

**BSF7****BSF8****BSM7 / BSM7 USB**

SPORTident stations BSx7/BSx8

Short summary

BSF7

- Same size as BSF6
- 67% of the weight compare to BSF6
- Lithium battery, one cell only
- Several years of life time on one battery
- Always on, activation in one second by punching with a SI-card.
- Display from below side showing:
 - Battery voltage
 - Time
 - Serial number
 - Present function

- Higher accuracy of the internal clock
- Update of the sw is done by the customer

BSF8

- 40% of the size compared to BSF6
- 31% of the weight compared to BSF6
- Lithium battery, one cell only
- Several years of life time on one battery
- Always on, activation in one second by punching with a SI-card.
- Display from below or from above showing:
 - Battery voltage
 - Time
 - Serial number
 - Present function

- Higher accuracy of the internal clock
- Upgrade of the software (sw) is done by the customer using SI-boot
- Delivered in a red or blue transparent box

Based on a robust new electronic core, the series 7 and 8 SPORTident stations provide a number of significant improvements, while maintaining full compatibility with the existing SPORTident system.

Main common product features

- Easy product handling

The new SPORTident stations are easy to use and require next to no maintenance. The stations are “always on” and so there is no longer the need to switch a station on or off. The internal real time clock features a high level of accuracy and is also temperature compensated.

An on-board LCD display can quickly provide information about the station’s settings and properties.

The station’s settings can be viewed and modified by PC software.

- Working modes

The station spends most of its life in **Standby Mode**, a low activity mode which consumes very little power. Switching from Standby Mode to **Active Mode** takes place when the first SPORTident card is inserted in the station and the maximum reaction time is 1 sec (this time is adjustable).

Once the station is in Active Mode the reaction time to the insertion of subsequent SPORTident cards is very quick. After an adjustable period without a SPORTident card being inserted, the station drops back to standby mode. As with earlier stations, Active Mode can also be entered by setting a predefined switch on time using PC software (Competition mode).

From Standby Mode the station can also be switched to **Service mode**. This is done by switching on the station with the “lilac off stick”. In Service Mode the station’s LCD display offers additional information like station’s origin, battery consumption and firmware version. Service Mode is used for any inductive coupling from station to station to set the properties of a station or to read out data stored in a station. The use of a coupling stick is recommended to achieve fast and reliable data transfer from station to station. Service Mode is automatically terminated after 10 minutes or earlier if the “off stick” is used.

- BS8 - unique design

The new BS8 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 station. The BS8 station is available in two different colours. A special bottom conversion element is also available so that the station can be seated in an existing (larger) baseplate that is used for BS3/BS7 stations.

- “Green” product

It was a special goal to develop a device which best meets the growing requirement to protect our environment. Most important is the reduction of

station's power consumption. This enables the use of a smaller battery and increases the typical battery life to several years. The battery is soldered to the printed circuit board and this enables the SPORTident organisation to guarantee and control a fully certified disposal of empty batteries.

For the first time an environmentally compatible 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.

- Limitations

- The function Clear (keep start no.) is no longer supported
- SIMAN 9.8 does not show the correct value for the battery, instead use the internal display that shows the both the battery voltage and the %.
- The compensation of the temperature that will make the clock even more accurate is so far not in use. At this moment +/- 1 second per week in room temperature is valid.
- After programming the station it is only active for 10 minutes. Make a test punch and then turn off the station.
- Sometimes the inductive coupling is to weak especially if you are using a BSM 3. Using a BSM 4 or 6 normally works better. If you are not able to program the new stations we strongly recommend you to buy a new Master station BSM7. Then you are able to upgrade the software in the station as well.
- To be able to upgrade the software in the station you always have to use the new Master station BSM7.

- Other features

The SPORTident stations 7 and 8 feature an easy firmware upgrade mechanism. The station 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. The station's backup memory is increased and is typically 8 times bigger than that of the BSF6 station.

The communications interface is extended with a second instruction set. The new instructions enable faster data transfer, improve the data transmission security and feature an extended time format. The station's internal time resolution is approx. 4 ms.

Main values

	BSF6	BSF7	BSF7-D	BSF8
Mass [g]	203	137	148	62
Mass [%]	100	67	73	31
Measures [mm ³]	115*62*32	115*62*32	115*62*32	101*51*19
Volume [mm ³]	245.000	245.000	245.000	98.000
Volume [%]	100	100	100	40

The battery

Valid for both BSF7, BSM7 and BSF8

Battery level high (new battery):

3,56 voltage, [BAT356] on the display

Low battery voltage, time to change the battery:

3,00 voltage [BAT300] and "low battery symbol" on the display + beeps/flashes at every punch.

Empty battery, the station turns off by itself:

2,60 voltage [BAT260] on the display

Note: On BSM7-USB the battery voltage is not shown correctly when the station is connected to the PC since the internal battery then is disconnected.

The display

Valid for both BSF7, BSM7 and BSF8

Active mode

The station automatically starts up into active mode when „punching“ with a SI-card. This takes no more than 1 second. The display is turn on and shown the following in 3 seconds intervalls:

- SI-card number (last punch)
- Time
- Function + code number

After one cycle (SI-card number - time - function) it shown only Time and Funciotn until the next punch.

Service mode

„Punch“ with the OFF stick (it has to be a quit new OFF stick) to turn the station into „sleep mode“. The display turns off.

„Punch“ **one more time** (for 3 seconds) to go into service mode.

The display shows the folloing in 3 seconds intervalls:

- Function (CN 73) CN=control, FIN=finish, STA=start, CLR=clear, CHK=Check, RDO=Card read out
- Time: [09:08:57] 24h format
- Active time: [OFF240] minutes before sleep mode
- SW version: [SW 559]
- Boot version: [B 0004]
- Hardware: [HWA196] type of components etc.
- Battery voltage: [BAT345] 3,45 voltage.
- Battery capacity used: [CAP027] 27% battery used
- Serial number: [080745]

SPORTident stations BSx7/BSx8

The SPORTident stations series 7 and 8 are available in the following base versions:

- BSF7-D (**D**isplay)
LCD service display, visible from the bottom side



- BSF8-DB (**D**isplay **B**ottom)
LCD service display, visible from the bottom side



- BSF8-DT (**D**isplay **T**op)
LCD service display, visible from the top side



Available colours for the SPORTident 7 station boxes:

- transparent, black shielding
- transparent, red shielding

Available colours for the SPORTident 8 station boxes:

- transparent red
- transparent blue

Trouble shooting

The station does not respond	1. Try to activate it using the Service-OFF stick
	2. Try to load the latest firmware using SI-Boot
	If nothing works, contact Sportident info@sportident.se
The station is correctly programmed but does not write to the SI-card	Make sure that the SI-card is not full. (36 punches for the SI-card 5, 65 punches for SI-card 6). If full, the display shows “FULL”
The start station does not respond when a SI-card is inserted	Clear the SI-card first, the start station always checks that the SI-card is cleared.
BSM only: not possible to read out a SI-card	Make sure it is programmed as “Read SI-card” (RDO on the display)
When I connect the BSM7-USB to the PC it does not work	Please download the special driver from www.sportident.se and install this first

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