

# BioGraph Infiniti System Known Issues

## **WINDOWS® OPERATING SYSTEMS: SOUND ISSUES**

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### **DVD instrument Volume Action turns all sounds off**

*Can occur in Windows® 10, Windows® 8, and Windows® 7*

Problem: This can happen when recording or replaying a session with a screen which includes multiple instruments with sound feedback enabled and a DVD instrument is set to the *Volume Action* with the low value set to zero. If, during the session, a condition occurs which toggles the DVD sound to *Low*, this will also turn off all other screen sounds.

Solution: There is no solution for this problem in this version of BioGraph. You can restore the screen sounds by removing the condition which is muting the DVD sound or by accessing the *Windows Volume Mixer* dialog box and raising the volume slider. You may have to edit the screen and select a different feedback *Action* on the DVD instrument.

### **When using AVIs with sound, sound does not play**

*Can occur in Windows® 10, Windows® 8, and Windows® 7*

Problem: This can occur sometimes even though an AVI with sound is included on the screen and the sound function in BioGraph Infiniti is turned on. The screen will load but the animation will not be initialized and will not run.

Solution 1: Use a Flash animation instead, by editing the screen and replacing the AVI instrument with a Flash instrument.

Solution 2: To use your original AVI file, update of audio and video codecs will solve the problem on most systems (we cannot guarantee this will work on all systems as it is mainly an operating system issue). In most cases, installation of the following codec combinations will solve the problem:

- MS Video (MS-CRAM) + PCM
- Cinepack + PCM;
- MPEG-4 Visual (DivX 5) + MPEG Audio (MP3)

There is a software utility (called *MediaInfo*) that determines what codecs are required by a particular video file (AVI or otherwise). It can be downloaded here: <http://mediainfo.sourceforge.net/ene>.

## **BIOGRAPH INFINITI SCREEN RESIZING**

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### **Images and picture instruments disturbed by screen resizing**

When manually resizing screens directly from BioGraph Infiniti (i.e. without using the Screen Editor), the individual instruments are automatically resized accordingly.

Problem: Background image does not adjust properly and appears centered.

Solution: Using the Edit menu, select *Edit Background Picture Style* and choose *Stretch (fit to screen)*.

Problem: Images incorporated on the screen using a picture instrument are not modified appropriately.

Solution: Using the Edit menu, select *Edit Selected Screen in Screen Editor*, right-click on the image and select *Instrument Settings*, and check the check box labelled *Stretch* in the settings dialog box.

Alternatively, go into the *Advanced* settings tab in *Preferences*, select *Enable Screen Auto-Resizing* and click *Stretch (fit to screen)* to override the setting on any screen. With this option selected, all screen backgrounds will always be stretched to fill the background area.

## **Screens automatically minimized**

At times, loading a BioGraph screen into certain monitor resolutions may cause the screen to be automatically minimized.

Problem: Screen cannot be properly restored from this minimized state.

Solution: Unload the screen. From the Tools menu, select *Preferences* and click the *Advanced* tab. Uncheck *Enable Screen Auto-Resizing*.

Alternatively, use a larger computer monitor.

## ***BIOGRAPH INFINITI SENSOR CALIBRATION***

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### **Loss of calibration data**

Problem: When upgrading to BioGraph Infiniti version 6.7 from a version older than 6.0, sensors previously calibrated using the *Hardware Calibration* tool will lose their calibration data.

Solution: Sensors must be recalibrated using BioGraph Infiniti version 6.7.

## ***BIOGRAPH INFINITI and SCREEN EDITOR***

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### **Upper limit on AVI screen instruments**

Problem: When working with a screen which incorporates many AVI animation instruments (over 20 on the test system), you may get an error message indicating that "there is no driver installed on your system" when attempting to open the *Instrument Setting* dialog box. The error message is generated by the Windows operating system and is not actually related to a missing driver.

Solution: If you see this warning, you have reached the upper limit of your system's ability to manipulate AVI files. You have to delete one or more AVI animation instruments and save the screen again.

