Environmental Friendly Marine Antifouling Device

What is Sonicgy M20?
Sonicgy M20 is an ultrasonic Anti-fouling Device that is designed using the principle of ultrasonic wave to inhibit marine organisms such as barnacles, zebra mussels, oysters, clams and tube worms from attaching themselves to your boat’s hull and drive system.

How does Sonicgy M20 Work?
Sonicgy M20 utilizes a compact microprocessor control unit in conjunction with durable ultrasonic resonators which are secured to the inside of the hull (no through-hull fittings necessary). The number of required resonators will vary according to the size of your boat, with each covering an around 5 meters diameter. When the resonators are activated by the control unit, the vibration of resonators creates a micro-thin layer of rapidly-moving water which acts to blanket the hull and running gear, hence making it difficult for fouling organisms and algae to attach. Sonicgy M20 performs the function automatically without any toxic chemical action which could be harmful or endanger the marine environment.

What are the operational recommendations and requirements for Sonicgy M20?
Sonicgy M20 works either 12VDC or 120Vac or 220Vac supply system (Different models). It draws an average current of around 0.08A of power. In fact; a 12-volt battery can keep the system running continuously for over few months without the need to recharge. Sonicgy M20 is designed to be used continuously without problems. It is very silent without noise.

Will Sonicgy M20 affect my other on-board equipment...cause electrolysis...or affect the structural property of the hull?
Sonicgy M20 is electrically isolated and will not cause electrolysis or affect on-board electronic equipments. Sonicgy M20 does not emit radio waves that cause interference and will not impact the structural property of the hull in any way. The sonic resonance or vibration emitted is well below any levels that could potentially cause problems.

Is anti-fouling bottom paint necessary if I have Sonicgy M20 installed on my boat?
It’s a proven fact that bottom paints alone are unable to prevent the reoccurrence of fouling organisms, not to mention the continued maintenance requirements which are inherent in their application. For the ultimate protection against fouling activity, we recommend that Sonicgy M20 to be used in harmony with bottom paint applications to provide the strongest protection.
Does Sonicgy M20 work on all boats?
Sonicgy M20 works on 90 percent of all boats in the marketplace, with few exceptions. It does not work on boats with cored fiberglass hulls or solid fiberglass bottoms in excess of 25mm / 1” thickness. Sonicgy M20 is also limited with metal hulls to a maximum plate thickness of 6mm / .25 inch. Special consideration must be given to installation in those hulls which feature on over-abundance of structural members including heavy frames, ribs or longitudinal stringers.

How is Sonicgy M20 installed?
Sonicgy M20 can be installed by the do-it-yourself captain and/or crew or you may want to contact your neighborhood boatyard to do the work for you. Either way, installation is simple and straightforward which requires the simple tools. Each package is shipped with a complete installation manual and, if needed, our staff is also ready to answer any questions you might have.

What guarantee do you offer on the product?
Sonicgy M20 provide one-year warranty from date of purchase.

Will Sonicgy M20 be expensive?
Sonicgy M20 is affordable and reasonable for their application. The number of units will depend on the size boat. A 34-foot (10 meters length) boat would need to install two units to protect the hull along with the prop-shafts and struts.

How quickly will I begin to see results after installation?
This will depend on a number of factors. If the boat is in the water with heavy growth on the hull when the unit is installed. The algae and barnacles will begin to die off after only a few days. They will only be shrugged off by passage through the water. If the boat is regularly used then the hull should clean itself in a matter of a few weeks – giving the hull a light scrub will also help. The best results will be achieved when the system is installed on a clean hull – the Sonicgy M20 Antifouling Device is designed primarily to be preventative, not curative.

Does this mean I need never take my boat out of the water?
A: Safety checks and mechanical inspections cannot be avoided. Zincs need the usual periodic replacements and rudders and running gear require the normal maintenance.

Will the Sonicgy M20 be harmful the surrounding marine life?
No, traditional antifouling paints contain toxic chemicals that actually kill algae. Unfortunately, these chemicals also leech into the surrounding environment, which is why they are so environmentally damaging. Sonicgy M20 Antifouling Device is designed to create a micro-environment around your hull that algae cannot tolerate.

Will Sonicgy M20 Antifouling Device damage my boat?
No, the system transmits a relatively small amount of energy through your boat’s hull. It should not negatively affect the structure in any way.

