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# www.norsup.eu









#### A. HARDWARE INFORMATION

#### A.1 GENERAL INFORMATION

#### A.1.1 OVERVIEW

NorsupOne is an intelligent controller, equipped with sensors and actuators around software specifically developed for swimming pools and spas. NorsupOne manages all types of treatment and water balance, filtration, heating, roller shutters, lighting, led pulsed lighting. A total of 15 actuators are possible.

The registration date corresponds to the creation of the customer account on the NorsupOne registration platform. The use of a NorsupOne home automation controller implies the acceptance of the general conditions of use.

When powering up, all relays light up to verify that all of the signal wiring is correct. In case of doubt put all devices in the OFF position on the user interface and replug the relays, then carry out an ignition test of each device and check that each relay triggers the connected equipment.

During installation you must ensure that you comply with the following points, to guarantee a correct installation.

- · A relay cannot control a power higher than 8A (1500 W)
- · For higher powers, a power contactor is installed.
- Scrupulously respect the polarities of the Modbus sensors, probes and buses.
- Respect the electrical standards for protection and power of the circuit breakers.
- Connect an equipotential bonding to the hydraulic circuit before filtration, in series with the earth intended for the devices.

# (If in doubt, contact your service representative or your licensed electrician)

The mobile application of NorsupOne will enable the installer and the customer to control devices and sensors using IoT Flowers via IoT Flowers cloud service and the web application enables the installer to monitor the activities.

#### A.1.2 WARNINGS

Failure to follow these instructions may result in serious injury or death

- The appliance is intended for swimming pools and spas only the installation of the appliance must be carried out by a person with proven and certain skills in electricity and hydraulics
- Disconnect the appliance from the mains supply before carrying out any work.
- · All electrical connections must be made by a qualified professional electrician and in accordance with the standards in force in the country of installation.
- Make sure that the appliance is connected to an outlet protected against short-circuits. The device must also

- be supplied via an isolation transformer or a residual current differential device (DDR) whose nominal residual operating current does not exceed 30 mA.
- Ensure that children cannot play with the device. Keep your hands and all foreign objects away from openings and moving parts. In particular, make sure there is no contact with electronic cards and power cables.
- Check that the supply voltage required by the product corresponds to that of the distribution network and that the supply cables are suitable for the current supply of the product.
- · Chemicals can cause internal and external burns. To avoid death, serious injury and / or property damage: Wear personal protective equipment (gloves, glasses, mask ...) when servicing or maintaining this device. This device must be installed in a sufficiently ventilated room, protected from humidity and without contact with splashes of water or other liquid.
- To reduce the risk of electric shock, do not use an extension cord to connect the appliance to the mains. Use a wall outlet.
- Read the instructions in this manual and the instructions on the device carefully. Failure to comply with the instructions and recommendations could cause damage. This document must be given to any end user, who will keep it in a safe place.
- This device can only be used by children under 18 years of age or by people with reduced physical, sensory or mental capacities or lack of experience or knowledge, only if they (if they) are properly supervised (e) s or if instructions relating to the safe use of the device have been given to them and if the risks involved have been understood. Children should not play with the device. Cleaning and user maintenance must not be carried out by children without supervision.
- If the power cable is damaged, it must be replaced by the service provider originally installed, its aftersales service or by persons of similar qualifications, in order to avoid danger. Electric shock may occur.

## **ELECTRICAL CONNECTION STANDARDS**

- F NF C 15-100
- · GB BS7671:1992
- D DIN VDE 0100-702
- EW SIST HD 384-7-702.S2
- · A ÖVE 8001-4-702
- · H MSZ 2364-702:1994 / MSZ 10-533 1/1990
- E UNE 20460-7-702 1993, REBT ITC-BT-31 2002
- · M MSA HD 384-7-702.S2
- · IRL IS HD 384-7-702
- PL TS IEC 60364-7-702
- ·I CEI 64-8/7
- · CZ CSN 33 2000 7-702
- ·LUX 384-7.702 S2
- · SK STN 33 2000-7-702
- · NL NEN 1010-7-702
- ·SLO SIST HD 384-7-702.S2
- · P RSIUEE
- •TR TS IEC 60364-7-702

#### INSTALLATION

#### A.2.1 DESCRIPTION

The NorsupOne kit can be delivered with

- · Control box
- · Relay box

### A.2.2 CONTROL BOX

All the connectors are in this box, it allows you to connect the probes and the relay box or boxes. Wifi, ethernet, a 4 GB hard drive and 512 MB of memory are installed by default. It offers total autonomy even without internet with its own interface, onboard software and all pool and spa automation.



Fig. 1: Control Box

#### A.2.3 RELAY BOX

It is made up of 8 numbers of 8A relays, and a connector to connect it to the control box. These relays can supply small equipment, metering pumps, lights, dry contacts or supply power contactors for larger equipment (filtration, heating, jet ...)

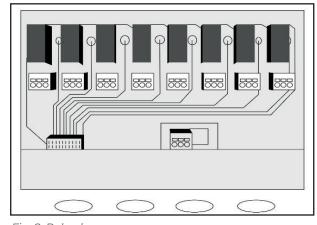


Fig. 2: Relay box

# A.2.4 ELECTRICAL INSTALLATION AND WIRING

### A 2.4.1 POWERING THE CONTROLLER

Two ports on top right of the controller are for the powering (Neutral and Live)



Fig. 3: Powering of control box

#### A.2.4.2 CONNECTIONS OF SENSORS TO **CONTROL BOX**

Here we are connecting pH, ORP, Electrical conductivity and temperature probe to control box

- · Connect 3 wires of PT100 temperature sensor to the U26 connector (Port 4 from right), red wire on the left, the other 2 on the right whatever the direction.
- · Connect flow detector on terminal block 7 to 12.
- · Connect the BNC Connectors of ORP, pH and Electrical conductivity probe respectively to the BNC input on the control station as given in the below image.



Fig. 4: Connection of ORP, pH, EC and Temperature sensor to the control box

You can also connect the sensors to Salt chlorinator (If you are using) as shown in the figure below.

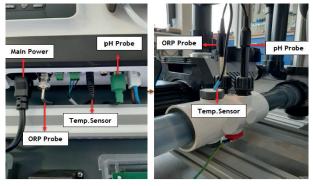


Fig. 5: Connection of ORP, pH, EC and Temperature sensor in the accessory holder

#### A.2.4.3 CONNECTION OF HEAT PUMP

Only 2 wires are needed to do the Modbus connection between the Heat Pump and the controller: A and B (Black and Blue as shown in the image) on the port 2-3 of the RS485 connector on the controller(U12). The heat pump will automatically stop if the temperature goes below 10°C.

PAC	Description	Norsup One	Туре
A3	RS485 - A+ signal	А	crossed
B3	RS485 - B- signal	В	crossed
GND	common ground - 0V	GND	nc
NC	12 volts	+12v	do not
			connect

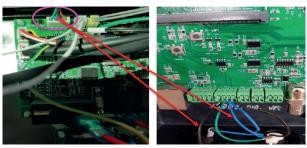


Fig. 6: Connection of heat pump from heat pump board to the Control box

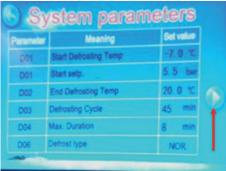
- · For a length of less than 20 meters, use a crossover cable of telecom type, strip a pair and connect one of the pairs to A and the other to B on port U12.
- · On the NorsupOne app, the port number 16 (In Modbus) is booked for the NorsupOne heater.

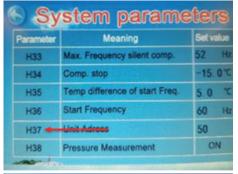
# A.2.4.3.1 HEAT PUMP PARAMETERS

- · Press on the Settings icon on the screen, number pad will be displayed
- Enter the password 066 and tap on the Enter icon, System Parameters will be displayed
- · Tap on the next arrow till it reach parameter H37, tap on the Unit address, number pad will be shown
- $\cdot$  Enter 50 and tap on the enter icon
- · Tap on the back arrow at the left top of the screen to go back to the normal screen











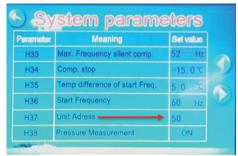


Fig. 7: Shows parameters setting process

Parameter	Meaning	Set value
H33	Max. Frequency silent comp.	52 Hz
H34	Comp. stop	-15.0℃
H35	Temp difference of start Freq.	5.0 ~
H36	Start Frequency	60 Hz
H37	Unit Adress	50
H38	Pressure Measurement	ON

Fig. 8: Shows the Back arrow

#### A.2.4.4 CONNECTION OF VARIABLE SPEED PUMP

• The ports 13 to 15 of controller (refer figure 10) corresponds to speed 1, 2 and 3 of variable speed pump and must be linked to the relay box to any of the 8 ports (+ the power wire which is port 16)

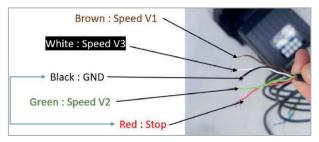
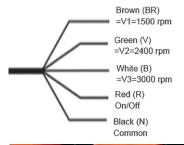


Fig. 9: Connecting wires of Variable speed pump

NOM	Description	Bor-	Color
		nes	
V1	Low pump speed (V1)	13	Brown (Br)
V2	Average pump speed (V2)	14	Green (V)
V3	High pump speed (V3)	15	White (BI)
С	Common	СОМ	Black (N)
D	Start/Stop	NC	Red (R)



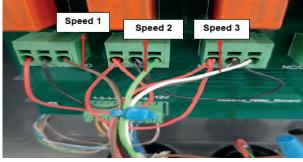


Fig. 10: Variable speed pump connection to relay board

- · Bridge the red on the 3 NC ports of the 3 selected relays. Bridge black on the 3 COMMON ports of the 3 relays. Insert each colour into one of the NO ports, respecting the numbers of the start connector on the control board.
- · Connect the pump power to a suitable power contactor with START / STOP trigger.
- · On the NorsupOne app, the port number 13 (U20) is booked for the Variable Speed Pump.

