OCEANIC®

O2 TECH REG

O24/Alpha 7 Regulator

owner's guide

Pay special attention to items marked with this Warning Symbol.

WARNINGS:

- **This Regulator is intended for use by recreational specialty divers who have successfully completed a nationally recognized specialty training course in scuba diving using breathing gases containing high levels of oxygen by volume. It must not be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving using breathing gases containing high levels of oxygen.**
- **It is NOT intended for use by military and commercial divers.**
- **This Regulator must be used together with an instrument that measures and indicates the user's breathing gas supply pressure.**
- **As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.**
- **Read and understand this owner's guide completely before diving with this Regulator. If you do not fully understand how to use this regulator, or if you have any questions, you should seek instruction in its use from your Authorized Oceanic Dealer before you utilize this product.**
- **Prior to each dive inspect and test this Regulator for proper operation. If any part does not function properly, DO NOT USE!**

Oceanic promotes responsible diving practices and does not advocate diving beyond the limits of your training and experience. Oceanic regulator equipment is designed to offer continued safe and reliable performance in the event the need arises and the recreational diving limits are exceeded.

Oceanic O2 Tech Reg Owner's Guide
Doc. No. 12-2360
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San Leandro, Ca. USA 94577

LIMITED TWO-YEAR WARRANTY
For details, refer to the Product Registration Card provided by your Authorized Oceanic Dealer. For additional information, visit the Oceanic web site at - http://www.OceanicWorldWide.com

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www.OceanicWorldWide.com

△ **NOTE: Oceanic Regulators are only CE certified to a maximum operating depth of 50 meters (165 feet).**

INTRODUCTION

THANK YOU for choosing an Oceanic O2 Tech Reg (O24/Alpha 7)!

Features and operation are described in this owner's guide, and/or any addendum or supplement provided with it. By following the instructions in this guide, you will understand how your regulator works, how to make best use of its features, and how to maintain it. DO NOT dive with the O2 Tech Reg until you have read and understand all information provided with it.

Oceanic O2 Tech Regulators are classified as being suitable for use with nitrogen-oxygen (Nitrox) breathing gas mixtures containing up to 99% oxygen and for use with 100% oxygen.

⚠ **WARNINGS:**
Oceanic O2 Tech Regs are prepared for Oxygen Service when sealed and shipped from the factory. In this condition, they are for use with nitrogen-oxygen breathing gas mixtures (nitrox) that contain up to 99% oxygen by volume as well as for 100% oxygen.

If Oceanic O2 Tech Reg equipment is subsequently used with equipment, or connected to an Air supply system, that is not rated for Oxygen Service, it cannot subsequently be used with Nitrox breathing gases containing more than 40% O2 by volume unless it again prepared for Oxygen Service by the Oceanic factory.

Oceanic O2 Tech Regs are not intended to be used by untrained persons who may not know the inherent risks and hazards of SCUBA diving and diving with breathing gases that contain high concentrations of oxygen.

Prior to use of Oceanic O2 Tech Reg equipment with breathing gas mixtures that contain a higher fraction of oxygen than 21%, the user must have received, or must first obtain, certification in diving with Nitrox from a recognized training agency.

An Oceanic O2 Tech Reg is not a medical device. It is not intended and must not be used to supply treatment oxygen in a medical emergency.

⚠ **NOTE: The term Breathing Gas used throughout this owner's guide applies to enriched nitrogen-oxygen (nitrox) mixtures as well as compressed Air and 100% oxygen.**

When using Air with this regulator equipment, the Air used must meet EN132 Annex A standards.

O24 FIRST STAGE

⚠ WARNING: Failure to prepare your First Stage properly for use in harsh environmental conditions, such as being subjected to sediment or the possible buildup of ice, or salt crystals, may result in serious injury or death.

Operation of your First Stage is not visible when using a regulator system. The First Stage converts the cylinder's high pressure breathing gas to an intermediate pressure of approximately 140 psi that can be handled by the regulator Second Stage to deliver a smooth flow of breathing gas upon demand (i.e., when you inhale). Intermediate pressure gas is also available for inflation of a BC or dry suit.

⚠ WARNING: Under no circumstances should adjustment of an Oceanic regulator First Stage be performed by anyone other than an Authorized Oceanic Service Technician. Doing so may cause failure underwater, resulting in serious injury or death.

