

List of changes made to Larson Davis SoundAdvisor Model 831C1

# SoundAdvisor Model 831C Version 5.3.0

**March 2025** 

# *Improved*

Cloud Push – To prevent issues caused by importing an incomplete measurement file folder, it is
now initially copied into a subfolder named ".TEMP" under the set path when pushed to the
cloud storage. Additionally, each individual file within the folder is given a temporary ".partial"
extension during the copying process. Once the upload is complete, the full measurement file
folder is moved to its final location.

#### **Fixed**

- 2. **Ln Percentile label** Fixed an issue where the Ln Percentile page incorrectly displayed NF30 labels as " $L_{NFn}$ " instead of " $L_{\omega\tau n}$ " labels, such as " $L_{AS10.0}$ ", when this option was not installed. This issue affected only the labels on the 831C UI's Ln Percentile pages. Data files and reports continue to use the correct labels.
- 3. Leq page Peak value Resolved an issue where the  $L_{\omega pk(max)}$  metric on the Overall and Current Leq pages showed the same level as  $L_{\omega pk(live)}$ . Other pages correctly displayed this metric, and data files remain unaffected.

# SoundAdvisor Model 831C Version 5.2.2

January 2025

#### **Fixed**

1. **Event Time History** – Fixed an issue where event time history records would end before collecting post-trigger samples. This issue affected firmware versions 5.2.0 and 5.2.1.

## SoundAdvisor Model 831C Version 5.2.1

December 2024

#### **Fixed**

 Enable Time History – Fixed an issue where the Enable Time History setting would be disabled when powering on the meter or changing instrument modes. This issue affects firmware version 5.2.0.

# SoundAdvisor Model 831C Version 5.2.0

**November 2024** 

### Added

1. Room Acoustics – Added NC and RC measurements.

## *Improved*

- 2. **Event Triggers** Peak detector triggers will now qualify an event immediately.
- 3. **PRM2103 Cal-Check** Verify calibration tones are off before resuming after an Auto-Cal-Check.

<sup>1</sup> Note: Numbers in parenthesis such as "(3210)" are an internal tracking number.



4. **PRM2103 Overload** – Reduced the overload level by 2.0 dB when using a PRM2103 to match the linearity range with a 100-foot cable.

# SoundAdvisor Model 831C Version 5.1.2

August 2024

Fixed

2. **WiFi Access Point** – Fixed configuration for access point mode. In firmware versions 5.1.0 and 5.1.1 the wireless network would fail to initialize as an access point. Other network interfaces and wireless station mode were not affected.

# SoundAdvisor Model 831C Version 5.1.1

**July 2024** 

Improved

1. **GPS movement alert** – The alert now shows the time the movement was detected. The speed field of the alert has been updated to include both the speed and direction of travel at the time the alert was sent.

#### Fixed

- 2. **File download** Fix an issue where SDK users calling "/download" that interrupts a current file download could keep that file locked preventing it from being downloaded again until reboot.
- 3. **File list** An SDK user requesting "/sdk?func=getDataFileList" will now filter the file lists by the path type specified when the file list was built. From firmware version 4.5.0 to 5.1.0, the response would contain files from both Internal and USB but mislabeled as the specified path type. G4 and the SDK call "/sdk?func=getManifestList" were not affected by this issue.
- 4. **Overall Ln Percentiles** Fix an at most -0.1 dB offset when calculating statistics index which now matches Spectral Ln table calculations.

#### Known issue

5. **Interrupted download** – Since firmware version 4.8.1, if a download over USB interrupts a download over TCP all downloads over TCP will fail to start until reboot.

# SoundAdvisor Model 831C Version 5.1.0

**June 2024** 

#### *Improved*

1. **System stability** – Certain USB kernel drivers could consume all available resources when an error is encountered resulting in the 831C failing to store data or lock up. Added improvements and checks to recover from these issues.

