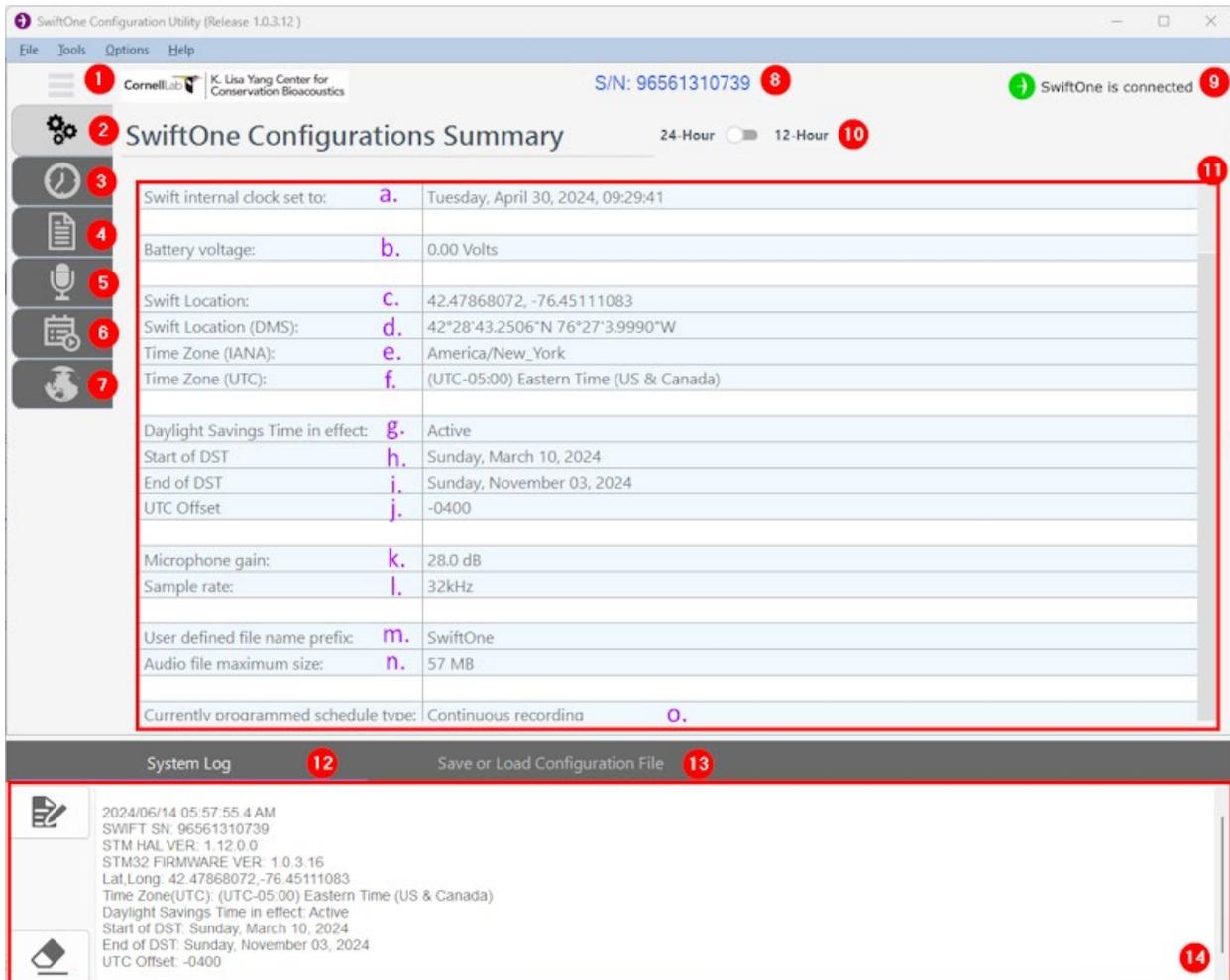


SwiftOne Configuration Utility (Release 1.0.3.x) Quick Start Guide

When you first successfully connect to the SwiftOne recorder on the SwiftOne Configuration Utility (Release 1.0.3.x), you will see a screen below without the red bullet points, red rectangles, and purple text markers that we'll use to describe the function of each portion in the next section.

