



MOVING IMAGE TECHNOLOGIES INC

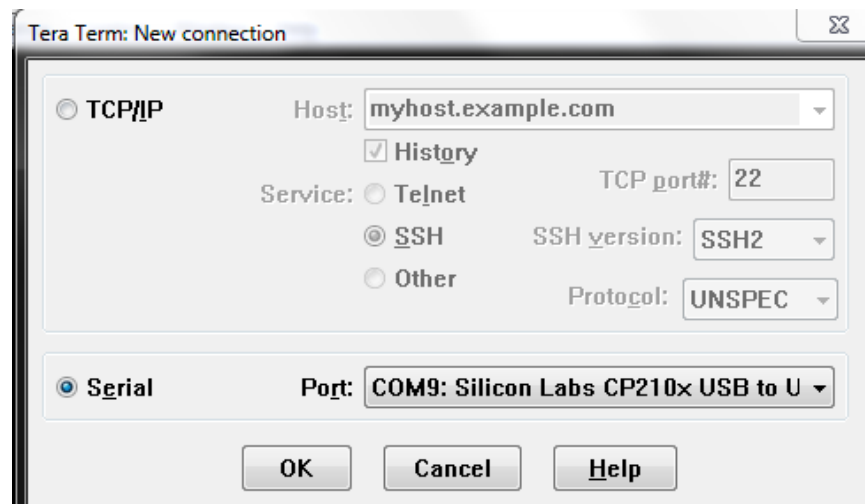
Technical Note R000243: CCR-100 Firmware Update Procedure Ver. 2022.09.27

The CCR-100 Closed Caption Reader can receive firmware updates through the Mini-USB port. These instructions apply to recent versions of Microsoft Windows.

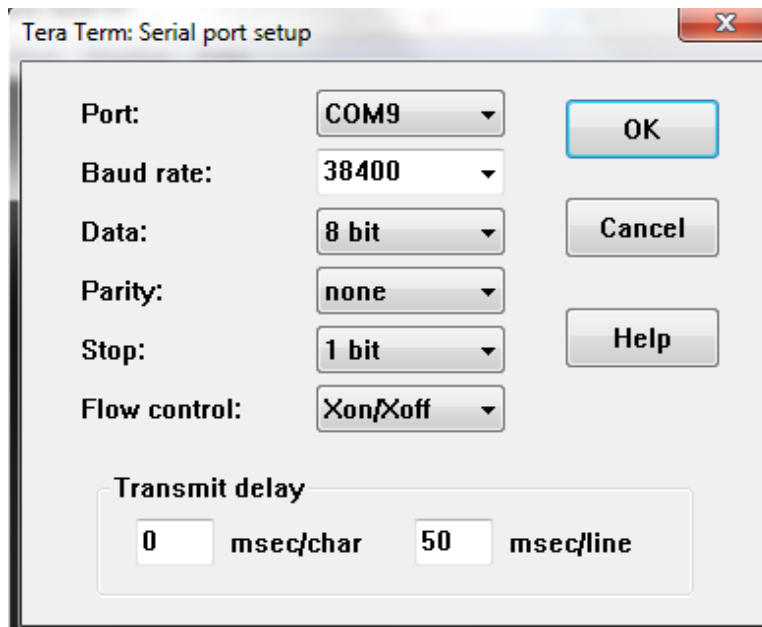
Important: There was a change that occurred in June 2000 that created a compatibility issue between the firmware versions of the IRC-28C Emitter, and the CCR-100 reader. If you are updating a CCR unit to a firmware version newer than **v200601**, you should verify your IRC-28C is also running a firmware version newer than **v200601** before proceeding to update the CCR, otherwise the new CCR firmware may not work. For more information about this change, see MiT Tech Note R000242.

CCR Update Procedure

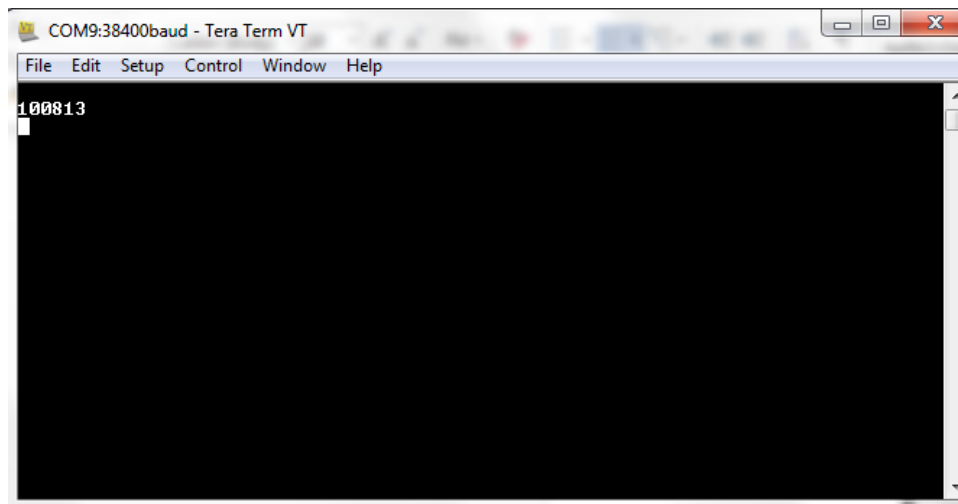
1. Install Tera Term Pro. The latest version is available from:
<https://osdn.net/projects/ttssh2/releases/74780>
(at the time of this writing the current version is 4.106)
2. If the computer does not already have the Silicon Labs CP2102 Virtual Com Port Driver installed, you will need to install it. You can get it here:
http://www.silabs.com/Support%20Documents/Software/CP210x_VCP_Windows.zip
3. Turn off the CCR and connect a USB cable from it to the computer.
4. Start Tera Term. Select Serial and Silicon Labs CP210x as shown below.



5. Click OK.
6. Select Setup – Serial Port. Set the baud rate to 38400, Data to 8 bit, Parity to none, Stop to 1 bit, and Flow Control to Xon/Xoff. Set the transmit delay to 50msec/line. Click OK. The screen should look like the image below.



7. Turn on the power switch on the CCR. You should see a date code for the bootloader appear.



8. In the File menu, select Send File. Select the hex file MIT has provided for the update. Click OK.
9. You should see a lot of hexadecimal data scroll by on the Tera Term window. Within the CCR, an alternating red and green LED will be visible below the display on the left.
10. When the data stops scrolling, the update is complete. The CCR will reboot with the new code. Verify that the version number has changed to the new version.
11. If updating multiple units, disconnect the USB cable, select a different serial port, connect the USB cable to the new unit, then reselect the CP210x as shown in Step 3. Then go to Step 6.

New firmware versions for these products may be downloaded from the following URL. You should check it periodically for new versions.

<http://www.movingimagetech.com/product/closed-captioning-listening-devices/>