## SoundAdvisor Model 831C Version 5.0.0

**April 2024** 

#### Fixed

1. **Event triggers are now properly saved** – Fixed an issue when a measurement setup is set to active, if the event triggers changed, those changes were temporary and would revert to old settings after a reboot. This firmware ensures the event triggers are saved. For a workaround with older firmware, after recalling a setup, making any change to the active setup will cause all settings including the event triggers to be saved.



# SoundAdvisor Model 831C Version 4.9.6

January 2024

**Fixed** 

1. **Ln Percentiles range correction reverted** – The maximum categorized input level is 199.7 dB to remain compatible with previous versions of G4. This fixes an issue introduced in 4.9.5 where the Spectral Ln table displayed the data incorrectly in the G4 spreadsheet.

# SoundAdvisor Model 831C Version 4.9.5

December 2023

**Fixed** 

- 1. **FFT Data with Microphone Correction Filters** When using a transducer type other than a microphone, microphone correction filters could still be applied in FFT Mode. If the Mic Correction setting was set to "Off" the data was unaltered by the filter. Microphone correction filters are now automatically disabled when using other transducer types. This is only applicable to meters with the FFT option enabled.
- 2. **Date Filename sequence** When the Daily Auto-Store frequency is shorter than once per day, removing files from the 831C during the day could cause the filename sequence to restart. This fix ensures filenames are unique, avoiding overwritten data on cloud storage.

# SoundAdvisor Model 831C Version 4.9.2

October 2023

**Fixed** 

- 1. Time zone is now correctly applied to the Single/Daily Block system wakeup timers. Previously the wakeup timers ignored time zone and only used UTC time, which caused the meter to not wake up at the appropriate time prior to a measurement.
- 2. Format command properly initializes the AudCal database for use, reboot is no longer required.
- Added validation to ensure all sensitivity parameters are correctly maintained during reset processes. This prevents the rare occurrence of an entire measurement file with corrupt data after a reset.
- 4. Fixed issue where error details were left blank when failures occurred during cloud service authentication or cloud push. This affected 831C versions 4.6.2 through 4.9.0.

### SoundAdvisor Model 831C Version 4.9.0

**June 2023** 

#### *Improved*

1. The meter with a PRM2103 preamplifier will verify that the Cal Check tone has turned on and off properly.

### **Fixed**

- 2. Entering invalid characters for filenames would keep the meter from displaying data files properly. These characters are now disabled. Past files can still be accessed in G4.
- 3. In rare occasions, the meter with a PRM2103 preamplifier might remain in Cal Check mode. Now the meter will end the Cal Check when the meter reaches a timeout.
- 4. AudCal: Fixed booth test certificate generation so multiple certificates can be created instead of only one.



- 5. AudCal: Extra Audiometers would show up in the generated "Audiometers Due for Calibration" report. The report would not generate unless you enabled the automatic notification option.
- 6. AudCal: Linearity would not store test data performed for frequencies other than 1 kHz. Now, the report will show the last tested frequency.
- 7. AudCal: The speech RETSPL was set at supra-aural level regardless of the specified transducer. It now follows the correct level for the chosen transducer.
- 8. AudCal: The Hearing Level test displayed results on the report with an extra column that was not labelled, shifting the data to the right and truncated the last column.

### SoundAdvisor Model 831C Version 4.8.2

February 2023

### *Improved*

1. When PRM2103 fails to report temperature and humidity, or fails to start a calibration check, the system will reset the Preamplifier automatically when stopped.

#### Fixed

- 2. AudCal: Reports work correctly when language set to French. Added New Zealand standard to Booth report.
- 3. When viewing PRM2103 details on Meter Manager or on Live Preamp page, heater would always show as Auto: Off when set to Auto.

