

The Innovative Microplate Reader Series

NANO-VC™

Operator's Manual



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The Innovative Microplate Reader Series

Microvolume Plate

Operator's Manual

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LTEK Instruments Co., Ltd.

Notices

LTEK Co., Ltd.

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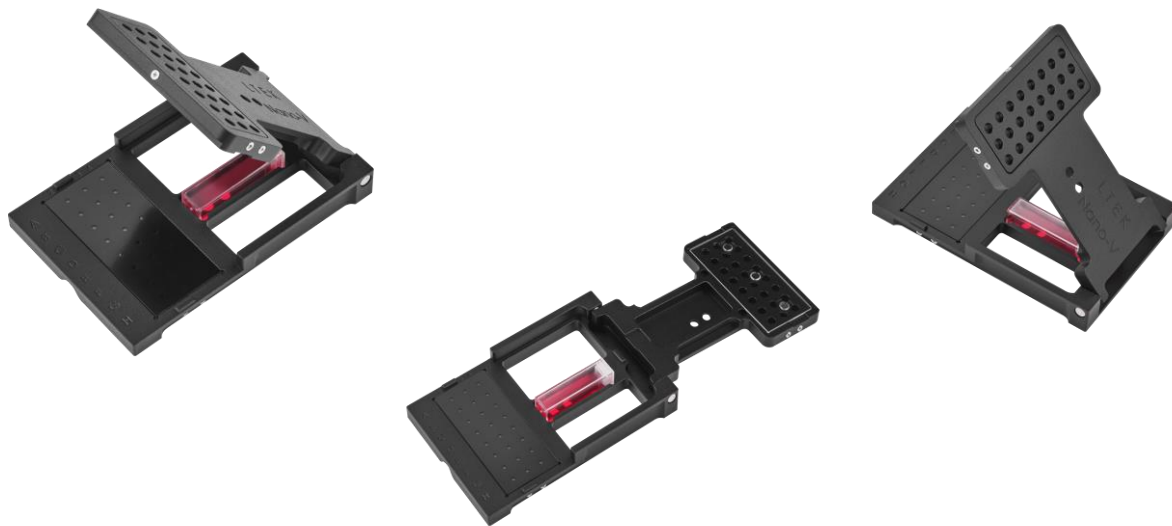
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NANO-VC™ (Microvolume Plate)



24 Wells DNA/RNA/Protein Quantitative Measurement

- Using 2 μ L of DNA/RNA samples, quantitative measurement is possible.
- This also helps the users to understand or interpret the unknown or unspecified samples by measuring from 240 to 320 nm with 2 nm steps.
- A total of 2 μ L 24 wells allow you to measure variety types of samples at the same time.
- dsDNA, RNA, ssDNA, 1Abs at 1cm = 1 mg/ml
- BSA, IgG, Lysozyme, and other samples are measurable

Specification

Physical Properties	
Mass	235g
Length	127.7mm
Width	85.4mm
Height	16mm
Nominal Well Diameter	6.0mm

Specification	
2µl Sample Capacity	24 Wells
Cuvette Capacity	1 Slot
Cuvette Size	2.5 - 3.5ml tube (Standard size: 12.5 x 12.5 x 45 mm)
Compatible Models	INNO, INNO-M, INNO-S, INNO-H
Nominal Well Diameter	0.5 mm
Detection Limit	2 ng/µl dsDNA

NANO-VC Setting



1. Check behind the NANO-VC plate to see the Calibration Value and must set same Calibration value in [INNO_SET.ini] file, which is at file route of the following

(c:) → SAMS → INNO_SET.ini. Looking at the serial number from the 6th letter to the 8th number are the calibration value. If the 5th is 2, the 6th is 1, and the 7th is 0, that means the calibration value is 21.0, and make sure to save [INNO_SET.ini] after changing the Calibration value. The software must be closed and reopened to be able to apply the new Cal value to the software.

