

Charger Quick Reference Guide



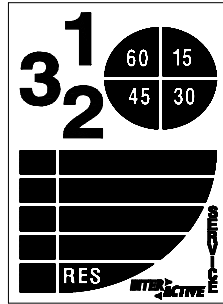
Customer Support Group

Digital Battery Real Time Display

The large numbers **1, 2** or **3** indicate remaining hours under current load. Only one number will display at any time.

When the 5 blocks on the left side of the Real Time display blink, the battery is requesting an AUTOCAL to update the battery's Learned Capacity.

If the entire LCD flashes during use - this indicates that the battery is being subjected to a high current load. While the battery will continue to operate normally, frequent high current loads will shorten battery longevity.



The pie chart numbers (**15, 30, 45, 60**) indicates remaining minutes under current load. The highest number displayed is the number of minutes remaining.

Top Bar: Indicates 75% - 96% remaining

2nd Bar: Indicates 50% - 75% remaining

3rd BAR: Indicates 25% - 50% remaining

4th BAR: Indicates 7% - 25% remaining

"RES" BAR: Indicates 0% - 6% - Will flash until EOD (End Of Discharge)

"INTERACTIVE": Indicates 96% - 100% Appears when battery is 100% charged.

"SERVICE": - Return to Anton/Bauer Service Department for evaluation.

The **Real Time Display** shows the operational time remaining and is based on the current draw of the equipment against the battery's learned capacity. When the battery is off the charger, the time indicated is based on a simulated 20 - watt draw and will change when subjected to a higher current load.

Learned Capacity - The learned capacity of a battery is the average of the last 5 complete discharge cycles. The learned capacity is what the Real Time fuel gauge is based on. As a battery ages it will have less capacity, by calibrating the battery, this will maintain the accuracy of the Real Time Fuel Gauge.

AUTOCAL - Is requested by the battery because it has not seen a complete charge/discharge cycle in quite some time and is needed to maintain fuel gauge accuracy. This is an automatic process with PowerChargers and should be allowed to complete if requested. The AUTOCAL can take up to 12 hrs and is the same as a Standard test.

Interpreting Anton/Bauer PowerCharger Displays

QUAD 2702 Rev # 4.9
Discharger INSTALLED

To access the PowerCharger model and software information, start from the main display - push and hold the TEST Button. Tests can only be performed on chargers with a discharger.

1-Waiting to Charge
PROPAC 14 16.5V

Information on primary page - Non-Digital battery

Line 1 - Charger position, Charge status

Line 2 - Battery Model, Charge Voltage

2-READY (Lifesaver) 4.0
PROPAC 14D 100% 16.5V

Information on primary page - Digital Battery

Line 1 - Charger position, Charge status, Last A/H charge

Line 2 - Battery Model, Charge Capacity, Charge Voltage

To access the secondary page with Digital batteries, push the Display button to bring up the battery in question, release and quickly push and hold the Display button again. There is no secondary page for non-Digital batteries.

2-Ser# 96280 Mar09 4.0
118 cycles VCO 27°C

Information on secondary page - Digital Battery

Line 1 - Charger position, Serial #, Manufacture date, Learned Capacity

Line 2 - # of charge cycles, type of charger cut off, battery temperature

Testing Anton/Bauer Batteries with PowerChargers

There are 2 types of tests available with PowerChargers:

Standard (12-hr Test) - This test is used to determine battery capacity and establish a baseline for comparison. The battery is charged, discharged and then fully recharged. The Standard test is the same as if you charged your battery, took it off the charger, used it for the day and returned it to the charger.

24 - hr Test - This is a stricter test. The battery is fully charged and disconnected from the charger to sit for 24 hrs. The battery is then discharged and fully recharged. This test actually determines how strong the cells are by tracking how much current self-discharges or "leaks" out of the cell during the 24 hr sit period.

The average difference in test results between the 12 hr. and 24-hr tests is 10%. The greater the difference - (15%, 20%....) actually allows you to determine how weak the cells really are.

To start a test - Push the PowerCharger Display button to select the battery to be tested. Then push and hold the TEST button for 3 beeps. The charger display will ask if you want to select a 24-hr test. If you do not, then do not push the TEST button and the Standard test is automatically selected. Once a test is completed, the charger display will indicate TEST DONE and you can access the test results.

Interpreting Test Results with PowerChargers

To access the test screen, push the Display button until the selected battery is displayed then push and hold the TEST button.

4-Ready (Secondary)
Discharge Amp-Hrs 3.2

Typical test display with non-Digital batteries (Pro-Pac 14 4.0 A/H)

Line 1 - Battery position, Battery charge status (secondary or balancing)

Line 2 - Tested capacity of battery in amp/hrs

2-Ready (Lifesaver) 9.6
Discharge Amp-Hrs 9.4

Typical test display with Digital batteries - (HyTron 140 10 A/H)

Line 1 - Battery position, Battery charge status Last charge

Line 2 - Tested capacity of battery in amp/hrs

2-Ser# 96280 Mar09 9.4
Discharge Amp-Hrs 5.1

A. This is showing that the Learned Capacity of this battery is higher than the available capacity. This would cause the battery to indicate that it has more power than is available and would seem to shut off early. This is because the battery has not been allowed to calibrate for a long period of time. Run several Standard tests to recalibrate the battery.

2-Ser# 96280 Mar09 5.1
Discharge Amp-Hrs 9.4

B. This is showing that the Learned Capacity of this battery is less than the available capacity, This would cause a battery to run longer after you get a low voltage warning in your camera. This is because one or more of the discharge readings that make up the Learned Capacity were corrupted or lower than they should be which caused the Learned Capacity total to be shifted lower. You can either run 5 consecutive Standard tests to purge the lower readings or return the battery to Anton/Bauer to be re-programmed.

2-Ser# 96280 Mar09 5.1
Discharge Amp-Hrs 5.1

C. This is showing a calibrated battery that has low capacity. This battery has only 5.1 A/H which is almost 50% capacity of a new HyTron 140 and should be replaced.

Examples A, B, C above - Top line = from Digital battery secondary page, Bottom line = from Test display screen

Downloading Test Results To Your Computer Via Hyperterminal

- 1) Open the Hyperterminal file on your computer
- 2) Type in the name you wish to use for the file - Using the serial number of the battery and the test date would be ideal
- 3) Pull down the window for COM PORT #1. Click OK
- 4) You should now have the COM properties window showing. Change the baud rate from 2400 or its current setting to 1200 Click OK
- 5) Press the Display button on the charger until you reach the battery that you wish to download the information
- 6) Now press the TEST button and hold it down. You should see the data sent to the computer screen.

NOTE: In order to retrieve this information you must first run either a Standard, 24HR or AUTOCAL Test on one or more batteries. You MUST also use a null-modem cable.