


<b>Document Description:</b> CSB-CSM 1.51.00-A0002 SWF Release Notes	<b>Document Number:</b> 80026432 <b>Version:</b> A
	
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## *Customer Service Bulletin*

<b>Product:</b>	Welch Allyn® Connex® Spot Monitor (CSM)	<b>Date:</b>	2020-04-24
<b>Subject:</b>	CSM 1.51.00-A0002 SWF Release Notes		
<b>HW Version(s) Affected:</b>	All	<b>SW Version(s) Affected:</b>	ALL
<b>Serial Numbers Affected:</b>	All	<b>Lot or Date Code Affected:</b>	N/A

<b>Classification:</b>	As Needed		
<b>Distribution:</b>	<input checked="" type="checkbox"/> Customer Care	<input type="checkbox"/> Product Service	<input type="checkbox"/> Field Service
	<input checked="" type="checkbox"/> ASPs <input checked="" type="checkbox"/> Distributors	<input checked="" type="checkbox"/> Customers	<input type="checkbox"/> Company Confidential

## Release Details:

This is a CSM sustaining release. The previous release version was 1.42.00. This update enables the below features and additions.

- Adds optional Masimo® RRP® (Respiration-Rate via Pleth) in episodic profiles (Spot, Intervals and Office Profiles) from a Masimo SpO2 sensor.
- Patient List capability to HL7 Out of the Box.
- Ability to highlight by EWS color the rank score of parameters on the home screen
- Configurable option to force capturing facility required parameters - This configurable option allows the user to configure whether or not additional parameters need to be entered or not to proceed through a workflow
- The capability to Disable USB ports on device
- Configurable acknowledgement of send data in intervals mode
- Ability to utilize barcode scan from the Patient List feature to lookup patient
- Date of Birth return from EMR to auto-set EWS Scoring Protocols
- EWS Summary from Review Tab
- Update supported cipher list used by TLS to always use AES-256 with ECDHE which provides forward secrecy and a high level of hashing using SHA384
- Add CSM Connectivity to Scale-Tronix 5002, 5702, 6002, 6702 Series, 5122 and 4802D Scales with Serial Numbers starting with U1072.
- Pulse Rate averaging capability<sup>1</sup>
- Update to new Hillrom splash Screen
- Expand Location ID Field to 64 Characters
- CSM Patient ID Character Length Increase to allow up to 30 characters<sup>2</sup>
- Update of the device default date to a date closer to the 1.51 release


All devices built after 04/XX/2020 will have v1.51.00 out of the box. Devices built prior can be updated in the field using the Welch Allyn Service Tool (WAST). All Welch Allyn Service Tool (WAST) users must upgrade to the new version 1.9.

The WAST installer is designed to update during the installation of the new version. Users don't need to uninstall the previous version before installing the new one. However, PC Admin rights to install WAST and to perform software updates for CSM, and Spot 4400 is required.

The software package for the WAST 1.9 release along with the updated Installation Guide can be downloaded from our website <https://www.welchallyn.com/en/service-support/service-center/service-tool.html>. Under the Download link for the Service Tool Software & Service Tool Installation Guide.

The latest Service Manual can be downloaded from our website (link below).

<https://www.welchallyn.com/en/products/categories/patient-monitoring/vital-signs-devices/connex-spot-monitor/documents.html>

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**Further details on Masimo RRp:**

Customers may order a Masimo RRp enabled device using a new series of part numbers. Contact your local Hillrom representative for part numbers available in your country (not all model numbers listed will be available in all countries).

