Digital Camera Battery

Owner's Manual

Model # DCB30WB

Safety Rules

1. Since the Digital Camera Battery can power so many different devices, make sure you are using the proper cord. This includes the voltage, polarity, as well as the physical connector dimensions.

2. Inspect all cords and connectors prior to use. If a cord is damaged, return it to the factory with payment of ½ the current list price and it will be replaced. This price includes all ground shipping charges and taxes on replacement cords in the continental U.S.

3. Do not use high voltage adapters in wet locations. (Very Dangerous!)

4. Do not expose the Digital Camera Battery to direct moisture. Although the Digital camera battery was designed to handle high humidity... IT IS NOT WATERPROOF. Water damage voids the 1 year parts and labor warranty.

5. Do not use chargers or cables unless they have been factory approved. Improper cables will definitely damage your equipment and may even cause damage to the Digital Camera Battery. **Never put meter probes into the Digital Camera Battery connectors!** It is possible to damage the unit if control pins are shorted or activated improperly by a meter's load or voltage. An improper charger will damage your Digital Camera Battery in a way that will void the 1 year parts and labor warranty.

6. Do not remove the covers on the Digital Camera Battery. The only exception to this rule is when changing the power cell. The factory does not charge for labor or ground shipping (continental U.S. only) when replacing the power cell. Power cells replaced at the factory are charged, tested, and charged again before returning to the customer. Include your charger when replacing cells. If we find any problem with the charger it will be replaced at no additional cost. For customers outside the U.S. contact your local dealer about obtaining power cells or service to save shipping cost.

7. Only the Power Cell designed to go in the Digital Camera Battery may be used. Power Cells made from different chemistries can leak or even explode if used in the Digital Camera Battery. The Digital Camera Battery was designed with the highest capacity cells available for it's intended environment. NiCad batteries do not have the capacity to handle the charge and will leak. Lithium-Ion cells will not handle the voltage and temperature extremes and are guaranteed to explode! Lead acid batteries should never be used in our system. Only use the NiMH Power Cell provided by the factory in the Digital Camera Battery.

Operation

1. When you receive your Digital Camera Battery it can be used right out of the box. Each Digital Camera Battery is fully tested at the factory. Each unit is completely charged and then discharged through each connector. Units are charged before they are packaged. However, if the unit has been exposed to extreme heat or has been on the shelf for some time, charging will be required. If this is the case, plug the charger into the Digital Camera Battery and charge for up to 12 hours. Charging is complete when the unit is warm to the touch. Always remove the Digital Camera Battery from any cases when charging to prevent overheating. Always unplug the charger from the AC outlet when not in use.

2. After connecting the shoulder strap, mounting brackets, or belt clip, connect the cables to be used. Power the digital camera battery on. When the GREEN L.E.D. comes on you may turn on the equipment attached. Power is not available for a moment when the Digital Camera Battery is first turned on. This allows the computer to perform a power up test and prevents overheating should serious physical damage occur to the Digital Camera Battery.

3. When the YELLOW L.E.D. comes on it is recommended that the pack be recharged at this time. Digital camera cables will continue to operate if they are below 8.5 volts. Some high voltage step-up cables will shut down to allow the camera power for proper shutdown.

4. When the RED L.E.D. comes on, shut everything down, you have very little power remaining. If your equipment has internal batteries, just swap out the Digital Camera Battery or use the internal batteries as a backup. It is always a good idea to have a complete set of backup equipment.

5. When the RED L.E.D. Blinks, switch to another Digital Camera Battery. You can leave the discharged pack on. The Blinking RED L.E.D. will remind you to charge that pack at a later time. If the pack will not be charged within 8 hours, turn the unit off to prevent deep discharge.

6. Do not rely on the recycle time of the flash to determine charge level of the Digital Camera Battery as the power output is constant from start to finish. This consistent regulated power is one of the Digital Camera Battery's features no other battery pack on the market can match.

7. Do not expose the Digital Camera Battery to physical forces in excess of 100 G's. While we advise against dropping any equipment on the ground, accidents do happen, the padded carrying case will help reduce the chance of damage in the event you drop your Digital Camera Battery.

Maintenance

1. Charge the Digital Camera Battery prior to use. Please note that the outputs are disabled during charging even when the unit is in the ON position. This allows all types of DCB chargers to be used. Options include standard, worldwide, fastcharger, carcharger and solar chargers. For solar customers the output control can be overridden with a modification at the factory, but the cell warranty is shortened to 90 days on units modified in this way. (Constant short cycle charging due to the sun going in and out during the day while discharging can cause premature cell failure.)

2. When the battery becomes warm during charge, it is full. Some chargers have indicators to indicate charging status, the standard charger does not.

