

# INSTRUCTION MANUAL

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Colony Counter

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## Model No.

Galaxy 330

Tech support



# ROCKER

Please read this instruction manual before using this product.



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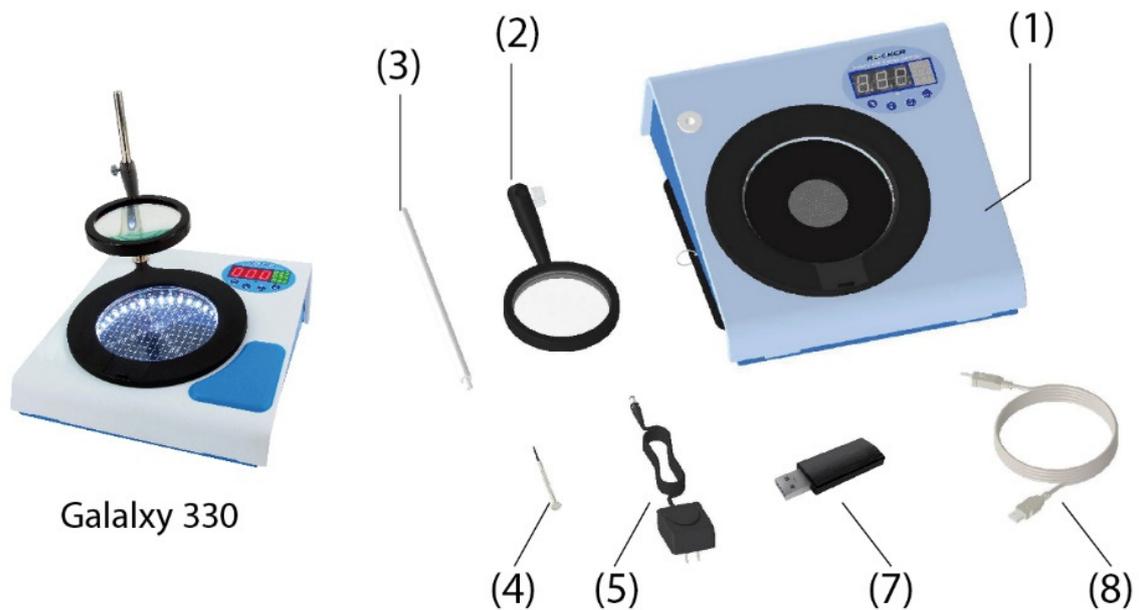
# 1. Important Notice

This instrument is designed for laboratory usage only. Please read this manual carefully before installing and operating. The instrument shall not be modified in any way. Any modification will void the warranty and may result in potential hazard. We are not responsible for any injury or damage caused by any non-intended purposes and modifying the instrument without authorization.

1. Check the voltage specified on the name plate and ensure it matches the line voltage in your location.
2. Install the instrument in a clean, dust-less and ventilated area under 40°C.
3. To prevent burning or malfunction, please use the 12V DC power adaptor and USB connecting cable supplied by the manufacturer.
4. Avoid scratching the surface of Petri dish position to maintain proper illumination of backlight.
5. Please discard packing material according to local related regulations.
6. Operating condition
  - (a) Ambient temperature: 5~ 40°C
  - (b) Relative humidity: 80% RH Max.
  - (c) Power supply: 100-240V~, 50/60Hz, 10W
  - (d) Altitude: up to 2000 m
  - (e) Pollution degree: II
  - (f) Indoor use

