NINA™ Liquid Level Controls is the optimum choice for any situation requiring the precise control of a water level. It is ideal for automatically maintaining the correct level in liquid environment using the correct sensor style and type including but not limited to towers, storage tanks, or process water applications.

NINA™ Liquid Level Controls may look like the competition but the unit is revolutionary in its design. The NINA™ is perfect in any application where water level management is important. It uses a microprocessor that monitors all probes for correct operation and then provides the corresponding outputs to drive the dry contacts. By using a very low voltage and current, NINA probes never foul or degrade whenever using solid state sensors like the ones we offer.

⚠️ WARNING: Make sure you power the module as it was factory set, otherwise it will be destroyed and not warranted (24V AC or 24V DC) factory set.

**IMPORTANT SAFETY INSTRUCTIONS**

1. Call the factory with any questions. 1-888-905-1892 or write to: System Dynamics Inc., P.O. BOX 12544, Scottsdale, AZ 85260
2. Read and follow all instructions.
3. Only qualified personnel should install this unit or replace the "replaceable" parts.
4. Only factory supplied parts should be used whenever a replaceable part is needed.
5. The manufacture will not be liable for any injury or damage that may arise from the misuse of this unit or from failure to follow all of these instructions.
6. Save these instructions and provide them to the end user.
7. Use copper (CU) wire only for all connections.
<table>
<thead>
<tr>
<th>SOCKET</th>
<th>FILL</th>
<th>DUAL FILL</th>
<th>PUMP</th>
<th>SENSOR COLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relay Common(s)</td>
<td>Relay Common(s)</td>
<td>Relay Common(s)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Fault Relay</td>
<td>Fault Relay</td>
<td>Fault Relay</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>High Alarm Relay</td>
<td>High Alarm Relay</td>
<td>High Alarm Relay</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Fill Relay</td>
<td>Fill 1 Relay</td>
<td>Drain 1 Relay</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Low Alarm Relay</td>
<td>Fill 2 Relay</td>
<td>Drain 2 Relay</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>HCO Relay</td>
<td>Low Alarm Relay</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>High Alarm Sensor</td>
<td>High Alarm Sensor</td>
<td>High Alarm Sensor</td>
<td>Green</td>
</tr>
<tr>
<td>8</td>
<td>Fill OFF Sensor</td>
<td>Fill 1 &amp; 2 OFF Sensor</td>
<td>Pump 1 ON Sensor</td>
<td>Red</td>
</tr>
<tr>
<td>9</td>
<td>Fill ON Sensor</td>
<td>Fill 1 ON Sensor</td>
<td>Pump 1 OFF Sensor</td>
<td>White</td>
</tr>
<tr>
<td>10</td>
<td>Low Alarm Sensor</td>
<td>Fill 2 ON Sensor</td>
<td>Pump 2 ON Sensor</td>
<td>Brown</td>
</tr>
<tr>
<td>11</td>
<td>HCO Sensor</td>
<td>Low Alarm</td>
<td>Pump2 OFF Sensor</td>
<td>Blue</td>
</tr>
<tr>
<td>12</td>
<td>Common Sensor</td>
<td>Common Sensor</td>
<td>Common Sensor</td>
<td>Black</td>
</tr>
<tr>
<td>13</td>
<td>Power In</td>
<td>Power In</td>
<td>Power In</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Power In</td>
<td>Power In</td>
<td>Power In</td>
<td></td>
</tr>
</tbody>
</table>

**FILL**

**RELAY OUTPUTS**

- Relay Coils Only

- 14 FAULT
- 14 HCO
- 14 LA
- 14 FILL

**DUAL FILL**

**RELAY OUTPUTS**

- Relay Coils Only

- 14 FAULT
- 14 HA
- 14 FILL 1
- 14 FILL 2

**PUMP**

**RELAY OUTPUTS**

- Relay Coils Only

- 14 FAULT
- 14 PUMP 1
- 14 PUMP 2
- 14 LA

*It is okay to use the same power source for dry relays to drive external relay coils.*

*The Sensor colors are related to our standard sensor colors.*

**THESE ARE DRY CONTACTS**

24V AC or 24V DC Max @ 0.25A Max

24V AC or 24V DC Max @ 0.25A Max

24V AC or 24V DC Max @ 0.25A Max

System Dynamics, Inc.
P.O. Box 12544
Scottsdale, Arizona 85260
Toll Free: 888-905-1892
info@waterlevelcontrols.com
www.waterlevelcontrols.com
SAME POWER SOURCE

POWER 13
4 2
3
1
4
5
6
14
EXTERNAL COIL FOR ANY RELAY

SEPARATE POWER SOURCE

POWER B

POWER A

EXTERNAL COIL FOR ANY RELAY

Shield from Sensor wire

Sensor Wire Shield

Multiconductor Shielded Wire
(or Water Level wire or Beldon Shielded)

Do not connect wire shield on this end.

Solid state sensor from any manufacturer.

2” or 3”

NINA liquid level controls

MODULE

Shielded Wire

NEMA 4

WIRE COLOR CODES vs NUMBER OF CONDUCTORS

PROBE LENGTH

FUNCTION, COLOR CODES FOR PROBES


FUNCTION, COLOR CODES FOR PROBES


Suggested Nina Panel for 3 Floats System

Float Switch Options

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