

# IMPORTANT NOTES ON REPLACING THE BATTERY

**Attention: These instructions are not valid for the new PULSE STAR II PRO!**

The PULSE STAR II uses a sealed lead-acid battery. This kind of battery does not suffer from "memory-effects" known from NiCd batteries, allowing you to recharge the battery at any time.

However, like all batteries the lead-acid battery of the PULSE STAR II suffers from self-discharging. **To compensate this, the battery of the PULSE STAR II must be charged at least every six months even if the unit is not in use!** If the battery remains in a discharged condition (either by forgetting to recharge or by forgetting to turn the PULSE STAR II off), the battery may lose capacity or may even be destroyed. See also chapter 7 of the manual.

Under normal operating conditions and by observing this practical note, the built-in battery will last for several hundred charging cycles. Nevertheless, should a battery replacement become necessary, please use the following battery type only: **PANASONIC LC-R121R3PG (12V, 1.3Ah)**. This type of battery is perfectly suited for the PULSE STAR II charging electronics.

**Note: Initially, the PULSE STAR II was equipped with the following type: HITACHI Sealed Lead-Acid Battery HP1.2-12 (12V, 1.2Ah). However, this type is no longer produced. Please observe the new instructions (#7 below) related to the new PANASONIC type battery!**

## Detailed instructions on replacing the battery

1. Make sure that the PULSE STAR II PRO is turned off and no charger is connected.
2. Open the PULSE STAR II (turn the unit, loose and take out two screws from the lower side, turn the unit again, detach the upper side of the enclosure).
3. Carefully pull out the REAR electronics module.
4. Push the battery towards the open back side of the housing (do not pull the battery upwards!) and pull off the two connecting wires.
5. Put in the REAR module again in a way that both the aluminum panel and the printed circuit board slide into the guiding slots of the enclosure. Ensure that the 12-pin connector fits exactly to its counterpart on the MAIN Module (CAUTION: single pins may be twisted!) and press the module fully down.
6. Connect the two wires with the terminals of the new battery. Make sure to connect the red wire with the positive battery terminal (+ red) and the black wire with the negative terminal (- black). A reverse connection will immediately blow the fuse on the REAR module!
7. Place the battery next to the MAIN module with its terminals facing to the outside of the enclosure. The mounting strips will fit exactly to the pair of the mounting strips on the bottom of the enclosure half when the rear sides of battery and MAIN module are in one line. **ATTENTION: With the new PANASONIC battery type, the two battery terminals are no longer located next to the fuse, but at the opposite side, i.e close to the front module!** Press the battery down strongly to lock the fasteners.
8. The two connection wires of the battery should run down from their starting point to the enclosure's bottom, and then further at the enclosure's bottom between the bolt and the side of the enclosure towards the battery terminals. Use the small piece of foam rubber to fix the wires in their place.
9. Last, close the unit with the upper half of the enclosure. Ensure that the guiding slots on both the front and rear side precisely embrace the FRONT and REAR modules. Use the two screws to finally connect the two halves of the enclosure.

