

MYONYX  
Rehab Suite



**ThoughtTech**

5250 Ferrier, Suite 812, Montreal, Quebec H4P 1L3

Tel: +1 (800) 361 3651 0 +1 (514) 489 8251 Fax: +1 (514) 489 8255

[www.thoughttechnology.com](http://www.thoughttechnology.com)



Thought Technology Ltd.  
5250 Ferrier, Suite 812,  
Montreal, QC, Canada  
H4P 1L3

[mail@thoughttechnology.com](mailto:mail@thoughttechnology.com)

**Product Name:** MyOnyx Rehab Suite

**Product No.:** SA9017

**Device Name:** MyOnyx



SA9000

**Manual Number / Revision:** SA9017 (November 2019)

© Thought Technology Ltd. 2019

# Table of Contents

<b>Introduction</b> .....	<b>1</b>
<b>Chapter 1 Setting Up the MyOnyx</b> .....	<b>2</b>
<b>System Requirements</b> .....	<b>2</b>
<b>Connecting the Cables and Electrodes</b> .....	<b>2</b>
<b>Registering the MyOnyx in BioGraph</b> .....	<b>3</b>
<b>Chapter 2 Setting Up the Sessions</b> .....	<b>9</b>
<b>Tips for Running a Quick Start</b> .....	<b>9</b>
Viewing the Signal.....	9
Adjusting the Scale Automatically.....	9
Adjusting the Scale Manually.....	9
Adjusting the Thresholds .....	10
<b>Managing Animation Files</b> .....	<b>10</b>
<b>Managing Audio Files</b> .....	<b>12</b>
Adding Audio Files .....	15
<b>Chapter 3 The Surface EMG Quick Start Favorites</b> .....	<b>16</b>
<b>The SEMG Assessments</b> .....	<b>16</b>
<b>Running the SEMG Fatigue Assessment</b> .....	<b>16</b>
Setting up the MyOnyx Device .....	16
Starting the Quick Start .....	16
Recording the Session .....	17
<b>Running the SEMG Complete Assessment Session</b> .....	<b>19</b>
Set up the MyOnyx .....	19
Starting the Quick Start .....	20
Recording the SEMG Complete Assessment .....	21
<b>The SEMG Open Assessment</b> .....	<b>24</b>
Setting up the MyOnyx Device .....	24
Starting the Quick Start .....	24
Recording the SEMG Complete Assessment .....	25

<b>The Training Quick Starts.....</b>	<b>26</b>
<b>SEMG Training: Activating Ch 1 while Relaxing Ch 2 .....</b>	<b>26</b>
<b>Training Control Sessions.....</b>	<b>33</b>
<b>SEMG Training Control Session .....</b>	<b>33</b>
<b>SEMG Training Control with Extra Channel Session .....</b>	<b>38</b>
<b>SEMG Training: Equilibrium.....</b>	<b>44</b>
<b>SEMG Training: Relaxation 1 Channel .....</b>	<b>49</b>
<b>SEMG Training: Relaxation 2 Channels .....</b>	<b>55</b>
<b>SEMG Training Strengthening Session.....</b>	<b>61</b>
<b>EMG Training Strengthening with 2 Channels.....</b>	<b>67</b>
<b>Chapter 4 Reviewing the Sessions .....</b>	<b>74</b>
<b>Ending Session Recording.....</b>	<b>74</b>
<b>Reviewing Saved Sessions .....</b>	<b>76</b>
Artifact Rejection	78
Trend Graph	79
Raw EMG & 3D Spectrum	81
Review – Endurance	81
<b>Chapter 5 MyOnyx Downloading Options .....</b>	<b>82</b>
<b>Downloading Sessions with the MyOnyx External Session Download Tool .....</b>	<b>83</b>
Downloading Recorded Sessions from the MyOnyx to your PC	83
<b>Importing Downloaded Sessions to BioGraph .....</b>	<b>85</b>
<b>Using the Direct Downloading Option in BioGraph.....</b>	<b>90</b>
<b>Viewing the Channel Set Configuration .....</b>	<b>95</b>
<b>Creating a New Script.....</b>	<b>97</b>
<b>Troubleshooting.....</b>	<b>98</b>
Reviewing Downloaded Sessions in MyOnyx	98

# Introduction

The MyOnyx Rehab Suite is a software application designed for the MyOnyx device and BioGraph Ininiti® software. It is used for surface electromyography (SEMG) in muscle rehabilitation therapy.

It contains a series of interactive screens, predefined sessions, and tasks. These provide immediate feedback for both the clinician and the client. This is easy to understand and meaningful for both.

The screens are accessed in BioGraph through the Quick Start menu or the Open Display Session menu.

The Quick Start menu contains predefined sessions, used for recording and reviewing assessment and training sessions. Both scripted and open sessions are available. Scripted sessions are timed and follow a predefined order. In open sessions, the clinician provides instructions and decides how long to run and record the session. Both open and scripted sessions have the same review screens.

Alternatively, the clinician can access the screens through the Open Display Sessions menu and choose the available recording and review screens.

---

**Note:** Before using the MyOnyx Rehab Suite, the MyOnyx device, or the accessories, read the *MyOnyx Hardware Manual* and *MyOnyx Reference Manual* especially the sections containing warnings, precautions, and contraindications.

---

# Chapter 1 Setting Up the MyOnyx

## System Requirements

Before running the MyOnyx Rehab suite, ensure that you have the following:

- MyOnyx SA9000 Extended version
- BioGraph 6.7 or higher installed on a Bluetooth-enabled PC or laptop

---

**Note:** The MyOnyx must be paired with BioGraph as described in the *MyOnyx Reference Manual*.

---

## Connecting the Cables and Electrodes

The MyOnyx Rehab Suite uses Channels A and B on the MyOnyx. The configuration for each Quick Start Favorite is specified in this manual.

Before connecting any parts to the MyOnyx or using the device, ensure that you read and follow all warnings, precautions, and contraindications in the *MyOnyx Hardware Manual*. Make sure you use the approved cables specified in that manual.

To connect a cable

1. Insert the cable in the required channel.
2. Ensure that the cable is securely in place.
3. Connect the cable to the electrodes:
  - For **surface EMG**, either connect the two pins to electrical stimulation electrodes or connect the two pins to the DIN-to-snap connector. Then, connect the "snap on" Uni-Gel electrodes.
  - Make sure the patient's skin is clean, shaved, if necessary, and abraded. Then, peel the backing from the electrodes and place them on the patient.
4. Insert the Patient Drive (PD) cable into the REF port on the MyOnyx.



**REF** The REF port is in the center of the channel ports along the bottom of the device.

---

**Note:** Using EMG without the patient drive will cause false readings.

---

5. Connect the snap connection on the other end of cable to an EMG Uni-Gel electrode.
6. Peel the backing from the Uni-Gel electrode.

7. Place the electrode on a bony area, such as the patient's elbow, knee, ankle, or shoulder. Make sure it is not close to the area of the EMG reading.

## Registering the MyOnyx in BioGraph

Before using the MyOnyx Rehab Suite, you must register the MyOnyx device in BioGraph. The easiest way to do this is to run one of the Quick Start favorites and follow the online instructions.

This section describes this procedure running the *SEMG Complete Assessment* favorite. For this procedure, you need:

A PC running:

- BioGraph 6.7 or higher
- MyOnyx Rehab Suite

Hardware

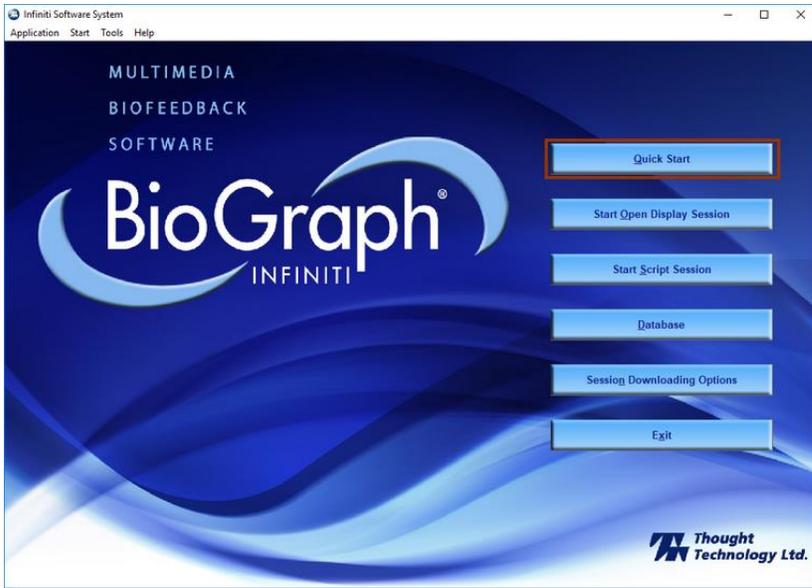
- A MyOnyx device that is paired with the PC running BioGraph.
- Two EMG cables, one connected to Channel A, the other to Channel B
- EMG Electrodes connected to the cables

Codes

- The key code and application key code provided to you by Thought Technology

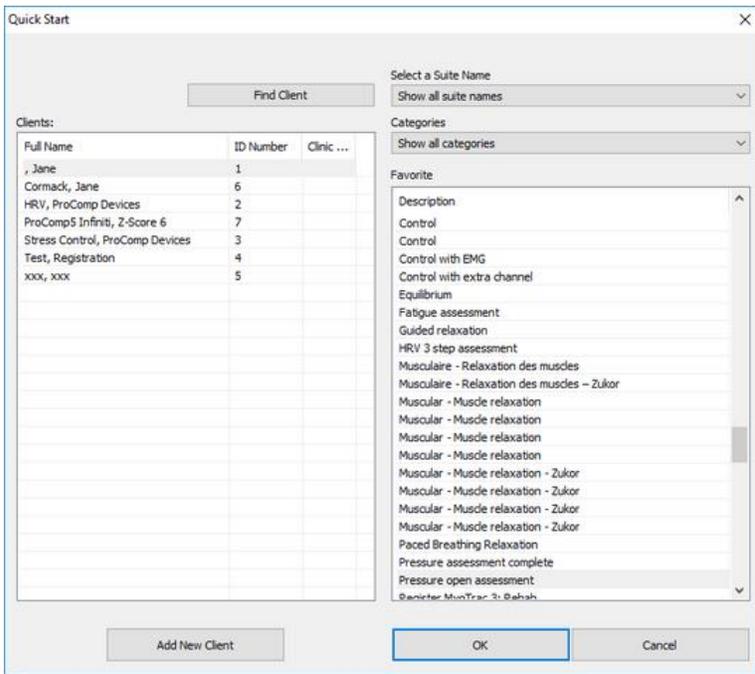
To register the device:

1. Turn on the MyOnyx.
2. Connect the EMG cables to Channels A and B.
3. Launch BioGraph.



4. Click **Quick Start**.

The Quick Start window opens.



5. Do one of the following:

- Select a client in the Clients list box if you have created client files.
- Click **Add New Client** and continue with the next step.

**Note:** You do not need to enter the names of a real person to register the device. You can enter anything in these fields.

- Click **OK** to return to the **Quick Start** window.

Full Name	ID Number	Clinic ...
BioGraph 6, Feature Set	8	
C, J	12	
Cormack, Jane	7	
Cormack, Jane	11	88
Encoder, Registration	1	
Encoder, Registrierung	3	
Enregistrement, d'Encodeur	2	
Gold, Jane	13	
HRV, ProComp Devices	9	
ProComp5 Infiniti, Z-Score 6	10	
Registración, del Codificador	5	
Registrazione, della Centralina	4	
Rejestracja, Kodera	6	

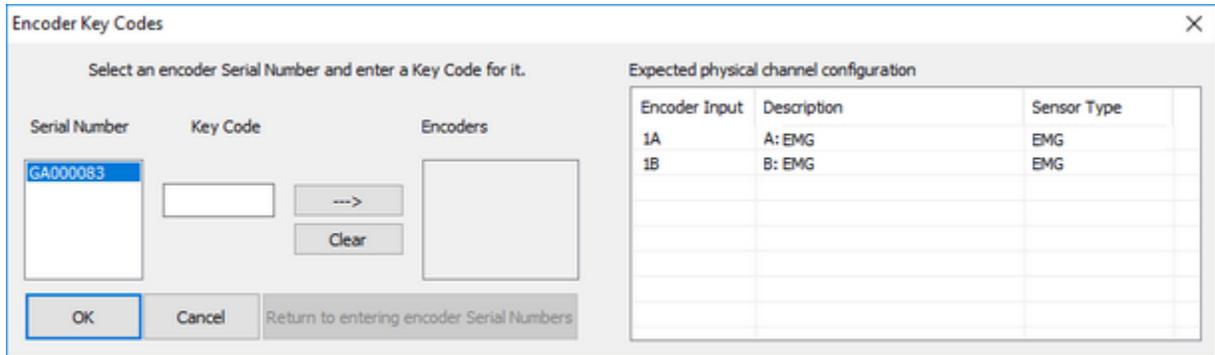
- Select **Rehab Suite** from the **Select a Suite Name** drop-down list.

8. Select **Assessment SEMG** from the **Categories** drop-down list.
9. Click **OK** on the Quick Start window.

The **Encoder Key Codes** window opens.

### Entering Key Codes

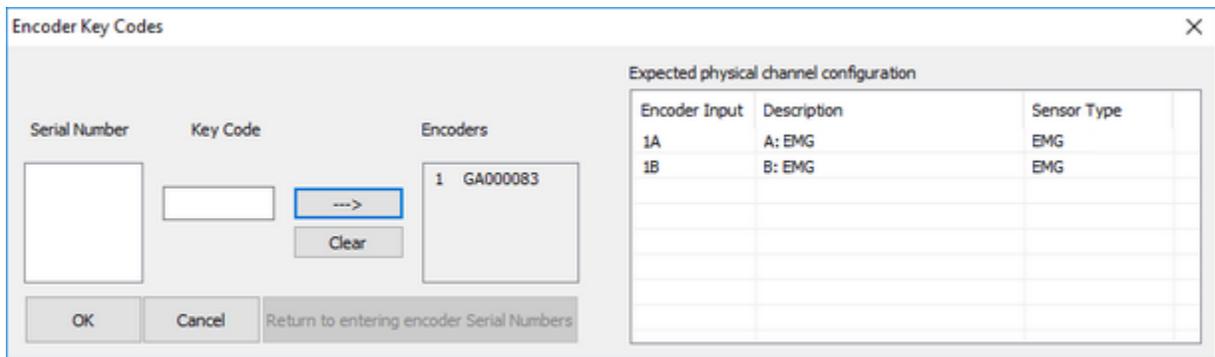
When the Encoder Key Codes window appears, enter the key codes provided to you by Thought Technology.



The **Serial Number** text box is automatically populated.

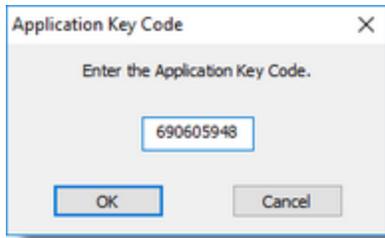
The Expected physical channel configuration list box is populated from the selected Quick Start Favorite.

1. Enter the Thought Technology key code in the **Key Code** text box.
2. Click the right arrow  to move the key code to the **Encoders** list box.



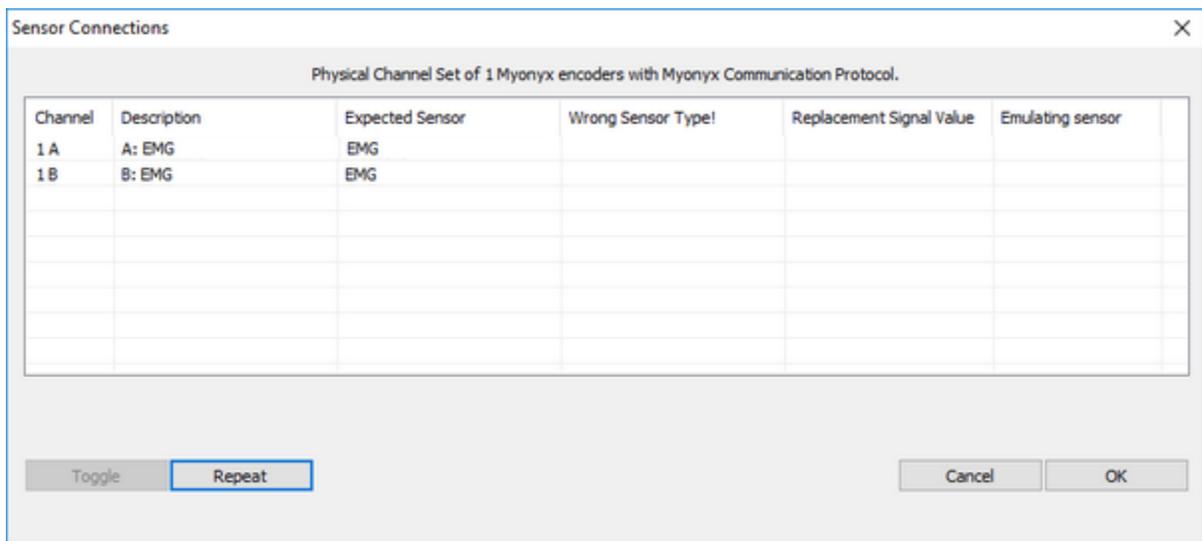
3. Click **OK**.

The Application Key Code window opens.



4. Enter the **Application Key Code**, provided by Thought Technology in the text box.
5. Click **OK**.

The Sensor Connection window opens.



This window displays the Channel Inputs for the encoder with a description and the name of the sensor that is expected.

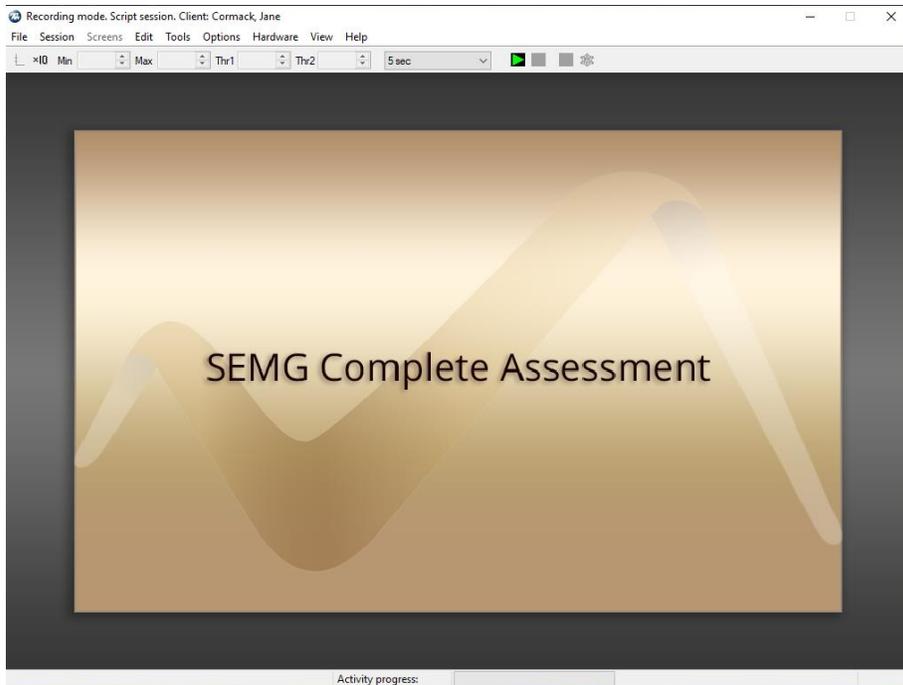
6. Do one of the following:

If the cables for the sensors are not connected correctly, the **Sensor is not detected** message appears in the **Wrong Sensor Type** column, verify the sensor connections and click **Repeat**

This clears the **Sensor is not detected** message.

7. Click **OK** on the Sensor Connections window.

The SEMG Complete Assessment recording window appears.



You can begin recording your session or run any Quick Start in the MyOnyx Rehab Suite.

# Chapter 2 Setting Up the Sessions

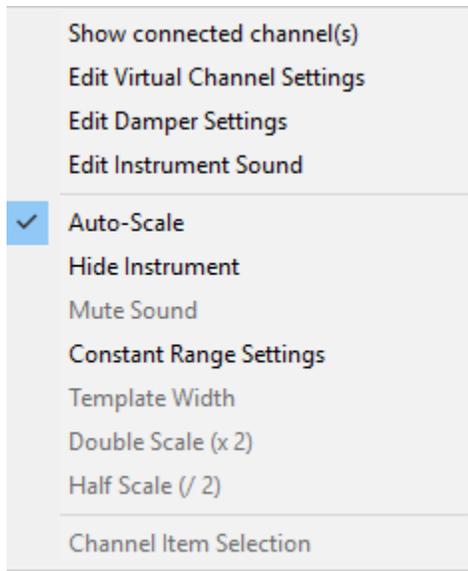
This chapter provides some tips for working with the sessions, as well as procedures for managing audio and video files.

## Tips for Running a Quick Start

### Viewing the Signal

#### Adjusting the Scale Automatically

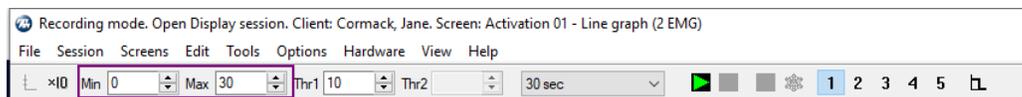
You can use the Auto-Scale feature to automatically adjust the screen, so that the entire signal is shown. To do this, right click on the graph and click **Auto Scale** from the menu.



#### Adjusting the Scale Manually

To zoom in on small specific areas or to zoom out for a wider view, manually

1. Right-click on the graph.
2. Deselect Auto-Scale
3. Click on the graph to enable the toolbar.



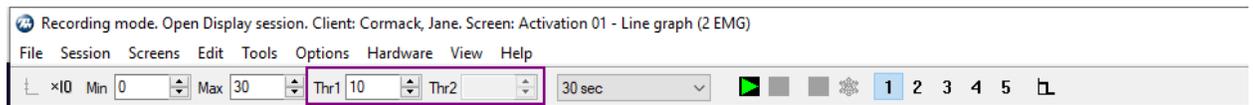
4. Change the values in the **Min** and **Max** text boxes in the toolbar.

## Adjusting the Thresholds

Thresholds are added to the graphs to indicate one or more condition set by the clinician for the client. For example, a condition may be to contract a monitored muscle and keep the signal above the threshold or to relax a muscle and keep the signal below the threshold.

To adjust a threshold, do one of the following:

1. Select it with your mouse and drag it to the correct position.
2. Click on the graph to enable the toolbar and change the value in the **Thr1** or **Thr2** text box.



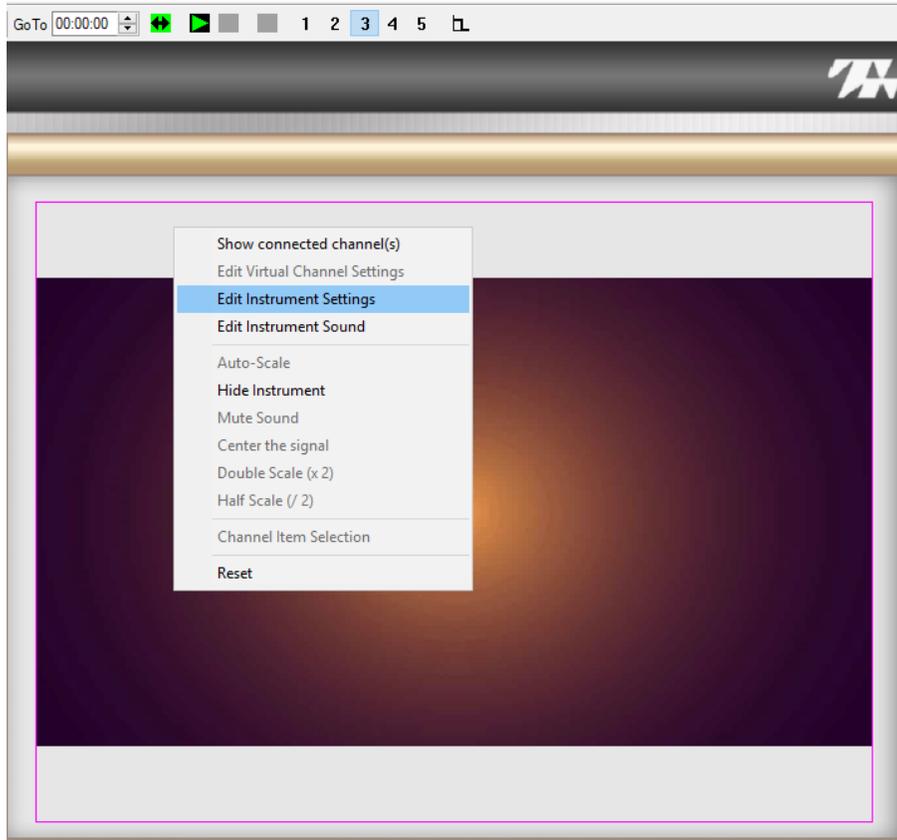
## Managing Animation Files

Animations or short videos are included with several Quick Start favorites to provide feedback. If the client performs tasks successfully or meets the conditions set by the clinician, the video plays.

You can change an animation before or after a session.

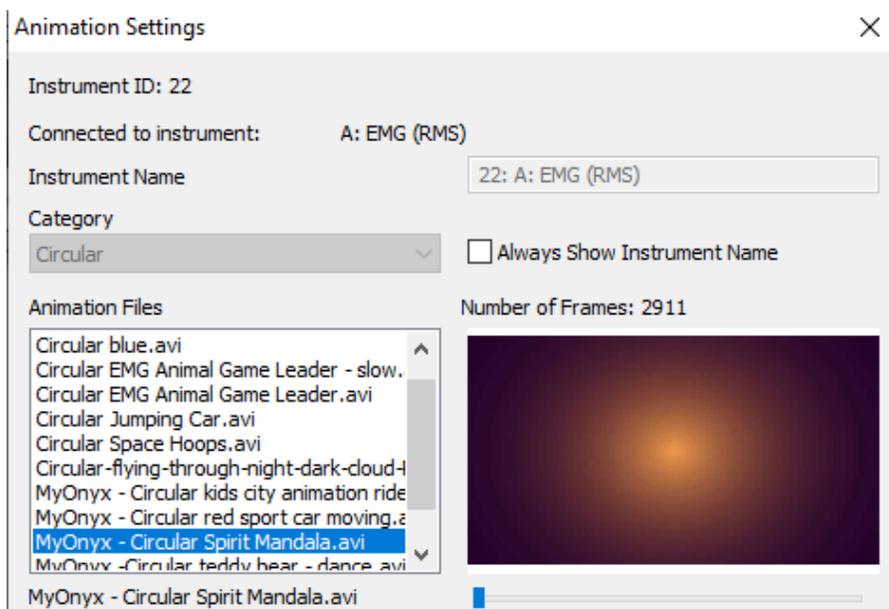
### To change an animation

1. Launch the Quick Start favorite.
2. Navigate to the screen with the animation.
3. Click on the animation.
4. A context-sensitive menu appears.



5. Select **Edit Animation Setting**.

The Animation Settings screen appears.



6. Select the animation in the list.

You can make your own AVI files available. To do this, save your files to the following location on the PC running BioGraph:

*C:\ProgramData\Thought Technology\Infiniti\AVI*

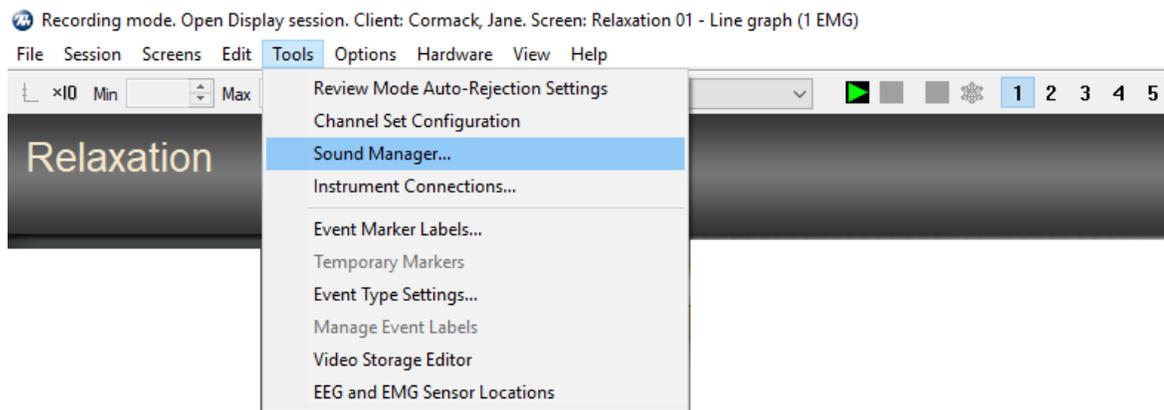
Then, choose the appropriate subdirectory.

## Managing Audio Files

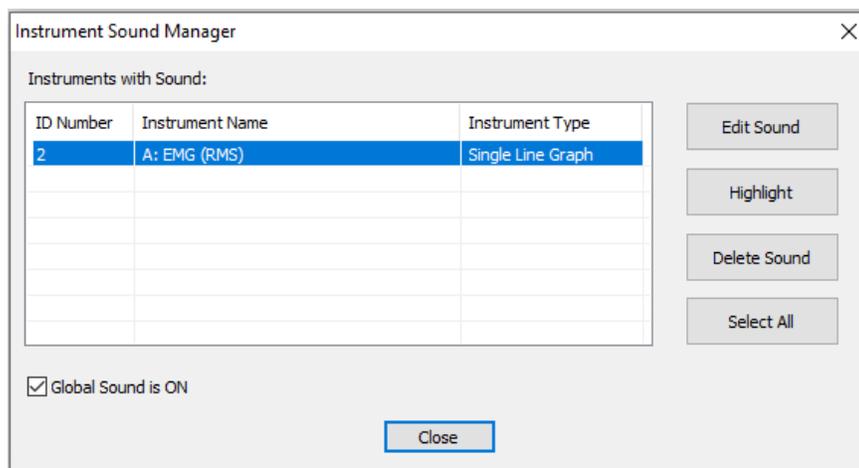
Audio files are included with the several Quick Start favorites to provide feedback to the client. For example, when the client performs a task successfully or meets a condition, music could be played, or barely audible music could be played at increased volume.

### To change an audio file

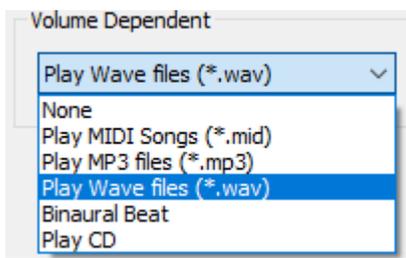
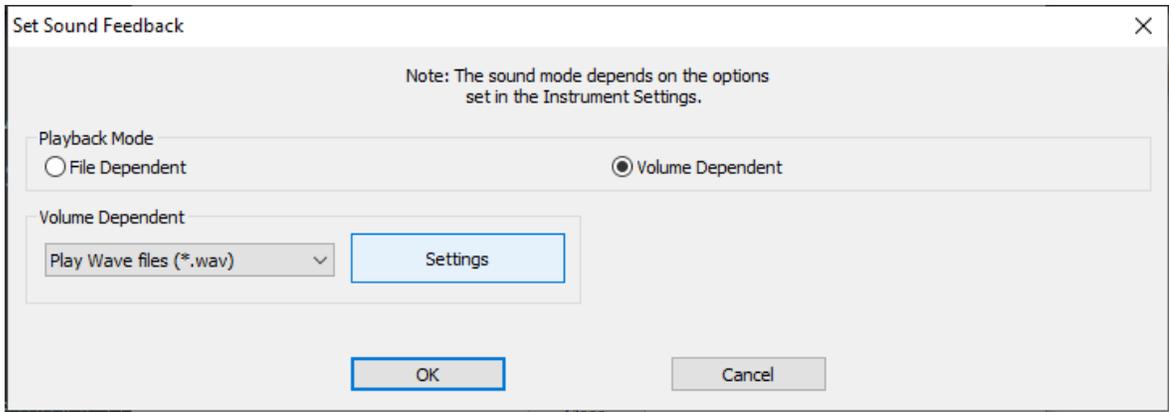
1. Open the Quick Start favorite.
2. Select **Tools > Sound Manager**.



The Instrument Sound Manager screen opens.



The Set Sound Feedback screen appears.