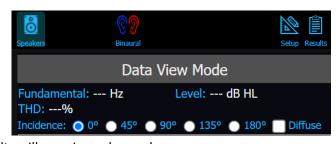
# SoundAdvisor Model 831C Version 4.8.1

December 2022

#### Added

1. AudCal supports the ANSI S3.6 (2018) and ANSI S3.6 (1989) standards. With the modifications, the user interface in AudCal includes speaker test variations in versions of ANSI S3.6. When performing a speaker test to the requirements of ANSI S3.6 1989, 1996 and 2004, the interface

remains the same with a selection for left or right speaker. Speaker tests, using ANSI S3.6 2010 and 2018, have a new selection for angle of incidence or diffuse and the top icon has changed from left/right to only binaural. When viewing test results for ANSI S3.6 2010



taken using a previous version, the results will remain unchanged.

AudCal assists booth testing in compliance with New Zealand document, "Assessment of occupational noise-induced hearing loss for ACC", page 25.
 The booth standards drop-down box contains an entry for standard "NZ ONIHL-ACC". This selection will show MPANL options for "Air", "Bone" and "Custom" (defaults to the same limits as "Bone"). AudCal will show only the seven frequencies defined by this standard for these tests.

### *Improved*

3. Downloads are more robust with communication validation.



4. Updated the menus and Setup Manager to improve navigation and responsiveness.

#### **Fixed**

- 5. During file downloads from the meter, communication would get interrupted. After time, the meter could lose communication completely and only a reboot would fix this.
- 6. Time History Options for Running Leq and Hail and Rain Accumulation would uncheck if on 100/200 ms TH period.

### Known Issues

- 7. When the meter has over 1000 files as viewed in G4 or archive folders on the Thumb Drive, the 831C's performance is adversely affected and can cause an unexpected meter reboot. To prevent this, keep the number of files less than 1000. You can do this using the automatic delete feature in the 831C.
- 8. In order to communicate with LD Atlas on iOS, the 831C cannot have security (HTTPS) turned on. Accounts still work, but security keeps the meter from talking to LD Atlas on iOS.
- 9. With Security (TLS/SSL/HTTPS) enabled, restrict the number of connections to the meter to two. Otherwise, the meter could reboot unexpectedly.
- 10. The meter supports a single download connection at a time. Each subsequent download connection will stop any current download.

# SoundAdvisor Model 831C Version 4.7.1

May 2022

#### Fixed

1. Certain strings in Italian caused the UI to lock up in G4 Live View, Setup Manager and certain graphs.

## SoundAdvisor Model 831C Version 4.7.0

**April 2022** 

#### Added

- 11. The meter now supports RT60 measurements. All RT60 measurement files now have graph support with Position Ensembles and the ability to exclude and include individual decays when imported to G4.
- 12. The meter displays the file name of the active settings and marks the name with an asterisk after you have modified active settings.
- 13. The Live pages display one second L<sub>eq</sub> and L<sub>peak</sub> levels.

#### **Fixed**

- 14. Removing USB memory did not reset the file correctly. (12600.
- 15. Email will no longer queue if hostname is blank.
- 16. Improved the microphone correction for configurations using the EPS2116 filter to have a more accurate acoustic response.
- 17. Settings: The range in dB presented with selecting the Normal or High range for OBA and sound recordings could be incorrect when +20dB Gain is checked and unchecked.
- 18. Updated the push to Dropbox feature to work with the new regulations.