ATTACHMENT OF HOSES

Low Pressure (LP) and High Pressure (HP) Port Thread sizes are different, making incorrect installation of Hoses unlikely. However, to avoid damage or personal injury that may occur due to incorrect installation, Oceanic strongly recommends having installation performed professionally by an Authorized Oceanic Dealer. If this is not possible, proceed as follows.

Type of Hose Being Connected:

- Determine whether the Hose that you are installing requires connection to an HP Port (for a Pressure Gauge or Air Integrated Computer), or to an LP Port (for an Octopus Second Stage, or a BC or Dry Suit Inflator).
- Be sure that you only place high pressure accessory Hoses in Ports specifically marked with the letters 'HP', or '4500 psi / 300 BAR'.

Installing Hoses:

After having determined the type of Hose -

- Remove the Port Plugs from those Ports to be used by turning them counter clockwise with a 5/32" hex key. Save for possible future use.
- Lightly lubricate the Hose-End Threads and O-ring with Christo-Lube MCG111 Lubricant.
- Thread the Hose clockwise into the Port until secure, then tighten it with an open end wrench of the appropriate size to a torque of 40 in-lbs.
  - • Second Stage - 9/16" wrench
  - • LP Inflator - 9/16" (or 1/2") wrench
  - • HP Gauge or Integrated Computer - 5/8" wrench
- After all Hoses are connected, test the complete Regulator Assembly by attaching it to an appropriate Tank, pressurizing the system, and carefully listening for leakage of breathing gas.

REMOVAL OF HOSES

⚠ **WARNING: At least one Second Stage must be connected to the First Stage to facilitate purging of breathing gas from the First Stage.**

To remove a Hose from the First Stage -

- Ensure that the Regulator System is purged of all breathing gas.
- Loosen and remove the Hose by turning it in the counter clockwise direction with an open end wrench of the appropriate size.

REGULATOR ATTACHMENT TO A TANK

⚠ **WARNING: Maximum working pressure for an Oceanic DIN style connector is 4500 psi / 300 BAR**

DIN STYLE CONNECTOR

Before attaching the Regulator to the Tank:

- Slowly open then close the Tank's Valve to allow a momentary flow of breathing gas to blow any moisture or contaminants from the breathing gas opening in the Tank Valve.
- Examine the Threads in the Valve to ensure they are clean and free of burrs or defects that could damage the Threads of your Regulator DIN Fitting.

To attach the Regulator to the Tank:

- Remove the Protector Cap from the Threads of the Regulator DIN Connector, and examine the Threads and sealing O-ring. Replace the O-ring if it is damaged.
- Using care not to cross the Threads, thread the DIN Connector clockwise into the Cavity of the Tank Valve until it is secure.
- Slowly open the Tank Valve (with the Pressure Instrument facing away from you) and listen to ensure there is no leakage from the Regulator/Tank Connection.
- If any leakage is observed, repeat the attachment procedure and inspect the sealing O-ring. If air still leaks, DO NOT USE! Take the Regulator and Tank to an Authorized Oceanic Dealer for inspection and service.

To remove the Regulator from the Tank:

- Close the Tank Valve and purge all pressure from the Regulator System by depressing the Purge Button of the Second Stage Regulator.
- Turn the DIN Connector Wheel counter clockwise out of Cavity in the Tank Valve.
- Place the Protector Cap on the Threads of the DIN Connector.
- Prevent water from entering the First Stage. **DO NOT blow breathing gas near a First Stage that does not have the Protector Cap in place.**

ALPHA 7 SECOND STAGE

WARNING: Even if your First Stage is properly prepared for use in harsh environmental conditions, only proper training will protect your Second Stage from the effects of the environment.

FEATURES AND OPERATION

The Second Stage of the regulator assembly receives breathing gas at an intermediate pressure of approximately 140 psi from the First Stage and delivers it to you at ambient pressure during inhalation. When you stop inhaling, it then shuts off the flow of breathing gas and provides a path for exhaled gas.

All Second Stages have a level of sensitivity that can result in excess breathing gas being expelled when the Second Stage is not in your mouth while in the water. When this occurs, it is usually during entry or when at the surface.
The condition described, referred to as free-flow, can usually be stopped by turning the Second Stage so the Mouthpiece is pointing down and the Purge Button is pointing up.

