



## Sonicgy M20 Anti-fouling Device



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### Marine Anti-Fouling using ultrasonic

#### Introduction :

Ultrasonic have been used for many industrial applications. It use the principle of conversion electrical energy into mechanical energy. The power is delivered through a device call transducers which is driven by a high frequency generator and vibrated in a high frequency. This high frequency vibration will transmit to the hull and hence to prevent the formation of bio-film. Also, ultrasonic frequency provide an cavitation effect under the water. This effect can damage the cell of micro-organism which adhere to the surfaces that submerged into water. Since, the micro-organism and bio-film can provide nutrition to the environment, it encourage algae (seaweed) and barnacles and even sessile to growth and attach the surface of hull. It is the main cause of fouling on your hull and the reason that year after year, you spend large amounts of money on antifouling paints, which in fact, are becoming more and more ineffective as a result of legislation banning the use of pollutants that are harmful to the environment. If the algae (seaweed) was prevented from attaching to your hull in the first place, you would have no need to paint the various products on it!

#### Ultrasonic Anti-fouling Device : Sonicgy M20

The ultrasonic anti-fouling unit is designed under our long time experience in ultrasonic engineering. It emits ultrasonic waves to destroy the microscopic cell casing surrounding the algae know as the vacuole and hence to kill the algae (seaweed) and eliminate the growth of sessile. Using ultrasonic frequencies to destroy algae is a chemical free, non toxic and eco-friendly. The power consumption is low and can be continuously operation.

#### Feature :

##### Generator / Power Supply Unit.

- Compact in construction.
- Digital Electronic technology with sweep frequency feature.
- Wide sweep frequency range up to 100KHz
- LED indication on working status.
- Rigid plastic case.
- Over temperature protection.
- Over current protection.
- Box size 160 x 160 x 80mm.
- Standard 5 meters transducer cable included.
- 2.5 meters power cable included.
- All cable and connector are IP68 water proof.



##### Transducers / Sonic Head.

- Rigid construction with sealed protection.
- Rigid body with corrosion resistant coating.
- IP68 water proof protection.
- Easily mounting method.

#### General Specification :

Type Series	M20-□□□-1	M20-□□□-2	M20-□□□-4
Power Supply Unit ( Input Voltage )	12VDC / 24VDC OR 110VAC / 220Vac (50/60Hz) +/- 10%	12VDC / 24VDC OR 110VAC / 220Vac (50/60Hz) +/- 10%	12VDC / 24VDC OR 110VAC / 220Vac (50/60Hz) +/- 10%
Peak Output Power	Max. 50W	Max. 50W	Max. 50W
Average current drain	1.1A at 12VDC	1.1A at 12VDC	1.1A at 12VDC
Output Control	Solid State Electronic	Solid State Electronic	Solid State Electronic
Power Supply Unit Protection	IP65	IP65	IP65
Operating Humidity	35% ~ 85%	35% ~ 85%	35% ~ 85%
Operating Temperature	-40°C ~ 55°C / -40°F ~ 131°F ( No freezing )	-40°C ~ 55°C / -40°F ~ 131°F ( No freezing )	-40°C ~ 55°C / -40°F ~ 131°F ( No freezing )
Sonic Head	Sealed ( Water Proof ) Submersible	Sealed ( Water Proof ) Submersible	Sealed ( Water Proof ) Submersible
Sonic Head Protection	IP68	IP68	IP68
No. of sonic head	1	2	4

#### Agent :

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We reserve the right to modify and change the specifications to improve or up-grade our products without priority notification.