19. Fixed issue where meter would restart after a push to cloud.

# SoundAdvisor Model 831C Version 4.6.6

January 2022

1. Updated internal files to coincide with G4 and AudCal.

# SoundAdvisor Model 831C Version 4.6.5

**November 2021** 

- 1. Improved File Size Estimation for FFT Measurement Histories. (11383)
- 2. A bug that caused the list of available calibrators to not be correct or save is fixed. (11513)
- 3. Added a preference to configure the meter to automatically delete files older than a preset age. (6941)
- 4. Fixed NMS044 with RV50 modem and CBL222LP issue where the RV50 power turned off for approx. 25 seconds during boot. (11624, 11383)
- Disabling Auto-Push to Cloud suspends pushing pending files instead of purging the queue.
   (11557)
- 6. Added new audio-streaming protocol for improved performance and simplified SDK API. (10836)
- 7. Changed the name of the correction WS001 to Default in the Mic Corrections.
- 8. Added the microphone correction filters to the FFT mode.
- 9. Limited compressed audio recording to 24ksps max in order to keep the meter stable. (11816)
- 10. Added compressed audio compression setting to allow High, Normal, Low, and Off. (6323)
- 11. Mask/Disable French LN Statistics meter option by default. (11556)
- 12. Fixed crash when changing from FFT PAS 20065 Tonality to FFT ISO 1996-2.
- 13. Added the ability to verify the SSL Certificate with provided CA Bundle. (10774)
- 14. New menu item added in Data Manager to push selected files to the cloud with Auto Push to Cloud enabled.
- 15. Added the Audio Calibration Constant to files, which can be used to convert the meter's recorded audio files.

# SoundAdvisor Model 831C Version 4.6.3

September 2021

1. Fixed: The Time History Lpeak held the peak from the last 100 ms of the sample period when greater than 100 ms. The Lpeak now processes the entire Time History sample period. With a Time History sample period of one minute or greater and the OBA setting Max Spec set to At Lmax, the meter already correctly calculated the Lpeak in the Time history.

## SoundAdvisor Model 831C Version 4.6.2

**May 2021** 

- 1. Feature: Firmware supporting LNE approval.
- 2. Feature: GPS information when available is included in email notifications.
- 3. Feature: The meter can send an alert email/text when GPS detects that the meter has changed position by greater than 50 meters/164 feet.
- 4. Improved: Files now delete faster and more reliably.
- 5. Fixed: The FFT's in Average, Record Count and Custom Units can be modified on the meter.



- 6. Improved: File list generation has less impact on meter performance. This is especially noticeable with large file counts on the meter and on USB.
- 7. Improved: While pushing files, if meter shuts down, the file push ends correctly.
- 8. Fixed: When weather data is enabled on the meter but has not been collected, time histories no longer appear corrupt.
- 9. Changed: The Live profile now updates even when not running.
- 10. Fixed: If triggered the overload visual indicator would stay visible, even when no longer in an overload state and be displayed when under range is detected.
- 11. Fixed: The memory usage page handles the measurement history and event time history correctly.

# SoundAdvisor Model 831C Version 4.6.0

# **March 2021**

- 1. Feature: FFT functionality has been added to work in G4 and in the meter's UI, including the use of vibration sensors with integration. Tonality for ISO 1996-2 and ISO 20065.
- 2. Feature: The weather inputs on the AUX connector are now supported for anemometers
- 3. Feature: SEA page available in the meter UI and G4.
- 4. Update: The Adjust Graph feature now has a reset to default and autoscale functions. Based on the selected units the adjustments may now descend to 1e-8.
- 5. Update: When recording time history data at periods shorter than once per second the Lpeak is for the selected period.
- 6. Update: Random incidence mic corrections for 377A15 added in System Properties > Preferences.
- 7. Improved: The display of PRM2103 temperature, humidity and serial number on the 831C has been improved to be more reliable.
- 8. Fixed: Corrupt USB thumb drive doesn't stop meter from running and the data will be stored internally.
- 9. Fixed: The Time History Meter UI has labels that fit correctly and the navigation arrows display correctly.
- 10. Fixed: On the 831C meter UI, the Measurement History tab shows the correct information after switching from a file.
- 11. Fixed: When using .ogg sound records, the meter could report incorrect file size.
- 12. Fixed: Sometimes files can display their start time as 2075-04-29 05:07:38 but corrects after download.