Recommended for an Octopus is to carry it with the Mouthpiece facing down when not in use, or to use a Mouthpiece Plug or Cover to prevent free-flow in the event that it is bumped.

During normal use underwater, a small amount of water collects inside the Body of a standard regulator Second Stage in a natural reservoir near the bottom. This is normal for most Second Stages, and the water is held away from your mouth naturally and will go unnoticed unless you become inverted or do subaquatic somersaults at which time you may experience temporary 'wet breathing'.

Water can be purged from the small internal air space of most Second Stages by exhaling a small puff of breathing gas into the Mouthpiece, or by blocking the Mouthpiece with your tongue and pressing the front mounted Purge Button to initiate a flow of breathing gas.

Second Stage Swivel

A Low Pressure Swivel is available as an accessory from your Authorized Oceanic Dealer who can install one on your Oceanic Second Stage.

CARE AND MAINTENANCE

TRANSPORT and STORAGE

If possible, transport your Regulator Assembly (preferably dry) in a padded carrying case or equipment bag separated from sharp items (i.e., dive knife, spear gun, etc.) that might damage or scratch the components. You should also protect the Second Stages from damage from heavy objects (i.e., dive light, first stage, etc.).

Prior to storing your Regulator:

- Ensure that the complete Regulator is clean and dry.
- If you were unable to clean the Regulator prior to transport, or if it became exposed to other equipment that was not thoroughly cleaned prior to transport (such as a BC or Wet Suit), clean it thoroughly and allow it to dry naturally as previously described.

POST DIVE CARE

As soon as possible at the end of each day of diving:

- Install the DIN Thread Protector Cap).
- If possible, immerse the entire Regulator Assembly in a warm fresh water bath and soak for one hour, preferably while pressurized. DO NOT depress the Second Stage Purge Button while the Regulator is soaking. Doing so will allow water to flow into the sealed portion of the First Stage.
- Remove from the bath and rinse all components of the Assembly with slow running fresh water. DO NOT use full water pressure.
- Flush the ambient openings of the First Stage and the exterior of all components thoroughly to remove dissolved salt and other contaminants.

- Flush the Second Stage by running water into the Mouthpiece and out the Exhaust Ports. DO NOT depress the Purge Button while rinsing., doing so will allow water to enter the First Stage.
- If possible, lay the complete Assembly flat in a cool, dry place **(out of direct sunlight)** and allow the components to dry naturally.
- DO NOT inject or spray Lubricants into or onto the First and Second Stages. Doing so can attract contamination that may subsequently interfere with proper operation.

REPAIRS and SERVICE

⚠ **WARNING: DO NOT attempt to disassemble or repair the First or Second Stages, or to adjust the First Stage. Doing so could cause malfunction while underwater resulting in serious injury or death. It will also void the Regulator's limited warranty.**

Only the Oceanic factory can service an O2 tech Reg that is used with breathing gases containing greater than 40% O2.

In the event that any component of your Regulator Assembly requires any form of repair or service, return it to your local Authorized Oceanic Dealer for professional service by a trained technician authorized to perform Oceanic factory prescribed service.

Once each year your complete Regulator Assembly should be inspected and serviced by an Authorized Oceanic Dealer. More frequent service is recommended if you dive in severe conditions or more frequently than an average diver (see guidelines on page 10).

Annual Service consists of:

- Inspection
- Complete disassembly
- Thorough cleaning and evaluation of reusable parts
- Replacement of non-reusable parts
- Complete reassembly
- Final adjustment and testing

Costs for routine inspection and Annual Service are understood to be a normal part of operation, and are not covered by the Regulator's limited warranty.

If **Warranty Service** is requested, or routine service parts are requested in accordance with a **Registered Service Agreement**, present the appropriate documents (i.e., card, receipts, and service records) to the Authorized Oceanic Dealer when the Regulator is delivered for service.

COLD WATER DIVING

Due to the inherent design of Oceanic Piston style First Stages, they cannot be specially prepared for use in waters having Temperatures below of 50°F (10°C). Oceanic therefore recommends the use of an Oceanic Diaphragm style First Stage such as the TDX5 fitted with an Environmental Protection Kit when diving in waters having colder temperatures.

