



# Release Notes

## Arc Software 2.2

March 2019

Please contact the Cadwell Application Support department or your local representative if you have any questions about the new features available in this upgrade.

Applications Support  
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**NOTE:** The Operator's Manual (100860-620) has a full overview of the system and software and can be found on the software installation disc.

## Introducing Apollo



*Product availability may vary.  
Please contact Cadwell for additional information.*

Cadwell's Apollo system is the mobile solution for Routine EEG, EMU, ICU, and At-Home monitoring. Consisting of the Apollo Recorder and Apollo 32 Amplifier, the Apollo system provides unique features that can improve data security, patient experience, and ease of use.

With a 1 MHz sampling rate, storage rates from 250 Hz to 2 kHz are user selectable. 32 channels of EEG are available, including 3 bipolar pairs.

With battery or USB power and built in memory, Apollo provides unparalleled freedom. Patients within the hospital can disconnect from the monitoring PC and enjoy a high level of mobility. When the patient is reconnected to the monitoring PC, the batteries are recharged, and acquired data is immediately downloaded and available for review. This workflow allows indefinite recording length.

In an ambulatory recording, more than three days of data acquisition is possible with no patient intervention required.

Apollo also has a QuickStart feature, allowing a user to start a recording without using a PC.

The Apollo offers up to 4 programmable buttons that can be associated with Events, as well as an external Patient Event switch. Apollo also supports the use of a lapel microphone, allowing the patient an additional way to document Events and provide detailed information about their experience.



# Apollo Recorder



Provides power supply (Li-Ion rechargeable batteries), data storage, and communication to PC. Single cable required to connect to Apollo 32 Amplifier.

