

**13.0 WARRANTY:**

- 13.1 Standards warranty 12 months from date of purchase.
- 13.2 Warranty voids if overload connected to the Control Panel.
- 13.3 Warranty covers against only manufacturing defects.
- 13.4 Keep this warranty card safely.
- 13.5 In case of water found inside warranty voids.
- 13.6 Follow the user manual instructions strictly before use.

Customer Name: .....

Ph.No: .....

Dealer / Distributor: .....

Sign: .....

Stamp: .....

Date: .....

Product Serial No.: .....

Product Model No.: .....

**Dealer Stamp:**

**Customer Support:**



# **USER MANUAL & WARRANTY CARD**

**AP 1-1, 1-3, 3-3 PLUS &  
AP 1-1, 1-3, 3-3 GSM PLUS  
RO CONTROL PANEL**

**Models & Features:**

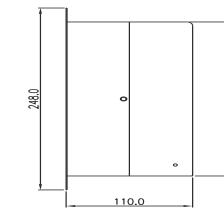
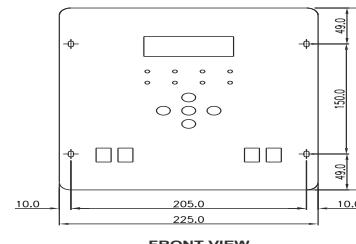
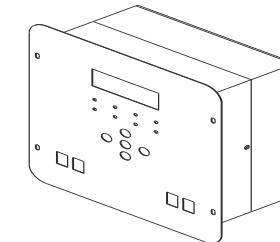
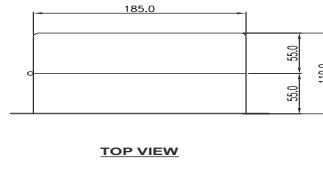
AP 1:1 PLUS      GSM, TDS, VOLTAGE &amp; CURRENT SENSE

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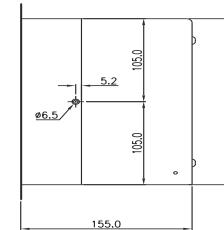
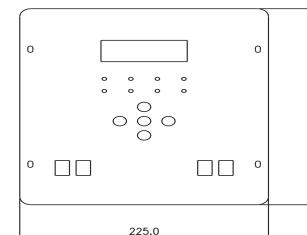
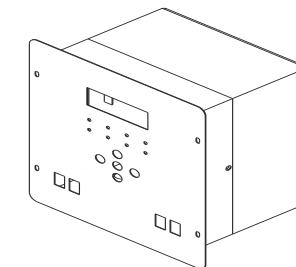
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**11.0 MECHANICAL 1-1 ENCLOSURE DIMENSIONS:**

11.1 Dimensions: Length x Width x Height = 185 x 110 x 210 mm.

**12.0 MECHANICAL 1-3 ENCLOSURE DIMENSIONS:**

12.1 Dimensions: Length x Width x Height = 185 x 155 x 210 mm.



## 10.0 TROUBLE SHOOTING GUIDE LINES:

Sl.No.	Message ON Display	Cause & Action
1.	Raw Water Tank Empty	<ul style="list-style-type: none"> <li>• Actually tank is empty.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
2.	LPS Failed	<ul style="list-style-type: none"> <li>• Pressure lower then the set value.</li> <li>• Check the input water pressure.</li> <li>• Check the LPS Connections.</li> </ul>
3.	HPS1	<ul style="list-style-type: none"> <li>• Pressure Higher then the set Value .</li> <li>• Check the sand, Carbon Filters.</li> <li>• Check the HPS1 Connections.</li> </ul>
4.	Dosing	<ul style="list-style-type: none"> <li>• Actually tank is empty.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
5.	Treated Water Tank Full	<ul style="list-style-type: none"> <li>• Actually tank is Full.</li> <li>• Floaty is not connected.</li> <li>• Check the float &amp; wires.</li> </ul>
6.	RWP Overload	<ul style="list-style-type: none"> <li>• Check the Pump Amps rating.</li> </ul>
7.	HPP Overload	<ul style="list-style-type: none"> <li>• Check the Pump Amps rating.</li> </ul>
8.	Low Voltage	<ul style="list-style-type: none"> <li>• Check Low Voltage set point Or Low Voltage.</li> </ul>
9.	High Voltage	<ul style="list-style-type: none"> <li>• Check High Voltage set point or High Voltage.</li> </ul>
10.	GSM	<ul style="list-style-type: none"> <li>• Check GSM Signal and SIM balanced.</li> <li>• Check antenna wire.</li> </ul>
11.	Flow Sensor	<ul style="list-style-type: none"> <li>• Check flow sensor wiring &amp; Flow sensor.</li> </ul>