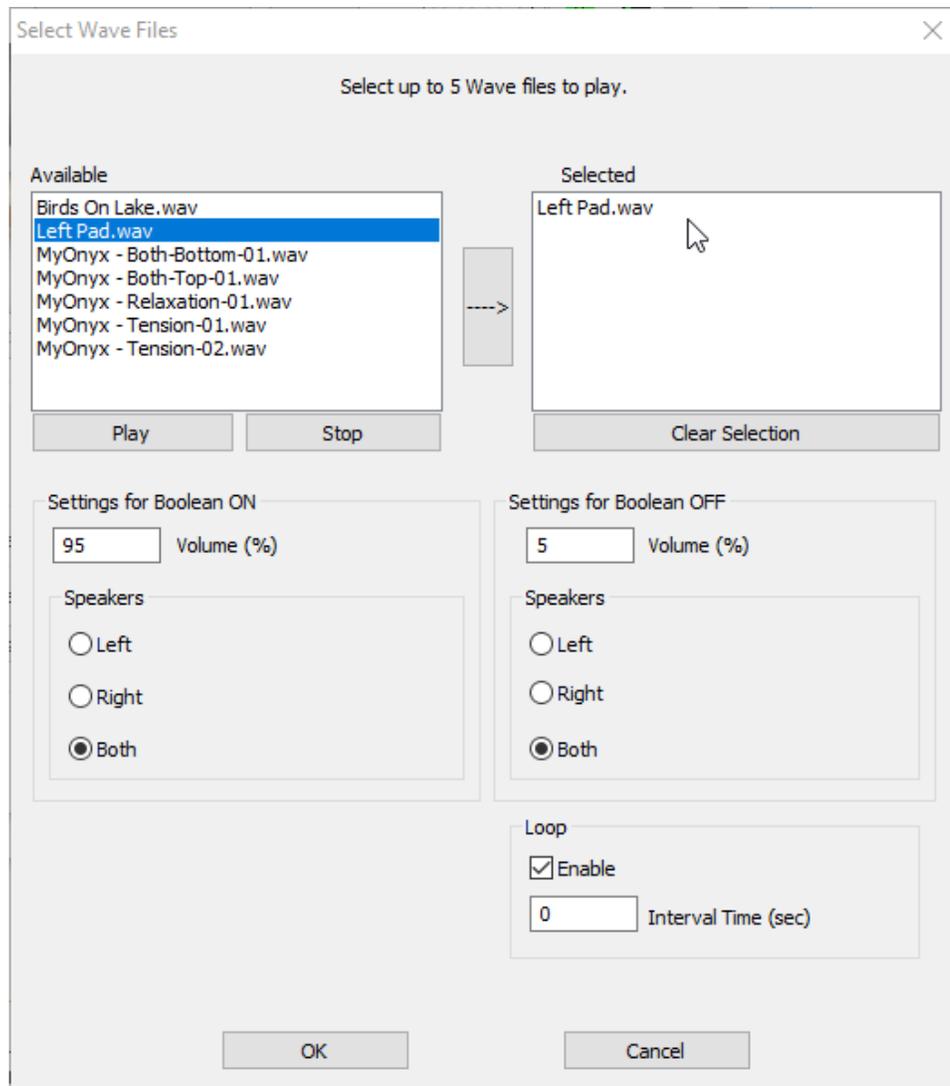


**Tip:** To change the audio file type, expand the Volume Dependent drop-down list and select one of the following:

- Play Wave Files (\*.wav)
- Play mp3 files (\*.mp3)

3. Click **Settings** > **OK**.

The file selection screen opens for the type of audio file selected for the Quick Start, Mp3 or Wave.



The audio file selected for the Quick Start favorite is displayed in the **Selected** list box.

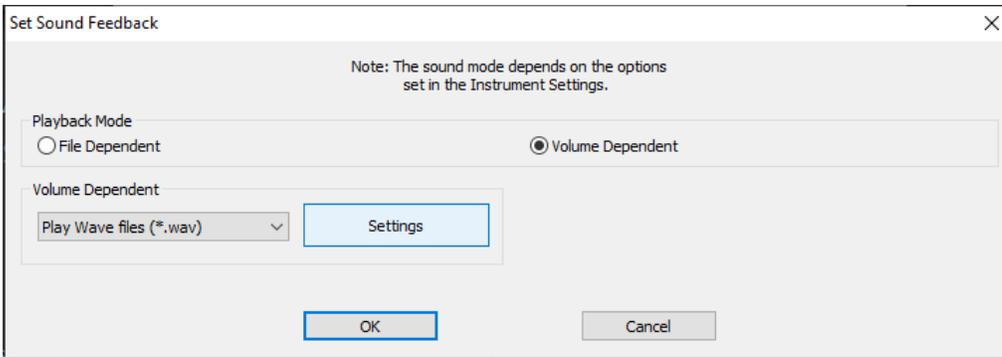
---

**Tip:** You can select any file in the list and click **Play**. To end it, click **Stop**.

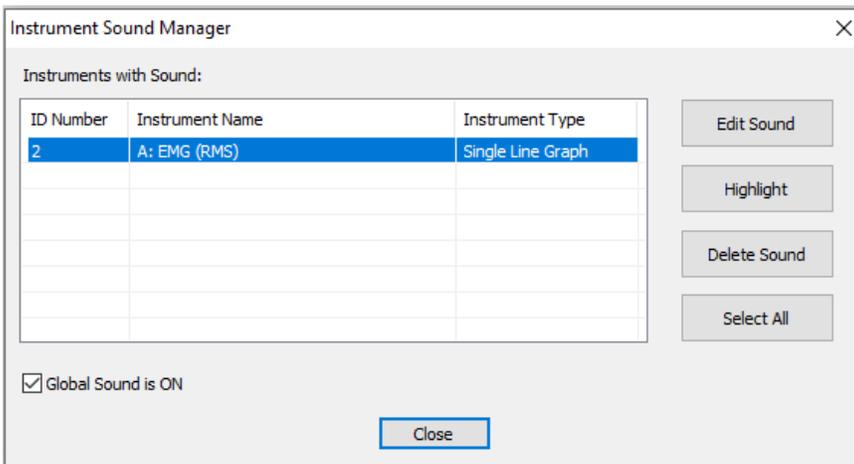
---

4. Click **Clear Selection**.
5. Select a file in the **Available** list.
6. Click the right arrow to move it to the Selected list.
7. Click **OK**.

The Set Sound Feedback window appears.



8. Click **OK** on the Set Sound Feedback window.



9. Click **Close** on the Instrument Sound Manager window.

## Adding Audio Files

If you want to use your own wave (\*.wav) or MP3 files in a Quick Start favorite, save them to the one of the following directories on the computer running BioGraph:

Wave files: *C:\ProgramData\Thought Technology\Infiniti\Waves*

MP3 files: *C:\ProgramData\Thought Technology\Infiniti\Sounds*

Then, you can select them as described in the previous procedure.

# Chapter 3 The Surface EMG

## Quick Start Favorites

This chapter describes the SEMG assessments and training sessions available through the Quick Start menu.

### The SEMG Assessments

The following Quick Start Favorites are available for SEMG Assessments.

- SEMG Fatigue Assessment
- SEMG Complete Assessment
- SEMG Open Assessment

### Running the SEMG Fatigue Assessment

The SEMG Fatigue Assessment measures muscle fatigue. It is an Open Assessment. This means you can decide when to start and stop the session, rather than a following a predefined script.

### Setting up the MyOnyx Device

To set up the MyOnyx for the Fatigue Assessment

1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG cable to Channel A.
3. Connect the Patient Drive to the REF port.
4. Connect EMG electrodes to the cables and place the electrodes on the patient.

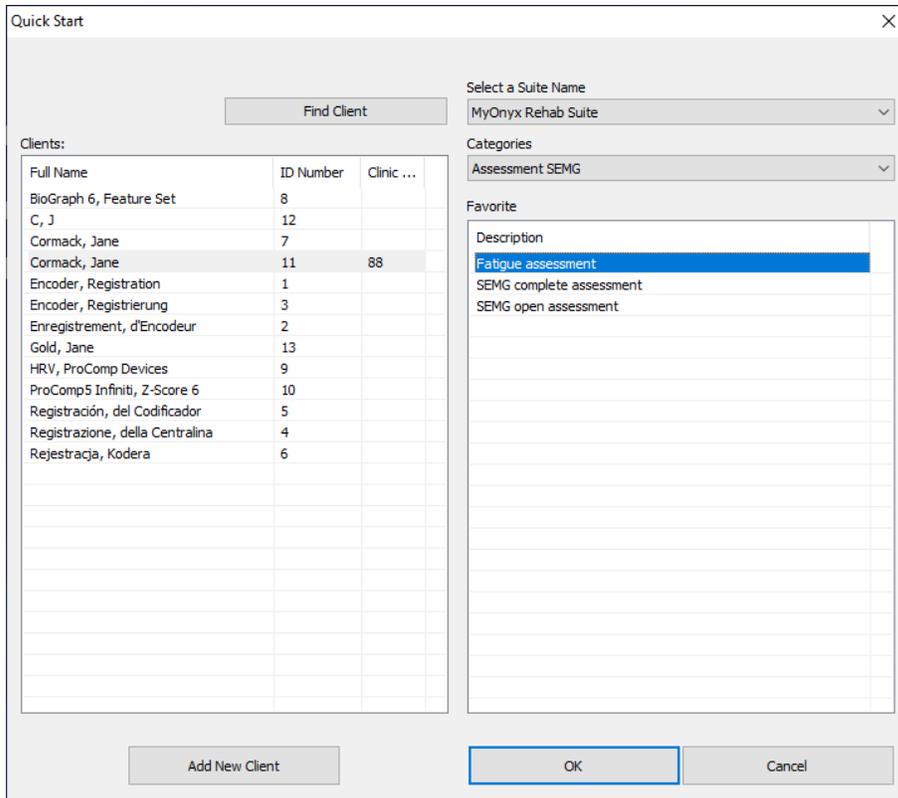
*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

### Starting the Quick Start

To start the Quick Start Favorite:

1. Launch BioGraph and click **Quick Start**

The Quick Start window opens.



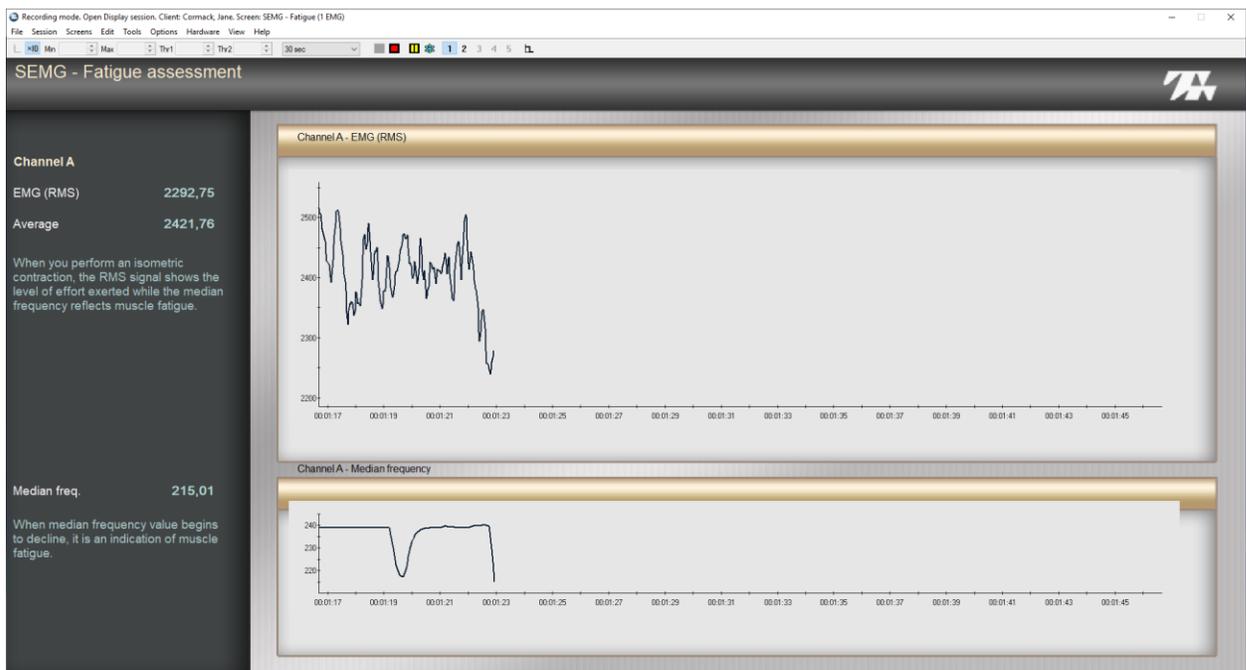
2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Assessment SEMG** from the **Categories** drop-down list.
4. Select a client in the **Clients** list box.
5. Select **SEMG Fatigue Assessment** in the **Favorite** list box.
6. Click **OK** on the Quick Start window.

## Recording the Session

The Connected screen is displayed on the MyOnyx.



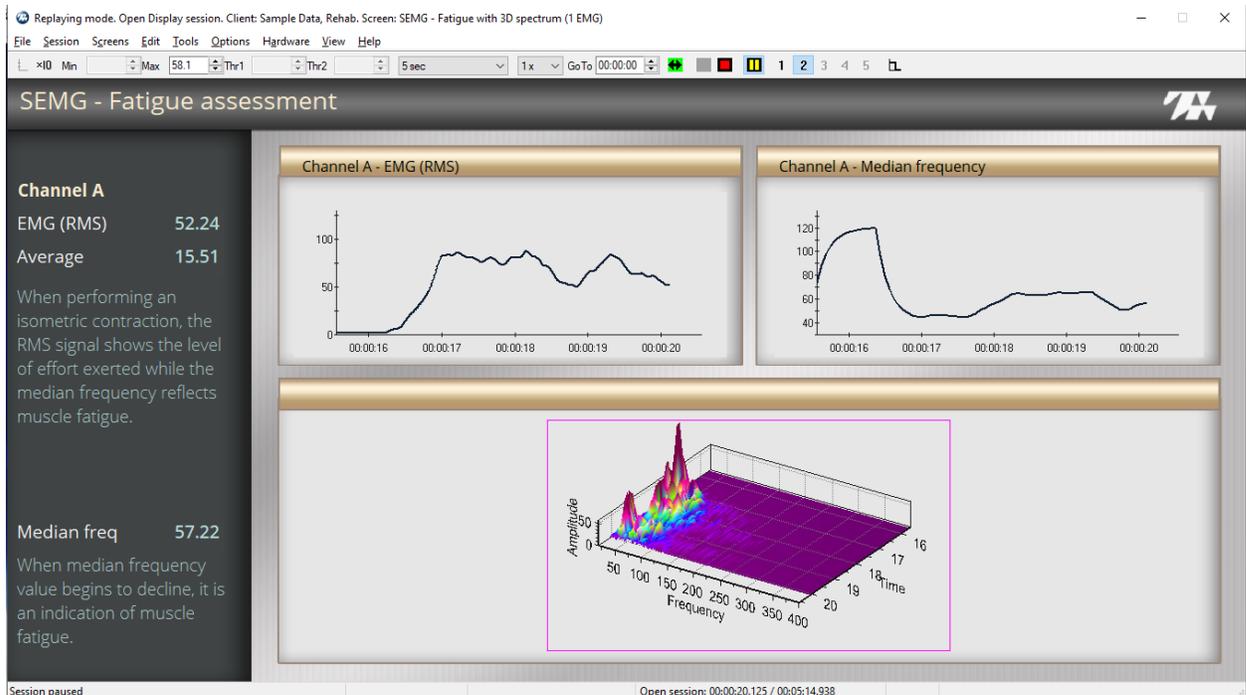
In BioGraph, the SEMG Fatigue Assessment recording window appears when you click **OK** on the Quick Start window.



The first screen of the Fatigue Assessment displays two graphs.

- The graph in the top pane shows the RMS signal from Channel A and the level of contraction in the muscle.
  - The graph in the lower pane shows the Median Frequency. When the muscle becomes fatigued, it begins to decline.
1. Explain to the client how the signal changes as the monitored muscle contracts and then becomes fatigued.
  2. Press the **Start** button  when you and your client are ready to begin recording.

- Describe the feedback: explaining how the signal line on the graphs rises and falls corresponding to the level of contraction or relaxation in the muscle.
- Click **2** in the BioGraph Recording window toolbar to display the second screen. This presents a different view of the RMS signal. You can switch back to the first screen.



This screen shows two graphs and a 3D spectrum of the EMG signal.

The RMS Signal is shown on the left, the median frequency on the right.

- Click **Stop**  when you are ready to end the session and stop recording.

## Running the SEMG Complete Assessment Session

The SEMG Complete Assessment is a scripted session.

### Setting up the MyOnyx

To set up the MyOnyx for the SEMG Complete Assessment

- Turn on the MyOnyx.
- Connect EMG cables to Channels A and B.
- Connect the Patient Drive to the REF port.
- Place the electrodes on the patient.

Refer to the *MyOnyx Reference Manual* for full details on connecting cables and electrodes.

## Starting the Quick Start

To start the SEMG Complete Assessment favorite.

1. Launch BioGraph.
2. Click **Quick Start**.

The Quick Start window opens.

The screenshot shows the 'Quick Start' dialog box. It contains a 'Find Client' button, a 'Select a Suite Name' dropdown menu (set to 'MyOnyx Rehab Suite'), a 'Categories' dropdown menu (set to 'Assessment SEMG'), and a 'Favorite' list box. The 'Clients' list box is a table with the following data:

Full Name	ID Number	Clinic ...
BioGraph 6, Feature Set	8	
C, J	12	
Cormack, Jane	7	
Cormack, Jane	11	88
Encoder, Registration	1	
Encoder, Registrierung	3	
Enregistrement, d'Encodeur	2	
Gold, Jane	13	
HRV, ProComp Devices	9	
ProComp5 Infiniti, Z-Score 6	10	
Registración, del Codificador	5	
Registrazione, della Centralina	4	
Rejestracja, Kodera	6	

The 'Favorite' list box contains the following items:

- Description
- Fatigue assessment
- SEMG complete assessment** (highlighted)
- SEMG open assessment

At the bottom of the window are buttons for 'Add New Client', 'OK', and 'Cancel'.

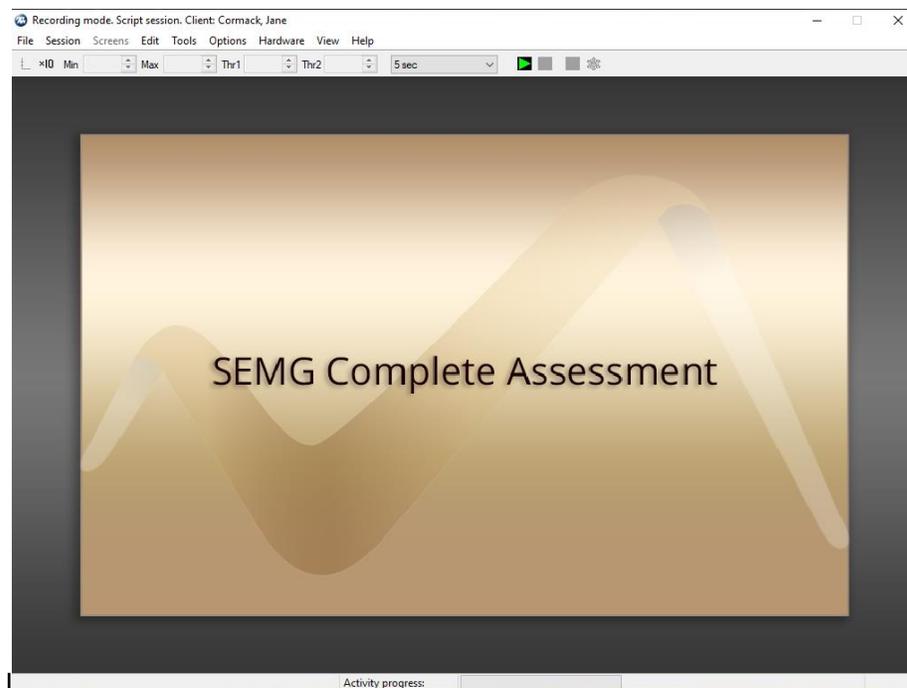
3. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
4. Select a client in the **Clients** list box.
5. Select **Assessment SEMG** from the **Categories** drop-down list.
6. Select **SEMG Complete Assessment** in the **Favorite** list box.
7. Click **OK** on the Quick Start window.

## Recording the SEMG Complete Assessment

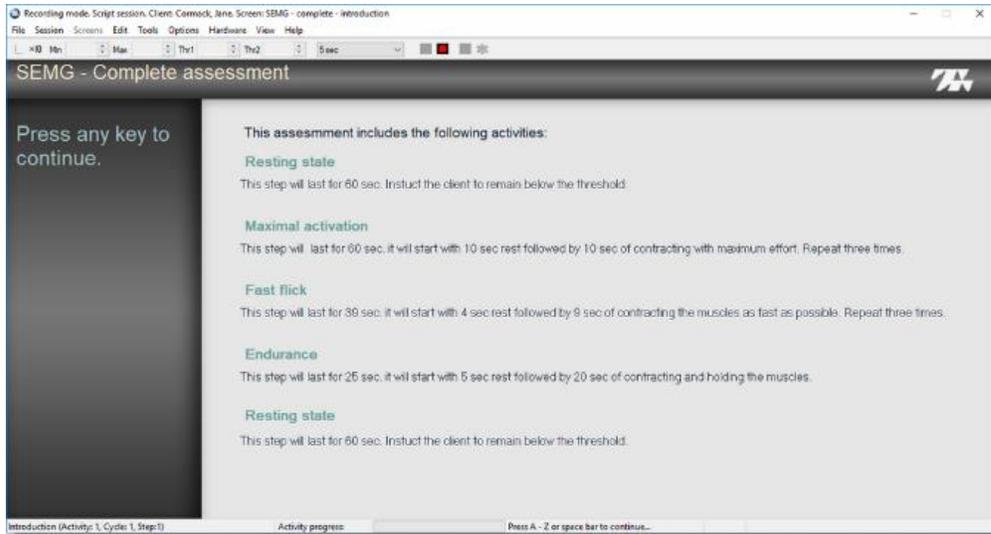
The Connected window is displayed on the MyOnyx screen.



The SEMG Complete recording screen appears when you click **OK** on the Quick Start window.



The first screen of the SEMG Complete Assessment script is an instruction screen:



You can review the steps presented in the instruction screen with your client.

### **Step I: Resting State**

This step lasts 60 seconds. In this phase, the client tries to remain below the threshold.

The clinician can move the threshold up or down manually. It changes color when the client is not meeting the condition and signal is below the threshold.

### **Step II: Maximal Activation**

This step lasts 60 seconds. It runs through three rest-work cycles. The rest phase lasts 10 seconds. During this phase, the client tries to remain below the threshold. The work phase lasts 10 seconds. During each work phase, the client contracts to maximal effort.

### **Step III: Fast Flick**

This step is like the previous one, but faster. It lasts 30 seconds. It runs through three rest-work cycles. The rest phase lasts 4 seconds. During this phase, the client tries to remain below the threshold. The work phase for each cycle lasts 9 seconds and the client contracts to maximal effort.

### **Step IV: Endurance**

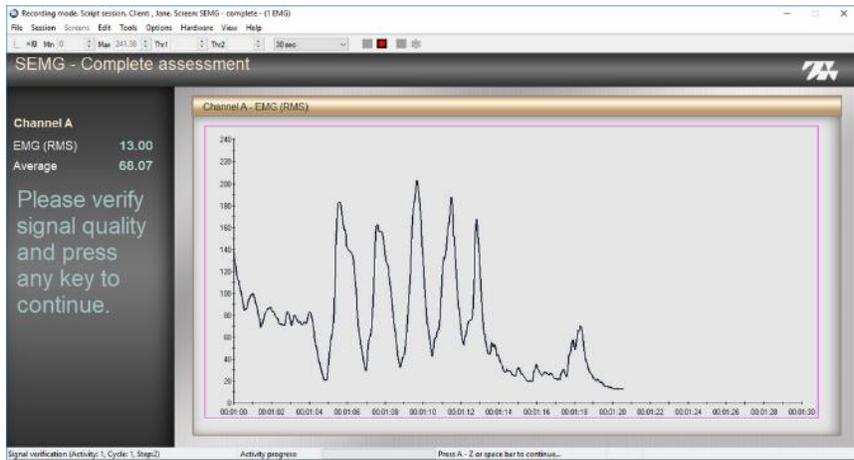
The Endurance step lasts 25 seconds. It begins with 5 seconds of rest when the client tries to remain below the threshold. It is followed by 20 seconds during which the client contracts and holds the muscle.

### **Step V: Resting State**

The assessment script ends with a 60-second resting phase. This is the same as the first step.

## Introduction

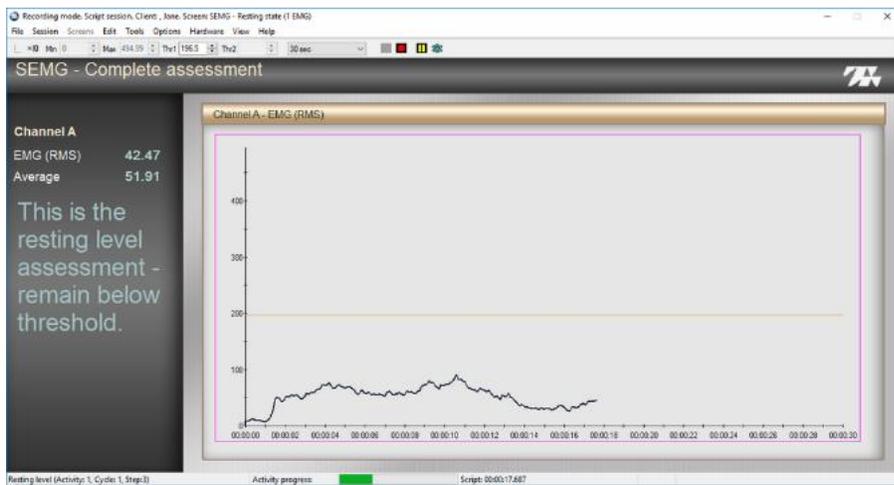
Before the main steps in the script start, an introduction screen is presented.



When this screen appears, you can ask your client to practice contracting and relaxing the monitored muscles to see how the signal varies on the graph. Explain that instructions are shown on the screen and voice prompts are played during the session. These help your clients to perform the required tasks.

To navigate to the next screen, press the space bar or any key between A and Z.

## The SEMG Resting Step



In this step, a threshold is shown on the screen. To change the threshold, select it with your mouse and move it into position.

To use this screen

1. Instruct the client to try and relax the monitored muscle during the resting phase and keep the RMS signal below the threshold.



4. Select **SEMG Open Assessment** in the Favorite list box.
5. Click **OK** on the Quick Start window.

## Recording the SEMG Complete Assessment

The Connected window is displayed on the MyOnyx screen.



The Bluetooth icon is displayed next to the battery icon. If you do not see this screen on the MyOnyx device, verify that the device is paired to the PC via Bluetooth.

The SEMG Recording screen appears when you click OK on the Quick Start window.



Line graphs display the RMS signal from Channels A and B.

To use this screen

1. Ask the client to perform one or several tasks.
2. Click **Start**  in the Recording window toolbar when you are ready to begin recording.
3. Press the space bar to add markers and indicate events, such as changes in tasks that you want to review.
4. Click **Stop**  when you are ready to end the session and stop recording.

## The Training Quick Starts

The following Quick Start Favorites are available in the sEMG Training category

- Activating ch 1 while relaxing ch 2
- Control
- Control with extra channel
- Equilibrium
- Relaxation 1 channel
- Relaxation – 2 channels
- Strengthening 1 channel
- Strengthening 2 channels

### SEMG Training: Activating Ch 1 while Relaxing Ch 2

In this training session, the client tries to perform two different tasks, contracting one muscle and relaxing a second muscle.

To run the Activating Ch 1 while Relaxing Ch 2 Quick Start Favorite:

#### Setting up the MyOnyx

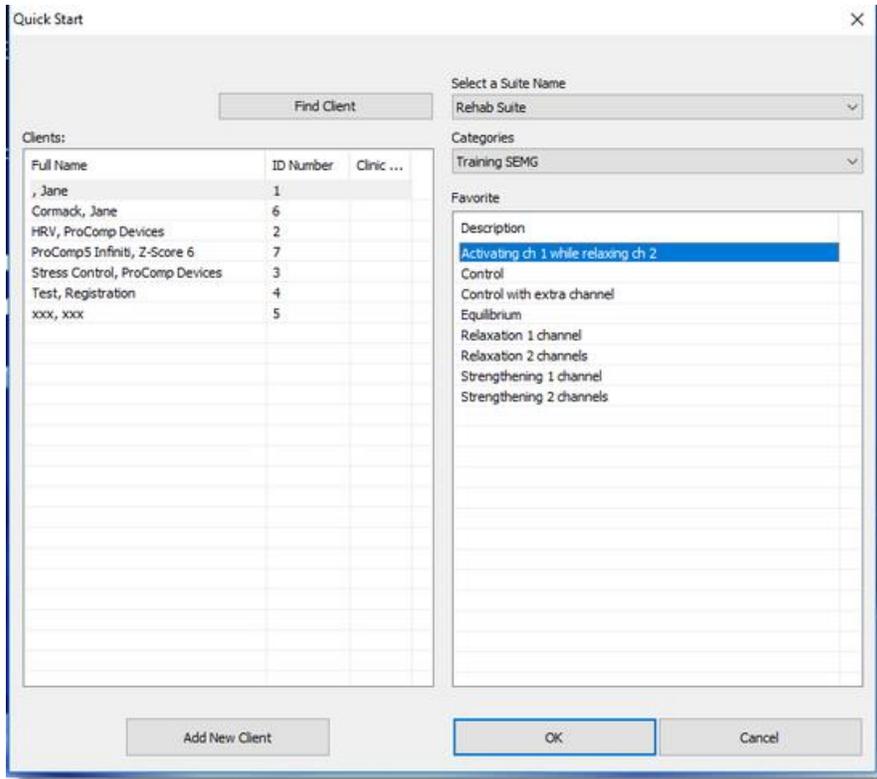
1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect EMG cables and electrodes to Channels A and B.
3. Connect the Patient Drive to the REF port.

*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

## Starting the Quick Start

1. Launch BioGraph and click Quick Start

The Quick Start window opens.



2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Training SEMG** from the Categories drop-down list.
4. Select **Activating Ch 1 while Relaxing Ch 2** in the **Favorite** list box.
5. Click **OK** on the Quick Start window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



The Activating Ch 1 while Relaxing Ch 2 recording window appears in BioGraph.



The screen displays two graphs.

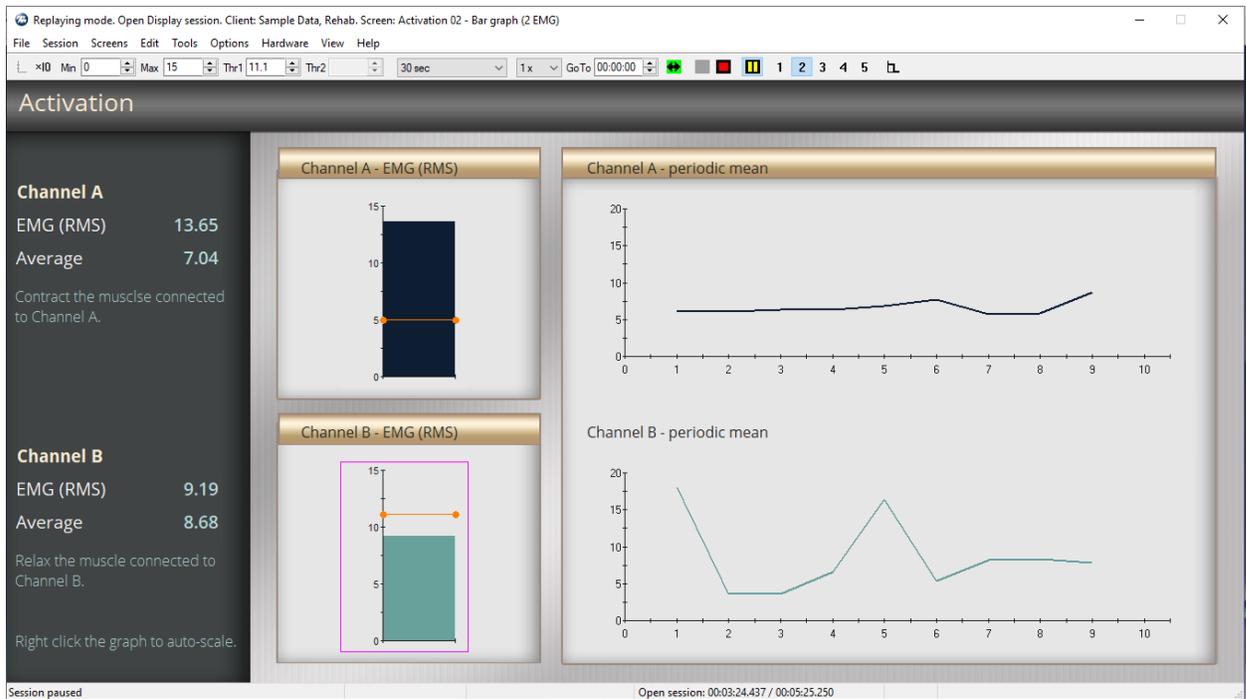
The top graph shows the RMS Signal from Channel A, the lower from Channel B.

A threshold is displayed on each graph. To change the position of a threshold, select it with your mouse and drag and drop it to the appropriate position.

To use this screen

1. Instruct the client to try to meet two conditions for this screen:
  - Contract the muscle connected to Channel A and keep the signal above the threshold.

- At the same time, relax the muscle connected to Channel B and keep the signal below the threshold.
2. Click **Start**  when you are ready to begin recording.
  3. Describe the feedback.
    - On the Channel A graph, the color changes when the signal drops below the threshold. This indicates that the client is not meeting the condition.
    - On the Channel B graph, the color changes when the signal goes above the threshold. This indicates the client is not meeting the condition for this channel.
    - For both channels, music plays at full volume when the client meets a condition. It plays quietly when the client no longer meets one of the conditions.
  4. Select **2** in the toolbar of the recording window to navigate to the next screen.