- 73RT- \* BT, CSM, NIBP, MASIMO RRp, SURETEMP PLUS
- 73RE- \* BT, CSM, NIBP, MASIMO RRp, BRAUN PRO6000
- 73RX- \* BT, CSM, NIBP, MASIMO RRp
- 74RT- \* WFR, CSM, NIBP, MASIMO RRp, SURETEMP PLUS
- 74RE- \* WFR, CSM, NIBP, MASIMO RRp, BRAUN PRO6000
- 74RX- \* WFR, CSM, NIBP, MASIMO RRp
- 75RT- \* WIFI, CSM, NIBP, MASIMO RRp, SURETEMP PLUS
- 75RE- \* WIFI, CSM, NIBP, MASIMO RRp, BRAUN PRO6000
- 75RX- \* WIFI, CSM, NIBP, MASIMO RRp

\*Plug Type (-B, -2, -4 etc..)

The process to upgrade devices to add Masimo RRp will be detailed in near future and may not be available at the time of this publication. Note, only 7300, 7400 and 7500 models will be upgradeable to Masimo RRp. The parameter requires devices to have the below:


- Masimo SpO2 hardware (MX-5) with software version 7.14.6.2 or greater
- CSM software version 1.51 or greater
- CSM device UI license (7000-RRP)
- Configuration tool v 1.87 to successfully activate the device RRp functions. The configuration tool will now support the creation of two (2) config files (Standard Config, as well as a License Config) that can be applied to the CSM device in the same manner as before using WAST or a USB stick.
- CSM RRp IFU (80023180 Rev C) available for download on the Hillrom website

**Additional Information:**

CSM Configuration (Config) Tool version 1.8.7 is required to support the 1.51 CSM Software Update.

**Config Tool Release Details:**

- Adds support for NEWS2 standard template
- Adds support to enable or disable Prevent Skip Required Modifiers
- Adds support to silence the audio tone after successful send

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- Adds support to enable pulse rate averaging
- Adds support to enable RRp parameter
- Adds support to create license file for RRp parameter
- Adds support to enable or disable USB ports on the device
- Adds support to allow for Date of Birth return from EMR to auto-set EWS Scoring Protocols
- Adds support to increased device location ID to 64 characters
- Adds support for RRp to Modifier List
- Adds support for Override RESP rate
- Adds support to select between MAX and FAST mode for radio configuration

**Hardware/Software Compatibility**

It is expected that the CSM 1.51.00 software is compatible with the below listed or newer versions until superseded by a future CSM software update.

<b>Compatible Versions</b>		
<b>Subsystem Description</b>	<b>Version</b>	<b>Notes</b>
CSM Main Board	Pattern E - H	409703-12; PCA, CVC Main Board
Braun Software	3.85	Software, Braun Pro6000 v3.85
Radio Software	2.00.02	Software, Newmar 2.00.02
Bluetooth Low Energy	4.0.1.1	Bluetopia Stack version 4.0.1.1 which minimally support the Bluetooth Core Specification Version 4.0 for BLE
Bluetooth BR/EDR	2.1	Bluetopia Stack version 4.0.1.1 which minimally support the Bluetooth Core Specification Version 2.1 for Bluetooth BR/EDR
Scale Software	N/A	Various manufacturers – must be WACP compatible.
WA Connectivity SDK	3.0.0.19	Software, SDK 3.0.0.19
NCE	NCE 5.1.0.16	Software, NCE 5.1.0.16
Connex	1.7.1	Software, CS 1.7.1
	See Note 1, Note 2 below	

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CSM Configuration Tool	1.8.7	Software, CSM Config Tool v1.8.7
Welch Allyn Service Tool (WAST)	1.9.0	1.9.0.0
SWF: WAST CSM plugin v .1.2.0.0	V1.2.0.0	Necessary for support for loading radio certificates and updating first time boot flag when replacing main boards.
Service Monitor	1.6.0.1	Service Monitor 1.6.0.1

**NOTE 1:**

CSM 1.51.00 introduces ability to perform pulse rate averaging when operating in Office Profile. Pulse rate average data is communicated to Connex CS, however support for pulse rate averaging is not implemented in Connex CS at time of release of 1.51.00.

