

Instruction Manual

Thank you, and congratulations on your purchase of Sea & Sea's VMC-75, an underwater LCD monitor with a depth rating of 60m (200 feet). To get the best results from your new monitor, please read this manual before use and retain it for future reference.

Safety Precautions

※ Misuses listed in the following precautions could lead to serious consequences. Please observe these precautions; they contain highly important information related to personal and product safety.

⚠ **WARNING!** : Situations that could result in serious injury or death.

⚠ **CAUTION!** : Situations that could result in property damage or personal injury.

⚠ WARNING!

- When transporting this product or storing it for a long period of time, remove the battery. Accidentally activating the power switch with batteries in place could start a fire.
- Be careful when opening the product. Battery overheating or other conditions inside may build interior pressure, which may cause an explosive opening and cause injuries.
- Don't open the product in the vicinity of open flames.
- Don't disassemble or structurally change this product; doing so may cause fire or electric shock.
- Don't pour water or insert foreign objects into the product; doing so may cause fire or electric shock. The product is waterproof, but if water gets inside it for any reason, immediately turn it off and stop using it. Once the product is out of the water, remove the batteries as soon as possible.
- Don't use the LCD monitor in any place with flammable or explosive gases. It may start a fire or trigger an explosion.

⚠ CAUTION!

- Read this instruction manual carefully before using the product.
- Always make sure that this product is securely mounted to a compatible arm or grip to prevent it from falling off, becoming lost, or causing personal injury or equipment malfunction.
- Do not open the product in a wet or sandy environment. Protect the interior from moisture, sand, or other foreign objects.
- If flooding occurs, turn off the product. Discontinue use immediately. If flooded, beware of increased pressure inside the product. Handle with extreme care when opening.
- Use only batteries specified by Sea & Sea. Other batteries may cause heat, fire, or bursting resulting in personal injury.
- Don't step on this product or put it under heavy objects. It may deform the housing or damage the equipment, causing fire, electric shock, or malfunction. It may also cause the housing to leak.
- This product includes plastic parts. Do not subject this product to extreme heat, such as on a car dashboard or in direct sunlight. Plastic parts are prone to warping.
- This product has been constructed with an airtight seal. When packing this product for air travel, open the housing to prevent internal pressure buildup due to change in air pressure at altitude.
- If you detect smoke and/or an acrid odor, discontinue use immediately. Remove the batteries and send the product to an authorized Sea & Sea service center.
- Always rinse this product with fresh water after use. Be sure the latch is securely closed before rinsing to prevent water from entering the interior.
- Never use petroleum solvents such as alcohol or paint thinner to clean this product; such products might mar or otherwise damage the product's finish.
- Sea & Sea is not responsible for any loss of captured images or expenses caused by loss of images, even if you're unable to shoot due to a product defect.
- Use this product in accordance with this instruction manual to prevent flooding, product damage, or malfunction. User mishandling will void the warranty.

Handling the O-Ring

The O-ring used in this product provides an airtight waterproof seal. Improper handling and maintenance can cause flooding. Please observe the following precautions carefully.

⚠ CAUTION!

The specially manufactured O-rings for this product contain silicone oil that gradually exudes from the O-ring over time to keep it lubricated. When it requires external lubrication, it must be lubricated with Sea & Sea pure silicone grease designed for these O-rings. The grease comes in a tube with blue lettering and a blue cap. Never use Sea & Sea silicone grease in a tube with a BLACK lettering or other manufactures' brands of silicone grease. Incompatible silicone grease will cause the O-ring to lose its waterproofing ability. If you have applied incompatible grease on a blue O-ring, the O-ring must be replaced.

● Remove the O-ring for inspection.

Before using, remove the O-ring from its groove and the O-ring contact surface. You can't thoroughly examine the O-ring and the O-ring groove unless you first remove the O-ring.

● Always inspect the O-ring for scratches, cracks or cuts.

If the O-ring is damaged, it must be replaced. Never remove the O-ring with a sharp tool. To avoid damaging the O-ring, use the Sea & Sea O-ring remover, a tool especially made for O-ring removal.

● Inspect for debris.

Make sure that there are no foreign particles, such as dust, sand, or hair on the O-ring, the O-ring groove, or the O-ring contact surface. Such contamination will breach the seal and cause flooding.

● Lubricate with silicone grease.

Silicone grease protects the O-ring from drying and abrasion. Dab a small amount of grease on your finger and draw the O-ring through your fingers until it's evenly coated. Use the silicone grease sparingly. Too much grease attracts debris.

