

OCEANREEF

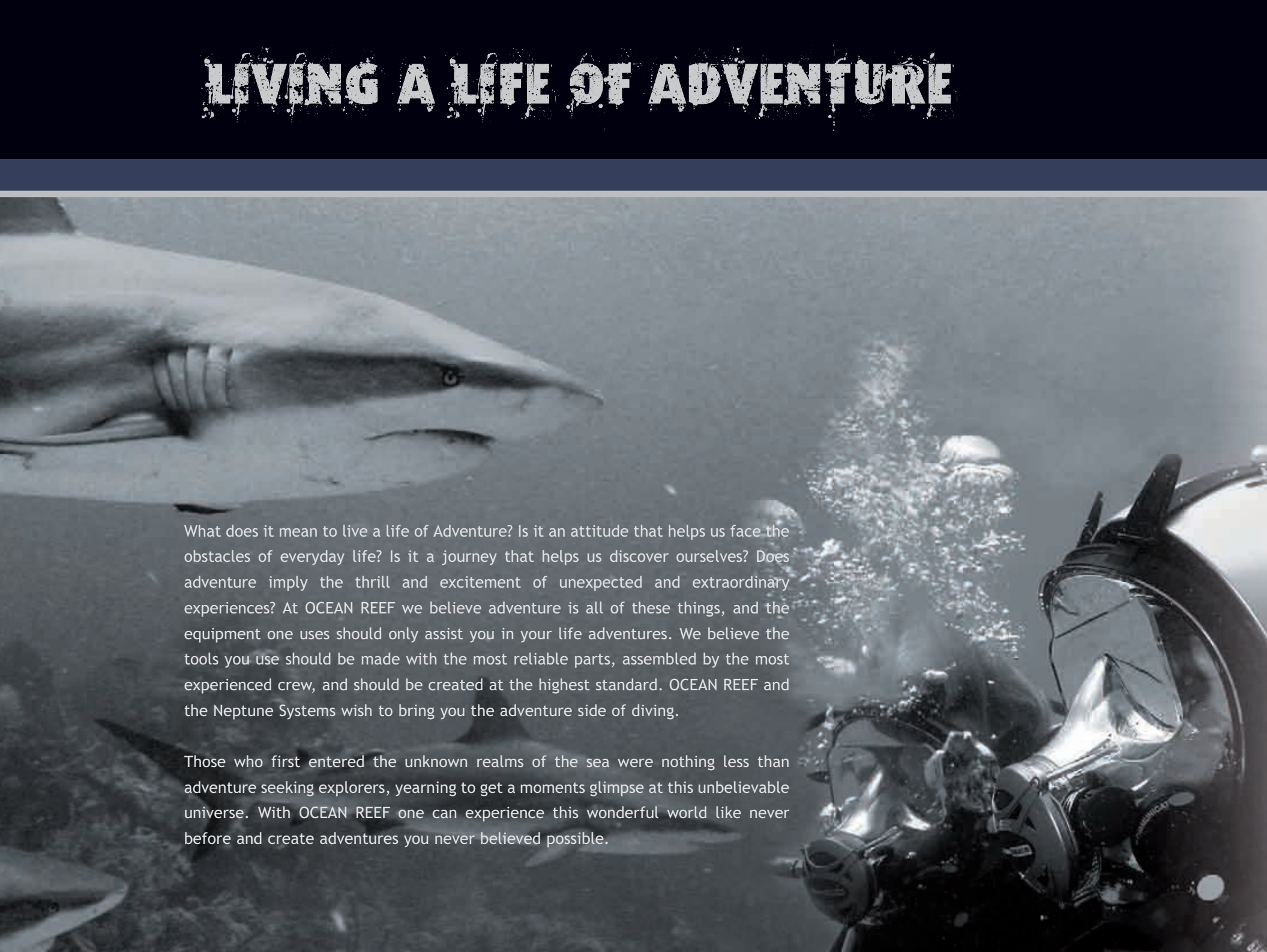
connecting divers



Neptune System 2 0 0 9



LIVING A LIFE OF ADVENTURE



What does it mean to live a life of Adventure? Is it an attitude that helps us face the obstacles of everyday life? Is it a journey that helps us discover ourselves? Does adventure imply the thrill and excitement of unexpected and extraordinary experiences? At OCEAN REEF we believe adventure is all of these things, and the equipment one uses should only assist you in your life adventures. We believe the tools you use should be made with the most reliable parts, assembled by the most experienced crew, and should be created at the highest standard. OCEAN REEF and the Neptune Systems wish to bring you the adventure side of diving.

Those who first entered the unknown realms of the sea were nothing less than adventure seeking explorers, yearning to get a moments glimpse at this unbelievable universe. With OCEAN REEF one can experience this wonderful world like never before and create adventures you never believed possible.

THE NEPTUNE SYSTEM PHILOSOPHY

In the last 20 years, improvements in equipment have completely changed the way we dive by increasing safety and comfort. As a result, scuba diving has evolved from an activity for a few experts into a hobby for millions of people throughout the world. Masks and regulators have traditionally been separate units in recreational diving. However, by keeping the mask and regulator separate, we expose the rest of the face to the elements, thus losing precious body heat. Moreover, since all humans breathe primarily through their nose, while using their mouth to communicate, it's reasonable to say that the separate mask and regulator set-up is relatively unnatural.

The Neptune System Philosophy is based on the above principles. We have created an integrated mask and regulator system and a complete system of underwater communications. By integrating these systems we solve several problems: we are more thermally efficient; we can communicate; we have a broader field of vision; and we are much more comfortable. Now, divers have the ability to use more sophisticated systems than ever before. The Neptune System is the future of scuba diving!



THE NEPTUNE SYSTEM PHILOSOPHY	3
SDVL (SHIELD DISPLAY & VISOR LIGHTS)	4
THE NEPTUNE SPACE FULL FACE MASKS	6
FULL FACE MASKS TECHNICAL CHARACTERISTICS	7
1ST STAGE SL35TX - MASKS PACKAGING	10
NEPTUNE II FULL FACE MASKS	11
VISOR LIGHTS	12
NEPTUNE HELMET H08	13
OPTIONAL ACCESSORIES	14
WIRELESS COMMUNICATIONS SYSTEMS	16
GSM	16
GSM .DC	16
GSM G-POWER - GSM G-POWER SL	19
M101A - M101AR - NEPTUNE SPACE KIT	20
M100	21
M105 - M105 DC - M105 BASIC	22
MULTI-TASK COMMUNICATION SYSTEMS	24
GSM CUBE ³	24
HARDWIRED COMMUNICATION SYSTEMS	25
ALPHA PRO X-DIVERS	25
GC 2008 ADAPTER	26
ALPHA UWCP - UNDERWATER CELLULAR PHONE	27
SPECIAL & AUDIO VIDEO SYSTEMS	28
GAMMA 105	28
GAMMA ALPHA	29
GSM VHF	30
SERVICE & MERCHANDISING	31
NEPTUNE SYSTEM TRAINING PROGRAM	32
DIVING CENTERS / SCHOOL KITS	33
COMMERCIAL / PROFESSIONAL APPLICATIONS & TESTIMONIALS	34

SDVL, SHIELD DISPLAY & VISOR LIGHTS



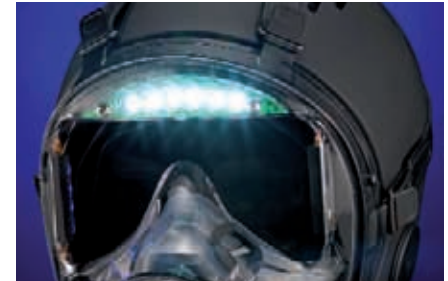
>>>> Main unit



>>>> Waterproof connectors



>>>> Double PTT



>>>> Integrated visor lights and depth/pressure LED's gauges



Integrated data and illumination system

When checking important data while diving (depth and air pressure), a diver usually has to look at their wrist or console display instruments to do so. When a divers hands are occupied or when visibility is low, keeping track of ones gauges may be difficult.

With the SDVL the depth and pressure data are comfortably displayed on the right and left sides of the Neptune Space visor. These two displays are accompanied with visor lights installed in the top of the visor. The depth and pressure displays are activated the moment the diver enters the water. The visor light (made of 6 in-line LED's) is easily activated by a switch on the right side of the mask and incorporated in the surface air valve.

