

MYONYX



FIRMWARE UPDATE INSTRUCTIONS



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Product Name MyOnyx System

Device Name MyOnyx



SA9020

Manual Number/ Revision Myonyx Firmware Update Instructions
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Introduction

This quick manual is to help the user to upgrade their SA9000 device to SA9020 with version 1.26.0.0 of firmware. This will enable TENS (Transcutaneous electrical nerve stimulation) and MET (Micro-current Electrostimulation Therapy) functions of your MyOnyx device.

Preparation

Before you start updating, please make sure these items are ready:

- MyOnyx device and its power adapter (charger).
- The USB key with firmware updater (installer) in it.
- A Windows 10 or 11 PC with Bluetooth function.
- Your Android device is powered on and connected to the internet

How to Update your Myonyx Device

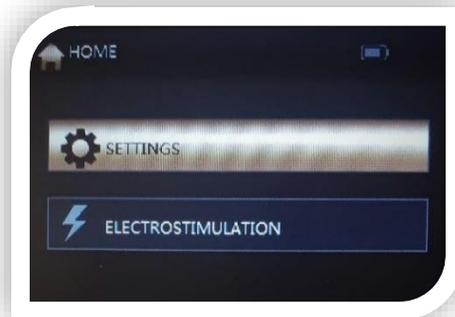
Bluetooth pairing your device to your pc

To update the firmware, MyOnyx device should be paired to a Windows PC first. Windows 10 or 11 PC is recommended. (There is slight difference between Windows 10 and 11 for Bluetooth pairing)

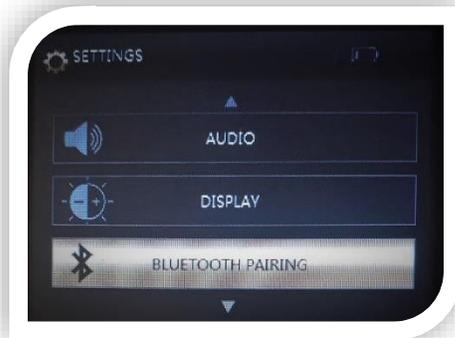
Please skip this section and go to [Running the Update Application](#) on page 9 if your MyOnyx is already connected with PC over Bluetooth.

Step 1: Put your device in pairing mode

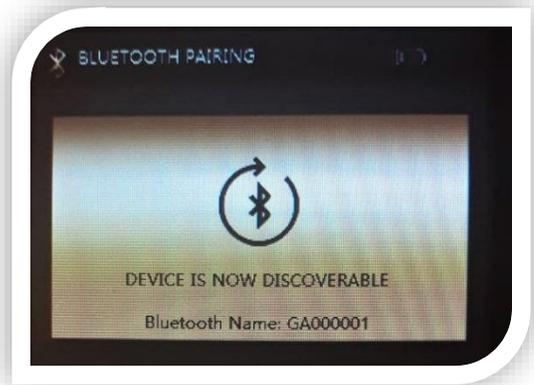
- In the home screen, select **SETTING** and press **OK**



