WildSonic Recorder Service Manual

Required Resources:

- **Micro SD card**: Any capacity up to 2TB
  - **Recommended:** SanDisk Extreme Pro
    - [SanDisk Extreme Pro 64GB microSDXC UHS-I, V30](#)
    - [SanDisk Extreme Pro 128GB microSDXC UHS-I, V30](#)
    - [SanDisk Extreme Pro 256GB microSDXC UHS-I, V30](#)
- **Micro SD card Reader:**
    - **Recommended:** [SanDisk MobileMate USB 3.0 microSD Card Reader - SDDR-B531-GN6NN](#)
- **21700 Li-ion batteries** x 2 batteries
  - **Recommended:** [AMS NMC 21700 5000mAh (3c) Lithium-Ion Battery](#)
- **Battery Charger**
  - **Recommended:** [Nitecore New i4 Battery Charger](#)
- **Large-head Phillips #2 Screwdriver**
- **Dry towel** or moisture-absorbing cloth
- A windows computer / laptop to perform device configuration using the app.

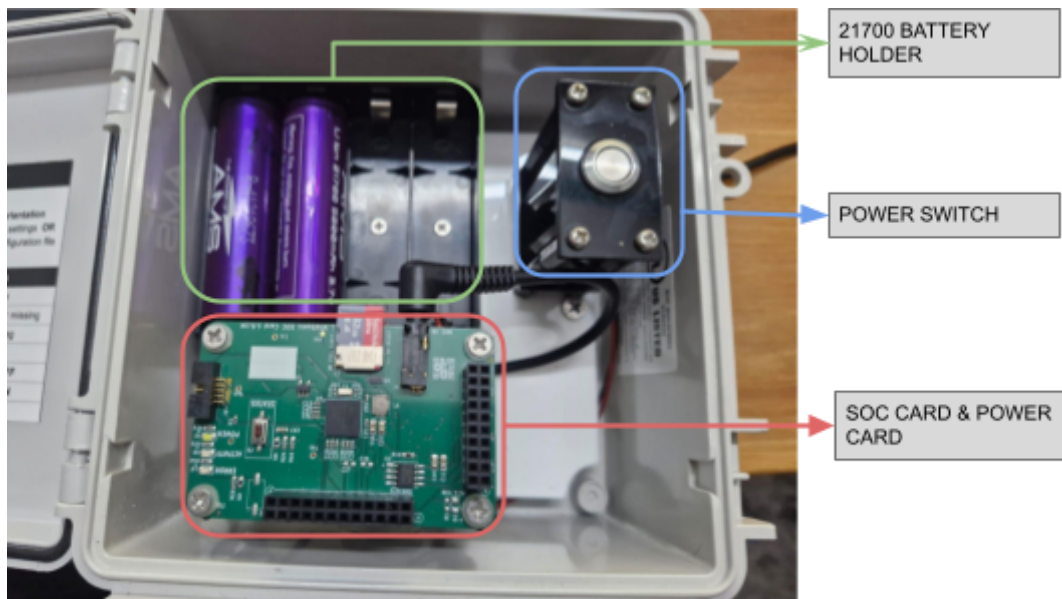## Precautions Before Opening the Recorder Unit:

Moisture Removal:

- Ensure to wipe away all moisture from outside of the plastic enclosure.
- Rotate the unit in different directions to remove any hidden moisture around the lid.
- Properly drying the unit is crucial to prevent water damage upon opening.
- Insert silica gel packet(desiccant) to absorb any moisture ingress during installation

Device Overview:

The Wildsonic Recorder consists of following key components, shown in the figure:

- **Battery Holder:** Designed to power the device using 21700 cell batteries. The holder can accommodate either four (4) or five (5) cells depending on the required configuration. At least 2 cells must be installed for operation.
- **Power Switch:** Used to switch the device *ON* or *OFF*.
- **Main PCB and Power PCB Assembly:** A stack of the main working board and the **Power card**, they perform audio recording and storage to the SD card.
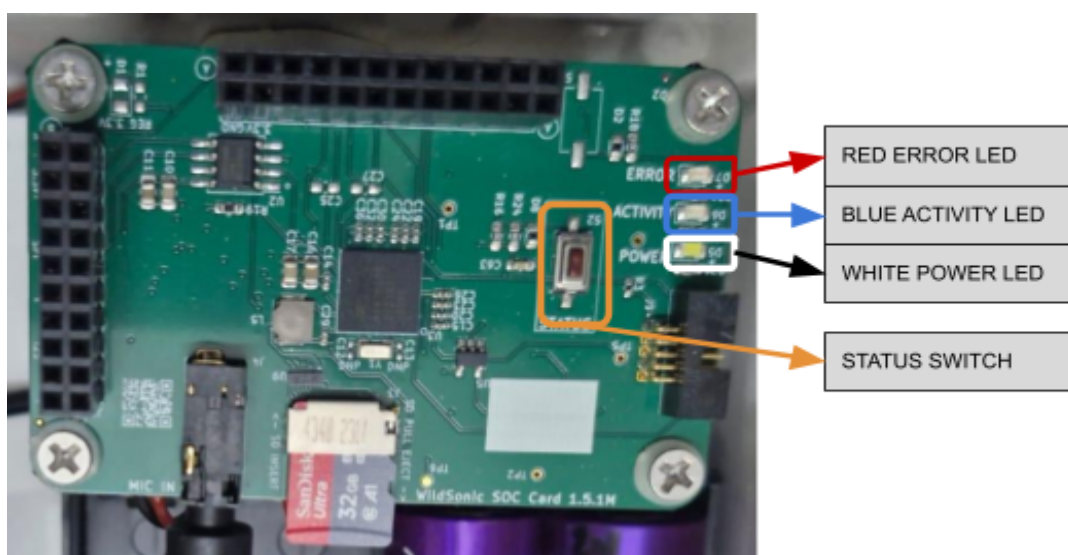
Fig 1.1 : Key parts of a WildSonic recorder

LED Indicators:

LED indicators will be in OFF mode and will activate once STATUS switch is pressed

- **White LEDs**: Power indicators
  - Blinking
    - Low battery
  - ON / OFF state indicates device in ON/OFF state
- **Blue LED**:   Activity indicator
  - **Blinking**:
    - Device is still recording
  - **OFF**:
    - The device is in a sleep cycle state
- **Red LED**: Error indicator
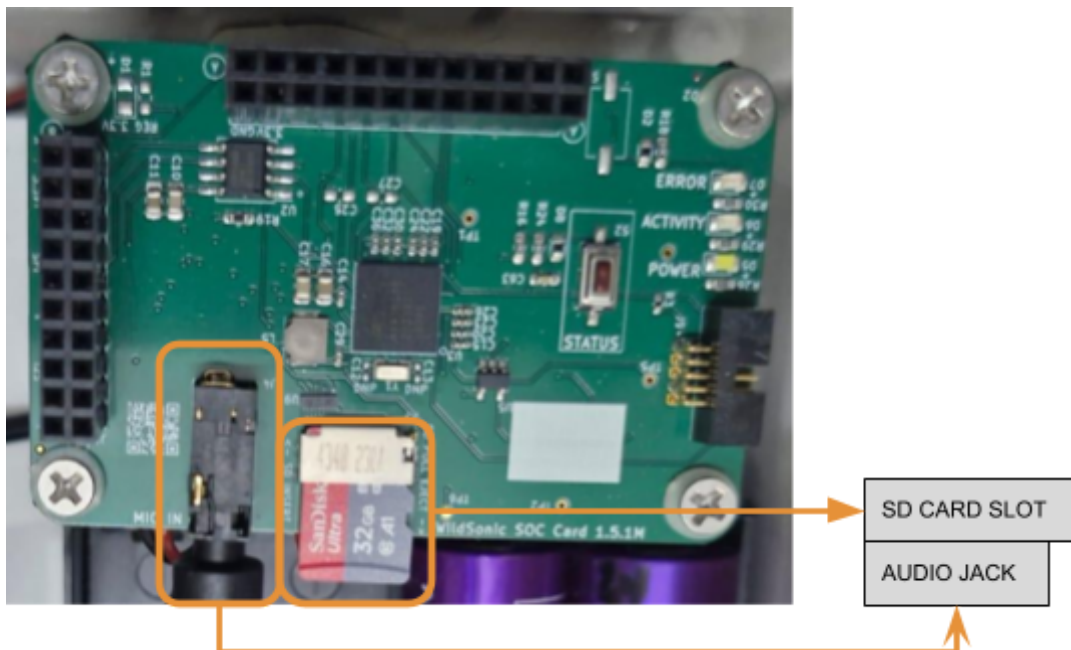 - Indicates an error if **blinking** (SD card is faulty/missing)

