BLADECOM

USER GUIDE

GILL SENSORS

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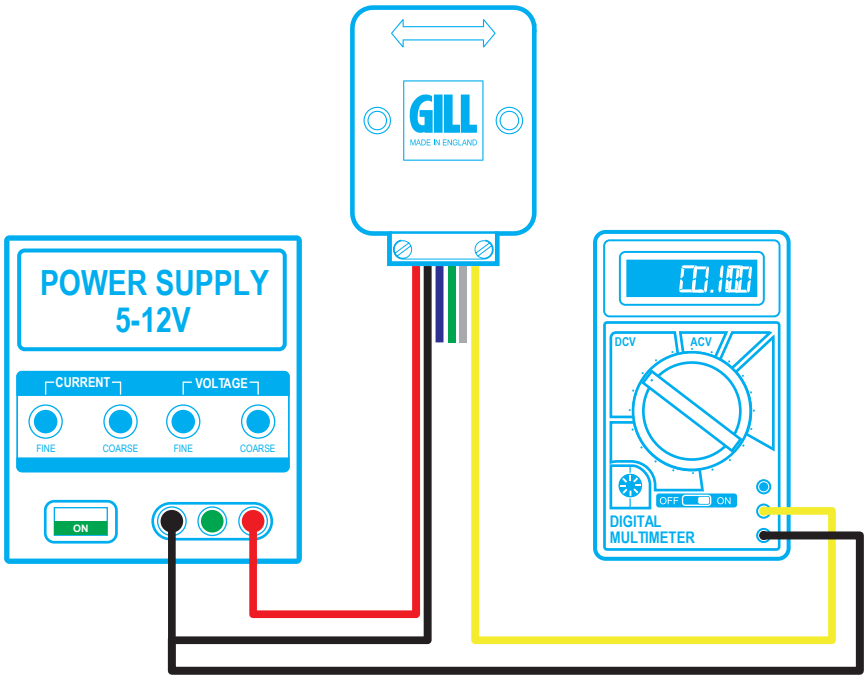
Thank you for purchasing a Blade Non-Contact Position Sensor from Gill Sensors. BladeCom has been designed to display data from the Gill Blade20, Blade25 and Blade60 position sensors. Please follow the steps outlined in this user guide for basic use of the BladeCom application. For more advanced setup instructions please see the Blade Sensor technical manual or contact Gill Sensors.

Is your Sensor connected?

Please refer to the Quick Start Guide for easy to follow instructions.



Note:

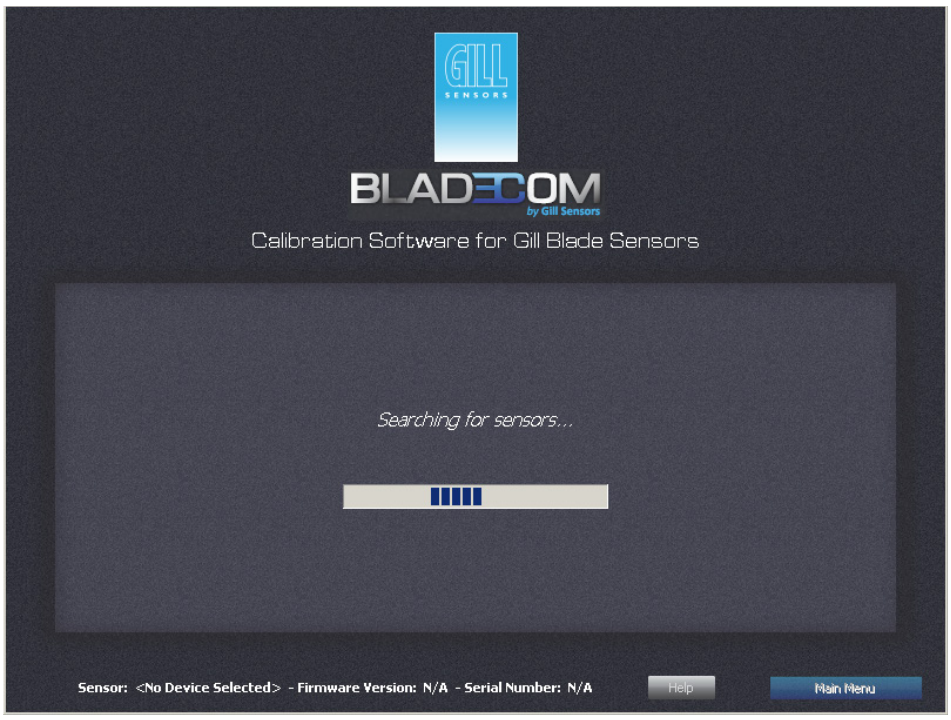
This version of BladeCom is still in development and intended only as a demonstration of the full version. Please see appendix A for known issues and fixes.

Installing the Software

The Software & Documentation CD has BladeCom loaded, ready to install.

Install BladeCom on your computer by creating a folder on your PC and copying all the files from the CD-ROM

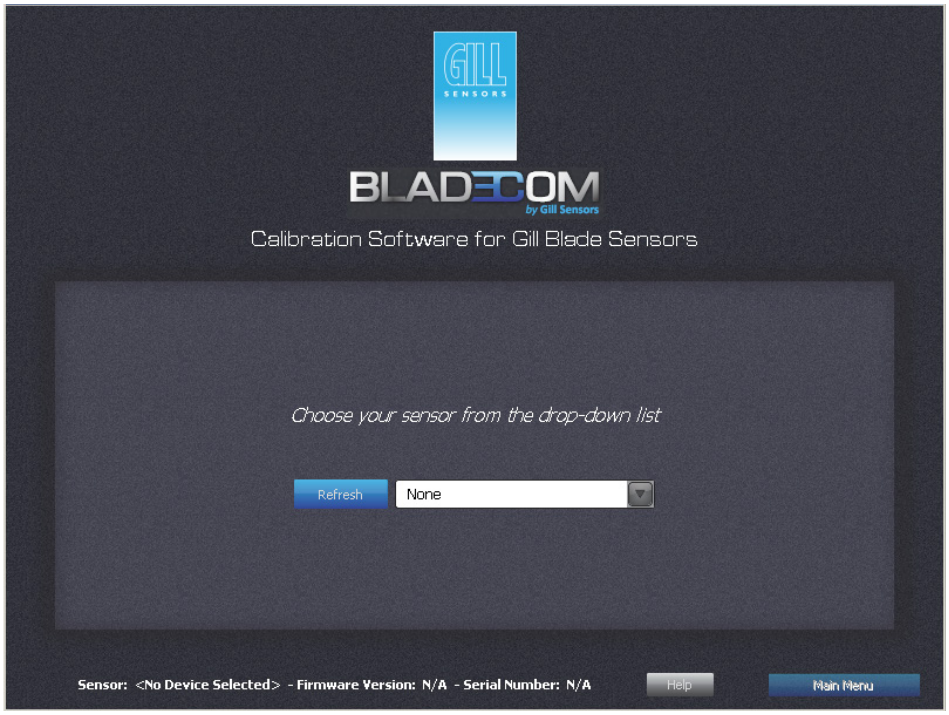
Start BladeCom by double-clicking the application.



