

DC Voltmeter "CRABEE" CT-V User's Manual

Thank you very much for purchasing this product.
A05-7065 DC Voltmeter "CRABEE" CT-V is digital voltmeter that measures easily voltage when included at any place inside electric circuit. Please use this product after carefully reading this user's manual.

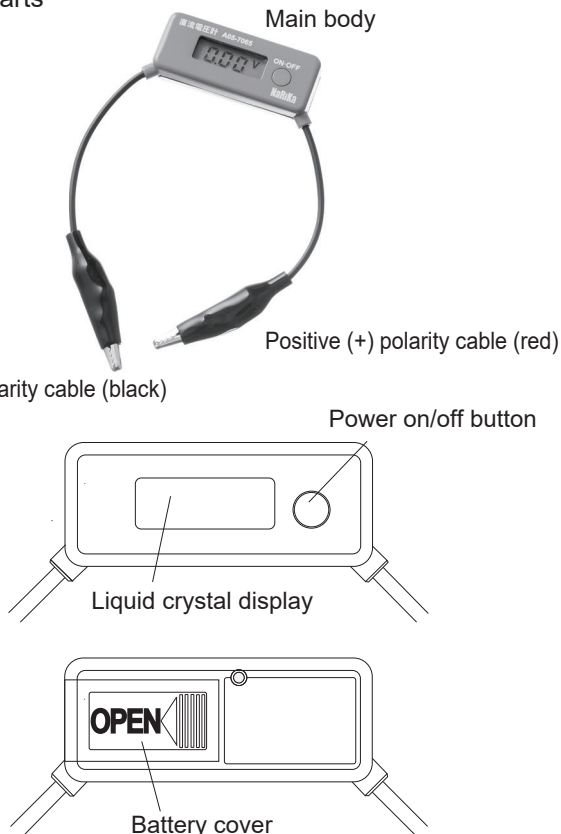
Caution

- No open flame: high risk of serious damage to the main unit
- No disassembly: disassembling might cause breakdown or injury, therefore do not disassemble the product.
- Keep dry: If the product get wet there is a risk of electric shock or breakdown, therefore do not expose to water.
- If during use or storage you notice abnormal smell, the product get warm, change of the products color, deformation and other abnormalities, do not use the product and contact us.
- Do not leave or store the product on places with high temperatures like under blazing sun inside a car or under strong direct sunlight. It might cause deformation or breakdown of the product.
- Do not apply strong pressure on the liquid crystal display, especially with sharp objects.
- When conducting experiment, place it on rigid, level surface only.
- Do not expose to strong shocks or do not throw with it.
- Do not open the battery lid and short circuit the inside parts.
- If stored for long time, remove batteries and store it separately.
- Do not use for electric circuits in which large electric current flows momentarily (Example: short circuit of dry cell battery and others).
- Do not use for a long time with current flowing over the measurement range.
- Never connect to alternating current (AC) electric circuit.
- Do not use if product case or cables are damaged.
- This product is developed for simple measurement during science experiments at schools. Use for different purposes is not supported.
- This is not a toy. Not intended for children 12 years and younger.

Specification

Size	: 53 x 21 x 15 mm (body), 280 mm (length)
Weight	: 20g (with battery)
Measurement range	: 1. ± 25.0 V 2. ± 5.00 V \rightarrow ± 5.1 V \sim ± 25.0 V (automatic range change)
Resolution	: 0.1 V (measurement range 1.) 0.01 V (measurement range 2. up to ± 5.00 V)
Polarity indication	: Automatic (display - sign only)
Function	: Auto power off
Electrical power	: 1 coin type lithium battery (CR1220)
Accessory	: 1pc of battery (CR1220) not included inside the product, User's manual

◇Name of parts



Operation instructions

◇Inserting battery

Slide the battery cover in the direction indicated by the arrow pointing to OPEN as printed on the cover to remove the cover before inserting 1 coin type lithium battery (CR1220), ensuring correct polarity.

When you press the power button, measurement is possible after 0 point calibration (CAL will be shown on the display).



0 point calibration of the product is based on condition that the product is not connected to electric circuit. When switching on the product make sure that electric circuit is switched off. Also, if certain amount of voltage is applied calibration will not be performed. To get accurate measurement conduct calibration outside of electric circuit and then connect into the electric circuit.

◇Voltage measuring

When you want to measure voltage inside of an electric circuit, please connect the product in parallel connection. When switching on the product, just in case do not forget to switch off the power in the electric circuit. You can change this product's measurement range freely.

Selectable measuring range:

1. ± 25.0 V (up to one decimal place)
2. ± 5.00 V (two decimal places) \rightarrow ± 5.1 V \sim ± 25.0 V (one decimal place)

The measuring range can be switched by pressing the power button for a while. When the product is switched on, the measuring range is set to 1.



ON/OFF button pressed for a while switch

In the case of measurement in measuring range 2., the display automatically switches when 5.00 V is exceeded. Also, when the display is switched, the display will switch automatically back to one digit when the voltage is 4.7 V and below.



The range will switch automatically.

The product maximum shown voltage is ± 25 V. When it exceeds the range, the following display will show and start flashing. Lower the voltage or remove the product from the electric circuit.



◇Auto power off

With the power turned on, if there is no electric current fluctuation for 5 minutes and 0 mA, then the product will turn off by itself. Also, during measurement, the product will turn off itself if used for longer than 15 min (automatic switch off in case of forgetting). Please be careful when doing long experiments.

◇Battery exchange

When battery replace is necessary, the liquid crystal display will start to repeatedly and slowly blinking. Please replace the battery accordingly.



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