. 0.4mA)

6-3-3  Continuity Check
(1) Insert the red test lead plug into the VΩHz terminal and the black test lead plug into COM terminal.
(2) Set the Function Selector Switch to "Ω" position. (Then, "AUTO" and "MΩ" symbols are indicated on the display.)
(3) Press the "SELECT" Key one time and set the instrument to Continuity Check mode.
(Then, "Ω" symbols are indicated on the display.)
Make sure that the "Ω." symbol is indicated on the display at this bout, then short the test lead tips and check "0" is indicated on the display and check if the buzzer beeps.

(4) Connect the test leads to both ends of the resistance under test.
Measured value is indicated on the display. The buzzer beeps below about 100Ω.

Note) Even if short the test lead tips, indicated value may not be "0". But this is because of the resistance of test leads and not a failure. In that case, by pressing "REL" key, "0" will be indicated.

6-4 Capacitance Measurement

⚠️ DANGER
- To avoid the danger of getting electrical shock, never make measurement of the circuit in which electric potential exists.
- Do not make measurement when opening the battery cover and the instrument case.
- Make sure to discharge the capacitor before making measurement.

(1) Insert the black test lead plug into the COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "AUTO" position.(Then, "Auto" and "nF" symbols are indicated on the display.)
(3) Press the "REL" key and "0" shall be indicated.(Then, "△" symbol is indicated on the display.)
(4) Connect the test leads to both ends of the Capacitance under test.
Measured value is indicated on the display.
Measuring unit "nF" / "µF" is automatically chosen and indicated due to the measured value.

Note) It may take some time according to the measuring capacitance.
Measuring capacitance < 4µF -------- Measuring time is about 2seconds
Measuring capacitance < 40µF ------- Measuring time is about 7seconds
Measuring capacitance < 100µF ------- Measuring time is about 15seconds

6-5 Frequency Measurement

⚠️ DANGER
- To avoid the danger of getting electrical shocks, never make measurement on a circuit over 600V AC/DC. (electrical potential to ground 300V AC/DC)
- Do not operate the Function Selector Switch during measurement.
- Do not make measurement when opening the battery cover and the instrument case.
- Keep your fingers and hands behind the Protective finger guard during a measurement.

(1) Insert the black test lead plug into COM terminal and the red test lead plug into the VΩHz terminal.
(2) Set the Function Selector Switch to "Hz" position.(Then, "Auto" and "Hz" symbols are indicated on the display.)
(3) Connect the test leads to the circuit under test.
Measured value is indicated on the display.
Frequency can be measured at ACV and ACA functions by pressing "Hz/DUTY" key.
Concerning with the direction for use of "Hz/ DUTY" key, please reference to the section 7-6 Hz/DUTY in this document.

Note) The minimum input can be measured is approx. 1.5V.
To measure a frequency, measure the voltage on the electrical circuit in advance. Then press the "Hz/DUTY" key to enter into frequency measurement.
Readings of frequency may fluctuate or be influenced under noisy environment.
7. How to use Function Switches

7-1 SELECT Key

This key is to chose the measuring function at Ω / Diode Check/ Continuity/ function and Current function(uA, mA, A). Actions at each function are as below.

● Ω / Diode Check/ Continuity function

When setting the instrument to "Ω / Diode Check/ Continuity" function, "Ω" measuring mode has been selected in the initial condition. By pressing "SELECT" Key, measuring mode changes.

"Ω" → "Continuity Check" → "Diode Check"

● Current function (uA, mA, A)

When setting the instrument to any function of the "uA", "mA", and "A", DC Current Measuring mode has been selected in the initial condition.

By pressing "SELECT" Key, measuring mode changes.

"DC" → "AC"

7-2 MIN/MAX Key

Press the "MIN/MAX" Key to lock MAX or MIN value, and the "MAX" or "MIN" sign will appear on the display, press it over 2 seconds to exit.

It cannot display bar graph on MAX/MIN HOLD mode.

7-3 RANGE Key

At each "ACV", "DCV", "Ω", "uA", "mA" and "A" function, setting for the measuring ranges can be done manually by pressing "RANGE" Key. ("Auto" symbol disappears from the display.)