# Apollo 32 Channel Amplifier



# Introducing Q-Video Mobile 3 (QVM3)

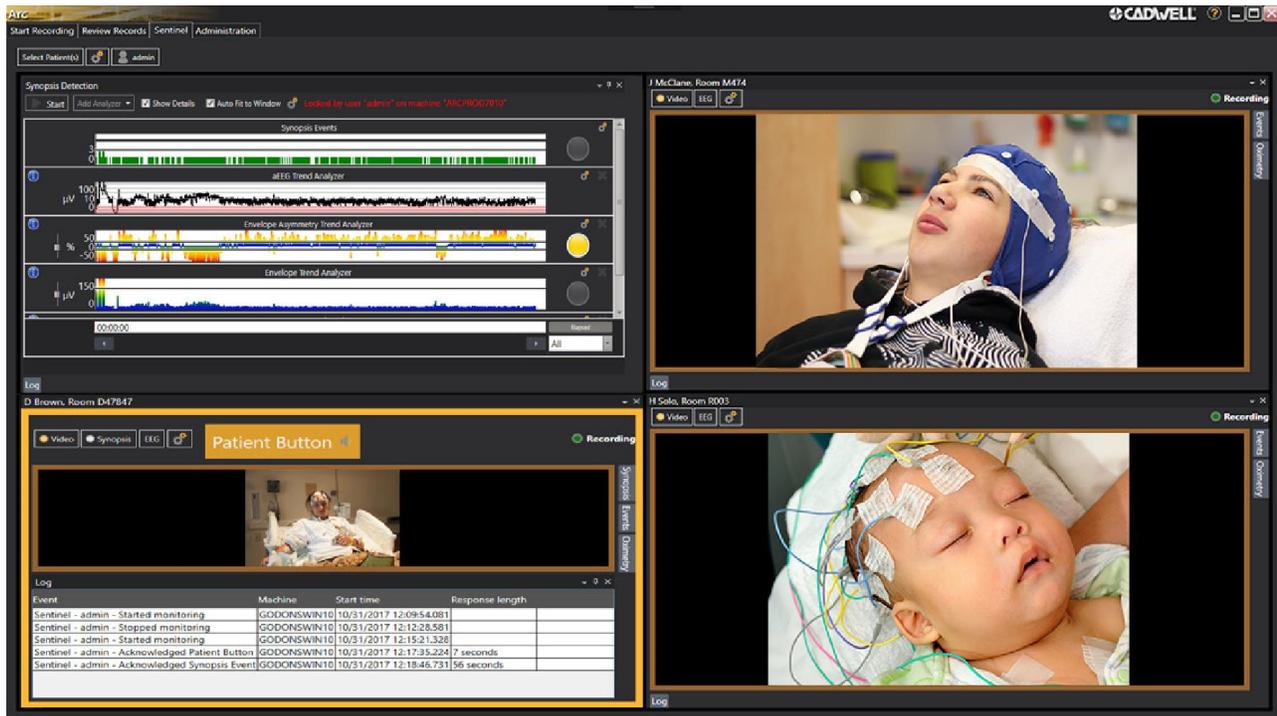


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When Apollo is combined with QVM3, HD video and audio can be acquired with ease in the patient home. QVM3 features a removable SSD hard drive, allowing large file transfers to happen quickly. Built in Infrared (IR) illumination and ambient light sensing technology allows the QVM3 to automatically switch between day and night recording. With up to 20 hours of internal battery life, the QVM3 is highly portable, and can be quickly charged at night while the patient is sleeping.

# Introducing Arc Sentinel



*Product availability may vary.*

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Improve your situational awareness with the latest in monitoring: Cadwell's Arc Sentinel. Sentinel allows users to monitor multiple active recordings on a single computer.

Sentinel displays video, events, and Synopsis trends for each patient, and supports viewing of EEG. Video and audible notifications can be configured for patient event button press, Synopsis detected events, and Persyst detected events. These notifications activate when an associated event is flagged in the recording. The video cameras can also be controlled from this software. Custom user events can be created and applied to the recording from Sentinel. Patient Events can be triggered from either the patient room or via Sentinel.

Multiple instances of Sentinel can be run concurrently on separate computers, allowing multiple people to monitor the same patient. Any notifications that occur are visible on all systems monitoring the same patient.

The above image shows four patients being monitored.

## Updated Minimum PC Requirements

<i>Area</i>	<b>Minimum</b>	<b>Recommended</b>
<i>Operating System</i>	Windows 7 Pro 64-bit, Windows 8.1, Windows 10	Windows 7 or Windows 10
<i>Processor</i>	Dual Core i7 3.0 GHz or faster	I7 Quad Core
<i>Hard Disk Drive</i>	160 GB	1 TB (if used for long term studies)
<i>Memory (RAM)</i>	8 GB	8GB
<i>Graphics</i>	1280 X 720 Resolution	1280 X 720 or higher

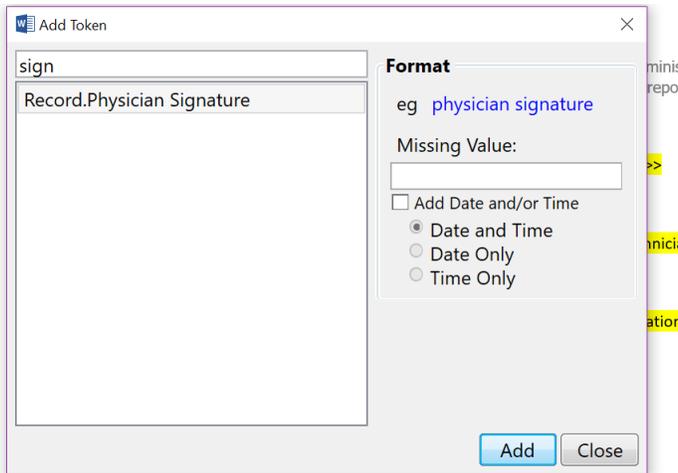
**Applies to the following systems:**

Apollo, Arc Sentinel, Q-Video Mobile 3, Arc Alterna, Q-Video Mobile 2, Arc Essentia, Easy III amplifier, Easy III photic, Arc photic.

## New Features

### Physician signature token and Date/Time Stamp Option

A new physician signature token has been added to CadReport. This token provides options to add date and/or time stamp when the report is generated. In addition, if applying a signature after report generation, there is now an option to add time and/or date stamp when applying the signature at that time.



