

Version 1.1
03 / 2018

macOS USB Driver

For all **SCS** modems

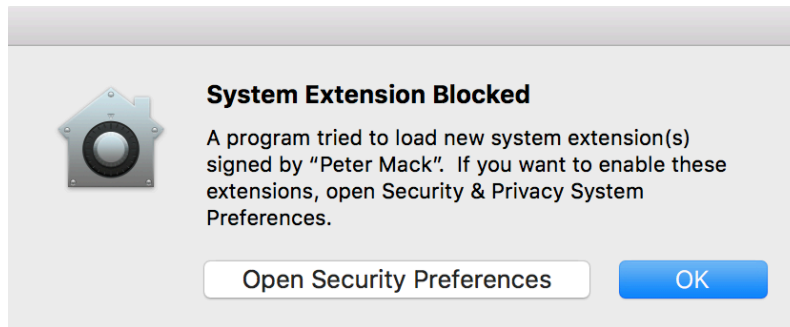
SCS Special Communications Systems



Installing the driver

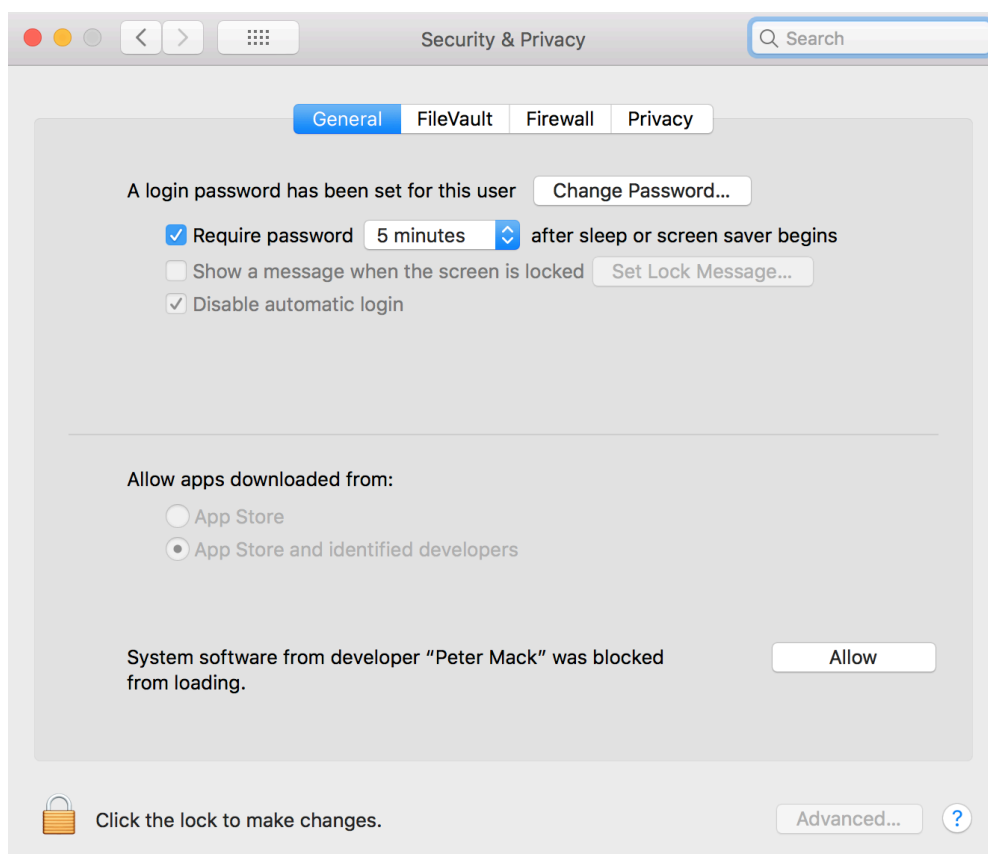
Double click on the installer package `SCSUSBSerialDriver.pkg` and follow the instructions.

Beginning with macOS High Sierra Apple added additional security when loading third party drivers. So you will see the following message during the last stage of the installation process:



The `SCSUSBSerialDriver.pkg` and the contained driver were properly signed with the private Apple developer ID of one of the **SCS** members (Peter Mack).

So you have to click on "Open Security Preferences". This leads you to the following dialog:



Click to "Allow" to continue the installation process.

Testing the driver

After successful installation of the driver you may now connect your **SCS** modem to your Mac using a standard USB cable.

To check if everything works start the Apple Terminal app from the Applications->Utilities folder. Enter the following command and press the Return key:

```
ls -l /dev/tty.*
```

You should see something like:

```
bash-3.2$ ls -l /dev/tty.*
crw-rw-rw-  1 root  wheel   17,  20  5 Feb 10:36 /dev/tty.Bluetooth-Incoming-Port
crw-rw-rw-  1 root  wheel   17,   2  5 Feb 10:36 /dev/tty.SCSDRAGON7800-DRXPT6RZ
```

You should see an entry like

/dev/tty.SCSDRAGON7800-DRXPT6RZ

SCSDRAGON7800 if you have a **SCS** P4dragon DR-7800 or

SCSDRAGON7400 if you have a **SCS** P4dragon DR-7400.