- Step 2: Select **BLUETOOTH PARING** and Press **OK**

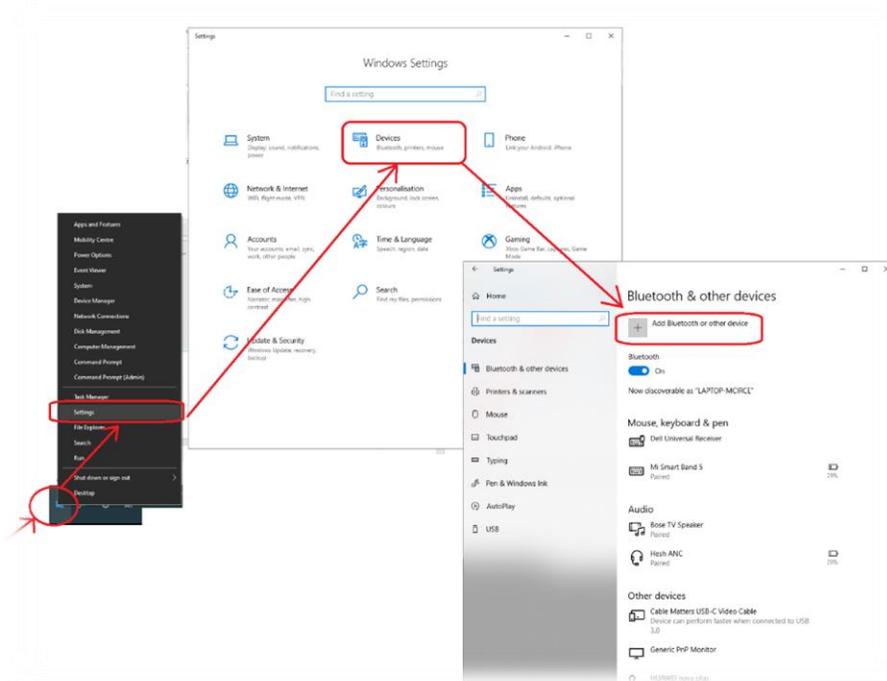


- The Bluetooth screen and **Bluetooth Name** will be shown. Now the device is waiting for the PC to connect.

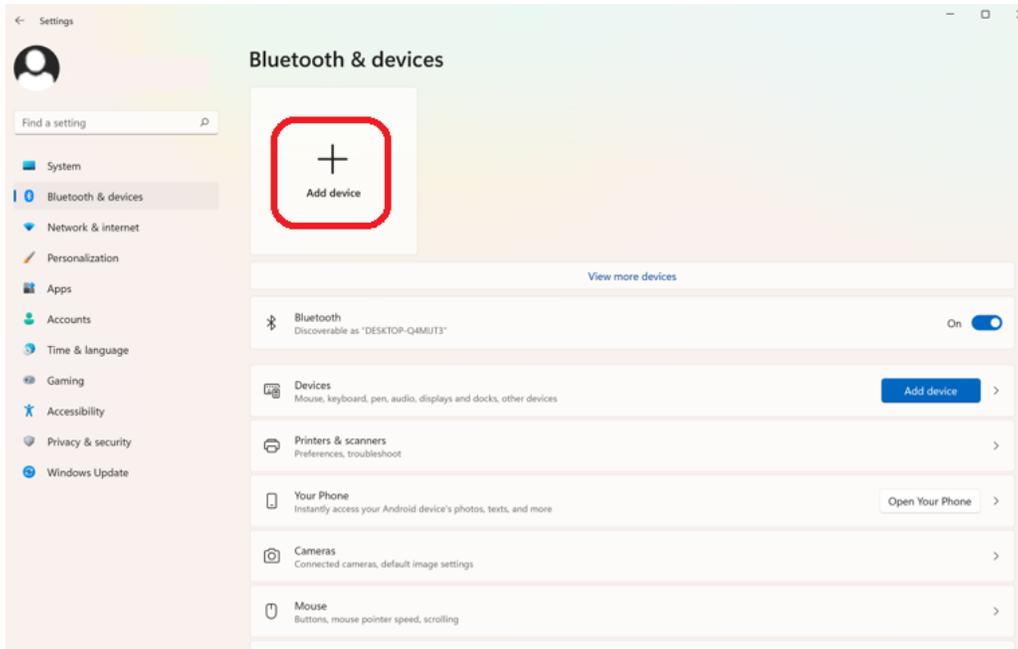


Step 2: Pairing your device with your Windows PC

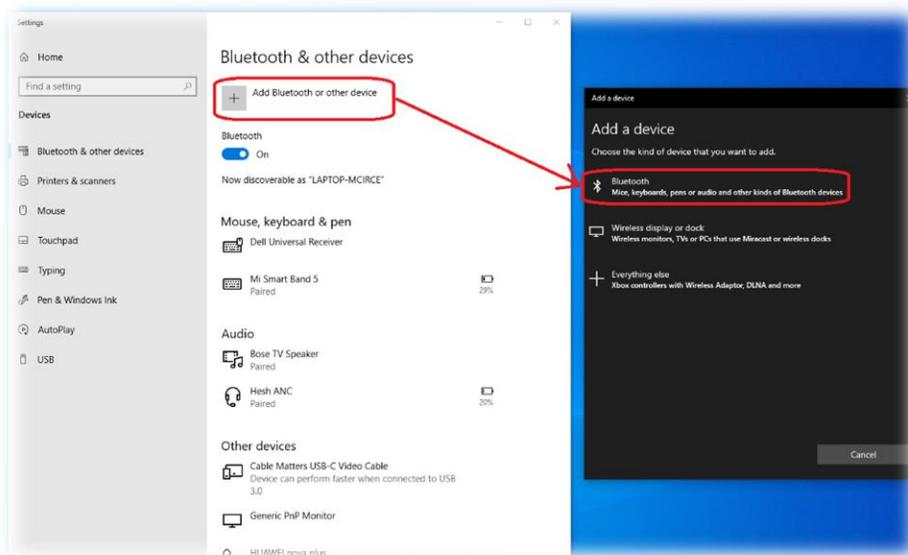
- In the Windows 10 PC, 'Right click' on the **Start** button (lower left side) and click on the **Settings** item, then click on the **Devices** icon in the settings window, the **Bluetooth & other Devices** window will be shown, select **Add Bluetooth or other Devices**.



