

SI Droid Instructions

Ayrshire Orienteering Club



Before the event

- 1/ Gather all the kit and information required in good time. We are assuming that we are using an Android tablet which has SI-droid Event installed and has had a folder created called "SI-droid" (a phone will work but has a smaller screen to peer at) .
- 2/ Plan the event on Purplepen; when Purplepen is ready to export the pdf's for printing also export the event in the "Data interchange File" IOF v3 xml spreadsheet format with a suitable file name and keep it for later transfer to the tablet. (see Note A)
- 3/ Write or obtain a list of the entries and put them on a spreadsheet which complies with the SI-droid format (a minimum of 3 columns showing SI number, name, age/club). There is a prepared SI dibber list .xls file with all the SI numbers that we have so far identified on the club Dropbox file, you can download that to edit. (if you don't have working spreadsheet software then "Libreoffice Calc" is a free solution). After entries close, download a copy of the archive dibber list from Dropbox and check the entry list against the list from Dropbox and add any new SI numbers that we haven't recorded before to create the start list. Also anybody who has prebooked a hire dibber can have their name allocated to the dibber number on the start list. Save this start list in .csv format.
- 4/ Start the tablet, select SI-droid and click the three dots symbol at the top right of SI-droid > Manage Database > Clear the previous event data. (In the unlikely case that you might want to reuse an event it is possible to save a backup copy from this menu before clearing it.) Navigate to the SI-droid folder on the tablet and delete any files from the previous event.
- 5/ Add the new "start list" .csv and the event courses Purplepen IOF v3 xml file to the "SI-droid" folder on the tablet (either plug the tablet into your planning computer and drag the files into the SI-droid folder or email them to the gmail account on the tablet, download them and move to the SI-droid file).
- 6/ Click the three dots symbol at the top right > Settings. Select Name > enter event name (whatever the event was advertised as). Select Date > enter date of event. Select Start time/Zero time > set a time about an hour before the planned start.
- 7/ Enter Courses:- Click the three dots symbol at the top right of the SI-droid "Courses" screen, tap "Import courses", navigate to the SI-droid folder and select the course .xml file that had been produced by Purplepen. If necessary enter length of course in metres (e.g. 3.1km would be 3100). Enter estimated climb in metres.
- 8/ Still in Settings. Select "Lookup of Card Owner". Check all the boxes are ticked except "Fetch owner from internet" (BOF doesn't offer this service). Tap "File with card owners", and this should take you to the SI-droid folder. Choose the pre-entries CSV file for your event.
- 9/ Make sure tablet, Bluetooth printer and any spare batteries are charged. Check the supply of paper roll. Check that when the tablet bluetooth is turned on the printer (and any spare printer) has been paired and the bluetooth ID code for the printer (written on the bottom of each printer) has been entered on the tablet. In SI-droid Settings "Receipt Printing", under "Automatic Printing" check that "always automatic" is selected. At the bottom of the "Receipt Printing" menu, check that there at least 3 line feeds set.

On the Day

In SI-droid Settings choose "Receipt Printing" and "Bluetooth Printer", choosing the relevant printer (which must be switched on). Have pen and paper handy.

Connect an SI Download station to the tablet via a USB OTG adapter to the micro USB port on top of the tablet. When the download station is powered up it will ping and a red light will show; if the red light on the station goes out it has been disconnected.

Results download

Ask finishers to insert their dibber into the download unit. SI Droid will pick up the name, age/club from the start list file. Where no name has been preallocated to an SI Card number, in Results tap the pencil symbol and replace the dibber number with the name and age/club (if it is busy, take a note on pen and paper and correct the name later). The results will be stored on the tablet and the competitor will receive a printed copy. SI-droid matches the course to the controls punched on the SI Card when it is read.

Our tablet has been set to make different "ping" audio alarms for success, miss punch or "no course". If that becomes unwelcome it can be disabled in the settings menu under "readout alarms"

Monitor the battery level on the tablet. If it is a particularly long day a spare battery can be added to the system using an OTG 2 Port Hub Adapter Cable, which is stored with the Bluetooth printer. It is important in what order things are connected to the cable for getting this to work. First the SI-station should be connected, then the power source and finally the phone/tablet.

After the Event

Make any necessary corrections to the results. Selecting any individual result will allow editing; "status" has a drop down menu with options to Finish, DNF or disqualify.

Select the Results screen and tap the share symbol. A choice of formats is presented. Tapping "more reports" shows a drop down menu with more formats. If we are going to share among ourselves or place on the Club website use the "write to storage" button to save "Simple HTML" and "Results with splits HTML". If we are going to pass on the results to, for instance, BOF then also "write to storage" the "All cards Sportident CSV" version (see Note C). All these files will write to the SIdroid folder. Give the results files suitable names while saving them and distribute the results from the SIdroid folder as required. Upload the updated archive SI dibber list (minus the names of any card hirers), back on to the Dropbox with the latest date in the title to replace what was there before.

