A.Y. MCDONALD COMMANDER INSTALLATION INSTRUCTIONS

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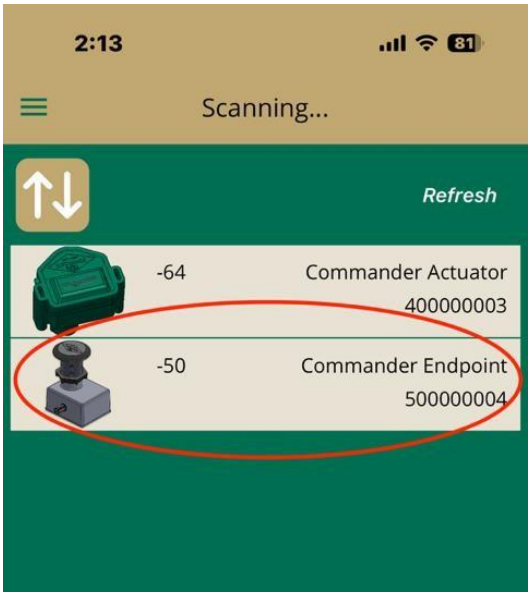
1.0 INITIAL SETUP

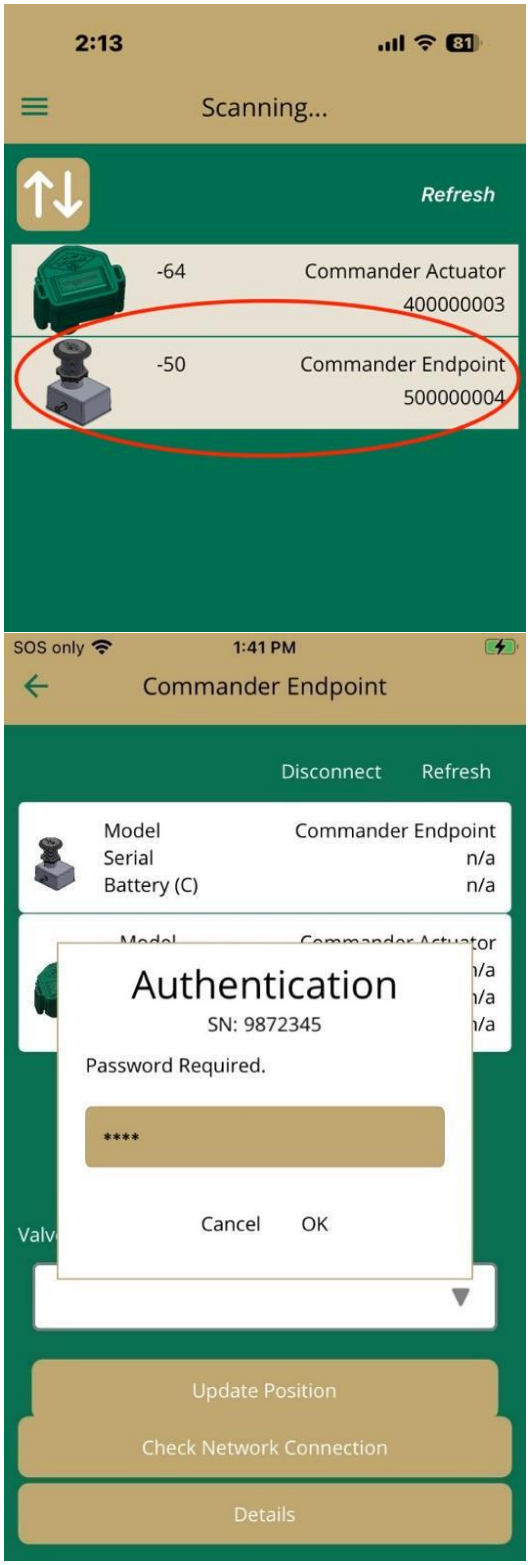
1.1 Download the Mobile App; Power up the Actuator and Endpoint **Follow these steps prior to performing the mechanical installation of the endpoint and actuator.** Download the mobile app. Search for "A.Y. McDonald: Pilot Program". Once installed, ensure your mobile device has Bluetooth turned on before you open the app.	
1.2 Swipe the magnet across the endpoint (on the side opposite of the serial cable) for about five seconds to power the device. Repeat the same process for the actuator (across the back of it).	

