NORTH WILTSHIRE ORIENTEERS

Information & User Guide to using SportIdent

Stuart Fisher – January 2025

Contents

SPORTIDENT EQUIPMENT and TERMINOLOGY

SportIdent or SI, is another method of providing control timing and results to events we organise. This replaces the EMIT equipment we have used previously and works in a similar way, however there are a few differences which particularly Planners, Controls, Organisers and event officials will need to be aware of.

Dibbers

Standard SI Dibbers

There are varying types of Standard SI Dibbers. None of these have internal batteries, therefore should not require any service or attention, and have a long-life expectancy. To successfully register or punch at a control station, the dibber must be physically placed onto the control station. An audible 'beep' to acknowledgment will be made by the control station.

Note: All our hire dibbers are SI-Card8 which can hold upto 30 control punches.

SIAC (touch free)

SportIdent Active Cards can work in the same way as a Standard SI Dibber, however can also work touch free, enabling a successful register at a control station within 50cm. Further details on what's required to enable use of touch free SIAC can be found later in this document.

Note: NWO have 2 x SIAC dibbers that are for the use of the Planner & Controller. These are not intended to be used as hire dibbers.

For reference, the table below details the different types of SI Dibbers:

	SI-Card 5	SI-Card 6	SI-Card 8	SI-Card 9	SI-Card 10	SIAC (SI-Active Card)	SI-Card 11 FLASH	pCard
Card Number Range	1 – 499,999	500,001 – 999,999	2,000,001 – 2,999,999	1,000,001 – 1,999,999	7,000,001 – 7,999,999	8,000,001 – 8,999,999	9,000,001 – 9,999,999	4,000,001 – 4,999,999
Typical Application	Orienteering, adventure sports	Orienteering, adventure sports	Orienteering less than 31 controls	Orienteering, adventure sports	Orienteering, adventure sports	Contactless Timing: Orienteering, mountain biking, adventure sports	Orienteering, adventure sports	Noncompetitive activities
Model Type	Finger Stick	Finger Stick	Finger Stick	Finger Stick	Finger Stick	Finger Stick	Finger Stick	Flat Card
Approx Size and Weight	72mm x 20mm 8g	72mm x 20mm 8g	72mm x 20mm 8g	72mm x 20mm 8g	70mm x 19mm 8g	68mm x 21mm 11g	70mm x 19mm 12g	54mm x 54mm 6g

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Colours	Red	Combination from 2 x 9 basic colours	Red or Blue Body with Black tip	Combination from 2 x 9 basic colours	Transparent body, 4 colours for tip	5 body colours, translucent tip. Flash and beeps	Transparent body, chrome tip with logo. Flashes	Full colour printing
Data Exchange Time	330 ms	130 ms	115 ms	115 ms	60 ms	60 ms	60 ms	115 ms
Time Format	12 hrs	24h-format, day of week, counter for up to 4 weeks	24h-format, day of week, counter for up to 4 weeks	24h-format, day of week, counter for up to 4 weeks	24h-format, day of week, counter for up to 4 weeks	24h-format, day of week, time resolution to 4ms	24h-format, day of week, counter for up to 4 weeks	24h-format, day of week, counter for up to 4 weeks
Code No. Range	1 – 255	1 - 511	1 - 511	1 - 511	1 - 511	1 - 511	1 - 511	1 - 511
Total Records	39 (33+6)	68	33	53	132	132	132	23
Control Records	30 + 6 (code number only)	64	30 ONLY	50	128	128	128	20 ONLY
Special Records: Start	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Finish	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clear	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Check	Yes (overwritten when in 'Sprint mode)	Yes	No	No	Yes	Yes	Yes	Bonus data
SI-Station Compatibility	All SI-Stations	All SI-Stations	SI-Stations 7/8 FW 4.49	SI-Stations 7/8 FW 4.49	SI-Stations 7/8, firmware V5.74	SI-Stations 7/8, firmware V5.80	SI-Stations 7/8, firmware V5.74	SI-Stations 7/8 FW 4.49
Extra Information Colour choice on personalised cards only	DISCONTINUED	DISCONTINUED		Card number reservation, card holder colour combination	Card number reservation, tip colour Choice	Card number reservation, colour choice	DISCONTINUED	Customised Card printing Service available

System Dibbers

System dibbers are coloured purple and are used to perform certain administrative tasks such as changing modes, clearing memory and switching on/off control stations.

