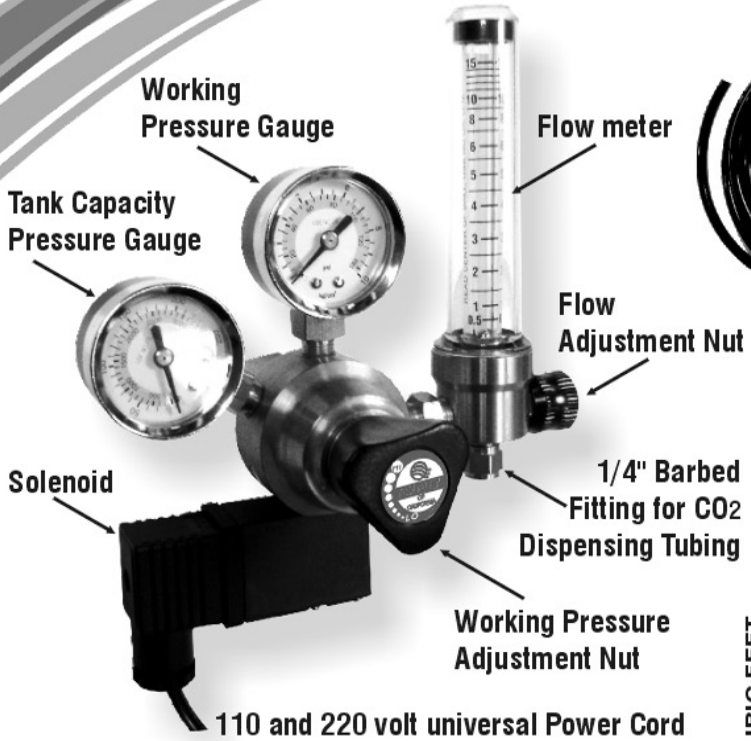




AQUATEK Deluxe CO₂ Regulator with Integrated Solenoid



Our Deluxe AQUATEK CO₂ Regulator with Integrated Solenoid is perfect for many CO₂ injection applications from green houses to aquariums. It has been shown that CO₂ enrichment at two, three, or four times the natural concentration will promote plant growth. Our deluxe version of AQUATEK CO₂ Regulator is equipped with a flowmeter that precisely illustrates the current flow rate.

Furthermore, our CO₂ regulator includes dual gauges (in both psi & kg/cm) and a needle valve for fine tuning the amount of CO₂ injection to maintain the desired level of CO₂ concentrations to achieve optimal plant growth.

FEATURES

- Cool-touch, industrial solenoid design
- Brass constructions for long-lasting durability and dependability
- Precision output working pressure adjustment knob: 140 PSI Max
- Flowmeter - from 0.5 to 15 SCF/hour
- Precision needle valve for fine tuning release of CO₂
- 110 and 220 volt universal power design complete with 6-foot cable
- Includes 16-foot detachable 1/4 inch CO₂ gas line

WARNING

- 1) Never detach CO₂ regulator from CO₂ tank if it is under pressure. Shut off the tank valve and loosen the needle valve to release gas before detaching the regulator
- 2) CO₂ tanks should always be placed on a flat surface and securely mounted to a permanent structure such as a wall or metal frame to prevent tipping and personal injury.
- 3) Keep CO₂ tank away from heat.
- 4) Please obey all state laws regarding transport, storage, and handling of CO₂.
- 5) CO₂ concentrations should be kept below 2,500 PPM at all times. Concentrations above 5,000 PPM can be harmful.

INSTALLATION

- 1) CAUTION! It is important to ensure that the CO₂ tank does not contain any sediment prior to installing the regulator to prevent blockage. Typically, sediment can be extricated by slowly loosening the tank valve to open position for a few seconds and let the release of CO₂ gas blow out any potential sediment in the CO₂ tank, then tighten the tank valve.
- 2) Once sediment extrication process is completed and tank valve tightened, you can then install the regulator to the CO₂ tank. Aquatek CO₂ regulators include a plastic washer in the packaging, which must be placed in between regulator connector and the CO₂ tank connector to create a tight seal and reduce CO₂ leakage.
- 3) IMPORTANT: Whenever the regulator is attached to the CO₂ tank, be sure to loosen the tank valve slowly to prevent gauge blow out and damages to the inner seals of the regulator.
- 4) IMPORTANT: The CO₂ tank must be securely placed on a flat surface in an up-right position. Unsecured placement of CO₂ tank can cause the tank to tip over and lead to severe damage of the tank valve and/or regulator. Damaged CO₂ tank can also result in sudden release of high-pressure CO₂ gas.
- 5) Aquatek CO₂ regulators are equipped with CGA 320 connectors, offering a custom fit to standard U.S. CO₂ tanks.
- 6) Connect air tube to CO₂ regulator by unscrewing the nut all the way, fit one end of airline tube through the nut and fit it over the air outlet, and then tighten the nut down. Connect the other end of air tube to a dispenser.
- 7) Plug the power cord of the solenoid valve to an AC outlet, a timer device or a CO₂ level controller.
- 8) Slowly open the main CO₂ tank valve (located on the top of the CO₂ cylinder). Do not open the main valve all the way, a couple of turns should provide enough outflow.
- 9) Slowly open the needle valve to make minor adjustments to outflow rate.

To determine the duration of CO₂ emission (in minutes) to bring the CO₂ level to 1500 PPM for the growing area, you should first calculate the size of the growing area in cubic feet. Simply multiply the space's Length x Width x Height measured in feet, this will give you an approximate measurement of your growing area in cubic feet. Then, reference the table above to determine the flow rate setting (0.5 to 15 cubic feet / hour) and the approximate duration of CO₂ emission (in minutes) to reach 1500 PPM. Please ensure the growing area has good air-movement to evenly distribute CO₂ throughout the space. We recommend that you use a CO₂ level controller to monitor the level of CO₂.

FLOW METER SETTINGS (CUBIC FEET PER HOUR - SCFH)

	0.5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
50	7	4	2	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
100	14	7	4	2	2	1	1	1	1	1	NA	NA	NA	NA	NA	NA
200	29	14	7	5	4	3	2	2	2	2	1	1	NA	NA	NA	NA
400	58	30	14	14	10	7	6	5	4	4	3	3	3	2	NA	NA
600	87	43	22	14	11	9	7	6	5	5	4	4	4	3	3	NA
800	115	58	29	19	14	12	10	8	7	6	6	5	5	4	4	4
1000	144	72	36	24	18	14	12	10	9	8	7	7	6	6	6	6
1200	137	87	43	29	22	17	14	12	11	10	9	8	7	7	6	6
1400	202	101	50	34	25	20	17	14	13	11	10	9	8	8	7	7
1600	230	115	58	38	29	23	19	17	14	13	12	11	10	9	8	8
1800	259	130	65	43	32	26	22	19	16	14	13	12	11	10	9	9
2000	288	144	72	48	36	29	24	21	18	16	14	13	12	11	10	10

TIME (MINUTES)

This chart is based on an ambient level of 300 PPM of CO₂ and a desired level of 1500 PPM.