## 2. Unpacking

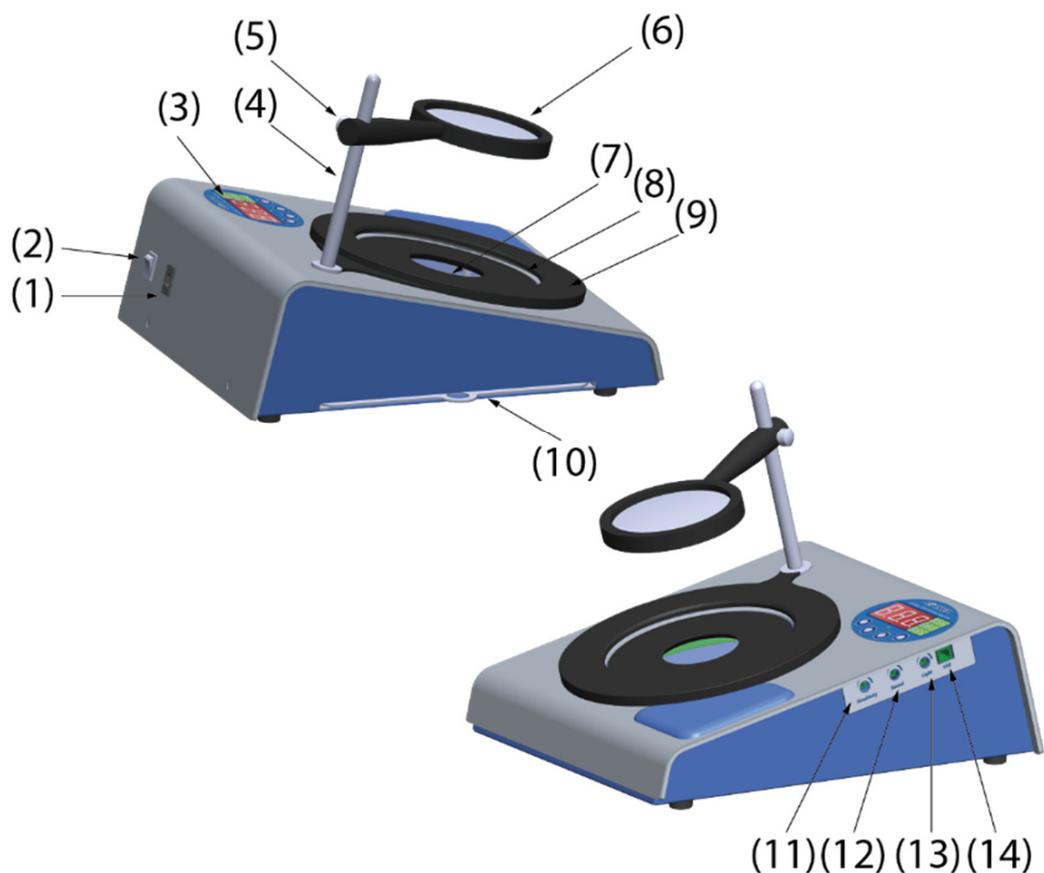
Please check if the package is complete without any damage before unpacking. When unpacking, please make sure you have all accessories that indicated on the list. If there is any problem, please keep the serial number along with packing case and contact your local distributor immediately for assistance.



Model	Standard Package Includes:	
Galaxy 330	1	Galaxy 330, Colony Counter
	2	Magnifier
	3	Magnifier Holder
	4	Screwdriver
	5	Power Adaptor
	6	Instruction Manual
Galaxy 330 with software (Optional)	7	PC Software USB Flash Drive
	8	USB Connecting Cable
	9	Instruction Manual

