Day&Night Box camera with 36x Optical Zoom

WV-CZ392/CZ492

WV-CZ392

WV-CZ492

2011.Sep.6

Security & AV Systems Business Unit
Panasonic System Networks Company

Panasonic ideas for life

Key Features

Day&Night Box camera with 36x Optical Zoom

- **36x Optical Zoom Lens**
- **Super Dynamic 6 (CZ492)**
- **Horizontal Resolution 650TV lines (Typ. @Color/BW)**
- **High Sensitivity 0.5lx(color)/0.04lx(BW) @F1.4**
- **Hyper Resolution**
- **RS-485(2-Wired) Pelco-D/P Protocol Support**
- Electronic Sensitivity UP 32x max. (AUTO) / 512x max. (Manual)
- Digital Zoom 20x
- Day/Night function (IR cut filter removable)
- Ambient Operating Temperature
  -10 deg C ~ +50 deg C (14 deg F ~ 122 deg F)
- Eco-friendly, Reduce power consumption
- Powered by New “SR” processor

New "SR" image processor (Panasonic Original DSP)

New DSP enables all models to have both superior realistic image and high cost performance.

Superior feature

SD6 SuperDynamic

- Super Wide Dynamic + Enhanced ABS

Advanced features

- Hyper Resolution
- Color Reproducibility
- Proactive 2D/3D-DNR
- Enhanced ABS
- Lens Distortion Compensation
- Electrical Sense Up 512x
- On Screen Display Menu
- Auto Tracking
- Scene Change Detection
- Auto Image Stabilizer

Basic features

- Horizontal resolution 650 lines
- Min. illumination 0.008 lx (Box and Dome, Day&Night(IR), B/W)
- Eco-friendly, Reduce power consumption

Super Dynamic 6

Super Dynamic 6 delivers Superior image by fusion of Super Dynamic with non-linear combination algorithm and Enhanced ABS (Adaptive Black Stretch) by DTCC (Dynamic Tone Curve Control), so can provide more natural bright and dark graduation and color reproducibility.

Super Dynamic 6 = **Super Dynamic** + **Enhanced ABS**

Iris is set for indoor. Outdoor image is washed out.

Iris is set for outdoor. Indoor Image is too dark.

Both bright area and dark area are clearly visible.

SD6 image quality

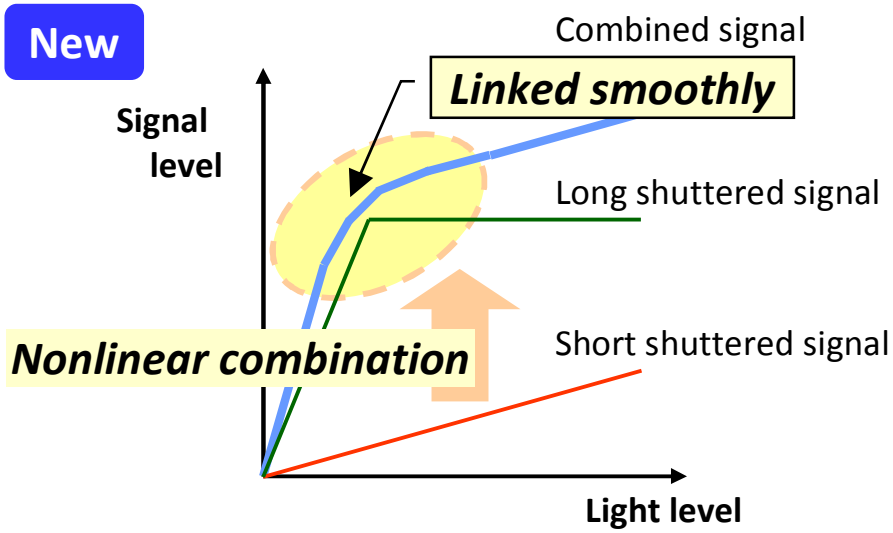
natural bright and dark graduation in low brightness and high brightness area is improved.

The glass and inside of building can be seen more.