BladeCom will automatically search all USB ports for a sensor.

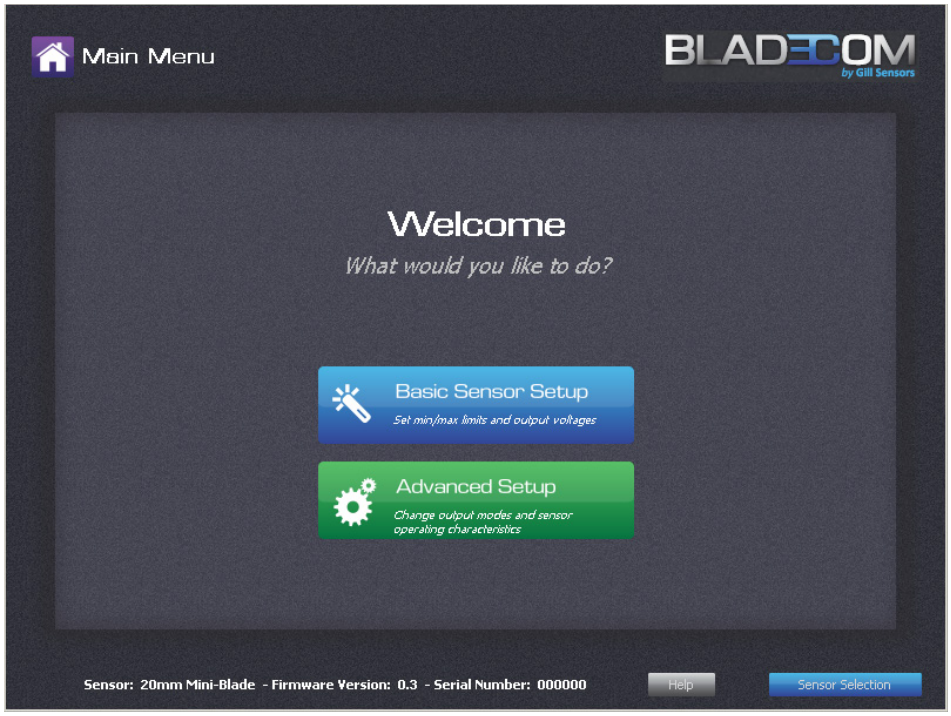
When detected, the sensor will be displayed in the drop-down menu with the connection port displayed. When ready to proceed click on Main Menu.

If the drop-down menu shows 'None' there may be an issue with the sensor connections.
Check that you sensor is connected correctly as per the Quick Start guide. When you have done this click 'Refresh' and BladeCom will search again.



If the sensor details are still not displayed please contact Gill Sensors.

Click on the Blue 'Basic Sensor Setup' button to begin.



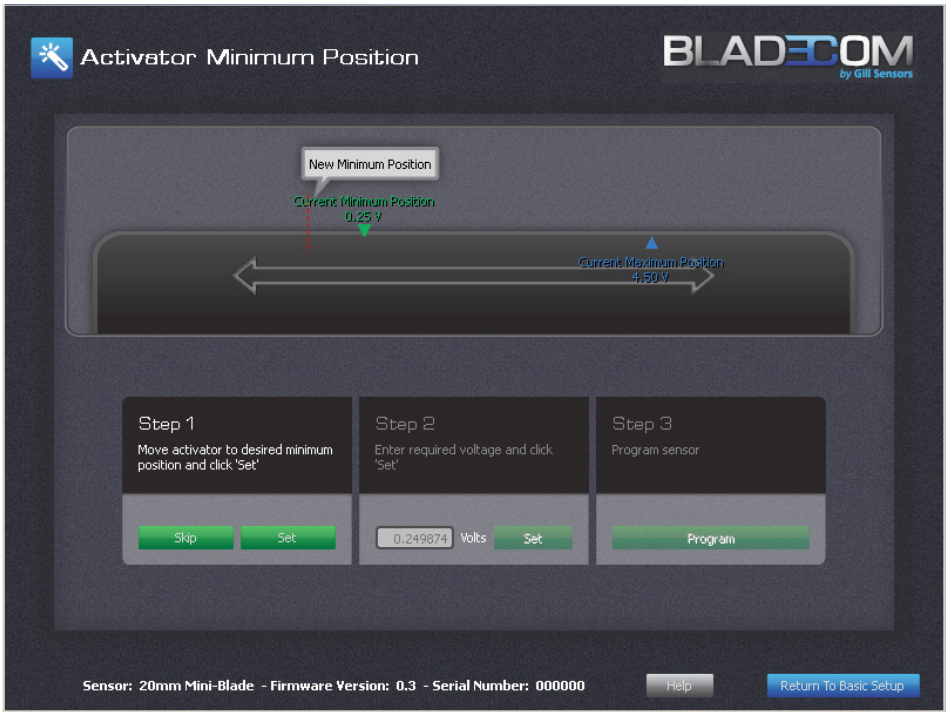
The display will show the activator current position along with the default voltage.

To configure the sensor, first click on ' Set Activator Min Position' and follow the simple 3 step process.

If the display shows no activator present. Please check the activator position and start again or go to page 12 for advanced sensor setup.

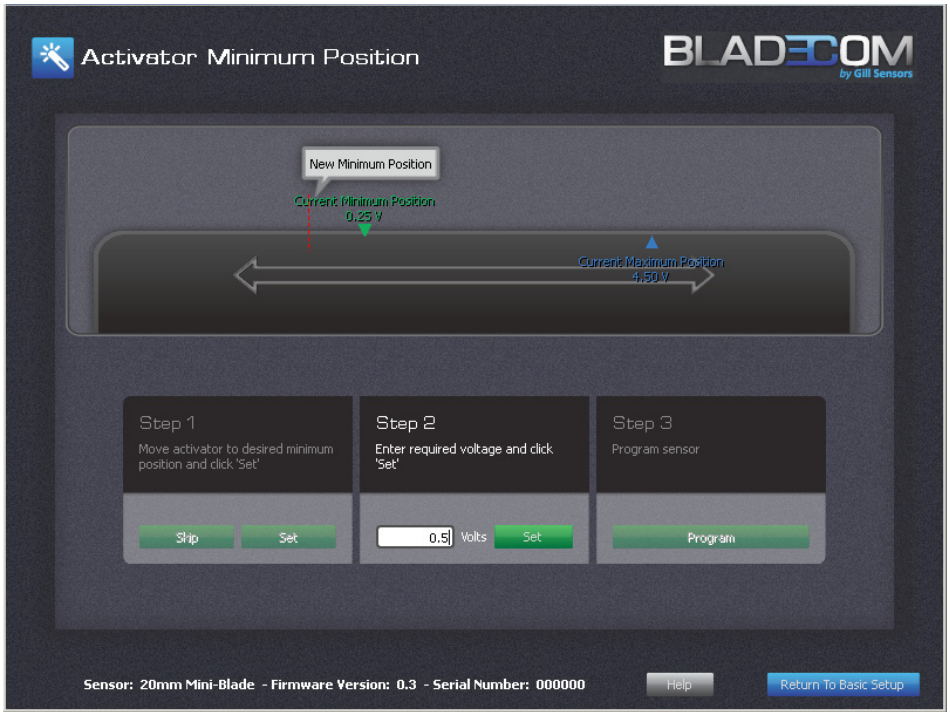
Step 1.

