



USER MANUAL

MODEL:

ALX-LITE

Chemical Allocation Controller

English (Original Instructions)

Updated: 03/24/2021



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WARNING:

- Avoid contact of chemicals with skin and eyes. If contact occurs, see MSDS sheet for further first aid measures.
- Always wear appropriate PPE
- Follow safety instructions of chemical manufacturer (MSDS).
- Always follow plant and OSHA guidelines about the use of equipment.
- Disconnect power before servicing equipment.

Overview

The ALX-LITE is a simple, entry-level time-based chemical dispenser for dispense Applications. It restricts access to chemicals to only authorized individuals either with a 4 digit access code or HID RFID card (optional add-on).

The ALX-LITE is designed to accommodate dispense applications for up to 6 chemicals at a time. Dispenses are controlled via simple fixed-time values with the option of multiple products per dispense Application, if desired. New Applications are set up directly on the unit and can be modified at any time. The controller also records all chemical consumption data into a simple .CSV file format that can be downloaded to a USB drive for review.

Terminology

- **Users** - The people who will be using the system to dispense Applications. Up to 999 users can be stored.
- **Devices** - The physical outputs and/or inputs that connect to the controller to perform a function. The ALX-LITE is compatible CAN-SO-1 and CAN-SO-4 solenoid valve output devices.
- **Applications** - Recipes which determine the type and sequence of Dispense Steps. Up to 999 recipes can be stored.
- **Dispense Step(s)** - Segments of an Application that determine which output Device will be energized and for how long. 1-6 steps can be used per an Application.
- **Fixed Time Step** - Will energize an output Device for a specified amount of time. Reported Step volume must be manually entered.

Specifications

Software

- Maximum number of Users: 100
- Maximum number of Applications: 999
- Maximum Dispense Steps per Application: 6
- Dispense Step time range: 00.1s - 99m:99.9s
- Permissions time range: 1-24 hours
- Max Permissions count: 99

Hardware

- Maximum number of Devices: 16*
- Dimensions: 12" x 10" x 7"

NOTE: A single CAN-SO-4 counts as 4 Devices.

Acceptable Chemical Products

- Acids
- Caustics
- Sanitizers
- Chlorine

Acceptable RFID Card Types:

ProxCard® II	Proximity®
ISOProx® II	ProxCard® Plus
DuoProx® II	ProxKey® II
Smart ISOProx®	MicroProx®
DuoProx® II	MIFARE®

NOTE: Only Prox® RFID cards are accepted. iClass cards will not register.

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READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



Installation Requirements

Electrical

- 110 VAC, 5A, Single Phase, 50-60 Hz
- NEMA 5-15 GFCI Protected Outlet
- Surge suppression recommended

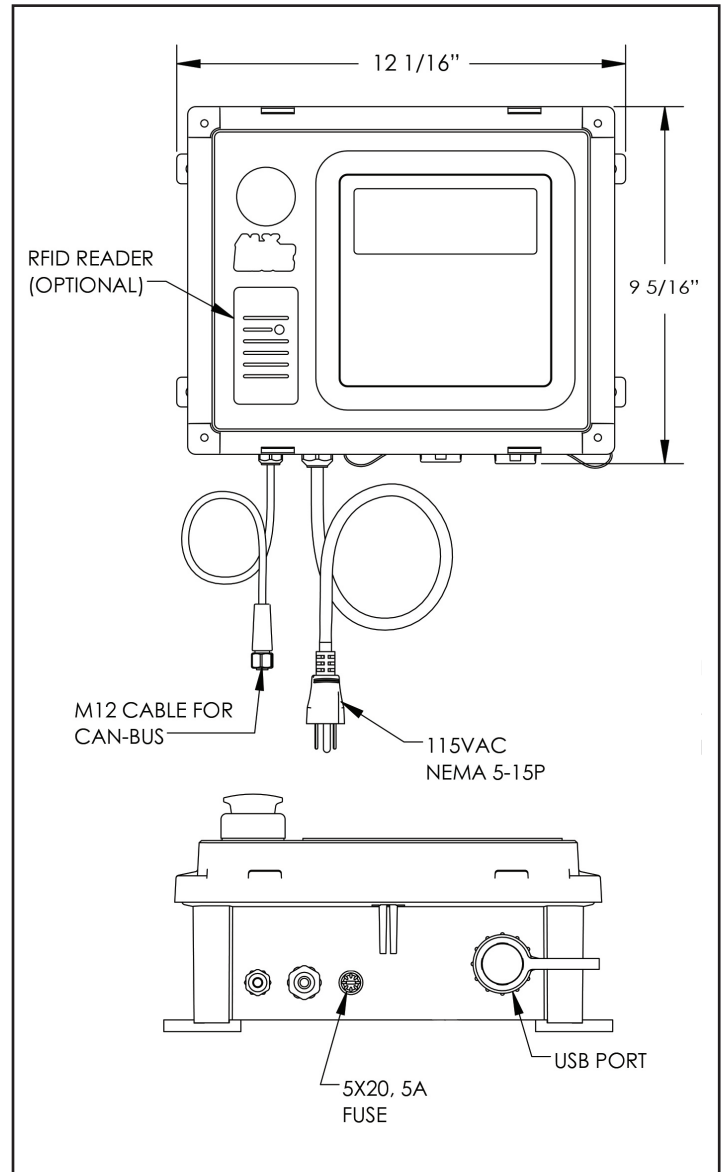
Compressed Air (typical installation)

- Clean, dry air
- 10 CFM (283 L/min) @ 80 psi (5.5 bar) minimum
- 100 psi (6.9 bar) maximum supply pressure
- Recommended regulator setting: 80 PSI (5.5 bar).

Water Supply (typical installation)

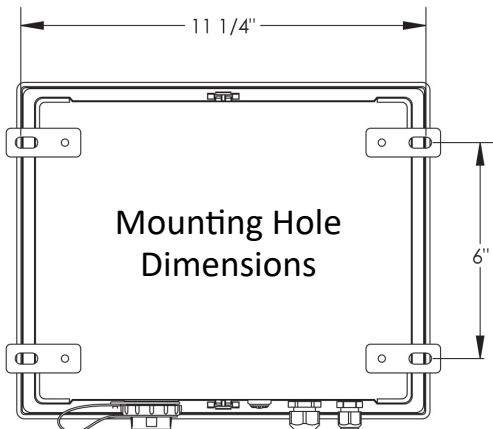
- Cold Portable Water
- 7 GPM (26.5 Lpm) @ 35 psi (2.5 bar) minimum
- 100 psi (6.9 bar) maximum supply pressure
- Recommended regulator setting: 50 PSI (3.4 bar).

NOTE: A back flow preventer must be installed in the water supply to this unit, per local codes.



