

QUANTUM BATTERY 1 COMPACT

OPERATING INSTRUCTIONS

Attention new QB1c owners:

QB1c is a unique battery pack with operating procedures different from your QB1+. Please read these instructions completely. Recharge QB1c after each use, and recharge *the night before the next use*, for maximum capacity.

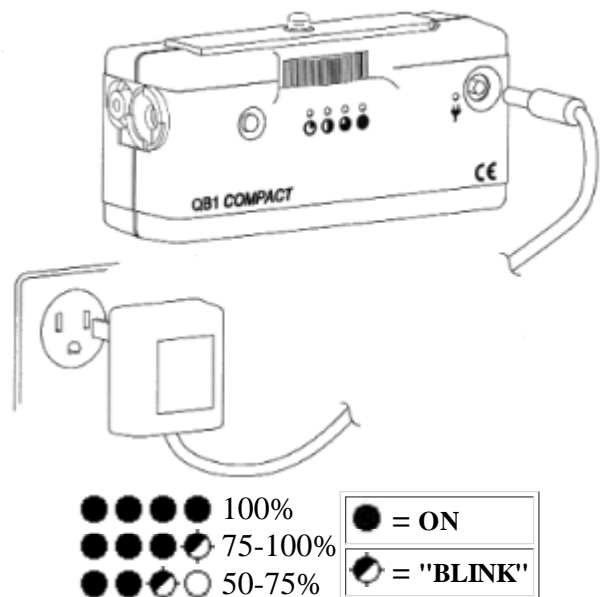
1.0 NEW FEATURES

- 1.1 Compact Design** - Lightweight and under camera mounting.
 - 1.2 Two Outputs** - Two different types of outputs can fit both Quantum "X" series modules (Bantam type) and "M" series modules (QB1+ type).
 - 1.3 Battery Capacity Display** - The LED "gas gauge" will display battery capacity for both charging and discharging.
 - 1.4 Discharge Prevention** - If no flash occurs in 1/2 hour, QB1c shuts off. To keep QB1c on between longer intervals, use the Energy Saver Mode.
 - 1.5 Low Battery Shut Down** - When the cells are exhausted QB1c shuts itself off. The red "gas gauge" LED blinks slowly.
 - 1.6 Energy Saver Mode** - Hold down the ON/OFF button about 3 seconds until the LED "gas gauge" blinks once, then release. The LED "gas gauge" blinks to show capacity. QB1c remains on until turned off.
 - 1.7 Over Current Protection** - If QB1c shuts down due to overload, the "gas gauge" blinks 3 times quickly.
 - 1.8 Rapid Charging** - Charging time is 3 to 4 hours. The LED "gas gauge" indicates charging progress.
 - 1.9 Self Check** - When connecting the charger, QB1c goes through a self check. If QB1c detects any problems, one or more of the "gas gauge" LED's will blink.
 - 1.10 Output Voltage Stabilized** - The output voltage of QB1c is stabilized. This will prevent high voltage run away on some flashes.
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2.0 CHARGING

For maximum capacity from your QB1c recharge the night before the next use.

- 2.1** Disconnect modules from the QB1c outputs.
- 2.2** Connect the charger to the QB1c charge input and to a standard household outlet. Select an outlet that cannot be turned off accidentally.
- 2.3** The Charge Status light will be on. QB1c will undergo a brief self check.
- 2.4** The LED "gas gauge" indicates the charge progress.
- 2.5** Charge is complete when all "gas gauge" lights are ON steadily.
- 2.6** Charge time is approximately 3-4 hours.
- 2.7 Do not use a wall outlet timer when charging.** Connect the charger to a continuous source of power.
- 2.8** When traveling to countries with different voltage ratings, a Quantum charger recommended for that voltage is required. **Do not use a voltage adapter.**