Move the activator to the desired minimum position and click 'Set'



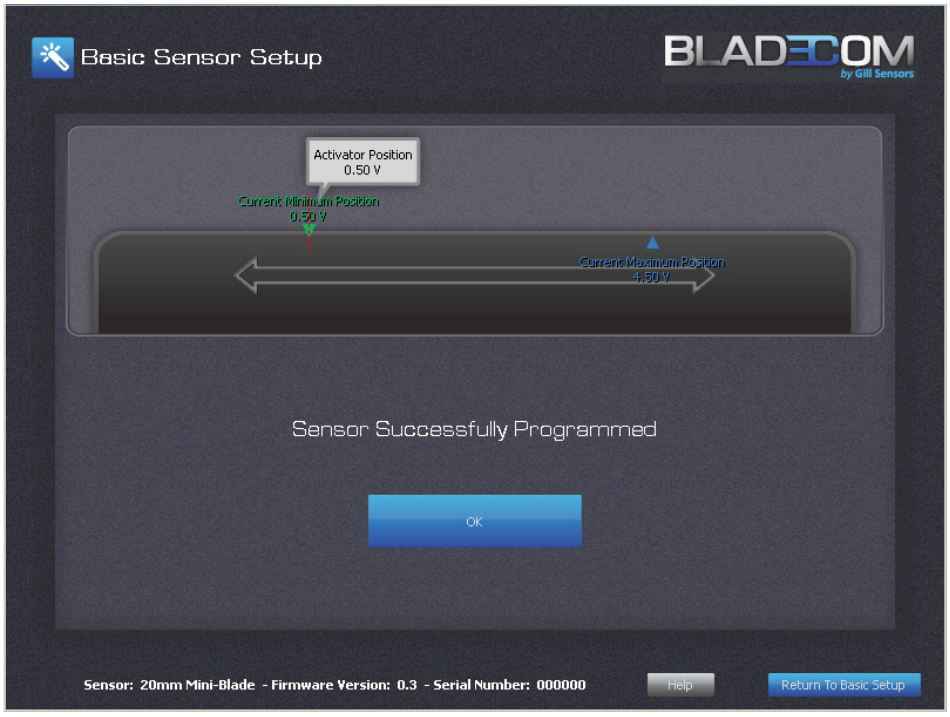
Step 2.

Enter the required voltage and click 'Set' or to accept the default voltage click 'Set' to skip to Step 3.



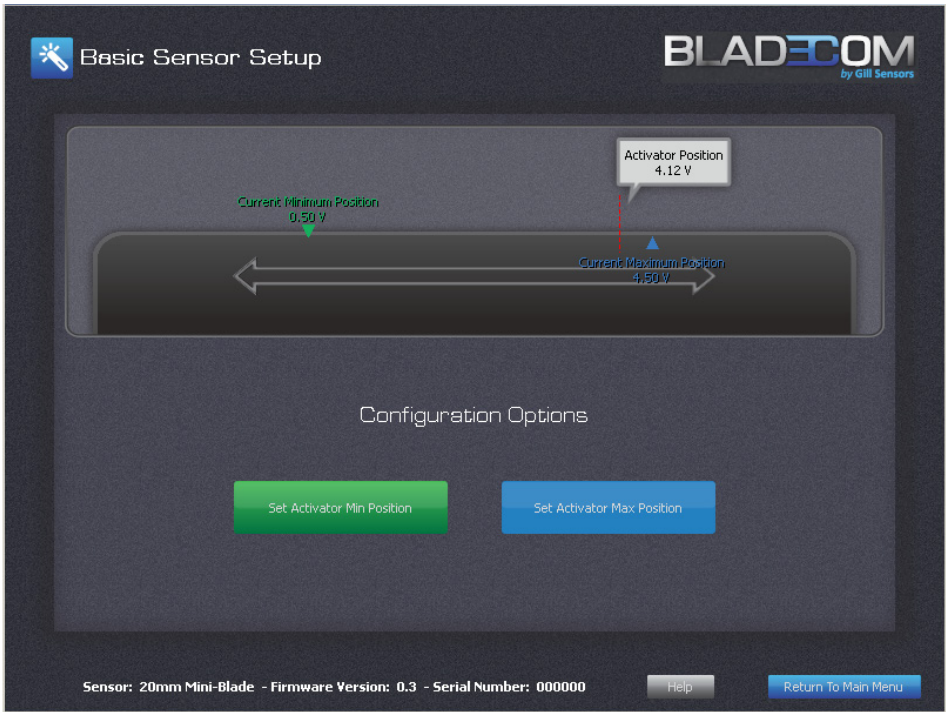
Step 3.
Click 'Program' to program the sensor.

The sensor has been successfully programmed.
The display will now show the new minimum position.



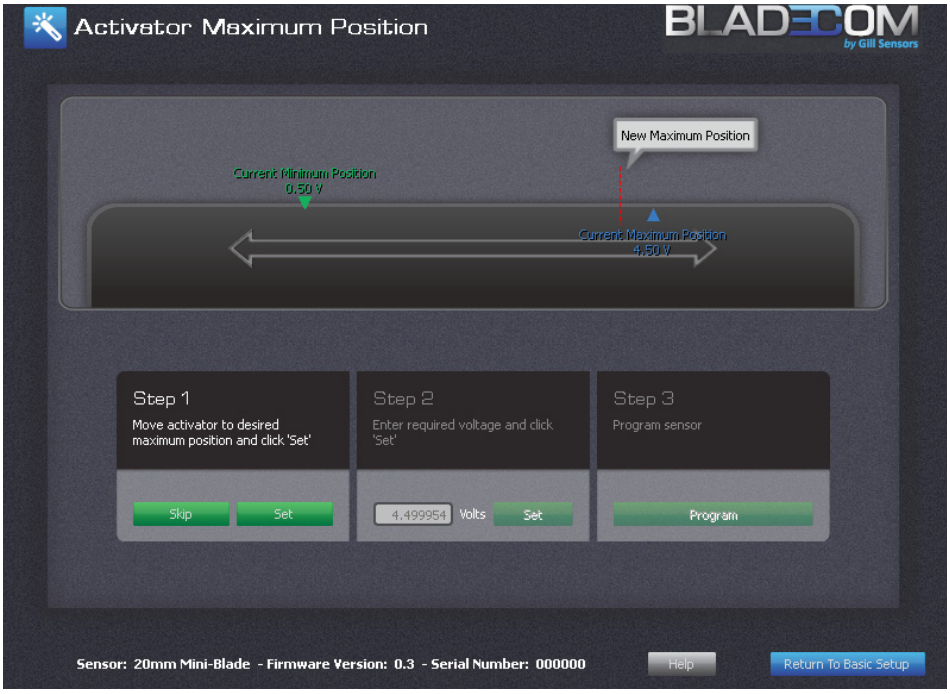
Click 'Ok' to continue.

Click on 'Set Activator Max Position'



Step 1.