History: <<Patient History>>

Technician Comments: <<Technician Comments>>

Interpretation: <<Impression>>

<<Physician Signature>>

Above is an image of the “Add token” window to add time and/or date stamp.

Add Date and/or Time to signature
 

- Date and Time
- Date Only
- Time Only

Associated Document Name :

*Dr. Doctor, M.D.*

4/19/2018 6:12 PM

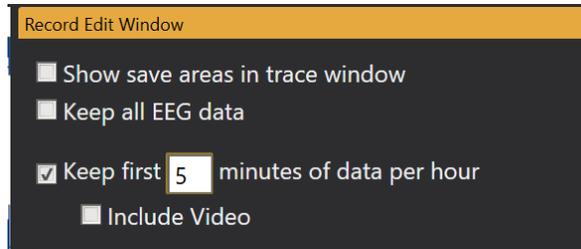
The above images show the option to add date and/or time stamp when applying a signature after the report is generated and an example of how the signature token will resolve when date and time stamp are selected.

## Video Source Switching

Added the capability to switch video sources during a live recording. A pulldown menu is available in the video window allowing users to select a different video feed to utilize with the record. This capability is available from within the main Arc application as well as the Sentinel application.

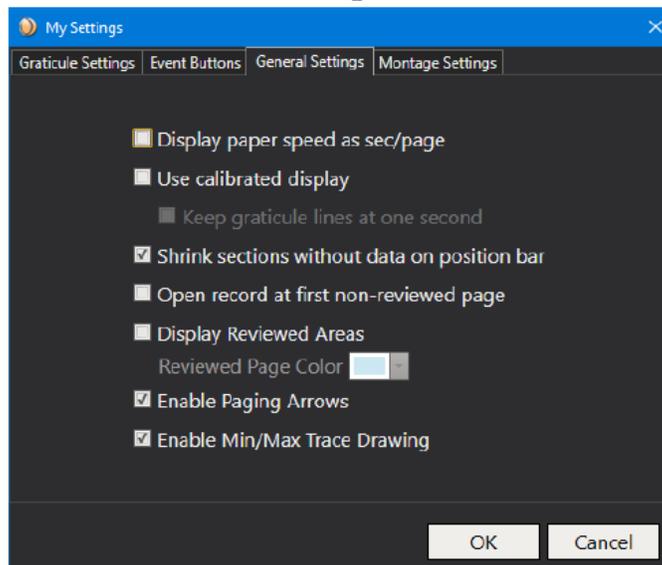
## Select minutes per hour of data to save

The Record Edit window now has an option to configure the number of minutes per hour of data to keep. There is also a checkbox to determine if video will be saved.



## Enhanced shading for reviewed areas

In My Settings, General Settings tab, users can now uncheck Display Reviewed Areas if they do not want the software to automatically shade areas of a recording that the user has already reviewed. If checked, the user can select the color of the shading.

