

# Instruction manual for Moisture Meter for Compost Model SK-970A No. 1736-00

Read this manual thoroughly before use and keep it in a safe place for future reference whenever necessary.

## Before Use

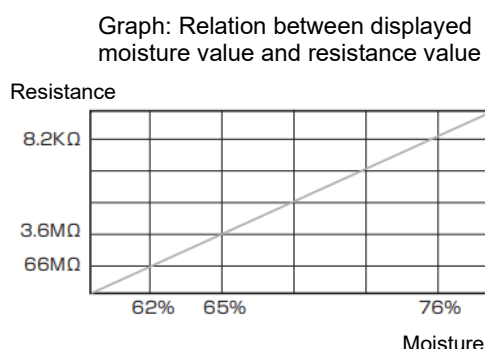
SK-970A is designed to measure the electric resistance in electrodes on the probe and display a value that represents the moisture content. As it has temperature compensation function, you do not need to compensate temperature against the measured value within 5 to 40°C. Note that powdered or granular objects cannot be measured.

The displayed reading is not an absolute value but is relative to electric conductance. If the compost has a high concentration of highly conductive substances such as salt or metals, the reading will be higher than the actual moisture content. However, as long as these substances are in small quantities and are evenly distributed throughout the compost, and so have little effect on the moisture content value, this device is useful for comparative examinations after proper setting.

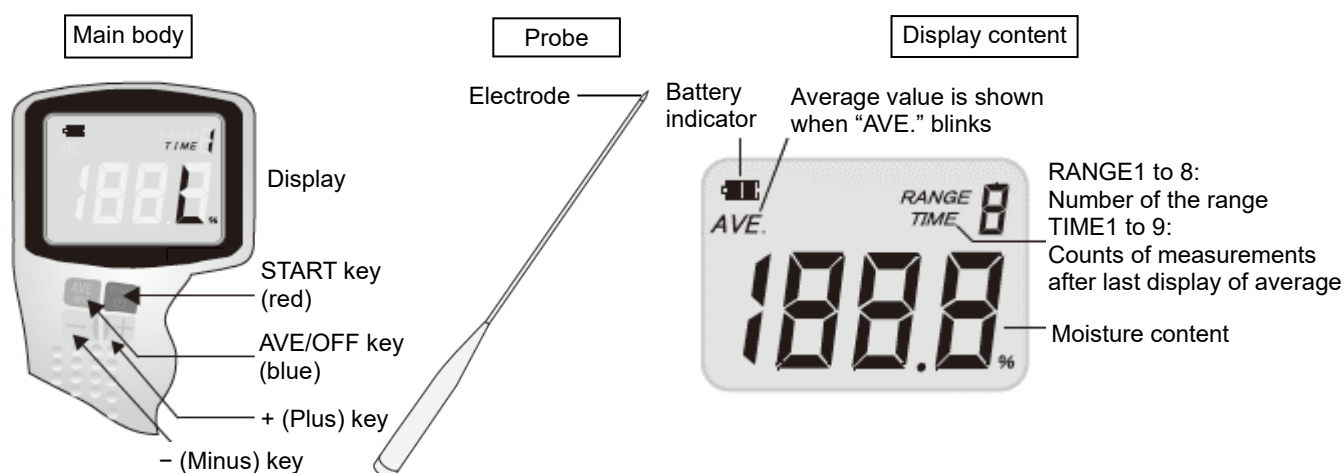
SK-970A has eight editable ranges including one standard range (RANGE1) and seven users' ranges (RANGE2 to RANGE8). By default, the setting values in all ranges are tentatively set that the angle is 100 and the equilibrium is 0.0 as shown in the right graph. The setting values can be individually changed in all ranges. Refer to "Setting of Users' Ranges."

Note: The RANGE1 can also be edited but it is recommended to not to change it for future convenience.

If the unit is not used for a long period of time, remove the battery. Otherwise, the battery may leak resulting in malfunctions.