## SoundAdvisor Model 831C Version 4.5.2

October 2020

- 1. Feature: Addition of Rain and Hail weather data to the Time History records.
- 2. Feature: Only append Model and Serial Number to the cloud storage file path if the setting is left blank. The default path is blank and so will include Model Serial number as the last folder on the cloud storage.

### SoundAdvisor Model 831C Version 4.5.1

August 2020

1. Feature: Support added for new GPS.



- 2. Improved: Session Log entry for Sound Buffer overrun.
- 3. Improved: In scheduled run mode, the meter can do an auto cal-check when stopped.
- 4. Improved: Email addresses, with uppercase letters that are migrated to the new Accounts, can now be modified.
- 5. Improved: USB as Backup has been removed. The meter will default Data Storage to USB.
- 6. Bug Fix: Setup Manager configuration list scrolls correctly with the arrow keys.
- 7. Bug Fix: Extra invalid data could be appended to the end of the Time History. G4 correctly handled the issue while DNA did not. This firmware keeps the extra data from being appended.
- 8. Bug Fix: Pressing store without a run or zero length duration will not create a file.

# SoundAdvisor Model 831C Version 4.5.0

# May 2020

- Feature: Added user accounts that can control who can access the 831C from a network and/or
  to create user specific configurations for email and text alerts. When enabled, users are required
  to login with a user name and password in order to access certain features of the 831C over
  remote connections.
- Feature: Scheduling allows the meter to control Run, Stop, Alerts, Event Triggers and Cellular Modem functions using a user-defined schedule.
- Feature: When configuring the 831C to automatically push files the Dropbox, the authorization process has been improved and the user interface localized.
- Feature: The 831C now supports encryption of network traffic for increased security. The encryption is supported on TCP/IP port 443.
- Feature: Wind speed and direction at Lmax and max wind speed and direction over the duration of the event.
- Feature: Event Time History includes max wind speed and direction.
- Improved: Event Trigger Source reporting to include the source and trigger level.
- Feature: Events can now be triggered from specific or multiple 1/1 or 1/3 octave filters.
- Feature: Events contain all of the any level data.
- Feature: GPS function when connected to Sierra Wireless Modem.
- Feature: The Calibration tab allows for mic selection.
- Feature: Sierra wireless modem power control has been added
- Bug Fix: Audio Streaming no longer has audio pop at the beginning of the stream

# SoundAdvisor Model 831C Version 4.0.8

# January 2020

- New Feature: For SDK users, when using the API for streaming data the data streaming settings in the 831C are now remembered when establishing a new connection.
- Bug Fix: Fixed a bug that could cause the meter display to have a gray overlay and then not accept inputs.

# SoundAdvisor Model 831C Version 4.0.7

December 2019

Bug Fix: Closing the Calibration popup using the "x" would leave the meter in a locked state.



# SoundAdvisor Model 831C Version 4.0.6

**November 2019** 

- Bug Fix: RClone works correctly with G4 to authorize Drobox.
- Bug Fix: The Locked Screen with the Big Digit display would show the incorrect label.
- Bug Fix: The Event Triggers would not appear on the Measurement Properties popup menu when on the Setup Manager Tab.
- Bug Fix: Sometimes the dates on the control would change to a wrong date after selecting the desired date. This includes the fix for the Time Zone offset causing the day to appear to be the previous day when in the Eastern Hemisphere.

# SoundAdvisor Model 831C Version 4.0.5.1

October 2019

- Bug Fix: If an improper shutdown occurs the meter will recover the file numbering correctly now. When an .RCO is created the file numbering will not restart at 00.
- Some third-party security software on your desktop could put tracking files into archive files breaking the file structure for the SLM files. The files are now ignored by the meter.
- Feature: Low Frequency L(20-200Hz) added to the 1/3 Octave Overall page

## SoundAdvisor Model 831C Version 4.0.5

September 2019

• Bug Fix: After reboot the meter sometimes would come up with a grey screen; this has been corrected with this firmware.

