Quick Start Installation Instructions

3rd Generation Receiver Analyzer

P/N QSX-RXAN-3R1D-A1-1111-SW

Included Receiver Analyzer (RA) hardware in each kit:

RA Unit	**USB 2.0 AB Cable** **Power Cord** **Two (2) Calibrated RF Output Cables** **Six (6) 75 ohm Clock and Data Cables** **CD with control software, user manual, data sheets, etc.** **Note: The latest User Manual and Data Sheet are always available on the Quasonix web site.**

Connect Devices

Connections between the Receiver and the RA vary depending on the type of receiver and the measurements desired.

1. Connect a Receiver to the RA using the appropriate TTL clock and data cables for the receiver; connect the RF cable from the RA to the Receiver RF input.

2. Connect the RA to a Windows PC using the USB connector on the back panel.

3. Connect each device to an appropriate power source.
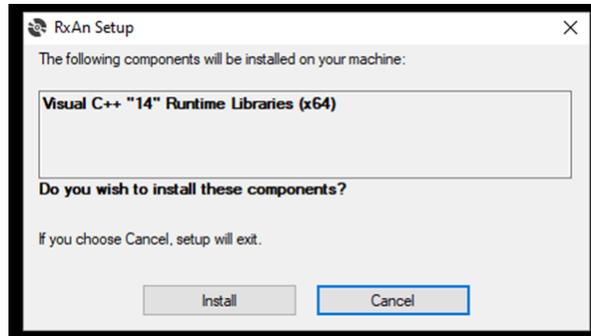
Install RxAn GUI Software

The Quasonix 3rd Generation RA is shipped with an installer for the RxAn GUI.

1. Copy the installer software to a location on the connected PC.

2. Go to the software folder and locate the setup.exe file.

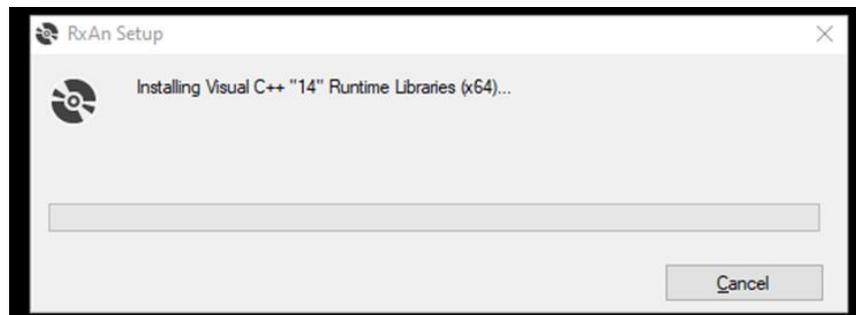3. Double-click on the setup.exe file to start running.

Do not execute RA3Install.msi directly. Setup.exe installs any needed external requirements. It is recommended that the default file locations be used.

RxAn uses a number of support libraries from Microsoft. The installer checks to see if the system has these libraries installed and attempts to install them, if necessary. If your system does not have these libraries installed, you will be prompted to let the installer install them.

Click on the Install button to continue.

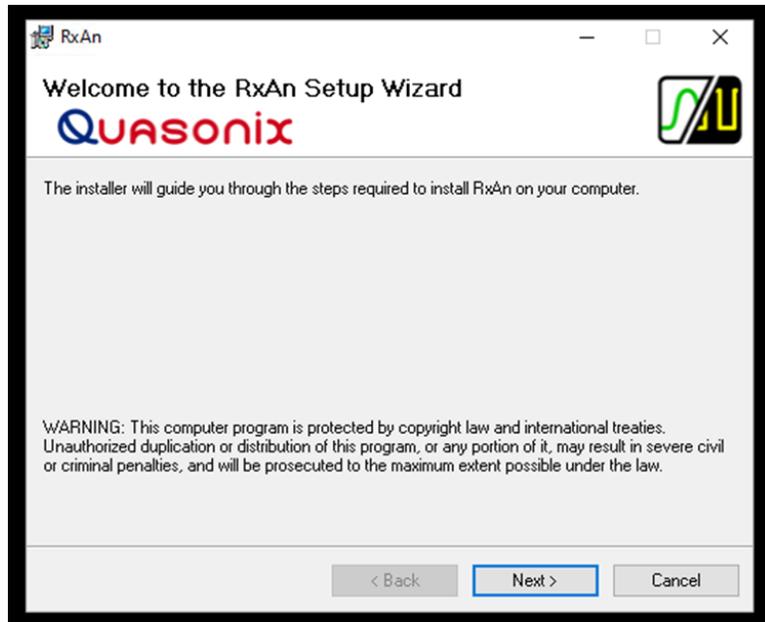A status window shows the progress of the installation.

