

Appendix A

Using the Motocross Terminal Emulator

Motocross is a terminal emulator for communicating with the McLane samplers and profilers.

- A built-in Motocross feature can log communications with your instrument to a capture file located on the connected Host PC. McLane recommends using capture file logging when running any bench tests or setting up a deployment.
- McLane instruments require Motocross [CTRL]-C keystrokes to be configured as character transmissions for canceling operations, waking from low power sleep mode, and navigating menus. The other Motocross Transmission mode, Standard Windows Editing mode, uses [CTRL]-C as a text copy function and is not recognized by McLane instrument operations.
- McLane created a custom version of Motocross (MotoCrossML.exe) that is configured with the Motocross settings required by our instruments. MotoCrossML.exe is included on the media shipped with a new instrument and is available at www.mclanelabs.com under Support > Software Utilities.

IMPORTANT

Running a Motocross executable other than the program provided by McLane (MotoCrossML.exe) will not make the necessary configuration changes for using Motocross terminal emulation with McLane instruments.

Connecting the Instrument to a PC and Configuring Motocross

1. Connect the instrument to a serial communication port on the PC using a McLane serial communication cable (included in the toolkit).
2. Open MotocrossML.exe.
3. Confirm that “Transmit Control Characters” is enabled. From the top menu bar, select the Edit menu. Confirm Copy-Paste Options are set to transmit control characters, Click OK.

