



Quick-Start Guide

Genesis Software for use with
Gemini Multibeam Sonars

0716-SOM-00101-02



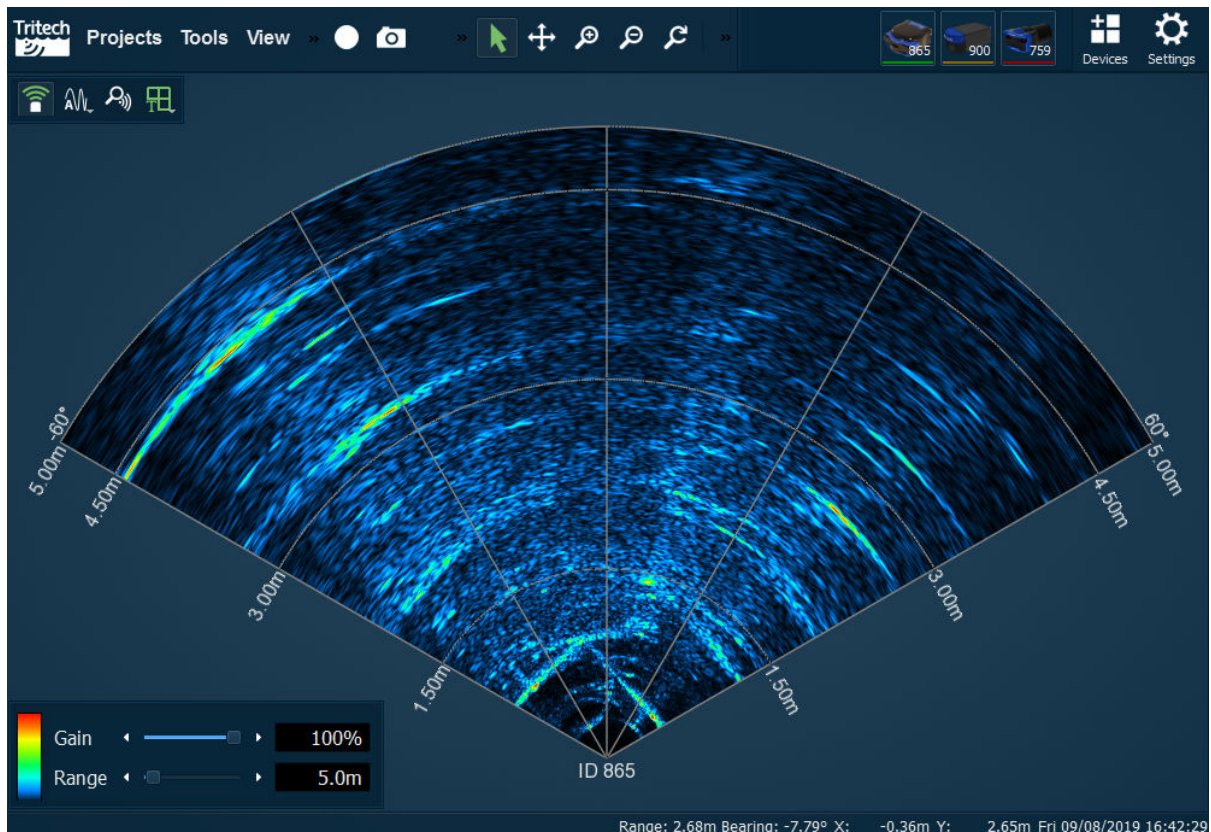
The Genesis software package from Tritech allows the connection and display of data from the various different Tritech sonar and survey equipment within the same software environment. This document is intended as a companion to the other Genesis Quick-Start Guides for the general operation and features of the Gemini series multibeam sonars within the Genesis software environment. For more information on using the software and its use with other supported Tritech products please refer to the relevant quick start guide.

Please note that the screen illustrations may differ slightly from that displayed on your computer.