These libraries have their own installers. As each runs, you will be prompted to allow the installer to make changes to your system. This may only be indicated by the secure desktop icon in the taskbar.

Click on the Secure icon, then select Yes to continue. This step repeats for each library installed.
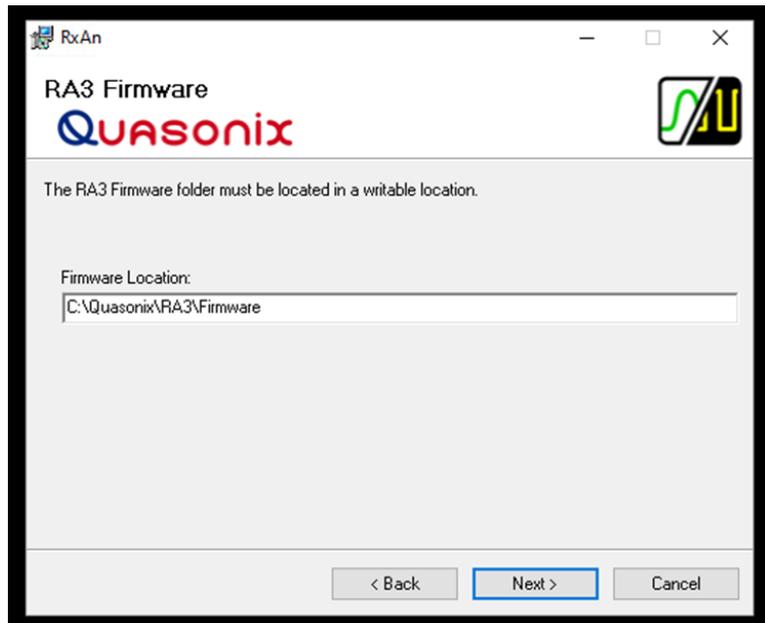
After all of the required libraries are verified as installed, the RxAn Setup Wizard displays.

1. Follow the RxAn Setup Wizard to continue. Click on the Next button to continue the installation.
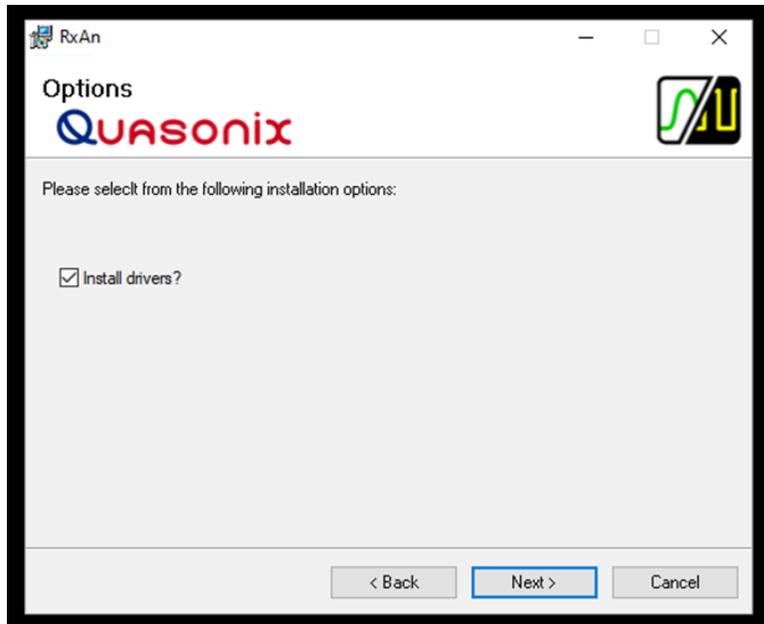
The RxAn installation includes the matching firmware for the version of RxAn being installed. This is located separately in case the user has difficulty with a firmware update, this can be used, under the guidance of Quasonix, to help complete the firmware update.

