

Your Batteries are Safe with the Superseder/MasterCharger

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Introduction:

The Superseder/MasterCharger series of Battery Charger-Analyzers, and other Charger-Analyzers manufactured by JFM Engineering, are designed to be safe instruments for the batteries as well as for the operator and the equipment.

Safe Operation Description:

The Superseder/MasterCharger starts with a highly regulated output current which is independent of battery voltage and line voltage. In addition, a Monitor circuit shuts down the operation if it detects that the current differs from the programmed current. Ultimately, a mains breaker and current limiters serve as final protection in case of an overcurrent condition.

There are additional protections in case of reversed polarity connection and open circuit protection.

In case of a reversed polarity connection, as it could occur when attempting to charge a single cell, the Monitor Circuit will not allow the system to start, thus preventing damage to the cell.

In case of an open circuit, as it could occur with a missing link or if the cable is simply not connected to the battery, the Monitor Circuit shuts down operation when it senses that there is no load to absorb the output current. Similarly, a momentary interruption of the current, as with an intermittent connection (loose link) will result in an immediate system shutdown.

Finally, the battery voltage is continuously sensed by the Monitor Circuit, which will shut down the charge in case of battery overvoltage. The battery temperature is also continuously monitored by the Monitor Circuit, which will shut down the charge in case of battery overtemperature.

As a complementary precaution, the control circuit is backed up by an internal rechargeable battery that protects the integrity of the operation in case of power failures. Whether the power failures are momentary or prolonged, the Superseder will recover and continue with the programmed operation.

The precision of its control circuits and the protection of the monitor circuits are the basis for the operational reliability of the Superseder. It can be operated unattended with the confidence that the system will perform safely and completely.

Why risk damaging your batteries with equipment of inferior performance?

With over 30 years in the market, the Superseder/MasterCharger has established itself as a most reliable instrument. In addition, it is backed-up by a manufacturer which guarantees immediate response in case of application problems, overnight shipping of spare parts, fast repair turn-around time and efficient product upgrading.

JFM Engineering has over 30 years in the development and manufacturing of precision instruments for the testing of batteries and an FAA certified repair station for the testing and maintenance of aircraft batteries of all types.

For additional information, please contact the sales department at 305-592-2272 or visit our website www.jfmeng.com for complete information on our products and services.