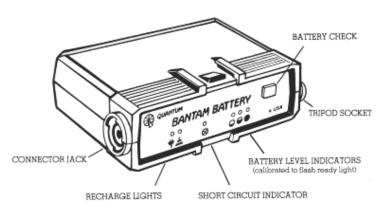
OUANTUM BANTAM BATTERY

OPERATING INSTRUCTIONS

READ FIRST



You've just purchased a high performance power pack for portable flash - The Bantam Battery.

For maximum flash power performance you **absolutely must read and follow** these instructions. We want you to get the most from your Bantam Battery purchase.

To operate, a Bantam Power Module (purchased separately) must be used. Consult your dealer and/or the Bantam compatibility chart on our website to select a Power Module suitable to your flash.

CONTROLS, LIGHTS AND FUNCTIONS

CONNECTOR JACK - Provides power to flash module and accepts recharger plug. When a plug is inserted the BATTERY CHECK switch is operative. Always remove plugs from the CONNECTOR JACK when storing Bantam away to prevent accidental pressure on the BATTERY CHECK from discharging the Bantam.

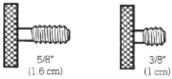
SHORT CIRCUIT INDICATOR - Will light red if the Power Module is not properly located inside the flash. **Remove module immediately!** (See "Mounting a Power Module into a Flash".)

BATTERY CHECK - Press to display the Battery Level indicators. A Power Module must be connected for this switch to work.

BATTERY LEVEL INDICATORS - Display the power capacity remaining in the battery. (See "Using the Battery Check".)

RECHARGE LIGHTS - The plug symbol when lit indicates the charger is properly connected. The pyramid symbol displays the charge status while charging .(See "Recharging".)

TRIPOD SCREWS - Two tripod thumbscrews are supplied for mounting the Bantam to your camera or bracket.



TRIPOD SOCKET - Use this socket to store either of the two thumbscrews provided. **Do not** insert a thumbscrew longer than the 5/8" (1.6cm) screw supplied or you will damage the internal parts of the Bantam.

RECHARGING

Always recharge the Bantam immediately after using it. You may occasionally delay the onset of charging 6-12 hours without ill effect, but continually leaving the Bantam in an uncharged condition could cause permanent loss of some or all of its capacity.

Recharge the Bantam to full charge before using it for the first time.

To recharge, connect the charger to a wall outlet and the charger plug to the Bantam Connector Jack (Fig. 2). There are two yellow indicators that indicate charge status:

Plug Indicator Light - A steady on light indicates the charger is properly connected.

▲Pyramid Indicator Light - Displays the charging status:

INITIAL CHARGE - A steady light followed by a blinking light, its rate varying as the battery is charging. **FULL CHARGE** - After 16 hours a normal full charge will be assured. At this time the pyramid light should blink on once every 5 seconds or slower, or go out.

Note: Depending upon the model purchased, the green battery indicator lights may be on or off during the charge cycle.

For the first 10 recharge cycles of a brand new battery, the pyramid light may not slow down within 16 hours. Nevertheless, this is enough time for a full charge for these break-in cycles.

For peak performance you may charge longer (up to 96 hours) but **never** less than a full charge. If the Bantam's capacity should seem to decrease for any reason, charge 48-96 hours before using it again.

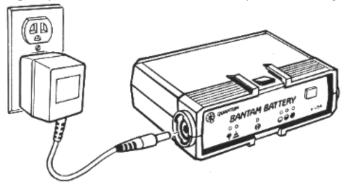


Fig. 2

MOUNTING A POWER MODULE INTO A FLASH

Most modules look like a square cluster of four batteries. Read steps 1-4 thoroughly before proceeding.

- 1) Remove the AA batteries from your flash.
- 2) Turn the flash **on**.
- 3) Plug the module into the Connector Jack of the Bantam Battery. Lock the module plug by turning the ring clockwise (Fig. 3).

Caution! The metal contacts on the bottom of the module are live - do not touch to metal. (They are otherwise safe to handle).

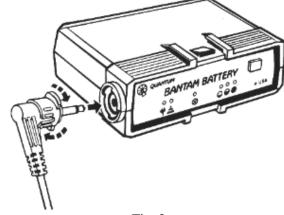


Fig. 3

- 4) The module can be positioned inside the flash four different ways. Only one is correct:
 - a) Wrong Position Short circuit indicator lights. Remove module immediately.
 - b) Wrong Positions In two positions nothing will happen.

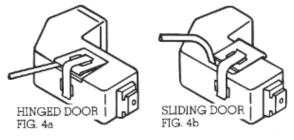
 The short circuit indicator does not light and the flash does not operate.

c) Correct Position Indicators on the flash light and/or you may hear the high pitched sound of the flash recycling.

As a reminder for the next time you use the module, place one of the red "dot" stickers (provided with the module) on your flash next to the red marker on the power module.

Note: After use, turn flash off or remove module plug from Bantam to prevent accidental discharge.

The general methods for securing the module in the flash compartment are shown as follows (Fig. 4). If necessary, specific information for your flash and material (such as velcro) for securing the module will be provided with the module.



USING THE BATTERY CHECK

Turn your flash on and allow it to recycle until the "ready" light comes on. Wait approximately 30 seconds. Press the Battery Check on the Bantam and observe the green Battery Level indicators. They will go out automatically in about 10 seconds.

The Battery Level indicators will display the capacity remaining in the Battery:



- full capacity



- 2/3 capacity remaining



- 1/3 or less capacity remaining

Indicators are accurate only when you follow the above procedure.

