ALPHA-PRO X-DIVERS OWNER'S MANUAL



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1 - INTRODUCTION

For more than 70 years, OCEAN REEF has been involved in the underwater diving industry. We have contributed much to this industry, from fins and snorkels to the most modern systems of underwater communication. Through the spirit of intrepid pioneers, brilliant inventors, passionate divers, and dynamic entrepreneurs, OCEAN REEF has been able to turn dreams into reality in the underwater world.



If you lose this manual or if you should require more copies, you can download it at diving.oceanreefgroup.com/support/ or contact the Manufacturer: Mestel Safety SRL, Via Arvigo 2, 16010 Sant'Olcese (GE), IT. Phone: +39 0107082011. E-mail: infoitaly@oceanreefgroup.com. Website: diving.oceanreefgroup.com

The Manufacturer has carefully worded and edited this owner's manual. However, in no event the Manufacturer will be responsible for any damage caused by the incorrect interpretation of its content, nor due to any misprints and/or incompleteness in the text.

The Manufacturer will not accept liabilities for any damage caused by:

- Insufficient, incorrect and improper maintenance, failing to comply with the manual's recommendations
- Absence of periodic tests and checks
- Incorrect and improper use
- Failing to comply with guidelines included in the owner's manual
- Alterations and/or modifications of the Vesper

If any of the above were to occur, considering these actions are potentially dangerous to the health and life of the users, the manufacturer is released of any responsibility and the warranty is void.

The Manufacturer is an ISO 9001:2015 certified company (https://diving.oceanreefgroup.com/support/#ISO_CC).

2 - GENERAL WARNINGS / OWNER'S RESPONSIBILITIES

WARNINGS, CAUTIONS AND NOTES

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



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



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

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

IMPORTANT

The content of this manual is based upon the latest information available at the time of print. OCEAN REEF reserves the right to modify any products, processes and manufacturing techniques at any time. It is the technicians' responsibility to acquire the latest information and parts from OCEAN REEF for service and repairs to be performed.

If the instructions provided in the manual are unclear or difficult to understand, please contact OCEAN REEF at infoitaly@oceanreefgroup.com before using the equipment or attempting any repairs.



Carefully read this instruction manual before use, and keep it for future reference.



While this is a product of high quality, the user is not exempt from problems connected with the incorrect use of the product or failure to follow the rules of safe diving.



Do not modify or alter in any way the ALPHA-PRO X-DIVERS.



DO NOT USE the unit if it is overheating, if it is leaking battery fluid, if water has leaked the unit, if there is smoke coming from the unit or if any part is broken.



Before using the ALPHA-PRO X-DIVER the user must ensure that the product has been properly inspected and maintained. (See Chapter 8 Maintenance, Cleaning and Storage).



OCEAN REEF refuses all responsibility for damages caused by non-compliance with the instructions contained in this manual. These instructions do not extend the warranty or the responsibilities stated by OCEAN REEF terms of sales and delivery.



In order to maintain the warranty, service and routine, maintenance of the products must be performed by the end user as indicated by OCEAN REEF and described in chapter 8 MAINTENANCE, CLEANING AND STORAGE.

For details, contact an authorized OCEAN REEF dealer at: https://diving.oceanreefgroup.com/shop-dealers/

3 - REMINDERS AND TIPS FOR USE



Use the original charger only. It is your responsibility solely to assure the charger works properly.



Product should be stored in shade and cool location. Do not expose to extreme low and high temperatures. Do not leave the product under direct sunlight. Operating temperature: 0°C (32°F) and +40°C (104°F)



Do not dismantle or repair the communication unit by yourself



Before charging, please make sure the charging port is dry. Charge in a safe, dry place.



When not in use or at the end of each use, make sure that the surface unit has been turned off.



Make sure there is no dirt, debris or water in any part of the unit, especially in the rubber 6 pin connector. If any dirt, debris or water is found, remove it.



Before diving, check the surface unit battery.



This product should not be exposed to chemical products such as sunscreen or insect repellents as some components may melt or damage plastics.



Talking and listening while underwater requires practice. With experience, divers will become more proficient in the use of the communications system.



Do not allow it to fall or be knocked around.

4 - FEATURES AND COMPONENTS/ PACKAGE CONTENTS

INCLUDES:







1 - SURFACE UNIT W/MIC & CHARGER

2 - PROFESSIONAL 50 M CABLE

3 - UW UNIT

The ALPHA-PRO X-DIVERS is a hardwired, full-duplex underwater communication system for conversations between the surface and one or two divers.

With powered volume for both diver and surface.

Moreover, the volume of the underwater unit can be adjusted from the surface unit to allow the divers to have the best comfort during the dive.



