SMS Pump Controller

Model: NTSMS-P01

SMS/GSM based Pump Controller

- *Configurable through SMS*
- *Get SMS alert on every event*
- *On/Off control by sending SMS*

General Description:

Nelso™ is manufacturer of SMS/GSM based Pump Controller. It also generates SMS alert when turned On/Off by sending SMS Command and giving missed call.

Features:

- Completely Configurable through SMS
- Five mobile numbers can be stored for controlling the device
- Get SMS alert on every event.
- Automatic Pump On/Off by setting three schedule timer
- On/Off control by sending SMS

Applications:

- Agriculture
- Home
- Industry
- Appertment
- School

Quick Reference Data:

Model No.	Input Voltage	Output Type	Contact Current	Compatible with
NTSMS-P01	230V AC	Potential free relay contact	15A	All Pump Sets

Quick installation:

Remove top cover of the controller.
Make sure that the power switch is off.
Insert a SIM card with SMS balance into the SIM card holder.
Close the top cover.
Connect 230V AC to the connector of the controller as marked.
Connect GSM antenna.
Connect RL1 and RL2 with START button and RL4 with stop button of your existing panel as described below
Turn on the power switch.

LED Indication:

GSM LED: It blinks every second when searches for network and every 3 seconds upon getting network.
OP LED: It turns On when the pump is On and blinks 5 times at the time of sending SMS.

Configuring the device through SMS:

Save a User No. ($UNx9874228400$) Default - Blank:
All SMS command must be started and ended with $ symbol. Controller can save up to 5 user's mobile nos. and send SMS alert to them. Registered users can also control (On/Off) the Pump. Factory settings is blank. Any one can save first user's no. by sending SMS to the device. After that only registered users can save, delete or alter other user's nos. All mobile nos. should be 10 digits. For example to save first user no. send SMS **$UN19874228400$** from any mobile no. Now only first user can save other user's nos. For saving second user's no. sand SMS **$UN29088999888$**. Here **UN1** to **UN5** denotes five users. All commands mentioned below should be from registered mobile numbers only if not specially mentioned.

List of saved user's nos. (LST):
Send LST to get list of users in return SMS. You can send this command from any mobile no.

Delete a User No. ($DELx$):
Here x denotes user's position. For example to delete third user send SMS $DEL3$.

Set scheduled On and Off ($SHDx hh:mm-HH:MM$) :
You may set 3 schedule to turn the pump On and Off in daily basis. After setting a schedule the controller will switch to Auto mode until you operate it manually by sending SMS or miss call. Here x denotes the schedule number and it will be 1,2 or 3 for three scheduling. **hh:mm** denotes **from time** and **HH:MM** denotes **to time**. Time is in 24hr format. For example if you wish to turn the pump on at 5:45PM and Off at 6:05PM then send SMS **$SHD1 17:45-18:05$**. **From time** should be less than **to time**.

GET saved schedule information ($SHD?$):
Send SMS $SHD?$ to get saved schedule list.

Clear particular schedule ($CLRx$):
To clear a saved schedule send SMS $CLRx$ where x denotes schedule number and it wiil be 1, 2 or 3.

Status Report (STA):
If you send **STA** then the controller will return pump On/Off Status and main line status.

Pump On/Off:
Send ON from registered mobile to turn the pump On and send OFF to turn it off. You can also turn the pump On/Off by calling the device SIM Number. Device will automatically drop the call after few rings. If you manually On/Off the pump by sending SMS/missed call, the device will switch to manual mode and scheduled On/Off facility will be deactivated.

Manual Mode (MAN):
Disable scheduled on/off features. Manual pump On/Off through SMS and miss call.

Auto Mode($AUTO$):
Switch the device to automatic pump On/Off as per schedule

Auto generated notification On/Off:
Send NON to on auto generated notifications which are fired at the time of scheduled pump On/Off and send NOF to turn it off.

