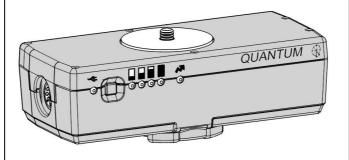


Turbo Blade

Model TBL

Operating Instructions

+



Quantum Instruments
Designed and manufactured in the USA

1. Introduction

Turbo *Blade* uses the latest technology Nickel Metal Hydride (NiMH) battery. The battery provides high power for quick flash recycling, great capacity, no memory, and long life. Quantum's NiMH battery is smaller and weighs less than other high power batteries!

Turbo *Blade* weighs 15 ounces (420 grams) and mounts under a camera.

2. Warnings and Cautions:

Do not disassemble the Turbo Blade. High voltage!

Return equipment requiring service only to Quantum, or its authorized dealers or distributors.

Never put metal objects near either socket. Keep children away.

Turn Turbo Blade off before attaching or removing cables.

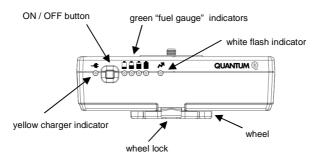
Turbo Blade is powerful! Do not exceed flash's maximum consecutive full-power flashes (see flash instructions, or else 20 flashes). Then rest flash until it cools. Note: no limit for Qflash.

3. Quick Guide

For best results, charge your Turbo *Blade* the night before each use. The nature of Nickel Metal Hydride batteries is that they loose a portion of charge every day. Charging the night before or right before use insures maximum capacity for your job.

The "fuel gauge" is a computer calculated monitor of remaining battery power and the amount of charge during recharging. When powering flashes, the green indicators go out as battery power is used up. With only one green indicator lit less than 25% capacity remains.

To check *Blade* capacity without a flash or camera attached, press the ON/OFF button. The LED fuel gauge will come on for a few seconds displaying remaining capacity. *Blade* will not stay on unless connected to a flash or camera.



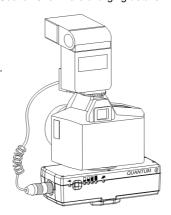
When the green 25% indicator blinks, power to external equipment is shut off. Turbo Blade must be recharged.

• = steady light
$$\Rightarrow$$
 = blinking \circ = off

During charging, each green indicator will blink and eventually stay on as charge is returned to the battery. When all green indicators are lit steadily, charging is complete. See Section 5 for more charging details.

Turbo *Blade* powers a flash using Quantum Flash Cables ("C" series) as well as short Flash Cables ("CC" series). Plug these cables into Turbo *Blade* and into your flash.

Turbo *Blade* is **not** compatible with SD and CD Camera Cables.
Quantum Qflash models come with their own power cord, which plugs into the socket of Turbo *Blade*.



4. Operation

Turn Turbo Blade OFF before attaching or removing cables.

For trouble free operation, always turn off Turbo *Blade*, camera and flash before connecting or disconnecting Flash Cables. See Section 8 and 9 for selecting a Flash Cable or accessory.

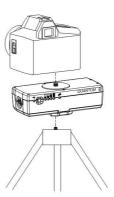
To turn on Turbo *Blade* press and hold the panel button ■ until the green "fuel gauge" lights come on, then release. To turn off, press and hold the button until the lights go out.

One white LED panel indicator is marked with the flash ${\scriptstyle {\cal N}}{}^{{}}$ symbol . This indicator lights steadily when connected to a flash. Please see Sections 6 and 7 for LED indications of the status of your Turbo *Blade* and/or any problems that it may have detected.

Mounting Turbo Blade

Connect Turbo *Blade* to the tripod socket on the bottom of the camera.

Tighten with the wheel at the bottom of the Turbo *Blade*. Pull out the wheel lock if necessary. Press in the wheel lock once Turbo *Blade* is secured.



To mount a Turbo *Blade* and Camera to a tripod, connect Turbo *Blade* to the Camera first. Press in the wheel lock, then mount Turbo *Blade* to the tripod and secure. To disassemble, loosen the tripod first. If the Turbo *Blade* wheel begins to rotate, push the wheel lock in to stop rotation. Completely disconnect the tripod. Then to disconnect the camera, pull the wheel lock out and turn the wheel.

5. Recharging

Recharge at room temperature. Charge the night before, or charge just before use to be assured of obtaining 100% charge.



Turbo *Blade* is supplied with a universal charger that works with AC mains power from 100 to 240 VAC. The mains plug of charger is interchangeable.

When used with the accessory universal charger kit TCRU, it allows connection to a Euro, UK, US, or Australia/NZ 90 – 240 VAC power outlet. A voltage converter is not necessary.

Be sure the AC mains socket is an uninterruptible line (not switched). It is important not to interrupt the charging so that the computerized fuel gauge remains accurate. If the charge cycle is interrupted, the fuel gauge may read incorrectly during use, but will correct itself on the next cycle.

The yellow charge indicator $\ ^{ullet}$ lights when the charger is properly connected. A full charge takes about 2 hours. **Do not use any other type of charger and risk damage to the Turbo** *Blade*!

When the charger is first connected the green fuel gauge LED's turn on and off during a brief self check. When the self-check finishes, charging begins and the fuel gauge indicates charge progress. The fuel gauge indicates charging progress as shown in the diagram.