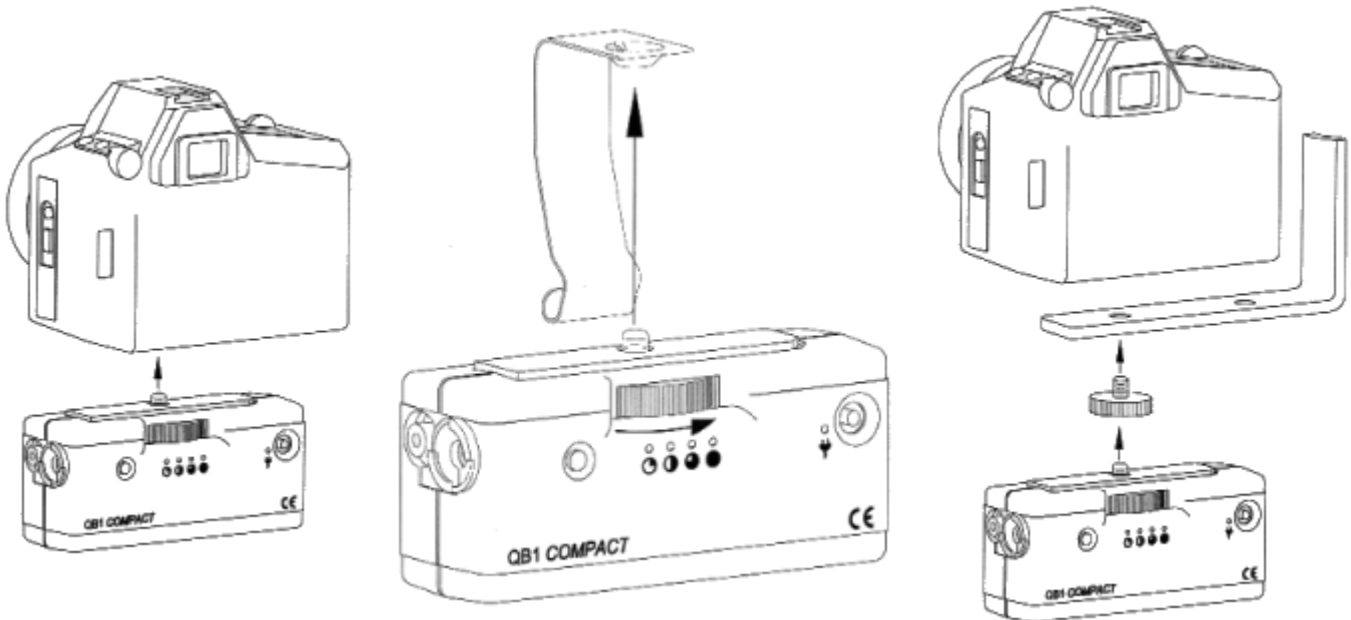


2.9 Do not use a Bantam Battery charger. A Bantam charger will not charge QB1c.



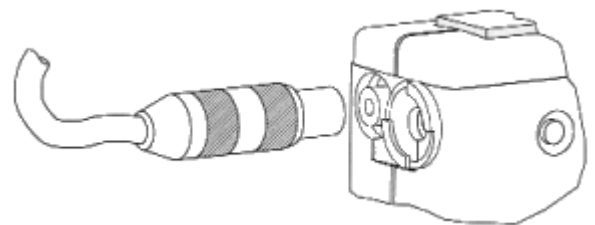
3.0 MOUNTING QB1c

- 3.1 To mount under the camera, insert the screw of QB1c into the tripod socket of the camera. Tighten securely with the wheel.
- 3.2 "X" series modules are recommended for under camera mounting.
- 3.3 To wear QB1c on a belt, attach the belt clip to the screw of the QB1c and tighten with the wheel.
- 3.4 "M" series modules are recommended for wearing QB1c on a belt, or use type "X" series modules with extension cord BEX.
- 3.5 To mount QB1c below a camera bracket a male/female tripod thumbscrew may be necessary. This will allow QB1c to clear the thumbscrew that holds the camera to the bracket. (See the mounting diagram). Your camera dealer can supply a suitable male/female thumbscrew.