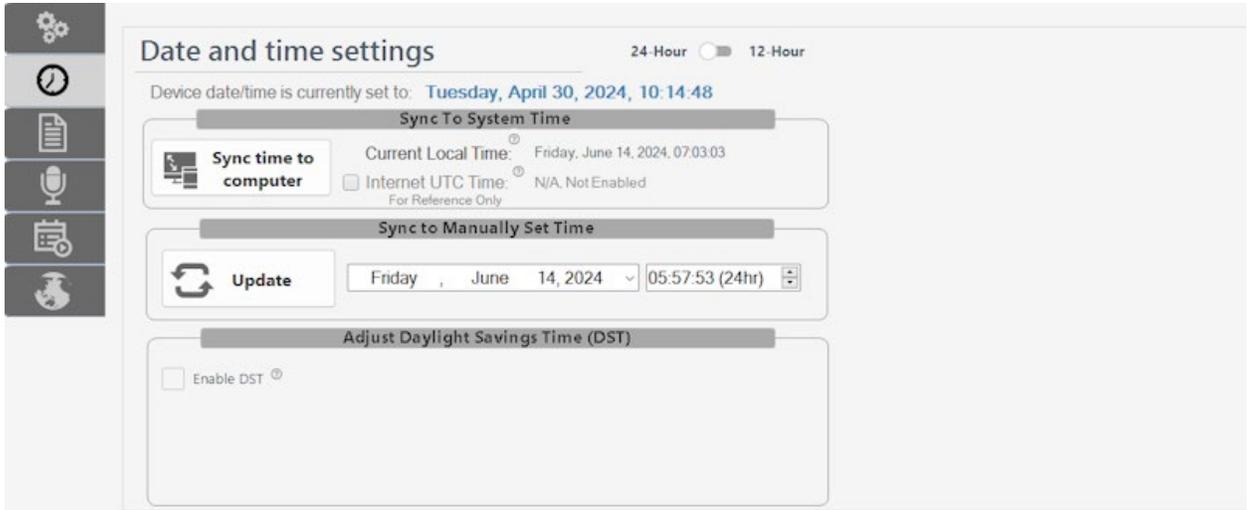


As indicated by the red bullets in the image above, the description for each of the associated portions is listed below:

1. **A Rollout menu.** This item describes a short function description of each system button. Click this button to expand the descriptions and click again to hide them.
2. **Settings Summary menu** button. This shows the screen you see now on the right window, indicated by the red border rectangle for Bullet #11. The summary describes
 - a. The current clock value on the SwiftOne Recorder. You can switch between the 24-hour format or 12-hour format for viewing using the toggle button indicated by Bullet #10

- b. Battery Voltage level of the SwiftOne Recorder. This value will read 0.00 V when the physical toggle switch on the recorder is in the OFF position. The actual battery voltage will be displayed when the physical toggle switch on the recorder is in the ON position.
 - c. SwiftOne Recorder Location in Latitude and Longitude. These values are set by the Location and Time Zone menu activated by Bullet #7 button.
 - d. SwiftOne Recorder Location in the equivalent DMS (Degrees, Minutes, Seconds) coordinates. These values are set based on the Latitude and Longitude values set in the Location and Time Zone menu activated by Bullet #7 button.
 - e. SwiftOne Recorder Time Zone in IANA standard. This value is set by the Location and Time Zone menu activated by Bullet #7 button.
 - f. SwiftOne Recorder Time Zone in UTC display. This value is the equivalent value of the IANA standard set by the Location and Time Zone menu using Bullet #7 button.
 - g. Daylight Savings Time Active indicator. This will display whether the current Daylight Savings Time is active or inactive. The DST mode can be enabled or disabled using Date and Time menu activated by Bullet #3 button.
 - h. Start Date of DST Mode observation. This is only available when the DST Mode is enabled in the Date and Time menu activated by Bullet #3 button.
 - i. Stop Date of DST Mode observation. This is only available when then DST Mode is enabled in the Date and Time menu activated by Bullet #3 button.
 - j. UTC offset indicates how many hours and minutes are being offset from the local time zone compared to the UTC. For example, -0400 indicates negative 4-hour and 0-minute offset. If enabled, this value is linked to the Time Zone location and the Daylight Savings Time (DST).
 - k. SwiftOne Recorder microphone gain value in dB. This value is set by the Gain and Sample Rate menu activated by the Bullet #5 button.
 - l. SwiftOne Recorder sample rate value in kHz. This value is set by the Gain and Sample Rate menu activated by the Bullet #5 button.
 - m. SwiftOne Recorder audio recording file name prefix. This value is set by the File Options menu activated by the Bullet #4 button.
 - n. SwiftOne Recorder maximum file size per audio recording. The file size limits how many minutes of audio recording are available in a single recorded file. This value is dependent on the sample rate. The file size can be changed using the File Options menu activated by the Bullet #4 button.
 - o. SwiftOne Recorder schedule mode and summary. This value can be changed using the Scheduling menu activated by the Bullet #6 button.
3. **Date and Time menu** button. This activated the Date and Time screen that lets you synchronize the SwiftOne clock to your computer time. If the "Internet UTC Time" checkbox is checked, the system will display the current UTC time. An internet connection is required to view the Internet UTC Time. Please note that the Internet UTC Time is for reference only, and only the Current Local Time based on your PC