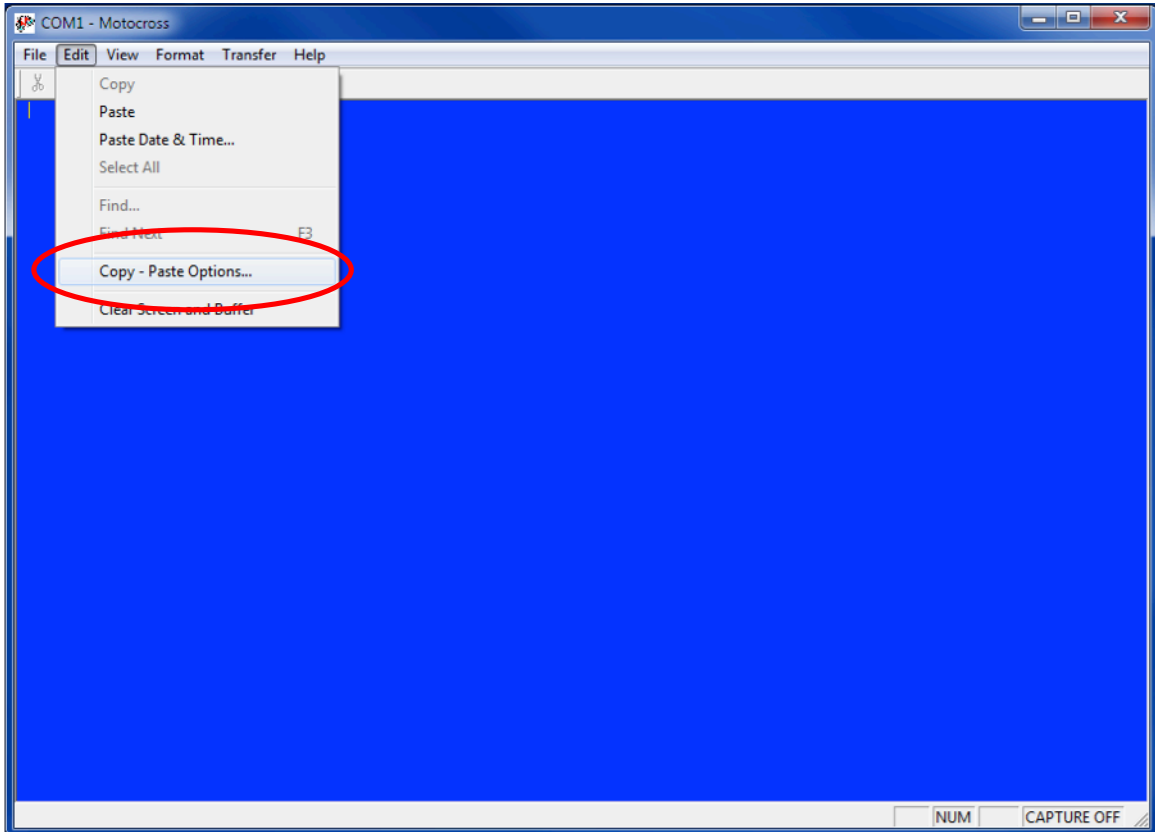


Figure A-1: Change Default Settings for Sending Control Characters

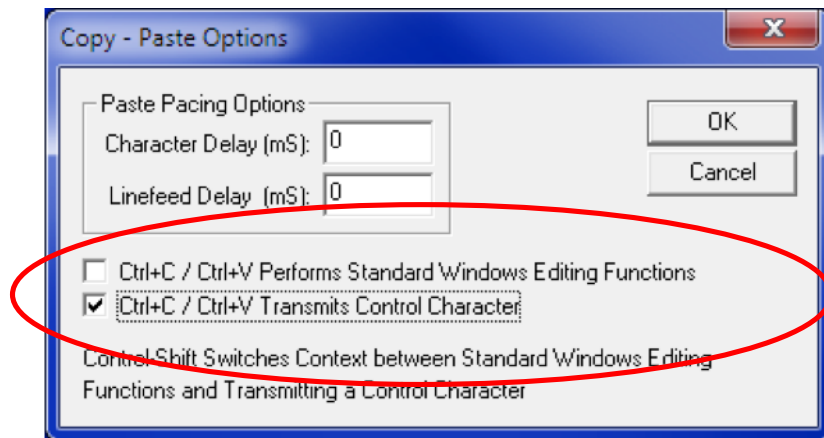


Figure A-2: Ctrl+C/Ctrl+V Transmits Control Characters

Configuring Motocross communication settings

To define Communications Settings, complete the following steps:

1. From the File menu, select “Communication Settings” (Figure A-3). Set parameters to:
 - Port # (the connected port).
 - Baud Rate: 9600 baud
 - Parity: None
 - Data Bits: 8
 - Flow Control: None

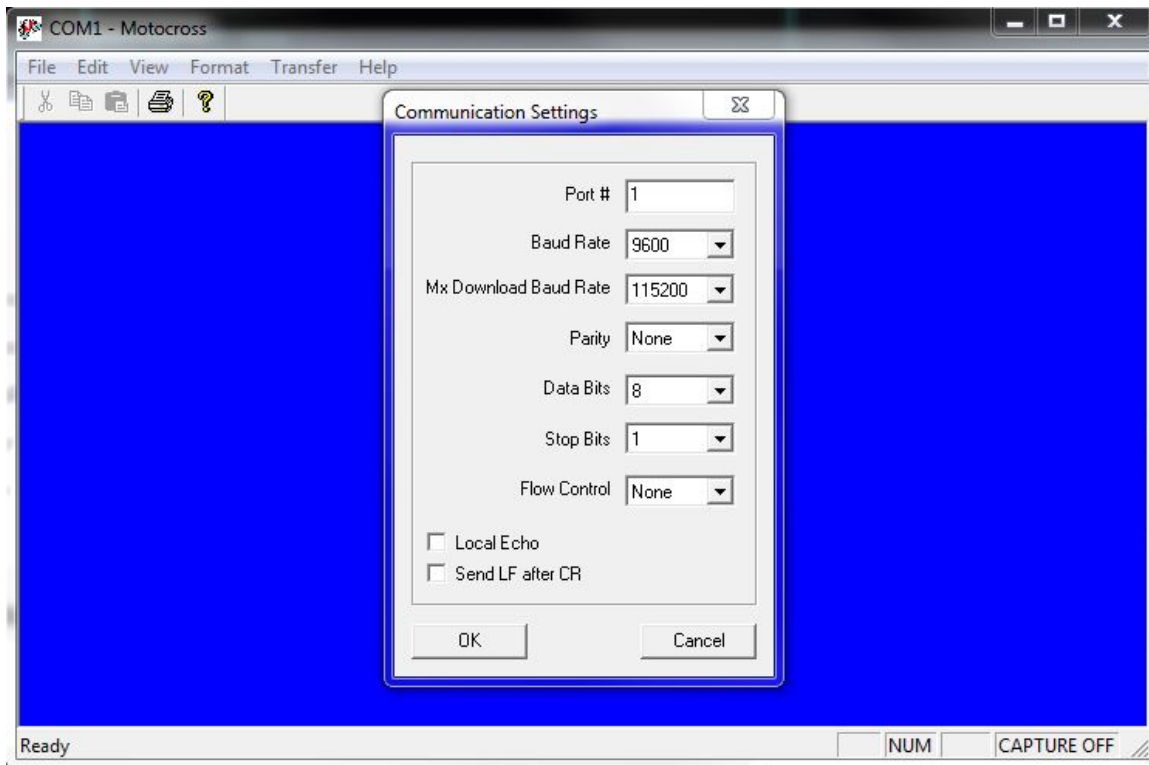


Figure A-3: Communication Settings Configuration

2. Select OK.
3. After configuring communication settings, press [CTRL]-C three times (with one second pauses between each).

