SPORTident BSF8 stations

July 2011

Release notes

Dear customer,

Thank you for using our SPORTident BSF8 Control station. This letter describes features to be considered using the system parts.

Product features

The SPORTident-Station BSF8 is based on a newly developed hardware core. The new design offers a number of significant improvements and new features compared with the older series of SPORTident-Stations. The new BSF8 station is still compatible with the already existing SPORTident- System parts and can be used mixed with older equipment.

- The new BSF8 station is designed as a smooth and compact device. It is about the size of a mobile phone but still large enough to incorporate a number of future enhancements. Different mounting options allow the station to be used for a variety of applications in different environments. A special semi-transparent plastic is used to show off the insides. The BSF8 station is available in two different colors. A special conversion holder is also available so that the station can be seated in an existing larger holder that is used for BS7 stations.

- The BSF8 station is “always on” and works in a low power Stand-by Mode. There is no need to switch on the station or to make any special preparations before the unit can be used. Also in Stand-by Mode the station is fully qualified to proceed SPORTident-Cards. The maximal wake up time is 1 second but can be adjusted by the user. A faster wake up will increase station’s power consumption. The station is switched from Stand-by Mode to Active Mode when the first SPORTident-Card is inserted.

- Once the station is in Active Mode the reaction time to the insertion of subsequent SI-Cards is very quick. After an adjustable period without a SI-Card being inserted, the station drops back to Stand-by Mode.

- The BSF8 station features with an on-board service display visible from the back side (BSF8-DB) or from the top side (BSF8-DT). The display shows quickly main stations' settings like real time and code number. After a card has punched the card number is displayed for 3 seconds.

- From Stand-by Mode the station can also be switched to Service Mode. This is done by switching on the station with the Service/OFF-Card. In Service Mode the station’s LCD display offers additional information like the serial number, battery consumption and firmware version. Information about station’s battery is given both by measuring the battery voltage and by computing the station’s battery consumption in relation to the battery performance. Service Mode is automatically terminated after 10 minutes or earlier if the Service/OFF-Card is used.

- It was a special goal to develop a device which best meets the growing requirement to protect our environment. The SPORTident station BSF8 features with a very low power consumption. In typical application cycles a battery will serve for several years. This enables the use of a smaller battery. The battery is soldered to the printed circuit board and this enables the SPORTident GmbH to guarantee and control a fully certified disposal of empty batteries. For the first time an non-polluting lithium battery is used. This battery type does neither contain Cadmium nor Mercury. Other points of importance are decreased use of plastic material as a result of the smaller volume and weight.

- The station's real time clock system is calibrated and temperature compensated (starting with firmware V5.53). This offers higher accuracy also at very high and very low temperatures. The internal time resolution is 1/256 s, approximately 4 ms.

- The station's backup memory is increased and is typically 8 times bigger than that of the BSF6 station.

Handling and service

- The BSF8 station only needs minimal services. In typical application cycles only station's real time has to be monitored.

- The station's settings can be changed by using PC-software SI-Config. In the inductive coupling process between a SPORTident-Master Station and a slaved station a coupling stick can be used to improve data transmission.

- To achieve highest synchronism in the station's real time clock it is recommended to adjust station's real time by using the "SI-Master" (coupling stick needed).

- The battery has a capacity of 1000 mAh. This value should not be changed in the setups.

- SPORTident-Station BSF7 and 8 feature with an easy firmware upgrade mechanism.
  Station's firmware can be uploaded by the user via simple inductive coupling. This feature keeps the station up to date and enables the implementation of additional functionality. To upgrade the firmware a master station BSM7 must be used. Information about the firmware version and features are available at www.sportident.com.

Specifications

Internal power supply:	1 x Lithium ½ AA cell, no rechargeable
Battery capacity:	1000 mAh
Battery life:	3 – 5 years
Battery exchange:	by SPORTident GmbH and authorized SPORTident dealers
Operating range:	-20°C - +50°C
International protection class:	IP 64 (DIN EN 60529) – Protection against penetration of dust – Protection against splashed water from all directions
Dimensions:	101mm x 51mm x 19mm
Weight:	62 g
Accuracy at normal temperature:	less than +/- 20 seconds a month
Switch on time:	< 1 second (standard)
Backup memory:	maximum number of punches: 21802 maximum number of SI-Cards data records: 1022

Good luck with SPORTident!