# SPORTident AIR+
How to prepare and how to use the SIAC
Information for athletes

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1. General information

The SPORTident-ActiveCard "SIAC1" is a combined active/passive transponder card. It works in the classical SPORTident direct punching mode, as well as for contactless punching, when the SPORTident AIR+ system configuration is used.
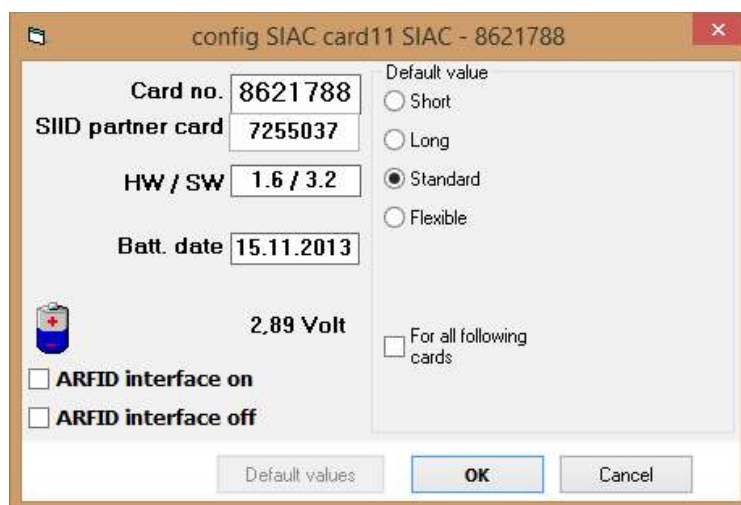

Optical feedback signals
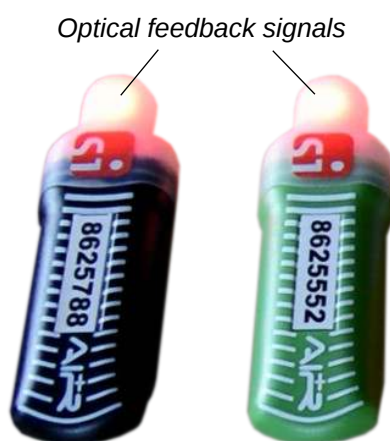
SIAC contains a battery and will always work in direct punching mode even if the battery is empty. Direct punching provides a fall-back option to register at controls. In contactless punching mode the SIAC's optical and acoustic feedback signals confirm that a control code and timestamp have been successfully written to the card.

SIAC features extremely low power consumption. The estimated battery life time is about 4 years if the card is used about 40 times a year in orienteering events. SIAC's battery can be replaced in a qualified service process.

SIAC and the AIR+ configuration meet the latest IOF specification for contactless punching in orienteering. The IOF specification gives different working distances for the disciplines of the sport but there is no difference in the user experience offered by AIR+.

2. Basic setup

SIAC can be personalised according to user's requirements. A record of athlete's personal data can be stored in SIAC's memory. In additon SIAC's feedback signals can be configured by using SI-Config.

In general it is recommended to use a longer feedback cycle for applications in Ski-O and MTBO and a shorter feedback cycle for Foot-Micro-O.
SIAC is delivered with a balanced setting of the feedback signals to meet best the requirements of typical orienteering events.

3. Preparation before the race

It is very important to ensure that the battery in the SIAC has sufficient power before it is used at an event. The station "SIAC Battery Test" can be used to perform a straightforward test.

The station indicates sufficient battery reserve with a normal beep and a warning signal will sound if the battery is low. The battery check should be carried out in the event centre and not immediately before the start.

SIAC's AIR+ features are not always active to reduce power consumption. AIR+ functionality is enabled at an event by the CHECK-process after the chip has been cleared.

SPORTident AIR+

The CHECK-process is mandatory for all SPORTident AIR+ applications. AIR+ functionality is terminated by the FINISH-punch.

4. At the race

At the race, the SIAC in AIR+ mode registers the time and station's code number when in proximity of the station. As long as the SIAC is inside the station's working range, feedback signals are sent out continuously. The feedback signals from the SIAC confirm that the athlete has successfully recorded a visit to the control.

BSF7/8 stations work in direct punching mode as well: direct punching with the SIAC is possible and can be used as a fall back option.

5. How to carry the SIAC

There is no general recommendation of how to carry and to attach the SIAC best. It is recommended that the athlete should be able to detect the SIAC's feedback signals.

For Foot-Orienteering the SIAC carried as a finger stick is a good solution.

SPORTident AIR+

SPORTident offers mounting equipment both for MTBO and Ski-O.

Mounting holder "Bike" for SIAC

Mounting holder "SkiO" for SIAC

SPORTident AIR+ mode can be compromised by disturbances caused by third party equipment. The active antenna of some GPS-watches can significantly reduce the SIAC's sensitivity. As a general rule a GPS-watch and SIAC shall not be carried on the same arm.

WRONG - Do NOT wear a GPS watch and the SIAC at the same arm

Advanced LED-lamps use a switching circuitry to modulate lamp's brightness. Some lamp models are not properly protected against emission of these signals. Even the battery leads of these lamps can act as an antenna. The LED-lamp shall not be mounted next to the SIAC and battery leads should not be positioned by the SIAC.

WRONG - Do NOT mount the SIAC next to a LED-lamp

WRONG - Battery leads shall NOT be positioned by the SIAC