NOTE

Only one [CTRL]-C is needed if the device is not in Low Power Sleep (LPS) mode.

Capturing Instrument Output to File

A built-in Motocross feature will log all communications to a capture file located on the connected Host PC. This capture file is a very useful troubleshooting tool. McLane **HIGHLY SUGGESTS** setting up a capture file while running any bench tests or setting up a deployment.

Capturing instrument output to a text file

1. Open MotoCrossML.exe
2. Click the Transfer Menu in Motocross (Figure A-4).
3. Select “Capture Text”.
4. Enter a file name and location for the capture file.
5. Click “Start”.

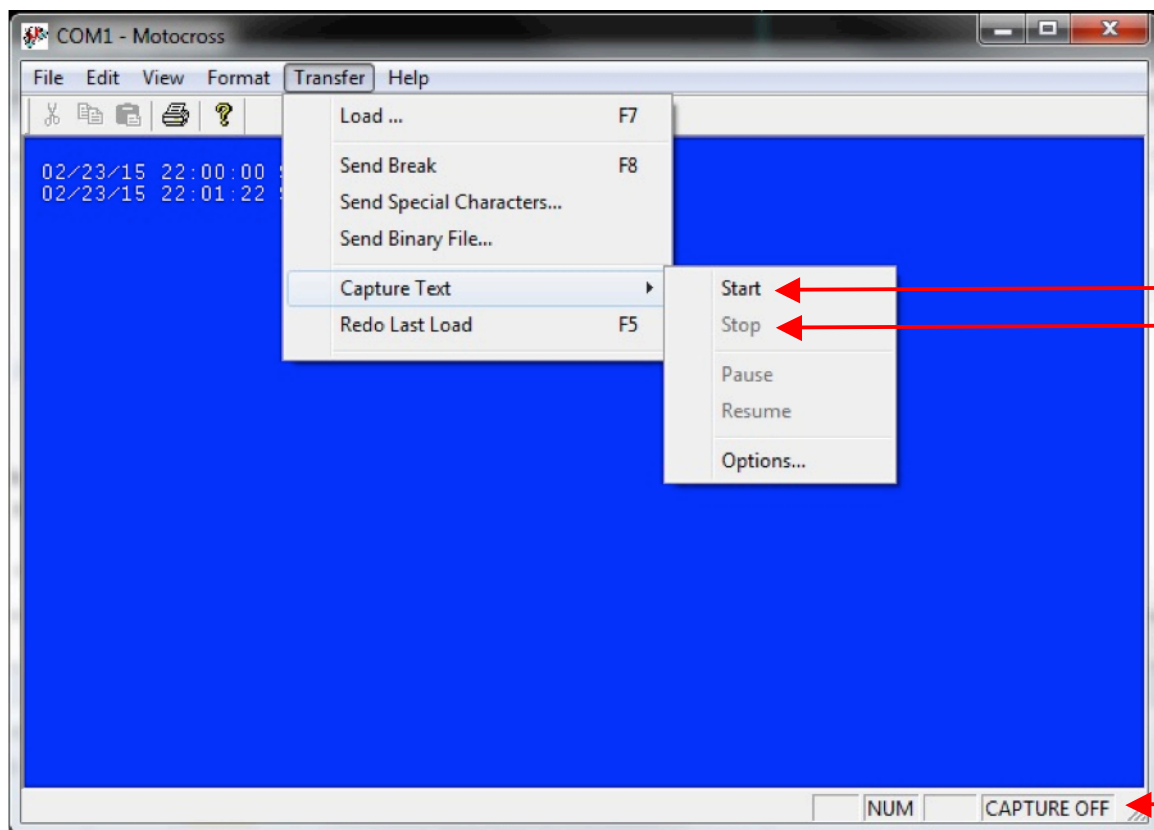


Figure A-4: Start and Stop Capture File

6. Select whether to Append or Overwrite the file (Figure A-5). Use caution when making this selection. Overwrite replaces any information in the log file. Append adds new information to the file.

