



**Technical Service Bulletin**

**CARDIOPULMONARY**

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**Bulletin Type: AS NEEDED**

**Manufacturer: Welch Allyn**

**Date: 2015-02-15**

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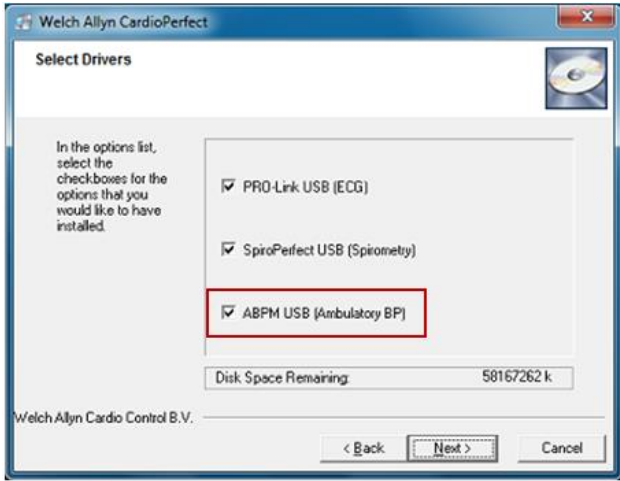
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<b>Subject:</b>	TSB-CPWS 1.6.6 SOFTWARE RELEASE	
<b>Distribution Scope:</b>	Welch Allyn Global Technical Support, Product, Field & Customer Service Teams, WA ASPs.	
<b>Product(s) Referenced:</b>	<b>Material being updated:</b>	
	<b>Material#</b>	<b>Description</b>
	411071	ASSY DVD CPWS SOFTWARE 1.6.6
	<b>Affected Products:</b>	
	<b>Part #</b>	<b>Description</b>
	100638	CONNECTIVITY KIT,CPX00 TO CPWS
	101442	PCR100 AHA W/INTERP,SPIRO,SYRINGE
	101443	PRO ECG IEC W/INTERP,SPIRO,SYRINGE
	101444	PCR100 AHA W/INTERP, ABPM
	101445	PRO ECG IEC W/INTERP, ABPM
	101447	CPWS ABPM AND SPIRO W/SYRINGE
	101448	PCR100 AHA,SPIRO,SYRINGE
	101449	PRO ECG IEC,SPIRO,SYRINGE
	101450	PCR100 AHA, ABPM
	101451	PRO ECG IEC, ABPM
	101452	PCR100 AHA ,SPIRO,SYRINGE, ABPM
	101454	PRO ECG IEC ,SPIRO,SYRINGE, ABPM
	101455	PCR100 AHA W/INTERP,SPIRO,SYRINGE,ABPM
	101456	PRO ECG IEC W/INTERP,SPIRO,SYRINGE,ABPM
	101457	PCE210 AHA STRESS, W/INTERP,PC,TM
	101458	PRO ECG STRESS IEC W/INTERP,CLIP
	101860	PCR100 RESTING ECG, NON-INTERP, AHA, 3M
	101861	PCR100 RESTING ECG, NON-INTERP, AHA, 5M
	102261	CPR100 Rest ECG, AHA, Serial, interp
	102262	CPR100 Rest ECG, IEC, Serial, non interp

