



GUARDTEC

Start-Up Guide

Rev 1.0

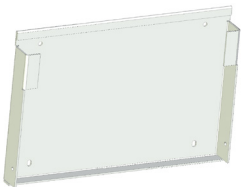
1-800-4-PULSAR

1 Mounting

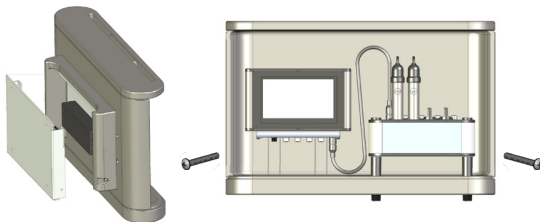
- Clearance needed: 30" W x 20" H x 8" D [76.2 cm x 50.8 cm x 20.3 cm]

- Provide cover to protect from direct sunlight

1. Bolt mounting plate to wall with 4x 3/16" bolts

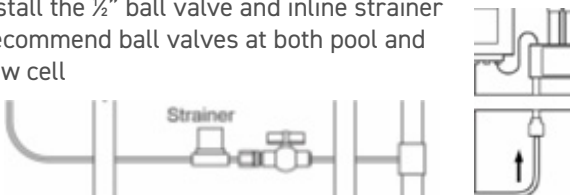


2. Hang GuardTec enclosure on mount plate. Insert retaining screws in holes on sides of enclosure



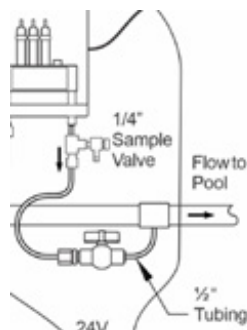
2 Install 1/2" Sample Tubing To Flow Cell Inlet

- Refer to installation schematics on back
- Install immediately after the pool filter
- Install on pool pump discharge if additional flow needed
- Install prior to chemical injection points
- Install the 1/2" ball valve and inline strainer
- Recommend ball valves at both pool and flow cell



3 Install 1/2" Return Tubing On Flow Cell Outlet

- Refer to installation schematics on back
- Install downstream of equipment (heater, UV system, etc.) to maximize flow
- Install Tee and 1/4" sampling valve
- Install 1/2" ball valve and tubing connector



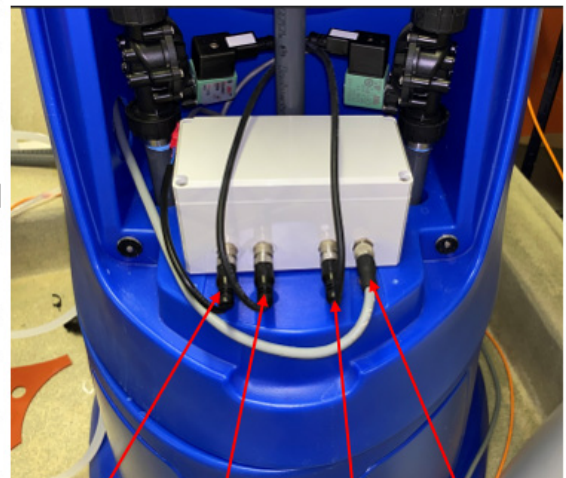
4 Connect Equipment (wall mounting preferred)

Feeder Module - New Feeder

- Connect the M12 data cable from the back of the feeder to an available connector on the GuardTec

Feeder Module - Retrofit

- Install the module on the front of the hopper with the included self tapping screws
- Connect one end of the M12 data cable to the module and run the cable through the front and out of the back of the hopper
- Connect the other end of the cable to an available connector on the GuardTec



73334 – level switch M12 cable to level switch

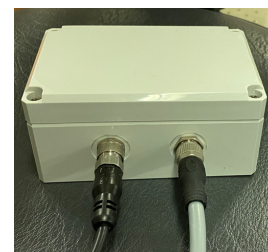
73337 – feed solenoid cable

73337 – wash solenoid cable

73333 – 5m Data cable

VCM for 24VDC solenoid valve

- Connect the M12 x DIN cable from the module to the solenoid valve
- Connect the DIN end of the cable to the solenoid
- Connect the M12 data cable from the module to the GuardTec



PCM for booster pump (use a certified electrician)

- Hard wire the booster pump to the PCM using 14AWG or bigger cable
- Connect the orange flow switch cable to the flow switch installed in the pool pipe
- Connect the M12 data cable from the PCM to the GuardTec
- Connect the power cable to a 120/240V, 15A min outlet (comes with default 120V plug)

