

# 500438 Video Scaler, 4K/60 Software Application Guide

## Overview

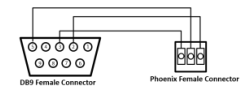
The HDMI Video Scaler (500438) allows one (1) HDMI source to be distributed to one (1) HDMI display. The scaler supports video sources up to 4096 x 2160 @ 60 Hz, 12 bit color and HD audio. The scaler is able to upscale up to 3840 x 2160 @ 60Hz and downscale to 1024 x 768 @ 60Hz. It is HDCP 2.2 compliant, has audio extraction capability, OSD (On Screen Display) configuration menu, and may be controlled via RS232. This document covers how to setup and manage the 500438 via the device's RS232 interface.

Access to the 500438 Graphic User Interface (GUI) is possible via RS232 and the 500438 Software Application for a Windows PC. Please download the “HDMI Video Scaler V1.00” executable software application file from the MuxLab website in order to connect to and manage the unit.

## RS232 Connection Setup

Acquire an RS232 cable according to the following pinout. If your computer does not have an RS232 port, utilize a USB to RS232 (male) adapter. Connect the RS232 cable from the Windows PC to the 500438 serial port.

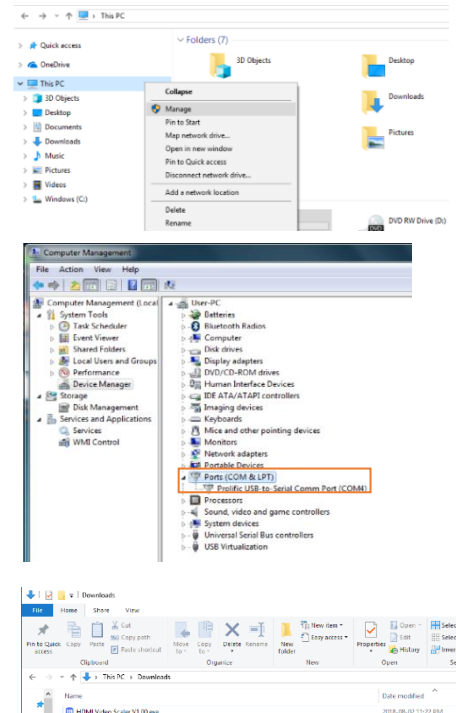
Pin 1	RI
Pin 2	TXD
Pin 3	RXD
Pin 4	DSR
Pin 5	GND
Pin 6	DTR
Pin 7	CTS
Pin 8	RTS
Pin 9	Power Input/DCD



## File Installation

Prior to running the application, please validate that your Windows PC properly detects the cable. You may follow these steps:

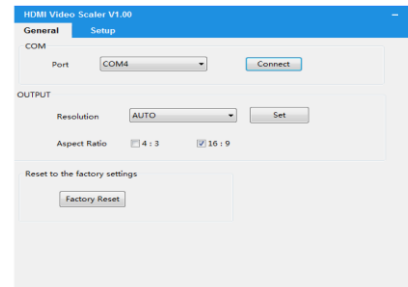
1. Right click “This PC” (or Computer for older Windows OS versions) and click on Manage.
2. In the Computer Management section, go to Device Manager, expand the Ports (COM & LPT) section and validate that the cable or adapter has been properly detected. Take note of the COM number.
3. To run the “HDMI Video Scaler V1.00” software application, that was previously downloaded. Note that the application does not get installed, so you need to run it whenever it is required.



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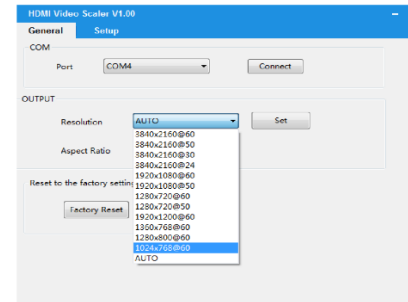
## General Tab

In order to connect to the unit, select the COM Port number identified above and click on the Connect button.



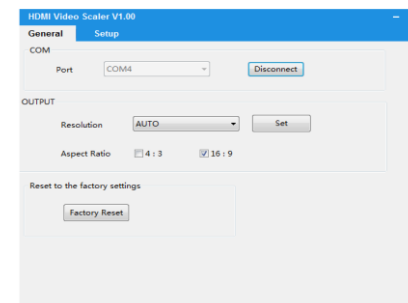
## Output Settings

In the Output configuration section you may select the output resolution mode. For instance, you might want to downscale, upscale or simply pass-through (AUTO) your input resolution. Once the output resolution is selected, click on the “Set” button. To modify the video Aspect Ratio, you may “check” the checkbox with the aspect ratio you would like to use. The change is immediately implemented.



## Factory Reset

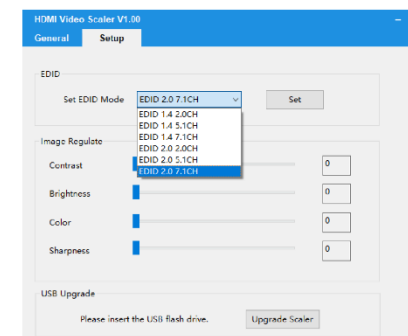
To perform a Factory Reset, click on the “Factory Reset” button. The unit will load the factory default configuration which sets the output resolution to 720p60. The factory reset can also be done from the front “Resolution” button: press it for five seconds, then as soon as you see the OSD frozen, release it.



## Setup Tab

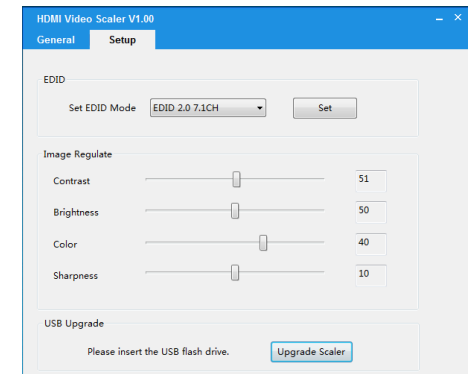
In the Setup tab you can configure the EDID mode, adjust the image and perform an upgrade.

To set the EDID mode, select the mode from the drop down menu list and click on the Set button.



## Image Adjustment

The “Image Regulate” section allows the user to adjust the image settings manually. The default values are shown in the screenshot.



## USB Upgrade

To perform a Firmware update on the 500438 scaler, use a USB flash drive which contains the file “merge.bin” (available from the MuxLab website). Insert the USB drive into the USB port of the scaler and click on the “Upgrade Scaler” button. The screen will turn black during the upgrade process, and will return to normal once the upgrade is complete.

