



## SeaSonde Radial Suite Release 21 Installation Guide



0156.02.2204.IG

April 1, 2022

This document will guide you through the Radial Suite R21 installation. These instructions require a Macintosh installed with macOS 11 or 12, with the OS configured for SeaSonde. Refer to the [SeaSonde\\_On\\_MacOS12.pdf](#) for further instructions on configuring your Macintosh computer for SeaSonde.

**Note:** This document illustrates installing on macOS 12. Most of the steps will apply for previous versions of macOS, but some of the System Preference panes may look slightly different. The latest versions of macOS are capable of a light and dark mode, which means dark text on light background or light text on dark background; examples here are with the light mode.

**Release 21 requires a Codar licensing certificate file matched to the computer running the SeaSonde.**

Before you start, confirm that the computer meets the minimum requirements for proper SeaSonde operation. You can find the system specs by selecting “About This Mac” under the  menu:

### **Recommended Configuration**

MacMini or MacPro, Arm or Intel  
16 GB RAM or higher  
500 GB or higher boot volume  
macOS 11 or newer

### **Minimal Configuration**

MacMini Intel  
*8 GB RAM (not recommended for add-ons)*  
*50 GB boot volume*  
*macOS 10.13*

*(Note: MacBookPro can be used for offline processing, but not suitable for real-time)*

## **Connectivity Requirements**

The computer must be connected with internet access for the following features of Radial Suite: Radial Web Server, automatic data transfer to Combine Sites and for full technical support from CODAR engineers.

# SeaSonde Radial Suite Release 21 Installer

Note: The installer will only install onto the startup volume.

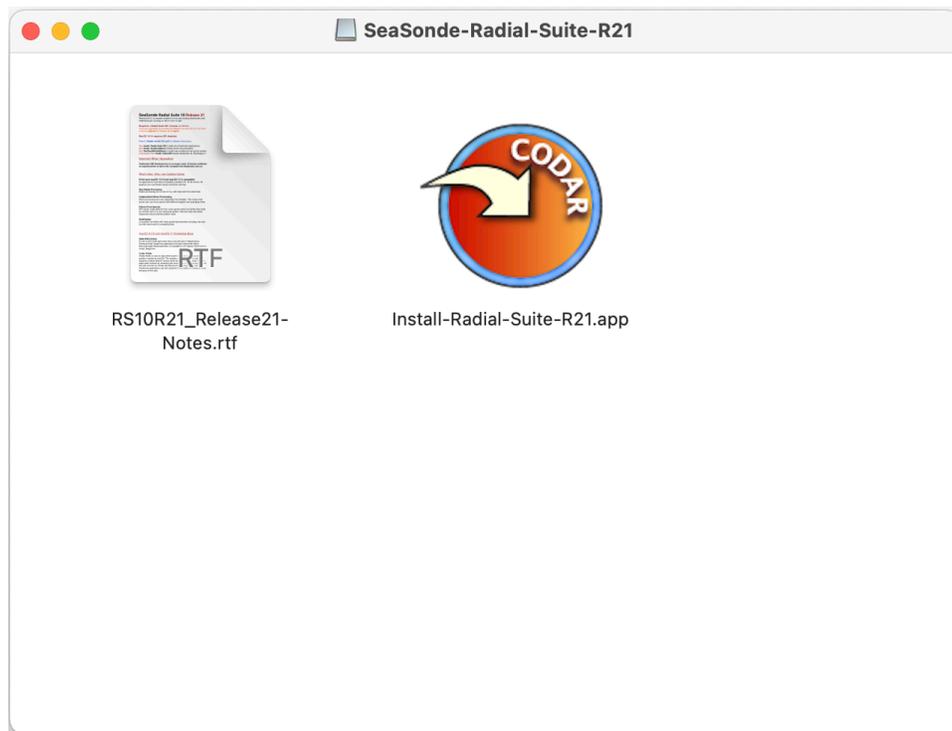
If you are upgrading a previous SeaSonde installation, the installer will first quit all known SeaSonde applications. You can also manually close all applications using the <command>Q keyboard shortcut after clicking on the application's icon on the Dock.

Release 21 installer will modify and rename some of the configuration files. You should always **backup** your **important data** and **configuration** files before running any installer. CODAR cannot be held responsible for any lost data.

To Install **SeaSonde Radial Suite** from the installer disk image, follow the steps below:

Double-click the disk image SeaSonde10R21-RadialSuite.dmg. A window will appear showing its contents.

**CAUTION: For macOS 10.13 and 10.14 computers upgrading from Release 8u4, be sure to follow the special instructions listed at the end of this guide before proceeding with the following steps; otherwise you won't be able to open the disk image file.**



## Installation Files

**RS10R21\_Release21-Notes.rtf** - important notes about installation and software changes.

**Install\_RadialSuite-R21.app** - installs all software applications.

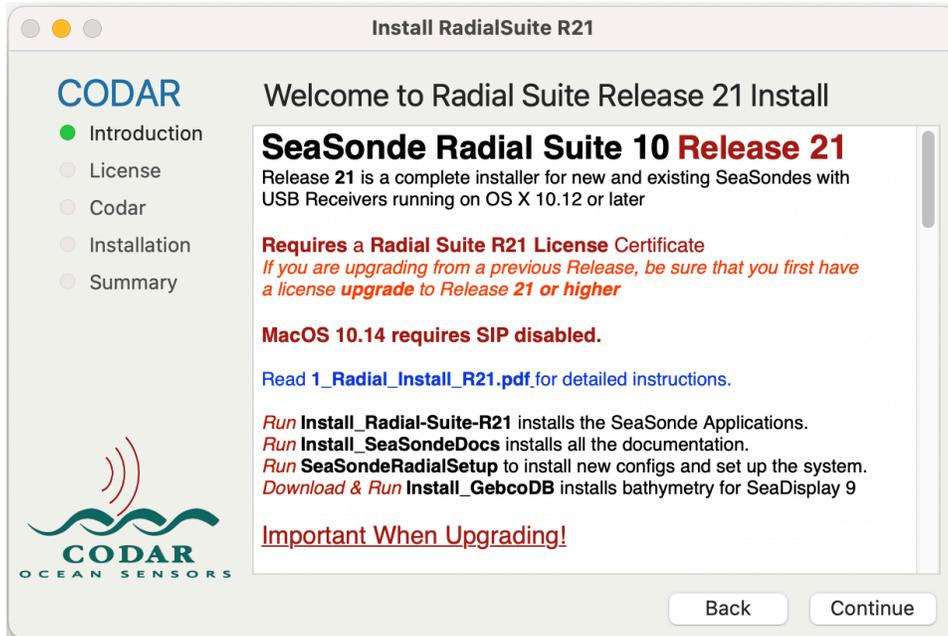
The bathymetry installer, **Install\_GebcoDB**, is a separate 1.2 GB download from CODAR Support that installs the GEBCO bathymetry database for SeaDisplay.

