

## Active Air CO2 Regulator System

### Specifications:

Model:	COSYS / COSYS20
Watts:	14
Volts:	120v
Cord Length:	8'
Compatibility:	CO2 controllers, monitors, and Hydrofarm™ timers

### Parts:

Regulator system (includes flow meter, PSI gauge, and heavy duty solenoid)	x 1ea.
Dual outlet timer (TM01015D)	x 1ea.
Flexible feeder tube (3')	x 1ea.
Flexible distribution tube (15')	x 1ea.
Plastic "T"	x 1ea.
Eyelet screws	x 6ea.

### Assembly Instructions:

1. Remove the CO2 regulator system and all of the included parts from the box and packaging.
2. Arrange the eyelet screws in a halo formation into the wall or ceiling above the garden.
3. Thread the flexible distribution tubing through the heads of the eyelet screws and connect the ends to the arms of the plastic "T" closest to where the tank will sit.
4. Attach the regulator system to the threaded spout on the designated CO2 tank. To do so, use the threaded nut included on the steel shaft going into the silver bell of the PSI gauge. Ensure the black rubber o-ring seal is securely seated into the groove of the steel shaft before attaching the system to the tank.
5. Hand-tighten the regulator nut onto the tank spout.
6. Plug the power cord of the solenoid into the appropriate timer or CO2 controller device.

## Setting the Flow Meter:

**Note: The following directions are designed for grow rooms that incorporate an exhaust and/or intake equipment.**

1. To properly set the flow meter use the Hydrofarm™ CO2 calculator available at [www.hydrofarm.com/co2calc.php](http://www.hydrofarm.com/co2calc.php). If internet access is not available, contact Hydrofarm or your retailer for assistance.
2. Plug in the length, width, and height of the room into the calculator and set the dispersion rate to 15 minutes.
3. The given flow rate setting can be set using the adjustable knob on the front of the flow meter. Plug the power cord of the solenoid into a live power outlet and slowly open the valve of the tank until it is fully open. Adjust the flow meter to the desired CFH and unplug the solenoid.

## Operation:

1. After the flow meter setting has been determined, the ON time of the regulator system should be set to run for 30 minutes. **\*All intake and/or exhaust equipment should be turned off and remain off for the entirety of the CO2 cycle, not just the operating time of the regulator.\***
2. When the 30 minute operation time of the regulator has expired, the room atmosphere should be in the approximate range of 1500 PPM (parts per million). Provide an additional 60 minutes from this point for the plants to absorb the CO2 that was just introduced into the room. **\*Intake/exhaust equipment should still be off\***
3. After the allotted 60 minutes of saturation/absorption time for the garden, the intake and/or exhaust equipment can be turned back on to promote fresh air circulation and reduce CO2 back down to “normal” levels.
4. Maintain fresh air intake and/or exhaust equipment ON for at least 1 hour before starting the CO2 enrichment cycle over again.
5. Set the included timer for the desired amount of ON cycles, sync it to the current time, and plug it into the wall. Plug the solenoid into the timer to begin the CO2 cycle operation.

**Note: “Sealed” grow rooms will obviously not dissipate CO2 as fast as those that use intake and/or exhaust equipment. If the room is considered sealed, wait approximately 3 to 4 hours after the regulator shuts off before turning it back on again.**

## Special Notes and Instructions:

- CO2 is only beneficial to plants during active light cycle hours.
- Instead of using the included halo setup, a solid piece of distribution line can feed into the back of an oscillating fan to blow CO2 directly onto the plants.
- When the CO2 regulator begins the 30 minute ON time, the intake and/or exhaust equipment should remain off for 90 minutes.
- Carbon filters used as scrubbers will NOT absorb or affect CO2 levels in the room.
- The PSI gauge is factory calibrated and should read 30 PSI. If it does not read 30, use a crescent wrench and screwdriver to adjust it up or down using the bolt on the front of the silver bell.

## Warnings:

- Avoid direct contact with water and/or excessive heat. Failure to do so may cause malfunction or possibly electric shock.
- Keep out of reach of children.
- CO2 levels that reach beyond 2000 PPM can be considered dangerous. Take caution to ensure CO2 levels do NOT achieve this state.

## The Hydrofarm Guarantee

Hydrofarm CO2 systems are guaranteed to the original owner for 3 years from the date of purchase. Misuse, abuse, or failure to follow instructions are not covered. If you have a problem, recheck your system and timer to isolate the problem. If this doesn't remedy the situation, contact the original place of purchase for a warranty assessment. Unauthorized returns will not be accepted. Save your receipt/invoice – a copy is required for all warranty work.