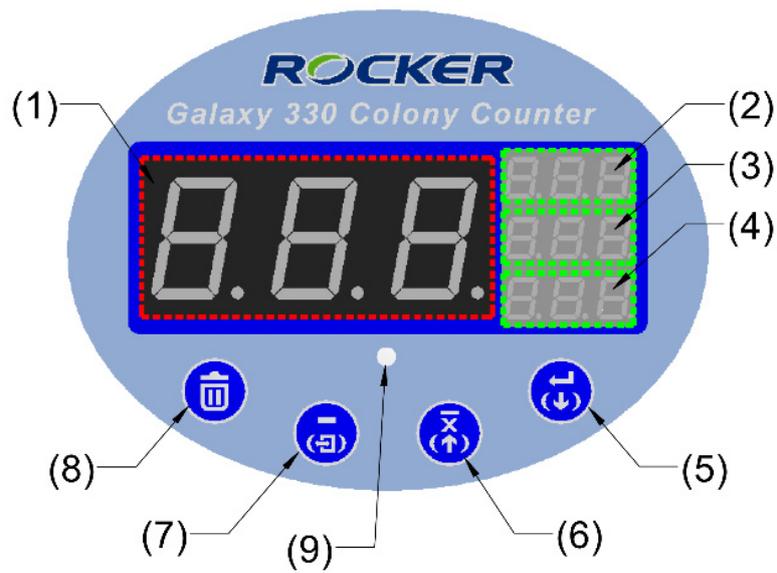
# 3. Main Part Diagram

(1). Galaxy 330, Colony Counter



Position	Designation	Position	Designation
1	DC Socket	8	Adaptor for Petri Dish (60 mm)
2	Power Switch	9	Adjustable Adaptor for Petri Dish (90~150 mm)
3	Control Panel	10	Background Plate
4	Magnifier Holder	11	Pressure Sensitivity Regulator
5	Adjustable Screw	12	Acoustic Counting Signal Regulator
6	Magnifier	13	Light Intensity Regulator
7	Petri Dish Position	14	USB Connecting Port

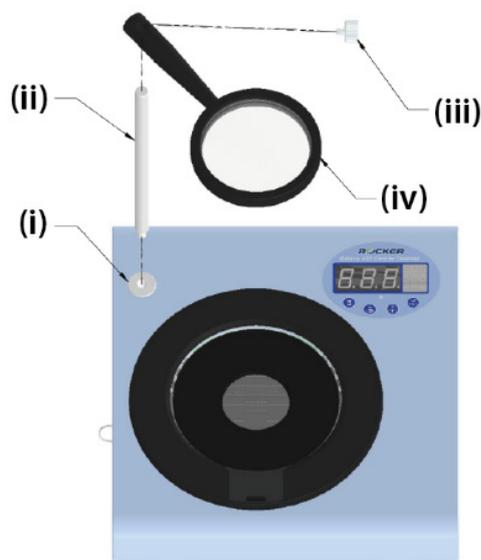
(2). Control Panel



Position	Designation	Position	Designation
1	Counted Value Display (LED-A)	6	Average / Previous
2	Storage Value Display (LED-B)	7	Back / Exit
3	Storage Value Display (LED-C)	8	Delete
4	Storage Value Display (LED-D)	9	USB Connecting Indicator (Green: connected / Red: off)
5	Save / Next		

## 4. Installation and Operation

### (1). Installation



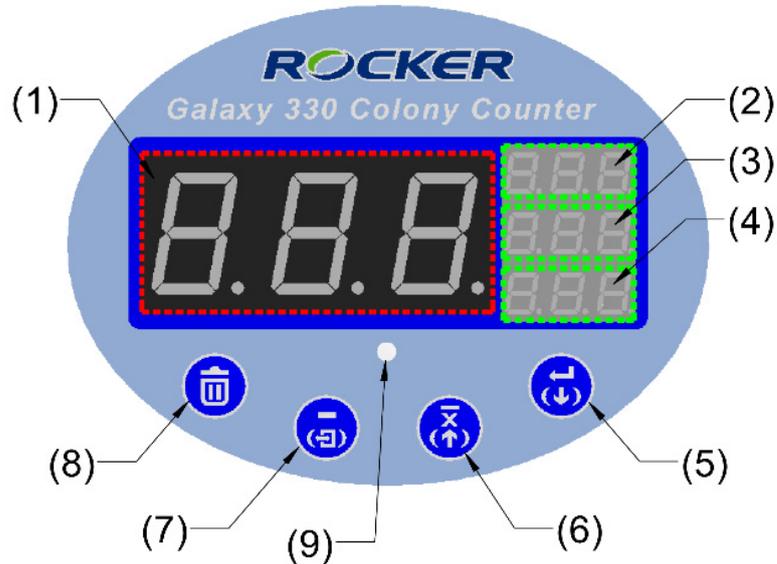
- I. Screw the magnifier holder (ii) into magnifier position (i).
- II. Pass the magnifier (iv) through the holder (ii) and lock the adjustable screw (iii) at proper height.

