

# M Display Console

Debugging/Monitoring Utility for M Display

**User's Manual**

2013-09-05

*"Everything for Embedded Control"*

**COMFILE**  
TECHNOLOGY

Comfile Technology Inc.

[www.cubloc.com](http://www.cubloc.com)

Copyright 1996,2011 Comfile Technology

## Table of Contents

|                          |   |
|--------------------------|---|
| Introduction.....        | 3 |
| System Requirements..... | 3 |
| Setup.....               | 3 |
| Usage.....               | 4 |
| Shortcut Keys.....       | 5 |

# Introduction

The M Display's USB port, when not in DFU mode, functions as a virtual serial port that can be used to output information to a console program so users can debug, monitor and obtain information about their M Display.

However, because the feature is implemented via USB the M Display can be hot-plugged and unplugged, and most serial terminals cannot tolerate this. Therefore, the M Display Console was created to make it easier for users to monitor their M Display.

At this time, the M Display cannot receive drawing commands over its USB port. All drawing commands must be issued to the M Display through its RS-232 serial port.

## System Requirements

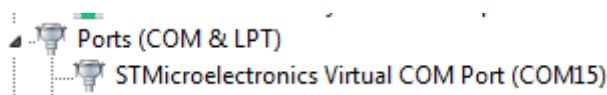
- Windows XP, Vista, 7 or 8
- .Net Framework 4.0

## Setup

Be sure the M Display is not in DFU Mode. Switch dip switch 2 to the OFF position. In this configuration, the USB port will function as a virtual serial port.

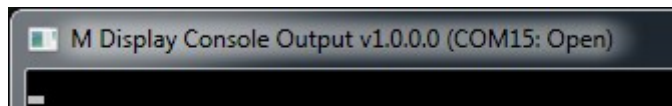
Before connecting the M Display to your PC run the driver installation program in the "Driver" folder for this software package. There are two installation programs: one for 32-bit computers, and one for 64 bit computers. Be sure to execute the appropriate program for your PC.

After successful installation, connect the M Display to your PC. Use the Windows Driver Installation Wizard to finish installing the driver. After successful installation, a device titled "STMicroelectronics Virtual COM Port (COMx)" will appear in device manager. Each PC will assign the COM number differently.