3. A completely discharged unit should be charged for 12 hours (standard charger). The Solar charger will charge the 30 watt Digital Camera Battery in a single day of bright sunlight. The Fastcharger will charge the 30 watt Digital Camera Battery in under 3 hours anywhere in the world. (The Fastcharger includes a US 120VAC power cable, but any electronics store worldwide will offer local AC power cables.)

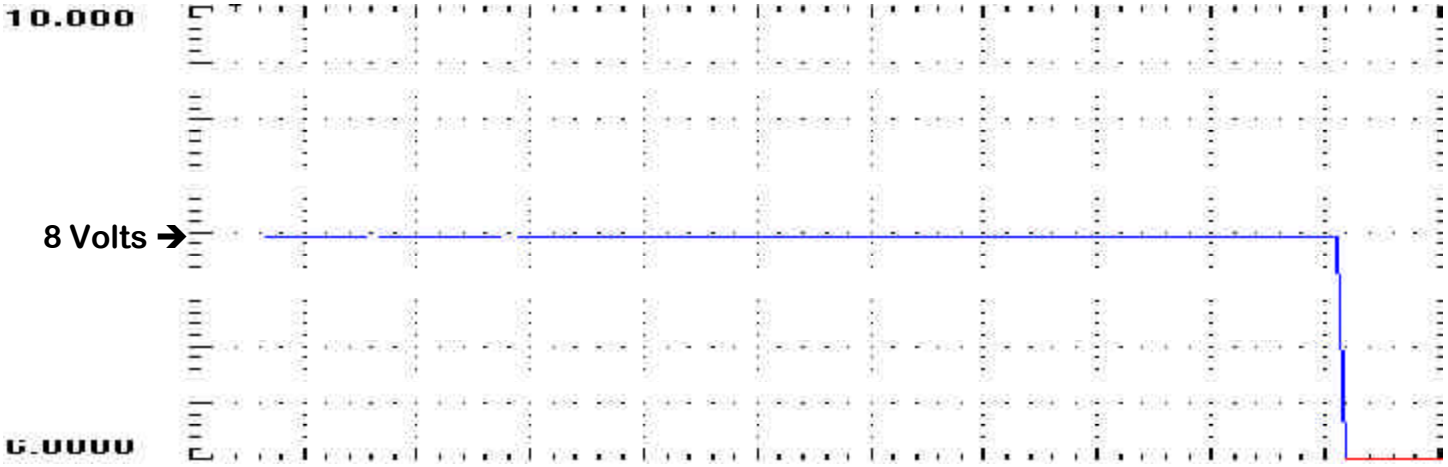
4. When the unit no longer performs to the expected level return it to the factory for Power Cell replacement. Include the charger when returning any Digital Camera Battery for ANY reason. The cost is $75 (DCB30WB) which includes the replacement Power Cell, return ground shipping (continental U.S.), as well as testing of the unit and charger. If there is any problem with the standard charger, it will be replaced at no cost.

5. If your Digital Camera Battery becomes damaged to the point it no longer functions, return it to the factory. Repairs will never exceed ½ the current list price. If the cost exceeds ½ list price the unit will be replaced for ½ list price and will have a Full 1 Year Warranty. For customers outside the U.S. contact your local dealer for other repair options since shipping costs may not be economical.

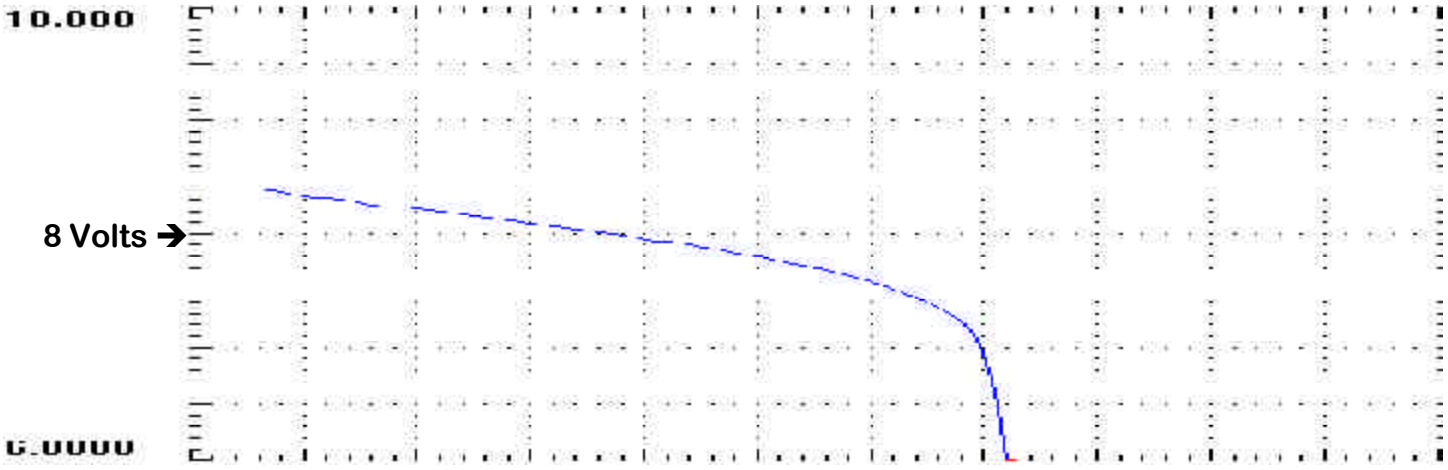
If you are wondering why we test the charger regardless of the problem, it is because that is the only component beyond our control. Lightning, high line voltage and physical abuse may not show any signs of damage yet cause all kinds of problems. Our standard charger is designed to be economical but is susceptible to environmental conditions and shorting. We would rather give you a new standard charger than have you dissatisfied with a Digital Camera Battery. All of our other chargers can withstand continuously shorted outputs and wide input voltage ranges. (We don't know of other manufacturers of battery packs having chargers that can withstand this type of abuse.)