2. While the PC location of the firmware file may be changed, it is recommended that the default file locations be used. Click on the Next button to continue.
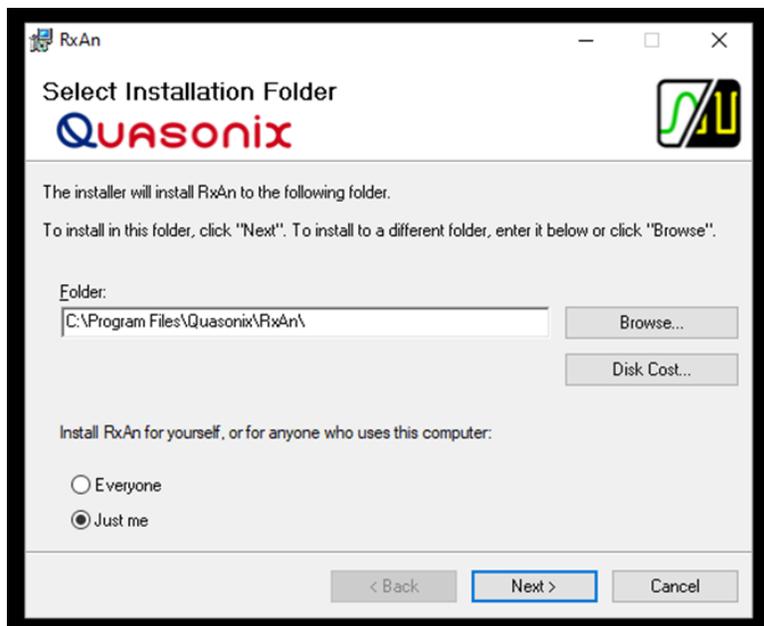
3. RxAn communicates with the RxAn hardware through a USB interface. This interface requires drivers to be installed on the PC, if they are not already installed. To install the drivers, click on the Install Drivers? check box.
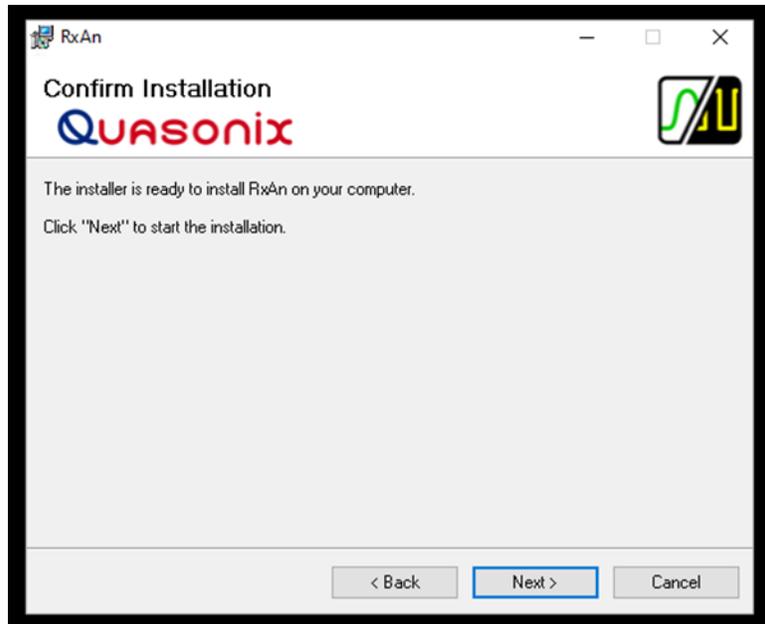
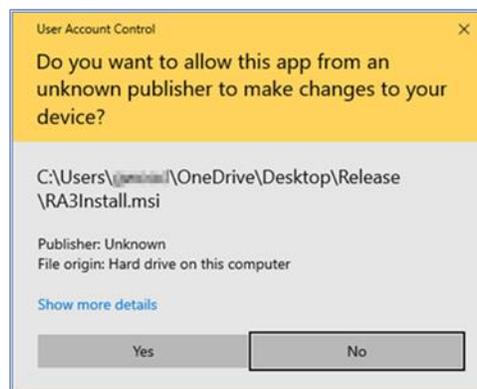If this is an update or reinstallation of RxAn, the user can uncheck the box.