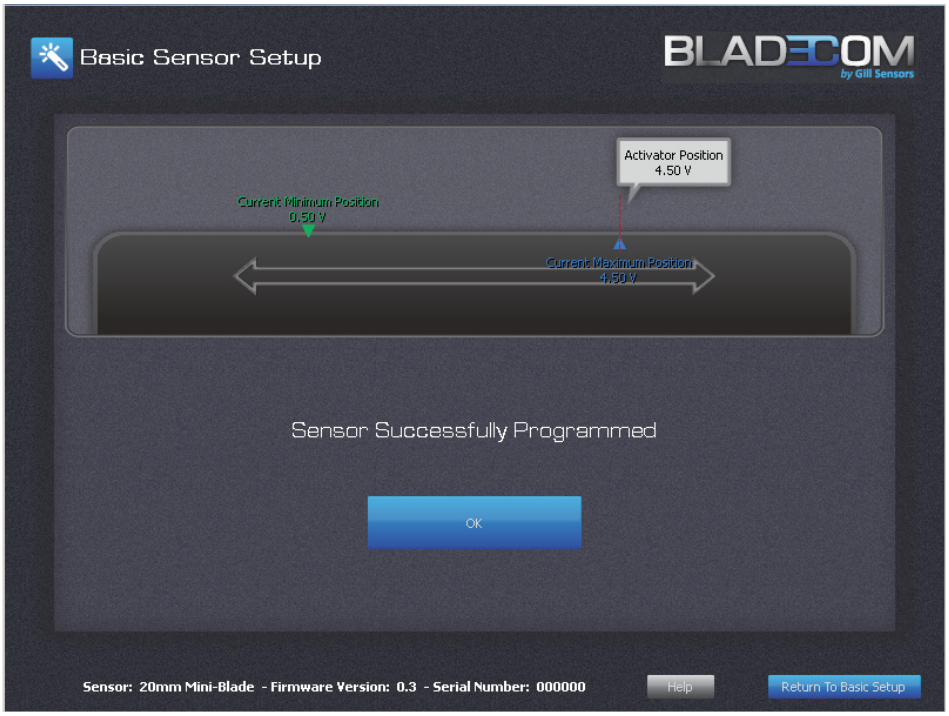
Move the activator to the desired maximum position and click 'Set'



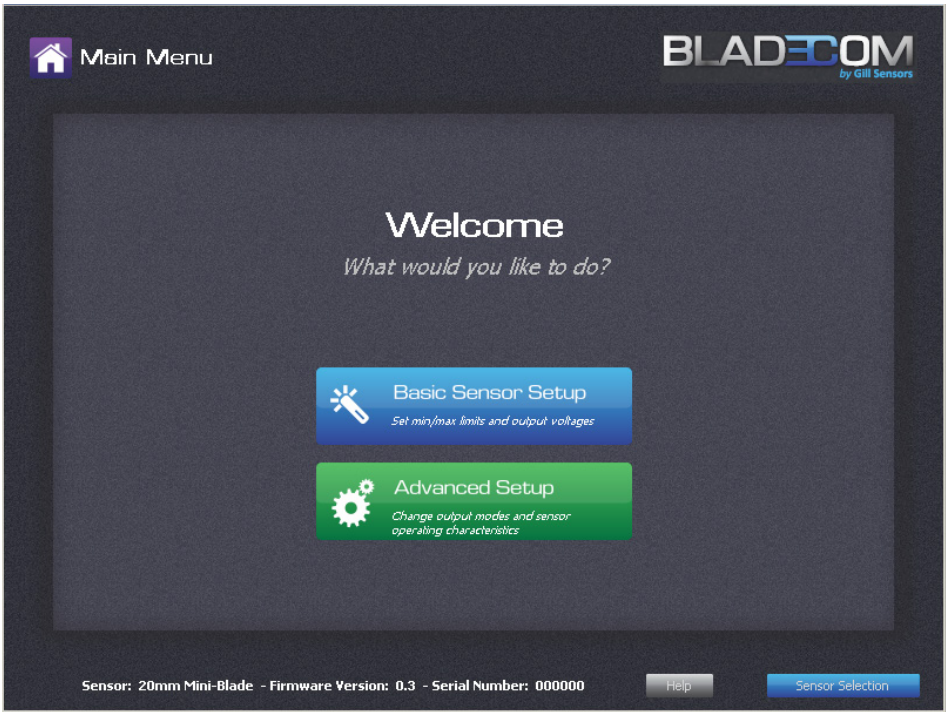
Step 2.
Enter the required voltage and click 'Set' or just click 'Set' to accept default voltage.

Step 3.
Click 'Program' to program the sensor.

The sensor has been successfully programmed.

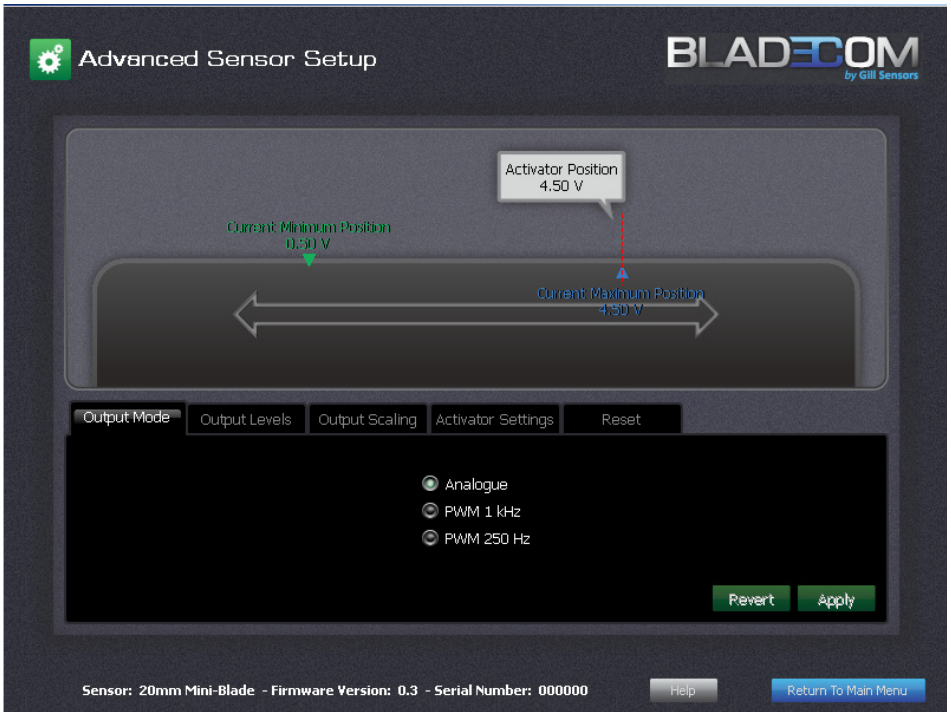


If you wish to set specific sensor calbration parameters select 'Advanced Setup'