The SDVL is composed of:

A **main unit** with removable and rechargeable battery fit with a tank belt handle, Low Pressure and High Pressure sensors, and wet switch contacts.

A **High Pressure hose** to be connected to your first stage.

A **wire** connecting the main back unit to the mask, which is provided with 2 waterproof multi pin connectors for quick connection and removal.

A **double PTT** to control the on/off of the visor light (6 bright LED's on the top of the visor), the brightness of the visor light, and the on/off of the depth and pressure display LED's (if not exceeding the present safety limits shown later).

The **battery** may be easily unscrewed and recharged or replaced. It is protected by a black anodized anticorrosion housing, with an overpressure valve to prevent explosions in the case of a battery malfunctioning. There are two o-rings on the battery body that ensure an even seal in case of an incidental partial unscrewing. A 110/220 volt battery charger is supplied with the SDVL.

Two LED's display for the tank pressure status and the diver depth. The LED's work by a reference bar and 10 LED's showing the present data. It is an analogical/comparative display that gives the diver an immediate reminder of tank consumption as well as where the diver is in correlation to a 50 meter/164 foot water depth.

Powered by	9.6 volts 4000mA ni-mh battery
Autonomy (with 60% of the LEDs turn on)	48 hours
Low battery autonomy (after alarm starts)	30 min (starts Under 6.2 volt)
Depth/pressure tolerance	2.5m
Depth sensor - max pressure	10 bar
HP Air pressure sensor max applicable pressure	400 bar
Start up	Automatic (wet contacts)
Turn off	Automatic
Alarms	Low battery - Depth > 50 mt/ 165 feet - Out of air
Weight of main unit (outside of the water)	1.5kg
Hp hose with swivel	Enclosed
Charger	100/250v 16v 50-60 Hz -max 150mA 25W

How the SDVL works during a dive

The SDVL turns on automatically as the diver enters the water and the unit gets wet. All LED's remain turned on for a few seconds to show that the unit is working properly. During diving the two LED bars turn on, depending on tank pressure and depth (see attached chart). The LEDs brightness can be adjusted by means of the control button, adapting to environmental conditions (day or night diving, cave diving...). To achieve this, hold the SDVL control button pressed until the desired intensity is reached. The LED bars can be switched off and on by pushing the control button quickly. For safety reasons the two bars will turn on automatically if the tank pressure gets below



50 bar or if you dive deeper than 40 meters. The depth LED's have 3 different colors (blue = from 0 to 20 meters, yellow = from 25 to 40 meters, and red below 40 meters) to report ergonomic information to the diver. The pressure LEDs are green + there are 2 red LEDs which turn on when air is running low.

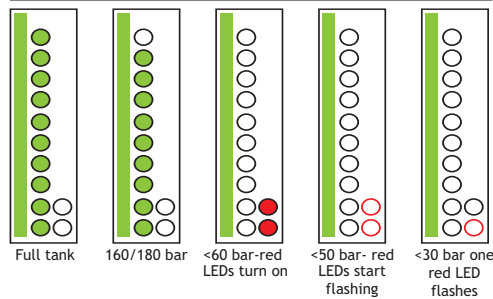
Pressure

The air pressure display has two sets of LED's. One is the reference line, where various green or red LED's show the tank pressure level (see attached schemes). Regarding the reference line, the diver will have an idea of how much air remains in their tank. Flashing red pressure LED's advise the diver that their air reserve is running dangerously low.



Pressure LEDs

Operations example



Pressure



Available configurations

SDVL mounted on a PREDATOR m/l black	OR025010
SDVL mounted on a SPACE m/l black	OR025008
SDVL mounted on any other mask (mask sold separately)	OR025004

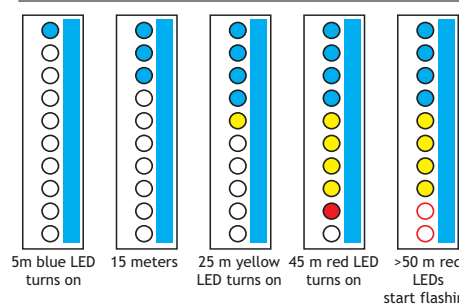
Depth

At the beginning of the dive only the reference bar turns on. Once the diver descends past 5 meters/ 15 feet the LED's will light up accordingly, giving a reading of corresponding depth. At 45 meters/ 130 feet the LED turns red. At 50 meters/ 164 feet the LED red light flashes. It is important to remember that the SDVL is a support system and it is **NOT** an alternative to the conventional pressure and depth gauges, or computers. The SDVL provides, at a glance, information allowing the diver to quickly evaluate the relative conditions (air supply and depth) of their dive.



Depth LEDs

Operations example



Depth	BLUE LED's	YELLOW LED's	RED LED's
3 - 5m			
6 - 10m			
15m			
20m			
25m			
30m			
35m			
40m			
45m			
50m			



THE NEPTUNE SPACE FULL FACE MASKS

neptune space

OCEAN REEF's revolutionary full face masks, the Neptune Series, are the products of intense research and valuable experience acquired in the development and production of military protection equipment. The surface-based versions of our full face mask have received international approval for use in the civil sector and have been adopted by specialized departments in numerous military and defense organizations for use in Nuclear, Biological, and Chemical (NBC) operations. From the Gulf Wars/Homeland Security program to Antarctic expeditions, from military use to space exploration, from commercial to recreational activities, the Full Face Mask Project, which started in 1985 and involved over 50 different types of masks, has experienced a diverse range of conditions and applications.

There are 3 main models. All of them have common features but each one has unique and specific characteristics and applications

neptune space PREDATOR

The Neptune Space PREDATOR is the newest innovation in the Neptune Series of full face masks. This new edition of the Neptune Space mask is constructed with parts made of Anticorodal®, a light weight and durable aluminum compound used in aeronautics for applications requiring high mechanical resistance. The front cover of the mask's state-of-the-art integrated regulator is made of laser-cut Anticorodal®. This portion of the regulator has a light gold finish recalling the helmets of the first deep water divers. The adjustable knob, its external trim screw, the laser-cut hand finished frame, and the six fast release buckles are all made of AISI 316 stainless steel.

The sturdy feeling of the mask's design allows divers to make sensitive micro adjustments to the airflow, even



when using gloves. Surface treatments protect the mask from salt water damage and tech polymer protection treatments allow the Neptune Space PREDATOR to be used in extreme conditions.

The total weight of the mask is 1030 g (2.28lb) with a positive buoyancy of just 232 g (0.5lb), creating a light and comfortable fit.

The PREDATOR is specifically designed for professional and high performance applications and comes with a Limited Lifetime Warranty. It is available in 2 sizes.

neptune space RAPTOR

The RAPTOR is a nitrox compatible Space mask. The o-rings are made by Viton and the o-rings lubricant is a Christolube Oxygen Grease. The mask can also be used with conventional air as well. The Raptor distinguishes itself by the black Ixef® polyaramide cover and the black orinasal cavity, making it the ALL BLACK MASK.

Available in two sizes.

Limited Lifetime Warranty.

neptune space

The Neptune Space, has been designed with the technical experience gained through 10 years of full face mask manufacturing. The Neptune Space has a state-of-the-art integrated regulator, a reduced internal volume, an improved visual field, and an integrated surface air valve. It can be used with a communication unit and various accessories. Tech polymer protection treatments allow the Neptune Space to be used in extreme conditions. The total weight of the mask is 860 g (1.89 lbs) with a positive buoyancy of 400 g (0.89 lb), creating a light and comfortable fit. Limited Lifetime Warranty.

neptune space			
Neptune Space PREDATOR	Black	Small/Medium Medium/Large	33368 33369
Neptune Space RAPTOR	Black	Small/Medium Medium/Large	OR025001 OR025002
Neptune Space	Clear	Small/Medium Medium/Large	33370 33371
	Black	Small/Medium Medium/Large	33372 33373
	Cobalt	Small/Medium Medium/Large	33374 33375
	Emerald	Small/Medium Medium/Large	33376 33377
	Yellow	Medium/Large	33378

FULL FACE MASKS TECHNICAL CHARACTERISTICS

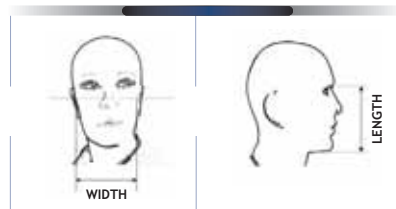
SIZES

The Neptune Space is available in two sizes, Small/ Medium and Medium/Large.

