

Transfer Race Data From Time Machine To Your Computer

The Time Machine timer allows you to receive race data on your computer via your communications ports by transmitting the data through the RS232 or serial port on the Time Machine. The serial port on the Time Machine uses RJ-11 and an RS-232 adapter that ships with the Time Machine. However, you may need an RS-232 to USB adapter to make the appropriate connections. This adapter may be purchased on Amazon for less than \$10. See the image



Purchased on Amazon for less than \$10

below.

We are using a software application called Cool Term to receive the transmitted data from the Time Machine. It is free software provided for free at <https://freeware.the-meiers.org/>. This software will display the received data as well as allow you to export the data to a text file. You may then import the text file into Excel or other spreadsheet applications.

Step 1

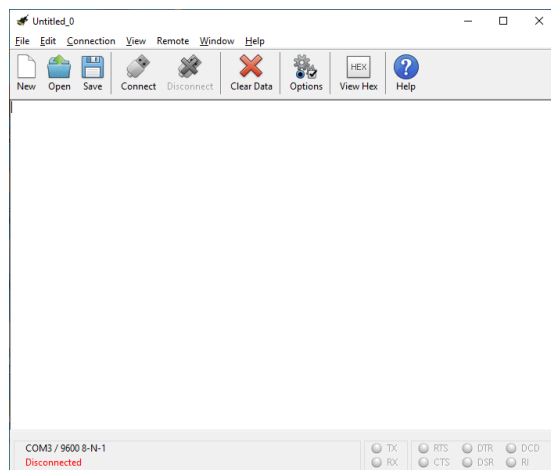
Download Cool Term to your computer.

Step 2

Connect the Time Machine to your computer's USB port using the provided RJ-11 cable, the RS-232 adapter and the RS-232 to USB adapter.

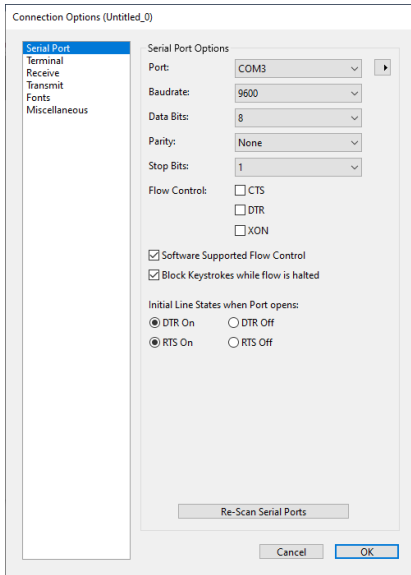
Step 3

Open Cool Term.

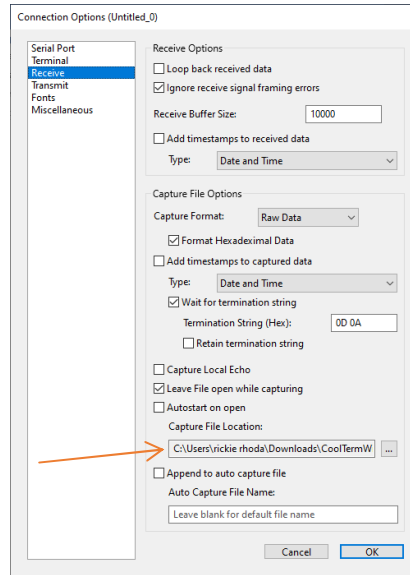


Step 4

In Cool Term, click **Options** and the following window will display.



For the **Serial Port settings**, choose your communications ports as show above. Make sure the **Baudrate** setting is set to 9600 and the **Data Bits** setting is set to 8. **Parity** should be set to none. **DTR On** and **RTS On** should be selected.



For the **Receive** settings, choose a location for where your text file should be created.