#### A.2.4.4.1 VARIABLE SPEED PUMP PARAMETERS

Once we connected the variable speed pump to the replay box and controller, we need to change the mode of the variable speed pump as given below.

- · Press on the SET button until the SET UP shows on the screen.
- · Use set till the screen shows E.
- · Press on the down arrow to change that to On.
- · Press SET and then on the down arrow.
- · Press set twice, the STORE option will be shown on the screen.



Fig. 11: Variable speed pump parameter setting steps

#### A.2.4.5 CONNECTION OF A CHLORINATOR / ACID **DOSE PUMP (MODBUS)**

If you have Modbus intelligent chlorinator, with its own algorithms, connect it to the ModBus U12 port (Red and Green wires, as given in the image). Your controller will carry out the security checks (flow, min and max of the PH and ORP sensors, commissioning of the filtration). Apart from these points, Chlorinator/ acid pumps duo device will define its own course.





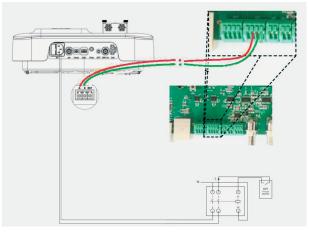
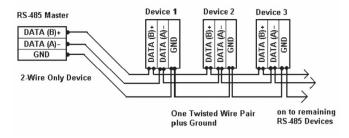


Fig. 12: Connection of Salt Chlorinator to the Control box



Fig. 13: Shows the Salt Chlorinator

If one or more devices are being connected to the Modbus RS485 the then the connection should be in series as shown in the below diagram.



#### A.2.4.6 CONNECTION OF POOL LAMP

Connect two cables of light into NO and COM ports of relay box as shown in the image below. And connect the corresponding communication cable from relay box to control box (port number 12).



Fig. 14: Connection of Pool Lamp to the Relay box

# A.2.5 CONNECTING CONTROL BOX AND RELAY BOX

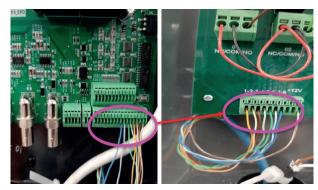


Fig. 15: Connection between Control box and Relay box

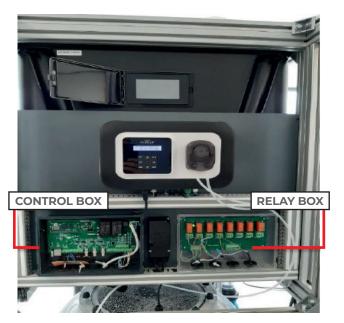


Fig. 16: Control box and relay box in the actual set up

#### **A.2.6 CHEMICAL WATER BALANCE**

The water must be balanced manually BEFORE the device is started up. The following table summarizes the concentrations recommended by NorsupOne. Your water should be checked regularly to maintain these concentrations and minimize surface corrosion or deterioration.

CHEMISTRY	Recommended
	CONCENTRATIONS
Free chlorine	1.0 to 3.0 ppm
рН	7.2 to 7.6
Cyanuric acid	20 to 30 ppm max.
(Stabilizer)	(Add stabilizer only if necessary) 0 ppm in indoor pool
Total alkalinity	80 to 120 ppm
Water hardness	200 to 300 ppm
Metals	0 ppm.

# A.2.7 RESET WI-FI/PUTTING CONTROLLER TO AP MODE

- $\cdot$  Click for 12 seconds on the R-WIFI push button (S1).
- · led D2 flashes quickly



# **B. USER CREATION**

Staff, Installer, Supplier and Customers are main users come under the NorsupOne application. The staff will be from the Megagroup and staff has authority to invite the Installer and the Supplier. Installer is the person who invites the Customer.

#### **B.1** TO INVITE STAFF

The Megagroup admin can invite the Staff.

- · Click on the Customer option, choose Staffs
- · Click on Invite Staff and enter the staff's email address
- · Click on Invite

#### **B.2 TO INVITE INSTALLER**

The installers will be added in the AX and all the installers have an AX id. The staff should enter the email id (Used to create AX id), AX id and the shop id on the respective fields to invite the installer.



Fig. 17: Shows the Customer option



Fig. 18: Shows the Staff option

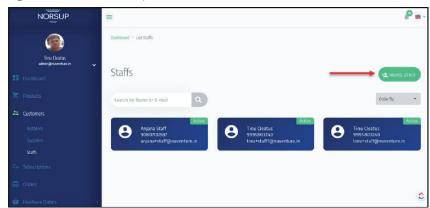


Fig. 19: Shows the Invite Staff option

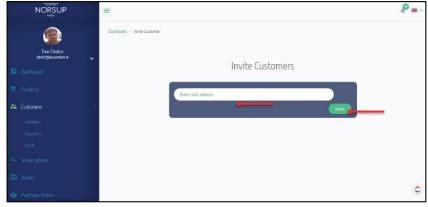


Fig. 20: Shows the field to enter the email Id and the Invite option

#### **B.2 TO INVITE INSTALLER**

The installers will be added in the AX and all the installers have an AX id. The staff should enter the email id (Used to create AX id), AX id and the shop id on the respective fields to invite the installer.

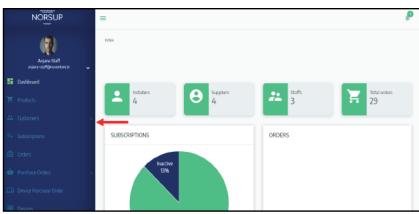


Fig. 21: Shows the Customer option



Fig. 22: Shows the Installer option

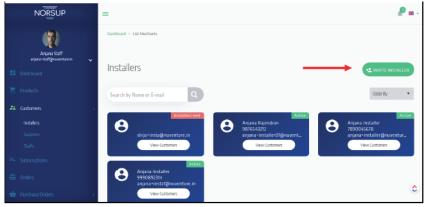


Fig. 23: Shows the invite Installer option

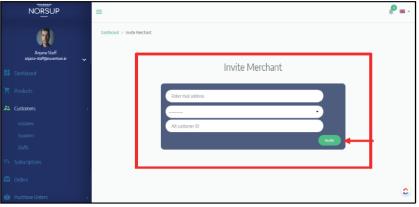


Fig. 24: Shows the field to enter the installer details and the invite option

#### **B.3 TO INVITE SUPPLIER**

The staff can invite the supplier by entering their email id and shop id on the respective field.



Fig. 25: Shows the Supplier option

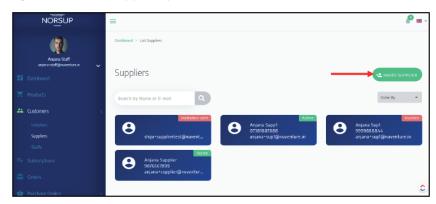


Fig. 26: Shows the Invite Supplier option



Fig. 27: Shows the field to enter the Supplier details and Invite option

#### **B.4 TO INVITE CUSTOMERS**

The installer can invite the customer by entering their email id on the respective field. Installer can use both mobile and web application to invite the customers.

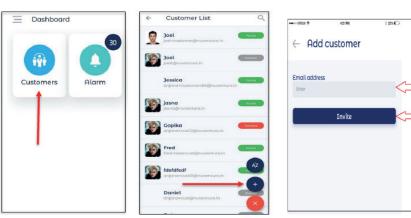


Fig. 28: Shows the steps of inviting a customer



Fig. 29: Shows the Customer option

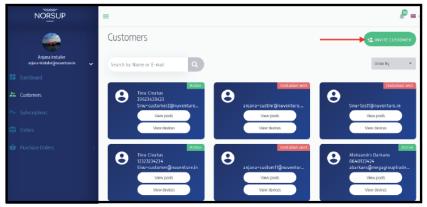


Fig. 30: Shows Invite Customer option

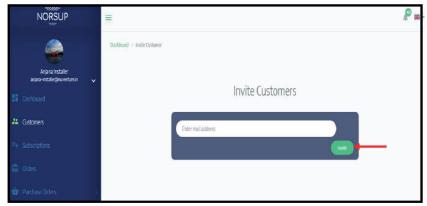


Fig. 31: Shows Invite option

### C. NORSUPONE IOT APPLICATION

NorsupOne is a common platform to manage IoT, Warranty information and Chemical subscription. The customer can control the devices and sensors under the Smartpool option, they will get the warranty information under the Product option and can subscribe the chemicals need for the pools under the Store option.

#### C.1 INSTALLER LOGIN

The installer can log into the application using their Username and Password.

To create installer (Refer B.2)

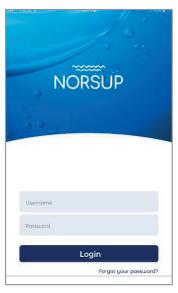


Fig. 32: Shows the login page

#### C.2 DASHBOARD

Once the installer has logged in, the dashboard will be displayed. The dashboard contains the following options.

- · Customers
- · Alarms



Fig. 33: Shows the Dashboard of installer

#### C.3 CUSTOMER

Under this option the list of customers will be shown. On tapping the customer name, the details of the controllers, products etc added under the customer, will be displayed.