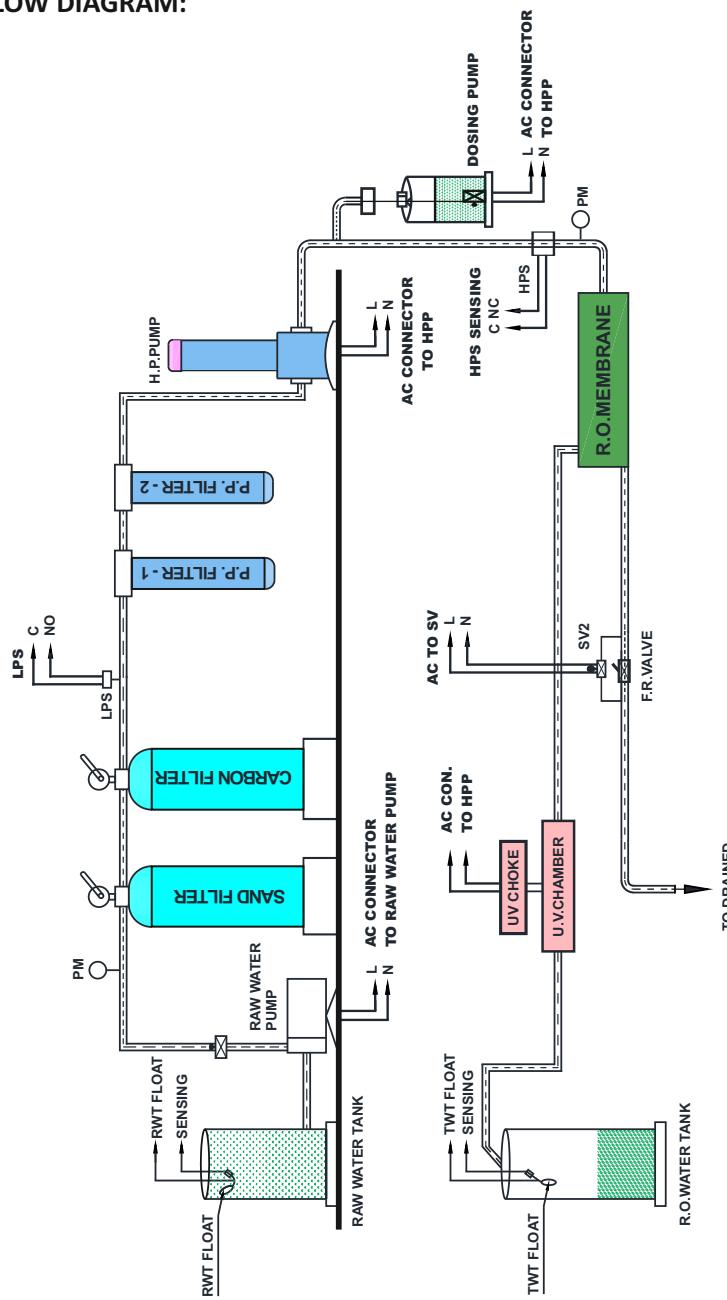
## 1.0 INSTALLATION & SAFETY INSTRUCTIONS:

To Comply with the published safety standards, The following must be served when using this control panel.

- **Applicable Models: AP 1-1, 1-3, 3-3 Plus & AP GSM 1-1, 1-3, 3-3 Plus .**
- Allow sufficient space around the control panel for proper air circulation.
- RO Control Panel designed to operate for “ **INDORE USE ONLY** ” for RO Plant.
- Operating voltage for **single phase 230V & 3 - phase 440V** only.
- High voltage inside, to be serviced by trained persons only.
- Protect the RO control from the water dropping.
- Do not connect more the specified load on RWP & HPP.
- Connect the proper earthlings.
- Connect the input connecting wires 2.5 Sqmm.
- Connect the proper phase sequence RYB & Neutral ( For 1-3 & 3-3 Model).
- Fix the panel properly with the nut bolts.
- Ro Control Panel can be fixed on the plain surface.

