Mmdisp (G-Lec control software)
Version 3.5.1.9
Important Notes – seven steps to successfully deploy G-Lec software (version 1.1, 12-08-2009)

1. Uninstall previous versions

It is not necessary, but might make sense to uninstall all previous versions of mmdisp from your computer before installing this new version. Go to 'control center' -> 'Add/remove programs', select 'G-Lec Phantom II', and uninstall it.

2. Uninstall previous USB drivers

It is not required, but strongly recommended, to uninstall previous USB drivers before installing this new version. (You should know that the USB driver G-Lec uses is a quite common thing. Some scanners, and in particular a lot of USB-serial adaptors use it. If you are using such devices, you might try running G-Lec with the already installed drivers, and install new drivers later if problems occur).

The standard way of driver uninstall is by 'control center' -> 'add/remove programs', select FTDI drivers.

However, in order to clean your system from all FTDI drivers, download, unzip, and execute the tool ftclean from the [vendor's website](#) or from [G-Lec's website](#). This little program is very much self-explanatory, and simply does remove all FTDI drivers. Make sure you read the messages (the last-but-one reads 'Do you want to cancel...?' - you have to hit 'No' in order to proceed!)

3. Manual driver installation

As usual, the appropriate new drivers should be installed automatically. And again as usual (for Windows), it's not so unlikely that this process fails. **Make sure the driver is installed correctly before going to a job!** To do so, simply hook up an S-Drive by USB, power it up, and start the G-Lec software. Now, hit 'Show Serial Numbers', and hit 'Start Detect'. If you get the message 'exit, failed open device (DEV0)', then either the S-Drive is not connected at all, or the USB drivers are not installed correctly.

In order to manually install the drivers, open the device manager, locate any devices with a yellow exclamation mark (probably in the USB section), right-click, select 'update driver', and manually select the folder \drv of your G-Lec installation (e.g. C:\program folders\G-Lec Phantom II\drv).

4. most current serial.dat

Albeit the current serial.dat is published at [G-Lec's website](#), you usually do not have to download and update it manually. Instead, with the G-Lec software, there comes the G-Lec Serial Updater, which cares for all needed steps. Simply execute this program (Start Menu -> G-Lec-> G-Lec SerialUpdater) in order to retrieve the most current serial.dat (you need to do so only when you need to work with newer panels you haven't operated before)

5. other serial.dat files

The option to manually select the serial.dat file from inside the program has gone. If you really need to select another file (probably the serial_solaris.dat, for the old Solaris system), exit the program, navigate to the G-Lec program folder, open mmdisp.ini in your editor, and change the value for SD (`SD=serial.dat`) accordingly.

6. Understand Variable Cropping

It is of topmost priority to understand the concept of Variable Cropping. If you are using a new S-Drive (S-Drive II), you **must** use variable cropping, to tell the S-Drive which area of the screen to send to the frames. If you are using an old S-Drive (S-Drive 1.1), you **must not** use variable cropping, otherwise you frames might end up far outside any valid video signal. Furthermore, since by now the panels can be positioned outside the old 640x480 boundaries, it's absolutely possible that on the next setup, the panels do not show anything (initially). Never say die! Simply make a group, upload – and here we go. Under rare circumstances, it might make perfect sense to define a large enough cropping area (just with two 'dummy panels – top-left and bottom-right'), and upload only that cropping area to the S-Drive.

A rule of thumb:
– if operating a new S-Drive (version II): ALWAYS use Variable Cropping
– if operating an old S-Drive (version 1.1): NEVER use Variable Cropping

7. Gamma and old panels

Please understand: old Panels (Phantom 60, Phantom 30-long, and the 'prototype' series Phantom 30-1) do **not** feature gamma/colour correction. Futhermore, they do not understand the appropriate commands, and will not toggle back to video mode if gamma is uploaded. **Uploads to those old systems should always be performed with both options, Global Gamma, and Keep Gamma, unchecked.**

8. Device select

Always select the proper device you're working with in the Properties dialogue (Phantom 60, Phantom 30...). Else, you might end up with virtual gaps between adjoining panels, or overlapping panels.