



Form 1232-4000  
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## OPERATING INSTRUCTIONS

### TYPE 1232-4000

### RECHARGEABLE BATTERY

The Type 1232-4000 Rechargeable Battery (non-mercury) replaces the nine mercury cells (M72) supplied with the standard instrument. The rechargeable battery provides up to 90 hours of operation and can be recharged several hundred times.

The battery assembly includes 9 type CD-4 nickel-cadmium cells sealed in an epoxy cylinder along with a Type 0746-4400 Step-Down Transformer and a 1N3253 charging diode. A power-plug end cap allows connection to a 115-V ac supply for charging.

The nickel-cadmium cells have a rated capacity of 225 mA-hr and a nominal voltage of 1.22 V (11 V total) at normal current. When fully charged, the cells have an open-circuit voltage of about 1.4 V (12.6 V total). When discharged, the cells have an open-circuit voltage of about 1 V (9 V total). With the 2.5-mA drain of the 1232-A Amplifier, the cells will provide 90 hours, or about 2 weeks, of normal operation. When discharged, the cells should be recharged for 14 to 16 hours (e.g., overnight). Avoid overcharging or excessive discharging which will shorten the life of the battery[1].

Disconnect the charging cord when operating the amplifier. In other respects the operation of the instrument is unchanged.

[1] Lewis Hofstatter, "Nickel-Cadmium Batteries", Electronics World, October 1965, pg. 37.