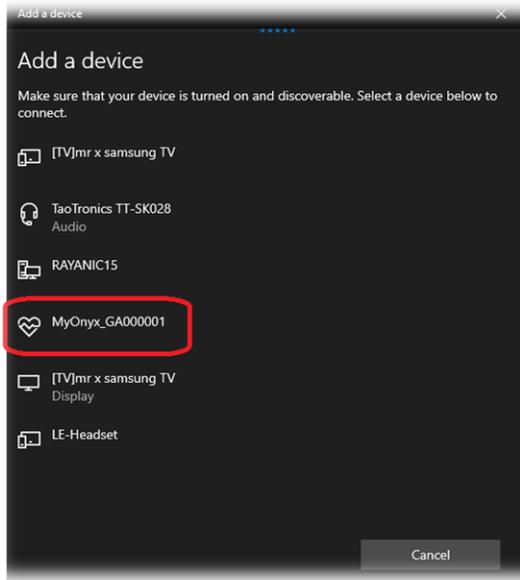
- In the Windows 11 PC, 'Right Click' on the **Start** button, choosing **Settings**, then click on **Bluetooth & Devices** in the settings window. Select **Add Device** from the top of your screen.



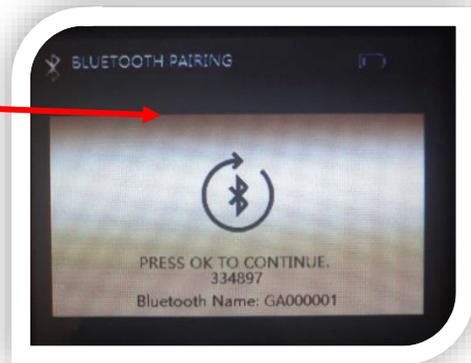
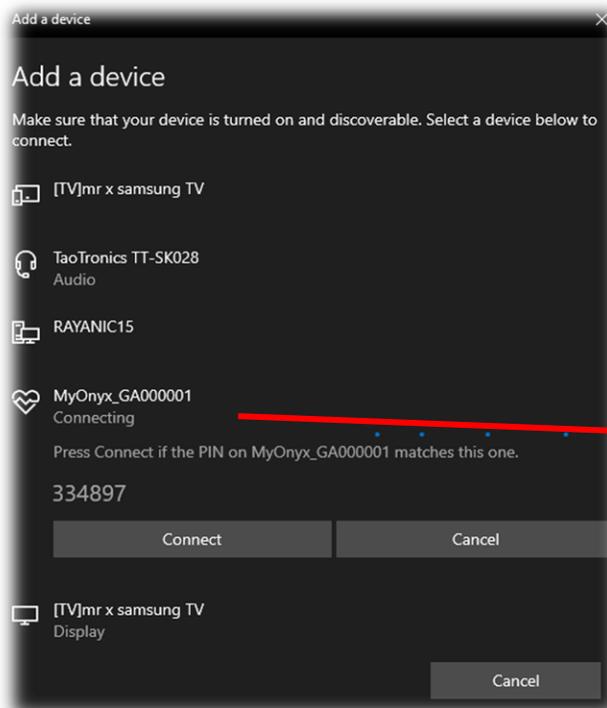
- In the **Add a device** window click on **Bluetooth**.



