Thales 25 Lithium-Ion Battery Maintenance

The Thales 25 Hand Held Radio uses Lithium-Ion battery technology for its' rechargeable batteries, part number 1600464-2, -4 and -5. The current -5 battery has an 1800 mA/hr capacity which provides at least 11 hours endurance at a duty cycle of 5% transmit at 5W, 5% receive and 90% standby.

Rechargeable Battery Background

Nickel Cadmium (NiCad) batteries are rechargeable and are a good power source for the demands of portable radios but develop a 'memory effect', requiring the end users to occasionally fully discharge or recondition the batteries.

Nickel Metal Hydride (NiMH) batteries are also rechargeable and have less of a memory effect than NiCad batteries but have an excessive shelf discharge rate, requiring the end user to charge the batteries shortly before a mission.

Lithium Polymer batteries are a new battery technology but at the current time do not possess the same current draw performance as Li-Ion batteries.

Lithium-Ion (Li-Ion) batteries are the optimal re-chargeable battery choice for two-way portable radio equipment. They offer significant improvements over the alternatives; they have no memory effect and a better shelf life than NiMH batteries but do require minimal maintenance for optimal performance.

Thales Li-Ion Battery Performance

The Li-Ion batteries contain 'pack manager' electronics which monitors all data associated with the internal cells. Amongst other data, this provides safety and capacity monitoring. The safety monitor checks a variety of factors, such as low and high battery voltage, cell temperature, cell mismatch etc. The capacity monitor provides the 'gas gauge' on the radio.

The MA6996 battery charger, with software version 2.01 and higher, will reset the pack manager electronic registers in the battery, if required.

Suggested Lithium-Ion Battery Maintenance

We encourage you to use the following maintenance guidelines to achieve the maximum potential from your Thales 25 Lithium-Ion batteries:

- Charge the batteries immediately on receipt, certainly within 30 days
- Charge the batteries at least every 90 days, this is only an issue if the batteries are stored and not constantly in use
- If the battery is used to depletion, re-charge it immediately, certainly within 48 hours
- Keep the battery in the charger when not in use, attached to the radio is fine, there are no memory effects
- The recommended storage temperature is 15ºC (59ºF).

For additional assistance, please contact Customer Service at 1-800-914-0303 or Bob DiDonato at 240-864-7622.

Thales Communications, Inc.
22605 Gateway Center Drive
Clarksburg, MD 20871
www.thalescomminc.com

Service & Support: **1-800-914-0303**
Equipment Sales: **1-800-258-4420**

E-mail:
customer.service@thalescomminc.com