

ACM - Air Control Module
OWNER'S MANUAL



OCEANREEF[®]
underwater, naturally.

ACM Air Control Module OWNER'S MANUAL

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The System described in the following manual is the: ACM - Air Control Module

WARNINGS, CAUTIONS, NOTES

Pay special attention to information provided in warnings, cautions and notes that are accompanied by these symbols:



WARNING indicates a procedure or situation that, if not avoided, could result in serious injury or death to the user.



CAUTION indicates any situation or technique that could cause damage to the product, and could subsequently result in injury to the user.



NOTE is used to emphasize important points, tips, and reminders.

INTRODUCTION

OCEANREEF ACM, Air Control Module is a lightweight, portable control box for use in surface supplied air diving operations

The ACM controls the diver's air supply, communications and monitors the diver's depth. It also allows two divers clear round robin communications. The ACM is also available without communication system.



The air supply can be either from a low pressure compressor or high-pressure cylinders.

The ACM's adjustable first stage regulator reduces the high-pressure air and supplies low pressure through the umbilical to the diver's breathing system. High pressure hoses with INT or DIN adapters permit U.S. standard scuba cylinders or DIN valve cylinders to be used. A switching system that uses two high-pressure feed lines which allows changing of used cylinders without interruption of the diving operation. A low pressure air supply fitting (optional) with non-return valve allows for a L.P. compressor to be used as the primary air source. Shut off valves allow the isolation of each diver's air supply.

A complete Pneumo system (optional) is provided, for each diver to control diver's depth.

The Communication Set is a multipurpose intercommunication system that provides reliable and clear communications between a topside operator (tender) and one or two surface-supported divers.

The lightweight, wheels equipped, high impact polyethylene plastic case with extra thick corners ensure exceptional strength and a long work life. An O-ring seal protects hardware from moisture when the case is closed. All HP line components are stainless steel for maximum safety and work life.



WARNING

The high quality of the product does not allow the user to ignore the problems connected with the correct use of the product and the rules for safe diving.

Diving is a hazardous activity and no piece of equipment can prevent the possibility that you may be killed or injured any time you enter the water.