Regulated Outputs

NiMH 30 Watt Digital Camera Battery @ 8 Volts **Actual = 27.07 Watts**
17.35 Watts / Pound **90.23% Eficiency**



LEAD Battery 8 Volt 3.2 AH = 25.6 Watts **Actual = 18.67 Watts**
10.59 Watt / Pound **72.93% Eficiency**



Scale = 10min. x 500mV • Load = 2 Amps

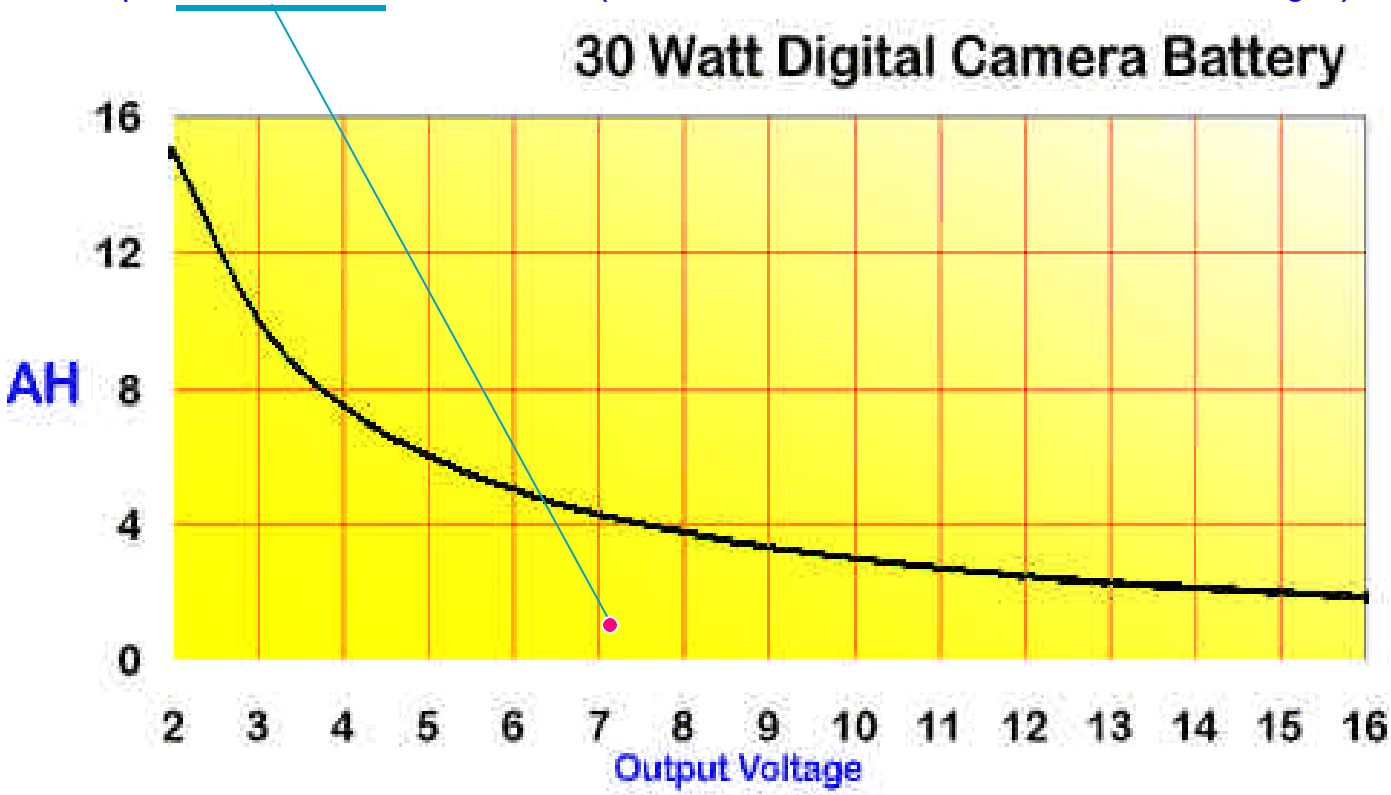
As you can see the Digital Camera Battery provides steady power from start to finish. The unregulated output from other packs can cause over voltage and brown out conditions that can damage sensitive electronics. The unregulated output of the LEAD cell and many other types of rechargeable packs can also provide very high currents that could start an electrical fire in a matter of seconds if the cable should become shorted or damaged.

