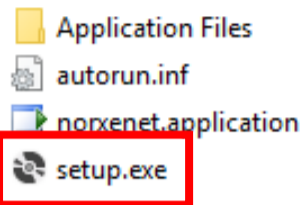


The Quick Start Guide is intended to help you set up and use your control application in an efficient way. For more comprehensive guidance please refer to the control application User Guide or the manufacturer’s website.

1. INSTALL

The following files should be downloaded ahead of installation:



Double-click on ‘setup.exe’ to install the application.

2. START

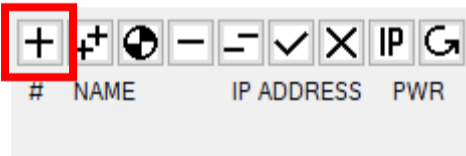
Start the application.

NOTE!

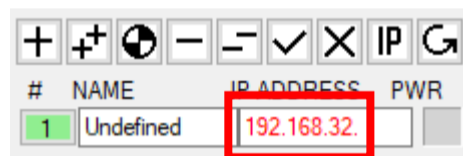
- The application is designed to run on Windows 10. It has also been tested on Windows 7.
- First time you run the application you will be asked several times if you wish to create various directories to save application settings, projector data, etc.
- If you answer yes to these questions, your data and settings can be retrieved and used in future sessions.
- Saving data and settings allows for control of multiple installations.

3. ADD PROJECTORS

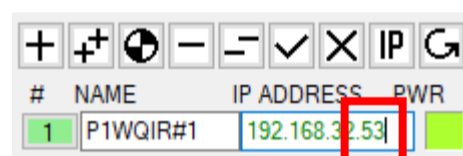
Add projectors manually:



Click the ‘+’ button to add a projector...



...with base IP address in red (i.e. incomplete)...



...type valid sub-address manually (‘53’) and the address turns green.

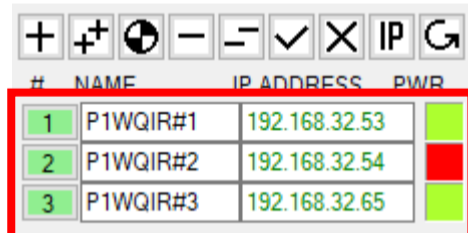
NOTE!

- Repeat this process to add all projectors you want to control
- Make sure all projectors are on the same sub-network

Alternatively add projectors automatically:

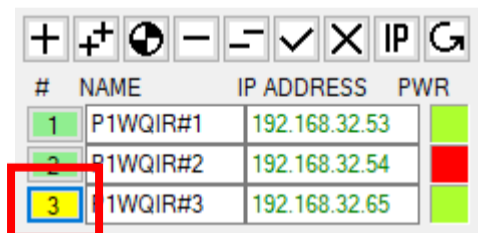


Click the ‘++’ button to add all projectors...

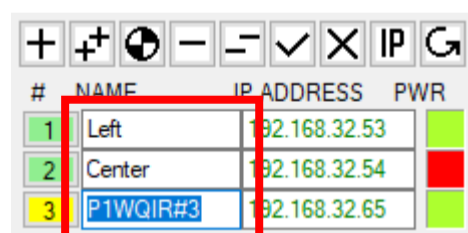


...appearing with ascending IP addresses.

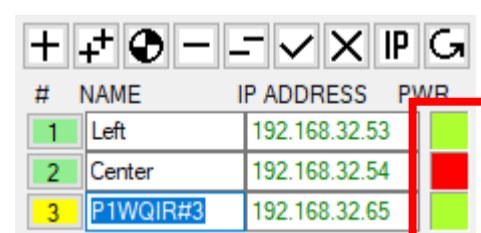
Manage projectors:



Click number-button to activate/deactivate.



Type in names as desired.