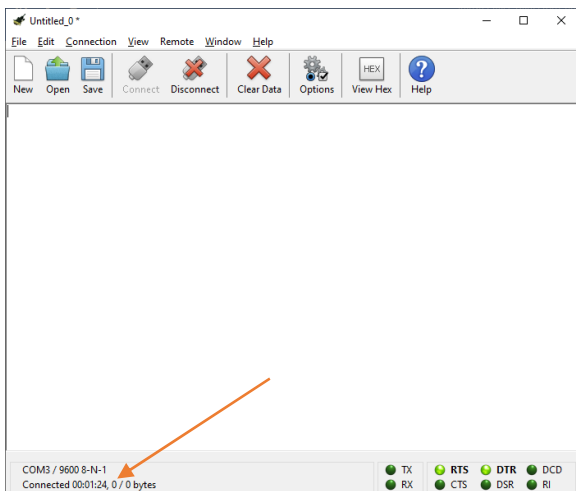
Another setting that might be useful is under the **Fonts** section. This setting allows you to choose a font that suits you.

Step 5

Save your connection by click **File>Save As**. Then, choose a location and file name for your connection.

Step 6

Click **Connect**. You should see a message at the bottom right of the Cool Term window indicating the communication port that you are connected to and the baud rate as well as other settings.



Step 7

1. Turn on the Time Machine. Push The **SET UP** key until you see the **[RS232 PORT]** parameter.
2. Press Enter. The display should read **[RE-XMIT DATA]**.
3. Push SET UP until you see **[CHG LINE SETUP]**.
4. Push Enter. The display will read **[SHOW SETTINGS]**.
5. Push Enter. Ensure that the **BAUD, PRTY, BIT,** and **HS** match the settings in Cool Term.
6. If all settings match, press **Enter**.
7. Press **CLEAR** until you have exited the setup parameters.

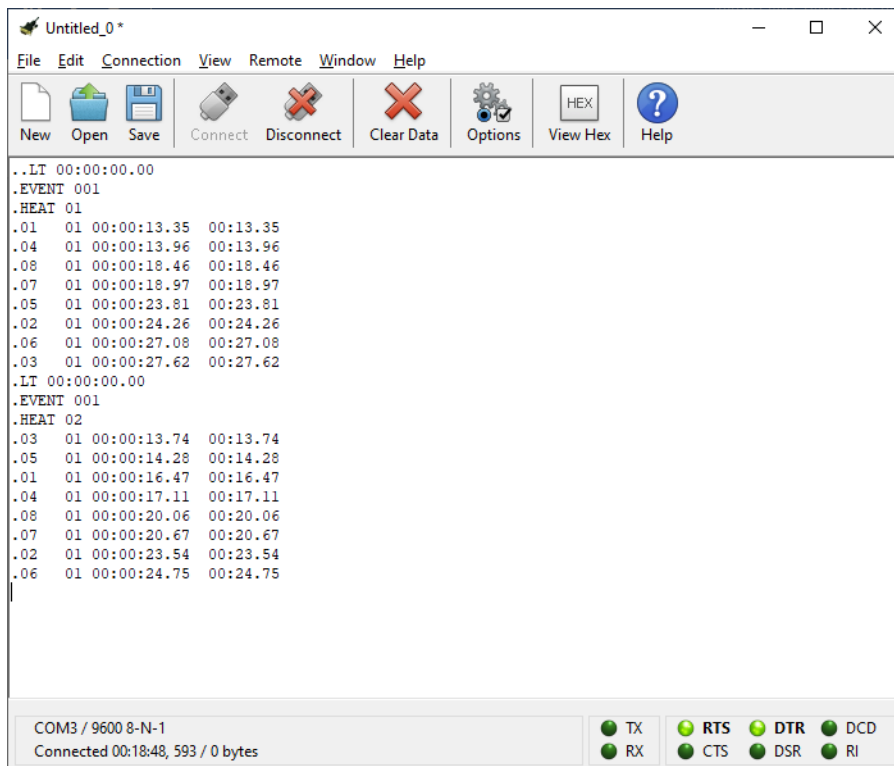
Step 8

Start the Time Machine as if you were timing a race. Navigate to Cool Term and you should see a “.” at the top left of the main Cool Term window. This is an indication that Cool Term is listening on the serial port and data is being transmitted and received.

Start the Time Machine using the **START TIME** key. Race data will begin displaying in the main window of Cool Term. For this step, I am using **Track Mode** and I will do 2 heats for a race, for example.

