

The **USAlert WatchDog Charger with Antenna** is designed for those situations where the pager is charging and you would like to improve your signal reception. The WatchDog Charger with Antenna is a standard WatchDog Charger that has been modified with a BNC connector to allow the external antenna to be attached to it. The charger can be used for both WatchDog and WatchDog LT voice pagers.

The antenna is a dual band (VHF / UHF) omni-directional whip antenna with a circular magnetic base. Set screws are used to connect the upper antenna to the lower antenna for both VHF and UHF configurations.

The external antenna has the following characteristics:

## Gain:

2.1dBi at 144MHz (VHF) 4.5dBi at 430MHz (UHF)

## **Dimensions:**

Upper Antenna Length: 17.25" (43.8 cm) Lower Antenna Length: 9" (22.9 cm)

Base Diameter: 3.5" (8.9 cm)
Base Height: 1.5" (3.8 cm)
Total Height: 27.75" (70.5 cm)

Antenna Cable Length to Charger: 39.4" (1.0 m)

## **Antenna Gain - A Simplified Explanation:**

Received signal strength from an antenna with 3 dBi gain will be double that from an antenna which has 0dBi gain. A 3 dBi increase in received signal strength is roughly equal to doubling the transmitter power output. So, received signal strength and therefore range can be increased by raising the transmitter output power or by using a higher gain antenna.

The USAlert WatchDog Battery Charger is both a smart charger and a rapid charger. Using a 12VDC 1.0A power adapter, it will charge both the WatchDog pager and a spare set of three NiMH (Nickel Metal Hydride) batteries simultaneously or individually. The rapid charge period is approximately 3-4 hours from a completely discharged state. A typical recharge period for moderately discharged batteries is approximately 2 hours. Recharging batteries with the pager powered on will take a slightly longer time complete as the charger must compensate for the amount of current being drawn by the pager.

There are three colored LED's on the front of the charger. The green LED indicates power is applied to the charger and the two red LED's indicate charging status, one for the pager and one for the spare batteries. The spare batteries all need to be facing in one direction as the label indicates in the spare battery compartment. With properly inserted pager and batteries, the red LED's will flash on and off while charging. When the charge cycle nears completion, the corresponding red LED will begin to flash at a faster rate indicating the batteries are close to a full charge. When the charge cycle is completed, the red LED will be on continuously. The charger will then enter a trickle charge mode to maintain the charge on the batteries.

If the pager or spare battery red LED does not light with the pager or spare batteries inserted properly, there may be a contact

problem or a battery failure. If the charger's red LED's never stop flashing, you may have a defective battery or a defective charger. Change all three batteries and if this does not resolve the issue, then replace the charger. If there is no lighted green LED, make sure the power adapter is plugged into a live wall outlet. If the green LED still does not light, the charger's power connector may be defective or the power adapter has failed.

## DO NOT RECHARGE ALKALINE BATTERIES.

The WatchDog Charger has been designed to properly recharge and maintain NiMH batteries only. Other types of batteries may cause improper operation of the charger. Discard and replace damaged batteries.