

Quick-Start Guide

Genesis Software

Introduction and Main Features

0716-SOM-00100-02



# Genesis Quick-Start Guide

## Main Program & Features

Document Ref:  
0716-SOM-00100

Revision : 2


The Genesis software package from Trittech allows the connection and display of data from the various different Trittech sonar and survey equipment within the same software environment. This document is intended as a quick start guide for installation and general operation of the Genesis software and common features. For more information on using the software with specific Trittech products please refer to the relevant quick start guide.

Connection to the computer and Genesis software can be made via direct USB (using a Trittech adapter), Ethernet or Serial (via direct connection or Trittech 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.

### PC and Hardware Requirements

The table below highlights the minimum and recommended computer specification required for Genesis version 1.5.3 and above:

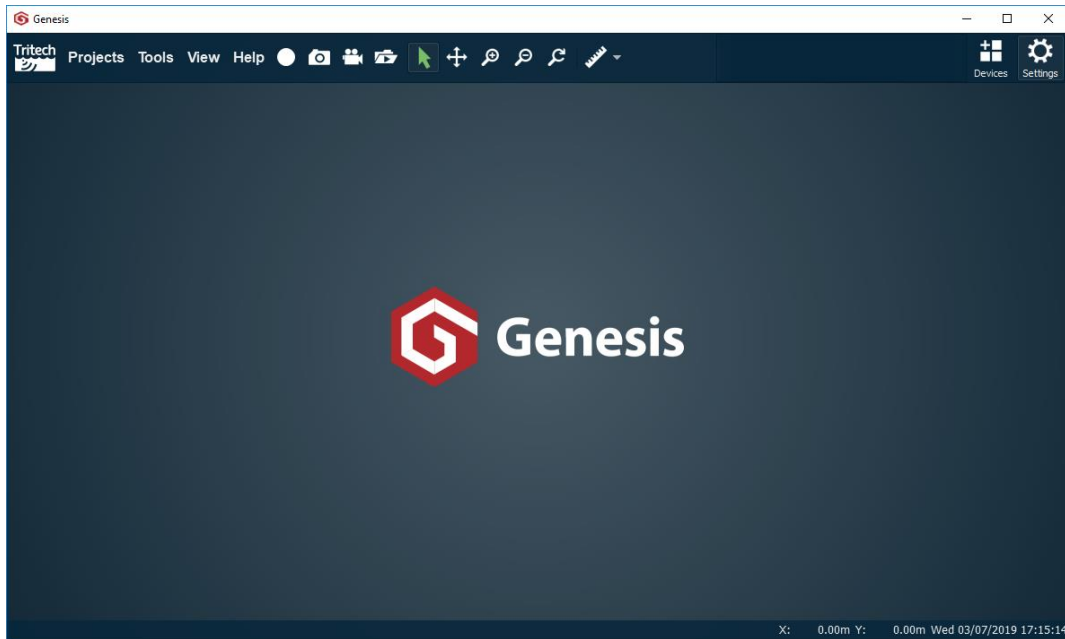
Specification	Minimum	Recommended
Processor	2 GHz Dual Core	Intel i7™ Quad Core
RAM	4 GB	8 GB
Disk Space	300 MB free for program installation 500 GB (SSD recommended) for data recording and storage	
Graphics	3D hardware accelerated graphics	
Open GL	ver. 2.0	ver. 3.3
Display	800x600 32 bit (True) Colour	1920x1080 32 bit (True) Colour
Operating System	Microsoft Windows 7 and later	
Network Interface	100BASE-TX Ethernet	1000BASE-T Ethernet
Serial Interface	RS232 or RS485 Hardware Based or USB Converter	

	Genesis Quick-Start Guide Main Program & Features	Document Ref: 0716-SOM-00100
		Revision : 2

## Genesis Software Setup

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

Ensure any previous version of Genesis has been uninstalled and the computer restarted prior to the installation of a new version. After installation and with no devices connected, the initial Genesis screen is as below:





## Connecting Devices

As you connect the devices via Ethernet or Tritech USB Adapter (720im) they will be automatically detected and added to the program. The main area will display the default configuration and 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:

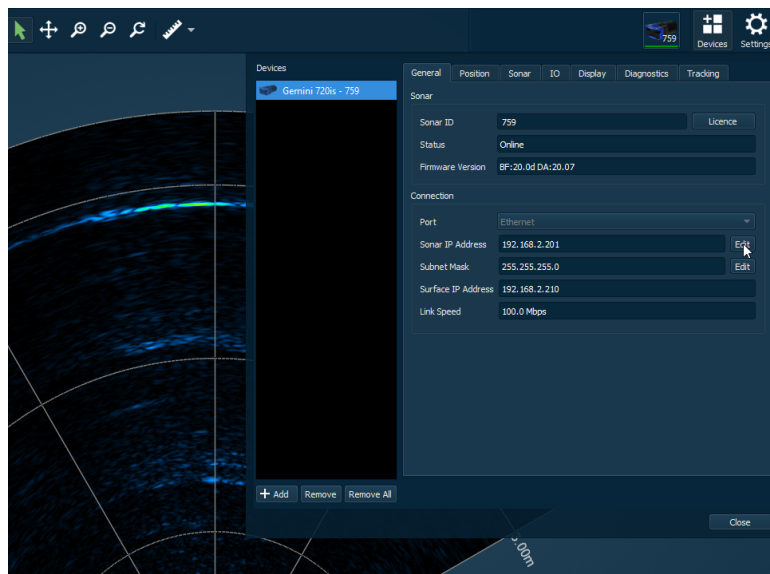
- Green device is connected and online
- Amber device is connected and offline  
(default for newly connected devices)
- Red there is a problem with the device



Clicking on the icon will bring up the settings and properties for the device with any error messages shown in the diagnostic tab of the device properties.

For connection of any devices via Ethernet the TCP/IPv4 network configuration of the host network adapter (PC, SCU or similar) should be set to an IP address of 192.168.2.xxx with a subnet mask 255.255.255.0. Do not use the IP address for any of the sonar devices or reserved addresses xxx.2.17, xxx.2.200, xxx.2.201 or the "Obtain an IP address automatically" option.

Each device must have a different IP address to allow them to communicate with the Genesis software. To change the IP address of a connected device, ensure the device is online and select the device status icon to show its properties and select the "General" tab.



The IP Address and Subnet Mask can be adjusted and saved to the device.

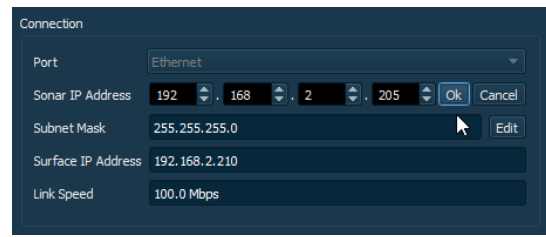
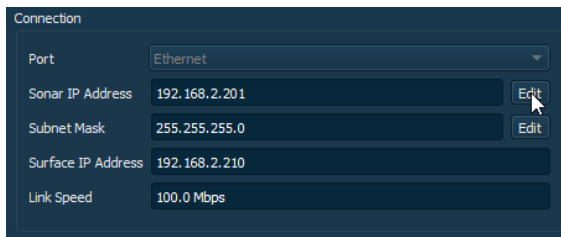


