

Federal Beverage offers a less expensive, more efficient and reliable alternative to high pressure nitrogen gas cylinders.



ON-SITE NITROGEN/MIXED GAS SYSTEM... an excellent way to enhance the quality of your beer and increase the profitability in your bar operation



The brewery takes great care to brew, store and distribute kegs of draught beer to your establishment...The AC Nitrogenator was designed to dispense brewery fresh draught beer at all times!

Save Money & Gain The Following Benefits:

- **Correct pouring problems due to flat or over-carbonated beer.**
- **Extend keg life by maintaining proper gas level balance.**
- **Enable custom gas blends for each dispensed product.**
- **Eliminate running out of high-pressure cylinders.**
- **Maintain draft beer system pressure at all times**
- **Provide high purity Nitrogen of 99.7% or greater regardless of demand.**

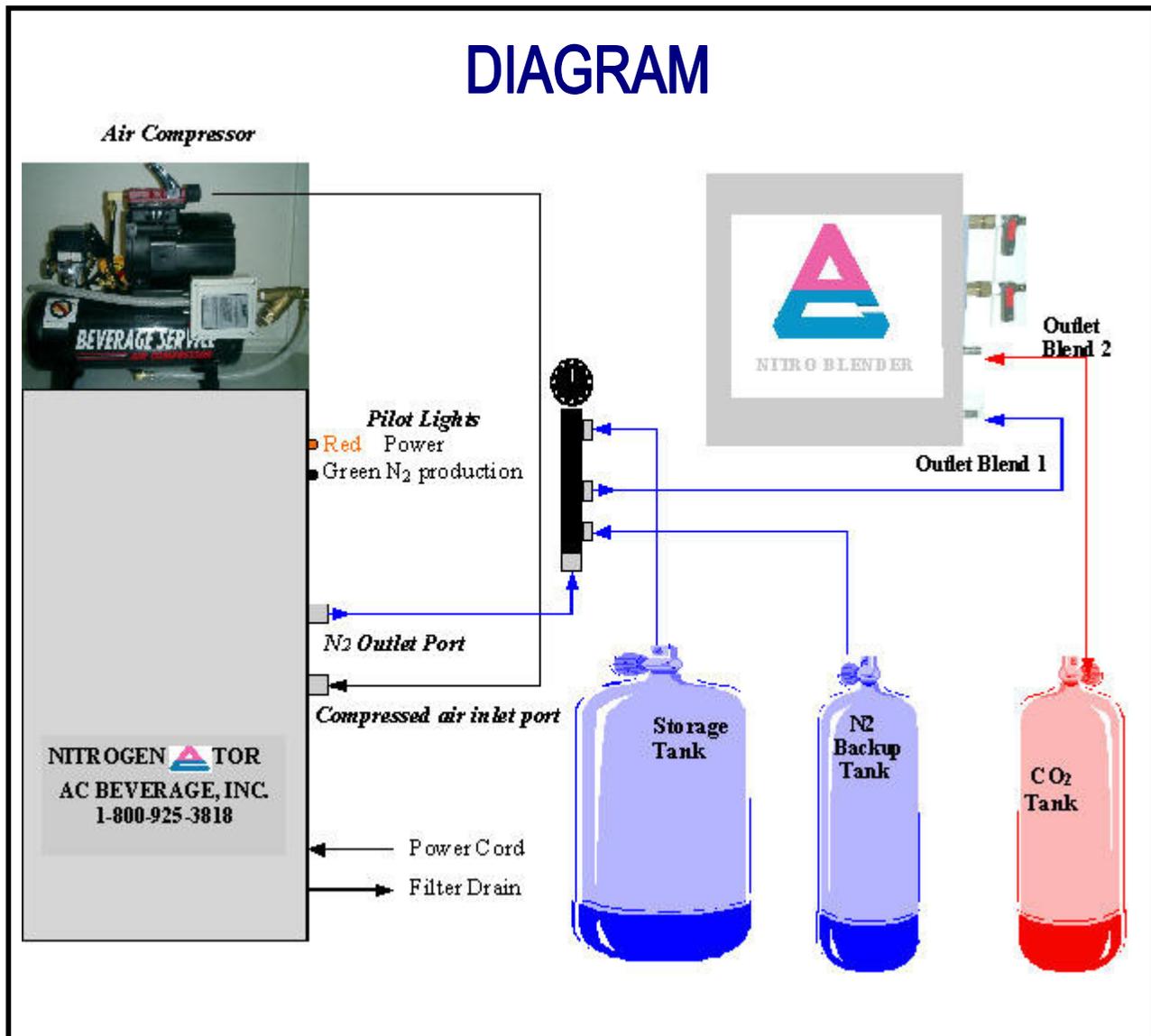
The AC Nitrogenator is the first on-site gas system developed by a beverage service company. Federal Beverage provides service to thousands of customers and understands the individual needs of each client. Realizing these needs, the AC Nitrogenator is engineered as a component system, allowing customers to purchase only the equipment required and then build upon the system as demands change. The AC Nitrogenator systems are comprised of the generator cabinet with a separation membrane fed by a beverage service air compressor. Pure Nitrogen is stored in a 28-gallon tank that feeds an AC Nitro Blender. Blended gas is then piped to the draught beer system.