● Do not crimp the O-ring.

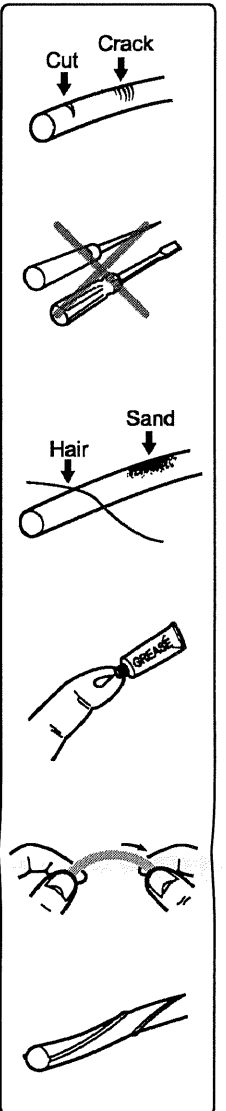
Hold the O-ring straight and do not bend or twist it when fitting it into the O-ring groove.

● Store the O-ring properly.

Always store your O-ring in an airtight container and in a cool environment. Keep it out of direct sunlight. Take care that it is stored flat and not bent or twisted. Do not place any heavy objects on it; excessive weight will flatten it and impede its sealing capability.

● Replace the O-ring when it's too old.

The life of the O-ring depends on the diligence of your maintenance, the frequency of use, and storage conditions. On average, if you maintain your O-ring properly, it will retain its watertight integrity for one year. Replace the O-ring when it's older than one year.



Identification of Parts

① FrontCase

② RearCase

③ Latch

④ Lock

⑤ Hood attachment frame

⑥ Shield Hood(detachable)

⑦ Monitor Window

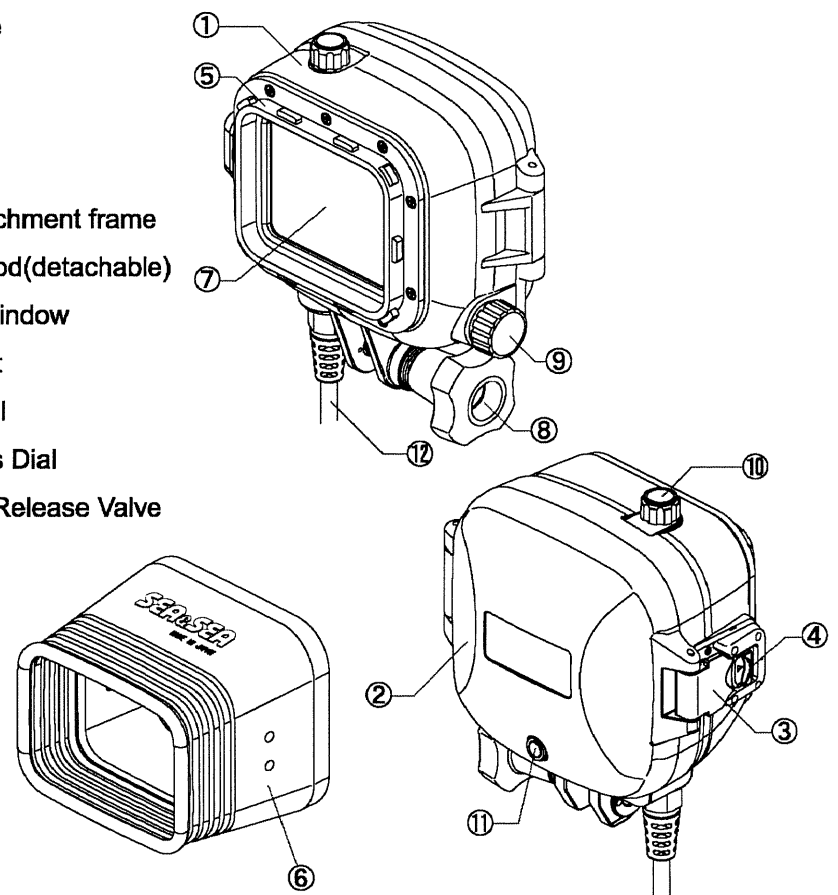
⑧ Fixing Bolt

⑨ Power Dial

⑩ Brightness Dial

⑪ Pressure Release Valve

⑫ AV Cable



Operating Instruction

《Inserting Batteries》

⚠ CAUTION!

- When inserting or changing batteries, use dry hands and be sure to remove moisture on the product.
- Use batteries of the same type.
- When charging or changing batteries, change all four batteries at the same time.
- When unsealing four new batteries, use the identification sticker provided for proper battery management.

