

Service Bulletin: Projector Gamma & Uniformity Utility Tool (v1.43)

Model : All series

Description

This bulletin is a guide for usage of software tool « Projector Gamma & Uniformity Utility Tool » (PGUUT)

This tool is dedicated to all Sony projector series. It contains many different functionalities, depending on the model it is connected to. Such as correction files export and import, 1024-step test patterns, Blue 30°C patch appliance, laser adjustment, etc...

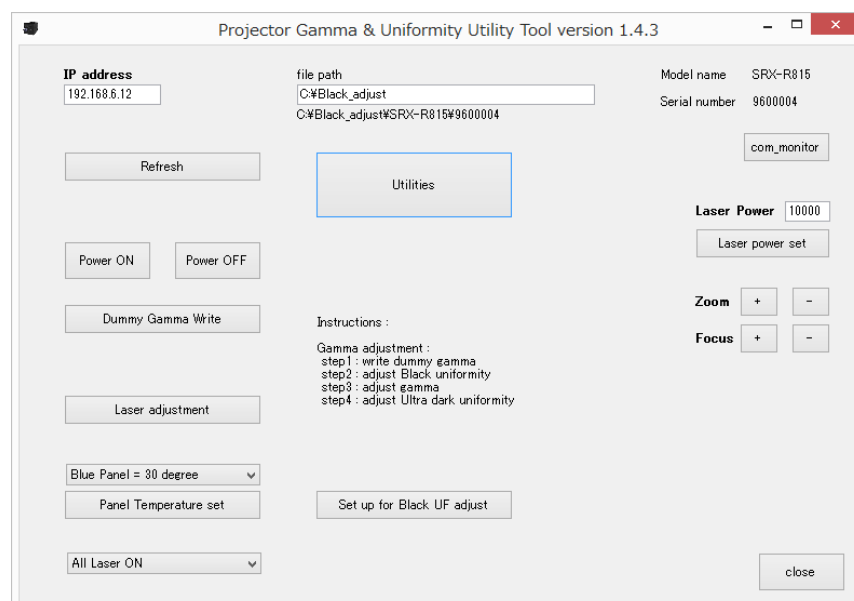
Concerning SRX-R500 series, new functionalities of v1.43 require projector system version v1.55 or later.

Preparation

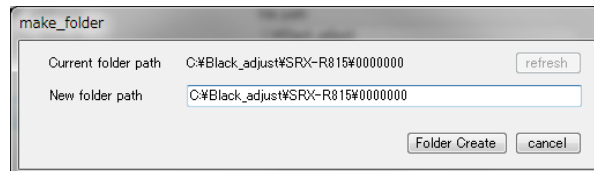
- Software file
Projector_Gamma_and_Uniformity_Utility_Tool_V1.43.zip
- PC computer
OS: Windows 7/8/10
LAN cable
The runtime of .Net framework is required.
Change the IP address so that it will match with the subnet of the projector.
Ex) Projector = 192.168.6.12 / PC = 192.168.6.100

Installation and connection

- Extract the folder contained in compressed zip file to some desired location in PC.. “Projector Gamma and Uniformity Utility Tool.ini” must be on the same layer than the .exe file.)
- Additionally, move “Black_adjust” folder in the obtained folder directly to the root of C drive. If you prefer to choose another location for it, you need to edit absolute path in .ini file. “Black_adjust” folder will be the folder where all correction data will be implemented. The tree structure of the folder will be as following, and automatically populated after first connection to projector :
Black_adjust folder → Folders for each model → Folders for each serial numbers → Saved data
- Execute .exe file and enter the password “PGUUT001”
- Confirm the IP address of the projector on the top screen, and press “Refresh”.



