Organising a Small Orienteering Activity with a SPORTident Training Set - Android



Event Timing Solutions



These instructions explain how to run a small orienteering event using a SPORTident Training Set and an Android device. You will also find them helpful if you are organising any other activity with a Training Set. There is a crib sheet on the final page of this document if you only need a refresher.

Once Only Installation on an Android Device

Your Android device needs to have Android 5 or newer operating system and support USB OTG. In the Google Play Store search for **SPORTident Orienteering** and install SPORTident Orienteering by SPORTident GmbH, which will compute the results for simple events. Visit <u>https://docs.sportident.com/user-guide/en/orienteering</u> app <u>quick start guide.html</u>

Configure the SPORTident Printer to work with the App - Switch on the printer and then ensure that Bluetooth is enabled on your Android device. Scan/search for available Bluetooth devices on your Android device and you will see "**SI Printer 0xxxx**". The serial number of your SPORTident printer "**0xxxx**" is on the underside of the printer. Connect the printer to your Android device and enter the required PIN code which is **5349**. In the general **Settings** for the app, select the option to **Automatically Print Split Times.**

You can then setup a **Training Event** in the App and configure the event for very simple use so that you don't need to type in the name of the participant who is using a particular Si-Card. This means that whenever you dip an SI-Card in the Mini Reader, a printout is printed immediately.

If you would like to use the online features of the SPORTident Orienteering App, you need to create a SPORTident Center account at <u>https://center.sportident.com/admin/register</u> Your printer comes with a free subscription to Orienteering App 100 which allows you to manage events with 100 participants. While you are logged on to your Center account click **My account -> Subscription.** Enter the promo code shown on the printer **Quick Start Guide** to start your subscription and you can now load results from your events online.



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Before the event

Decide on the format of the event. The two typical options are:

- **LINEAR EVENT** Participants have to visit the controls in a set sequence. The winner is the one with the fastest time for all the controls in the correct order. Only those who visit all the controls in the correct order get a valid time.
- **SCORE EVENT** Participants have to visit as many controls as they can in any order, usually in a set time period. Any late finishers get a penalty based on how late they are. The winner is the one with the most controls (or points) after adjusting any penalty.

There are numerous possible variations around these two themes, such as a linear event with extra optional controls, or additional rules about the order such as all the odd numbered controls followed by the even ones, or different points values for score controls with easier ones scoring lower.

Pre-Event Preparation

Set up the SPORTident equipment as follows:

 Clear the SI-Cards (dibbers) - Dip each SI-Card in the top side of the blue SI-Master CLEAR station until the station beeps and flashes. One beep/flash is sufficient! If an SI-Card is not cleared, it will not work in the START station.



- Synchronise the Clocks in All Stations See full details later in the document
- Attach the Mini Reader to the Android device using the appropriate short Micro USB or USB C lead.
- Charge The Printer The trickle charger takes a few hours to fully charge the printer battery. When fully charged, the LED on the printer changes colour from red to blue. The printer can be used while being charged (but not if the battery is completely flat when you start charging) and you will need a power source.





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On the Day

Each participant is given an SI-Card. They complete the course and after they punch the **FINISH** station they are directed to the Download which ideally is located a few metres beyond the finish. It is best to download SI-Cards in a waterproof structure with a table and power (if required). There needs to be enough space for finishers to get in and out and a queuing system is better than a scrum! Connect the printer to the Printout Station (black box with gold stripe). The printer will typically print participant results for **5 hours** on one charge. Switch on the printer by pressing the circular power button until you see 3 blue LEDs. When you have finished using the printer, switch it off by pressing the power button until the blue LEDs stop displaying. **If you forget to switch off the printer, the battery will completely drain** and the printer will need a significantly longer charge.

Participants don't need to stay in order and there is no time constraint, but it is best to download SI-Cards straight away to avoid forgetting and losing them. The finisher puts the SI-Card in the Mini Reader Station until it beeps and the result is printed.

The format for each download is as follows:

- The date and time of download
- The SI Card number
- The start punch time
- A line for every control visited; the order, box code, clock time, split time and cumulative race time
- The finish clock time, split for last leg and final time

015-05-07 16:34:16		
713394 SPORTident UK Lt		
51-Card: 4713394		
Start 16:31:56		
1 102 16:32:27	0:31	0:31
2 105 16:32:45	0:18	0:49
3 101 16:33:05	0:20	1:09
4 103 16:33:24	0:19	1:28
Finish		
16:33:55	0:31	1:59

If you need to recycle an SI-Card because you have more participants than SI-Cards, make sure that you clear it (using the **CLEAR** station) after you have downloaded it and before the next person uses it.

Validation

A lot of organisations configure an event on the orienteering app so that the downloaded data is printed without validating the course or requiring the name of the participant. It may be helpful to deploy the control stations in numerical order to simplify a visual check of the splits print, however this is poor practice for adult events (as they should depend on navigation rather than numerical clues).

For a score event you need to count how many different controls they have visited. Note that if they punch the same one twice it may show up twice, but should not be counted, so it needs a careful check.

Other Useful Notes

Keep the **CLEAR** station out of reach of participants so they don't delete the data on their SI-Card before download.