- A. Plug the power adaptor into main unit and ensure the supplied voltage is within the acceptable range of the power adaptor.
- B. Attach the magnifier to the main unit by following above diagram and adjust its height for optimal viewing.
  - ◆ An optional 1.5X magnifier (Cat. No. 175200-34-2) is available to comply with regional regulations.
- C. To transfer the counting data to computer, please use the provided USB cable to connect the colony counter to a PC and start the operation of the software.
  - ◆ For the first-time use, please install the software by referring to the "PC Software Installation and Operation" file on the USB flash drive.
- D. Use the provided screwdriver to adjust the pressure sensitivity, acoustic volume, and illumination as required.
- E. Change the background plate (white / black) if necessary.
- F. Please keep the Petri dish position and magnifier clean to ensure good light transmission.

## (2). Operation

### 2.1 Buttons, Indicator and Regulators

- Buttons



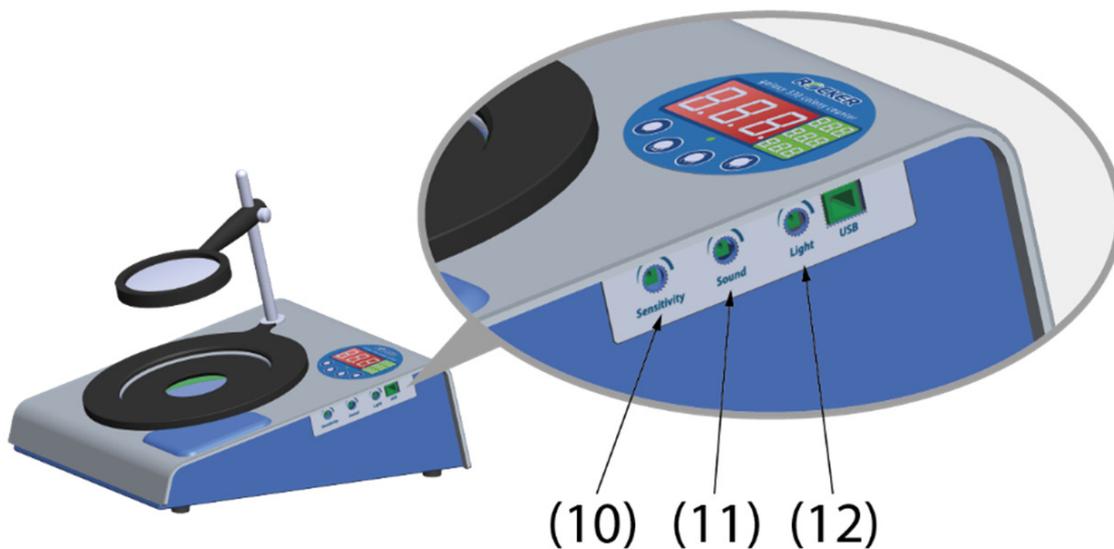
	Position	Function	Description
Operating Mode	5	SAVE	Save the counting value to main unit.
	6	AVERAGE	Calculate the average of the saved counts. Average data displays on LED-A (1).
	7	BACK	Subtract 1 from the counting value on LED-A (1). Alarm with a beep.
	8	DELETE	Clear the counting value or the previous stored data. Alarm with a long beep.
Viewing Mode	5	NEXT	View the next record.
	6	PREVIOUS	View the previous record.
	7	EXIT	Press and hold for 1 second to enter Viewing Mode when "000" shows on LED-A (1). Press again to exit the Viewing Mode.
	8	DELETE	Clear the flashing, saved record on LED-B/C/D. Alarm with a long beep.