WARRANTY

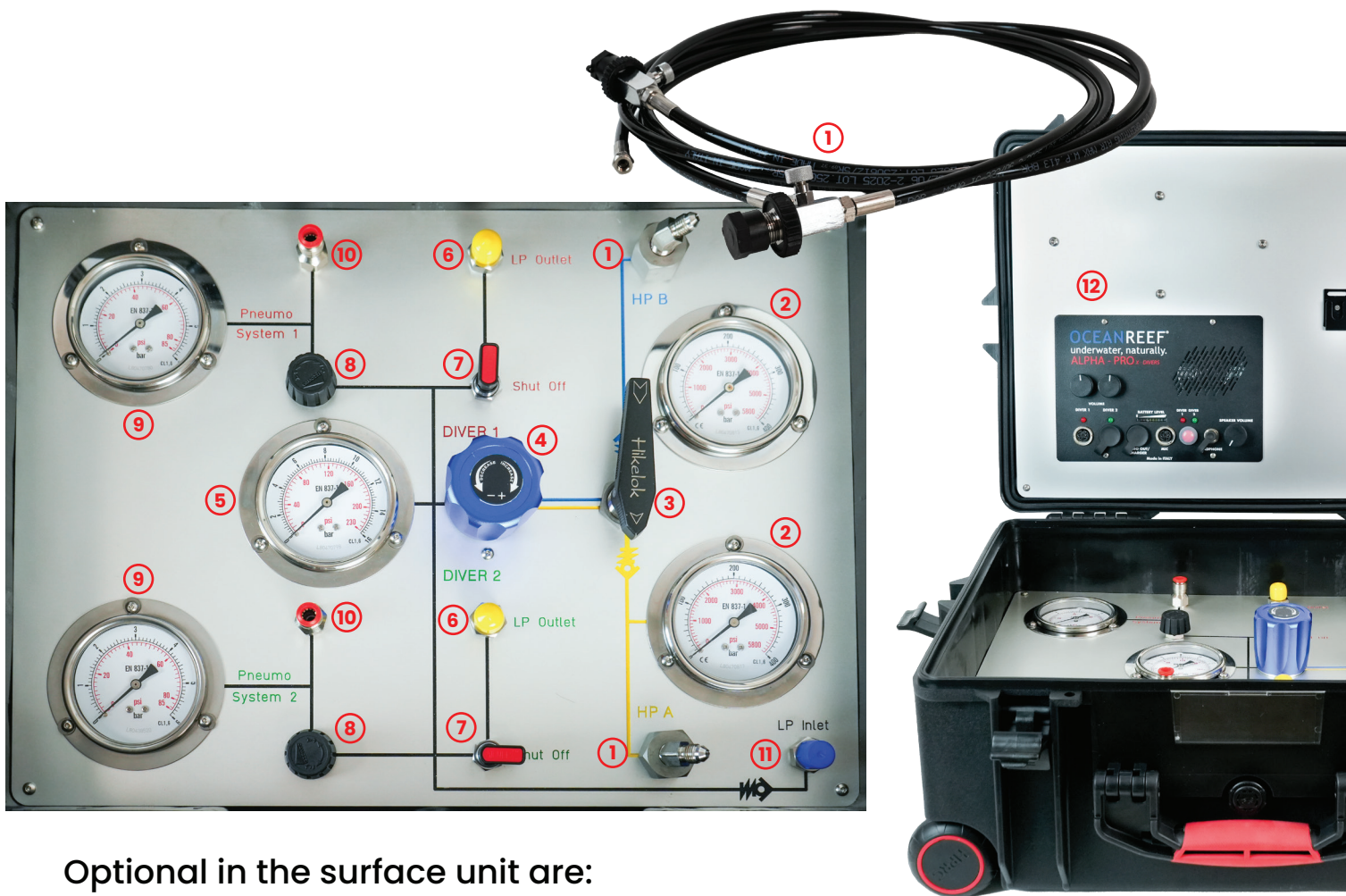
1. OCEAN REEF ACM System is guaranteed to be free of material or manufacturing defects for a period of 24 months from the time the unit is purchased. For the duration of the guarantee, the Company's responsibility is limited to replacement of any parts that are defective in our opinion, and that have not been used incorrectly or handled negligently. The unit must be returned to the outlet from which it was bought, along with the warranty card. The cost of transport is to be prepaid by the customer.
2. Even during the guarantee period, this guarantee shall not be valid where:
 - Damage was caused by incorrect handling or carelessness.
 - Damage was caused by the unit falling after it was purchased.
 - Damage caused by fire, earthquake, floods, lightning, or other natural disasters, pollution or electrical charges.
 - The warranty card is not produced.
 - Our name, the date of purchase, and the seller's name do not appear on the warranty card.

MAIN COMPONENTS & OPTIONAL

Surface unit

Basic surface unit is comprised of:

- two high pressure inlets with hose and cylinder fittings (1)
- two high pressure gauges (2)
- selection handle (3)
- divers pressure regulator (4)
- divers pressure gage (5)
- two diver umbilical outlets (6)
- shut off valves for umbilical outlets (7)

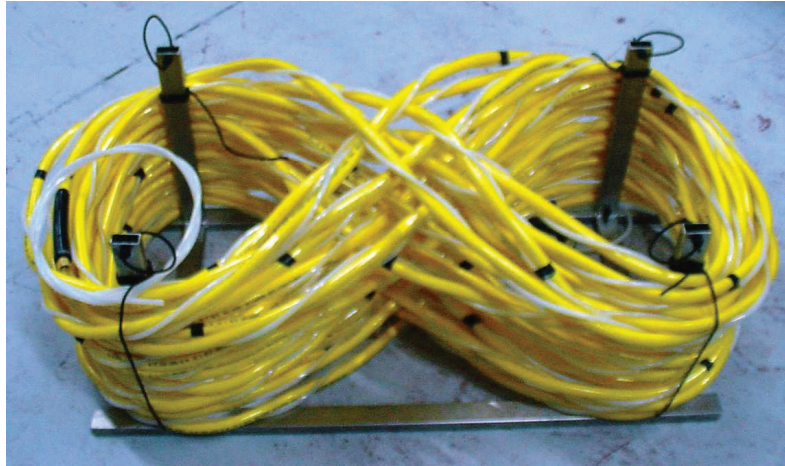


Optional in the surface unit are:

- diver depth measuring “Pneumo” system for each diver, with:
 - Air valve (8)
 - Gage (9)
 - Umbilical outlet (10)
- compressor LP inlet with non-return valve (11)
- hardwired communication system Alpha_Pro X-Divers (12)

Umbilical

3/8" umbilical hose for breathing air with terminations.
Available any length on request.



