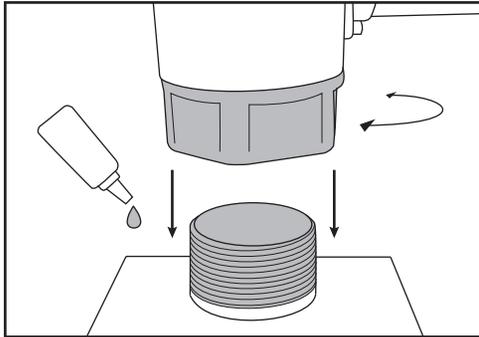


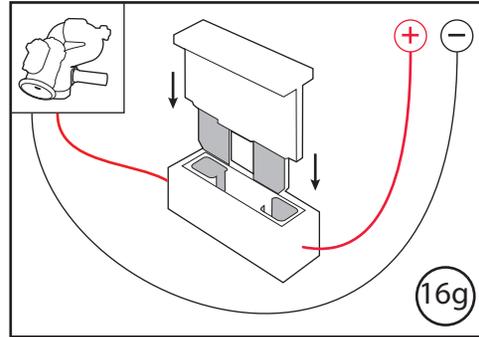
## Step 1. Mount Monitor onto base

### MOUNT MONITOR - FLANGE



Thread monitor onto base using Loctite 592 thread sealant or equivalent.

### MOUNT MONITOR - THREADED



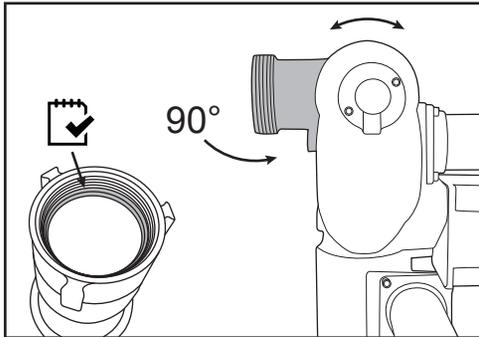
Install a 20A fuse (12VDC) into the positive power lead; 10A fuse for 24VDC.

NOTE: We recommend using 16 AWG for monitor power and ground. See installation instructions section of the Sidewinder EXM manual (98317000) for length to gauge recommendations.

NOTE: If a Quick Connect is being installed, please refer to the Quick Connect Install Guide. Guide can be found under the Sidewinder EXM manual section at [www.elkhartbrass.com](http://www.elkhartbrass.com).

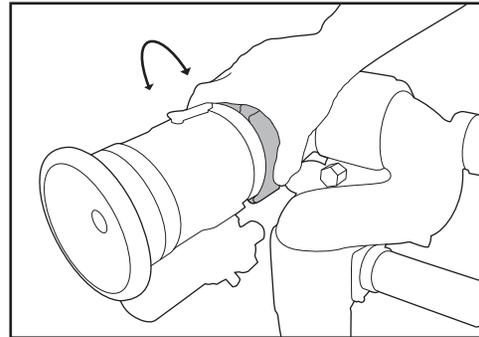
## Step 2. Attach Nozzle to Monitor

### POSITION DISCHARGE



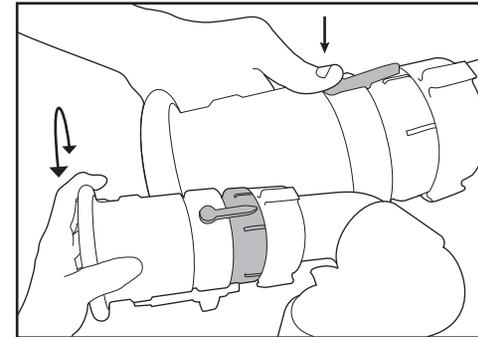
Position monitor discharge elbow parallel to the ground. Ensure gasket is inside nozzle swivel before installing.

### INSTALL NOZZLE



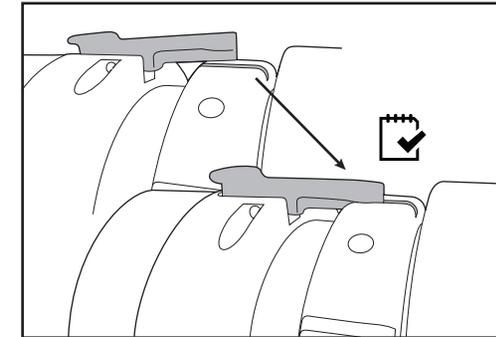
Hand tighten nozzle to monitor using swivel.