Fig 1.2 : LED indicators on the WildSonic PCB

WildSonic Recorder		
Quickstart	1. Check that the device is **OFF** 2. Insert batteries in **correct +/- orientation** 3. Insert blank **SD** card for default settings **OR** Insert **SD** card with optional configuration file 4. Turn **ON** the recorder	
Guide to LEDs (press **STATUS** button)		
ERROR LED (Red)	Off	No error
	On	SD Card faulty or missing
ACTIVITY LED (Blue)	Off	Not recording
	Blinking	Recording
POWER LED (White)	Off	Recorder is **OFF**
	On	Recorder is **ON**
	Blinking	Low battery

Replacing the Micro SD Card:

1. **Open:** the recorder unit
2. **Power Down**: Ensure the system is powered OFF by the Power switch in OFF position.
3. **Micro SD Card**:
   - Temporarily remove the audio jack connection from the 3.5mm audio port.
   - Remove the old micro SD card from the slot.

Fig 1.3: Figure to show the key parts for a SD card replacement.

4. **Adding Configuration file to the New SD Card**:
   - Insert the empty Micro SD card into a Micro SD card reader on your PC.
   - Download the WildSonic Configuration INI File Generator software utility (WildSonic Config App.exe).

     Download WildSonic Config App

   - Open the utility.
   - If unsure, leave the values at default.
   - Set the system time offset (in seconds) based on the time it takes to complete the remaining steps 4-5.
   - Click "Save Config" and select the Micro SD card root directory as the destination folder.