# Installation

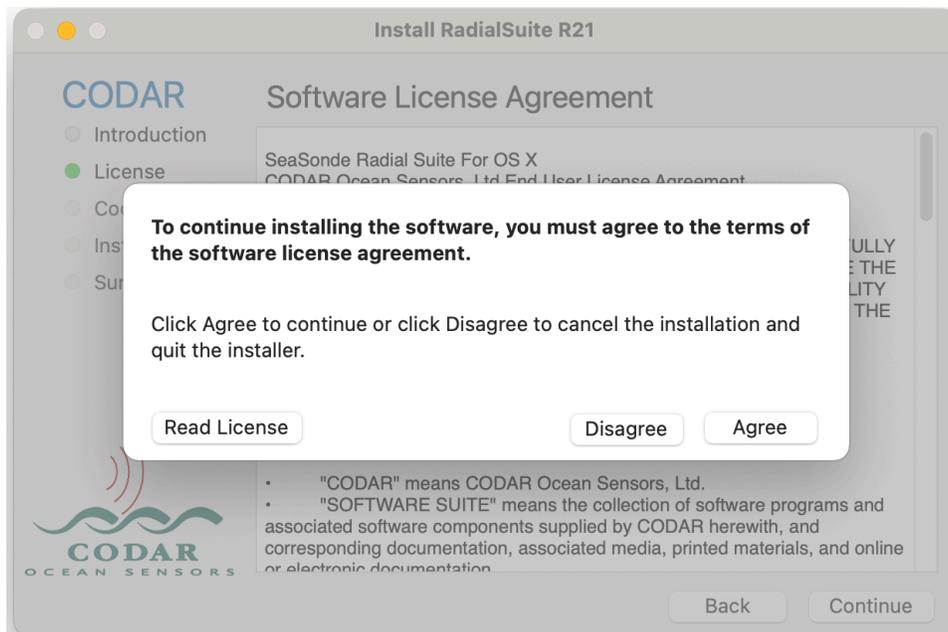
## Double-click 'Install\_Radial-Suite-R21'

When you run the installer, you might first see a dialog about downloaded from the Internet. Click Open.

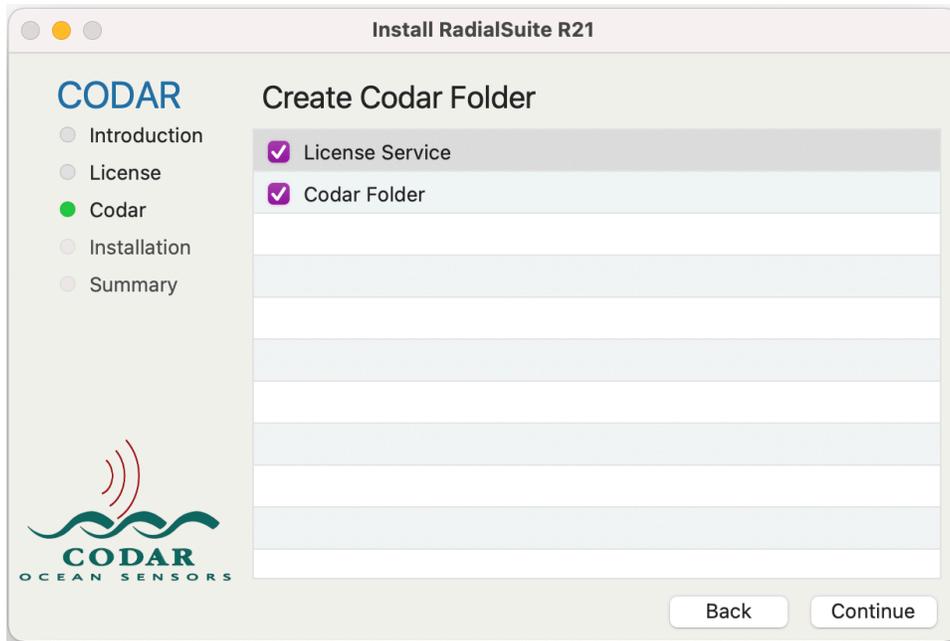
Read the notes in the installer's main window (also provided in RS10R21\_Release21-Notes.rtf). These notes contain important information about the changes from Release 8. If you are not prepared to install the software, click Back and quit the installer; otherwise, click Continue.



