

NBC 9-3-12

Digital Fast Charger

- *Can charge 12 units simultaneously*
- *Advanced microprocessor based*
- *Convenient carry / storage case*
- *Auto-select 9V / 3V charging*
- *Self-diagnostic feature*



The NBC 9-3-12 Digital Fast Charger is designed to simultaneously charge and store up to twelve COMTEK 216 or 75 series receivers and/or transmitters. The charger will charge 3 volt (two AA size batteries) or 9 volt nickel-metal hydride (Ni-MH) batteries. The charger will automatically select the charging mode for the type of battery being used. It is also equipped with a self-diagnostic capability to identify faulty batteries and to ensure safe operation.

Nickel-metal hydride batteries can be recharged hundreds of times without generating a significant loss of power capacity or battery memory problems. An analog-to-digital voltage slope detector determines charge completion. If units are used only for a short time, the batteries will automatically receive a short “top-off” charge. When batteries reach a fully charged state, the NBC 9-3-12 charger will indefinitely maintain the batteries in a fully charged state of readiness until units are to be used.

COMTEK®

NBC 9-3-12 Operating Instructions

1. Plug the 18 volt D.C. power supply into a 100-240 volt outlet. Plug the low voltage connector into the receptacle on the side of the charger. (See figure 1.) All the LED's should flash RED and stay off until a unit is plugged in.

2. Make sure that units to be charged have proper Ni-MH batteries installed.

CAUTION: Do not insert COMTEK units into charger without a battery.

3. Be sure that the on/off switch on COMTEK unit to be charged is in the OFF position.

4. Insert each COMTEK device upside down with label side exposed, making certain the charging plug is inserted completely. (See figure 2.)

NOTE: The charger LED must be OFF before inserting unit.

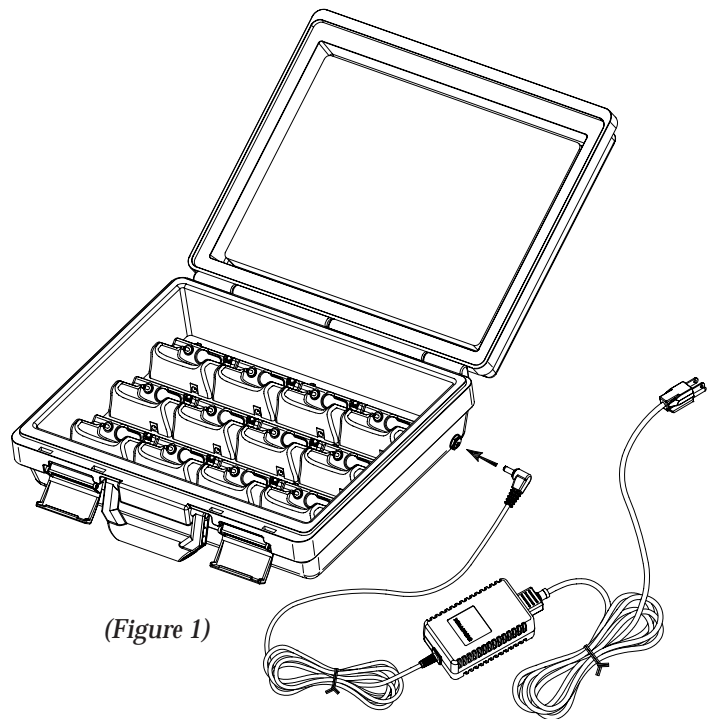
5. Allow up to four hours for complete charge. Batteries will automatically receive a shorter "top-off" charge if used only for a short time.

6. The NBC 9-3-12 will maintain the batteries in a fully charged state, and units can be stored indefinitely while the steady green LED is on.

7. Periodically open the battery compartment on stored COMTEK units to check for battery leakage. If a Ni-MH battery is leaking, it must be discarded.

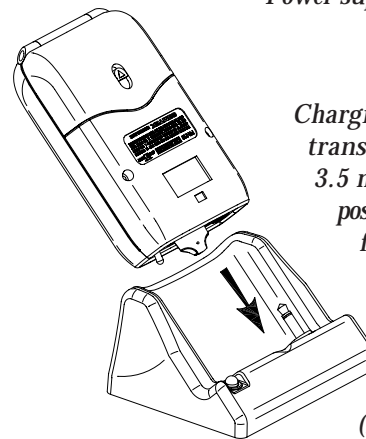
An important feature of the NBC 9-3-12 battery charger is its diagnostic capability and automatic safety system designed to prevent damage in the event of improper battery usage. The single LED indicator on each charger unit is a multi-function indicator which detects the following conditions:

- a. Steady red ----- Normal charging
- b. Steady green ----- Charging cycle is complete and trickle charging is occurring
- c. Blinking red ----- Over-voltage shut off has occurred indicating a defective or inappropriate battery
- d. Blinking green --- Safety timer shut off has occurred indicating an incomplete charge. Unit may be removed and reinserted after ten seconds for another charge cycle.



(Figure 1)

AP-18V-2200
Power supply adaptor



Charging the receiver or transmitter through the 3.5 mm jack ensures a positive electrical contact for higher current fast charging systems.

(Figure 2)

NBC 9-3-12 Specifications

Input Power:
18V DC Switching Adaptor (2.2 amp)

Fast Charge Current:
3V battery mode ----- 450 mA
9V battery mode ----- 80 mA

Trickle Charge Current:
3V battery mode ----- 40 mA
9V battery mode ----- 6 mA

Fast Charge Termination:
"Negative delta V" peak detection

Power Control:
Switching Regulator

Charger Control:
Microprocessor

Dimensions:
15 1/2" X 13 1/4" X 5"

Weight:
6 3/4 lbs (with power supply adaptor)