• Indicator

Position	Color		Description
9		Green	<b>Illuminated</b> - successful connection and data transmission. <b>Flashing</b> - data is currently being transmitted.
		Red	<b>Illuminated</b> - connection error and data transmission failure.
		Off	<b>No light</b> - computer connection is not detected.

• Regulators

Adjust the below items with screwdriver. Turning it clockwise will increase setting, turning it counterclockwise will decrease the setting.



Position	Function	Description
10	Pressure Sensitivity Regulator	Adjust the counting sensitivity.
11	Acoustic Counting Signal Regulator	Adjust the volume.
12	Light Intensity Regulator	Adjust the backlight intensity.

## 2.2 Main Unit Operation - Operating Mode

- ◆ The labeled number in this section, please refer to P.3 3. (1) Galaxy 330, Colony Counter.

A. Place a 90 mm~150 mm Petri dish onto the Petri dish position (7) and align it to the center by sliding the adjustable adaptor for Petri dish (9) properly.

- ◆ For 60 mm diameter dish, fixed it by placing adaptor for Petri dish (8) on petri dish position (7).
- ◆ An optional adaptor (Cat. No. 175330-09-1), compatible with Petrifilm™, MC-Media Pads, Compact Dry™, and EasyPlate™, can be installed in 2 orientations. Ensure the foam side faces downward and aligned with the crosshair markings.
- ◆ Choose the color of background plate (black / white) based on counted colonies.

B. Mark colonies on cover of Petri dish with marking pen. Each mark and click will be accompanied by a beep, and the value on LED-A will increase by 1.

- ◆ Before starting counting, please ensure the display on LED-A is "000", and no values show on LED-B / C / D. If there are any values, press "DELETE"  to clear the data.

C. If there's over-counting, press "BACK"  to decrease the value of LED-A by 1 with a bleep.

D. When the counting is complete, press "SAVE"  to save the count which will be displayed on LED-B.

E. Repeat steps (A) to (D) for each Petri dish until all counting is completed. The saved counts will be sequentially displayed on LED-B / C / D.

F. After all counts are completed, press and hold the "EXIT"  to enter the Viewing Mode and check the counting data. Press the "EXIT"  again to go back to the Operating Mode.

- ◆ Viewing Mode Operation, please refer to P.8 (3) Main Unit Operation - Viewing Mode.

G. Press "AVERAGE"  to automatically calculate the average of previously saved counts, and the result will be displayed on LED-A.

- ◆ The average value shows up to 3 digits, such as 000., 00.0, or 0.0.

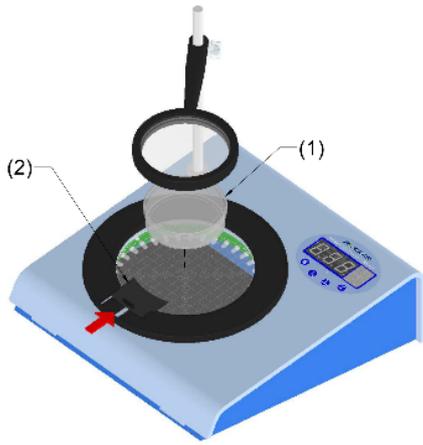
### \* Note:

(1) If there are more than 3 counting data, the latest 3 counts will be shown on LED-D / C / B, while the rest of data will be saved but not displayed.

(2) The main unit can save up to 100 sets of data and fails to work if exceed the limit.

Resume main unit by deleting data or calculate the average.

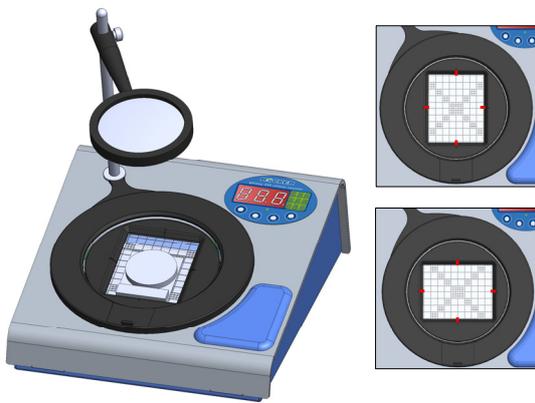
(3) When the main unit is connected to a computer, pressing "AVERAGE"  will transfer the saved counts and average counts to the operation software on the computer. Please refer to the file of "Installation and Operation of Software" on USB flash drive for software operation.