4. RxAn is a 64-bit executable and will be installed in the 64 bit application folder. Click on the Next button to continue.

5. When Confirm Installation displays, all of the installation options are set, and the installer is ready to begin the installation. Click on the Next button.
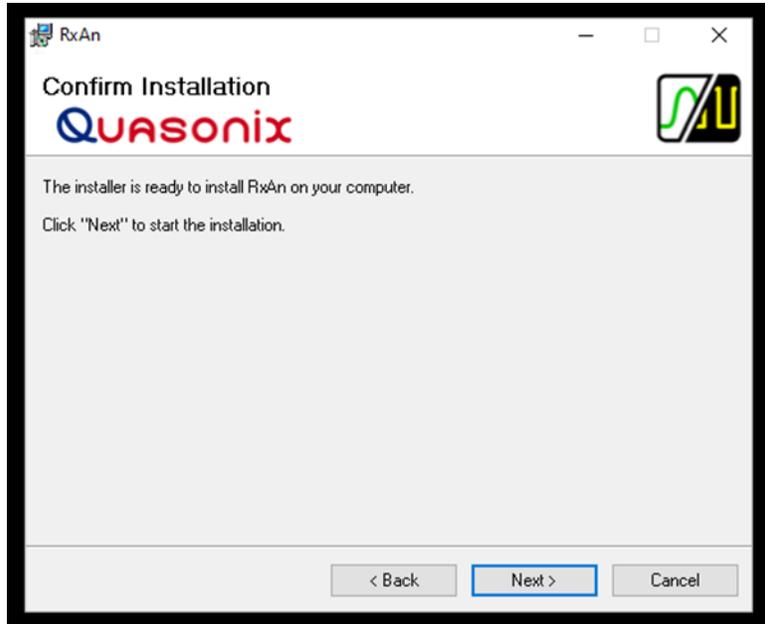
6. The installation may ask if it is ok to install from an unknown source. If it does, click on the Yes button.
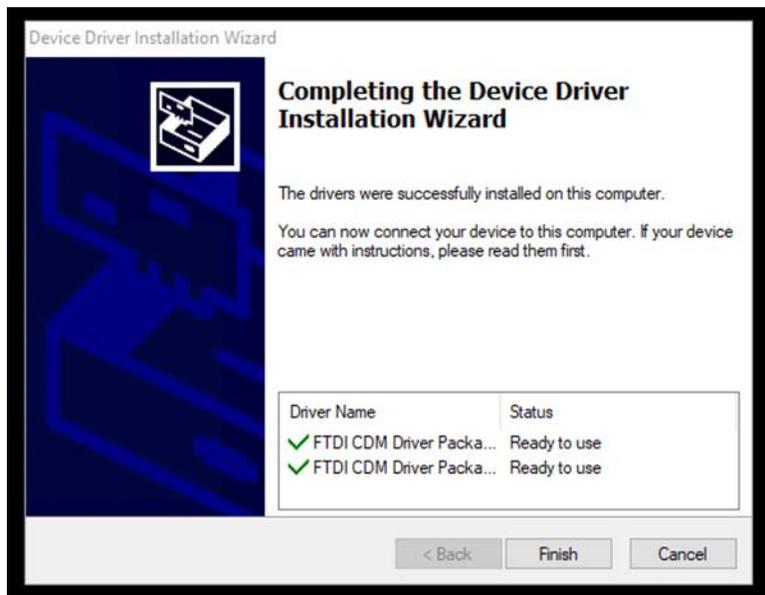

While RxAn is being installed, a progress window displays.