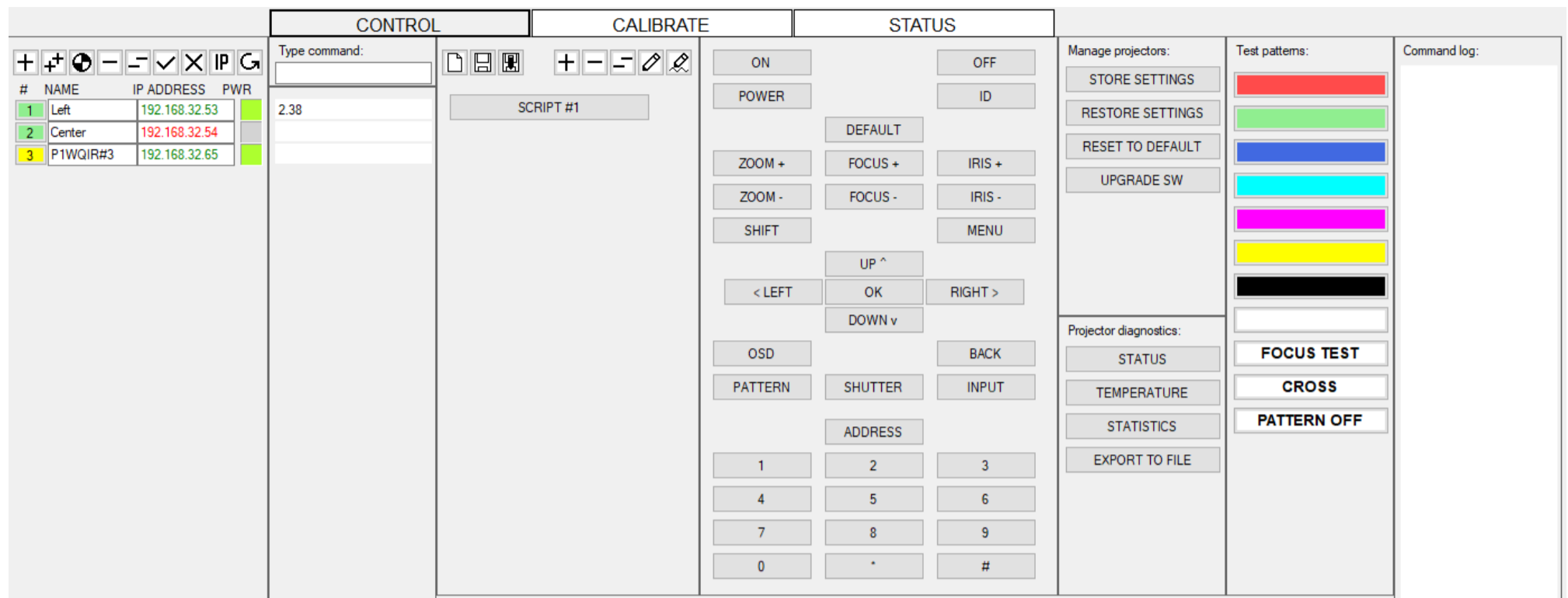
PWR indicates if projector is on, off or cooling down

NOTE!

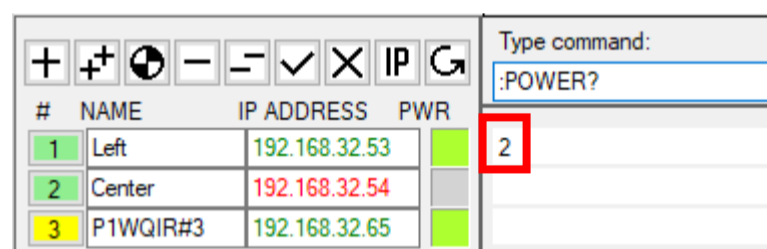
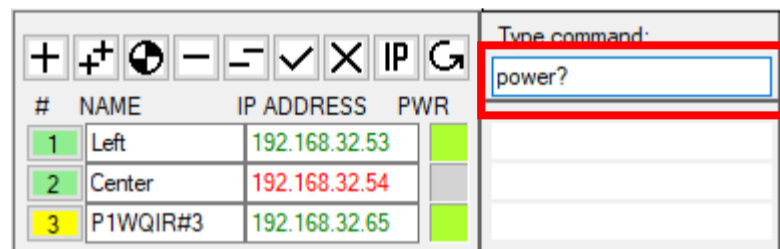
- You control all projectors that are both selected (green # button) and that have a valid IP address (green address).
- You cannot control any projector that is de-selected (yellow # button) or that is having an invalid IP-address (red address).

4. CONTROL

Overview of CONTROL panel showing the various control functions available:



Type command:



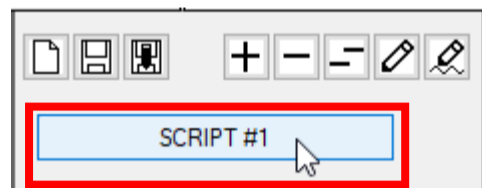
Type for example command 'power?' (lower-case is valid)...

...#1 responds with '2' (=ON), #2 does not have a valid IP address, #3 is not selected.

NOTE!