PCM for dosing pump

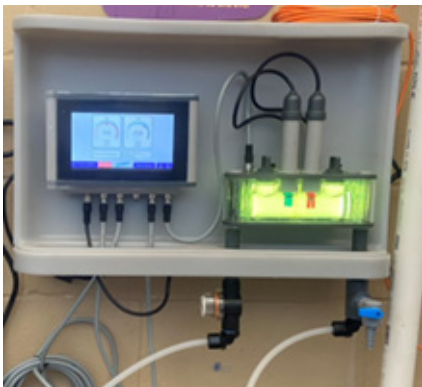
- Connect the M12 data cable from the PCM to the GuardTec
- Connect the power cable to a 120/240V outlet (comes with default 120V plug)
- Connect the dosing pump power cable to the female adapter plug

5 Prime Flow Cell

1. Ensure (4) port plugs are still installed
2. Open inlet and outlet valves to let water flow
3. Inspect $\frac{1}{2}$ " tubing and fittings for leaks. Correct as needed
4. Shut the inlet and outlet valve, then open the $\frac{1}{4}$ " sampling valve on the outlet to release pressure. Shut the valve.
5. Remove (4) port plugs from the flow cell with $\frac{1}{4}$ " counterclockwise turn
6. Slowly crack open inlet valve and allow water to rise through each sensor port. Shut the inlet valve

6 Install Sensors

1. Connect the sensor cables to an available connector on the flow cell. Keep blank caps on unused connectors.
2. Wet the O-rings on the sensor for lubrication for easier insertion
3. Insert the each sensor in the port near the it's connected cable. Ensure the O-rings do not roll out of its groove during insertion
4. Turn sensor clockwise and lock into place
5. Open valves and check for leaks.



7 Start-Up

1. Ensure all applicable modules in section 4 are connected to GuardTec via data cables
2. Ensure PCM(s) connected to 120/240V power
3. Plug in the GuardTec power cable to 120/240V power (comes with default 120V plug)
4. After powerup, follow onscreen instructions to setup the GuardTec
5. Press the "Ready to Connect" button shown on the main screen. All equipment will now be configured and expected by the GuardTec

8 Setup - Facility

1. Press setup on main screen and go to facility screen
2. Enter site information for each pool
3. Enter pool volume, turn over rate, and pool type

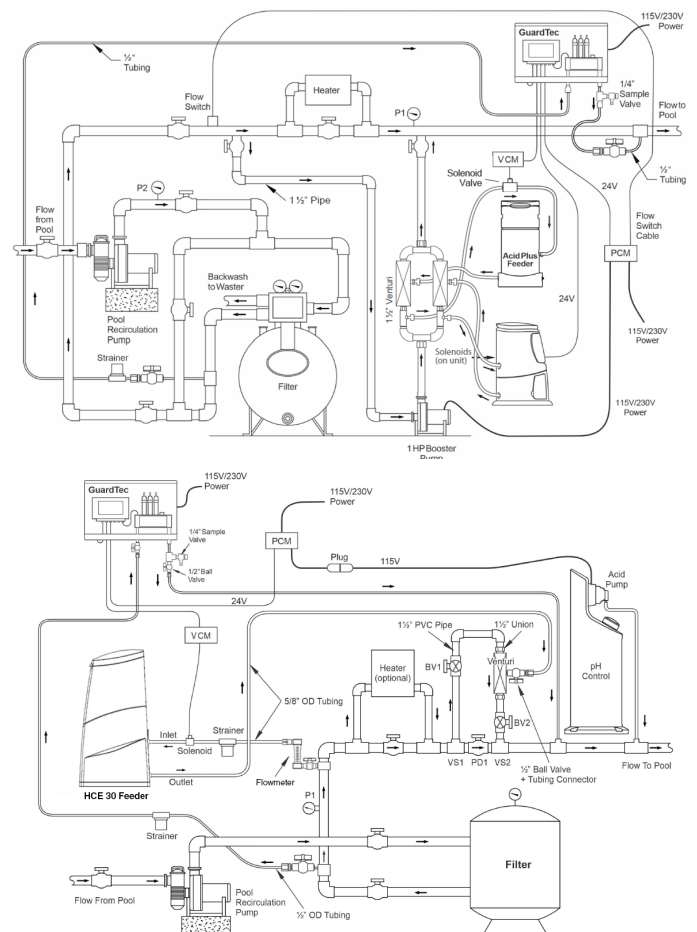
9 Setup - Options

1. Go to options screen
2. Setup time zone, date, time and daylight savings time (automatic if connected to the internet)
3. Choose language, unit preference
4. Adjust LCD parameters

10 Setup - Dosing Controls

1. On main screen, press pH, ORP, or FAC to setup sensor and dosing control parameters
2. Press on feeder setup to start or stop feed

INSTALLATION SCHEMATICS:



pulsar

GUARDETEC



Download the
GuardTec Manual