



Swift Recorder Maintenance Suggestions

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Document revision history

Revision	Revision date	Revision details
1.0	1/14/2020	Initial version of the Maintenance Suggestions created

Introduction

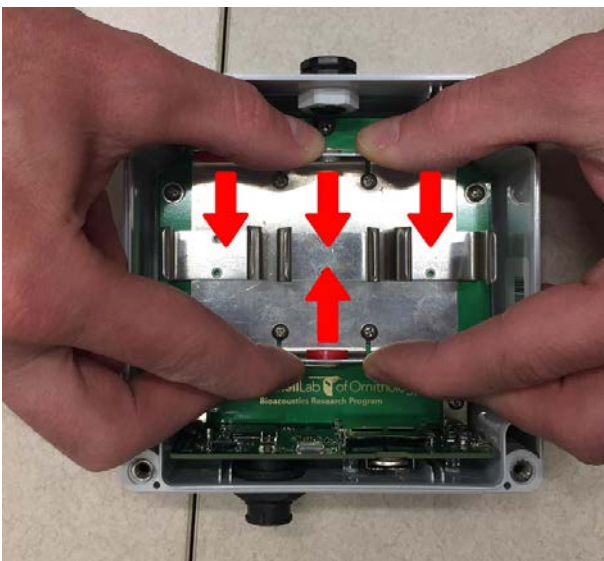
This document contains several maintenance suggestions to check before deploying the recorder. Briefly checking these suggestions will help insure reliable operation

Check D cell battery connections

A good battery connection is important for reliable operation. If you notice intermittent power interruptions it may be because the battery terminal connections are becoming loose. The vertical battery holder “slats” may begin to bend outwards after repeated use, resulting in a small gap in the location shown below:

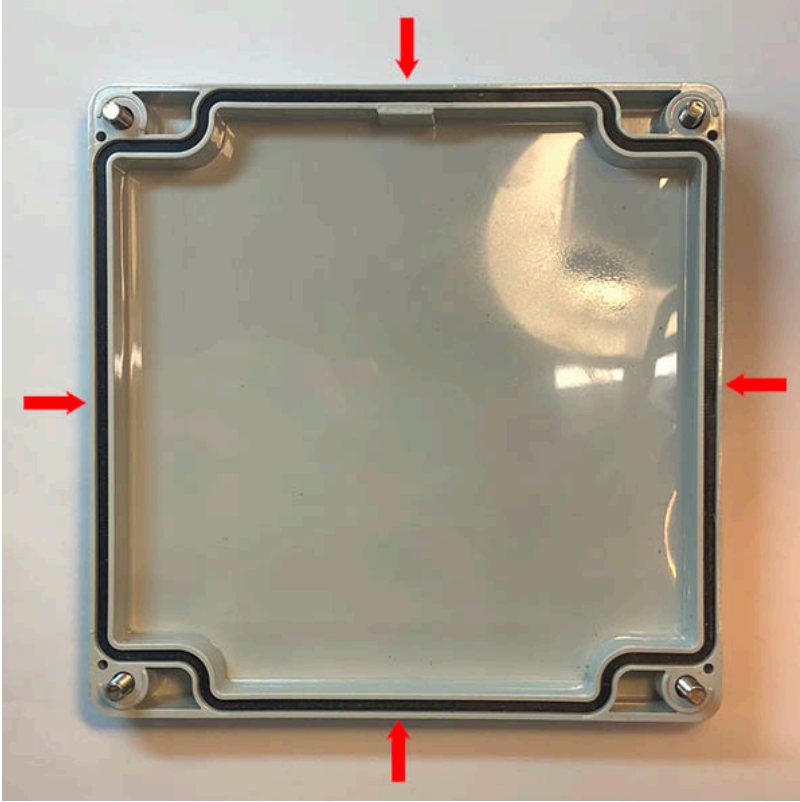


The battery holder slats may be bent back into position by using your fingers to put pressure on them as shown below. This process must be done with the batteries removed.



Check rubber gasket around enclosure lid

If you remove the enclosure lid and flip it over, you'll notice a thin rubber gasket running around the perimeter as shown in the picture. This gasket is essential for keeping moisture out of the enclosure



Visually inspect the gasket to make sure it's sitting flat in its channel. If you notice the gasket appears twisted in sections, use a toothpick or similar pointy tool to nudge the gasket back into position

Consider using desiccant packs for additional protection against moisture

Placing a small desiccant pack (or silica gel pack) inside the enclosure can provide additional moisture protection. This can be especially beneficial in very wet environments.