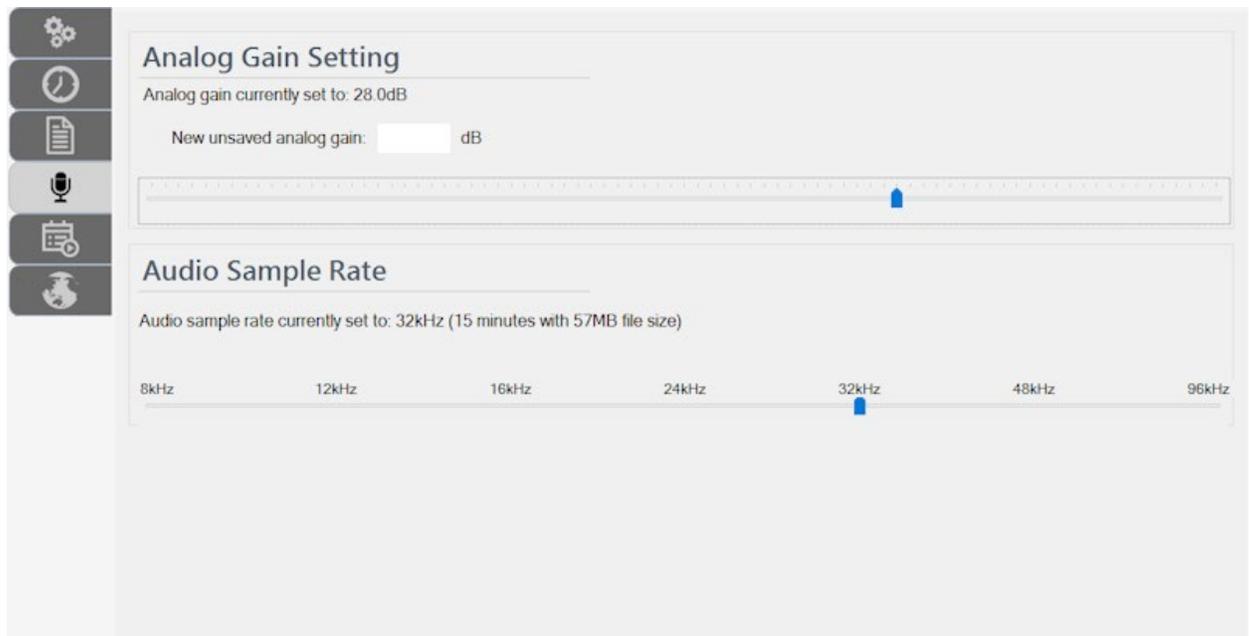
gets set to the SwiftOne recorder when the "Sync time to computer" button is pressed. An arbitrary time can also be set to the SwiftOne recorder using the Sync to Manually Set Time option. You can enter the date and time of your choosing and click the "Update" button to set the arbitrary time to the SwiftOne recorder. This feature is helpful in setting the date and time that's not what your computer date/time has. The Adjust Daylight Savings Time (DST) option allows the SwiftOne recorder to take DST rules into account. Currently this mode is experimental and not yet recommended.



4. **File Options menu** button. This activates the File Options screen that lets you change the file name prefix of the audio recording file name. By default, the prefix is "SwiftOne," but you can change it to anything with valid alphanumeric values up to 8 characters. The Recording File Size option lets you choose how big a single audio recording file can be. The audio length in the recording file depends on the sample rate set in the Gain and Sample Rate Menu activated by the Bullet #5 button. Typically, it's a good idea to set the file size to capture the audio length you want to capture in a single file. For example, a 32kHz sample rate set for a 57 MB file will give you 15 minutes of audio per file.

