

**Sensor Troubleshooting**

<b>Application &amp; Activation Process</b>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action to Take</b>	<b>Expected Result</b>
When attempting to activate the Sensor, the indicator lights do not come on.	Defective Sensor.	Replace the Sensor.	Replacement Sensor performs as intended.
After initial application of the Sensor, and a button press to activate recording, the Sensor lights alternately blink red and green.	1. Valid ECG signal not detected.*  OR 2. Defective Sensor.	1. Make sure the Sensor is properly positioned and adhered to the patient. 2. Press firmly over the electrodes to ensure good contact and adhesion. 3. Press the Sensor's button.  <i>Within a few seconds the Sensor should detect the heartbeat. The green light will begin to blink in cadence with the heartbeat.</i> 4. If, after twice through the above sequence, a flashing green light is not observed, discard the Sensor and use a replacement. Be sure skin preparation instructions are followed.	ECG recording established as confirmed by green flashing when the Sensor's button is pushed.  Replacement Sensor performs as intended.
* <b>Note:</b> The Sensor must detect a valid ECG signal for recording to start. Proper skin preparation is necessary to remove insulating layers of dead skin or body oils that prevent a good electrical contact.			
<b>Wearing Process</b>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action to Take</b>	<b>Expected Result</b>
The Sensor starts to come off the skin before the end of the wear period.	1. Improper skin preparation: a. Insufficient hair removal. b. Insufficient skin oil removal. c. Insufficient abrasion with gauze pad. 2. Sensor is applied too soon after alcohol wipe; skin is not dry. 3. Insufficient pressure applied around the edges to adhere the Sensor to the skin. 4. Excessive water contact: bathing / submersion. 5. Heavy sweating.	1. The patient should apply firm but gentle pressure to the Sensor over the area that has lost adhesion. Smooth out any ripples or irregularities that may have developed. 2. If the Sensor will not re-adhere, health care provider assessment is required.	With proper pressure and duration, the adhesive should re-adhere to the skin.  ECG recording will continue as intended.
<b>Note:</b> The adhesives are water based. Activities that result in profuse sweating may reduce the wear time.			
<b>Note:</b> It is important to immediately re-adhere a Sensor that starts to come off the skin. The conductive electrode hydrogel is hydrophilic; if it were to be exposed to water, the adhesion issue could be exacerbated by swelling hydrogel.			
	Skin folds under the Sensor.	1. The Sensor should be placed to minimize folding of the skin under the Sensor during the wear period. 2. In some patients, it may be necessary to place the Sensor higher and closer to the sternum to minimize folding issues. 3. The patient should apply firm but gentle pressure to the Sensor over the area that has lost adhesion. Smooth out any ripples or irregularities that may have developed.	With proper pressure and duration, the adhesive should re-adhere to the skin.  ECG recording will continue as intended.
The Sensor is difficult to remove.	Patient's skin type and perspiration characteristics.	1. Lift one edge and put an alcohol wipe in the space between the skin and Sensor. 2. Slowly peel the Sensor using alcohol swab or wipe on the skin. 3. If there is still difficulty removing the Sensor, use petroleum jelly (e.g. Vaseline <sup>®</sup> ) or baby oil between the skin and the Sensor as the Sensor is slowly peeled off.  A Q-tip <sup>®</sup> is useful for applying the oil.	The Sensor is removed with minimal patient discomfort.

