SPORTident Printout-Set

Printout station BS7-P firmware 5.59+

V1.1 27.11.2013

Operating instructions

Basic features

The SPORTident Printout-Set is a complete and compact evaluation tool to read out and print data stored in SPORTident-Cards. It consists of the SPORTident Printout station and a thermal-printer. Using the Printout-Set the data records stored in SPORTident-Cards can be computed and printed out. Standard features of the printout are control points' code number, punching time, lap times, and total running time.

Part of the set is the SPORTident Printout station BS7-P. Compared with earlier versions the device offers a number of advantages and new features (firmware 5.59+). Most important are:

- The station automatically switches on when a card is inserted "Auto-on". The thermal-printer MCP 7830 must be switched on by pressing the button marked with .

- The Printout station can store a user defined printout layout by using PC software SI-Print. So application specific printouts are possible. This offers the usage of the Printout-Set in a wide range of applications in different sports.

- The Printout station features an easy evaluation printout. SI-Cards read in are automatically sorted into different categories and ranked according their running time.

- The backup memory size of the Printout station is enhanced. The station can store the content of up to 1022 SI-Cards for later evaluation.

- The Printout station BS7-P is not only a Printout station. It can be programmed into all other operating modes known from the SPORTident-System like "Read SI-Cards", "Control", "Start", "Finish", "Clear", and "Check" except into the "SI-Master" functionality. Use SI-Config to change stations configuration.

- There is the option "sprint_4ms" selectable when configuring the Printout station. If this option is active the total running time is computed with a resolution of 0.1 sec. To have correct data in the start- and finish station the same option has to be set active.

Printout layout configuration

In the user definable printout layout the header- and foot lines can be edited. It is of special importance that Control station code numbers can be replaced by ordinary text strings.

PC software SI-Print serves as interface program to define the print layout and to download the information into the Printout station. The size of the text can be modified by different commands.

Command	Function
%W0	thin
%W1	thick

Result list Sample 1

```
EuroSprint

2010-03-30  11:29:25
600725     SPORTident
SI-Card:   600725
Start      10:28:43
   1 Paris
   10:28:46      0:03    0:03
   2 London
   10:28:50      0:04    0:07
   3 Madrid
   10:28:54      0:04    0:11
   4 Rom
   10:28:57      0:03    0:14
   5 Moscow
   10:29:01      0:04    0:18
   6 Prague
   10:29:04      0:03    0:21
   7 Berlin
   10:29:09      0:05    0:26
   8 Warsaw
   10:29:13      0:04    0:30
Finish    10:29:17      0:04    0:34


service and support:
www.sportident.com

SPORTident - System
*****************************************
```
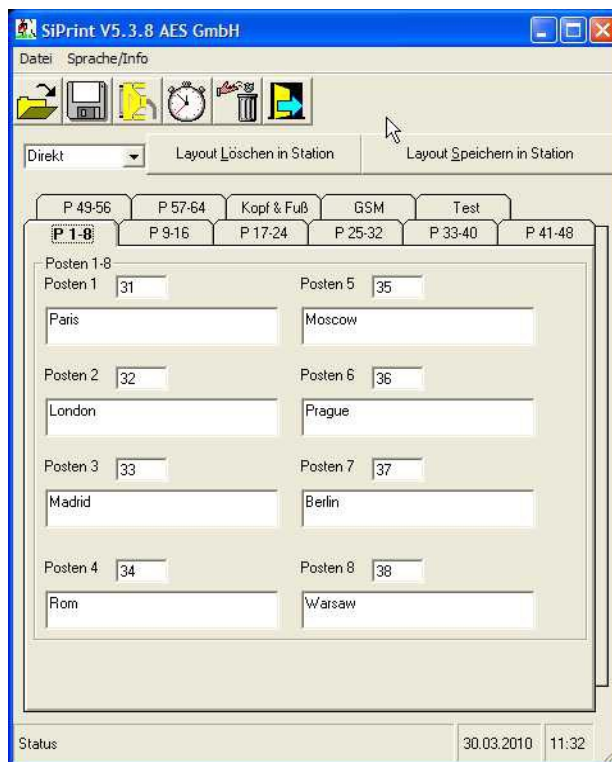
SI-Print - Layout Editor

