

## Quick Start Guide

# mRS Device Manager Software

**The official software platform  
distributed to make use of mRS devices**

## Requirements

To run mRS Device Manager the following elements are required:

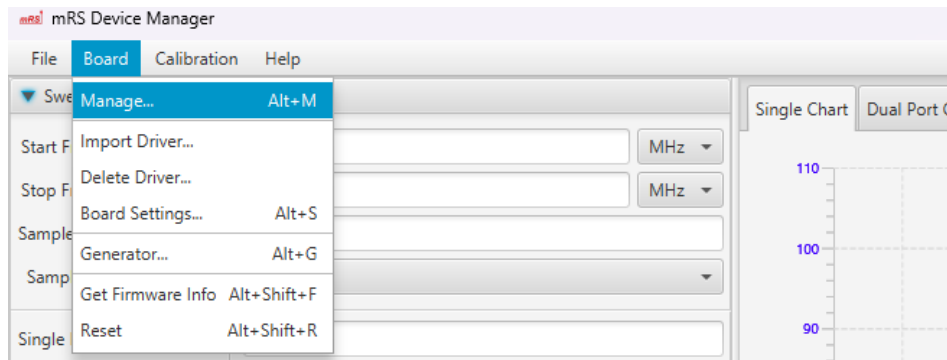
- A computer with an x86 CPU (ARM is currently unsupported, meaning devices such as Apple Macs with newer M CPUs or Raspberry Pi computers)
- A functioning installation of Java 17 or newer (recommended version is Java 21).

Found on <https://www.oracle.com/java/technologies/downloads>.

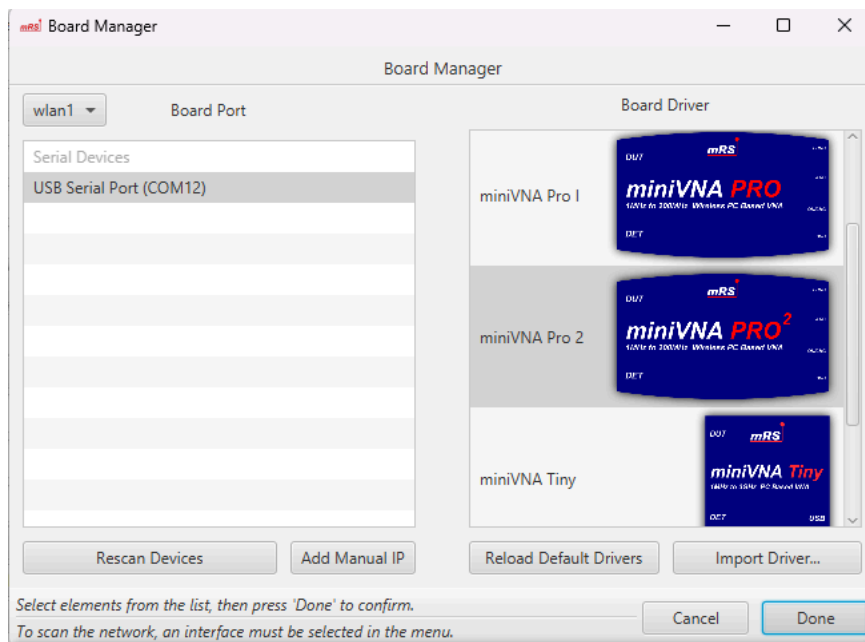
Once the requirements are satisfied, the software can be downloaded through the mRS Website at [mrsinstruments.com](https://mrsinstruments.com).

## How to set up

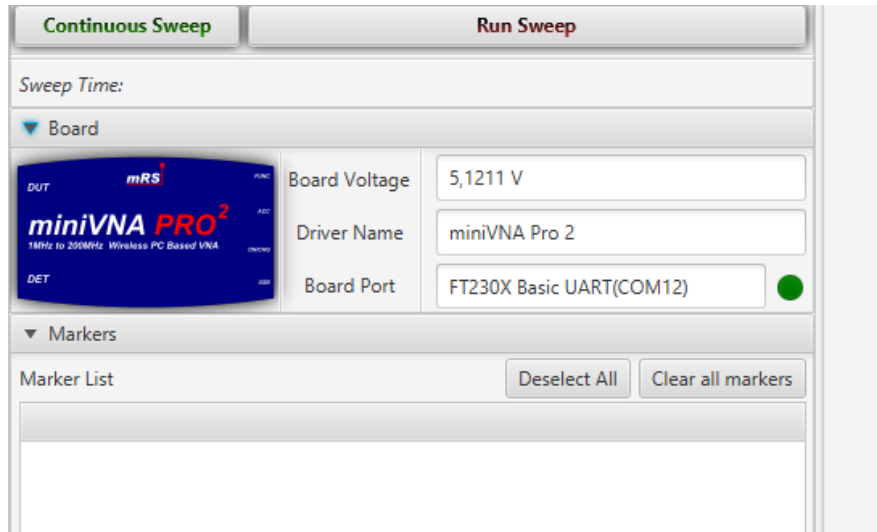
To initialise the communication between the software and the board, first open the **Board Manager**, by opening the menu in the top and selecting Board -> Manage:



Once in the board manager, select the right board from the available devices shown in the list and the correct driver for the model of the connected board, then press **Done**:

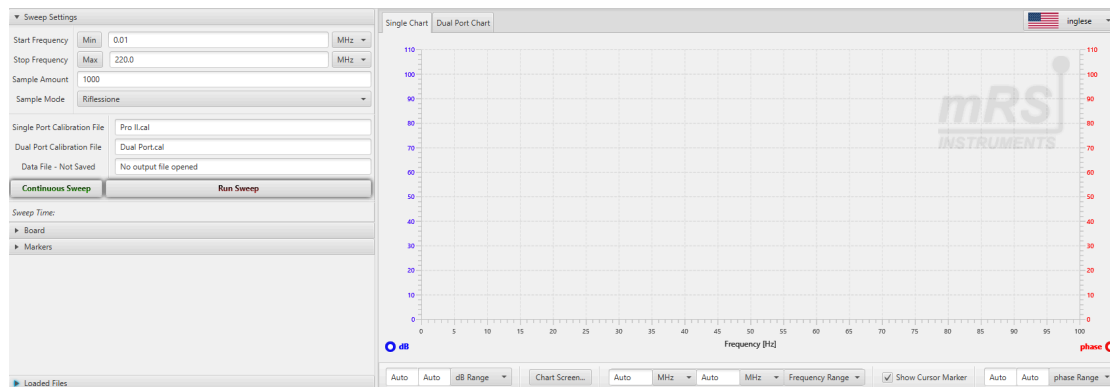


Now the board is connected and ready to be used, as shown in the **Board** Submenu in the main window's sidebar:



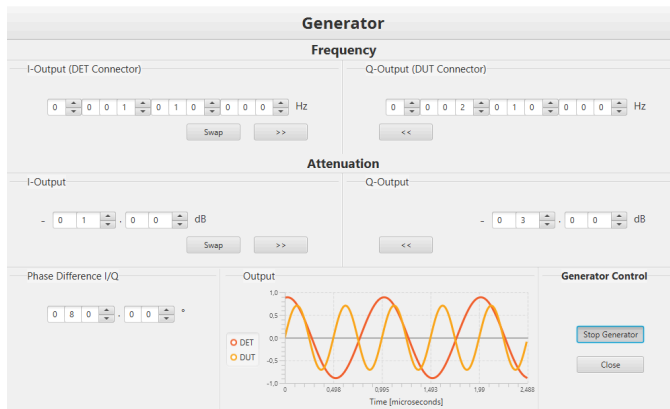
## Main Features

1. **Device Scan:** The software can execute a scan with a specified frequency range, sample amount and scan mode (referring to either transmission or reflection). Single port and dual port devices are both supported. As well as wireless boards, connected through the computer's network interface.



Main software window showing the Sweep Settings to change the indicated scan parameters and the Run Sweep buttons.

2. **Board Generator:** The software is able to make use of the board as a generator, for supported boards, two generator outputs are supported, one for each board's BNC

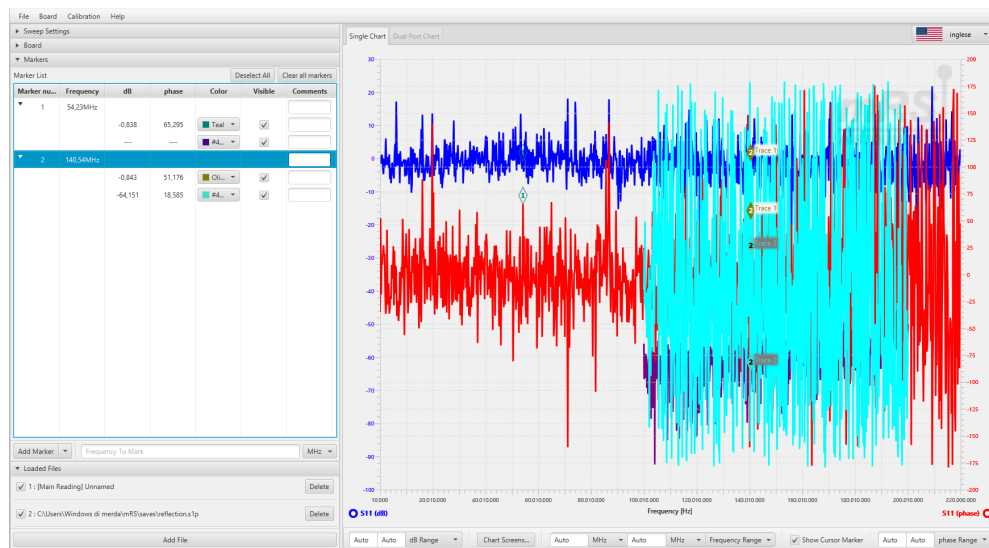


connector.

Each generator output can be configured to have a specific frequency and amplitude. If the board supports both, the two generator outputs can be configured to be out of phase between each other by a specified amount of degrees.

Screen of the generator creating two output sine waves shown in the chart on the bottom with the specified parameters.

3. **Multiple Files:** The application is able to load multiple file readings in a single chart, to allow for comparison between them. No limit is set on the amount of individual files that can be loaded on a single chart. Markers can be set to indicate the parameters of all these readings at a specific frequency, showing the results on a table called the **Marker List**.



Sample of multiple files being loaded with marker support.

4. **Calibration Manager:** A calibration manager is available to allow the user to calibrate its board once and have the calibration saved for that board internally, allowing the user

to quickly find and load the calibration file again if more than a single hardware is being used.

*Sample of the manager being used to calibrate a single port board.*