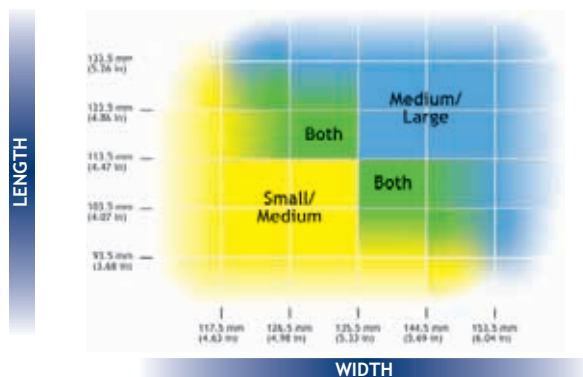
In order to determine whether a diver should wear a S/M or M/L mask, OCEAN REEF has designed a Mask Measuring Kit (code 33075).

The sizing and measuring system were designed in accordance with the official measuring procedure used in the Los Alamos Scientific Laboratory Charts at the SBCCOM Mask Fit Facility-Aberdeen Proving Ground (Maryland, USA). Before purchasing a mask, the customer may use the caliper to take two simple face measurements. Using the Full Face Mask Size Recommendation Chart, he or she can evaluate the size category into which the measurements fall.

There are three different size categories on the chart: Small/Medium, Both, & Medium/Large. If the measurements fall within the Both category, then the customer should technically be able to wear either full face mask (MEDIUM/LARGE or SMALL/MEDIUM), and in that case they should try on a mask to select the best fit.



Please note that the chart boundaries fade. The fading areas represent less common face measurements. It is very likely that a mask will still fit comfortably even if measurements are located in these fading areas.



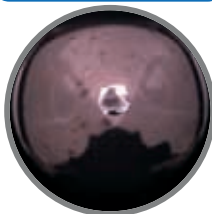
>>>> Neptune Mask face seal
MEDIUM/LARGE and SMALL/MEDIUM



TECHNICAL CHARACTERISTICS



>>>> Neptune Space



>>>> Interspiro Aga



>>>> Conventional Mask



ADAPTABILITY

The patented bellows-type skirt with a “spring profile” and large sealing surface (30-45 mm, double that of a conventional mask) is molded of premium grade silicone rubber. The spring effect is achieved by a combination of the double “S” section and the inner support ribs, resulting in a comfortable fit and ample support. This allows the mask to “float” comfortably on the face. The face seal and strap concepts are OCEAN REEF patents.



VISUAL FIELD

The visor, made of transparent polycarbonate, is designed to be wider and sit closer to the face than previous full face masks. This design maximizes the visual field, particularly the peripheral area. The visible light transfer of the visor is 92%.

The visual field of the Neptune Space compared with one competitor's full face mask and a conventional mask.

DURABILITY AND SCRATCHING RESISTANCE

The visor of the Neptune Space can resist the impact of a 6.35 mm steel ball traveling at speeds of 540 km/hour (335 mi/hour). The visor is coated on both sides with a siloxane resin to increase the scratching resistance. For added protection during transport, the Neptune Space comes with a removable protective shield (to be removed before diving).

THE HEAD HARNESS AND FRB II

The head harness straps are directly attached to the face shield, allowing pressure to be distributed equally along the mask skirt. The six straps of the head harness hold the mask in a firm position due to their low elasticity. The tip of each strap (rubber) is wider, making them easier to grasp while wearing neoprene gloves. The FRB II (Raptor and Space Fast Rotating Buckle) allows the mask to be donned and doffed quickly.



AIR CIRCULATION

The Neptune Space air circulation system is designed to minimize fogging and reduce the amount of CO and CO₂ build-up. The silicone orinasal pocket is built with two one-way valves through which air is inhaled. Exhaled air is

directed through a valve under the orinasal pocket, limiting the mixing of this air (containing high amounts of CO₂) with the fresh air from the regulator. The direction of exhaled air is controlled by a four position exhaust valve. The adjustable valve therefore allows exhaust to flow in four directions:



A - to the left

B - to the right

C - both (direction of least resistance)

D - no exhaust

Position D, the “off” position is used when the diver is in a “head-down” position which, due to pressure on the second stage, causes the regulator to free flow. Placing the exhaust valve in the off position causes pressure to build in the mask, preventing free flow and returning the system to an “air on demand” situation.

SURFACE AIR VALVE

The Neptune Space is equipped with a surface air valve that allows the diver to breathe ambient air while at the surface. The surface air valve is easily adjustable with large air vents.

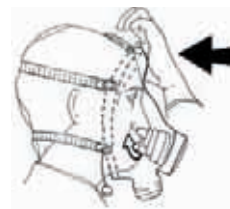


DRAINING AND PRESSURE EQUALIZATION

Water that may seep into the mask is easily eliminated by exhaling or pushing the “purge” button on the second stage. Mask squeeze, a common problem for conventional masks, will not occur with the Neptune Space because the pressure inside the mask is equal to the pressure outside the mask.

THE 3-D EQUALIZATION SYSTEM

The patented OCEAN REEF 3-D equalization system is designed to allow equalization during a dive. The system consists of a movable plate and two eccentric blocks; these blocks move close to the nostrils when the upper part of the visor is pressed. If the unit is equipped with visor lights, grab the entire regulator and push the mask back towards your face until a nasal seal is created. The blocks plug the diver’s nose allowing equalization. Before donning the mask, the blocks may be moved up or down depending on the length of the diver’s nose. They may also be adjusted to fit wide or narrow noses. The system also includes 3 pairs of extenders 3-6-10mm long which allow the distance between



the blocks and the nose to be modified to accommodate the diver’s face. The 3-D equalization system makes diving more comfortable and inhibits any undesired pressure during a dive.

REGULATOR CHARACTERISTICS

The pneumatically balanced second stage provides consistent ease of breath at any tank pressure. An inhalation adjustment feature allows the diver to control air delivery under a variety of diving conditions. The Dive/Pre-dive venturi lever reduces free flow on the surface and provides

maximum air flow while at depth.

The purge button, made of premium grade silicone rubber, has a temperature range of operations between -40°C and 70°C (-40°F and 158°F). The purge button protection bezel is made of a high impact-resistant double metallized/coated techno polymer.

NEPTUNE SPACE 50/60PSI

These masks have the interstage pressure of the regulator set up at 50/60 PSI allowing the use of it with an alternative surface air supply (hookah).

Performance of the Neptune Space 50/60 regulator depends by the stability of interstage pressure provided by the surface air line supply.

neptune space 50/60PSI

black	Small/Medium	33366
	Medium/Large	33367

TECHNICAL CHARACTERISTICS



1st stage SL 35 TX

The Neptune Space is available with a 1st stage (sold separately).

1st stage SL 35 TX high performance, balanced diaphragm 1st stage with

anti-freeze kit. The first stage has adjustable medium pressure and is made of brass with a plated chromed finish

body, stainless steel piston, Teflon seat, and stainless steel spring.

It is available with the following characteristics:

Standard connection 200 bar (code 9922)

DIN connection 300 bar (code 9923)

> 2 high pressure ports 7/16 -20 UNF

> 4 Medium pressure ports 3/8-24 UNF

> Flow rate of approx. 4800 l/m at 140 bars

1st stage SL 35 TX INT for NEPTUNE SPACE = code 9922

1st stage SL 35 TX DIN 300 bar for NEPTUNE SPACE = code 9923



PACKAGING



The Neptune Space masks come in a padded zip-per bag, designed to hold other equipment such as a first stage and GSM, along with the following items:

- > **1st stage connecting hose**
- > **Visor protector** this transparent shield protects the mask visor during transport and handling. (Remove before diving)
- > **User's manual**
- > **Quick Reference Card**
- > **Screw driver** this tool is for adjusting the 3-D equalization system
- > **Extensions for equalization**
- > **Full Face Mask Diver Registration Card**
You must register your warranty at www.oceanreefgroup.com
- > **Warranty** The Neptune Space has a Limited Lifetime warranty.

Neptune Space complies with CE Certification in accordance with 89/689/EEC directives under the UNI EN250 standard rules for underwater activities, including low temperatures (<50°F).



NEPTUNE II MASK

The OCEAN REEF Full Face Mask project, which started in 1985 and involved more than 50 different types of masks created a unique experience in extreme conditions and applications. This allowed OCEAN REEF to be recognized as "THE FULL FACE MASK COMPANY"

The **NEPTUNE II** was designed in 1996 for underwater use.