## Names of Parts



## How to Use

1. Check that the probe is clean. Wipe it with a dried cloth if it is dirty.
  2. Press START key and confirm that "L" (below the range) is displayed.
  3. Press + or - key to choose the range from RANGE1 to RANGE8.
  4. Apply the electrodes of probe to a part of compost where you wish to measure, then press START key.
- Be sure to apply the probe to the compost with the same pressure, and the temperature difference between the unit and the sample is fairly small.**
5. For accurate reading, measure the same sample repeatedly, then press AVE/OFF key to show an average. Stored data are reset each time when the average is calculated.
  6. After the measurement, be sure to clean the probe.
  7. Pressing AVE/OFF key for 3 seconds will turn off the device.

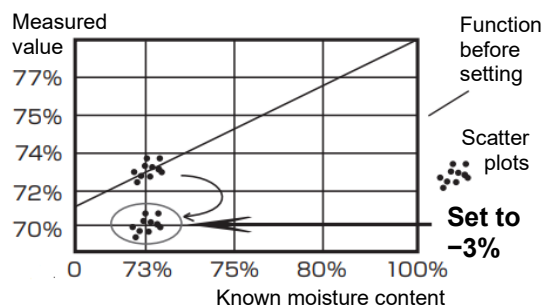
## Setting of Users' Ranges

It is available to individually set the suitable value responds to each sample in seven users' ranges. Angle and equilibrium of a relation function are editable for each range.

### Parallel change (equilibrium change)

1. After turning on the device, Press + or – key to choose the range to be edited.
2. Press + and – keys simultaneously.  
The character at upper right changes to “H” and the current equilibrium is shown. The default setting is “0.0” in all ranges.
3. Press + or – key to modify the value, available between –99 and 99.9. It can vary in steps of 0.1 between –19.9 and 99.9. The value increases or decreases continuously by a long press. In the right case, set it to –3.0.
4. Press AVE/OFF key to complete. If a measured value was displayed before this setting, a recalculated value is displayed. Otherwise, “L” is displayed.

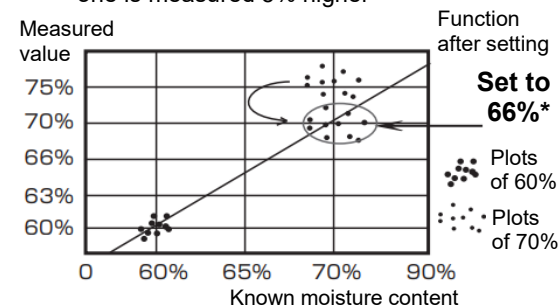
Pattern 1: When all the measured values are 3% higher



### Angle change

1. After turning on the device, Press + or – key to choose the range to be edited.
2. Press + and – keys simultaneously, and then press START key.  
The character at upper right changes to “A” and the current angle is shown. The default setting is “100” in all ranges.
3. Press + or – key to modify the value, available between 0 and 999. The value increases or decreases continuously by a long press. In the right case, set it to 66 following the equation  $A^*$ .
4. Press AVE/OFF key to complete.

Pattern 2: When 60%-water compost is detected correctly whereas 70%-water one is measured 5% higher



$$A^* = \frac{\text{Difference of known values}}{\text{Difference of measured values}} = \frac{70\% - 60\%}{75\% - 60\%} = 66\%$$

## Specifications

Name:	Moisture Meter for Compost Model SK-970A
Measuring method:	Electric resistance measurement
Measuring range:	23.0 to 80.0% in the standard range
Operating ambient	5 to 40°C without condensing
Resolution:	0.1%
Power requirement:	Two AA zinc-carbon batteries
Dimensions:	Main body: 70 (W) x 155 (H) x 25 (D) mm Cable: 0.8 m long Sensor: 10 mm dia. x 800 mm long
Weight:	447 g including batteries
Accessories:	Two AA zinc-carbon batteries, hand strap

## Warranty Policy

Our products are warranted to be free from defects in materials and workmanship for a period of one year from date of delivery. If repair is necessary and has not been the result of misuse, force majeure, or transportation arranged by yourself within the one-year period, please return the products on freight prepaid basis. Correction of the defect will be made without charges. We alone will determine if the product problem is due to deviations or customer misuse. Out-of-warranty products will be repaired for a fee. Before returning, request for our acknowledgement first.

For details, contact us or a retailer from which you have purchased.

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