There are 2 main System Dibbers

- Service/OFF – this can be used to change modes and switch off control stations
- Clear/backup – this can be used to clear the memory of a control station

USB Mini-Reader

The USB Mini-Reader allows connection of the Control Stations and Dibbers to the laptops, enabling configuration of Control Stations and the registration/download of SI Dibber during an event.

Note: The Mini-Reader labelled 'Download' should only be connected to the NWO Master laptop via USB Port 1. Similarly, the Mini-Reader labelled 'Registration' should only be connected to the NWO Slave laptop via USB Port 1. Connecting of the Mini-Readers differently to the above may result in USB

port setting of the laptops/software to change, resulting in complications performing certain tasks such as failure to be able to read/download dibbers during an event.

Control Stations

Control Stations are the units that are placed at physical control sites and also used at the start and finish. Further details of where and how to use Control Stations can be found later in this document.

For reference, NWO have:

- x40 'numbered' Control Stations, numbered from 151 to 190, inclusive. This are configured to work with SIAC, i.e touch free. If addition control stations are required for an event, these will need to be borrowed from a neighbouring club.
- x2 'SI-Master/Clear' Control Stations
- x2 'Check' Control Stations
- x2 'Start' Control Stations.
- x2 'Finish' Control Stations.
- x1 'SIAC Test' Control Station
- x1 'SIAC Off' Control Station

Note: The Start and Finish Control Stations are not configured for SIAC touch free, therefore all competitors must physically punch these control stations to successfully register. This should be clearly published on entry notes and also the start and finish teams are aware.

Note: All of the control stations have a set operating time and will automatically switch off after this time has elapsed. This does not impact those with Standard SI Dibbers as these will automatically awaken a Control Station. However, Control Stations that are or have auto switched off, will not register touch free punches, therefore this will affect competitors using SIAC as touch free. This needs to be considered by the Planner and Controller when deploying controls to ensure that an early runner using touch free isn't affected.

The operating time of the x40 'numbered' Control Stations is set to **8 hours**.

The operating time of the Start & Finish, SI-Master Clear, Check and SIAC Test Control Stations is set to **4 hours**

Stakes

The SportIdent Control Station uses a fiberglass stake with a metal tip and foot plate to aid placement into the ground. Care should be taken when handling and carrying the Stakes to avoid injury from the tip.

Induction Coupling Stick

The Induction Coupling Stick is a small ferrite rod that is used to allow communication between Control Stations.

Note: this can be easily lost and should always be stored in the SI Dibber case.

Config+

Config+ is SportIdent's software that allows for reading, synchronisation, and configuration of Control Stations. This software cannot be used to run events or provide event results, this has to be performed in Colour.

Colour

The Colour software is used to manage courses at events and to capture/publish entrant results. Used in connection with Config+ it is possible to determine entrants who have started but not yet downloaded during an event.

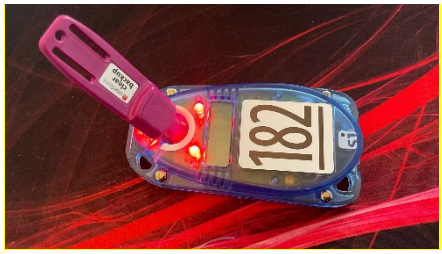
PRE-EVENT SETUP

Prior to an event, the following tasks must be completed to prepare the SI Control Stations. Failure to do so may result in inaccurate time reporting in results and prevent investigation/resolution of mis-punches or other result queries made by competitors.

Data Clearing of Control Stations

Whilst not strictly essential, it is good practice to ensure any stored data from a previous event is cleared from all control stations. This can be easily and quickly achieved using the 'clear/backup' purple dibber.

Place and hold the 'clear/backup' purple dibber into each control station and wait for a beep. This can sometimes take a couple of seconds to complete, the beep signals that the data clearing has been successful.



This should be completed on all Control Stations including the Start, Finish, Check, Clear and SIAC Test.

Synchronising Control Stations

Synchronising the clock safeguards against the inevitable time drift of stations over a period, which can be as much as 1 second per day. This is a fundamental difference compared to EMIT and therefore needs to be considered by the Planner and Equipment Officer in advance of the event.

All control stations (including Start, Finish, Check, Clear, SIAC Test) must be synchronised as close to the event as possible, ideally the day before an event if possible, however this may need to vary depending on who has access to the necessary equipment prior to the event.