Use only AA Ni-MH batteries or alkaline batteries with this product.

1. Set the monitor face up with the back cover facing down. Make sure moisture can't enter when you open or close the back cover.

2. Slide the lock in the direction indicated by the arrow to unlock it, then unlatch and open the rear case. (Fig.1)

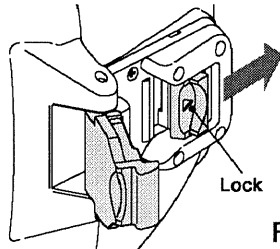
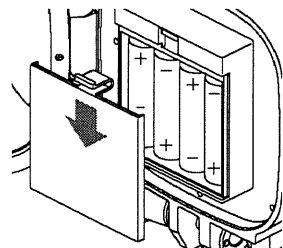


Fig.1

3. Push down the top tab to open the cover of the battery box located inside the monitor, then remove the batteries. (Fig.2)



Cover can be removed by pushing down. Use care in not dropping product.

Fig.2

4. Insert fresh batteries as indicated on the battery box. (Fig.3)

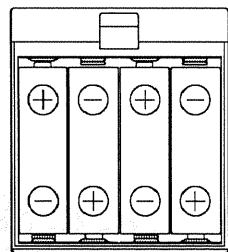


Fig.3

5. Close the cover of the battery box.

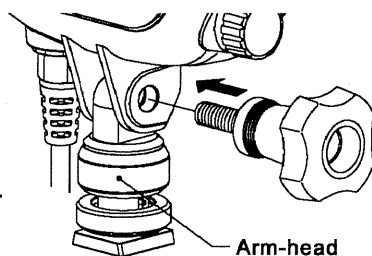
6. Remove the O-ring and examine it to confirm that there are no flaws, dust, or other blemishes on its surface or in the O-ring seat of the monitor. Put a small amount of silicone grease on the O-ring and re-insert it into the O-ring seat.
※ Refer to the earlier O-ring instructions for more details.

7. Close the rear case and snap the lock completely shut.

《Installing a Shoe Arm》

The monitor attaches to a video housing using a Sea & Sea shoe arm. To attach to a Sea & Sea VX-FX1 or VX-2000/2100PRO housing, use a Hot Shoe Arm II. To attach to any of the Sea & Sea VX-G1 series of housings, use either the Hot Shoe Arm or the Mini Shoe Arm.

1. Insert the shoe arm's head into the monitor's arm holder.
2. Pass the fixing bolt through the arm holder and arm head as shown in the figure, then tighten it to secure the monitor. Moving the monitor while the fixing bolt is tight may cause damage. Loosen the fixing bolt before changing the orientation of the monitor.

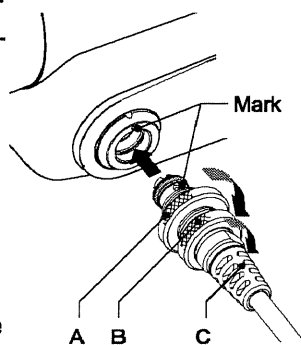


⚠ CAUTION!

- Do not over-tighten the fixing bolt when you install the shoe arm. Over-tightening will damage the arm holder.

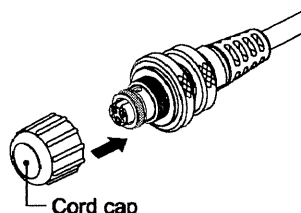
《Connecting the AV Cable Connector to the Housing》

1. Check the O-ring on the end of the AV cable connector for flaws or dust, then lightly grease the O-ring with silicone grease.
2. Align the mark (a dot) on the end of the AV cable connector with the mark on the housing's AV outlet (which has five holes), then plug the connector straight into the outlet.
3. Fit the connector's threads against the housing's threads, then turn the locking collar (B) clockwise until it stops. After that turn the locking collar (A) clockwise until it stops and the connector is fully screwed into the housing.
4. To detach the AV cable connector, turn the locking collar (A) and then the locking collar (B) in the opposite direction until the connector is unscrewed, then pull directly back on the cable's stress reliever (C). Do not pull directly on the cable or twist the cable.



⚠ CAUTION!