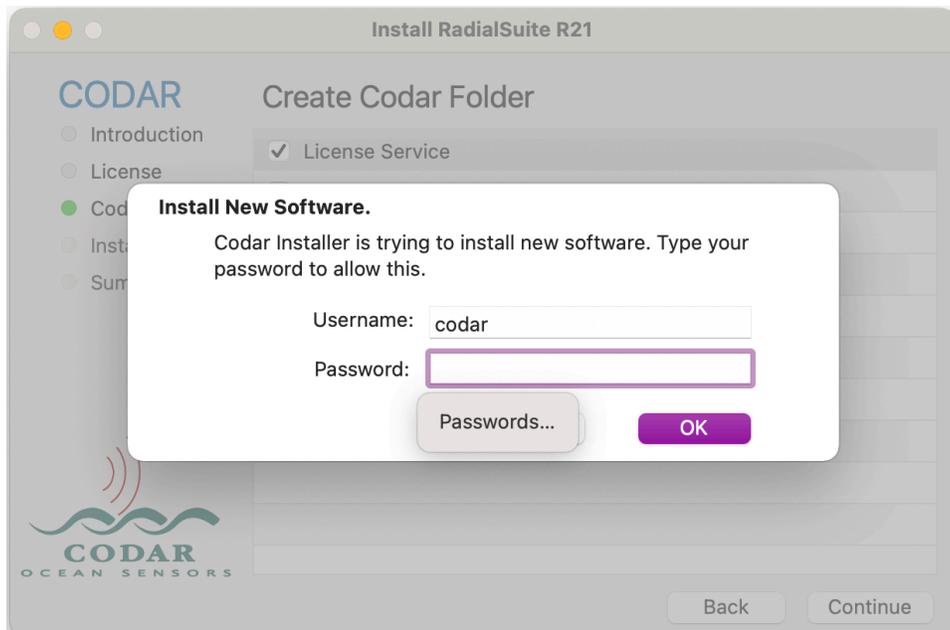
Read and accept the following licensing agreement.



The installer will first install the licensing server and create the folder structure for the Suite.



Because we are keeping the folder structure compatible with previous macOS versions, we are still creating a Codar folder on the root of the volume. For macOS 10.15 and newer, restrictions require placing an alias in the root and the software into a new data volume. For new installs after this completes, the installer will restart the computer, after which you'll need re-run the installer and when the installer again gets to this step it will continue without restarting the computer.



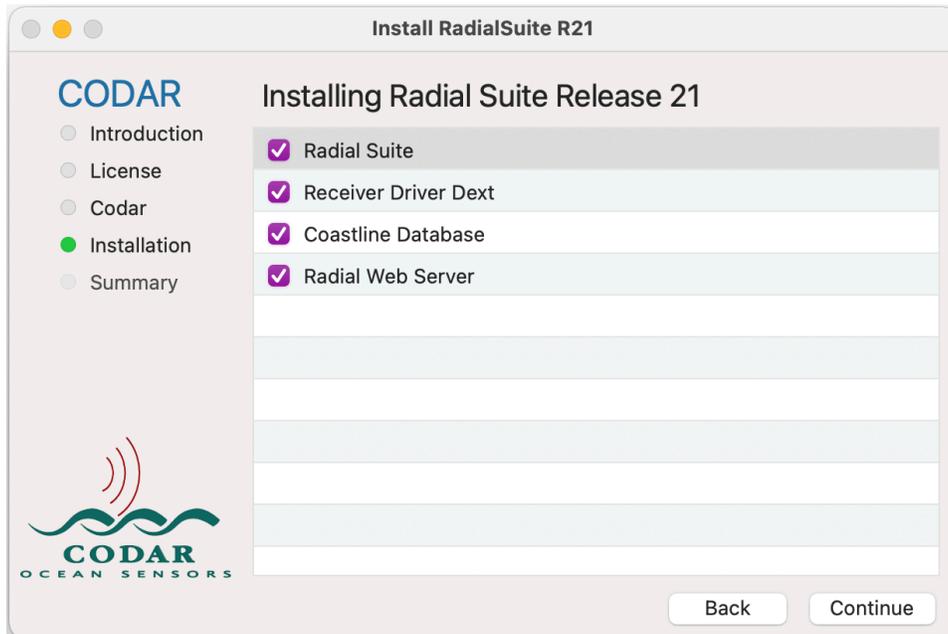
After the licensing server and Codar folder has been created the main installation steps are next. Click Continue button to proceed with the installation.

**Radial Suite** - installs all the Radial Suite applications, configurations, and sub- installers.

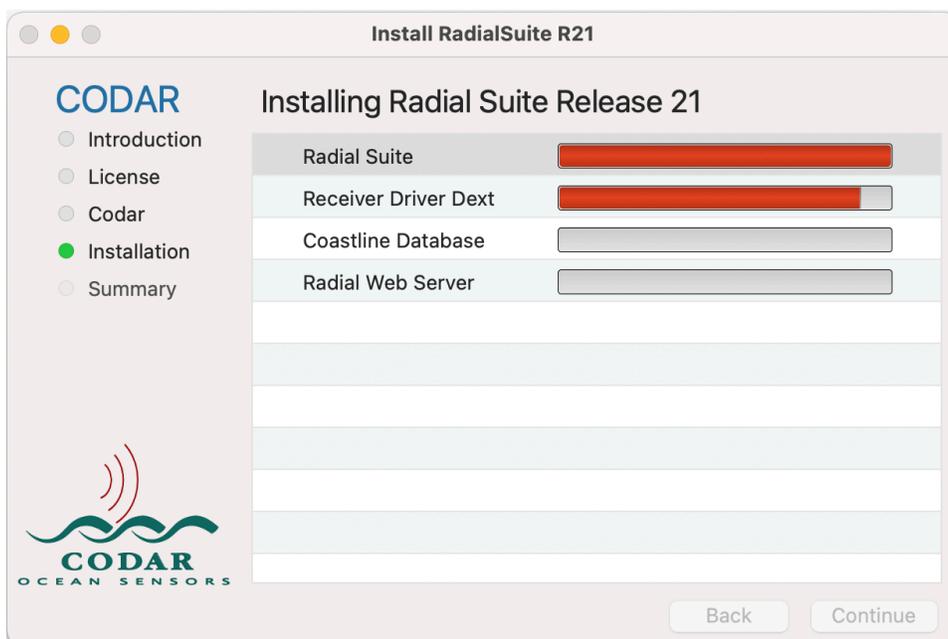
**Receiver Driver** - installs a USB driver in order to communicate with a SeaSonde receiver or transponder.

