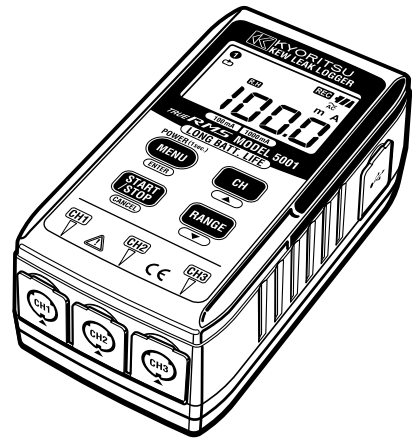


Quick manual



Leak Logger for Measuring & Recording leakage current

MODEL 5000/5001

Preface

This Quick manual is a simplified version of the full instruction manual and providing the simple explanation for the operation method and the indications. This manual is intended only as a handy reference guide and should only be used after having read the full instruction manual which contains full details on each function of this instrument and safety precautions.

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1. Operating procedures (flow chart)

Following explains the flow of operation: preparation through recording stop.

1: Preparation

Select the appropriate sensor and connect it to the instrument.

2: Confirmation and change of the recording mode

Confirm or change the recording mode.

3: Confirmation and change of the recording condition

Confirm or change the recording condition.

4: Preparation before recording

Install the instrument and do setups for each channel.

5: Start of recording

Start recording.

6: Stop of recording

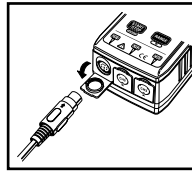
Stop recording.

* The recorded data can be viewed either by the following two methods.

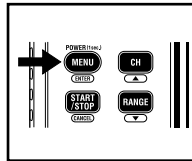
- ◆ On a PC: Refer to the instruction manual. (Data transfer to PC)
- ◆ On the instrument: Refer to (2)Confirmation of recorded data (status1) and (3)Confirmation of recorded data (status2) described on the backside of this manual.

* At the Event/ Max. value/ Capture recording modes, the LED flashes when the preset current value is exceeded. The LED is flashing during the data recording. Make the instrument into Menu mode to turn off the LED.

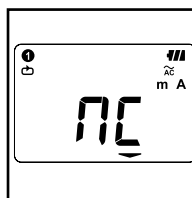
1: Preparation



1. Connect the clamp sensor to the instrument firmly with careful attention to the orientation of the connector.

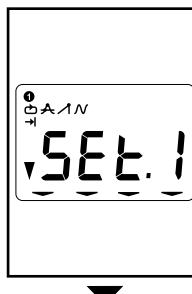


2. Press the **MENU** button at least 1 sec. to turn on the instrument. Release the button when all indications are displayed on the LCD.



3. Can make measurement right after turning on the instrument. When **NC** is displayed on the LCD, a sensor is not connected to the appropriate channel; or the connection is incorrect.

2: Confirmation and change of the recording mode



1. The instrument goes into menu mode when **MENU** button is pressed. Each button acts as follows at menu mode.

MENU → **ENTER**, **CH** → **▲**
START/STOP → **CANCEL**, **RANGE** → **▼**

2. Confirm that "Set. 1" (which means Setting 1) is displayed on the LCD, and press the **ENTER** button.

3. Then the selected recording mode is displayed.

Recording mode	Details
Continuous recording	Intermittent measured value is recorded continuously at the pre-set interval. (15-kind: 1 sec. to 60 min.)
Event recording	When the preset current value is exceeded, (hereinafter, this event is referred as current detection) three previous RMS value, the RMS value when detecting it, and four subsequent RMS values, 8 data in total (0.8 sec.) are recorded.
Max. value Recording	The max. RMS value is recorded at every 10 sec. prior to and subsequent to the current detection. It ends when a value drops to 50% or less of the preset current value; or when 10 min. has been elapsed.
Capture recording	Ten to twelve waveforms (for 200mS) are recorded prior to and subsequent to the current detection.

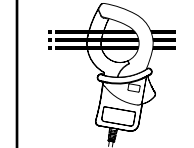
* Recording mode cannot be set individually at each channel.

- ◆ No change: Press the **▼** button, and proceed to Step 3.
- ◆ To change: Change the set value as follows and press the **▼** button. Then proceed to Step 3.

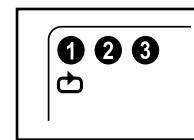
Change of set value

- (1) Press the **ENTER** button while the set value is being displayed on the LCD.
- (2) Then the set value flashes
- (3) Press the **▲** or **▼** button and set it to the desired value.
- (4) Press the **ENTER** button to confirm the value. Then the value stops flashing, and the set value is confirmed. To cancel the change, press the **CANCEL** button.