Mounting Controller

- Determine mounting location, with consideration of the following:
 - User accessibility
 - Distance to electrical outlet
 - Distance to Devices/pumps
- Attach the included mounting feet to the controller.
- Securely mount unit to wall using appropriate hardware (not included).
- Plug power cord into a 115 VAC, GFCI protected receptacle.



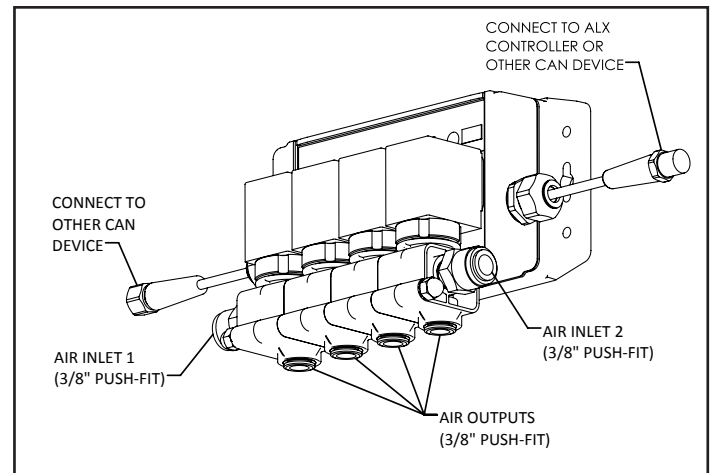
Connecting Devices

The following types of Devices are compatible with the ALX-LITE:

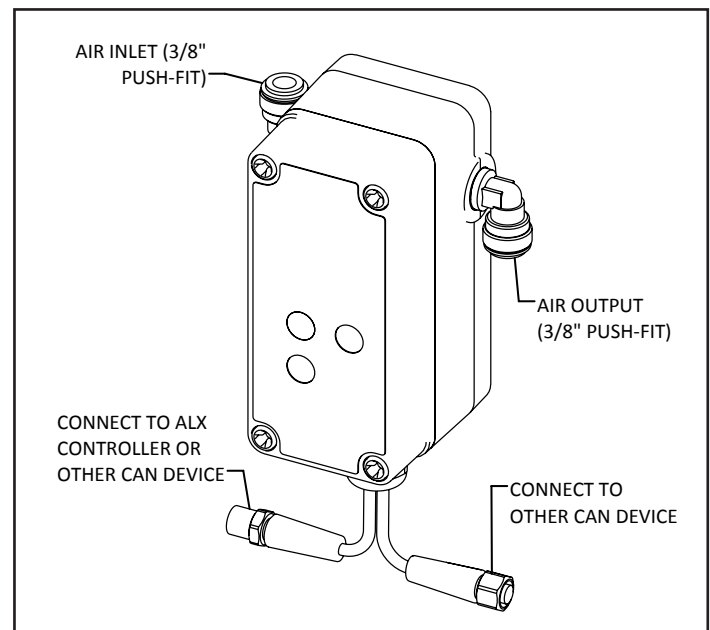
- **CAN-SO-4:** A four output, 3-way solenoid valve pack for controlling 1/2" or smaller AODD pumps and/or air operated valves
- **CAN-SO-1:** A single output, 2-way solenoid valve for controlling up to a 1" Air Operated Double Diaphragm (AODD) pumps

Continued on next page

CAN-SO-4



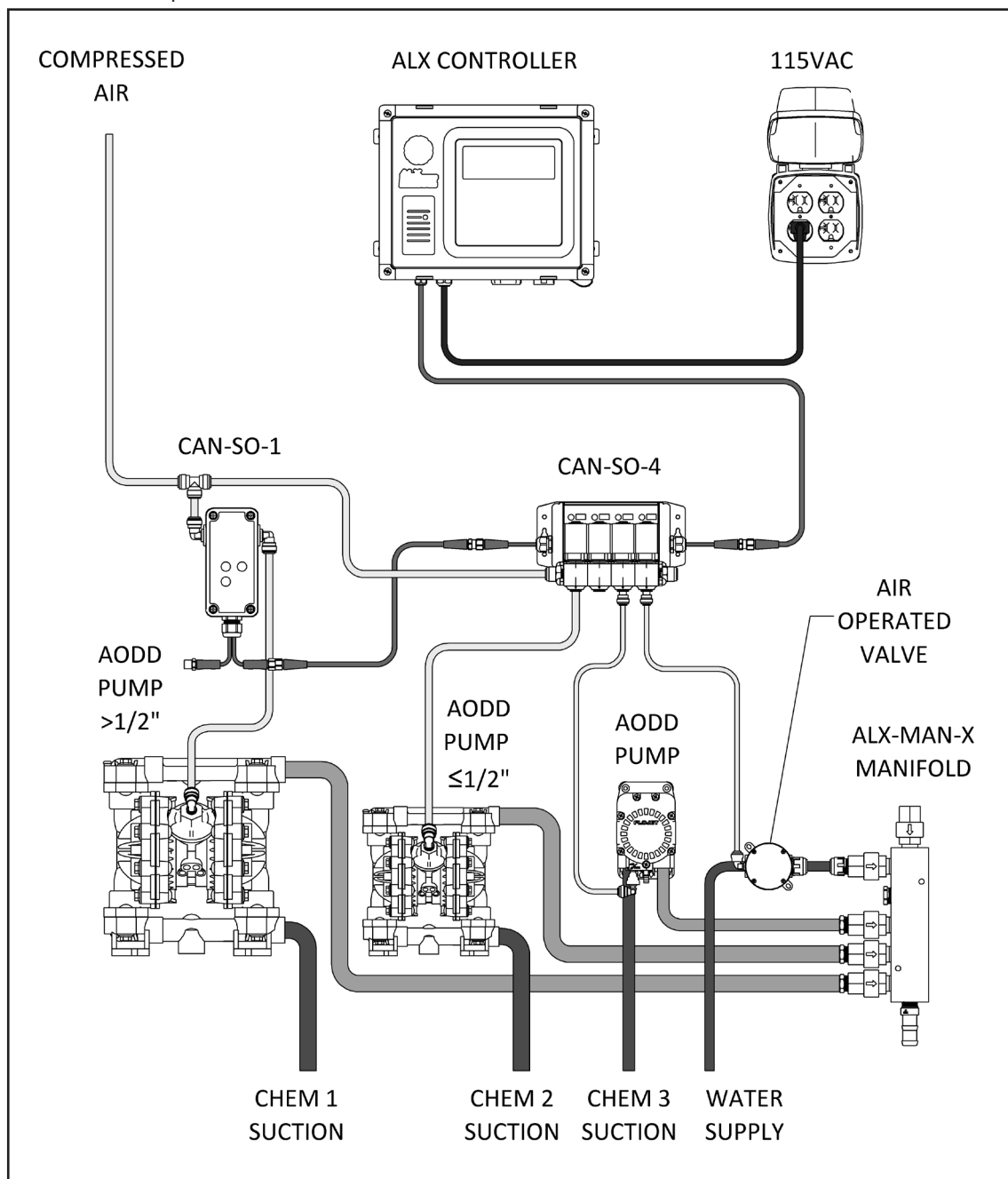
CAN-SO-1



Connecting Devices (continued)

- Mount and connect Devices in a daisy-chain fashion using the orange M12 cables. They can be installed in any order. (NOTE: If purchased as a -KIT, the Devices will be supplied pre-mounted and connected)
- Hand tighten M12 cable connections, then tighten two more clicks using wrenches.
- Plumb compressed air lines and fluid lines for pumps and valves as necessary [see below]

Installation Example



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Notes:

Notes section with 18 horizontal lines for writing.