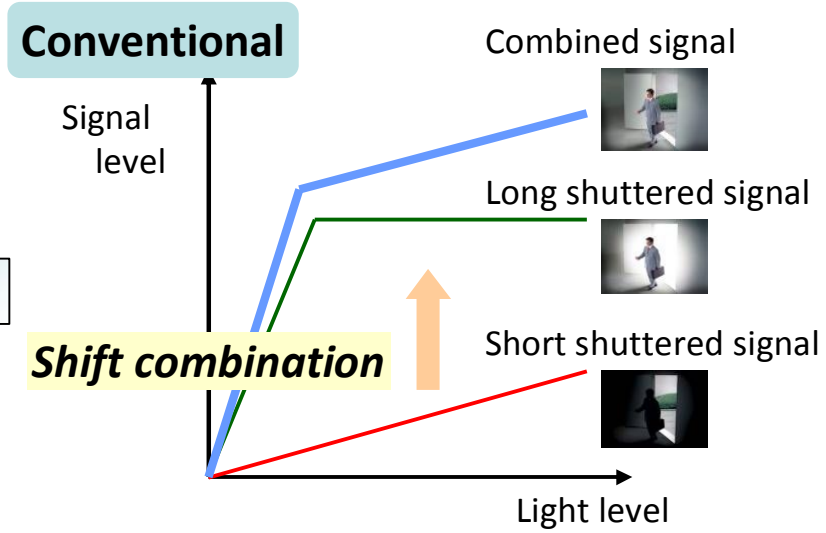
SD6 Technology: Nonlinear combination

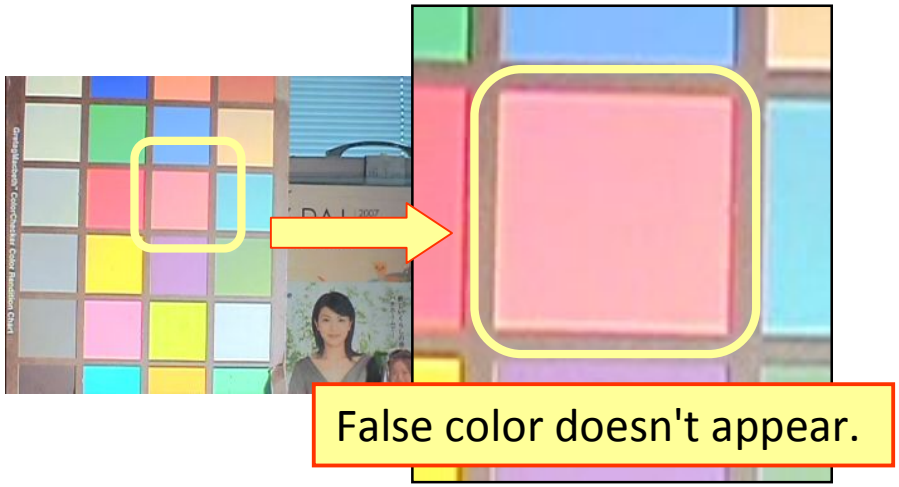
Nonlinear combination algorithm linked short shuttered signal and long shuttered signal smoothly. This technology provide more natural color reproducibility.