Every time when pressing "RANGE" Key, range moves.

In order to change from manual mode to Auto-ranging, there are following 2 ways.

1) Press "RANGE" Key for 2 seconds

2) Change to the other functions.

7-4 REL Key

The difference between measured values can be indicated on the display at each "ACV", "DCV", "Ω", "Capacitance", "ACA" and "DCA" function.

When pressing "REL" Key, "△" symbol lights up and the value under measuring is stored.

After that, the difference between stored value and measuring value is indicated on the display.

It can be released by pressing the "REL" Key again, changing to the other functions.

Note) Do not press "REL" Key over 2 seconds to cause the malfunction.

It can be released again by pressing "REL" Key over 2 seconds.

7-5 HOLD Key

The measured value can be hold at all functions.

By pressing "HOLD" Key, "DH" symbol indicated on the display and the indicated value can be held.

By pressing "HOLD" Key again, "DH" symbol disappears from the display and held data is released.

7-6 Hz/DUTY Key

Making measurement for frequency of input signal and DUTY(Pulse width / Pulse period).

(1) Change from normal measurement to "Frequency Measurement" and "DUTY Measurement".

Every time when pressing "Hz/DUTY" Key, it changes in the following sequence from normal measurement.

"Frequency" → "DUTY" → "Normal measurement"

(2) Change Frequency and DUTY at "Hz/DUTY" function.

By pressing "Hz/DUTY" Key, it changes in the sequence : "Frequency" → "DUTY".
8. Auto Power Off

Auto power off function operates when about 15 minutes passed after power on this instrument. When Auto power off function operates and the instrument powered off, the power-off statue returns to normal by pressing any key. And it is possible to release the Auto power off function. Turn the Function Selector Switch from OFF position to the function you want with pressing "SELECT" Key, and power on the instrument.

9. Battery & Fuse Replacement

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Never open the battery cover and the instrument case when making measurement.</td>
</tr>
<tr>
<td>● To avoid getting electrical shock, be sure to remove test leads from the instrument when opening the battery cover in order to replace batteries and fuses.</td>
</tr>
</tbody>
</table>

9-1 Battery replacement
(1) Remove test leads from the instrument.
(2) Remove the holster from the instrument.
(3) Loosen one screw on the bottom of the Instrument and open the battery cover then replace batteries.

9-2 Fuse replacement
(1) Remove test leads from the instrument.
(2) Remove the holster from the instrument.
(3) Loosen two screws on the bottom of the instrument and open the battery cover, then replace fuses.

10. Maintenance

Use a cloth dipped in water or neutral detergent for cleaning the instrument. Do not use abrasives or solvents.
保証書

共立製品をお買い上げいただきありがとうございます。保証期間内に正常なご使用状態で万一故障が生じた場合は、保証規定により無償修理をさせていただきます。本書を添付の上ご依頼ください。

お名前

ご住所 〒

TEL

保証期間内に生じました故障は無償で修理いたします。
但し、下記事項に該当する場合は対象から除外させていただきます。
1. 取扱説明書と異なる不適切な取扱い、または使用方法が原因で発生した故障。
2. お買い上げ後の持ち運びや輸送の間に、落下させるなど異常な衝撃が加わって生じた故障。
3. 弊社サービス担当者以外による改造、修理が原因で生じた故障。
4. 火災、地震、水害、公害及びその他の天変地異が原因で生じた故障。
5. 傷など外観上の変化。
6. その他弊社の責任と見なされない故障。
7. 電池など消耗品の交換、補充。
8. 保証書のご提出がない場合

保証規定

<table>
<thead>
<tr>
<th>MODEL</th>
<th>1012</th>
<th>製造番号</th>
</tr>
</thead>
<tbody>
<tr>
<td>保証期間</td>
<td>ご購入日（年月日）より1年間</td>
<td></td>
</tr>
</tbody>
</table>

KYORITSU ELECTRICAL INSTRUMENTS WORKS, LTD.
2-5-20, Nakane, Meguro-ku, Tokyo, 152-0031 Japan
Phone: +81-3-3723-0131
Fax: +81-3-3723-0152
Factory: Ehime, Japan

www.kew-ltd.co.jp