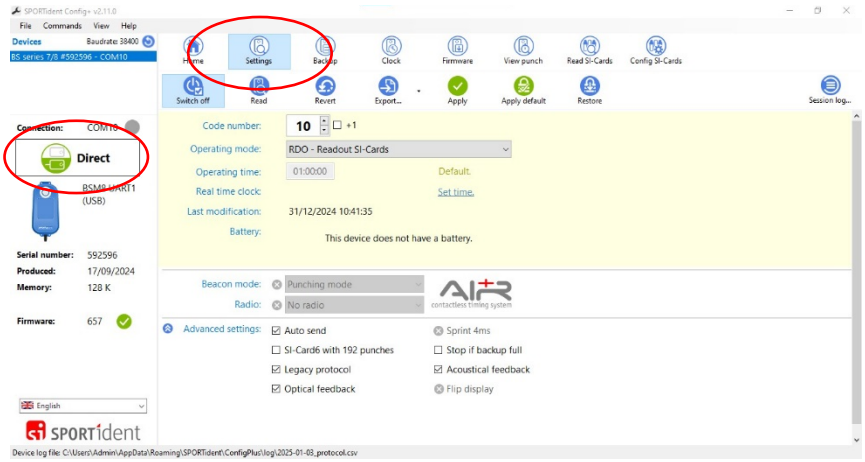
There are 2 ways in which the Control Stations can be synchronised, either via the Laptop using the Config+ software or using the SI-Master Clear control station. Note, the synchronisation of the clock on the SI-Master control station should always be performed via the Config+ software.

Equipment Required:

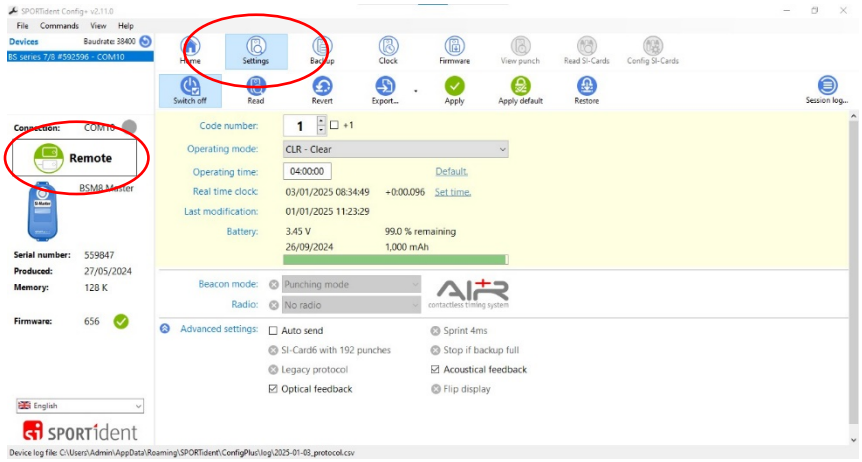
- NWO Master Laptop & USB Mini-Reader (labelled download)
- SI-Master Control Station: This will hold the event master time and is used to sync the other stations, any time differential will be the same over all relevant stations once process is complete.
- Induction (coupling) stick.
- Service/OFF card.

Synchronisation with Config+

1. Using the NWO Master laptop, connect the USB Mini-Reader (labelled Download) into USB port 1
2. Check the laptop time and date is set correctly. Note: this only needs to be a good reflection of the current time and date. If it's a few seconds out from GMT, this does not matter, the important thing is that all control units operate at the same time with each other.
3. Open the Config+ software and connect to the Mini-Reader. Ensuring the 'Direct' connection is selected and select 'Settings'.

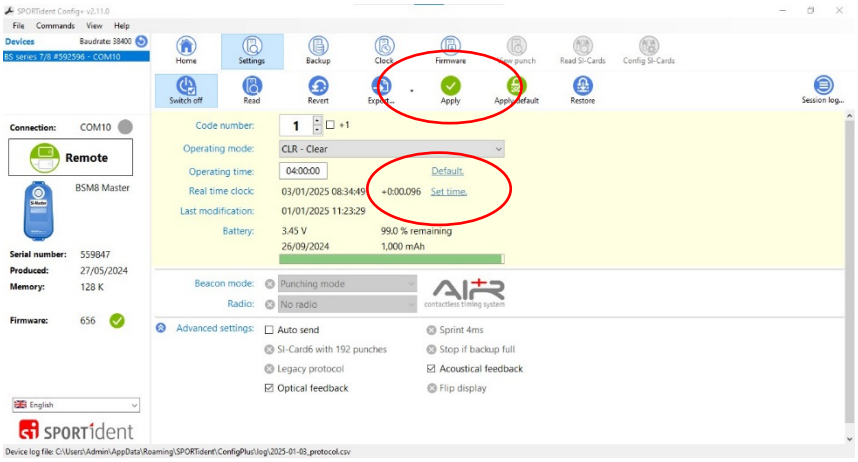


4. Using the SI-Master Clear control station, insert the 'Service/Off' service dibber to switch on the control station. **SERVMO** must be displayed on the LCD screen on the control station.
5. Place the SI-Master Clear control station directly on top of the Mini-Reader and select 'Remote' connection. Then click on 'Settings' to connect to the SI-Master Control Station.



