

For use in food service facility drain lines, professionally serviced residential drain lines, and other appropriate drain lines. The *InVade Power Dose* injection system is programmed to inject a metered dose of highly concentrated microbial solution to provide a continual microbial presence in treated drain lines. This continuous dosing of the drain line maximizes microbial effectiveness. Use *InVade Power Dose* refill cartridges with the *Power Dose* Dispenser. **Dispenser is 4.65" wide x 9" high x 3.15" deep and needs 9" clearance for the door to open.**

**Tools needed:** Cordless drill, 3/16", 1/4" & 3/8" drill bits, open-end wrench, 2 C-cell batteries, 11" zip ties, degreasing cleaner

- A Mounting the dispenser (1)** It is recommended when installing the dispenser to use the adhesive pad as well as screws when mounting the dispenser to the wall. If unable to screw the dispenser to the wall, installation may be accomplished using the adhesive pad only.
1. Clean the wall with a degreasing cleaner then wipe with the alcohol prep pad (7).
  2. Use the key (6) to open the dispenser. Key is attached to the back of the dispenser.
  3. Remove the paper attached to one side of adhesive pad (A7). Stick the pad on the back of the dispenser.
  4. Remove paper from second side of pad, and mount dispenser to wall.

### Optional Screw Mounting

1. Drill a 1/4" hole using appropriate type drill bit.
2. Insert a large wall anchor (5) into hole and hammer it flush to wall.
3. Insert a large mounting screw (5) into the wall anchor leaving 1/4" exposed.
4. Remove the paper attached to one side of adhesive pad (A7). Stick the pad on the back of the dispenser. Remove paper from second side of pad.
5. Mount dispenser to wall by poking the screw in the wall through the adhesive pad.
6. Tighten the screw to secure dispenser to wall.

- B Install the drip tube (2)**
1. Remove the tape from the end of the tubing that has the brass nut and O-ring.
  2. Using the end of the tubing that has the brass nut and O-ring attached, insert approximately 1" of the tubing into the bottom of the dispenser. As you press the tubing into the dispenser, slightly rotate the tubing back and forth. Firmly press the tubing until it does not move any further into the dispenser.
  3. Slide the O-ring flush against the bottom of the dispenser, followed by the nut. Tighten the nut finger tight and give the tube a slight pull to ensure it is secure.

### Optional

To further secure the tube, attach it to the wall near the dispenser using the P clips (3). Drill holes using the 3/16" drill bit and secure the P clips using the small mounting screws (4) and small wall anchors (4).

- C Open Air Gap Drain installation**
1. Extend the drip tube about 1" past the bottom of the drain pipe it is secured to (ensure the solution will enter directly into the drain when it exits the drip tube).
  2. Secure the drip tube to the pipe at several locations with zip ties to ensure the tubing does not come loose. **Do not tighten the zip ties to the point where the tubing begins to collapse.**

- D Closed Drain installations – (picture on page 2)**
1. Identify an injection point into the drain pipe that is as close to the dispenser as feasible.
  2. Drill a 3/8" hole into the top of the drain line. (Do not drill into cast iron, it will crack)
  3. Screw the base of the compression fitting (8) into the hole using an open-end wrench.
  4. Cut any excess drip tubing off, leaving sufficient length to span from the dispenser to the injection point.
  5. Remove the compression end off the fitting by unscrewing it.
  6. Slide the end of the drip tube through the black compression fitting base and over the compression nipple at the base and hand tighten.
  7. Use zip ties to secure the drip tube to the drain pipe at several points if necessary. **Do not tighten the zip ties to the point where the tubing begins to collapse.**



## E Operating the dispenser

1. Insert 2 “C” cell alkaline batteries (not included).
2. Press the female end of the green actuator adapter onto the top of the cartridge. Six actuators are included in each case of cartridges.
3. Slide the cartridge into the dispenser while pressing both the cartridge and green adapter securely into place. You should hear a “beep” once the cartridge is securely in place.
4. Press the **RED POWER** button. The display will appear in the LCD screen.
5. Press the **BLACK ENTER** button to cycle the dispenser until you see liquid exit the bottom of the dispenser, just below the nut (you may have to press the enter button up to 15 times).
6. Press the **GREEN QUICK** button until the LCD displays 30, indicating the dispenser is set for a 30 day cycle. This will cycle the unit approximately every 14 minutes.
7. Close the cover to lock the dispenser unit.
8. **WARNING:** If an alarm sounds check to make sure the green actuator adapter is firmly in place, batteries are placed properly and the cartridge is securely in place.

## F Monthly Service – Changing the Cartridge

1. Replace the cartridge monthly by removing the old cartridge (with the green adapter attached) and place the existing (or new) green adapter onto the new cartridge. Follow the instructions above in “Operating the dispenser” section E3-E7.
2. Check the drip tube to ensure it has not come loose and is still secure at the injection point.
3. Check the drip tube to ensure there are no blockages. If necessary replace the drip tube.
4. Replace batteries twice a year or as needed. Each time batteries are replaced the **GREEN QUICK** button must be pressed until the LCD displays 30 to reset the timer.



**E4** Power Button  
(Turns unit on and off)

**E5** Enter Button  
(Quick Cycles)

**E6** Quick Button  
(Programming Options)

**D6**



**D**



**E2**



**E3**



## Placement considerations:

- To avoid water damage and possible malfunction, the *Power Dose* units should be installed outside splash zones.
- In order for the *Power Dose* unit to achieve optimal results, it should be installed in drain lines with daily water flow.
- DO NOT treat dishwasher drain lines for 8-10 ft from the dishwasher. Most are 140° or higher and will liquify grease and keep the drain line clear.
- If there is a FOUL ODOR coming from the grease trap – Place an InVade Bio Bullet into the trap. If the trap cannot be opened, do an initial treatment of the drain with InVade Bio Foam, InVade Bio Drain or InVade Hot Spot.