## ***STIM INSTRUMENT***

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### **Hidden pop-up dialog box**

Problem: This can happen when recording or replaying a session with a screen showing the Stim instrument, set to full screen mode, on the second monitor. If the session is paused and a menu item which calls a dialog box is clicked (for example, *Edit Channel Set Settings*), the dialog box may appear on the second monitor, hidden behind the Stim instrument. When this occurs, it isn't possible to continue the session because the Windows operating system is waiting for the dialog box to be closed. The problem is caused by the full screen mode, which won't allow pop-up windows to be opened in front of it.

Solution: Pressing the [Escape] key on your keyboard will toggle the Stim instrument to a window, which you can move aside in order to see the open dialog box. After closing the dialog box, you can double-click the Stim instrument to maximize it again.

## ***MYOTRAC INFINITI: USING MULTIPLE DEVICES***

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### **Channel sets built with one Clinical and one Home Trainer unit**

Problem: No data is transmitted to the software and no warning message can be shown.

Situation: This happens only in the specific situation where two MyoTrac Infiniti units are connected to the system, one is a clinical unit used as the first encoder, and the other is a home trainer unit used as the second encoder. In this situation, starting a session will not work. The program indefinitely tries to read data from the encoders but none comes through and there is no warning message.

Solution: Although it may seem like the program is frozen mid-action, it isn't really. You can simply click the **Stop** button or close the recording screen by clicking the **X** button in the top right corner to exit this mode. Then you have to disconnect the home trainer device or modify your settings to use two clinical units instead of a home trainer. Home trainer units are not designed to work with the PC software, only clinical units.

## ***WEB CAMERA VIDEO***

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### **Mirror Images in Video Instruments**

Problem: On certain systems, when using screens with video instruments, the image can be shown as mirrored horizontally. With two video instruments, one image can be the mirror image of the other.

Note: This problem only happens with some web camera products and drivers, and sometimes in combination with third party web cam and video packages. Updating video and web cam driver or uninstalling third party video packages can solve this problem.

### **Loss of synchronization**

Problem: If replaying a session with video at speed 8x, video might be out of sync with session data.

Note: BioGraph Infiniti uses the MPEG-4 codec made by Intel. This codec is not designed to provide accurate replay at speeds greater than 4x. Another factor that can affect accuracy of video replay speed and its duration is CPU performance.

Problem: When recording a session with two video cameras with sound, depending on the processing power of your CPU, the CPU can become very busy (100%). If you continue recording with this condition, the duration and synchronization of the video could be out of sync with session data and session duration.

Note: BioGraph Infiniti encodes video into MPEG-4 format at the same time as it records the session. This requires a lot of CPU time.

Solution: Disable the video sound recording option if it is not needed. Close unnecessary programs which are running at the same time as BioGraph Infiniti. Remove unnecessary instruments from the recording screen.

## Insufficient power from USB socket

Problem: When two webcams are being used, some computers may supply insufficient power to the USB ports and one of the cameras may not function. If this happens, the video image is blank.

Solution: The recommended solution for this problem is to install an externally powered USB hub on your PC (i.e., one that requires an adapter to connect to a wall power socket). The camera will then be powered by the USB hub and not by your machine's power supply.

## VIDEO STREAM INSTRUMENT

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### The Video Stream Instrument is known to have the following limitations

Problem: (1) Drag-and-drop sometimes fails to function with the Internet Explorer and Edge web browsers. You can work around this, either by opening the **Video Storage Editor** and pasting the URL of the video into **Path**, or by using a different web browser, such as Google Chrome.

(2) Tunnel, Blur, and Pixilation actions may be ignored on some computers, depending on the version of OpenGL on your computer. You can try to resolve this by updating your video card driver or your video card.

(3) The instrument can play videos only from Internet links to YouTube and Vimeo.

These links can have their Internet access removed, without warning and at any time, by YouTube or Vimeo. When this occurs, the instrument will display a black screen even if the link was previously functional. You can verify if a link is functional by examining it in the **Video Storage Editor** to make sure that the full video length has been retrieved and that the video is actually playing.

(4) The instrument will not play swf-format Flash files, although it will play flv-format Flash video files.

