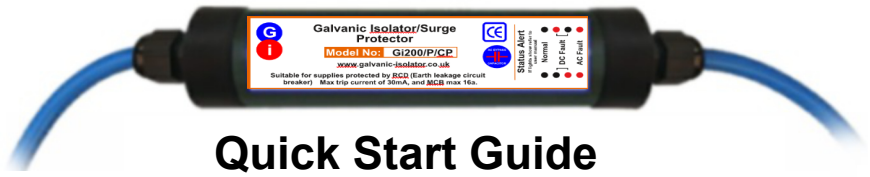
Galvanic Isolator/Surge Protector
Gi200-P-CP

Instruction Leaflet



Quick Start Guide

Installation:

1. **Ensure the electricity supply is switched off.**
2. **Connect the isolator/suppressor to either end of the hookup cable.**
3. **Connect the hookup cable to the electricity supply.**
4. **Switch on the electricity supply.**
5. **Check that the RCD test button operates normally.**
6. **You are now protected. No further action is required.**

Note:
Your Surge Suppressor is for use **only** with supplies that are protected by an RCD (Earth Leakage Circuit Breaker) with a trip current not exceeding 30mA, and an MCB (Circuit breaker) not exceeding 16A.

For outdoor use only. NOT to be fitted inside an enclosed space.

Surge suppressors have a finite lifespan. Protecting your electrical system takes its toll on a surge suppressor, as it absorbs the surge energy that might otherwise destroy your equipment. Lightning strikes or large surges may cause electrical and/or physical damage to the device. We recommend periodic visual inspections for your SS-16/P. If your surge suppressor shows signs of damage, please return it to us for testing. If it is found to have been damaged by a power surge, it will be replaced free of charge - you only pay for postage (at cost price).

Note:
This product is suitable for shore supplies that are protected by an RCD (Earth Leakage Circuit Breaker) with a trip current not exceeding 30mA, and an MCB (Circuit breaker) not exceeding 16A. If in doubt, please consult a qualified electrician, or call us. We will be glad to help.

For detailed instructions, please scan the QR code, or go to our website, click…

instructions → plug in → then select your model

Tel: 0757 807 3490 www.galvanic-isolator.co.uk

Galvanic Isolator/Surge Protector Gi200-P-CP

The galvanic isolator protects the hull of your boat from corrosion caused by Galvanic and leakage currents that arise due to chemical inter- actions between your boat and nearby boats/structures and bank- side.

The Galvanic Isolator simply connects to EITHER end of your shore line. It can be connected either at the boat end or the shore end. Both options work equally well. Ensure that no ground connections on the vessel bypass the Galvanic isolator.

Locate your isolator where it will not be subjected to excessive heat, physical damage or water ingress, particularly the plug & socket. (Rain is acceptable - immersed or in running water is not).

When installed, to avoid water ingress, we recommend that the entries to the plug & socket should point downwards.

1) Switch off the electricity supply at the shore supply.

2) Unplug the shore line from whichever end you choose.

3) Connect the isolator to the now free end of the shore line.

4) Connect the free end of the isolator to the boat/shore supply.

5) Switch on the electricity supply at the shore supply.

6) Check that the RCD test button on the boat operates normally

7) You are now protected.

The LED's on your isolator inform you about any faults with your boats Earthing arrangement. Illuminated LED's NEVER indicate a faulty isolator.
Electrical surges are of short duration, and do not cause the LEDs to illuminate.

Both Lights OFF: Normal operation. No action required – just check back occasionally to ensure that all's well.

One Light ON: If either of the lights are on, it indicates DC leakage. This can cause severe corrosion to your boat. Our instructions give clear basic advice on how to resolve the problem.

Both Lights ON: If both lights are ON, this indicates AC leakage, usually from the mains wiring or a connected appliance. AC leakage can be a danger to life. Please see instructions for help in rectifying the problem.

Occasionally, when you fit a Status Monitored galvanic isolator, both of the warning lights may glow straight away.