Capacity

The chart below allows you to compare the Digital Camera Battery to the battery in the product you are using. If the capacity is twice the capacity of you products battery it will run twice as long. This chart is for the DCB30WB, the 60, 90, and 120 watt models have 2, 3 and 4 times the capacity respectively. If this chart means nothing to you, plug the Digital Camera Battery in and be glad that it runs a long time.

Multiply your (camera battery's Voltage) x (it's AH rating) to get the Watt capacity.

Sample: **7.2V x 1.3AH** = 9.36 Watts (The 30 Watt D.C.B. would last over 3 times longer.)



When the Digital Camera Battery is powering a camera and flash at the same time several factors will contribute to the number of exposures you will get from a single charge. Here is a list of the most common factors you will encounter (some you can control) :

- Limit the LCD usage, this uses almost as much power as taking a picture.
- If the camera has a battery saver mode, try to enable even when external power connected.
- Both cameras and flash units consume power just being on, turn them off during extended standby.
- Some cables use power even when the connected device is off, turn off the DCB when not in use.
- High f-stop's or long distance shots use more flash power than close-up's or low f-stop exposures.
- Image stabilized lenses consume power, regardless of the number of exposures taken.
- Keep the DCB from extreme temperatures. (Under coat in cold weather, out of direct sun in heat.)
- Charge the DCB prior to using and do not leave on charge for extended periods.
- Remove DCB from any case or holder during charge, heat buildup will prevent proper charging.

Warranty

1 Year Parts and Labor

Any Digital Camera Battery or Accessory requiring repair due to manufacturer defect will be repaired or replaced for free during the first year. The only responsibility to the customer is shipping to repair facility. Please insure your Digital Camera Battery and / or accessories for the amount you paid. Include a copy of your invoice and a description of the problem or damage. Always include the charger when returning a Digital Camera Battery for repair. Upon receipt your unit will be tested, repaired, final tested and shipped back to you by ground shipping. Units damaged due to neglect will be charged for parts and labor. Any repair that would exceed 50% of the current list price will be replaced at 50% of the current list price. Liability is limited to repair of the Digital Camera Battery and it's accessories. No warranty is made or implied for any product manufactured by any other company. For customers outside the U.S. contact your local dealer to see if they offer other repair options .

Lifetime Warranty

If your Digital Camera Battery is damaged beyond repair, simply return the damaged item with a check for 50% of the current list price. Repairs that would exceeds 50% of the current list price will be replaced. A new replacement will be sent when payment has cleared. All replacements have a full 1 year new product warranty. All Items requiring repair due to manufacturer defect will be repaired or replaced for free during the first year and the current warranty will remain in effect. Liability is limited to repair of the Digital Camera Battery and it's accessories. No warranty is made or implied for any product manufactured by any other company. Additional shipping charges apply for special shipping requests or shipping outside the continental U.S.

Return Shipping Address

Digital Camera Battery, Inc.
2328-B Destiny Way
Odessa, FL 33556
(727) 375-9865

For the latest information please visit our web site.
www.digitalcamerabattery.com

Specifications

Digital Camera Battery:

Input:	**24 VDC @ 200 mA x 12 hours** **or** **0~24 VDC @ 1.6 A, DV=0 Termination**
Output:	**1.2~16 VDC (Set by cable) @ 0~5 A x 2**
Temperature :	**Maximum Range: 32°F ~ 120°F** **Optimum: 70°F** **Charging in environments above 90°F not recommended.**
Moisture:	**30 ~ 85 % RH**
Dimensions:	**H=6.325 W=2.850 D=1.300 (Inches)**
Weight:	**1.57 Pounds**

Standard Charger:

Input:	**120 VAC 60Hz 7.5 Watts**
Output:	**24 VDC 200mA** **30 VDC No Load**
Temperature :	**Maximum Range: 18°F ~ 122°F**
Moisture:	**30 ~ 85 % RH**
Dimensions:	**H=3.0 W=2.4 D=1.8 (Inches / prongs & cord excluded)**
Weight:	**0.638 Pounds**