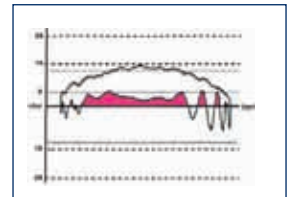
This mask is allowing the connection of conventional regulators and communication units by one front and two sides DIN thread ports. The mask is equipped with a regulator connector medium size (if individually required = code 33021) but a small size is available too (code 33020).

Tech polymer protection treatments allow NEPTUNE II to be used in extreme conditions. This also allows us to provide a lifetime warranty. The in air weight is less than 600 grams (22.00 Oz).

neptune II		
black	Small/Medium	33357
	Medium/Large	33001
yellow	Medium/Large	33012

Use of over-injected regulators

Over injected regulators have a diagram with an inhalation cracking pressure below zero. These regulators "free flow" easily, and as a result, should not be used with the Neptune masks.





>>>> Magnetic switch



>>>> Easy battery replacement



>>>> Charger



VISOR LIGHTS (code 33380)

Illuminate the undersea world with this row of 6 powerful LEDs, assembled inside the mask visor!

The on/off switch (included with the lights) is installed in the surface air valve port, but does not impair the function of the surface air valve.

You may purchase a Neptune Space mask with the lights installed or purchase the lights separately.

Features

- > 45-lumen output/LED
- > 100,000-hour light life
- > 12 degree beam angle
- > Light color TYP 5,500 - MAX 10,000 K°
- > 1.5 hour burn time, depending on the type of rechargeable battery.
- > Waterproof to 80 m (260 ft)
- > Rechargeable CR 123 lithium battery included
- > 12 v battery charger with vehicle lighter connector cable included

NOTE: These lights are not designed to be a primary light source.

neptune space			
Visor Lights pre/assembled on Neptune Space Predator mask	black	medium/large	OR025006
Visor Lights pre/assembled on Neptune Space mask	black	medium/large	OR025005
Visor lights, pre assembled on any Neptune Space mask (mask sold separately)			OR024502
Visor lights (applicable on any Neptune Space mask)			33380

NEPTUNE HELMET H08



NEPTUNE HELMET H08

This helmet is specifically design to be used with the Neptune Space, Raptor and Predator OCEAN REEF masks. It was created to provide impact resistance during adventurous activities where head protection may be needed, such as cave or arctic diving. The GSM G-Power SL may be incorporated in to the helmet, which makes it a very unique, lightweight, compact, underwater communication and protective piece of equipment.

The helmet patented design provides an ultra snug and stable fit. The lightweight streamlined design and soft foam cushion provides total comfort and freedom of movement. The lycra rash-guard sleeve prevents neck rash for maximum comfort during long sessions. The 2mm thick shatter proof plastic shell combined with a molded soft foam lining provides an ultra lightweight layer of defense. The Neptune Helmet H08 is made from the most revolutionary high impact resistant plastics,

designed to withstand years of exposure from saltwater and direct sunlight.

Anyone who becomes unconscious during a dive runs a very real risk of drowning.

The H08 Helmet covers the temple area and ears to help reduce this risk. The H08 Helmet is secured by strong nylon webbing to stay on no matter what you put it through. The helmets soft foam lining is molded from a closed cell non-water absorbent foam and is uniquely shaped for rapid water drainage and maximum comfort. The helmet is also uniquely shaped to have a high cut shell for total peripheral vision and extends down over the temple and ears for extra cover. The unit includes a protective carrying bag.

Available in 2 colors and 4 sizes.

neptune helmet H08		
black rubber	medium	OR23099
	large	OR23100
	x-large	OR23101
	xx-large	OR23102
silver	medium	OR23104
	large	OR23105
	x-large	OR23106
	xx-large	OR23107



OPTIONAL ACCESSORIES



Polar Mesh Strap (code 9007)

A fabric strap designed for use in extremely low temperatures. The mesh net grants a perfect fit and improved comfort. The straps are reinforced and easy to adjust.



Optical Lens Support (code 33299)

A frame specially designed for the Neptune series of masks which allows the use of standard optical lenses (not included) while diving. Both lightweight and strong, the frame can be easily inserted and removed.



Quick Connect hose (code 33032)

Made of chromium plated brass, this device allows the quick and easy connection and disconnection at the second stage, so that the mask may be transported free of the first stage. The length of the hose is 800 mm (32 inch).



Commercial Quick Connect hose (code 33072)

This quick connection is made for commercial & professional applications. Made of chromium plated brass, it is a sturdy unit that requires two hands to disconnect. The length of the hose is 800 mm (32 inch).

Dual tank valve (code 33049)

This device permits the connection of the Space regulator to two different gas sources (air/nitrox), allowing alternate use of gases without removing the full face mask. The dual tank valve is not available in the USA or Canada.



Swivel connection (code 33033)

Made of chromium plated brass, this device allows freer movement when attached to the second stage. The swivel connection can be used in conjunction with the quick connect hose.



Neptune Mask Measuring Kit (code 33075)

For determining mask size, this kit contains the following items:

- > Measuring tool (caliper)
- > Full face mask size recommendation chart
- > Measuring instructions



USE OF CONVENTIONAL REGULATORS

A special adapter allows the connection of several kinds of regulators. The adapter is available in two sizes, medium (standard) and small. This adapter fits in place of the surface air valve. (code 33020: S, code 33021: M)



NEPTUNE DRINKING DEVICE

This accessory may be used with the Neptune Space and allows the diver to drink while underwater. The drinking device connects on the right octopus port and requires the oralnasal mask to be changed. A rotating straw sits inside the mask. A valve on the drinking device tube allows the diver to control the flow of liquid through the device. The drinking device kit must be assembled by an authorized OCEAN REEF Service Center.

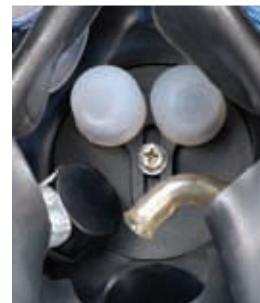
The Drinking Device Kit contains the following items:

- > Internal silicone and rotating straw, oralnasal mask
- > Drinking device connection to the mask
- > Tube, valve, and quick connection
- > Neptune water pouch

Drinking device kit only (code 33080)

Drinking device kit & mask assembly (code 33081)

Neptune water pouch, 1 L (.26 gal) (code 33082)



>>>> Quick Connections



>>>> Neptune Water Pouch



>>>> Valve



Use of the drinking device is strictly limited to commercial and expert certified divers.

WIRELESS COMMUNICATION SYSTEMS



>>>> GSM - Global Submarine Messenger



Since the beginning of scuba diving, divers have wanted to talk to each other underwater. So far, the only feasible systems for audio communication have been available only to commercial divers. Unfortunately, these systems were also complicated, cumbersome, and expensive. However, OCEAN REEF has designed a communication system which is easy to use, lightweight, and within a recreational diver's budget. Our system has many applications for both the professional and recreational diver, such as scuba instruction, marine research, underwater surveying, and guided dive tours, just to name a few. The OCEAN REEF underwater communication system adds a whole new dimension to dive safety and enjoyment by connecting divers with each other and with partners on the surface.

GSM - Global Submarine Messenger (code 33105)

The GSM is the basic underwater transceiver unit. It has a manual transmission mode with a PTT (Press to talk) button. The GSM is designed for use on the Neptune full face masks, but can be used on any full face masks equipped with a standard DIN female connection. It operates on one channel (channel 1 - 31.768 kHz). The GSM has all the characteristics of the GSM DC™ (see next), excluding the DAT™ and dual channels.

The autonomy of the unit (using a single 9v alkaline battery) is approximately 30 hours in standby mode.

GSM DC™ (code 33122)

The GSM DC™ underwater transceiver unit incorporates the latest innovations in underwater ultrasonic 2-way radio communication. The unit features a digital driver for vocal message equalization, an automatic system for activating transmission (DAT™), and a double transceiver channel. The standard frequency (channel 1) is the same for all Neptune System units, so it is possible to communicate with any other GSM, GSM DC™, GSM G-Power, GSM G-Power SL, GSM CUBE³, M-101A receive units, M-105 Digital surface units, and all discontinued units.