- The 'power?' command is converted to the correct uppercase format with a leading colon ':POWER?' once the command is executed.
- See the 'LAN Protocol Communication User Guide' that describes the various commands available

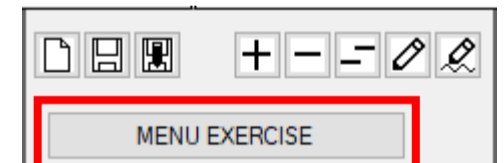
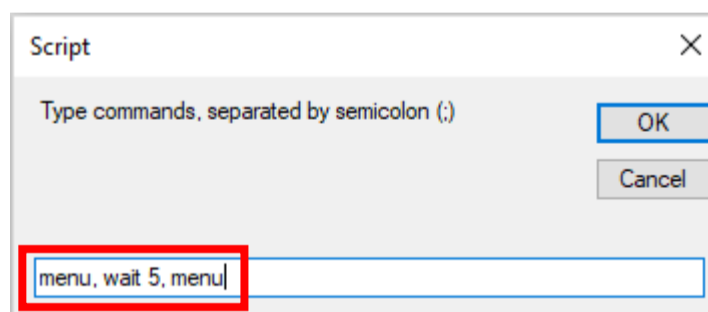
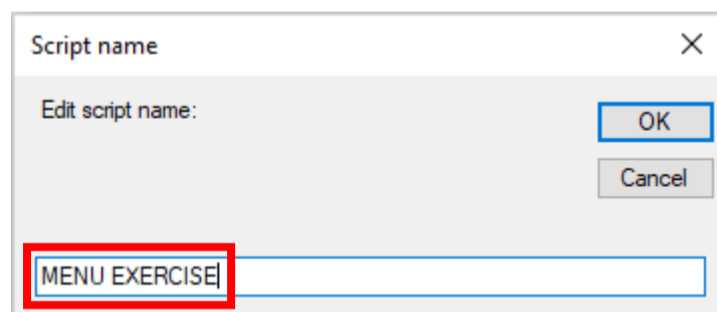
Script:



Right-mouse-click on script-button to edit...

...or click 'pencil' button to edit script...

...and 'pencil-line' button to edit script-name'



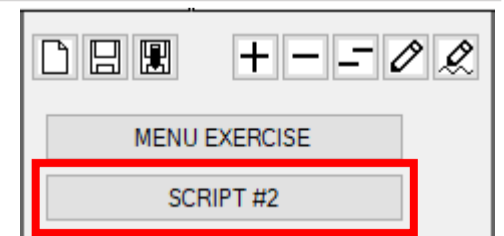
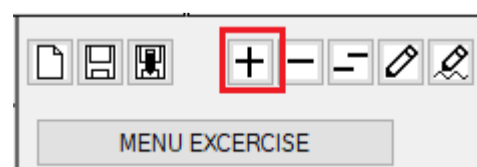
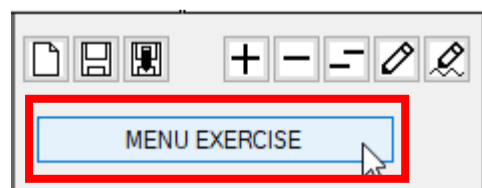
Type in name of choice for menu-button...

...then the command sequence for the script...

...button changes name.

NOTE!

- The command sequence above first invokes the menu on the selected projectors, then waits 5 seconds, then removes the menu).



Left-mouse-click menu button to send command sequence to selected projectors.

Click the '+' button to add another script...

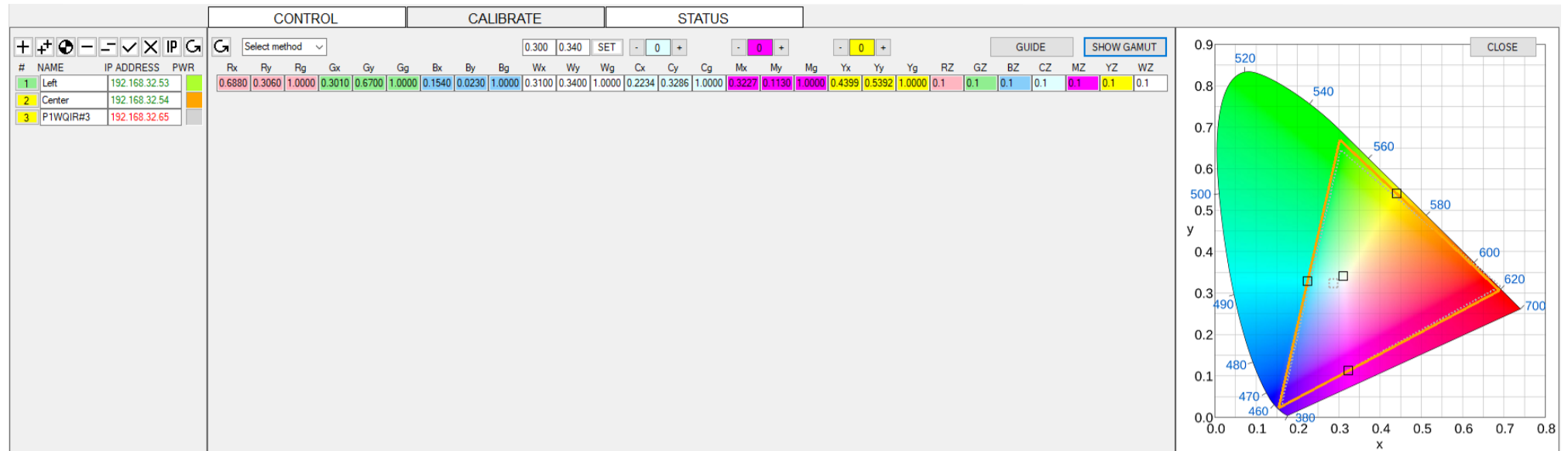
...new script-button appears.

