


Title: CVSM/CIWS Minimum Hardware/Software level Requirement		Document Number: 20012631 Revision: AH	
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## 1.0 Purpose

This document identifies supported minimum levels of hardware and software for Connex Vital Signs Monitor 6000 (CVSM) series monitors and Connex Integrated Wall System (CIWS) returned for service. As they become available a comprehensive list of Change Orders, Work Instructions, and Technical Service Bulletins are provided, which will directly affect fit, form, or function of the monitor, or accessory.

Outgoing repaired monitors or loaner monitors must be updated to meet or exceed the minimum levels.

## 2.0 Scope

This document applies to all Welch Allyn Product Service Personnel, and designated service personnel, involved in the repair or upgrade of any Connex Vital Signs Monitor 6000 series release 1.x and 2.x or Connex Integrated Wall System returned for service.

## 3.0 Responsibilities

Service Engineering is responsible for maintaining this document.

The local service center manager is responsible for implementing, training, and verification of compliance for their service center personnel. Local service center managers are responsible for providing this document to any ASPs under their jurisdiction authorized to service and support CIWS or CVSM.

## 4.0 References

60096509	SRN, ModPG for CVSM v2.07
60097176	SRN, CVSM 2.42.00
60090527	Winbond NAND Test Regression Review 2018-05-03 and 2018-05-23
60093804	SRN, CVSM 2.41.00
60090588	SRN, CVSM CIWS, 2.40.01
60086756	SRN, CVSM CIWS, 2.30.01
60082241	SRN, CVSM, CIWS, 2.30.00
60077277	SRN, CVSM, 2.20.03, RELEASE NOTES
60070625	SRN, CVSM, 2.20.01, RELEASE NOTES

60062368	SRN, CVSM, 2.20.00, RELEASE NOTES
60058932	SRN, CVSM, 2.10.00, RELEASE NOTES
60054321	SRN, CVSM, 2.00.05, RELEASE NOTES
60052253	SRN, CVSM, 2.00.00, RELEASE NOTES
60070601	SRN, CVSM, 1.71.04, RELEASE NOTES
60050484	SRN, CVSM, 1.71.03, RELEASE NOTES
60087266	SRN, Nellcor SPO2 WUI 1.00.15
60084039	SRN, ModPG V2.06 for CVSM CIWS
60087547	SRN, SureTemp Plus v2.08 for CVSM CIWS

## 5.0 Work Instruction

Welch Allyn personnel, contractors and ASPs servicing and supporting CVSM and CIWS will use this document as a reference to ensure that all required updates and enhancements have been performed.

### 5.1 Overview

The document contains the following sections:

- Minimum Software Requirements
- Support Software and Systems
- Minimum Hardware Requirements
- Minimum Requirements for a 2.x Upgrade
- Software compatibility
- Hardware / Software Released Production Configurations
- Appendix A Technical Service Bulletins

### 5.2 Minimum Hardware and Software levels

#### 5.2.1 CVSM/CIWS Minimum Software Requirements

This section provides minimum software levels for CVSM and CIWS with software version 1.x (table 5.2.1) and software version 2.x (table 5.2.2). Use table 5.2.2 if the device has been upgraded from 1.x software to 2.x software. The tables indicate minimum shippable software levels, supported levels and current software levels. Previous software versions that no longer meet the minimum requirements must be upgraded to the highest supported software level except as noted below. Supported versions are shown for devices that cannot be upgraded due to compatibility issues with connected systems. The supported versions may show more than one software level for subsystems when multiple versions are supported. Current versions show the latest released versions. These are typically what is currently being shipped from manufacturing apart from service only releases.

Note: Device manufactured on or after December 2018 are built and provisioned to meet the requirements of IEC 60601 4th edition. To maintain compliance those devices may not be downgraded to software version less than shown in table 5.6.3.1 for host software version 2.41.00. All 4<sup>th</sup> edition complaint materials may only be replaced with 4th edition or later compliant materials, shown in table 5.6.3.2. See Customer Service Bulletin 80022414 CSB

– CVSM/CIWS IEC 60601 4th Edition for the exact manufacturing cutoff and start dates as well as the serial number for the first 4th-edition devices.

Note: Device manufactured on or after November 29, 2017 are built and provisioned to meet the requirements of IEC 60601 3<sup>rd</sup> edition. To maintain compliance those devices may not be downgraded to software version less than shown in table 5.6.2.1 for host software version 2.30.01. All 3<sup>rd</sup> edition complaint materials may only be replaced with 3<sup>rd</sup> edition or later compliant materials, shown in table 5.6.2.2.

Note: Devices that were manufactured prior to November 29<sup>th</sup>, 2017 are not required to meet IEC 60601 3<sup>rd</sup> edition requirements and therefore are not required to upgrade the subsystems software only to meet 3<sup>rd</sup> edition requirements. It is acceptable to use subsystem legacy hardware when upgrading to the current host software provided they are compatible.

Note: With the production release of software version 2.30.01 all CVSM and CIWS models will be provisioned with version 2.30.01 or later. Table 5.2.1 defines software levels for 1.x legacy devices. Devices may be upgraded from 1.x versions to 2.x versions on an as needed basis.

Note: Some customers may not want their devices upgraded if they have not validated the upgrade with 3<sup>rd</sup> party system software. Prior to installing any software check the RMA to determine if the customer has indicated the software should not be updated. In this case those devices are exempted from meeting the minimum service shippable level. However, hardware cannot be upgraded or replaced without updating software where a software upgrade is necessary to support the hardware.

Note: In some cases, newer versions of software may be found on devices returned for service than what is shown as the current level. This will be the case if the software was released before a revision of this document was released.

**Table 5.2.1 CVSM/CIWS 1.x Minimum Software Requirements**

Shipping Level	Host / (Boot)	Comms	Radio Server (Kernel)	Sure Temp Plus Main (Boot)	Masimo SpO2 WUI <sup>2</sup> (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI <sup>2</sup> (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI <sup>2</sup> (Boot)	NIBP Main [Safety]( Boot)	Braun 4000 dock Main (Boot)	Weight Scale adapter Main (Boot)
Current	1.71.04 <sup>3</sup> (1.71.04)	1.00.00 A0003	3.00.04 (5.0.4) <sup>4</sup>	2.08 <sup>5</sup> (1.06)	2.1.0 (1.0.4) [7.8.0.5]	2.1.1 (1.0.4) [7.12.0.7]	1.00.15 <sup>6</sup> (1.00.15) 1.00.14 (1.00.14)	2.07 [1.04] (1.02)	1.00.03 (1.00.01)	1.0.26 (1.0.2)
Minimum	1.71.03 (1.71.03)	1.00.00 A0003	3.00.01 (5.0.1)	2.02 (1.02)	2.0.9 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2]	1.00.14 (1.00.14)	2.05 [1.03] (1.02)	1.00.03 (1.00.01)	1.0.26 (1.0.2)

Note: 1.x software is no longer used in production.

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1. Masimo MX- references the SpO2 PCBA and software version. The MX-3 and MX-5 software is not interchangeable. Use 7.10.1.2 or 7.10.7.0 with the MX-5 PCBA (material: 721463). Use version 7.8.0.5 with the MX-3 PCBA (material: 713654, 716603, 717105, and 717769).
  2. WUI references the “WACP, USB, & Isolation PCBA software version.
  3. Host version 1.71.04 is released for service, but will not be used in production until registration is completed in Singapore and China. Devices sold for Singapore and China may not be upgraded to 1.71.04. Upgrade devices to 1.71.04 when replacing display P/N 405883 with P/N 411161, see TSB 20014010.
  4. Radio version 3.00.04 is a service only release available as a Field upgrade only, see 20014653 TSB-Flexnet Radio Ver. 3.00.04 for details.
  5. SureTemp version 2.08 is only required for 4<sup>th</sup> edition IEC 60601 compliance. Pre 4<sup>th</sup> edition devices are not required to be upgraded. When upgrading from version 2.02 to 2.08 SureTemp must first be upgraded to 2.05.

Table 5.2.2 CVSM/CIWS 2.x Minimum Software Requirements

Shipping Level	Host (Boot) [HW Ver]	Comms (Lamar)	Comms (Newmar)	Lamarr Radio (Kernel)	Newmar Radio	Early Sense	SureTemp Plus (Boot)	Masimo WUI (Boot) [MX-3] <sup>1</sup>	Masimo WUI (Boot) [MX-5] <sup>1</sup>	Nellcor NELL-1 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP [Safety] (Boot)	Medtronic /OridionC O2 (Boot)	Braun 4000 dock Main (Boot)	Braun 6000 Thermometer (Boot)	GI ECG App (boot)	Weight Scale adapter Main (Boot)
Current production	2.42.00 <sup>2</sup> (2.42.00) [P6]	-	No SW HW v.2 (Mat # 410389-04)	-	2.00.01	01.06.007	2.08 <sup>3</sup> (1.06)	-	2.1.1 (1.0.4) [7.12.0.7]	-	1.00.15 (1.00.14)	2.07 [1.04] (1.02)	1.14 <sup>4</sup> (1.24)	-	5.25 <sup>5</sup> (1.27)	1.00.05 (1.00.02)	1.0.26 (1.0.2)
Supported	2.42.00 <sup>2</sup> (2.42.00) [P6, P5, P3]	1.00.00 A0003	No SW HW v.2 (Mat # 410389-04)	3.00.05 <sup>6</sup> (5.0.5) 3.00.04 <sup>7</sup> (5.0.4) 3.00.03 (5.0.3) 3.00.02 (5.0.2) 2.30.03 (4.1.31)	2.00.01	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.1, 2.1.0, 2.0.9 (1.0.4) [7.8.0.5]	2.1.1, 2.1.0 (1.0.4) [7.12.0.7] 7.10.7.0 7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14) 1.00.13 (1.00.01 0528)	1.00.15 (1.00.14)	2.07/2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.14 <sup>4</sup> (1.24)/ 1.10.02 (1.24)	1.00.03 (1.00.01)	5.25 <sup>5</sup> (1.27) 5.19 (1.26)	1.00.05 (1.00.02)	1.0.26 (1.0.2)
Supported	2.41.00 <sup>9</sup> (2.41.00) [P6, P5, P3]	1.00.00 A0003	No SW HW v.2 (Mat # 410389-04)	3.00.05 <sup>6</sup> (5.0.5) 3.00.04 <sup>7</sup> (5.0.4) 3.00.03 (5.0.3) 3.00.02 (5.0.2) 2.30.03 (4.1.31)	2.00.01	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.1, 2.1.0 (1.0.4) [7.8.0.5]	2.1.1, 2.1.0 (1.0.4) [7.12.0.7] 7.10.7.0 7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14) 1.00.13 (1.00.01 0528)	1.00.15 (1.00.14)	2.07/2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.14 <sup>4</sup> (1.24)/ 1.10.02 (1.24)	1.00.03 (1.00.01)	5.25 <sup>5</sup> (1.27) 5.19 (1.26)	1.00.05 (1.00.02)	1.0.26 (1.0.2)
Supported	2.40.01 <sup>11</sup> (2.40.01) [P5 or P3]	1.00.00 A0003	No SW HW v.2 (Mat # 410389-04)	3.00.05 <sup>6</sup> (5.0.5) 3.00.04 <sup>7</sup> (5.0.4) 3.00.03 (5.0.3) 3.00.02 (5.0.2) 2.30.03 (4.1.31)	2.00.01	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.1, 2.1.0 (1.0.4) [7.8.0.5]	2.1.1, 2.1.0 (1.0.4) [7.12.0.7] 7.10.7.0 7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14) 1.00.13 (1.00.01 0528)	1.00.15 (1.00.14)	2.07/2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.14 <sup>4</sup> (1.24)/ 1.10.02 (1.24)	1.00.03 (1.00.01)	5.25 <sup>5</sup> (1.27) 5.19 (1.26)	1.00.05 (1.00.02)	1.0.26 (1.0.2)
Supported	2.30.01 <sup>12</sup> (2.30.01) [P5 or P3]	1.00.00 A0003	NA	3.00.05 <sup>6</sup> (5.0.5) 3.00.04 <sup>7</sup> (5.0.4) 3.00.03 (5.0.3) 3.00.02 (5.0.2) 2.30.03 (4.1.31)	NA	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.0 (1.0.4) [7.8.0.5]	2.1.1, 2.1.0 (1.0.4) [7.12.0.7] 7.10.7.0 7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.07/2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	5.25 <sup>5</sup> (1.27) 5.19 (1.26)(1.26)	1.00.05 (1.00.02)	1.0.26 (1.0.2)
Supported	2.30.00 <sup>13</sup> (2.30.00) [P5 or P3]	1.00.00 A0003	NA	3.00.05 <sup>6</sup> (5.0.5) 3.00.04 <sup>7</sup> (5.0.4) 3.00.03 (5.0.3) 3.00.02 (5.0.2) 2.30.03 (4.1.31)	NA	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.0 (1.0.4) [7.8.0.5]	2.1.1, 2.1.0 (1.0.4) [7.12.0.7] 7.10.7.0 7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.07/2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	5.25 <sup>5</sup> (1.27) 5.19 (1.26)	NA	1.0.26 (1.0.2)
Supported	2.20.03 <sup>14</sup> (2.20.03) [P3]	1.00.00 A0003	NA	3.00.05 <sup>6</sup> (5.0.5) 3.00.03 (5.0.3) 3.00.02 (5.0.2)	NA	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.0 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.12.0.7]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	N/A	NA	1.0.26 (1.0.2)

Supported	2.20.01 <sup>15</sup> (2.20.01) [P3]	1.00.00 A0003	NA	3.00.05 <sup>6</sup> (5.0.5) 3.00.03 (5.0.3) 3.00.02 (5.0.2)	NA	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.0 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.7.0] [7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	N/A	NA	1.0.26 (1.0.2)
Supported	2.20.00 (2.20.00) [P3]	1.00.00 A0003	NA	3.00.05 <sup>6</sup> (5.0.5) 3.00.03 (5.0.3) 3.00.02 (5.0.2)	NA	01.06.007	2.08 <sup>3</sup> (1.06) 2.07 <sup>10</sup> (1.06) 2.02 (1.02)	2.1.0 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.7.0] [7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	N/A	NA	1.0.26 (1.0.2)
Supported	2.10.00 <sup>16</sup> (2.10.00) [P3]	1.00.00 A0003	NA	3.00.02 (5.0.2)	NA	01.06.007	2.02 (1.02)	2.0.9 (1.04) [7.8.0.5]	2.1.0 (1.0.4) [7.10.7.0] [7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.06 <sup>4</sup> [1.04] (1.02) 2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03 (1.00.01)	N/A	NA	1.0.26 (1.0.2)
Minimum	2.00.05 <sup>17</sup> (2.00.05) [P3]	1.00.00 A0003	NA	3.00.02 (5.0.2)	NA	N/A	2.02 (1.02)	2.0.9 (1.04) [7.8.0.5]	2.1.0 (1.0.4) [7.10.7.0] [7.10.1.2]	1.00.15 <sup>8</sup> (1.00.14) 1.00.14 (1.00.14)	NA	2.05 [1.03] (1.02)	1.10.02 (1.24)	1.00.03/ (1.00.01)	N/A	NA	1.0.26 (1.0.2)

