

## Specifications of new motor controller for fixed discharge volume pump system

Product name	Motor controller
Model number	RE-C300 (Dimensions: 180x150x42 mm)
Applicable pumps :	Ring Pump RP-H series (Sterilizable) Ring Pump RP-H series (Sterilizable) Ring Pump RP-M series Ring Pump RP-K series * To be discussed separately for custom made products.
Drive voltage	DC24V (AC/DC adapter included)
Control method	Original system for our fixed discharge volume pump system
Function	Stand-alone control of RE-C300 motor controller



For software control, please refer to attached software manual.

1. SINGLE-MODE
2. PROGRAM-MODE

The numbers in circle mean the numbers indicated on the above picture of the controller.

- ① Connect to AC/DC adapter included.
- ② USB : Type\_ Micro B  
Type\_ A USB connecting cable is included for PC connection.
- ③ Connecting cable to the pump (included)
- ④ Feed switch : (Indicator light is on.)
  - ④-1 Press Feed switch. (Green light blinks when "ON".)
  - ④-2 Pump starts to prime the solution rapidly through the tube of inlet side.
  - ④-3 Stop the priming by pressing Feed switch again when the solution reaches at discharge position by pressing.
  - ④-4 When the pump stops, default position is automatically detected and come to complete stop.
  - ④-5 Green light of Feed switch goes out and the green light of Start switch will be on to show standby.
- ⑤ Specification of single digit figure (0 - 9 - 0)
- ⑥ Specification of second digit figure (0 - 9 - 0)
- ⑦ Display : Indicating preset rotations.
  - Rotations from 1 to 99 can be set.
  - In setting your designated rotations, please refer to the data sheet of discharge volume in one rotation which comes with the product.
  - Number of rotations = the volume you want / discharge volume in one rotation (mL/rev)  
(Round-off)
- ⑧ Start switch : Automatically stops after rotating preset number of rotations.

### Accessories RE-C300 :

- ① AC/DC adapter
- ② Connecting cable for Type\_ A and Type\_ micro B USB terminals
- ③ Connecting cable to the pump
- ④ USB flash memory (Software)

## Manual of software for motor controller RE-C300

RE-C300-TIMER-SYSTEM-V1A-NW211220

CONNECTION -OK-

### OPERATING TIME CONTROL PANEL

POS.No.	TIME(h:m)	Flow Rate (mL)	<TIME SETTINGS>	<PROGRAM>
< 1 >	--:--	--	-hour- -minute-	Repeat count set. KEY in (max999)
< 2 >	--:--	-1	00 00	
< 3 >	--:--	-2	Flow Rate 1 (mL)	1 x day
< 4 >	--:--	--		
< 5 >	--:--	--	<b>ENTER</b>	<b>START</b>
< 6 >	--:--	-3		
< 7 >	--:--	--		
< 8 >	--:--	--		
< 9 >	--:--	-4	<b>CLEAR</b>	COUNT: --- DATE: 12/21 TIME: 08:28
< 10 >	--:--	--		

Resolution 0.000 (mL/rev) <SINGLE> Flow Rate 1 (mL)

**FEED** **START** **RESET** **EXIT**

Make sure the connection to motor controller RE-C300 is established. -OK-

Start priming of the solution until it passes outlet point.

Then click "STOP", and the point is detected and automatically memorized as the default position. (Standby mode)

By clicking "FEED" the reading changes to "STOP" and then "WAIT" will be displayed, and standby is complete when the pump stops completely.

Enter "Resolution"

The figure listed in the data sheet which comes with the product shall be entered to 3 places of decimals.

e.g. Resolution 0.258 = 0.258mL/rev in one rotation

#### SINGLE MODE

Select your desired discharge amount from the dropdown options.

- A: RP-H series Up to 7mL in increments of 0.2 mL
- B: RP-H series Up to 70 mL in the unit of 1.0 mL
- C: RP-M series Up to 25 mL in increments of 1.0 mL
- D: RP-K series Up to 150 mL in increments of 5.0mL

#### PROGRAM-MODE

For using repeat function like repeating 7 days of same program to discharge certain volume at certain time.

- 1 Select your desired time : e.g. ten o'clock "10" "00"  
\* Can be set in 5 minute increments by dropdown options.
- 2 select your desired volume :  
\* Selections are in increments of 0.2 mL, 1 mL, 1mL,5 mL ... and the maximum amount is the one of the specific pump.  
\* The unit differs according to the pump you use. (Max : 7mL,70mL, 25mL, 150 mL Pump)
- 3 Setting is decided.
- 4 Clear the POS unit input.
- 5 Can be set for up to 10 different times per day.  
When the input in POS 1 is done, indication of number changes to red. Then input in POS 2, and so on repeating procedure -1 to -3.
- 6 Input "7" in Repeat count set to repeat 7 days.  
\* Can be set up to 999 days.
- 7 Click "START" of PROGRAM MODE.

RESET : Reset all program in PROGRAM MODE.

EXIT : Disconnect from Moter controller RE-C300.