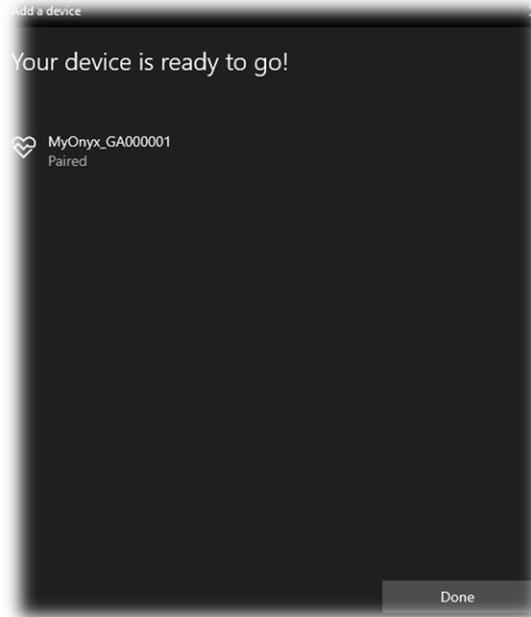
- After several seconds of searching, the MyOnyx device with its Serials Number will be shown.



- Select your MyOnyx device in the list, PINs are displayed on both the MyOnyx device screen and the PC. Make sure the two PINs are the same. Click on **Connect** on the PC and Press **OK** on the device.



- Your device is now paired.



- You can also see the device in **Other devices** list on Windows 10.

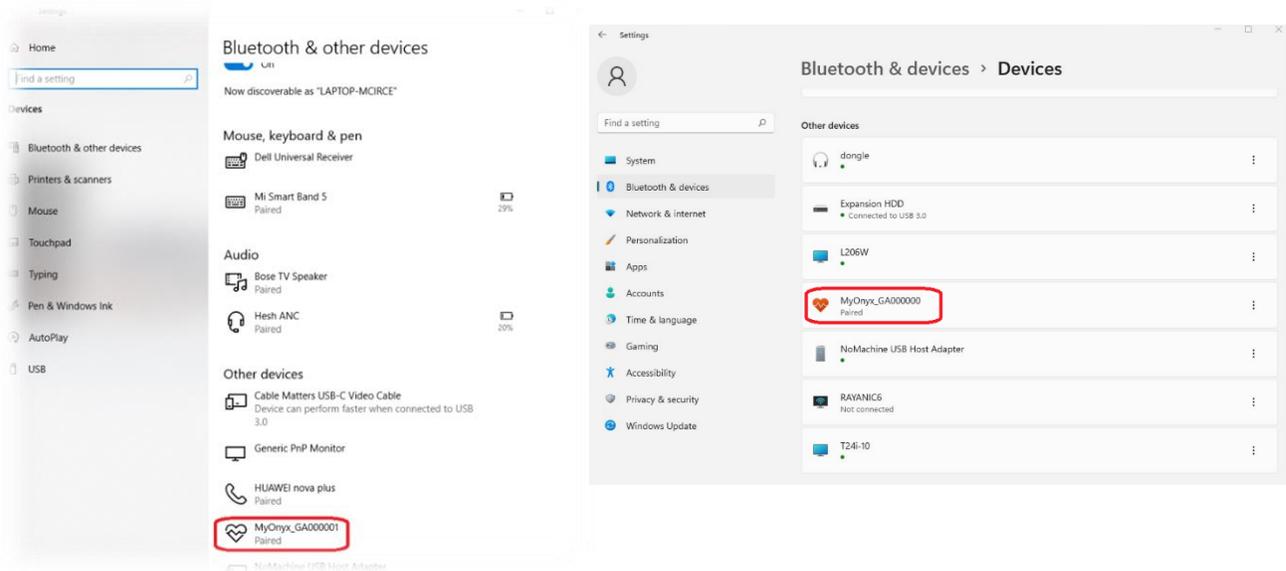


Figure 1: Your device will be on the "Other Devices" list (Windows 10 on the left, and Windows 11 on the right)

Running the Update application

Please check battery level of your MyOnyx device:

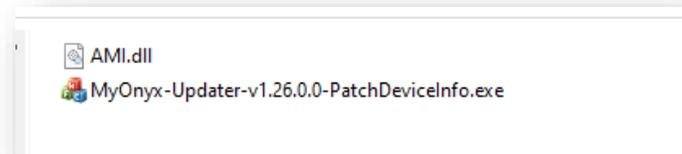
- The battery level should be higher than 50%
- We highly recommend you connect power adapter (charger) to MyOnyx and keep it connected until the end of the update process.
- Please do not turn off the device during update. If for some reason the device is turned off it is still safe to turn it on and retry the update process.

Now your MyOnyx device is ready for update.