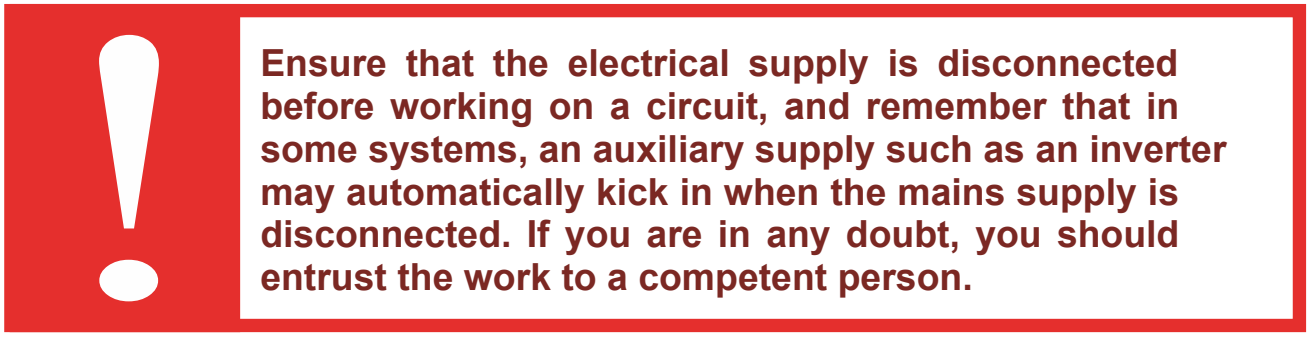
If both lights are illuminated on your galvanic isolator, you have AC earth leakage. **You do NOT have a faulty isolator**. In fact, your isolator is alerting you to a potentially dangerous situation that you may not previously have been aware of.

There are two main types of earth leakage: Mains Leakage and Imprinted Leakage.

Mains Leakage

Mains Leakage happens when an appliance, cable or connection has poor insulation resistance, and some of the circuit's current "leaks" away to earth. If there is sufficient leakage, the earth leakage circuit breaker, also known as the RCD, will trip, disconnecting the supply.

At lower levels of leakage, the RCD may not trip, but the lights on your galvanic isolator may still glow, alerting you to the likelihood of earth leakage. Usually, an earth leakage fault will only get worse, so you should always take this seriously and investigate.



No two electrical systems are the same, so it's only possible to give the broadest suggestions of how to locate any problem. Usually some detective work is required, and this starts by switching off the main RCD on the boat. In most cases, this will result in the lights going out. If not, there is probably something connected to the mains supply BEFORE the RCD.

Assuming the lights go out when the RCD is switched off, switch off ALL the circuit breakers, then switch the RCD back on. In most cases, the isolator's lights will stay off. You can then switch the circuit breakers back on one at a time until the isolators lights come back on. The last circuit breaker you switched on has the faulty circuit, or appliance connected to it.

Very rarely, even though all the circuit breakers (except the RCD) are switched off, the isolator lights will remain on. In this case you will need to disconnect all appliances, either by pulling out the plugs, or disconnecting any wired in appliances. Do this one at a time, taking care to ensure that you don't forget anything. As you disconnect items, check the isolator lights. The last item you disconnect is the one causing problems.

When you have traced the fault to a single appliance or circuit, it must then be checked for earth leakage by a competent person.

Imprinted Leakage

Imprinted Leakage typically occurs when equipment using a Switched Mode Power Supply Unit, (SMPSU), is connected to your system.

Pay close attention to earthing of equipment. Equipment is often installed without adequate earth bonding. Please consult the equipment's installation manual, or contact the manufacturers for more information.