2. Press the Nano Volume icon at the starting menu of the INNO-X program.

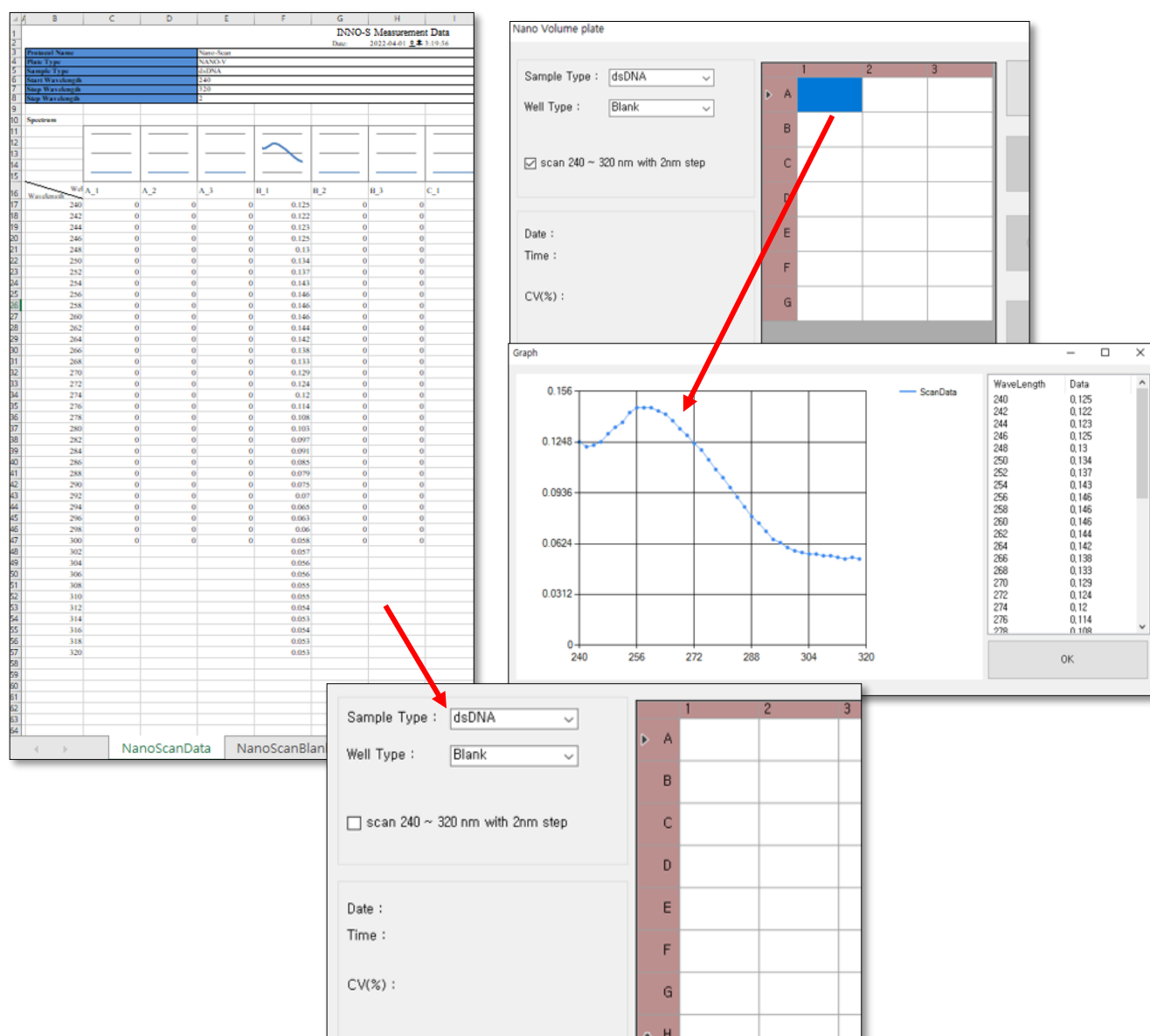
3. The nano volume option appears only when the product is purchased with NANO-VC.

※ Do not keep the NANO-VC plate inside of the instrument when the instrument is on and when the plate is not in use. Place it in the hard case if you purchased it, and if not, try to keep it in a dust-free area.

NANO-VC

- To measure Blank in the NANO-V menu, dispense 2µl of distilled water into each well to be measured. Then select the dispense well in the well layout, select “**Sample Type**”, and click the “**READ**” button.
- The result appears in the selected well(s) and shows the **CV** value of Blank. If the CV value exceeds 10%, the selected wells are colored red on the Well layout.
- Users can click on the red well (s) to deselect them, adjust the CV value below 10% and proceed to the next step, or press the “**RESET**” button to resuspend the BLANK.
- Remove the NANO-V plate from the plate carrier and wipe the DW with laboratory tissue.
- Dispense 2µl of sample into the well(s) where Blank is selected. Dispense the sample into a well where the Blank has not been measured, and measurements may be erroneous.
- After measuring the blank, users will activate the “**NEXT**” button in the NANO-V menu. After dispensing the sample, place the NANO-V plate on top, click “**NEXT**”, and click the “**READ**” button to measure the sample.
- The result is displayed in an Excel window, and the “**Save Raw Data**” button shows the Raw data read separately.