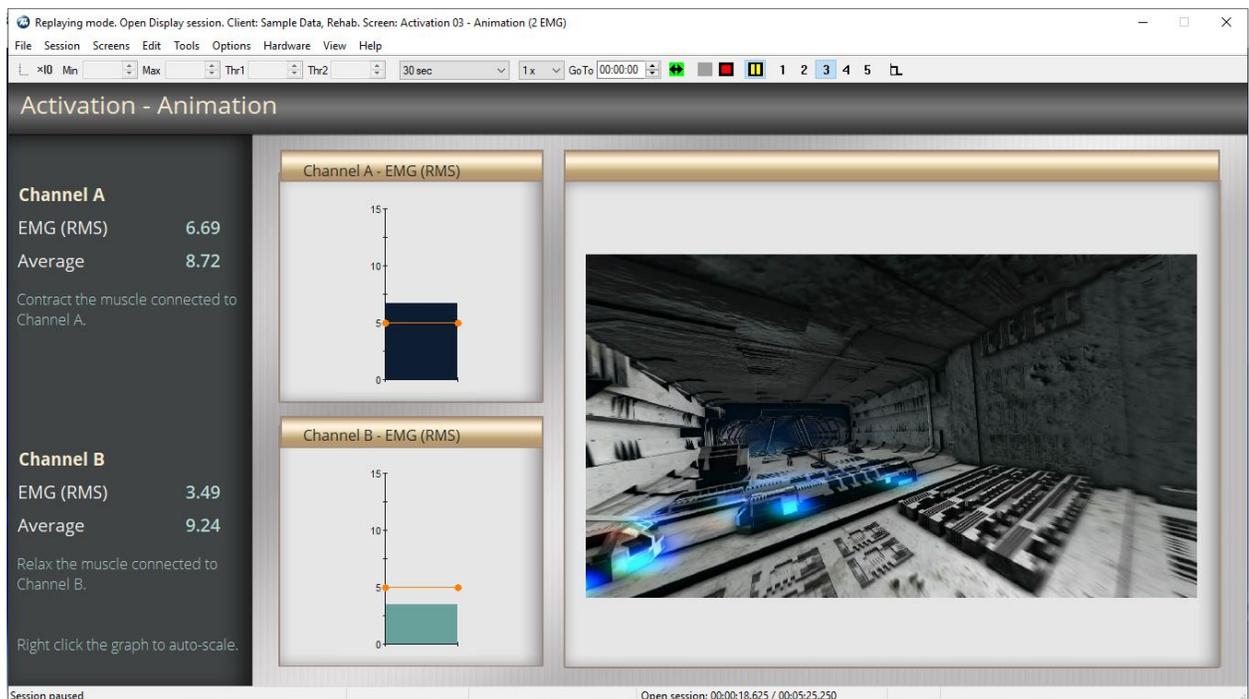
The second screen presents a different view, with two bar graphs and two trend graphs. These graphs show the average value of the EMG signal and are updated every 20 seconds.

A threshold is shown on each bar graph. To change the position of a threshold, select it with your mouse and move it to the appropriate level.

Proceed as with the first screen:

1. Instruct the client to try to meet two conditions for this screen:
  - Contract the muscle connected to Channel A and keep the signal above the threshold.

- At the same time, relax the muscle connected to Channel B and keep the signal below the threshold.
2. Describe the feedback.
    - On the Channel A graph, when the signal drops below the threshold, the color changes. This indicates that the client is not meeting the condition.
    - On the Channel B graph, the color changes when it goes above the threshold. This indicates the client is not meeting the condition for this channel.
    - For both channels, music plays when the client meets a condition. It stops when the client does not meet a condition.
  3. Select **3** in the toolbar of the recording window to navigate to the next screen.



The screen shows two bar graphs and an animation.

The top bar graph shows the RMS signal from channel A, the lower graph from Channel B.

A threshold is available for each graph. To change the position of a threshold, select it with your mouse and move it to the appropriate level.

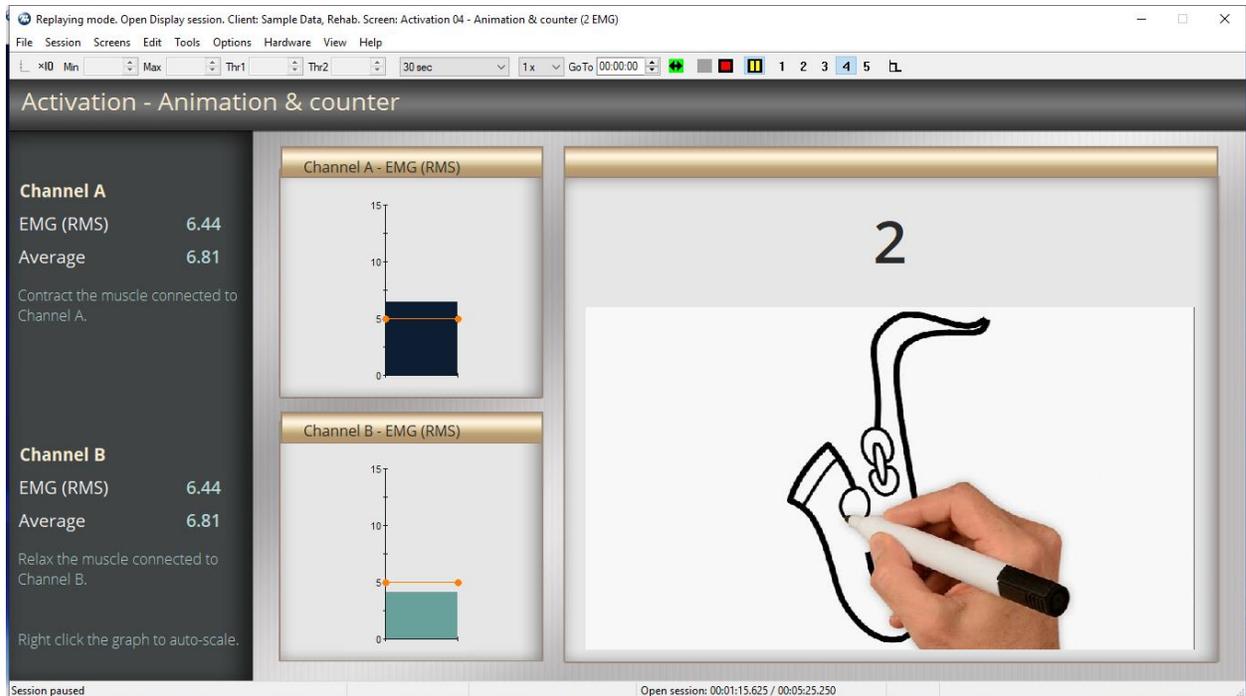
To use this screen

1. Instruct the client to try to meet two conditions for this screen:
  - Contract the muscle connected to Channel A and keep the signal above the threshold.
  - At the same time, relax the muscle connected to Channel B and keep the signal below the threshold.

2. Describe the feedback:

- On the top graph, the line color changes when the signal drops below the threshold, indicating the client is not meeting the condition.
- On the lower graph, the color changes when the signal goes above the threshold, again indicating the client is not meeting the condition.
- When both signals are in condition, the animation plays.

3. Select **4** in the toolbar of the recording window to navigate to the next screen.



Like the previous screen, this screen shows two bar graphs and an animation. It adds a counter to make the client's tasks more challenging.

The top bar graph shows the RMS signal from channel A, the lower graph from Channel B.

A threshold is shown on each graph. You can change the position of the thresholds.

To use this screen

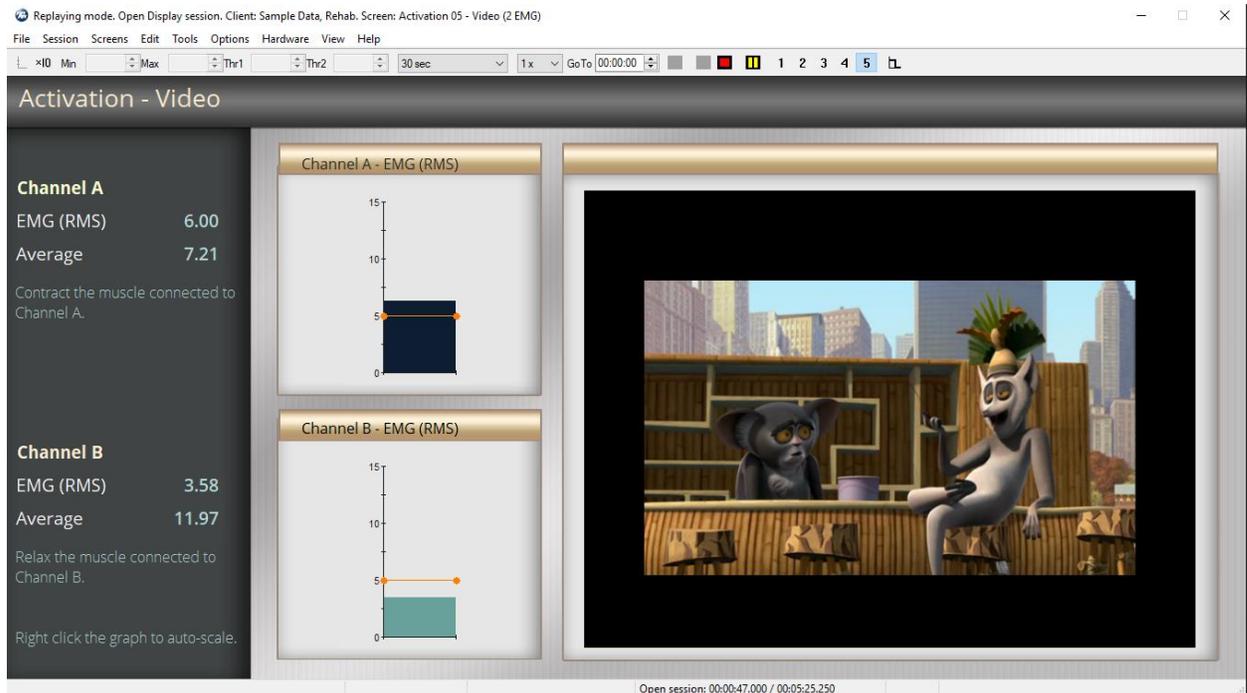
1. Instruct the client to try to meet two conditions for this screen:

- Contract the muscle connected to Channel A and keep the signal above the threshold.
- At the same time, relax the muscle connected to Channel B and try to keep the signal below the threshold.

2. Describe the feedback:

- On the top graph, the line color changes when the signal drops below the threshold, indicating the client is not meeting the condition.
- On the lower graph, the color changes when the signal goes above the threshold, again indicating the client is not meeting the condition.
- When both signals are in condition, the animation plays. Then, one is added to the counter, and a new animation.

3. Select **5** in the toolbar of the recording window to navigate to the next screen.



This screen shows two bar graphs and a video. It plays when the client meets both conditions.

The top bar graph shows the RMS signal from channel A, the lower graph from Channel B.

A threshold is shown on each graph. To change the position of a threshold, select it with your mouse and move it into position.

To use this screen:

1. Instruct the client to try to meet two conditions for this screen:
  - Contract the muscle connected to Channel A and keep the signal above the threshold.
  - At the same time, relax the muscle connected to Channel B and try to keep the signal below the threshold.
2. Describe the feedback

- When the client meets both conditions, the video expands to fill more of the screen. When the client fails to meet a condition, it shrinks.
3. Click Stop  when you are ready to end the session and stop recording.

## **Training Control Sessions**

The SEMG Training Control and Control with Extra Channel Quick Start favorites are similar. One uses a single channel, the other two.

### **SEMG Training Control Session**

This Quick Start Favorite uses a single channel.

#### **Setting Up the MyOnyx Device**

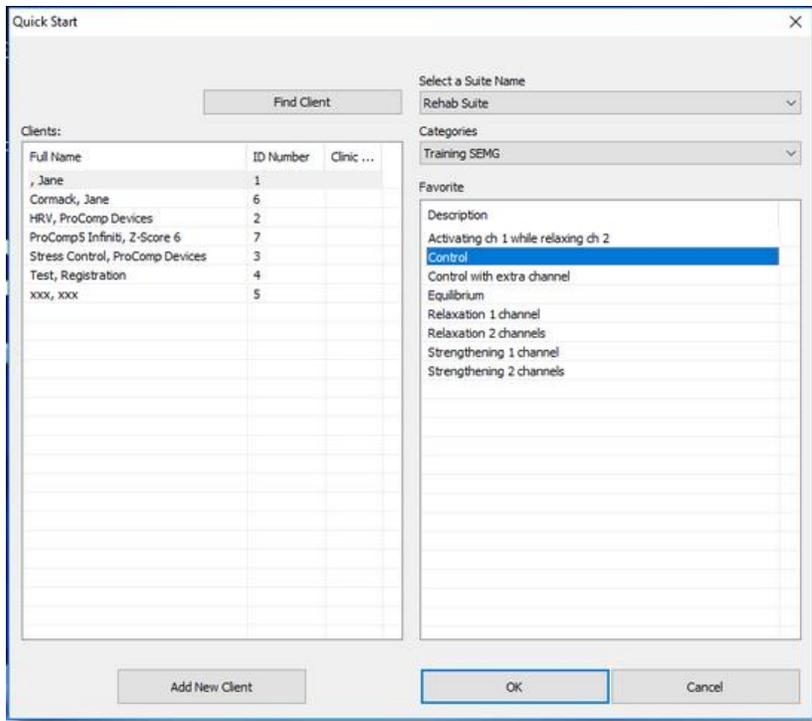
1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A,
3. Connect the Patient Drive to the REF port.

*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

#### **Starting the Quick Start**

1. Launch BioGraph and click Quick Start

The Quick Start window opens.



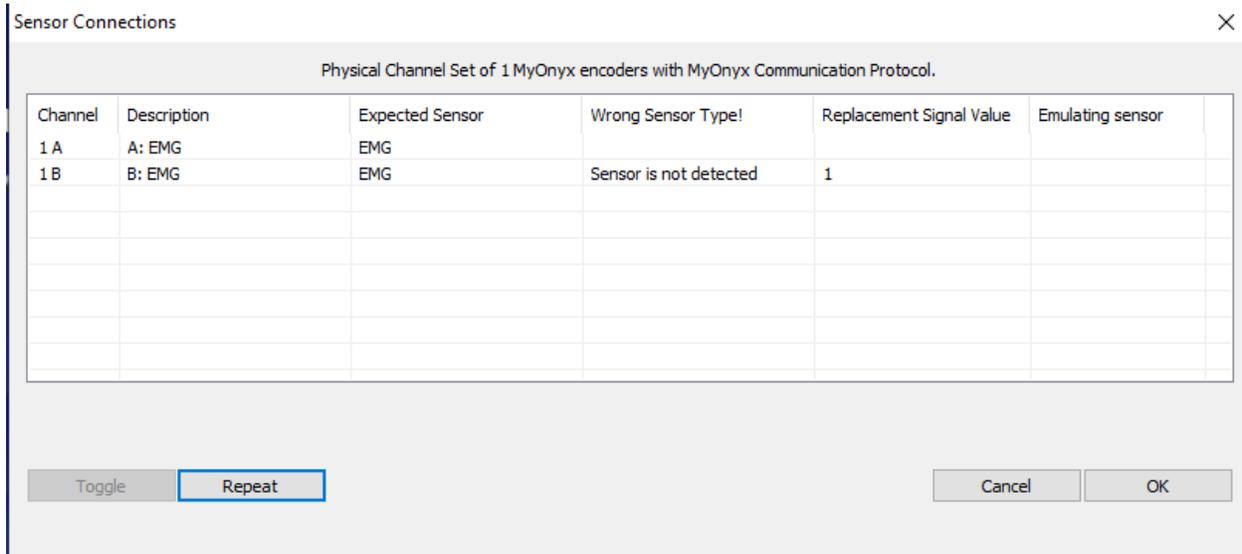
2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Training SEMG** from the **Categories** drop-down list.
4. Select **Control** in the Favorite list box.
5. Click **OK** on the Quick Start window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



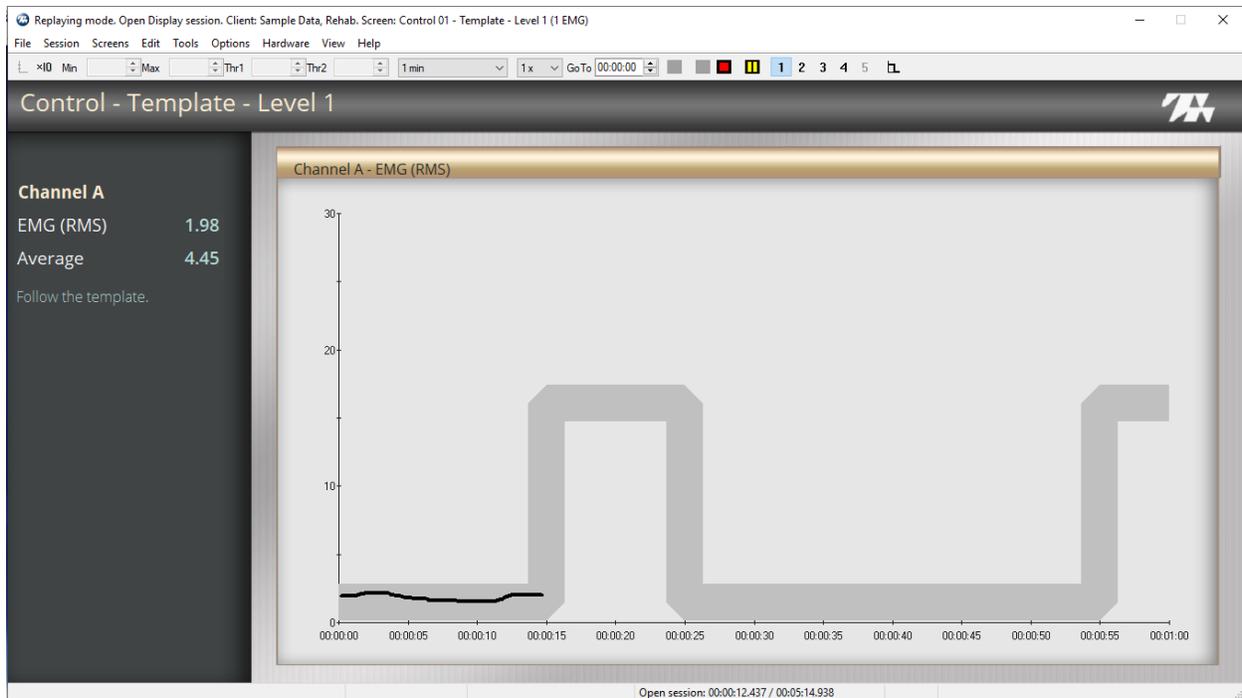
If you have only one EMG sensor connected, the Sensor Connections screen appears.



You can do one of the following:

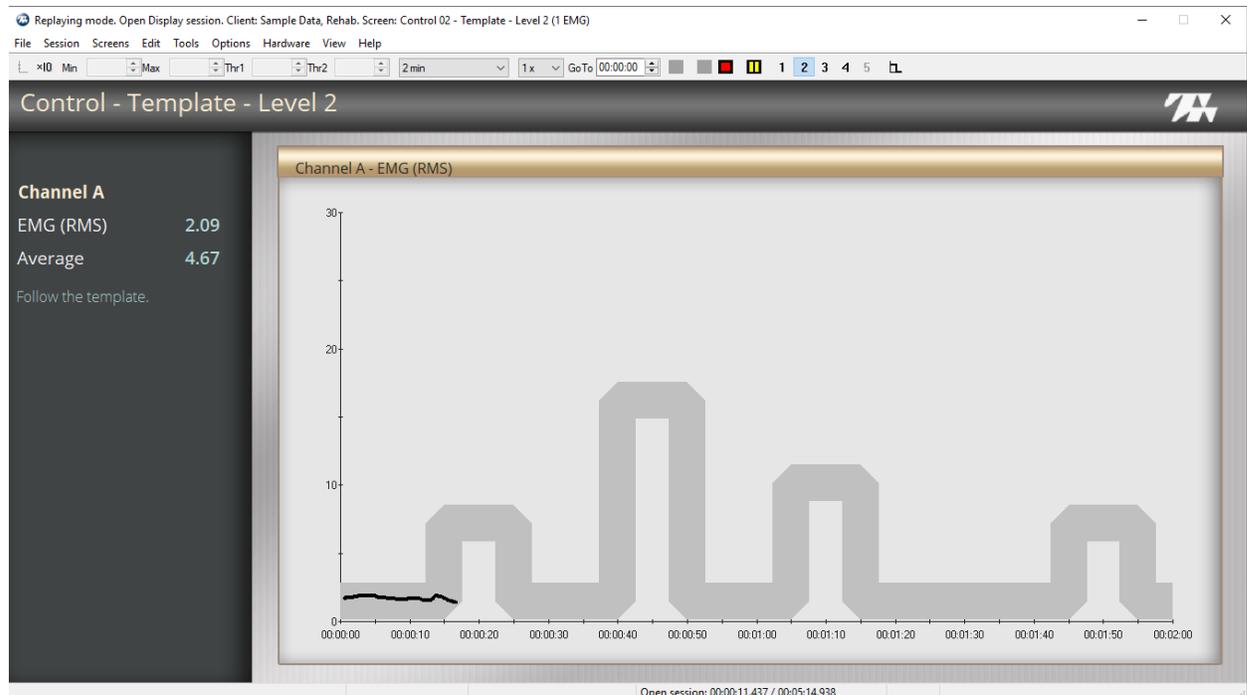
- Connect a sensor to Channel B and click **Repeat** and then **OK**.
- Click **Cancel**. The second sensor is not required for this Quick Start.

The Control Template – Level 1 window is displayed in BioGraph.



The screen shows a line graph and a template. The graph shows the RMS signal from Channel A.

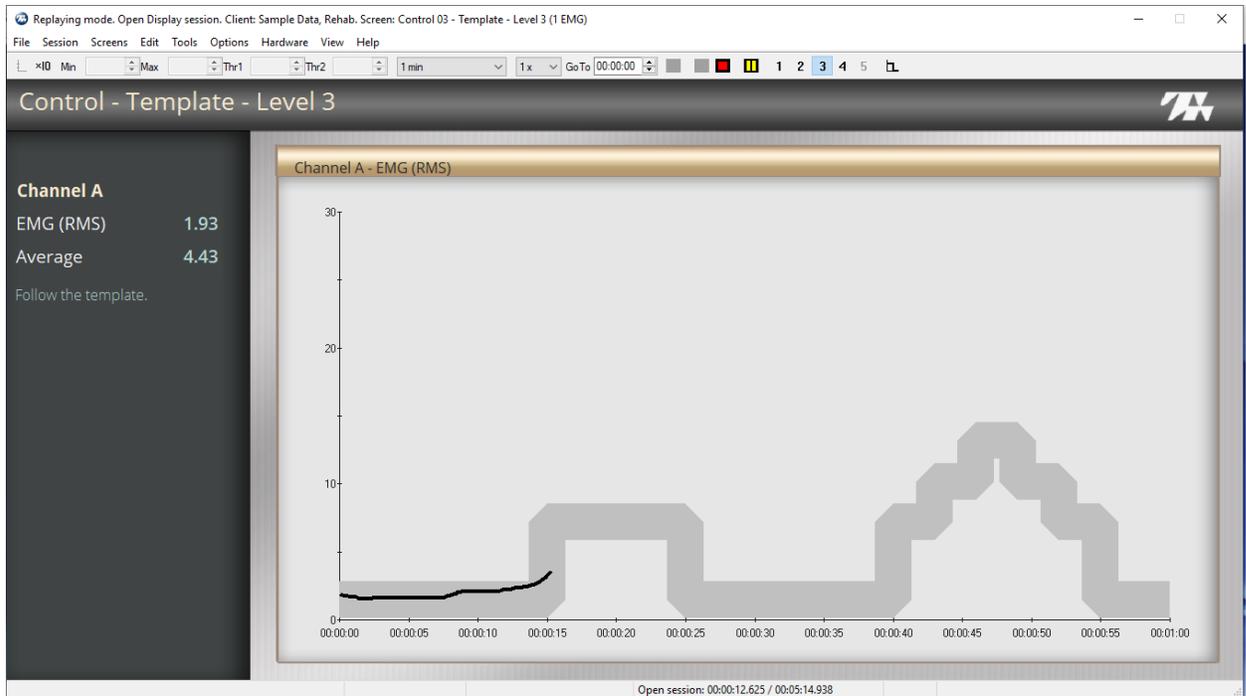
1. Instruct the client to contract and relax the monitored muscle, so that the signal line follows the outline of the template.
2. Click **Start**  when you are ready to begin recording.
3. Click **2** in the BioGraph recording screen toolbar to navigate to the next screen.



The second screen presents a new challenge. The client's task is the same, but the template is more difficult to follow.

To use this screen

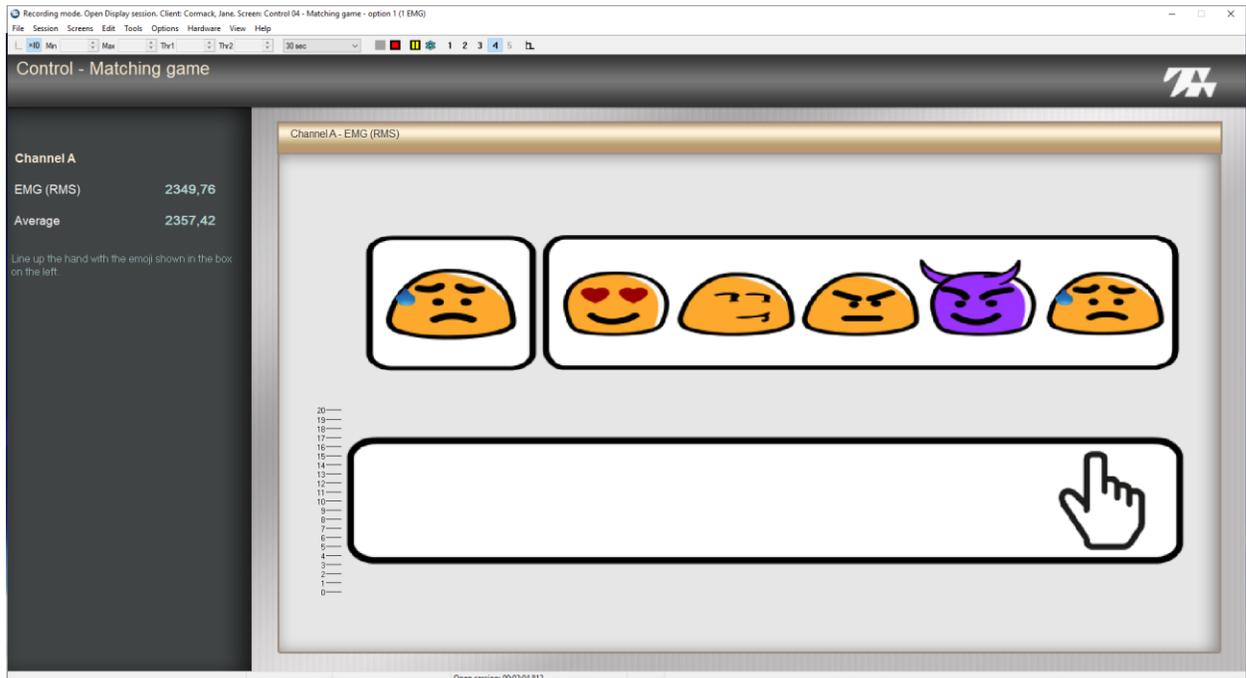
1. Instruct the client to follow the template, explaining the task is now more challenging.
2. Click **3** in the BioGraph recording screen toolbar to navigate to the next screen.



The third screen presents a new challenge.

To use this screen

1. Instruct the client to follow the template as in the previous screens, explaining that it is even more difficult.
2. Click 4 in the BioGraph recording screen toolbar to navigate to the next screen.



This screen presents an interactive animated game for Channel A.

In the top section of the screen, a series of animations are displayed on the right. A figure that matches one of the animations is displayed in a separate box to the left. A hand is displayed underneath.

To use this screen

1. Instruct the client to contract and relax the monitored muscles, so that the hand lines up with the matching animation.
2. Describe the feedback
  - The hand moves as the client contracts and relaxes the muscle.
3. Click **Stop**  when you are ready to stop recording and end the session.

## SEMG Training Control with Extra Channel Session

The SEMG Control with Extra Channel Training sessions are the like the SEMG Training Control screens. The difference is that the EMG signal is shown as a bar graph to the left of the design in Screens 1 to 3. It is shown below the interactive game in Screen 4.

### Setting up the MyOnyx Device

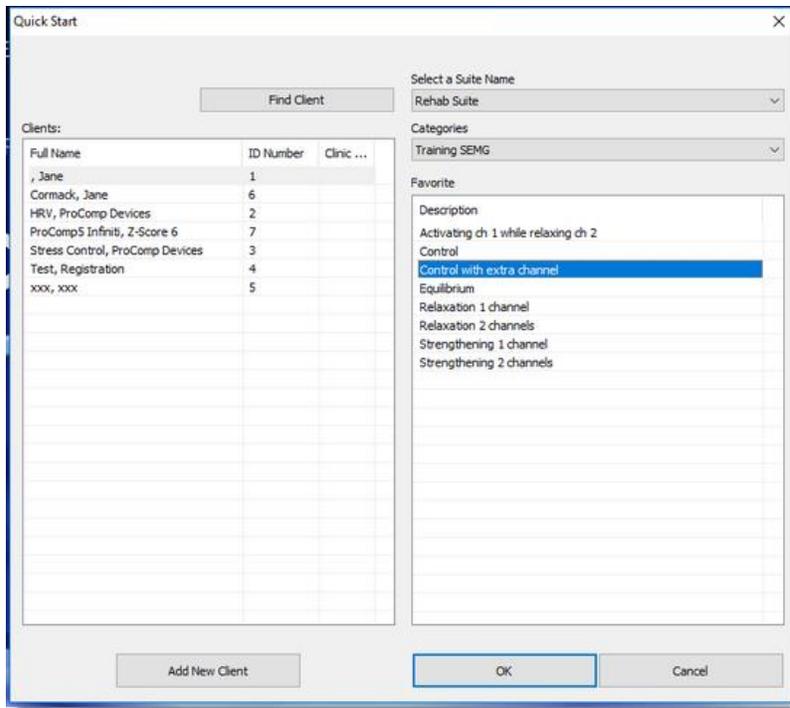
1. Turn on the MyOnyx and navigate to the Home Screen.
2. Connect an EMG Sensor to Channel A.
3. Connect a second EMG Sensor to Channel B.
4. Connect the Patient Drive to the REF port.

*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

### Starting the Quick Start

1. Launch BioGraph and click Quick Start

The Quick Start window opens.



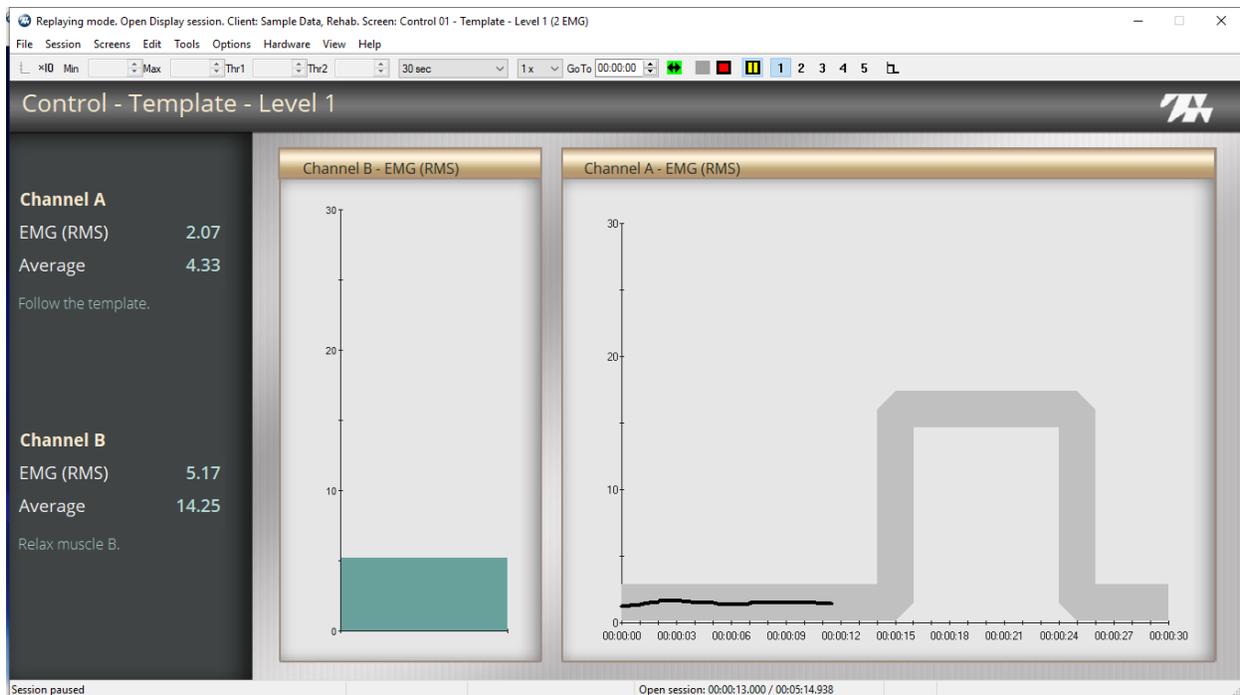
2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Training SEMG** from the **Categories** drop-down list.
4. Select **Control with extra channel** in the Favorite list box.
5. Click **OK** on the Quick Start window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



The Control Template – Level 1 window is displayed in BioGraph.