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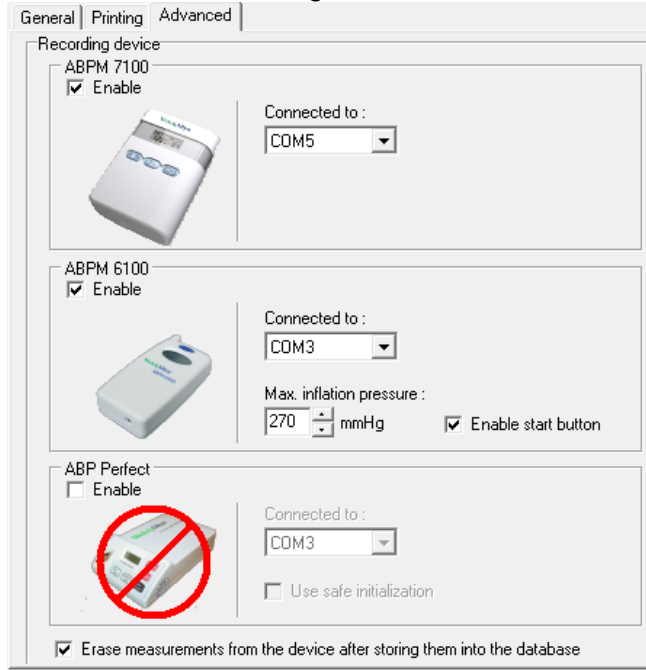
102263	CPR100 Rest ECG, IEC, Serial, interp	
406814	CP50 CONNECTIVITY KIT	
703554	SPIROPERFECT KIT, USB, CPWS	
ABP	AMBULATORY BP SYSTEM WITH SW	
ABPM-6100C	ABPM-6100 with Chinese SW	
ABPM-6100S	ABPM SYSTEM W/6100 RECORDER& SOFTWARE	
6100P	ABPM RECORDER & ACCESSORIES IN PKG	
6100-24	CABLE,PC CONNECTION,ABPM 6100	
6100-24USB	CABLE,USB,PC CONNECTION,ABPM 6100	
PC-USB-SER	CONVERTER, USB TO RS232 (DB9)	
ABP-SW	ABPM CARDIOPERFECT SOFTWARE	
ABP-UK	AMBLTRY BP SYS WITH SOFTWARE UK	
CCW-UPCPWR	CPWIN REST.UPGRD WACPW REST. ECG	
CCW-UPST	DOS STRESS,UPGRD WACPW STRESS ECG	
CP-CON	EMR CONNECTIVITY OPTION	
CPE-CN-EB-D	CER100 PDA REST. ECG, NON-INTERP, IEC	
CPR12-UN-EB	PRO ECG SYSTEM 1200 HZ WITH	
CPR-SN	PRO ECG SYS W/SER INTRFCEXCL. PAT CBL	
CPR-UI5-EB-D	PRO ECG 5M USB,INTERP,CABLE DISP ELECT	
CPR-UI-EB	PRO ECG SYS W/ USB INTERP & INTRFC,ADULT	
CPR-UI-EB-D	PRO ECG SYSTEM WITH USB INTERP	
CPR-UI-UB-D	PRO REST SYS	
CPR-UN	PRO ECG SYS600 HZ W/USB INTRFC EXCL.PAT	
CPR-UN5	PRO RESTING ECG SYSTEM W/ 5MT	
CPR-UN5-EB-D	PCR100 RESTING ECG,NON-INTERP,IEC (5M)	
CPR-UN-EB	PRO ECG SYS W/USB INTRFCE INCL.PAT CBL	
CPR-UN-EB-D	PCR100 RESTING ECG,NON-INTERP,IEC	
CPR-UN-UB-D	CARDIOPERFECT PRO REST SYS	
CPR-UN-UB-D-1200	CARDIOPERFECT PRO REST SYS	
CPR-UPG-LTU	UPGRADE FROM RESTING ECG	
CPR-UPG-MD-1	UPGRADE FROM MDR TO CPR-UN	
CPR-UPG-POR-1	UPGRADE FROM POR TO CPR-UN	
CPR-UPG-POR-3	UPGRADE FROM POR TO CPR-UN	
CPSL-UN	PRO EXER ECG LGHT SYS 600HZ W/USB INTRFC	
CPSP-UN-UC-D	PCE210,STRESS,NON-INTERP,AHA,NO PC,NO TM	
CPSP-UN-UC-D-P	PCE210,STRESS,NON-INTERP,AHA,PC,NO TM	
CPSP-UN-UC-D-PT	PCE210,STRESS,NON-INTERP,AHA,PC,TM	
CPSP-UN-UC-D-T	PCE210,STRESS,NON-INTERP,AHA,TM	
CPS-UN	PRO EXR ECG SYS 600HZ W/USB INTRFCE EXCL	
CPS-UN5	PRO STREE ECG SYSTEM W/ 5MT	
CPS-UN-EC	PCE200,STRESS,NON-INTERP,IEC,CLIP	
CPS-UN-EP	PCE200,STRESS,NON-INTERP,IEC,PUSH	
CPS-UPG-LTU	SW UPGRD WACPW LITE TO FULL STRESS	
CPS-UPG-MDS-1	UPGRADE FROM MDS TO CPS-UN	
PE-PROCM-LNK-GB	UPGRADE SET FOR CPR TO CPE SYS	
REC-SW	WACP WORKSTATION EVENT ECG	
RE-SW-ECG	CARDIOPERFECT PRO CP WORKSTATION SW TEST	
RE-SW-HRV	HEART RATE VARIABILITY OPTION FOR WACPW	
RE-SW-MEANS	CARDIOPERFECT PRO REST ECG INTERPRET SW	
RE-SW-PEDIA	PEDIATRIC AUTO RST-ECG INTERP	
RE-SW-VCG	VECTORCARDIOGRAM (RECONSTR.12	
SE-UPG-USB	UPGRD MD SYSTO EXER TEST USB INTERFACE	
SPIRO-NS	CPWS PC SPIRO NO SYRINGE	
SPIRO-NS-RS232	CPWS PC SPIRO NO SYRINGE, RS232	