**NOTE 2:**

CSM 1.51.00 extends Patient ID character length from a max of 20 characters up to a max of 30 characters. For patient IDs greater than 20 characters, the current Connex CS version is not compatible so will see a blank (0 characters) patient ID. A new release of Connex CS software is needed to support patient IDs greater than 20 characters. Customers using NCE will need to use an updated transform to support IDs greater than 20 characters. This is done to avoid truncation of the ID which would end up being treated as a different patient in the database.


**Summary of Prior Releases:**

**1.42.00.A0001 version released 10/02/2019**

This is a CSM sustaining release. The previous release version was 1.41.01. This update provides encryption of PHI data at rest as well as minor improvement of the services for BLE. When the values sent were high systolic BP (>204) and Weight (>327kg) via BLE they would show as a negative number in the EMR application.

**1.41.01.A0001 version released 07/09/2019**

This is a CSM sustaining release. The previous release version was 1.41.00. This update included a fix for a minor time delay for the manufacturing automated test equipment.

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**1.41.00.A0005 version released 03/10/2019**

This is a CSM sustaining release. The previous release version was 1.40.10. This update provides support for Service Workflow updates, Newmar Radio Updates, as well as an assortment of software anomaly fixes.

Key updates provided in this release are noted below:

- Remote upgrade and configuration from Service Monitor and view only access (VNC).
- New Radio Software Newmar v2.00.02
  - ❖ Added b/g/n Radio Selection mode
  - ❖ Added independent FIPS Enable/Disable functionality to WPA2-Personal and valid WPA2-Enterprise Auth Modes/EAP Types, default FIPS enabled
  - ❖ Newmar certificate installation should encrypt password file information
 

***Note:*** Requires the wa-updatecerts script used by WAST to create certificate PIM files be updated to the latest version. If the version of WAST that does not include the updated wa-updatecerts script, certificates **will not** successfully authenticate on Newmar 2.00.02 SW.
- Clear Patient ID in office profile save
- Beirut Time Zone support

**1.40.10.A0002 version released 12/10/2018**


This is a maintenance release for CSM. The previous shipping production release was 1.40.00-A0002. This update provides support for 4th-Edition compliance. Supports All Device Hardware versions. Upgradeable, and down-grade-able only to 1.32.19 version.

**1.40.00.A0002 version released 09/19/2018**

This is a maintenance release for CSM. The previous shipping production release was 1.32.10-A0001. This update provides support for 4th-Edition compliance. Supports All Device Hardware versions. Upgradeable, and down-grade-able only to 1.32.19 version.

**1.32.19.A0001 version released 12/10/2018**

This is a service maintenance release for CSM. The previous shipping production release was 1.32.10-A0001. This update provides support for new Hardware based on 4<sup>th</sup> Edition Compliance. Upgradeable with new hardware only (Version G or greater). Supports ALL Device Hardware version. Can't be downgraded to any previous versions.

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**1.32.10.A0001 version released 8/07/2018**

This is a service maintenance release for CSM. The previous shipping production release was 1.32.02-A0002. This update provides support for 4th-Edition compliance, an assortment of software updates (detailed below), and support for the Thai language. CSM Configuration Tool has also been updated to v1.8.3 20180727 located here <https://config.welchallyn.com/configurator/>

**Update Instructions**

The CSM software will be *auto deployed* to the Welch Allyn Service Tool (WAST).  
Instruction to do Software upgrades is covered in the Service Manual located on our website below.  
<https://www.welchallyn.com/en/products/categories/patient-monitoring/vital-signs-devices/connex-spot-monitor/documents.html>

For information about Welch Allyn product(s) and/or features, contact your Welch Allyn Sales Rep, or our Technical Support Team: [www.welchallyn.com/about/company/locations.htm](http://www.welchallyn.com/about/company/locations.htm)

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<b>Version</b>	<b>Sec, Pg, Para Changed</b>	<b>Change Made</b>	<b>Date Version Created</b>	<b>Version Created By (initials)</b>
A	N/A	Initial Release	2020-03-26	KMG