### Footnotes

1. Masimo MX- references the SpO2 PCBA and software version. The MX-3 and MX-5 software are not interchangeable.
2. Version 2.42.00 adds support for Single Sing On (SSO) and RFID scanners.
3. SureTemp version 2.08 is only required for 4th edition compliance. Pre 4th edition devices are not required to be upgraded. When upgrading from version 2.02 to 2.08 SureTemp must first be upgraded to 2.05.
4. Required for 4th edition compliance. Compatible with all 2.xx host software versions.
5. Braun v. 5.25 Required for 4th edition compliance, cannot be loaded on 3<sup>rd</sup> edition Braun thermometers material no. 411543
6. Radio version 3.00.05 is a service only release available as a Field upgrade only, see 20015146 TSB-Flexnet Radio Ver. 3.00.05 for details .
7. Radio version 3.00.04 is a service only release available as a Field upgrade only, see 20014653 TSB-Flexnet Radio Ver. 3.00.04 for details.
8. Software released for Nellcor PMB05N is compatible with Nell-1 but not required
9. Version 2.41.00 is the minimum 4<sup>th</sup> edition compliant version.
10. SureTemp version 2.07 is only required for 3rd edition compliance. Pre 3rd edition devices are not required to be upgraded. When upgrading from version 2.02 to 2.07 SureTemp must first be upgraded to 2.05.
11. Version 2.40.01 adds support for Newmar
12. Minimum software level for devices used with ECG.
13. Version 2.30.00 adds support for Braun 6000, Office profile and ECG.
14. Version 2.20.03 adds support for 63-character passphrase in network settings. Customers using 63-character passphrases will need version 2.20.03 or later. (Ref Tech Note DIR:20014045
15. Version 2.20.01 hides artifact with new display. Upgrade devices to 2.20.01 when replacing display P/N 405883
16. Version 2.10.00 is maintained for CVSM used with Connex CS 1.5 and service monitor 1.1.
17. Version 2.00.05 is maintained for CVSM used with Connex CS 1.2. Version 2.10.00 and later is not compatible with CS 1.2

### 5.3 CVSM/CIWS Support Software and Systems

Table 5.3.1 CVSM/CIWS Support Software and Systems captures CVSM and CIWS device software compatibility with Welch Allyn Service Tool and system software.

**Table 5.3.1 CVSM/CIWS Support Software and Systems**

Device SW	Welch Allyn Service Tool (WAST) <sup>3</sup>	Service Monitor <sup>4</sup>	Service Dashboard	On Host	Connex VM <sup>5,6</sup>	Connex CS <sup>7,8,9</sup>	DataCatcher	Connectivity SDK <sup>4</sup>	DCP Server	CDIS-NCE	Configuration Tool	Custom XML Utility XML Schema	
												Custom modifiers	Custom Scores
2.42.00	1.8	1.3, 1.3.1.0, 1.4.0	2.0	2.11.5 2.12.1	2.0.1	1.7 BL 4 /1.8/1.8.1	4.0.0.2	3.0.1.2 3.0.0.19	3.0.0.3 3.0.1.1	5.0.0.3 5.0.0.8 5.1.0.16	1.8.4	2.00.00/ 2.01.00/ 2.01.01	2.00.00/ 2.01.00/ 2.01.01
2.41.00	1.8	1.3, 1.3.1.0, 1.4.0	2.0	2.11.5 2.12.1	2.0.1	1.7 BL 4 /1.8/1.8.1	4.0.0.2	3.0.1.2 3.0.0.19	3.0.0.3 3.0.1.1	5.0.0.3 5.0.0.8 5.1.0.16	1.8.4	2.00.00/ 2.01.00/ 2.01.01	2.00.00/ 2.01.00/ 2.01.01
2.40.01	1.8	1.3, 1.3.1.0, 1.4.0	2.0 <sup>10</sup>	2.11.5 2.12.1	2.0.1	1.7/1.7.1/1.8	4.0.0.2	3.0.1.2 3.0.0.19	3.0.0.3 3.0.1.1	5.0.0.3 5.0.0.8 5.1.0.16	NA	2.00.00/ 2.01.00	2.00.00/ 2.01.00
2.30.01	1.8	1.1, 1.2, 1.3, 1.3.1.0	2.0		2.0.1	1.5/1.6/ 1.7/1.7.1	4.0.0.2/4.0.1.0	2.4/3.0.0.19		5.0.0.3/ 5.1.0.16	NA	2.00.00/ 2.01.00	2.00.00/ 2.01.00
2.30.00	1.8	1.1, 1.2, 1.3, 1.3.1.0	2.0		2.0.1	1.5/1.6/ 1.7/1.7.1	4.0.0.2/4.0.1.0	2.4/3.0.0.19		5.0.0.3/ 5.1.0.16	NA	2.00.00/ 2.01.00	2.00.00/ 2.01.00
2.20.03	1.8/1.7	1.1, 1.2, 1.3	2.0		2.0.1	1.5/1.6/1.7/1.7.1	4.0.0.2	2.3/2.4/ 3.0.0.19		5.0.0.3	NA	2.0	2.0
2.20.01	1.8/1.7	1.1, 1.2, 1.3	2.0		2.0.1	1.5/1.6/1.7/1.7.1	4.0.0.2	2.4		5.0.0.3	NA	2.0	2.0
2.20.00	1.8/1.7	1.1, 1.2	2.0		2.0.1	1.5/ 1.6/ 1.7	4.0.0.2	2.4			NA	2.0	2.0
2.10.00 <sup>2</sup>	1.8/1.7	1.1	1.0		2.0.1	1.5/1.6/ 1.7	4.0.0.2	2.3			NA	1.0	
2.00.05 <sup>2</sup>	1.8/1.7/1.6	N/A	N/A		2.0/2.0.1	1.1/ 1.2/1.5	4.0.0.2	2.3			NA		
2.00.00 <sup>2</sup>	1.8/1.7/1.6	N/A	N/A		2.0/2.0.1	1.1/ 1.2/1.5	4.0.0.2	2.3			NA		
1.71.04	1.8/1.7 /1.6	N/A	N/A		2.0/2.0.1	1.1/1.2/ 1.5/1.6/ 1.7/ 1.7.1	4.0.0.2	2.3	N/A	N/A	NA	N/A	N/A
1.71.03	1.8/1.7/1.6/1.5.02	N/A	N/A		1.1/2.0/ 2.0.1	1.1/1.2/ 1.5/1.6/ 1.7/1.7.1	4.0.0.2	2.3	N/A	N/A	NA	N/A	N/A
1.71.02 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		2.0/2.0.1	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.70.04 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		2.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.70.03 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		2.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.70.02 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		2.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.70.00 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		2.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.50.02 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		1.14/1.1/ 1.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.50.01 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		1.14/1.1/ 1.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
1.00.00 <sup>1</sup>	1.8/1.7/1.6/1.5.02	N/A	N/A		1.1/1.0	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A

Foot notes:

1. Does not support Active Directory
2. Host SW not validated with CIWS
3. WAST with PMP plugin version 1.2.2.0 is required to support devices with custom data. PMP plugin v. 1.2.2.0 is included with WAST 1.8 and supported in WAST 1.7
4. The following CVSM 2.20.0x features are not supported in Service Monitor 1.1: Remote Configuration, manual 'Sync to server'
5. Does not support Custom Modifiers or Custom Scores from device.
6. Connex VM 1.1 does not support CVSM/CIWS match to save features in host SW 1.71.02, 1.71.03 or 1.71.04.
7. Connex CS supports device SW 1.71.03 and 1.71.04 episodic monitoring only, continuous monitoring is not supported
8. See DIR 80018292 for detailed information on host software compatibility with Connex CS.
9. Connex CS does not support ECG
10. With the addition of encryption of the configuration files in the 2.4x.xx software, the ability to clone devices using Service Monitor was inadvertently removed.



## 5.4 CVSM/CIWS Minimum Hardware Requirements

### 5.4.1 CVSM minimum hardware requirements

Table 5.4.1 CVSM 1.x Minimum Hardware Requirements lists materials that have been updated in the device BOM which are required to be brought up to current levels when the device is returned for service. Replace the obsolete material with the current material as shown in table 5.4. All current materials are backward compatible unless otherwise noted.

**Table 5.4.1 CVSM 1.x Minimum Hardware Requirements**

Material SAP description	Obsolete Material number	Current Material number	Effectuated serial numbers	ECN, TSB or reference document
HOUSING, BACK WITH INSERTS, MMF	712961	720719	All prior to 103001283411	DIR# 20012684

### 5.4.2 CIWS Minimum Hardware Requirements

NA

## 5.5 CVSM/CIWS 1.x to 2.x Upgrade Requirements

CVSM 1.x devices will not be updated to CVSM 2.x unless the customer has requested the upgrade. Technical Support will address all requests for software only upgrades per the TSB detailing the software version release. CVSM model 6300 is not upgradeable to 2.x software. All upgrades must meet the software and hardware requirements described in the following sections.

### 5.5.1 2.x Upgrade Minimum Software Requirements

Before upgrading any 1.x device to 2.x software it must meet the minimum software level shown in table 5.5.1. Software versions older than 1.71.03 must be upgraded to version 1.71.03 or 1.71.04 before being upgraded to 2.x. Subsystems must be upgraded when upgrading the host software to 1.71.03 or 1.71.04 when required, if the host version 1.71.03 or 1.71.04 is already installed subsystem software may be installed when upgrading the host to 2.x if required. 2.x versions support both Masimo MX versions, minimum levels are shown for each. Minimum hardware requirements apply, see section 5.5.2

Upgrading host software version 2.00.00 or 2.00.05 to any version greater than 2.10.00 requires an intermediate upgrade to 2.10.00 first.

**Table 5.5.1 2.x Upgrade minimum software levels**

	Host / (Boot)	Comms	Radio Server (Kernel)	Sure Temp Plus Main (Boot)	Masimo SpO2 WUI <sup>1</sup> (Boot) [MX-3 <sup>2</sup> ]	Masimo SpO2 WUI <sup>1</sup> (Boot) [MX-5 <sup>2</sup> ]	Nellcor SpO2 WUI <sup>1</sup> (Boot)	NIBP Main [Safety] (Boot)	Braun 4000 dock Main (Boot)	Weight Scale adapter Main (Boot)
Minimum version	1.71.03 (1.71.03)	1.00.00 A0003	3.00.03 (5.0.3)	2.02 (1.02)	2.09 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2]	1.00.14 (1.00.14)	2.05 [1.03] (1.02)	1.00.03 (1.00.01)	1.0.26 (1.0.2)

### 5.5.2 2.x Upgrade Minimum Hardware Requirements

For a 1.x device to qualify for a 2.x upgrade it must meet the minimum hardware level shown in table 5.5.2. Any hardware that does not meet the minimum requirements shown in table 5.5.2 must be upgraded. Minimum software requirements apply, see section 5.5.

**Table 5.5.2 2.x Upgrade minimum hardware levels**

Component	Medium Compute Engine (MCE) <sup>1</sup>	Comms Module Standard	Radio PCBA <sup>1</sup>	SureTemp Module <sup>2</sup>	SpO2 Masimo Module <sup>2</sup>	SpO2 Nellcor Module <sup>2</sup>	MOD PG (NIBP) Module	Housings <sup>3</sup>
Material number	407574 HW ver. P3	407524	406187 408472 409115 409437 410910	405701 412406 412568 412687 412688	713654 716603 717105 717769 721463 726347 727889	405712	405672 412574	720557 HOUSING, BOTTOM, CVSM 2.0, ES 720558 HOUSING, ST+ COVER, MMF, ES

Footnotes:

1. HW version P3 was added to production starting with serial number 103000011111
2. If present
3. For CVSMs that will add the Early Sense Parameter

## 5.6 IEC 60601 Compliance

### 5.6.2 CVSM/CIWS IEC 60601 3rd Edition Compliance

All CVSM and CIWS manufactured on or after November 29<sup>th</sup>, 2017 are IEC 60601 3<sup>rd</sup> edition compliant and must be maintained with 3<sup>rd</sup> edition compliant materials. CVSM became 3<sup>rd</sup> edition compliant starting with serial number 100043244817, CIWS became 3<sup>rd</sup> edition compliant starting with serial number 100023374817.