**TAGconnect™ Software and Smart Cable Troubleshooting**

<b>Software Installation</b>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action</b>	<b>Expected Result</b>
TAGconnect software will not install on the PC.	Minimum PC hardware requirements for the application are not met.	Ensure the PC meets minimum hardware and application requirements. Minimum requirements: <ul style="list-style-type: none"> <li>• Windows 7, 8, or 10</li> <li>• 2 GB available hard disk space - 16 GB preferred</li> <li>• 4 GB RAM / system memory</li> <li>• Dual Core CPU @ 2.5 GHz or greater</li> <li>• CD or DVD drive</li> <li>• 1 available High Speed USB 2.0 port</li> <li>• Network connection - if using networked printer or a network storage location</li> <li>• Access to a printer - if printed, physical copies of Summary Reports are desired</li> <li>• Adobe® Acrobat™ Reader installed</li> </ul>	Software installs when minimum PC hardware and application requirements are met.
	TAGconnect CD not recognized / damaged.	1. Confirm the CD is not readable by inserting into a second CD or DVD drive.  <i>If the CD can be read by another drive, the issue is not with the CD but is instead with the drive.</i>  2. If the CD is not readable, discard and request another CD.	Software installs using the new CD.
	The PC is setup to require administrator account log in for software installation.	Log in to the PC with administrator credentials.	Software installs when logged in with administrator credentials.
<b>Admin Password Lost or Forgotten</b>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action</b>	<b>Expected Result</b>
Administrative Password is lost.  <b>Note:</b> <i>There is no "Backdoor" – a lost Admin password requires deleting settings and re-initialization of all Admin and User settings.</i>	Password misplaced / forgotten.	1. As Admin and User data are stored in a hidden Windows file, using Control Panel, open Folder Options and enable viewing of hidden files.  2. Navigate to C:\ProgramData and delete the "Cardiac Insight" folder.  3. Start TAGconnect. The Admin login will be presented.  4. Login and re-enter Admin and User preferences.	Updated Admin and User preference settings and passwords allow software use as intended.
<b>Summary Report Viewing / Creation</b>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action</b>	<b>Expected Result</b>
Summary Report cannot be viewed.	Compatible PDF viewer not installed on PC.	1. Confirm that Adobe® Acrobat™ Reader is installed on the PC. Adobe Acrobat Reader is the only approved PDF reader.  2. If an alternate PDF reader is installed, right click on the filename & select 'Open with' Adobe Acrobat Reader.  3. If you do not have Adobe Acrobat Reader installed you may install it from: <a href="http://get.adobe.com/reader/">http://get.adobe.com/reader/</a>  4. Install Adobe Acrobat Reader.	With Adobe Acrobat Reader the Summary Report is viewable.
	<b>Note:</b> <i>To install Adobe Acrobat Reader you may need administrator privileges on the PC. If you are unsure whether or not you need / have administrator privileges contact your site's Information Technology support resource.</i>		
TAGconnect reports zero hours of recorded data.	Sensor was not started when applied to the patient.	1. Apply another Sensor to the patient. Make sure to properly prepare the skin.  2. Activate the Sensor and confirm the green LED blinks in cadence with the heartbeat.	Sensor performs as intended.
<b>Smart Cable</b>			
<b>Note:</b> <i>Sensor data is not lost if multiple attempts are made to transfer ECG data from the Sensor.</i>			
<b>Problem / Scenario</b>	<b>Potential Cause(s)</b>	<b>Action</b>	<b>Expected Result</b>
Plugging the Smart Cable into the PC's USB port does not illuminate the Smart Cable's PC Icon (left) LED.  <b>Note:</b> <i>Green LED = connection OK.</i>	PC not powered on.	1. Make sure the PC is powered on.  2. Make sure the user is logged in.	PC Icon (left) LED is green indicating Smart Cable connected.
	Defective Smart Cable / Smart Cable's PC Icon (left) LED is Red.	Replace the Smart Cable.	PC Icon (left) LED is green indicating Smart Cable connected.
	USB Driver is not installed.	1. Unplug the Smart Cable from the PC.  2. Re-insert the Smart Cable into either the same or a different USB port on the PC.  <i>Windows may display a message "Installing Driver" – light should come on.</i>  3. It may take 1-3 minutes for Windows to install and start the USB Driver.  4. Open Device Manager. Verify WinUsb is functioning properly. If not, re-install WinUsb.	PC Icon (left) LED is green indicating Smart Cable connected.
<b>Note:</b> <i>The Smart Cable USB Driver is a standard Windows driver (WinUsb Device) and is installed during the installation of TAGconnect software.</i>			

**Uninstall the TAGconnect Software**

The TAGconnect software is like other Windows-type applications. Removal may be accomplished by entering the Control Panel, followed by Programs, Uninstall a Program and double-clicking on Welch Allyn TAGconnect icon. The specific steps may be somewhat different depending on your version of Windows and how your system is configured. Consult your Windows documentation or Information Technology support for assistance if needed. Uninstalling TAGconnect software does not delete the Patient Data Directory or the associated PDF reports. Refer to the System Administration window in TAGconnect for Patient Data Directory.