WildSonic Configuration INI File Generator 1.0.1

System Time Offset ⑦
60

Sampling Rate ⑦	Lower Freq ⑦	Upper Freq ⑦
48000 ▾	0	100000

Number of Channels	Bits per Sample	Mic Gain ⑦
1 ▾	16 ▾	0

Time Per audio file ⑦	Sleep time ⑦	Folder Structure ⑦
3600	0	daily ▾

Date Range ⑦ : YYYY ▾ / MM ▾ / DD ▾ - YYYY ▾ / MM ▾ / DD ▾

Time Range ⑦ : HH ▾ : MM ▾ : SS ▾ - HH ▾ : MM ▾ : SS ▾

Days of Week ⑦ : ☑ Mon ☑ Tue ☑ Wed ☑ Thu ☑ Fri ☑ Sat ☑ Sun

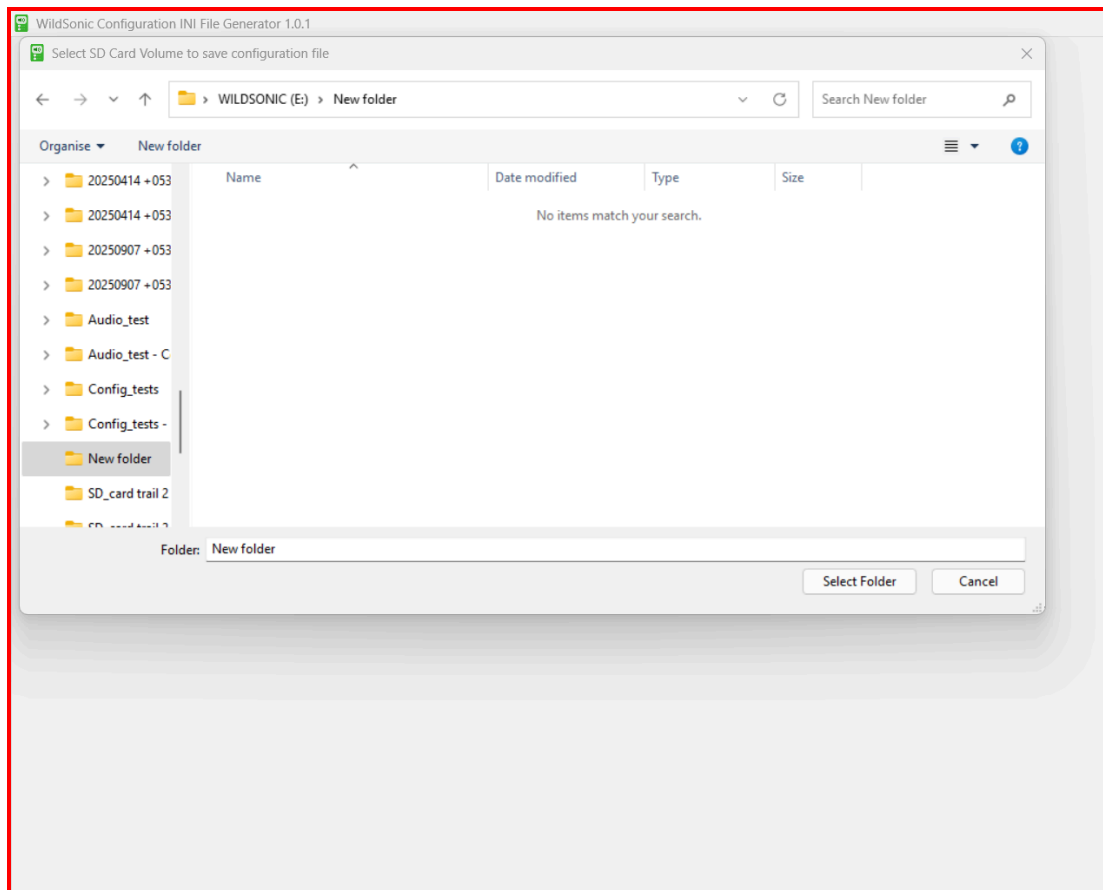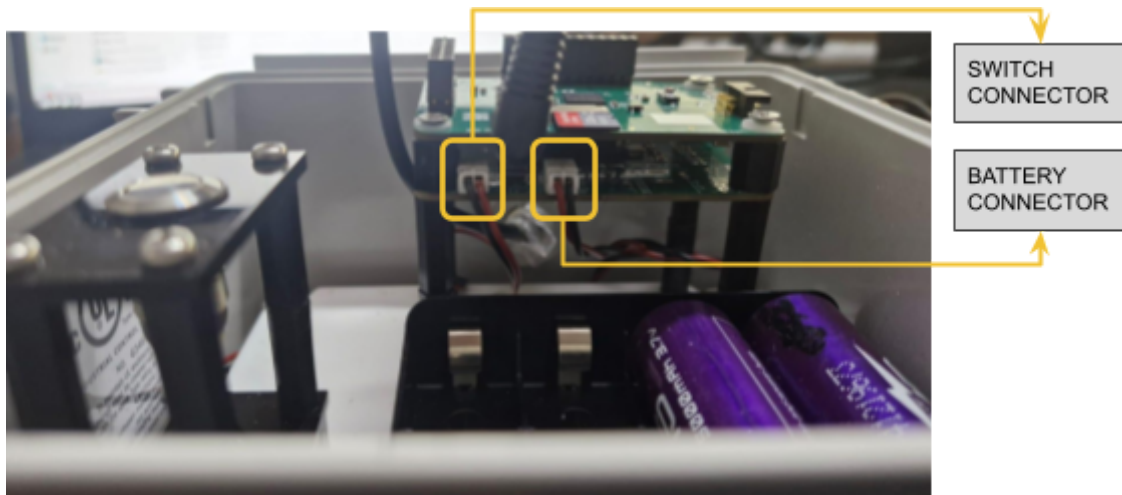| Transmission Mode ⑦	SMS Status Frequency ⑦
4G ▾	3600

Save Config

About

5. **Final Steps**:
   ○ Eject the Micro SD card from your PC.
   ○ Insert the configured Micro SD card into the device's Micro SD card slot.
   ○ Reconnect the Mic audio jack and any other previously disconnected connections.
   ○ Power on the device by pressing the power switch
   ○ The Activity LED (White) should blink.
   ○ If the Error LED (RED) is blinking or ON, power off and then on again. The Activity LED (White) should resume blinking.
   ○ Close the lid and secure the device.

Replacing the Battery:

- **Clear all extended cables across the boards.** *Precaution: Take note which cable is connected to which jack before disconnecting*:
  1. Disconnect the Switch and Battery JST connector from the board.
  2. Disconnect audio jacks.

1. **Replace the batteries**: Insert the battery, following the +/- polarity indicated on the battery holder. *Properly executing this step is crucial to preventing damage to the unit*.

2. **Reconnect cables**:
   a. Reattach audio jacks.
   b. Reattach the Switch and Battery JST connector to the board.

Remember to follow these steps carefully to maintain the functionality and longevity of your WildSonic Recorder. 🎙️🔧