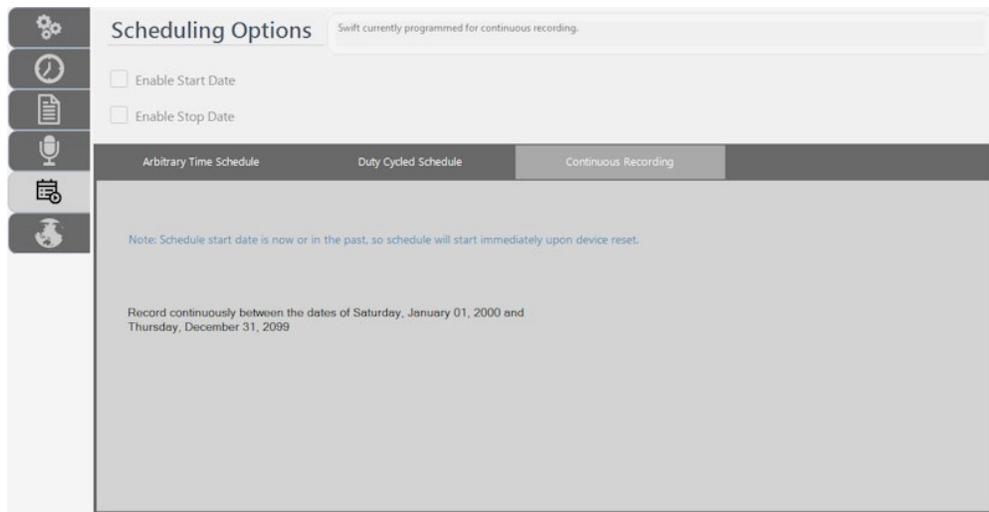


6. **Gain and Sample Rate menu** button. This activates the Gain and Sample Rate screen, which lets you change the microphone input gain to 40 dB. Every 3 dB gain doubles the sound input level. You should set the dB gain so that the recorded sound is loud enough to capture the dynamic sound range for your recording without saturating the audio input. If the gain level is too high, the sound clipping will occur along with sound distortion. The Audio Sample Rate option lets you set the recording sample rate. Set the sample rate according to the Nyquist frequency (folding frequency) to capture the interested sound frequency you want to observe without aliasing. For example, a bird song is typically in the range of 8kHz and 10kHz, and to capture it, you need the sample rate to be 32 kHz so that the folding frequency is at a 16 kHz peak value. This means you will record sound between 0 Hz and 16 kHz without aliasing, which is perfect for capturing a bird song.

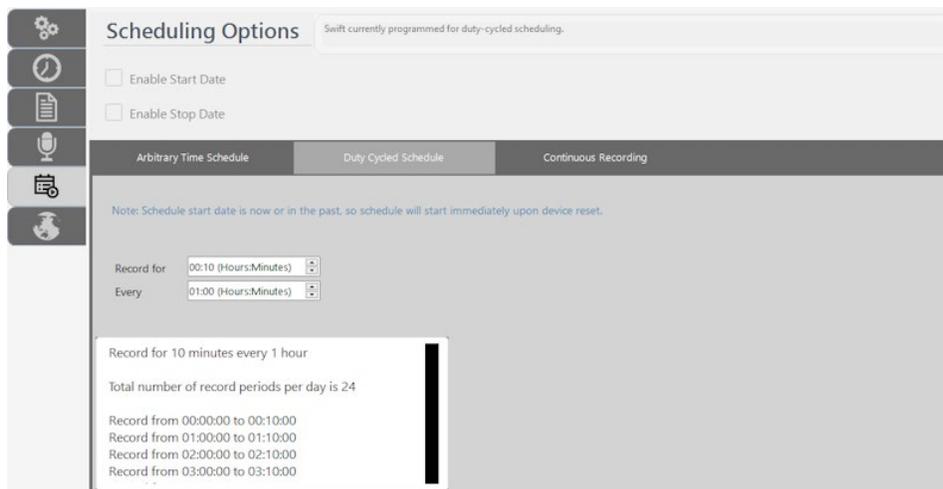


7. **Scheduling menu** button. This activates the Scheduling screen that lets you set the schedule type and the specific schedules for the selected type. There are 3 different schedule types - 1) Continuous, 2) Duty Cycle, and 3) Arbitrary. By default, the recorder is set to the Continuous Recording mode.

- a. **Continuous Mode:** the recorder records the sound from 00:00 AM to 11:59 AM every day from the start to the stop. If the start date and stop date options are not checked, the dates are set from January 1, 2000, to December 31, 2099, which means the recorder will start recording as soon as you turn the unit on. One minute is reserved before midnight at the end of the day to allow the recorder to do housekeeping on the system files and the clock scheduling.



- b. **Duty Cycle Mode:** The recorder will record in a periodic pattern mode based on your duty cycle choice. You can choose from many combinations, and the schedule pattern will be shown based on your selection.