**Coastline Database** - installs world coastline database files needed by SeaDisplay in order to create/ edit site maps.

**RadialWebServer** - installs RadialWebServer to handle the Radial Web interface. The installer will prompt you to enter your computer administrative username and password. Once you've entered your password and clicked OK, the installer will begin.



The second item shows 'Receiver Driver **Dext**' for macOS 10.15 and later. For earlier macOS, it shows 'Receiver Driver **Kext**'. With macOS 10.15, Apple requires a very different driver with stricter installation requirements.

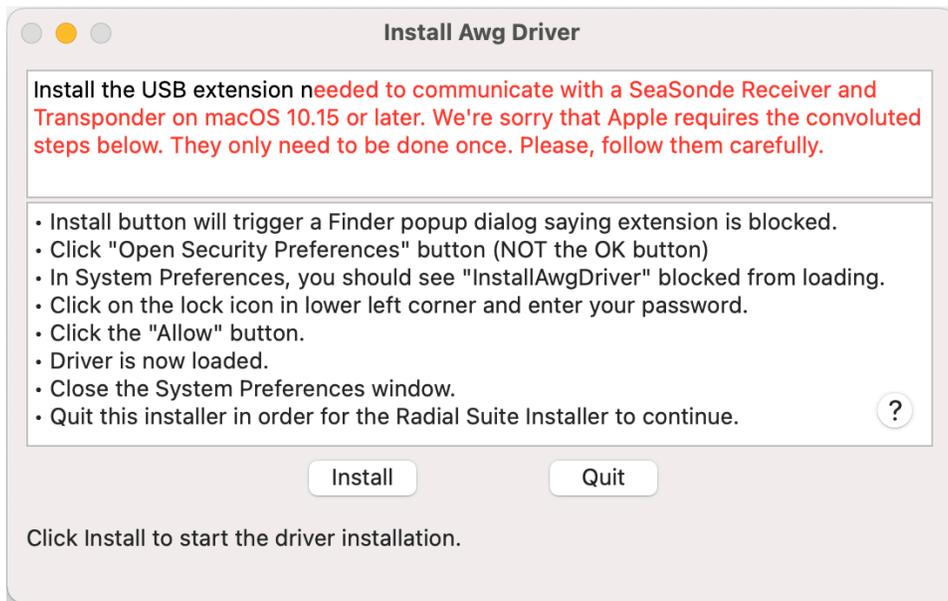


Pre macOS 10.14 will install a kext driver without any notifications.

With macOS 10.14, 11 & 12, you'll see a popup 'System Extension Block' and will need to open System Preferences -> Security and click the 'Allow' button. It will likely require you to unlock the preferences first. There's some similarity to the instructions for the Dext below without the extra application install steps.

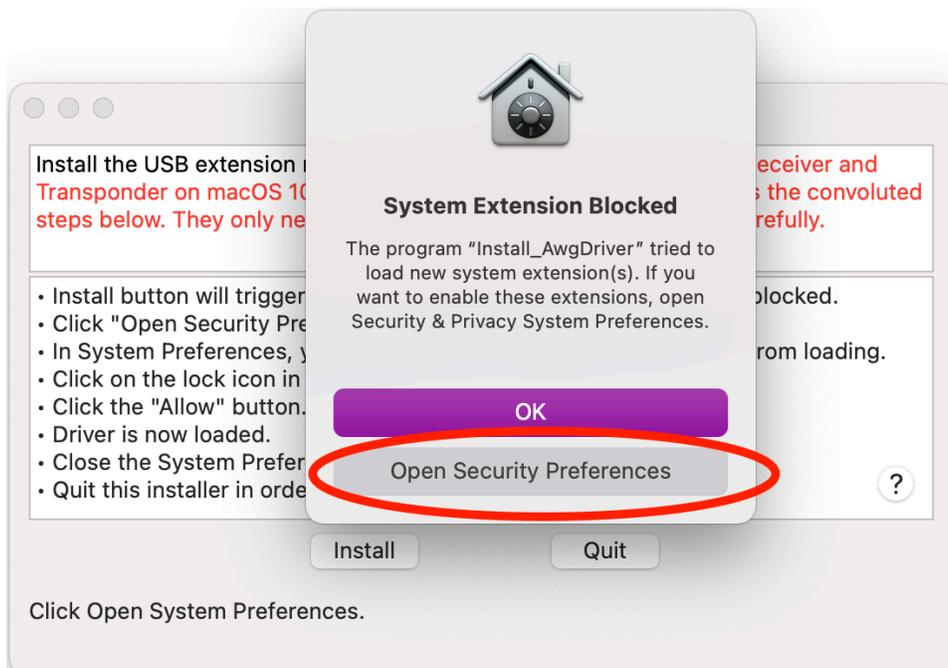
With macOS 10.15 and later, Apple requires the driver to exist in the Applications folder. The SeaSonde Suite installer copies the driver there and runs it in order to complete the driver installation. The Suite installer will continue after the driver installer is finished and closed. The driver installer will run and show the following window. Click the 'Install' button.

