

INTRODUCTION

The Unitech Low Level Alarm Module (LLAM) is used to detect low levels in Laundry Chemical Containers and give an early visual warning to the users. Chemicals will be replenished before they run out, ensuring that clothes will be washed properly.

SPECIFICATIONS

- Attaches to Unitech Main Controller Module using standard Satellite interface
- Detects up to eight chemical levels simultaneously
- Gives clear message and lights Alarm LED when one or more chemicals need replacing
- Automatically resets low chemical alarm when chemicals are replenished
- Connects to simple float switches with normally open dry contact switches
- Includes eight individual front-facing LEDs to indicate one to eight low levels
- Clearly marked screw terminal connections for each low level sensor
- Two screw terminals for all eight sensor common connections

OPERATION

See the following pages for installation steps. After installation is complete, insert the level sensors into the chemical containers and apply power to the Unitech Laundry system. You should see the following message for several seconds on the LCD:

LLA Found
SubDevice #1

This means that the Main Controller detected the attached Low Level Alarm Module and it will check it continuously to see if any chemicals are low.

Whenever the Main Controller gets a low chemical message from the LLAM for at least five seconds, it will display the following message on the LCD:

CHEMICALS LOW OR
EMPTY-REFILL

The Alarm LED will also turn on and stay on until the low chemicals are replenished.



CAUTION: Wear protective clothing and eyewear when dispensing chemicals or other materials. Observe safety handling instructions (MSDS) of chemical mfrs.



CAUTION: To avoid severe or fatal shock, always disconnect main power when servicing the unit.

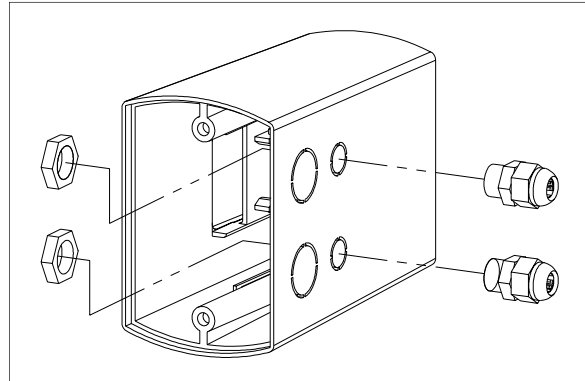


CAUTION: When installing any equipment, ensure that all national and local safety, electrical, and plumbing codes are met.

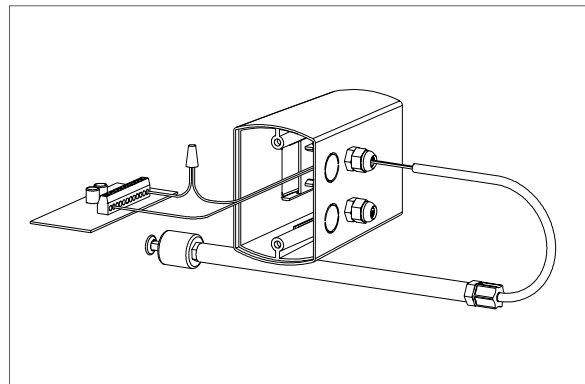
INSTALLATION

CAUTION: Ensure all power is off before the LLA, Float switch or any other option is added to the UNITECH system.

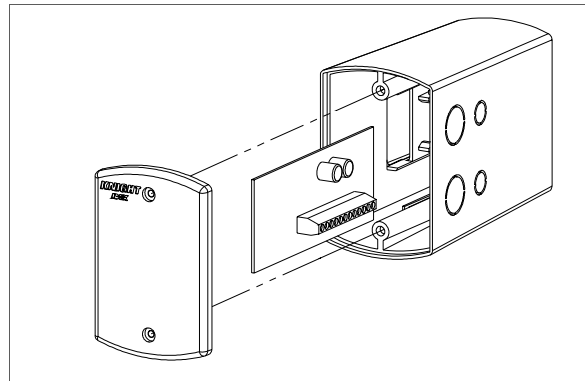
- (1) Break away the desired small hole knock out (Remove the board to ensure it is not harmed in the process). Install the small strain relief(s) to hold the wires and create a moisture-proof seal.



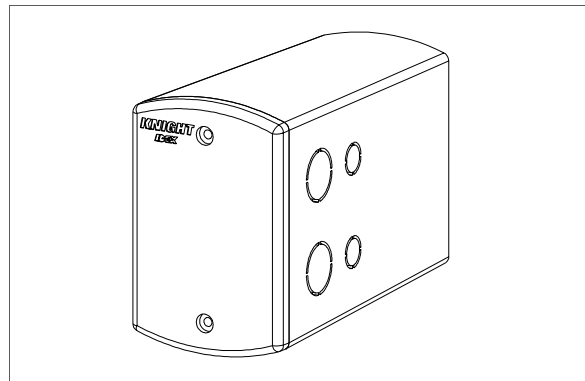
- (2) Route wire pairs for all low level sensors through the strain relief(s). Connect one wire from each sensor to corresponding terminal connection (AL-1 to AL-8). Be sure to note which sensor is connected to which terminal. Connect the other wire from the sensors to one of the GND terminal connection. Use the provided wire nuts to join GND connections together to reduce the number of leads going into the GND terminal. If using the SA-12 Alarm option (7112130) connect wires of the Alarm to the LLA. The red wire to the +24, connect the black wire to one of the two GNDs, and connect the brown wire to the AOUT.