Allow Federal Beverage to show you the difference!

PRINCIPAL SPECIFICATIONS

		60% CO ₂ 40% N ₂		25% CO ₂ 75% N ₂		
Five Hr. Surge (kegs) @ 30psi Applied Pressure *Optional: 2 nd Storage Tank increases capacity to Monthly Keg Capacity Nitrogen Gas Purity Minimum = 99.7%		16		9		
		21		12		
		481		271		
	DIMENSIONS				VOLTS	AMPS
	W	D	H	Wt.	60Hz	
Nitrogenator	14"	13"	30"	45 lbs.	115	6
Nitro Blender	12 ¹ / ₄ "	6 ¹ / ₂ "	12 ¹ / ₄ "	9 lbs.		
Storage Tank <i>Capacity 108 Liters =28 Gallons</i>	14.9"	14.9"	47.3"	73 lbs.		
Air Compressor	16.5"	8"	16.8"	25 lbs.	115	4.2

DIAGRAM



TECHNICAL INFORMATION

MODEL: AC N₂nitrogenator®, model no. AC-Base-N₂

GENERAL DESCRIPTION:

The AC Nitrogenator® is a Nitrogen generating system that converts compressed air into Nitrogen utilizing state-of-the-art membrane technology. The PRISM® Alpha Membrane is the heart of the system, which consists of a bundle of hollow fiber membranes. The compressed air enters the center core of the fibers and travels the length of the module. As air travels along the fiber, Oxygen, CO₂ and water vapor molecules pass through the membrane wall faster than the Nitrogen molecules. This results in a high purity dry Nitrogen stream exiting at a low pressure.

INSTALLATION:

The AC Nitrogenator® should be located in an area where the ambient temperature is between 38°F and 100°F (3°C and 38°C). Installation of the AC Nitrogenator® in an area where the temperature falls outside this range may affect the performance and/or the life of the system. The environment surrounding the AC Nitrogenator® must be well ventilated also.

- ❖ **Mounting** - The AC Nitrogenator® can sit on a flat surface or be wall-mounted. If wall mounted, a supporting member of a wall, such as a stud must be used to secure the unit. Drill mounting holes into the wall using the mounting template outlined on the packing box. The AC Nitrogenator® must be in a vertical position to maintain proper operation of the pre-filter float drains.
- ❖ **Drain Lines** – The drain port coming from the pre-filter and air compressor condensate drain must be connected to an appropriate disposal container or drain. The liquid in this drainage will consist of water and compressor contaminants.
- ❖ **Compressed Air** – The AC Nitrogenator® requires a source of clean dry compressed air for operation. The air should be between 60°F and 110°F (15°C and 43°C) and have a dew point lower than the ambient temperature of the installation location. The incoming compressed air pressure should be between 100 psig and 125 psig., unless the AC Nitrogenator® has been ordered to operate at a lower pressure range. The AC Nitrogenator® requires .5 SCFM of compressed air for operation. The compressed air system that supplies the unit should have adequate capacity or the performance of the system will be compromised.

NOTE: Federal Beverage recommends the use of the model #T-617-6Z948, 1/2 HP Beverage Service air compressor outfitted with an electric auto condense drain, which has a proven performance record.

- ❖ **Pre-filtration** – The AC Nitrogenator® comes equipped with a .01-micron coalescing filter to remove dust, hydrocarbon vapors and water vapor. Additional pre-filtration may be required in applications where air borne contaminants are evident or high humidity conditions exist.

NOTE: AC Beverage recommends the use of model #831A Carbon pre-filter in extreme conditions.

- ❖ **Connections** – Pipe the AC Nitrogenator® per the illustrated diagram shown on Principal Specification Sheet.
- ❖ **Start-Up** – Plug the air compressor power cord into an appropriate 120 VAC/60 Hz power receptacle and operate until fully charged to 120 psig. Plug AC Nitrogenator® into appropriate 120 VAC/60 Hz power receptacles and note that the red and green lights illuminate. These indicators allow for visual inspection that power is on “Red” and that Nitrogen production “Green” is taking place.
- ❖ **Leak Test** – Turn storage tank valve located on the Distributor off and both blender gas outlets. Observe N₂ pressure gauge as it should rise to 100psig. At this point, the “Green” N₂ production light should shut off. Monitor system for a minimum of 15 minutes to ensure that pressure remains at 100 psig and that “Green” light remains off. Upon completion of leak test, turn on valves to storage tank and allow system to pressure up.
- ❖ **Operation** – The AC Nitrogenator® will operate continuously as long as it receives power and compressed air. The air compressor should not cycle continuously during normal operation. However, the compressor may cycle on and off frequently during periods of high dispense gas demand.
- ❖ **Nitrogen Back-Up Tank** – An emergency back-up tank set to 100 psig should be connected to the system to allow for a Nitrogen source in the event of compressor failure or major leak in beer dispense plumbing. If Nitrogen pressure drops below 40 psig the back-up tank should be turned on to rebuild pressure to at least 90 psig. In the event of a compressor failure, the tank should remain on until compressor is repaired or replaced. The back-up tank is designed to assist the AC Nitrogenator® in the event that the demands for Nitrogen exceed the output levels. Turning the back-up tank on to recharge system is an option during extreme volume situations.