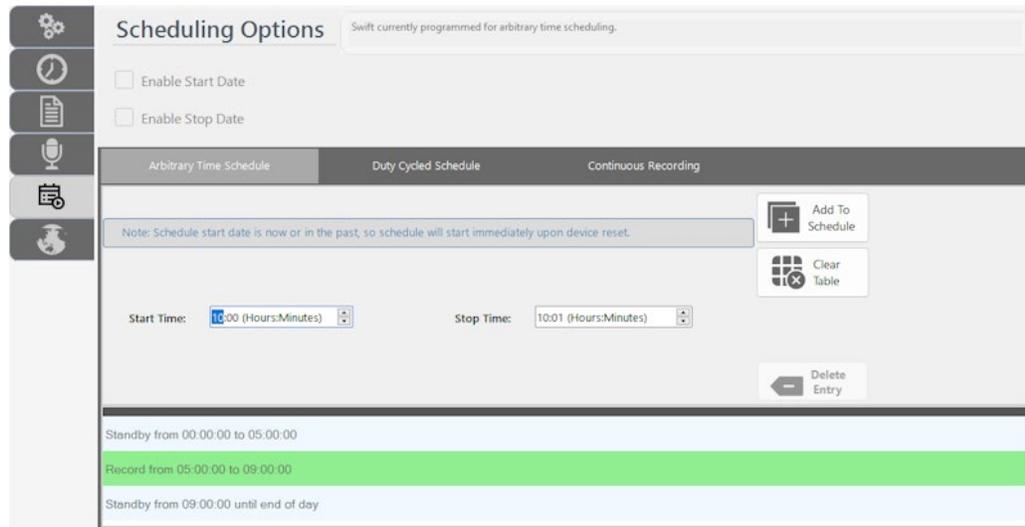


- c. **Arbitrary Mode:** this mode lets you set arbitrary recording intervals of up to 20 schedules. The schedule can be as short as 1 minute. It's recommended that you always have at least one schedule that starts at 00:00:00 to ensure that the recorder is activated after midnight. Some recorders don't start the schedule reliably without at least a midnight schedule.

****Setting a 00:00:00 to 00:01:00 schedule is recommended if none of your intervals starts at midnight.**

The schedule can be added by selecting the start and stop times and then clicking the "Add To Schedule" button. The green entry indicates the schedule interval that you add. The light blue intervals are automatically added to show when the units are not recording.

You can remove the schedule interval by clicking on the green entry and the "Delete Entry" button. You can clear the schedule by clicking the "Clear Table" button. You'll notice various messages appearing as you select and change the Start and Stop times. The system tries to warn you whether the selected time interval is valid.



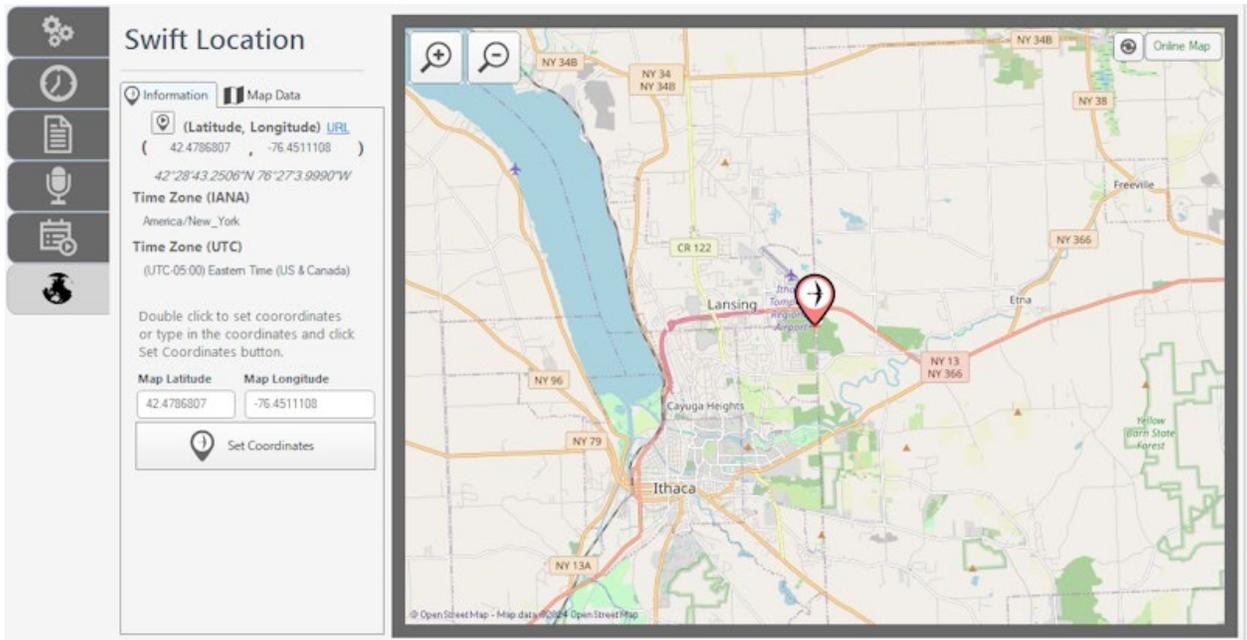
- 8. **Location and Time Zone menu** button. In this mode, you can select the deployment location of your recorder. Double-click on the map to set the

location. Click the Save Icon () in the lower left corner of the screen to confirm the location placement. If you know your location's exact Latitude and Longitude, you can type them in the Map Latitude and Map Longitude text box entries and then click the "Set Coordinates" button to set the location. Again, click the Save Icon to confirm the location placement. The assigned location to the SwiftOne recorder will be used to determine the location of the time zone, which will also affect how

the daylight savings time mode is calculated.