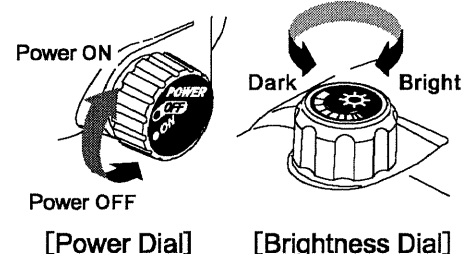
- Do not touch the connections on the end of the AV cable connector or apply silicone grease to the connections. If you get silicone grease on the connections, use rubbing alcohol to remove it.
- When the AV cable connector is detached from the housing, place a cord cap on the end of the connector to protect it.
- When washing the AV cable connector in water, make sure to put the cord cap on its end before washing to protect the connector.



《Using the Monitor Controls》

[Power Switch]

Turn the switch clockwise to turn on power, counterclockwise to turn off power. Leave the power off when not in use.



[Brightness Dial]

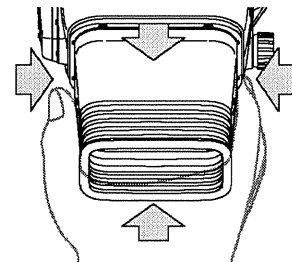
Push the dial down and turn clockwise to make the monitor image brighter, counterclockwise to make the image darker.

[Power Dial]

[Brightness Dial]

《Installing the Shield Hood》

Place the hood onto the hood attachment frame on the front case of the monitor. Hold the hood by its base and press firmly and evenly until the hood snaps into place.



⚠ CAUTION!

- Do not lift the monitor and housing by the shield hood. The hood may suddenly detach and drop the monitor and housing.

《Changing the O-Ring》

1. Set the monitor face up with the back cover facing down. Make sure moisture can't enter when you open or close the back cover.
2. Slide the lock open, then unlatch and open the rear case.
3. Remove the O-ring from the O-ring groove.
4. Put a small amount of silicone grease on the new O-ring.
※ Refer to the earlier O-ring instructions for more details.
5. Make sure there is no dust, dirt, or sand on the O-ring or in the O-ring groove, then close the rear case and snap the lock completely shut.

《Understanding the Pressure-Release Valve》

⚠ CAUTION!

Gas may be generated inside the monitor if you use the monitor with a water leak, or you use the monitor repeatedly with low- or overcharged batteries. The monitor is equipped with a pressure-release valve that releases gas from the monitor. If you see bubbles coming out of the valve while using the monitor, it's likely that the monitor is generating gas. To protect the monitor, do the following:

1. Immediately turn the monitor off.
2. Return to the surface at a safe speed. Don't rush your ascent-bubbles coming from the valve are not a leak. The valve vents gas, but does not allow water to enter.
3. Return the monitor as soon as possible to the store where you purchased it or to Sea & Sea's service center for inspection and repair.

Maintenance and Storage

- After use, soak in fresh water and then rinse with tap water. Make sure the monitor is securely closed before immersing in water.
※ Do not allow salt water to dry on the monitor. Salt will crystallize and become difficult to remove.
- After rinsing, wipe with a soft cloth.
- ⚠ CAUTION! : Do not use a hair dryer. The heat may cause warping or other damage to the plastic parts.
- When storing this product for an extended period, avoid extremely high or low temperature, high humidity, or direct sunlight.
- Lubricate the O-rings before storing. O-rings should be replaced with new O-rings at least once a year.

Notice



This "Pressure Test Passed" sticker confirms that this product has met Sea & Sea pressure test standards.

Specifications

【Power】	AA Ni-MH batteries × 4
【Display Element】	High-resolution color LCD[TFT-type liquid crystal]
【Resolution】	Approx. 110000 pixels(480 × 240 pixels)
【Running time】*1	2 continuous hours on one set of batteries *2
【Image size】	Width: 50 mm (1.97 in.) , Height: 39 mm (1.54 in.) Diagonal measurement: 63 mm (2.48 in.)
【Light Source】	Back light: High-intensity fluorescent
【Video Format】	NTSC/PAL Automatic switch
【Water-resistant to this depth】	60 m (200 ft.)
【Construction materials】	Front case: PC, Rear case: ABS
【Weight】	Above water: approximately 640 g (1 lb., 7.6 oz.) Underwater: positively buoyant by approximately 10 g (0.35 oz.)
【Dimensions】	Width by Height by Depth: 73 x 73 x 156 mm (2.9 x 2.9 x 6.1 in.)
【Accessories included】	Fixing bolt, hood, O-ring, silicone grease
【Accessories sold separately】	O-ring set for VMC-75 (#62119)

※1: Differs depending on use conditions. ※2: When using nickel-metal hydride batteries(2500mAh)
※Specifications are subject to change without notice.

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