# Genesis Quick-Start Guide

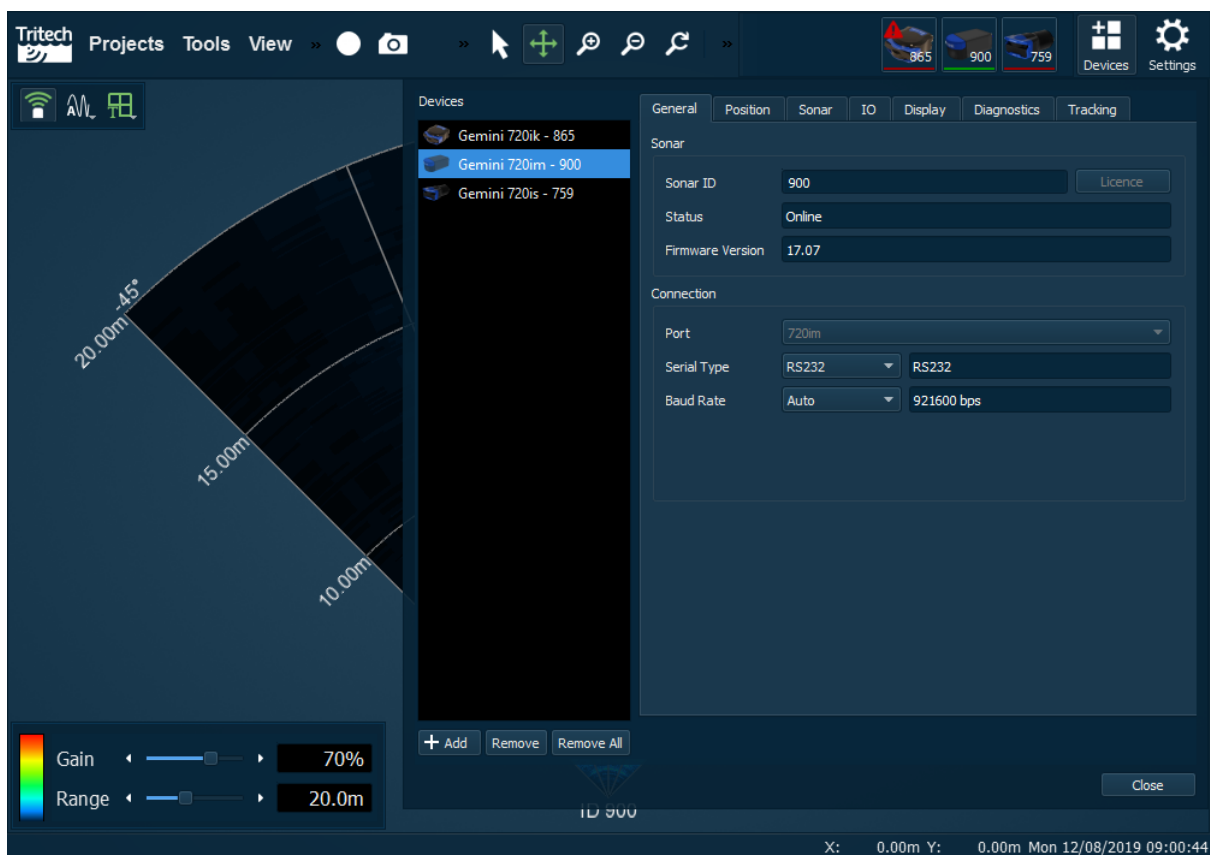
## Main Program & Features

Document Ref:  
0716-SOM-00100

Revision : 2



If two devices with the same IP address are connected at the same time neither will communicate with Genesis. If you require to change the IP address of a device it is recommended that only the device being changed is connected.