*If the driver was previously installed and is up-to-date, you will not see this step; skip down to where Coastline Database is installed.*

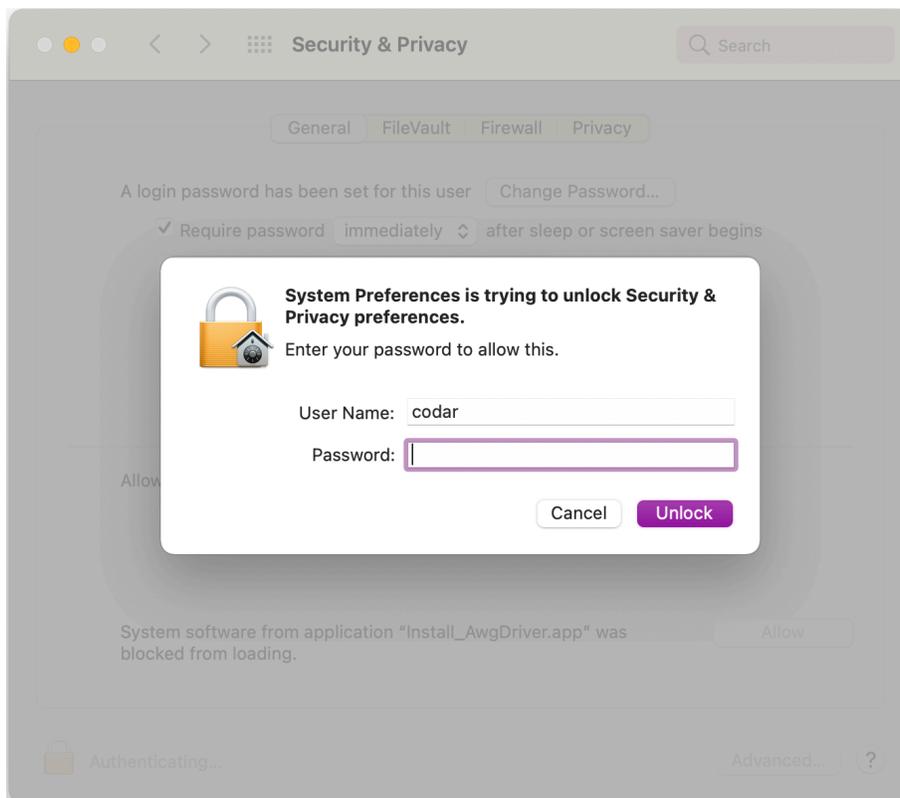
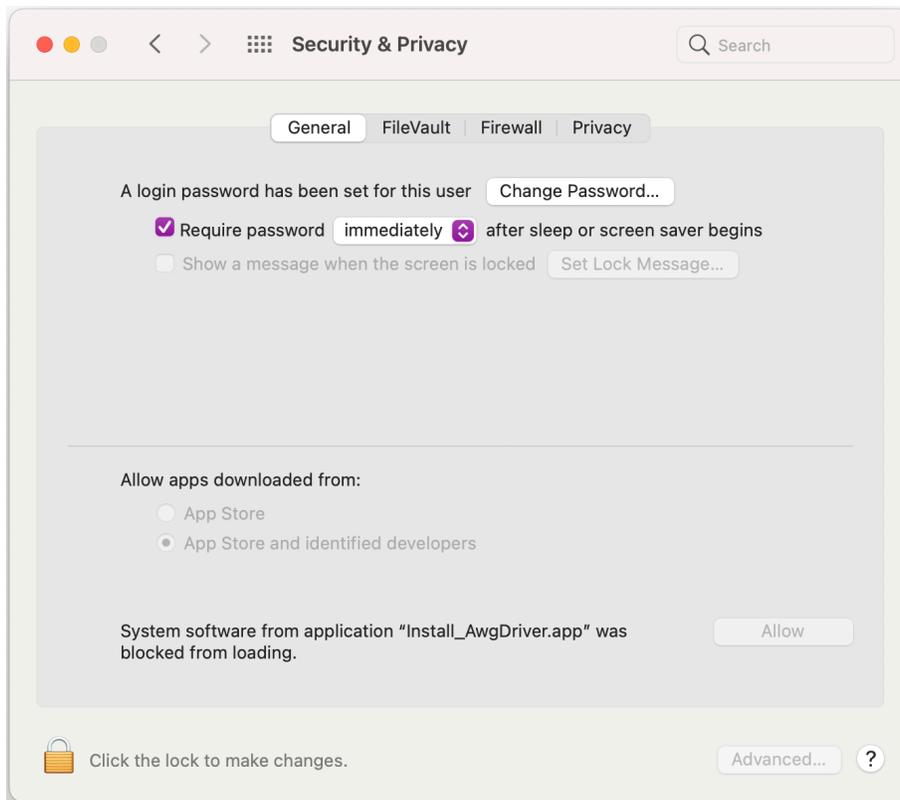


The driver installer will cause the follow popup dialog 'System Extension Blocked'. Click the 'Open' button, NOT the 'OK' button. The 'Open' button will open System Preferences.

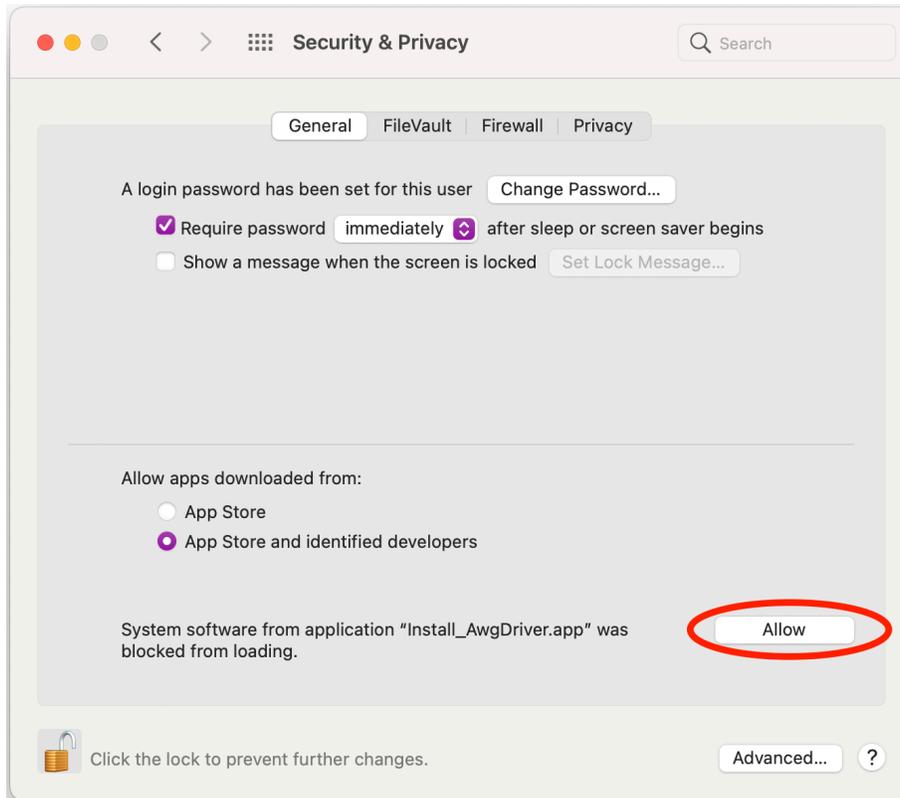
*If you do accidentally hit the OK button or return key, it will just dismiss the pop up. Go to the Apple menu on top left of screen and select 'System Preference', then select 'Security & Privacy'*



