# RRDE-3A Rotating Ring Disk Electrode Apparatus Ver.1.2

## **Quick setting manual**

This quick setting manual explain the basic function settings and how to acquire data. For detail instructions and warranty terms, refer to the RRDE-3A Operating manual. Full Manual is available at: <a href="http://www.als-japan.com/support-instrument-manual.html">http://www.als-japan.com/support-instrument-manual.html</a>

Please read the full manual before operate RRDE-3A.

## 1. Accessories



	RRDE-3A Accessory kit consists of				
	Cat #	Description	Qty		
1	012632	Sample vial (100mL)	1		
2	012064	Spin coating adapter	1		
3	012065	Male connector for gas purge (PP)	1		
4	013392	TYGON tubing, OD1/4 x ID1/8	1		
5	013271	RRDE-3A Teflon cap V.2	1		
6	012642	RRDE-3A Silicon sheet 100x180mm	1		
7		O-ring for RRDE-3A bearing assembly	3		
8		O-ring for RRDE-3A shaft assembly	3		
9		Power cable	1		
		Instruction manual	1		

## 2. References



	Description	
1	Remote Terminal	
2	Power On/Off Swich	
3	Fuse Holder	
4	Power plug	
5	Ground terminal	
6	Gas Inlet Connector (5 psi maximum)	



	Description	
7	rpm and purge time display	
8	rpm LED	
9	Rotation switch	
10	Rotation speed knob	
11	Purge LED	
12	Gas purge switch	
13	Gas purge flow knob	
14	Purge time knob	
15	Moter shaft	
16	Teflon tubes	
17	Working electrode	
18	Glass cell vial	

## 3. Quick Start

The shaft can be moved up and down by loosen the black knob. The shaft can also be rotated at  $180^{\circ}$ 





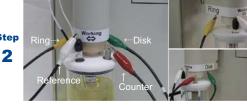


Step RR

Screw the working electrode on the contact probe.



Plug the power cable and switch on the power. If you need to purge the solution, connect the purge valve and the Tygon tube.



Place the **cell vial** with the solution on the silicon sheet and attach the **electrode wires** of your potentiostat to the electrodes.

Immerge the working electrode into the solution (keep it rotating at 1500rpm during immersion to avoid any air bubble on the electrode). Place the purging tubes if necessary

(black tube above the surface and the other one into the solution).

Electrode color code of the potentiostat

Wire color	Electrode
Green	Disk
White	Reference
Red	Counter
Yellow	Ring

Purge the solution by selecting the purge time if needed (do not forget to open the flow yellow knob).

Set your rotation speed (3000rpm recommended) and start your rotation.

To start the rotation or purge locally, set the switch to LOCAL.



- 1. Rotation switch
- 2. Rotation speed
- 3. Gas purge
- 4. Purge time

Position	Action
LOCAL	Activate
SET	Deactivate
REMOTE	Remote ctrl

Your data are ready to be acquired with your potentiostat.

#### 4. Remote connection memo

RRDE-3A back side



RRDE-3A input	Function
IN	Rotation
GND (next to IN)	Analog Ground
PURGE	Purge
GND	Digital Ground

For more details about potentiostat remote connection, please read Chapt. "A-7 Connecting other potentiostat" from the full manual.