Notes: (There is a "Help" facility available at the bottom of the "Settings" page.)

Note A) Create courses. Apart from Purplepen there are other ways to create courses. Both OCAD and Condes can export the IOF v3 xml spreadsheet. Also, you can either start SI-droid, select the Courses page then press + and manually fill in the gaps or you can set all the SI stations (including clear/check/ start and finish) out on the kitchen table, dib them in the order for the course and download them to SI-droid then select the download in the "results" window by long pressing on it. An option to "create course from card" will appear. Select that, rename it to what you want, optionally add the estimated length and height gain and tap OK. Repeat for other courses.

Note B) Results Service. It is possible to set up a live on-site short range results service using the tablet WiFi connection. In the SI-droid Settings select "Result Service" which allows you to view the latest result on another device on the WiFi network. Selecting "Result Service" displays a url which can be seen on a browser on up to 10 other devices within 30 meters. The results available can be chosen between several html or spreadsheet options. When "Result Service" is selected an icon appears on the top of the tablet screen; swipe down on that icon and tap on the alert message to reveal the choices of result available along with the exact url required for each result type. Probably use "simple HTML". Either email the entrants that url beforehand (with the name and password for the router) to copy and paste as a browser bookmark on their smart phone or display it on a card on site. Suggest that users hit their "refresh" button to update the result. See the SI-droid website for more options and information.

Note C) Report Results. BOF require results for level A, B or C events to be filed with them within 7 days. Level D events are optional. The required BOF spreadsheet format is different from anything exported directly by SI-droid, so will require a bit of processing. If necessary email the event "All cards Sportident CSV" results file to the person nominated to upload results to BOF and they will deal with it.

Note D) Minimum Kit. The first part of this document described how to use SIdroid for mainstream events where we are using SI stations for every control. There may be activities where we are just using the Clear › Check › Start › Finish › Download SI units and punch clippers or numbers on the controls. It might be that we don't want to put out a full set of control stations for security or logistical reasons, or it might be that we have only the start and finish available.

It's simple enough to just use start and finish and then download for a single course, with no course pre-described; the result will read "no course" but will give a start, finish and elapsed time.

What if you want to run multiple courses at the same time? Using any of the methods described in Note A, it is possible to create courses which only have a start, finish and a title; for instance, "Score", "Orange" or whatever.

With a full compliment of SI timing stations out on the course, if there is a matching course found at download the runner is automatically assigned to that course. That won't work when we are only using clear/check/start/finish, so we need to allocate the downloading dibber to the correct course. That can be done manually from either the "readout" or "results" page.

The allocation of runners to courses can be automated a bit if you have prepared a .csv spreadsheet with the numbers and names for the dibbers that you have entered for the activity. The five columns on the spreadsheet read "SI number", "Name", "Club" (which can also contain age group if you want), "ID" (which is used for a BOF number, if you have one) and "course" (If you know beforehand which course anyone is going to run, fill it in here). Then load the .csv file into the SIdroid folder on the tablet.

Do the usual clear/check/start, run the course then finish and download. SIdroid will allocate the runner to the course specified on the entries .csv. If someone wants to do another run or a different course do the clear/check/start thing again and at download their name or dibber number should appear again on the tablet with a # symbol and a number indicating which run it was. It is likely that the 2nd and subsequent runs might be allocated to the wrong course. If that happens "long press" the name in the "results" list, tapping the funny looking sauggle symbol or the three dot menu symbol will allow a change of course. Tapping the pencil symbol from the runners details allows you to change most things in the record; there is a drop down menu hidden under "status" which allows you to disqualify and so on.

If you haven't gone to the length of loading a .csv file in the first place the download will just pick up whatever is on the dibber and you can rewrite almost everything in the result, it is just better time management to prepare beforehand. You still have to do clear/check/start before each run otherwise it won't add to the previous record.

If you have access to a small number of SI stations, it is possible to speed up result processing by using a single unit to define each course. For instance White might be defined by Start › 31 › Finish, Yellow would be Start › 32 › Finish, Orange would be Start › 33 › Finish and so on. Even without a pre-loaded .csv entries file using one SI unit per course in this way will shuffle the results onto the correct course. The physical set up at the event would be Clear › Check › Start › immediately dib the relevant numbered unit for the course › run the course clipping away merrily › Finish › Download.

Written Feb 2022 by WDN of AYROC.

The SI-droid developers website is at http://www.joja.se/index.php?title=Main_Page