If you experience problems connecting to the SI-Master Clear control station, then remove the station and repeat steps 3 to 5.

6. Select ‘set time’, the control station should beep. Then select ‘apply’. This should ensure the time is set to the control station. Note: this can be checked on the LCD display of the control station.



7. You can repeat steps 3 to 6 for all other Control Stations or follow the steps in the following section for a quicker method.
8. Remember to switch off each of the stations once the clock has been synchronised, using the ‘Service/Off’ service dibber.

Synchronisation with SI-Master Control Station

Ensure the SI-Master Control Station has been synchronised following the steps above.

1. Put the Service/OFF instruction card twice (with a very short time interval) in the SI-Master Control Station.
2. Check the LCD display of the SI-Master Control Station shows **TIMEMA**. When you see this, the station is ready.
3. Put the Induction Coupling Stick in the SI-Master Control Station.

4. Place the Control Station you want to synchronise on top of the SI-Master Control Station, ensuring the Induction Coupling Stick is inserted into the dibber port.

5. After a few seconds the control station will beep. The time of the station is now adjusted/synchronised to that of the SI-Master Control Station

6. Place the Service/OFF system dibber into the synchronised control station until the LCD display is empty, ensuring the control station is switched off.
7. Repeat steps 4 to 6 for all other control stations.
8. Remember to ensure all control stations are switched off (the LCD display should be blank), including the SI-Master Control Station once completed.

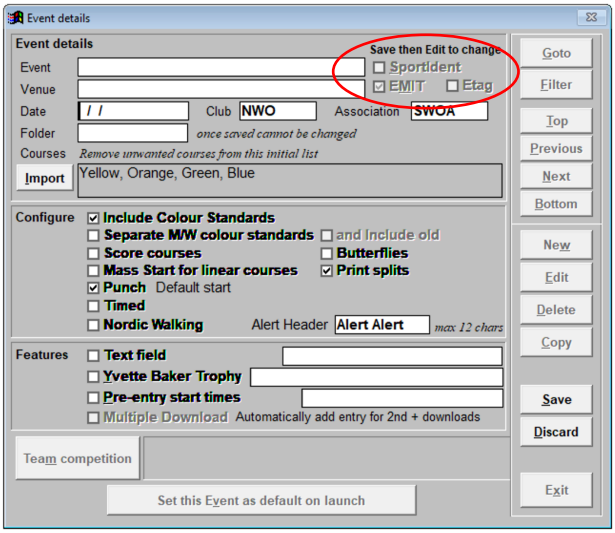
All control stations should now be ready for the event and the Planner to start setting out controls.

Note: The fastest way to do a whole batch of control stations is to lay them all out, sync all with the SI-Master station as at 5 above, then confirm time is the same and then turn all off with the Service/Off system dibber.

Event Creation in Colour

Creation of the event in Colour should be completed as usual, further details of how to do this can be found in the NWO document "Dummies Guide to Colour Software".

The only key difference is that when creating the event, that 'Sportident' is selected. This will either be already selected if inheriting data from a previous SI event or can be edited post creation of the event.



All other settings, including the creation of Courses and Entries should following the usual import process as detailed in the "Dummies Guide to Colour Software" document.

Note: If individual creation of an entry is to be performed (for example, entry on the day) then registering of entrants using their SI dibber will need to be performed using the NWO Slave laptop with the USB Mini-Reader labelled 'Registration' and connected to USB Port 1. Trying to perform this using the 'Download' labelled USB Mini-Reader connected to the NOW Master laptop will not work.

Deploying Controls

All control stations that are to be deployed should have been updated and time synched before being taken to the event. Further details on how to synchronise control stations can be found earlier in this document.

Before setting out to place the controls

Each control station is to be deployed as per the Planner's requirements and checked by the Controller. All control stations (except the Start and Finish Control Stations) are configured as SIAC enabled when switched on / active.