### ADJUST FLOW SETTING



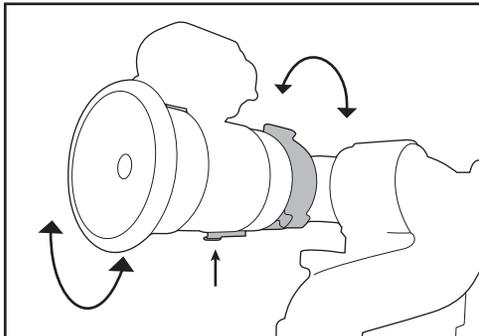
Adjust flow by pressing down on locking lever and rotating nozzle to desired flow setting.

### LOCKING LEVER PLACEMENT



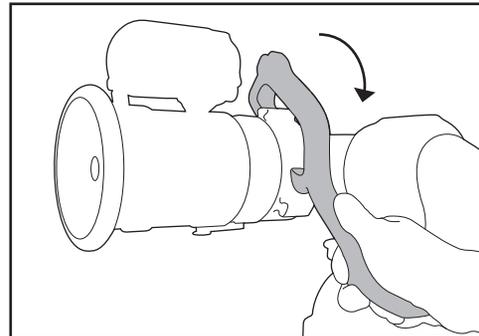
Confirm that locking lever is snapped securely into position.

### REPOSITION NOZZLE



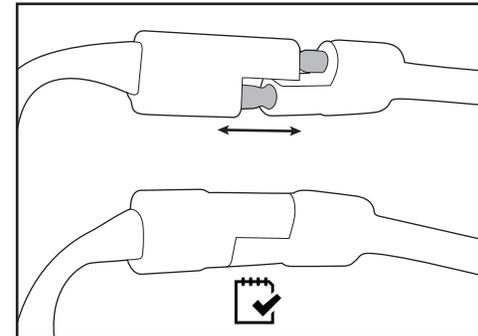
Loosen swivel and reposition nozzle so the locking lever is on the bottom.

### TIGHTEN NOZZLE



Tighten swivel using a spanner wrench to ensure a secure connection.

### CONNECT POWER



Connect nozzle & monitor two-way connectors.

## Step 3. Confirm Connections

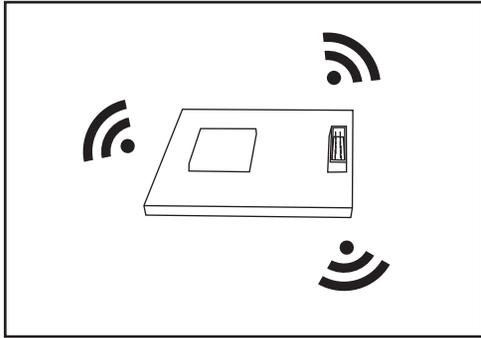
Confirm that all connections are tight and all electrical connections have been reconnected.

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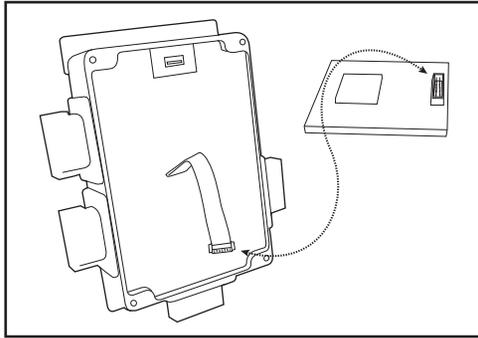
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## Step 4. RF Installation