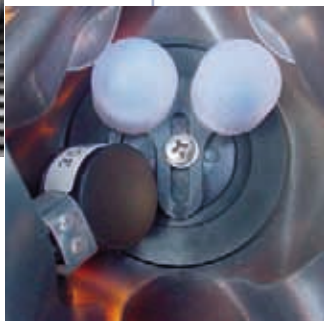


>>>> GSM DC

Underwater communication is accomplished through ultrasound and can be used in two unique modes, manual transmission mode and automatic transmission mode. To start communication in manual PTT (Push to Talk) mode, press and hold the “A” button (see picture) to transmit and release the button to receive. The “B” button activates and de-activates the automatic



transmission mode, DAT™ (see later). The GSM DC™ automatically begins receiving capabilities upon contact with the water.



The GSM DC™ is a dual channel (DC) unit, which means it is equipped with two transceiver channels. By pressing buttons “A” and “B”, it is possible to change the frequency channel. Any time the channel is changed, a recorded message informs the diver of which channel has been activated (channel 1 or channel 2). The two channels allow different diving groups to operate in the same area with limited interference and confusion. The GSM DC™ sound quality depends upon both the D-Mic microphone, a special dynamic microphone with high acoustic qualities, and the microprocessor (DSP), which takes the digitized vocal message and filters out unwanted noise such as exhaust, air bubbles, or mask vibrations.



The D-Mic is the special microphone of all ocean reef underwater communication units. The housing has a hydrophonic membrane which is permeable to air, but prevents water from passing through the electronics. The membrane’s reduced thickness limits any reduction of the vocal signal. The permeability of the membrane keeps the internal pressure equalized with the external pressure, enabling the microphone to be used at practically any depth. The D-Mic is installed onto the transmission button contacts and can be made compatible with all previous GSM versions by slightly altering the transmission button contacts; this can be performed at any OCEAN REEF service center. When speaking inside a full face

mask, a series of reflections and vibrations, called distorted frequencies, are generated. “High frequencies” are caused by mask visor vibrations. “Low frequencies” are caused by the noise from air bubbles. If they are not removed, these distorted frequencies will be amplified and transmitted to the receiver unit, resulting in low intelligibility. Our DSP microprocessor removes these frequencies making communication loud and clear.

DAT™ (Digital Activation Transmission)



This automatic activation system is an exciting innovation in underwater communication, exclusively from OCEAN REEF. The DAT™ system allows the option of transmitting in a hands-free mode rather than manual mode.

To activate transmission, quickly press and release the “B” button. Once the button is pressed, a series of impulses are sent out, automatically keeping the unit in transmit mode for 30 seconds. After the initial 30 seconds of transmit mode, the unit will return to receive mode for 20 seconds accompanied by a series of impulses in a different tone from the first. This cycle continues until the “B” button is pressed for at least 1 second, which returns the unit to manual mode. DAT™ is useful when it is necessary to have both hands free while transmitting, making diving more comfortable and safe. Another benefit of the DAT™ system comes in the case of an emergency; by activating the DAT™ a series of impulses will emit every 30-20-30 seconds, which can be received at a great distance by search and rescue workers and other divers.



WIRELESS COMMUNICATION SYSTEMS



NACS™ (Neptune Adjustable Communication Support) (code 33054)

The patented NACS™ is an adjustable support arm for the GSM, GSM DC™, GSM G-Power, GSM CUBE3, ALPHA PRO, UWCP or M101A receiving unit. It is installed on the Neptune mask on the left side of the visor and prevents the communication unit from hanging on the mask strap. By relieving the weight of the communication unit, the NACS™ also allows the mask strap to slide easily through the buckle; thus, the strap can stay loose while the mask is donned and the communicator stays out of the way. The NACS™ can be adjusted for tilt and distance between the communication unit and the visor.

All GSM models must be used with the NACS™.



The GSM DC™, GSM and M101A units have a software/hardware for the removal of “dirty frequencies” such as noise from bubbles and echoes inside of the visor.

The resin component of the underwater communication unit speaker is designed to withstand depth pressure more efficiently.



GSM G-Power SL (code OR033125)

The GSM G-Power SL is a version of the GSM G-Power which also includes a headset. This unit has all the same features as the GSM G-Power, including: range of operation, excellent autonomy, speaker/s audio and volume adjustment, main unit surface treatment, but also includes a twin speaker headset. This unit can be used under a suit hood or with the OCEAN REEF Diving Helmet H08. The headset, made with 2 special speakers, is connected to the main unit by a cable and a waterproof rubber connector. The main unit can be hung on the jacket shoulder by using the included and incorporated stainless steel clip. The underwater rubber connection makes it possible to disconnect

the unit from the headset/mask system during a dive. This unit is especially recommended for divers working in loud environments or for those wearing a hood or the helmet H08.

GSM G-Power (code OR033124)

The GSM G-Power is a powered version of the GSM standard. This unit has been developed for divers requiring a very long range with compact/light underwater communication units. Depending on the surrounding environment conditions, the GSM G-Power can communicate with any other OCEAN REEF communications system (underwater and surface) with a range of 500 meters (1500 feet). The unit also has an autonomy of approximately 25 hours (in standby mode). The second built in button of the PTT system, allows the diver to adjust the volume of the speaker by choosing the best level, according to her/his needs (ie. use of a suit hood). The shape of the unit is protected by a "rubber surface treatment," which reduces the adhesion of air micro-bubbles, and improves underwater communication. The GSM G-Power is equipped with one channel.



WIRELESS COMMUNICATION SYSTEMS



The Neptune Space is also available as a kit with either the GSM DC™ or GSM communication unit. See the Communications section for more details.






M101A (code 33107)

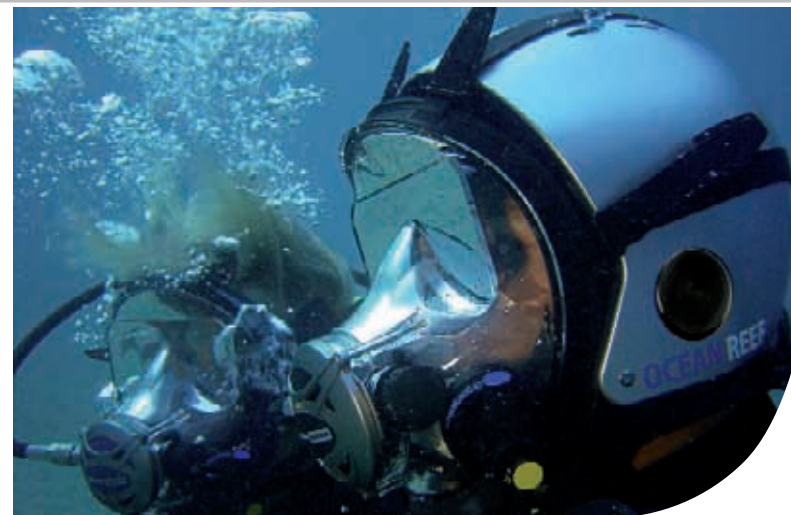
The M101A is a receive-only unit operating on one channel, (channel 1 - 32.768 KHz) the same frequency of GSM units, M100, M105 units, and any previous OCEAN REEF communication systems. The M101A fits on any standard mask strap, conventional masks or full face models. The unit automatically activates upon contact with the water. The M101A uses a 9v alkaline battery and has a "low battery" alarm which beeps every 30 seconds when the battery is low. The M101A's reception is so strong that it is not always necessary to attach it to the mask strap. A diver may hold the unit or attach it to a BC, allowing other divers to listen to the transmission (dependent upon environmental conditions and distance). The M101A unit's total battery autonomy has been increased to approximately 30 hours.

M101AR (code 33130)

The M101AR is a receiving unit for underwater video cameras. The unit connects to the "Mic" port of an underwater video camera to record conversations among divers and/or with the surface. The M101AR cable (1m/3ft) must be connected to the audio/video port of the video camera housing while the receive unit is attached to a Neptune mask, in order to control the quality of the recorded audio. The M101AR may hang on the camera housing or BC jacket. The technical characteristics are the same as the M101A (see chart).



neptune space				
NEPTUNE SPACE KIT (Neptune Space + GSM DC™)		clear	small/medium	33150
			medium/large	33151
		black	small/medium	33152
			medium/large	33153
		cobalt	small/medium	33154
		medium/large	33155	
NEPTUNE SPACE KIT (Neptune Space + GSM)		black	small/medium	33156
			medium/large	33157
		cobalt	small/medium	33158
			medium/large	33159



M100 Portable Surface Transceiver (code 33165)

The M100 is a portable surface transceiver unit that may be worn on the operator's belt. This is a high performance, compact, and easy to use unit. It is made to respond to the demands of communicating with divers in action.

