# **OUANTUM BATTERY 2**

OPERATING INSTRUCTIONS

For Quantum Battery 2's with Serial Numbers:

B796 and below and

All 6 digit (xxxxxx) Serial Numbers

#### 1. IMPORTANT

Understand how to use your new Quantum Battery and you will enjoy its full power and speed:

First. Charge the Quantum Battery whenever you are not using it.\*

**Second.** Turn the Quantum Battery switch off when not in use.

**Third.** Stop using and recharge when all three green lights do not turn on.

**Fourth.** If the red STOP light comes on, turn off all power and refer to part 3.

**Fifth.** Brand new batteries MAY sometimes get warm the first few times they are charged. This is normal. If this occurs stop charging (sooner than the usual 16 hour overnight charge) and use your Quantum Battery. After a few charging cycles, new cells will be "broken-in" and will not become warm.

\*The Quantum Battery lead cells **cannot be overcharged** or develop a "memory" from too-frequent charging. Keep your battery fully charged, ready for use. (Charging longer than 24 hours has no effect on the cells and consumes almost no electricity.)

### 2. RECHARGING-THE KEY TO HIGH PERFORMANCE

### **NORMAL CHARGING**

Always recharge the Quantum Battery immediately after using it. Do not wait. If a battery is stored in an uncharged condition it could permanently lose some or all of its capacity.

- 1. Turn the Quantum Battery switch OFF.
- 2. Plug in the QB28 charger to a 115 volt AC outlet and into the Quantum Battery.
- 3. The CHG (yellow) and BATT (green) indicators will light.
- 4. Charge for 16 hours or longer.

### RECONDITION CHARGING

If you overdischarge your battery its capacity will drastically decrease. Overdischarge is caused by accidentally leaving your Quantum Battery ON when not in use. Or, it can be caused by continuing to use your battery after all green lights go out. Undercharging can cause overdischarge also.

Whatever the cause, an overdischarged battery will seem to have lost 1/2 to 2/3 of its capacity. Your Quantum Battery, however, is equipped to "recondition" an overdischarged battery. Recondition as follows:

- 1. Connect the charger.
- 2. Turn the Quantum Battery switch ON.
- 3. The CHG (yellow) indicator will be OFF. The ON (yellow) indicator will light. The BATT (green) indicators will light.
- 4. Charge for 96 hours!

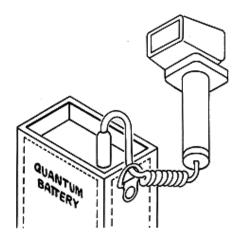
Reconditioning a Quantum Battery is recommended only to save your cells and not as routine charging. (Refer to Normal Charging).

## **TRAVEL**

When traveling to countries with different voltage ratings, a Quantum Charger recommended for that area is required. Do not use a voltage adapter. See the charger listings on our web page.

# 3. HOW TO LOAD A "POWER MODULE" INTO YOUR FLASH

The Quantum Battery supplies power to your flash by means of a Power Module. The module is placed into the battery compartment of the flash and the coiled cord is plugged into the Quantum Battery. Specially designed modules are available for various flash units and are purchased separately.



New models are continually being developed. For the latest developments contact your dealer or Quantum. (For custom designed modules inquire directly to Quantum.)

### TO USE YOUR POWER MODULE

- 1. Place the module into your flash. Plug the cord into one of the Quantum Battery flash output  $\stackrel{>}{>}$  jacks. PRESS FIRMLY UNTIL IT "CLICKS" AND LOCKS INTO THE JACK. Loop the cord through the "D" ring as shown for further security.
- 2. Turn the flash and Quantum Battery ON. The flash should operate, and one, two, or three green BATT lights will come on.
- 3. The red STOP! light indicates an overload or short circuit. Disconnect your power module and shut down. If the flash has been fired rapidly for a long period let it cool down. If the flash was not functioning at all then a wrong connection or malfunction exists, or else an improper module was used.
- 4. CAUTION: Quantum Power Modules have been designed for use with the Quantum Battery. To avoid damage to your flash do not use with other power packs.
- 5. You may connect a second flash to the other flash output jack.
- 6. If you cannot get power see "Care and Maintenance" or consult your dealer or Quantum Instruments.

### CONTROLS. LIGHTS AND FUNCTIONS

**On switch.** When switched to ON, power is supplied to both FLASH outputs. The yellow ON indicator and one, two, or three green indicators should light. When switched off, the charger may be connected to the CHG jack.

**FLASH outputs.** Plug Power Modules into either output jack (or both outputs for dual flash operation). Both outputs provide fast recycling and are protected by an automatic circuit breaker. In case of overload power will be interrupted and the red STOP! indicator will light. In a few seconds power will be restored, provided the circuit overload (short circuit) is removed.

**Red STOP!** indicator. If this lights, shut off the Quantum Battery and check that the Power Module is properly

placed in the battery compartment. Other than that, if the indicator lights during normal operation it could indicate a malfunction or a temporary overload in the flash.

**Green BATTERY lights.** These monitor the power in the battery and indicate approximately 1/3, 2/3, or 1 (full) charge left in the battery. After firing the flash some lights may go out, then come on again after the flash recycles. The status of the battery is most accurately indicated a minute or more after firing the flash.

**IMPORTANT.** When the green lights do not come on after flash recycling, shut off the Quantum Battery and recharge. Allowing the battery to discharge further will severely decrease the cells' recharging lifetime, possibly requiring replacement.

**Carrying the Quantum Battery.** Clip it to your belt or connect a camera strap to the "D" rings for over-the-shoulder wearing.

### 4. CARE AND MAINTENANCE

- If the Quantum Battery is not used for long periods of time give it a charge every 3-6 months to maintain maximum recharge life.
- Store at room temperature.
- Recharge indoors at room temperature.
- Never submerge the charger or the Quantum Battery in water.
- Use the Quantum Battery between temperatures 40°F and 120°F (-40°C to 55°C).

## In Case of Trouble

- Check for the proper Power Module orientation. Is it seated firmly in the battery compartment? Is it the correct model Power Module for your flash? Is Power Module plug pressed firmly into battery? It should "click" and lock.
- Be sure the Power Module is securely plugged into an output jack.
- Is the flash unit switched on?
- If the unit appears not to be charging check that the wall outlet is live, the charge plug is all the way in the CHG jack, and the switch off.
- When the capacity of the battery on a full charge diminishes substantially, the cells can be replaced by sending the Quantum Battery and its charger to the factory either directly or through your dealer. First be sure the batteries have been given a "reconditioning" charge see the charging instructions.
- If you have further questions do not hesitate to contact Quantum Instruments, Inc.

Specifications subject to change.



CONTAINS SEALED LEAD ACID BATTERY.
MUST BE RECYCLED OR DISPOSED OF PROPERLY.

# DO NOT PLACE USED BATTERIES IN YOUR REGULAR TRASH!

Return this battery to a federal or state approved sealed lead battery recycler. This may be where you purchased the battery.