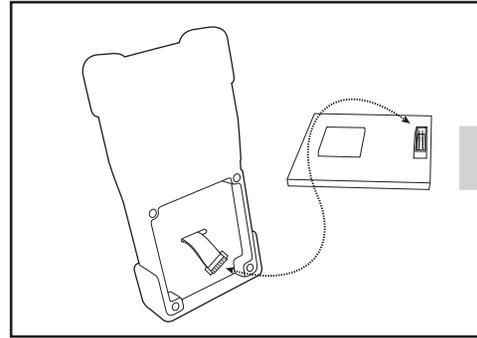
### INSTALL RF MODULE



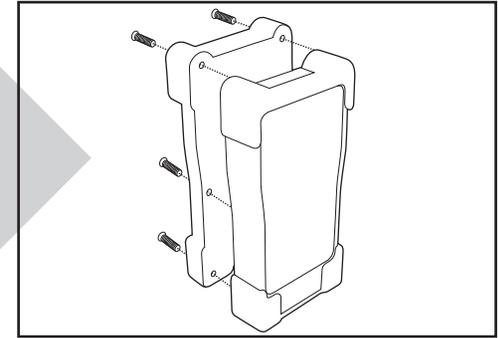
### INSTALL RF - OEM



### INSTALL RF - HANDHELD

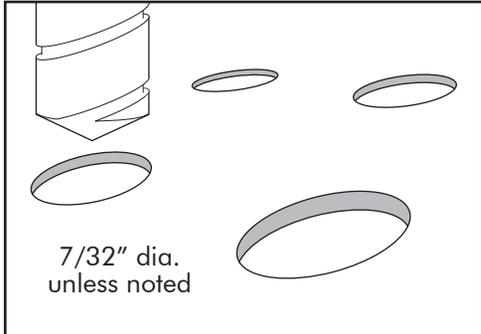


### INSTALL BATTERY PACK



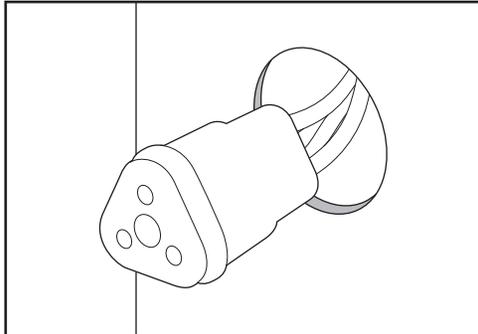
## Step 5. Component Mounting

### DRILL MOUNT HOLES



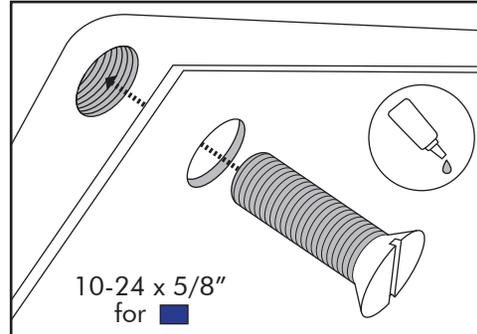
Use mounting templates found in the instruction manual for dimensions.

### DRILL CAN HOLES



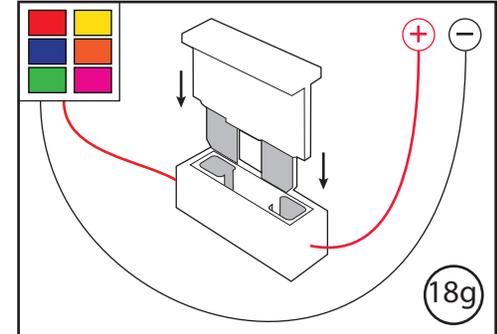
Drill holes for CAN network and power cables for each component.

### MOUNT COMPONENTS



Mount components using 10-24 x 1/2" screws. Use Loctite 242 or equivalent.

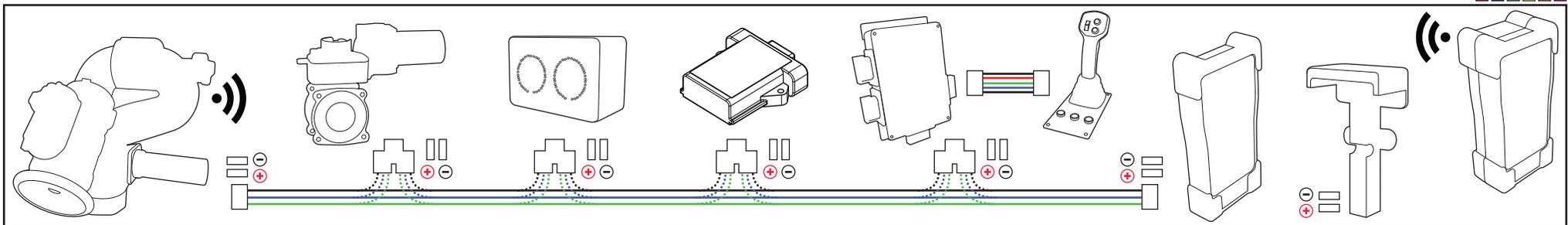
### SUPPLY POWER - FUSE



Install a 1A fuse (12VDC) into the positive power lead; 0.5A fuse for 24VDC.

