使用尊正 BoxIO 作为测试序列

配合 CalMAN Studio 和 i1 Display Pro 测量监视器

软件需求

操作系统:Window7 或更高版本 (64 位)

软件: CalMAN Studio (需购买)

硬件需求

运行 Window7 或更高版本的 PC (64 位)

X-Rite i1 Display Pro

尊正 BoxIO 标准版或 Lite 版

SDI线

网线

准备工作

测量环境: 暗室, 减少环境光对测量数据的影响。

监视器开机预热半小时以上(LED 背光 LCD 面板机型)

操作流程

BoxIO 通电开机,使用网线将其与电脑直连 (需在同一个网段内)

使用 SDI 线将 BoxIO 的 SDI out 端连接至监视器的 SDI in

将 i1 Display Pro 连接至电脑

打开 CalMAN Studio

选中 Workflow 下拉列表中的 SDR Toolkit

Start Session 载入对应的工作流程 (根据测量需求可选择其它与 SDR 相关的流程)

CalMAN 2019 CalMAN Studio					_ 0 ×
CalMAN					
History 1 +				Test Mode	Direct Display Control
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Workflow Browse					
CalMAN ColorMatch					
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HDR Toolkit	1				
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在下图窗口点击 Option 进行设置

CalMAN 2019 CalMAN Studio	_					- 0 ×
CalMAN						
	History 1 +		S T	mulated Meter est Mode	Source Direct Display	Control 👻 🔮 🕚
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	Dynamic Range		Grayscale 2pt		Grayscale - Multi	
	Color Gamut		3D LUT		ColorChecker	
	Saturation Sweeps		Luminance Sweeps		Screen Uniformity	
	Screen Angularity		Screen Stability		Spectral Power Dist.	
			Generate Report			

设置好测量的参考值(可以根据不同的测量情况选择对应的参考值)。我们以 rec.709 作为测量参考进行对应的设置

CalMAN 2019 CalMAN Studio					
CalMAN -					
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	Whitepoint:	D65 🗸	0.3127	0.329	
	Gamma Formula:	Power 🗸		2.4	
	Hardware:				
	Display Type:	Test Mode 🔹			
	Pattern Size:	Window 10%			
				« E	Back Next 📎

设置完成后展开右上角仪器配置选项卡

点击 Find Meter, 勾选第一个选项后点击 Search 查找并连接仪器

	Simulated Meter Source Pirect Daplay Control -
	Meter Settings
Find Meters	Simulated Meter - 12345678 Find Meter
Search Serial Ports	Meter Mode (Target Display Tune)
SI X All Meters except those listed below	Meter Information
Colorimetry Research Inc meters (US8) Colorimetry Research Inc meters (US8) Gossen light meters (US8) dati meters (US8, Blackboth) Kalin Indurumetrs meters (186-332, US8)	Rec709 Gamma 22 and 2.5 ReCa 30 minutes ¥ Use Status Lights
Contract Ministra C3-2006, C3-2007, C3-2007, C4-2007, C4-2007	Units
ORB Optronic meters (USB) Photo Research Six series (USB) Photo Research Six series (RS-232 @9500)	Meter Exposure Modes
Photo Research 5x series (US8, Bluetooth) Photo Research 7x series (R5-232 @9600, US8) Photo Research 7x, 74 series (R5-232 @9600, US8) Topcon meters (R5-232 @38400)	Standard Exposure Mode 0.5 Second
Windows DS sensors	Low Light Mode 23 months of 100 million 10
	Profiles and Offsets
	Mater Profile None New/Edit

仪器连接成功后软件右上的仪器设置选项会变成绿色

如图所示将 Meter Mode 设置成 LCD (LED)

Meter Exposure Modes 设置读取序列的间隔时间(建议设置 2 Seconds,速 度太快会导致读取到错误的数据)

Profiles and OffSets 选中由色彩分析仪 CS-200 采集的**设备特征数据**(此处的 CS-200 由 CS-2000 校正过)



展开 Source 选项卡点击 Find Source

X-Rite i1Display Retail Source Direct Display Control	
Source Settings	
Source	
Source Find Source	
Open Pattern Window	
Source Information	
- Manual Control Ontical player or standalone generator	
Triplet support: Full triplet support	
Source Automation	

弹出窗口中 Manufacture 下拉列表选中 Flanders Scientific

Model 这里选中 FSI-BoxIO,输入设备的 IP 地址(出厂默认为 192.168.1.244)

点击 Connect

CalMAN 2019 CalMAN Studio				= 0 ×	
CalMAN 💿 -					
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Grayscale - Multi Color Gamut 3D LUT	Targets:				
ColorChecker Saturation Sweeps Luminance Sweeps Screen Uniformity	Range:	SMPTE (64-940)			
Screen Angularity Screen Stability Spectral Power Dist.	Colorspace:	Find Source	purce Automation		
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	Pattern Size:	Connect	ICC Enabled HDR Mode No Metadata		
		Ś.	Specialty Patterns Brightness		
				Back Next >>	

连接成功后 Source 选项卡会变成绿色

在 Settings 这里可以调整测试序列窗口大小,序列切换时间,LUT 的开关以及 输出信号的格式

此教程为直接测量监视器,这里确保 LUT 都是关闭的状态



完后后注意软件左侧的标签选项,这里可以根据需求选择要测量的项目。本文选

择其中几个进行操作说明。

这里我们选择 Grayscale-Multi 灰阶测量



点击右下角的 Read Series 开始读取当前灰阶测量数据



灰阶测量



读完之后选择 Color Gamut 测量设备当前的色域表现

色域



色卡测量



饱和度测量



其它测试项目类似,选择后点击 Read Series 测量即可

测量结束后,点击左侧的 Welcome 选项卡,然后选择需要生成报告的测量项,

点击 Generate Report 生成一份完成的测量报告。

CalMAN .							
•	History 1	3		X	Rite i1Display 200-i1	y Retail 😜 🛛 FSI BoxiO Generator 🤤 🖉 Direct Displa	Control 🚽 🔯
SDR Toolkit							
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Saturation Sweeps Luminance Sweeps Screen Uniformity Screen Angularity Screen Stability Spectral Power Dist.				SDR Analysis			
				Options			
			Report		Report		Report
		Dynamic Range		Grayscale 2pt		Grayscale - Multi	X
		Color Gamut	X	3D LUT		ColorChecker	X
		Saturation Sweeps	×	Luminance Sweeps	X	Screen Uniformity	
		Screen Angularity		Screen Stability		Spectral Power Dist.	
				Generate Report			

完成后可以选择打印报告或生成 PDF 文件

•	Print F	Report	Export to PDF	Report Ter	mplate: SDR A	nalysis Report	Generate Report	
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