(5) Bookmarks don't function for Internet links.

Note: There are currently no workarounds for issues 3, 4, and 5.

## DVD INSTRUMENT

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### DVD does not play on secondary monitor

Problem: When replaying or recording a session with a DVD instrument placed on the part of the screen that is located on the secondary monitor, the DVD instrument does not display the playback.

Note: The ability to play the DVD on the secondary monitor depends entirely on the capability of your video card and its driver.

Solution: Place the DVD instrument on the primary monitor, or update the driver for your video card, or upgrade your video card.

### DVD Instrument seems to hang at session start

Problem: When the DVD plays a block of advertising before the film begins, the DVD Instrument displays the message "Please Wait". Since some ad blocks may last up to 60 seconds, it looks as if it is not functioning.

Solution: Select the option *Start DVD but Pause Session* and wait until the DVD Instrument starts showing the film before you click the **Pause** button to start recording or replaying the session.

## DVD bookmarks are lost after update

Problem: After updating from an earlier version of BioGraph Infiniti to version 6.7, previously existing DVD bookmarks are lost. The first time you play the DVD for the client, it will play from the beginning.

Note: There is no solution for this problem. The new version of BioGraph Infiniti will set new bookmarks.

## FLASH ANIMATION INSTRUMENT

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### BioGraph Infiniti will not play .swf file

Problem: The Adobe Flash Player cannot play a Flash .swf file if it is greater than 1 GB (gigabyte).

Solution: Use a smaller Flash .swf file.

## IMPEDANCE CHECKING

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### Interference from other sensors

Problem: When measuring impedance with one or more EEG-Z sensors, the impedance reading is affected by other sensor types that are hooked-up to the client.

Solution: When recording EEG with peripheral physiology, connect and hook-up the physiological sensors only after having checked the impedance on the EEG electrodes.

Note: More than one EEG-Z sensor will not interfere with one another because the ProComp Infiniti automatically turns them ON and OFF sequentially when making the measures.

## ERGONOMIC SENSOR ADAPTERS

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### Wrong Voltage Isolator Range

Problem: When using the Voltage Isolator, the raw signal's range displays as  $-0.85$  to  $+0.85$ , instead of "0 to 0.2" or "0 to 2.0" Volts, as described in the voltage isolator documentation.

Solution: A work-around consists of introducing a virtual channel to use the *Linear Transformer* computation to correct the readings. Use  $-0.85$  and  $+0.85$  as the input min and max, respectively, and, depending on the range indicated on the voltage isolator device, 0 to 0.2 or 0 to 2.0 as the output min and max, respectively.

### Unstable Signal Change Speed and Acceleration Computations

Problem: When using the *Signal Change Speed* and *Signal Change Acceleration* computations on high-sampling channels, the output of the computation is unstable and not useable.

Solution: These computations work best on slow sampling channels (32 samples/second) or on signals that are pre-processed (i.e. filtered or averaged) to reduce the variability of the signal.

## MediTOOLS Report Generator

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### Run as an Administrator

Problem: To use the MediTOOLS Report Generator within BioGraph Infiniti, you must run BioGraph as an administrator. This is due to a file protection configuration in the MediTOOLS program.

### High-Sampling Rate Channels Appear Noisier

Problem: When using the high sampling rate channels (2048 samples/sec) to record data, the raw signal appears noisier than when using slower sampling rates.

Solution: This issue is inherent to the process of sampling data signals. Higher sampling rates mean more resolution, more detail and more obvious noise. Generally, it is recommended to use the high sampling rate for high frequency signals such as raw EMG, or for signals that require high precision such as EKG or BVP. When processing slow signals through high sampling rate channels, more filtering is required, which may add distortion and cause delays to the feedback.

### Synchronization between inputs with fast and slow sampling rates

Problem: When doing phase-sensitive training (connectivity training, evoked potentials and reaction time), you must use encoder inputs with the same sampling rate (both 2048 samples/sec or both 256 samples/sec). If you use encoder inputs with different sampling rates, synchronization cannot be ensured.