- General
- Installation
- Configuration
- Operation
- Troubleshooting
- Appendices



This section explains how to setup the ALX-LITE using the built-in keypad and screen.

Administrator Login

- Press the **ADMIN** key.
- Type in a 4-digit administrator passcode.

NOTE: The default Administrator user passcode is **1234**. This passcode can be changed under the “Users” section.

NOTE: Users will be automatically logged out after 1 minute of inactivity for security.

```
LITE Admin Menu
1-Users
2-Devices
3-Applications
4-Unit Info/Config
5-Set Date & Time
6-USB Options
7-Network Setup
8-Reporting
```

Users

Adding a User

- Log in as an administrator.
- Use **↑** and **↓** keys to select **Users** and press **ENTER**.
- Select **00-Add New User** and press **ENTER**.
- Enter a Name and a 4-digit Passcode.
- Use **→** and **←** keys to grant or deny Administrator privileges.
- If equipped, an RFID card can be scanned to populate the RFID field.

NOTE: Each user must have a unique 4-digit passcode.

NOTE: Only one RFID card can be assigned per user, cards cannot be shared between users.

NOTE: For RFID cards to be used, the unit will have to be configured for RFID permissions (see page 14).

- Press the **ESC** key to exit.
- When prompted to save changes, press **ENTER** to save or **ESC** to cancel.

```
Edit Users
>00-Add New User
01-administrator
```

```
Editing User #02
Name: Jason
Password: 1234
Admin: >NO< YES
RFID: 000000000000
(DELETE Entry)
```

```
Editing User #02
<SAVE Entry>
ENTER to save
ESC to ignore
```


Users (continued)

Editing a User

- Select a user in the list and press **ENTER**.
- Edit the user settings as necessary
- Press the **ESC** key to exit.
- When prompted to save changes, press **ENTER** to save or **ESC** to cancel.

```

Edit Users
00-Add New User
01-administrator
>02-Jason
    
```

```

Editing User #02
Name: Jason
Password: 1234
Admin:    >NO< YES
RFID: 0000000000
(DELETE Entry)
    
```

Deleting a User

- Select a user in the list and press **ENTER**.
- Use the ↓ key to scroll to the bottom of the screen.
- Select (DELETE Entry) and press **ENTER**.
- When asked to confirm, press **ENTER** again.

```

Editing User #02
Name: Jason
Password: 1234
Admin:    >NO< YES
RFID: 0000000000
> Are you SURE?
    
```



CAUTION:

The unit will always require at least one user to be an administrator. Be careful not to delete all of the administrators!

Devices

Adding a Device

- Make sure devices are connected and green lights are illuminated.
- Log in as an administrator.
- Use **↑** and **↓** keys to select **Devices** and press **ENTER**.
- Select a device from the list and press **ENTER**.

NOTE: When new Devices are first connected, they will appear in the Device list with the name "CONFIG PUMP"

TIP: A red indicating light will blink on the currently selected device

- Type in a name for the device
- Select the Device Type:
 - AODD PUMP** - Constant output
 - Valve** - Constant output
 - Piston Pump** - Pulsed output with user defined stroke Volume and ON/OFF cycle Time.
- If Piston Pump is selected, enter stroke volume and ON/OFF Time
- If you wish to prime, press the **START** key to turn the Device output on and press **STOP** when to turn off.



WARNING:

Pressing the **START** key on this screen will cause the output to turn on and the pump to run! Wear PPE and be ready to contain the flow of chemical in an appropriate vessel!

- Press the **ESC** key to exit.
- When prompted to save changes, press **ENTER** to save or **ESC** to cancel.

```
Edit Devices
>0555-CONFIG PUMP
0875-CONFIG PUMP
0689-Water (Red)
```

```
Editing Device #0555
Demo Chemical
Type:  AODD Pump
Prime (Start/Stop)
(DELETE Entry)
```

```
Editing Device #0555
Demo Chemical
Type:  Piston Pump
Prime (Start/Stop)
Volume: 000.00oz
ON Time: 00.0s
OFF Time: 00.0s
(DELETE Entry)
```

```
Editing Device #0555
<SAVE Entry>
ENTER to save
ESC to ignore
```


Devices (continued)

Deleting a Device

- Select a Device in the list and press **ENTER**.
- Use the ↓ key to scroll to the bottom of the screen.
- Select (DELETE Entry) and press **ENTER**.
- When asked to confirm, press **ENTER** again.



```
Editing Device #0555
Type:  A0DD PUMP
Prime (Start/Stop)
>  (DELETE Entry)
```



```
Editing Device #0555
Type:  A0DD PUMP
Prime (Start/Stop)
>  Are you SURE?
```

Applications

The **ALX-LITE** is designed to accommodate multiple step dispense applications for up to 6 chemicals at a time. Dispenses are controlled via simple time values with the option of multiple products per dispense Application. New Applications are set up directly on the unit and can be modified at any time.

Adding an Application

- Log in as an administrator.
- Use **↑** and **↓** keys to select **Applications** and press **ENTER**.
- Select **00-Add New APP** and press **ENTER**.
- Enter a 3-digit Access Code and a Name.

NOTE: Each Application must have a unique 3-digit code.

- Select **Add dispense step** and press **ENTER**.
- Select a Device. The Device name will be displayed below.
- Set the On Time for the Fixed Time Dispense Type:
 - Fixed Time** - Will energize the Device for the amount of time specified in the **Time:** field and requires **Volume:** to be manually entered for Reporting purposes.

NOTE: If the Device is configured as a Piston Pump, the **Type:** field will show **Piston Pump**. **Volume:** must be manually entered and **Time:** is automatically calculated.