As the grip switches are pressed, the timer transmits that data through the serial port in real time and it displays immediately in the Cool Term main window.

See the image below. Notice that the even and heat are displayed at the top of the race data.



The screenshot shows the Cool Term software window titled "Untitled_0*". The window has a menu bar with "File", "Edit", "Connection", "View", "Remote", "Window", and "Help". Below the menu bar is a toolbar with icons for "New", "Open", "Save", "Connect", "Disconnect", "Clear Data", "Options", "View Hex", and "Help". The main window area displays the following text:

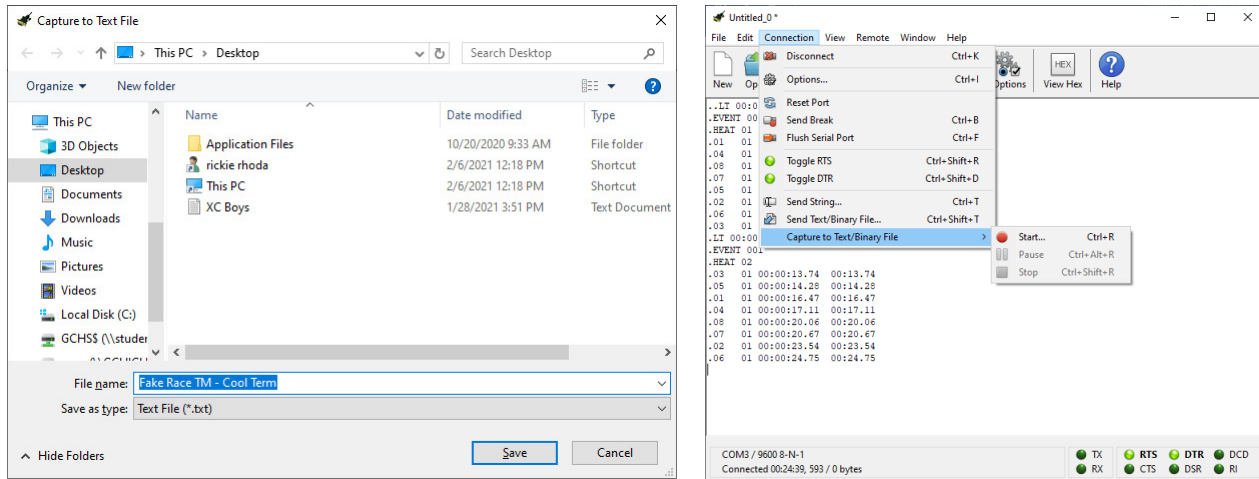
```
..LT 00:00:00.00
.EVENT 001
.HEAT 01
.01 01 00:00:13.35 00:13.35
.04 01 00:00:13.96 00:13.96
.08 01 00:00:18.46 00:18.46
.07 01 00:00:18.97 00:18.97
.05 01 00:00:23.81 00:23.81
.02 01 00:00:24.26 00:24.26
.06 01 00:00:27.08 00:27.08
.03 01 00:00:27.62 00:27.62
.LT 00:00:00.00
.EVENT 001
.HEAT 02
.03 01 00:00:13.74 00:13.74
.05 01 00:00:14.28 00:14.28
.01 01 00:00:16.47 00:16.47
.04 01 00:00:17.11 00:17.11
.08 01 00:00:20.06 00:20.06
.07 01 00:00:20.67 00:20.67
.02 01 00:00:23.54 00:23.54
.06 01 00:00:24.75 00:24.75
```

At the bottom of the window, there is a status bar showing "COM3 / 9600 8-N-1" and "Connected 00:18:48, 593 / 0 bytes". To the right of the status bar are several status indicators: TX, RX, RTS, CTS, DTR, DSR, DCD, and RI, each with a green light icon.

Exporting your race data to a text file

Step 1

In Cool Term, click **Connection** in the File Menu. Choose **Capture to Text/Binary File** as shown below. Then, choose **Start**. Cool Term will suggest a file name for you. However, you may change to a file name that is more descriptive and therefore, more suitable for you. Once you are satisfied with your file name, click **Save**.