## Step 6. Wiring

### CAN NETWORK WIRING DIAGRAM



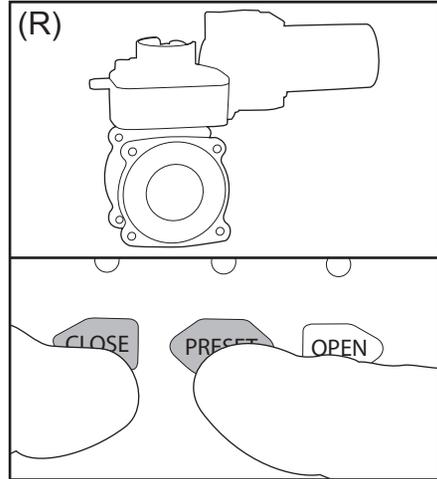
Connect entire CAN network together using 18-22 AWG. Ensure every component connected to the CAN network is connected in between the two (2) end components that have CAN termination. Please refer to the BLUE, GREEN, and BLACK lines as the CAN wires below.

**Before continuing, use the EXM Configuration Tool manual P/N 98510000 to configure the EXM system.**

# Step 7. Operational Settings

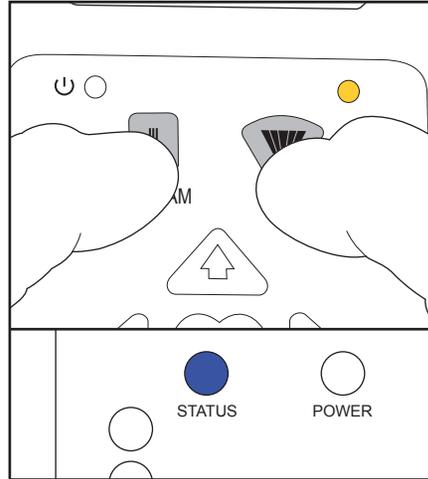
NOTE: (R) This step is required. (O) This step is optional.

## CALIBRATE VALVE



You will need to calibrate the valve before use. While you are **NOT** in setup mode, place the valve in a half open position, then press and hold PRESET & CLOSE until calibration begins. The valve will automatically start to calibrate itself.

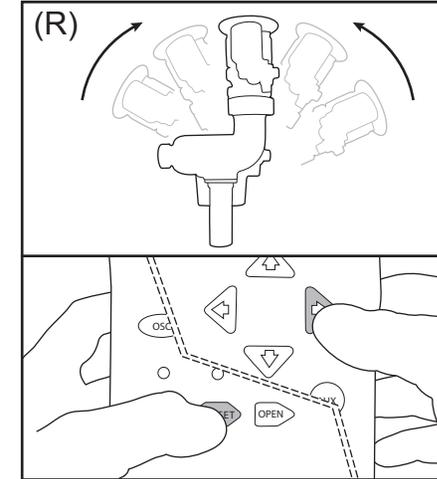
## ENTER SETUP MODE



On the Handheld controller, press and hold FOG & STREAM buttons for 5 seconds. Blue Status LED on monitor & yellow LED on controller will be lit.

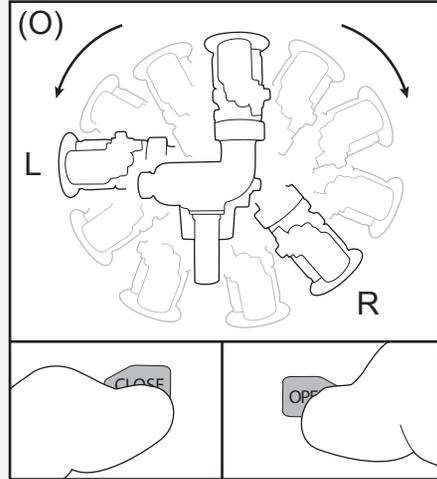
On the Joystick controller, press and hold AUX & PRESET until LEDs turn on.

