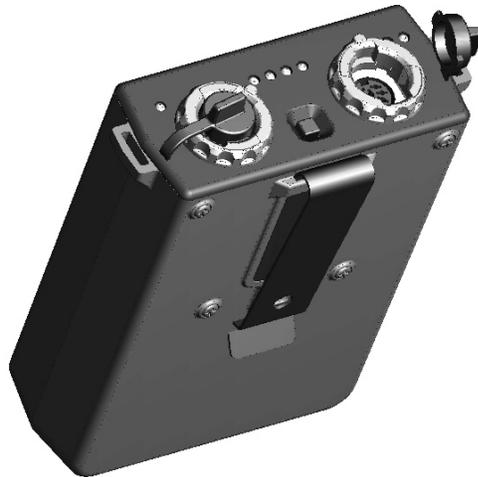




TURBO3

Operating Instructions



Quantum Instruments Inc.
Designed and manufactured in the USA





1. Introduction

Turbo 3 can power a digital camera and flash together, or two flashes. With *three times* the capacity of the original Turbo battery. Turbo 3 is the most capable flash/camera portable power pack Quantum has developed to date.

Turbo 3 uses the latest technology Nickel Metal Hydride (NiMH) battery. The battery provides bursts of high power for quick flash recycling, great capacity, no memory, and long life. (NiMH batteries are not subject to the air travel restrictions of some Lithium batteries.)

2. Warnings and Cautions:

Do not disassemble the Turbo 3. High voltage!

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

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

Turn Turbo 3 off before attaching or removing cables.

Turbo 3 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 3 *the night before* each use. The nature of Nickel Metal Hydride batteries is that they lose a portion of charge every day. Charging the night before or right before use ensures maximum capacity for your job.

The "fuel gauge" is a computer calculated monitor of remaining battery capacity. The "fuel gauge" also displays the state of charge during recharging. When powering cameras and flashes, each green indicator goes out as battery capacity is used up. With only one green indicator lit less than 25% capacity remains.

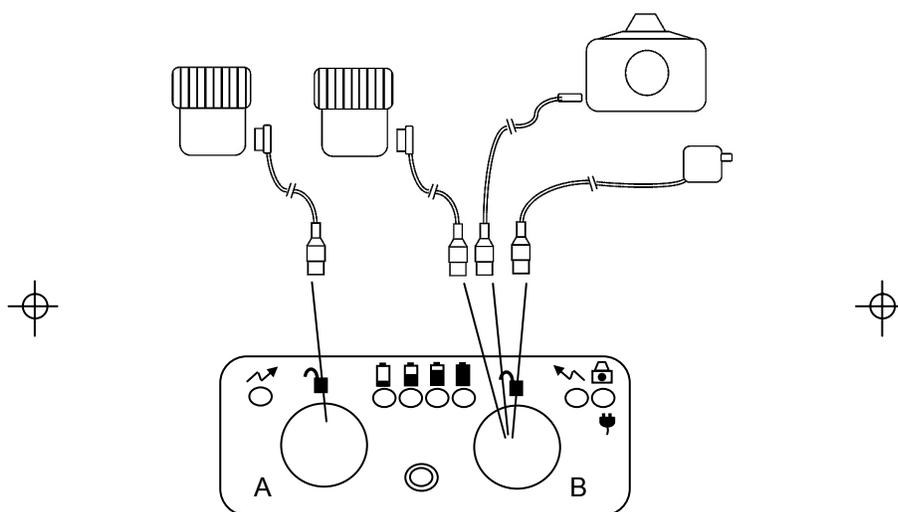
To check Turbo 3 capacity without a flash or camera attached, press the ON/OFF button. The LED fuel gauge will come on for a few seconds displaying remaining capacity. Turbo 3 will not stay on unless connected to a flash or camera.



When the green 25% indicator *blinks*, Turbo 3 has shut down power and must be recharged.

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

Turbo 3 powers two pieces of photo gear at the same time. Socket covers keep rain and dirt out of one (or both) sockets when not being used. Socket "A" can be used only for **Flash Cables**. Socket "B" can be used for **Camera** or **Flash Cables**, and for **charging**.