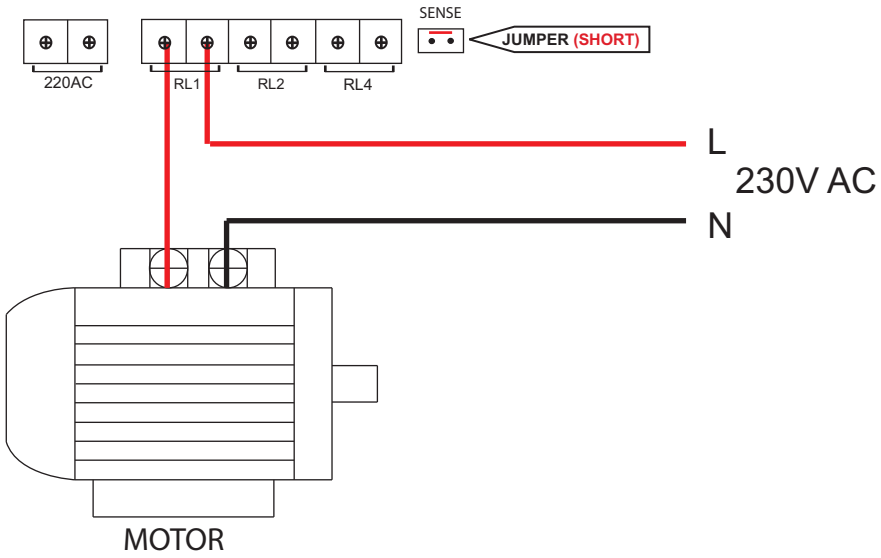
Working principle:

RL1, RL2 and RL4 are potential free contacts. RL1 and RL2 are parallel and NO contacts but RL4 is NC contact. The jumper at sense point should be open if the device is connected with a panel which has Green START and Red STOP button. RL1 and RL2 will short to start the pump and then open again after 500 ms together. 2/4 wires from RL1 and RL2 will connect with 2/4 points of green start button parallely. RL4 will connect in series with any one contact in Red STOP button. This is normally closed contact but to stop the pump it opens for 1 second and again close.

The jumper should be short if the pump is connected with a piano type switch. In that case RL1 and RL2 will remain short until the pump is On. As RL1 and RL2 shorts and opens together, you may use these two relays parallely to increase the current rating. RL4 has no use in this connection.

In case of power failure the device will store last state of pump and resume it when it will get power again.

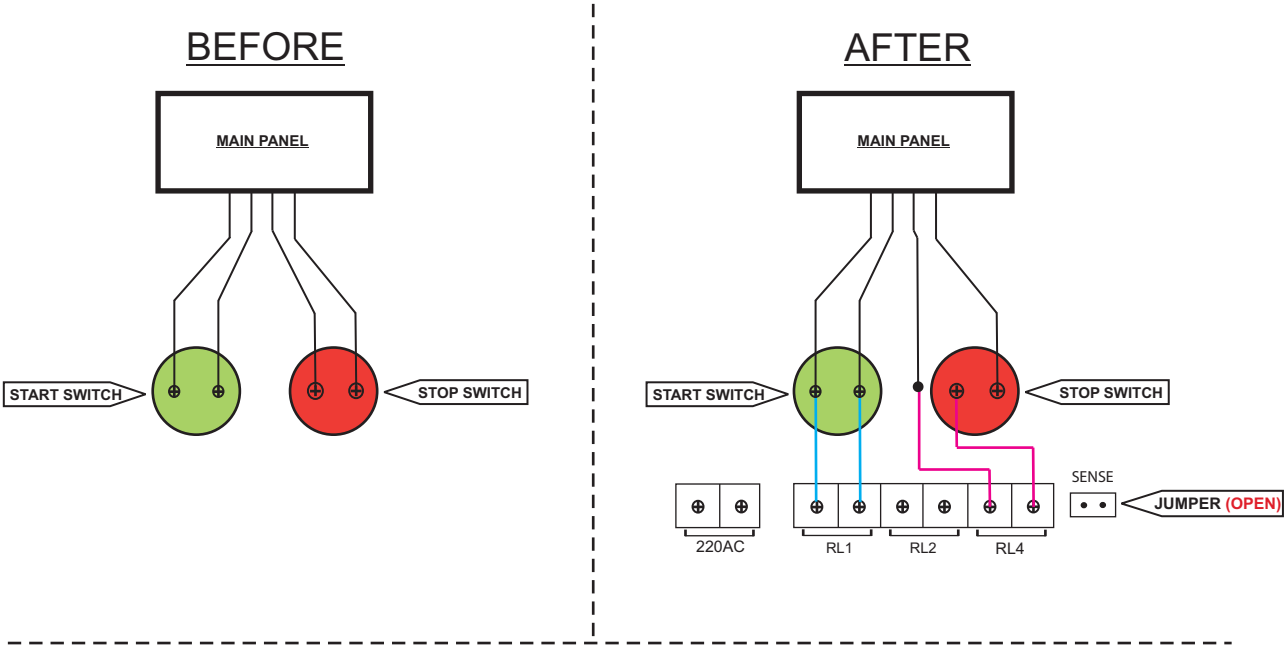
Connection Diagram for Piano type switch:



Starter type panel connection diagram:

Control Panel with START and STOP switch and each switch has two terminals (connections) behind it.

Note: Must keep the jumper open (Extended Mode).



Control Panel with START and STOP switch and START switch has four terminals (connections) behind it.