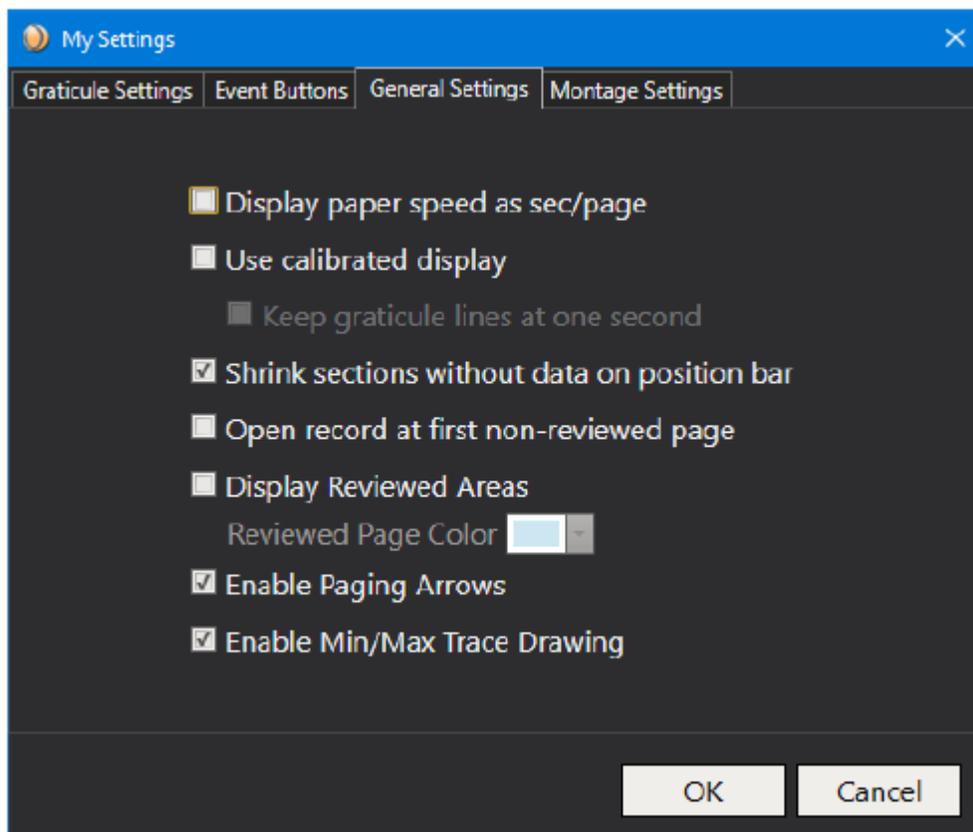


## Paging Arrows or Screen Grab Option

In My Settings, General Settings tab, users can uncheck Enable Paging Arrows. When checked, the application will retain the Paging Arrow behavior of previous versions of Arc. When unchecked, paging arrows will not be present. The time axis can be manipulated by clicking and dragging within the trace window. The keyboard arrows retain paging functionality regardless of the Paging Arrow selection.

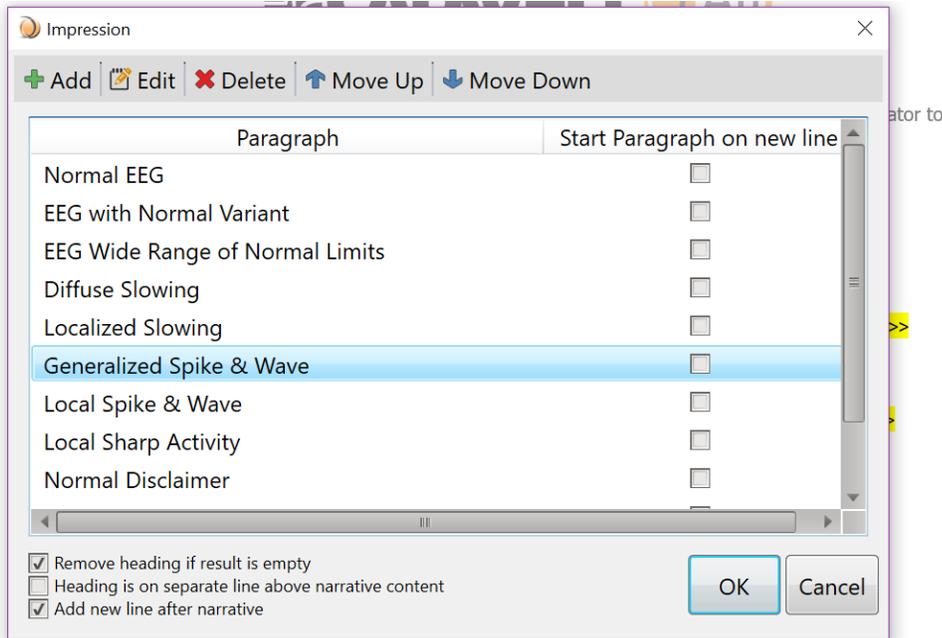
## Trace Drawing Selection

In My Settings, General Settings tab, users can uncheck Enable Min/Max Trace Drawing. When checked, traces will retain the display characteristics of previous versions of Arc. When unchecked, traces displayed in the trace window will appear subtly thinner.



## Reorder paragraphs within a narrative

When in edit mode for a narrative, users can now rearrange the order of the paragraphs.