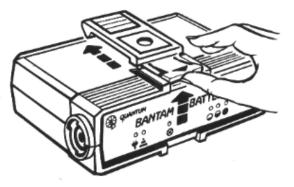
Note that immediately after firing your flash the Battery Level indicators may go out for a few seconds. This is normal as the flash draws power from the Bantam while it recycles. After the flash finishes recycling, the Battery Level indicators turn on to indicate capacity level (if Battery Check is pressed).

Press the Battery Check after each roll of film or more often. Stop using and recharge the Bantam immediately if the battery check does not indicate at least 1/3 power within 30 seconds of flash recycling.

For a brand new Bantam, full power may not be indicated after charging for the first 10 uses. This is a normal break-in period.

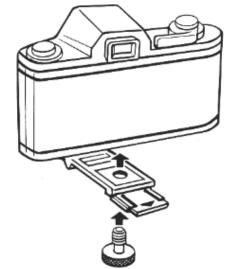
HOW TO MOUNT THE BANTAM

Mounting under a camera or bracket.

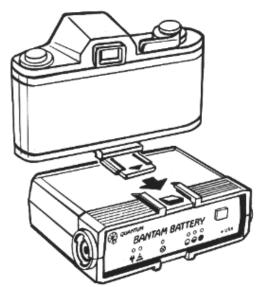


1) Remove the belt clip from the Bantam.

2) Using the short (3/8" - 1cm) tripod screw, secure the belt clip by screwing into the tripod socket in the bottom of the camera or bracket .

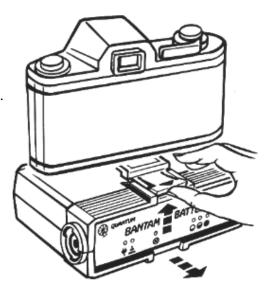


3) Tighten well.



4) Slide the Bantam onto the clip and snap into place.

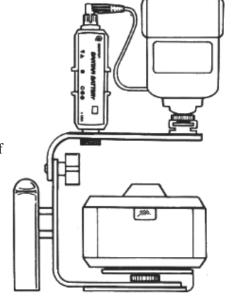
5) To remove, lift the belt clip tab up and slide the Bantam forward.



Mounting through a bracket hole.

1) Use the longer (5/8" - 1.6cm) tripod screw.

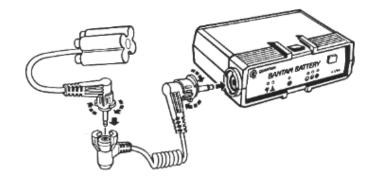
2) Place the screw through a hole in the bracket and into the Tripod Socket of the Bantam. Use on brackets up to 5/16" thick (0.8cm).



Wearing on a belt.

The optional Extension Cord model BEX (purchased separately) is required and will provide six feet (2m) of working room.

Plug the BEX into the Bantam, then plug the Power Module into the BEX Extension Cord. Turn the rings to lock the plugs.



TROUBLESHOOTING

Flash not powered:

- Is the correct Power Module being used?
- Is the module properly located inside the flash?
- Is the module plugged into the Bantam and locked?
- Is the flash switched on?

Charge indicators not lighting?

- Is the charger plugged into a live outlet?
- Is the charger plug fully engaged into the Bantam?
- If the battery is very low and you have checked the above, allow 15-30 minutes for charge lights to glow.

Low capacity after recharging:

- This may be caused by leaving the Bantam fully exhausted and not recharged within 12 hours of use. Or it may be caused by leaving the Bantam connected to your flash (switched on).
- If you have always charged your Bantam properly and used it for many thousands of flashes, it may be time to replace the internal battery.

BATTERY REPLACEMENT

When the capacity of the battery diminishes substantially, the cells can be economically replaced by sending the battery and charger to Quantum Instruments, Service Department. (Used cells will be recycled.)

IMPORTANT INFORMATION

- Caution! The Bantam Battery is a powerful power pack. Consult the manufacturer's instructions for your flash unit and do not exceed the maximum number of full power consecutive flashes allowed without a cool-off period.
- The Bantam Battery does not affect the light output of the flash. It supplies more capacity and faster recycling.
- Do not submerge the Bantam, modules, or the charger in water.
- Recharge indoors at room temperature.
- If the Bantam is not used for long periods, charge it before storing it away and charge again every 3-6 months.
- To prevent accidental discharge when not in use always unplug the Power Module (or BEX Extension Cord) from the Bantam.

BANTAM BATTERY RECYCLING PERFORMANCE CHART

* Flash Capacity f/8 @ 10 ft., ASA 100 (Approximately 1/2 of Manual Full Power)

		VIVITAR 285			CANON 420 EZ		
	Flash	Alkalines	NiCads	Bantam	Alkalines	NiCads	Bantam
Recycle Times (sec)*	1st	7	5.5	2.5	6	3.5	1.3
	36th	9.5	6.5		9	5	
	Final	13	10	4	10.5	13	3
Total Flashes		145	112	210	150	90	255

Full Power (f/11 @ 10 ft., ASA 100=GN 110 flash) maximum: 100 shots.

Recycle time will vary according to flash.

Note: When shooting automatic or TTL Bantam may provide from 100 to many times more shots, depending upon shooting conditions. Subject to change without notice. Performance may vary slightly depending upon flash model used.

ADDENDUM

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.

Note:

When using a BR-2 or BR-3 charger with a U.S.A. Bantam Battery (having a S/N with one letter), charge for 16 hours and disregard the yellow charge indicators.



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.