Earth bonding point

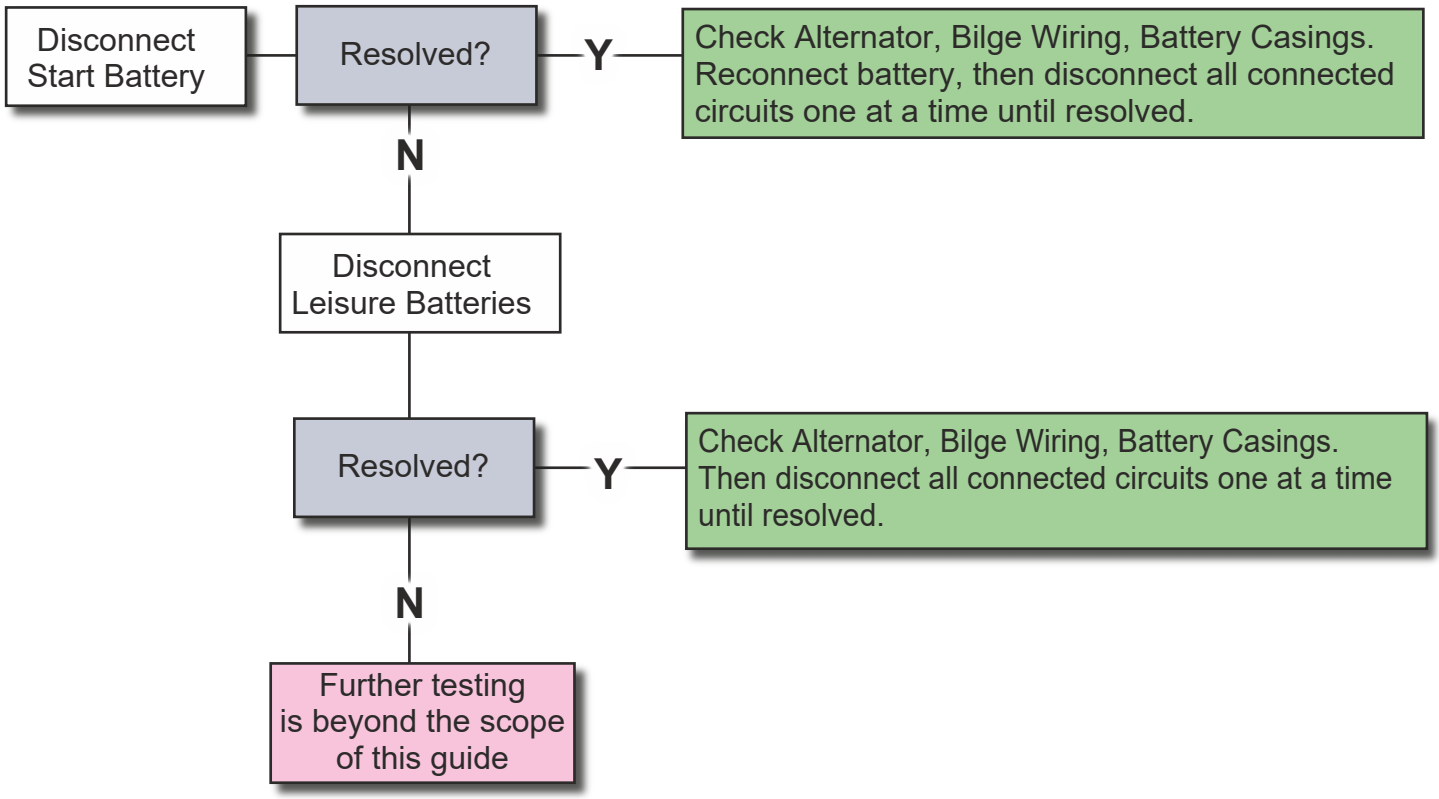
Equipment utilising SMPSU's include, Battery Chargers, Computers, TV's, Domestic Appliances, Phone Chargers etc.

In our experience, battery chargers are often the cause of imprinted leakage. CE regulations require that equipment should not create this kind of interference, but not all equipment is as "clean" as it should be.

Because of the way SMPSU's operate, some of them leak power into the boat's earth wiring. This can cause the galvanic isolators light to come on, as the isolator correctly detects the leakage.

Imprinted Leakage is traced in exactly the same way as for Mains Leakage. However, when you track the problem down to an individual appliance, it may still pass an Earth Leakage test. In that case, it's likely that the problem is Imprinted Leakage. Imprinted Leakage is often due to incorrect installation, but can also result from design or manufacturing issues.

ONE (either) LED glowing



BOTH LEDs glowing

This indicates a possibility of AC (mains voltage) leakage. Proceed with great care Danger of electrical shock. If in doubt, please consult a qualified electrician.