- Press **ESC** to return to previous screen.
- Repeat steps 5-7 above to add more dispense steps or press **ESC** if finished.
- When prompted to save changes, press **ENTER** to save or **ESC** to cancel.

```
Edit Applications
>000-Add New APP
001-Demo APP 1
```

```
Editing APP #123
Name:Demo APP 2
APP Long ID:
Demo Application 2
>Add dispense step
```

```
APP# 123 Step# 1
Device #0689 A000
Name:Water (Red)
Time: 000m:15s
Volume:
000.50GAL 000.00 oz
<DELETE Entry>
```

```
Editing APP #123
Name:Demo APP 2
Step#1-Water (Red)
Step#2-Demo Chemic
Add dispense step
<DELETE APP>
```

Applications (continued)

Deleting a Dispense Step

- Select an Application in the list and press **ENTER**.
- Select the **Step#** you wish to delete and press the **DEL** key.
- When asked to confirm, press **ENTER** to save or **ESC** to cancel.

OR

- Select the **Step#** you wish to delete and press **ENTER** to open its Edit screen.
- Use the **↓** key to scroll to the bottom of the screen.
- Select **<DELETE Entry>** and press **ENTER**.
- When asked to confirm, press **ENTER** again.

```
Edit Applications
000-Add New APP
001-Demo APP 1
>123-Demo APP 2
```

```
Editing APP #123
Name:Demo APP 2
Step#1-Water (Red)
>Step#2-Demo Chemic
Add dispense step
(DELETE APP)
```

```
APP# 123 Step# 1
Device #0689 A0DD
Name:Water (Red)
Time: 000m:15s
Volume:
000.50GAL 000.00 oz
> <DELETE Entry>
```

Deleting an Application

- Select an Application in the list and press **ENTER**.
- Use the **↓** key to scroll to the bottom of the screen.
- Select **<DELETE APP>** and press **ENTER**.
- When asked to confirm, press **ENTER** again.

```
Time:000m:15s
Volume:
000.50GAL 000.00oz
> <DELETE APP>
```

```
Time:000m:15s
Volume:
000.50GAL 000.00oz
> Are you SURE?
```

Unit Info/Configuration

- Log in as an administrator.
- Use **↑** and **↓** keys to select Unit Info/Config and press **ENTER**.
- Use **↑** and **↓** keys to select an option and **→** and **←** keys to change selections
 - Login Level:** Switches the user login between Users, RFID, and Admin

NOTE: When User Login is set to Admin, the bottom of the home screen will not require a login code and will read Press START To Begin. When set to Users or RFID, the screen will read Enter Passcode and requires Users to enter their 4-digit passcode or scan their RFID card (if applicable).

- Login Level:** Turns dispense log recording on and off.
- Language:** sets the default language that the controller will revert to each time it is rebooted.
- Units:** Imperial (Gal, oz) or Metric (L, ml)
- Version #:** Identifies the software version installed
- Built On:** Identifies the date when the unit was created by manufacturer.

```
Unit ID#: 123456
Login Level: Users
Logging: ON
Language: English
Units: Imperial
Version #: 106
Built On: 01/11/2017
```

```
01/11/2017 01:27PM
CleanLogix ALX-LITE
Welcome!
Press START To Begin
```

```
01/11/2017 01:27PM
CleanLogix ALX-LITE
Welcome!
Enter Passcode
```

Set Date & Time

- Login as an administrator.
- Use **↑** and **↓** keys to select Set Date & Time and press **ENTER**.
- Use **→** and **←** keys to select a field and **↑** and **↓** keys to change it.
- Press **ESC** to exit.

```
Date
M: 01 D: 11 Y: 2017
Time
H: 04 M: 10 PM
```

USB Options

The ALX-LITE includes a 8GB USB drive already plugged into the port on the bottom of the controller. The controller will store dispense logs on this USB drive, which can be retrieved manually at anytime. The USB drive can also be used to import and export controller settings (Users, Devices, Applications) and for software updates.

⚠ CAUTION:

Leave a USB drive plugged into the unit at all times, except when manually retrieving logs or importing/exporting. If the USB drive is removed indefinitely or for long periods of time, the controller will be unable to record data!

```

USB Options
Update USB logs
Export configs
Import users
Import apps
Import devices
Update firmware
    
```

Export Settings

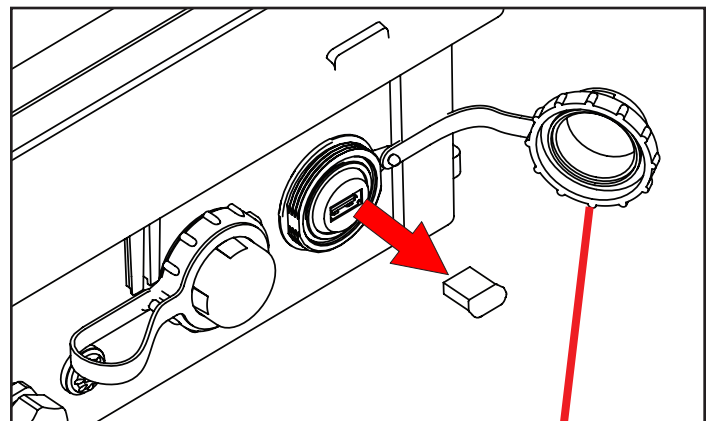
This will export the controller settings for Users, Devices and Applications. It will create a file for each on the USB drive with the suffix **export.db**.

- Make sure a USB drive is plugged into the controller port.
- Log in as an administrator.
- Use **↑** and **↓** keys to select **USB Options** and press **ENTER**.
- Use **↑** and **↓** keys to select **Export configs** and press **ENTER**.

Import Settings

This will import previously saved settings for Users, Devices and Applications.

- Follow the steps above to export settings onto a USB drive and plug it into a laptop.
- Save a copy of each **export.db** file to be imported and rename each to **import.db**
- Plug the USB drive back into the controller
- Use **↑** and **↓** keys to select **Import** for the items to be imported and press **ENTER**.



⚠ CAUTION:

Always make sure to install and tighten the protective cap after the USB flash drive is re-inserted. If using a flash drive other than the one included, make sure the protective cap will still fit in place and screw on all the way!

EXAMPLE: **usersExport.db** will be copied and renamed **usersImport.db** in the same file location.

NOTE: When importing settings, the system will automatically reboot when finished.

Dispensing an Application

- If the screen says Press **START** to Begin, Press **START**.
- If the screen says Enter Passcode, Type in a 4-digit passcode or swipe a valid RFID card.
- Select an Application either by using the **↑** and **↓** keys, then press **ENTER** to select the Application.

TIP: You can use the number keys to begin typing a specific Application number to filter the list below.

- Make sure the dispense hose is in an appropriate size container.
- Press **START**.
- The screen will show a status bar, the elapsed time (C 0:07) and the total Application time (T 0:20).
- When the application completes, the screen will show **Dispense Complete** and a summary.
- To return to the previous Select App screen press **ESC**.
- Press **START** or **ENTER** to dispense another Application.
- To stay log out press **ESC** again to return to the main screen.