Turbo 3 has a cable locking feature that works with newer Flash Cable models CKE2, CZ2, and CQ2. Older cables may also be used without the locking feature. Please see the tables in Section 8 for all cable models.

Turbo **Camera Cables** and **Flash Cables** come in several styles, defined by their initial prefixes.

C" series **Flash Cables** power flashes from any Turbo model. Examples are CK, CKE, CKE2, CM4, CV, CZ, CZ2, CQ2, CQ8, etc. They power flashes with high voltage, rapid recycling power. Plug them into either "A" or "B" Turbo 3 socket and into your flash. The white LED panel indicator marked flash symbol will light.

“CD” **Camera Cables** power digital cameras from any Quantum Turbo model that has a low voltage output. Examples are CD1, CD3, CD30. “SD” **Camera Cables** power digital cameras from Turbo 3 or T2X2 only. Examples are SD2, SD4.

Plug CD or SD cables only into socket B of Turbo 3, and plug the other end into the camera it is designed for. Turbo 3 automatically adjusts the DC low voltage correctly for the compatible camera. The yellow LED indicator  will light for SD cables. The white LED indicator  will light also when CD cables are connected.

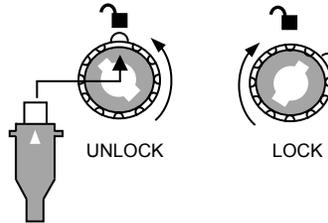
Quantum Qflash “T” models come with their own power cord which plugs into the A or B socket of Turbo 3.

Qflash Pilot can use an accessory power cord CCQ8, CQ8, or CQ2 for power. Plug into A or B socket of the Turbo 3.

4. Operation

Turn Turbo 3 OFF before attaching or removing cables.

To attach a locking cable, turn the lock ring counter clockwise. Line up the key indicator  on the cable plug with the “unlock” symbol  and press fully in. Lock the cable by turning the lock ring clockwise.



To insert a non-locking cable line up the key indicator with the “unlock” symbol  on the panel and press fully in.

To turn Turbo 3 **on** press *and hold* the **ON / OFF** button until the “fuel gauge” lights, then release before the lights go out. To turn **off**, press *and hold* the button until the lights go out.

The fuel gauge displays the remaining capacity in the pack.

Each socket A and B lights steadily when in use. The A socket has a white LED indicator and flash symbol . The B socket has a white LED indicator and flash symbol , a yellow LED indicator with camera  and charger  symbols. Please see Sections 6 and 7 for LED indications of the status of your Turbo 3 and/or any problems that it may have detected.

You may connect flashes to either A or B sockets, but digicams may connect only to the B socket. Keep unused sockets clean and dry with the attached covers.



5. Charging

Charge at room temperature. Charge the night before, or charge just before use to be assured of starting your assignment with 100% charge.

Turbo 3 is supplied with a universal charger that works with an AC mains power from 100 to 240 VAC. An accessory universal charger kit TRU may be used to allow charging from Euro, UK, US, or Australia/NZ 100-240 VAC power outlet. A *voltage converter is not necessary*.

Be sure the AC mains socket is an uninterruptible line (not switched). Plug the charger into the **B socket only**. (Please note that the A socket will not accept a charger). The charge indicator  will light when the charger is properly connected. It is important not to interrupt the charging so that the computer fuel gauge remains accurate. If the power is interrupted, the fuel gauge may read incorrectly for one charge cycle, but will correct itself on the next cycle.

A full charge takes about 3.5 hours. **Do not use any other type of charger and risk damage to the Turbo 3 and the charger!**

The fuel gauge indicates charging progress as shown in the diagram.

25% charged 50% charged 75% charged 100% charged
                

● = steady light ✨ = blinking ○ = off





6. “Flash” and “Camera” Output Indicators

The Flash indicators show status of the corresponding outputs.

- A **steady** light means the output is supplying either flash (using a C Flash Cable) or camera power (using a CD or SD Camera Cable).
- ☼ A **Blinking** low voltage indicator shows when high voltage has shut down (but still supplying low voltage power).
- **Off** indicates no power for that output.