The main unit has a PTT (Push to Talk) button and a headphone/ microphone connector. The unit turns on when the headphone/ microphone is connected to the main unit. The unit turns off automatically when the headphone/microphone is removed.



A 10 meter (30 feet) transducer cable connects to the main unit and is lowered into the water.

The operator may control the depth of the transducer.

It operates on one channel and uses a 9v replaceable alkaline battery with autonomy of approximately 9 hours. The range of operation is approx 250 meters (750 feet).

The unit comes with the following items:

- > 10 m (30 ft) transducer cable
- > Headphone/microphone
- > Screwdriver

WIRELESS COMMUNICATION SYSTEMS



M105 DIGITAL (code OR033126: 220V - code OR033127: 110v)

The M105 Digital is a surface to diver communication unit which allows surface personnel to talk with divers in the water and vice versa. The unit uses a 6 VDC lead battery, allowing up to 48 hours of operation, or may be hardwired to a 12 VDC source. The system is activated only when the transducer is connected, preventing unwanted loss of battery power. To start communication the transducer must be lowered into the water; the standard cable length for the transducer is 30 ft.

Transmission is activated by pressing the microphone button, which will emit a short beep letting divers know transmission is about to begin. It will return to receive mode when the button is released.

The M105 Digital comes standard with the following items:

- > Headphone connection
- > Volume control
- > Loudspeaker
- > Water resistant case w/ pressure compensation valve
- > Battery charger
- > Easy to read LED battery tester which shows the power status of the battery
- > Transducer cable bag
- > 10 meters (30 foot) antenna
- > Microphone

Available accessories:

- > Audio out cable = code 8590
- > Headset = code 8589
- > External power cable 12 volts = code 8594
- > Tuner for >50 meters M105 Antenna = code OR008609
- > Splitter for connection of 2 antennas at M105 or M105DC = code OR023001
- > Mixer for audio output = code OR006512

It is possible to purchase a "portable" battery tester (code OR023003) for previous M105 BASIC units. A portable 9 volts battery tester is also available (code OR023002) for all GSM, GSM DC, GSM G-Power, and M101A units.

M105 DIGITAL DC (code OR033128: 220v, code OR033129: 110v)

This unit has the same characteristics as the M105 Digital, but with the addition of a second channel. The operator may easily switch from channel 1 to channel 2. When switching between channels, a recorded message informs the operator of which channel has been activated.

M105 DIGITAL BASIC

These units come w/out the battery level tester

M105 DIGITAL BASIC 110/220V = code 33114

M105 DIGITAL DC BASIC 110/220V = code 33161

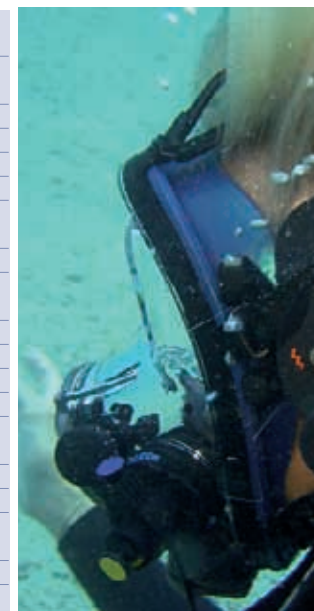


specifications

	GSM	GSM DC™	GSM G-Power	GSM G-Power SL	M101A	M100	M-105 Digital w/batt. Test.	M-105 Digital DC w/batt.test.
Code	33105	33122	OR033124	OR033125	33107	33165	OR033126(220v), OR033127(110v)	OR033128(220v), OR033129(110v)
Type	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic	Wireless ultrasonic
Activation	Automatic	Automatic	Automatic	Automatic	Automatic	Upon connection	Upon connection/switch	Upon connection/switch
Transmission	PTT	PTT	PTT	PTT	Receive only	PTT	PTT	PTT
Receiving	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Speaker volume adjustment	No	No	Yes	Yes - separate headset	No	Yes	Yes	Yes
System type	H-SSB	H-SSB	H-SSB	H-SSB	H-SSB	H-SSB	H-SSB	H-SSB
Frequency	32.768 kHz	32.768 kHz ch. 2 41.000 kHz	32.768 KHz	32.768 KHz	32.768 kHz	32.768 KHz	32.768 kHz	32.768 HHz ch. 2 41.000kHz
Working range(*)	200m/600ft	200m/600ft	500m/1500ft	500m/1500ft	200m/600ft	200 m/600 ft	200m/600ft	200m/600ft
Rated depth(**)	40m/120ft	40m/120ft	40m/120 ft	40m/120 ft	40m/120ft	Surface unit	Surface unit	Surface unit
Powered by	9v alkaline	9v alkaline	9 v alkaline	9 v alkaline	9v alkaline	9v alkaline	Rechargeable6v lead	Rechargeable6v lead
Autonomy(total)	30h	9h	25h	25h	30 h	30 h	48h	48h
Low battery autonomy (after alarm starts)	1h	1h	1h	1h	1h	1 h	1.5h	1.5h
Low battery alarm	1 beep/30 sec under 6.8v	1 beep/30 sec under 7.5 v	1 beep/30 sec under6.8 v	1 beep/30 sec under6.8 v	1 beep/30 sec under 6.8 v	1 beep/30 sec under6.8 v	1 beep/30 sec under 4.8v	1 beep/30 sec under 4.8v
DAT™	No	Yes	No	No	No	No	No	No
Transmit/receive cycle	No	Yes, DAT™ mode-30 sec transmit-20 sec receive	No	No	No	No	No	No
Squelch	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Weight with batteries	370g/12.9 oz	370g/12.9 oz	370g/12.9 oz	370g/12.9 oz	290 g/12.9 oz	730g / 250oz	2.3kg/5 lbs	2.3kg/5 lbs

(*) The operating distance is effected by obstacles, air bubbles, thermo-clines, temperature, and salinity

(**) Does not include other depth limits that may apply



MULTI-TASK COMMUNICATION SYSTEMS



>>>> wireless / ultrasonic



>>>> hardwired



>>>> with a VHF radio



GSM CUBE³ (code OR033131)

At OCEAN REEF innovation comes first!

The GSM CUBE³ is an underwater communication unit capable of operating wireless / hardwired or interfaced with a VHF radio!! 3 units in one!!

If the unit is connected to the ALPHA PRO X-Divers surface unit via cable, then communication is on full duplex with the surface unit (no need to press the transceiver button to communicate). At the same time the unit is capable of communicating with other wireless underwater units such as the OCEAN REEF GSM, GSM DC, GSM G Power and GSM G Power SL, M105 and M100.

By pressing the button of the PTT the unit is transmitting on channel 1 of ultrasonic frequency (channel 1 - 31.768 kHz).

The GSM CUBE³ can be connected to a VHF radio (see page 30) through the waterproof carrying bag and other relevant connectors and interfaces.

The GSM CUBE³ is equipped with a special plug for the six pin connector which can be used when you don't need to connect the cable. You can also connect and disconnect the unit to/from the cable while diving.

Operating MODES

By itself and no cable connect
Connected to an ALPHA PRO X Divers surface unit by cable
Connected to an ALPHA PRO X Divers surface unit and by itself
Connected to a VHF unit

wireless
hardwire
hardwired/wireless
becomes a GSM VHF
(see page 30)

HARDWIRED COMMUNICATION SYSTEMS



ALPHA PRO X-DIVERS - (code OR033132, include surface and uw unit + 50 meters cable)

The Alpha Pro X-DIVERS is an hardwired, full-duplex underwater communication system for conversations between the surface and one or two divers. The system consists of the following items:

Surface unit (if sold separately code OR033133)

- > 2 ports for 2 communication cables
- > On/off and volume adjustment switches
- > Microphone
- > Switch for communication between surface & diver 1, surface & diver 2, surface & diver 1 & diver 2
- > Headset port (headset optional)
- > External power charger, 9/12v (cable optional)
- > Battery charger port
- > Audio/video recall
- > Incorporated speaker
- > 6v rechargeable battery
- > Underwater unit volume adjustment (for both divers)
- > Stand-by autonomy: 24h

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

6 pin cable with yellow rope exterior. The cable's diameter is 10mm with a resistance of more than 4000 Newtons. The cable includes waterproof rubber 6 pin connector. The Professional cable is also available at any length on request. A carry-bag is available with the cable and sold separately as an accessory.