To deploy the controls and to activate them you will need;

1. Any SI Card (this can be either a standard SI Card or SIAC). Note: There are 2 SIAC dibbers available for the Planner and Controller.
2. Before setting out, remember to clear the memory of the dibber. Note: Once the memory of a dibber is full, they will still turn on control stations but will not beep to confirm activation.
3. The operating time of the control stations will need to be consider as to when the Planner first deploys the control stations and the time elapsed to when the Controller checks.
4. Control Stations placed the day before an event and activated by the Planner will have likely auto switched off before the event start (remember the operating time of 8 hours).
    a. Therefore it may be advisable for the Planner to only place the control Stakes the day before and to revisit all control sites on the morning/day of the event to place and activate the Control Stations. The Controller can then follow round to check each control site and test touch free functionality (Note: the SIAC Dibber will only become active for touch free after it has first been physically punched). Or
    b. If the Stake and Control Station has been placed the day before, the Planner should physically punch the Control Station to check it's function, immediately followed by the 'Service/OFF' dibber to switch off the Control Station. This will help preserve the battery life. The Controller will then need to check all control sites on the morning/day of the event. (Note: the Controller will need to physically punch all control station to awaken them, before moving away from the control to return a few seconds later to test touch free.

Carrying Controls and Stakes

Stakes have a sharp metal point that can cause injury, so stakes should be carried point downwards and towards the rear. Ideally you should not run when carrying stakes.

Control stations are secured to the top of stakes by clips, however these plastic clips become brittle and/or loose so stations are not secure in them when moving. Therefore, stations should be carried separately in a secure manner.

If control stations are threaded onto a rope/string in the deployment order, then they are easier to find from a bag etc. Lengths of black rope/string is contained in the bag with the Control Stations.

The clips on the Stakes also have a small clip/hanger to allow for hanging of the Kite.

At the control site

The stake or gripple is to be deployed with the flag at the appropriate location and a O flag attached that does not obscure the control and allows clear manual punching.

The correct control station is to be selected and activated. The control station is activated by any SI Card punching the station for about 1 second to 'wake' the station. There will be a beep to confirm the station is active. **If there is no beep then look to see if the LCD display is functioning.** If it is and there was no beep it may be that the SI card is full as it will wake stations but no beep will be sounded by the station. Firmly affix station to stake or gripple.

If using a SIAC to wake the station, then punch the station until it wakes. Attach station to stake or gripple. Move back 1m until SIAC card stops flashing then swipe near station and look for flash and listen for beep. If no flash or bleep it may be because the card has already registered and will not re-flash for 10 secs, wait and try again.

Any issues deploying controls are to be reported ASAP to the planner/controller and if necessary, the Equipment Officer.

DAY OF THE EVENT

Registration / Download

The Battery pack, Laptops, and Printers should be connected in the usual manner. Note: The event, courses and entries should have been pre-programmed into the Colour software.

The USB Mini-Reader labelled 'Download' should only be connected to the USB 1 port of the NWO Master laptop. This station can only be used for download and cannot be used to register a new entrant, (i.e on the day entry).

The USB Mini-Reader labelled 'Registration' should only be connected to the USB1 port of the NWO Slave laptop. This station can only be used to register a new entrant (i.e on the day entry) and also used to read Control Stations during the event to check entrants who have started but not downloaded and also to investigate any issues with results such as missing punches. Further detail on such investigations can be found later in this document.

Each of the Hire dibbers are numbered 180 – 229 however as they do not have a backup card (as with EMIT) there is no easy way to label each Hire dibber with the name of the entrant. Therefore, a list identifying the correct Hire dibber number to an entrant should be made available so that the Registration/Download team can correctly identify and issue Hire dibbers, or an alternative removable tag or label attached to the Hire dibber with the corresponding entrant's name.

Note: All Hire dibbers can only store a maximum of 30 Controls, plus a Start & Finish. Therefore, courses should not be planned with more than 30 controls. Please see the table in the Dibbers section for further details. If a course has to be planned with more than 30 controls, then alternative arrangements/provisions will need to be made with Hire dibbers and communicated to those entering with their own dibber.