History: <<Patient History>>

Technician Comments: <<Technician Comments>>

Interpretation: <<Impression>>

## Record Navigation Enhancement

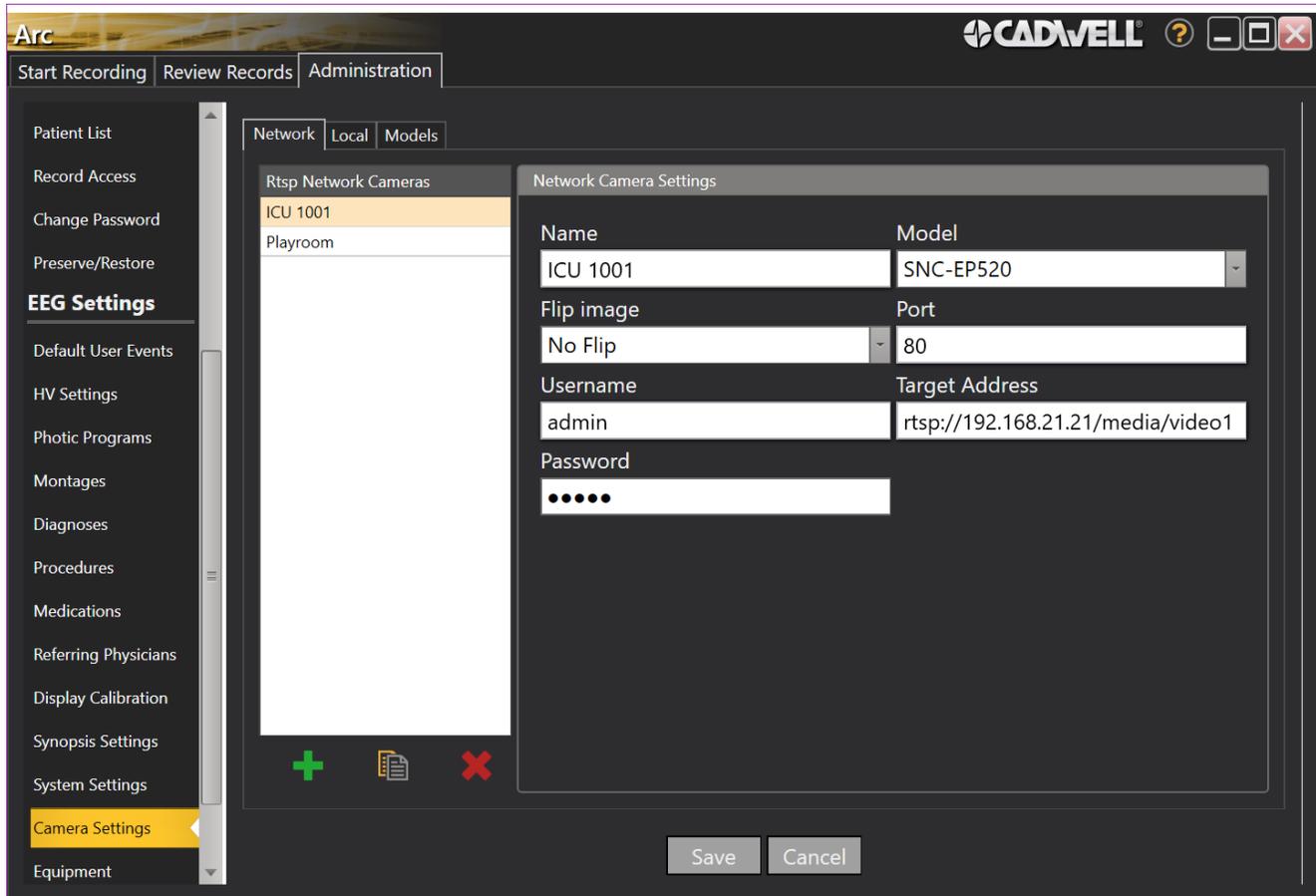
When in a live recording and paged back for review, users can now hit the End key once or arrow forward and eventually catch up to live sweep. In prior versions, users had to click on the View Live button in the toolbar to get back to live sweep.