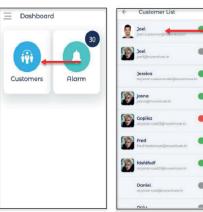




Fig. 34: Shows the customer list and page come under a customer

# C.3.1 TO ADD CONTROLLERS UNDER A CUSTOMER IN INSTALLER LOGIN

The installer can add controllers and products under a specific customer. To add controller or products:

- · Select the customer under whom you would like to add new controller
- $\cdot$  Tap on the add icon at the bottom
- · Choose controller option, available controllers will be shown
- · Select one controller from the given controllers
- Enter the Serial number, API key (find it on the control box) and Pool. The installer should add at least one pool,

If he has not added the pool:

- Tap on the **ADD icon** given at the right side of the select pool option, enter the pool details
- $\cdot$  Tap on the **ADD option** at the bottom
- · Tap on Start option at the bottom
- · Activate the AP mode (refer 2.7) of the controller and then tap on next option
- · Connect to swimo access point Wi-Fi network on your mobile phone, then tap on next option
- Enter the Wi-Fi SSID and Password (swimo000), then tap on Connect option at the bottom

- · Restart the controller (power off and power on) then tap on next option
- · Connect your phone with home Wi-Fi network, then tap next
- · The controller will be added



### To add pool

**CONTROLLER & LOW SALT ELECTROLYSE UNIT TYPE NORSUPONE** 



Fig. 35: Shows the steps of add a controller under a customer



# C.3.2 TO VIEW THE CONTROLLER DETAILS (DEVICES AND SENSORS UNDER THE CONTROLLER)

The details of controller like whether it is on or off, the sensors and devices under it, it's Speed range, alarms etc. will be displayed when you tap on the controller. To view the controller details:

- Select the customer whose controller details you would like to view
- · Choose the controller you want to see
- The sensors and devices added under the controller will be displayed



Fig. 36: Shows the steps to view the devices and sensors under a customer

### C.4 CRITICAL ALARMS

If the devices show any abnormality in its functioning it shows as alarm list. To view the alarm details, tap on the E.g. If the pump is overheating, an alarm notification will be sent to the installer along with the problem details, device info and customer name.

Or

The installer can go to the dashboard and tap on the alarms to get more details.

The installer can follow the given steps:

- · Go to the dashboard
- · Tap on the Alarm option, alarm list will be displayed
- · Tap on the alarm to view the alarm detail



Fig. 37: Shows the Alarm list

#### C.4.1 TO VIEW THE CUSTOMER CONTACT DETAIL

The installer can view the contact of the customer by the tapping on the respective alarm.

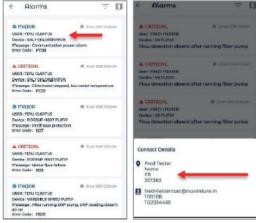


Fig. 38: Shows the customer contact details

# C.4.2 TO FILTER THE ALARM LIST

The installer can filter the alarms on the basis of its emergency. The installer can filter as All, Critical, Major, Minor and Info alarms.



Fig. 39: Shows the Filter icon and the alarm filtering options

#### C.4.3 TO VIEW THE REGIONS WHERE THE ALARMS TRIGGERED

The installer can find the regions where the alarms triggered by taping on the map option given at the right top of the alarms screen.

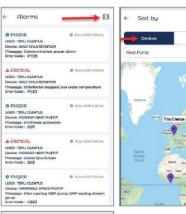




Fig. 40: Shows the map icon and the selection of Device







Fig. 41: Shows the Alarms selecting procedure

#### **C.4.4 RESOLVED ALARMS**

Once the issue in the alarm has been resolved, the installer can move it into resolved option.

To put the alarms under resolved option:

- · Swipe right the alarms that you want to resolve
- · Resolved option will be shown at the left side of the respective alarm
- · A pop-up window asking the issue resolved will be displayed, tap on the Resolved option

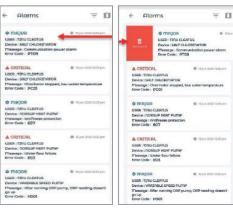




Fig. 42: Shows the process of resolving alarms

#### C.5 CUSTOMER LOGIN

Customer can login to this application by using his username and password. (To invite customers, refer B.4)



Fig. 43: Shows the login page of the customer

#### C.6 TO CUSTOMIZE THE DASHBOARD

The customer can add sensors and devices by following the given steps:

- Login to the application, a blank dashboard screen will be displayed
- Tap on the Navigation Drawer icon at the left top of the screen, the Navigation drawer will be displayed
- Select the Smartpool option, an empty dashboard will be displayed with an add icon at the right bottom
- Click on the add icon and select the required sensors or devices then tap on Save changes option at the bottom of the screen
- · Selected devices and sensors will be displayed on the screen
- Tap on the back arrow to view the dashboard with added sensors and devices

# C.7 TO AD SENSORS AND DEVICES UNDER A CONTROLLER

The customer can add sensors or devices under a controller.

To add sensors or devices:

- Tap on the navigation drawer icon, Navigation drawer will be displayed
- · Select smart Pool option from the navigation drawer



Fig. 44: Shows the Navigation Drawer icon



Fig. 45: Shows the Smart Pool option in Navigation drawer

#### To add devices

The customer can add devices under a controller. Smart light, Heat pump, Variable speed pump and Salt Chlorinator are the available devices. Customer can add the devices by following the given steps:

- Choose Smart Pool from the navigation drawer, new page will be opened
- Tap on the add icon, two options, Devices and Sensors will be shown
- · Choose Devices option, list of devices will be displayed, select the one that you would like to add

### C.7.1 TO ADD SMART LIGHT

- · Tap on the add icon
- $\cdot$  Choose Devices option
- Select Smart Light from the device list, the selected device and port number will be shown
- Tap on the Connect option at the bottom of the page, the device will be added

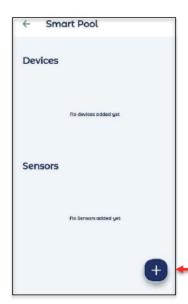


Fig. 46: Shows the smart pool page before adding sensors and devices



Fig. 47: Shows the Devices option



Fig. 48: Selecting Smart light from the device list



Fig. 49: Shows the Connect/Add option

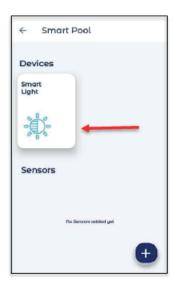


Fig. 50: Shows the Added smart light on the dashboard

#### **C.7.2 CONTROLLING THE SMART LIGHT**



Fig. 51: Shows Off and on option of the Smart Light

#### C.7.2.1 TO ADD TIMER SLOT

Customer can set time for the smart light by following the given steps.

- · Tap on the calendar icon at the right top of the screen.
- · Tap on the Add icon, a screen to choose start time, end time and days will be displayed.
- · After selecting the time and days tap on the Add time slot option at the bottom of the page. The slot will be added.
- · To delete the time slot, swipe right on the time slot and tap delete option.
- · Confirmation pop-up will be displayed choose Delete.





Fig. 52: Shows the calendar

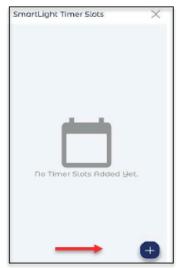


Fig. 53: Shows the Add icon





Fig. 54: Shows choosing the start and end time

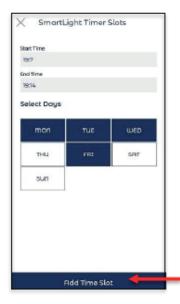


Fig. 55: Shows the Add time slot option

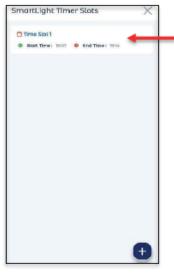


Fig. 56: Shows the added time slot

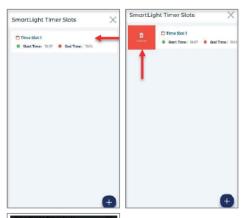




Fig. 57: Shows the steps to delete a time slot

#### C.7.3 TO ADD HEAT PUMP

You can follow the same procedure as in smart light to add heat pump (Refer C.7.1). Choose heat pump after taping on the devices option. (Connect heat pump to port: 19, The heat pump will automatically stop if the temperature goes below 10°C)

#### C.7.4 CONTROLLING THE HEAT PUMP

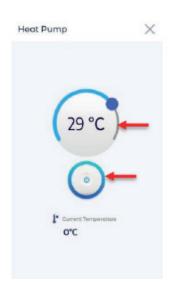


Fig. 58: Shows the On and Off of Heat Pump

#### C.7.5 TO ADD VARIABLE SPEED PUMP

You can follow the same procedure as in smart light (Refer C.7.1) to add variable speed pump. Choose variable speed pump after taping on the devices option. (Connect variable speed pump to port: 13).

#### C.7.6 CONTROLLING THE VARIABLE SPEED PUMP



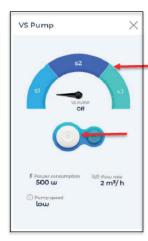


Fig. 59: Shows the controlling options of Variable Speed Pump

#### **C.7.7 TO ADD SALT CHLORINATOR**

You can follow the same procedure as in smart light (Refer C.7.1) to add Salt Chlorinator. Choose Salt Chlorinator after taping on the devices option. (Connect Salt Chlorinator to port: 17. The salt chlorinator should be connected with either VS pump or flow switch to work).

#### C.7.8 TO RESET ACID LEVEL VOLUME FOR SALT **CHLORINATOR**

- $\boldsymbol{\cdot}$  Reset option has been given at the bottom of the screen, tap on that
- · Confirmation pop-up will be displayed, tap on Confirm
- Enter the value on the respective field and tap on Submit



Fig. 60: Shows the Reset option





Fig. 61: Shows the confirmation pop-up



Fig. 62: Shows the field to enter the value and the Submit option

#### C.7.9 CONTROLLING THE SALT CHLORINATOR

To control the ORP and pH of slide on the respective options after turning the salt chlorinator ON. Boost option has also given on the same screen. You cannot control the ORP and Ph values if the salt chlorinator is OFF or it is in BOOST mode. The pH and ORP value range that we can control using app is 6.8 to 7.8 and 500-900.