DRXPT6RZ is a more or less random number.

Now you can use the simple serial communications app like CoolTerm from

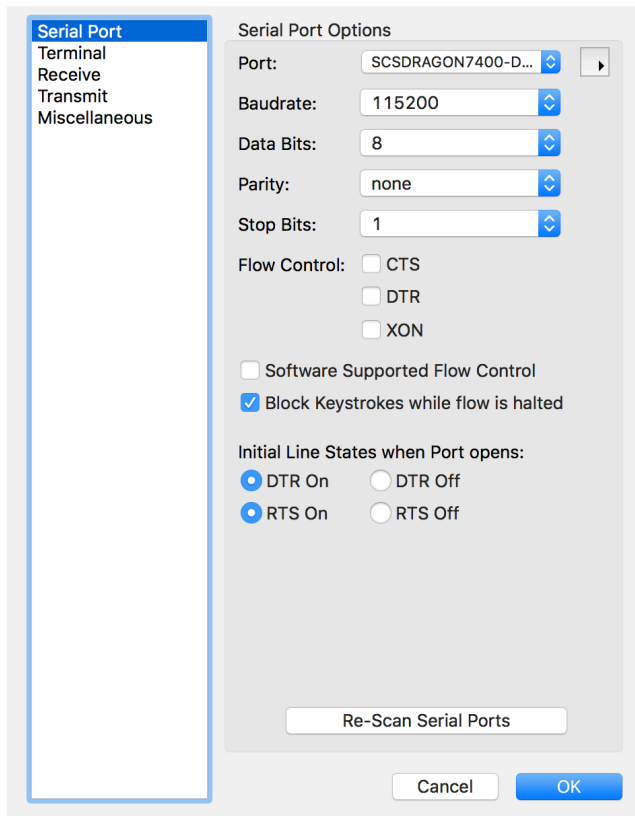
<http://freeware.the-meiers.org> to communicate with your modem.

Because this app is not signed you have to follow these steps to start the app the first time:

- 1) In Finder, Control-click or right click the icon of the app.
- 2) From the contextual menu that appears select Open while holding down the command key.

Using CoolTerm

Setting up CoolTerm for the use with **SCS** modems is pretty straight forward. Only a few settings have to be changed. First open the Option dialog from the Connection menu or click on the Options icon at the tool bar. The following dialog shows up:



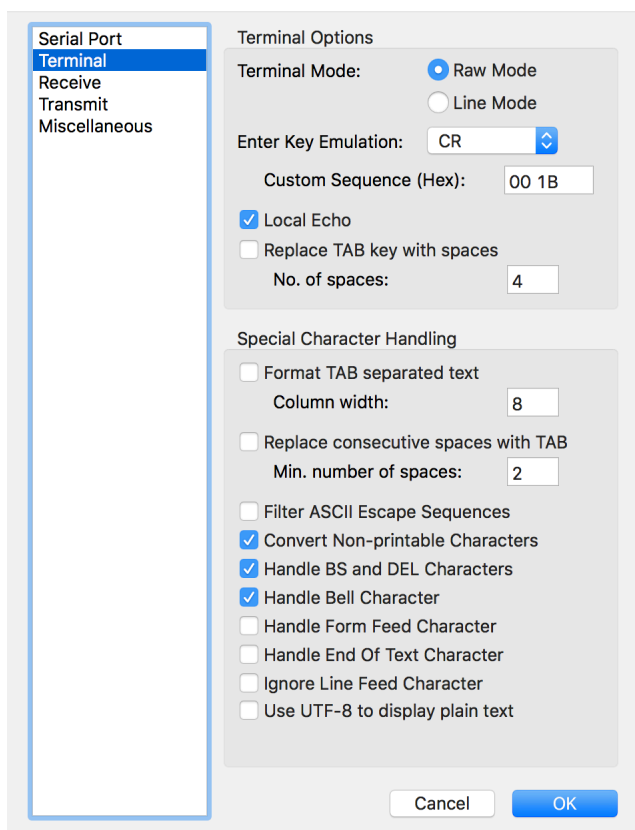
The image shows the 'Serial Port Options' dialog box in CoolTerm. On the left is a sidebar with tabs: 'Serial Port' (selected), 'Terminal', 'Receive', 'Transmit', and 'Miscellaneous'. The main area is titled 'Serial Port Options'. It contains the following settings: 'Port' is set to 'SCSDRAGON7400-D...'; 'Baudrate' is '115200'; 'Data Bits' is '8'; 'Parity' is 'none'; 'Stop Bits' is '1'. Under 'Flow Control', 'CTS', 'DTR', and 'XON' are unchecked, while 'Software Supported Flow Control' is also unchecked and 'Block Keystrokes while flow is halted' is checked. Under 'Initial Line States when Port opens:', 'DTR On' and 'RTS On' are selected with radio buttons. At the bottom is a 'Re-Scan Serial Ports' button. At the very bottom of the dialog are 'Cancel' and 'OK' buttons.