Step 1: Open the Myonyx Update Installer on your PC

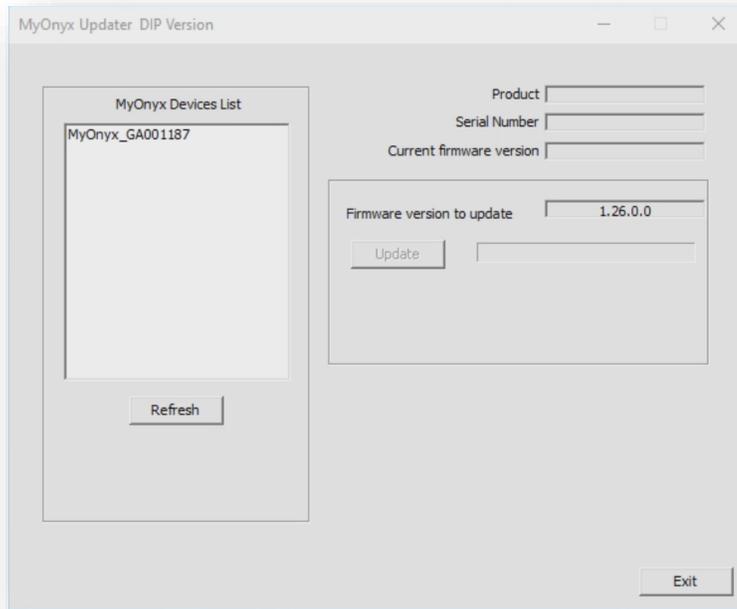
- Plug the USB key to your PC, go to the updater folder, double click on the executable file:
Myonyx-Updater-v1.26.0.0-PatchDeviceInfo.exe

(Please keep AMI.dll in the same folder of the .exe file)

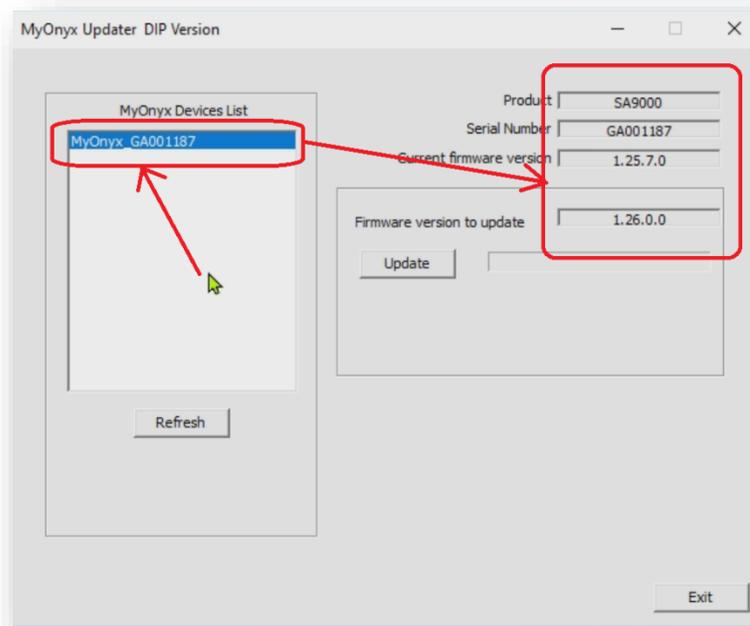


Step 2: Choose your Myonyx Device

- The updater application will list all paired Myonyx devices, select your device which can be identified by the serial number