## Current record status in Record Status Window

The record status window that appears when a study is closed, now displays current status so users can make a more informed decision about what status they would like to close the record with.

## Camera Configuration Settings

To configure IP cameras, a Camera Settings window is now available within the Administration tab. Settings were previously available in a configuration file which required editing outside of Arc.



## Fixes and General Enhancements in Arc 2.2

### Pasting a narrative can occasionally cause a crash

A crash was seen when a narrative was added to a report template and then copied and pasted to another item.

### Copy and paste between report templates can result in inactive tokens

Occasional issue with tokens being deactivated after copying and pasting within a report template

### Default Video settings should be machine specific

The video settings will now be stored as machine specific. Once a default video source is selected on a given machine, the machine will automatically default to that video source. In prior versions, the default was following the user instead of staying with the machine.

### Padlock setting status of locked/unlocked was not saving in recording

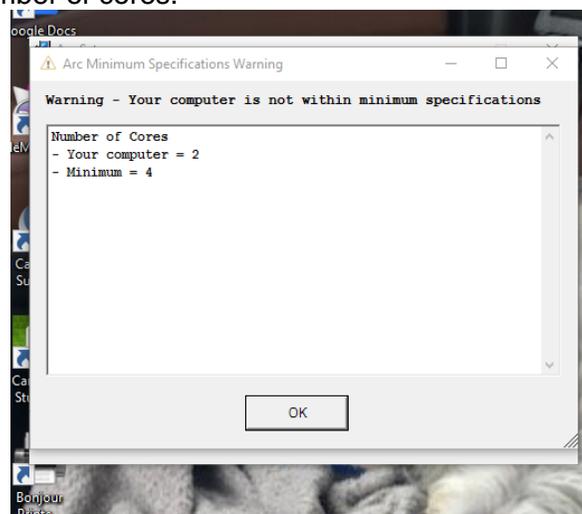
Fixed an issue where the padlock setting was not saving in recording mode. In prior versions, it was only saving the setting for review, it would revert back to unlock every time a new study was started.

### Improved patient window scaling

When the patient info window is widened, the fields will adjust automatically allowing all of the patient info fields to be visible at one time. In prior versions, the patient info windows would stay centered and would not adjust to allow everything to be displayed on one page.

### Added prompt to notify user if their computer does not meet minimum specs

The prompt can be acknowledged and the installation can continue. This is an opportunity for users to be informed that their computer does not meet minimum specs and performance of the application may not be optimal. The image below is an example of the prompt. In this case, the system did not have the recommended number of cores.



### **Fixed additional trace window docking issue**

If two or more additional trace windows are added to a view and docked on top of each other in tabular format. The tabs will display in the bottom left allowing users to go back and forth between trace windows. In prior versions, the tabs did not show up and users had to undock the top trace window to get at the bottom window.

### **Enhanced archiving to external hard drives**

In prior versions, some users experienced issues when restoring archived files from external media. Occasionally the computer would assign a different path to the drive than the one that was assigned when the archive occurred. The software will now capture enough information to eliminate this issue.

### **Improvements made to archiving and exporting preparation speeds**

In prior versions, the application would take an extended amount of time to prepare to export or archive a record(s). Performance improvements were done to reduce this time.

### **User login list now in alphabetical order**

The login pulldown was not in any meaningful order in prior versions. The list of usernames will now be in alphabetical order to allow for quicker logins.

### **Resolved Highlights and full screen mode switching issue**

In prior versions, going from Full Screen mode to Highlights mode could uncheck the As Recorded option in the toolbar. Now if a user is reviewing As Recorded data and they switch between Full Screen and Highlights, the setting will remain as selected.

### **Free text comments now honor case for the first letter entered**

In prior versions, when a user entered a comment via free text, the software would sometimes default to lower case. Now the software will honor the case of the first letter entered.

### **Easy III import with video**

Resolved an issue where Easy III files would be imported and occasionally some or all of the video would not import into Arc.

### **Added Persyst installation instructions to the Help File and installation disc**

### **Order of Event buttons is now saved**

Resolved an issue where the order of event buttons was not being saved after making changes.

## **Known Issues**

No known issues at this time.