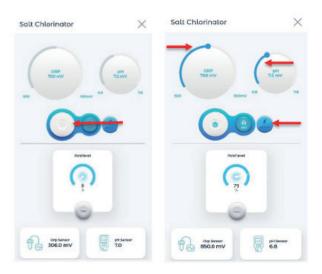


Fig. 63: Shows the Controlling of ORP & PH



Fig. 64: Shows the Boost mode

#### To add sensors

The customer can add sensors under a controller. Temperature sensor, PH electrode, ORP sensor and EC electrode are the available sensors. To add sensors, follow the given steps:

- · Choose Smart Pool from the navigation drawer, new page will be opened
- · Tap on the add icon, two options, Devices and Sensors will be shown
- · Choose Sensors option, list of devices will be displayed, select the one that you would like to add

#### **C.7.10 TO ADD TEMPERATURE SENSOR**

- $\cdot$  Tap on the add icon
- · Choose Sensors option
- · Select Temperature Sensor from the device list, the selected device and port number will be shown
- Tap on the Connect option at the bottom of the page, the sensor will be added



Fig. 65: Shows the Sensors option



Fig. 66: Selecting Temperature Sensor from the sensor list



Fig. 67: Shows the Connect/Add option

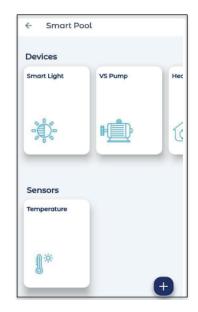


Fig. 68: Shows the added Temperature Sensor under the Smartpool controller



#### C.7.11 TO ADD PH ELECTRODE

Follow the same steps as in adding temperature sensor (Refer C.7.10). Choose pH electrode option from the sensors list. (Connect pH electrode to port: 1).

#### C.7.12TO CALIBRATE THE PH SENSOR

To calibrate the pH sensor:

- · Tap on the pH sensor, a new screen will be opened
- · At the bottom Calibrate sensor option has been given, tap on that, a popup screen will be shown
- Enter the value of Buffer no.1 on the given field, then tap on the Start option at the bottom. It takes 60 seconds to complete it
- Then enter the value of the Buffer no.2 and tap on the Start option
- · A popup showing the Calibration completed message will be displayed, tap on the Ok option to complete the calibration

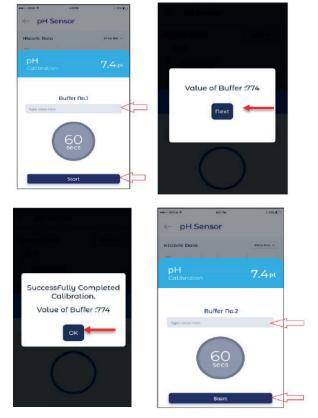


Fig. 69: Shows the calibration process of pH sensor



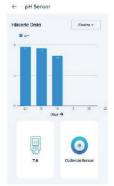


Fig. 70: Shows the Historic data of pH sensor

# C.7.13 TO ADD ORP/EC ELECTRODE

You can follow the same steps as in adding temperature sensor (Refer C.7.10) to add an ORP electrode. Choose the ORP sensor from the sensors list to add the same (connect your ORP electrode to port:2)

#### C.7.14 TO CALIBRATE THE ORP/EC SENSOR

Tap on the ORP sensor in the dashboard, new screen with Calibrate Sensor option will be displayed. You can follow the same steps as in the pH sensor calibration (Refer C.7.11) for ORP calibration. In ORP calibration you need to enter only one buffer value.

#### C.8 ALARMS

If there is any misfunctioning in the devices the customer will get an alarm as push notification. To view the details of alarm, tap on the notification.





Fig. 71: Shows the steps to view the alarm details

To filter the alarm list, you can follow the same steps as in installer, please refer C.4.2

#### C.9 TO INVITE GUEST

The customer can invite a guest to add and control the devices and sensors in his absence. The guest also has access to view the products but he/she cannot add or delete the controller or products.

To invite a guest, follow the given steps:

- · Go to navigation drawer
- · Select the Guest option, a blank page will be opened along with a Add icon
- $\cdot$  Tap on the add icon, then enter the email address of the guest and tap on the Invite option
- · The guest can fill the profile details by log into the link sent to their email id







Fig. 72: Shows the steps to invite a guest

#### C.10 RESET WI-FI

The customer can reset the Wi-Fi password by,

- · Go to navigation drawer, select settings
- · Tap on the Reset controller Wi-Fi button
- · Activate AP mode on your controller and click next
- · Connect to swimo access point Wi-Fi network on your mobile phone, then tap on next option
- Enter the Wi-Fi SSID and Password (swimo000), then tap on Reset option at the bottom
- · Restart the controller (power off and power on) then tap on next option
- · Connect your phone with home Wi-Fi network, then tap next

(Refer steps in C.3.1 TO ADD CONTROLLERS **UNDER A CUSTOMER)** 









Fig. 73: Shows the process to reset wi-fi



#### C.11 SIGN OUT

In mobile application the customer can sign out from the app by following the given step:

- · Go to navigation drawer
- Tap on the customer name given at the top of the navigation drawer, customer profile will be shown (You can edit the profile by taping on the Edit icon given at the right side)
- · Tap on the sign out option given at the bottom of the screen

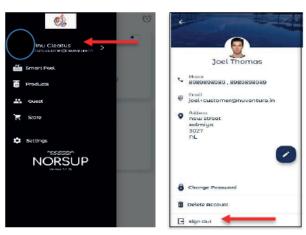


Fig. 74: Shows the sign out process

### D. WARRANTY INFORMATION

#### D.1 PROCESS FLOWS

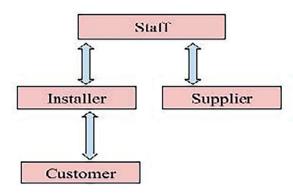


Fig. 75: shows the process flow of Smart pool warranty information

#### D.2 WORK FLOW

- Megagroup Staff creates new purchase order based on the requirement from the installer (Refer D.3.1)
- Supplier receive the purchase order and generate QR code for the same (Refer D.4.1)
- Customer or installer on behalf of customer can add the bill details and other information to get the warranty information (Refer D.5.1)
- Once the customer added the device and uploaded the bill the staff will verify it. The warranty information will be available to the customer

#### D.3 STAFF LOGIN

- $\boldsymbol{\cdot}$  Sign into the web page using user id and password
- · Staff's account page will be opened



Fig. 76: shows sign in option

# D.3.1 ADD DEVICE PURCHASE ORDER

Staff creates new purchase order based on the requirement from the installer. To add order:

- · Click on 'Device purchase order' at the bottom left of the page, the list will be displayed
- Click on 'add device purchase order' On the top right of the screen New box will be opened asking the details like, select supplier, item number, quantity, purchase order number, expected date of delivery, enter the details
- $\cdot$  Click on the send button, the purchase order will be sent to the supplier



Fig. 77: shows the add device purchase order option

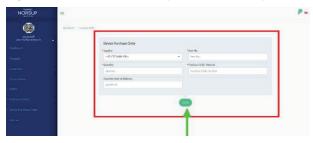


Fig. 78: shows information box and send option

#### **D.3.2 EDIT PURCHASE ORDER**

The staff can edit the information of Device purchase order.

- · Click on the 'Device purchase order' option, Device purchase list will be shown
- · Click on the edit icon of the item in which the staff wants to make changes, abox containing the information will appear
- · After entering the changes click on the 'send' option

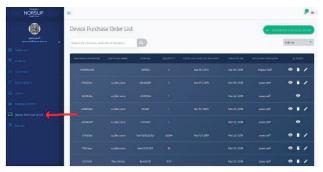


Fig. 79: shows Device purchase order option

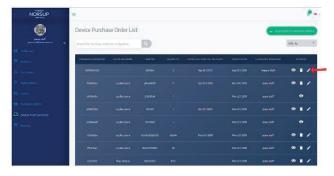


Fig. 80: shows edit icon

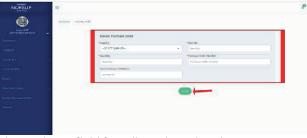


Fig. 81: shows field for edit and send option

#### **D.3.3 DELETE DEVICE PURCHASE ORDER**

The staff can delete the purchase order by clicking on the Delete icon on the item.

For that follow the given steps

- · Click on 'Device purchase order', Device purchase list will be displayed
- · Click the delete icon on the item which the staff want to delete, Confirmationmessage will be displayed on the screen
- · Click on confirm to delete that order

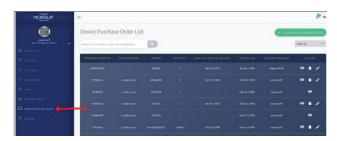


Fig. 82: shows Device purchase order option



Fig. 83: shows the delete icon



Fig. 84: shows confirmation message

#### D.4 SUPPLIER SIGN IN

Once the purchase order has been sent to the supplier, he will get the purchase order request on Email and as notification on 'Device Purchase Order' option. For seeing the request on the page supplier should: (To invite supplier refer B.3)

- · Login to supplier account with his username and password
- · Supplier account will be opened



Fig. 85: supplier login page



Fig. 86: shows the supplier account menu

### **D.4.1 GENERATE QR CODE**

- · Click on 'Device Purchase Order' option at the bottom left, Device purchaseorder list will be shown
- · Click on the 'Purchase order number' in which the supplier wants to generate the QR code
- · List of items (will be equal to the quantity ordered) will be shown
- The supplier can enter the 'Expected date of delivery' and 'serial number' ofeach item (the serial number for each item should be different)
- Then click on 'Generate QR code' option. QR codes will be generated for eachitem
- · To take print click on 'Print QR code' option

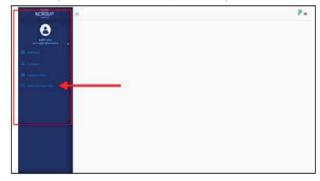


Fig. 87: Shows Device purchase order option

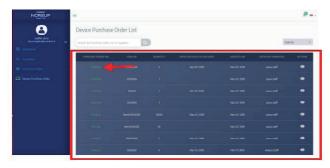


Fig. 88: Shows Device purchase order list and purchase order number



Fig. 89: Shows fields for entering the expected date of delivery, serial number of the items and the option for generate QR code



Fig. 90: Shows the generated QR codes and option for Print QR code



Fig. 91: shows the print form of QR code of items

The supplier will send the product after sticking the QR code on the items.