TIP: if any errors appear, refer to the troubleshooting guide on the following pages

```
11/11/2016  01:27PM
CleanLogix ALX-LITE
Welcome!
Enter Passcode
```

```
11/11/2016  01:27PM
Passcode: XXXX
```

```
Select APP #---
001-Demo APP 1
123-Demo APP 2
```

```
APP # & Name: #123
Demo APP 2
Press START To
Dispense
```

```
Dispensing APP #123
Demo APP 2
STATUS■■■■■
Time C 0:07 / T 0:20
```

```
Cheers!
Dispense Complete
#123 Demo APP 2
Total:T00:20/0.750G
```


USB Reporting

Export Dispense Logs

- Make sure a USB drive is plugged into the controller port.
- Log in as an administrator.
- Use ↑ and ↓ keys to select **USB Options** and press **ENTER**.
- Use ↑ and ↓ keys to select **Update USB Dispense Logs** and press **ENTER**.
- Remove the USB drive and plug it into a laptop or computer to view the .CSV file.

```
USB Options
>Update USB logs
Export config
Import users
Import apps
Import devices
Update firmware
```

Troubleshooting

Oh No!
Dispense Cancelled!

Cause

User pressed STOP before the dispense finished.

Solution

During a dispense, do not press any buttons until the post-dispense screen appears, signaling the end of the dispense.

Application
config is
invalid

Causes

When attempting to dispense an Application, one or more of the following is true:

- The Application does not contain any dispense steps
- The Application contains a dispense step with a zero time value

Solution

Log into the Admin screen, then under "Applications" select the Application, then check and correct the above conditions.

Device missing.
Unable to start
dispense!

Cause

One or more of the Devices assigned to this Application has been disconnected from the CAN network.

Solution

Ensure there are solid green lights on all of the Devices. Flashing lights indicate a loss of communication. Check orange M12 cable connections to ensure they are not corroded or damaged.

Troubleshooting (continued)

Select APP#---
No applications

Cause	No Applications are setup.
Solution	Login as an Administrator and create new Applications (Page 14).

Action Failed

Cause	Export Settings was attempted, but there is no USB drive in the USB port.
Solution	Plug in a USB drive and retry.

INVALID user, Abort?
Are you SURE?
Press 1 for Yes
Press 2 for No

Causes	When creating or editing a User, one or more of the following is true: <ul style="list-style-type: none"> User passcode is already in use User passcode is missing User name is missing
Solution	Press 2, then check and correct the above conditions.

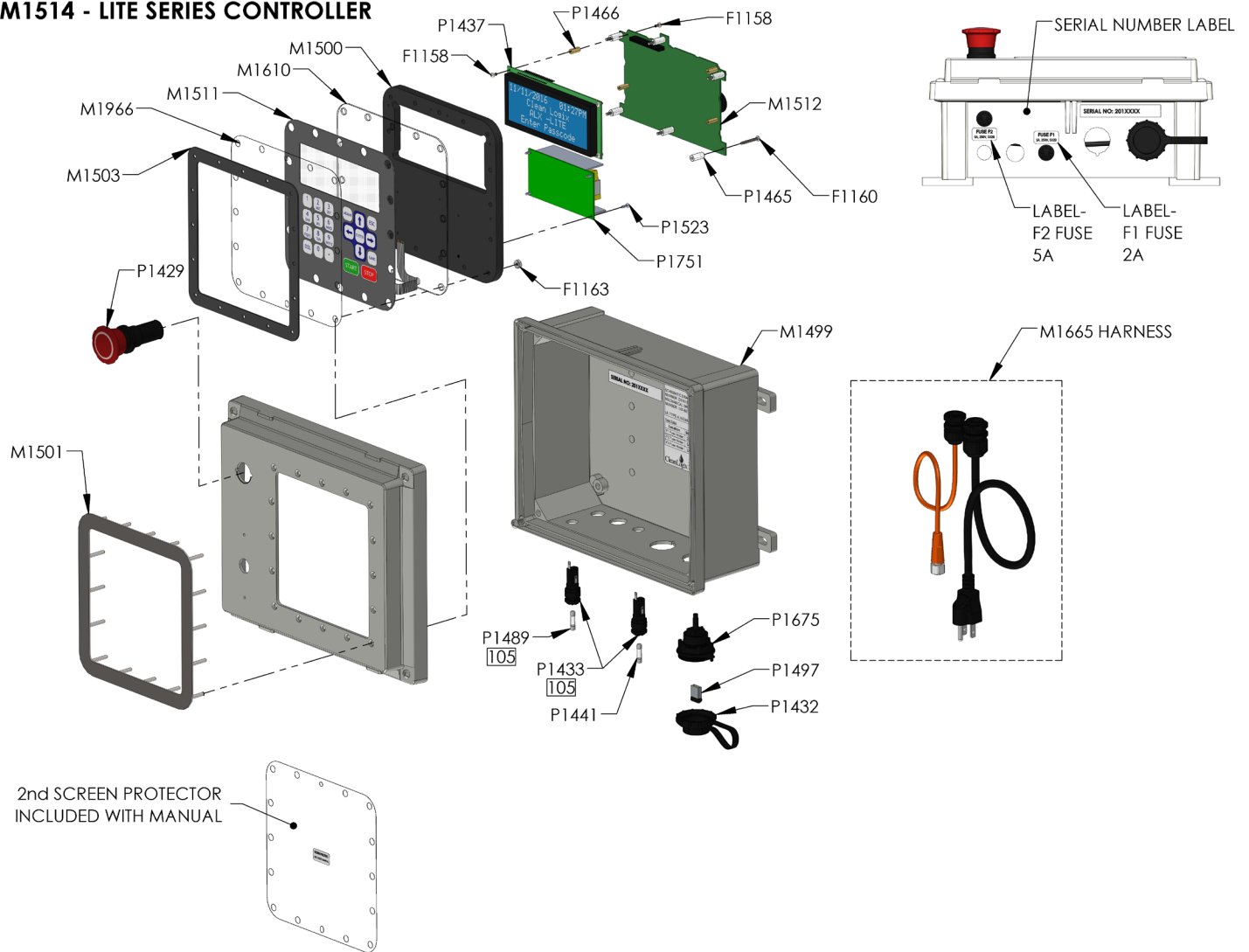
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READ ALL INSTRUCTIONS BEFORE OPERATING EQUIPMENT