Underwater unit (if sold separately code OR033135)

- > Waterproof piezoelectric speaker
- > D-Mic microphone
- > Full duplex system
- > Audio/video recall button

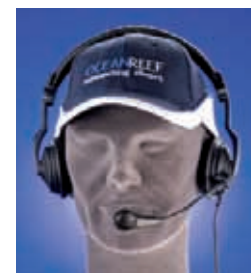
By adding an additional surface/diver cable and underwater unit, the Alpha Pro X-DIVERS may communicate with two divers at the same time. It is also possible for the surface to switch between each of the divers.



(Possible configurations: surface/diver 1, surface/diver 2, surface/diver 1/diver 2. If the unit is set for surface/diver 1/diver 2, the two divers would also be able to communicate with each other.)

Headset + Mic for ALPHA PRO X Divers (code OR023004)

Connected to the ALPHA PRO X-Divers surface unit allows for a full duplex conversation, bypassing the unit speaker.



>>>> possibility to customize the cable lenght or make extensions



alpha pro x-divers			
ALPHA PRO X-DIVERS	110/220V		OR033132
ALPHA PRO X-DIVERS - surface unit only	110/220v		OR033133
ALPHA PRO X-DIVERS prof cable	50 meters		OR033134
ALPHA PRO X-DIVERS UW unit (w/PTT)			OR033135
PROFESSIONAL Cable w/rope	yellow	per meter	8488
Water proof rubber connector 6 pins			OR005270
DIN connector to surface unit - ALPHA PRO X Divers			3108
Professional ALPHA PRO Cable 50 mt bag			8686
Professional ALPHA PRO Cable 75-100 mt bag			8687



GC2008 (code OR006509)

OCEAN REEF communication units are designed to be user friendly. One of our main commitments is to respond to the variety of diver operative applications, mainly professionals. This is now possible thanks to the GC 2008 adapter which interconnect existing com parts, thus creating the possibility for new com systems.

For example by using the GC 2008 it is now possible to interconnect the surface unit of the ALPHA PRO X Divers (hardwired system) to the headset microphone assembled (MHA-2) supplied with the GSM G-Power, or separately. This allows the diver to operate via cable by switching from the GSM G-Power SL (installed in the H08 Helmet) wireless unit to the hardwired full duplex and headset system.

Another option is to connect the MHA-2 to the surface unit of the Alpha UWCP (underwater cellular phone) by using the GC 2008.

The GC 2008 can be installed underwater.

COMBINATIONS

GSM G Power SL		←				→	MHA-2
ALPHA PRO X divers surface unit	cable	↔		GC 2008	↔		MHA-2
Alpha UWCP surface unit	cable	↔		GC 2008	↔		MHA-2

UNDERWATER CELLULAR PHONE - ALPHA UWCP

ALPHA UWCP OR033122

OCEAN REEF is proud to introduce a 3rd option in underwater/surface communications, the use of cell phone transmission while diving. This new form of communication from and to divers is now possible with our new product, the ALPHA UWCP. This new technology makes it possible for communication between 2 divers or diver to surface at a distance of up to 20,000 km away!

This new underwater communication unit is integrated with a speaker and microphone and can be easily installed on any one of the OCEAN REEF full face masks (Neptune Space, Predator or Raptor). This unit is wired with a 40 meter cable and can be modified to most any request. (OCEAN REEF suggests a cable length of no more than 50 meters for action divers). A quick release waterproof rubber connection allows the diver to separate from the cable at any given moment. The cable ends with a quick water resistance bayonet connection, plugged into an impact and water resistant compact box. This compact box may be contained in a special custom made buoy with a unique top pocket to provide a firm attachment to the box. The device is further attached to the buoy with the use of custom rubber bands. The buoy has a water reserve bottom pocket for even more stability while on the surface. The device is also equipped with diver flags (international and commercial). The water resistant surface box contains an electronic interface which can be connected by Bluetooth to a cellular phone. The device works with a 9 volts alkaline battery. As an option, a cellular phone can be provided for the unit at an additional cost.

Any cellular phone with "voice dialing", Bluetooth capabilities and with dimensions no larger than 60 mm wide, 25 mm thick, 110 mm high, can simply be interfaced with the ALPHA UWCP. Phones larger than these dimensions can also be adapted. Custom made units can also be created by request and quantity evaluation.





SPECIAL & AUDIO VIDEO SYSTEMS



GAMMA 105 (code 33119: PAL, code 33120: NTSC)

The Gamma 105 is an integrated audio/video system consisting of the M105 Digital and a CCD Micro Video Camera, which may be fixed in an underwater housing, attached to a Neptune mask, or held by the diver. This system makes it possible for those on the surface to communicate with an unlimited number of divers, within the range of the M105, while simultaneously monitoring the underwater video footage.

The camera is hardwired via a 50 m (164 ft) cable to a 7 inch color LCD monitor. The Gamma 105 system includes the following items:

- > Ultrasonic surface communication unit: 10 m (33 ft) transducer cable, microphone, external power supply cable, audio port, headphone port, volume control, and loudspeaker
- > CCD Micro Video Camera with underwater housing and mounting bracket
- > 50 m (165 ft) camera cable
- > 7 inch 16:9 color LCD monitor, loudspeaker, audio and video port, brightness and color controls
- > Video port for external video recorder or monitor
- > 12v battery
- > Battery charger connector
- > 12v battery charger



M-105 MIXER (Code OR 006512)

This accessory allows for the connection between the M105 Digital / M105 Digital DC or audio from the Gamma 105 to an external amplifier or recorder. The Mixer takes its power directly from the M-105 and does not need a separate battery. Audio output cables (w/ RCA connectors) are not included.



GAMMA ALPHA (PAL = code OR033137 NTSC = code OR033138)

The Gamma Alpha is a hardwired audio and video communication system.

The ultrasonic wireless unit of the GAMMA 105 is replaced by an ALPHA PRO X Divers full duplex unit.

The surface unit may be connected by audio and video to 2 divers.

The audio characteristics are the same as the ALPHA PRO X Divers.

With regards to the video, the installed 7" LCD color monitor displays the video feed coming from the uw camera of diver 1 or diver 2.

It is possible to switch the video/s to external monitors / recorders (there are 3 different possibilities of video recording: diver 1 through video out plug #1, diver 2 through video out plug #2, mixed through the video out plug under the switch. With this third option, one can record the same images you see in the 7 inch monitor.

The unit consists of:

Surface unit with:

- > 7 inch 16:9 color LCD monitor, brightness and color controls
- > On/off and speaker volume adjustment switch
- > Speaker
- > Microphone
- > Switch for communication between surface & diver 1, surface & diver 2, surface & diver 1 & diver 2
- > Headset port (headset optional)
- > Audio/video recall from divers
- > 12v rechargeable battery + battery charger
- > 2 plugs for audio connections to divers
- > 2 plugs for video connection to two divers

- > 3 video out plug
- > Underwater unit volume adjustment (for both divers)
- > Switch for the video: 2 positions to show the video of diver 1 or diver 2
- > External power charger, 12v (cable optional)
- > Stand-by autonomy: 24h

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

6 pin cable with yellow rope exterior. The cable's diameter is 10mm with a resistance of more than 4000 Newton's. The cable includes a waterproof rubber 6 pin connector. The Professional cable is also available at any length on request. A carrybag is available with the cable and sold separately as an accessory.

One Underwater unit (if sold separately code OR033135)

- > Waterproof piezoelectric speaker
- > D-Mic microphone
- > Full duplex system
- > Audio/video recall button

One video surface/diver cable (50 meters -165 ft long) (if sold separately code OR008587)

One CCD micro video camera with underwater housing that can be fixed to any Neptune Space mask or can be held by the diver (if sold separately PAL = code OR033139 - NTSC = code OR033140).





GSM VHF (Basic configuration code: OR033123)

The GSM VHF is a very unique communication system with the integration of Ultrasonic/Underwater communication features and the VHF long distance communication requirements. It is mainly dedicated to Rescue Team Divers and was developed thanks to the collaboration of the Italian Red Cross.