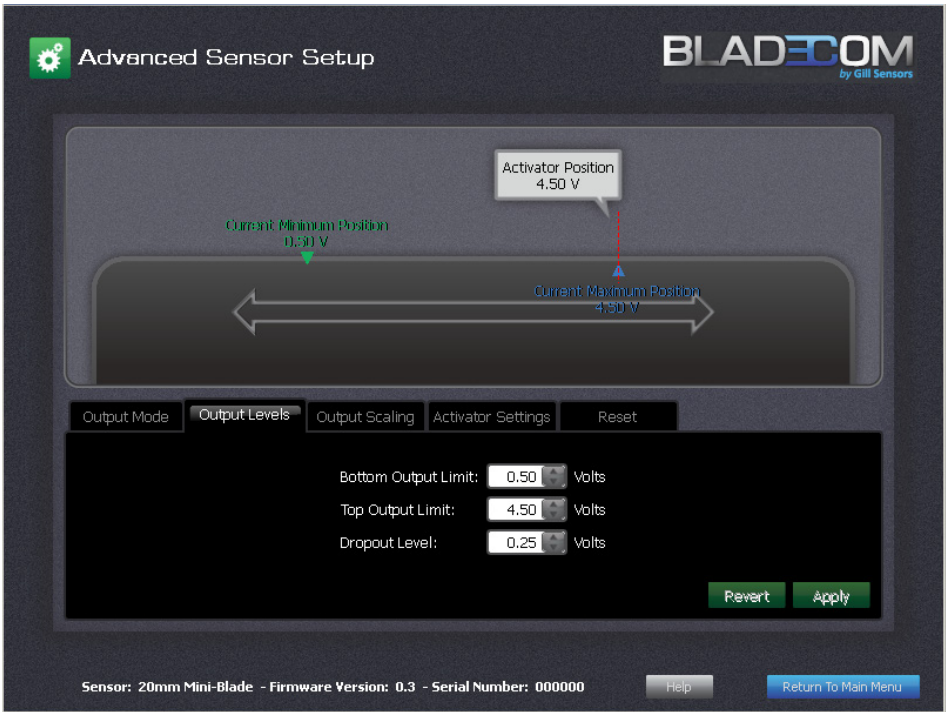
Output Mode

Select the ouput mode option and click 'Apply'



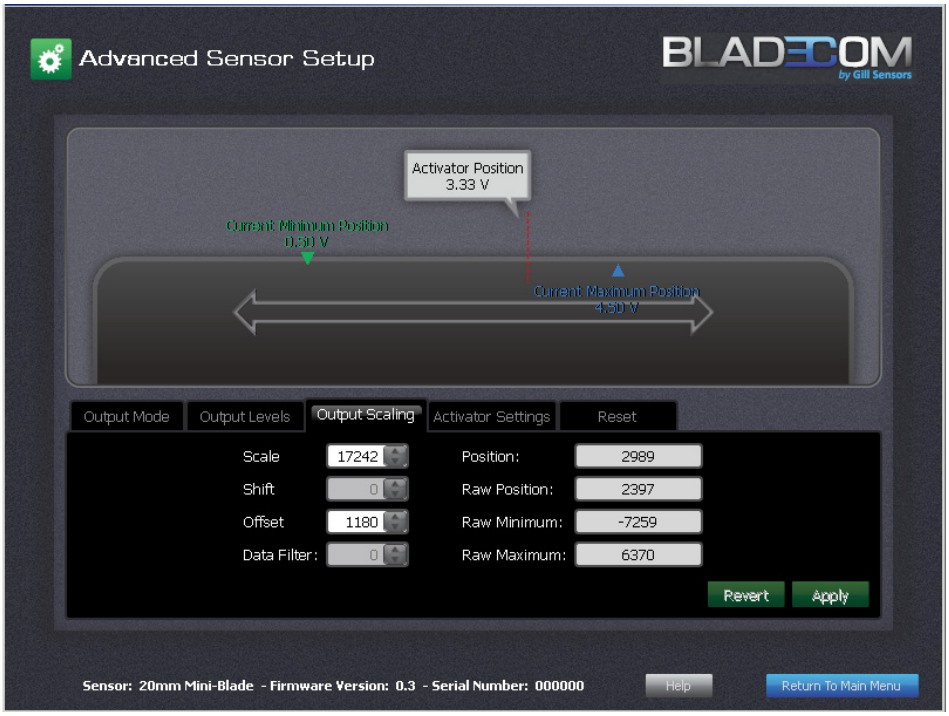
Output Levels

Use the UP/DOWN arrows to select the required voltage in the fields and select ' Apply'.



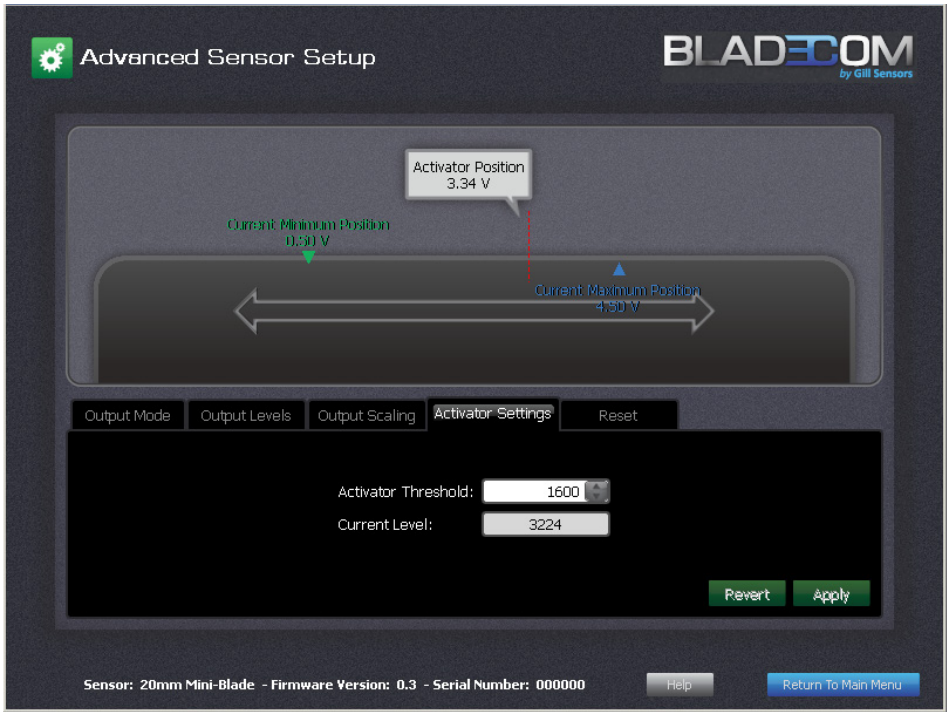
Output Scaling

Use the UP/DOWN arrows to select the required settings and click 'Apply'.