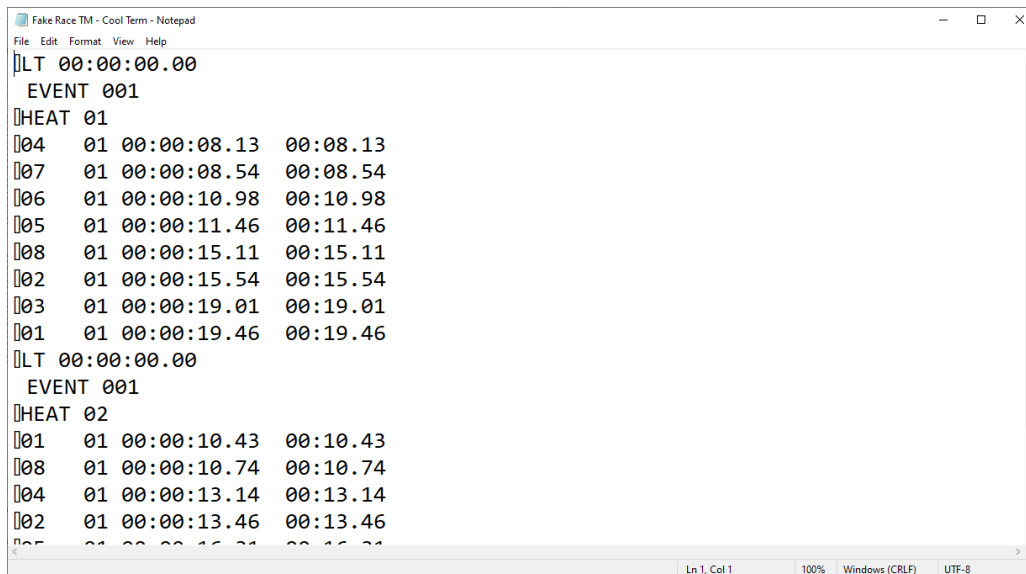
Once you have set up your text file to record to, your status indicator at the bottom left of the Cool Term window should display **"Capturing..."**

Note: You must set up your text file before you start timing and capturing the race data in Time Machine.

Step 2

Start your time and the race data will display in Cool Term. It is also being captured in your designated text file. See the text file image below.

The below image shows the race data which was capture in my designated text file.



Importing your race data to Excel (from the text file capture)

Step 1

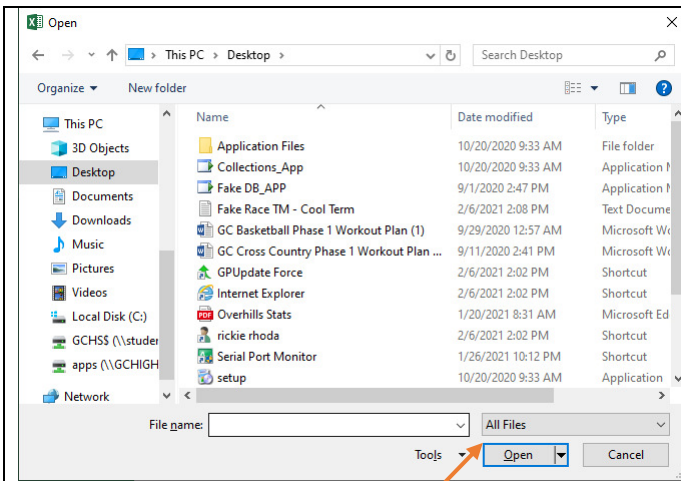
Open Excel

Step 2

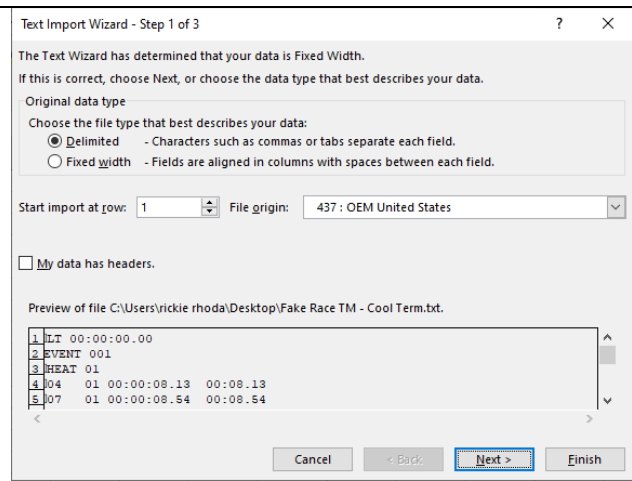
Click **File > Open** and then choose Browse.