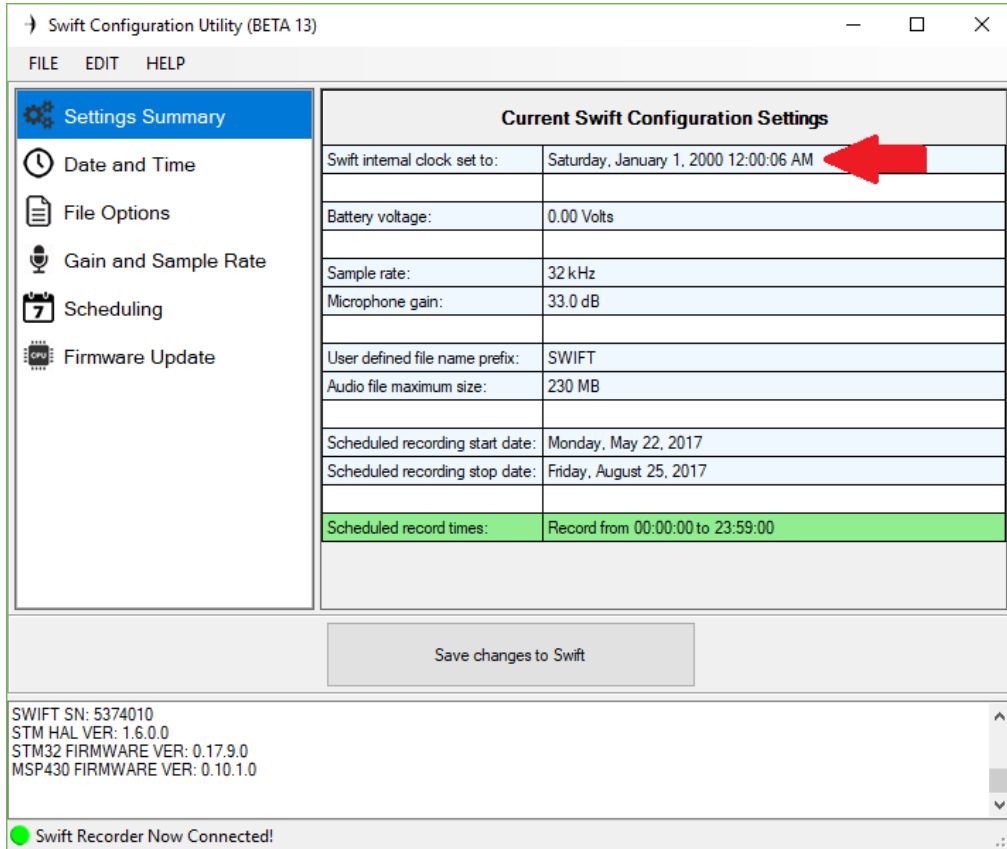
Check coin-cell battery

The coin-cell battery keeps the internal clock running when the unit is switched off or the D-cell batteries are removed. It is important that the Swift internal clock maintains the correct date and time because the following functions rely on it:

- Audio recording files are timestamped with the date and time at which they are created
- The recording scheduler relies on the date and time to turn the recorder on and off at the appropriate intervals

Since the internal clocks operation depends on the coin-cell battery, it is important to make sure the battery has not been depleted. An easy way to test the coin-cell battery is by plugging the Swift into the USB port on your computer and checking the date and time in the configuration program.

If the date reads January 1, 2000 like in the screenshot below, then the Swift coin-cell has likely died. January 1st 2000 is the date the clock defaults to when the correct date and time has not been set



The coin-cell can be replaced with standard BR1225 or CR1225 batteries. The BR1225 battery is preferred because they operate over a wider temperature range and have a little more capacity than the CR version.

We find that the coin-cell batteries typically last a year or so

Check for the most up-to-date firmware version

Current Swift Configuration Settings	
Swift internal clock set to:	Saturday, January 1, 2000 12:00:06 AM
Battery voltage:	0.00 Volts
Sample rate:	32 kHz
Microphone gain:	33.0 dB
User defined file name prefix:	SWIFT
Audio file maximum size:	230 MB
Scheduled recording start date:	Monday, May 22, 2017
Scheduled recording stop date:	Friday, August 25, 2017
Scheduled record times:	Record from 00:00:00 to 23:59:00

SWIFT SN: 5374010
STM HAL VER: 1.6.0.0
STM32 FIRMWARE VER: 0.17.9.0
MSP430 FIRMWARE VER: 0.10.1.0

Swift Recorder Now Connected!

The “STM₃₂ FIRMWARE VER” should be 0.17.9.0 or 0.17.9.1. The “MSP₄₃₀ FIRMWARE VER” should be 0.10.0.0 or 0.10.1.0