#### **D.4.2 DOWNLOAD EXCEL TEMPLATE**

- · Select the Purchase Order Number
- · Click on Download Excel Template option
- · Enter the Serial number on the given field, Save it
- · Click on Import from Excel option, select the file
- · The serial number will be displayed on the list

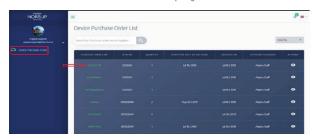


Fig. 92: Shows the Device Purchase Order option and purchase order number



Fig. 93: Shows the Download Excel Template

A	A	В	0	D	3	-
1	FO Number	PO Date	Item Number(AX)	Date of Fabrication(Delivery)	Ser al Number	
2	12425367787	2019-07-18	0020247	2019-07-19	12345	
3					_ A	
+					4)	
5						
5					13 L	
7						

Fig. 94: Shows the Excel template and the field to enter the serial number



Fig. 95: Shows the Import from Excel option



Fig. 96: Shows the Serial number

#### **D.5 CUSTOMER LOGIN**

Customer or installer on behalf of customer can add the bill details and other information to get the warranty information. (To invite customer, refer B.4)

· Log into account with the user id and password.



Fig. 97: shows the customer login page

#### **D.5.1 TO ADD PRODUCTS BY A CUSTOMER**

- · Log into the application and go the navigation drawer
- · Tap on the Products option
- · Tap on the Add icon at the right bottom of the page, add product page will bedisplayed
- · Product page has an option to Scan the QR or Bar code and a field to enter the serialnumber, choose one

#### If you choose to Scan

- · Tap on the Scan option and scan the QR code or Bar code
- · List of products will be shown, select the product
- · Choose your device, the image and serial number of the product will be displayed
- $\cdot$  Tap on the Save option, the product will be added and it will be shown in the Productspage
- · Tap on Upload Bill copy option, a page with product image will be displayed
- · Tap on the Add purchase bill option at the bottom of the page
- · To produce the bill of the product, either use the camera option or upload the bill from the device
- · Enter the Purchase date and then tap on the Add option, the bill will be added and the warranty of the product will be shown





















Figure 98: Shows the process of adding product and bill to get warranty information

#### **D.5.2 TO ADD PRODUCTS BY AN INSTALLER**

The installer can add products under a customer by following the given steps:

- Select the customer under whom the installer wants to add the product
- Tap on the Add icon, Controllers and Products will be displayed
- Choose Products option, the list of added products will be shown

(Follow the same steps as in customers refer D.5.1)







99: Shows the process of adding product under installer login

#### **D.5.3 TO ADD BILL THROUGH WEB APPLICATION** BY CUSTOMER

- · Click on 'Devices' at the bottom left of the page, device list will be displayed
- · Click on the eye icon, to view, box containing information regarding the order will appear
- · Click on 'add bill' option at the bottom of the box
- · Another box will be opened, click on 'choose file' option at the bottom and select the file to be uploaded
- · Then click on 'update device' option
- · If the update is successful, 'Device updated successfully' message will be shown at the top of the page
- · The bill will be added and on clicking the eye icon Warranty details will be displayed



Fig. 100: shows the device option



Fig. 101: shows the device list and the eye icon



Fig. 102: shows the details of order and add bill option

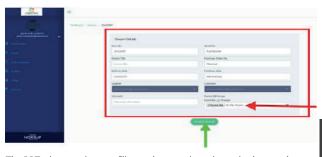


Fig. 103: shows choose file option and update device option

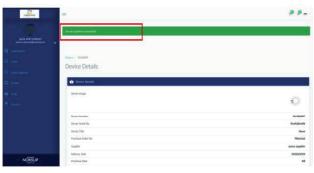


Fig. 104: shows the Updation successful message

# E. CHEMICAL SUBSCRIPTION

#### **E.1** ACCESSING THE SYSTEM

Smartpool Application: http://smartpool. nuventuretech.com/ Smartpool is having a common interface for all type of users.

#### E.2 WORK FLOW

- The staff can log into the application using the username and Password
- · Staff can invite the Installer (Refer B.2)
- · Installer creates the Customers (Refer B.4)
- Customers can add pool by log into their account (Refer E.5.3)
- Then the customer adds the subscription (Refer E.5.4)
- Once the customer added subscription, the Installer can generate order (Refer E.4.6)
- Then the Staff will confirm the order and generate invoice (Refer E.3.9)

#### **E.3 STAFF LOGIN**

 Staff can log into the application using the user name and password



Fig. 105: - Login Page



Fig. 106: - Staff home page

#### **E.3.1 STAFF DASHBOARD**

On the dashboard the staff can view all the details come under him.



Fig. 107: Shows the details in the Dashboard

#### **E.3.2 TO ADD PRODUCTS**

Only the Staff can add products and all the products will be automatically fetched from the AX system.

NS: All the products will be automatically fetched from the AX system

- From Home page click on Products
- Click Add Product button. Enter the details in Add Product page
- · Click ADD PRODUCT to save



Fig. 108: Shows the Product option



Fig. 109: Shows Add Product option

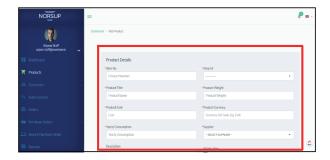


Fig. 110: Shows the field to enter the Product details

#### **E.3.3 TO VIEW THE PRODUCT DETAILS**

- · From Home page click on Products
- · The product list will be displayed
- · At the right side of every product 'View' icon has been given, click on that
- · The product details will be shown



Fig. 111: Shows the product option



Fig. 112: Shows the View icon

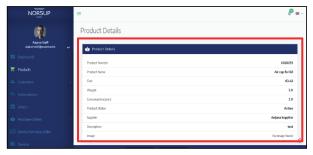


Fig. 113: Shows the View / Edit / Delete option

### **E.3.4 TO EDIT PRODUCT DETAILS**

- From Home page click on Products, the product list will be displayed
- · At the right side of every product 'Edit' icon has been given, click on that
- · The product details will be shown, edit the details
- · Click on Update Product



Fig. 114: Shows the Product option



Fig. 115: Shows the Edit icon



Fig. 116: Shows the product details



Fig. 117: Shows the Update Product option

#### **E.3.5 TO DELETE A PRODUCT**

- From Home page click on Products, the product list will be displayed
- At the right side of every product 'Delete' icon has been given, click on that
- · A confirmation popup will be displayed
- · Click on Confirm to delete the product



Fig. 118: Shows the Product option



Fig. 119: Shows the delete icon



Fig. 120: Shows the confirmation popup

### **E.3.6TO VIEW THE INSTALLER LIST**

- $\cdot$  From the home page click on drop down arrow given near to the customer option
- · Choose the Installers option
- · The list will be displayed



Fig. 121: Shows the Installer option



Fig. 122: Shows the Installer list

#### **E.3.7TO VIEW STAFF**

- From the home page click on drop down arrow given near to the customer option
- · Choose the Staff option, staff list will be displayed



Fig. 123: Shows the Customers option



Fig. 124: Shows the Staff option



Fig. 125: Shows the Staff list

#### **E.3.8 TO VIEW THE SUBSCRIPTION**

- · From Home page click on Subscriptions
- · The Subscription list will be displayed



Fig. 126: Shows the Subscription option



Fig. 127: Shows the Subscription list

#### **E.3.9 TO CONFIRM THE INVOICE OF THE ORDER**

- · From the home page click on subscription option
- · Click on View order
- · Click on View PO
- · On clicking Confirm, the invoice will be generated



Fig. 128: Shows the View orders option

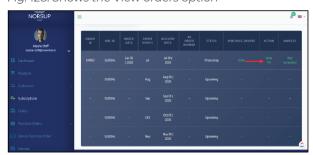


Fig. 129: Shows View PO option



Fig. 130: Shows the Confirm option

#### E.3.10 TO VIEW PURCHASE ORDER

We have two options available under the purchase order: Orders from customers and Orders to customers.

#### **E.3.10.1 TO VIEW ORDERS FROM CUSTOMERS**

- From Home page click on Purchase order option
- · Orders from customers and Order to Megagroup will be displayed
- · Choose Order from Customers option



Fig. 131: Shows the Purchase order



Fig. 132: Shows the Orders from customers options



Fig. 133: Shows the Orders from customers

#### **E.3.10.2 TO VIEW ORDERS TO MEGAGROUP**

- · From Home page click on Purchase order option
- Orders from customers and Order to Megagroup will be displayed
- · Choose Order to Megagroup



Fig. 134: Shows the Purchase order



Fig. 135: Shows Orders to Megagroup option



Fig. 136: Shows Orders to Megagroup

#### **E.3.11 TO VIEW DEVICE PURCHASE ORDER**

• From Home page click on Device Purchase order option the list will be displayed



Fig. 137: Shows the Device Purchase order option

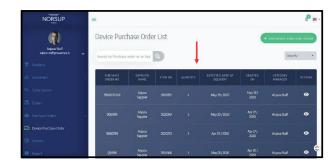


Fig. 138: Shows the Device Purchase order list

#### **E.3.12TO ADD DEVICE PURCHASE ORDER**

- From Home page click on Device Purchase order option the list will be displayed
- At the right top of the list Add Device Purchase Order option has been given, click on that
- · Enter the details on the given field
- · Click on Send option



Fig. 139: Shows the Device Purchase order option

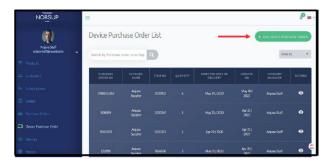


Fig. 140: Shows the Add Device Purchase order option



Fig. 141: Shows the field to enter the details and the Send option



Fig. 142: Shows the Device option



Fig. 143: Shows the Device list

#### **E.4 INSTALLER LOGIN**

The installer will get access to the application through the link sent by the staff to his email id. The installer can fill up the sign in details to login. (To invite installer, Refer B.2)

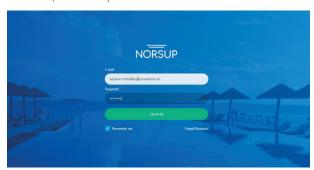


Fig. 144: Shows the login page



Fig. 145: Shows the Installer home page

#### **DASHBOARD** E.4.1

On the dash board the installer can view the statistical information of customers, revenue, latest orders etc.