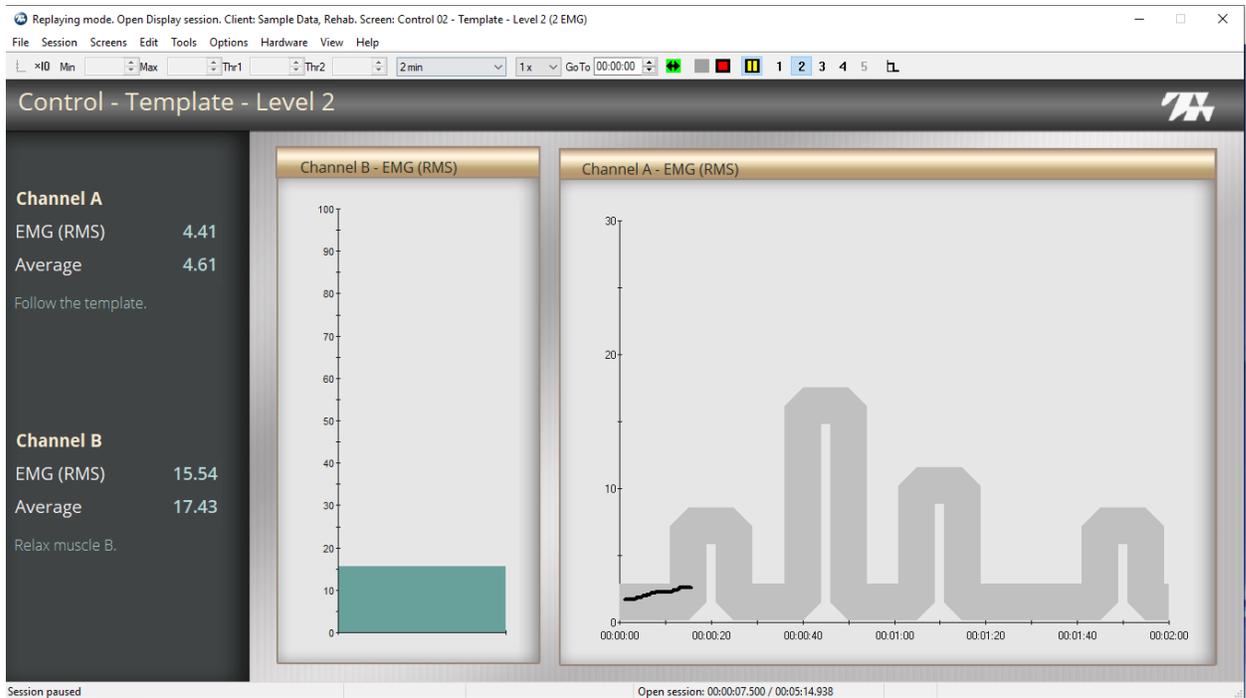
The screen shows two graphs.

The graph on the right displays the RMS signal from channel A, with a template line graph displayed on the graph.

The bar graph on the left shows the RMS signal from Channel B. It shows the level of contraction or relaxation.

To use this screen

1. Instruct the client to try and follow the template by contracting and relaxing the monitored muscle.
2. Describe the feedback
  - The bar graph on the left show the level of contraction.
3. Click **Start**  to begin recording.
4. Click **2** on the toolbar to navigate to the next screen.

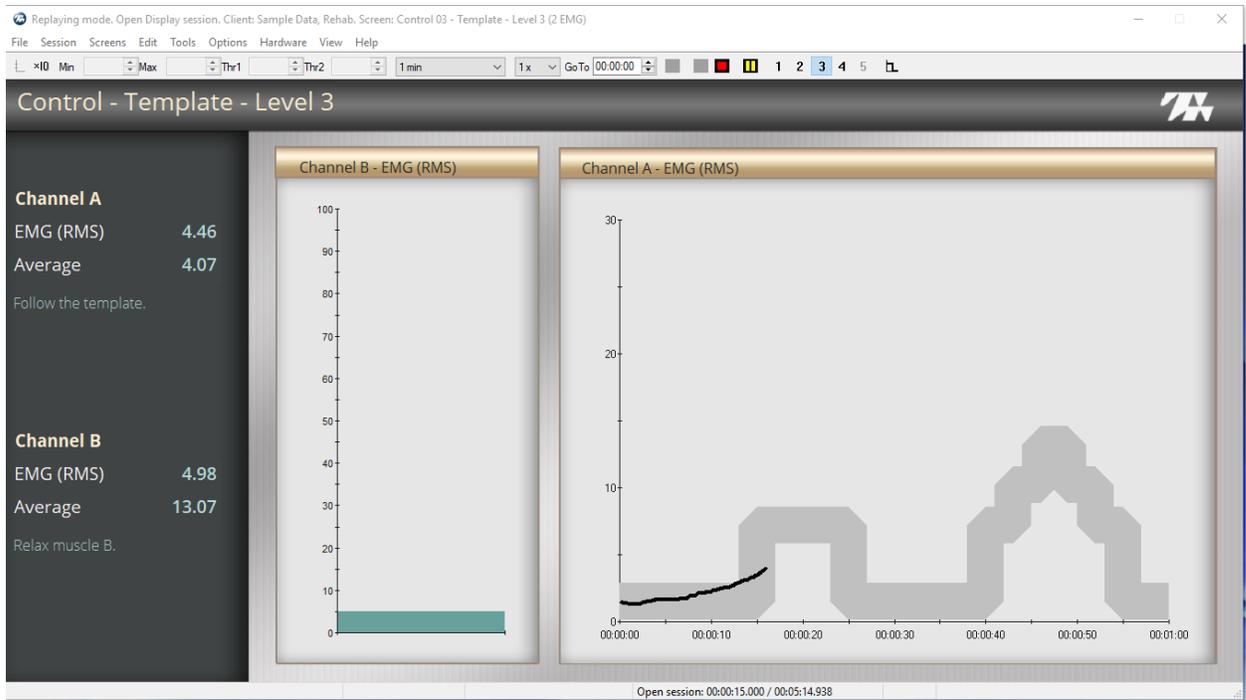


The second screen displays a bar graph on the left and a template on the right.

presents a new template for Channel A, with a similar but more difficult challenge.

To use this screen

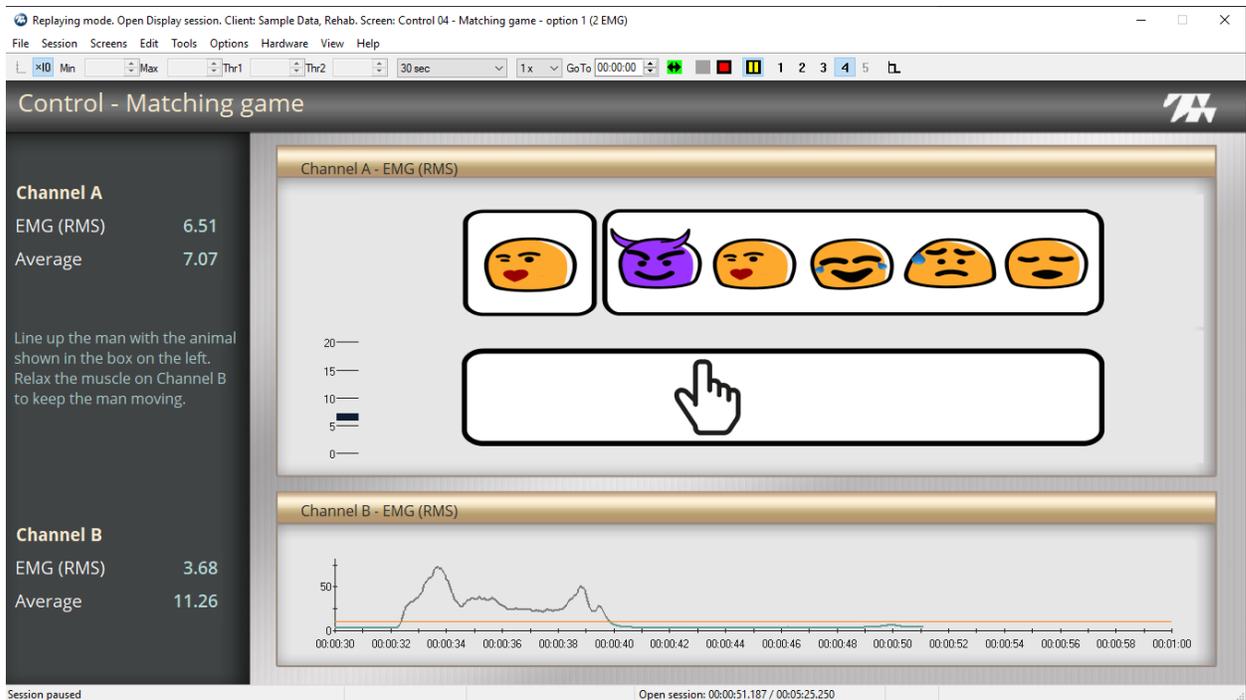
1. Instruct the client to follow the template, explaining that it is more difficult than the previous screen.
2. Describe the feedback.
  - The bar graph monitors the signal.
  - The signal rises and falls on the template as the client contracts and relaxes the muscle.
3. Click **3** on the toolbar to navigate to the next screen.



The third screen presents a new template for Channel A.

To use this screen,

1. Give the client the same instructions as in the previous screen, explaining the challenge is even more difficult.
2. Click **4** on the toolbar to navigate to the next screen.



This screen presents an interactive animated game for Channel A and a line graph for Channel B.

In the top section of the screen, a series of animations are displayed on the right. A figure that matches one of the animations is displayed in a separate box to the left. A hand is displayed underneath.

A line graph is displayed under the animations. It shows the RMS signal for Channel B. A threshold is displayed on the graph. You can change the position of the threshold, by selecting it with your mouse and moving it into position.

To use this screen

1. Instruct the client to perform the following tasks:
  - Contract and relax the monitored muscles, so that the hand lines up with the matching animation.
  - At the same time, relax the muscle, so that the signal remains below the
2. Describe the feedback
  - The color on the graph changes color when it goes above the threshold.
  - When the signal is below the threshold, the client can move the hand by contracting or relaxing muscles.
  - When the signal is above the threshold, the hand does not move.
3. Click **Stop**  when you are ready to stop recording and end the session.

# SEMG Training: Equilibrium

In this training session, the client tries to maintain a predefined level of muscle contraction. To assist in performing this task, a balance beam is displayed on the screen. The client tries to keep the beam level.

To run the Equilibrium Quick Start Favorite:

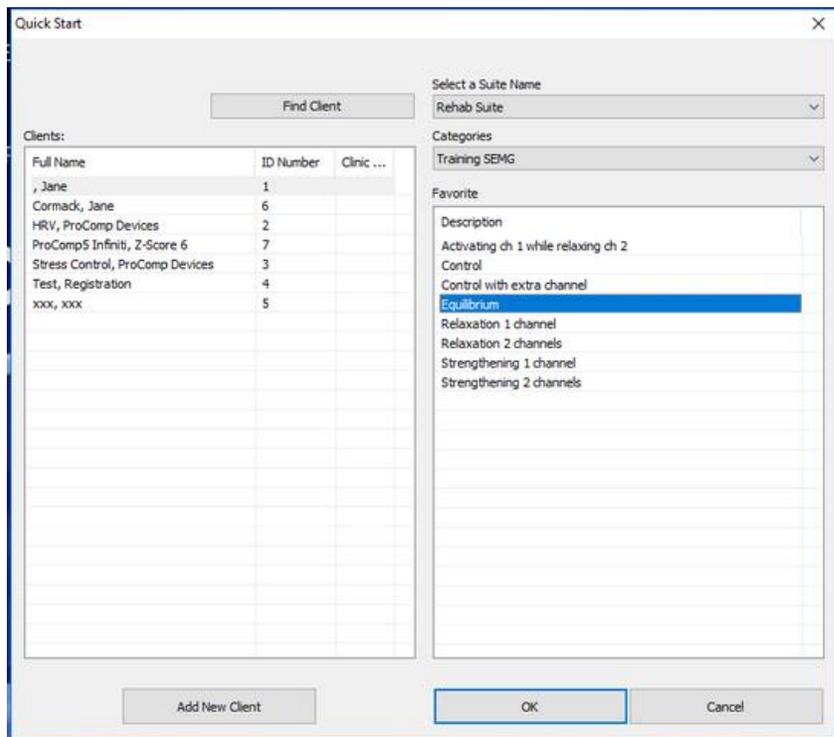
## Setting Up the MyOnyx Device

1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A.
3. Connect a second EMG Sensor to Channel B.
4. Connect the Patient Drive to the REF port.

Refer to the *MyOnyx Reference Manual* for full details on connecting cables and electrodes.

## Starting the Quick Start

1. Open the Quick Start window in BioGraph.



2. Select **Training SEMG** from the **Categories** drop-down list.

3. Select **Equilibrium** in the Favorite list box.
4. Click **OK** on the Quick Start window.

The Connected window is displayed on the MyOnyx screen.



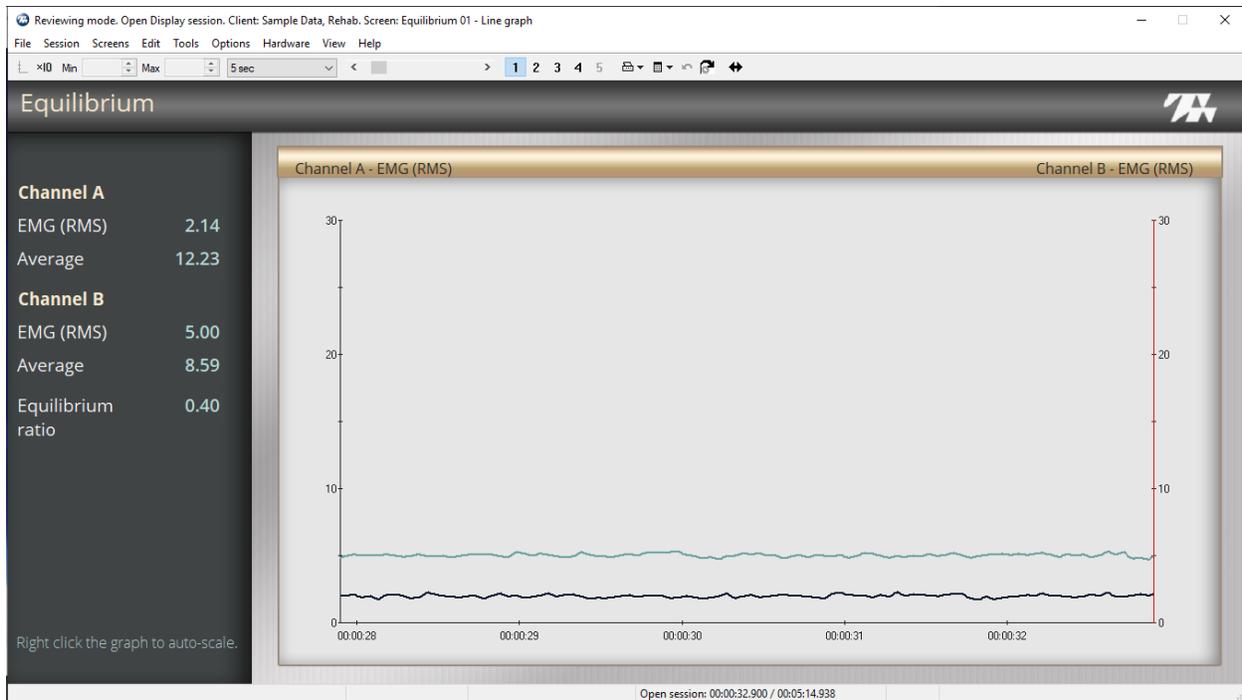
The screen reads PC connected to device.

## **Recording the Session**

The Connected window is displayed on the MyOnyx screen.

If you do not see this screen on the MyOnyx device, verify that the device is paired to the PC via Bluetooth.

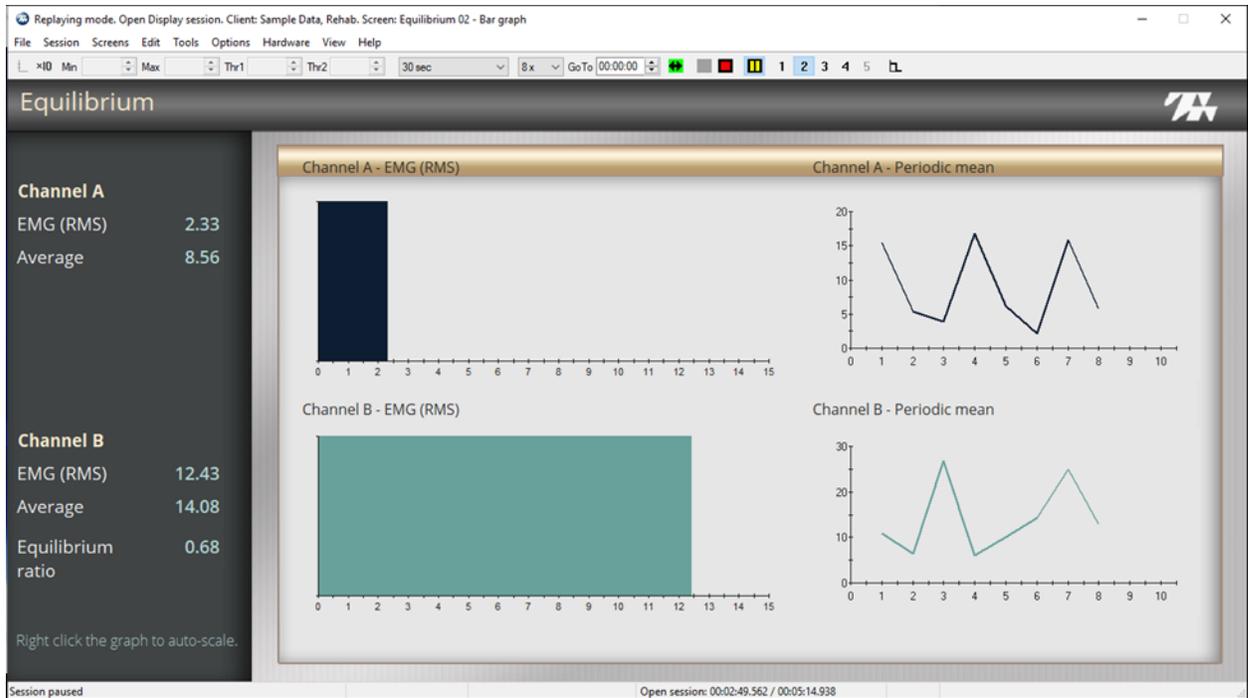
The Equilibrium recording screen appears in BioGraph.



A line graph displays the signals from Channels A and B.

To use this screen

1. Give the client one or more tasks.
2. Click **Start**  when you are ready to begin recording.
3. Describe the feedback.
  - Explain how the signal line changes as the client contracts and relaxes the monitored muscle.
4. Click **2** in the recording window toolbar to navigate to the next screen.



The screen shows two bar graphs and two trend graphs. The top bar graph connects to channel A., the lower to Channel B. Two trends graphs per signal. Every 20 secs the graph updates with average value of the EMG signal.

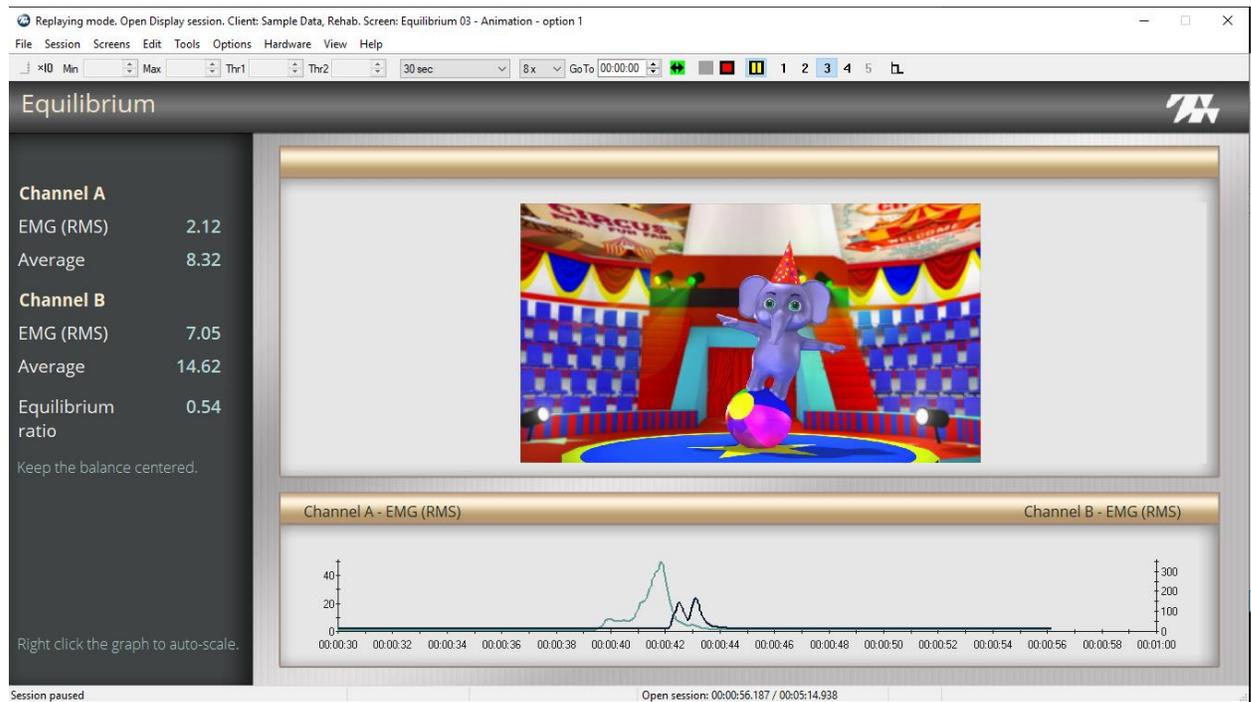
To use this screen

1. Give the client one or more tasks.
2. Describe the feedback

Explain how the signal line changes as the client contracts and relaxes the monitored muscle.

3. Click 3 to navigate to the next screen.

## Equilibrium 3



The screen shows a line graph and an animation.

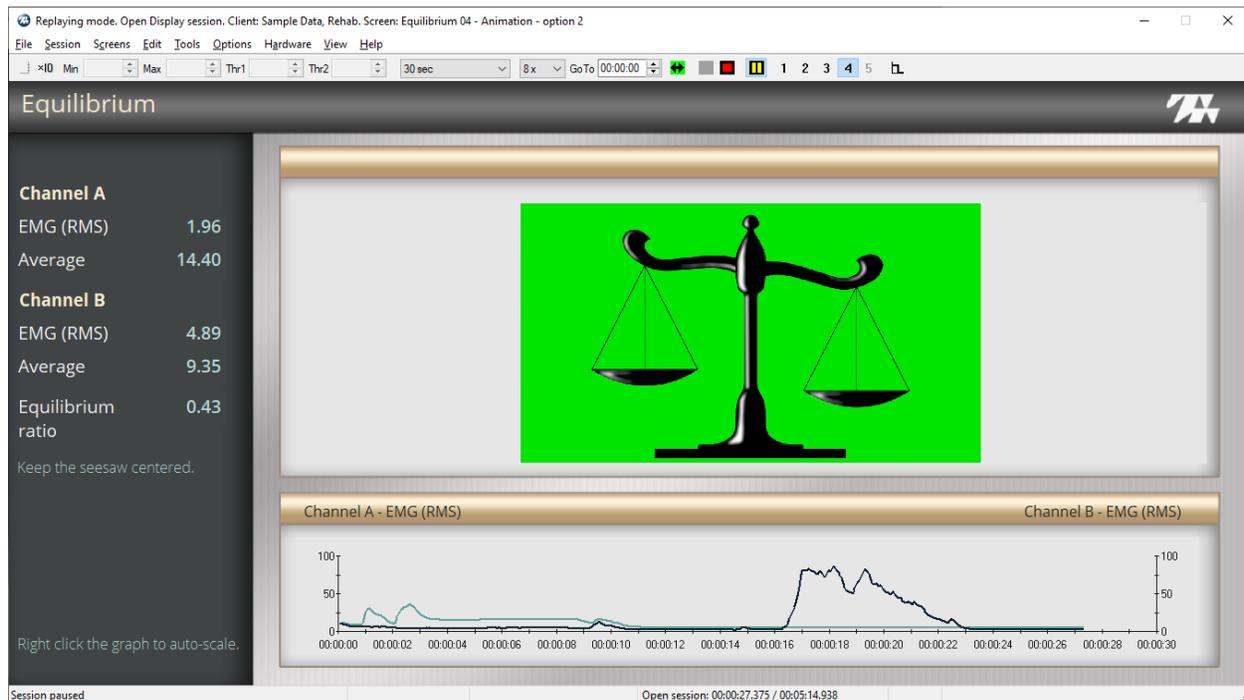
The animation connects to the equilibrium ratio. The animation plays proportionally to the signal.

The line graph connects to channel A and channel B. A y axis is shown for each channel.

To use this screen

1. Instruct the client to try and keep the beam level by contracting and relaxing the muscle.
2. Describe the feedback, explaining how the signal lines on the graph rise and fall.
3. Click **4** in the BioGraph toolbar to navigate to the next screen.

## Equilibrium 4



This screen provides an alternative image to the previous screen. The information is the same.

To end the session and stop recording, click **Stop**  in the toolbar.

## SEMG Training: Relaxation 1 Channel

The SEMG Relaxation Quick Start is used to train the client to relax the muscles being treated.

To run the Relaxation Quick Start Favorite:

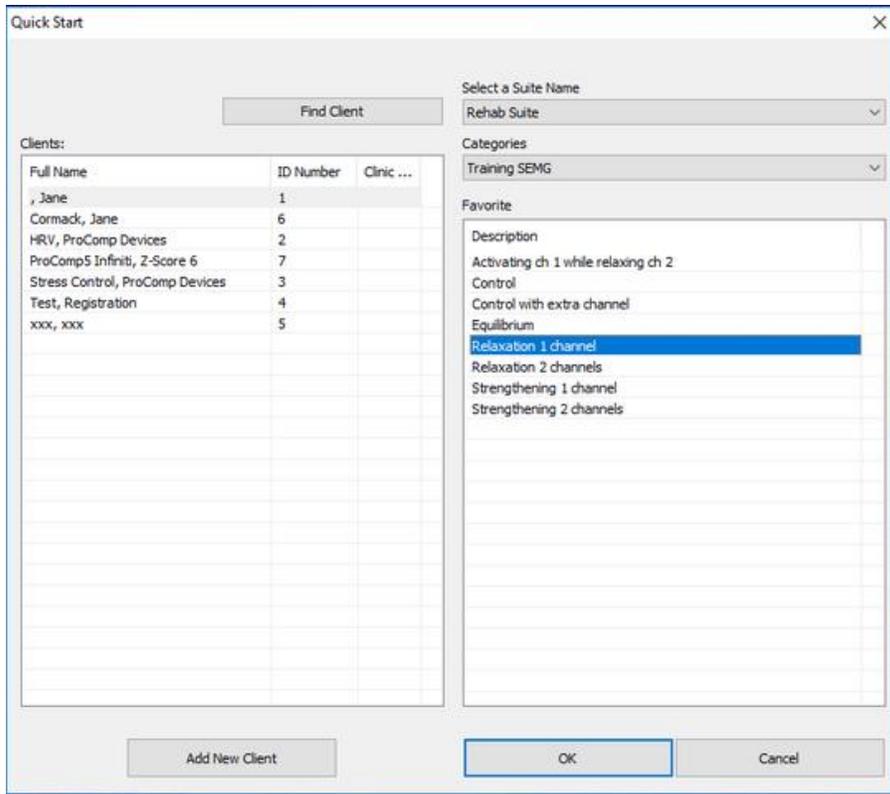
### Setting Up the MyOnyx Device

1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A.
3. Connect the Patient Drive to the REF port.

*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

### Starting the Quick Start

1. Open the Quick Start window in BioGraph.



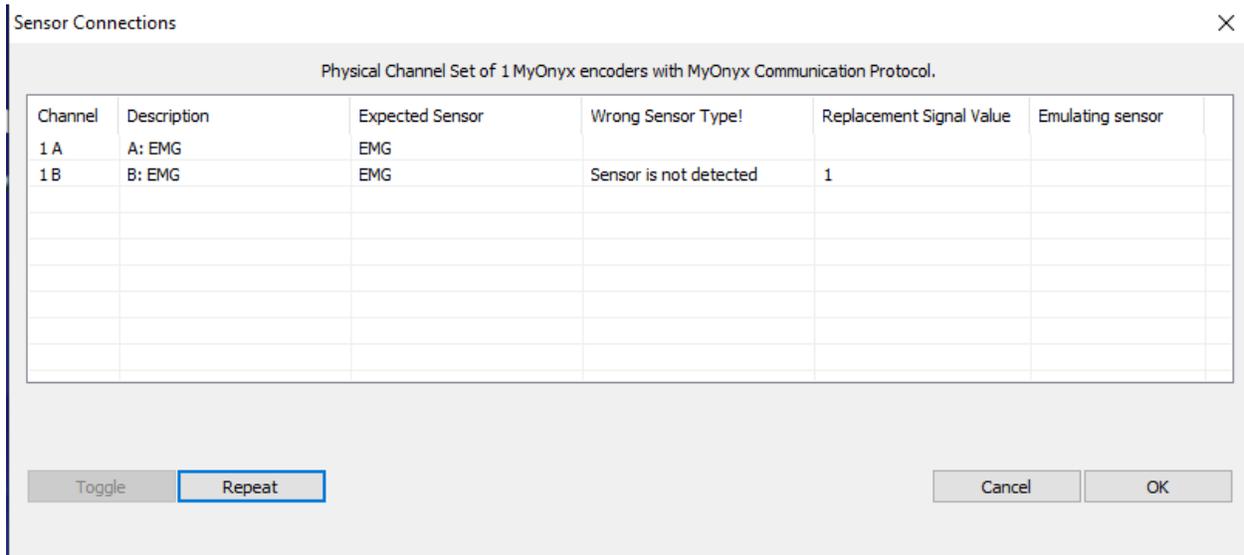
2. Select **Training SEMG** from the **Categories** drop-down list.
3. Select **Relaxation 1 channel** in the Favorite list box.
4. Click **OK** on the recording window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



If you have only one EMG sensor connected, the Sensor Connections screen appears in BioGraph.

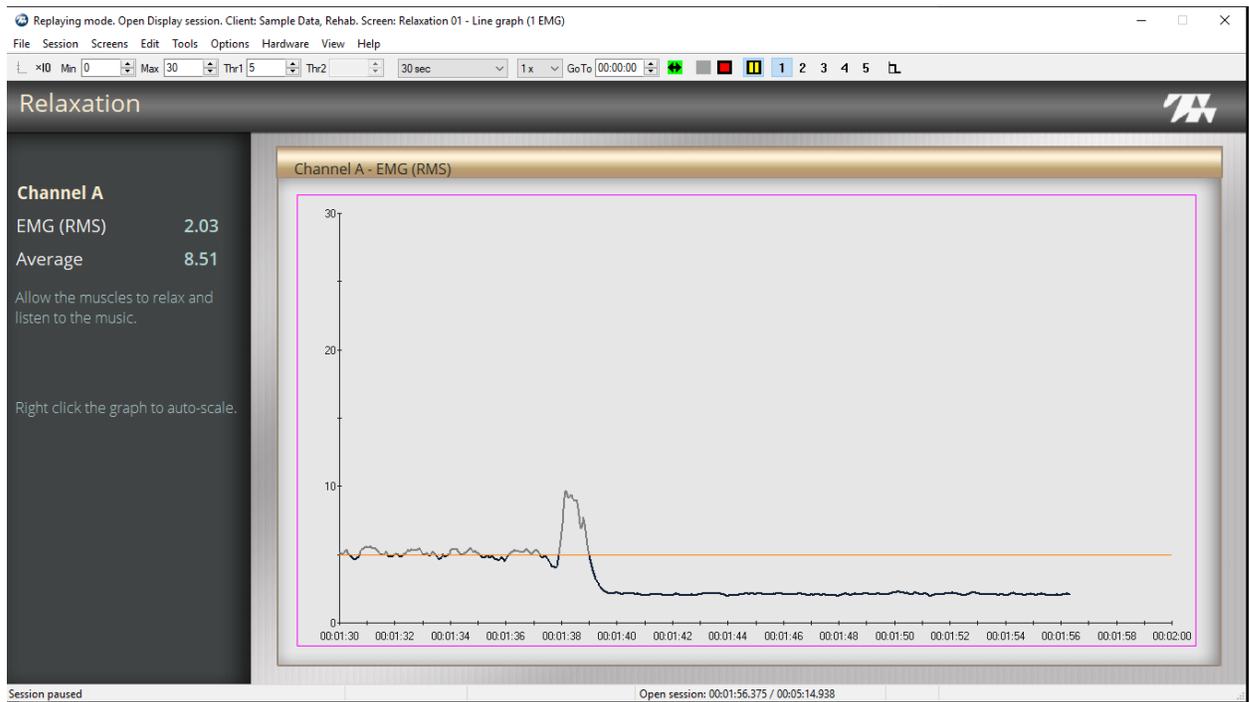


You can do one of the following:

- Connect a sensor to Channel B and click **Repeat** and then **OK**.
- Click **Cancel**. The second sensor is not required for this Quick Start.

The Relaxation recording window appears in BioGraph.