## CALIBRATE HORIZONTAL



Aim monitor at center forward "zero" position. Hold PRESET, then press and release LEFT or RIGHT. The Status LED on monitor should blink and return to solid. Release PRESET button.

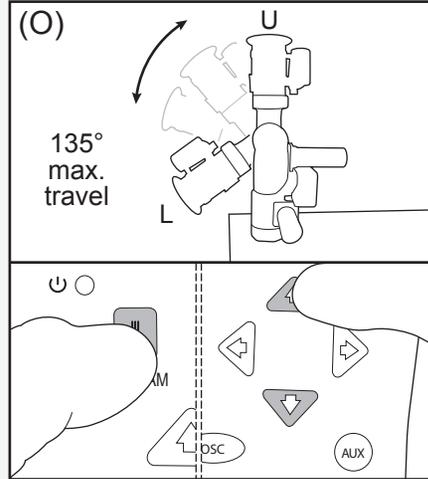
## HORIZONTAL TRAVEL LIMITS



Move monitor to the left limit and press CLOSE. Move monitor to the right limit and press OPEN.

Maximum travel limits will allow +175° from the calibrated "zero" position in either direction.

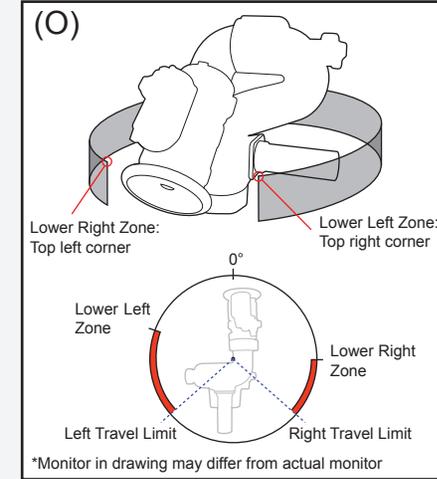
## VERTICAL TRAVEL LIMITS



Upper: Move monitor to highest point of travel. Hold STREAM, then press UP, and release both.

Lower: Move monitor to lowest point of travel. Hold STREAM, then press DOWN, and release both.

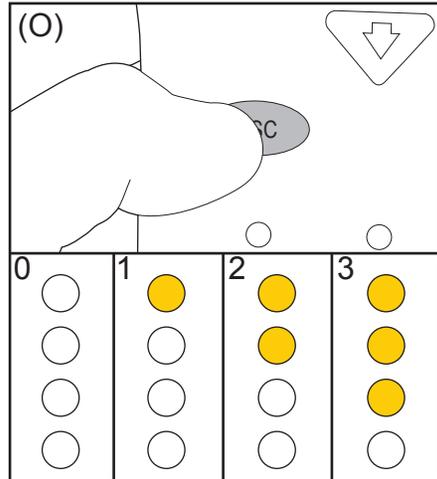
## KEEP-OUT ZONES



Lower Left: Move to top right corner of the lower left zone, hold PRESET, press CLOSE, and release both.

Lower Right: Move to top left corner of the lower right zone, hold PRESET, press OPEN, and release both.

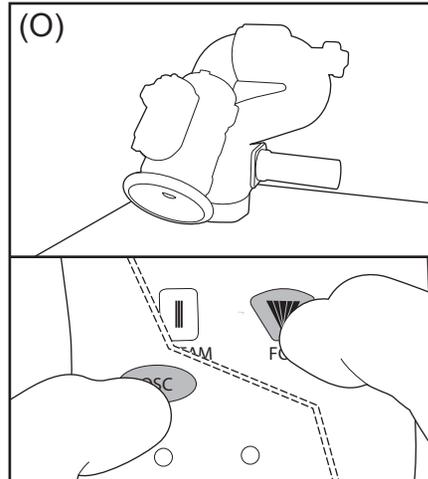
## MONITOR MOTOR SPEEDS



Pressing the OSC button will cycle through the monitor speed options:

LEDs - Vert / Horz  
 0 - Fast / Fast  
 1 - Slow / Fast  
 2 - Fast / Slow  
 3 - Slow / Slow

