

*The Worldwide Standard of **Full Color Balance Lens***

# CBL



**Australian Photographic Engineering P/L**

- ▶ **Digital Back Mounted View Cameras**
- ▶ **Digital Back Mounted SLR Cameras**
- ▶ **Digital SLR Cameras (DSLR)**
- ▶ **Camcorders**
- ▶ **Compact Cameras**
- ▶ **HD Broadcasting & Movie Cameras**

# Components of CBL Lens by Prism & Spectrum Tecnology



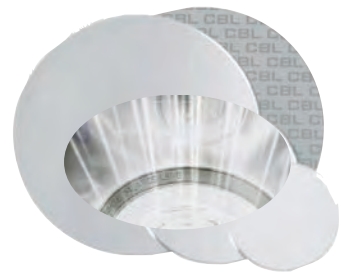
## Condenser Lens

It gathers the light into the range of lens housing through mixed boards



## Mixed Boards

The grooves, lines, and very fine surface of mixed boards act as prism and create the vast ranges of full color spectrum



## Reflection Boards

These boards emit and reflect the spectrum created from mixed board into the CCD /CMOS of your digital shooting equipments

White Balance Data

CBL Full Color Balance Data



“ The CBL lens has helped me save hours of time from my digital workflow. Just literally, a few seconds of calibrating my camera let me have beautiful color-corrected Images that need no adjustments. If you want to save hours of time, try the CBL Lens with your camera and see why I have a big smile on my face these days.”

◆Andy Marcus, US Prestigious Wedding Photographer◆



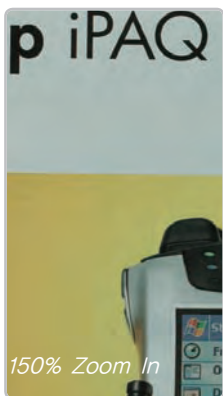
Standard Setting



Sun Light Flood Light Setting



Image & Data Provided by Jin Studio, Seoul (Samsung Exclusive Photo Studio) The above images are actually from one single shot and compared from the data of a grey card and the grey part of CBL Lens.



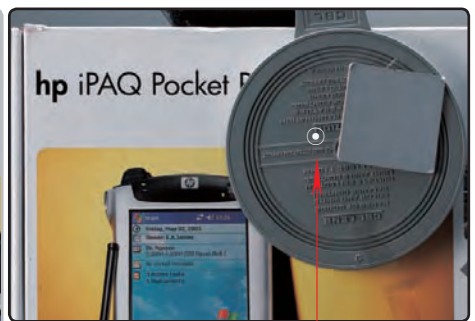
150% Zoom In



Grey Card White Balance with 22 Million Pixels Digital Back

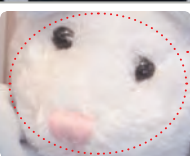


150% Zoom In



CBL Lens Full Color Balance with 22 Million Pixels Digital Back

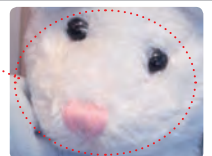
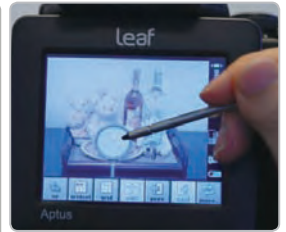
Grey Card White Balance with 33 Million Pixels Digital Back (RAW)



200% Zoom In



CBL Lens Full Color Balance with 33 Million Pixels Digital Back (RAW)



200% Zoom In

The Worldwide Standard of Full Color Balance CBL Lens

## ◆ Professor Harris Fogel ◆

Associate Professor, Photography  
 The University of Art, Philadelphia  
 Coordinator, Photography Program  
 Director, Sol Mednick Gallery and Gallery 1401  
 Media Arts Department

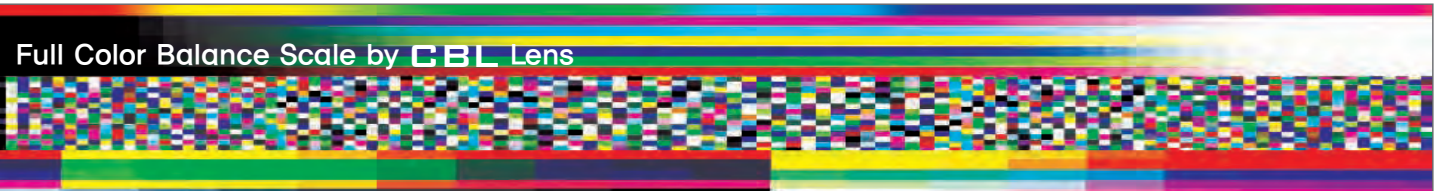
“As a professor of photography and digital imaging, I’m keenly aware of and interested in solutions that help to solve color management problems, and thus I was interested in your product, which took a new approach to the problem of setting an accurate white balance in digitally captured images.”