NANO-VC Scan

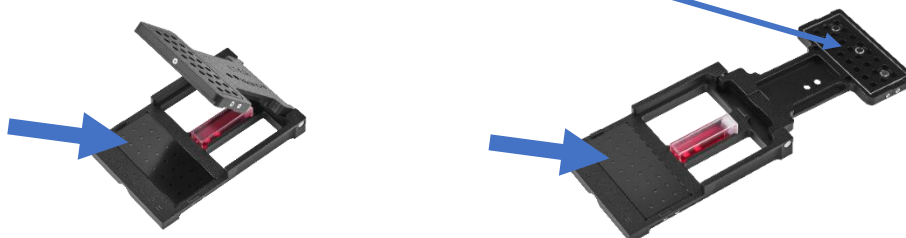


- Before measuring the blank, users can check the "Scan 240 ~ 320nm with 2nm step" checkbox to measure with the scanning type. Users can also check the result in graph format.
- After the measurement, click on the selected well(s) to view the results in graph format.

NANO-VC cleanings tips

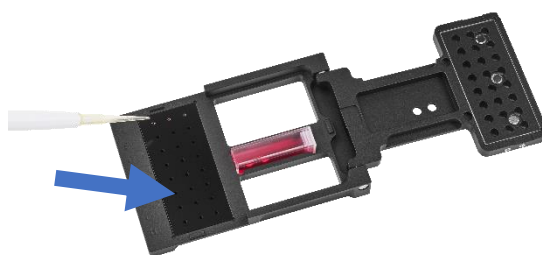
1. Gently apply water or a drop of cleaning purpose ethanol on a piece of cloth or soft materials that are cleaning purpose.
2. Start wiping around the NANO-V.
3. Be careful to not to let any of cleaning agents to touch the pipetting glass. Refer to the **pictures below.**
4. When wiping off the left-over reagents off from the surface of the top cover part, please gently wipe off the reagents. Do not press down and apply force towards to the glass to wipe off the reagents. This may cause the glass to fall apart. Refer to the **pictures below.**

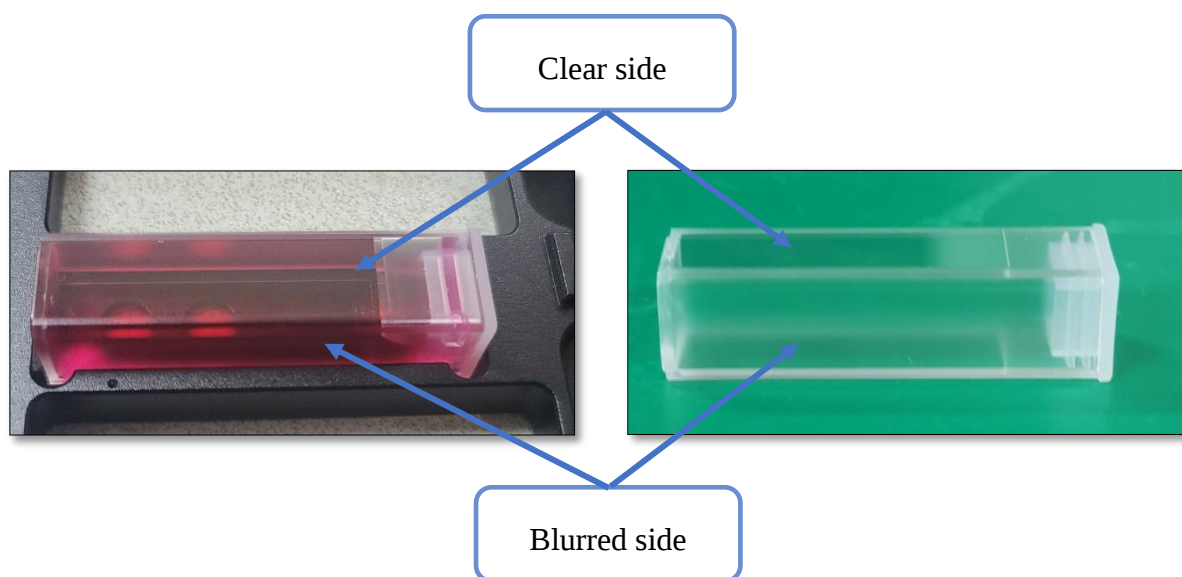
Do not apply much force towards to the glass when wiping off reagents



※ Color “BLUE” lined arrow indicates the area that must not be touched with any agents that include alcohol.

5. When docking in the 2.5ml cuvette into the cuvette hold in NANO-VC let the bottom of the cuvette touches the floor first then completely lean down the cuvette





- ※ Now when you equip the 2.5ml cuvette into the NANO-VC cuvette slot, you must make sure that the clear side should be attached to the bottom (where the E7, E8 holes are) in order for the detector to be able to measure accordingly