

# QUANTUM BATTERY 2

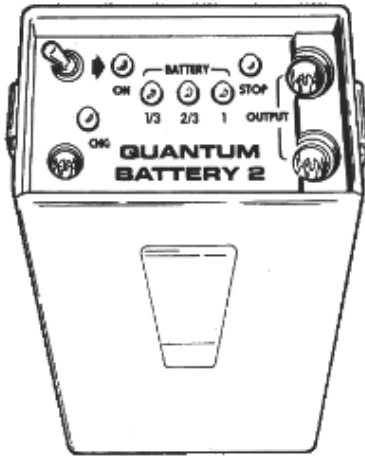
## OPERATING INSTRUCTIONS

For Quantum Battery 2's with Serial Numbers: B797 and above

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### FIRST THINGS FIRST

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The Quantum Battery you just purchased is a high performance "rechargeable" battery pack for portable flash units. Proper charging is the key to quality performance and long battery life. It is important to thoroughly read and understand the instructions that follow. To use your new Quantum Battery with your flash, a module (purchased separately) is required. Consult your dealer or the Compatibility Chart on our web page for a module suitable for your flash.

Important Note: For current or previous owners of a Quantum Battery 2 or QB-37 Fast Charger. The Quantum Battery 2 charging system was revised in 1989. It is important that you read and follow these instructions as they may differ from your current or previously owned Quantum Battery 2.

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### CHARGING WHEN AND HOW

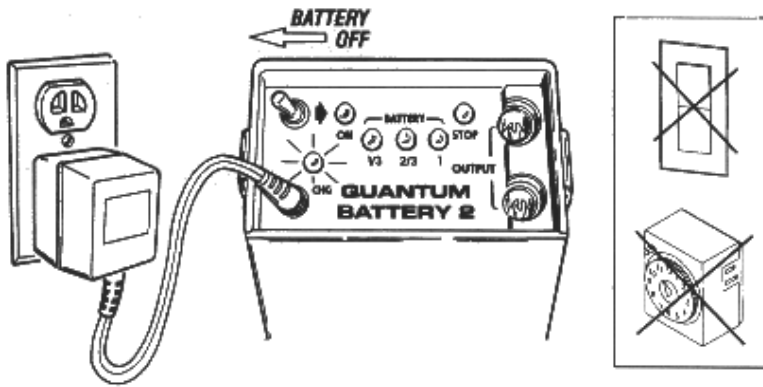
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#### When to Charge:

- Charge before using for the first time.
- Charge after each use.
- You can charge from any capacity indicated. It is not necessary to discharge fully prior to charging. There is never a memory problem with the Quantum Battery.
- Charge immediately if there is a Low Battery shutdown. (See section: Battery Indicators.)
- "Top off" the battery by charging before a shoot or in between shooting sessions. Topping off adds extra life and capacity to the battery.
- Charge before storing. Recharge a stored battery every three months.

#### How to Charge:

- Switch the Quantum Battery to the "OFF" position.
- Connect the Charger to the Quantum Battery and to a standard household outlet (USA-115 Volt AC).
- The yellow charge light will be on. The green battery lights will be off.
- Charge time: 12 hours is recommended to assure a full charge regardless of the state of the battery. (You may charge up to 3 days without overcharging).
- Warning! The Quantum Battery 2 is powered by sealed lead batteries not nicads. Unlike nicads the Quantum Battery does not need to be discharged completely prior to charging.
- Never discharge the Quantum Battery to complete exhaustion. It is not necessary and may damage the cells. See "Special Features."



## HOW TO POWER YOUR FLASH: STEPS 1-3

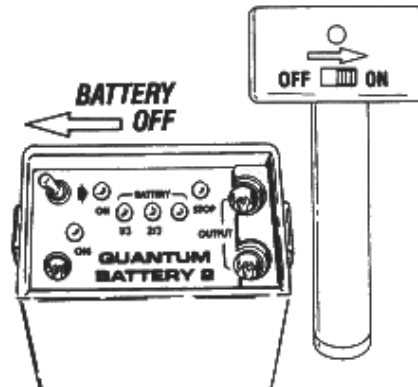
Before powering your flash read steps 1-3 thoroughly:

Most modules are keyed (depending upon the design of the flash) so they can be positioned inside the flash in only one direction. If your module is not keyed it is important that you understand how your flash will respond with the module connected in either the correct or wrong positions. Leaving the module connected to the flash in the wrong position with the Quantum Battery ON could damage your flash.

**1**

Turn the Quantum Battery OFF.

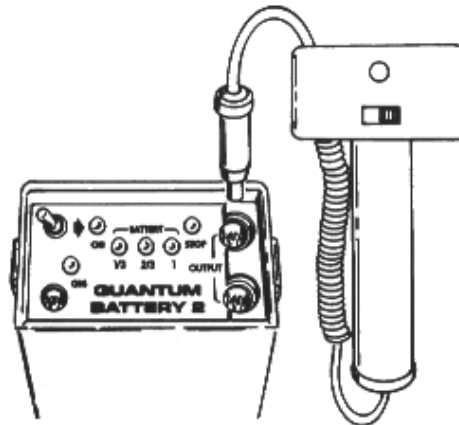
Turn the flash ON.



**2**

Place the module inside the flash  
(see instructions included with the module).

Connect the module to either flash  
output of the Quantum Battery,  
press firmly until it clicks into place.