## SoundAdvisor Model 831C Version 4.0.3

**August 2019** 

- Feature: Added configurable trigger source and level to Measurement History Interval email and text alerts, updating the property Control tab to allow users to select these options
- Feature: Added pause, run, and reset to list of conditions that will trigger state transition email and text alerts
- Bug Fix: Fixed issue where date filenames restart at sequence number 0 after reboot or when files have been removed (i.e., moved to Dropbox). Now the sequence number will only reset to 0 at the beginning of a day
- Feature: Added 1, 2, and 5 minute Daily Auto Store periods and changed user interface to show interval time rather than files per day.
- Bug Fix: Dropbox and email now will continue working when multiple network interfaces attached or the same interface repeatedly attached and remove.
- Bug Fix: Fixed a memory leak which could cause the system to run out of memory when the 831C is frequently queried
- Reduced the overall memory usage of the system

## SoundAdvisor Model 831C Version 4.0.1

**July 2019** 

 Bug Fix: Previously, system properties may be corrupted when transferring between other 831Cs or G4 LD Utility software with different software or firmware versions. Now, differences between versions are handled correctly. If concerned about possible corruption, use G4 LD Utility V4.0.1 or later to resend system properties to the meter.



- Bug Fix: A defect that caused the keyboard on the 831C to freeze and become unresponsive has been fixed.
- Bug Fix affecting 831 & 831C: Weather data displaying dashes when the value is 0.0 has been fixed and 0.0 is correctly displayed.
- Bug Fix affecting 831 & 831C: Wind compass direction would display as dashes if the direction is between 350 and 359 degrees. Now, correct direction is shown for all cases except when direction is due north (0 degrees), which still shows dashes.

# SoundAdvisor Model 831C Version 4.0.0

**June 2019** 

- Fixed default SFTP path (7029)
- Fixed NTP settings not being applied properly when transferring settings to the meter (4947)
- Fixed meter not waking from power save when the power save preference changes (i.e., turned off) (6744)
- Fixed duplicating the active calibrator, and dropping calibrator 4, when transferring settings to the meter (7014)
- Fixed not waiting for GPS time sync on boot (7030)
- Improved communication with G4 for faster connection
- Fixed Run Time being incorrect when Single Block Timer timespan between the start and end dates is greater than 24 hours
- Fixed Block Timer end date not keeping the correct day reverting to previous day when navigating back to the page after saving the settings
- Fixed: When degrees are selected for weather the live weather page would not show the indicator correctly
- Fixed issue where the session log digits lost small floating point value for calibration
- Bug Fix: Unable to maintain zoom on FFT graph in 831C
- Bug Fix: On the 3rd daily timer the start and stop times are set to the same time when only changing the start time

# SoundAdvisor Model 831C Version 3.3.1

**April 2019** 

 Bug Fix: Fixed an issue with the Settings that may cause DNA or other older software using the old SDK translator not parse files correctly.

#### SoundAdvisor Model 831C Version 3.3.0

**January 2019** 

- Features added for PTB certification
- The settings for OBA and Sound range now show the range in dBA as well as the Normal and High selection