Step 3

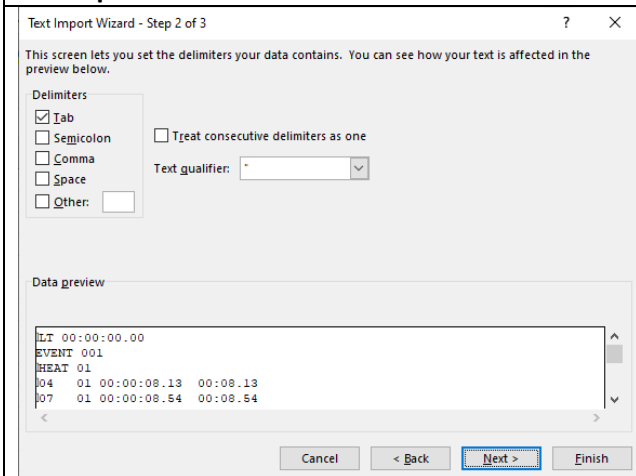
Navigate to the location of your text file and choose it. If Cool Term is still in capture mode, you will get a message in Excel indicating that the file is in use. If so, just choose **Read Only**.



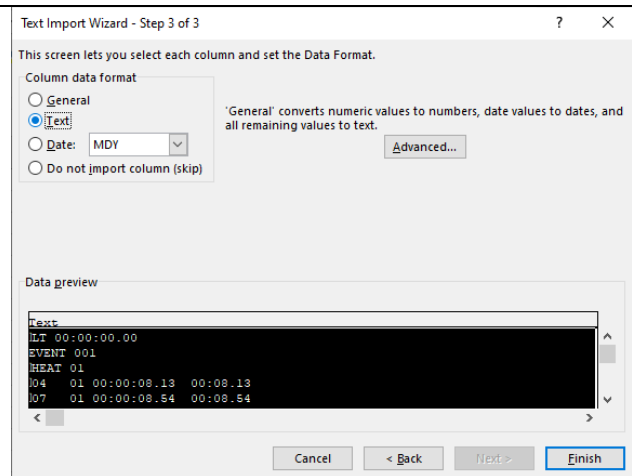
Change **All Excel Files** to **Text Files**. Choose your file and click **Open**.



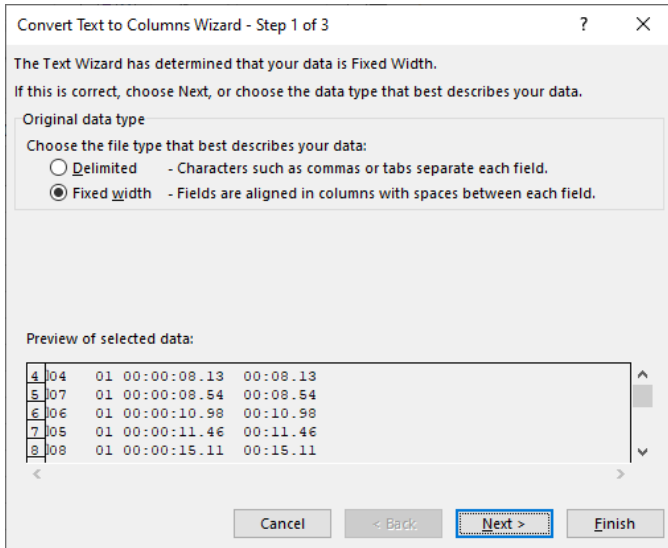
You may use **Fixed width** or **Delimited**.