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Periodic Maintenance

Synchronising the time

The clocks within each of the stations can drift a bit and need to be synchronised every month. To do this, lay out all the stations and the Printout Station. Take the blue **SI-Master/CLEAR** station and the purple **SERVICE/OFF** key. The blue **SI-Master/CLEAR** box has five modes: Standby, Service, Time Master, Extended Master and Standard Master. From the **STANDBY** state (when the LCD screen in the box is blank), using the Service/Off key in succession will change the mode in sequence.

- The first time you dip the SERVICE/OFF key will set the SI-Master/CLEAR station to SERVICE mode. The LCD says CLR before scrolling through some system codes. In this mode the station can be used programmed.
- The second use will switch it to Time Master mode. The LCD screen displays TIME MA before scrolling to show the clock time. In this mode any control that is coupled with the SI-Master/CLEAR will have its clock synchronised with the time in the SI-Master/CLEAR.
- 3. The third use will switch it to **Extended Master mode**. The LCD screen displays **EXT MA** before scrolling. In this mode clock in a coupled control is synchronised as above but the backup memory is also cleared and the Active Time set the same as the SI-Master. If the station being synchronised is a beacon, the Active Time is set to 12 hours.
- The fourth use will switch it to Standard Master mode with the LCD screen displaying STD MA. This will synchronise the clock, clear the backup memory and also restore the standard default configuration in the coupled station (assuming one has been set up in advance using SPORTident Config+).
- 5. The fifth use will switch it to **STANDBY** again.

If you are not sure what default configuration has been saved in the stations you will want use either **TIME MA** or **EXT MA**. Choose whether to just sync the time (you can always clear the backup using the purple **CLEAR BACKUP** key) or sync the time and clear the backup. Set the blue SI-Master to the appropriate mode, then insert the black coupling stick into the cylindrical hole in the SI-Master with the thin part first so that it sticks out of the bottom of the station. Put the SI-Master station on top of the station to be synchronised so that the stick goes through the hole in the box below. The station should beep twice to show it has been synced. If it does not beep twice, repeat until it does. If it continually fails it is faulty. Also synchronise the time in the Printout Station and Master Station if you have them.





This might sound a bit complicated, but in practice it is pretty easy and only takes a few minutes.

Replacing the Printer Paper

If the paper runs out in the printer, open the printer by lifting the transparent lid. Take care to orientate the paper roll correctly in the printer. If nothing prints out when the next person downloads it means the paper is around the wrong way.



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Other Activities

As well as traditional orienteering courses, your training set can be used for any number of different activities.







Or a **Butterfly Run** with four participants/teams starting a different loop at the same time? They complete all loops one by one and run clockwise trying to catch each other. What about having exercises on each loop – 10 push ups, 20 jumps, answer a question, etc.





A **Rainbow Run** can be created by randomly placing control stations on the gym floor or outdoor area. Attach papers of different colours or with different numbers or letters on. Allow the participants to run round the course once to get to know the control locations and symbols.

Give the participants a sequence of colours / numbers / letters and they have to find visit them all in the correct order. Fastest wins.



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Additional Equipment

Your Training Set can be easily extended by adding additional controls and SI-Cards. Other equipment such as stakes, mounting plates and orienteering flags can also be purchased.

Please visit <u>www.sportident.co.uk/equipment/catalogue</u> for further details.



SiTiming is software for Windows developed by SPORTident UK to manage events using this equipment. It is used by the majority of orienteering clubs in UK and you might wish to purchase a licence so that you can use it for larger or more complex events. When using SiTiming your SI-Card Reader station is connected directly to a Windows computer:

- When participant downloads their SI-Card the course can be automatically validated
- Many different types of course can be created, including linear and score
- Results can be produced there and then you can even display scrolling live results updated as soon as a participant downloads their SI-Card

More details on SiTiming can be found at <u>https://www.sportident.co.uk/software/sitiming</u>

SPORTident Config+ allows you to re-program all your stations. You can also read all the timing data that has been stored in a Printout station and save it as a simple csv file which can then be opened in a spreadsheet package. This opens up a number of opportunities – an energetic maths lesson perhaps! SPORTident Config+ can be downloaded from https://www.sportident.co.uk/support/downloads.php



Using SPORTident Training Set – Crib Sheet



Event Timing Solutions

Please see earlier in this document if you need more details of any steps in the process.

Before the Event

- Synchronise all the stations (including the Printout Station) with the SI-Master/CLEAR **once a month**
- Ensure the printer is charged overnight before the event (or power is available)
- Attach the Mini Reader to the Android device
- Switch on the printer and keep it close to the Android device
- Clear the SI-Cards by dipping them in the **CLEAR** station. You can either do this before the event or as part of the process when handing out the SI-Cards to participants.

At the Event

- Competitors dip their card in the **START** station to start their competition time if the **START** station doesn't beep when the card is inserted then the SI-Card needs to be Cleared.
- Participants visit the controls on the course, dipping at each station. This records the station code and the time on the SI-Card
- They dip the **FINISH** station which ends their competition time
- Participants place their SI-Card in the Mini Reader to download their results. The printer will immediately produce a splits print displaying overall run-time and the time taken between each control visited.
- If you need to recycle SI-Cards at the event, remember to download the card and then **CLEAR** the card before it is used again.