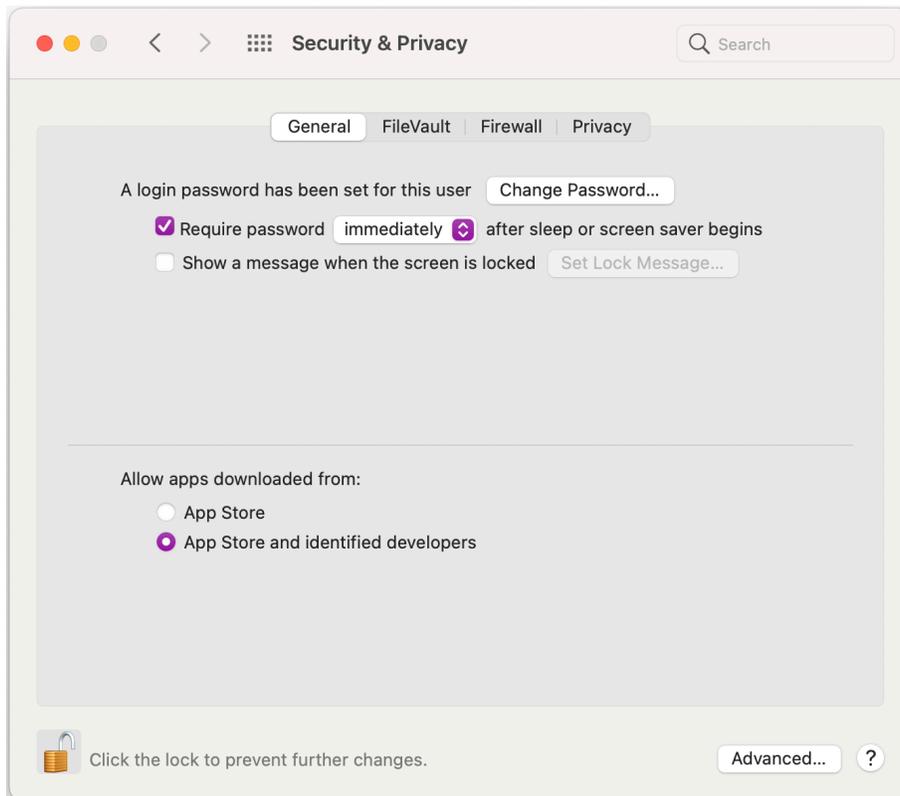
Unlock System Preferences by clicking lock icon in lower right.



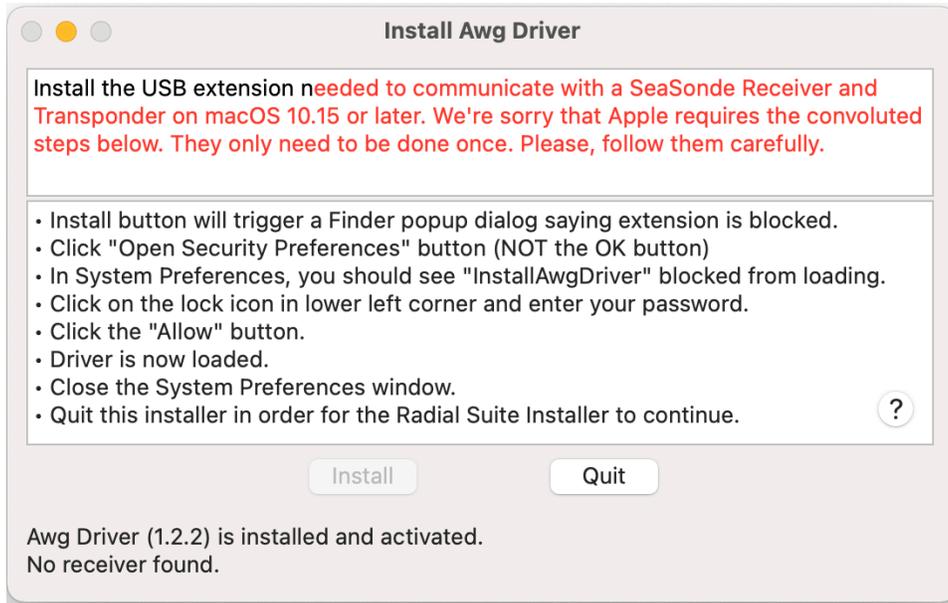
Once unlocked, click the 'Allow' button. As soon as you do, the Allow button will disappear.