## Relaxation 1

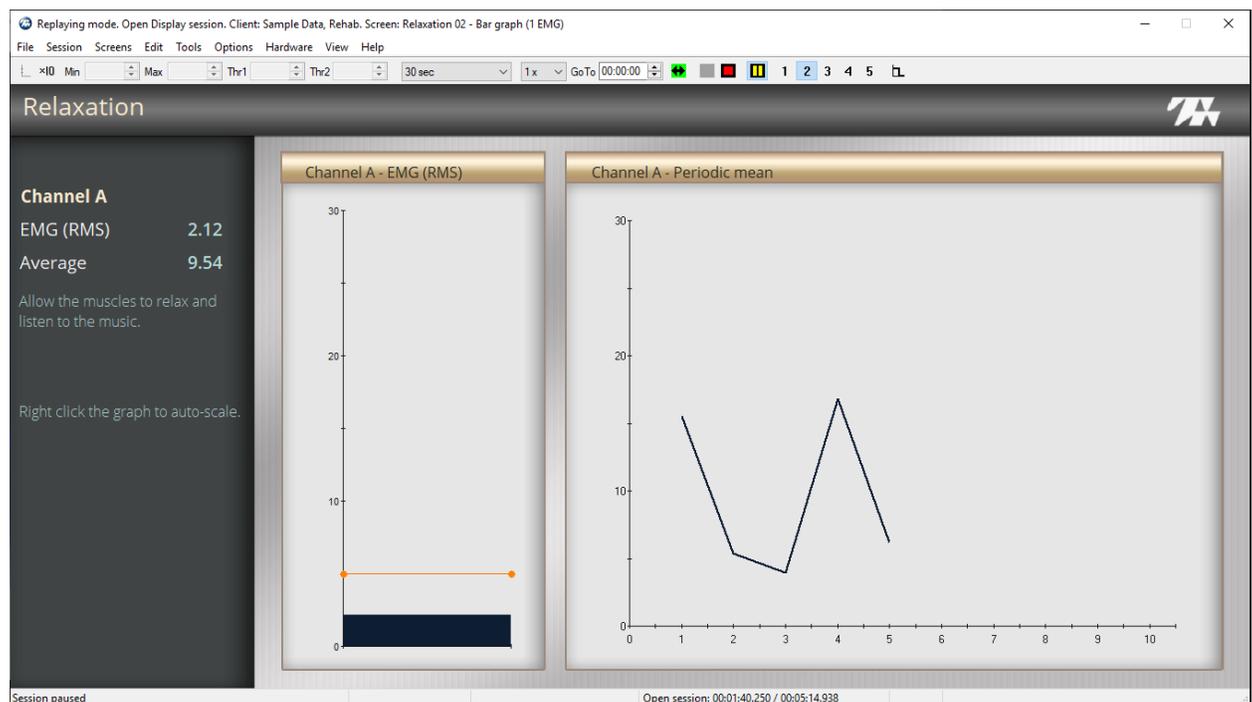


A line graph displays the signal from the sensor connected to Channel A. A threshold is available. To change the position, select it with your mouse and drag it to the appropriate position.

To use this screen

1. Instruct the client to relax the monitored muscle, so that the signal stays below the threshold.
2. Click **Start**  when you and your client are ready to begin.
3. Describe the feedback
  - The line changes color when the signal is below the threshold.
  - Music plays at full volume when the client meets the condition. It plays quietly when the client is not meeting the condition.
4. Click **2** in the BioGraph toolbar to navigate to the next screen.

## Relaxation 2



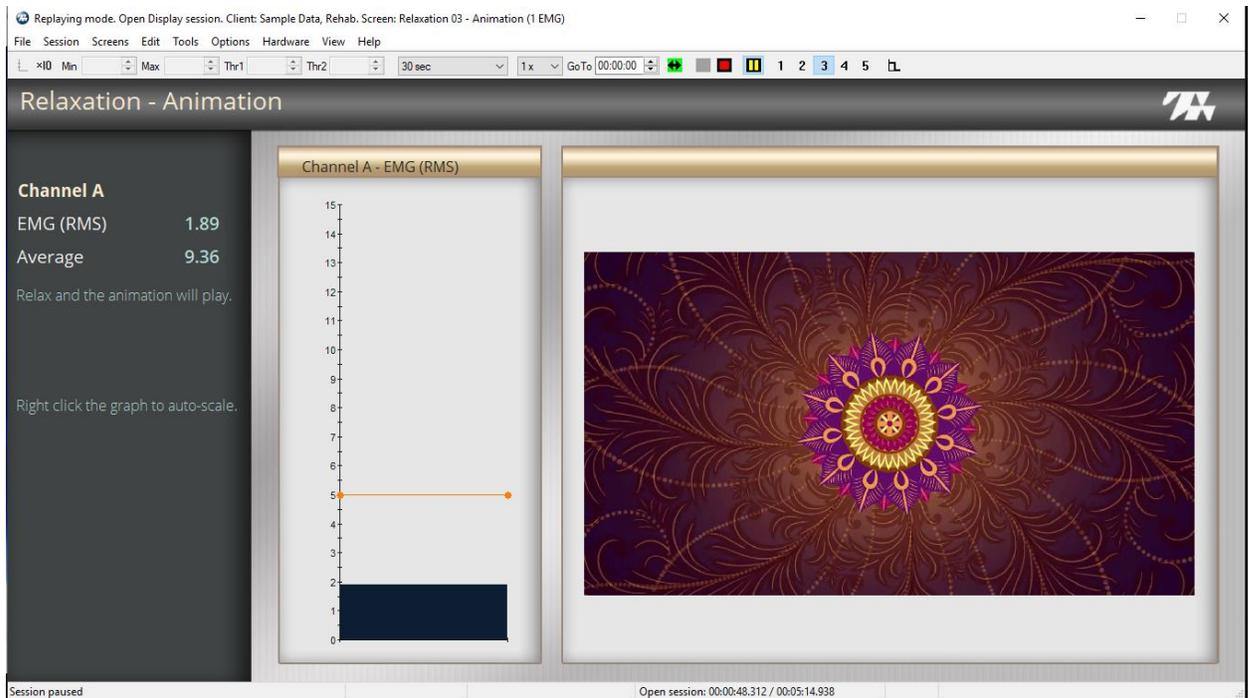
The screen presents a bar graph and a trend graph showing the RMS signal from Channel A. The trend graph displays the average value of the EMG signal. It updates every 20 seconds.

A threshold is available on the bar graph. You can change the position of the threshold by selecting it with your mouse and dragging and dropping it into position.

To use this screen

1. Instruct the client to relax the monitored muscle, so that the signal stays below the threshold.

2. Describe the feedback.
  - When the signal is below the threshold, music plays at full volume. If the signal goes above the threshold, the color changes and the volume lowers.
3. Click the **3** in the recording toolbar to navigate to the next screen.

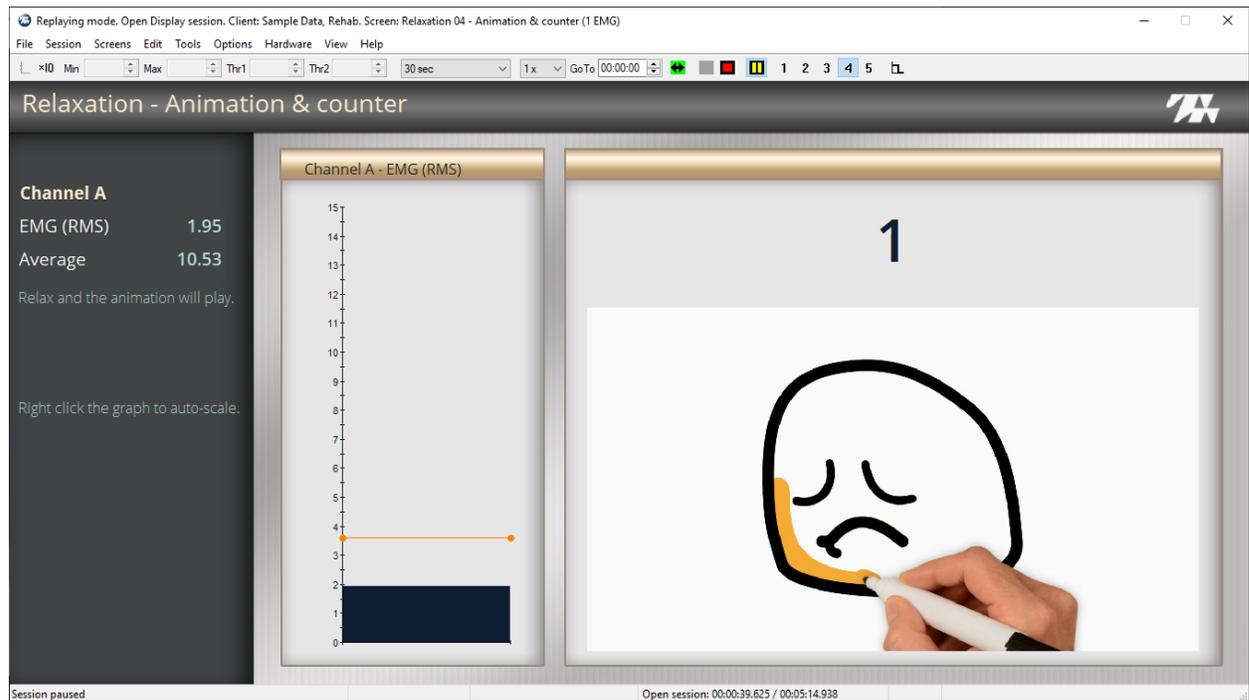


This screen displays a bar graph, connected to Channel A, and an animation.

To use this screen

1. Instruct the client to relax the monitored muscle to keep the signal below the threshold.
2. Describe the feedback:
  - The color on the graph changes when the signal is above the threshold. This indicates the client is not meeting the condition.
  - When the client meets the condition, the animation plays.
3. Click **4** in the recording window toolbar to navigate to the next screen.

## Relaxation 4

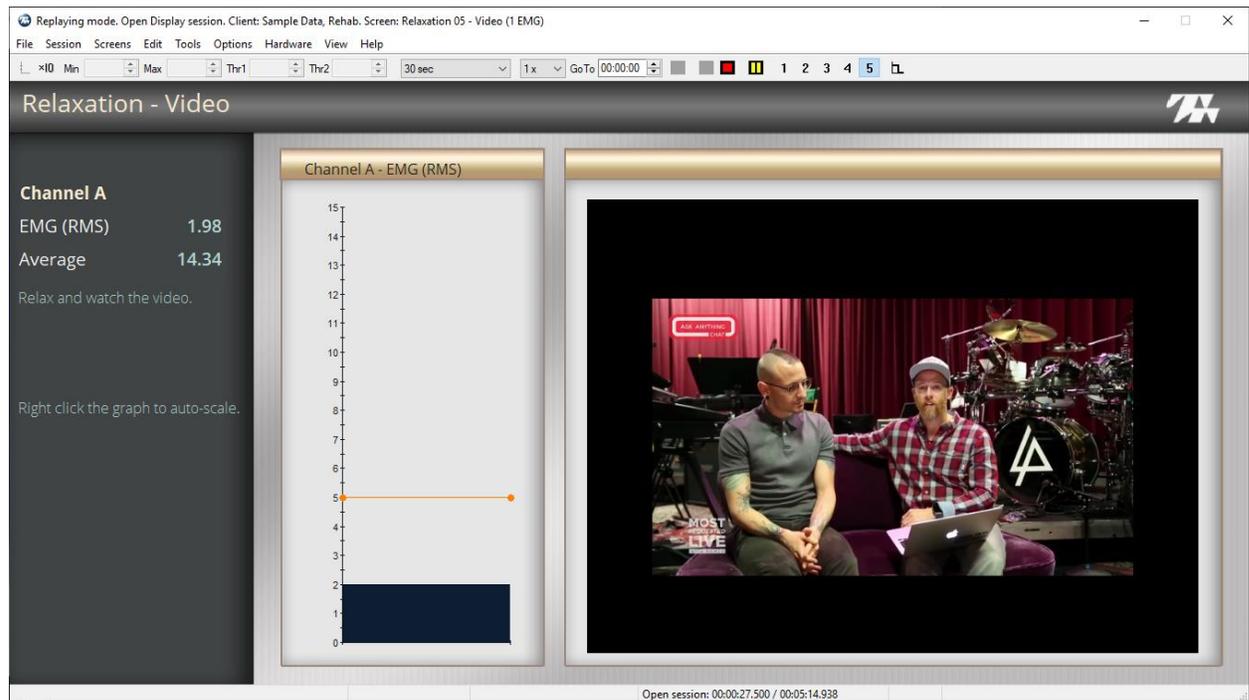


This screen displays an animation, and a counter. The animation is a series of sketches.

To use this screen:

1. Instruct the client to try and meet two conditions:
  - Contract the muscle connected to Channel A.
  - At the same time, relax the muscle connected to Channel B.
2. Describe the feedback.
  - When the client meets both conditions, the animation plays. This indicates the client is meeting both conditions.
  - Each time the client is successful in meeting both conditions, one is added to the counter and a new sketch begins.
3. Click **4** in the BioGraph toolbar to navigate to the next screen.

## Relaxation 5



The screen displays a bar graph and a video.

To use this screen:

1. Instruct the client to relax the muscle and keep the signal below the threshold.
2. Describe the feedback:
  - The color on the graph changes when the signal is above the threshold. This indicates the client is not meeting the condition.
  - When the client meets the condition, the video expands. It shrinks when the client is no longer meeting the condition.
3. Click **Stop**  to end the session and stop recording.

## SEMG Training: Relaxation 2 Channels

The SEMG Relaxation 2 Channels Quick Start trains the client to relax the monitored muscles connected to Channels A and B.

To run the Relaxation 2 Channels Quick Start Favorite:

### Setting up the MyOnyx Device

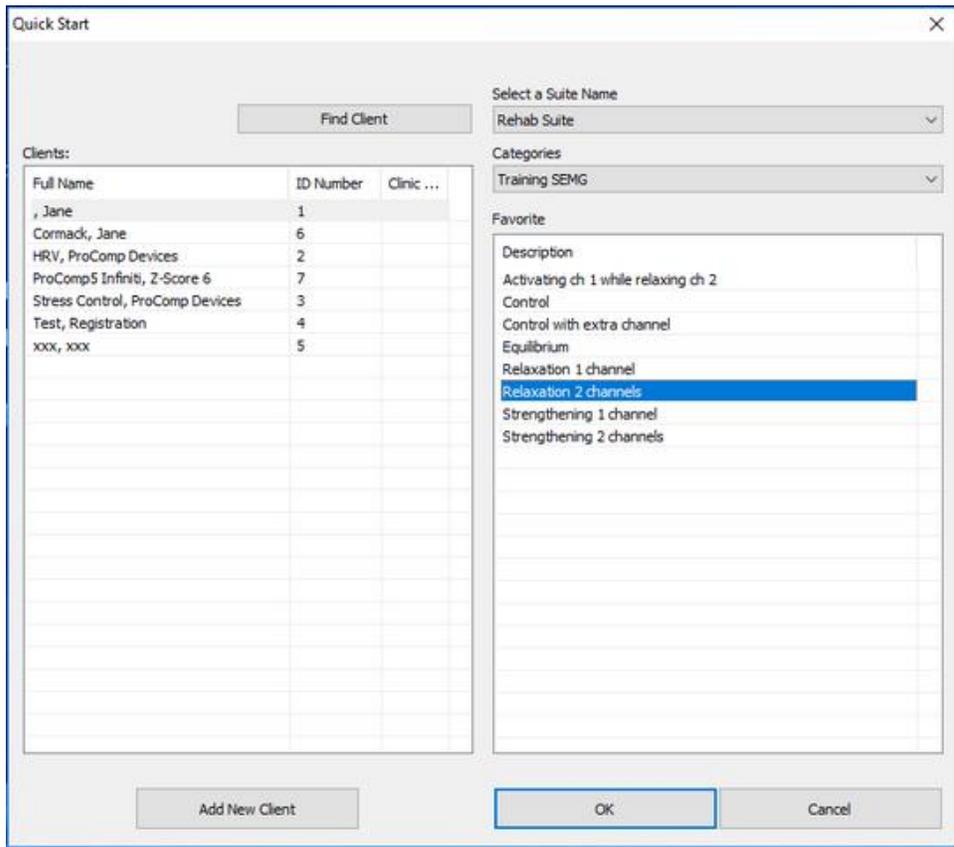
1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A.
3. Connect a second EMG Sensor to Channel B.

4. Connect the Patient Drive to the REF port.

Refer to the *MyOnyx Reference Manual* for full details on connecting cables and electrodes.

## Starting the Quick Start

1. Open the Quick Start window in BioGraph.



2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Training SEMG** from the **Categories** drop-down list.
4. Select **Relaxation 2 channels** in the Favorite list box.
5. Click **OK** on the Quick Start window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



The screen reads PC connected to the device.

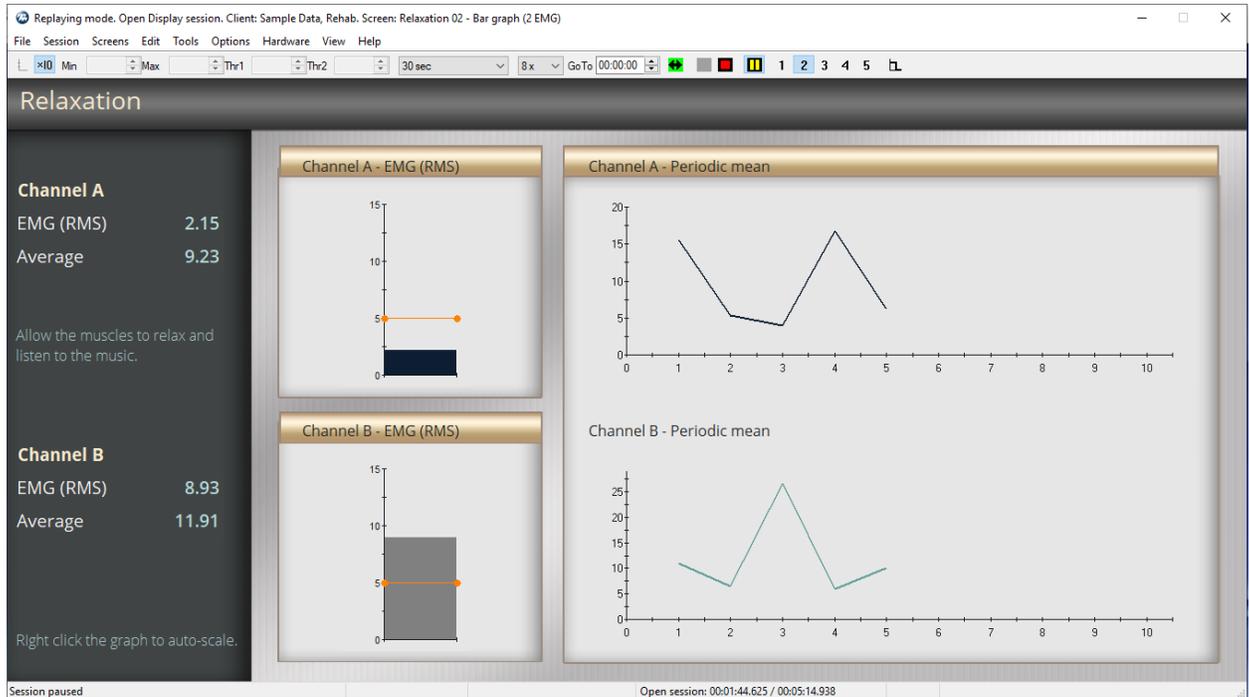
The Relaxation recording window opens in BioGraph.



The first screen shows two-line graphs, one connected to Channel A, the other to Channel B.

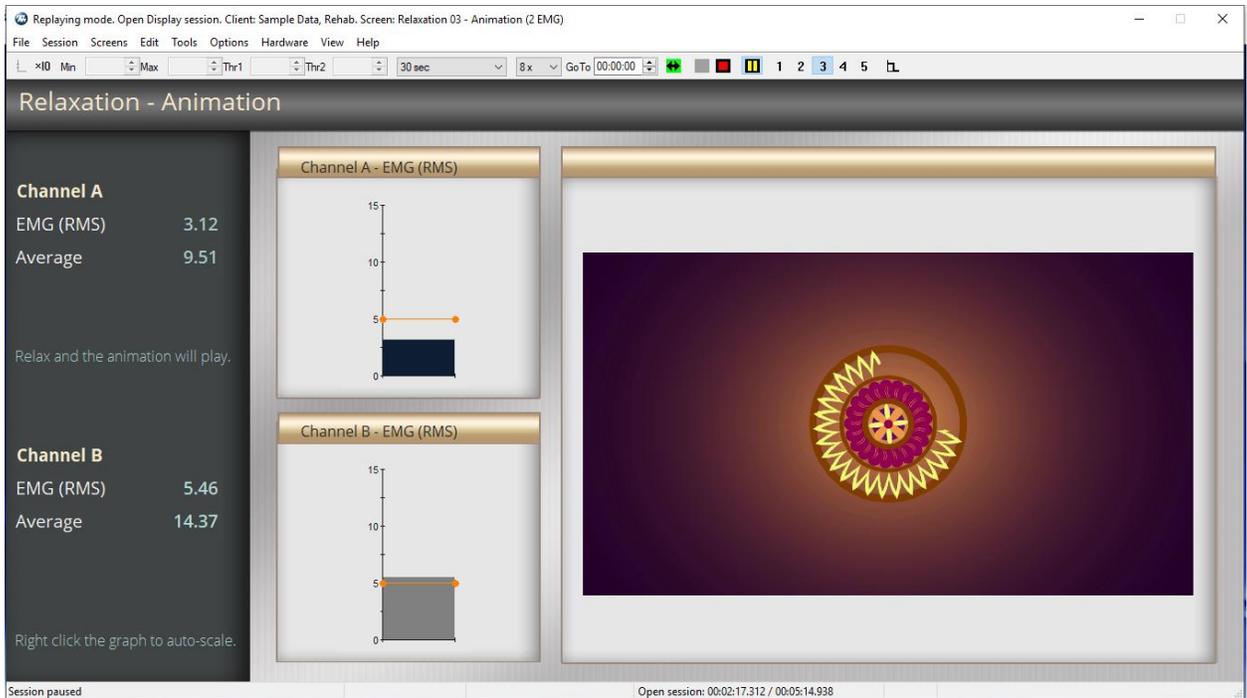
1. Instruct the client to keep the monitored muscles below the threshold.
2. Click **Start**  when you are ready to begin recording.
3. Describe the feedback. It is the same for both channels.

- When the signal is above the threshold, the color changes. This indicates that the client is not meeting the condition for that channel.
  - Music plays at full volume when the client is meeting a condition. It plays quietly when the client is not meeting a condition.
2. Click **2** in the BioGraph toolbar to navigate to the next screen.



This screen shows a bar graph and a trend graph for each channel.

3. Describe the feedback for this screen.
- The color on the graph changes color when the signal is above the threshold. This indicates the client is not meeting the condition.
  - Music plays when the client meets a condition. It stops when the client is no longer meeting a condition.
  - The trend graphs are updated every 20 seconds with the average value of the EMG signal.
4. Click **3** in the BioGraph toolbar to navigate to the next screen.

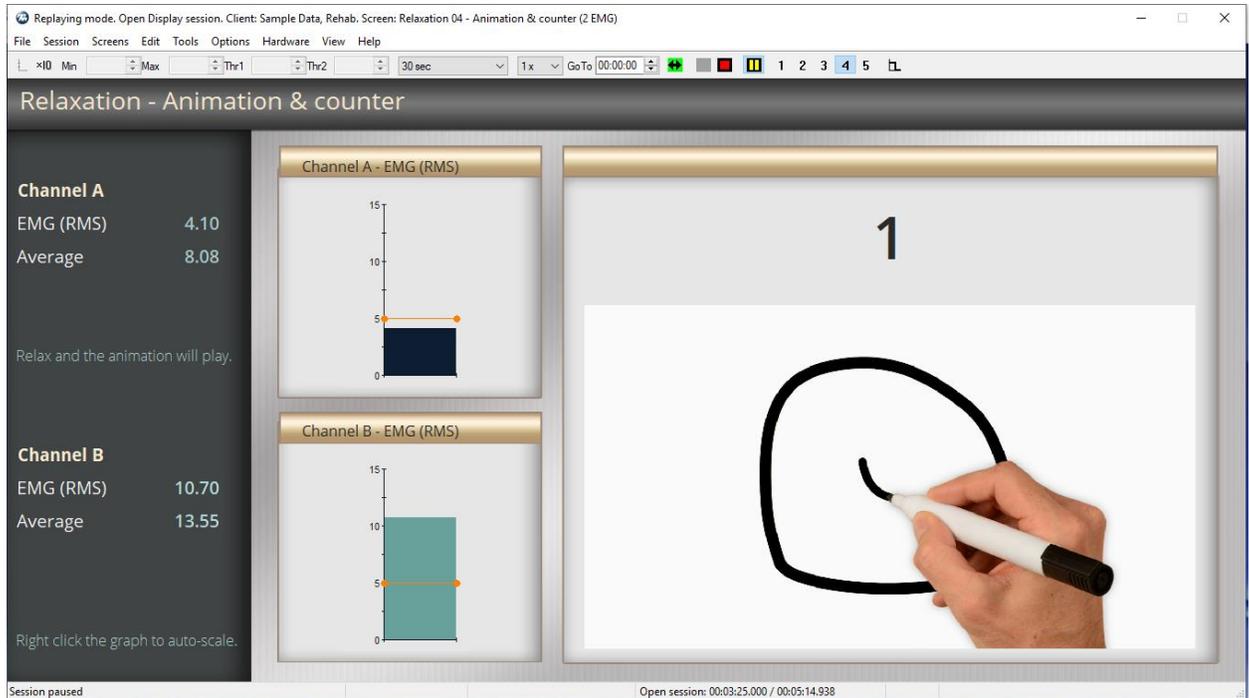


This screen adds an animation. Proceed as with the previous screen:

1. Describe the feedback from this screen.

The animation plays when the client keeps the signals from Channel A and Channel B below the threshold, meeting the conditions.

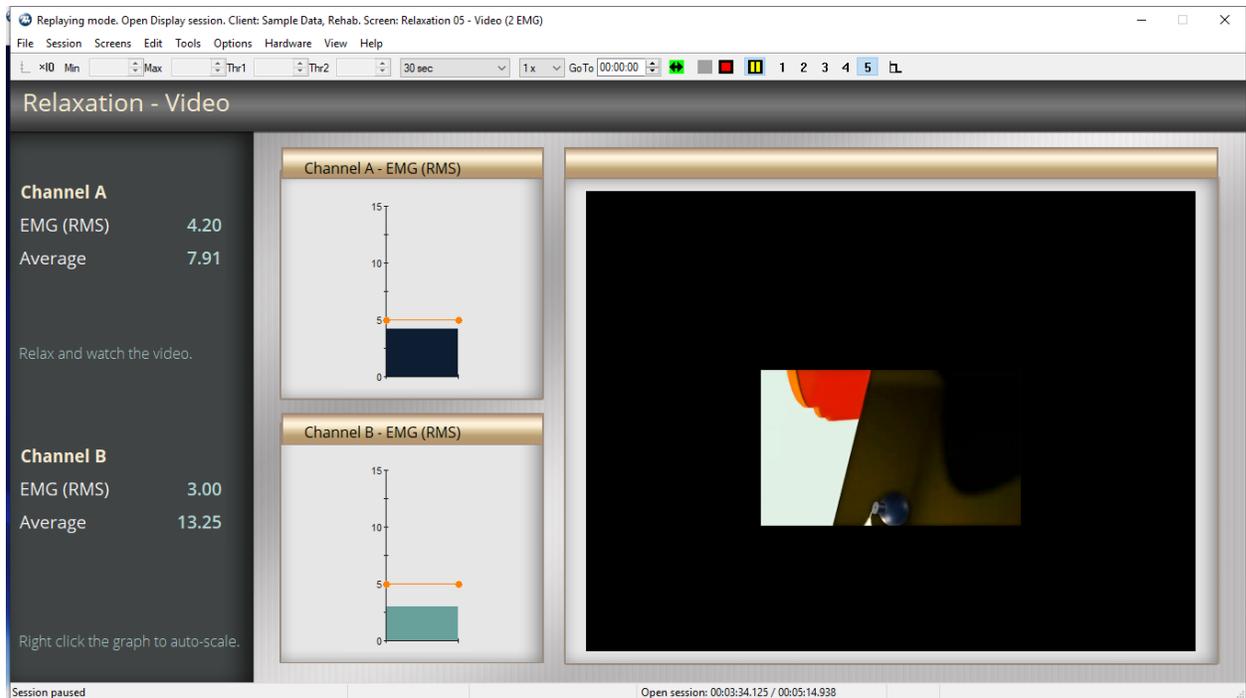
2. Click **3** in the BioGraph toolbar to navigate to the next screen.



The screen shows two bar graphs, an animation, and a counter. The animation is a series of sketches.

To use this screen:

1. Instruct the client to try and meet the conditions for both channels:
  - Relax the muscles to keep the signals below the thresholds.
2. Describe the feedback.
  - The color on a graph changes when the client is not meeting the condition for that graph.
  - When both signals are in condition, the animation plays. This indicates the client is meeting both conditions.
  - Each time the client is successful in meeting both conditions, one is added to the counter and a new sketch begins.
3. Click **4** in the BioGraph toolbar to navigate to the next screen.



The screen shows two bar graphs, and a video.

To run this screen:

1. Instruct the client to meet two conditions:
  - Relax the muscles connected to Channels A and B to keep the signals below the threshold.
2. Describe the feedback:
  - For both channels, the color on the graph changes when the client is not meeting the condition for that channel.
  - When the client meets both conditions, the video expands. It shrinks when a condition is no longer met.
3. Click **Stop**  to end the session and stop recording.

## SEMG Training Strengthening Session

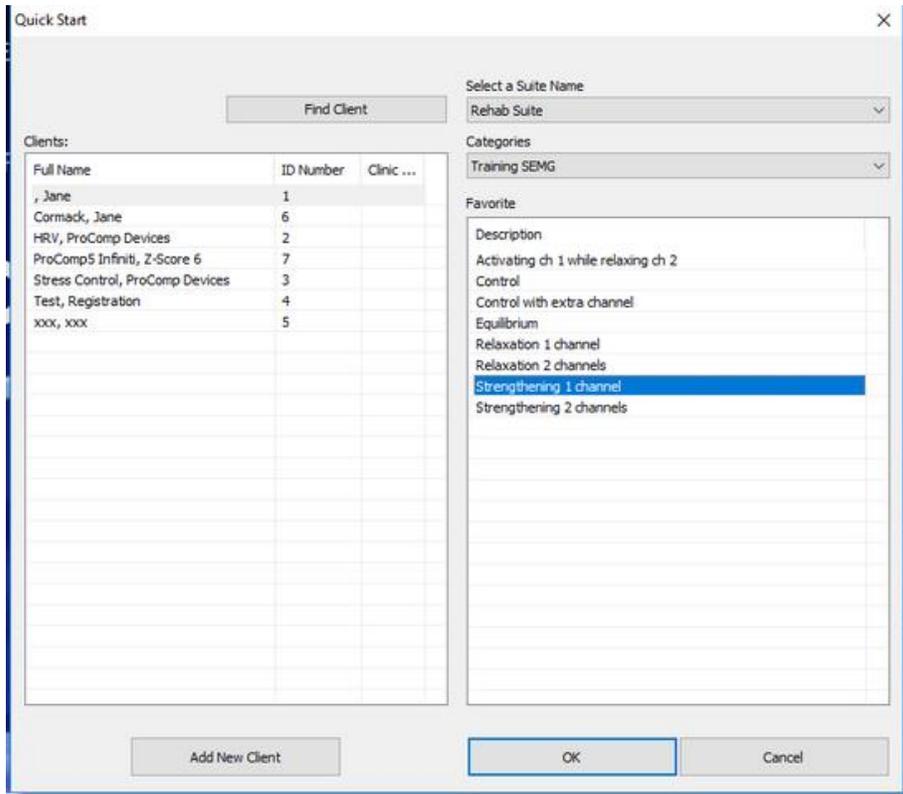
### Setting up the MyOnyx Device

1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A.
3. Connect the Patient Drive to the REF port.

*Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.*

## Starting the Quick Start

1. Open the Quick Start window in BioGraph.



2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.
3. Select **Training SEMG** from the **Categories** drop-down list.
4. Select **Strengthening 1 Channel** in the **Favorite** list box.
5. Click **OK** on the Quick Start window.