Scan the QR code and watch the video tutorial

This communication unit is specifically designed to meet the needs of professional and commercial divers that cannot compromise on a full duplex, hands free, clear communication system. Cable communication is still unequaled in quality, while needing a tethered connection of a diver to the surface.

The underwater unit can be sold separately, and customized for use with some other brand surface units, but is designed to be used specifically with the ALPHA PRO X DIVERS surface unit.

The range depends on cable length. (cable length customizable on request - up to 200 metres /600ft)

Speaker and microphone as featured in all comm. units, but what looks like a push to talk button is actually a recall button.

4.1 SURFACE UNIT



Surface unit (if sold separately code OR033133)

Surface unit, hardwired, full duplex underwater communication. It has the following features:

- 1. 2 ports for 2 communication cables.
- 2. On/off and volume adjustment switches.
- 3. Microphone.
- Switch for communication between surface & diver 1, surface & diver 2, surface & diver 1 & diver 2 (cross talk).
- 5. Headset port (headset optional).
- 6. Battery charger, external power & audio out port (cables optional)
- 7. Audio/video recall.
- 8. Incorporated speaker.
 - 12V rechargeable battery
 - Audio recall
 - Underwater unit volume adjustment (for both divers).
 - Stand-by autonomy: 24h.



The serial number on the Surface unit is located on the top inside cover of the case.

4.2 PROFESSIONAL SURFACE/DIVER CABLE



Professional surface/diver cable (50meters -165 ft long) (if sold separately code OR033134)

6 pin cable/wire with yellow rope exterior. The cable's diameter is 10mm with a resistance of more than 4000 Newton.

The cable includes waterproof rubber 6 pin connector at the diver side and DIN metal connector on the surface side.

The Professional cable is also available at any length on request (up to 200 metres).



4000 N is the tear up strength, audio signal may be lost earlier!



It is fundamental to pay attention that the cable does not get stuck on the boat or on the seafloor.



It is also very important to keep the cable slightly buoyant, by attaching a small buoy or floating device to the cable a few feet away from the underwater unit.



It is a good idea to connect the cable with a hook or retractor to the BC jacket, avoiding any traction between the surface and the underwater unit.

OCEAN REEF cable fleeter is avaiable as optional.



During the dive the surface operator must slowly feed the cable out to the underwater diver as needed, while keeping voice contact. It is not advised to simply throw the cable into the water. The same procedure should be used when the dive is completed and the cable has to be brought on board.



- 1 ALPHA PRO X DIVERS bag this bag is designed to be incredibly durable to carry coil cables, it is bright colored and easy to spot
- 2 cable floaters (x3) useful accessory to keep audio/v cables floating avoiding entanglement
- 3 Cable fleeter avoid any traction between the surface and the underwater unit

4.3 UNDERWATER UNIT 2.0

Underwater unit 2.0 (if sold separately code OR033135)





- Waterproof piezoelectric speakers (X2)
- D-Mic microphone
- Full-duplex system
- Audio recall button
- 6 pin waterproof connector

The Underwater unit can be connected to any professional OCEAN REEF Mask using the OCEAN REEF Extender Frame



The connector between the cable and the underwater unit can be disconnected and connected again underwater



Do not touch the hydrophobic membrane with any sharp object that may damage it.



Routinely, clean the microphone contacts and check the integrity of the hydrophobic membrane and the casing. If the microphone is flooded, it CANNOT BE recovered and must be replaced.



The serial number of the underwater unit is printed on the left earphone.

AVAILABLE SEPARATELY AS ACCESSORIES:

1 - ALPHA PRO X DIVERS BAG 8686 (50MT BAG) - 8687 (75-100MT BAG)

2 - CABLE FLOATERS (X3) 0R015001

3 - CABLE FLEETER NEW! 0R033148 (10-20 MM) 0R033149 (25-38 MM)

5 - ASSEMBLYING THE UNDERWATER UNIT 2.0

Assemblying the ALPHA PRO X-DIVERS underwater unit on the Extender Frame

Start removing from the Extender Frame both side connections, as shown in the picture below.





Begin mounting the left (the one connected to the mic-PTT), earphone of the ALPHA PRO X-DIVERS underwater unit securing it to the Extender Frame exactly like a neutral or an earphone support.

Bridges have L and R written on them for identification.

Finish by screwing firmly the bridges on the inside.





Be careful to insert the support in the correct position with no gap between the support and the frame.





Proceed connecting the PTT/MIC on the COMMUNICATION side port of the mask by screwing it on. The crown around the PTT will turn until flush.





Last, connect the R, earphone to the right side of the Extender Frame by having the cable connecting the two ears passing underneath the straps into the face seal groove.