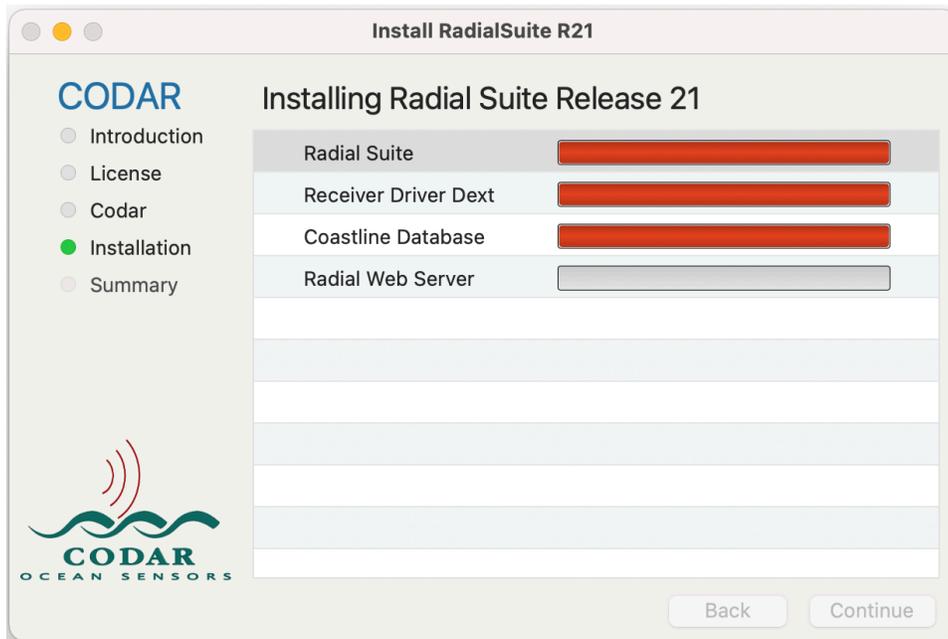
The driver is now running. Click the close button (red dot on upper left of window) to close the System Preference.



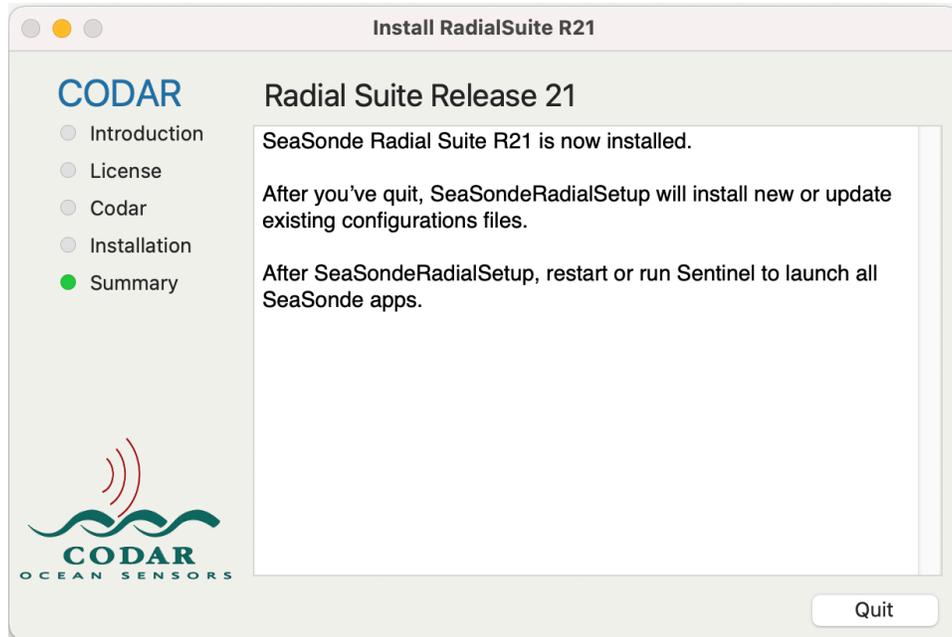
The driver installer will now show that the driver is installed and will show if a receiver is connected.



Click the 'Quit' button to quit the driver installer. The Suite installer will now automatically continue.



The Radial Suite is now installed. Click the Quit button to continue to next step of configuring the SeaSonde.

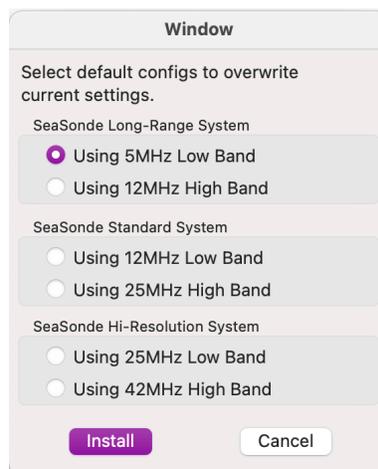


The Radial Suite installer will automatically launch SeaSondeRadialSetup in order to configure the SeaSonde. (Note you will see SeaSondeController running as well, because SeaSondeRadialSetup will tell it how to configure the receiver.)