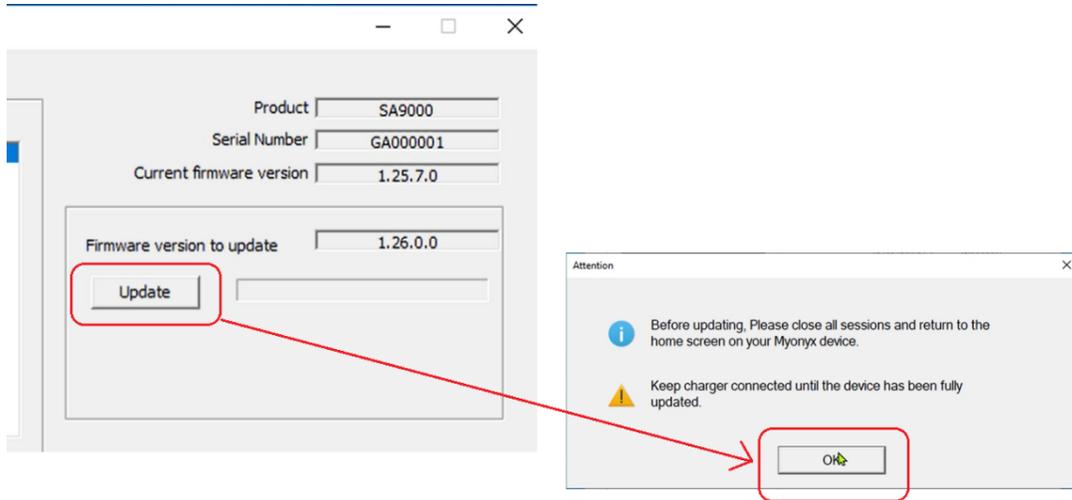


- After several seconds, the application will show the device and current firmware information.

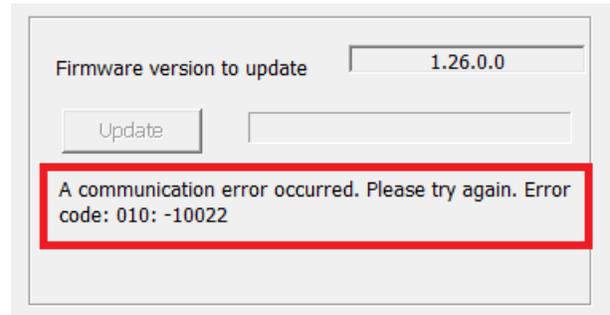


Step 3: Update your firmware

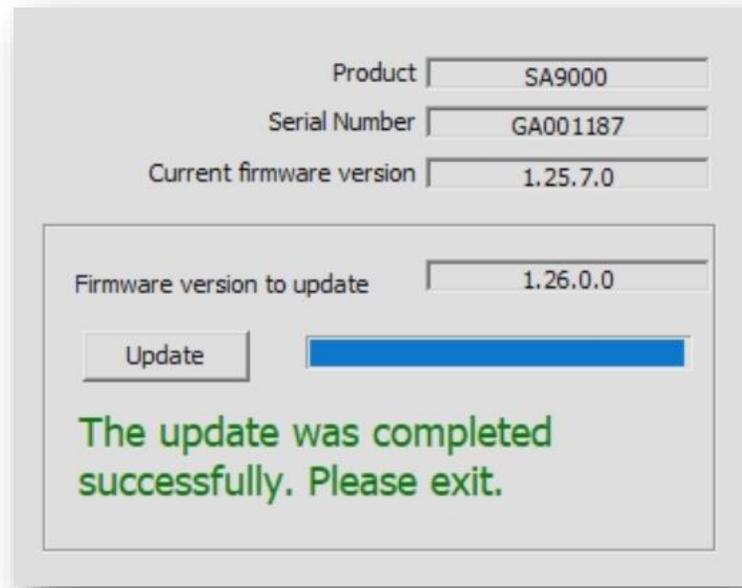
- Click on **Update**. You will get a popup with information about going back to the home screen on the MyOnyx device and keeping the power adapter (charger) connected. Click **OK** on the message and the update will start. Your device will restart multiple times during the upgrade.



 *If there is any error happen during updating, the updating process will be stopped and an error message will be shown. In this case, please close the updaters application, then reopen it and try again.*

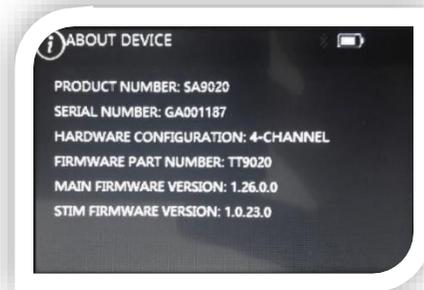


- You will see a message confirmation in green that the device successfully updated.



Step 4: Check your Myonyx device About Device Screen

- Check the device information in the **ABOUT DEVICE** of MyOnyx. You should see the product number is SA9020 and the firmware version is 1.26.0.0.



Step 5: Apply the new device label

- Be sure to apply the new label that you received in your upgrade package to the back of your Myonyx device. You can place it over the old label.



Step 6: Take a picture & send it to us

- Please take a photo of the new label on the device,, and of your about screen, and email both pictures to us at support@thoughttechnology.com.

How to Update your Myonyx Mobile App

Automatic Update

Updating your Myonyx Mobile App will install new functionalities such as MET and TENS electrostimulation programs. Updates are usually done automatically, and requires no steps for you to take.

Manual Update

If you have turned off automatic updates, you will have to manually update the app.