1.3 Connect the Endpoint to the Actuator ***Fully*** connect the actuator cable to the endpoint. You should hear a click once connected.	
1.4 Open the app. When both devices are powered, they should appear in the mobile app.	

1.5 Connect to the Endpoint via Mobile App

In the app, tap on “Commander Endpoint”.

An “Authentication” dialog box will appear with a prefilled password. Press OK to connect to the endpoint.



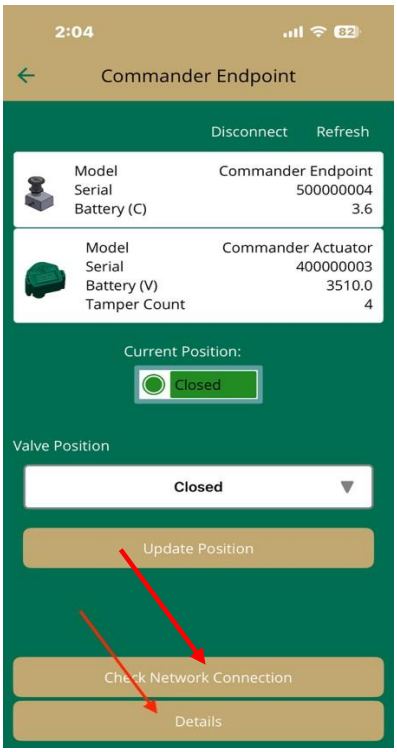
2.0TEST ENDPOINT CELLULAR CONNECTION AND ACTUATION

2.1 Check Network Connection

NOTE: Before you begin, make sure the endpoint is in an upright position with the cap pointed towards the sky.

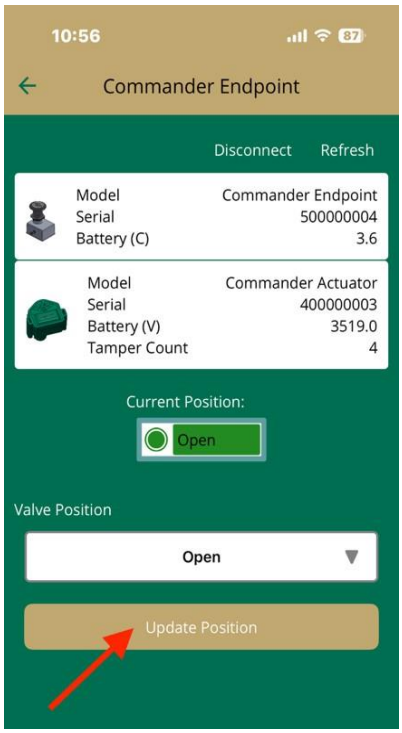
Tap on the "Check Network Connection" button to ensure that you have adequate cellular coverage at your installation location. The endpoint will now attempt to check-in. You will be taken to a screen displaying the last check-in time of the unit. It can take up to 1-2 minutes for the new check-in to be displayed.

If the connection fails, please try again. If it fails a second time, you may not have adequate coverage in this location.



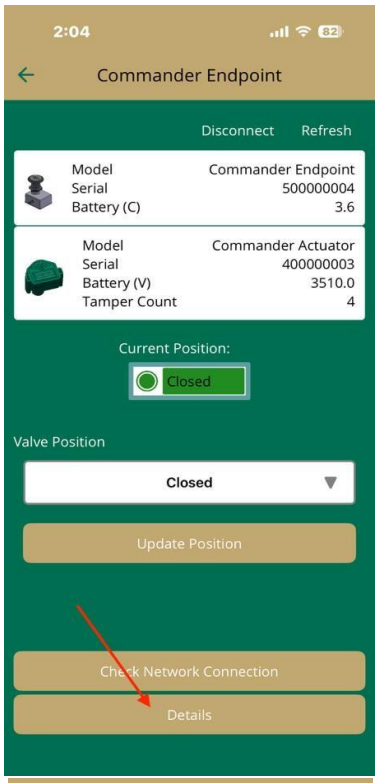
2.2 Changing the Valve Position (via Endpoint)