2.2.A Petri Dish Placement ( $\Phi$  90~150 mm)



2.2.A Adaptor Placement ( $\Phi$  60 mm)



2.2.A Opt. Adaptor Placement (2 Orientations)



2.2.D Press "SAVE" to Save Current Count



2.2.F Hold "EXIT" to Enter Viewing Mode



2.2.G Average the Saved Counts

## 2.3 Main Unit Operation - Viewing Mode

- A. Press and hold "EXIT"  to enter Viewing Mode when "000" shows on LED-A.
- ◆ While holding "EXIT" button, LED-A will show total number of saved data.
- B. After releasing "EXIT" , the saved counts will be displayed on LED-B / C / D. The currently selected count will be in a flashing state, and its corresponding entry number will be shown on LED-A.
- C. Press "PREVIOUS"  or "NEXT"  to select the data. It will alarm with a beep when reaching the last or first data.
- D. Press "DELETE"  to delete the flashing data with a long beep alarm.
- ◆ It cannot be restored after deletion, please confirm before proceeding with deletion.
- E. Press "EXIT"  to exit the Viewing Mode and back to Operating Mode.



2.3.A Enter Viewing Mode



2.3.B Selected Count and Its Entry Number

## 5. Maintenance

1. The instrument is not autoclavable. Please clean the Petri dish position, the magnifier and the surface of main unit with 75% ethanol after every use to sterilize and ensure good illumination.
2. Please keep instrument in well packed box to prevent dust from accumulating and affecting light transmission if it is not in use for a period.

## 6. Troubleshooting

Problem	Reason and Solution
Main unit failed to start	<ul style="list-style-type: none"> <li>• Wrong voltage → Reconnect to power specified on name plate (DC12V).</li> <li>• Switch is off → Switch the main unit on.</li> <li>• Faulty or loose components → Contact distributor for assistance.</li> </ul>
Poor backlight (LED)	<ul style="list-style-type: none"> <li>• Improperly light setting → Adjust the light intensity with screwdriver.</li> <li>• Faulty main board or backlight plate → Contact distributor for assistance.</li> </ul>
No or low acoustic sound	<ul style="list-style-type: none"> <li>• Improperly acoustic setting → Adjust the volume with screwdriver.</li> <li>• Faulty main board → Contact distributor for assistance.</li> </ul>
Poor sensitivity	<ul style="list-style-type: none"> <li>• Improperly sensitivity setting → Adjust the sensitivity with screwdriver.</li> <li>• Faulty main board → Contact distributor for assistance.</li> </ul>
Failed to connect to PC	<ul style="list-style-type: none"> <li>• Loose USB connecting cable → Reconnect the cable firmly.</li> <li>• Faulty USB connecting cable → Change a new one.</li> <li>• Not installed USB driver → Install the driver properly.</li> <li>• Unactive PC software → Activate PC software.</li> <li>• Faulty main board → Contact distributor for assistance.</li> </ul>

## 7. Ordering Information

175330-01(02)	Galaxy 330, Colony Counter with AC100-240V adaptor, US plug (EU plug)
175331-01(02)	Galaxy 330, Colony Counter with software, AC100-240V adaptor, US plug (EU plug)
175330-12	Software Package for Galaxy 330 (Include a 16G USB and connecting cable)
175200-34-2	Magnifier, 1.5X
175330-09	Adaptor for Petri Dish (60 mm)
175330-09-1	Adaptor for Petrifilm™, MC-Media Pads, Compact Dry™, EasyPlate™
166000-11	Screwdriver
175330-31	Background Plate

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