Step 1: Open the Google Play Store  on your device

Step 2: Click on your icon in the top righthand corner

Step 3: Choose **Manage Apps and device**

Step 4: Select the **Manage** tab along the top

Step 5: Select **Updates Available**

Step 6: Scroll until you see Myonyx Mobile App, and press on the icon

Step 7: Press the Update button

Play Store Link

For a manual update, you can also:

- Follow this [link](#)
- Scan the QR code
- Search for Myonyx in the Google Play Store



Verifying the App Update

To be sure you are on the correct version of the Myonyx Mobile App, please visit the about screen:

Step 1: Open the Myonyx Mobile App



Step 2: Click the Settings Icon  in the top right corner of your screen

Step 3: Click About

If you are on the correct version, the REF number will be SA9030



Help & Support

If you are having any trouble updating either the app or your device, our support team is happy to help you. Please contact them at support@thoughttechnology.com, or at 1-800-361-3651 extension 167.

Appendix A: TENS and MET Program Configuration & Specifications

The following section is an excerpt taken from the most recent update to the Myonyx Hardware User Manual, specifically addressing TENS and MET:

Transcutaneous Electrical Nerve Stimulation (TENS) Programs

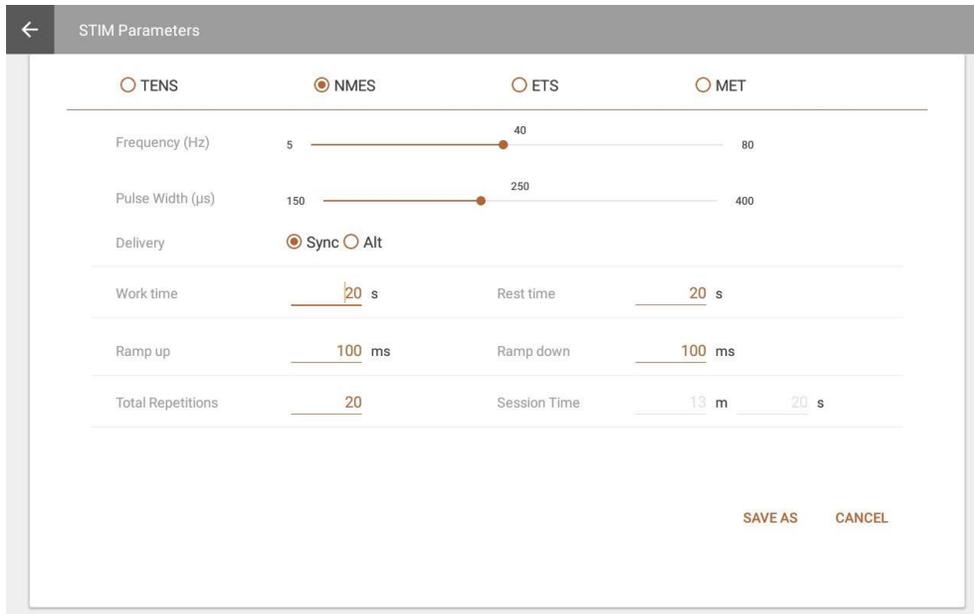
TENS is designed to stimulate the nervous system with little or no motor contraction.

There are two TENS programs: Chronic Pain and Acute Pain. The delivery type for both is continuous. This means that ES is delivered throughout the session with no rest phase. For the chronic pain program, ES is delivered in a burst pattern at two bursts per second. The pattern for the acute pain program is called Frequency Modulated. The pulse rate and width increase and decrease following a predefined pattern. The parameters for these programs are listed in the following table: **Program**

	Pattern	Total Time (sec)	Cycles	STIM time (sec)	Rest time (sec)	Ramp-up (sec)	Ramp-down (sec)	Pulse Rate (Hz)	Pulse Width (µs)
Acute Pain	Modulated	1800	1	1800	0	0	0	100	150
Chronic Pain	Burst	1200	1	1200	0	0	0	100	200

Modifying a TENS Program

You can make changes to the following fields, by overwriting the values in the text fields or moving the sliders left or right:



Parameter	Value range	Default value
Frequency (Pulse Rate)	[2 – 150 Hz]	80 Hz
Pulse Width	[50 – 250 µs]	150 µs
Delivery	Continuous (Fixed)	Continuous
Pattern	Burst Continuous Frequency Modulation Low Freq. + Amp. Modulation High Freq. + Amp. Modulation	Burst
Ramp Up	[0 – 10000 ms]	0 ms
Ramp Down	[0 – 10000 ms]	0 ms
Session Time	[0, 7200s]	300s

Microcurrent Electrostimulation Therapy (MET) Program

MET, like TENS, is used for treating some forms of pain. The main difference is that it is applied at much lower intensities. It is measured in microamps, rather than milliamps.

