1. A. Install monitor to flange using 5/8”-11 UNC Grade 5 bolts and nuts. Tighten uniformly to 70ft/lb using Loctite 242 or equivalent.

B. Add a 20A(12VDC)* fuse between RED controller lead and positive power lead. Use 40A fuse if nozzle with foam expansion tube is utilized. *10A(24VDC)

NOTE: We recommend using 14 AWG for monitor power and ground (12 AWG if using nozzle with foam expansion tube). See installation instructions section of the Scorpion EXM manual (98342000) for length to gauge recommendations.

2. A. Position monitor discharge elbow vertical. Ensure gasket is inside nozzle swivel before installing.

B. Hand tighten nozzle to monitor using swivel end piece. Position actuator assembly about 45° around the swivel.

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

D. Connect nozzle and monitor two-way connectors.

3. Confirm that all connections are tight and all electrical connections have been reconnected. If installing additional components, such as controllers, you may choose to double check the connections after everything has been installed.
4. A. Install valve into plumbing. Torque adapter bolts to spec using torque specs listed to the right.
   
5. A. Follow mounting templates on page 30 of the instruction manual for hole diameters and dimensions.
   B. Drill holes for CAN network and power cables for each component's leads behind each component.
   
6. A. Connect entire CAN network together using 18-22 AWG. Ensure every component connected to the CAN network is connected in between 2 end components that have CAN termination. Please refer to the BLUE, GREEN, and BLACK lines as the CAN wires below.

Before continuing, please refer to the EXM Configuration Tool Manual (98510000) to configure the EXM system.
NOTE: You will need to calibrate the valve before use. While you are NOT in setup mode, press and hold <Preset> and <Close> for approximately 5 seconds. The valve will automatically start to calibrate itself.

Press and hold <Stream> and <Fog> until yellow status LED on controller and blue status LED on monitor box turn on.

From a Joystick Controller, press and hold <Aux> and <Preset> until LEDs turn on.

Move monitor to the left limit and press <Close>. Move monitor to the right limit and press <Open>.

Maximum Travel limits will give approx 175° of travel from the calibrated horizontal forward position in either direction.

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.

Pressing the <Osc> button will cycle through the monitor speed options:

LEDs - Ver / Hor
0 - Fast / Fast
1 - Slow / Fast
2 - Fast / Slow
3 - Slow / Slow

Move monitor to the left limit and press <Close>. Move monitor to the right limit and press <Open>.

Pressing <Open> and <Close> at the same time will clear travel limits, keep out areas, and the stow position.

Press and hold <Stream> and <Fog> on the panel mount and <Aux> and <Preset> on the joystick until the status LEDs turn off.

This step is required (R).

Aim monitor at center forward “zero” position. Hold <Preset>, then press and hold <Left> or <Right> until status LED on monitor blinks & returns to solid. Takes about a second.

The following steps are optional (O).

NOTE: You will need to calibrate the valve before use. While you are NOT in setup mode, press and hold <Preset> and <Close> for approximately 5 seconds. The valve will automatically start to calibrate itself.

Pressing <Osc> button will cycle through the monitor speed options:

LEDs - Ver / Hor
0 - Fast / Fast
1 - Slow / Fast
2 - Fast / Slow
3 - Slow / Slow

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.
Button Press Logic: Panel Mount & Handheld

To Stow
Hold <Fog> and <Osc> until monitor begins to stow.

To Oscillate
Press the <Osc> button at both extremities of the desired oscillation pattern.

NOTE: You can manually control nozzle position while in a single axis oscillation. Example: Up and Down will allow you to manually control the vertical axis while in a horizontal oscillation. Any direction in a two axis oscillation will stop the oscillation.

Left, Right, Up, Down
These function normally

Fog & Straight Stream
These function normally

Valve Open & Close
These function normally

Valve Preset
Opens or closes valve to a predetermined position

To Change Valve Preset
Open or close the valve to the desired position. Press and hold the <Preset> button until the preset light blinks (approx 10 seconds).

Valve Auto Travel
To auto travel OPEN, hold the <Open> button, then press <Close>, and release both. The valve should fully open automatically. To CLOSE, hold the <Close> button, then press <Open>, and release both.