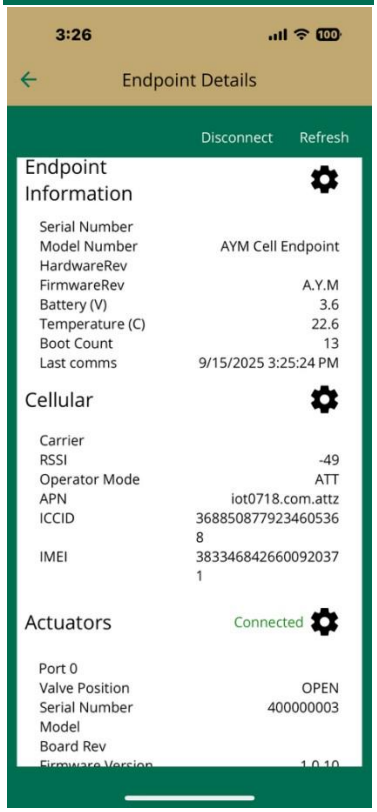
The valve's current position is shown below the actuator details. To change the valve position, use the dropdown below the *Current Position* to select *Open* or *Close.* Tap "Update Position".



2.3 View Endpoint Details

Tap on “Details” at the bottom of the screen to view the endpoint and actuator configuration details.





3.0 INSTALLING THE ACTUATOR

3.1 AYM Install and Mounting Instructions

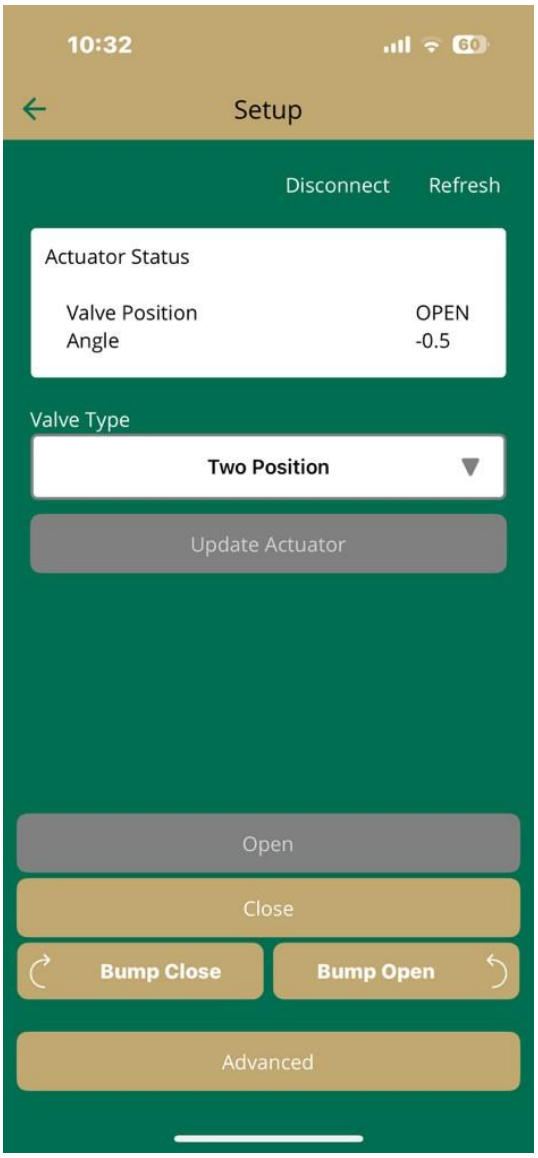
Before installing the Commander Actuator, manually turn the curb stop valve between closed and open positions to ensure the valve is moving freely.

Place the curb stop valve in the open position. Also, place the actuator in the open position, if needed. (Commander Actuators will be shipped in the open position.) Install the actuator to the valve.

3.2 Troubleshooting Tips: Bump Feature

The actuator has a bump feature which works as an adjustment mechanism when installing the actuator onto the valve. When mounting the actuator on top of the brass valve, sometimes the actuator slot does not perfectly align with the pipe slot, making it difficult to screw the bolts down. The bump open/close functionality allows for small rotational adjustments to help align these components.

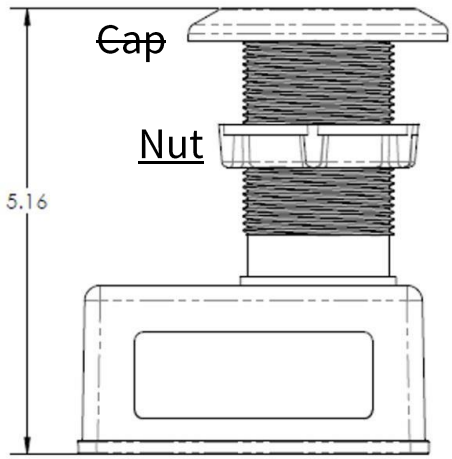
Return to the *Scan* screen. Tap on the actuator to connect. Then tap on *Details* > *Actuator Settings*. Tap *Bump Open* or *Close* depending on the valve cap.