Choose the appropriate Port and set the Baudrate to 115200.

For the **SCS** Tracker / DSP TNC set the Baudrate to 38400 (if not changed with DIP switch 2).

Uncheck "Software Supported Flow Control".

Select the Terminal tab:



The image shows the 'Terminal Options' dialog box in CoolTerm. The 'Terminal' tab is selected in the sidebar. The main area is titled 'Terminal Options'. It contains the following settings: 'Terminal Mode' has 'Raw Mode' selected with a radio button and 'Line Mode' is unselected. 'Enter Key Emulation' is set to 'CR'. 'Custom Sequence (Hex)' is '00 1B'. 'Local Echo' is checked, 'Replace TAB key with spaces' is unchecked, and 'No. of spaces' is '4'. Under 'Special Character Handling', 'Format TAB separated text' is unchecked, 'Column width' is '8', 'Replace consecutive spaces with TAB' is unchecked, 'Min. number of spaces' is '2', 'Filter ASCII Escape Sequences' is unchecked, 'Convert Non-printable Characters' is checked, 'Handle BS and DEL Characters' is checked, 'Handle Bell Character' is checked, 'Handle Form Feed Character' is unchecked, 'Handle End Of Text Character' is unchecked, 'Ignore Line Feed Character' is unchecked, and 'Use UTF-8 to display plain text' is unchecked. At the bottom are 'Cancel' and 'OK' buttons.

Set "Enter Key Emulation" to CR.

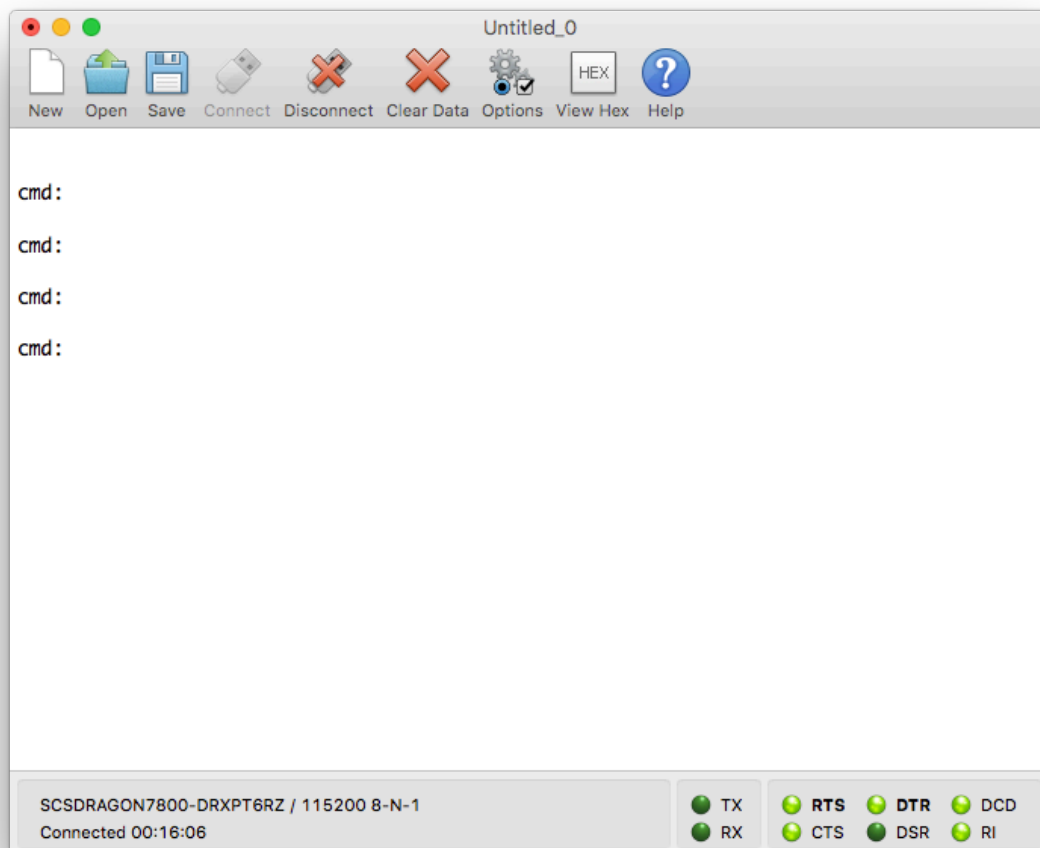
Check "Local Echo".

Check "Handle BS and DEL Characters".

Check "Handle Bell Character".

Click Ok.

Now you can click on Connect from the tool bar. After pressing the Enter key you should see the typical `cmd:` from the modem. For an appropriate reaction of the Tracker / DSP TNC you should press the ESC key.



Technical information

This driver is a customized version of the FTDI OS X USB driver version 2.2.18 see <http://www.ftdichip.com/Drivers/VCP.htm>

Despite the fact that this driver is specified only for OS X 10.3 to 10.8 by FTDI it runs perfectly up to macOS 10.13.3.



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