

## ▶ Polycom® Temperature Compensated Charging

### **Assuring Long Lasting Handset Batteries and Quick Recharging**

A wireless handset with a flat battery is of no use. In fact none of the many advantages of having a wireless telephony solution really matter if the handset battery can't last you through the entire work day.

Mobility is the essence of wireless telephony and a wireless handset should therefore be able to spend as much time as possible in a users hand or belt clip, and as little time as possible in its charger.

To make this a reality Polycom has developed a special charging technology of the Polycom® KIRK 3040 and Polycom® KIRK 40XX Handset series which makes it possible to recharge the handsets very quickly without damaging the batteries.

### **Polycom® KIRK Handset Batteries**

The charging of batteries can be a challenge if you want to assure the fastest possible charging without it damaging the batteries. In most cases the charging needs to be done very carefully with a constant low current and consequently the recharging takes a long time. An alternative is to have an extra set of batteries and keep spending time switching between the two. None of these options are really optimal.

In response to this challenge Polycom has developed a way of recharging batteries which completely eliminates the need of having a second set of batteries or leaving the handset in the charger for long periods of time.

The KIRK Handsets boast an outstanding speech and standby time of more than 16 and 150 hours respectively. In addition to this the temperature compensated charging technology makes it possible to recharge the batteries very quickly, making the handsets a valuable tool for employees working shifts. There is no need to fear flat batteries and you can feel reassured that the handsets will last your employees throughout the entire work day.



*The temperature compensated charging of the KIRK 3040 and KIRK 40XX Handset series assures long lasting handset batteries and a quick recharging.*

### The Technical Issues

The batteries used in the KIRK 3040 and KIRK 40XX Handsets are of the Ni-MH type. To assure the best possible recharging the battery pack includes a temperature sensor which allows for the charging to take place under constant temperature supervision. By doing so, the risk of damaging the batteries is eliminated and the charging can take place with maximum electrical current.

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:

- 600 mAh equals a capacity of at least 16 hours of speech time and 150 hours of standby 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 standby 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 Polycom 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 Polycom focuses on, the KIRK 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.

In retail environments the handsets are often in use for up to 18 hours a day. Our retail customers emphasize the battery lifetime as an important feature for them and one even notes that when an employee forgets to place his handset in the charger at the end of the work day and accidentally brings it home with him - the handset is still fully functional the next morning and can last the employee another day without being recharged.

Dansk Supermarked Gruppen A/S is the second largest chain of food and general merchandise stores in Denmark with more than 30.000 employees. Many of the stores within the chain have Polycom® KIRK wireless solutions. One of them is Bilka in Holstebro, where the COO Søren Hansen is very impressed with the KIRK solution as a whole, but also with the handset battery lifetime and battery charging. On the subject he states:

*"We are very satisfied with the KIRK Handset battery lifetime. Even though the handsets are in use throughout the entire day and are used by*

*staff working shifts, we haven't experienced any problems. The speech/standby time is excellent as it is, and the fact that just five minutes in the charger between shifts is enough to assure battery lifetime for the next shift really does make a big difference for our staff".*