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	SPIRO-S	CPWS PC SPIRO W/ SYRINGE	
	SPIRO-S-RS232	CPWS PC SPIRO W/ SYRINGE, RS232	
	SP-SW	WACP W/STN SP SOFTWARE (SP-SW)	
	SW-CCW-CD	CCW CD-ROM(FOR SERVICE PACK)	
	SW-CCW-LIC	WACPW SOFTWARE LICENSE	
	SW-CCW-LIC-UPD	CCW SOFTWARE VIEWING LICENSE UPDATE	
	SW-CCW-TELEM	CARDIOPERFECT PRO TELEMED OPTION	
	SW-UPD-1	UPDATE TO CCW	
	SW-UPD-2	UPDATE TO CCW	
	SW-UPD-3	UPDATE SOFTWARE CCW	
	SW-UPD-4	UPDATE SOFTWARE CCW	
	SW-UPD-5	UPDATE SOFTWARE CCW	
<b>SW Version:</b>	CPWS versions 1.6.5 and earlier		
<b>Summary:</b>	<p>The Welch Allyn Cardiopulmonary category team is pleased to announce a new version of software for the CardioPerfect Workstation (CPWS). This version 1.6.6 of the software incorporates several enhancements and fixes that are outlined in this bulletin.</p> <p>This latest software version adds support for the new ABPM7100 (ABPM7100 yet to be released at the time of this TSB). It also adds a new Spirometry Norm value, improved documentation in regards to installation in a thin client environment and the use of File Link, along with other improvements and bug-fixes.</p> <p>The software can be ordered as an update or upgrade for existing CardioPerfect users and will be distributed via DVD on all new orders starting in <u>mid-February, 2015</u>.</p>		
<b>Issue:</b>	<p><b>Software changes &amp; enhancements:</b></p> <ul style="list-style-type: none"> <li> <b>Software Installation:</b>                      By choosing the ABPM USB option, both the ABPM 6100 and the ABPM 7100 USB cable drivers are installed:                 </li> </ul> 		

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- **Addition of ABPM7100 capabilities:**  
ABPM Advanced setting tab:



**Note:** Identify the ABPM7100 COM port by looking at the “Prolific serial-USB” device in Device Manager.

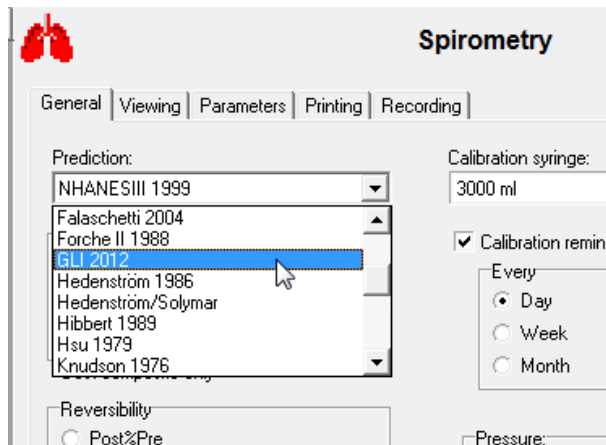
- If more than 1 device is enabled, CPWS will show the following screen every time you try to connect to a device:



(Although it is rarely seen, a screen like this has existed in CPWS since rev 1.4.4.)

- Click on the picture of the appropriate device to continue.

- **Spirometry:**
  - Addition of GLI 2012 Norm



- **Other:**
  - Supported Thin Client environment details added to the System Requirements section of the DFU.

**Bug-fixes:**

- Printing: solved inability to print auto reports and/or generate File Link images when too many formats were selected.
- File Link: error message resolved for XML output on spiro tests with multiple norm extrapolations.
- File Link: Updated print driver now allows TIFF images to print in certain thin client environments in which it previously failed.
- SCP export: issue solved that prevented HR and QTc to be read by some external systems.
- Stress: issue solved where protocol hold button sometimes did not match protocol hold status.
- ECG: Pediatric lead set now passes to MEANS correctly
- XECG: Resolved the issue that caused the ST Trend view to remain empty if the 1st ST measurement did not contain measurements for all 12 leads.

**Action:** Use appropriate CPWS Update DVD part number(s) for customers when needed.

**Known Issues (CPWS 1.6.6):**

Administrator Tool:

- HIPAA not logging when you remove a Spiro effort.
- HIPAA log prints off the edge of the paper.
- Need for Chinese translation correction in the Admin Tool / User Rights section.
- Manually creating a back-up in the Admin Tool to the root of any drive, and while using MSSQL 2005 Express, the user may get an error that states that there is not enough disk space and the back-up will fail. Creating a folder for the back-up location resolves this issue.
- Chinese language setting: The error "Failed to add the role. A role with this name already exists." does not translate to Chinese but remains in English.