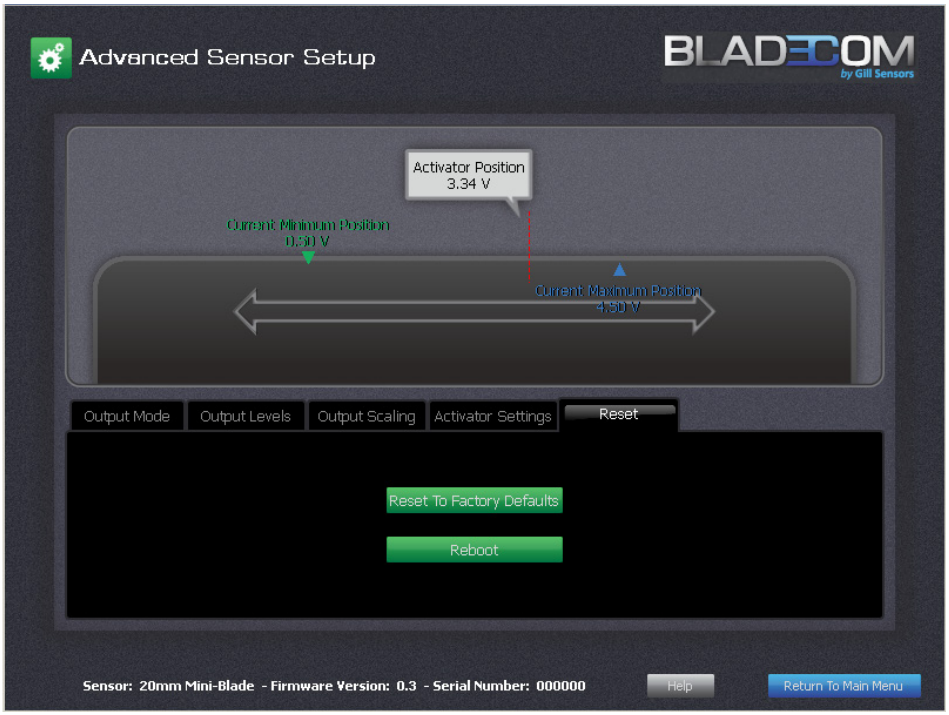
Activator Settings

Use the UP/DOWN arrows to set the required activator threshold and click ' Apply'.



Reset

Click to Reset the factory defaults or Reboot the sensor.



For help with advanced sensor configuration please contact Gill.

There is a known issue with the Beta release of BladeCom that is currently being addressed.
This section highlights this issue and a provides a workaround.

It is not possible to set the min and max points too close together (were the min and max markers are almost at the same point). If this is attempted on BladeCom, the message "failed to calibrate: scale is beyond calibration." is displayed as shown in Figure 1.

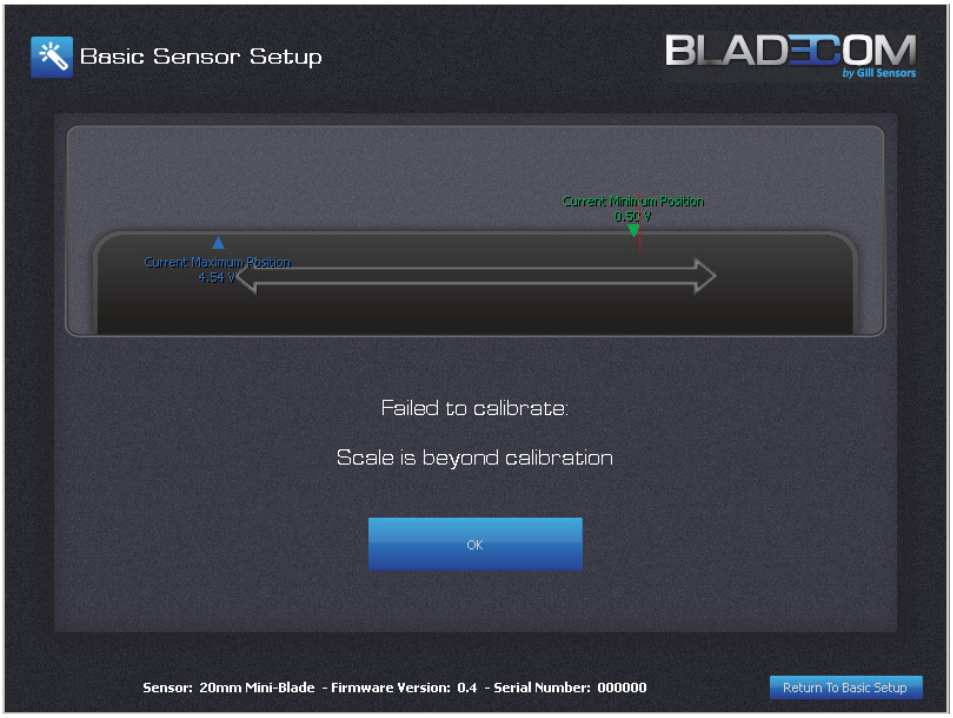


Figure 1: Min and max points trying to be set at almost the same point

In certain circumstances, where the min and max points are set to close, the min and max points swap over and are not located where they were originally set. This is shown in Figures 2, 3 and 4.