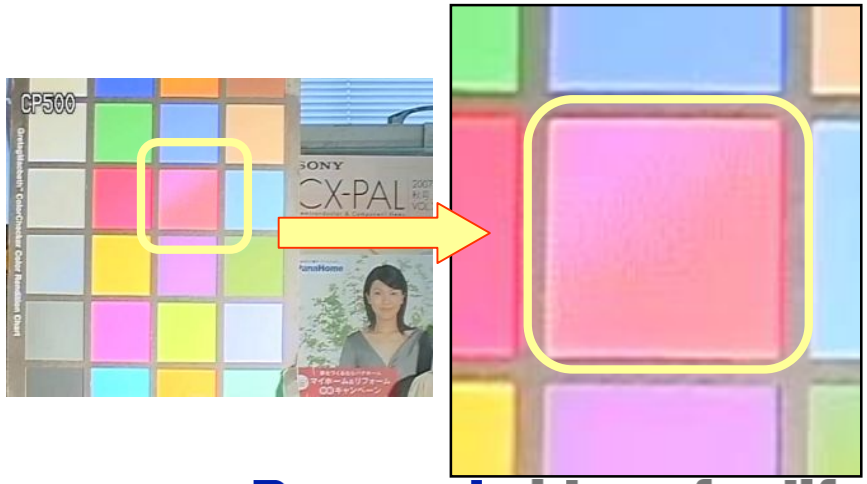
New



Conventional

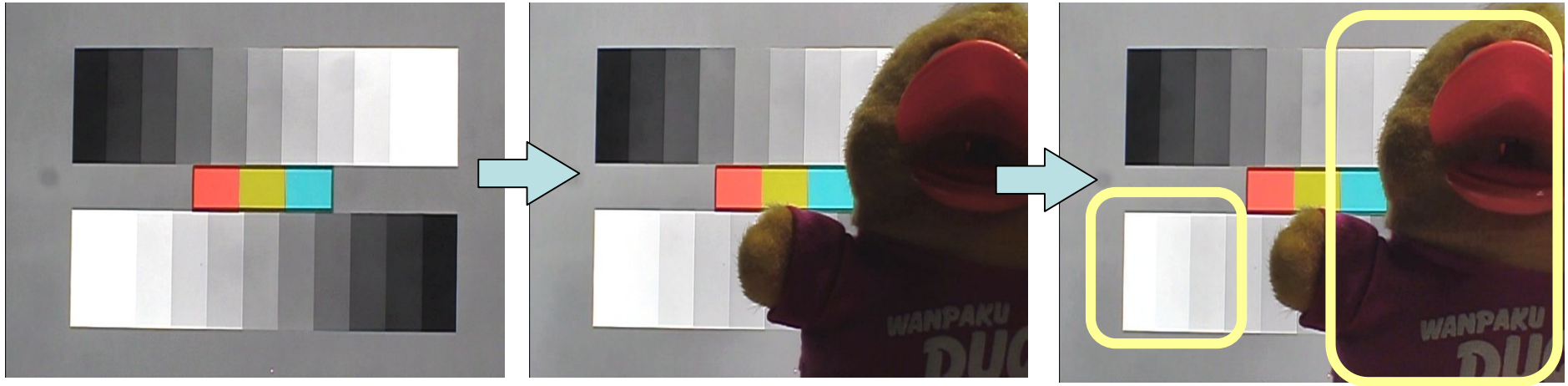






SD6 Technology: Enhanced ABS

Enhanced ABS (Adaptive Black Stretch) provide more natural bright and dark graduation depending on the situation by DTCC (Dynamic Tone Curve Control).



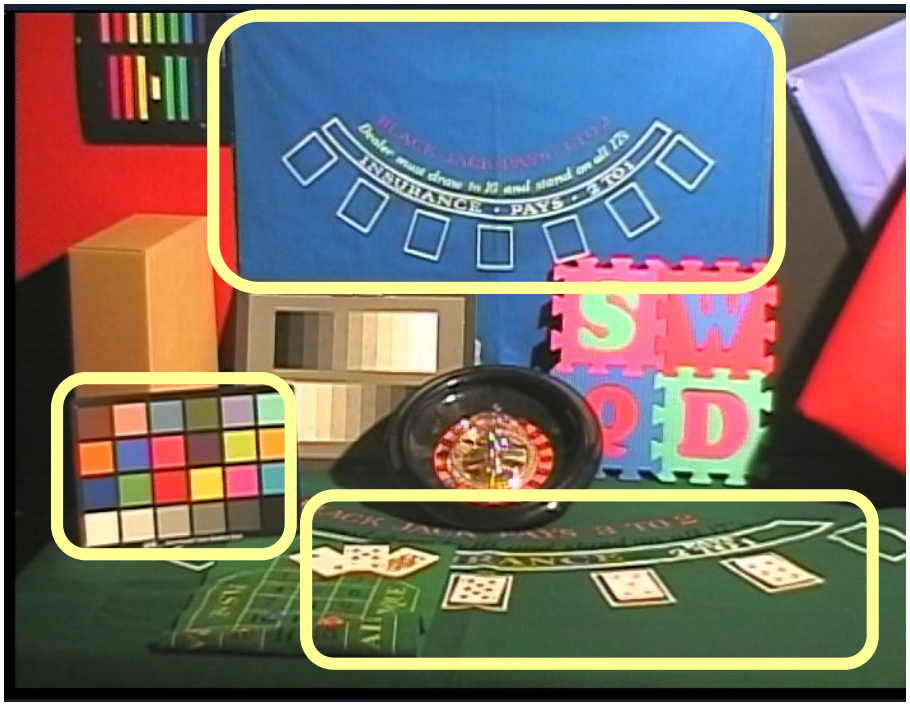
The gain of the background is down and the gain of the doll is raised corresponding to the image change.