Fig. 146: Shows the Dashboard

#### TO VIEW CUSTOMER LIST

· From the home page click on the Customer option, customer list will be displayed



Fig. 147: Shows the Customer option

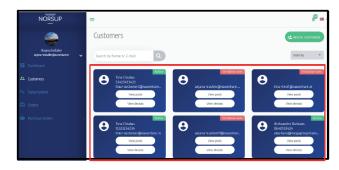


Fig. 148: Shows the customer list

#### TO INVITE CUSTOMER

Installer can invite the customer by entering their email id. To have a detailed view of the screens please refer B.4.

#### **E.4.4 TO VIEW SUBSCRIPTIONS**

• From the home page click on the Subscription option, the list will be displayed



Fig. 149: Shows the Subscription option

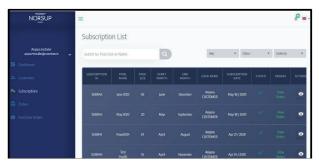


Fig. 150: Shows the Subscription list

#### **E.4.5 TO VIEW ORDERS**

• From the home page click on the Orders option, the list will be displayed with all the one-time purchase order details.



Fig. 151: Shows the Order option



Fig. 152: Shows the Order list

#### **E.4.6 PURCHASE ORDER**

The installer has two options under Purchase order: Orders from Customers and Orders to Megagroup.

#### **E.4.6.1 ORDERS FROM CUSTOMERS**

- · Click on the Purchase order option
- · Choose Orders from Customers



Fig. 153: Shows the Purchase Order option

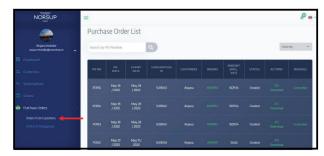


Fig. 154: Shows the Orders from customers option



Fig. 155: Shows the Orders from customers

#### **E.4.6.2 ORDERS TO CUSTOMERS**

- $\cdot$  Click on the Purchase order option
- · Choose Orders to customers



Fig. 156: Shows the Purchase Order option

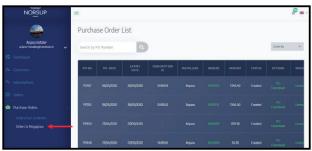


Fig. 157: Shows the Orders to Megagroup option

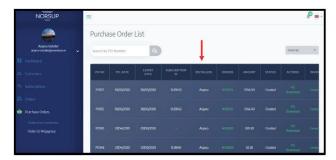


Fig. 158: Shows the Orders to Megagroup

#### **E.4.7 TO GENERATE ORDER**

- · From the home page click on Subscription, the new subscription will show at the top of the list
- · Click on Generate order
- · Click on View orders
- · PO can be generated in two ways Manually and Automatically. You can change this in Settings option. If you choose automatic option the PO will be automatically generated otherwise click on Generate PO option
- · The staff will be notified to confirm the invoice



Fig. 159: Shows the Subscription option

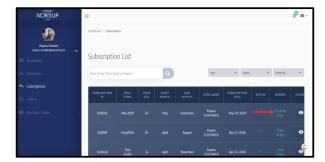


Fig. 160: Shows Generate order option

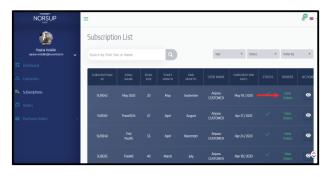


Fig. 161: Shows View Orders option



Fig. 162: Shows Generate PO option

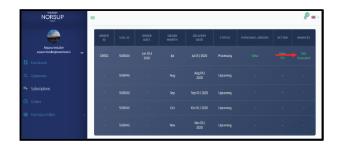


Fig. 163: Shows the not Generated option

## E.4.7.1 TO AUTOMATICALLY GENERATE THE PURCHASE ORDER

- · Click on the drop-down arrow on the home screen
- · Choose settings option
- Click on the box given next to automatically generate purchase order option



Fig. 164: Shows the drop-down arrow



Fig. 165: Shows the Settings option



Fig. 166: Shows the box to select the automate the purchase order generation

#### **E.5 CUSTOMER LOGIN**

The customer will get access to the application through the link sent by the Installer to his email id. The customer can fill up the sign in details to login. (To invite customer, refer B.4)



Fig. 167: Shows the customer login page



Fig. 168: Shows the customer

#### **E.5.1 CUSTOMER DASHBOARD**

Customer can view the order details on the dashboard.



Fig. 169: Shows the dashboard option

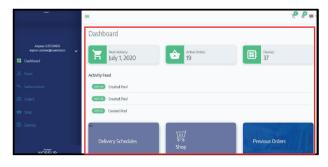


Fig. 170: Shows the dashboard

#### **E.5.2 TO VIEW POOLS LIST**

• From the home page click on the Pools option, the pools list will be displayed

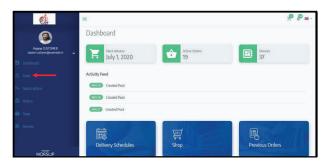


Fig. 171: Shows the Pools option



Fig. 172: Shows the Pools list

#### E.5.3 TO ADD POOL

- $\cdot$  From the home page click on the Pools option
- · Click on Add pool option at the top right of the page
- · Fill the pool information and contact details
- · Click on Add pool option at the bottom
- $\cdot$  Once you successfully added it, Pool created successfully message will be shown at the top of the page

The customer can add pools using both web and mobile application. Refer E.6.1 to add pools using mobile application.

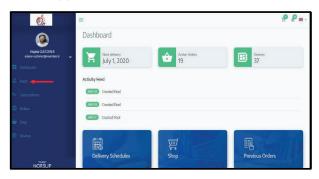


Fig. 173: Shows the Pools option

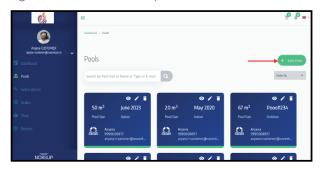


Fig. 174: Shows Add Pool option



Fig. 175: Shows the field to enter the information and the Add pool option

#### E.5.3.1 TO VIEW POOL DETAILS

- · From the home page click on Pools option, pools list will be displayed, view option has given with every pool
- · Click on the View icon, pool details will be shown



Fig. 176: Shows the Pools option



Fig. 177: Shows View icon

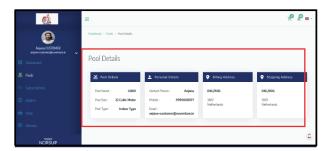


Fig. 178: Shows the Pool details

#### E.5.3.2 TO EDIT POOL

- From the home page click on Pools option, pools list will be displayed, edit option has given with every pool
- · Click on the Edit icon, pool details will be shown
- · Edit the details
- · Click on Update Pool option at the bottom



Fig. 179: Shows the Pools option



Fig. 180: Shows Edit icon



Fig. 181: Shows the field to edit and the Update Pool option



Fig. 182: Shows the added pool

#### E.5.3.3 TO DELETE POOL

- From the home page click on Pools option, pools list will be displayed, delete option has given with every pool
- · Click on the Delete icon, a confirmation message will be displayed
- · Click on Confirm to delete the pool



Fig. 183: Shows the Pools option



Fig. 184: Shows Delete icon



Fig. 185: Shows the confirmation message

#### **E.5.4 TO ADD SUBSCRIPTION**

Once the pool has been added the customer can add the subscription for the pool.

- · From the home page click on the Subscription option
- · Click on the Add subscription option at the right top of the page
- Enter the subscription details
- On Choosing the End Month, a Subscription table will be displayed with Products Details
- From the Subscription table, choose the quantity of each products based on which the total cost/ Subscription cost is calculated. Automatically it will display the quantity required for the size of the pool. If not, you can edit the quantity
- · Click on SUBSCRIBE button

Subscription can be added using the mobile application refer E.6.4.

# EN

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Fig. 186: Shows the Subscription option



Fig. 187: Shows the Add Subscription option



Fig. 188: Shows the field to enter the subscription details



Fig. 189: Shows the product details



Fig. 190: Shows the Subscribe option

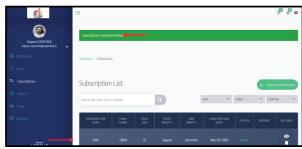


Fig. 191: Shows the added subscription

#### **E.5.4.1** TO VIEW SUBSCRIPTION

- · From the home page click on the Subscription option
- · View icon has given with every subscription, click on that



Fig. 192: Shows the Subscription option



Fig. 193: Shows the view icon



Fig. 194: Shows the details of subscription

#### **E.5.4.2 TO EDIT SUBSCRIPTION**

- $\cdot$  From the home page click on the Subscription option
- · View icon has given with every subscription, click on that, the subscription details will be shown
- Edit option has been given at the right top of the page, click on that editing field will be displayed, edit the details
- · Click on Update Subscription at the bottom of the page



Fig. 195: Shows the Subscription option



Fig. 196: Shows the view icon



Fig. 197: Shows the edit option



Fig. 198: Shows the Update Subscription

#### **E.5.4.3 TO CANCEL SUBSCRIPTION**

- From the home page click on the Subscription option
- Delete icon has given with every subscription, click on that, subscription will be cancelled



Fig. 199: Shows the Subscription option



Fig. 200: Shows the Delete icon

#### E.5.5 TO SHOP

- From the home page click on the Shop option, Product list will be displayed
- · Click on Add to cart option
- Click on View in cart option, product image and price will be shown
- · Click on Proceed to checkout option
- · Select the shipping address and click on Checkout option at the bottom

To shop the customer can use the mobile application also, refer E.6.7.