**Table 5.6.2.1** list the minimum software levels to meet IEC 60601 3rd edition compliance.

**Table 5.6.2.1** list materials that have been updated or added to CVSM/CIWS to meet IEC 60601 3<sup>rd</sup> edition requirements. Refer to Dir 20014675 TSB – PMP IEC 60601 3rd Edition Compliance for more details

**Table 5.6.2.1 CVSM/CIWS 3<sup>rd</sup> edition minimum compliant software**

Host (Boot) [HW ver.]	Comms	Newmar Comms	Radio (Kernel)	Newmar Radio	Early Sense	SureTemp Plus (Boot)	Masimo WUI (Boot) [MX-5]	Nellcor WUI (Boot)	NIBP [Safety] (Boot)	Oridion CO2 (Boot)	Braun 6000 Thermometer (Boot)	GI ECG App (boot)	Weight Scale adapter Main (Boot)
2.30.01 (2.30.01) [P5]	1.00.00 A0003	NA	3.00.03 (5.0.3)	2.00.00	01.06.007	2.07 (1.06)	2.1.1 (1.0.4) [7.12.0.7]	1.00.14 (1.00.14)	2.05 [1.03] (1.02)	1.10.02 (1.24)	5.19 (1.26)	1.00.05 (1.00.02)	1.0.26 (1.0.2)

**Table 5.6.2.2 CVSM/CIWS 3<sup>rd</sup> edition compliant materials**

New Mat#	3 <sup>rd</sup> ed. Compliant material description
412082	PCA: PLFM POWER BUTTON FLEX PATT C
724561	FRAME, LCD-CVSM W/GND
412406	SURETEMP MODULE ASSY, MMF_3 ED
412568	SURETEMP MODULE ASSY, CIWS_3RD ED
726347	MODULE ASSY, MASIMO MX5-2.1.1
411936	CHASSIS, MACHINED, CIWS, 3RD EDITION
725587	LABEL, NURSE CALL (CVSM)
719414	POWER SUPPLY, 60 WATT - FRIWO
411695	ASSY, PRINTER, PLATFORM, 2" W/GND HARNESS
411821	HARNESS, AC-IN TO PWR SUPPLY, CVSM
411824	HARNESS, AC-IN TO PWR SUPPLY, CIWS
411822	HARNESS, LCD FRAME TO CHASSIS, CVSM
411823	HARNESS, LCD GND, CVSM (INSTALLED TO LCD DISPLAY IN KIT)
725318	COPPER FOIL TAPE (INSTALLED TO LCD DISPLAY IN KIT)
411825	HARNESS, LCD GND, CIWS (INSTALLED TO LCD DISPLAY IN KIT)
724363	USB CABLE SEPARATOR 9 POSITION
724500	ETHERNET CABLE 20 INCH
725585	CVSM PRODUCT LABEL, 3RD EDITION
725692	EARLY SENSE MODULE W/EMI SHIELD (CVSM)
407574-06	PCA:PLFM, MED COMPUTE ENGINE

<b>New Mat#</b>	<b>3<sup>rd</sup> ed. Compliant material description</b>
407574-08 <sup>1</sup>	PCA:PLFM, MED COMPUTE ENGINE

### 5.6.3 CVSM/CIWS IEC 60601 4th Edition Compliance

All IEC 60601-1-1-2 4th edition compliant devices must be maintained with 4th edition compliant materials. All CVSMs manufactured from serial number 100072205218 and later and all CIWS manufactured from serial number 100025445218 and later will be serviced as 4<sup>th</sup> edition complaint devices.

**Table 5.6.3.1** list the minimum software levels to meet IEC 6060-1-1-2 4th edition compliance.

**Table 5.6.3.2** list materials that have been updated or added to CVSM/CIWS to meet 4th edition requirements, and materials previously released to meet 3<sup>rd</sup> edition which are also required to meet 4<sup>th</sup> edition. Compatibility with previous IEC 60601 editions is provided for reference. Refer to Dir 20015104 TSB – PMP IEC 60601 4th Edition Compliance for more details.

**Table 5.6.3.1 CVSM/CIWS 4th edition minimum compliant software**

Host (Boot) [HW ver.]	Newmar Comms [HW ver.]	Newmar Radio	Early Sense	SureTemp Plus (Boot)	Masimo WUI (Boot) [MX-5]	Nellcor PMB05N WUI (Boot)	NIBP [Safety] (Boot)	Medtronic CO2 (Boot)	Braun 6000 Thermometer (Boot)	GI ECG App (boot)	Weight Scale adapter Main (Boot)
2.41.00 (2.41.00) [P5]	No SW Mat # 410389-04 [HW v.2]	2.00.01	01.06.007	2.08 (1.06)	2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15)	2.06 [1.04] (1.02)	1.14 (1.24)	5.25 (1.27)	1.00.05 (1.00.02)	1.0.26 (1.0.2)

**Table 5.6.3.2 CVSM/CIWS 4<sup>th</sup> edition compliant materials**

Service Kit Mat#	4 <sup>th</sup> edition Component Mat#	3 <sup>rd</sup> & 4 <sup>th</sup> Edition Compliant material description	Hardware Compatibility with IEC 60601 editions		
			2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
107124	412896	MODULE ASSY SpO2, NELLCOR, 4 <sup>TH</sup>		X <sup>2</sup>	X
107290	412897	MODULE ASSY, ETCO2, ORIDION, 4 <sup>TH</sup>	X	X	X
107257	727294	HOUSING, MAIN, NEWMAR, PW (CIWS)	X	X	X
107169 107170 107171 107172	413023	RADIO, 2.00.01, PROV,802.11A/B/G/N, NEWMAR		X	X
107166	410389-04	PCA, COMMS MODULE DELUXE (NEWMAR)		X	X
107167 107168	411590	PCA:ANTENNA DUAL BAND 802.11 A/B/G/N (NEWMAR)		X	X
107167 107168	723627	ANTENNA, COAX, 175MM, OPP ENDS (NEWMAR)		X	X
107256, 107257	412082	PCA: PLFM POWER BUTTON FLEX PATT C	X	X	X

1. Requires host SW version 2.41.00 or later  
2. Requires host SW version 2.40.01 or later

Service Kit Mat#	4 <sup>th</sup> edition Component Mat#	3 <sup>rd</sup> & 4 <sup>th</sup> Edition Compliant material description	Hardware Compatibility with IEC 60601 editions		
			2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
107280 107281	412574	MODULE ASSY, MODPG_4TH ED	X	X	X
107258	412688	SURETEMP MODULE ASSY, MMF_4TH ED	X	X	X
107259	412687	SURETEMP MODULE ASSY, CIWS_4TH ED	X	X	X
107282 107283 107284 107285 107286 107287 107288 107289	727889	MODULE ASSY MASIMO MX5 4TH EDITION	X	X	X
107123	725811	NOMEX ESD SHIELD, CVSM PWR SUPPLY			X
103573	724561	FRAME, LCD-CVSM W/GND	X	X	X
104269	411936	CHASSIS, MACHINED, CIWS, 3RD EDITION	X	X	X
105362	725587	LABEL, NURSE CALL (CVSM)	X	X	X
106821 106829	719414	POWER SUPPLY, 60 WATT - FRIWO		X	X
106822	411695	ASSY, PRINTER, PLATFORM, 2" W/GND HARNESS		X	X
106821 106823 106840	411821	HARNESS, AC-IN TO PWR SUPPLY, CVSM		X	X
106826	411824	HARNESS, AC-IN TO PWR SUPPLY, CIWS		X	X
106824	411822	HARNESS, LCD FRAME TO CHASSIS, CVSM		X	X
106825	411823	HARNESS, LCD GND, CVSM (INSTALLED TO LCD DISPLAY IN KIT)		X	X
106825 106827	725318	COPPER FOIL TAPE (INSTALLED TO LCD DISPLAY IN KIT)		X	X
106827	411825	HARNESS, LCD GND, CIWS (INSTALLED TO LCD DISPLAY IN KIT)		X	X
106831	724363	USB CABLE SEPARATOR 9 POSITION		X	X
106832	724500	ETHERNET CABLE 20 INCH		X	X
	726377	CVSM PRODUCT LABEL, IPX, 3RD EDITION		X	X
106838	725692	EARLY SENSE MODULE W/EMI SHIELD (CVSM)	X	X	X
106839	407574-06	PCA:PLFM, MED COMPUTE ENGINE		X	X
107231	407574-08 <sup>1</sup>	PCA:PLFM, MED COMPUTE ENGINE		X	X

<sup>1</sup> Requires host SW version 2.41.00 or later

## 5.7 Masimo hemoglobin and acoustic respiration minimum requirements

The Masimo SpO2 modules support additional parameters; hemoglobin (SpHb) and acoustic respiration (RRa). Table 5.6.1 lists the minimum software level to support each parameter and compatible Masimo hardware by material number. The device must also meet the minimum software and hardware requirements shown in the previous tables when serviced.

**Table 5.7.1 Minimum requirements for SpHb and RRa**

CVSM/CIWS		MX-3 modules				MX-5 modules			
License	Main / (Boot)	Module material	WUI/Boot	MX FW	Upgrade Dongle	Module material	WUI/Boot	MX Firmware	Upgrade Dongle
SpHb	1.71.03 (1.71.03)	713654	1.7.3/1.0.2	7.5.1.3	NA	721463	2.1.0/1.0.4	7.10.1.2	NA
		716603				726347	2.1.1/1.0.4	7.12.0.7	
		717105							
717769									
RRa	2.00.00 (2.00.00)	713654	2.0.7/1.0.3	7.8.0.5	718019	721463	2.1.0/1.0.4	7.10.1.2	
		716603				726347	2.1.1/1.0.4	7.12.0.7	
		717105							
717769									

### 5.7.2 Masimo hemoglobin and acoustic respiration licensing

Masimo provides license dongles to enable SpHb and RRa. Each parameter has an associated dongle that contains either the SpHb license or the RRa license. The original MX-3 licensing dongles are not compatible with the newer MX-5 PCBA. The newer dongles are backward compatible with the older modules containing the MX-3 PCBA. Material numbers have been assigned to the dongles based on usage. This information is summarized in table 5.6.2 below.

**Table 5.7.2 Masimo licensing tools**

Usage	MX-3 License Dongles		MX-3 & MX-5 License Dongles	
	SpHb	RRa	SpHb	RRa
Production	717483	717954	722297	722294
Service upgrade or service kit	717484	717955	722298	722295
Service replacement	717485	717539	722296	722293

## 5.8 CVSM/CIWS Software compatibility

Table 5.7.1 and 5.7.2 list compatibility between the host software and the modular component software. This information is presented for reference to aid in identifying mismatched software.

Software version 1.x does not support Newmar radio, Newmar comms, Nellcor PMB05N, CO2, Early Sense, Braun 6000, or ECG.

For each component the boot version, application version, WUI version and other software versions are shown. The grouped versions reflect intra-compatibility. When upgrading components or modules the component software versions must match one of the groups shown. For example, the first row of table 5.7.1 lists the software component versions for the Masimo MX as WUI version 1.0.1.0, Boot version 1.0.1, and MX version 7.5.1.3. If the WUI version is updated to 1.0.2.0 (next row), the boot version must be updated to 1.0.2, the MX version may remain at 7.5.1.3 as shown in the second group of Masimo software versions. Although the software upgrade packages will

contain only compatible versions, you should be aware of the intra-compatibility as mismatches are possible.

**Table 5.8.1 1.x Software Compatibility**

Host Main/(boot)	Comms	Radio Server (Kernel)	SureTemp Plus (Boot)	Masimo WUI SpO2 (Boot) [MX-3] <sup>1</sup>	Masimo WUI SpO2 (Boot) [MX-5] <sup>1</sup>	Nellcor WUI SpO2 (Boot)	NIBP Core (Boot) [Safety]	Braun 4000 dock (Boot)	Weight Scale Adapter (Boot)
1.00.00 (1.00.00)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.1.0 (1.0.1) [7.5.1.3] 1.0.2.0 (1.0.2) [7.5.1.3]	Not validated	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00] 2.02 (1.00) [1.01] 2.03 (1.00) [1.02]	N/A	N/A
1.50.01 (1.50.01)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	Not validated	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00] 2.02 (1.00) [1.01] 2.03 (1.00) [1.02]	1.00.02 (1.00.00) 1.00.03 (1.00.01)	N/A
1.50.02 (1.50.01)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	Not validated	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00] 2.02 (1.00) [1.01] 2.03 (1.00) [1.02]	1.00.02 (1.00.00) 1.00.03 (1.00.01)	N/A
1.70.00 (1.70.00)	1.00.00 A0003	2.20.00 (4.1.22) 2.30.00 (4.1.26) 2.30.02 (4.1.30) 2.30.03 (4.1.31) 3.00.01 (5.0.1)	2.00 (1.00)   2.02 (1.02)	1.0.2.0 (1.0.2) [7.5.1.3] 1.7.3 (1.0.2) [7.5.1.3] 2.0.7 (1.0.3) [7.5.1.3] 2.0.7 (1.0.3) [7.8.0.5] 2.0.9 (1.0.4) [7.8.0.5] 2.1.0 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2]  2.1.0 (1.0.4) [7.10.7.0]  2.1.0 (1.0.4) [7.12.0.7]	1.00.12 1815 (1.00.01 0528)   1.00.14 (1.00.14)	2.00 (1.00) [1.00]  2.02 (1.00) [1.01]  2.03 (1.00) [1.02]  2.05 (1.02) [1.03]	1.00.02 (1.00.00)   1.00.03 (1.00.01)	1.0.25 (1.0.1)   1.0.26 (1.0.2)
1.70.02 (1.70.00)	1.00.00 A0003	2.30.00 (4.1.26)  2.30.02 (4.1.30)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3] 1.7.3 (1.0.2) [7.5.1.3] 2.0.7 (1.0.3) [7.5.1.3]  2.0.7 (1.0.3) [7.8.0.5]	NA	1.00.12 1815 (1.00.01 0528)  1.00.13 (1.00.01 0528)	2.00 (1.00) [1.00]  2.02 (1.00) [1.01]  2.03 (1.00) [1.02]	1.00.02 (1.00.00)  1.00.03 (1.00.01)	1.0.25 (1.0.1)  1.0.26 (1.0.2)