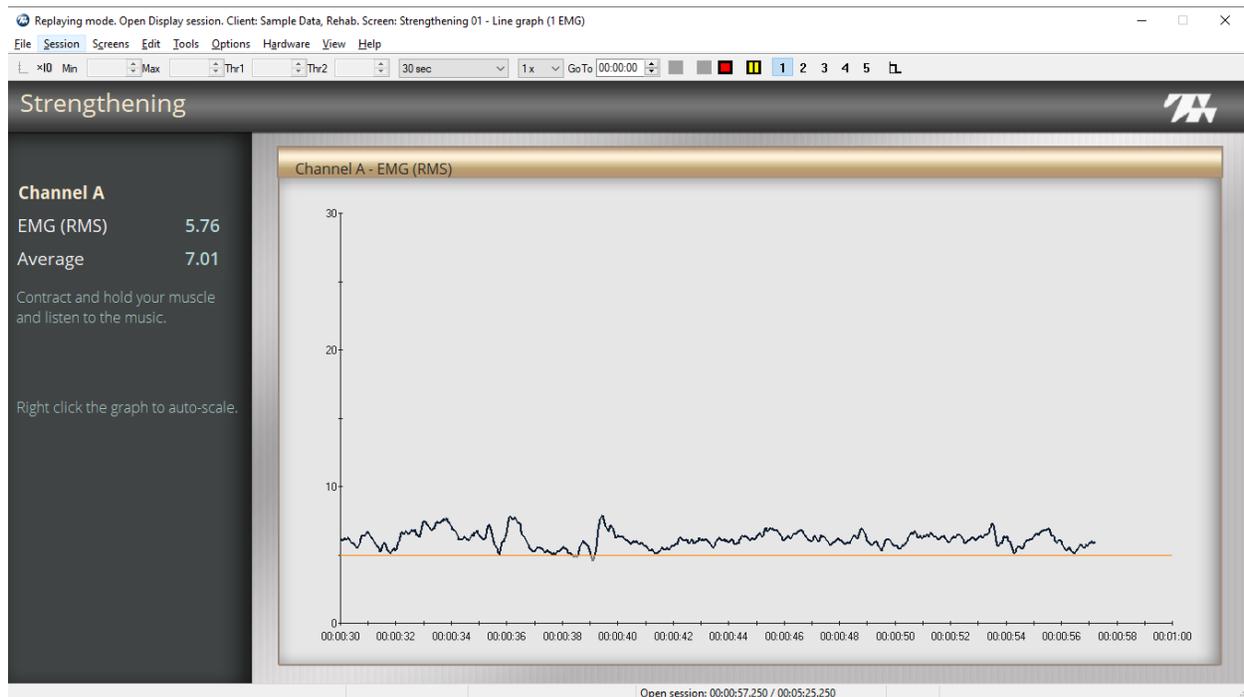
## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



The recording screen appears in BioGraph.

## Strengthening 1



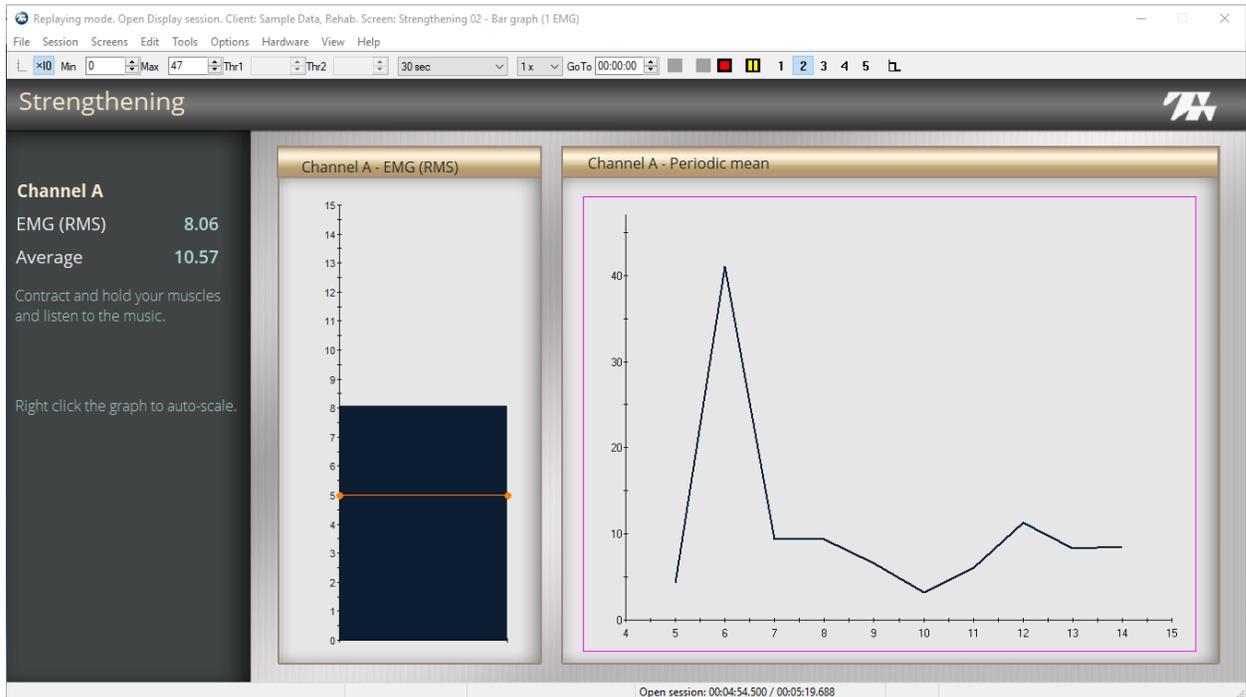
The screen shows a line graph displaying the signal from Channel A.

To use this screen

1. Instruct the client to contract the monitored muscle, so that the signal stays above the threshold.
2. Click **Start**  to begin recording.
3. Describe the feedback

- When the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition.
  - When the client meets the condition, music plays at full volume. It plays quietly when the client is no longer meeting the condition.
4. Click the **2** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 2

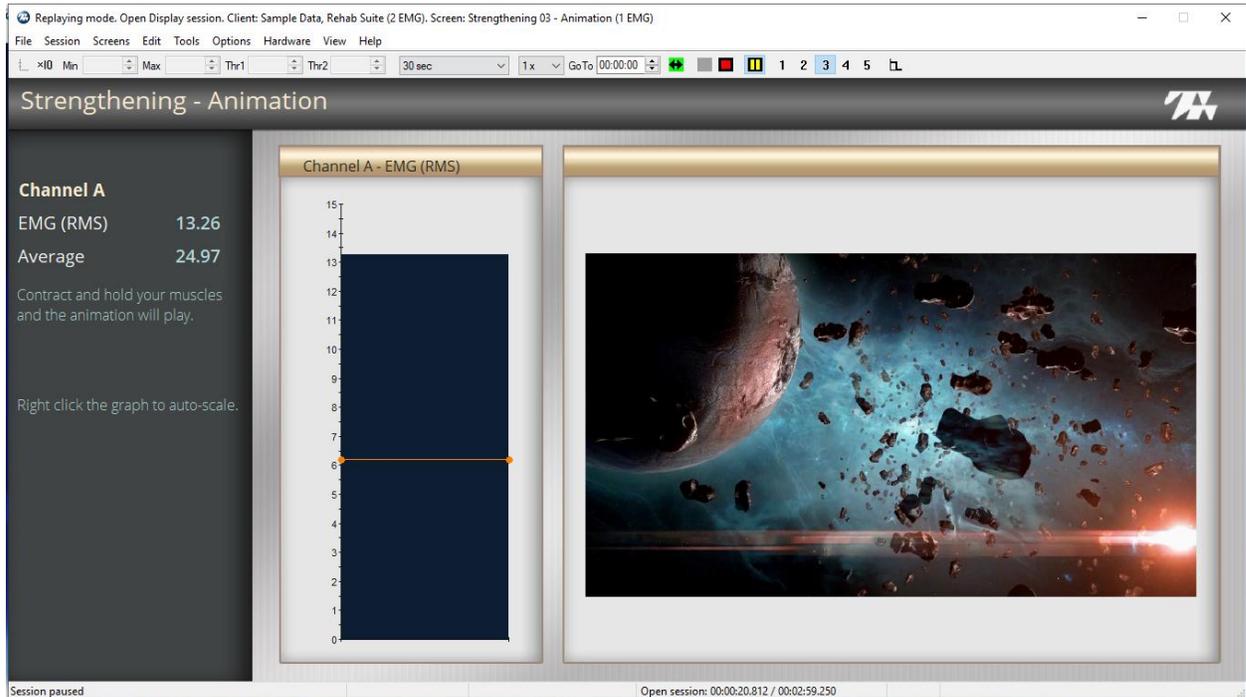


This screen displays a bar graph and a trend graph.

To use this screen

1. Instruct the client to contract the monitored muscle, so that the signal stays above the threshold.
2. Describe the feedback.
  - On the bar graph, when the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition.
  - Music plays at full volume when the client meets the condition. It plays at low volume when the client is no longer meeting the condition.
  - The trend graph is updated every 20 seconds with the average value of the EMG signal
3. Click the **3** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 3

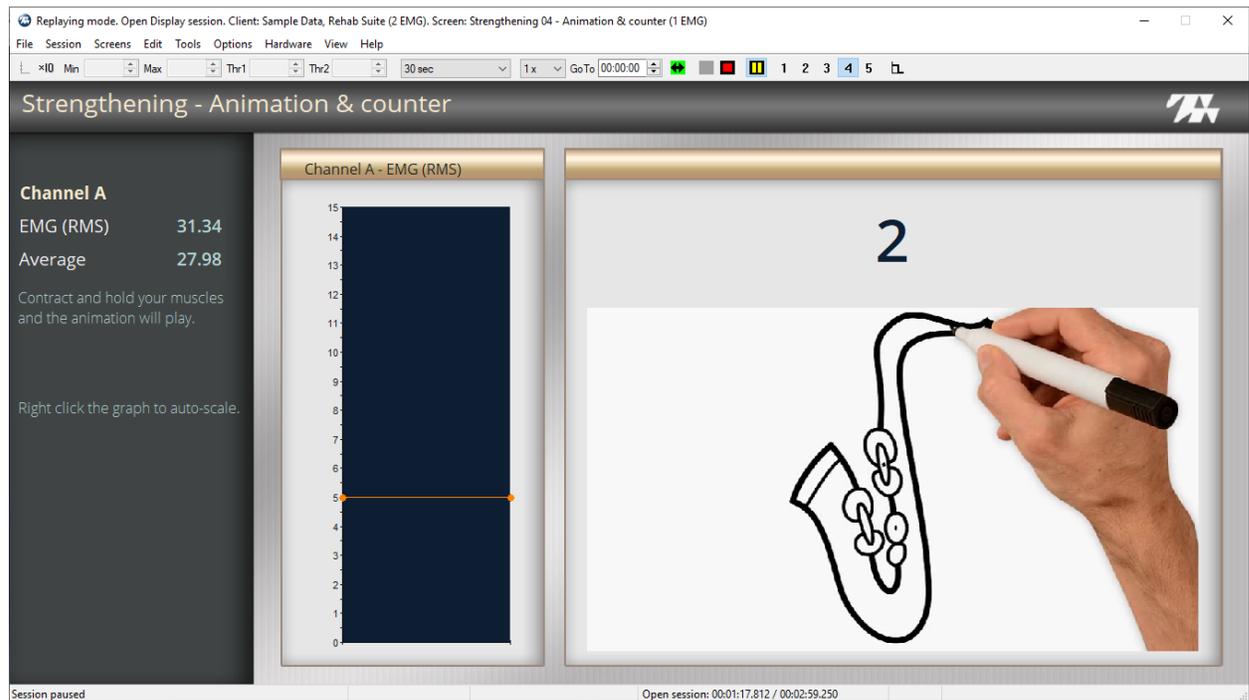


This screen displays a bar graph on the left for Channel A and an animation on the right. A threshold is available. To change the threshold, select it with your mouse and move it into position.

To use this screen

1. Instruct the client to contract the muscle, so that the signal stays above the threshold.
2. Describe the feedback:
  - When the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition.
  - When the client meets the condition, the animation plays.
3. Click the **4** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 4

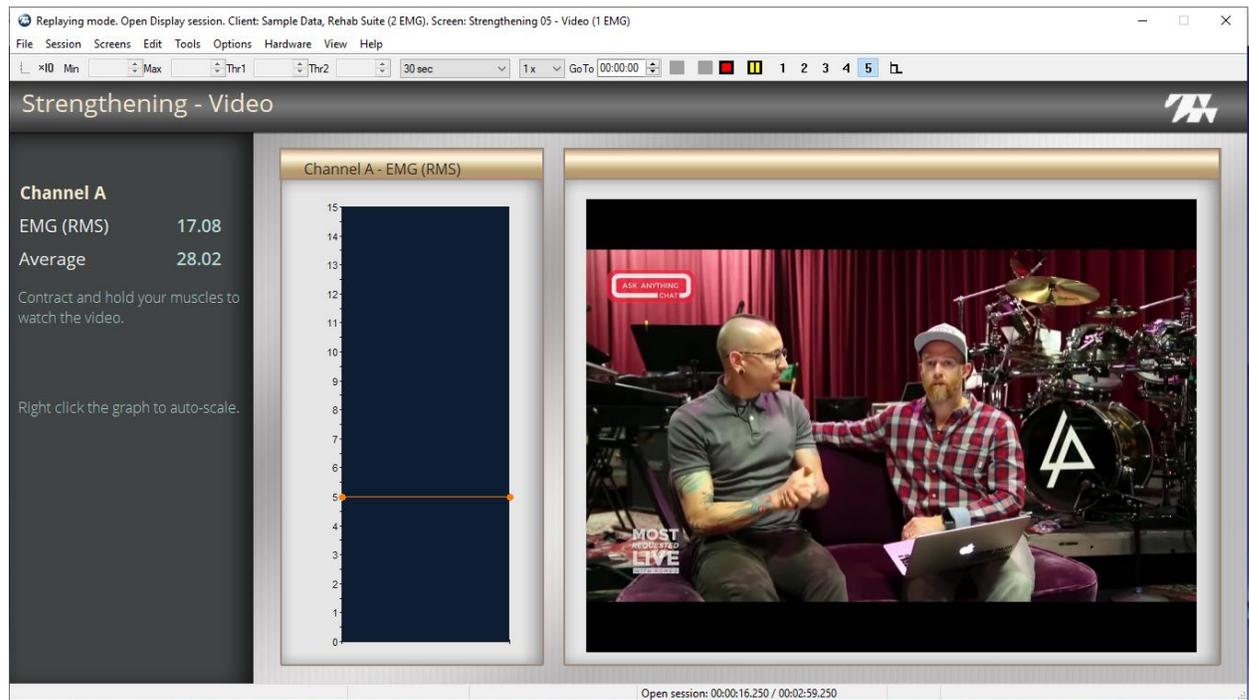


The screen displays a bar graph, connected to Channel A, on the left, and an animation and a counter on the right.

To use this screen

1. Instruct the client to contract the muscle and keep the signal above the threshold.
2. Describe the feedback:
  - When the signal drops below the threshold, the color on the graph changes. This indicates the client is not meeting the condition.
  - When the client meets the condition, the animation plays. Then, one is added to the counter, and a new animation plays.
3. Click the **5** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 5



The screen displays a bar graph, connected to Channel A, and a video.

To use this screen

1. Instruct the client to contract the monitored muscle and keep the signal above the threshold.
2. Describe the feedback
  - When the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition.
  - When the client meets the condition, the video expands. It shrinks when the client is no longer meeting the condition.
3. Click **Stop**  to end the session and stop recording.

## EMG Training Strengthening with 2 Channels

The EMG Training Strengthening 2 Channels Quick Start is like the Strengthening 1 Channel Quick Start. However, signals from two channels are displayed.

### Setting Up the MyOnyx Device

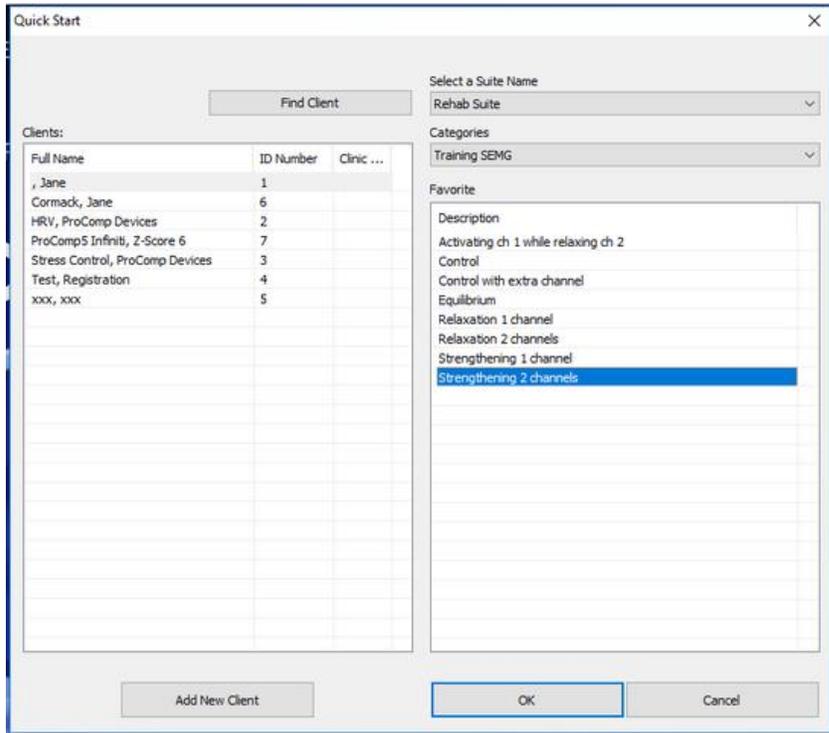
1. Turn on the MyOnyx and navigate to the Home screen.
2. Connect an EMG Sensor to Channel A.
3. Connect the EMG Sensor to Channel B.

4. Connect the Patient Drive to the REF port.

Refer to the MyOnyx Reference Manual for full details on connecting cables and electrodes.

## Start the Quick Start

1. Open the Quick Start window in BioGraph.



2. Select **MyOnyx Rehab Suite** in the **Select a Suite Name** drop-down list.

3. Select **Training EMG** from the **Categories** drop-down list.

4. Select **Strengthening 2 Channels** in the Favorite list box.

5. Click **OK** on the Quick Start window.

## Recording the SEMG Session

The Connected window is displayed on the MyOnyx screen.



The recording screen appears in BioGraph.

## Strengthening 1

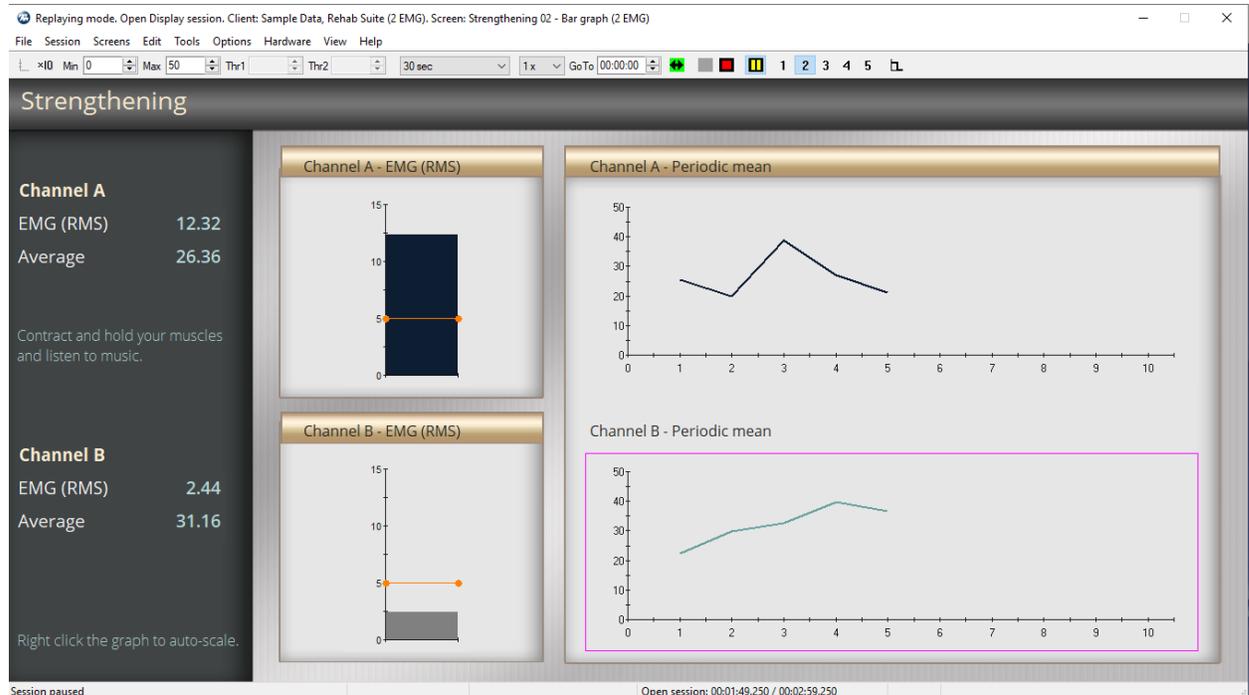


The screen shows a line graph displaying the signal from Channel A, and a second line graph showing the signal from Channel B.

1. Instruct the client to contract the muscles connected to both channels, so that signal stays above the threshold.
2. Describe the feedback.
  - On both channels, when the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition for the channel.
  - When the client meets both conditions, music plays at full volume. It plays at low volume when the client is not meeting a condition.

3. Click **Start**  to begin recording.
4. Click the **2** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 2

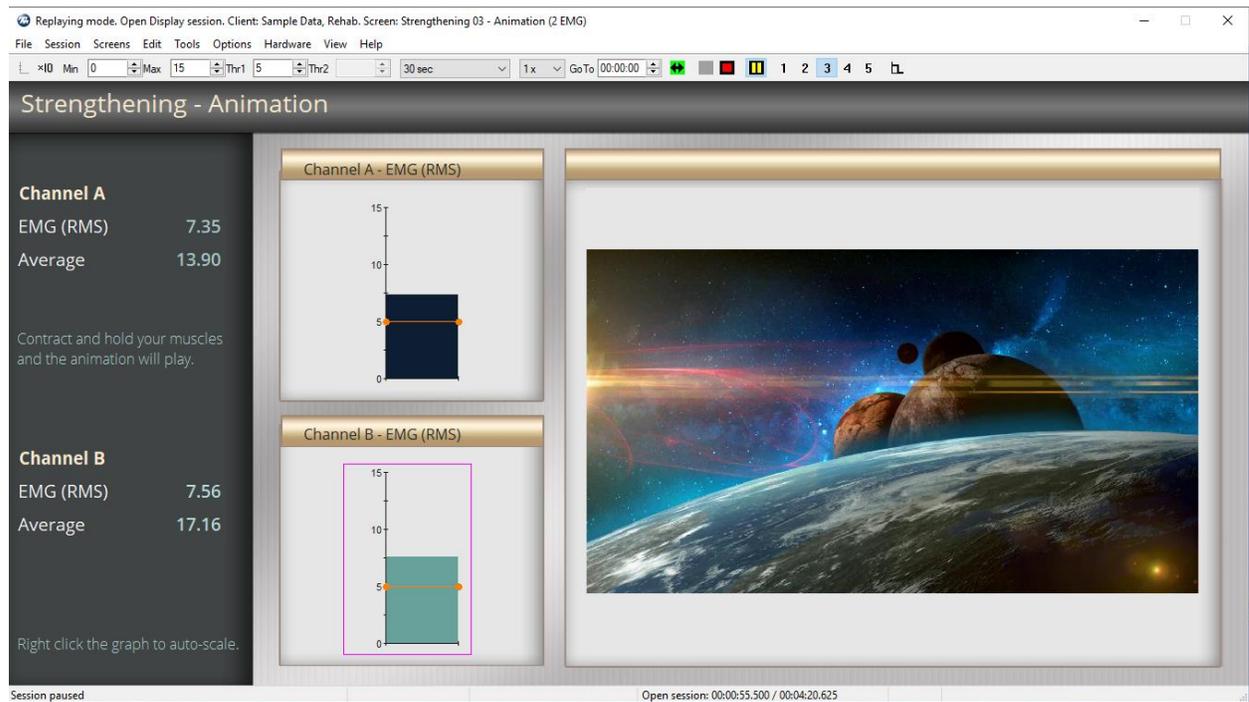


This screen shows two bar graphs and two trend graphs.

To use this screen

1. Instruct the client to contract the muscles connected to both channels and to try and keep the signals above the threshold.
2. Describe the feedback.
  - For both graphs, when the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition for the channel.
  - A wave file is associated with the
  - For both channels, music plays when the client meets the condition. It stops when the client is no longer meeting the condition.
  - The trend graphs are updated every 20 seconds with the average value of the EMG signal.
3. Click the **3** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 3



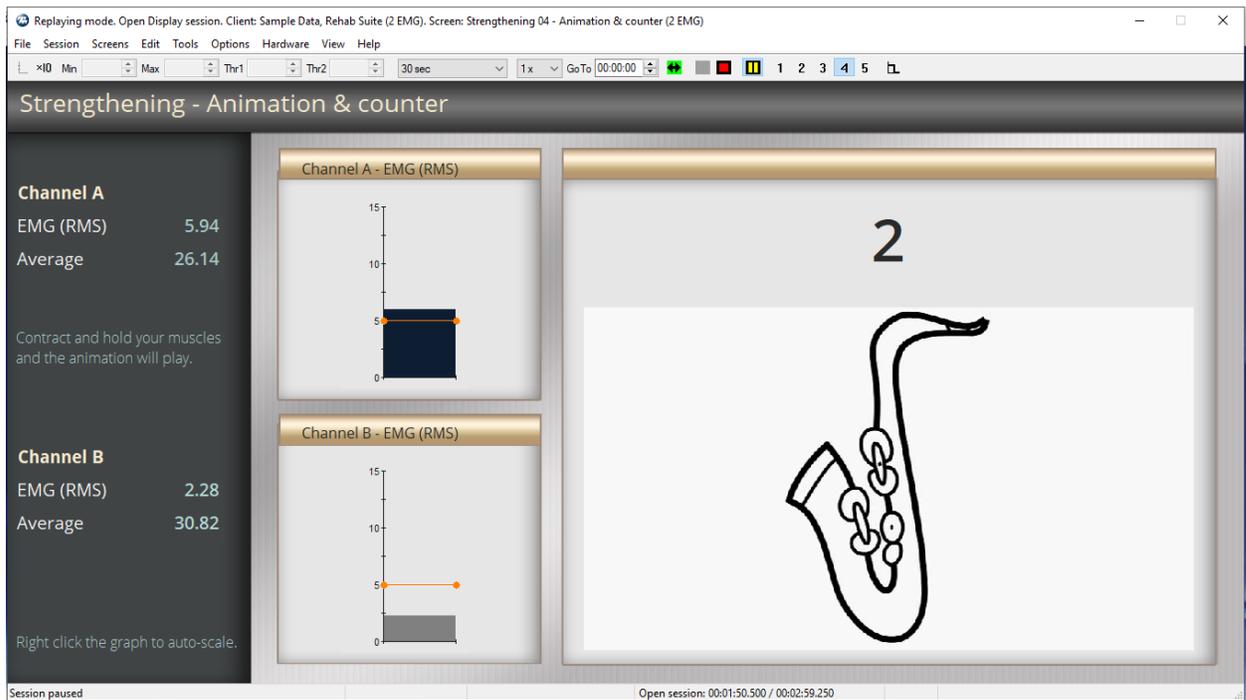
This screen displays two bar graphs on the left and an animation on the right. Thresholds are displayed. To change a threshold, select it with the mouse and move it into position.

The upper bar graph shows the signal from Channel A, the lower graph shows the signal from Channel B.

To use this screen

1. Instruct the client to contract the muscle, so that the signal stays above the threshold.
2. Describe the feedback:
  - For both graphs, the color on the bars changes when the signal is below the threshold. This indicates the client is not meeting the condition.
  - The animation plays when the client meets the conditions for both channels.
3. Click the **4** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 4

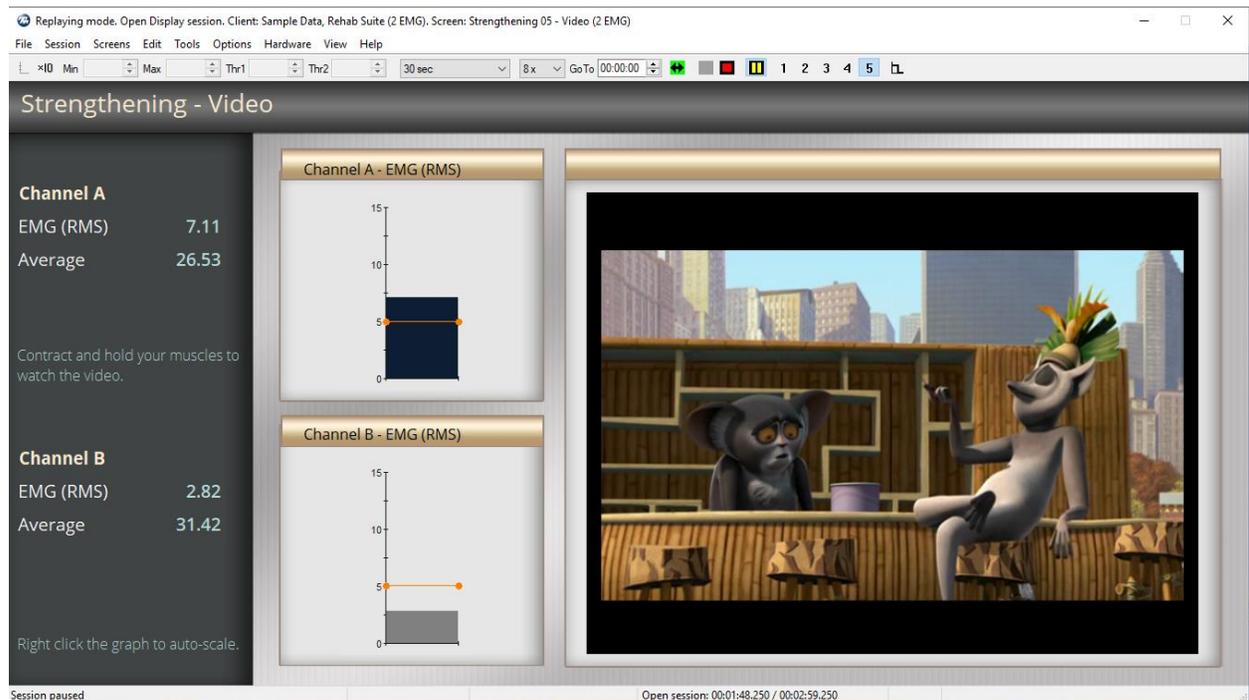


The screen displays two bar graphs on the left, and an animation and a counter on the right.

To use this screen

1. Instruct the client to contract the muscles and keep the signals above the threshold.
2. Describe the feedback:
  - On each graph, when the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition for the channel.
  - When the client meets both conditions, the animation plays. Then, one is added to the counter, and a new animation plays.
3. Click the **5** in the toolbar to navigate to the next screen.

## SEMG Training Strengthening Level 5



The screen displays two bar graphs and a video.

To use this screen

1. Instruct the client to contract the monitored muscles and keep the signals above the threshold.
2. Describe the feedback
  - For each graph, when the signal drops below the threshold, the color changes. This indicates the client is not meeting the condition for that channel.
  - When the client meets the conditions for both channels, the video expands. It shrinks when the client is no longer meeting one of the conditions.
3. Click **Stop**  to end the session and stop recording.

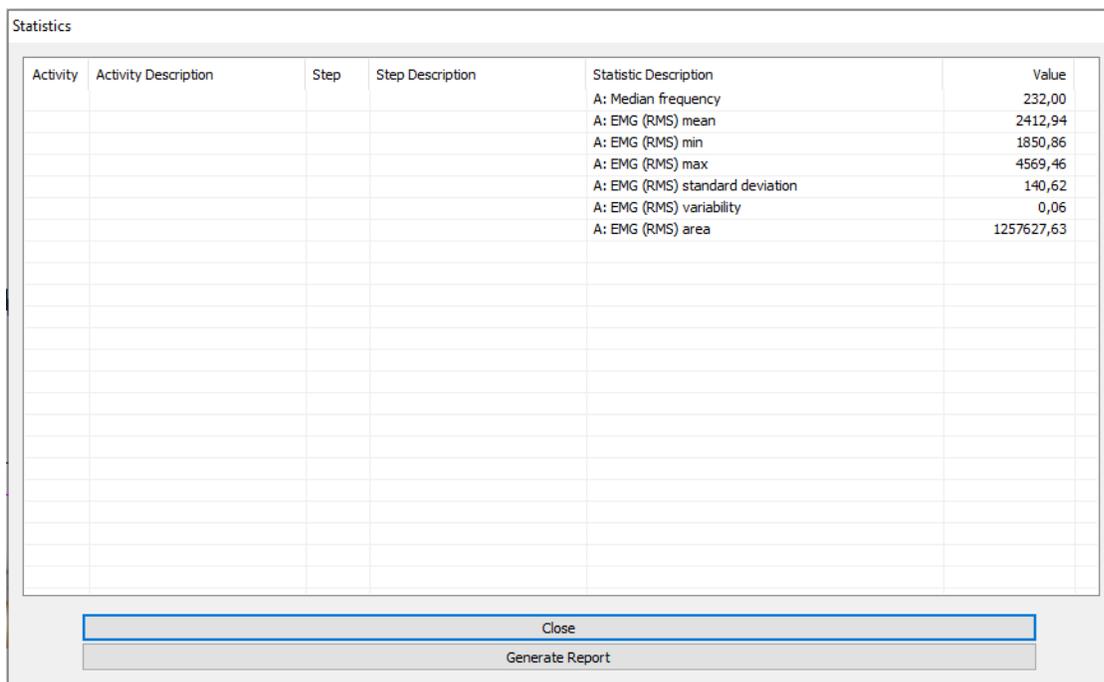
# Chapter 4 Reviewing the Sessions

This chapter includes the following sections:

- Ending Session Recording
- Reviewing Saved Sessions

## Ending Session Recording

At the end of a session, when you click the Stop Recording button , the Statistics Page is shown.