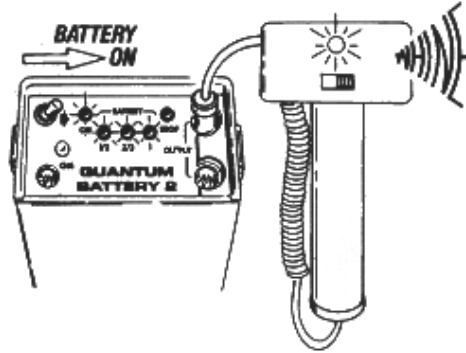
**3**

Turn the Quantum Battery ON for ONE SECOND. If you have the (✓) correct module position the flash will respond instantly. If you have the (X) wrong module position turn the Quantum Battery OFF IMMEDIATELY.



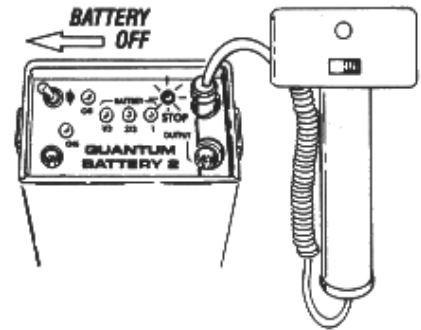
**CORRECT MODULE POSITION:**

Any of the indicators on the flash will light or/  
You will hear the WHINE of the flash recycling.



**WRONG MODULE POSITION:**

There is no response from the flash.  
(None of the lights goes on and there is no sound.) or/  
The red STOP! indicator on the Quantum Battery will light.



Check the module instructions for properly locating the module inside the flash.  
Repeat steps 1-3 until the correct position has been determined.

**SPECIAL FEATURES**

**GREEN BATTERY LIGHTS:**

The battery lights indicate the amount of power in the battery (see diagram below). After firing the flash the lights will go out then go on again after the flash recycles.

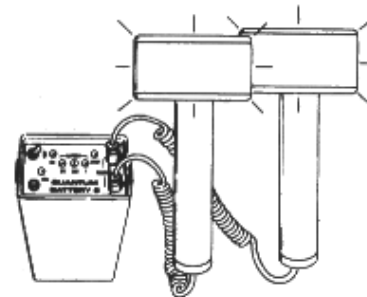


The battery lights are accurate 15 seconds after the flash is fired. If the 1/3 Battery light does not light within 15 seconds recharge the Quantum Battery immediately.

\*Important Charging Note: Charge the Quantum Battery after each time it is used (even if the battery lights display full power).

**DUAL FLASH OUTPUTS:**

Modules can be connected to both flash outputs for dual flash operation.



**CARE AND MAINTENANCE**

To conserve power during a shooting session, switch the Quantum Battery to the OFF position when it's not being used.

DO NOT EXCEED the flash manufacturer's recommendation for the MAXIMUM NUMBER OF FULL POWER CONSECUTIVE FLASHES without a COOL-OFF PERIOD.

Store at room temperature. Recharge every 3 months when in storage.

Recharge indoors at room temperature.

Use the Quantum battery between temperatures -40°F and 120°F (-40°C to 55°C).

Never submerge the Quantum Battery or Charger in water.

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## TROUBLESHOOTING

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### FLASH NOT POWERED:

Is the correct Module being used?

Is the Module in the correct position and firmly seated inside the battery compartment?

Is the Module securely plugged into the output jack?

Is the Flash switched ON?

Has the Quantum Battery been properly charged?

### CHARGER NOT CHARGING:

Is the Charger plugged into a working outlet?

Is the Charger securely plugged into the charge jack of the Quantum Battery?

### OTHER:

If the red STOP! light goes on during normal use it could indicate a malfunction or temporary overload. Turn the Quantum Battery "OFF" and disconnect the module, review instructions, reconnect and try again. If you continue to have a problem contact our Service Department at Quantum Instruments.

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## ADDENDUM

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### IMPORTANT CHARGING INFORMATION

1) The easy rule for perfect charging...

Charge **not less than** 12 hours nor more than 72 hours. If you charge **right after** each use of the battery you'll get optimum performance.

2) Quantum batteries can be charged in-between jobs to "top off" but must be given a 12 hour charge when the last flash assignment is finished.

3) **Never, never** discharge the battery to exhaustion. These special sealed-lead batteries (not nicads) may be given an extra charge any time before a shoot to insure 100% capacity.

4) Consult the Instruction Manual and Handy Tips (below) for more details.

### HANDY TIPS

1) To conserve power during a shooting session turn the battery OFF when not in use. When finished shooting turn the switch OFF, and disconnect the cable or module from the battery. Store in a cool or room temperature location - not in direct sunlight.

2) A new Quantum battery will mature and provide the maximum number of flashes after approximately 10 charge/discharge cycles. This occurs during normal use. If the battery is stored for long periods it will need several charge/discharge cycles to regain its maximum performance. This is normal.

3) When stored for long periods it is **required** that the battery be refreshed every 3 months at least to maximum reliable performance.

### REFRESHING PROCEDURE:

Charge for 24 hours. After charging connect a flash and fire it about every 10 seconds at full power manual. Continue for several minutes (be careful not to overheat the flash). Recharge for 12 hours minimum (72 hours maximum) and store the battery or use it.

4) If your battery capacity is substantially lower than normal, try using the REFRESHING PROCEDURES above to restore capacity. Keep in mind Handy Tip #2.

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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.