Appendix A - Parts Callout

M1514 - LITE SERIES CONTROLLER



Part No.	Description
F1158	SCREW MACHINE M2.5 X 5 SS PHILLIPS PAN HD
F1160	SCREW MACHINE 4-40 X 7/8 ZN PHILLIPS PAN HD
F1163	NUT KEPS LOCK 6-32 ZN
M1499	CONTROLLER ENCLOSURE
M1500	MEMBRANE BACK PLATE
M1501	MEMBRANE BEZEL
M1503	GASKET 200 SERIES KEYPAD
M1511	MEMBRANE KEYPAD 200 SERIES
M1512	PCB 200 SERIES CONTROLLER
M1610	200 SERIES KEYPAD CARRIER
M1665	WIRING - LITE SERIES - HARNESS ASSEMBLY
M1966	LITE-ELITE KEYAD PROTECTOR

Part No.	Description
P1429	PUSH-PULL BUTTON RED 40MM
P1432	USB DUST CAP ASSY
P1433	FUSE HOLDER 250V 10A PANEL MOUNT
P1437	LED DISPLAY 4X20
P1441	FUSE 250VAC 2A 5X20
P1465	SPACER #4 X 1/4" X 9/16" NYLN
P1466	STANDOFF M2.5 X 12 BRASS
P1489	FUSE 250VAC 5A 5X20
P1497	USB FLASH DRIVE 8GB LOW PROFILE
P1523	SCREW #4-24 X 5/16" HI-LO PHILLIPS PAN ZN
P1675	RECEPTACLE USB-A PANEL MOUNT CIRCULAR SEALED w/0.50m CABLE
P1751	POWER SUPPLY 24V 2.5 AMP 60 WATT OPEN FRAME

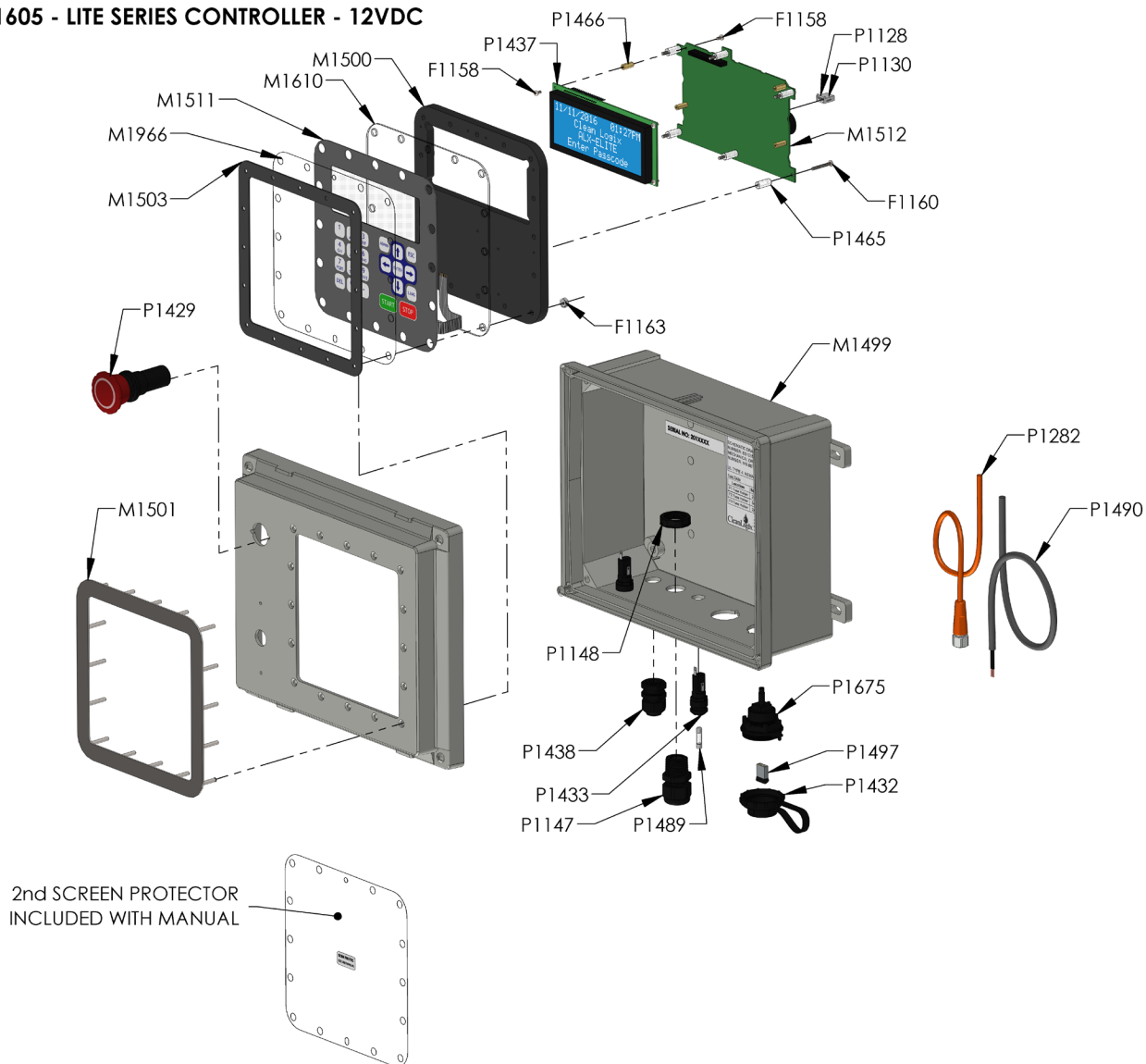
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Appendix A - Parts Callout

M1605 - LITE SERIES CONTROLLER - 12VDC



Part No.	Description
F1158	SCREW MACHINE M2.5 X 5 SS PHILLIPS PAN HD
F1160	SCREW MACHINE 4-40 X 7/8 ZN PHILLIPS PAN HD
F1163	NUT KEPS LOCK 6-32 ZN
M1499	CONTROLLER ENCLOSURE
M1500	MEMBRANE BACK PLATE
M1501	MEMBRANE BEZEL
M1503	GASKET 200 SERIES KEYPAD
M1511	MEMBRANE KEYPAD 200 SERIES
M1512	PCB 200 SERIES CONTROLLER
M1610	200 SERIES KEYPAD CARRIER
M1966	LITE-ELITE KEYAD PROTECTOR
P1128	TERMINAL HOUSING 4-POS
P1130	TERMINAL CRIMP
P1147	CORD GRIP 1/2 NPT X .170 - .450 BLK

Part No.	Description
P1148	CORD GRIP NUT 1/2 NPS NYL
P1282	CAN CABLE 5 Meter (16.48ft)
P1429	PUSH-PULL BUTTON RED 40MM
P1432	USB DUST CAP ASSY
P1433	FUSE HOLDER 250V 10A PANEL MOUNT
P1437	LED DISPLAY 4X20
P1438	CORD GRIP PG9 X .065-.230 BLK
P1465	SPACER #4 X 1/4" X 9/16" NYLN
P1466	STANDOFF M2.5 X 12 BRASS
P1489	FUSE 250VAC 5A 5X20
P1490	CABLE 2 CONDUCTOR 18 AWG PVC
P1497	USB FLASH DRIVE 8GB LOW PROFILE
P1675	RECEPTACLE USB-A PANEL MOUNT CIRCULAR SEALED w/0.50m CABLE