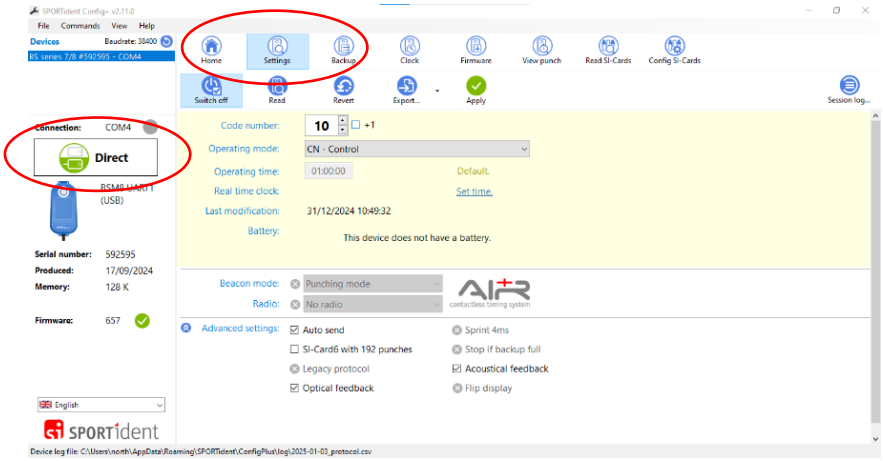
Downloading Data from Control Stations

During an event, especially with pre-entry where runners may go straight to the start, it is necessary to check to see if any runners are still out on the course. This is a particularly important safety check, especially with young or vulnerable runners, but also to check all runners have finished before control collection.

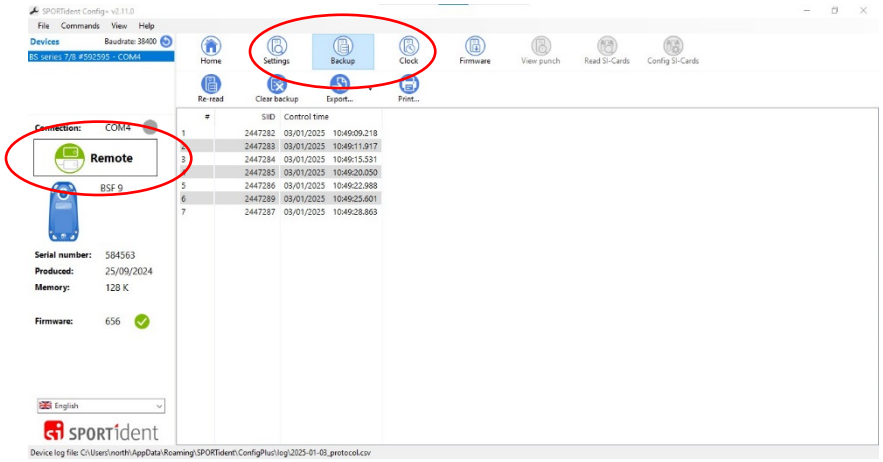
Once the start is closed, the start team will need to return all Clear, Check and Start Control Stations to the download team for processing.

Extracting data from the Control Stations must be performed using Config+. During an event, this is best performed using the NWO Slave laptop as this will allow the Master laptop to continue to be used for download.

1. Open the Config+ software and connect to the mini-reader. Ensuring the 'Direct' connection is selected and select 'Settings'

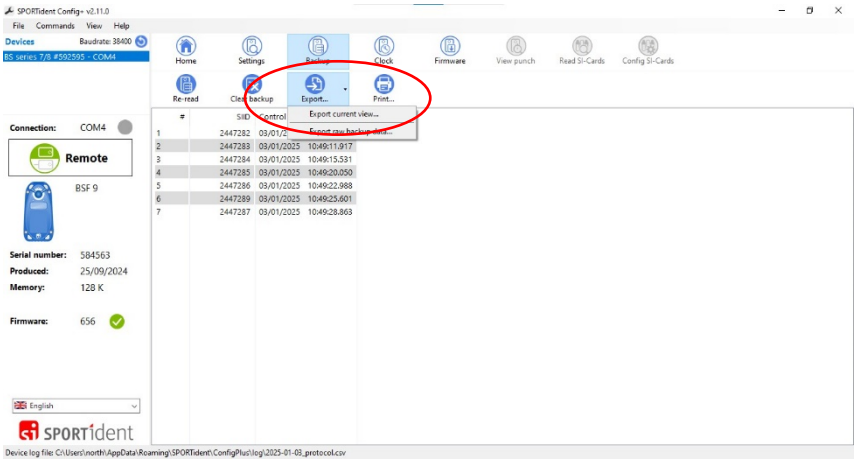


2. Use the 'Service/Off' service dibber to switch on the control station you wish to read. **SERVMO** must be displayed on the LCD screen on the control station.
3. Place the Control Station directly on top of the USB Mini-Reader and select 'Remote' connection. Then click on 'Backup' to read data from Control Station.