- Following pop-up will appear



- Click “Folder Create” if this is the first time that projector is connected to the PC. Otherwise click “cancel” (there is no issue to click on “Folder create” when folder already exists, software will use it and will not duplicate)

NOTE :

- If a correction file is saved during processes explained later, system will overwrite if one already exists in the folder. It’s a good practice to make a backup in another folder if needed.
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Software usage

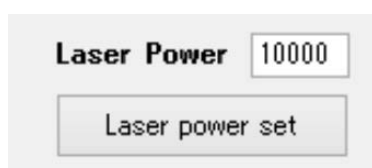
Main window



Turn ON and OFF the lamp(s) of projector head



Action zoom and focus motorisation



Set up laser power (only for SRX-R815/810)

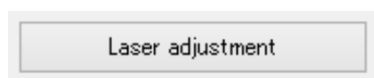
Sony Digital Cinema™ 4K

Bulletin No.: 157
Model : All

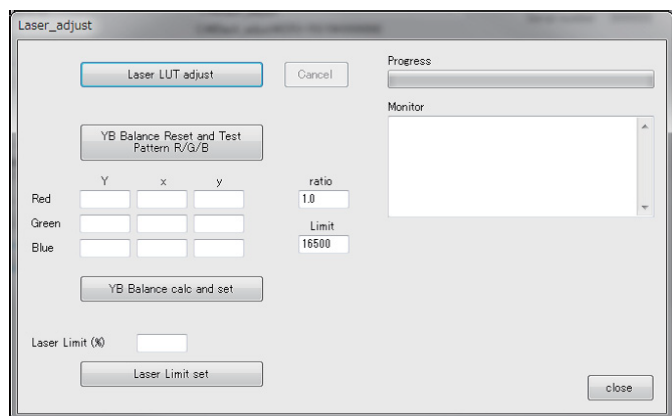
21st April 2020



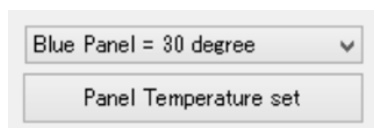
Used for Black & Dark Uniformity adjustment process. See separated bulletin for details



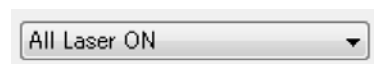
Open new window for specific laser adjustments (only for SRX-R815/810)



For details concerning laser adjustment processes, please refer to SRX-R815 Maintenance Manual section 1-7



Blue panel control temperature can be set to 30 °C / 35 °C / 40 °C / 45 °C. After the setting, be sure to turn the breaker to OFF and ON.



Each laser can be lit individually. (only for SRX-R815/810) :

All Laser / Only Y1 / Only Y2 / Only Y3 / Only Y4 / Only B

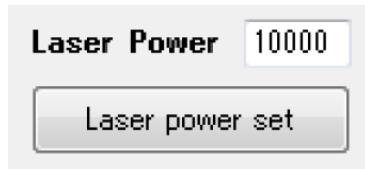
This can be used for adjustment of optical axis (see Service Manual section 2-6-19)

Sony Digital Cinema™ 4K

Bulletin No.: 157

21st April 2020

Model : All



The power of the laser output can be set.
(only for SRX-R815/810)

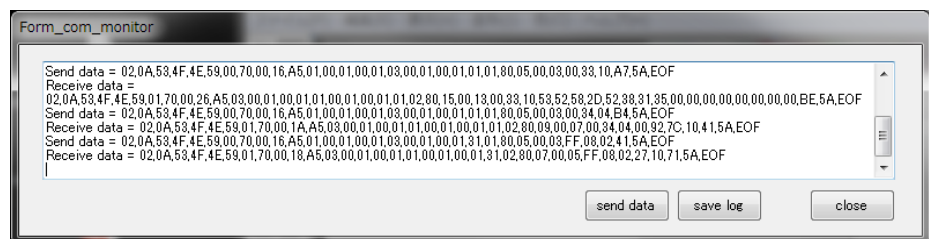
Set the value between 3000 and 10000
in the text box.

(3000 = 30.00% and 10000 = 100.00%)



Used to monitor the communication data
sent/received to/from projector head
system board.