Device Connection and Setup

Connection to the computer and Genesis software can be made via direct USB (using a Tritech adapter), Ethernet or Serial (via direct connection or Tritech Hub). For details of the software setup please refer to the relevant quick start guide and for details of the wiring connections please refer to the relevant product manual.

As you connect the devices via Ethernet, USB (SeaHub / NavHub) or Tritech USB Adapter (720im) they will be automatically detected and added to the program. The main window area will display the default output configuration for the specific device. The picture below shows the default device window layout for a Gemini 720ik sonar which is similar for the other Gemini devices.





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The status icons for the devices will appear in the top right of the menu bar area. The icons will appear with three different status colours:

- Green device is connected and online
- Amber device is connected and offline (default for newly connected devices)
- Red there is a problem with the device

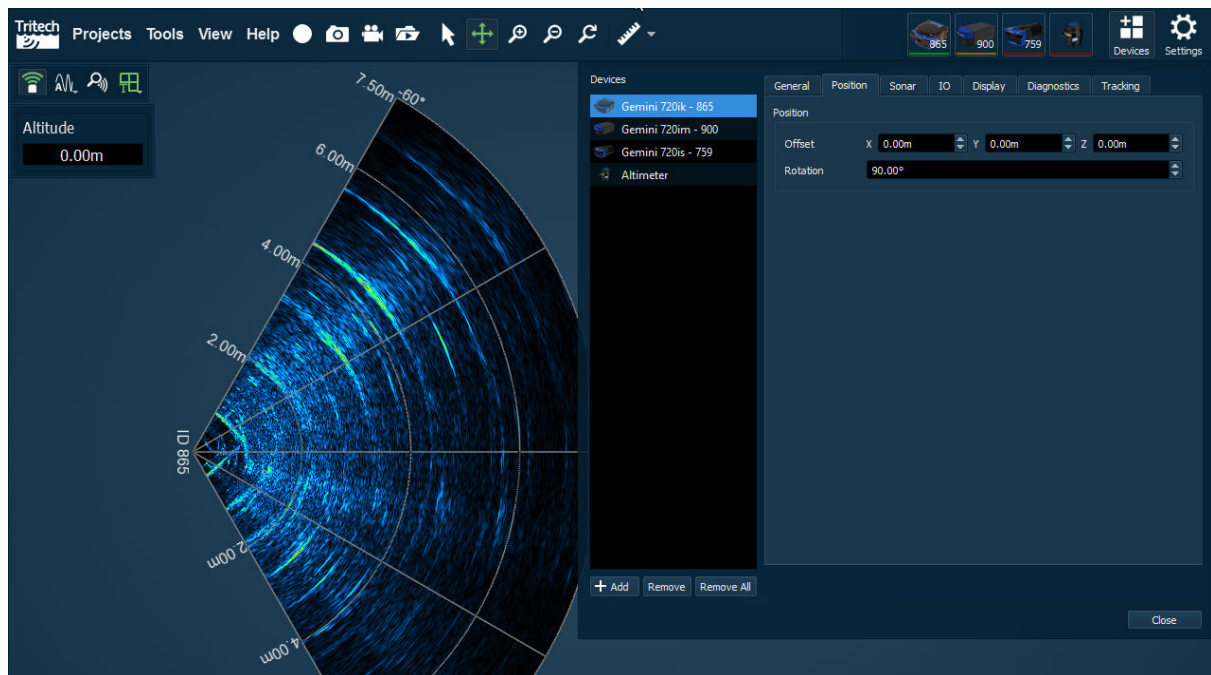


Clicking on the device icon will bring up the settings and properties for the device allowing changes to the communications and device window display. The settings on each tab will vary depending on the model of Gemini sonar connected and the connection method.