**Table 5.8.1 1.x Software Compatibility**

Host Main/(boot)	Comms	Radio Server (Kernel)	SureTemp Plus (Boot)	Masimo WUI SpO2 (Boot) [MX-3] <sup>1</sup>	Masimo WUI SpO2 (Boot) [MX-5] <sup>1</sup>	Nellcor WUI SpO2 (Boot)	NIBP Core (Boot) [Safety]	Braun 4000 dock (Boot)	Weight Scale Adapter (Boot)	
1.70.03 (1.70.00)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	2.1.0 (1.0.4) [7.10.1.2]	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00]	1.00.02 (1.00.00)	1.0.25 (1.0.1)	
		2.30.00 (4.1.26)		1.7.3 (1.0.2) [7.5.1.3]			2.1.0 (1.0.4) [7.10.1.2]			2.02 (1.00) [1.01]
		2.30.02 (4.1.30)		2.0.7 (1.0.3) [7.5.1.3]			2.1.0 (1.0.4) [7.10.7.0]			2.03 (1.00) [1.02]
		2.30.03 (4.1.31)	2.0.7 (1.0.3) [7.8.0.5]	2.1.0 (1.0.4) [7.12.0.7]	1.00.03 (1.00.01)					
		3.00.00 (5.0.0)	2.02 (1.02)	2.0.9 (1.0.4) [7.8.0.5]		1.00.14 (1.00.14)	2.05 (1.02) [1.03]	1.0.26 (1.0.2)		
		3.00.01 (5.0.1)		2.1.0 (1.0.4) [7.8.0.5]						
1.70.04 (1.70.00)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	2.1.0 (1.0.4) [7.10.1.2]	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00]	1.00.02 (1.00.00)	1.0.25 (1.0.1)	
		2.30.00 (4.1.26)		1.7.3 (1.0.2) [7.5.1.3]			2.1.0 (1.0.4) [7.10.1.2]			2.02 (1.00) [1.01]
		2.30.02 (4.1.30)		2.0.7 (1.0.3) [7.5.1.3]			2.1.0 (1.0.4) [7.10.7.0]			2.03 (1.00) [1.02]
		2.30.03 (4.1.31)	2.0.7 (1.0.3) [7.8.0.5]	2.1.0 (1.0.4) [7.12.0.7]	1.00.03 (1.00.01)					
		3.00.00 (5.0.0)	2.02 (1.02)	2.0.9 (1.04) [7.8.0.5]		1.00.14 (1.00.14)	2.05 (1.02) [1.03]	1.0.26 (1.0.2)		
		3.00.01 (5.0.1)		2.1.0 (1.0.4) [7.8.0.5]						
1.71.00	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	2.1.0 (1.0.4) [7.10.1.2]	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00]	1.00.02 (1.00.00)	1.0.25 (1.0.1)	
		2.30.00 (4.1.26)		1.7.3 (1.0.2) [7.5.1.3]			2.1.0 (1.0.4) [7.10.1.2]			2.02 (1.00) [1.01]
		2.30.02 (4.1.30)		2.0.7 (1.0.3) [7.5.1.3]			2.1.0 (1.0.4) [7.10.7.0]			2.03 (1.00) [1.02]
		2.30.03 (4.1.31)	2.0.7 (1.0.3) [7.8.0.5]	2.1.0 (1.0.4) [7.12.0.7]	1.00.03 (1.00.01)					
		3.00.00 (5.0.0)	2.02 (1.02)	2.0.9 (1.0.4) [7.8.0.5]		1.00.15 (1.00.15)	2.05 (1.02) [1.03]	1.0.26 (1.0.2)		
		3.00.01 (5.0.1)		2.1.0 (1.0.4) [7.8.0.5]						
1.71.02 (1.70.00)	1.00.00 A0003	2.20.00 (4.1.22)	2.00 (1.00)	1.0.2.0 (1.0.2) [7.5.1.3]	2.1.0 (1.0.4) [7.10.1.2]	1.00.12 1815 (1.00.01 0528)	2.00 (1.00) [1.00]	1.00.02 (1.00.00)	1.0.25 (1.0.1)	
		2.30.00 (4.1.26)	2.02 (1.02)	1.7.3 (1.0.2) [7.5.1.3]	2.1.0 (1.0.4) [7.10.7.0]		2.02 (1.00) [1.01]			
		2.30.02 (4.1.30)	2.07 (1.06)	2.0.7 (1.0.3) [7.5.1.3]	2.1.0 (1.0.4) [7.12.0.7]		1.00.03 (1.00.01)			1.0.26 (1.0.2)



**Table 5.8.1 1.x Software Compatibility**

Host Main/(boot)	Comms	Radio Server (Kernel)	SureTemp Plus (Boot)	Masimo WUI SpO2 (Boot) [MX-3] <sup>1</sup>	Masimo WUI SpO2 (Boot) [MX-5] <sup>1</sup>	Nellcor WUI SpO2 (Boot)	NIBP Core (Boot) [Safety]	Braun 4000 dock (Boot)	Weight Scale Adapter (Boot)
		2.30.03 (4.1.31) 3.00.00 (5.0.0) 3.00.01 (5.0.1)	2.08 (1.06)	2.0.7 (1.0.3) [7.8.0.5] 2.0.9 (1.0.4) [7.8.0.5] 2.1.0 (1.0.4) [7.8.0.5]		1.00.13 (1.00.01 0528) 1.00.14 (1.00.14) 1.00.15 (1.00.15)	2.03 (1.00) [1.02]  2.05 (1.02) [1.0.3]		
1.71.03	1.00.00 A0003	2.20.00 (4.1.22) 2.30.00 (4.1.26) 2.30.02 (4.1.30) 2.30.03 (4.1.31) 3.00.00 (5.0.0) 3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3)	2.02 (1.02)  2.07 (1.06)  2.08 (1.06)	2.0.9 (1.0.4) [7.5.1.3]  2.0.9 (1.0.4) [7.8.0.5]  2.1.0 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2]  2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0]  2.1.0 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15)  1.00.14 (1.00.14)	2.05 (1.02) [1.03]  2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.00.03 (1.00.01)	1.0.26 (1.0.2)
1.71.04	1.00.00 A0003	2.20.00 (4.1.22) 2.30.00 (4.1.26) 2.30.02 (4.1.30) 2.30.03 (4.1.31) 3.00.00 (5.0.0)	2.02 (1.02)  2.07 (1.06)  2.08 (1.06)	2.0.9 (1.0.4) [7.5.1.3]  2.0.9 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0]  2.1.0 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15)  1.00.14 (1.00.14)	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.00.03 (1.00.01)	1.0.26 (1.0.2)

**Table 5.8.1 1.x Software Compatibility**

Host Main/(boot)	Comms	Radio Server (Kernel)	SureTemp Plus (Boot)	Masimo WUI SpO2 (Boot) [MX-3] <sup>1</sup>	Masimo WUI SpO2 (Boot) [MX-5] <sup>1</sup>	Nellcor WUI SpO2 (Boot)	NIBP Core (Boot) [Safety]	Braun 4000 dock (Boot)	Weight Scale Adapter (Boot)
		3.00.01 (5.0.1)							
		3.00.02 (5.0.2)		2.1.0 (1.0.4) [7.8.0.5]	2.1.1 (1.0.4) [7.12.0.7]				
		3.00.03 (5.0.3)							

**Footnotes:**

1. There are two MX boards used with CVSM/CIWS; the original MX-3 board is used in material numbers 713654, 716603, 717105, 717769, and the newer (2014) RoHS compliant MX-5 board used in material number 721463 and 716347. The MX-3 firmware is not compatible with the MX-5 PCBA, and the MX-5 firmware is not backwards compatible with the MX-3 PCBA.

**Table 5.8.2 2.x Software Compatibility**

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.00.00 (2.00.00)	1.00.00 A0003	NA	2.30.03 (4.1.31) 3.00.01 (5.0.1)	NA	2.00 (1.00) 2.02 (1.02)	2.07 (1.0.3) [7.8.0.5] 2.09 (1.0.4) [7.8.0.5] 2.10 (1.0.4) [7.8.0.5]	2.10 (1.0.4) [7.10.1.2] 2.10 (1.0.4) [7.10.7.0] 2.10 (1.0.4) [7.12.0.7]	1.00.13 (1.00.01 0528) 1.00.14 (1.00.14) 1.00.15 (1.00.15)	NA	2.03 (1.00) [1.02] 2.05 (1.02) [1.03]	1.14 (1.24.0) 1.09.12 (01.22.00)	NA	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA
2.00.05 (2.00.05)	1.00.00 A0003	NA	2.30.03 (4.1.31) 3.00.01 (5.0.1) 3.00.02 (5.0.2)	NA	2.00 (1.00) 2.02 (1.02)	2.09 (1.0.4) [7.8.0.5] 2.10 (1.0.4) [7.8.0.5]	2.10 (1.0.4) [7.10.1.2] 2.10 (1.0.4) [7.10.7.0] 2.10 (1.0.4) [7.12.0.7]	1.00.13 (1.00.01 0528) 1.00.14 (1.00.14) 1.00.15 (1.00.15)	NA	2.03 (1.00) [1.02] 2.05 (1.02) [1.03]	1.14 (1.24.0) 1.09.12 (01.22.00)	NA	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA
2.10.00 (2.10.00)	1.00.00 A0003	NA	3.00.02 (5.0.2)	NA	2.02 (1.02)	2.09 (1.0.4) [7.8.0.5] 2.10 (1.0.4) [7.8.0.5]	2.10 (1.0.4) [7.10.1.2] 2.10 (1.0.4) [7.10.7.0] 2.10 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03]	1.14 (1.24.0) 1.09.12 (01.22.00) 1.09.12 (01.23.00) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.20.00 (2.20.00)	1.00.00 A0003	NA	2.30.03 <sup>2</sup> (4.1.31) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.05 (5.0.5)	NA	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5]	2.10 (1.04) [7.10.1.2] 2.10 (1.04) [7.10.7.0] 2.10 (1.04) [7.12.0.7]	1.00.15 (1.00.15)  1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA
2.20.01 (2.20.01)	1.00.00 A0003	NA	3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.05 (5.0.5)	NA	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5]	2.10 (1.04) [7.10.1.2] 2.10 (1.04) [7.10.7.0] 2.10 (1.04) [7.12.0.7]	1.00.15 (1.00.15)  1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA
2.20.03 (2.20.03)	1.00.00 A0003	NA	3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.05 (5.0.5)	NA	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5]	2.10 (1.04) [7.10.1.2] 2.10 (1.04) [7.10.7.0] 2.10 (1.04) [7.12.0.7]	1.00.15 (1.00.15)  1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	NA	1.0.26 (1.0.2)	NA

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.30.00 (2.30.00)	1.00.00 A0003	NA	2.30.03 <sup>2</sup> (4.1.31) 3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.05 (5.0.5)	NA	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5] 2.11 (1.04) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0] 2.1.0 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	5.19 (1.26) 5.25 (1.27)	1.0.26 (1.0.2)	1.00.05 (1.00.02)

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.30.01 (2.30.01)	1.00.00 A0003	NA	2.30.03 <sup>2</sup> (4.1.31) 3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.05 (5.0.5)	NA	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5] 2.11 (1.04) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0] 2.1.0 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	NA	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	5.19 (1.26) 5.25 (1.27)	1.0.26 (1.0.2)	1.00.05 (1.00.02)

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.40.01 (2.40.01)	1.00.00 A0003	1.00.00 HW v.2	2.30.03 <sup>2</sup> (4.1.31) 3.00.01 (5.0.1) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.04 (5.0.4) 3.00.05 (5.0.5)	2.00.01 <sup>3</sup> A0001	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	1.00.15 (1.00.15)	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	5.19 (1.26) 5.25 (1.27)	1.0.26 (1.0.2)	1.00.05 (1.00.02)
2.41.00 (2.41.00)	1.00.00 A0003	No SW HW v.2	2.30.03 <sup>2</sup> (4.1.31) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.04 (5.0.4) 3.00.05 (5.0.5)	2.00.01 <sup>3</sup> A0001	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.04) [7.8.0.5] 2.10 (1.04) [7.8.0.5] 2.1.1 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0] 2.1.0 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	1.00.15 (1.00.15)	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	5.19 (1.26) 5.25 (1.27)	1.0.26 (1.0.2)	1.00.05 (1.00.02)

Host Main (Boot)	Comms (Lamarr)	Comms (Newmar)	Lamarr Radio Server (Kernel)	Newmar Radio	SureTemp Plus Main (Boot)	Masimo SpO2 WUI (Boot) [MX-3] <sup>1</sup>	Masimo SpO2 WUI (Boot) [MX-5] <sup>1</sup>	Nellcor Nell-1 SpO2 WUI (Boot)	Nellcor PMB05N WUI (Boot)	NIBP Core (boot) [Safety]	Medtronic/Oridion CO2 Main (boot)	Early Sense	Braun 4000 dock (Boot)	Braun 6000 Thermometer (Boot)	Weight Scale adapter (Boot)	GI ECG Module App (boot)
2.42.00 (2.42.00)	1.00.00 A0003	No SW HW v.2	2.30.03 <sup>2</sup> (4.1.31) 3.00.02 (5.0.2) 3.00.03 (5.0.3) 3.00.04 (5.0.4) 3.00.05 (5.0.5)	2.00.01 <sup>3</sup> A0001	2.02 (1.02) 2.07 (1.06) 2.08 (1.06)	2.09 (1.0.4) [7.8.0.5] 2.1.0 (1.0.4) [7.8.0.5] 2.1.1 (1.0.4) [7.8.0.5]	2.1.0 (1.0.4) [7.10.1.2] 2.1.1 (1.0.4) [7.10.1.2] 2.1.0 (1.0.4) [7.10.7.0] 2.1.1 (1.0.4) [7.10.7.0] 2.1.0 (1.0.4) [7.12.0.7] 2.1.1 (1.0.4) [7.12.0.7]	1.00.15 (1.00.15) 1.00.14 (1.00.14)	1.00.15 (1.00.15)	2.05 (1.02) [1.03] 2.06 (1.02) [1.04] 2.07 (1.02) [1.04]	1.14 (1.24.0) 1.10.02 (1.24)	01.06.007	1.00.03 (1.00.01)	5.19 (1.26) 5.25 (1.27)	1.0.26 (1.0.2)	1.00.05 (1.00.02)

Footnotes

1. There are two MX boards used with CVSM/CIWS; the original MX-3 board is used in material numbers 713654, 716603, 717105, 717769, and the newer (2014) RoHS compliant MX-5 board used in material number 721463 and 726347. The MX-3 firmware is not compatible with the MX-5 PCBA, and the MX-5 firmware is not backwards compatible with the MX-3 PCBA.
2. Lamarr version 2.30.03 does not support server authentication or DNS lookup.
3. Newmar requires interface with comms PCA 410389-04 or later



## 5.9 CVSM/CIWS Hardware / Software Released Production Configurations

Table 5.8.1 captures the original production configurations of CVSM/CIWS as shipped. Service SW is the version that shipped on the CD with the device. Actual device software and material numbers may have been upgraded and therefore will not match this reference table exactly. Multiple software levels are shown in a single column for components that released multiple versions during the production of the particular device release. Material numbers in this table typical report into service kits used for repair.

**Note:** CVSM version 2.20.02 was never released, as it contained code to support MCE version P5. CVSM 2.20.03 is a service only release, not released to production at this time.