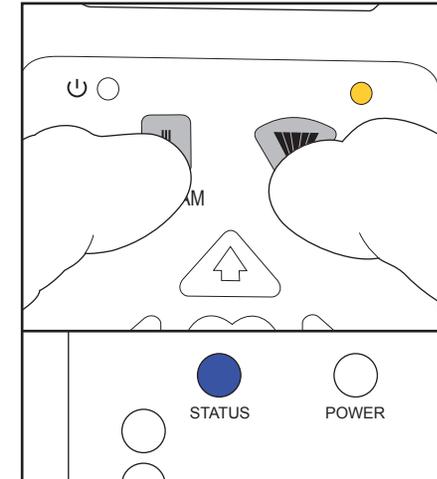
## STOW POSITION



Move monitor to desired position, then press FOG and OSC at the same time to store a stow position.

Stow position must be within allowed limits of travel.

## EXIT SETUP MODE



Press and release FOG & STREAM simultaneously one time. LEDs will turn off.

Press and release AUX & PRESET simultaneously one time if using the Joystick controller.

## Step 8. Verify

**NOTE:** Changes made during setup mode won't take effect until you exit setup mode.

**Valve Calibration** - If the LEDs above the closed & open buttons on an input controller are flashing, the valve has not been calibrated.

**Rotational Limits** - If Travel Limits haven't been set, you can check the horizontal and vertical rotation limits by moving the monitor until it stops at the maximum allowed rotation. This will be  $\pm 175^\circ$  for horizontal movement, and  $135^\circ$  total for vertical movement.

**Travel Limits** - Move the monitor in all directions. The discharge should stop at the set Travel Limits. If it does not stop at the set Travel Limits, and travels all the way to the calibrated Rotational Limits, enter Setup Mode and repeat the Travel Limit steps.

**Monitor Motor Speed** - Motors come factory set both in fast mode (all yellow LEDs off). If a motor speed setting other than fast/fast is desired, follow step 7.7 Monitor Motor Speeds to change the motor speeds to the desired speed combination.

**Keep-Out Zones** - Raise discharge above the set Keep-Out point. Rotate discharge above the Keep-Out Zone. Lower discharge down until it stops at set Keep-Out point. Rotate the monitor toward the "Zero" forward position, and try to move discharge down every inch. Once discharge clears Keep-Out point, it should rotate all the way down to the Rotational or set Travel Limit.

**Stow Position** - While outside of Setup Mode, press and hold the FOG and OSC button to initiate the Stow function. The discharge should move to the set Stow Position. If monitor does not Stow, repeat step 7.8 to set a stow position. (Rotate thumb wheel down for FOG on joystick).

## Button Press Logic

### Left, Right, Up, Down / Fog & Stream / Valve Open & Close

These buttons/commands function normally.

### Valve Preset

Opens or closes the valve to a predetermined position.

To set: open/close valve to desired position. Then press and hold PRESET until preset LED blinks (10 sec.).

### Valve Auto Travel

Auto Open: Hold OPEN, press CLOSE, and release both.

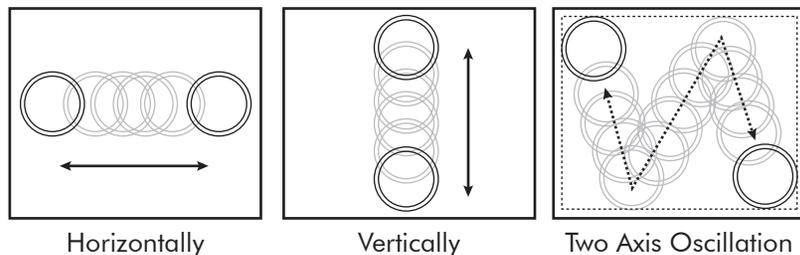
Auto Close: Hold CLOSE, press OPEN, and release both.

### Stow

Hold FOG and OSC until monitor begins to stow.

### Oscillate

Press the OSC button at each end, or corner, of the desired oscillation pattern. Monitor will begin to oscillate.



**NOTE:** You can manually control nozzle position while in a single axis oscillation (Ex: Up/Down in Horz., and Left/Right in Vert.). Any direction in a two axis oscillation will cancel the oscillation.