The *General* tab contains:

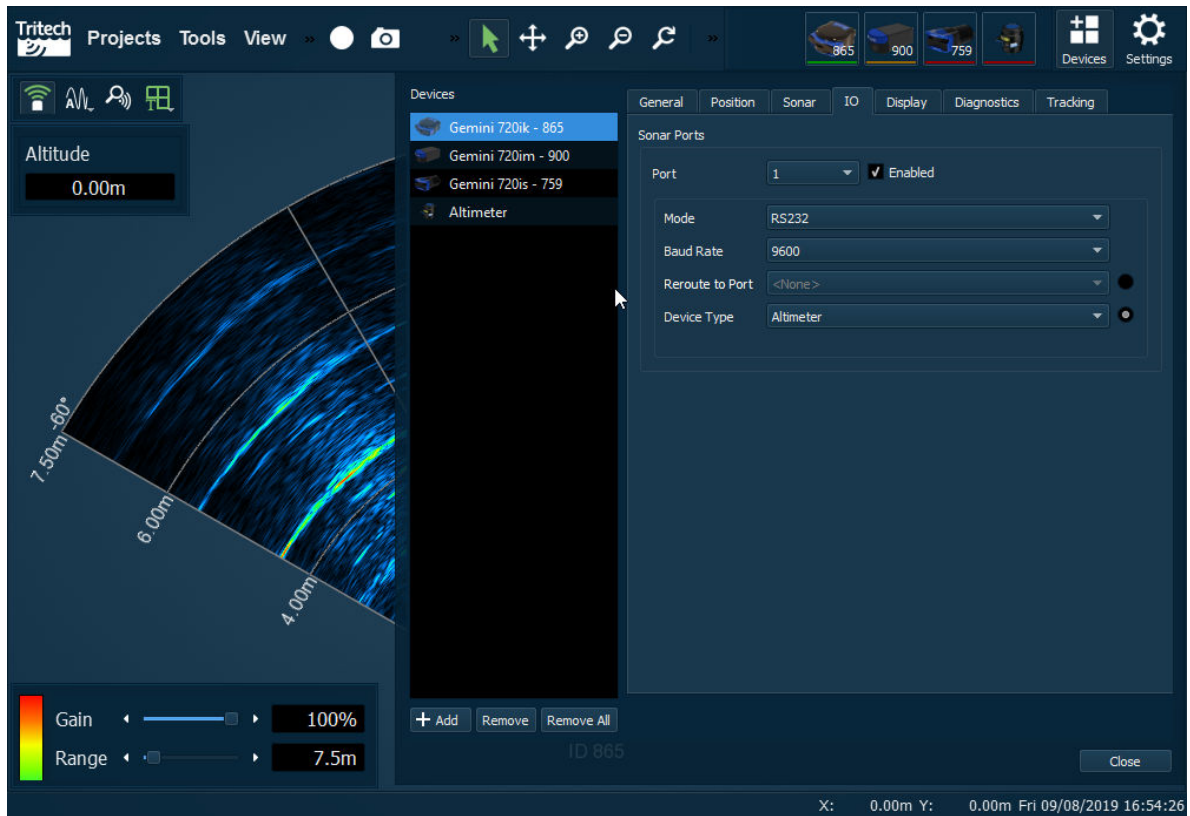
- Sonar ID, firmware and license details
- Connection details and controls to change the Ethernet or Serial configurations (dependant on connection method).

For details of setting up and configuring the serial and Ethernet communications please refer to the Main Program Quick-Start Guide.



The *Position* tab (shown above) contains the controls to alter the origin point of the sonar (X Y Z offset) and sonar rotation.

The *Sonar* tab contains controls and settings for the Speed of Sound, Chirp, Aperture (angle of scan) and high/low frequency operation switching range (1200ik only).



The *IO* tab (shown above) contains the setup options for the sonar auxiliary port connection if present. When enabled the data will be displayed in a separate window inside the device display window.