**Table 5.9.1 CVSM/CIWS Hardware / Software Released Production Configurations**

Component	CVSM (only) Release 1.0	CVSM/CIWS Release 1.5	CVSM/CIWS Release 1.70.00	CVSM/CIWS Release 1.70.02 *****	CVSM/CIWS Release 1.70.03	CVSM/CIWS Release 1.70.04
Host Release date	2010-08-12	2010-11-08	2011-06-15	*****	2012-04-18	2012-08-10
Host SW / boot code	1.00.00/ 1.00.00	1.50.01/1.50.01 1.50.02/1.50.01	1.70.00/ 1.70.00	1.70.02/ 1.70.00	1.70.03/ 1.70.00	1.70.04/ 1.70.00
Med Compute Eng (MCE)	407520	407574 407520	407574	407574	407574	407574
Comms SW	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003
Comms Module Standard	407524	407524	407524	407524	407524	407524
Basic	406270	406270	406270	406270 /407523	407523	407523
Radio Server SW/ Kernel	2.20.00/4.1.22	2.20.00/4.1.22	2.30.03/4.1.31 2.30.02/4.1.30 2.30.00/4.1.26	2.30.03/4.1.31	2.30.03/4.1.31	2.30.03/4.1.31 3.00.00/5.0.0
Radio PCBA with SW ver 2.20	406187	406187	NA	NA	NA	NA
Radio PCBA with SW ver 2.30	NA	NA	408472	408472	408472	408472
Radio PCBA with SW ver 3.00.00	NA	NA	NA	NA	NA	409115
SureTemp Plus SW / boot code	2.00/ 1.00	2.00/ 1.00	2.00/ 1.00	2.00/ 1.00	2.00/ 1.00	2.00/ 1.00
SureTemp Module	405701	405701	405701	405701	405701	405701
Masimo SpO2 SW WUI/ boot code (MX-3)	1.0.1/1.0.0 1.0.2/1.0.1	1.0.2/1.0.1	1.7.3/1.0.2	1.7.3/1.0.2 2.0.7/1.0.3	1.7.3/1.0.2 2.0.7/1.0.3	2.0.7/1.0.3
Masimo Rainbow CO-Oximetry App (MX-3)	7.5.1.3	7.5.1.3	7.5.1.3	7.5.1.3 7.8.0.5	7.5.1.3 7.8.0.5	7.8.0.5
SpO2 Masimo Module (MX-3)	713654 716603	716603	717105	717769	717769	717769
Nellcor SpO2 SW / boot code	1.00.12 1815/ 1.00.01.0528	1.00.12 1815/ 1.00.01.0528	1.00.12 1815/ 1.00.01.0528	1.00.13/ 1.00.01.0528	1.00.13/ 1.00.01.0528	1.00.13/ 1.00.01.0528
SpO2 Nellcor Module	405712	405712	405712	405712	405712	405712
NIBP SW / boot code/ safety	2.00/ 1.00/ 1.00	2.00/ 1.00/ 1.00	2.00/ 1.00/ 1.00	2.02/ 1.00/ 1.01	2.03/ 1.00/ 1.02	2.03/ 1.00/ 1.02

**Table 5.9.1 CVSM/CIWS Hardware / Software Released Production Configurations**

Component	CVSM (only) Release 1.0	CVSM/CIWS Release 1.5	CVSM/CIWS Release 1.70.00	CVSM/CIWS Release 1.70.02	CVSM/CIWS Release 1.70.03	CVSM/CIWS Release 1.70.04
Host Release date	2010-08-12	2010-11-08	2011-06-15	*****	2012-04-18	2012-08-10
MOD PG (NIBP) Module	405672	405672	405672	405672	405672	405672
<i>External Options</i>						
Braun 4000 dock SW /boot code	NA	1.00.03/1.00.01 1.00.02/1.00.00	1.00.03/1.00.01 1.00.02/1.00.00	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01
Braun 4000 Module	NA	407362	407362	407362	407362	407362
Weight Scale adapter SW / boot code	NA	NA	1.0.26/1.0.2 1.0.25/1.0.1	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2
Weight Scale Adapter	NA	NA	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1
<i>Service</i>						
Service SW	1.0.2.0	1.0.2.0	1.5.0.0	1.5.0.0	1.5.0.0	1.5.0.0
Service SW CD			103521	103521	103521	103521

\*\*\*\*\* NOTE: HOST SW 1.70.02 release was suspended after a limited number of units shipped (2012-02-02 thru 2012-02-14).

**Table 5.9.1 CVSM/CIWS Hardware / Software Released Production Configurations**

Component	CVSM/CIWS Release 1.71.02	CVSM/CIWS Release 1.71.03	CVSM/CIWS Release 1.71.04	CVSM Release 2.00.00	CVSM Release 2.00.05	CVSM Release 2.10.00
Host Release date	2012-10-01	2013-02-15	2015-06-30 <sup>1</sup>	2013-01-18	2013-05-10	2013-12-09
Host SW / boot code	1.71.02/ 1.71.02	1.71.03/ 1.71.03	1.71.04/ 1.71.04	2.00.00/ 2.00.00	2.00.05/ 2.00.05	2.10.00/ 2.10.00
Med Compute Eng (MCE)	407574	407574	407574	407574	407574	407574
Comms SW	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003
Comms Module Standard	407524	407524	407524	407524	407524	407524
Basic	407523	407523	407523	NA	NA	NA
Radio Server SW/ Kernel	3.00.00/5.0.0 3.00.01/5.0.1	3.00.01/5.0.1 3.00.02/5.0.2 3.00.03/5.0.3	3.00.03/5.0.3	3.00.01/5.0.1	3.00.02/5.0.2	3.00.02/5.0.2
Radio PCBA with SW ver 2.30	NA	NA	NA	NA	NA	NA
Radio PCBA with SW ver 3.00.00	409115	NA	NA	NA	NA	NA
Radio PCBA with SW ver 3.00.01	409437	409437	NA	409437	NA	NA
Radio PCBA with SW ver 3.00.02	NA	409594	NA	NA	409594	409594
Radio PCBA with SW ver 3.00.03	NA	410910	410910	NA	NA	NA

<sup>1</sup> Service only release

**Table 5.9.1 CVSM/CIWS Hardware / Software Released Production Configurations**

Component	CVSM/CIWS Release 1.71.02 2012-10-01	CVSM/CIWS Release 1.71.03 2013-02-15	CVSM/CIWS Release 1.71.04 2015-06-30 <sup>1</sup>	CVSM Release 2.00.00 2013-01-18	CVSM Release 2.00.05 2013-05-10	CVSM Release 2.10.00 2013-12-09
Host Release date	2.00/ 1.00	2.02/ 1.02	2.02/ 1.02	2.00/ 1.00	2.02/ 1.02	2.02/ 1.02
SureTemp Plus SW / boot code	2.02/ 1.02			2.02/ 1.02		
SureTemp Module	405701	405701	405701	405701	405701	405701
Masimo SpO2 SW WUI/ boot code (MX-3)	2.0.7/1.0.3 2.0.9/1.0.4	2.0.9/1.0.4	NA	2.0.9/1.0.4	2.0.9/1.0.4	2.0.9/1.0.4
Masimo Rainbow CO-Oximetry App (MX-3)	7.8.0.5	7.8.0.5	NA	7.8.0.5	7.8.0.5	7.8.0.5
SpO2 Masimo Module (MX-3)	717769	717769	NA	717769	717769	717769
Masimo SpO2 SW WUI/ boot code (MX-5)	NA	2.1.0/1.0.4 2.1.1/1.0.4	2.1.0/1.0.4	NA	NA	NA
Masimo Rainbow CO-Oximetry App (MX-5)	NA	7.10.1.2 7.10.7.0 7.12.0.7	7.10.7.0 7.12.0.7	NA	NA	NA
SpO2 Masimo Module (MX-5)	NA	721463	721463	NA	NA	NA
Nellcor SpO2 SW/ boot code	1.00.13/ 1.00.01.0528 1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.13/ 1.00.01.0528 1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14
SpO2 Nellcor Module	405712	405712	405712	405712	405712	405712
NIBP SW / boot code/ safety	2.03/ 1.00/ 1.02 2.05/ 1.02/ 1.0.3	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.03/ 1.00/ 1.02 2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03
MOD PG (NIBP) Module	405672	405672	405672	405672	405672	405672
MicroMediCO2 Main/Boot	NA	NA	NA	1.9.12/1.22	1.9.12/1.22	1.9.12/1.22 1.9.12/1.23 1.10.02/1.24
MODULE ASSY, ETCO2, ORIDION	NA	NA	NA	408259	408259	408259
Early Sense Software version	NA	NA	NA	NA	01.06.007	01.06.007
Early Sense Module	NA	NA	NA	NA	NA	720010
<i>External Options</i>						
Braun 4000 dock SW / boot code	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01
Braun 4000 Module	407362	407362	407362	407362	407362	407362

**Table 5.9.1 CVSM/CIWS Hardware / Software Released Production Configurations**

Component	CVSM/CIWS Release 1.71.02	CVSM/CIWS Release 1.71.03	CVSM/CIWS Release 1.71.04	CVSM Release 2.00.00	CVSM Release 2.00.05	CVSM Release 2.10.00
Host Release date	2012-10-01	2013-02-15	2015-06-30 <sup>1</sup>	2013-01-18	2013-05-10	2013-12-09
Weight Scale adapter SW / boot code	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2
Weight Scale Adapter	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1
<i>Service</i>						
Service SW	1.5.0.0	NA <sup>1</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>
Service SW CD	103521	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>	NA <sup>2</sup>

Component	CVSM Release 2.20.00	CVSM Release 2.20.01	CVSM Release 2.20.03	CVSM/CIWS Release 2.30.00	CVSM/CIWS Release 2.30.01	CVSM/CIWS Release 2.40.01 <sup>2</sup>
Host Release date	2014-05-28	2015-06-30	2016-07-28	2017-08-01	2017-11-29	2018-06-26
Host SW / boot code	2.20.00/2.20.00	2.20.01/2.20.01	2.20.03/2.20.03	2.30.00/2.30.00	2.30.01/2.30.01	2.40.01/2.40.01
Med Compute Eng (MCE)	407574	407574	407574	407574	407574-06	407574-06
Comms SW (Lamarr)	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	1.00.00 A0003	NA
Comms Module Standard (Lamarr)	407524	407524	407524	407524	407524	NA
Comms SW (Newmar)	NA	NA	NA	NA	NA	No SW
PCA, Comms module Deluxe (Newmar)	NA	NA	NA	NA	NA	410389-04
Lamarr Radio Server SW/ Kernel	3.00.02/5.0.2 3.00.03/5.0.3	3.00.03/5.0.3	3.00.03/5.0.3	3.00.03/5.0.3	3.00.03/5.0.3	NA
Lamarr Radio PCBA with SW ver 3.00.02	409594	NA	NA	NA	NA	NA
Lamarr Radio PCBA with SW ver 3.00.03	410910	410910	410910	410910	410910	NA
Newmar radio SW	NA	NA	NA	NA	NA	2.00.01
Newmar radio PCBA with SW ver 2.00.01	NA	NA	NA	NA	NA	413023
SureTemp Plus SW / boot code	2.02/1.02	2.02/1.02	2.02/1.02	2.02/1.02 2.07/1.06	2.07/1.06	2.07/1.06
SureTemp Module	405701	405701	405701	405701 412406	412406	412406

1. WAST is no longer shipped with the product
2. Version 2.40.00 was not released to production

Component	CVSM Release 2.20.00	CVSM Release 2.20.01	CVSM Release 2.20.03	CVSM/CIWS Release 2.30.00	CVSM/CIWS Release 2.30.01	CVSM/CIWS Release 2.40.01 <sup>2</sup>
Host Release date	2014-05-28	2015-06-30	2016-07-28	2017-08-01	2017-11-29	2018-06-26
Masimo SpO2 SW WUI/ boot code (MX-3)	2.0.9/1.0.4	NA	NA	NA	NA	NA
Masimo Rainbow CO-Oximetry App (MX-3)	7.8.0.5	NA	NA	NA	NA	NA
SpO2 Masimo Module (MX-3)	717769	NA	NA	NA	NA	NA
Masimo SpO2 SW WUI/ boot code (MX-5)	2.1.0/1.0.4	2.1.0/1.0.4	2.1.0/1.0.4	2.1.1/1.0.4	2.1.1/1.0.4	2.1.1/1.0.4
Masimo Rainbow CO-Oximetry App (MX-5)	7.10.1.2	7.10.1.2	7.10.7.0	7.12.0.7	7.12.0.7	7.12.0.7
	7.10.7.0	7.10.7.0	7.12.0.7			
		7.12.0.7				
SpO2 Masimo Module (MX-5) <sup>1</sup>	721463	721463	721463	726347	726347	726347
Nellcor SpO2 SW/ boot code	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14
SpO2 Nellcor NELL-1 Module	405712	405712	405712	405712	405712	405712
Nellcor SpO2 SW/ boot code	NA	NA	NA	NA	NA	1.00.15/ 1.00.15
SpO2 Nellcor PMB05N Module	NA	NA	NA	NA	NA	412896
NIBP SW / boot code/ safety	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03	2.05/ 1.02/ 1.03
MOD PG (NIBP) Module	405672	405672	405672	405672	405672	405672
Micro Medi CO2 Main/Boot	1.10.02/1.24	1.10.02/1.24	1.10.02/1.24	1.10.02/1.24	1.10.02/1.24	1.10.02/1.24
						1.14/1.24
						408259
Module assy, ETCO2	408259	408259	408259	408259	408259	412897
Early Sense Software version	01.06.007	01.06.007	01.06.007	01.06.007	01.06.007	01.06.007
Early Sense Module	720010	720010	720010	720010	725692	725692
<i>External Options</i>						
Braun 4000 dock SW /boot code	1.00.03/1.00.01	1.00.03/1.00.01	1.00.03/1.00.01	NA	NA	NA
Braun 4000 Dock	407362	407362	407362	NA	NA	NA
Braun 6000 Thermometer SW application/boot code	NA	NA	NA	5.19 /1.26	5.19 /1.26	5.19 /1.26

<sup>1</sup> RoHS version

Component	CVSM Release 2.20.00	CVSM Release 2.20.01	CVSM Release 2.20.03	CVSM/CIWS Release 2.30.00	CVSM/CIWS Release 2.30.01	CVSM/CIWS Release 2.40.01 <sup>2</sup>
Host Release date	2014-05-28	2015-06-30	2016-07-28	2017-08-01	2017-11-29	2018-06-26
Braun 6000 Thermometer	NA	NA	NA	411543	411543	411543
Braun 6000 Dock	NA	NA	NA	411585	411585	411585
Weight Scale adapter SW / boot code	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2
Weight Scale Adapter	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1
GI ECG Module SW app/boot code	NA	NA	NA	NA	1.00.05/1.00.02	1.00.05/1.00.02
GI ECG Module	NA	NA	NA	NA	412726	412726