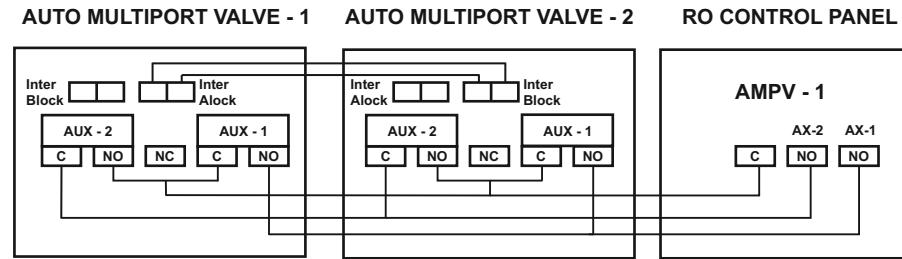
**Note: Read manual completely before installing the RO Panel.**

## **2.0 FLOW DIAGRAM:**

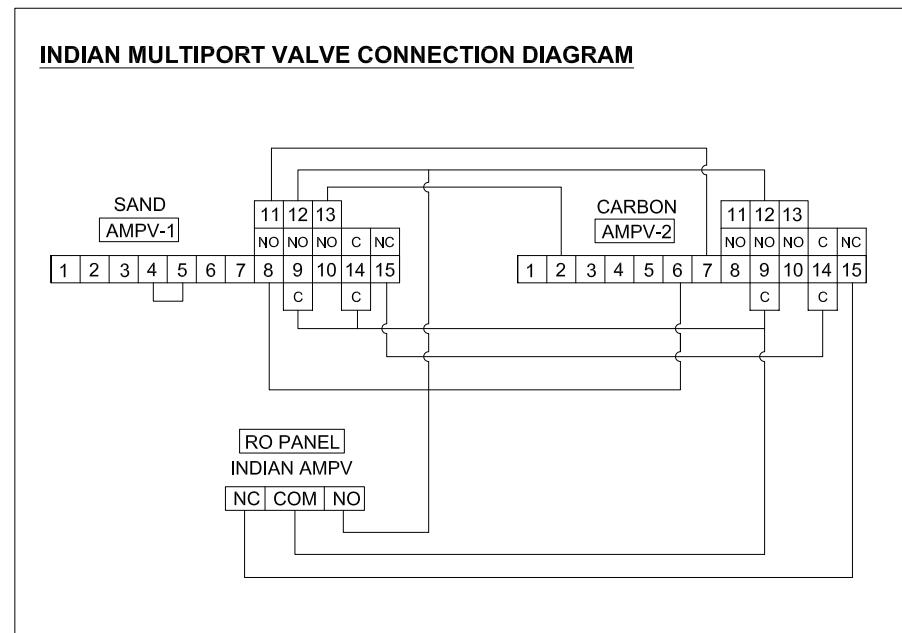


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## **8.0 RO CONTROL PANEL CONFIGURE WITH 2-MULTIPORT VALVE:**

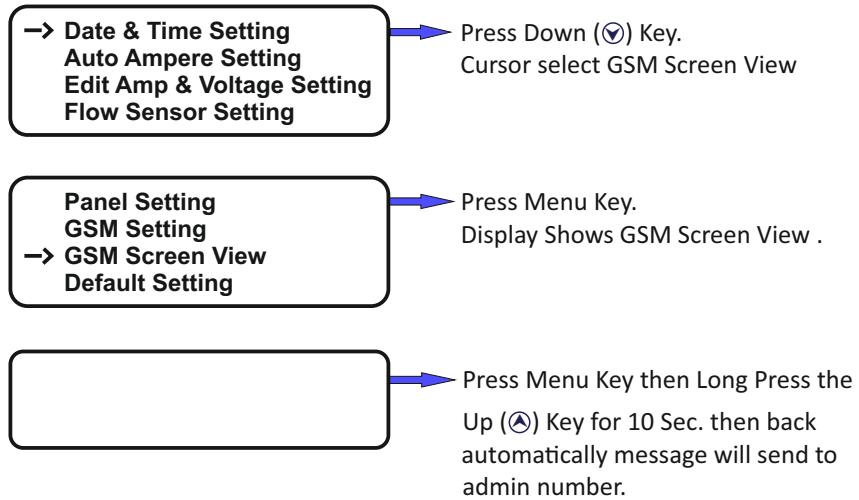


## **9.0 RO CONTROL PANEL CONFIGURE WITH INDIAN MULTIPORT VALVE:**

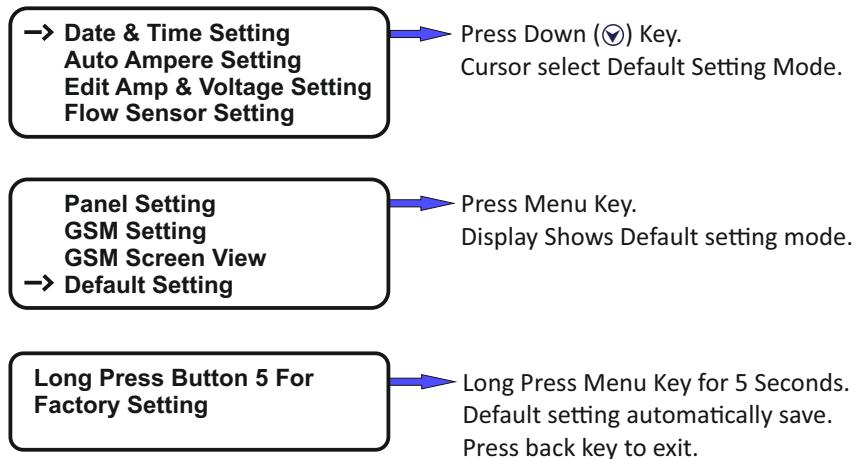