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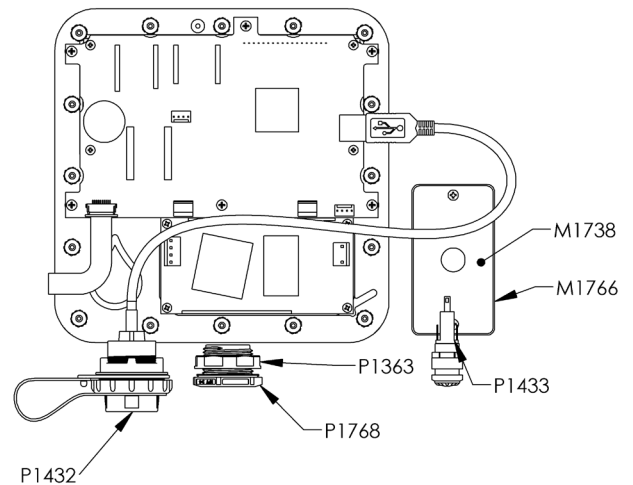


Appendix A - Parts Callout

ALX-LITE



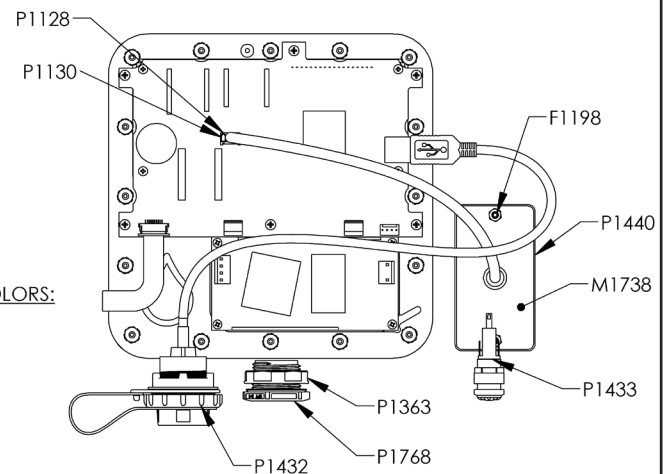
INTERNAL VIEW



ALX-LITE-R



INTERNAL VIEW



RFID WIRE COLORS:
BLACK: GND
GREEN: D0
WHITE: D1
RED: V+

Part No.	Description
F1189	SCREW SELF TAP #4 X 1/2 316SS
F1198	SCREW MACHINE 4-40 X 1/2 FLAT HEAD PHILLIPS 316SS
F1199	NUT NYLOCK 4-40 ZN
M1514	LITE SERIES CONTROLLER
M1738	GASKET RFID PROXPOINT PLUS
M1766	RFID BLANK PLATE

Part No.	Description
P1128	TERMINAL HOUSING 4-POS
P1130	TERMINAL CRIMP
P1363	CORD GRIP NUT 3/4 NPT NYLON
P1440	RFID READER HID PROXPOINT PLUS 6500
P1768	PLUG 3/4" NPT THREADED BLACK

Appendix B - Replacing Keypad or Keypad Protector

Replacing the keypad protector or the keypad itself for an ALX-LITE controller is a simple process that can be accomplished in a short amount of time.



CAUTION:

Careful not to damage the circuit board or connections points during the process.

Accessing Keypad and Protector:

1. Unplug the controller from power and any CAN connected devices (i.e. solenoids)
2. Remove the 4 screws at each corner of the enclosure and gently lift the top of the controller from its base [Figure 31.1].

NOTE: The cables and wire lengths leading from the base to the lid can vary and may be taut when removing.

3. Unplug any short cables (USB, RFID, etc.) connected to the circuit board to allow clearance to remove the keypad.
4. Using a 5/16" deep-well socket or wrench, remove all 16 nuts around the keypad backplate [Figure 31.2 - 31.3].
5. Proceed to the next page and follow the instructions for the part(s) to be replaced.



Figure 31.1: Removing enclosure cover

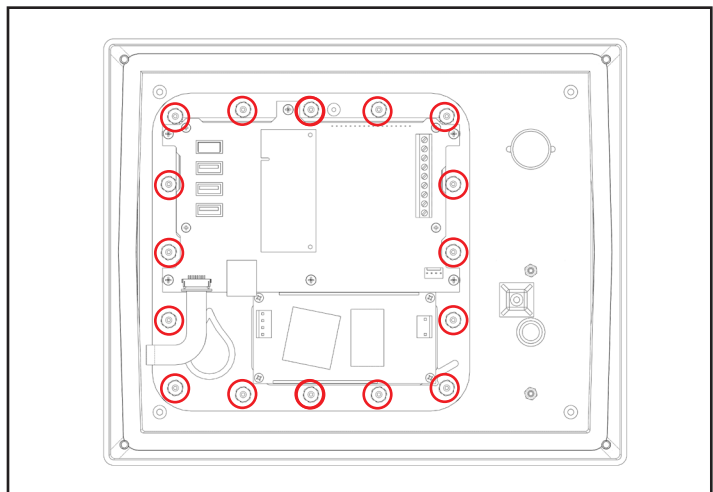


Figure 31.2: Keypad backplate nut locations

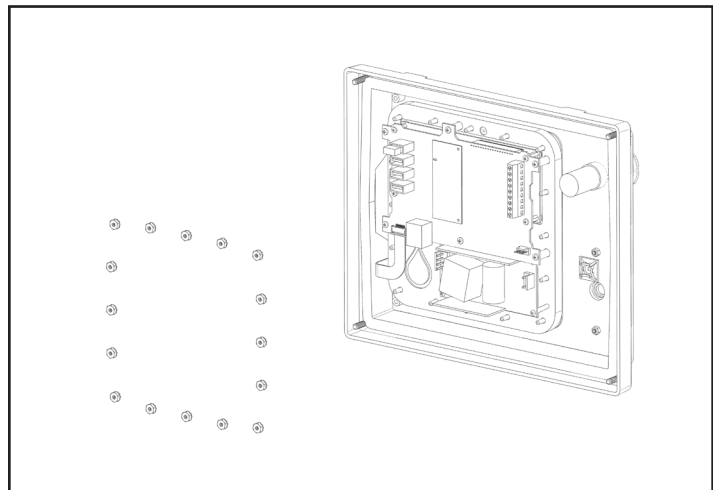


Figure 31.3: Removing 16 keypad backplate nuts

Appendix B - Replacing Keypad or Keypad Protector (cont.)