Enhanced ABS in real time (every 0.5 sec) compensates the graduation in each pixel according to changes in the environment, and provide the best brightness for image object.

*The conventional model only processed a fixed gain to the image.

Color reproducibility

Color reproducibility has improved.
It can provide superior surveillance where color reproducibility is important such as casinos.



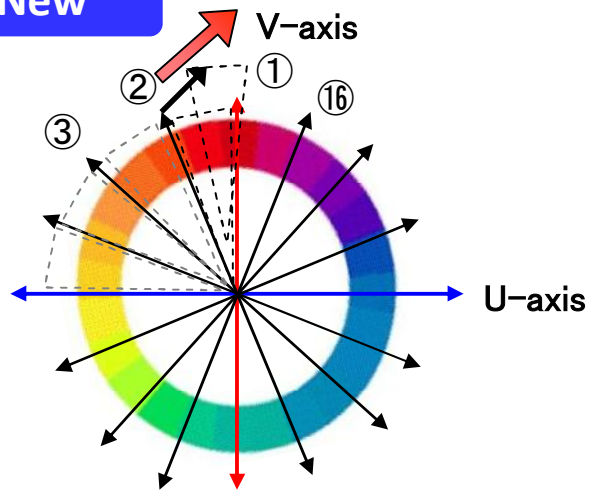
Color reproducibility of game sheet has improved.
And Card suits can be identified.