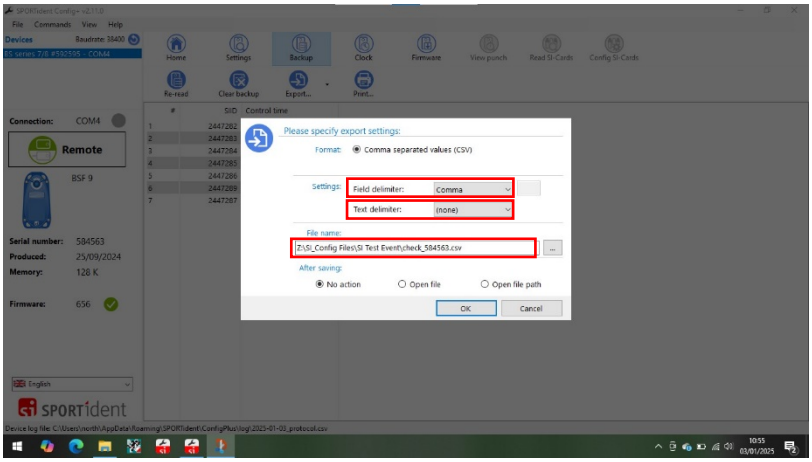


If you experience problems connecting to the Control Station, then remove the station and repeat steps 1 to 3.

4. Select ‘Export’ and ‘Export current view’. This will open a new dialogue window.



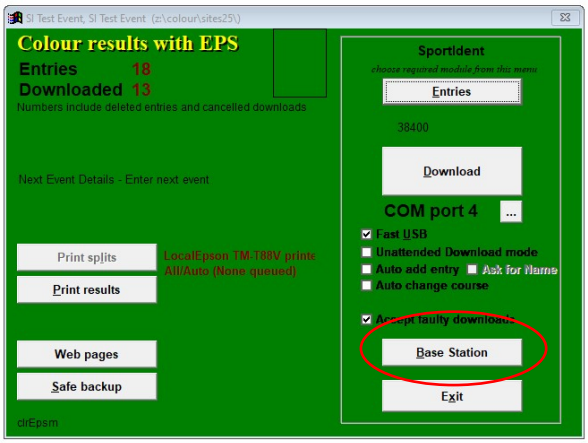
5. Change the file location to a folder that you can easily find. Ideally this could be the same event folder as used by Colour.



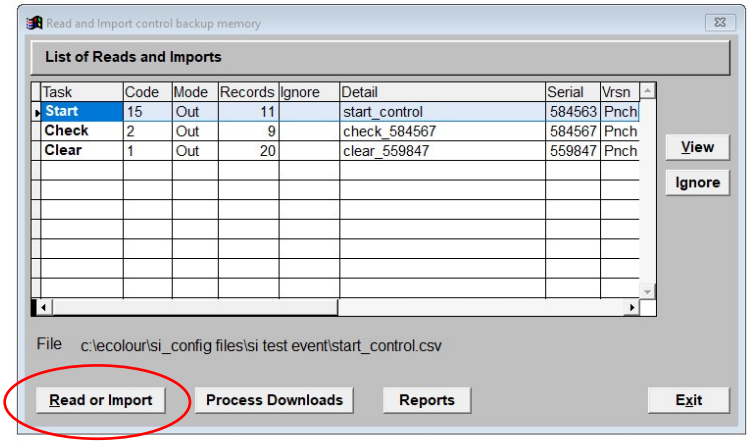
Ensure the field delimiter is set to ‘Comma’ and text delimiter is set to ‘none’.

Config+ will normally create a default file name that includes the word ‘control’ followed by control station’s serial number. Change the ‘control’ part of the file name to the control station type, i.e "start", "check" or "clear". For example “check_584563.csv”