Fig. 201: Shows the Shop option

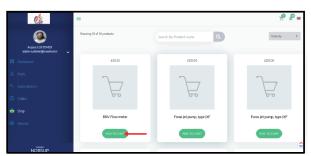


Fig. 202: Shows Add to cart option

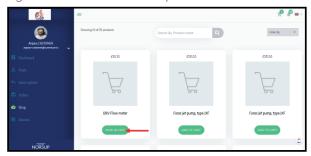


Fig. 203: Shows View in cart option



Fig. 204: Shows Proceed to checkout option

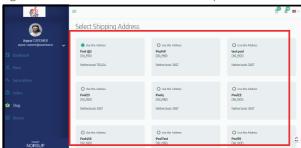


Fig. 205: Shows address selection field



Fig. 206: Shows Checkout option

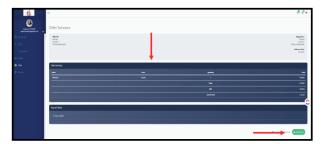


Fig. 207: Shows the order summary and Check out

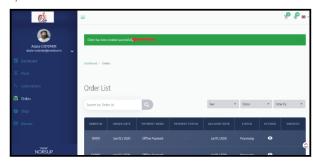


Fig. 208: Shows Order generated message

#### E.5.6 ORDERS

 $\cdot$  To view orders from the home page, click on Orders option, the list will be displayed with all the one-time purchase order details.



Fig. 209: Shows the Order option

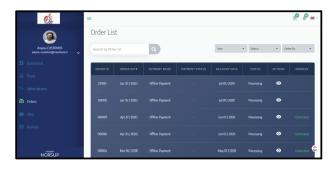


Fig. 210: Shows the Order list

#### E.5.7 DEVICES

• From the home page click on the Devices option to view the list

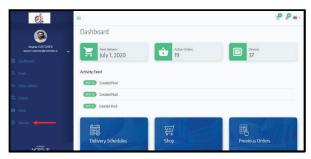


Fig. 211: Shows Devices option



Fig. 212: Shows Devices list

#### E.6 MOBILE APPLICATION LOGIN

The customer has access to the mobile application and have the options to add the pools and subscription, shop and order are included in the mobile application.

The login page contains the following details to enter:

- Email id You will receive an activation email once the installer adds you as a customer.
- Password: Need to set a password before login in through App.



Fig. 213: Shows the mobile app login screen

#### E.6.1 TO ADD POOL

- · Log into the application and go to the navigation drawer
- Tap on the Store option, pool, subscription, shop and orders will be displayed
- · Tap on the Pools option on the dashboard
- · Tap on the add icon at the right bottom of the screen
- Enter the pool details and tap on Done, the pool will be added



Fig. 214: Shows the Store option



Fig. 215: Shows the Pools option

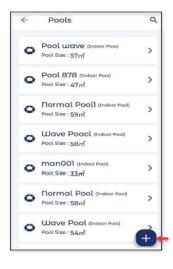


Fig. 216: Shows the Add icon

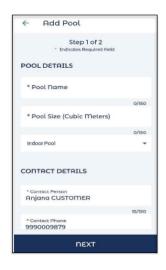


Fig. 217: Shows the field to add the pool details

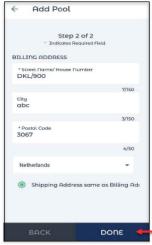


Fig. 218:

Shows the Done option

#### E.6.2 TO EDIT POOL

- · Tap on the Pools option on the dashboard, the pool list will be displayed, choose the pool you would like to edit
- Edit icon has been given at the right bottom of the page, tap on that editing field will be displayed
- · After the edit tap on the Update option



Fig. 219: Shows the Pools option

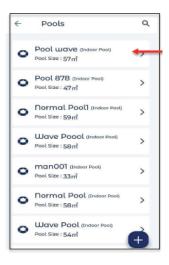


Fig. 220: Shows the Pools list

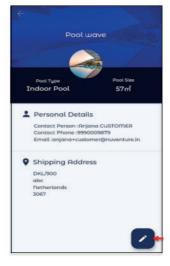


Fig. 221: Shows the Edit icon



Fig. 222:
Shows the Update option

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#### E.6.3 TO DELETE POOL

- Tap on the Pools option on the dashboard, the pool list will be displayed
- · Long press on the pool you want to delete
- Delete confirmation pop-up will be displayed, tap on Remove option



Fig. 223: Shows the Pools option

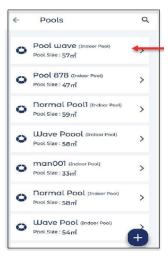


Fig. 224: Shows the Pools list

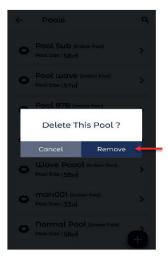


Fig. 225: Shows the Remove option

#### **E.6.4 TO ADD SUBSCRIPTION**

- · Tap on the Subscriptions option on the dashboard
- · Tap on the add icon at the right bottom of the screen
- Enter the subscription details and tap on ADD, the subscription will be added



Fig. 226: Shows the Subscription option

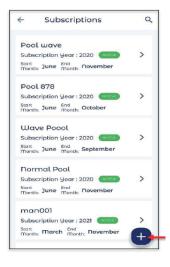


Fig. 227: Shows the Add icon



Fig. 228: Shows the field to enter the details and the Add option

#### **E.6.5 TO EDIT SUBSCRIPTION**

- · Tap on the Subscriptions option on the dashboard, the list will be displayed
- $\boldsymbol{\cdot}$  Choose the subscription you want to edit, the subscription details will be displayed
- · Tap on the Edit option has been given at the right bottom of the page
- · Tap on Next option
- · Tap on the Update option



Fig. 229: Shows the Subscription option

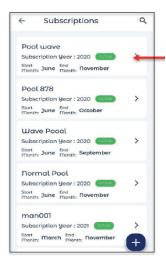


Fig. 230: Shows the Subscription list



Fig. 231: Shows the Edit option

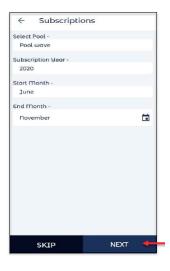


Fig. 232: Shows the field to edit and the Next option



Fig. 233: Shows the Update option

#### **E.6.6 TO UNSUBSCRIBE**

- Tap on the Subscriptions option on the dashboard, the list will be displayed
- · Long press on the subscription you want to unsubscribe
- · A confirmation pop-up will be displayed, Tap on Unsubscribe



Fig. 234: Shows the Subscription option

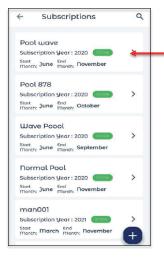


Fig. 235: Shows the Subscription list

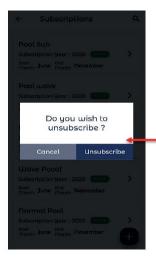


Fig. 236: Shows the Unsubscribe option

#### **E.6.7 TO SHOP**

- Choose Shop from the dashboard, the chemical list will be displayed, choose the chemical
- · Tap on the Checkout option
- · Confirmation pop-up will be displayed, choose Checkout
- · Select the shipping address
- · Confirm shipping by tap on the Checkout option
- Select the payment mode and tap on the Submit option, the customer will be redirected to the order page



Fig. 237: Shows the Shop option



Fig. 238: Shows the list of chemicals



Fig. 239: Shows the Checkout option

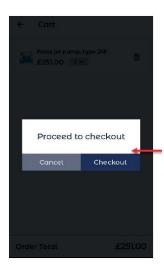


Fig. 240: Shows the confirmation рор-ир



Fig. 241: Shows the address list

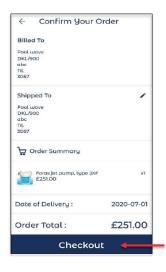


Fig. 242: Shows the Checkout option

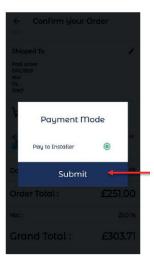


Fig. 243: Shows payment mode and Submit option

#### **E.6.8 ORDERS**

- Tap on the order option from the store dashboard list of orders will be displayed.
- · Choose an order to view the order details



Fig. 244: Shows the order option

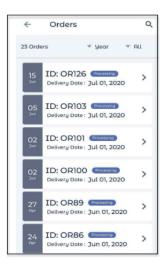


Fig. 245: Shows the order list



Fig. 246: Shows the order details

#### F. MAINTENANCE

#### F.1 MAINTENANCE OF THE HYDRAULIC CIRCUIT

Monitor the state of the pre-filter in the analysis chamber to maintain a constant flow in the chamber.

#### F.2 PROBE MAINTENANCE

Each year, clean and calibrate the probes, bathing them in a solution provided for this purpose, taking care not to damage the electrodes' bulbs. If you must store them, always leave the bulbs in a storage liquid or, if necessary, in water.

#### F.3 LIFESPAN OF THE PROBE

The PH probe is the most fragile. If you have to report professionally, we advise you to change this probe every year, and at the latest within 36 months after its commissioning. The known drift of the PH probes is 0.1 pts of PH per year. The RX probe (orp / redox) has a lifespan of 24 to 36 months; its drift is 54 mv / year. conductivity and temperature probes have a lifespan of more than 5 years.