Component	CVSM/CIWS Release 2.41.00	CVSM/CIWS Release 2.41.00	CVSM/CIWS Release 2.42.00
Host Release date	2018-10-16	4 <sup>th</sup> Edition 2018-12-23	2019-04-xx
CVSM 1 <sup>st</sup> SN	100039314218	100072205218	
CIWS 1 <sup>st</sup> SN	100020364218	100025445218	
Host SW / boot code	2.41.00/ 2.41.00	2.41.00/ 2.41.00	2.42.00/ 2.42.00
Med Compute Eng (MCE)	407574-06 407574-08	407574-06 407574-08	407574-08
PCA, Comms module Deluxe (Newmar)	410389-04	410389-04	410389-04
Newmar radio SW	2.00.01	2.00.01	2.00.01
Newmar radio PCBA with SW ver 2.00.01	413023	413023	413023
SureTemp Plus SW / boot code	2.08/1.06	2.08/1.06	2.08/1.06
SureTemp module CVSM	412688	412688	412688
SureTemp CIWS	412687	412687	412687
Masimo SpO2 SW WUI/ boot code (MX-5)	2.1.1/1.0.4	2.1.1/1.0.4	2.1.1/1.0.4
Masimo Rainbow CO-Oximetry App (MX-5)	7.12.0.7	7.12.0.7	7.12.0.7
SpO2 Masimo Module (MX-5)	727889	727889	727889
Nellcor SpO2 SW/ boot code	1.00.14/ 1.00.14	1.00.14/ 1.00.14	1.00.14/ 1.00.14
SpO2 Nellcor PMB05N Module	412896	412896	412896

Component	CVSM/CIWS Release 2.41.00	CVSM/CIWS Release 2.41.00	CVSM/CIWS Release 2.42.00
Host Release date	2018-10-16	4 <sup>th</sup> Edition 2018-12-23	2019-04-xx
CVSM 1 <sup>st</sup> SN	100039314218	100072205218	
CIWS 1 <sup>st</sup> SN	100020364218	100025445218	
NIBP SW / boot code/ safety	2.06/ 1.02/ 1.04	2.06/ 1.02/ 1.04	2.07/ 1.02/ 1.04
MOD PG (NIBP) Module	412574	412574	412574
Micro Medi CO2 Main/Boot	1.10.02/1.24	1.10.02/1.24	1.10.02/1.24
	1.14/1.24	1.14/1.24	1.14/1.24
Module assy, ETCO2	412897	412897	412897
Early Sense Software version	01.06.007	01.06.007	01.06.007
Early Sense Module	725692	725692	725692
<i>External Options</i>			
Braun 6000 Thermometer SW application/boot code	5.19 /1.26	5.25/1.27	5.25/1.27
Braun 6000 Thermometer	411543	413071	413071
Braun 6000 Dock	411585	411585	411585
Weight Scale adapter SW / boot code	1.0.26/1.0.2	1.0.26/1.0.2	1.0.26/1.0.2
Weight Scale Adapter	Health O meter HOMWA-1	Health O meter HOMWA-1	Health O meter HOMWA-1
GI ECG Module SW app/boot code	1.00.05/1.00.02	1.00.05/1.00.02	1.00.05/1.00.02
GI ECG Module	412726	412726	412726

## 6.0 Safety & Environment

N/A

## 7.0 Associated Documents

60027700	Service and Repair Plan
60037893	Connex Integrated Wall System S&R Plan
MPD-SOP-0304	Service Policy

### Reason for Change:

Revision	Sec/Para Changed	Change Made	Date
A		Initial Release	

Revision	Sec/Para Changed	Change Made	Date
B	4.0 5.2.2 5.2.3 Appendix A	Deleted CVSM definition Revised Software support tools table Added CVSM minimum hardware requirements table Added TSBs 20012668 and 20012684	2011-09-15
C	5.2.1 5.2.1 5.2.2 5.2.4 5.2.4 Appendix A	Added radio SW 2.30.03/4.1.31 new minimum SW level Reorganized footnotes Removed footnotes Added explanation for multiple SW levels in a column Added radio SW 2.30.03/4.1.31 Added TSBs 20012792	2011-30-11
D	5.2.1 5.2.2 5.2.4 5.2.5 7.0 Appendix A	Add min Host SW, NIBP SW, Masimo SW, Nellcor SW Edit Supporting Footnotes Edit Host SW Add CVSM Release 1.70.02 Add release 1.70.02 configuration info Update Associated Docs, Add Release Notes 1.70.02 RevA Add TSB 20012868	2012-02-01
E	5.2.1 5.2.2 5.2.4 7.0 Appendix A	Delete from Minimum Software Requirements: Host SW 1.70.02, Masimo SW 2.0.7, Nellcor SW 1.00.13. Revert back to Host SW 1.70.00, Masimo SW 1.7.3, Nellcor SW 1.00.12 Edit Supporting Footnotes Revert Host SW 1.70.02 Add definition 1.70.00 to column header & foot note. Remove Radio Server 2.30.02 & 2.30.00 from 1.70.02 configuration. Remove Accessory heading, change to External Options heading and combine tables. Add Service heading above Service SW. Remove Associated Docs 20012870, 20012871, 20012872 Update 20012873 to Rev B Remove TSB 20012868, Add TSB 20012882	2012-02-10
F	All sections 5.2.1 5.2.1 foot notes 5.2.4 5.2.5 Appendix A Appendix A Appendix A Appendix A Appendix A Appendix A	Add CIWS Update table as follows: Change column headings; Delete SW, add WUI to SpO2, replace boot code with boot. Add row headers minimum service shippable level and current level. Update minimum SW versions. Add foot notes 1 and 2 Add section CVSM/CIWS Software compatibility Add Column to table for 1.70.03 Add Status column Add TSB 20012868 Add TSB 20012889 Add TSB 20012916 Add TSB 20012936 Add TSB 20012516	2012-04-11
G	5.1 table 5.2.1 table 5.2.2 table	Updated Overview section Change Min SW Req, Braun dock (boot loader) 1.00.01 Change Min Host SW 1.70.04 Add Host SW 1.70.04	2012-08-15



Revision	Sec/Para Changed	Change Made	Date
	5.2.4 table	Add SW compatibility for Host 1.70.04 Correct table to show Masimo 2.0.7/1.0.3/7.5.1.3 as a compatible configuration Correct table to show Braun info 1.00.02 / 1.00.00	
	5.2.5 table	Correct format of table for Host section 1.70.03 Add Production Configuration for Host SW 1.70.04, Add Host Release date information, Add Comms Module Basic 407523 to reflect current production. Correct table to show Braun info 1.00.02 / 1.00.00	
	7.0 Associate Documents	Delete 20012873, MODPG VER 2.02 RELEASE NOTES rev B, 20012966, CVSM/CIWS 1.70.03 Release Notes Rev C ADD 20013188A, CVSM/CIWS 1.70.04 Release Notes	
	Appendix A	Add TSB's: 20012916 Rev A, B, status I, 20012842 status I	
	Appendix A	Add TSB's: 20012125, 20012178, 20012312, 20012349, 20012487, 20012523, 20012524, 20012525, 20012526, 20012861, 20012916revC, 20012936, 20013132, 20013147, 20013149, 20013154, 20013174	
	Footer	Remove "version", add letter version to end of DIR#	
H	5.2.2 5.2.5 Appendix A	Update WAST version 1.5.0.0 to 1.5.0.1 ADD Comms Modules 408498 & 408499. Update Service SW to 1.5.0.1, for 1.70.04 ADD TSB's: 20012845, 20013023, 20013132, 20013147, 20013149. Sort TSB's by descending date, rather than by DIR number.	D*
J	5.2.1 5.2.2 5.2.4 5.2.5 Appendix A	Update table replace radio 2.30.00 4.1.31 to 3.00.00/5.0.0 in row 3 Update table replace WAST version 1.5.0.1 with 1.5.0.2 Update table add radio 3.00.00/5.0.0 to radio column for Host 1.70.03 and 1.70.04 Update table column CVSM/CIWS release 1.70.04: Add release date to column header Row Radio server SW/Kernel add 3.00.00/5.0.0. Replace Plat.Radio2.30, PROV SPI,802.11A/B/G with Radio PCBA with SW ver 2.30. Add row radio PCBA with SW ver 2.20 Add row Radio PCBA with SW ver 3.00.00 409115, Change row Service SW change version to 1.5.0.0, for all columns add row CD Mat No.103521 Update table add 20012860 TSB - Flexnet Radio FIPS 3.00.00 CVSM/CIWS	D*

Revision	Sec/Para Changed	Change Made	Date
K	5.2.1	Update table column headers; add Boot to Host column header, enclose boot in parenthesis and MX in brackets to delineate it from other software versions. Replace row 1 & 2 Host version 1.70.04 with 1.71.02 and add boot version 1.71.02. Enclose all boot versions in parenthesis. Delete row starting with host version 1.50.02. Delete foot note 3 & 4 and reorder remaining footnotes	D*
	5.2.2	Add host SW 1.71.02 and Connex version 2.0.1	
	5.2.4	Update table add Boot to Host column header, enclose boot in parenthesis and MX in brackets to delineate it from other software versions. Add boot to Host column header and boot versions for all host versions. Add new row for Host 1.71.02 and all subsystem versions	
	5.2.5	Update table add new column for CVSM/CIWS release 1.71.02 and complete with SW/HW	
	Appendix A	Add new row at the end of the table for 20013264 TSB - CVSM_CIWS, 1.71.02, Release	
L	5.2.1	Replace radio server kernel version 3.00.00 (5.0.0) with 3.00.01(5.0.1) per TSB 20013342	D*
	5.2.4	Add radio server kernel version 3.00.01(5.0.1) to row for Host 1.70.04 Add radio server kernel version 3.00.01(5.0.1) to row for Host 1.71.02	
	5.2.5	Add radio server SW/Kernel 3.00.01(5.0.1) to column for Host 1.71.02 Insert row Radio PCBA with ver SW 3.00.01, add 409437 to column for Host 1.71.02	
	Appendix A	Inactivate 20012591 TSB-CVSM 1.7/Connex VM 1.1 Upgrade Strategy Add DIR 20013342 TSB-Flexnet radio CERTS 3.00.01 CVSM/CIWS	

Revision	Sec/Para Changed	Change Made	Date
M	2.0 3.0  5.2.2 Table 5.2.2.1 Table 5.2.2.2 Table 5.3.1  Table 5.4.1.1 Table 5.5.1 Table 5.5.2 Table 5.6.1  7.0 Table A	Added the "...release 1.x and 2.x ..."  Deleted "Product service" and "Product Service is responsible for implementing, training, and verification of compliance within the Product Service department."  Reword paragraph 1 and 2 to cover CVSM 2.x Number table for easy reference Add table for CVSM 2.x Change column headings for clarity. Add column heading for Connex VM and Connex CS. Add row for Host SW 2.00.00 and populate columns Number table for easy reference Number table for easy reference Add software compatibility table for CVSM 2.x Number table for easy reference. For column Release 1.70.04 and 1.71.02 row Comms module standard delete 408499 material was not used in production, for row Comms module basic delete 408498 material was not used in production. Add column for CVSM 2.0. and populate. Add row for MicroMediCO2. Add row for module Assy ETCO2 Oridion. Add * to bottom of table for WAST. Delete documents: 20012577, 20013188A, 20012969. It is not necessary to reference these documents Change table label from "Table 1" to "Table A". Add DIR 20013364 TSB-CVSM 2.0 Release. Add 20013381 TSB-Welch Allyn Service Tool-WAST v1.6.0.0	D*
N	Tables: 5.2.2.1 5.3.1 5.5.1 5.6.1 Appendix A	Updated minimum 1.x levels to host 1.71.03 and compatible FSS levels. Updated tables to reference new firmware released as part of 1.71.03 project. Added 1.71.03 release TSB.	D*
P	Add Document information Table 5.2.2.1  Table 5.2.2.2 Table 5.3.1  Section 5.4.3 Table 5.5.1 Table 5.5.2	Change document manager to John Master. John is the new service engineering manager Update radio server version for current level row. Update current Level row host (Boot) to 2.00.05 (2.00.05), radio Server (kernel) to 3.00.02 (5.0.2) Add new row for Host SW 2.00.05, update previous versions compatibility with footnotes to capture exceptions. Add footnotes to table Add to opening sentence "For a CVSM 1.x to..." Add radio SW 3.00.02 to row for host SW 1.71.03 Add row for host 2.00.05	D*      D*

Revision	Sec/Para Changed	Change Made	Date
	Table 5.6.1  Appendix, table A Revision History	Add column for CVSM release 2.00.05 Add row for Radio PCBA with SW ver 3.00.02  Add rows for TSB's 20013432 and 20013455  Update version and add initials for GS	D*
R	Add Document information Add Document information Table 5.9.2  Table 11	Change document manager to Eric Jensen  Document Author Changed to Ken Gilbert  Update for CVSM SWF 2.10 Release  Update for CVSM SWF 2.10 Release	D*
S	Update title block  Section 3.0  Section 5.0  Section 5.1  Section 5.2.1  Table 5.1  Table 5.2  Table 5.3  Table 5.4  Section 5.4.3 Table 5.4.3.1  Section 5.5 Section 5.5.2	Change revision from R to S Change Document author from <i>Ken Gilbert</i> to <i>Geoff Stone</i> Change document manager from <i>Eric Jensen</i> to <i>Jeff Schmidt</i> Added: <i>Local service center managers are responsible for providing this document to any ASPs under their jurisdiction authorized to service and support CIWS or CVSM.</i> Replaced <i>Employees</i> with <i>Welch Allyn personnel, contractors and ASPs servicing and supporting CVSM and CIWS</i> Deleted "Hardware from <i>Minimum Hardware Requirements for a 2.x Upgrade</i> Added <i>Note: Until the software is harmonized CVSM 1.x and CVSM 2.x will be maintained on separated tracks. A purchased parameter upgrade requiring CVSM 2.x software is justification for upgrading a CVSM 1.x to CVSM 2.x. Marketing may approve a limited number of customers for a CVSM 1.71.03 to 2.x software only upgrade.</i> Relabeled table 5.2.1.1 to 5.1 Changed <i>Current level</i> to <i>Current</i> Changed <i>minimum service shippable level</i> to <i>minimum</i> Relabeled Table 5.2.1.2 as Table 5.2 Updated current row with release 2.20.00 software versions Added supported row with version 2.10 software versions Replaced note 1 with note 2, and note 2 with note 3 Moved note 3 to note 4. Added new note 3 and 4. Relabeled Table 5.3.1 as Table 5.3 Added row for Host SW version 2.20. Added columns for Custom Data Schema. Updated footnotes 2, 3, and 4 Added note 5 Relabeled Table 5.4.1 as Table 5.4 Replace current material number 717676 with 720719 Deleted 5.4.3 CVSM 2.x Upgrade Minimum Hardware Requirements Deleted CVSM 2.1x Upgrade minimum hardware levels Added new section <i>CVSM 1.x to 2.x Upgrade Requirements</i> Added new section <i>CVSM 2.x Upgrade Minimum Software Requirements</i>	D*

