

## STC 4110 Dual Mode Battery Analyzer



- Tests 6V and 12V Batteries
- Powered by battery under test
- Amp-hour Analysis and Load Testing
- Automatic selection of battery voltage

### Description of device and operation

The **STC 4110 Dual Mode Battery Analyzer** is a microprocessor controlled, host powered instrument designed to test and evaluate the standby charged condition and dynamic capabilities under load of any 6 or 12 volt, sealed, lead-acid battery. It will also perform a calculation of the remaining Amp-hour capacity.

#### Pre-load static test:

The Analyzer automatically determines the voltage of the battery. The Amp-hour rating is entered to set the parameters prior to the load testing. A voltmeter function may be used to check the charging circuit

#### Dynamic load test:

A microprocessor controlled **load test** sequence is then operator initiated with the battery disconnected from the charging circuit. The load current is based on the entered Amp-hour capacity. The battery condition is evaluated during the **load test** and is displayed on LED's as:

*Good, marginal, bad*

#### Amp-hour Calculations:

The 4110 will perform an additional test that determines the remaining capacity of the battery. This result can be compared to the minimum standby requirement to determine if the battery will meet the demands of an extended power failure.

A math calculation routine is available in the 4110 to size batteries for various fire, UPS, and security systems.

### Specifications

#### ELECTRICAL

##### Input Voltage from battery:

5-15 VDC, Auto-select for 6V or 12V.

##### Testing Range:

4 to 110 Amp-hour, 12V. 4 to 60 Amp-hour, 6V.

##### Load Current:

200 ma. during static test, 30 Amps max. during dynamic test. Actual load is approximately 1/2 A.H. rating

##### Dynamic load time interval:

60 to 120 seconds. Approximately 50 to 100 seconds for Amp-hour determination.

#### MECHANICAL

##### Size:

11.5" wide X 11" deep X 5" high.

##### Weight :

7.7 lb., including test leads. 16.7 lb in carrying case. (Shipping weight: 18 lb.).

##### Input Connection:

Military Spec 97 Series Connector set.

##### Operating temperature:

32 to 140 degrees F. (0 to 50 degrees C.). 90% Relative humidity.

Overtemperature shutdown at 140 degrees F.

##### Battery Temperature Input:

Non-contact infrared thermometer for reading; keypad entry for temperature.

##### Test leads:

48 inch, high flex instrumentation cable, Stranded, copper conductor with soldered connections. Heavy duty copper alligator clips with color coded vinyl insulating boots.

Military grade connector assembly.

#### GENERAL

##### Displays:

2 Line vacuum florescent for prompts and data display.  
5 LEDs for battery voltage and load test results.

##### Data Input:

12 Button keypad with vacuum florescent for Amp-hours, prompts, battery temperature, and data.

##### Warranty:

Two years parts and labor. (See separate warranty statement for complete details.)

### Ordering Information

**STC 4110** Dual Mode Battery Analyzer, 6 and 12V., includes test lead set, infrared thermometer and carrying case.



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