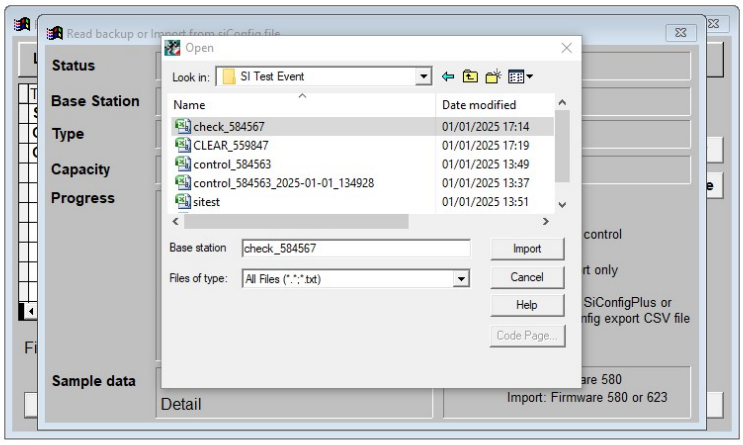
6. Open Colour and navigate to the ‘Results’ screen as normal. Select ‘Base Station’



7. Now select ‘Read or Import’.

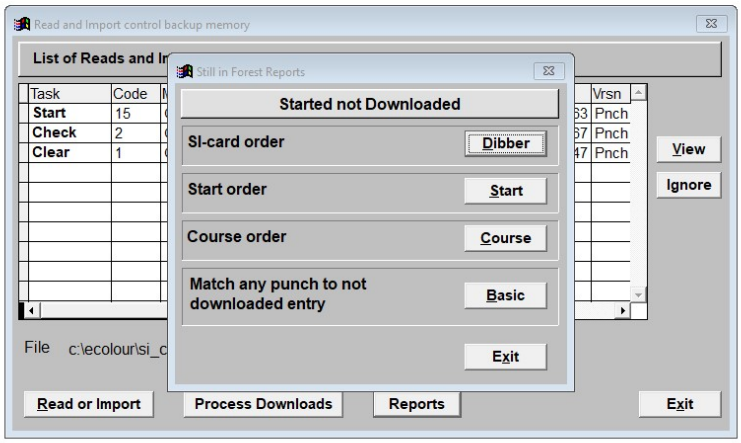


8. Then ‘Import’ and select the correct file location and file to be imported.



Note: If importing the file into Colour fails using the NWO Slave laptop, then try importing the file on the NWO Master laptop. During an event importing on the Master laptop this will prevent any finished competitors downloading until you have completed the import and returned to the normal download screen.

9. Repeat this process for all Clear, Check and Start Control Stations used at the start.
10. It should now be possible to run a ‘Match any punch to not downloaded entry’ report to identify any competitors who have started and not yet downloaded.



The Start

The layout of the start will often be impacted by the area available but, wherever possible, the following layout of controls should be presented in this order (as approached by a competitor). The start will need to be monitored at all times by a member(s) of the Start Team.

1. **Clear**: User physically punches clear as normal until beeps confirm card has been cleared.
2. **Check**: User physically punches, a beep/flash confirms card is clear and SIAC is turned on.
3. **SIAC Test**: User punches touch free, i.e waived over control - user to not physically punch the control. This step is not applicable to standard SI Cards

Note: If there is no flash or beep during any of the steps above, the user is to be directed back to the Clear station. This station should ideally be held by a member of the start team, but may be mounted on a stake. In this case a member of the start team should be ensuring all users Clear correctly.

Note: There must be at least 10 seconds for a SIAC card between each element otherwise the card may still be registering the previous action.

Note: The Start (and Finish) control in not SIAC enabled and will need to be physically punched by all competitors. It is particularly important that this is communicated and understood by SIAC users, otherwise they may miss punch the Start (and Finish).

Note: If a SIAC user has no beep/flash on their card when they punch the SIAC Test control station but works correctly with Clear and Check, then their battery has likely failed. In that case, they can use their own card in Punching Mode – i.e they will need to physically punch each control on the course.

The Finish

The Finish can be laid out in the same way as we have done for EMIT and there is no requirement for an additional safety control. As the finish control must be physically punched (i.e isn't touch free), the finish control will also act as the safety control.

At the end of an event, if a competitor has finished but failed to download then the data from the finish control can be interrogated to determine if all competitors have finished their course. This can be important if there is a suspected missing competitor, as the Finish/Safety Control can be interrogated to see if the competitor has punched it, in which case we would know that they had left the competition area.

Control Collection

Care should be taken with carrying stakes as with deployment and be aware that control station can easily fall off stakes. So please remove them and carry them separately. Controls to be returned to the control collection point, stations and flags removed.

At the event:

1. Check all controls are collected from the event.
2. Switch all control stations off with the 'Service/Off' service dibber.
3. Check all displays are blank.
4. Return all controls to the Equipment Manager.
5. Advise Equipment Manager and Results team of any known control issues.