Specialized training and skills required for cold water diving will reduce effects that cold water Temperatures can impose upon the operation of Oceanic Regulator Second Stages.

⚠ **WARNING: Failure to obtain proper training in the specialized techniques required for diving in cold water environments and failure to apply such techniques to handle such situations that could result in Regulator freezing will place you in risk of serious injury or death.**

ADDITIONAL SPECIFICATIONS FOR CONNECTING COMPONENTS TO OCEANIC REGULATOR FIRST STAGES

Second Stage (Primary or Octopus):

- Nominal Source Pressure = 140 psi (9.5 BAR) ± 5 psi (.5 BAR)
- Maximum Source Pressure = 155 psi (11 BAR)
- Thread Size = 3/8 - 24 UNF
- Inhalation Effort = 1.1 to 1.3 ciw* (cubic inches of water)
  * Delta 3 model = adjustable from 0.0 to 2.5 ciw
- Exhalation Effort = 1.1 ciw*
- Flow Rate = 30+ scfm (standard cubic feet per minute)
- Work of Breathing is equal to or better than USNavy and CEN

Pressure Gauge or Pressure Transmitter:

- Maximum Source Pressure = 5000 psi (350 BAR)
- Thread Size = 7/16 - 20 UNF

GUIDELINE FOR MINIMUM SERVICE INTERVALS

Due to variations of use and storage time that Oceanic Regulator equipment may be subjected to, the Guidelines and defined Intervals given herein are subject to the discretion of the owner of the specific product. Inspection and/or service indicated must be performed only by an Authorized Oceanic Dealer.

Personally owned equipment used for recreational diving activity:

- Equipment used 100 dives or less per year should be serviced at least once per year.
- Equipment used more than 100 dives per year should be serviced after 100 dives, prior to further use.
- Equipment stored for more than 6 months should be inspected, and serviced as required, prior to use.

Equipment used for dive training and/or consumer rental activities:

- Equipment should be inspected prior to every use.
- Equipment should be serviced at least once every 6 months, regardless of use, and after 100 dives prior to further use.
- Equipment stored for more than 3 months should be inspected, and serviced as required, prior to use.

Regardless of ownership or intended use:

- Equipment should be inspected and serviced if it displays any sign of leakage, malfunction, or freeflowing.
- Equipment should be inspected and serviced if the First Stage Inlet Filter shows any sign of residue or discoloration.
- Equipment should be inspected and serviced if it displays signs of improper performance or breathing effort.
- Equipment should be inspected and serviced if O-rings or Hoses display any signs of deterioration.

RECORDS

O24 Serial # _____

Alpha 7 Serial # _____

Octopus Model _____

Octopus Serial# _____

Date of Purchase _____

Oceanic Dealer _____

Dealer Phone No. _____

Dealer Address _____

INSPECTIONS / SERVICE

Date	Service	Authorized Dealer / Technician

Oceanic Germany - Nurnberg, Germany
Tel: 49-911-324-6630 Fax: 49-911-312-999
E-mail: office@oceanic.de

Oceanic South Europe - Genova, Italy
Tel: 0039-010-834-51 Fax: 0039-010-834-52-50
E-mail: Shawne.Stanley@oceanicse.it

Oceanic SW, Ltd - Devon, United Kingdom
Tel: 44-1-404-89-1819 Fax: 44-1-404-89-1909
E-mail: info@oceanicuk.com

Oceanic France - Marseille, France
Tel: 33-491-25-27-45 Fax: 33-491-25-35-86
E-mail: oceanicfrance@wanadoo.fr

Oceanic International (Pacific) - Kapolei, Hawaii
Tel: 808-682-5488 Fax: 808-682-1068
E-mail: oceanichi@oceanicusa.com

Oceanic Diving Australia Pty. Ltd
Sorrento, Victoria, Australia
Tel: 61-3-5984-4770 Fax: 61-3-5984-4307
E-mail: sales@oceanicaus.com.au

Oceanic Asia-Pacific Pte. Ltd - Singapore
Tel: 65-779-3853 Fax: 65-779-3945
E-mail: info@oceanicasia.com.sg

Oceanic Japan - Yokohama, Japan
Tel: 045-575-6671 Fax: 045-575-6673
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