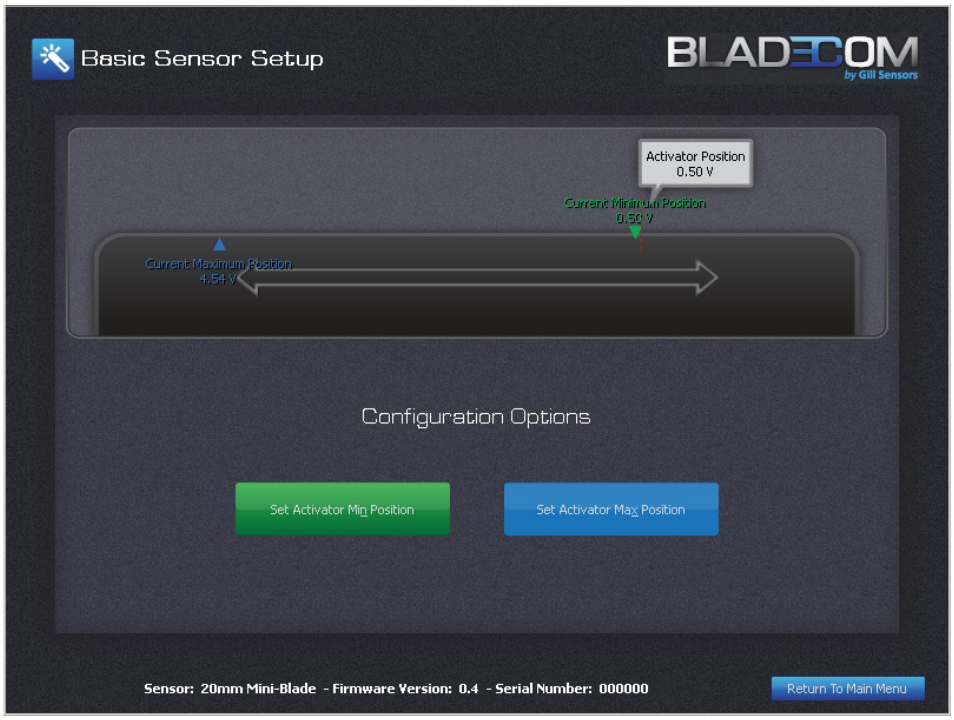


Figure 2: Start point

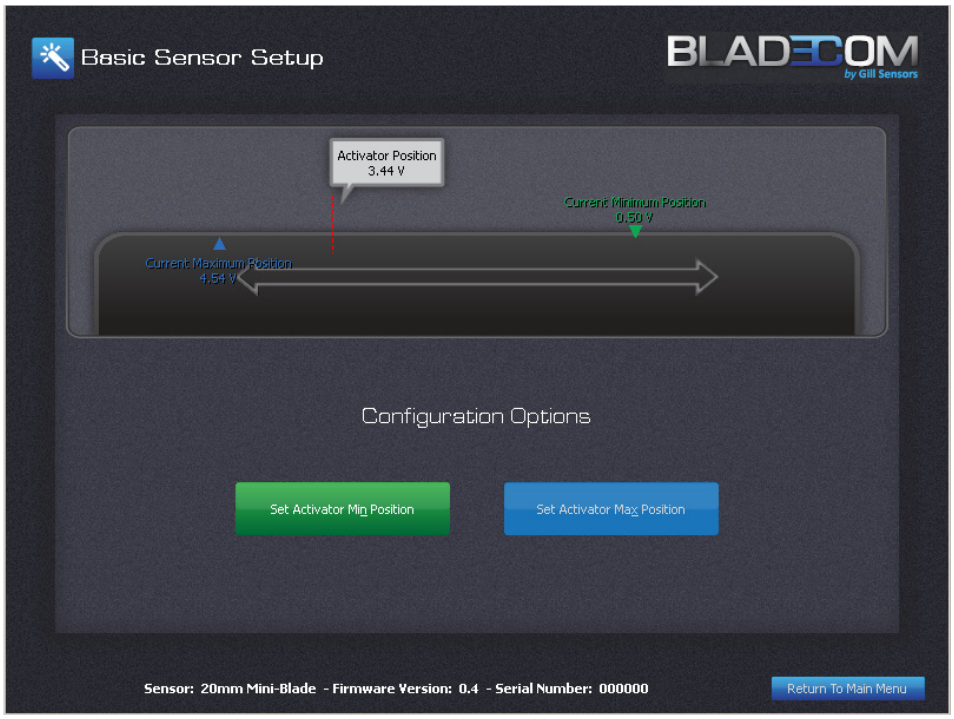


Figure 3: Try to set minimum level too close to the maximum

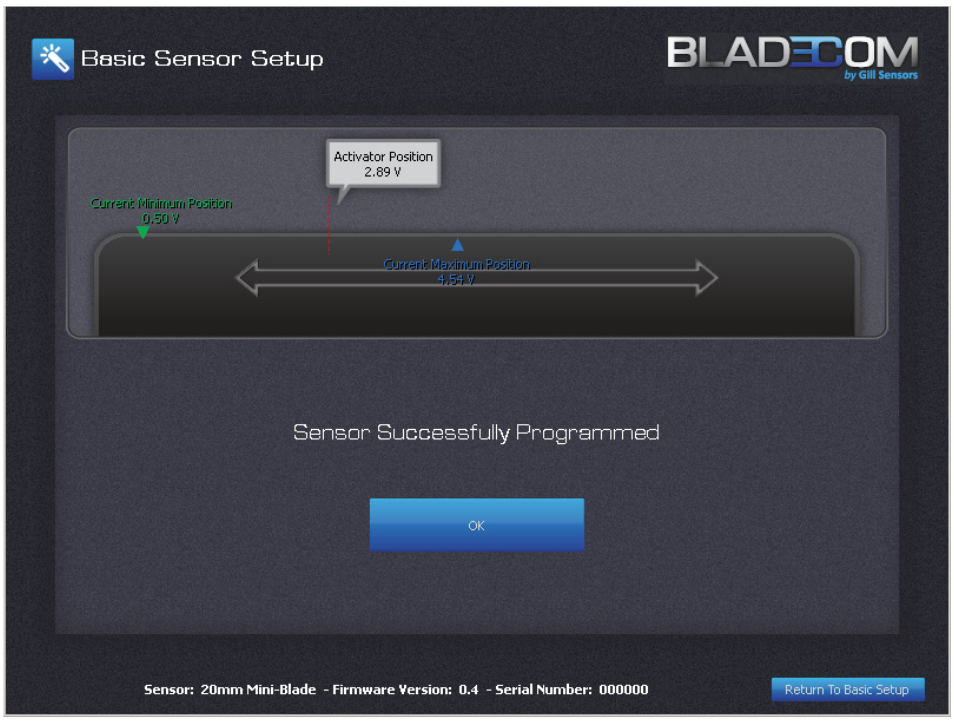


Figure 4: Min and max points reversed and not where they are expected

If this issue occurs it is a simple process to move the max point and then the min point to their true locations as the sensor polarity has been switched.

With the min and max positions shown below in figure 5, they can be swapped by following the process below.

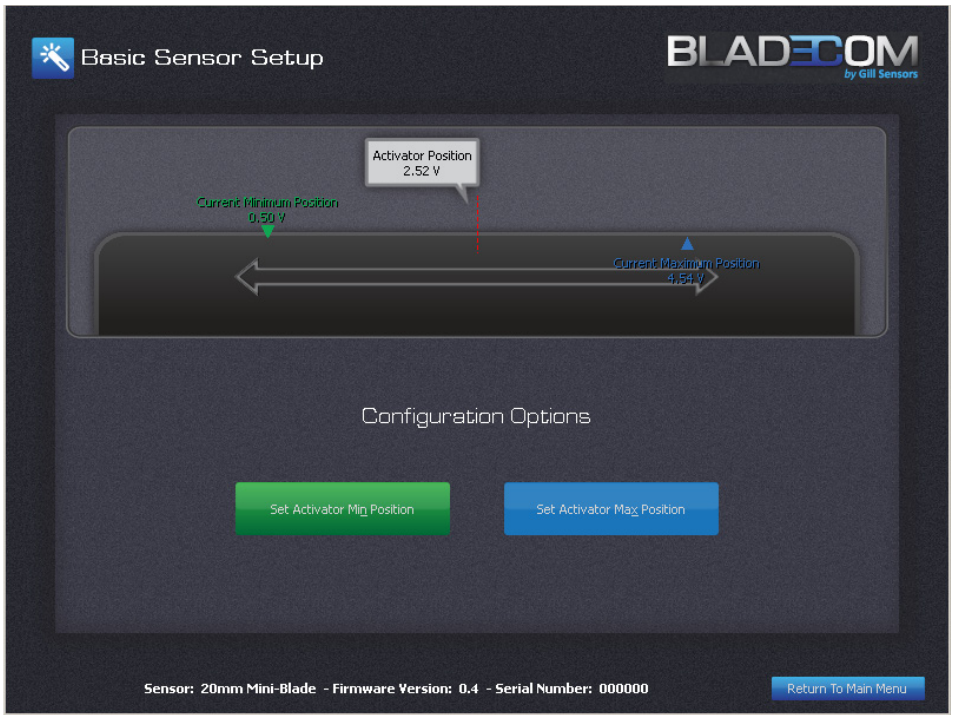


Figure 5: Start point for polarity switch

From this position you should move the activator to approximately the mid point then set either the max or min calibration. Figure 6 shows the max calibration point has been moved to the mid point.