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#### **g. GSM SCREEN VIEW SETTING:**

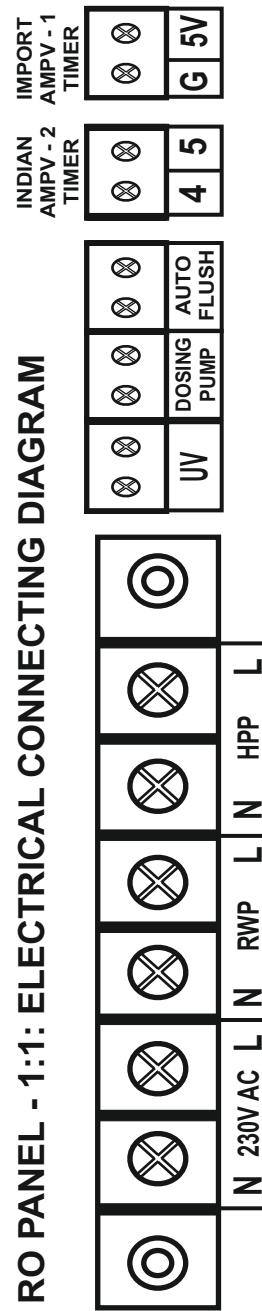


#### **h. SET DEFAULT SETTING: (Factory Setting will be updated Automatically)**



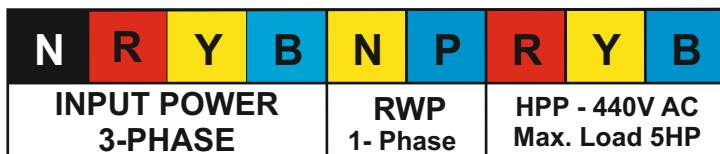
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### **3.0 CONNECTION DIAGRAM:**