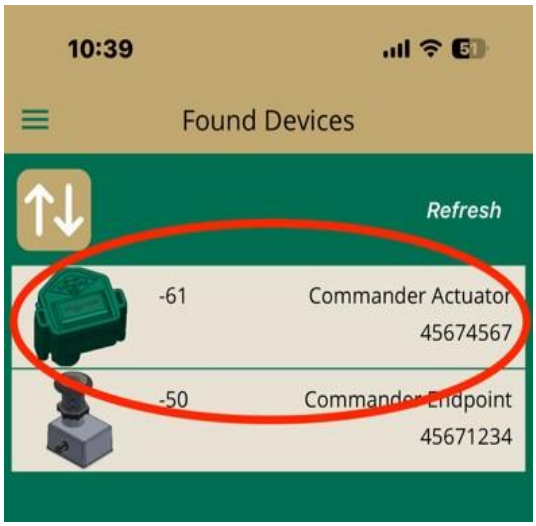
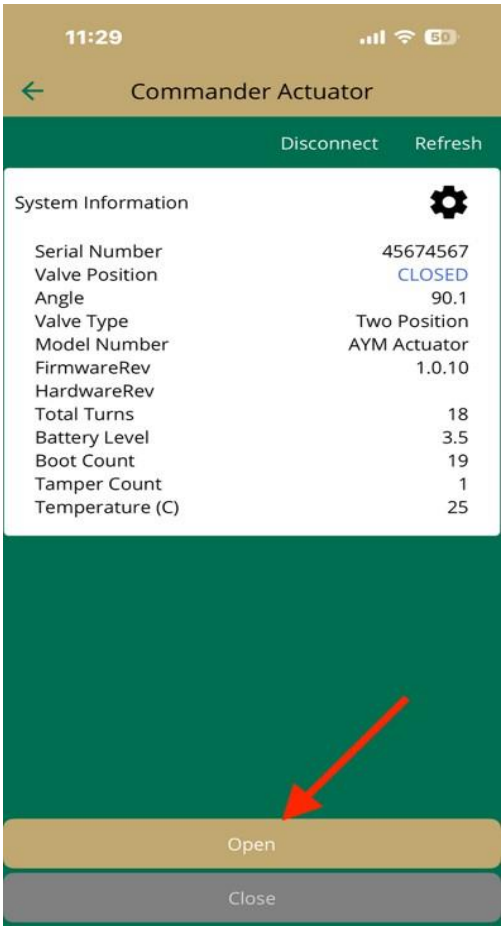
3.3 Confirm the Actuator is Working

Before leaving the location *and* after the actuator has been correctly mounted to the valve, repeat *steps 2.1 and 2.2* to confirm that the actuator successfully closes and reopens the valve.

4.0 INSTALLING THE ENDPOINT

4.1 Installing the Endpoint to the Meter Box Lid The Commander Endpoint's integrated antenna is a "through-the-lid" (TTL) design that is meant to be installed from the underside of the lid. Drill a 1 7/8th -inch diameter hole in the lid. Make sure you drill a hole where there will be enough space for the endpoint after the lid is closed.	
4.2 Then remove the cap off the antenna. Leave the nut in place.	
4.3 Insert the antenna through the hole in the underside of the lid.	
4.4 Screw on the cap. Tighten the nut to the lid.	

5.0 CHANGING THE VALVE POSITION VIA ACTUATOR

5.1 If the endpoint is not responding and a valve position needs to be changed, follow these steps. From the *Scan* screen, tap on the *Commander Actuator*.	
5.2 Then tap on the *Open* or *Close* button, depending on the current position of the valve, to actuate the valve.	

6.0 USER NOTICE

United States

FCC Part 15.21 statement:
The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

FCC Part 15.105 statement:
For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canada

English
ISED RSS-Gen Section 8.4 Statement:
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Français
Déclaration de la ISED RSS-Gen Section 8.4 :
Cet appareil contient des émetteurs/récepteurs exemptés de licence qui respectent les RSS(s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes :

(1) Cet appareil ne peut pas causer d'interférence.
(2) Cet appareil doit accepter toute interférence, y compris celle qui pourrait entraîner un fonctionnement indésirable de l'appareil.