Replacing Keypad Protector:

1. Remove the keypad and backplate with it's connected circuit board and hardware [Figure 32.3]

NOTE: If the keypad is not to be replaced it may remain plugged into the circuit board backplate. To remove the keypad, see **Replacing Keypad** section (page 33)

2. Remove the damaged keypad protector and discard.
3. Replace the protector in the same location, against the keypad gasket, aligning all mounting holes with the threaded studs as before.
4. Lay the backplate with the keypad against the protector, aligning all mounting holes with the threaded studs as before.

NOTE: Verify the keypad is key-side down, with the screen window in the correct orientation.

5. With the keypad and its new protector secured against the gasket replace the backplate and secure it place with all 16 nuts.
6. Reattach any cables or wires previously removed and secure the lid of the enclosure back to its base.
7. Plug in, power up and test the controller prior to re-installing for normal operation.

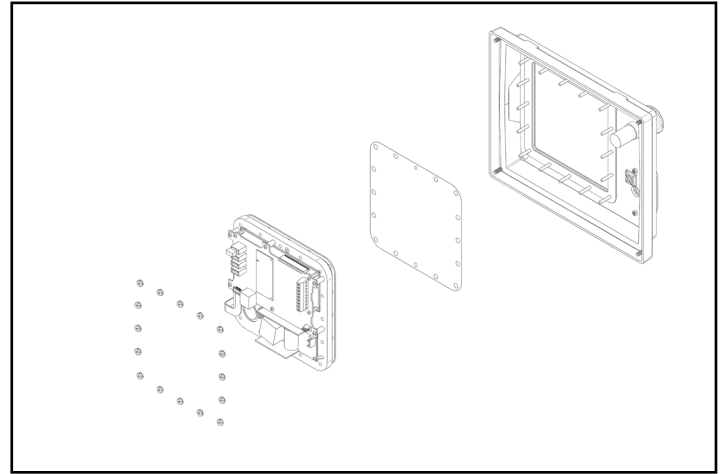


Figure 32.1: Removing keypad and backplate to access protector



More Information

Please contact Clean Logix at:

(616)-438-9200 or sales@clean-logix.com

Appendix B - Replacing Keypad or Keypad Protector (cont.)

Replacing Keypad:

1. Unplug the keypad ribbon from the circuit board by sliding the locking pins up using a fingernail or small flathead screwdriver [Figure 33.1 - 33.2].
 2. Pull the green keypad ribbon out of the connection port.
 3. Remove the backplate with its connected circuit board and hardware [Figure 33.3]
 4. Remove the damaged keypad and discard appropriately.
 - If necessary, remove the keypad protector and replace it as outlined in the previous section.
 5. Remove the plastic film from both the front and back of the new keypad.
 6. Lay the new keypad on the protector, aligning all mounting holes with the threaded studs as before.
- NOTE:** Insert the keypad key-side down, with the screen window in the correct orientation. The keypad ribbon will not align to connection port if mounted incorrectly.
7. With the new keypad and its protector aligned against the gasket, replace the backplate and secure it place with all 16 nuts.
 8. Plug the keypad ribbon into the connection port on the circuit board as before and lock both retaining pins into place.
 9. Reattach any cables or wires previously removed and secure the lid of the enclosure back to its base.
 10. Plug in, power up and test the controller prior to re-installing for normal operation.

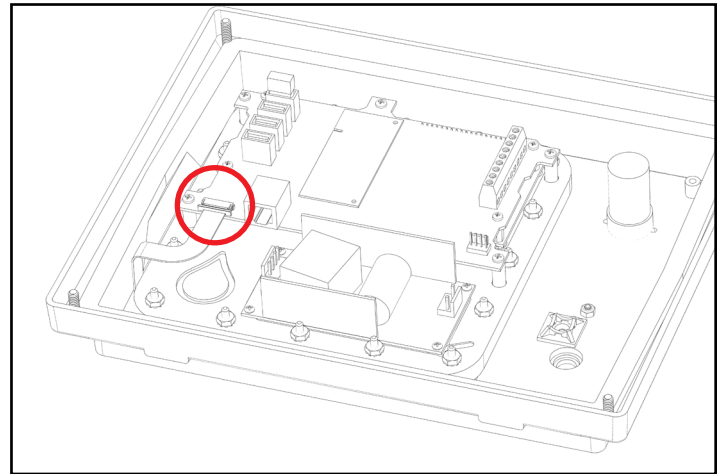


Figure 33.1: Keypad connection port location

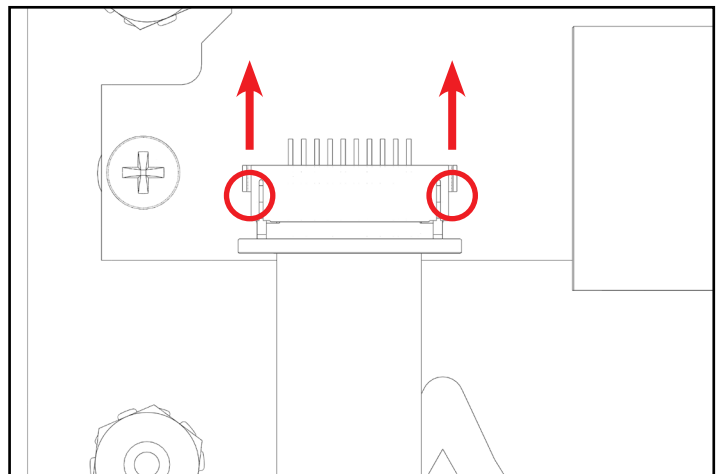


Figure 33.2: Unlocking keypad connection port

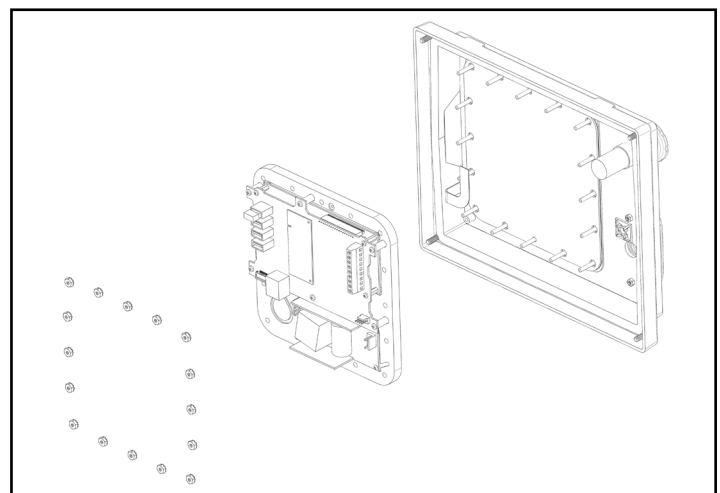


Figure 33.3: Removing backplate (keypad still in position)