Open new window :



By pressing this button, the data specified in file
“*send_data_file.txt*” will be sent to the projector head. This
file must be put beforehand to working folder
 (“C:\Black_adjust*<Model Number>**<Serial Number>*”)



Pressing this button will save the content displayed on the
monitoring window to dedicated file “*com_log_data.txt*”
This file will be available in working folder
 (“C:\Black_adjust*<Model Number>**<Serial Number>*”)



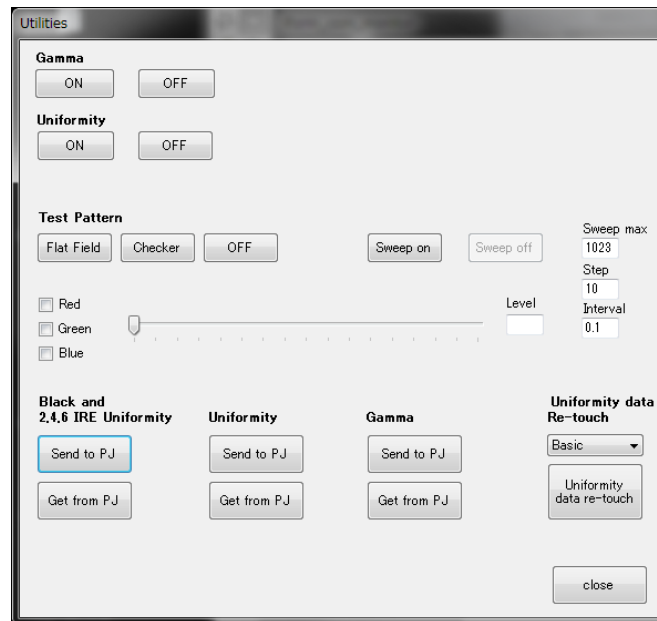
This button will open Facilities window.
See below for details

Sony Digital Cinema™ 4K

Bulletin No.: 157
Model : All

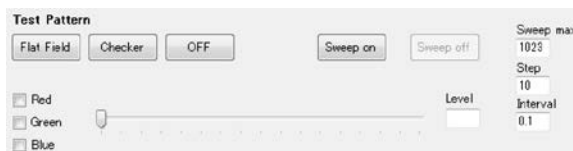
21st April 2020

Utilities window



Turns ON and OFF Gamma and Uniformity corrections

NOTE : If you use these buttons, ensure to press again ON before closing utilities window to confirm that corrections are duly applied



Click on “Flat Field” to output a flat field test pattern. Level of flat field is set by checking R/G/B boxes and adjusting slide bar

Click on “Sweep on” to start a sweep of test pattern from black level to the value set in “Sweep max”. Step of each jump and time interval between each step can be configured

Click on “Checker” to start a checker test pattern. Brightness can not be adjusted.

Click “OFF” to stop test pattern.

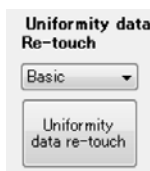


These buttons will load and save corrections data for Black & Dark(2,4,6IRE) uniformity, all levels uniformity and gamma

- Black & Dark uniformity :
 - Save : File will be saved in folder defined in “Installation and connection” section above. File name will be *Black_and_dark_uniformity_data.csv*
 - Load : Data will be loaded to projector from same folder. File name will have to be *Black_and_dark_uniformity_data.csv*
- All levels uniformity :
 - Save : Same process than above. File name will be *Uniformity_data.csv*
 - Load : Same process than above. File name will have to be *Uniformity_data.csv*
- Gamma :
 - Save : Same process than above. File name will be *Gamma_data.csv*
 - Load : Same process than above. File name will have to be *Gamma_data.csv*

NOTE :

- Beware that if a file with same name exists in folder, it will be overwritten during Save process
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This button will open a new window for manual application of uniformity correction. Before clicking button, you need to choose between two modes : Basic and Expert

Basic mode will apply correction in vertical row elements
Expert mode will apply correction cell by cell

NOTE : Additional bulletin will be issued for more details about this functionality