Typical examples are shown below:

A Socket	B Socket		
Flash	Flash	Camera	
●	●	○	A and B outputs supplying flash power.
●	○	●	A: supplying flash power B: supplying “SD” camera power
○	●	○	A: No cord connected B: supplying “CD” camera power
●	○	○	A: supplying flash power B: No cord connected
☼	☼	●	A: high voltage shut down B: supplying camera
☼	☼	○	A and B high voltage shut down.





7.0 Error Conditions and troubleshooting

Symptom

A flash cable is connected but the output indicator is not lit or blinking.

Solution

The cable could be broken, shorted, or it may be the wrong cable. Connect the cable to the other output; if the output indicator does not light, the cable has one of the above problems.

C type Flash Cable is connected to a flash and the output light blinks for 30 seconds

Turbo 3 has detected that no flash is connected. This could be caused by a bad cable or loose cable. Check that the cable is securely connected to flash and battery, then restart Turbo 3.

SD Camera Cable connected to B socket, C Flash Cable to the A socket. The A white flash LED blinks and high voltage is shut off.

Probably the "C" Flash Cable is broken (the cable is faulty). Replace the Flash Cable.

The green 25% fuel gauge LED light blinks for a few minutes, and then all lights go out and there is no power to the equipment 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. Accessories for Turbo 3

All Flash Cables power flashes with Turbo 3, Turbo, Turbo 2x2, Turbo SC, Turbo C, Turbo AC, Turbo Z,

Replacement Chargers:

Universal Charger TRU 100-240VAC, interchangeable mains plugs for Euro, UK, US, Aust/NZ

Locking "C" type Flash Cables for flash power:

CKE2	Nikon*
CZ2	Canon*
CQ2	Qflash TRIO / PILOT





“C” type Flash Cables for flash power:

CO5	Olympus FL50
CH	Honeywell*
CK	Nikon SB11, 24, 25, 26, 28-US
CKE	Nikon*
CL3	Minolta 360PX
CL4	Minolta 4000AF
CL5	Minolta*
CM1	Metz 45CT-1, 5
CM4	Metz 45CL1,3,4, 45CT3,4; Hasselblad 4504
CM5	Metz*
CM58	Metz 58AF series
CM54	Metz 54MZ series
CN3	Vivitar 3900
CO3	Olympus T32, T45
CS4	Sunpak*
CS5	Sunpak*
CS6	Sunpak 622
CV	Vivitar*
CZ	Canon*



Camera Cables for digital cameras:



CD1-	Nikon D1, D1x, D1h
SD2-	Kodak DC 200 series, 3400, 5000 Olympus “C”, “D”, and “E” models Nikon Coolpix 800 thru 995, 5000, 5700 Epson PC850Z, 3000Z
CD3-	Kodak DCS 520 thru 760, Pro Back Canon EOS D2000
SD4-	Fuji S1, S2, S3Pro, S20Pro, S700D
CD5-	Kodak DCS Pro Back 645M/ 645C Kodak DCS 300 series, 50, 120
CD30-	Canon
CD100-	Nikon
SD10-	Nikon

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

* See the complete selection chart for specific model in Quantum brochures, on the product package at your dealer, or on the Quantum website, www.qtm.com.





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 \$100 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# and expiration date.
Give us authority to charge repair costs up to \$100.00.
Provide your billing address.

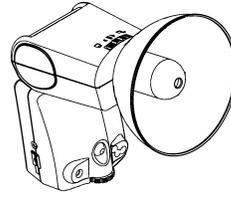
Note: Please do not email your credit card information



Other Quantum Products



PILOT



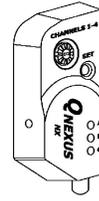
TRIO



FREE X WIRE



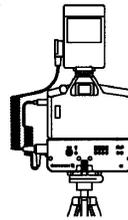
FW7Q



QNEXUS



TURBO SC



TURBO
COMPACT



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



Quantum Instruments Inc.
10 Commerce Drive, Hauppauge NY 11788-3968 USA
Tel: 1-631-656-7400 Fax: 1-631-656-7410
www.qtm.com

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