“I find that CBL took an interesting and unique approach to the problem, which was to create a handheld test target that utilized a combination of neutral point and prism technology to achieve accurate readings. This is a fresh approach to the problem, and my test of your CBL Lens units resulted in a very accurate white balance, with no colorcast for the final image.”

“When I first encountered your product, it didn’t seem all that complicated, a simple handheld plastic target with what seemed to be a plastic cover. But, I soon learned that each unit was hand-calibrated, and had an advanced and complicated inner coating system, and that the design’s plastic cover actually acted as prism, a design so unique that CBL was granted a patent on it.”

“While there are other very competent solutions to setting an accurate white point when working with digital cameras, the CBL Lens design seems to be in a class all its own. It is a bit more expensive than competing products, but for the critical user who demands an absolutely accurate color capture and post-production, the CBL Lens deserves serious consideration.”

“I am impressed that such an easy to use product incorporates such an advanced set of features. I believe that the CBL Lens is a solution that many serious photographers will discover to be a powerful tool for achieving an accurate and pleasing reproduction of colors in their photographs.”



▶ “CBL Lens has been invented for the perfect expression of precise original colors image as exactly seen by our own eyes.”

– Professor Hwang Seon Goo –

Source: Photographic Art Magazine, April & June 2007

### White Balance Zone System

### Grey Scale by All Other White Balance Devices

▶ “The existing white balance setting devices like grey cards or filters are based on 18% reflectance medium grey which had been used for checking the exposure level of black and white photography.”

– Professor Hwang Seon Goo –

Source: Photographic Art Magazine, April & June 2007

AWB Data



CBL Full Color Balance Data



“In near future, the current standard of white balance terms will be changed into a new standard by “Full Color Balance.”

– Professor Hwang Seon Goo –  
 Source: Photo Art Magazine, 2008

New

CBL 220mm

for HD Broadcasting & Movie Cameras



Grey Scale White Balance setting

CBL 220mm Full Color Balance setting

# Comparison of Grey Card, Color Meter, and CBL Lens

Color Meter Kelvin Setting



CBL Full Color Balance Setting



"I have tested the devices to know which one express more precise colors. I used Canon 1Ds MK2 which express good colors. And the lighting was under tungsten light of 3,150K. I used the custom white balance mode for Grey Card and CBL Lens and then used Color Meter to set the camera after checking Kelvin level on the subject.

The result shows quite substantial difference. Usually under tungsten light, we feel warmer colors on the photos. The colors of image set by Grey Card and Color Meter are expressed as taken under daylight. If we take photos set by the camera modes of cloud, indoor, fluorescent, tungsten, we feel sometimes these are all taken under daylight. Setting by CBL Lens also looks alike taken under daylight but still better than setting Grey Card or Color Meter as you can see the colors of wood, glass, red colors of the righthand side image. Setting by Grey Card shows cooler image and not realistic. Setting by Color Meter shows as taken under daylight. And Setting by CBL Lens expresses more natural original color image than others.

Setting by Color Meter shows differently depending on the level of Kelvin and depending on the distance, angles, lighting direction to the subject and shows different results. Setting by CBL Lens shows more adaptability of images and more realistic and precise color presentation than the other two devices under same shooting environment."

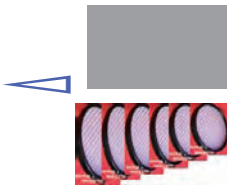
- Professor Hwang Seon Goo -

## ◆ Professor Hwang Seon Goo ◆

National Art College of Seoul, Department of Photography  
Professional Photographer  
Digital Image Columnist  
Graduated from New York University, Media Art



18% White Balance Data



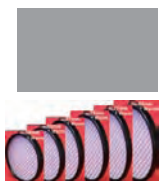
CBL Full Color Balance Data

150% Zoom In

18% White Balance Data

150% Zoom In

CBL Full Color Balance Data



The Worldwide Standard of **Full Color Balance** CBL Lens

“CBL Lens work particularly well with digital SLR cameras and, for that matter, any compact cameras with a live preview. One tried and tested technique is to establish the white balance without even looking through the viewfinder. With practice, the CBL Lens will then supply the excellent results you are looking for. Even cameras with well-reputed white balance modes will clearly profit from the CBL Lens. The Lens does not depend on the 18 percent grey balance and thus allows for full color white balance, also taking into account oblique stray light.”