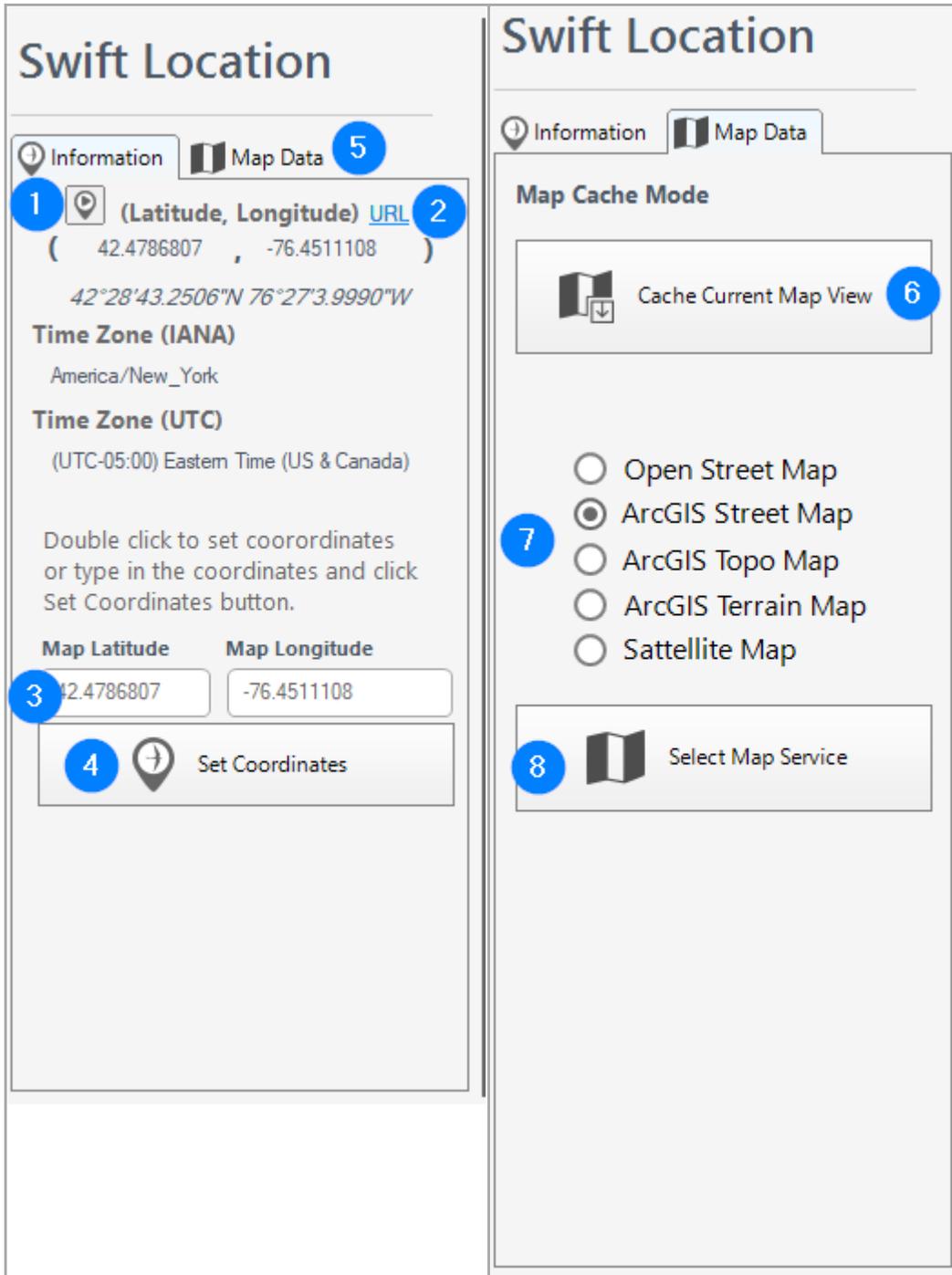
Setting the location before setting your recorder's clock time is important. You want to set the clock time to reflect the local time at the selected location.

For example, if you want to deploy your unit near [Lodja, Democratic Republic of the Congo](#) (Lat: -3.5134211, Long: 23.2800293), first navigate to that location and double click to set the pin on the map and click the Save Icon. Now go to the Date and Time menu, enter the actual local time at Lodja, DRC, in the Sync to Manually Set Time option, and click the "Update" button. The time on the SwiftOne would correctly reflect the location at the chosen location. The system will also correctly indicate that the time is UTC +02:00. You can verify this by opening a web browser and using a Google Search engine. Type "Time in Lodja, DRC" in the search and note the time result. Next, type "Time in UTC" in the search and note the time result. You'll see that the time in Lodja is precisely 2 hours ahead of the UTC time.