7. After RxAn is installed, if the user has allowed the drivers to be installed, the Device Driver Installation Wizard displays. Click on the Next button to continue the driver installation.
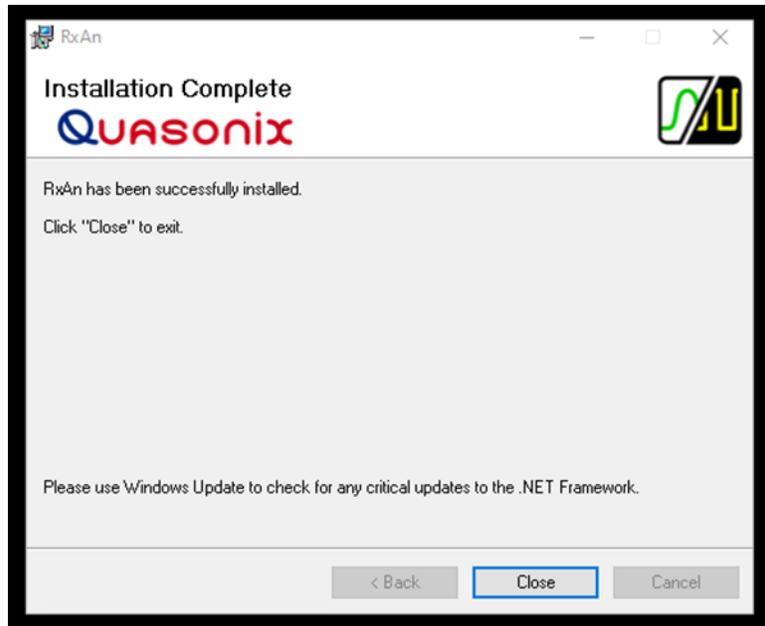
A License Agreement for the device driver displays. Select "I accept this agreement." You may print or save the agreement to a file, if desired. Click on the Next button to continue.

8. When the driver installation is complete, an installation status displays. Click on the Finish button to complete the driver installation.
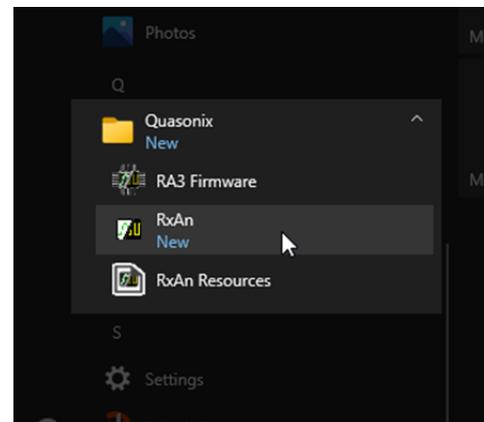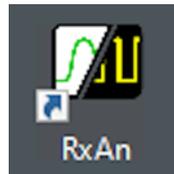
When the RxAn installation is complete, a final status displays.

After the installation is complete, a shortcut is added to the desktop.

A shortcut to RxAn is also installed in the Windows Start Menu under a Quasonix folder along with shortcuts to the RA3 Firmware and other RxAn Resources, including project files, layouts, measurements, and other documentation.
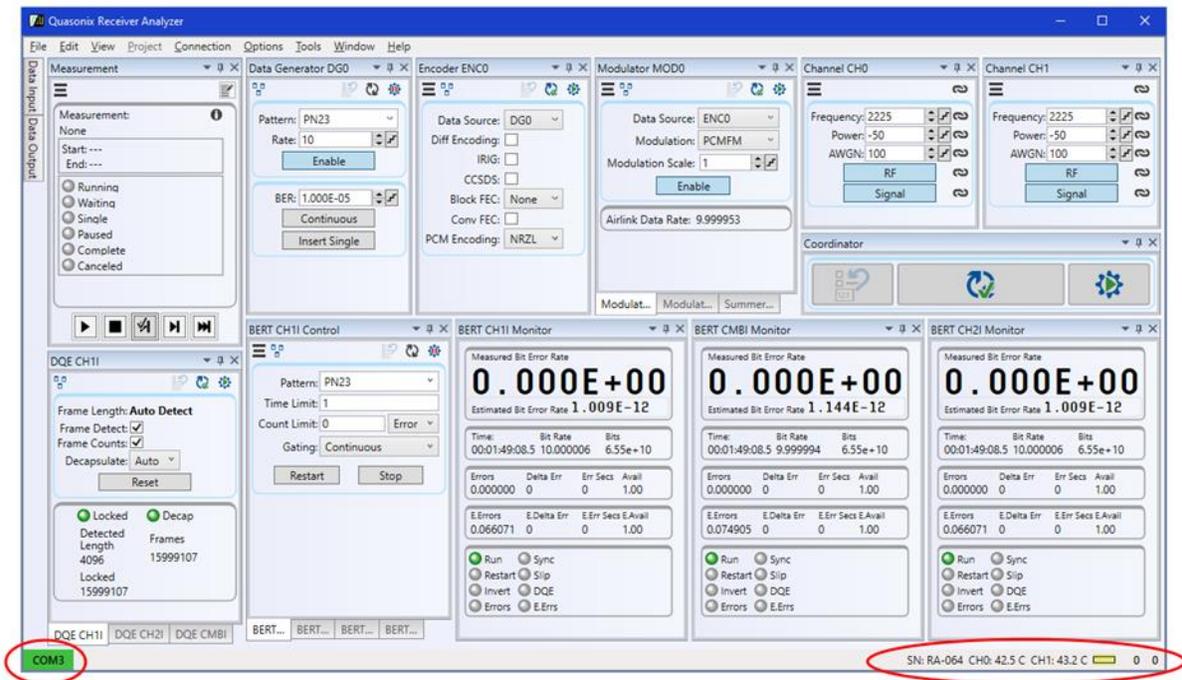