Result list Sample 2

```
Orienteering
The sport for the thinking runner

2010-03-30  11:26:57
500877     SPORTident
SI-Card:   500877
Start      10:26:22
   1   31  10:26:24      0:02    0:02
   2   32  10:26:27      0:03    0:05
   3   33  10:26:29      0:02    0:07
   4   34  10:26:32      0:03    0:10
   5   35  10:26:34      0:02    0:12
   6   36  10:26:37      0:03    0:15
   7   37  10:26:39      0:02    0:17
   8   38  10:26:41      0:02    0:19
   9   39  10:26:44      0:03    0:22
  10   40  10:26:47      0:03    0:25
Finish    10:26:49      0:02    0:27


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SPORTident - System
*****************************************
```

Result list Sample 3

```
Orienteering
The sport for the thinking runner
------------------------------------------

2010-03-30  13:09:24
Results

Course  1
   1 1230558 SPORTident    00:00:22
   2 1302803 SPORTident    00:00:24
   3 2002693 SPORTident    00:00:26

Course  2
   1 500877    SPORTident   00:00:27
   2 600725    SPORTident   00:00:34


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SPORTident - System
*****************************************
```

Instruction cards

Using Instruction cards the Printout station executes routines directly and without any control by PC. There are four instruction cards available:

- **Service/Off**
  The Printout station switches into Service Mode for 10 minutes.
  Switches off the Printout station as well as all other stations.
- **Start**
  A "start" - punch in the Printout station initiates a common start time (mass start) for all SI-Cards read-in afterwards. However, if there is a start punch in the SI-Card too, this punch will be used for time computation instead. After the event the mass start time must be cleared with the Instruction card Clear backup.
- **Print results**
  The Printout stations ranks all SI-Cards read in according to their total running time. Sorting into different courses is done automatically based on the evaluations of the first six punches in the SI-Card.
- **Clear backup**
  Printout station's backup memory is cleared and the Clear backup card clears the mass start time after finishing the event.

Subsequent evaluation

SI-Card data stored in the Printout station can be transmitted to the PC for further evaluation. For that purpose the Printout station has to be connected to a serial interface of the PC by using the attached adapter cable (zero-modem-cable). For evaluation the software SIME is recommended. With the command "Readout backup" the SI-Card data records will be read out from the backup memory and a result list in html-format will be created.

Adjustments and maintenance

Printout-station
The SPORTident Printout station BS7-P is nearly free of service needs. Real time clock adjustment and reprogramming have to be done by using PC software SI-Config.
For correct time computing it is important that Printout station's real time clock is synchronised according to the other SI-Stations' clocks.

Thermal-printer MCP 7830-242
The Thermal-printer MCP 7830-242 is configured to operate with the SPORTident Printout station. Settings are listed in appendix A.1. Details of the programming process are described in the printer's manual.
For the printer only paper authorised by the manufacturer should be used. Non standardised paper can lead to a higher wear out of the print-head, shorter life-time and loss of guarantee.

Note: While connecting the data-cable "RJ12 – D9" into the printer a clear "click" must ringing out!

Charging of thermal-printer MCP 7830-242 - Important information

- To charge the printer batteries use only the specified power supply unit MPS161.
- Charging is automatically activated when the external PSU is connected with the printer. The charging process is indicated by a blinking green LED and the completion of the charging process is indicated if the green LED is off. It is permissible to leave the printer permanently connected to the PSU to trickle charge the batteries.
- The printer's battery can be recharged more than 100 times. But with ongoing lifetime the battery capacity will become smaller. With a new battery 250 typical printout sheets (about 25 meters) can be printed.
- For replacement use only the Ni-MH standard rechargeable AA cells. It is strongly forbidden to use Alkaline or other primary cells!

Appendix

A.1. Settings for thermal-printer MCP 7830-242
      operating with Printout station BS7-P

```
MARTEL INSTRUMENTS LTD

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  MCP7830-242 V1.1

    @ MIL 2000-2010

INFRARED PORT

IRDA PHYSICAL LAYER

Baud rate      : 9600
Parity         : None
Data Bits      : 8
Stop bits      : 1

RS232 PORT

Baud rate      : 4800
Parity         : None
Data Bits      : 8
Stop bits      : 1
Handshake      : Software

SET UP

Print mode     : Normal
Print format   : 42CPL
Char width     : Normal
Char height    : Normal
Auto-off time  : 10min
```