MOTORMARINE II

A NEW CAMERA

SEA & SEA

Motormarine II

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Imagine yourself descending on a colorful tropical reef armed with camera, close-up lens and flash. You plan to take close-ups of the many colorful animals that populate the reef. Suppose that after 10 exposures, you look up and spot a huge manta ray circling, ready to play. What do you do other than curse into your regulator? One solution would be to carry several cameras, each with a different setup. But, just how do you carry it

all? You could always surface and change lenses, but nine times out of ten you would find the manta had disappeared and your photo subject was now a small shrimp.

The Sea & Sea division of GMI Photographic offers an affordable answer with its Motormarine II. Using a unique external bayonet lens system, you can now change lenses underwater without fear of flooding either the camera or lens. The

Motormarine II allows the photographer to change from macro to ultra-wide angle photography in seconds—underwater!

This lightweight camera has the same look as a standard 35mm land camera, but is just slightly larger. The body is made of yellow and black molded polycarbonate and is rated to a depth of 150 feet. DX coding pins inside the camera automatically set the correct film speed of either 100 or 400. A standard 35mm lens is permanently sealed and mounted on the front of the camera, allowing the photographer to take sharp photos on land and underwater.

Focusing is accomplished by turning a small black dial on one side of the lens. This knob has a large post extending from the dial, allowing easy manipulation even when wearing gloves. Both feet and meters are indicated on the dial, ranging from infinity to three feet/one meter.

Turning the focus control beyond the minimum distance moves a small close-up lens into the image path. This allows focusing on subjects only 20 inches in front of the lens.

The camera has a built-in flash for use when ambient light is insufficient. The control for activating this internal, sealed mini-flash is on the aperture knob. You will find one setting with a shooting distance of three to ten feet. The second setting is for use with the close-up lens.

The aperture knob allows you to set the lens opening from f/3.5 to f/22. Beside each of the various f/stops you will also find the icons for sun, cloudy and shade, indicating approximate exposure settings for land photography with ISO 100 film.

There is a small red shutter release on the top of the camera. This operates the mechanical shutter that is preset to 1/100 second for both U/W and topside photography. Exposure control is either through the lens (TTL) or manual. Depressing the shutter button automatically advances the film so you're always ready to capture the action. Every time the film travels over the film plane, a LED flashes, indicating the film is properly advancing. When you reach the end of the roll, simply push a lever and the film automatically rewinds itself.

Sea & Sea's Motormarine II uses two, easy to find AA alkaline batteries. Battery access is accomplished by using a coin to turn the front battery lock, which releases the battery holder on the base of the camera.

The camera viewfinder has two sets of frame lines for both close-up and distant photography. Three indicator lights can be seen below the framing lines. A red light indicates low light and a possible need for flash exposure. Yellow indicates that either the internal flash and or the external flash is charged enough to take a proper picture. The green light will glow for about four seconds when a proper exposure has been made using TTL external flash.

The most versatile part of the Motormarine II is its lens system. Each of the three optional bayonet lenses—macro, 16 or 20mm—is designed to use the 35mm lens as the rear element, water and the optional lens as the front element.

The 20mm lens offers an underwater coverage of 80 degrees and weighs 263 grams. At f/5.6, depth of field ranges from 2.3 to 5.9 feet, while at f/22 the range is 1.3 feet to infinity.

If you are into the super wide, the 16mm lens with its 91 degree coverage should be the ticket. Depth of field can range from 2.3 feet to infinity at f/5.6—0.9 feet to infinity at f/22. Basically, if your subject is more than two feet away, it will be in focus no matter which f/stop you use.

Macro photography can be accomplished by attaching a special macro lens and framer to the camera. The framer consists of a distance bar and two vertical rods that screw into the bar. The actual image is about 125 by 85mm or a little more than a one to three magnification.

No underwater camera system would be complete without a matching electronic flash. The MM-II Yellow Sub 50 TTL flash is designed to link up with the Motormarine II via a small bulkhead connector on the side of the camera. The flash is held in place using a camera baseplate and extension arm capable of telescoping out to 16 inches. A three position control on the back of the flash indicates off, on/full power and TTL.

The flash uses four AA batteries and has a recycle time of about 5.5 seconds. It has a guide number of 12 and a beam angle similar to that of the 20mm lens. This compact and efficient flash will handle most situations encountered with the Motormarine II camera.

Whenever there is effective competition between manufacturers of photographic equipment, we users reap the benefits. Sea & Sea introduced new and innovative ideas in underwater cameras with its Motormarine II. With features such as TTL metering, power wind and rewind, DX film coding and lenses that can be changed underwater, Sea & Sea's Motormarine II enables us to capture on film both a manta and shrimp in one fantastic dive! For more information on this compact system contact GMI Photographic, 1776 New Highway, Farmingdale, New York 11735.

MM-II Yellow Sub 50
TTL flash

20mm (left) and 16mm lenses

Optical Viewfinder with masks

The Motormarine II camera has a unique external bayonet system that allows you to change lenses underwater without fear of flooding either the camera or lens. The camera has a built-in flash but options include the MM-II YS-50 strobe, macro lens/framer, 20 and 16mm lenses and an Optical Viewfinder with parallax correction and masks for the 35, 20 and 16mm lenses.

Camera, 16mm lens and viewfinder

OPTIONAL ADD-ONS

- Lens Caddy II..............................$39.00
- Optical Viewfinder with parallax
  correction and masks $115.00
- Macro lens with framer...............$99.95
- 20mm SWL-20 II $359.95
- 16mm SWL-16 II $299.95
- MM-II YS-50 strobe with arm
  and baseplate $450.00