Revision	Sec/Para Changed	Change Made	Date
	Table 5.5.2.1 Section 5.5.3 Section 5.6 Table 5.7 Table 5.8 Section 5.7 Table 5.9 Appendix A Table A	Added new table <i>CVSM 2.x Upgrade minimum software levels</i> Updated <i>CVSM 2.x Upgrade Minimum Hardware Requirements</i> Relabeled section 5.5 as 5.6 CVSM/CIWS Software compatibility Relabeled Table 5.5.1 1.x Software Compatibility as Table 5.7 1.x Software Compatibility Added Masimo SPO2 2.1.0 (1.04) 7.10.1.2 to row for 1.71.02 Added footnote 1 Relabeled table 5.5.2 as Table 5.8 2.x Software Compatibility Added Masimo SPO2 2.1.0 (1.04) 7.10.1.2 to row for 2.10.00 Added new row for host 2.20.00 Relabeled section 5.6 as 5.7 CVSM/CIWS Hardware / Software Released Production Configurations Relabeled table 5.6.1 to 5.9 Added new column for host 2.20.00 Added row for DIR 20013734	
T	All 5.1 5.2.1 para2 5.2.1 para3 Table 5.2.1 footnote 2 Table 5.3.1 Table 5.3.1 5.4.1 5.5.2 5.6 5.7 Table 5.7.1 Table 5.7.1 footnotes Table 5.7.2 Table 5.7.2 footnotes 5.8 para 1	Re-numbered tables  Added appendix A to the list of sections Added last sentence starting with “However...” Added note on software harmonization Added explanation of new Masimo sw version 7.10.1.2 Delete footnote 3 Added footnote 5 Revised wording for clarity Revised wording for clarity Inserted new section for Masimo SpHb and RRA requirements Added 2 <sup>nd</sup> paragraph explaining sw version grouping Added column to table for Masimo MX-5 PCBA Added footnote Added column to table for Masimo MX-5 PCBA Added footnote Revised wording for clarity	D*

Revision	Sec/Para Changed	Change Made	Date
	Table 5.8.1 Appendix A Appendix A table A.	Added MX-3 and MX-5 to Masimo descriptions to distinguish between MX PCBA. Added rows for MX-5 WUI/boot version, app version, and module material number Add "Use appendix A to check..." Deleted, "Hardware/Software Change Order ..." Deleted row for TSB 20012312 Deleted row for TSB 20012916 Rev A Deleted row for TSB 20012916 Rev B Corrected row for TSB 20013734 to TSB 20013764	
U	5.2.1, second note	Delete, "a limited number of customers". There is no limit to the number of customers marketing may approve of upgrading.	D*
	Table 5.2.1	Change current radio version to 3.00.03 (5.0.3). Radio SW version 3.00.03 is released.	
	Table 5.2.2	Change current radio version to 3.00.03 (5.0.3). Updated footnote 2 to match footnote 2 in table 5.2.1	
	Table 5.3.1	Renumber footnotes for read ability. Replaced footnote 4, a with 6, Moved foot note 4 b to footnote 3 Corrected WAST version in column 2 Corrected service monitor version 1 to 1.1 in row 2 Corrected CS version in row 2, 3 and 6 to align with compatibility table in DIR 80018292	
	Sec. 5.5.1	Added text to clarify upgrade requirements as to when subsystem software should be upgraded and both Masimo MX versions are supported. Inserted column to show minimum software versions for both Masimo MX versions.	
	Table 5.5.1	Change minimum radio version to 3.00.03 (5.0.3). Radio SW version 3.00.03 is installed on all upgrades.	
	Table 5.5.2	Added radio PCBA 410910 in row 2 column 4	
	Table 5.7.1	Added radio version 3.00.03 (5.0.3) to row for host version 1.71.03	
	Table 5.7.2	Added radio version 3.00.03 (5.0.3) to row for host version 2.20.00	
	Table 5.8.1	Added radio version 3.00.03 (5.0.3) and radio PCBA SW Ver 3.00.03 material 4101910 to column for host version 1.71.03 and 2.20.00	
	Appendix A table A	Add 20013952 TSB-Flexnet Radio ver. 3.00.03 CVSM/CIWS	
W	5.2.1 note 1	Replace update with upgrade	D*
	5.2.1 note 1	Replace 1.71.03 with 1.x to clarify	
	Table 5.2.1	Split Masimo into two columns MX-3 and MX-5	
	Table 5.2.1	Change current shipping level from host 1.71.03 to 1.71.04	
	Table 5.2.1	Change current Masimo MX version from 7.10.1.2 to 7.10.7.0	
	Table 5.2.1	Correct footnote 1 definition of 'WUI'	
	Table 5.2.1	Update footnote 2 to describe difference between MX-3 and MX-5	
	Table 5.2.1 footnote 3	Add Foot note 3 for version 1.71.04	

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	Table 5.2.2	Split Masimo into two columns MX-3 and MX-5	
	Table 5.2.2	Change current shipping level from host 2.20.00 to 2.20.01	
	Table 5.2.2	Change Current row Masimo MX version from 7.10.1.2 to 7.10.7.0	
	Table 5.2.2	Add new supported row for host 2.20.00	
	Table 5.2.2	Correct footnote 1 definition of 'WUI'	
	Table 5.2.2	Update footnote 2 to describe difference between MX-3 and MX-5	
	Table 5.2.2	Update footnote 3 and 4 add 'Connex' in front of 'CS' for clarity	
	Table 5.3.1	Add row for host 2.20.01	
	Sec 5.3 Para 1	Replace CVSM and CIWS 'host' with 'device' for clarity	
	Table 5.3.1	Add row for host 1.71.04	
	Table 5.3.1	Footnote 3: replace 2.20.00 with 2.20.0x to include both versions 2.20.00 and 2.20.01	
	Table 5.3.1	Footnote5: and "...or 1.71.04"	
	Table 5.3.1	Footnote 6 replace host with device for clarity	
	Table 5.3.1	Footnote 6 add "...and 1.71.04"	
	Section 5.5.1 Para 1	Change all incidences of 1.71.03 to 1.71.03 or 1.71.04	
	Table 5.6.1	Column for CVSM/CIWS replace Host with Main	
	Table 5.7.1	1st column heading replace Host with Main	
	Table 5.7.1	For rows starting with host 1.70.00, 1.70.03, 1.70.04, 1.71.00, 1.71.02, and 1.71.03 for column Masimo MX-5 add WUI:2.1.0, Boot:1.0.4, MX-5:7.10.7.0	
	Table 5.7.1	Add new row for host 1.71.04	
	Table 5.7.2	For rows starting with host 2.00.00, 2.00.05, 2.10.00, and 2.20.00 for column Masimo MX-5 add WUI:2.1.0, Boot:1.0.4, MX-5:7.10.7.0	
	Table 5.8.1	For column for 1.71.03 row Masimo Rainbow CO-Oximetry App (MX-5) add:7.10.7.0	
	Table 5.8.1	Add new column for CVSM Release 1.71.04	
	Table 5.8.1	Add new column for CVSM Release 2.20.01	
	Appendix A	Add 20014010 TSB-CVSM/CIWS DISPLAY REPLACEMENT	
Y	Title box	Update revision to Y. Change doc manager to Keith Boyle, Eric Jensen is no longer the service manager.	D*
	Table 5.2.2	Add row for release 2.20.03. Change shipping level for version 2.20.01 to supported. Reformat footnotes Add foot notes to release 2.20.01 & 2.20.03 to explain release.	
	Table 5.3.1	Add row for 2.20.03. Change WAST version to show only major version all minor versions of the listed version are compatible	
	Table 5.7.2	Correct CO2 versions for host version 2.20.00 and 2.20.01 to versions listed in the software release notes (60062083 & 60070478). Add row for 2.20.03	



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	Sec 5.8	Add note to explain why release 2.20.02 & 2.20.03 are not listed in table 5.8.1	
	Appendix	Add 20014045 TN CVSM 2.20 62 Character Passphrase Limitation	
Z	5.2.1 para 1	Update table description to explain current and supported versions	D*
	Table 5.2.1	Update Masimo MX-3 column Minimum to 7.8.0.5, Masimo MX-5 column current version 7.12.0.7, minimum 7.10.1.2. Update footnote 2 to remove reference to v. 7.5.1.3	
	Table 5.2.2	Update Masimo MX-5 column current version 7.12.0.7, Supported and minimum add version 7.10.7.0. Update footnote 2 to remove reference to v. 7.5.1.3	
	Table 5.3.1	Update WAST column with version 1.8 for all rows. Update Connex CS column add 1.7.1 for Device SW rows 2.20.03, 2.20.01, 1.71.04, 1.71.03	
	Table 5.7.1	Change Masimo MX-5 column from NA to Not Validated for host main rows 1.00.00, 1.50.01, 1.50.02. For Masimo MX-5 column add version 7.12.0.7 for host main rows 1.70.00, 1.70.03, 1.70.04, 1.71.00, 1.71.02, 1.71.03, 1.71.04	
	Table 5.7.2	Update Masimo MX-5 column add version 7.12.0.7 for host main rows 2.20.00, 2.20.05, 2.20.10, 2.20.00, 2.20.01, 2.20.03. Delete v. 7.5.1.3 from Masimo MX-3 column to remove apparent discrepancy with tables 5.2.2 and 5.5.1. The versions are compatible but this is not a valid configuration	
	Table 5.8.1	Update column 1.71.03, 1.71.04, 2.20.01 row Masimo Rainbow CO-Oximetry App (MX-5) to add version 7.12.0.7	
	Appendix A	Add TSB 20014276	
AA	5.2.1 para 1	Revise text to show 2.x software is applicable to CIWS as well as CVSM.	D*
	5.2.1 2 <sup>nd</sup> note	Revise text to show 2.x software is applicable to CIWS. Change upgrade terms from as ns needed to support hardware upgrades to simply as needed.	
	5.2.1 4 <sup>th</sup> note	Add note “2.20.xx software is currently not used in CIWS production, but is available as an upgrade for CIWS.”	
	Table 5.2.2	Revise title to include CIWS	
	Tables: 5.2.1, 5.2.2, 5.5.1, 5.7.1, 5.7.2	Change column heading from “Braun dock main(boot)” to “Braun 4000 dock main(boot)” in preparation for release of Braun 6000	
	Table 5.2.2 footnote 3	Delete “Service only release”. This version is now used in production.	
	Table 5.2.2 footnote 5 & 6	Replace “devices” with “CVSM” to indicate versions 2.00.05 & 2.10.00 are only validated for CVSM	
	Table 5.3.1	Update device SW row for 2.20.03 add connectivity SDK version 3.0.0.19	
	5.5 Section heading	Add CIWS to indicate the 2.x minimum software requirements apply to both CVSM & CIWS	
	5.5 para 1	Revise the upgrade terms form “...unless the customer has ordered a parameter upgrade only supported in CVSM 2.x” to “...unless the customer has requested the upgrade”.	
	5.5.1 section heading	Delete CVSM to indicate the 2.x minimum software requirements apply to both CVSM & CIWS	



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	5.5.1 para 1	Delete CVSM and revise text to indicate the 2.x minimum software requirements apply to both CVSM & CIWS	
	Table 5.5.1	Revise title to include CIWS	
	5.5.2 Section heading	Delete CVSM to indicate the 2.x minimum software requirements apply to both CVSM & CIWS	
	5.5.2 para 1	Delete CVSM and revise text to indicate the 2.x minimum software requirements apply to both CVSM & CIWS	
	Table 5.5.2	Revise title to delete CVSM making the table device agnostic	
	Table 5.5.2	Update footnote 2 to indicate it applies only to CVSM	
	5.7 para 2	Change “inter-compatibility” to “intra-compatibility” to use correct terminology	
	Table 5.8.1	Update column for version 2.20.01 row host DE/boot code to correct versions listed. Add column for CVSM 2.20.03	
	Table 5.8.1	Change row heading from Braun to Braun 4000 in preparation for release of Braun 6000	
	Table 5.8.1	Reformat table to have the same number of columns on all pages	
AB	Sec. 5.2.1	Replace “with the exception of” with “apart from” to enhance readability. Change last note to list devices being provisioned with 2.30 SW	D*
	Table 5.2.1	Update Masimo WUI to 2.1.1 current shipping version	
	Table 5.2.2	Add row for Host 2.30.00 and make shipping level current. Add Column for Braun 6000 Thermometer. Add footnote for version 2.30.00	
	Table 5.3.1	Add row for 2.30.00 to show compatibility with support SW and systems. Replace commas between versions with forward slash for consistency. Change data catcher version numbers to eliminate extraneous zeros Change footnote 1 to list versions that do not support Active Directory Insert footnote 2 to document WAST limitations supporting devices with custom data	
	Sec. 5.5	Delete sentence “2.x software versions do not support Office Profile and those devices do not qualify for an upgrade at this time.”, this is no longer true.	
	Table 5.5.2	Add new material number for Masimo MX module. Add footnote to show when MCE P3 hardware was cutin to production.	
	Table 5.6.1	Add new material number for Masimo MX module.	
	Table 5.7.1	For host 1.71.03 & 1.71.04 add Masimo WUI version 2.1.1	
	Table 5.7.2	Add row for host 2.30.00	
	Table 5.8.1	For releases 171.03 add Masimo WUI version 2.1.1 Create new column for release 2.30.00 Create new rows for Braun 6000 thermometer SW, material & dock material	
	Appendix A	Add 20014538 TSB – CVSMCIWS 2.30.00 Release	