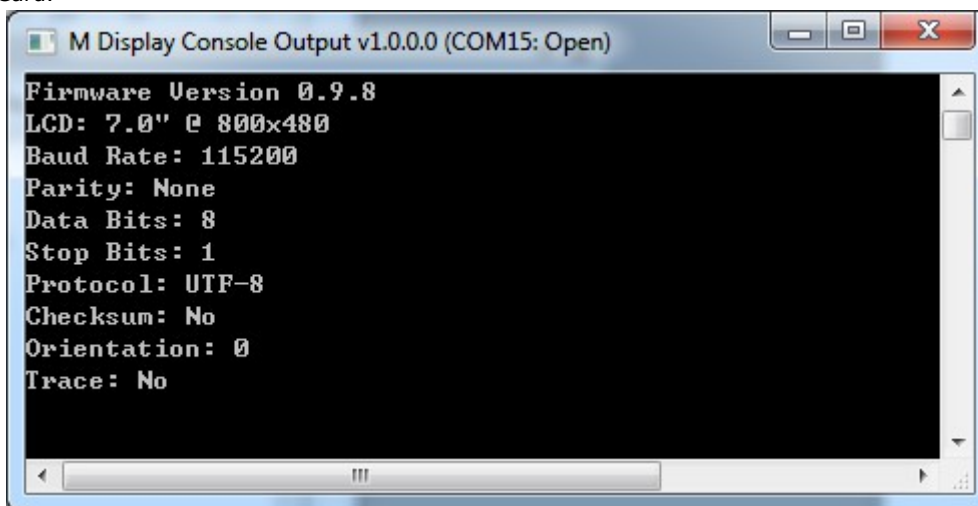


# Usage

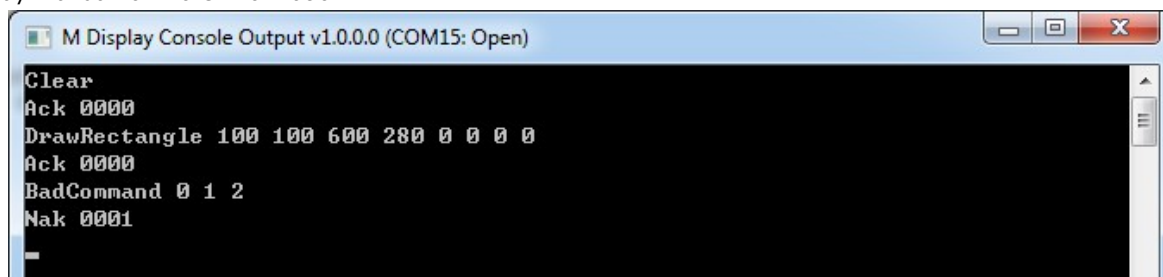
Execute the included MdisplayConsole.exe program. If successfully connected, the console's status bar will indicate so.



Cycle the power on the M Display and it will display the current firmware version and the init.txt configuration as read from the SD Card.



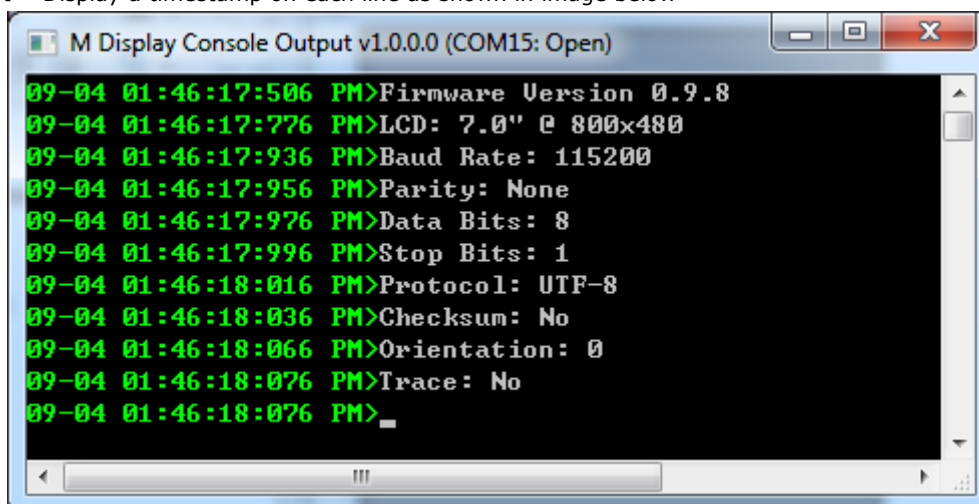
When commands are received by the M Display, it will trace the commands to this console window. This feature is disabled by default, but can be enabled with the *EnableTrace* command in the M Display's initialization file. See the M Display manual for more information.



# Shortcut Keys

MdisplayConsole also supports the following shortcut keys

- Ctrl-c - Clears the screen
- Ctrl-r - Resets the M Display
- Ctrl-t - Display a timestamp on each line as shown in image below



The screenshot shows a window titled "M Display Console Output v1.0.0.0 (COM15: Open)". The window contains a list of system parameters, each preceded by a timestamp in the format "YY-MM-DD HH:MM:SS". The parameters are: Firmware Version 0.9.8, LCD: 7.0" @ 800x480, Baud Rate: 115200, Parity: None, Data Bits: 8, Stop Bits: 1, Protocol: UTF-8, Checksum: No, Orientation: 0, and Trace: No. The window has a standard Windows-style title bar with minimize, maximize, and close buttons. A scrollbar is visible on the right side of the text area.

```
M Display Console Output v1.0.0.0 (COM15: Open)
09-04 01:46:17:506 PM>Firmware Version 0.9.8
09-04 01:46:17:776 PM>LCD: 7.0" @ 800x480
09-04 01:46:17:936 PM>Baud Rate: 115200
09-04 01:46:17:956 PM>Parity: None
09-04 01:46:17:976 PM>Data Bits: 8
09-04 01:46:17:996 PM>Stop Bits: 1
09-04 01:46:18:016 PM>Protocol: UTF-8
09-04 01:46:18:036 PM>Checksum: No
09-04 01:46:18:066 PM>Orientation: 0
09-04 01:46:18:076 PM>Trace: No
09-04 01:46:18:076 PM>_
```