- Changed AudCal narrow-band noise calculation to use FFT instead of octave bands. This allows
  the 831C to correctly determine the narrow band noise levels when the noise bandwidth does
  not match 1/3 octave filter bandwidths.
- Added capability to the SDK that allows the number of files and/or emails that remain on the 831C in a queue because the meter is unable to send them. Also added the ability to clear this queue using the SDK
- Updated Date Time Picker to use buttons for scrolling the selection
- The 831C will queue email and files that are to be sent. The queue has a maximum size of 25MB.
   Previously when the queue was full the newest items would be removed. It has now been changed so that the oldest items are now removed to make room for new items.
- When the run mode is set to daily timer, previously the 831C assumed the meter was stopped when a timer to run was encountered and also assumed the meter was running when a stop timer occurred and would toggle the run state. This caused the 831C to stop running if it was running when a run timer occurred and to start running if a stop timer occurred when the meter was already stopped. This has been changed so the meter will always perform the selected action, run or stop, independent of the current state.
- Fixed issue where the UI came out of sleep state while the backlights stayed off, thus draining batteries faster than expected
- Fixed problems with run-mode timers where the auto-store preference would cause the meter to not store
- When the meter is cradled in 831-INT-ET, the meter will display the IP Address from the Ethernet connected 831-INT-ET
- A period is no longer allowed within the prefix (the portion before the ".extension") portion of a filename
- Changed Running Leq to account for Linear Integration method
- Added Running Leq to Time History
- Fixed missing Time History entries that could happen with Auto Store
- Updated EPS2116 windscreen filter coefficients and calibration correction
- Adjusted FF:FF gain
- Change to turn off mic corrections during calibration
- When the preferences for the 831C specified a startup tab which was invalid, the meter UI would continually restart. This could happen if a preferences file was copied from one meter to another and the receiving meter didn't support the selected startup tab or if improperly selected through the SDK. Now when the startup tab is invalid, the meter will default to the Live tab.



- Fixed an issue where the event trigger level was reported incorrectly in the file and export
- In AudCal mode, fixed the FFT zoom when accessing the Live View in G4 or on a tablet
- Fixed the selection of a Measurement or Event to be persistent when more than one exists while accessing the Live View in G4 or on a tablet

# SoundAdvisor Model 831C Version 3.2.1

# September 2018

- Added ability to configure a static IP address
- Added a running Leq with a user selectable period from 1 sec to 1 hour. The running Leq is calculated for the current frequency weighting for the broadband signal.
- Added more event triggers, including the new Running Leq, which can be configured on the new Measurement Properties tab Event Triggers
- Updated the name of Triggers to Exceedance Triggers to show that they are for Exceedences
- Added the ability to send an email or text alert, if the Leq at the end of a measurement is greater than the Exceedance SPL 1 setting
- Fixed the duplicate Time History entry which would appear at the end of the Time Histories when pausing then stopping or when running while performing a firmware upgrade
- Fixed the first 100 ms of Time History data to use the correct TMS value
- AudCal THD fixed issue for frequencies above 5K where previous frequency data was shown for harmonics that would be greater than 20K
- Removed charger faults and cal. checks notices from Time Histories

## SoundAdvisor Model 831C Version 3.1.0

# **April 2018**

- Audiometer calibration option added to 831C (831C-AUD)
- System health notifications by HTML email and/or plain text email alerts for
  - o Memory low (25% free), out (10% free), and stopped for primary memory
  - Internal temperature too low or high
  - Low external battery warning for low battery and shutting down due to dead battery
  - Lost A/C power for systems with external battery backup. This alert only occurs if A/C power has been off for more than ½ hour and when power is restored
  - Meter stops running
  - Settings or preferences changed
  - USB memory is set for primary storage and is missing or mounted
  - Calibration due according to interval setting
- It is possible to reset the 831C from the web live view interface by selecting Menu -> Reset
- When selecting dates on the 831C, sometimes the date would be set as the previous day; this is fixed for all time zones.



- Overall data will now include
  - Min, Max and current external battery voltage measured at the end of the measurement period
  - Min, Max and current internal temperature measured at the end of the measurement period
- Support for Chinese and Thai languages has been added
- Fixed the 831C showing "insufficient power" and not charging rechargeable NiMH batteries issue
- Fixed the Set to Active where it would fail to make the selected file active and when manually changing settings the new settings didn't always store
- Fixed weather page that had trouble with switching units between degrees and compass, and missing Temperature
- Fixed an issue where changing User Preferences while running using USB storage caused the meter to switch from USB to internal memory until the next stop and store or reset. (6234)
- Fixed sound recordings where "static" was in recordings that were over-range and clipped.
- Fixed an issue where a one-minute file was created at daily auto-store when time was adjusted backwards by NTP or GPS.
- Fixed default settings files that are not restored after performing "Format Internal". (6245)
- Fixed an issue where saved Streaming Data Options (measurement controls) prevented time from updating. (6069)
- Added support for the microphones shipping with the AudCal systems as well as some legacy microphones.