Activity	Activity Description	Step	Step Description	Statistic Description	Value
				A: Median frequency	232,00
				A: EMG (RMS) mean	2412,94
				A: EMG (RMS) min	1850,86
				A: EMG (RMS) max	4569,46
				A: EMG (RMS) standard deviation	140,62
				A: EMG (RMS) variability	0,06
				A: EMG (RMS) area	1257627,63

Close  
Generate Report

You can review the statistics as shown on the screen or generate a report to save the statistics in a file.

---

Note: You can generate a session report in addition to the statistics report.

---

To generate a statistics report:

1. Click **Generate Report**.

You are prompted to add a Training Code and optional notes and a description for the session.

Session Notes

Training Code

Description

Notes

2. Enter a code in the **Training Code** field and any description and notes for easy reference.
3. Click **OK**.

**Thought Technology Ltd.**

OPEN SESSION CURRENT STATISTICS

10.09.2019 17:14:35

Client : 88 - Cormack, Jane

Description	Value
A: Median frequency	232,00
A: EMG (RMS) mean	2412,94
A: EMG (RMS) min	1850,86
A: EMG (RMS) max	4569,46
A: EMG (RMS) standard deviation	140,62
A: EMG (RMS) variability	0,06
A: EMG (RMS) area	1257627,63

4. Click **Close** the Statistics Page.

You are prompted to save the session. /

Infiniti Software System

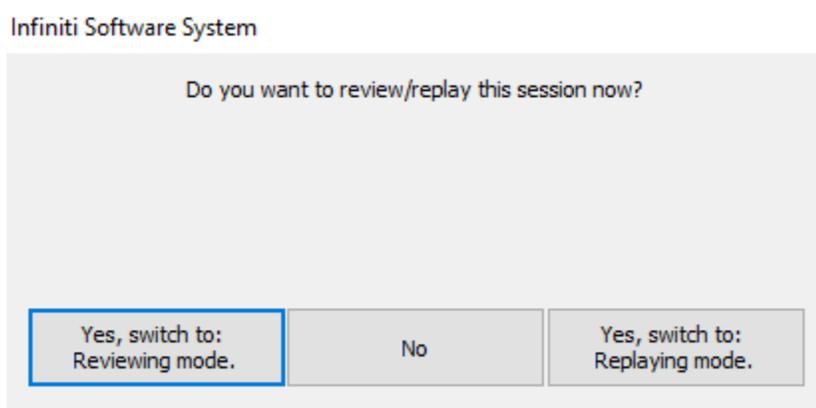
Do you want to save this session? Remember:  
Sessions saved with compression cannot be reviewed until decompressed!

---

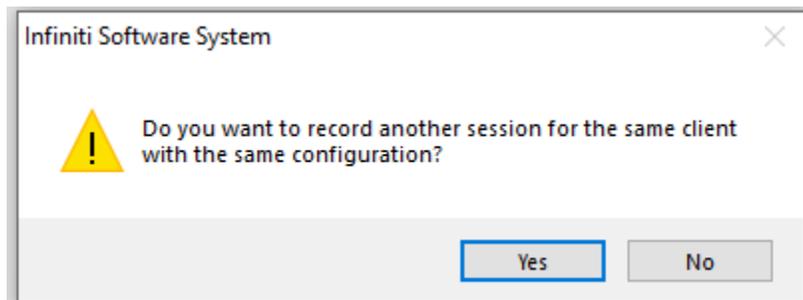
**Note:** If you compress the session, you can decompress it when you select it for review or replay.

---

You are prompted to review or replay the session.



If you click **No**, you are asked if you want to record another session with the same configuration.



If you want to record another session with the same client, click **Yes**. The same screen, which was open when the session was stopped, appears.

## Reviewing Saved Sessions

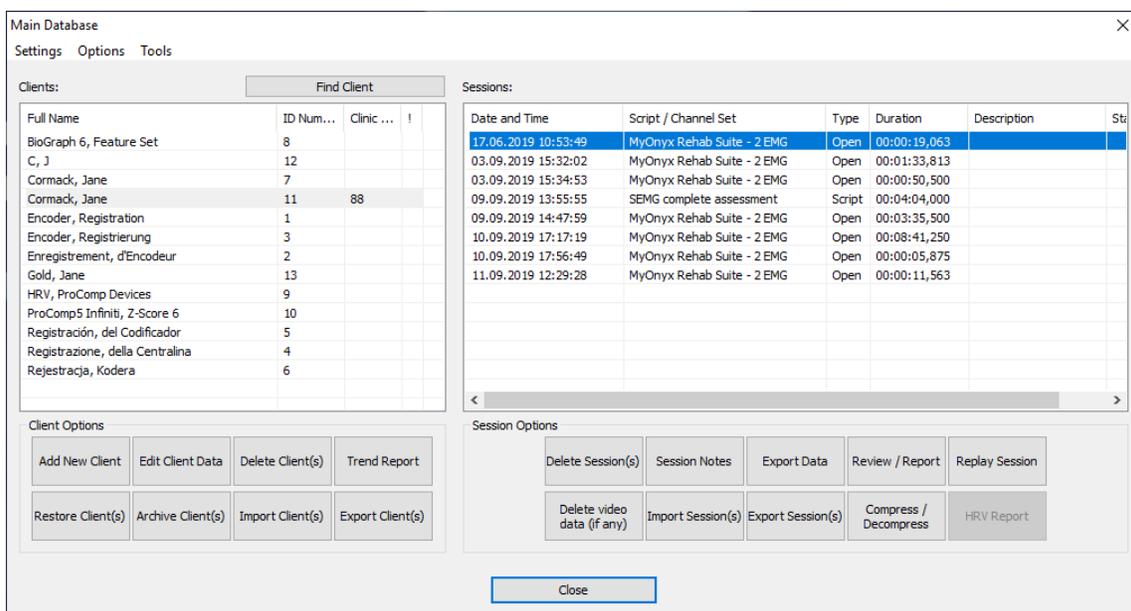
To access sessions saved to the BioGraph database:

1. Launch BioGraph.



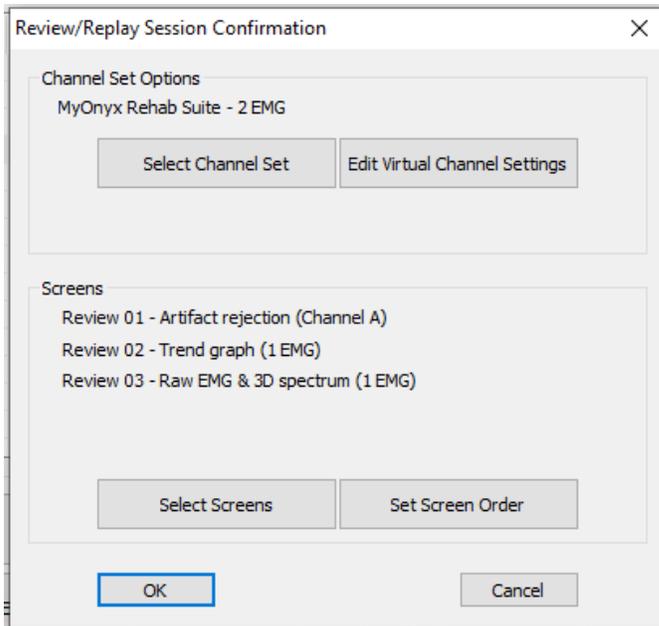
2. Select **Database**.

The Main Database screen opens.



3. Click **Review/Report** to review your session.

The Review/Replay Session Confirmation screen appears.

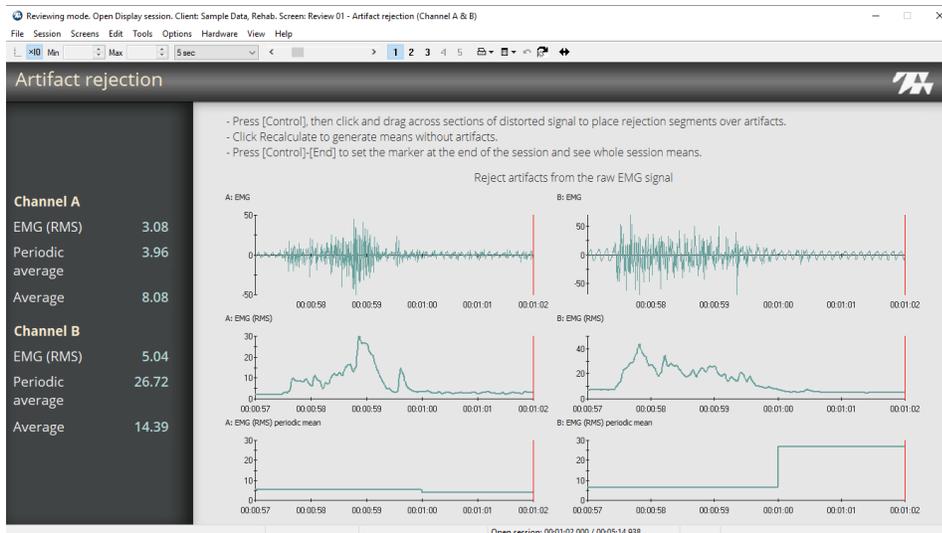


4. Click **OK**.

The following review screens are available:

- Artifact Rejection
- Trend Graph
- Raw EMG & 3D Spectrum
- Review – Endurance (for single-channel sessions only)

## Artifact Rejection



The screen displays Raw, RMS, and the RMS periodic mean for the channel or channels used in the session.

Review the data on this screen to detect unusual patterns. These can be caused by line interference, EKG artifacts, or movement if electrodes slide out of position or cables are pulled.

Review the RAW signal for the channel or channels. You may want to reject segments that are too high or too low. To do this, place artifact rejection segments over the signal: as described in the following steps.

1. Scroll through the data, using the time scroller at the top of the window, to find an artifact.

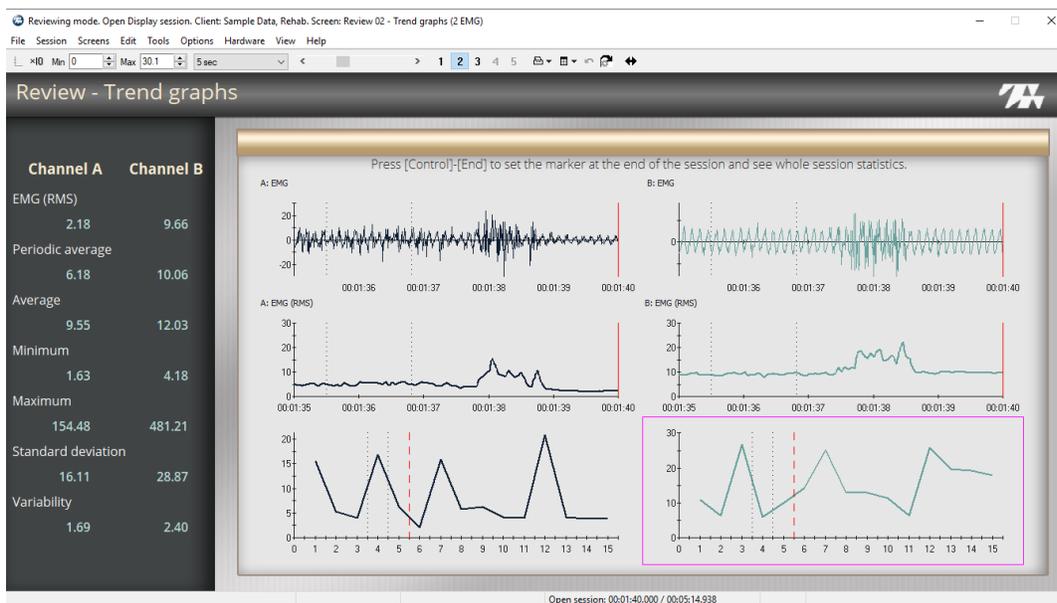
---

**Tip:** Right click on the graph and select **Auto scale** to view the full signal on the screen. Deselect it and adjust the **Min** and **Max** settings in the toolbar to zoom in on a segment.

---

2. Place your mouse cursor over the EMG segment you want to reject.
3. Press and hold the Control [Ctrl] key on your computer keyboard and your left mouse button at the same time. Move the cursor right until you reach the end of the distorted section
4. Release the Ctrl key and mouse button.

## Trend Graph

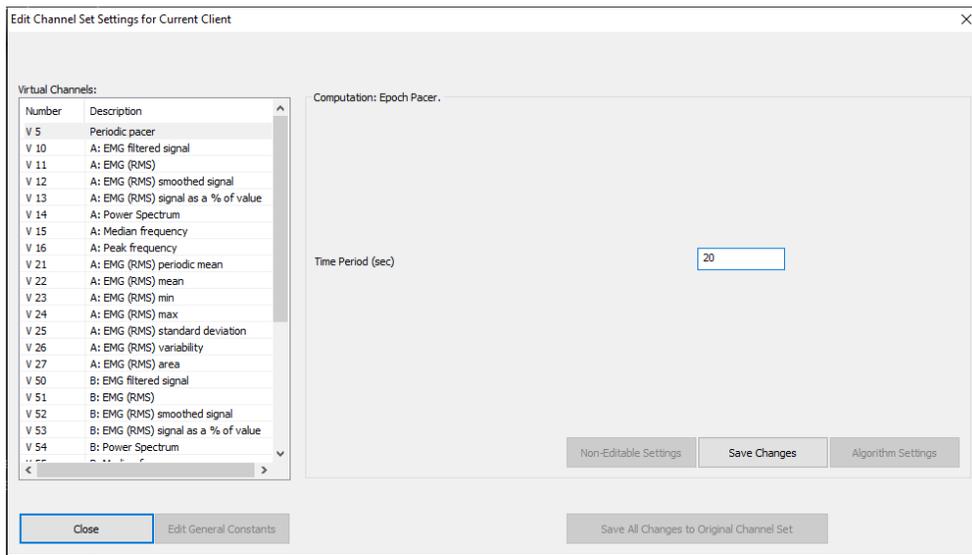


The screen displays the Raw, RMS and RMS periodic mean for the channel or channels used in the session. You can review the trend data. By default, the periodic means are calculated every 20 seconds. You can adjust this time period.

### To adjust the periodic mean duration

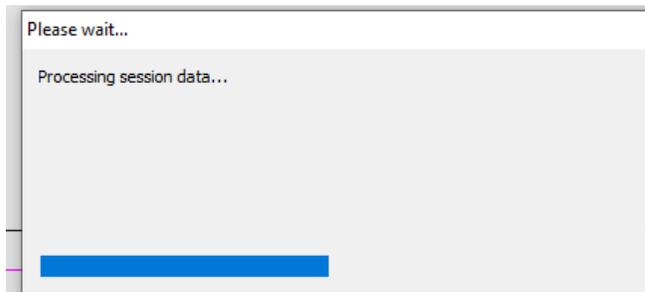
1. Right click on the trend graph.
2. Select **Edit Virtual Channel Settings > Control Data Channel**.

The Edit Channel Settings screen appears.

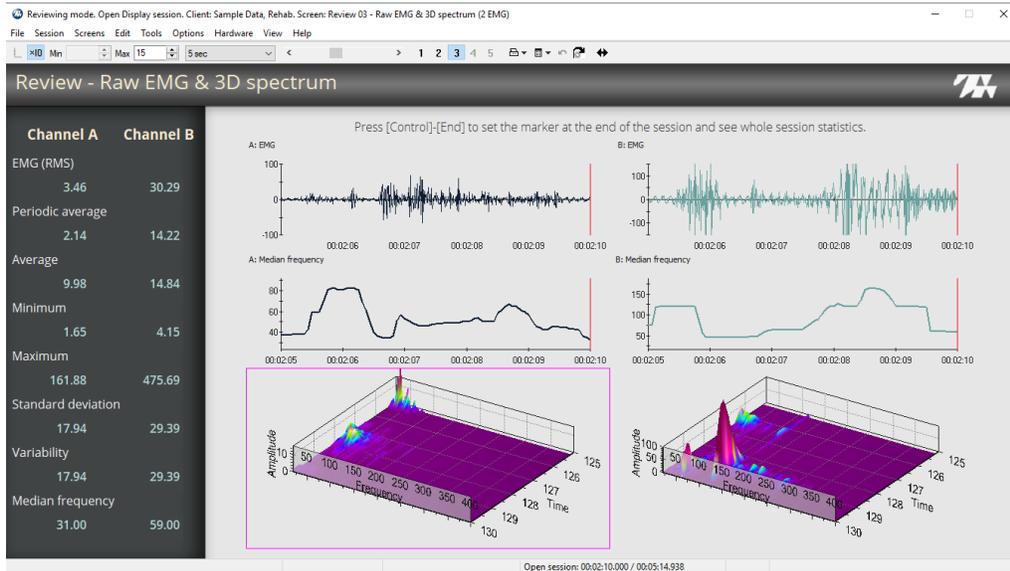


3. Enter the required duration in the **Time Period (sec)** field.
4. Click **Close**.

A progress bar is displays while the information is updated.



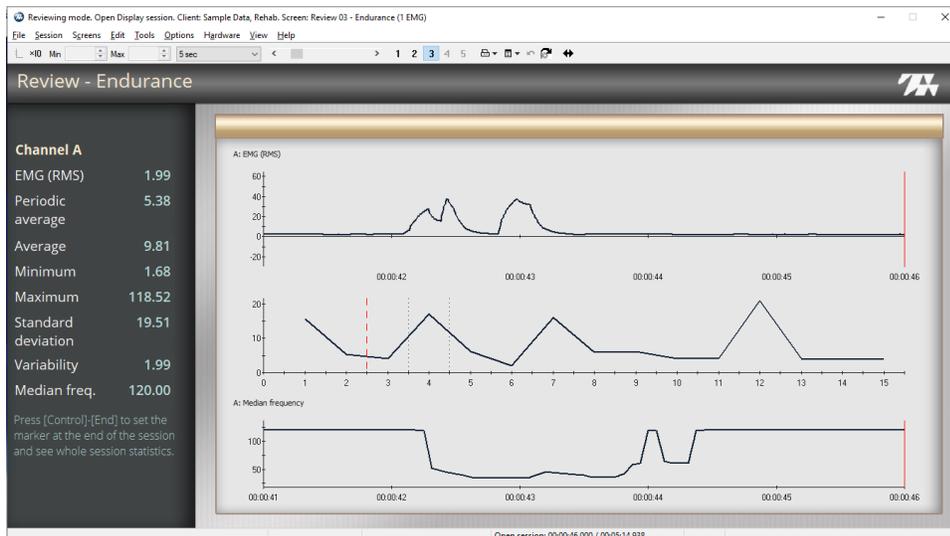
# Raw EMG & 3D Spectrum



The screen displays Raw, median frequency, as well as 3D spectrum of the EMG signal.

**Tip:** To view the entire graph in the screen, right click on the graph and select **Auto Scale**. To zoom in on an area, disable Auto Scale and adjust the **Min** and **Max** values in the toolbar.

# Review – Endurance



The screen displays the RMS signal, RMS periodic mean, and median frequency for channel A only. Review the trend data and median frequency through the assessment. You can adjust the time period for the periodic means.

# Chapter 5 MyOnyx Downloading Options

If you would like to review the biofeedback sessions you have recorded with the MyOnyx app in BioGraph, you need to download them from the MyOnyx device to BioGraph using the MyOnyx Downloading Options. The MyOnyx Rehab Suite Review screens are available for reviewing the downloaded sessions. All statistics and options available in BioGraph are available for these sessions.

The MyOnyx app supports two types of biofeedback, standard and alternating. These are recognized as the following session types in BioGraph:

MyOnyx App	BioGraph
Alternating or reciprocal biofeedback:	Open Session
Standard biofeedback	Script Session

Refer to the MyOnyx App Help for details on alternating and standard biofeedback.

---

**Note:** Standard biofeedback sessions must be complete if you want to download them. However, you can download incomplete alternating biofeedback sessions.

---

BioGraph provides two options for downloading sessions:

- the **MyOnyx External Session Download Tool:** This is recommended for sessions longer than ten minutes:
- the **Direct Downloading Option:** This can be used for sessions shorter than ten minutes. BioGraph is unavailable while you are using this option.

You can continue to use BioGraph while downloading sessions with the external tool. However, the MyOnyx device can be connected to only one device or software application at a time. While running the MyOnyx External Session Download Tool, you cannot run BioGraph or MyOnyx app sessions with the device.

# Downloading Sessions with the MyOnyx External Session Download Tool

There are two parts to downloading sessions with the MyOnyx External Session Download Tool. First, download sessions from the MyOnyx device to a folder on your PC or network. Then, import the sessions from that folder to BioGraph.

## Downloading Recorded Sessions from the MyOnyx to your PC

To download one or more sessions to your PC:

1. Turn on the MyOnyx device.
2. Navigate to the Home screen if it is not displayed.
3. Double-click on the **BioGraph Infiniti Docs & Editors** icon  on your desktop.
4. Click the **MyOnyx Session Download Tool** icon  to launch the tool.

**On the MyOnyx device**, the PC Connected to Device screen appears.



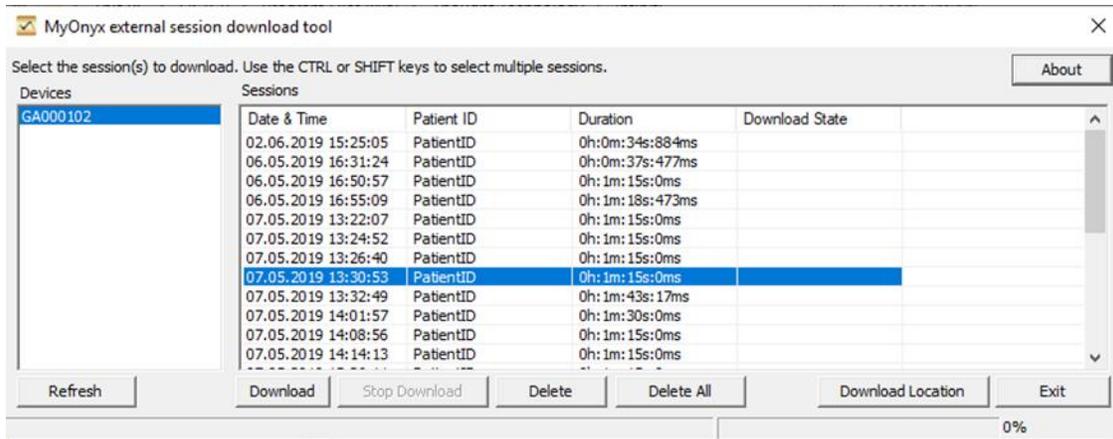
---

**Tip:** If this screen does not appear, verify the Bluetooth connection.

When you are downloading sessions with the MyOnyx external session download tool, you can use the power button to turn off the device, but all other functionality is controlled from the PC.

---

**On the PC**, The MyOnyx external session download tool appears.



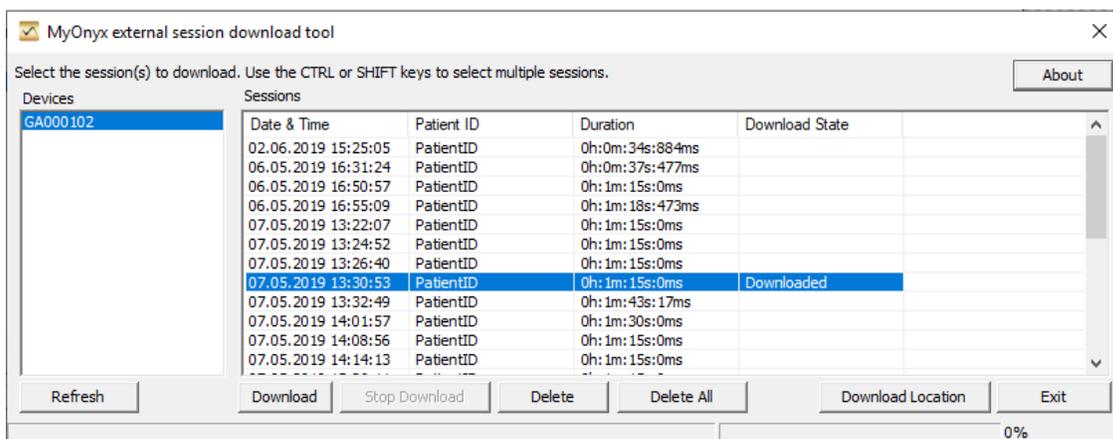
The Devices column of the MyOnyx external session download tool shows all the MyOnyx devices that are paired to the PC, turned on, and set to the Home screen.

5. Select the MyOnyx device in the **Devices** column that contains the sessions you would like to download.

The sessions saved to the device are displayed by Date & Time, Patient ID, Duration, and Download State.

6. Click **Download Location** and navigate to the folder on your PC or network where you would like to save the files.
7. Click **Download**.

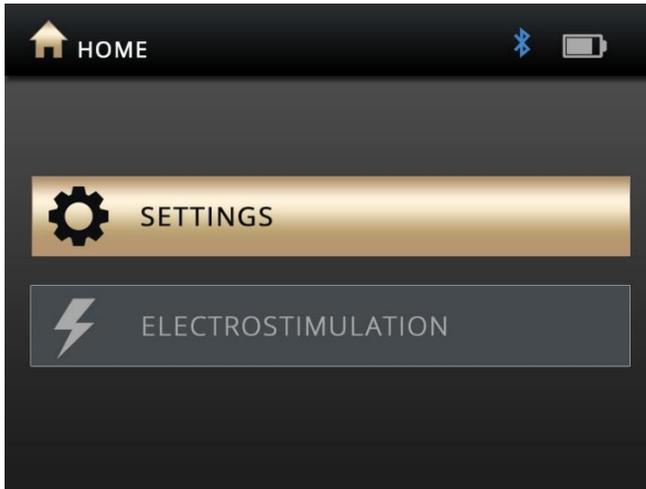
The Download State column displays downloading for each selected session while the download is in progress. The percentage of the download that is complete is shown in the status bar beside the percent sign (%).



When the download process is complete, the **Download State** column for the session displays **Downloaded**.

8. Click **Exit** to close the MyOnyx Session Download Tool once all required sessions are downloaded.

The Home Screen is shown on the MyOnyx.



## Importing Downloaded Sessions to BioGraph

After downloading sessions with the MyOnyx External Download Tool to a folder on your PC, the next step is to import the sessions to BioGraph.

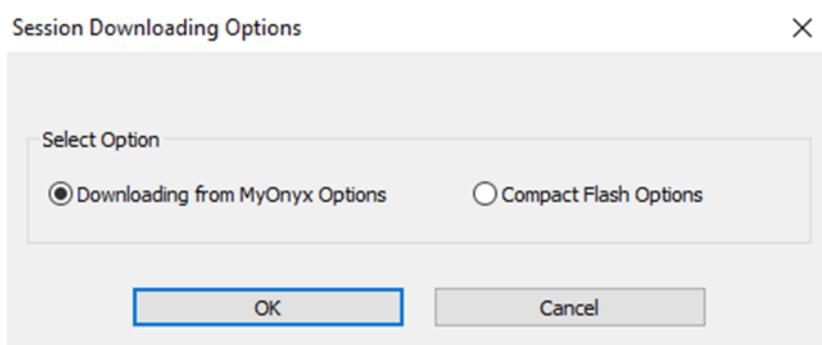
To import downloaded sessions to BioGraph.

1. Launch BioGraph



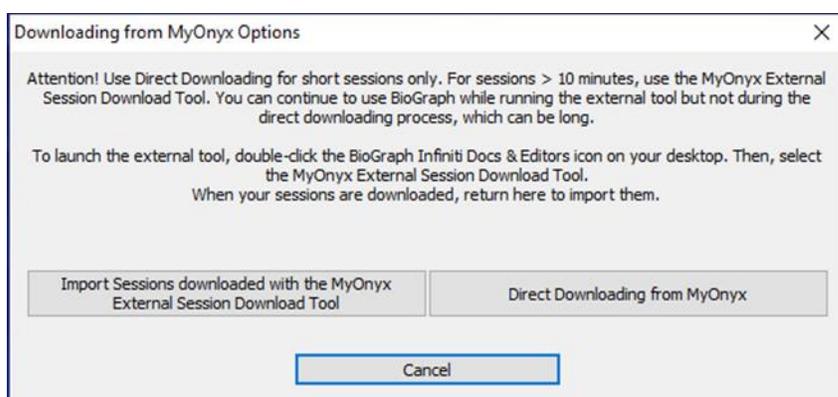
2. Click **Session Downloading Options**.

The Session Downloading Options screen appears.



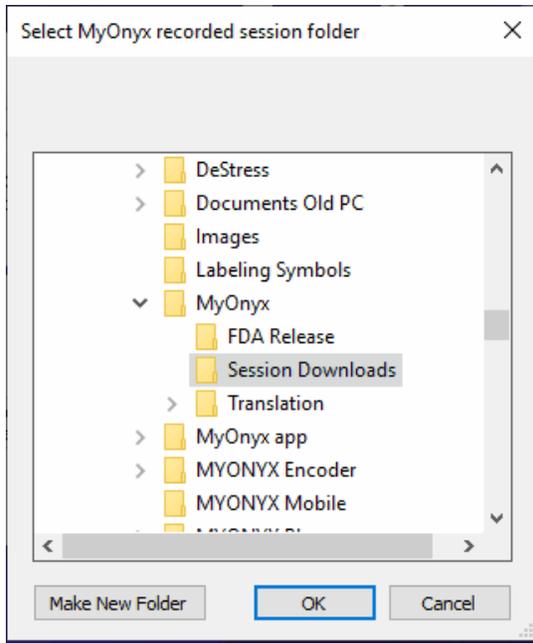
3. Select **Downloading from MyOnyx** and click **OK**.

The Downloading from MyOnyx Options screen appears.



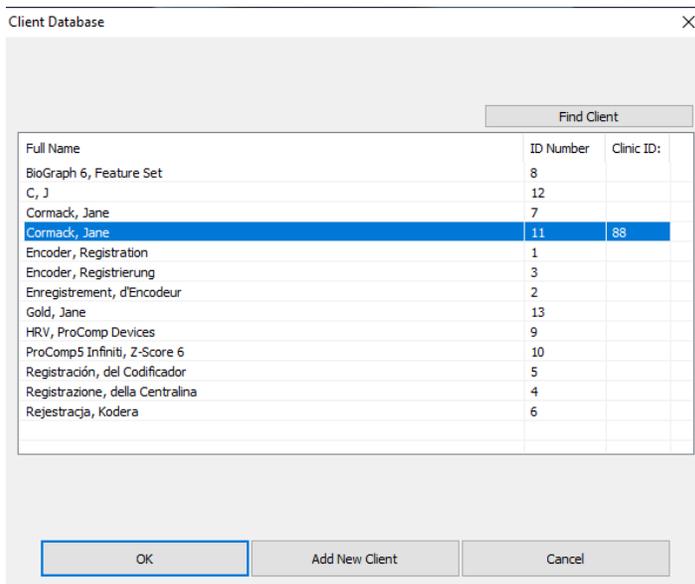
4. Click **Import Sessions Downloaded with the MyOnyx External Session Download Tool**.

The Select MyOnyx recorded session folder screen opens.



5. Navigate to the folder where your downloaded MyOnyx sessions are located if it does not open automatically.
6. Select the folder.
7. Click **OK**.

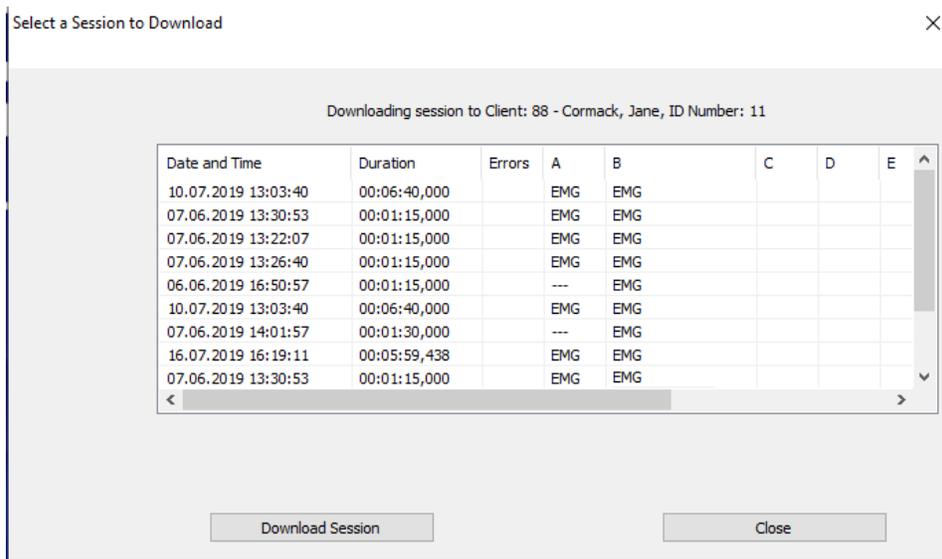
The BioGraph Client Database screen appears.



8. Select a client in the list and click **OK**.

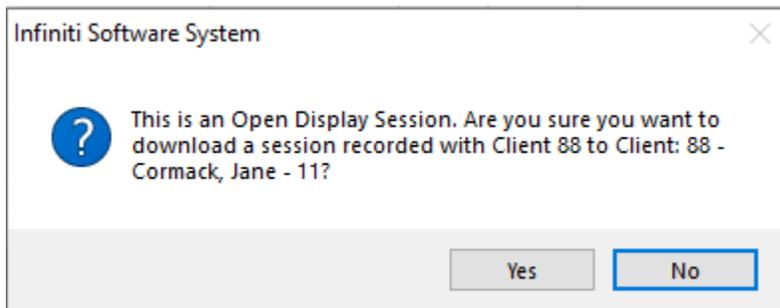
Alternatively, you can click **Add New Client** and create a new client account. You must select a client before importing downloaded sessions.