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AC	Section 5.2.1	Add first and second notes to mention IEC 6001 3 <sup>rd</sup> edition compliance and harmonization of 1.x and 2.x software tracks. Delete last note since all devices will be provisioned with 2.xx SW.	D*
	Table 5.2.1	Add footnote 1, 4 & 5	
	Table 5.2.2	Add new row for Host version 2.30.01. Add foot note 1 & 4	
	Table 5.3.1	Add new row for Host version 2.30.01.	
	Section 5.5.3 Table 5.5.3	Add new section for IEC 60601 3 <sup>rd</sup> edition compliance	
	Table 5.7.2	Add new row for Host version 2.30.01	
	Table 5.8.1	Add new column for Host version 2.30.01 Add new row for ECG module and SW	
	Appendix A	Add TSB 20014653, 20014675 and CSB 80022414	
AD	Sec. 5.2.1	Update language for clarity	D*
	Table 5.2.2	Add 2 <sup>nd</sup> and 3 <sup>rd</sup> row for version 2.40.01, add columns for comms (Newmar) and Newmar radio and Nellcor PBP05N. Organize footnotes, added software versions for host, Newmar comms, Newmar radio, SureTemp, Nellcor, NIBP	
	Table 5.3.1	Add row for version 2.40.01. Update versions for: service monitor, On Host, CS, connectivity SDK, CDIS-NCE. Add column for DCP server	
	Sec 5.5.1	Add requirement for upgrading version 2.00.00 and 2.00.05	
	Sec 5.5.3	Add minimum SW levels for IEC 60601 3 <sup>rd</sup> edition	
	Table 5.5.3	Add table for 3 <sup>rd</sup> edition compliant software	
	Table 5.5.4	Delete duplication of 725318 Copper foil tape, it was a typo	
	Table 5.6.1	Add new MX-5 material 726347 boot and firmware versions	
	Table 5.7.2	Reformat table to add columns for Comms (Newmar), Newmar radio, Nellcor PBP05N, Medtronic CO2. Add row for host version 2.40.01	
	Table 5.8.1	Add Column for 2.40.01	
	App A Table A	Add TSB 20014823	
AE	Table 5.2.2	Add Medtronic to Oridion CO2 header	D*
		Replace CO2 version 1.10.02 (1.24) with 1.14 (1.24) in current row	
		Add footnote 3	
	Table 5.6.1	Cleanup SW versions of MX 5 to show only minimum required versions	
	Table 5.7.2	Add Medtronic to Oridion CO2 header. Add CO2 version 1.14 (1.24) to all rows	
	Table 5.8.1	Column release 2.40.01 change release date from 6-15 to 6-26	
		Add to row Micro Medi CO2 Main/Boot version 1.14/1.24 for release 2.40.01 Add to row Module assy, ETCO2 material 412897 for release 2.40.01	
Appendix A	Add TSBs 20015006 & 20015007		
AF	Sec 4.0	Replace unused definitions section with references. Add references to software release notes	D*

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	Sec 5.2.1	Add note for 4 <sup>th</sup> edition device. Updated reference to table numbers in Note for 3 <sup>rd</sup> edition	
	Table 5.2.1	Update current SureTemp version to 2.08 and update foot note #5. Change Nellcor column header to differentiate between Nellcor modules. Update current SW from 1.00.14 to 1.00.15 and add footnote #6. Update NIBP current SW to 2.06 Reference footnote #6	
	Table 5.2.2	Add rows for host SW 2.41.00 current and supported listing current subsystems SW versions Add column for Nellcor PMB05N. Add Current SW versions for Nellcor PMP05N and NIBP. Add support SW version 2.06 for NIBP. Add Lamarr version 3.00.04 to rows for host 2.30.01 & 2.30.00. Add SureTemp 2.08 to rows for host versions 2.30.xx, 2.20.xx. Add Masimo WUI 2.1.1 to row for host 2.40.01 for MX-3. Add Nellcor 1.00.14 to row for host 2.40.01 for Nell-1. Add Nellcor 1.00.15 to all rows for Nell-1. Add NIBP 2.06 to rows for host versions 2.30.xx, 2.20.xx & 2.10.00 Add Braun 5.25 To Braun 6000 column for host rows 2.40.01 & 2.30.01 & 2.30.00 Replace auto footnotes with manual footnotes to fix formatting	
	Table 5.3.1	Add row for Device SW 2.41.00 Add column for Configuration Tool	
	Table 5.5.2.2	Add SureTemp; 412406, 412568, 412687, 412688 Add Masimo; 727889. Add MOFPG; 412574	
	Sec 5.6	Create new section to separate Upgrade requirements from IEC 60601 3 <sup>rd</sup> and 4 <sup>th</sup> edition requirements	
	Table 5.6.2.1	Add minimum to table description for clarity	
	Section 5.6.	Insert new section for CVSM/CIWS IEC 60601 4 <sup>th</sup> edition and renumber subsections	
	Section 5.6.2	Renumber CVSM/CIWS IEC 60601 3rd Edition Compliance tables from 5.5.3 to 5.6.2.1 and 5.5.4 to 5.6.2.2	
	Section 5.6.3	New section CVSM/CIWS IEC 60601 4th Edition Compliance	
	Table 5..6.3.1	Insert new table for 4 <sup>th</sup> edition software	
	Table 5..6.3.2	Insert new table for 4 <sup>th</sup> edition materials	
	Table 5.7.1	Add MX-5 material 726889	
	Section 5.8	Add 2 <sup>nd</sup> paragraph starting with Software version 1.x...	
	Table 5.8.1	Update rows for host 1.71.xx to include Nellcor 1.00.15. Update rows for host 1.71.03 & 1.71.04 to include SureTemp 2.07 & 2.08, and NIBP 2.06	

Revision	Sec/Para Changed	Change Made	Date
	Table 5.8.2	Add new column for Nellcor PMB50N Add SureTemp 2.07 & 2.08, and NIBP 2.06 to rows for host 2.20.xx, 2.30.xx. Add Nellcor 1.00.15 to all rows for Nell-1 Add Nellcor 1.00.15 to row for host 2.40.01 for Nellcor PMB05N. Add Braun 6000 5.25 to row for host 2.30.00, 2.30.01, and 2.40.01. Add new row for host 2.41.00	
	Table 5.9.1	Add rows for Nellcor PMB50N SW and material Add New column for 2.41.00	
	Appendix A Table A	Add CSB 80022414 and TSB 20015104	
AG	Table 5.2.2	Add Lamarr radio version 3.00.05, footnote 6, renumber footnotes 6 thru 14	D*
	Table 5.3.1	Add footnote 10 for service dashboard with device SW 2.40.01	
	Table 5.6.2.2	Add 407574-08 PCA:PLFM, MED COMPUTE ENGINE	
	Table 5.6.3.2	Add 107231, 407574-08, PCA:PLFM, MED COMPUTE ENGINE	
	Table 5.8.2	Add Lamarr radio version 3.00.05 to host main rows 2.20, 2.30, 2.40 and 2.41	
	Table 5.9.1	Add release date for 2.41.00. Add row for 1 <sup>st</sup> serial number	
		Add column for 4 <sup>th</sup> edition release	
Appendix Table A	Add TSB 20015215 and 20015220		
AH	Sec 4.0	Add SRN, CVSM 2.42.00 and SRN, ModPG for CVSM v.2.07	D*
	Table 5.2.1	Change current row replace NIBP version 2.06 with 2.07. Add note 1.x software no longer used in production. Add NIBP v. 2.07	
	Table 5.2.2	Add current and supported rows for SW v. 2.42.00, per 60096660. Update parameter versions for 2.41.00 per SRN 60093804 & 60096509. Update parameter versions for 2.40.01 per SRN 60090588 & 60096509. Update parameter versions for 2.30.01 per SRN 60086756 & 60096509. Update parameter versions for 2.30.00 per SRN 60082241 & 60096509. Renumber footnotes and add foot notes for 2.42, 2.41, and 2.40 to capture the essence of the release. Add NIBP v. 2.07	
	Table 5.3.1	Add row for 2.42.00, support software and systems versions per SRN 60096660 Update Connex CS version for 2.41.00 per 60093804	
	Sec 5.6.3	Add starting serial numbers for 4 <sup>th</sup> edition. Delete anticipated 4 <sup>th</sup> edition dates.	
	Table 5.7.1	Add columns for upgrade dongle	
	Table 5.8.1	Add NIBP v. 2.07 per SRN 60096509	
	Table 5.8.2	Add row for 2.42.00. Add NIBP v. 2.07 per SRN 60096509.	
	Table 5.9.1	Add column for CVSM release 2.42.00	

Revision History					
Version	Description	Change #	Init	Release Date	Appr
AH	CVSM Min HW/SW Level Requirements	D*	GS	D*	D*
D* SEE SAP DIR FOR CHANGE NUMBER, APPROVER NAME AND DATE OF APPROVAL					

## Appendix A

Use appendix A to check for updates to service action and status.

Key: Service Action I – Informational, AN – As needed, M – Mandatory, O – Obsolete (superseded by more recent CO)

Status: A – Active, I- Inactive

Table A - Change Orders, Work Instructions, Technical Service Bulletins and Technical Notes, History Index

ECO or DIR	Release Date	Description	Service Action	Status
20012069	2010-09-29	TSB- VSM6000 MASIMO MX UPGRADE	AN	A
20012125	2010-09-29	TSB-VSM6000 Wrench Error #14	AN	A
20012178	2011-11-11	TSB- CVSM 1.5 Release	M	A
20012349	2011-02-01	TSB – Medium Compute 1.5 PCA Release	I	A
20012487	2011-04-05	TSB-CVSM SpO2 Fails in Stby, Rel 1.50.02	M	A
20012514	2011-06-29	TSB-CVSM 1.7 Release	M	A
20012516	2011-05-10	TSB - Upgrade Masimo License	AN	A
20012523	2011-05-16	TSB- CVSM/CIWS USB Drive Quick Removal	I	A
20012524	2011-05-16	TSB-CVSM/CIWS Shutdown 20% Battery	I	A
20012525	2011-05-03	TSB- CVSM/CIWS 4GB Flash Drive Limit	I	A
20012526	2011-05-16	TSB-CVSM No IP Address From Some Routers	I	A
20012538	2011-06-10	TSB – PLFM Radio Ver 2.30.00 Upgrade	AN	A
20012591	2011-06-23	TSB-CVSM 1.7/Connex VM 1.1 Upgrade Strategy	O	I
20012668	2011-09-23	TSB-Flexnet Radio SW 2.30.02 for Spot LXi/CVSM	AN	A
20012684	2011-09-23	TSB-CVSM, Recessed Mounting Insert	AN	A
20012792	2011-12-02	TSB–Flexnet Radio 2.30.03 CVSM/CIWS/Spot LXi	AN	A
20012842	2012-01-30	TSB -Clearing CVSM/CIWS NIBP EEPROM ERROR	AN	I
20012845	2012-04-16	TSB - Braun USB cable replacement	AN	A
20012860	2012-09-14	TSB - Flexnet Radio FIPS 3.00.00 CVSM/CIWS	AN	A
20012861	2012-05-24	TSB-CVSM/CIWS PROVISIONING MODEL NO.	AN	A

Table A - Change Orders, Work Instructions, Technical Service Bulletins and Technical Notes, History Index

ECO or DIR	Release Date	Description	Service Action	Status
20012868	2012-02-21	TSB – CVSM/CIWS, 1.70.02, NIBP, SPO2, Update	O	I
20012882	2012-02-13	TSB – CVSM/CIWS, MODPG NIBP 2.02 Update	AN	I
20012889	2012-02-21	TSB – CVSM/CIWS, 1.70.02 Downgrade	AN	A
20012916	2012-05-11	TSB – CVSM/CIWS, 1.70.03, Update Rev C	AN	A
20012936	2012-04-18	TSB – CVSM/CIWS, MODPG NIBP 2.03 Update	AN	A
20013023	2012-09-12	TSB–CVSM/CIWS, COMMS BRD NURSE CALL FAIL	AN	A
20013132	2012-07-11	TSB - CVSM_CIWS, ETHERNET FAILURE ON MCE	I	A
20013147	2012-07-11	TSB-CVSM_CIWS, NIBP NOT FUNCT, CALL 4 SRV	I	A
20013149	2012-07-11	TSB-CVSM_CIWS, NIBP START TIMING	I	A
20013154	2012-07-09	TSB-WAST, Restoring Bootloader Devices	AN	A
20013174	2012-08-08	TSB-CVSM_CIWS,1.70.04, UPDATE	AN	A
20013264	2012-09-27	TSB - CVSM_CIWS, 1.71.02, Release	AN	A
20013342	2012-12-17	TSB-Flexnet Radio CERTS 3.00.01 CVSM/CIWS	AN	A
20013364	2013-01-18	TSB-CVSM 2.0 Release	I	A
20013381	2013-01-18	TSB-Welch Allyn Service Tool-WAST v1.6.0.0	O	A
20013291	2013-02-15	TSB-CVSM/CIWS 1.71.03 RELEASE	AN	A
20013432	2013-05-10	TSB - Flexnet Radio CERTS 3.00.02 CVSM/CIWS	AN	A
20013452	2013-05-10	TSB-CVSM 2.00.05 RELEASE	AN	A
20013613	2013-12-05	TSB-CVSM 2.10.00 RELEASE	AN	A
20013764	2014-05-23	TSB-CVSM 2.20.00 RELEASE	AN	A
20013849	2014-07-25	TSB-CVSM Missing Chinese Fonts	AN	A
20013952	2015-03-10	TSB-Flexnet Radio ver. 3.00.03 CVSM/CIWS	AN	A
20014010	2015-06-15	TSB-CVSM/CIWS DISPLAY REPLACEMENT	AN	A
20014045	2016-05-31	TN-CVSM 2.20 62 Character Passphrase Limitation	I	A
20014276	2016-08-31	TSB-CVSM/CIWS Masimo Rainbow SET Tester Compatibility	M	A
20014538	2017-07-15	TSB – CVSMCIWS 2.30.00 Release	AN	A
20014653	2017-11-01	TSB-Flexnet Radio Ver 3.00.04	AN	A
20014675	2017-12-01	TSB – PMP IEC 60601 3rd Edition Compliance	AN	A
20014823	2018-04-26	TSB-CVSM/CIWS with ECG	AN	A
20015006	2018-07-02	TSB-WAST PLUGIN UPDATES FOR NEWMAR	AN	A
20015007	2018-06-21	TSB – CVSM/CIWS 2.40.01 Release	I	A

Table A - Change Orders, Work Instructions, Technical Service Bulletins and Technical Notes, History Index

ECO or DIR	Release Date	Description	Service Action	Status
80022414	D*	CSB – CVSM-CIWS IEC 60601 4th EDITION	I	A
20015104	2019-01-15	TSB – CVSM/CIWS IEC 60601 4th Edition	AN	A
20015215	D*	TSB-WAST NO LAMARR RADIO TAB	AN	A
20015220	2019-01-22	TSB-CVSM/CIWS MCE Version P6 Release	I	A
20015260	D*	TSB-CVSM/CIWS 2.42.00 RELEASE	I	A