# TP9100 Battery Care and Charging Guide



This guide explains how to charge your Tait TP9100 battery as well as care for it, to ensure maximum performance and prolonged battery life.

**Note:** The instructions in this guide apply to both the desktop charger and the multicharger.

**Caution:** Your battery is designed and manufactured to the highest standard. Use only genuine Tait chargers and battery packs with your TP9100 portable radio.

## Charging the battery before first use

Before using your battery for the first time, you must charge it for **14 hours**. Remove the battery from the charger *only* when the 'Ready' LED glows green. See "Charging the battery".

This first charge is important because it prepares ('primes') the battery for use. (Subsequent charges should be complete in two hours or less.) The battery may take two to three shifts (charge/discharge cycles) to reach maximum capacity.

## Low battery warning

When the battery is almost empty, your radio warns you in the following ways:

- The battery indicator on the radio display looks empty.
- The status LED slowly flashes 🍑 red.
- A high-pitched beep sounds.

You should recharge or replace the battery as soon as possible.

When the battery is completely empty, the message **Battery is flat** appears on the display. The radio emits a long, low-pitched beep and then stops operating.

Turn off the radio immediately. You will reduce the battery's service life if you allow the battery to fully discharge each time you use it.

## Charging temperature

To achieve the best results when charging your battery:

- Before charging begins, the battery temperature must be close to the room temperature in which the battery is to be charged.
- Charging is best performed between 50°F (10°C) and 77°F (25°C) 41°F 5°C and starts only when the battery pack is between 41°F (5°C) and 95°F (35°C).

## Charging the battery

 Desktop charger—ensure that the charger is connected to the correct Tait power adaptor.

Multi-charger—ensure the charger is powered on.

2 Put the battery in the charger.

**Note:** For optimal results, the radio should be turned off while in the charger.



The red 'Charging' LED glows to indicate that the battery is charging.

**Note:** If the amber 'Fault' LED lights up, refer to "Troubleshooting your charger" on the next page.

3 The green 'Ready' LED on the charger glows when the battery is fully charged,. Remove it when you are ready—the charger will not overcharge the battery.

**Note:** If the radio was turned on while being charged, the battery indicator may not be accurate when the radio is initially removed from the charger. After a few seconds, the battery indicator is updated to display the amount of charge available in the battery.

## Maintaining battery life

With proper care and maintenance, you will maintain the performance and life of the battery. It is recommended that you:

- Use only Tait chargers.
- Avoid exposing batteries to high temperatures (above 122°F (50°C)) or extremely cold temperatures for long periods of time (-4°F (-20°C) for NiMH, and -22°F (-30°C) for NiCd).
- Charge batteries at room temperature (between 50°F (10°C) and 77°F (25°C)).
- If battery shift life starts to degrade, allow your nickel-based battery to fully discharge. To do this, leave your radio switched on and ignore the 'battery low' warnings. When the radio switches off, the battery is fully discharged.
- Store batteries properly when not in use. Refer to "Storing batteries" on the next page.

## **Storing batteries**

When not in use for a month or more, batteries should be stored correctly to prolong their life:

- Remove the battery from the radio before storage.
- Store the battery (in either a charged or discharged state) in a cool dry place.

## Using nickel-based batteries after storage

Batteries that have been stored for any length of time must be charged before being used. See "Charging the battery".

When first using a nickel-based battery that has been in storage for three months or more, it may not last an entire shift. The battery's optimal capacity should be restored by putting it through two or three cycles of charge/discharge.

## Disposing of batteries

Batteries should be disposed of properly. NiCd (nickel cadmium) batteries contain cadmium which, if disposed of in landfills, is very hazardous to the environment.



Please contact your radio provider for information on recycling programs in your area.



**Warning:** Do not cover the battery safety vent (shown below).



**Caution:** Engraving the chassis of your TP9100 portable radio can significantly reduce its mechanical strength and will void any warranty. If the chassis has been engraved, it must be replaced.

## **Troubleshooting your charger**

Fault LED	Possible reason(s) and solution
Flashing •	■ The battery is not compatible with the charger—use only Tait chargers and batteries.
	■ There is insufficient voltage to the charger—check you are using the correct power adaptor.
	■ The battery may be deeply discharged (less than 3V)— disconnect the battery from the radio and charge the battery.
	The battery may be faulty—consult your radio provider for advice.
Glowing	Charging is suspended because the battery is either too hot or too cold. Charging will begin when the temperature of the battery is between 41°F (5°C) and 95°F (35°C).

### Charger compliance information

#### United States

This battery charger has been tested and found to comply with the limits for a Class B digital device, in accordance with part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This battery charger generates, and can radiate, radio frequency energy. If it is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur. If this charger does cause harmful interference to radio or television reception (which can be determined by turning the charger off and on), try to correct the interference by:

- Reorienting or relocating the receiving antenna
- Increasing the separation between the equipment and receiver.
- Connecting the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consulting the dealer or an experienced radio/TV technician for help.

#### Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.