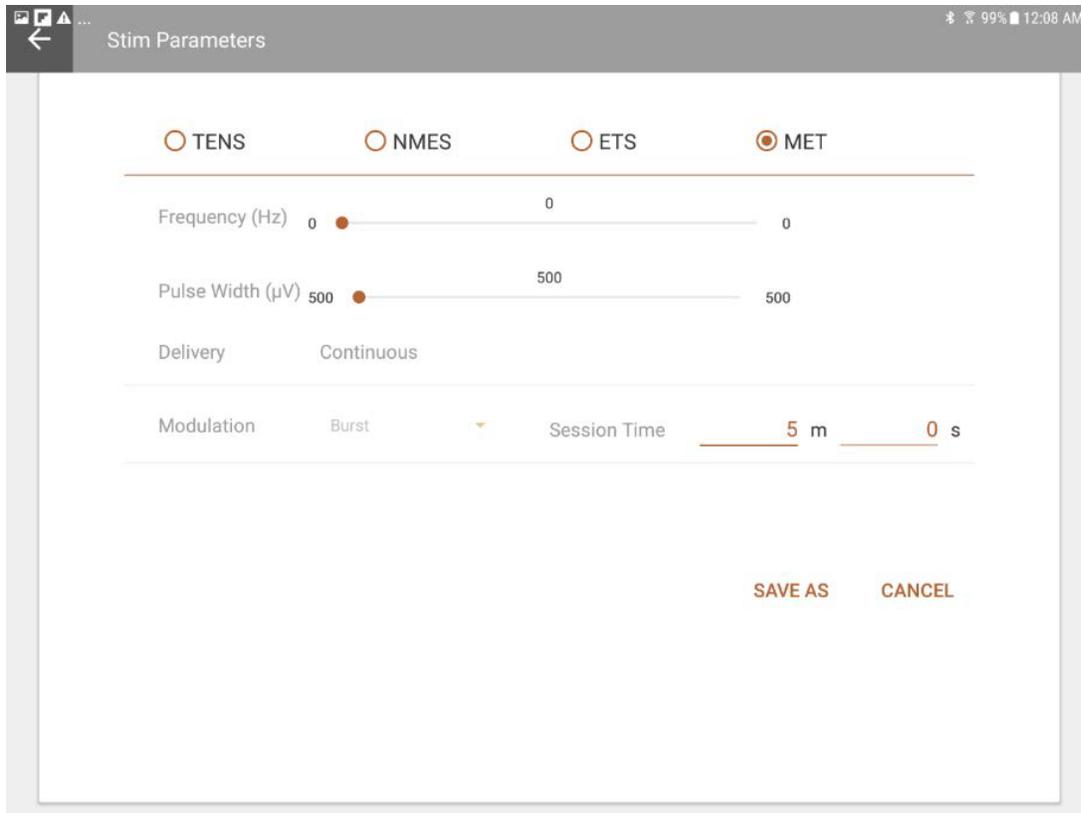
There is one MET program: Microcurrent. The delivery type is continuous. It is delivered at the same amplitude throughout the program. The pattern is also continuous. There is no variation in ES duration during the work phase.

The parameters for this program are listed in the following table:

Program	Total Time (sec)	Reps	STIM time (sec)	Rest time (sec)	Ramp-up (sec)	Ramp-down (sec)	Pulse Rate (Hz)	Pulse Width (µs)
Microcurrent	900	1	900	0	0	0	0.5	500,000

Modifying the MET Program

You can make changes to the following fields, by overwriting the values in the text fields or moving the sliders left or right:



Parameter	Value range	Default value
Session time	1-7200 s	300 s
Frequency (Pulse Rate)	0.5 Hz (Fixed)	0.5 Hz
Pulse Width	500 ms (Fixed)	500 ms
Delivery	Continuous (Fixed)	Continuous
Pattern	Continuous (Fixed)	Continuous
Ramp Up	0 (Fixed)	0 ms
Ramp Down	0 (Fixed)	0 ms
Session time	1-7200 s	300 s