6 - DIVER MODE CHART

By adding an additional surface/diver cable and underwater unit, the Alpha Pro X-DIVERS may communicate with two divers at the same time. It is also possible for the surface to switch between each of the divers.

DIVER 1 SELECTED			
	Receive from Talk to		
Surface	Diver 1 & 2	Diver 1	
Diver 1	Diver 2 & Surface	Surface	
Diver 2	None	Diver 1 & Surface	

DIVER 2 SELECTED			
	Receive from Talk to		
Surface	Diver 1 & 2	Diver 2	
Diver 1	None	Diver 2 & Surface	
Diver 2	Diver 1 & Surface	Surface	

DIVER 1&2 SELECTED			
	Receive from Talk to		
Surface	Diver 1 & 2	Diver 1 & 2	
Diver 1	Diver 2 & Surface	Diver 2 & Surface	
Diver 2	Diver 1 & Surface	Diver 1 & Surface	

7 - TROUBLESHOOTING

Problem	Probable cause	What to do	
The surface unit does not turn on	1. Low battery	Recharge the batteries	
The underwater unit does not receive	 Power turned off The surface diver cable is not attached to the surface unit Low volume Flooded underwater unit 	Turn on the surface unit Check the surface unit connection Turn up volume Return to surface, rinse in fresh water and send to OCEAN REEF service center	
Surface is not receiving	Volume too low Power turned off Flooded microphone on underwater unit Flooded UW unit	Raise volume on the surface audio and check the power Turn on the surface unit Return to surface, rinse in fresh water, replace mic Return to surface, rinse in fresh water and send to OCEAN REEF service center	
Recall system	Issues with the underwater unit button Issues with the surface unit alarm system	Return to surface, rinse in fresh water and send to to OCEAN REEF service center Return to surface and send to OCEAN REEF service center	

Replacing the Mic

Remove the MIC assembly from the mask, unscrew few threads of the two little side screws and pull off the Mic. Replace with the new one being careful not to overtighten the little screws to avoid damages to the contacts and to mount the microphone in the same direction.







8 - MAINTENANCE, CLEANING AND STORAGE

8.1 MAINTENANCE AND CLEANING

The underwater unit will work perfectly if the periodic program of maintenance and cleaning collected in Table 2 is applied during its whole life from the first use.

General and visual inspection means checking that all the components and parts are not damaged, and verifying there is not any wear and tear. No damages must be detected on the product. If damages are detected, the product cannot be used until repair.

TYPE OF ACTION	FIRST USE	BEFORE EACH USE	AFTER A DIVE
GENERAL FUNCTION CHECK	х	х	
GENERAL AND VISUAL INSPECTION	х	х	
CLEANING /RINSING (UNDERWATER UNIT AND CABLE)			х





For optimum longevity of the product and the proper functioning of its parts, we recommend rinsing the underwater unit and the cable thoroughly with fresh water after every use. DO NOT clean the product with any abrasive materials.

No chemical should be used. We recommend drying the unit with a soft, clean cloth.



Do not use solvents (such as diluents) to clean the unit. They can cause irreparable damage. Only use neutral detergents.



Use fresh water to remove the seawater from your UW unit after each use. The product must be stored completely dry.



Do not expose the unit to direct sunlight for prolongued periods of time.

8.2 STORAGE

The product should be stored in a ventilated environment preferably between 0°C (32°F) and +40°C (104°F), avoiding the direct action of sunlight, pollution, dirt, etc.

9 - WARRANTY

- The OCEAN REEF ALPHA PRO X-DIVERS is guaranteed to be free of material or manufacturing defects for a period of 24 months from the time the unit is purchased.
- 2. For the duration of the above mentioned warranty, the Company's responsibility is limited to replacement of any parts that are defective and that have not been used incorrectly or handled negligently. The product must be returned to the outlet from which it was bought.
- 3. Even during the warranty period, this warranty shall not be valid where:
 - Damage was caused by incorrect handling or carelessness.
 - Damage was caused by the product falling after it was purchased.
 - Damage caused by fire, earthquake, floods, lightning, or other natural disasters.
 - The warranty card is not produced.
 - Your name, the date of purchase, and the distributor's name do not appear on the warranty card.
 - The product has not been serviced as required through an OCEAN REEF authorized service center.
 - The product has been tampered with or has been repaired/serviced

You can find a copy of this and other OCEAN REEF manuals online on our website. In order to limit our paper consumption, and as a part of our environmental friendly and responsible approach, OCEAN REEF recommends, in case you lose or damage this manual, to consult the documentation present online rather than print it out.

Please refer to our web site: diving.oceanreefgroup.com/support/















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