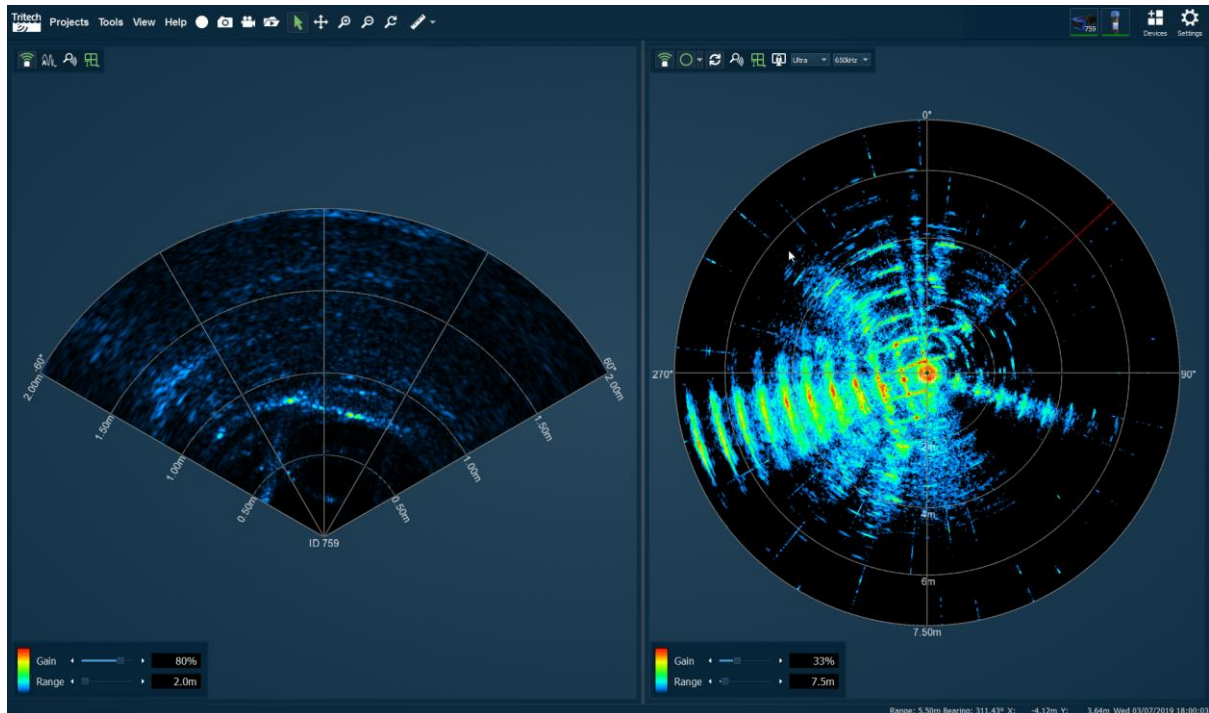
If the device is attached via a serial connection the options available will change according to the device. The above picture shows the typical controls for serial devices connected via the Tritech USB Adapter.

**If you modify the device serial or Ethernet connection settings always record any changes.**



## Using the Genesis Software

When connected the device will open in its own display window, the standard display configuration for a Gemini multibeam sonar and Super SeaKing V7 mechanical sonar is shown below as an example. Each device display window has a set of additional control buttons and controls that are specific to the device and functionality.



Across the top of the main window are the standard program controls that are present regardless of which devices are connected and being displayed.




From the *Projects* menu at the top left of the main menu bar you can:

- Start a *New Project* which will set all the devices and displays to their default original configuration.

- Open* a previously saved project with a specific layout and configuration.

- Save* and *Save As...* the current project and configuration.

	<p style="text-align: center;">Genesis Quick-Start Guide Main Program &amp; Features</p>	Document Ref: 0716-SOM-00100
		Revision : 2

The recording and playback buttons will allow you to:

- Record a Log File
- Take a Screenshot
- Record a Video of the device display screen
- Open Log Files that have previously been recorded



Detailed settings for these controls are on the Capture tab within the Settings menu.

The select and zoom controls allow you to move and resize the different parts of the main device display windows:

Select

Mouse Pan and Zoom which operates the main data display windows, the mouse wheel operates the zoom function.

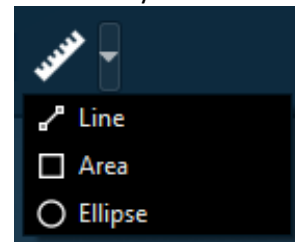
Zoom In & Zoom Out operates across all of the main display windows.

Zoom Reset returns the main window zoom and display positions to their defaults.



In the main device display window the ruler button and drop-down menu allows you to:

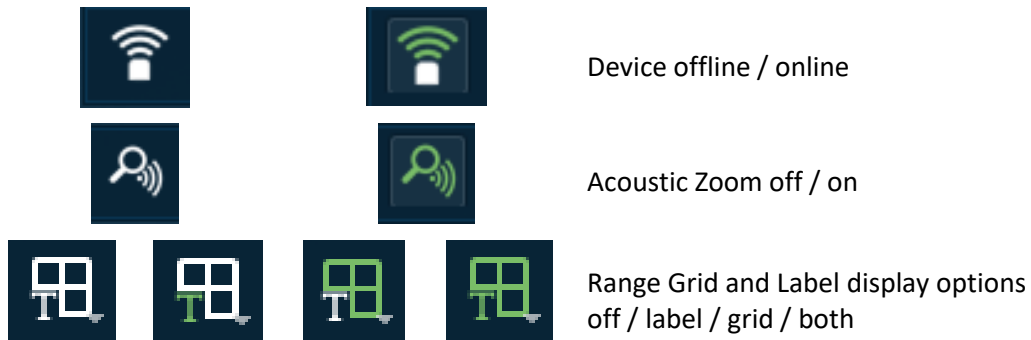
- Take a straight line point-to-point distance
- Measure the area inside a rectangle
- Measure the area inside a circle or ellipse





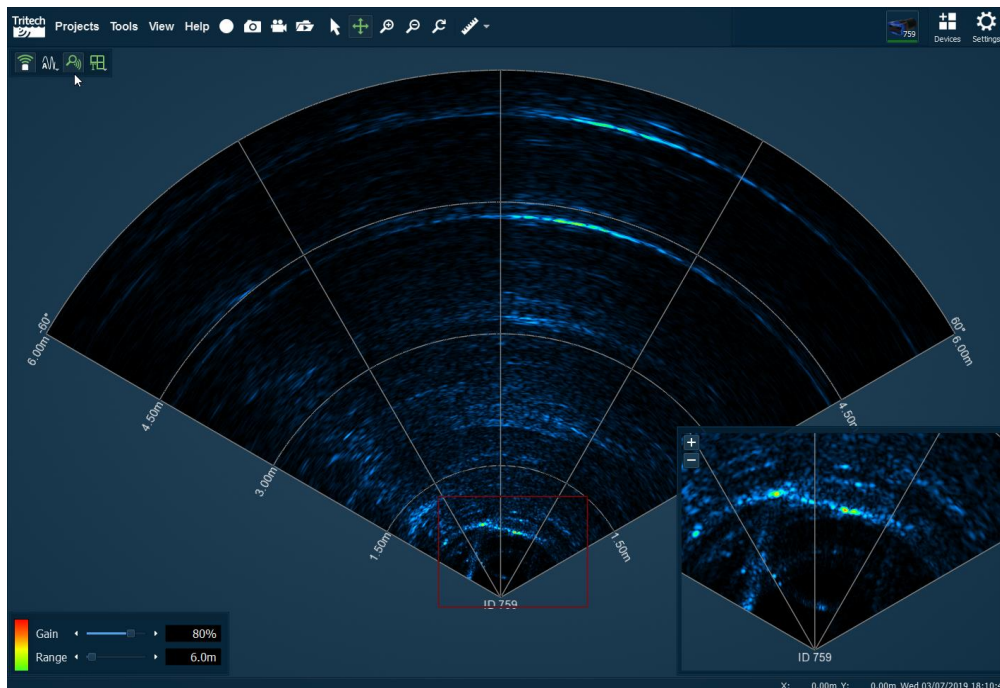
## Device Display Options

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



## Acoustic Zoom

Acoustic Zoom is a feature common across the majority of Trittech 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.



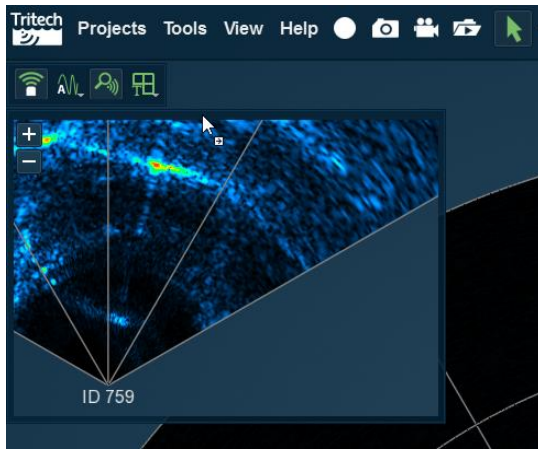


# Genesis Quick-Start Guide

## Main Program & Features

Document Ref:  
0716-SOM-00100

Revision : 2



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 dragged to a different area of the main device display.