



Temperature Compensated Charging for KIRK DECT Wireless Handsets

The Technical Issues

KIRK handsets use Ni-MH type batteries. To ensure safe and fast battery recharging, the battery-pack includes a temperature sensor which essentially monitors the charging process and allows charging to take place under constant temperature supervision. In doing so, battery risk is eliminated while charging performs at an optimal level.

The Process

The entire circuit for controlling the charging is built into the handset, meaning that the desk charger unit acts as a generator supplying a constant electrical current only. The charging current on cold batteries can be at its maximum and therefore even a few minutes of charging provide the handset batteries with enough energy to last for several hours of normal handset use.

Test performed to show the battery capacity and the recharging capacity defines the following: environments in wood-processing, ingredients and food industries.

- 600 mAh equals a capacity of up to 16 hours of speech time and up to 150 hours of stand by time*
- The charging current is 230 mA

- 5 minutes of charging equals 20 mAh, which provides the user with at least 30 minutes of speech time and 5 hours of stand-by time

This shows that charging the KIRK handset batteries with a maximum current for even a very short period of time grants the user the needed battery lifetime. With the temperature compensated charging provided by KIRK telecom you are consequently assured quick and safe recharging of the handsets - the best way of making sure that your wireless handsets are up and running at all times.

The Customers

In many of the vertical markets that KIRK telecom focuses on, the KIRK DECT handsets are in use for long periods of time every day - in some cases on a 24/7 basis. For these customers the temperature compensated charging is naturally a much appreciated feature.

Hospitals and many hospitality sites such as casinos and hotels need to function around the clock and as long as handsets can be charged during coffee or meal breaks, continuous handset usage is possible. Even in retail environments, handsets are often in use for up to 18 hours a day. All of these customers emphasize the battery lifetime as an important feature for them and it has been noted that when an employee forgets to place his handset in the charger at the end of the work day or accidentally takes it home with him - the handset is still fully functional the next morning and can last the employee another.

* Maximum battery life measured with new batteries when fully charged for KIRK 4020, 4040 and 4080 handsets. Actual battery performance may vary depending on actual conditions including age of battery, usage charging cycles and ambient temperatures.

Important

Before a handset is used it is preferable that the handset is charged overnight or as a minimum must be charged for at least 3 ½ hours. This ensures the battery is fully charged before its initial use. nt systems.