# SoundAdvisor Model 831C Version 3.06

**November 2017** 

- Update to improve the demise battery operation, allowing for proper shutdown in loss of power
- Firmware upgrade process to protect against downgrading to prior than 3.06 to prevent errors reading/writing newer flash chips
- Fixed crash bug due to communication inconsistency on meter

## SoundAdvisor Model 831C Version 3.05

**October 2017** 

- Updated for recent changes to new Dropbox API
- Added gueue and additional retries for files that fail to transfer to remote storage
- Email messages queue in an outbox until successfully sent
- Certain HTML email messages now contain some instrument status information
- Fixed issues with Run Timer where timer would count incorrectly



## SoundAdvisor Model 831C Version 3.04

**June 2017** 

- Added ability to automatically push data files to SFTP or Dropbox. Configuration is done through
   G4. Files are transferred after they are stored on the 831C.
- Added notification to inform user if there is not enough power available to charge the batteries (i.e., connected USB devices require more power than will allow concurrent charging)
- Using the touchscreen will keep the backlight on
- Changed Light Theme cursor color so that it is more visible on the Calibration History and Calibration Check Plots
- Weather and Touchscreen options are now maskable
- Added check for files on the USB when automatically generating file names
- Fixed an issue where the GPS would sometimes not be detected when booting

# SoundAdvisor Model 831C Version 3.03

May 2017

- For time history periods greater than 1s previously the meter would report the wind speed and direction for the last 1 second sample. Now the meter reports the average over the sample period.
- Added support for NMS044 with a new setup file that will appear at the top of PC list
- Time corrections will now only occur when stopped. If Auto-Store is enabled, the time sync will happen between runs.
- The "File Not Available" indicator was not being display correctly and now models the behavior
  of the file system
- Improvements to battery charging, allowing for better indicators and messages to be provided to the user
- The Big Digit trigger point uses the correct level from the meter to indicate that the level has been exceeded
- Mic correction constants have been updated
- Event Time History post trigger samples have an appropriate value matching the time slices that come from the meter on the time sync boundaries
- Added upgrade progress indicator, denoting that an upgrade is in progress
- Time zone will now update from the Time tab when pressing the "Set Time" button and will
  update before the new time is set on the meter. If EST is selected and the time is set to 07:00,
  and the button is pressed the meter will set EST and then set the time to 07:00. It does not
  convert the time before changing the time zone.
- Fixed issue with WiFi network passwords; the password is now correctly saved when using G4, allowing connection over WiFi

# SoundAdvisor™ Model 831C Release History



- Improved inter-communication between meter and G4
- Updated Options tab to ensure most recent properties are displayed
- A property on the PC side for event notification via email is no longer on the PC side and can only be set on the meter.
- Improved file system to correctly allow opening of data files; when opening multiple files in succession the meter will now handle these files.
- Update to fix the Communications tab where the IP Address will be updated at regular intervals so that changes to the address will be shown on this tab
- The Overload indicator only displays when the OBA is selected and on
- Playback of Sound Recordings on Android is improved allowing the user to press the play button
  if audio does not start immediately
- Modified main view of Awesome.html to work with more browser sizes where some display widths would cause text to wrap incorrectly changing the display to look incorrect
- External voltage is now monitored in power-save mode

### SoundAdvisor Model 831C Version 3.02

**April 2017** 

- Fixed issue with battery charging and improved power control
- Improved clock accuracy on reboot

# SoundAdvisor Model 831C Version 3.00

**March 2017** 

• First Release