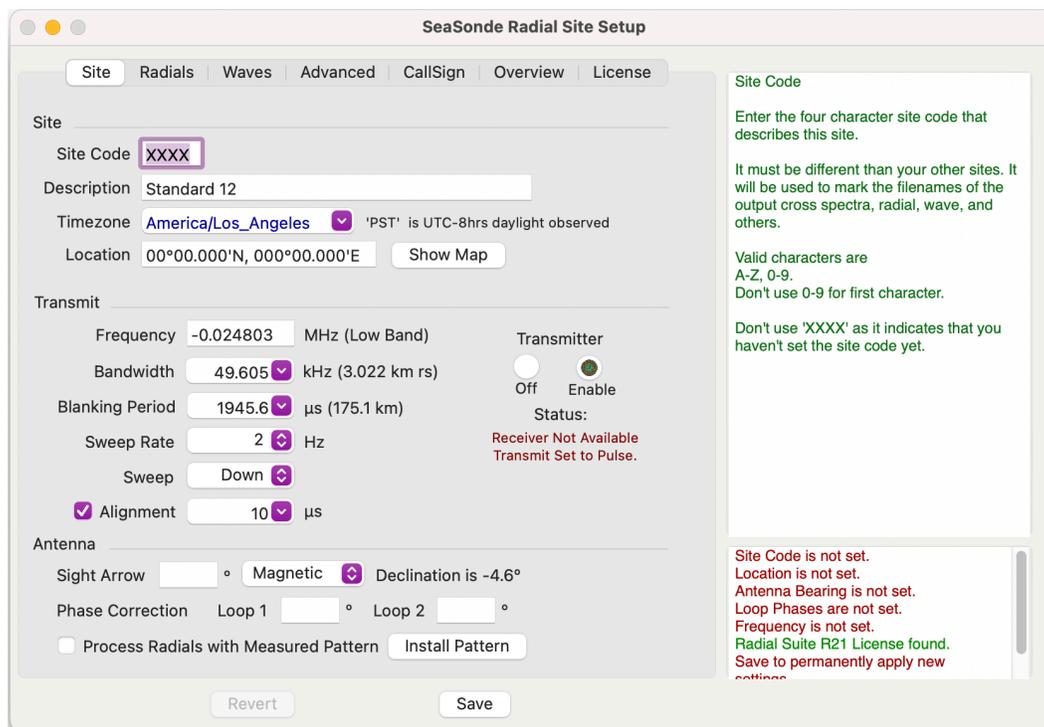


For a new system, SeaSondeRadialSetup will create a full set of default configuration files after asking what band(s) your system is built for.

When upgrading from previous release (R8), a backup of your configs will be made. Some config files will be replaced with newer configs after verifying what band(s) your system is built for.



Please read “[2\\_New\\_Site\\_Setup.pdf](#)” on how to configure a new site. With the transmitter turned OFF, now would be the time to have the SeaSonde Receiver turned on and connected to the computer. If updating from a previous release, please review your settings.

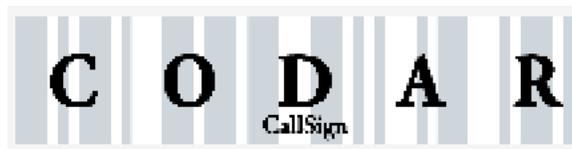


After you’ve configured your SeaSonde, save and quit [SeaSondeRadialSetup](#).

After you’ve completed the configuration, you should restart the computer to check that SeaSonde software comes up correctly and dismiss any first-time warning dialogs that sometimes come up.

## CODAR CallSign Feature

If you want to enable the new CallSign feature for an existing site, you will need to update the receiver’s firmware. Please contact CODAR Support. New SeaSondes will already have the updated firmware.



SeaSonde Radial Suite R21 is now installed.

Contact CODAR Support for any further questions.

# Special Instructions for macOS 10.13 and 10.14 Computers

If using macOS 10.14, then first disable Apple System Integrity Protection (SIP) before proceeding. See the next topic for instructions on disabling SIP.

Next follow the steps below for installing Release 21 on computers with macOS 10.13 or 10.14 (after disabling SIP).

**NOTE:** These steps are only needed if you are upgrading from an existing Release 8 installation to Release 21 on macOS 10.13 or 10.14. If you are installing on a new computer or after OS re-install with no prior Release 8 installation, then you don't need to do these steps. Download the Radial Suite Release 21 installer dmg file from [support.codar.com](http://support.codar.com).

Move it to the Desktop. Do not mount(open) the dmg file yet.

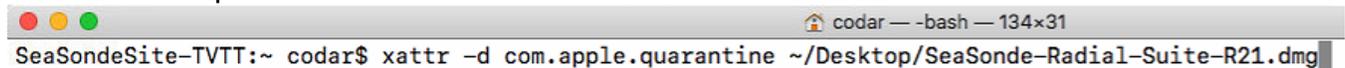
Open a new Terminal window on mac from icon on the dock or from /Applications folder.



Type the following command or copy and paste from here:(assuming you have the Release 21 installer file on the desktop of your computer. If it is in the download folder then change Desktop to Downloads)

**xattr -d com.apple.quarantine ~/Desktop/SeaSonde-Radial-Suite-R21.dmg**

Terminal example below:



*The above command is to remove a flag on the file that is set by macOS when a file is downloaded from the internet.*

**Note:** If you carried out the above steps on your office computer and then transferred the file over ssh/TeamViewer/LogMeIn to remote site computer, then you will not have to repeat the steps at your site computer.

After the above command is sent, now mount(open) the dmg file by double clicking on it and continue with the installation. If the above command was not successfully executed, you may not be able to mount the dmg.

Contact CODAR Technical Support if you have problems installing Release 21 on your macOS 10.13 or 10.14 computers. We can help with the installation.

## Disabling System Integrity Protection (SIP) on computers with macOS 10.14.

If your computer is on OS 10.14, you must disable Apple's System Integrity Protection (SIP) before upgrading to Radial Suite Release 21. *This requires you to be physically present in front of the computer. It can't be done remotely.*

**CAUTION:** *You will need to use a wired keyboard.*

### Follow below steps to disable SIP:

Restart computer with command(⌘) R keys held on your keyboard to boot into recovery mode. After computer completes reboot, launch Terminal app through the Utilities menu at the top.

Type following command in the Terminal:

```
csrutil disable
```

Restart computer. After it reboots normally, SIP should be disabled now.

Launch Terminal again and type command:

```
csrutil status
```

It should now show a message "System Integrity Protection status: disabled". If it still shows enabled, then something went wrong and you must repeat the above steps.

If successfully disabled, you are now ready to proceed with the next steps in installing R21.

## **Revision History**

Release Dec 29, 2021 - R21 Version

Revision 1: April 2, 2022 - added instructions for OS 10.13,10.14. version for support website.

## **Copyright and Disclaimer**

This document is copyrighted(c) by CODAR Ocean Sensors, Ltd and cannot be copied or reproduced in all or partial without expressed written consent by CODAR Ocean Sensors, Ltd.