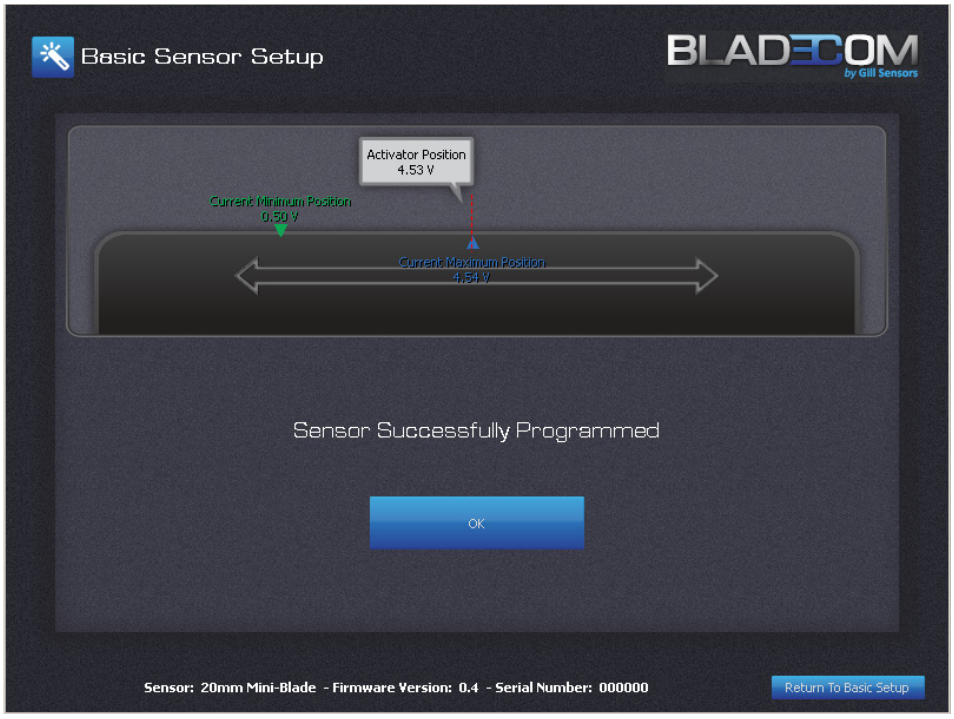


Figure 6: Small mid point step to Reverse Polarity

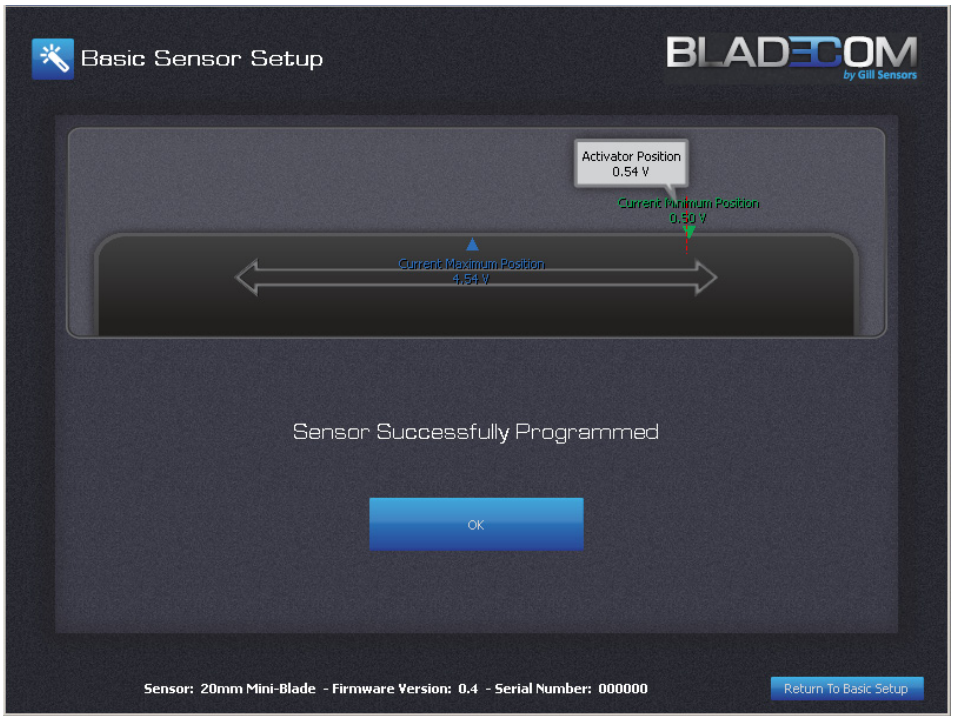


Figure 7: Minimum Calibration Point moved to opposite side

You can then reverse the minimum calibration point by moving it to the opposite side. Once these steps have been completed move the max position to its final location.

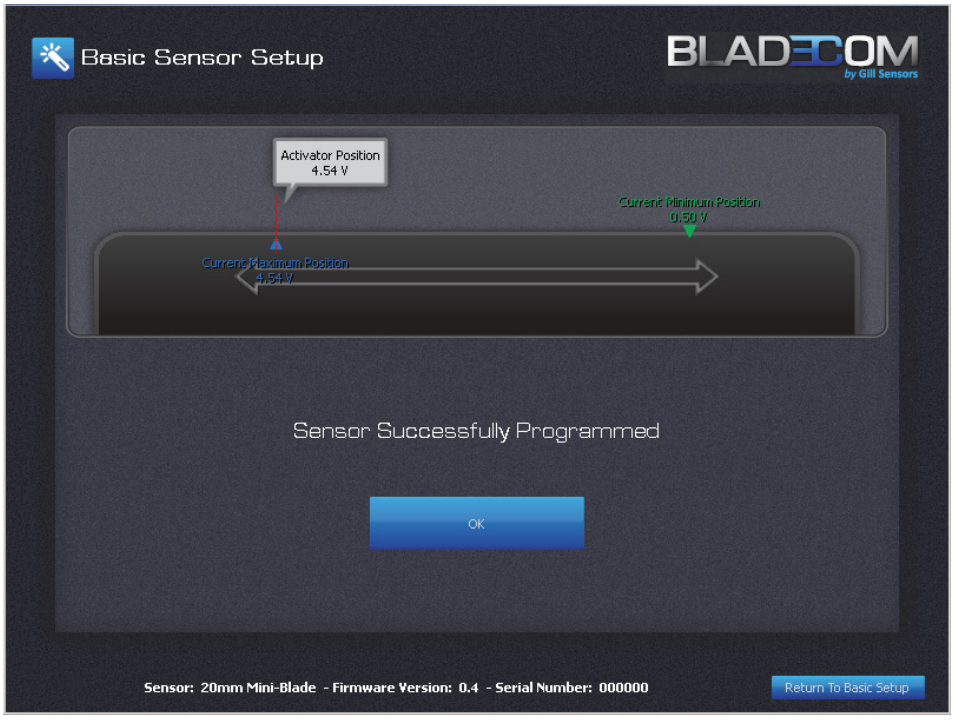


Figure 8: Final calibration position with polarity reversed

Gill Sensors
Saltmarsh Park,
67 Gosport Street,
Lymington,
Hampshire. UK
SO41 9EG

Tel: +44 (0) 1590 613400
Fax: +44 (0) 1590 613401
E-mail: info@gillsensors.co.uk
Website: www.gillsensors.co.uk