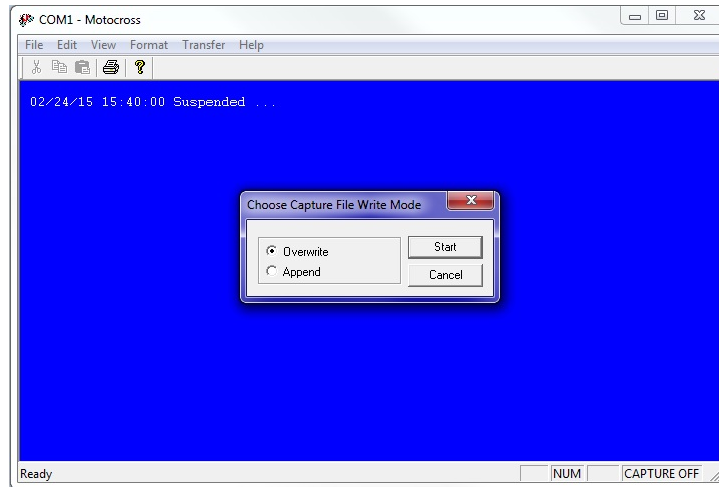


Figure A-5: Overwrite or Append Capture File

7. Click “No” when prompted whether or not to include the Buffer text (Figure A-6).

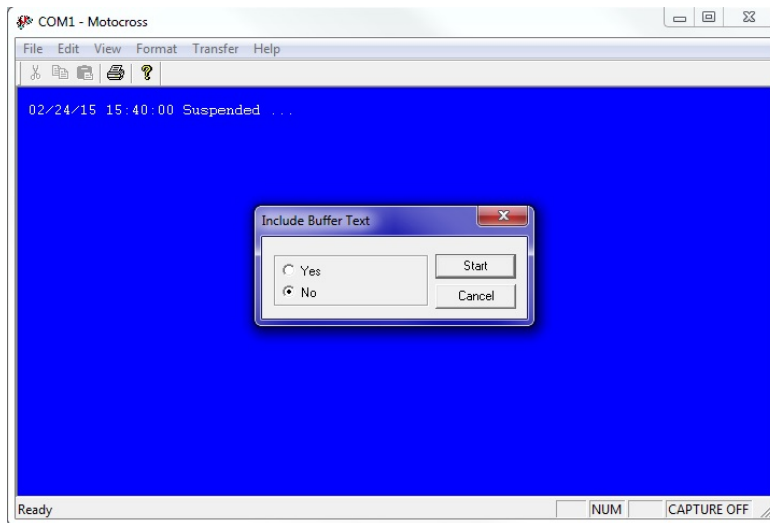


Figure A-6: Include Buffer Text?

8. To finish capturing to file, select “Capture Text” from the Transfer menu (Figure A-4) and then click “Stop” in the Transfer menu.

Troubleshooting

Troubleshooting: Confirm correct Port # defined

If the instrument firmware does not respond when connected to Motocross, use these steps to troubleshoot:

- Confirm the battery is connected to the instrument.
- Verify the correct Port # is defined (Figure A-3).
- Ensure that character transmission mode is set (Figure A-2).
- Read below for information on the toggle that changes Transmission mode.

Troubleshooting: Transmission Mode Toggle

It is possible to mistakenly switch between Control Character mode, and standard Windows Editing functions by holding down the [CTRL] key and pressing the Shift key. If Motocross does not respond as expected, press [CTRL]-Shift to toggle back to Character Transmission mode if needed.

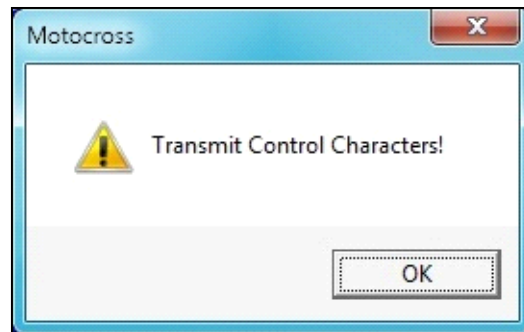


Figure A-7: Configured for Character Transmission Mode

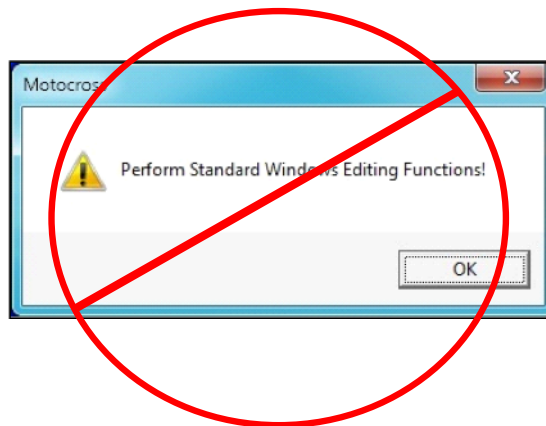


Figure A-8: Configured for Windows Editing Mode – Do Not Use