### ECG Module:

- Events in ECG Printouts not matching displayed positions on printed tests when printing with Calibration pulse.
- ECG Settings for Default Chart-speed and Default Sensitivity are not applied unless the test is refreshed by moving away from the test and returning.
- The first ECG recording may not start correctly on the server, if the client system has multiple recording devices attached.
- Missing Language Sets: Greek and Russian MEANS interpretation language files are not in the software and will give the interpretation in English.
- CPWS loses COM API connectivity when starting an ECG recording through EMR (NextGen) interface. (Cause is unknown and not a confirmed CPWS issue).
- While in live ECG monitoring or recording mode, enabled but disconnected network adapters may interrupt the acquisition and/or the display of the live data. This will result in a "Fatal error 1 detected, monitor will abort" error message.

### Stress Module:

- Averaged beats may not align properly.
- Averages stop being calculated while signal is not very bad. MEANS will stop calculating if QRS complexes become too wide.

### Spirometry Module:

- Referring Physician is not printed on some Spirometry printouts.
- The "Set Best Effort" function in the Action menu will be disabled (gray) when the test is opened with PRE or POST as the selected test option. Selecting another option and returning to the original option enables the "Set Best Effort" function.
- The New Effort button remains available when an in-progress test is inadvertently left open beyond the software's 24 hour limit for adding efforts to a test.
- Smoker and Asthma checkboxes only appear on measurements reports
- Calibration log does not show sensor ID.
- Last recorded SVC or MVV effort is still displayed in the monitor when switching from SVC to MVV effort type or visa-versa.
- The colors assigned to the flow results on the graph may not match the colors assigned to the measurement result shown below the graph.
- The list of available reports on the print dialogue is not wide enough. This causes the string for "All Plus Best Efforts FV" to be truncated when in Dutch, Greek, and Polish in the Report list-box of the dialog.

### ABPM Module:

- Exceeding Norms graphs follow the settings, not the threshold values in the Summary.

### Not Module Specific:

- The error "Invalid character value for cast specification" will occur when a patient's birthdate is incorrectly entered and the calculated age is over 200 years of age.

### File Link:

- On Server 2008, File Link requires the server role for Print Management and the Printer Spooler

<p>Service to be enabled.</p> <ul style="list-style-type: none"> <li>• Slow performance when the system that is running File Link is connected to a network and is not connected to the internet.</li> <li>• File Link: No output will be created if the software is closed before PDF/TIF printing is completed.</li> <li>• Will not save to UAC protected folders. Workaround: do not use UAC protected folders for File Link output file destination.</li> </ul> <p><u>PerfectLink:</u></p> <ul style="list-style-type: none"> <li>• 1.1 Upgrade does not upgrade ECG files. This will require the full un-install of 1.0 and reinstall of the 1.1 PerfectLink drivers.</li> <li>• The “Repair” function fails after upgrading PerfectLink from 1.0 to 1.1. This will require the full un-install of 1.0 and reinstall of the 1.1 PerfectLink drivers.</li> <li>• 1.1 PerfectLink drivers do not install on Windows 7 Embedded, 32 bit and 64 bit.</li> </ul>	
<b>Reference to Standards:</b>	<ul style="list-style-type: none"> <li>• 21 CFR Part 820, ISO 13485, MPD SOP-0002</li> </ul>
<b>Service Strategy:</b>	A customer may call that is <u>upgrading</u> to CPWS 1.6.6 from an older version of the software and does not have a DVD-ROM player installed on the PC. The CPWS 1.6.6 software installation media may need to be delivered to the computer through a different means. Please refer to the latest version of the CPWS REMOTE INSTALL REFERENCE GUIDE, DIR 20012822, and follow the TeamViewer delivery method.
<b>Procedure:</b>	Refer to this TSB and Installation documentation located on the CPWS DVD.
<b>Quality Documents:</b>	<p><b>All service centers using SAP to record service transactions:</b> For each product serviced, record the service activity in SAP.</p> <p><b>All other service centers and Field Service:</b> For each product serviced, complete and file a service report and attach to the service DHR.</p>

**Notes:**

1. Contact Welch Allyn regarding any questions or concerns from this or other issues.
2. Drawings, illustrations, and part numbers in this document are for reference purposes only and subject to change.

**End of Bulletin**

Revision History					
Version	Description	Change #	Init	Release Date	Appr
A	Initial Release	D*	SMB	D*	D*
D* SEE SAP DIR FOR CHANGE NUMBER, APPROVER NAME AND DATE OF APPROVAL					