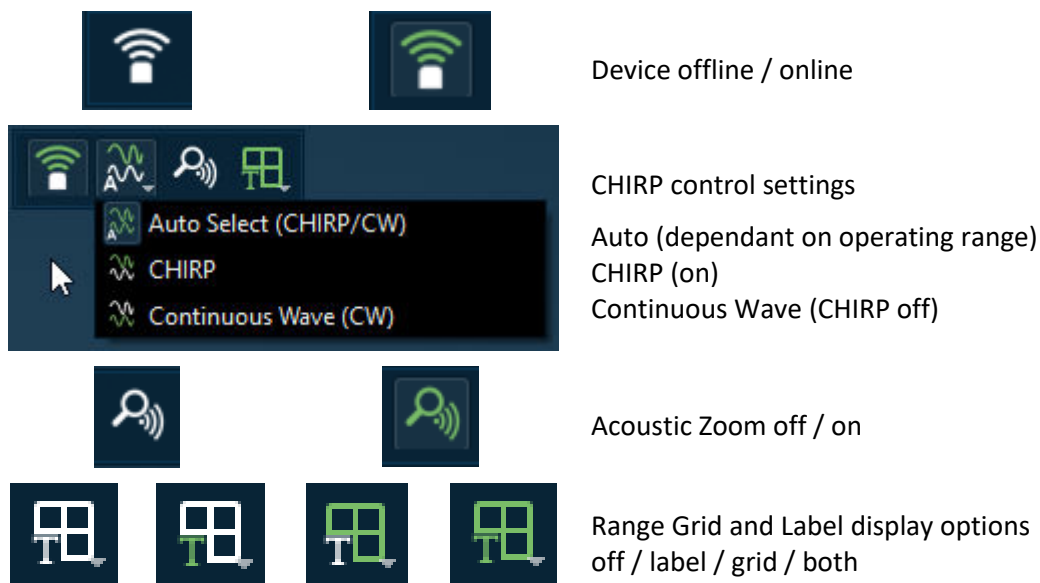
The *Display* tab contains the general and Auto Dynamic Range controls and settings for the display output.

The *Diagnostics* tab contains general diagnostics data from the device as well as any error or log messages.

The *Tracking* tab contains the controls for the object tracking utilities. The options are dependent on the license files loaded onto the device.

Device Display Options

The controls within the different device windows change according to the type of device attached. Controls that are common across the different Gemini devices are:



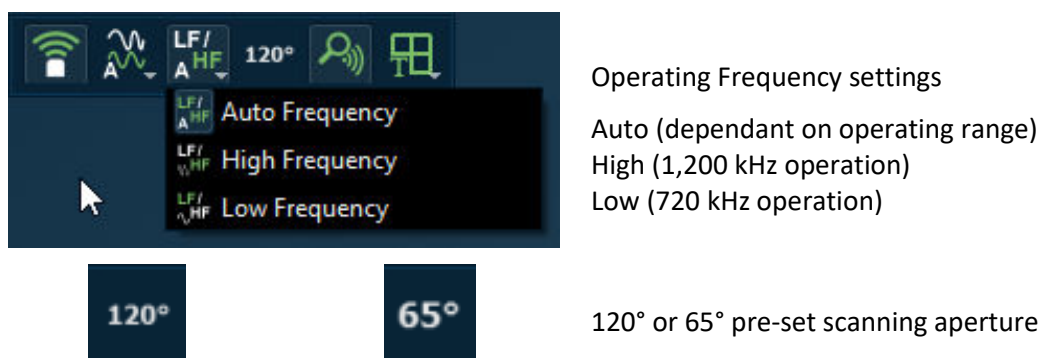
Device offline / online

CHIRP control settings
Auto (dependant on operating range)
CHIRP (on)
Continuous Wave (CHIRP off)

Acoustic Zoom off / on

Range Grid and Label display options
off / label / grid / both

Additional controls specific to the 1200ik dual frequency multibeam sonar are:

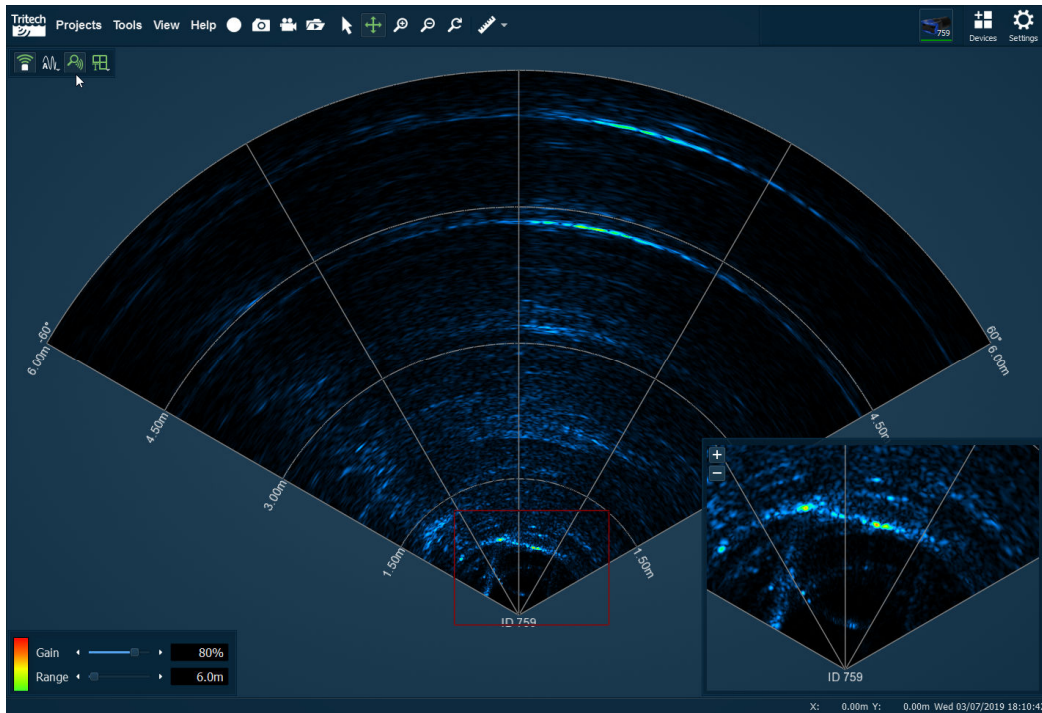


Operating Frequency settings
Auto (dependant on operating range)
High (1,200 kHz operation)
Low (720 kHz operation)

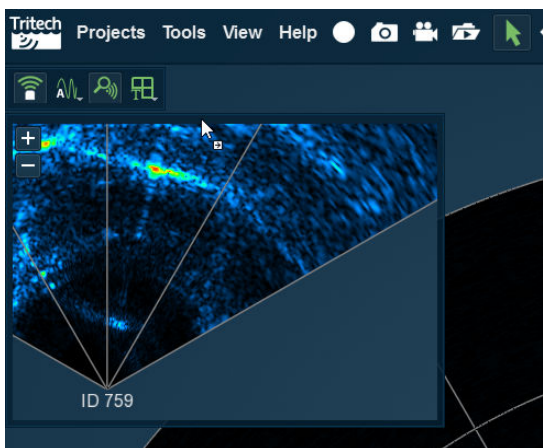
120° or 65° pre-set scanning aperture

Acoustic Zoom

Acoustic Zoom is a feature common across the majority of Tritech sonar devices that allows a separately operated zoom window to be opened within the device display area.



The acoustic zoom for each device window is turned on and off using the control button at the top left of each device window.



The zoom window can be selected and moved into the corners of the device display window. The corner areas of the main window are highlighted after you start to drag the zoom window. You can increase and decrease the zoom using the + and - buttons and the zoom area is shown as a red box on the main screen. If you hover with the mouse over the red box it will turn blue and can be moved to a different area of the main device display.