RA Communications Connection

Go to the desktop shortcut or to the Windows Start menu, then double-click on the RxAn.exe file.

The RA application scans available communication ports (COM), and automatically connects to the one attached to the RA.

When the application opens, a box in the lower left corner of the RxAn GUI displays the COM port connected. It displays in green when successfully connected. The lower right side displays status information received from the connected RA.
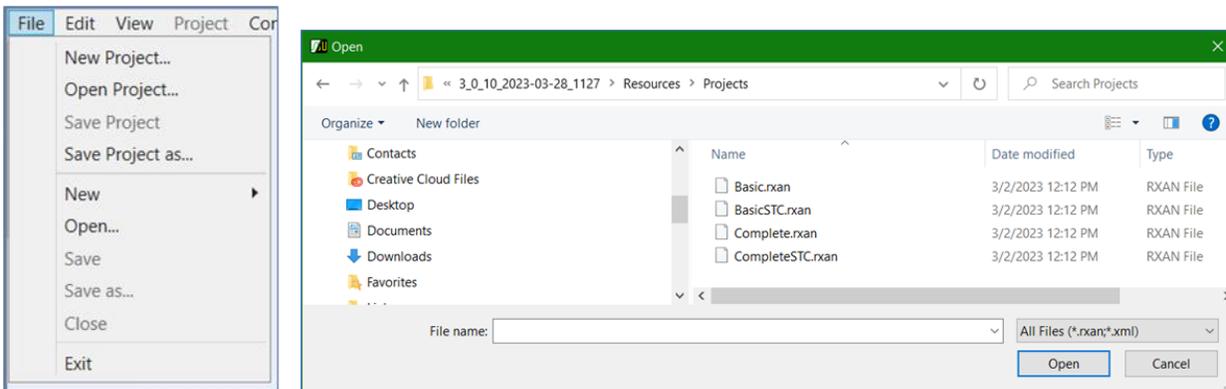
If there is no valid COM port connection, or no status information, use the Connection option in the Main Menu Toolbar. Refer to section 6.3.1.1 in the User Manual to troubleshoot the problem.

If connecting to multiple RAs, run another instance of the application after successfully connecting the first unit.
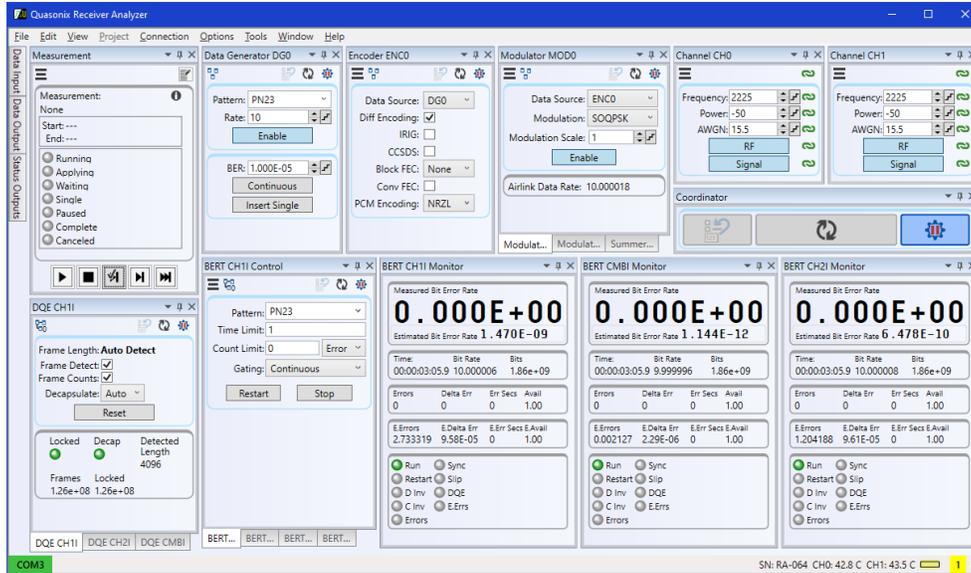
Open a Project File