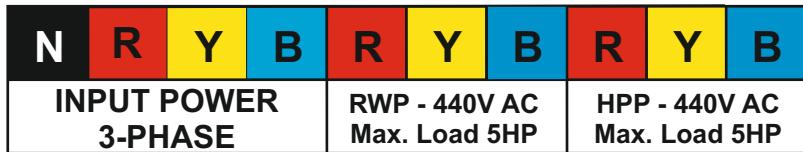


SENSING DIAGRAM PANEL: 1-1

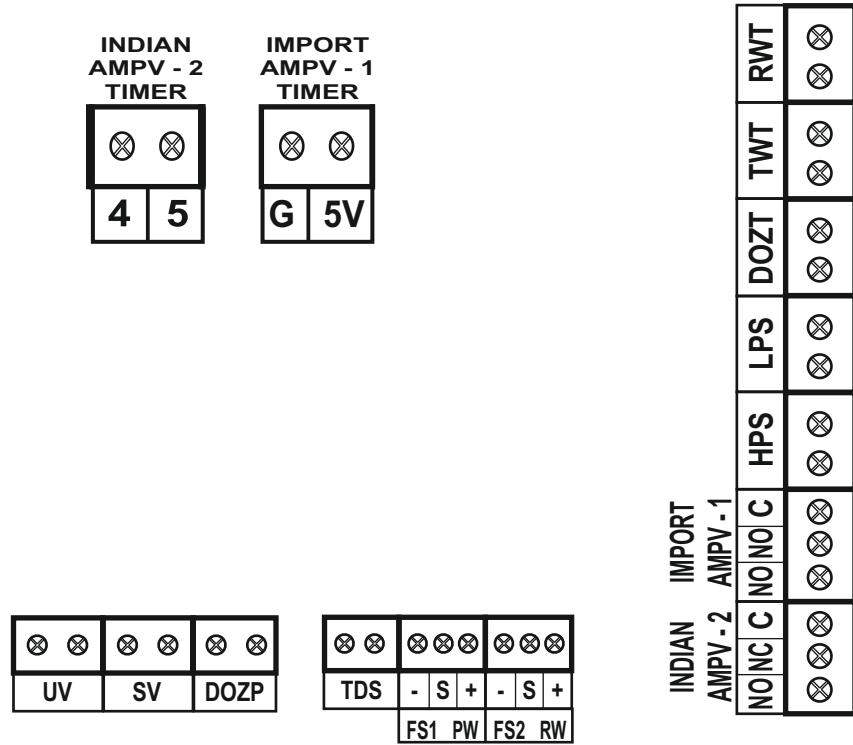
## 4.0 RO PANEL 1-3 : ELECTRICAL CONNECTION DIAGRAM



## 5.0 RO PANEL 3-3 : ELECTRICAL CONNECTION DIAGRAM



## 6.0 RO PANEL 1-3 &amp; 3-3 : SENSING CONNECTION DIAGRAM



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## f. GSM SETTING: (Plant information will be update for given 2 phone number's)

- Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting
  - Press Down (▽) Key.  
Cursor select GSM edit Mode.
- Panel Setting  
→ GSM Setting  
GSM Screen View  
Default Setting
  - Press Menu Key.  
Display Shows GSM Number Edit.
- 9963000150 Admin  
9955555555 Operator  
Set SMS Time 12 Hr.  
Server Time Real
  - Press Menu Key.  
Display shows double arrow for edit 1st user number.
- » 9963000150 Admin  
9955555555 Operator  
Set SMS Time 12 Hr.  
Server Time Real
  - Select the Edit place through Scroll (◎) Key. Set the required number through Up (Ⓐ) & Down (▽) key as per requirements.  
Press the Menu Key to save the set number.

(Note: Follow the same for 2nd user number as 1st user number and through the 1st given phone number only the plant can be controlled for remote operating)

- 9963000150 Admin  
9955555555 Operator  
→ Set SMS Time 12 Hr.  
Server Time Real
  - Press the Down (▽) Key.  
Select SMS Time edit mode.
- 9963000150 Admin  
9955555555 Operator  
» Set SMS Time 12 Hr.  
Server Time Real
  - Press the Menu Key.  
Display shows SMS Time edit.  
Set the required time through Up (Ⓐ) & Down (▽) key then press the Menu Key to save the set time.

(Note: Follow the same for Server Time as per the SMS Time)

**RO Capacity 1000**  
**F1 250**  
**F2 250**  
**→ Please Wait 1 Minute**

Press Menu Key.  
 Wait for 1 Minute for Auto Calibration process to be save.

(Note: RO Plant should running condition whenever the AutoCalibration Value setting)  
 After 1 Minute Auto calibrationBuzzer will give the beep so that flow of water will automatically saved (FS1 & FS2 to connected).Then press the back key to the exit.

#### e. PANEL SETTING:

**→ Date & Time Setting**  
**Auto Ampere Setting**  
**Edit Amp & Voltage Setting**  
**Flow Sensor Setting**

Press Down (▽) Key.  
 Cursor select Panel Setting edit Mode.

**→ Panel Setting**  
**GSM Setting**  
**GSM Screen View**  
**Default Setting**

Press Menu Key.  
 Display Shows Panel Setting.