NOTE!

- Repeat the process for more script-buttons as desired. Use the '-' or '--' buttons if you wish to remove one or more scripts.
- The scripts and all other settings can be saved to file before exiting the application for use when restarting later.

5. CALIBRATE

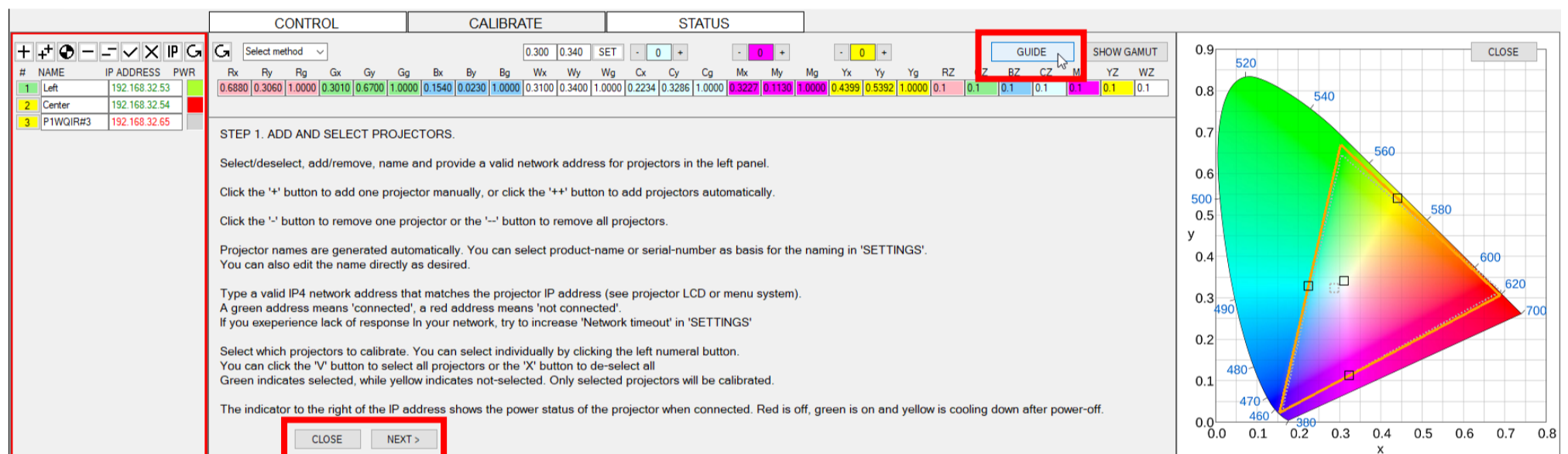
Overview of CALIBRATE panel showing color-coordinates, brightness and a graphical view of the color-gamut defined by the color coordinates:



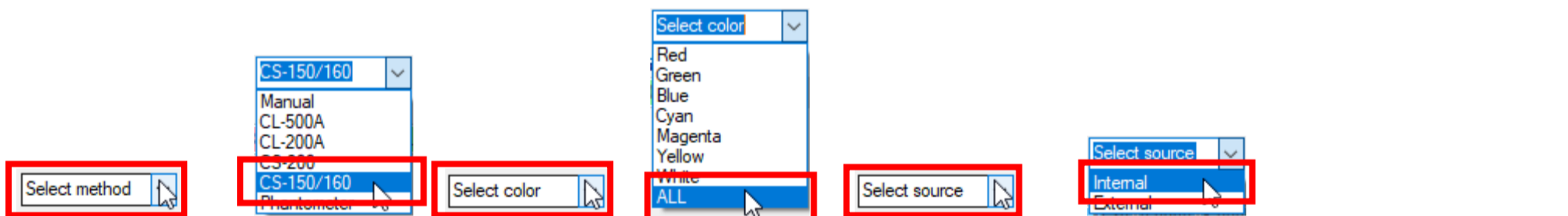
The CALIBRATE panel will assist you through a complete color and brightness calibration of a multi-channel set-up. A color/light meter is needed.