The File menu provides the ability to create, open, and save RA projects. Go to the File > Open option, then select the desired project file to open.
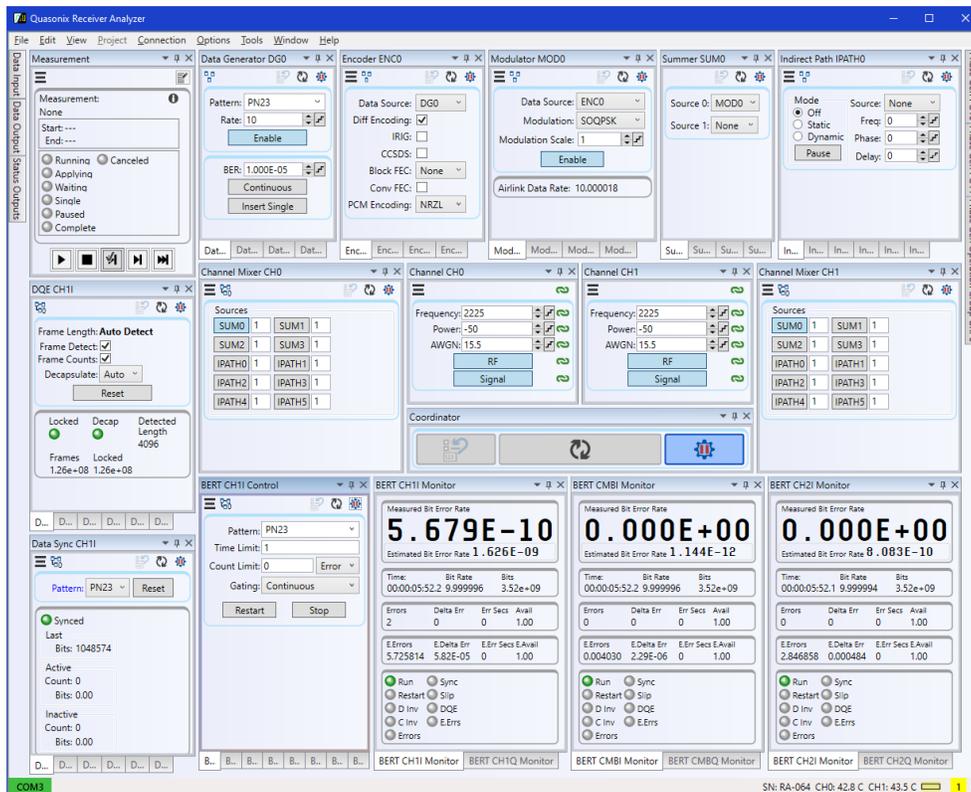

A few project files are provided as possible starting points. Basic.rxan and Complete.rxan provide a single modulated signal (PCMFM at 10 Mb/s to start) and three BERTs configured for measuring a dual-channel receiver with combiner. The only difference between these projects is the layout: Basic.rxan uses Basic.layout, which provides access to all common RA functions. Complete.rxan uses Complete.layout, which adds multipath capability.

Complete details, including user control via API, user control via GUI, and automated testing via measurement scripts, are available in the Installation and Operation Manual for the 3rd Generation Receiver Analyzer, available on the Quasonix web site.

Basic.RxAn Layout

Complete.RxAn Layout