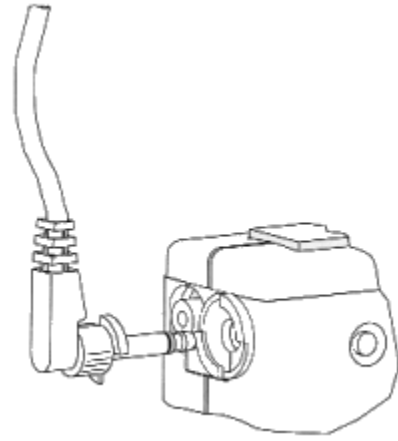


4.0 POWERING THE FLASH

- 4.1 Connect the module to the flash. (See Module Instructions to explain the proper module position). Turn the flash on.
- 4.2 Plug the module into one QB1c flash output.
- 4.3 Turn QB1c ON by pressing the panel button. Note: QB1c will not remain on without a module plug connected.
- 4.4 Indicators on the flash will light and you will hear the flash recycling.
- 4.5 **If there is no response from the flash, turn QB1c off immediately.** Check for proper module position inside the flash.
- 4.6 The LED "gas gauge" shows remaining battery capacity. When only the red LED is lit about 10% - 20% capacity remains. When **only the red** LED blinks slowly, power is cut off and the battery needs recharging.



- 4.7 If the LED "gas gauge" blinks 3 times quickly, see Troubleshooting - 5.4 Overload Shutdown.
- 4.8 Two flashes may be powered by QB1c. One flash can use an "X" series module and the other an "M" series module. The combined guide number may not exceed 240 (ft) or 72 (meters). This is equivalent to two shoe mount flashes. Otherwise, we recommend a separate power pack for each flash,
- 4.9 Do not exceed the maximum number of full power flashes, as specified by the flash manufacturer, without a cool-off period.



5.0 TROUBLESHOOTING

5.1 Flash not powered:

- Is the correct Module for your flash connected?
- Is the Module in the correct position and firmly seated inside the battery compartment?
- Is the Module securely plugged into an output?
- Is the Flash switched ON?
- Has the QB1c been properly charged?

5.2 Charger not charging:

- Is the Charger plugged into a working mains outlet?
- Is the Charger securely plugged into the charge input of QB1c?

5.3 Gas gauge LED's are blinking slowly after connecting the charger:

- If three LED's blink slowly make sure the proper charger is connected.
- If one or two LED's blink slowly QB1c has detected an internal fault. Please return the unit for service.

5.4 Overload Occurs:

- The LED "gas gauge" blinks **3 times quickly** to indicate an overload. QB1c power to the module will automatically shut down. To restart QB1c, determine the cause of the overload and remove it. Then turn QB1c off and on again.

5.5 Cause of Overload:

- A Module inserted incorrectly into a flash battery compartment.
- A short circuit across the module contacts. Be sure the contacts do not touch any metal surface.
- A defective flash unit which has an internal short circuit (repair or replace flash).
- Firing a flash repeatedly before the ready light comes on may result in underexposure and also stresses the flash.

6.0 CARE AND MAINTENANCE

6.1 Battery Replacement:

- All rechargeable cells have a limited life. The lifetime can vary depending upon use and whether the charging instructions were followed. Battery cells can be economically replaced by sending QB1c and charger to Quantum Instruments or any Quantum overseas distributor.

6.2 Conserve Power:

- To conserve power during a shooting session, switch the QB1c OFF when it's not being used. Or, use the Energy Saver mode: See 1.6.
- Always remove the module plug from QB1c when storing to prevent accidental discharge.

6.3 Environment:

- Store at room temperature or cooler.
- When QB1c is stored for a while, charge it the night before the next use.
- Operation temperature: -20°C to +50°C / -4°F to +120°F
- Charging temperature: +10°C to +35°C / +50°F to +95°F
- Never submerge the QB1c or its charger in water.