NOTE!

- Various Konica-Minolta color-brightness meters can be connected to the PC for automatic measurements, or values can be typed in manually.

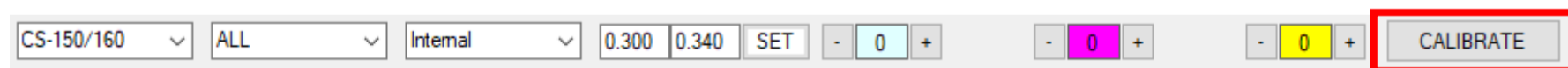


Click on the 'GUIDE' button if you wish to be guided through the calibration process. Click the 'NEXT', 'PREVIOUS' or 'CLOSE' buttons to navigate the guide.

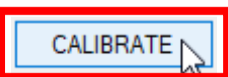


Click 'Select method'... ..select meter... ..click 'Select color'... ..select color... ..click 'Select source'... ..select 'Internal' or 'External' test pattern source.

'Internal' source means using the test patterns in the projector, while 'External' source means test patterns from an image generator connected to a video port.



The 'CALIBRATE' button now appears (after Method, Color and Source are defined). The process above uses a Konica Minolta CS-150/160 spot-meter connected to the PC. This will allow an automated measurement whereby all colors (as selected) are displayed one-by-one on each projector, measurements are taken and displayed on screen until all selected projectors are measured.



Click the 'CALIBRATE' button and automatic calibration will start. Follow the instructions on screen until finished!

Before measurements start, a common gamut is calculated and deployed to all projectors. After the measurements are done, individual deviations from the common gamut are automatically corrected for, brightness differences are aligned, and the new values are deployed to all projectors to achieve a homogenous canvas.

NOTE!

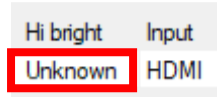
- When using a meter connected to the PC, you must move the meter between projectors while measuring. You will be notified when to move.

6. STATUS

Overview of STATUS panel showing the various projector parameters and their values:

				CONTROL	CALIBRATE	STATUS	Click 'STATUS' to refresh.																
#	NAME	IP ADDRESS	PWR	PICTURE										SOURCE				INSTALL					
				Contrast	Brightness	Gamut	Calibrated	Smear	Scaling	Dual mode	Proj mode	Hi bright	Input	DHCP	MAC addr	Orientation	Indicators	LED pwr	R offset	G offset	B offset	R gain	
1	Left	192.168.32.53		50 %	50 %	2.2	Off	Off	Fill all	Sequential	Multi	Unknown	HDMI	Unknown	F8-DC-7A-0B-BB-E1	Desk front	On	100 %	0	0	0	Unknown	
2	Center	192.168.32.54																					
3	P1WQIR#3	192.168.32.65																					

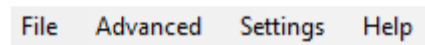
Click the 'STATUS' button again to refresh the display.



An 'Unknown' value indicates that the SW revision of this projector does not contain this parameter.

7. MENU

Overview of the Menu:



The menu system offers additional functionality to the CONTROL, CALIBRATE and STATUS panels.



Click File to manage project files; Advanced to manage advanced colorimetry (only for specialists); Settings (see below) and Help for various information.

'Settings' is a special menu function that controls the application behavior:

- Select 'Projectfile' to save all projector data to file. You can have multiple project files.
- Select 'Scriptfile' to save your control scripts. You can have multiple script files
- Select 'Logfile' to log all commands to file. You can define the maximum number of lines in a logfile. You can also define the logfile-history by how many logfiles you want to keep chronologically.
- You can define the projector communications port. This is by default 1025.
- Set the base IP address for the projectors. This is handy if you are connected to multiple networks.
- You can define the network timeout in seconds. Commands that do not receive a response after the timeout will not be executed. You may want to increase this value if your network is slow.
- You may select to monitor projectors continuously. You can choose how often the projectors are checked in seconds.

NOTE!

- This may load the network with traffic.

- Define the USB COM port and Baud-rate for meters that use older serial communications interface.

NOTE!

- Check the Windows 'Device Manager' under 'Ports (COM & LPT)' to find the correct USB COM port.

NOTE!

- For more information about this application, please refer to the User Guide.