Source: LFI, January  
 Writer : Mr. Ronald Schmidt



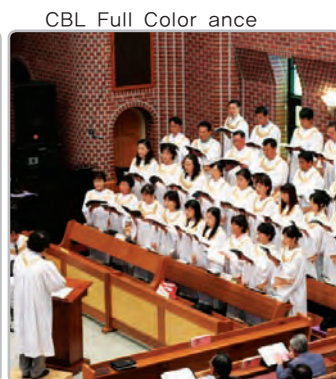
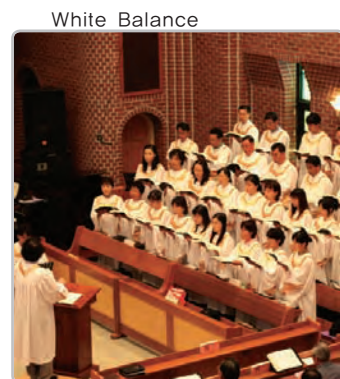
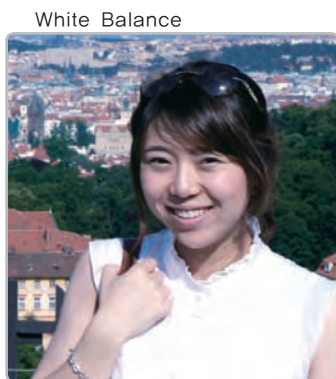
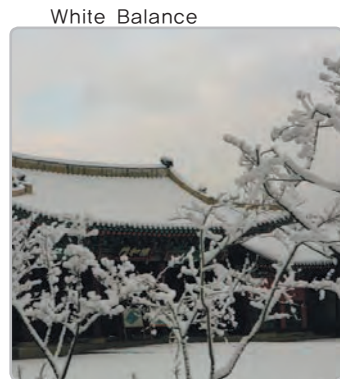
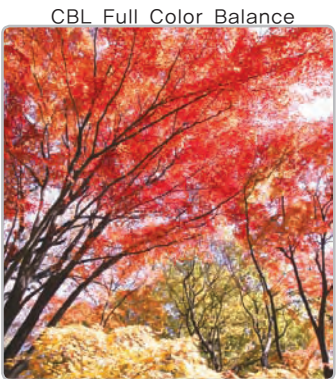
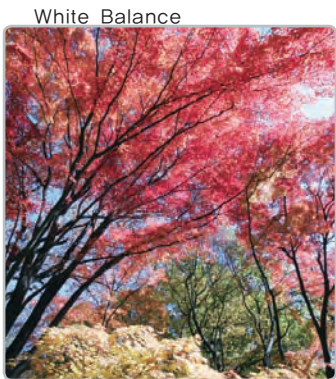
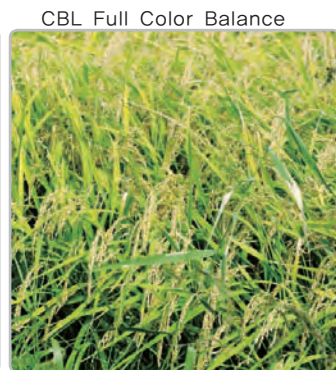
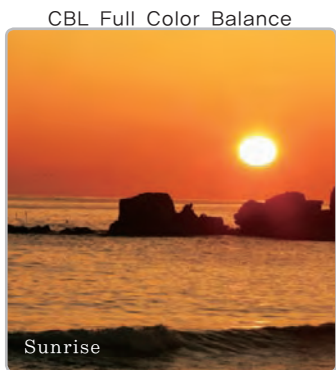
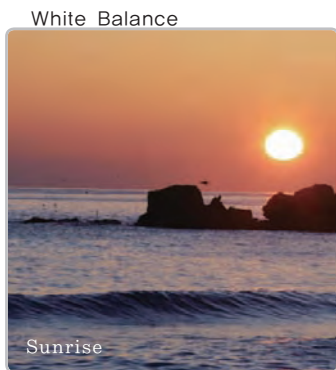
The effective white balance tools:  
 (left), CBL(Color Balance Lens,  
 right), Card(below)



Manual measurement with (left). A decent result, though a little on the cool side



Manual measurement with CBL: Here the impression is nice and balanced.



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# CBL

**New CBL 220mm**  
for HD Broadcasting & Movie Cameras



*Top Photographers  
Enjoy Greater Resolution,  
Gradation,  
Sharpness,  
& Deeper Details With  
Full Color Balance By  
**CBL Lens***



Manufactured by

**CBL CO., LTD.**

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