The map can be panned around by clicking and holding the left mouse button on the map to drag around to explore the map. The mouse scroll wheel can zoom in and

out on the map. The Zoom Icons ( ) on the upper left corner of the map can also be used to zoom in and out of the map. Refer to the image below showing different blue bullet points:



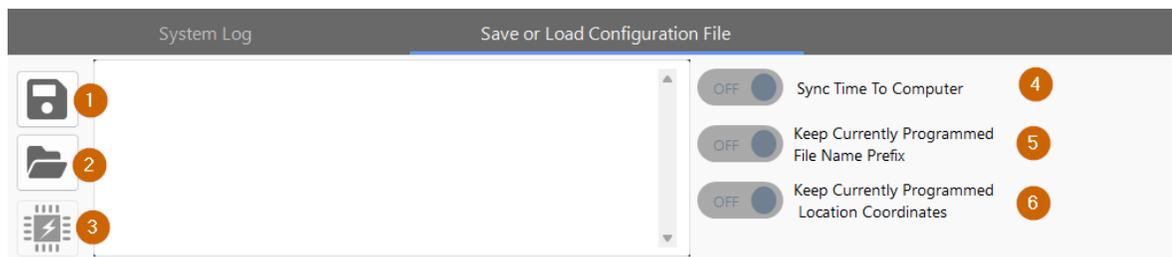
- **Blue Bullet #1:** The "Goto Coordinates" button lets you jump to the current selected map location by clicking it if you navigate the map and want to return to your set location.
- **Blue Bullet #2:** Google Map URL for the selected location. When you click the URL link, the location should open in a web browser on Google Maps.

- **Blue Bullet #3:** Manual Latitude and Longitude Text Box Entries. If you know the exact coordinates of your deployment location, you can type them here and click the "Set Coordinates" button to pin the location on the map. Make sure you click the Save Icon to confirm setting the location.
 - **Blue Bullet #4:** Set Coordinates button - lets you set the location to the manual coordinates set in Blue Bullet #3 entries.
 - **Blue Bullet #5:** Map Data mode selection. This menu lets you choose a different map mode to make your navigation more useful. For example, use the Satellite Map mode to see the actual satellite map of the viewing region. ArcGIS Street Map mode might be helpful if you want to see the terrain and the map labels simultaneously.
 - **Blue Bullet #6:** Cache Current Map View - if you plan on using the maps without an internet connection, you can use this button to cache the map data on your computer hard drive. The caching speed depends on how big of the map viewing area you want to see. Zooming in and caching the map to reduce the viewing area is faster. It could take several minutes to cache the entire world map. Please use caution when using this function. The caching can be aborted by clicking the ESC button on your keyboards multiple times since the map is getting cached in multiple zoom levels, and you have to escape from each save level. Only the Open Street Map type can be cached due to licensing reasons.
 - **Blue Bullet #7:** Map Mode Type selection. There are 5 map types you can select. You can play around to see which works the best for your map navigation. Once selected, the map has to be set by clicking the "Select Map Service" button.
 - **Blue Bullet #8:** Select Map Service button - lets you confirm the selection from the Map Mode Type selection and render the map on screen. Depending on your internet connection speed, the map rendering time could differ.
9. SwiftOne Recorder Serial Number. This value indicates your hardware serial number, unique to each SwiftOne recorder. This number helps troubleshoot the unit when you contact us for technical support.
10. SwiftOne Connectivity Indicator. The Swift Bird icon will turn green when the computer detects the unit via a USB connection when plugging in. The icon turns red when there's no SwiftOne recorder on your computer.