6. Flash indicator

- A white flash indicator ✓ shows the status of flash power.
 A steady light means the output is supplying flash power.
 A Blinking indicator indicates that high voltage has shut down.
- Off indicates no power for the output. 0

7. Error conditions and troubleshooting

Symptom / Solution

A Flash Cable is connected but the output indicator is not lit. The cable could be defective, or it may be the wrong cable.

A Flash Cable is connected to a flash and the Flash indicator blinks for 30 seconds

Turbo BLADE has detected that high voltage has shut down. This could be caused by a defective cable. Replace the cable.

The fuel gauge 25% green light blinks for a few minutes, and then all lights go out and there is no power to the equipment $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty} \frac$ connected.

This is the low battery indication. Recharge. Check that the charger is connected to a live mains outlet that cannot be switched off.

8. FLASH CABLES & ACCESSORIES

Cables and accessories are updated continuously. Please consult our website www.qtm.com, your dealer, or Quantum directly for the latest availability.

Short CC type Flash Cable - for mounting Turbo *Blade* to bracket. These short Flash Cables are designed for Turbo *Blade* and other Turbo models if they are mounted close to the flash.

Nikon	CCKE CCKE	See chart at www.qtm.com See chart at www.qtm.com
Metz	CCM4	See chart at www.qtm.com See chart at www.qtm.com
Sunpak	CCS4 CCS5	See chart at www.qtm.com See chart at www.qtm.com
Vivitar	CCV	See chart at www.qtm.com
Canon	CCZ	See chart at www.qtm.com
Quantum	CCQ8	TRIO

C type Flash Cables for flash power - extend to 6' (2m):

All Flash Cables power flashes with Turbo, Turbo Z, Turbo 2x2, Turbo 3, Turbo C, Turbo SC and Turbo *Blade*.

Canon	CZ CZ2	See chart at www.qtm.com Locking cable – see chart at www.qtm.com 4504
Hasselblad	CM4	
Honeywell	СН	See chart at www.qtm.com
Nikon	CK CKE CKE2	See chart at www.qtm.com See chart at www.qtm.com Locking cable – see chart at www.qtm.com
Minolta	CL3 CL4 CL5	360PX 4000AF See chart at www.qtm.com
Metz	CM1 CM4 CM5 CM54 CM58	45CT-1, -5 45CL1, 3, 4 & 45CT3, 4 See chart at www.qtm.com See chart at www.qtm.com See chart at www.qtm.com
Olympus	CO3 CO5	T32, T45 FL-50
Quantum	CQ8 CQ2	TRIO Locking cable for TRIO
Sunpak	CS4 CS5 CS6	See chart at www.qtm.com See chart at www.qtm.com 622
Vivitar	CV CN3	See chart at www.qtm.com 3900

9. Customer Service

Having any trouble in using your Quantum product? We are here to help. Mail, call, fax, or email our Service Department:

Service Department Quantum Instruments Inc. 10 Commerce Drive Hauppauge, NY 11788

Tel: 631 656 7400 Fax: 631 656 7410 email: QuantumHelp@qtm.com

Troubleshooting tips are available at www.qtm.com, Support, Customer Support, FAQ. If you suspect a malfunction or require adjustment, return the unit to us with an accurate description of the problem. Please be sure your problem is not caused by improper operating procedure or malfunctions in your other equipment. Send all equipment carefully packaged and insured to our address above.

An estimate of repair cost on out-of-warranty merchandise may be forwarded if you desire. This will require that we contact you for approval before proceeding and will delay return of your equipment. For fastest repair time, you may pre-approve repairs up to a limit of \$135 with your credit card. We will bill you only for actual costs up to that limit. If repair costs exceed your pre-approval, we will contact you.

Paying by check will delay the repair until the check clears (up to 15 days). Payment by money order is acceptable.

Normal repair time is 10-15 days. For expedited service, contact our Service Department.

Summary:

Ship via UPS, Parcel Post, or other carrier, insured. Give a clear, detailed description of the problem. Give your mailing address and daytime phone number, fax #, and/or email.

For warranty repairs include a copy of the receipt.

In addition, for out-of-warranty repairs with pre-approval: Provide your Visa, MasterCard, American Express, or Discover card number and expiration date.

Give us authority to charge repair costs up to \$135.00. Provide your billing address.

Note: Please do not email your credit card information



Other Quantum Products



Turbo SC Turbo Slim Compact....same power....small and light.



Turbo3 Super capacity, super fast recycling for portable flash



FreeXwire Radio TTL transmitter/receiver compatible with Trio & Pilot



FW7Q Radio TTL receiver for Qflash 5Td-R

Other Quantum Products



Qnexus Optical (IR) TTL receiver makes Qflash 5Td-R compatible with Nikon and Canon wireless IR systems.



Qflash Trio Shoe-mount professional flash with built-in radio TTL



Qflash Pilot Shoe-mount radio TTL command unit



Qflash 5Td-R Professional flash for studio & portable use

WARNING DO NOT SUBJECT THIS PRODUCT TO DRIPPING OR SPLASHING LIQUID, EXCESSIVE HEAT OR FIRE.



P676A