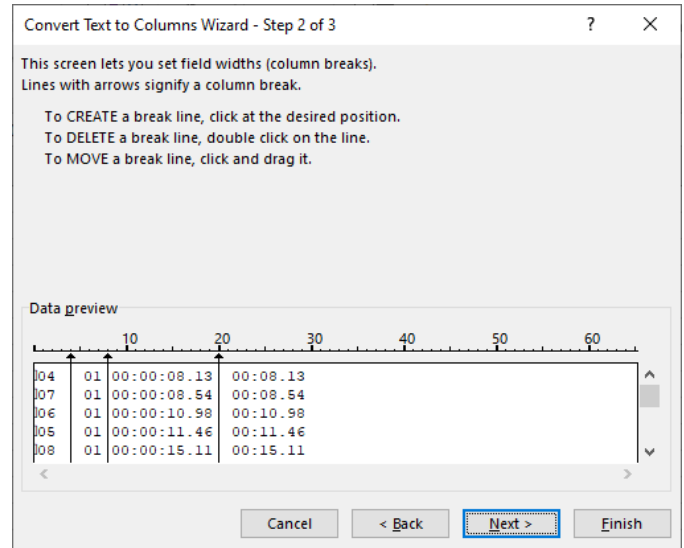
Choose **Tab** for Tab Delimited. Click **Next**.



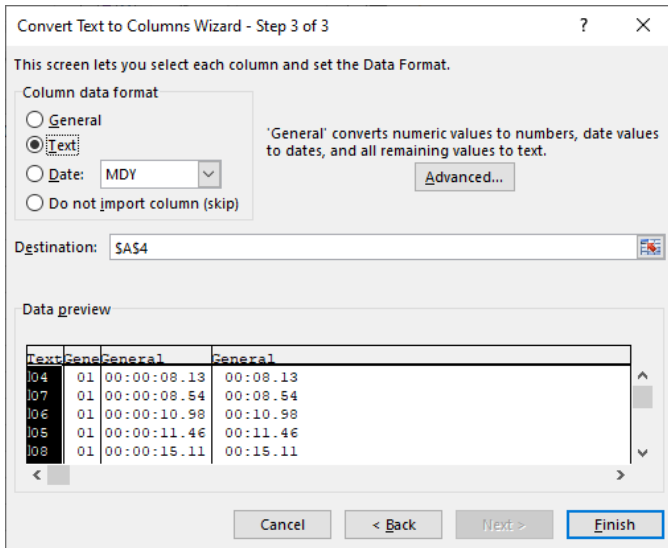
Important: Make sure you choose **Text** in Step 3 of 3 in the wizard. Click **Finish**.



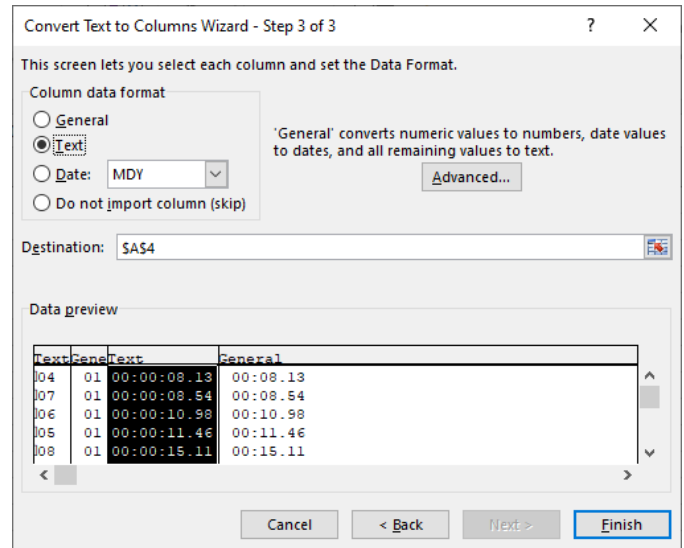
Choose **Fixed width** and click **Next**.



Check your break lines that will define your columns and click **Next**.



Important: Highlight the column or columns with time data in them. Change the **Column data** form to **Text**. This will insure that your times will not be rounding or changed to a date format.



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Click Finish and check the data in your columns.