Will the nuts and bolts on my boat eventually shake loose under vibration?
The ultrasonic frequencies used by the device are very high pitch, and not powerful enough to cause any nuts to loosen.
**Is Sonicgy M20 Antifouling Device effective in fresh and salt water?**
Yes, the system will work in both fresh and salt water. So, we have other models that they can be used in ponds, swimming pool, fish farm, lakes etc... You may visit our website at [www.bosan-control.com](http://www.bosan-control.com) for details.

**Is the device effective in wood, cement and aluminum boats?**
The Sonicgy M20 Antifouling Device has been designed primarily for use in fiber glass boats and metal boat. Wood and cement boats cannot be guaranteed to be effective because the hull will likely absorb the majority of the ultrasonic energy.

**Is the location of the transducers important?**
Yes, absolutely. In a power boat, where there is more drive gear to protect, the transducer needs to be as close to this point as possible for best effect. In a sailboat, the transducer should be ideally installed within a meter of the prop-shaft and along the centerline of the boat. Detail instructions are supplied with the unit.

**Can I install the unit myself?**
The device is simple to install and full instructions are given. If you have any questions during your installation we will be available to advise you via email or phone.

**How long does installation take?**
The installation should not take more than a few hours in total, spread over two days. The power supply unit and the transducer ring will be fitted on the first day, and the epoxy should be left to set for one day. The transducer can be fitted the next day. That’s it!

**What is the life expectancy of the system?**
The control unit is air cooled and the transducer is encapsulated to ensure a long life. Be careful to avoid cable chafing which could potentially prevent the system from operating at its full potential for many years. We fully guarantee the system for one year from the date of purchase against mechanical defect, and offer a [90-day performance guarantee](#), provided the system is correctly installed.

**Does the system require any maintenance?**
There is no maintenance required for the operational life of the system once installed. It is recommended that you make periodic checks on cables and connectors to make sure that no chafing or corroding has taken place. It is also a good idea to check the transducer for tightness from time to time.

**Why haven’t I heard of the Ultrasonic Anti-fouling Device before? if it is so good?**
The Ultrasonic anti-fouling has been in extensive testing, research and development for the past few years. Many research have been taken and proven that ultrasonic principle is one of most effective way on marine anti-fouling application.

**If I buy a larger boat can I transfer the system to my new boat?**
Each Sonicgy M20 Antifouling Device comes with the required transducers. If the first installation is incorrect, or if you purchase a new boat, simply fit a new ring and transfer the rest of the system to your new boat. Remember to check which system is best suited for your particular application.
My boat has a skeg hung rudder. Will it keep this clear of fouling?
A: Yes, the Sonicgy M20 Antifouling Device has been tested on boats with skeg hung rudders and found to be fully effective but positioning of the transducer is very important.

My boat has a complex prop arrangement. Will it keep this clear of fouling?
Yes. We advise our customers to clean propellers and running gear prior to setting up the Sonicgy M20 Antifouling Device - the system should keep them free of growth from then on. Again, the positioning of the transducer is very important.

Does the system work best when powered from a marina mains electrical system? My boat is on a swinging mooring. Will it work for me?
The Sonicgy M20 Antifouling Device is totally effective whether it is powered by AC or DC (Different model). The unit uses very little power and will operate in exactly the same way.

I have a power boat with a deep displacement hull. Will the Ultrasonic Anti-fouling Device work for me?
Yes, you should choose the correct model and place at a suitable location on your boat to perform maximum effect.

What effect will the Ultrasonic Anti-fouling Device have on my fuel consumption?
A clean hull will have a dramatic effect on the speed and smoothness through the water and will improve fuel consumption considerably. Consumption usually increases dramatically during the season as growth accumulates on the hull.

I have a racing yacht without engine or electrics can I still use the Sonicgy M20 Anti-fouling Device?
Sonicgy M20 Anti-fouling Device keeps the hull free from growth. It is ideal for a racing yacht. You will, however, need to fit batteries. We recommend that the system operates on a 12 volt system. You may wish to consider the optional solar cell charger to keep the battery fully charged.

Will the Sonicgy M20 Anti-fouling Device work on stern drive units?
it is advised to clean the stern drive prior to setting up the Sonicgy M20 Antifouling Device. The unit should keep them free of fouling from then on.

Will it work on my trim tabs?
Yes, trim tabs will be covered by the Sonicgy M20 Antifouling Device if the transducers are positioned correctly.

Does the unit need to be turned on all the time?
Ideally, the unit will be in operation 24 hours a day. We advise that it operates for a minimum of 8 to 12 hours a day to maintain a clean hull.

Does the system make a noise?
The unit does not emit a noise. It is so quiet during in operation.

If you have further questions? Please do not hesitate to contact us at info@bosan-control.com