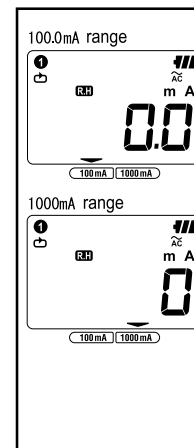
4: Preparation before recording



1. Clamp on the measured object and fix the Clamp sensor.
2. Instrument shall be firmly fixed so as not to come off easily.



3. The indicated value at each channel (CH1~3) switches by pressing the **CH** button.

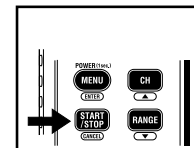


4. Measurement range switches by pressing the **RANGE** button.

Note

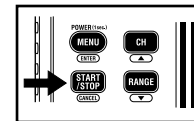
- ◆ At continuous recording mode: It switches in the sequence below. Auto-ranging → 1000mA → 100.0mA → Auto-ranging
- ◆ At event/ max. value/ capture recording mode: It switches between 1000mA and 100.0mA. Range cannot be switched during a measurement. Select the appropriate range before recording.

5: Start of recording



1. Press down the **START/STOP** button for a while.
 - ◆ At continuous recording mode or after changing the recording mode, "CLR" flashes while the button is being pressed down. A few seconds later, the measured value and the "REC" mark are displayed on the LCD. Then a recording starts.
 - ◆ At event/ Max value/ Capture recording mode or the recording mode is not changed, the "REC" mark flashes when pressing the **START/STOP** button for a while. Then, the measured value and the "REC" mark are displayed on the LCD. Then a recording starts.

6: Stop of recording



1. Press the **START/STOP** button at least 1 sec. to stop the recording.
2. Recording stops, and the "REC" mark disappears. Then the instrument goes back into measurement state.

Now recording is complete.

- * The recorded data can be viewed either by the following two methods.
 - ◆ On a PC: Refer to the instruction manual. (Data transfer to PC)
 - ◆ On the instrument: Refer to (2)Confirmation of recorded data (status1) and (3)Confirmation of recorded data (status2)
- * Press the **MENU** button at least 1 sec. to turn off the instrument.

3: Confirmation and change of the recording condition

Continuous recording mode

1. Recording interval is displayed. (interval: 1sec.~60min. 15-kind in total)
 - ◆ To change the interval → Refer to **Change of set value**
 - ◆ No change → Press the **▼** button, and proceed to the next step.
2. State of One-time system is displayed.
 - ◆ To change the setting → Refer to **Change of set value**
 - ◆ No change → Press the **▼** button, and proceed to the next step.
3. Setting is complete. Press the **ENTER** button to return to Setting 1 "Set.1".
4. Press the **CANCEL** button to get the instrument ready for a measurement.

One-time system

- ◆ ON: Recording stops when memory becomes full.
- ◆ OFF: Overwrite the old data, and store the latest data.

Event recording mode

1. Pre-set current value on channel 1 is displayed. (can be set at every 1mA from 0~1000mA)
 - ◆ To change the value → Refer to **Change of set value**
 - ◆ No change → Press **▼** button, and proceed to the next step.
2. Confirm the pre-set current value on channel 2 and 3 as well.
3. State of One-time system is displayed.
 - ◆ To change the setting → Refer to **Change of set value**
 - ◆ No change → Press **▼** button, and proceed to the next step.
4. Setting is complete. Press the **ENTER** button to return to Setting 1 "Set.1".
5. Press the **CANCEL** button to get the instrument ready for a measurement.

Max. value recording mode

1. Pre-set current value on channel 1 is displayed. (can be set at every 1mA from 0~1000mA)
 - ◆ To change the value → Refer to **Change of set value**
 - ◆ No change → Press **▼** button, and proceed to the next step.
2. Confirm the pre-set current value on channel 2 and 3 as well.
3. State of One-time system is displayed.
 - ◆ To change the setting → Refer to **Change of set value**
 - ◆ No change → Press **▼** button, and proceed to the next step.
4. Setting is complete. Press the **ENTER** button to return to Setting 1 "Set.1".
5. Press the **CANCEL** button to get the instrument ready for a measurement.

Capture recording mode

1. Pre-set current value on channel 1 is displayed. (can be set at every 1mA from 0~1000mA)
 - ◆ To change the value → Refer to **Change of set value**
 - ◆ No change → Press the **▼** button, and proceed to the next step.
2. State of One-time system is displayed.
 - ◆ To change the setting → Refer to **Change of set value**
 - ◆ No change → Press the **▼** button, and proceed to the next step.
3. Setting is complete. Press the **ENTER** button to return to Setting 1 "Set.1".
4. Press the **CANCEL** button to get the instrument ready for a measurement.