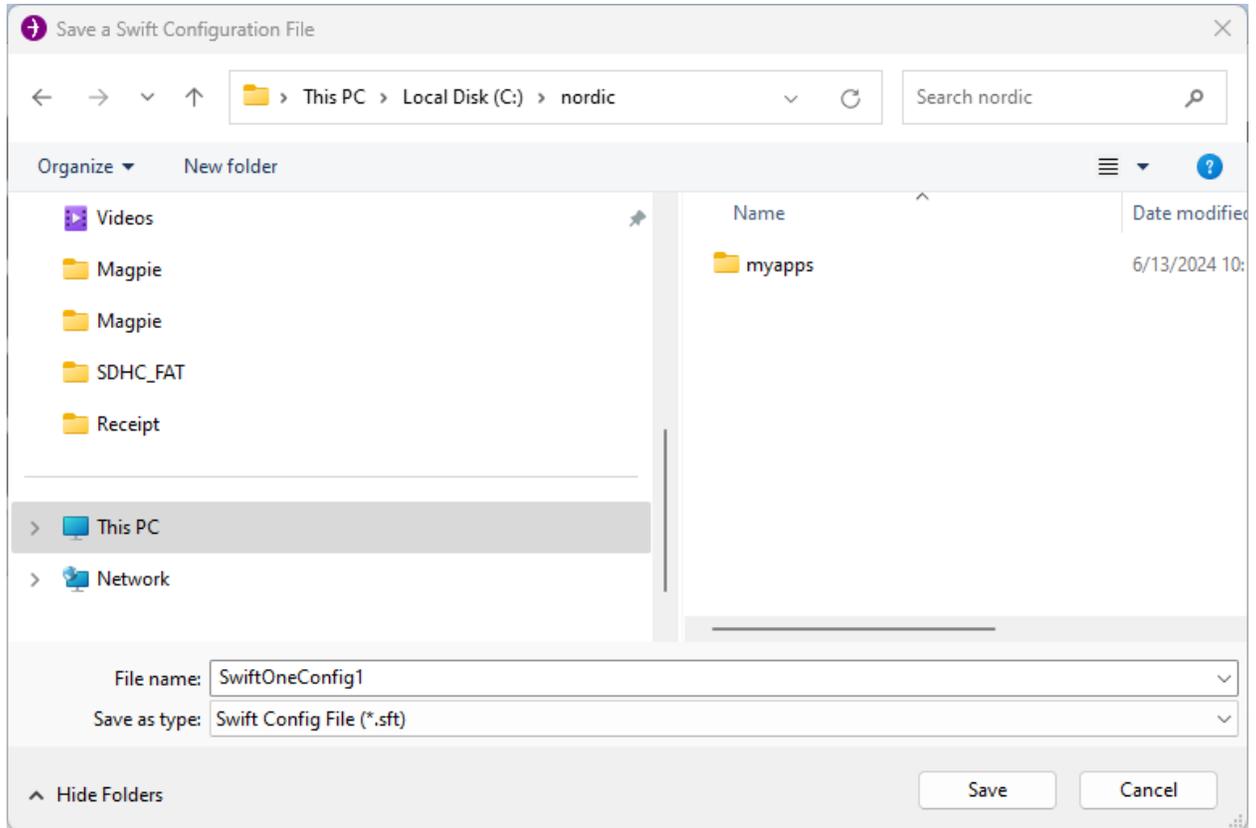
Sometimes, the unit is undetected if you have a faulty USB cable (or a non-data/power-only cable). The SwiftOne unit might also not be detected if you use a USB hub, depending on the USB hub model and brand. Additionally, computer peripherals like a gamepad or a particular model/brand of mouse can interfere with the SwiftOne recorder detection. It's recommended that you have as few

peripherals connected to your computer as possible if you have trouble detecting the SwiftOne recorder when plugging the unit in via USB.

11. Time Format selection for the Summary Screen. You can toggle between a 24-hour display mode or a 12-hour display mode (AM/PM). This is for the time format display on the computer, which doesn't affect how the recorder operates.
12. Mode display window. This portion changes according to which menu button you click, and the relevant options will be displayed according to the chosen menu.
13. System Log Button. This button toggles the system information view display in the region indicated by Bullet #14. This view contains metadata information for your SwiftOne recorder every time you connect a recorder to your computer via a USB cable. The history of the units is kept, and the newest information is at the top. You can save the information to a file using the "Save Log Entries to File" button (). You can also erase the view using the "Clear Log Entries" button ().
14. Save and Load Configuration File mode. This allows the user to save the recorder's current configuration to a local file on the PC. The file can then be loaded into the Configuration Utility to replicate the same settings on a different recorder.



To use this feature, first configure the unit. Then click the "Save Configuration File" button (Orange Bullet #1) () to bring up the Save File dialog on your system. Give the file name something meaningful and save it to a location on your computer where you can find it again.



Now load this same file or any other saved configuration file (*.sft) that you may have into the Configuration Utility by clicking the "Load Configuration File" button (Orange Bullet #2) (). For this example, you can locate and load the configuration file you saved in the previous step. You can preview all the settings in the text box next to the buttons to see the loaded values from the file. The settings should be the same as what we have on this recorder. There are 3 additional options you can pick (Orange Bullets #4, #5, and #6) to tweak what you want to configure the recorder connected to your PC.

****Note:** the configuration file created by the older SwiftOne Configuration Utility is not compatible with this operation. Loading the older *.sft file can lead to schedule corruption.

Orange Bullet #4: Sync Time To Computer—When toggled to ON, this will automatically sync the computer's time to SwiftOne. If, for some reason, this doesn't work, you can always update the time in the **Date and Time** menu.

Orange Bullet #5: Keep Currently Programmed File Name Prefix - when toggled ON, the existing file name prefix will not be overridden by the name prefix from the loaded settings. If this fails, you can update the name prefix in the **File Options** menu.

Orange Bullet#6: Keep Currently Programmed Location and Coordinates—when toggled ON, the existing Location Coordinates will not be overridden by Locations loaded from the configuration file. If this does not work, you can update the **Location Coordinates in the Location and Timezone** menu.

Usually these three options are disabled ("OFF") when you load a configuration file.

You can now unplug the current SwiftOne recorder from the computer and connect to a new one. The loaded settings will stay in this view. When the new SwiftOne recorder is connected, you can program the loaded settings to this recorder using

the "Program Configuration File to SwiftOne" button (Orange Bullet #3) ().



A Save Icon will pop up briefly to indicate that the settings are getting programmed on the connected SwiftOne recorder. You can verify the settings by going back to the **Setting Summary** menu.