For the PH and RX probes, the KCL gel crystallizes at 0  $^{\circ}$  C and makes the probes definitively unfit for their functions. Also, the wintering of the probes may be necessary if they are not in a place protected from frost during the winter.

#### F.4 MAINTENANCE OF OTHER PROBES

Overall, periodically check the probes, clean them if deposits are not formed. The deposit case is recurring with salt electrolysis. Limestone and impurities are also a cause of sensor malfunctions.

#### F.5 SPECIAL CASES

Analog sensors generally respond to leakage and circulating currents in the pools. If you see heterogeneous probe readings, check that you have a "ground pool" connected before the filtration pump and that it is well connected with the common ground to avoid any interference of the equipotentiality of the circuit. If your PH probe drops for no apparent reason, check your TAC with a test strip and immediately stop the treatment equipment.

The TAC, and in all cases the mineral balance of a basin must be maintained to allow a reading of the ionic exchanges. Do not hesitate to seek advice from a professional who can guide you.

#### F.6 TROUBLESHOOTING GUIDE

#### F.6.1 CALIBRATION

After any calibration, check with your buffer baths that your probes are correctly calibrated by letting them bathe for 5 minutes in each bath and by rinsing them between each bath to avoid contaminating the buffer baths.

#### **F.6.2 FLOW DETECTION**

The flow is a sign that the circuit is working. If the controller does not receive the correct information, it will fail the processing system. When you receive a debit alert, first check: - the state of the filter - the tightness of the circuit - the water level - if a valve is closed after washing etc, so that the system returns to normal operation.

#### F.6.3 TANK LEVEL

The system calculates the consumption of the cans. Without end of container detector (optional), this calculation system is reliable if: - the power of ml/min of the dosing pump has been correctly indicated - if the suction rod has been correctly primed - if the suction rod is still primed. - when the container was changed, the volume of the container was updated. If you have the impression that your set point has not been reached, or that the level of the container does not correspond to reality, check the previous points.

#### F.6.4 SMART MODE

Your controller offers a smart mode for each device. Overall, it will gradually define the ideal operation for your basin. (machine learning)

If you find that this mode is not optimized, check the general settings: - pool volume - type of pool - basin situation Then check that the flow rate in m3 / h of your filtration pump corresponds to reality. Finally make sure you have a temperature sensor connected to the hydraulic circuit and that your PH and RX calibrations are correct.

If you have any disturbances that are not reported here, contact your customer service who will be able to advise you.

#### F.6.5 LEDS MOTHER BOARD SWITCH OFF

In the event of an overvoltage, the 2 Ampere PF1 protection fuse ensures the durability of the motherboard. In the event that the card LEDs remain off after 10 seconds, check the condition of the fuse.

#### F.6.6 RESET WIFI

You change your WIFI password, internet boxing or simply you have entered a wrong password (led D2 flashes quickly). Click for 12 seconds on the R-WIFI push button (S1) and follow the WIFI procedure.

#### F.6.7 CUSTOMER SERVICE

If you are having difficulty or simply cannot find the answer to your need in this document, please do not hesitate to contact your customer service.

#### F.7 TERMS OF USE

These conditions are concluded on the one hand between the distributor of the service or product, hereinafter referred to as the supplier and on the other hand, between any natural or legal person who uses a controller, hereinafter referred to as the user. The supplier provides a product or service specializing in machine intelligence, and to do this, offers home automation controllers, together with sensors and actuators.

#### F.7.1 OBJECT

These conditions of use have been established to give the user all the means to understand the limits of use of our controllers, and the duties and obligations of the parties. The supplier reserves the right to be able to modify these conditions of use at any time. Characteristics of the services offered: We offer controllers with sensors to facilitate the management of water, air and soil, by operating equipment. Their roles are to achieve user defined guidelines.

#### **F.7.2 THE INSTRUCTIONS**

Regarding water quality, the instructions aimed at maintaining the balance of water and its quality, according to the defined objective, must be chosen with care. Thus, PH management, if it is regulated by our controllers, must always be within the margin acceptable by the standards in force in the user sector. For the swimming pool, we accept a PH of 6.8 to 7.7. It is therefore unwise to target a setpoint below or above these values. However, our controllers being intended for swimming pools as well as for the management of water for the cultivation of cyanobacteria or plants, we leave it to the user to choose the instructions for each equipment. By accepting the conditions of use of our controllers, the user refuses to initiate any procedure against the supplier's company concerning a set value which would not be adapted to the user's environment and which would have caused material or bodily damage. As such, adjusting the value of a probe by increasing or decreasing its value virtually also involves managing the setpoint by increasing or decreasing the original value and cannot bind the supplier in the event of an error in handling or choice setpoint.

The supplier's controllers are generally delivered uncalibrated or with basic factory calibration. As such, when installing a new probe, the user must calibrate the probe with quality buffer baths and check the calibration afterwards using a second control system. values of the probe (photometry, strip) to ensure that the probe is correctly calibrated to control an automation. Some automations can jeopardize the user's objective if the probes are not correctly calibrated. As the supplier's controllers offer a very wide range of possibilities, the supplier cannot be held responsible for any failure on the part of an uninformed user. The supplier's distributors offer maintenance services for users who do not have the technical skills or the desire to manage a home automation controller.

As such, the supplier commits its users to renounce the purchase of a maintenance-free home automation controller if their experience in the «area to be managed» is not acquired or if the chosen distributor does not provide such a service.

#### F.7.3 UPDATES

System updates are performed automatically remotely without human intervention. Supplier controllers are connected controllers. During the disconnection period, if it exists, whatever the reasons, the supplier disclaims all responsibility for the execution or not of the automations activated or not by the user. The supplier's controllers accept WIFI/ETHERNET and GSM connections. In the event of prolonged disconnection for reasons independent of the user, the user must install a backup solution via a GSM key or a mobile box to ensure that the controller remains connected to the network and be able to warn the user of any anomaly via its smartphone interface (IOS and ANDROID app) Any controller not connected to the Internet cannot claim any regulatory or automatic malfunction.

#### F.7.4 SENSORS

Sensors are the basis of automation. The sensors are digital or analog products and as a result can break down, go wrong, or be improperly shaped. It is imperative to regularly check the sensor readings and compare them with a photometric or digital analysis to ensure that the controller can meet the requested automations. This periodicity depends on the environment or the season and must be appreciated by the user. The supplier disclaims all responsibility for the quality of water, air or all elements managed by the controller in the event of a fault with a probe connected to the controller. The supplier offers an algorithm and machine learning service involving sensors and third-party equipment. As such, all elements outside the controller itself do not fall under the service guarantee provided by the supplier. The user must check his sensors, his equipment and all the elements which result from it (cables, products, levels, environment ...) periodically or call on a professional of the corresponding activity sector to obtain a maintenance service derogating from it of these obligations. DIN 34 408, Part 6, recommends using a flow chamber to measure the redox potential to remove the annoying influence of oxygen from the air.

#### F.7.5 GARANTIES

The circuits of the supplier's controllers are guaranteed for 3 years against all faults, 1 year in standard exchange, and 5 years at the cost price of the circuit, within the framework of a breakdown related to the equipment itself, apart from related breakdowns. weather or poor electrical connections. The warranty involves the parts, without labor. To benefit from such a guarantee, the controller must be returned to the supplier who will carry out its inspection and dispatch within 48 hours of a new circuit. Any movement by the supplier or its distributor to make the replacement will be billed at the hourly rate in effect on the day of the intervention. Any failure occurring on a circuit, for whatever reason, cannot claim any compensation. If necessary, the supplier can send a replacement circuit on simple request to save time and notify of its warranty later on simple written request from the user.

#### F.7.6 NOMADIC MODE

By default, some connected devices cannot be controlled remotely outside the user's local network, for security reasons, such as: metering pumps, roller shutters, etc. the list is not exhaustive. The supplier declines all responsibility for quality or security for each controller connected locally via a public IP or via GSM, the user of which would have exceeded the security instructions to remotely control, outside his local scope, sensitive equipment, causing damage, even death.

#### F.7.7 INTELLECTUAL PROPERTY

All supplier circuits are and remain the intellectual and exclusive property of the supplier. No one is authorized to reproduce, exploit, rebroadcast, or use, even partially, elements whether software, visual or audio without the express written consent of the supplier.

#### F.7.7 PERSONAL DATA

Personal information relating to buyers or users may be subject to automated processing. The supplier collects information about buyers and users when placing orders or using the services of the supplier. These data are not communicated to any third natural or legal person.

#### F.7.8 ARCHIVING - PROOF

The supplier archives all the controllers' transactions on a reliable and durable medium constituting a faithful copy in accordance with the provisions of article 1348 of the Civil Code. The supplier's computerized registers will be considered by the parties as proof of the communications, records and actions of the controllers and users of the service.

#### F.7.9 USER ACCEPTANCE

The customer accepts and acknowledges that all the information he has provided will not be disclosed to third parties by the supplier but may be used for maintenance and intervention purposes in agreement with the customer. The customer accepts and acknowledges that any changes made to the settings of the home automation installation, whether software or hardware, may cause a disturbance in the water balance or the functioning of the basin equipment, or even irreversible damage to the installation. The supplier and its stakeholders cannot be held responsible for the consequences of changes made to the home automation system directly by the customer. The customer remains solely responsible for the maintenance of his environment both in terms of the balance of elements and the settings of his equipment. The supplier and its stakeholders cannot be held responsible for IT problems, in particular security, resulting from an attack of the virus, phishing, hacking, malware or other type which may cause disturbances or disturbances in the functioning of home automation equipment.

#### F.7.10 LITIGATION

These conditions of use are subject to French law. In the event of a dispute, the court of the city of registration of the supplier's company will have sole jurisdiction, or if this is not the case, the court of Paris representing the manufacturer will have sole jurisdiction.



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