**→ A/F Cycle 1 hr**  
**A/F Timer 20 Sec.**  
**LPS Delay Time 15 Sec.**  
**LPS Retry Time 30 Min.**  
**RWTDS Calibration 1.64**  
**PWDTS Calibration 1.64**  
**TDS Alert 500**  
**AMPV Service Time OFF**

Press Menu Key.  
 Display Shows Auto Flush Edit.

**→ Flush Cycle 4 hr**

Press Menu Key.  
 Display shows double arrow for edit cycle time.

**» Flush Cycle 4 hr**

Select the Edit place through Up (Ⓐ) & Down (▽) key to set the as per required time.  
 Press the Menu Key to save the set time. Press back key to exit.

(Note: Remaining all settings follow as per the flush cycle time settings)

## 7.0 OPERATING INSTRUCTIONS:

### 7.1 KEY FUNCTIONS:

<b>Menu</b>	Helps to enter into settings. Confirmation of selection of your choice. Also works as CENTER KEY FUNCTION .
<b>Back</b>	Previous Menu to Service Mode. One step backwards. Also works as LEFT KEY FUNCTION .
 <b>UP</b>	Upward Movement. Increment of numbers & alphabets.
 <b>Down</b>	Downward Movement. Decrement of numbers & alphabets.
 <b>Scroll</b>	Helps to Left & Right Moment and Edit of the Numbers and Alphabets.

### 7.2 SETTINGS:

**WELCOME XXXXX V.0119**  
**COMPANY NAME**  
**LOCATION**  
**CONTACT : XXXXXXXXXX**

Press & Hold Menu Key for 5 Sec.  
 Display Shows Enter Password.

**Enter Password.**

Enter the Password.  
 Press (▽+Ⓐ +▽ +Ⓐ)  
 Display Shows Menu Option.

### 7.3 PROGRAMMABLE FEATURES:

- Date & Time Setting.
- Auto Amps Setting.
- Edit Amps & Voltage Setting
- Flow Sensor Setting.
- Panel Setting.
- GSM Setting.
- GSM Screen View.
- Default Setting.

**a. EDIT DATE AND TIME SETTING:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Menu Key.  
Display Shows Date & Time Edit.

DD  
03:01:2020 15:51

Select the Edit place through Scroll (>) Key. Set the Date & Time through Up (Ⓐ) & Down (Ⓑ) Key as per requirements then Press the Menu Key to save the set value. Press Back Key to Exit.

**b. AUTO AMP SETTING:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (Ⓑ) Key.  
Cursor select Auto Amps edit.

Date & Time Setting  
→ Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Menu Key.  
Display Shows Auto Amps sett.

RWP - ON      HPP - ON  
RWPA - 0.0      RWLPM - 0.0  
HPPA - 0.0      PWLPM - 0.0  
Volt - 230      Save .. ok

Display Shows pumps running amps. Press Menu Key save the Auto Calibration Amps.  
*(Note: RO Plant should running condition whenever the Auto Calibration Value setting).*  
Press the back key to the exit.

**c. EDIT AMPS & VOLTAGE SETTING:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (Ⓑ) Key.  
Cursor select Manual Amps Setting.

Date & Time Setting  
Auto Ampere Setting  
→ Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Menu Key.  
Display Shows Edit Amps & Voltage Edit Mode.

» RWP Amp-cut	0.0
HPP Amp-cut	0.0
RWP Dry Run	OFF
HPP Dry Run	OFF
Over Voltage	280
Under Voltage	170

Select the Edit place through Up (Ⓐ) & Down (Ⓑ) Key as per requirements then Press the Menu Key to set the required value through Up (Ⓐ) & Down (Ⓑ) Key save the set value.  
Press Back Key to Exit.

**d. SET FLOW SENSOR CALIBRATION:**

→ Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
Flow Sensor Setting

Press Down (Ⓑ) Key.  
Cursor select Flow Sensor Calibration edit Mode.

Date & Time Setting  
Auto Ampere Setting  
Edit Amp & Voltage Setting  
→ Flow Sensor Setting

Press Menu Key.  
Display Shows Flow Sensor Calibration Edit Mode.

→ RO Capacity 1000  
F1 250 ·  
F2 250  
Auto Calibration

Press Menu Key change the RO Capacity required Value through the Up (Ⓐ) & Down (Ⓑ) key.  
Press the Menu Key to save the set value. Press Down Key to select Auto Calibration Mode.

*(Note: If RO Plant is 1000 LPH keep 1000 or If RO Plant is 500 LPH keep 500 hour's)*