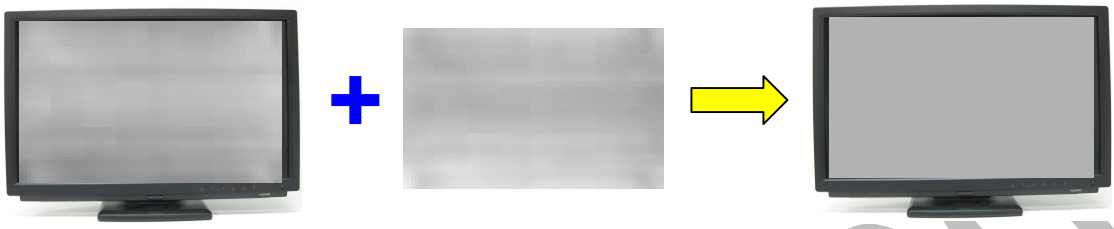
Color/Brightness uniformity compensation system (for FPD)

Model Name: CV-CH2000

Outline



before compensation　　compensation data (image)　　after compensation

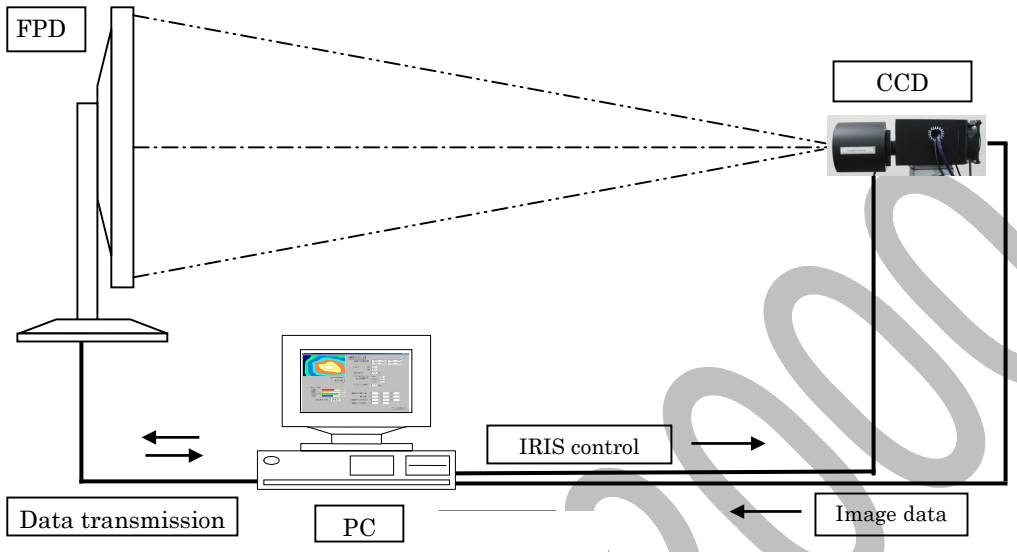
This system is the color and brightness compensation system for FPD.
Generally, color and brightness uniformity performance of FPD is not bad compared with LCD projector, etc. But there are some cases that FPD also has noticeable uniformity error caused by irregularity of liquid crystal and unevenness of back light system. This system captures the displayed picture image by camera, and then analyzes its data, and then generates a compensation data which can improve them. The correction data is stored into memory in the display.
This system has been designed for mass-production.
Color/Brightness uniformity compensation is executed from start to end automatically by pushing only start button on user interface.

Use

Color/Brightness uniformity compensation for FPD

System Structure

*Please use this system in the dark room.



Please prepare the compensation circuit at customer side.

System future

Adjustment Time	About 3 minutes	It depends on the settings of compensation. (Please ask us about the details.)
Accuracy		We can't guarantee any value because accuracy depends on the condition of projector. (Please ask us about it.)
Min Luminance	4cd/m2	It's possible to revise the dark contrast around the input level 10%.
Specifications	PC	OS: Windows 7 Data communication: RS232C (Please see the following other futures.)
	CCD camera	Resolution: 1920(H)*1080(V) Zoom:f=12.5-75mm(6times zoom)

Other features

1. As mentioned in the specifications, since zoom lens is being adopted in this system, the position of CCD camera can be set freely in a zoom range.
   (Please ask us about the settings in advance.)
2. It is necessary to know the relation between setting data and brightness changing based on the actual measurement. We call this relation " compensation coefficient".
   This system has the function which can get "compensation coefficient" automatically.
3. Data communication interface supports SPI and I2C, so we would like to confirm further information about it.
4. This system has a unique function for evaluating the condition of color uniformity as an option. Since this function can express the whole condition of color uniformity as one value, operator (engineer, too) can make sense of color uniformity condition quite easily and data management is easy, too.