~ To view the recorded quantity & the max. value ~

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- A digital display with a black background and white text. At the top, it reads "MEM MAX" in a sans-serif font. To the right of this text is a small icon consisting of three slanted parallel lines. Below this, the number "545.1" is displayed in a large, stylized digital font. Each digit has a small upward-pointing triangle above it and a small downward-pointing triangle below it.

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- A digital display showing 'MEM' and '100.0%' with a small triangle icon on the left and a battery level indicator on the right.

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- A digital display unit with a black background and white text. At the top, it shows 'MEM MAX' on the left and a battery level indicator on the right. Below this, the text 'CH 1' is displayed in large, bold, digital characters. To the left of the display are two small, white, upward and downward pointing arrow buttons. The entire unit is framed by a thin white border.



Two digital displays are shown. The top display shows 'MEM MAX' and '1.23'. The bottom display shows 'MEM MAX' and '4.56'. Both displays have a small 'i' icon in the top left corner and a small 'III' icon in the top right corner.

- MEM MAX $\hat{A}$
m A
789

~ To view the number of recorded data & RECALL ~

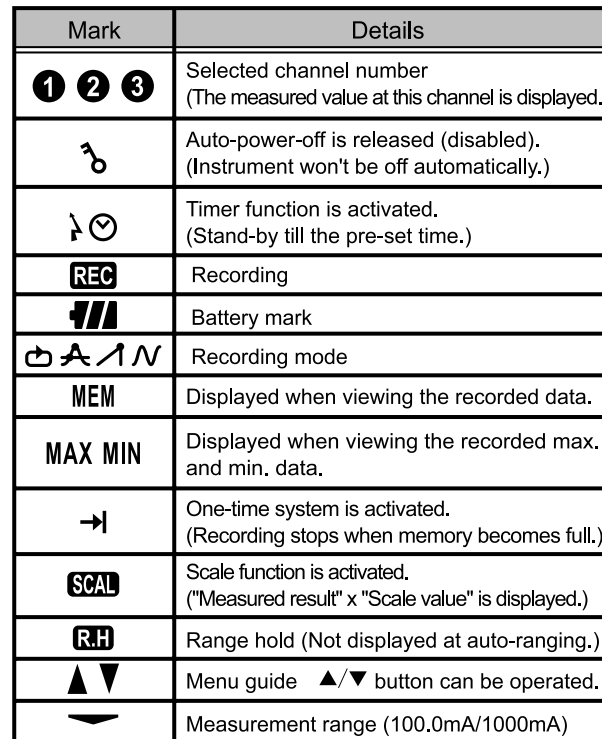
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- A digital display with a black background and white text. At the top center is the word "MEM". At the top right is "77A". In the center, the text "5t 5.2" is displayed in a large, stylized font. Below the "5t" and "5.2" are two sets of three small white dashes arranged horizontally.

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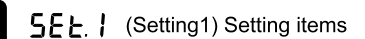
-
- Three digital displays are shown, each with a top status bar and a large numeric display. The top status bar includes a 'MEM' label, a smiley face icon, and a battery level icon. The first display shows '1.23' with a downward arrow on the left. The second display shows '4.56' with both upward and downward arrows on the left. The third display shows '789' with both upward and downward arrows on the left and an 'm A' label to the right of the battery icon.

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Message	Meaning
NC	Sensor is not connected.
OL	Over-range
SEt.1	Menu: Setting1(SET.1) View or change the recording mode/ condition
SEt.2	Menu: Setting2(SET.2) View or change the Location information and auto-power-off function.
StS.1	Menu: Status 1(STS.1) View the recorded quantity and the max. value at each channel.
StS.2	Menu: Status 2(STS.2) View the number of recorded data and RECALL
End	Menu: End
LOG	Continuous recording mode (LOGging)
dte	Event recording mode (detect)
-	Max. value recording mode (Max)
CAP	Capture recording mode (CAPture)
-PC-	PC data in transit
CLr	Warning of memory clear

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- ## Setting2 (Setting2) Setting items

- ### 5.5.1 (Status1) Reference items

- ## 5t5.2 (Status2) Reference items

1. Number of recorded data/ detected current
 - ◆ Continuous recording mode →
number of recorded data
 - ◆ Event/ Max. value/ Capture recording mode →
number of detected current at each channel.
2. RECALL "r:01" to "r:10": Time information of the latest 10 recorded data and the recorded value at each channel.
3. End: Setting end. Press the **ENTER** button to back to the "SEt 1".