The unit was created to the GSM standard and is hardwired to a specially modified waterproof radio carrying bag. A variety of different VHF radio models can be contained and interfaced to the unit. When purchasing, it is necessary to specify the model of radio desired and OCEAN REEF will custom make the required interface cabling.

The waterproof radio carrying bag may be connected to the jacket or shoulder of the diver (Carabiner and strap are included in the package). The GSM may be disconnected from the waterproof radio carrying bag by a rubber waterproof installed connector. It allows the diver to separate the mask / com unit from the VHF radio module.

When the diver is underwater he/she can communicate with other divers, as well as the surface by having the GSM unit act as a PTT unit. While at the surface the radio operates and receives audio through the speaker of the GSM unit, while the transmission is achieved by pressing the PTT in the mask built in microphone. The diver doesn't need to press any button to switch from an ultrasonic diving condition, to air VHF communication. A diver can communicate long distances with any operator on land or ocean surface, including helicopters and boats (depending on the radio installed). One does not need to remove the mask to accomplish this; the diver can continue to operate by wearing the mask and the underwater communication unit. The two systems (underwater and VHF) have completely independent power sources. The VHF continues to work even if there is no battery in the main unit of the GSM or if it is switched off. The diver may decide the VHF band and channel before or during the dive (this feature is in accordance to the radio model) The GSM VHF doesn't come with the radio. It may be supplied separately. Use of VHF radio requires local authorities' permission.





NEPTUNE SPACE NOZZLE ADJUSTMENT TOOL (code 9754)

An essential tool for every Neptune System Service Center to set up the 2nd stage in according to the factory specs.

PORTABLE TEST BENCH (code 9805)

Portable test bench for OCEAN REEF full face masks and conventional regulators.



NEPTUNE SPACE REGULATOR ADAPTOR (code 9794)

Tool fits on a conventional test bench or may be used with the portable one. It is useful for a technician who may set up and check a Space mask regulator prior to mask assembly.

SPACE SERVICING KIT (code 9799)

Contains the tools required for servicing the Neptune Space mask in combination with the nozzle adjustment tool (code 9794).



NEPTUNE SPACE HEAD DISPLAY (code 35018)

Non-working demo unit

M101A HEAD DISPLAY (code 35003)

Non-working demo unit

NEPTUNE SYSTEM TRAINING PROGRAM



The Neptune System Training Program (NSTP) is designed to teach safe usage of the Neptune System. The program has been developed by Instructors and Trainers of Instructors from various agencies. OCEAN REEF provides the educational material for instructors and students.

It is a friendly step by step learning program of “why” and “how” to use / teach an OCEAN REEF full face mask, its accessories and the communication units.

The Instructor program designed to improve the instructors knowledge and familiarity of an important and sometimes overlooked area of diving activity.

The Diver kit is created to support the instructors during the organization of the Neptune courses.

INSTRUCTOR KIT (code 35002)

Designed for Instructor Trainers or Course Directors.

DIVER KIT (code 35005)

Designed for students.



OCEAN REEF has created special packages specifically to meet the demands of scuba instruction and guided tours.

SPACE SCHOOL PACK (code 34990)

Designed for training, renting, and organized dives, the pack includes the following items:

- > 4 Neptune Space masks
- > Training video and manuals
- > OCEAN REEF t-shirt and cap
- > OCEAN REEF flag and promotional items.



SPACE EXCURSION PACK (code 34991)

Designed for instructors and guided tours. The instructor wears a Neptune Space with GSM while the students use M101A receivers. Because the instructor can audibly communicate with the students while underwater, they may make adjustments without having to surface. This dramatically increases the efficiency of the class and the comfort level of the students.

The pack includes the following items:

- > 1 Neptune Space mask
- > 1 GSM tranceiver unit
- > 4 M101A receiver units
- > Training video and manuals
- > OCEAN REEF t-shirt and cap
- > OCEAN REEF flag and promotional items.



SPACE NDC PACK (code 34992)

Designed for instructors, for communicating with divers and the surface. The pack includes the following items:

- > 2 Neptune Space masks
- > 2 GSM tranceiver units
- > 4 M101A receiver units
- > Training video and manuals
- > OCEAN REEF t-shirt and cap
- > OCEAN REEF flag and promotional items.

SPACE NDC PACK DC (code 34993)

- > Space NDC PACK with GSM DC in place of GSM.



COMMERCIAL / PROFESSIONAL APPLICATIONS



The Neptune System is used by Public Safety organizations because of such features as the mask's lightness, field of vision, easiness to don or doff, stability at low pressure, impact resistance, and reliability.

The Neptune System has been used in Dry-docks, when divers must communicate with each other and the surface during the positioning phases of ships, in many commercial activities such as cable spreading, portal dock maintenance, recovery operations, and technical assistance for boats. Often, these dives are for extended periods of time in frigid waters. During these operations, divers require thermal protection, physical comfort, excellent visibility, and communication abilities. The ability to breathe through one's nose while avoiding the discomfort of holding a regulator in one's mouth makes.

OCEAN REEF has also entered the world of recreational activities by being involved in adventures around the world. These include Dirty Jobs on the Discovery Channel, Destination Truth on the SciFi Channel, Mel Fishers Treasure Diving, Monty Halls, Shark Divers, and assisting the disabled in their own adventures.



"Thanks again for making OCEAN REEF a part of our adventures on Destination Truth. The masks added a whole new level of high-tech design and communication to our dive scenes that really helped the show. We hauled the masks and supporting electronics through more than a dozen countries and put them through a brutal field test in some of the harshest conditions on the planet. From the turbid and frigid lakes of Iceland to the toxic waters of a river in the Philippines, all of the Ocean Reef gear held up without so much as a scratch. Not to mention that they were a blast to use."

Joshua Gates
Host/Producer - Destination Truth

"OCEAN REEF masks were an integral part of shooting Mythbusters' Shark Week 2008. With so many myths to bust or confirm, we required reliable full face masks that also look great on camera. The Ocean Reef Neptune was exactly what the job required, and I was stoked on how comfortable they were even after an 8 hour day underwater!"

Luke Tipple
Marine Biologist and Nature Production Consultant

"OCEAN REEF's full-face masks and underwater communication systems are a key part of our four-times-weekly Kelp Tank Dive Shows here at the Birch Aquarium. They allow excellent communication between our divers and the viewing public.

Our live feeding shows are among the most popular attractions here at the Birch Aquarium, and Ocean Reef has been a major factor in helping us maintain that level of commitment to educating AND entertaining our visitors. We couldn't do it without them!"

Mark Ball - Lead Aquarist
Birch Aquarium at Scripps

"As the CEO of Shark Diver, I have come to depend on OCEAN REEF technology for simply outstanding underwater communication with our divers. The ease of use, the clarity of sound, and the styling of the units make them not only functional but cool to look at.

I not only suggest these units to our divers, but our safety dive teams use them as well and we now insist on their use with film crews who use Shark Diver for shark related film shoots all over the planet."

Patric Douglas CEO of Sharkdiver



"Your high level of customer service and technical support exceeded anything ever experienced before personally in my over 23 years of experience as a dive professional working with various dive equipment manufacturing and retailing organizations ... Again thanks for all your exemplary support and assistance to us over the past seven years."

Patrick Murphy - North Carolina Aquariums

"OCEAN REEF has become an integral component in my underwater film work. The Neptune System is very comfortable, provides excellent visibility, and makes using full face masks and underwater comm.'s a pleasure!"

Jeremiah Sullivan
Inventor of the Neptunic Sharksuit and adventure television personality



Marine Research and Education

The Neptune System is a valuable tool for scientific research and education. Audio /video capabilities allow conferences between divers in an

aquarium or pool and researchers on the surface or even students in a classroom. OCEAN REEF equipment has been officially adopted and used to great success at the North Carolina Aquariums and the Birch Aquarium at Scripps Institution of Oceanography.



OCEANREEF®

connecting divers



MESTEL SAFETY Srl
Via Arvigo, 2
16010 Sant'Olcese (Genova) Italia
Phone +39 010 659 8611
Fax +39 010 659 8622

OCEAN REEF Group on the Internet
www.oceanreefgroup.com
www.oceanreef.eu
ocean.reef@oceanreefgroup.com



OCEAN REEF Inc
1699 La Costa Meadows Dr. Suite 101
San Marcos, CA 92078
Phone +1 760 744 9430
Fax +1 760 744 9525
Toll free 1 800 922 1764