Optional:

- Rilsan 8mm hose for Pneumo system
- Communication cable for Alpha-Pro X-Divers with wet pluggable connector. The cable includes a yellow rope exterior, outside diameter is 10mm with a resistance of more than 4000 newton. The cable includes a waterproof rubber 6 pin connector. The Professional cable is also available at any length on Request and a carry-bag is available with the cable and sold separately as an accessory.

Terminations

Umbilical is coming standard with an adapter for the 9/16" second stage connection, different kind of terminations available on request.

Optional:

- One way valve for the breathing air hose
- Dual thank valve for safety thank connection

Note: Pneumo hose has no terminations on both sides



OPERATING INSTRUCTIONS

1. Visual check of all the parts
2. Connect the 2 cylinders
3. Connect the umbilical to ACM surface unit and tighten with a wrench
4. Connect the umbilical to the FFM.

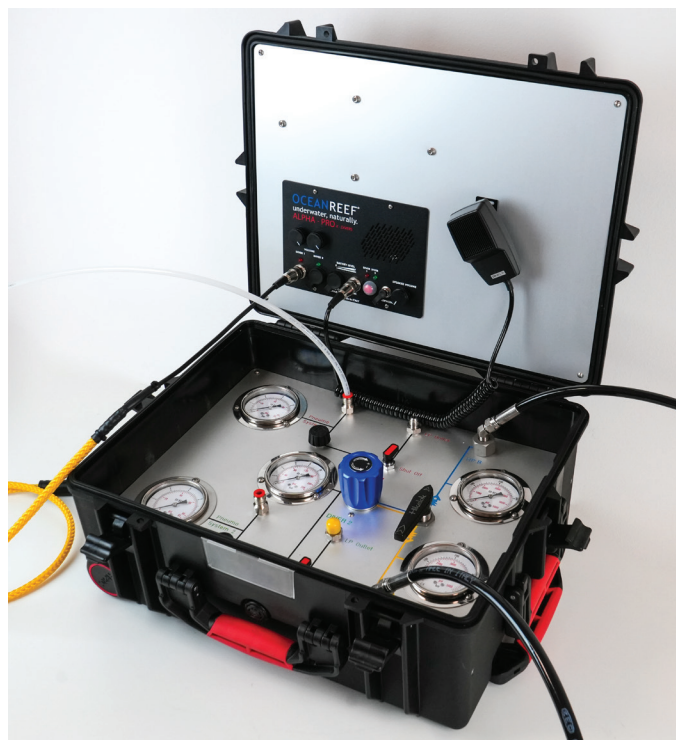
NON RETURN VALVE AND DUAL THANK VALVE FOR SAFETY THANK CONNECTION ARE STRICTLY RECOMMENDED



5. Connect the Pneumo hose to the ACM (if supplied)
6. Connect communication cable to the ACM (if supplied)
- 7. A complete test of the following characteristics must be carried before EACH DIVE.**

- a. Breathing air circuit (supply pressure, intermediate pressure and FFM functioning)
- b. Pneumo air circuit
- c. Communication system (if any)
- d. Compressor Inlet (if any)

IF ANY OF THE ABOVE MENTIONED TEST FAILS, STOP IMMEDIATELY THE OPERATIONS AND CONTACT THE SUPERVISOR OR THE DEALER.



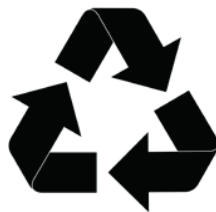
REPLACING THE CYLINDERS

The selection handle (#3 in page 7) is always directed to the gauge representing the tank in use, when this (for example HP A) is going under 50 bar safety limit, switch the handle to use the other (HP B) (full) tank. You can now close HP A tank valve, disconnect it from the ACM and replace it immediately.

In order to limit our paper consumption, and as a part of our environmental friendly and responsible approach, OCEANREEF prefers to put user documentation online rather than print them out.

Please for more detailed information refer to our web site:

www.oceanreefgroup.com



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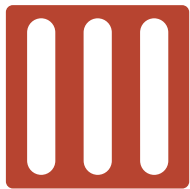
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