The Select a Session to Download screen appears.



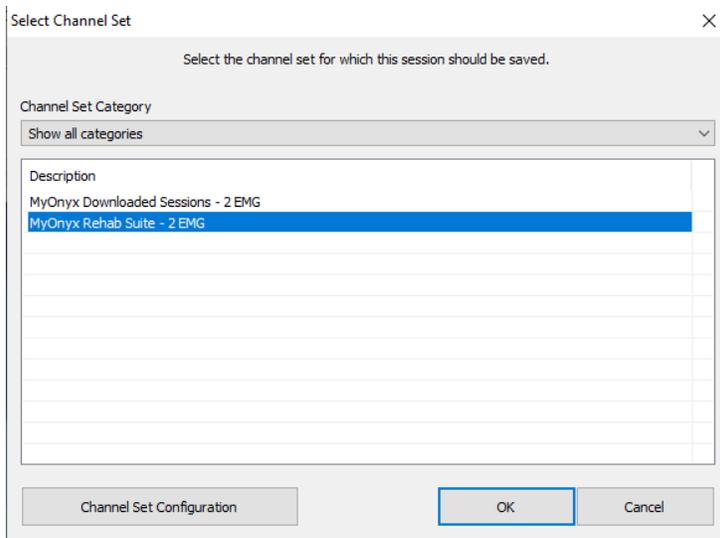
9. Select a session in the list and click **Download Session**.

A confirmation message appears.



10. Click **Yes** to continue.

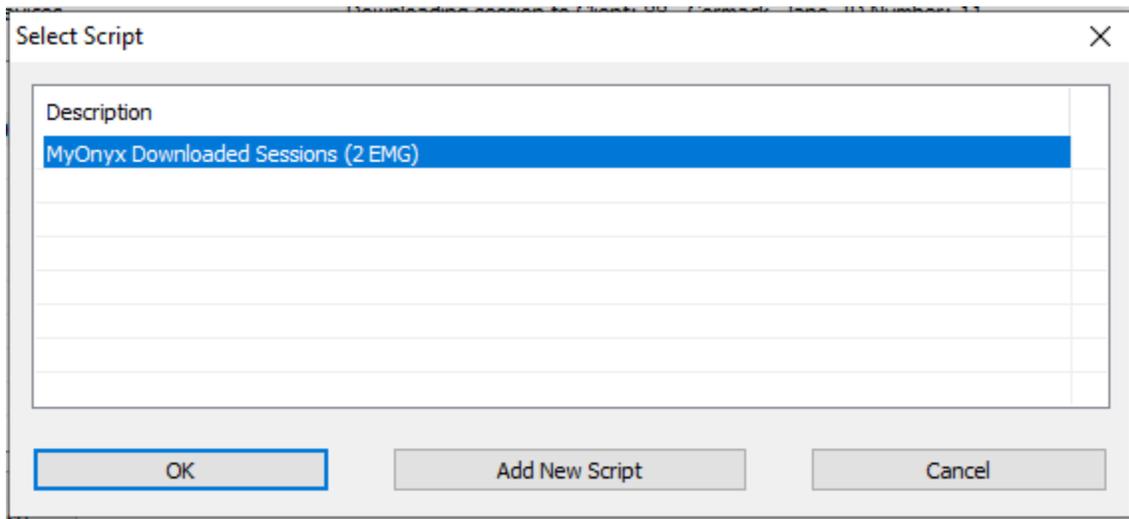
The Select Channel Set screen appears.



You can view details on the Channel Set, see [Viewing the Channel Set Configuration](#)..

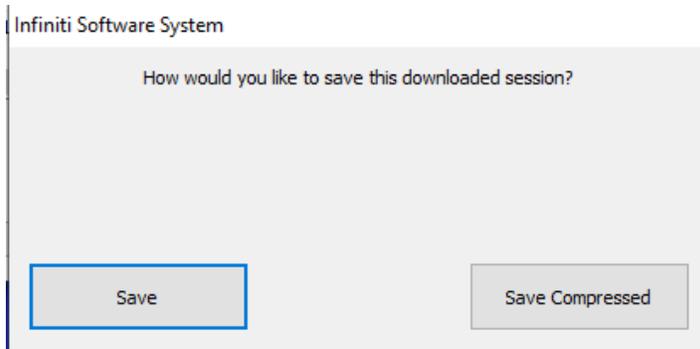
11. Select the Channel Set and click **OK**.

If the session was recorded as a standard biofeedback session on the MyOnyx app, the Select Script screen opens.



12. Select an item in the list and click **OK**.

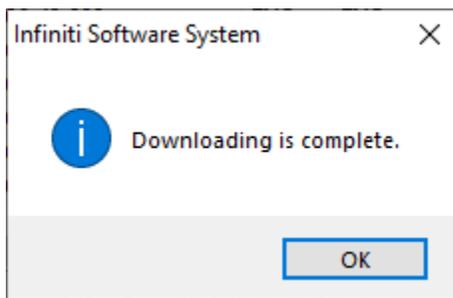
A confirmation message appears.



If the file is large, you can save it in compressed mode. You can decompress the file, when you open for Review or Replay.

13. Click **Save** or **Save compressed**.

A confirmation message appears.



14. Click **OK** on the message.

## Using the Direct Downloading Option in BioGraph

It is recommended to use the MyOnyx external session download tool for sessions longer than ten minutes. You can use the Direct Downloading option to download short sessions.

---

**Note:** BioGraph is not accessible when you are running this procedure.

---

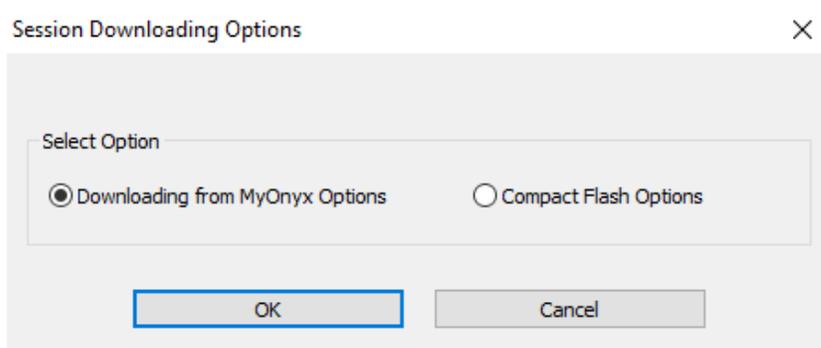
To download a session or sessions with the Direct Downloading from MyOnyx option

1. Turn on the MyOnyx.
2. Navigate to the Home screen on the device if it is not displayed.
3. Launch BioGraph on the PC.



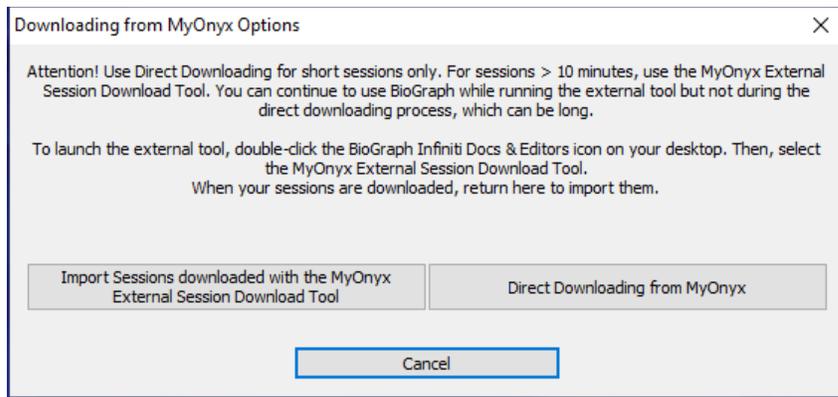
4. Click **Session Downloading Options**.

The Session Downloading Options screen appears.



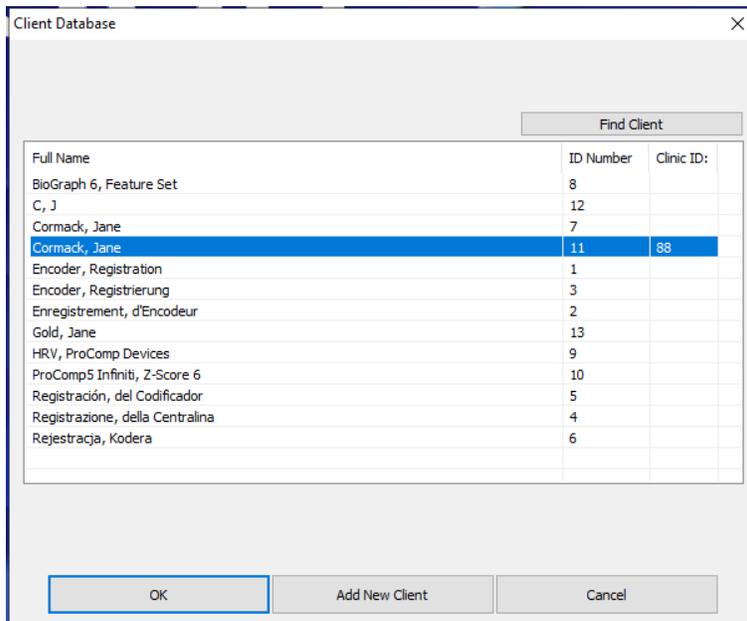
5. Select **Downloading from MyOnyx** and click **OK**.

The Downloading from MyOnyx Options screen appears.



6. Click **Direct Downloading from MyOnyx**.

The Client Database screen opens.



Sessions must be downloaded to a client account in BioGraph. For details on creating client accounts, refer to the BioGraph Infinity® Help.

7. Select the client account in the list.
8. Click **OK**.
9. On the MyOnyx device, the PC Connected to Device screen appears.



---

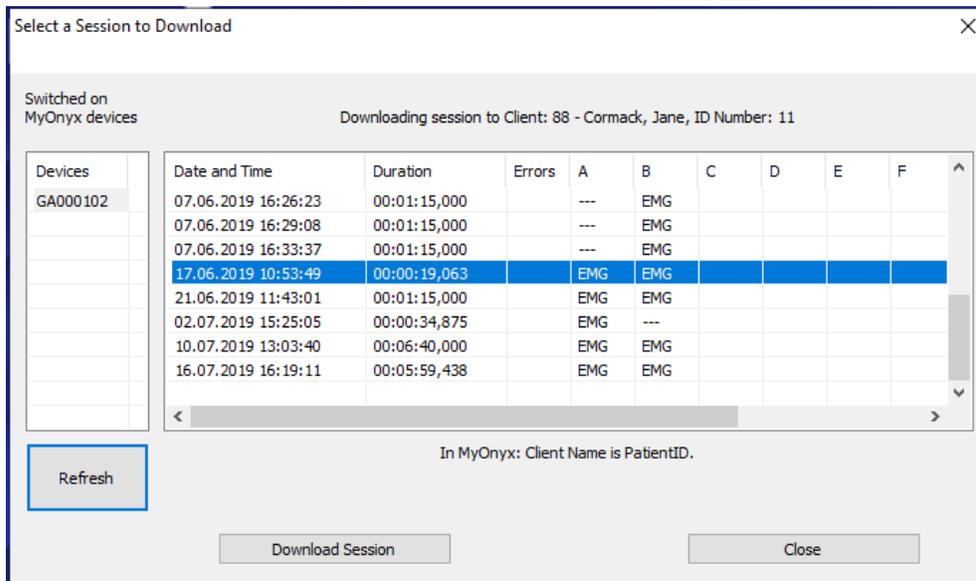
**Tip:** If this screen does not appear, verify the Bluetooth connection.

While you are downloading sessions, you can use the power button to turn off the device, but all other functionality is controlled from the PC.

---

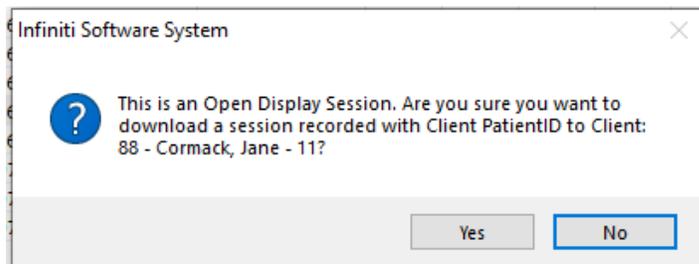
10. Click **OK** on the message to continue.

The Select a Session to Download screen opens.



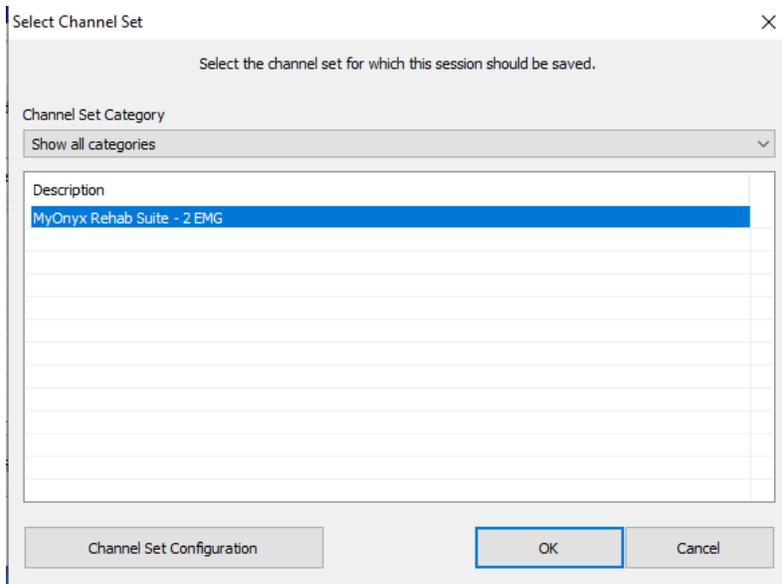
The Select Sessions to Download screen displays the devices that are connected to the PC, turned on, and set to the Home screen. When you select a device in the **Devices** list, the sessions saved to the device are displayed by date and time, duration, and channels.

11. Select the session or sessions you want to download and click **Download Session**. A confirmation message appears.



12. Click **Yes** to continue.

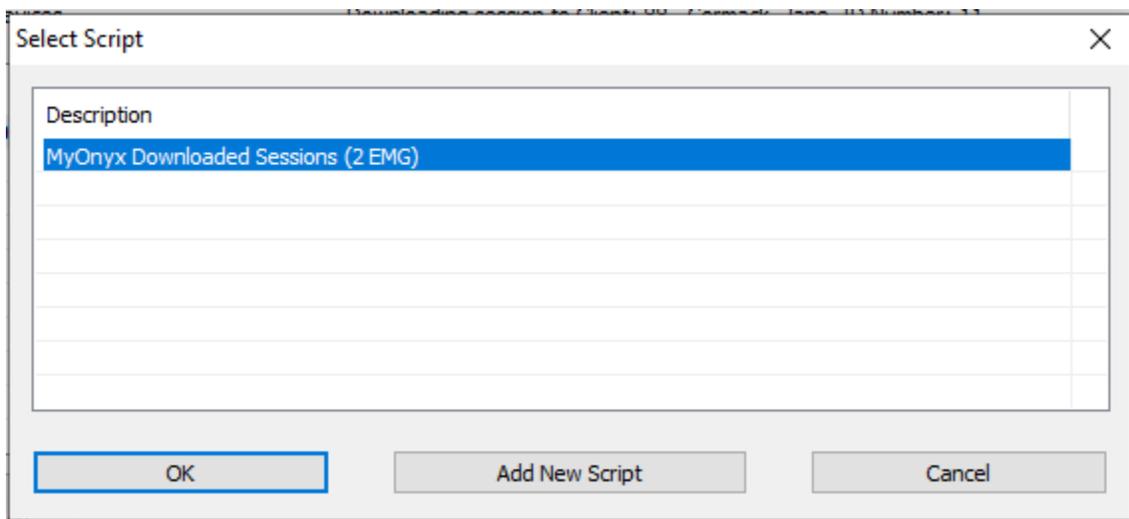
The Select Channel Set screen appears.



You can view details on the Channel Set, see [Viewing the Channel Set Configuration](#).

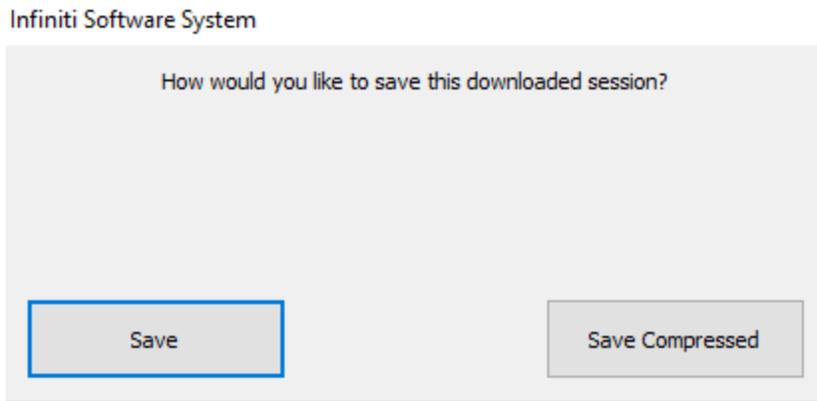
13. Select a Channel Set and click **OK**.

If the session you are downloading is a Script, or standard biofeedback session, the Select Script screen appears.



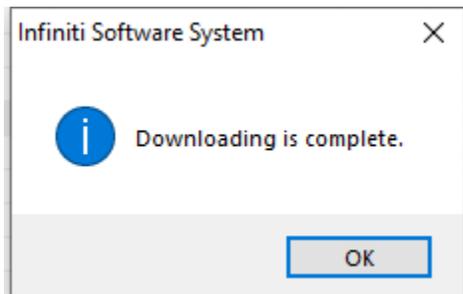
14. Select a script in the list and click **OK**.

You are prompted to save the session.



15. Click **Save** or if the session is long, you can save a compressed version.

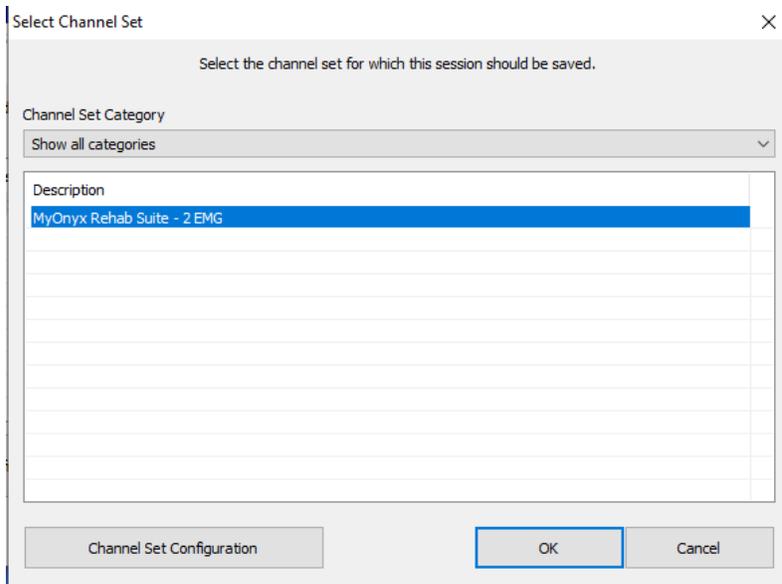
The Downloading Complete message appears.



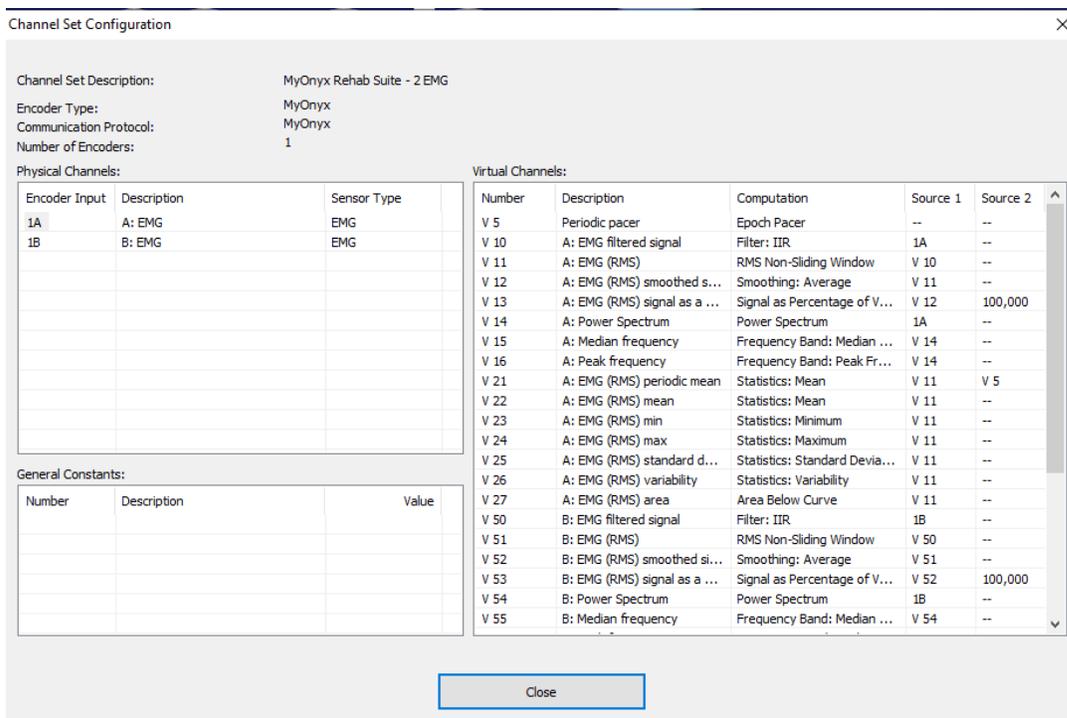
16. Click **OK** on this message.

## Viewing the Channel Set Configuration

When the Select Channel Set screen appears, you can view details on the channel set.



1. Click **Channel Set Configuration** to verify the configuration.



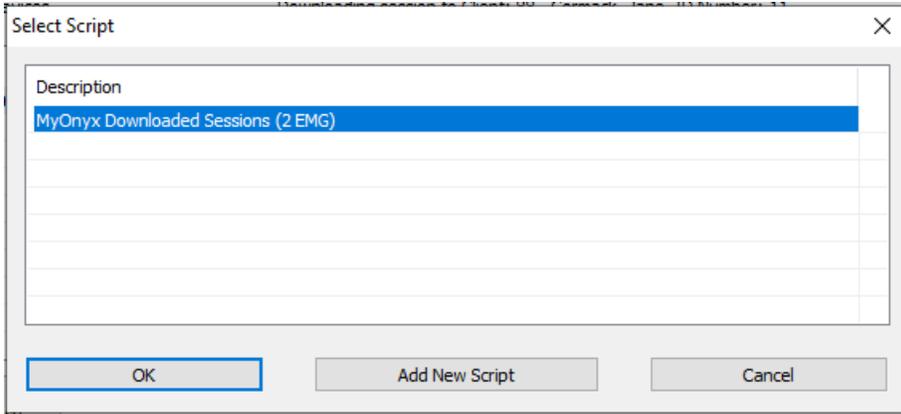
For details on this screen, click **F1** to view the BioGraph Help.

2. Click **Close** on this screen.
3. Click **OK** on the Select Channel Set screen.

If the session you are downloading is a Script, or standard biofeedback session, the Select Script screen appears.

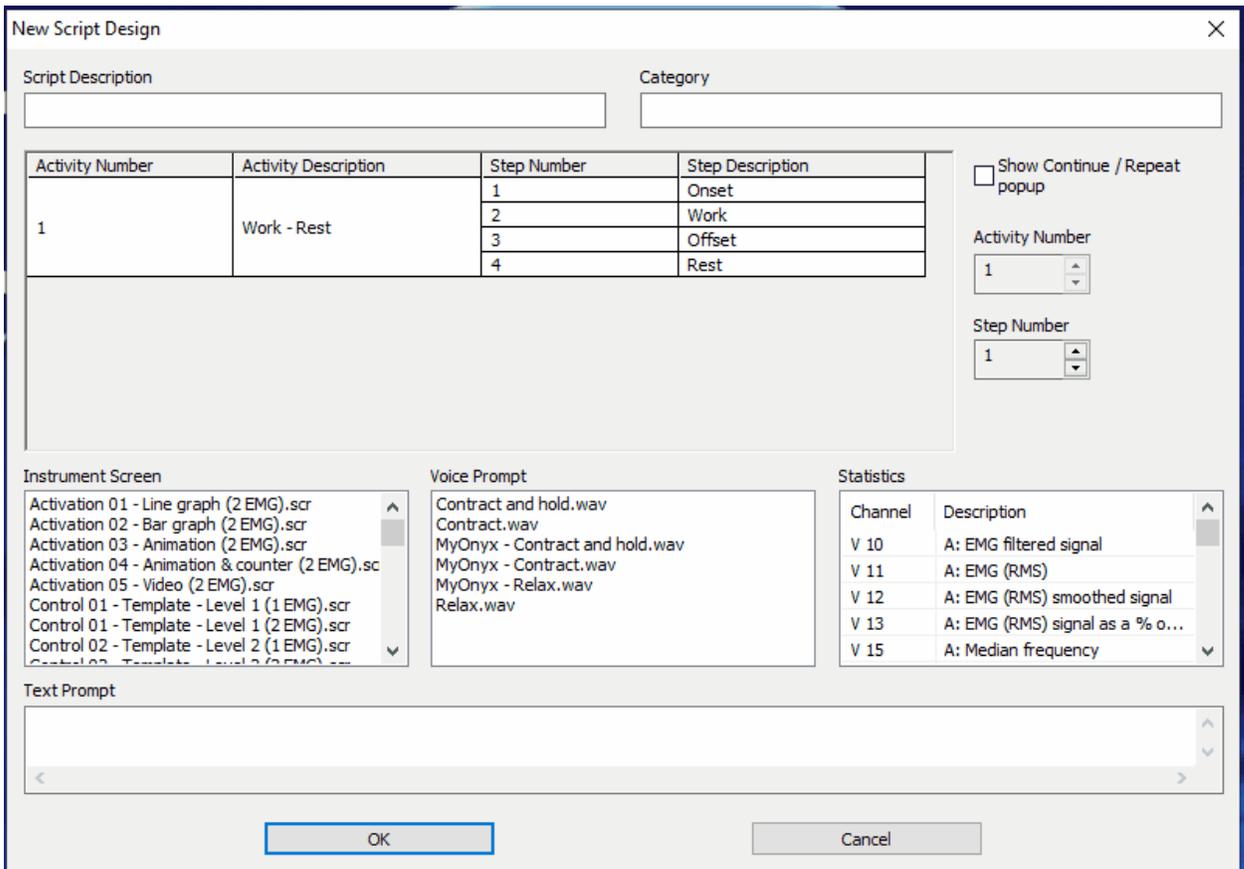
# Creating a New Script

When the Select Script screen appears, you can create a new script for your downloaded session.



1. Click **Add New Script**.

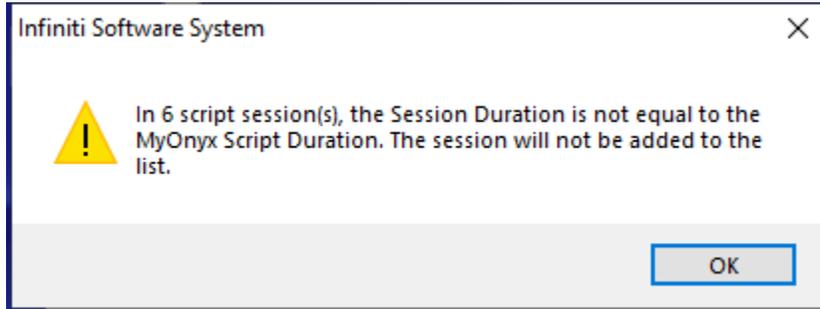
The New Script Design screen appears.



2. Click **F1** for details on this screen.

## Troubleshooting

The following warning message appears for incomplete standard biofeedback sessions. These are called Script sessions in BioGraph. It does not appear for alternating biofeedback sessions. These are called Open session in BioGraph.



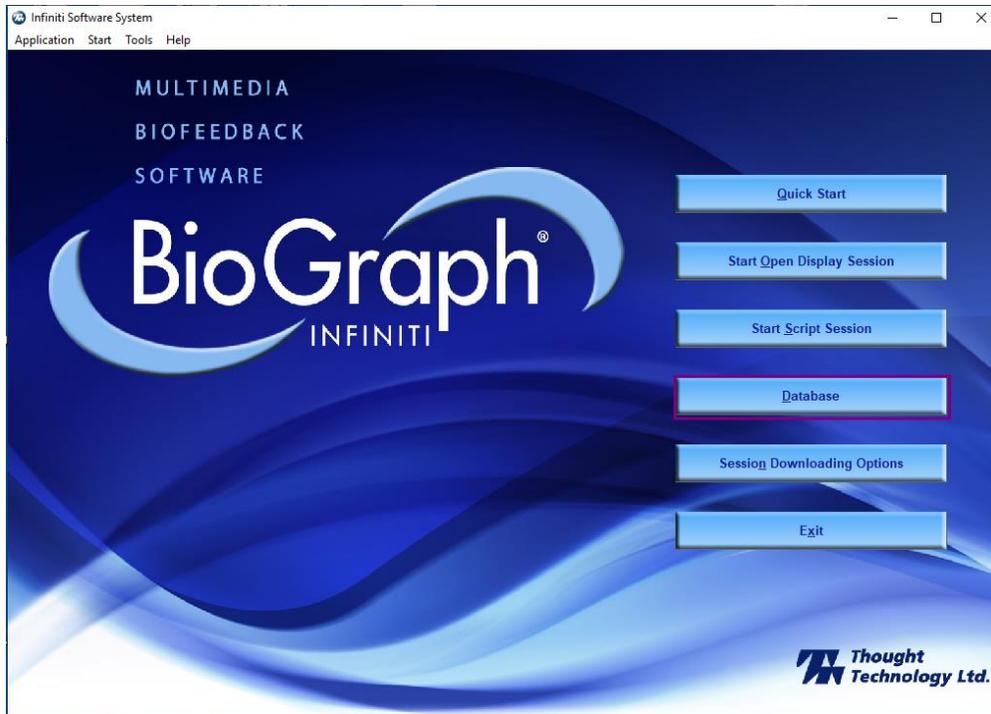
If recording is enabled on the MyOnyx device, all sessions recorded on the MyOnyx app are saved to the device. If a standard biofeedback session was not completed, the session is not added to the Select a Session to Download screen.

## Reviewing Downloaded Sessions in MyOnyx

After downloading sessions from the MyOnyx to BioGraph, you can review them as you would a session recorded in BioGraph.

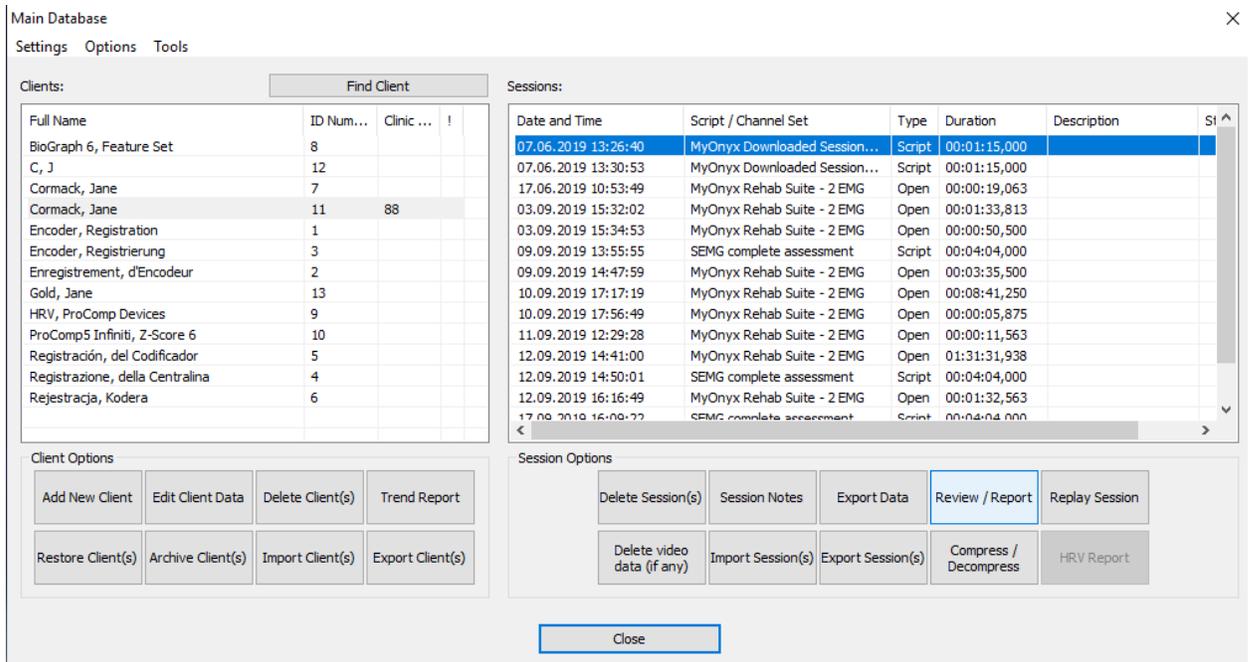
To review a session

1. Launch BioGraph.



2. Click **Database**.

The Main Database screen appears.



3. Click **F1** for details on this screen and how to review or replay sessions.