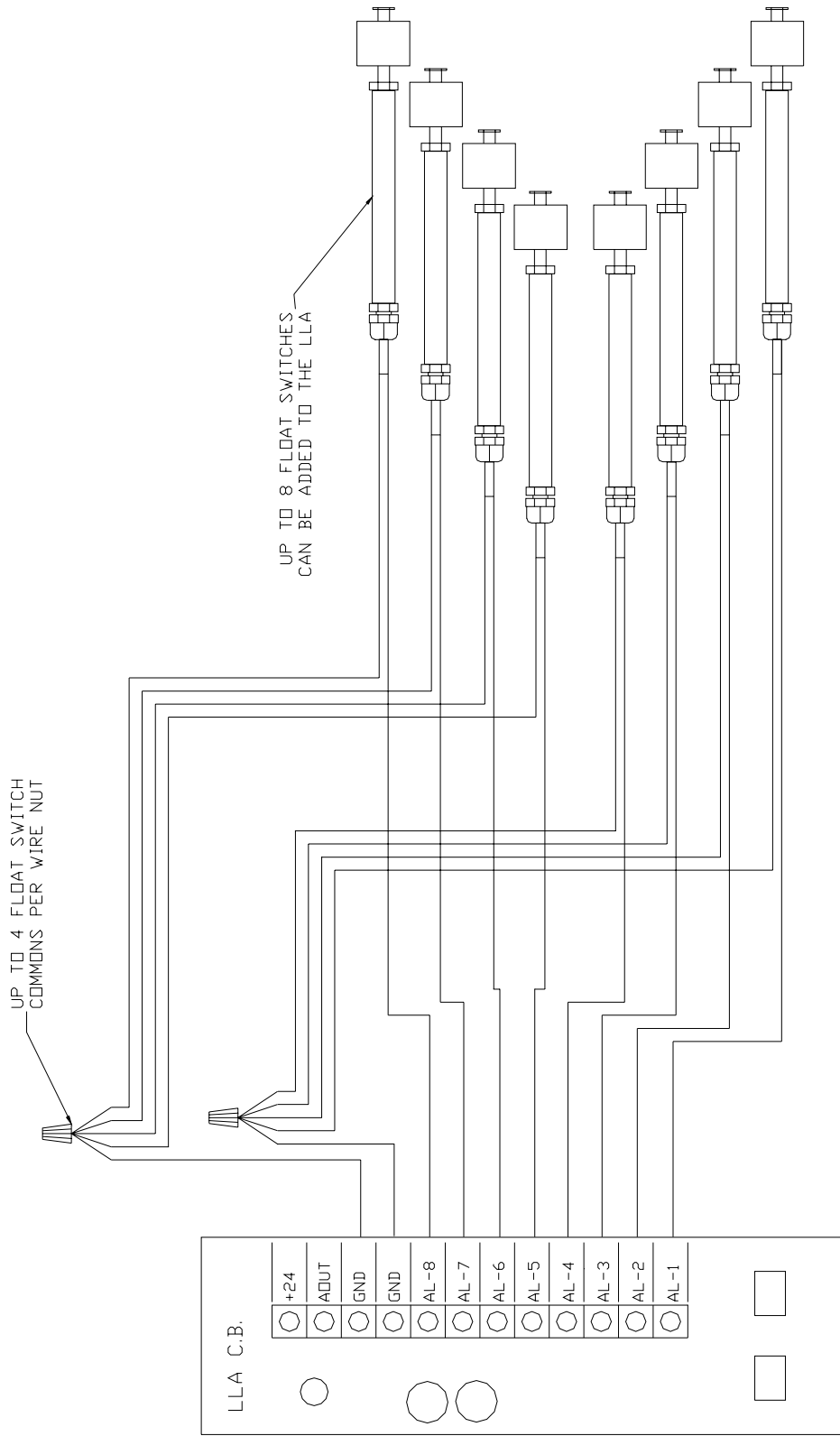
- (3) Slide the LLA into the pair of internal slots closest to the side holes. Ensure no wires are in the way, slide the board back all the way. Note the D5 to D12 markings indicate the eight low level alarm LEDs.



- (4) Screw the front cover on the enclosure. The LLA is now ready to be attached to the right side of the Main controller or any pump Satellite module. Ensure the Main controller is powered down before installing the LLA.



WIRING DIAGRAM



DISCLAIMER

Knight LLC does not accept responsibility for the mishandling, misuse, or non-performance of the described items when used for purposes other than those specified in the instructions. For hazardous materials information consult label, MSDS, or Knight LLC. Knight products are not for use in potentially explosive environments. Any use of our equipment in such an environment is at the risk of the user, Knight does not accept any liability in such circumstances.

WARRANTY

All Knight controls and pump systems are warranted against defects in material and workmanship for a period of ONE year. All electronic control boards have a TWO year warranty. Warranty applies only to the replacement or repair of such parts when returned to factory with a Knight Return Authorization (KRA) number, freight prepaid, and found to be defective upon factory authorized inspection. Bearings and pump seals or rubber and synthetic rubber parts such as "O" rings, diaphragms, squeeze tubing, and gaskets are considered expendable and are not covered under warranty. Warranty does not cover liability resulting from performance of this equipment nor the labor to replace this equipment. Product abuse or misuse voids warranty.

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