at Color temperature 2500K

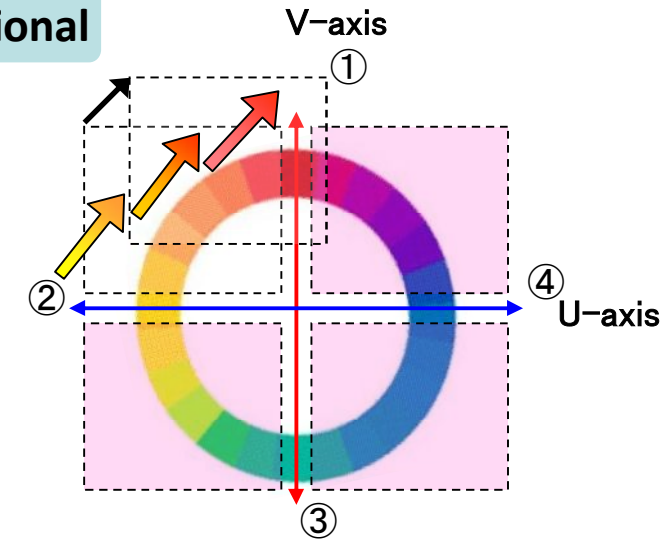
Color reproducibility technology

**By the wider range of color adjustment with 16 axis matrix,
The color reproducibility has improved.**

New



Conventional



16 axis matrix color compensation

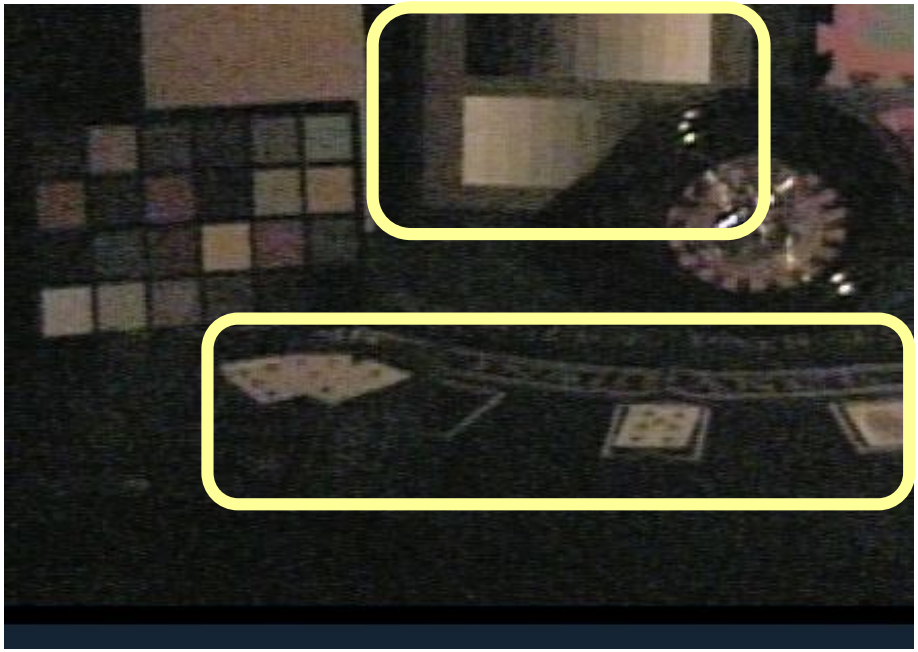
In new color reproducibility algorithm, to adjust red, it doesn't influence orange and yellow.
Because the red color space is separated from orange and yellow.
Therefore, this provides the wider range of color adjustment naturally.

4 axis matrix color compensation

For example, to adjust red, it is necessary to convert the orange and yellow as same, because the entire color space from yellow to red has to be converted.
Therefore, the range of the color adjustment is limited.

High Sensitivity

Color reproducibility at low light condition has improved with natural white balance.

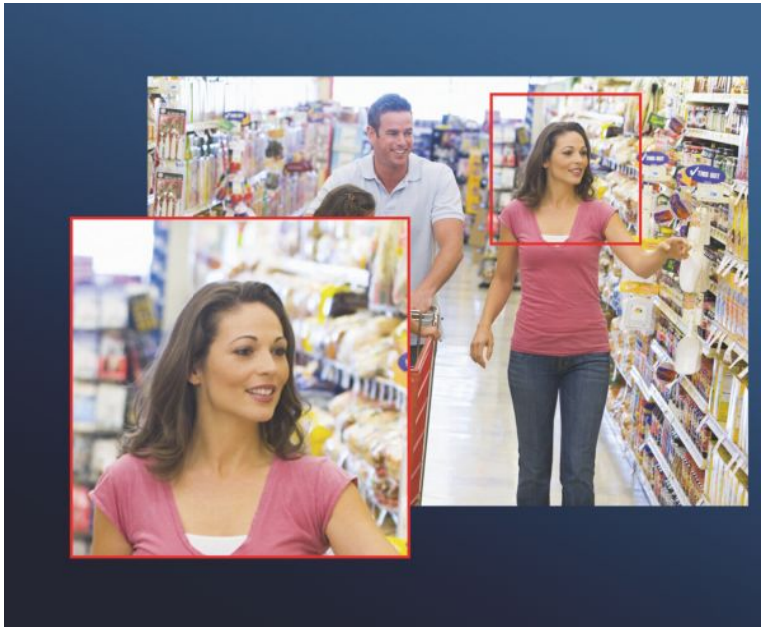


Color reproducibility has improved with reducing reddish in color at 0.5lx.

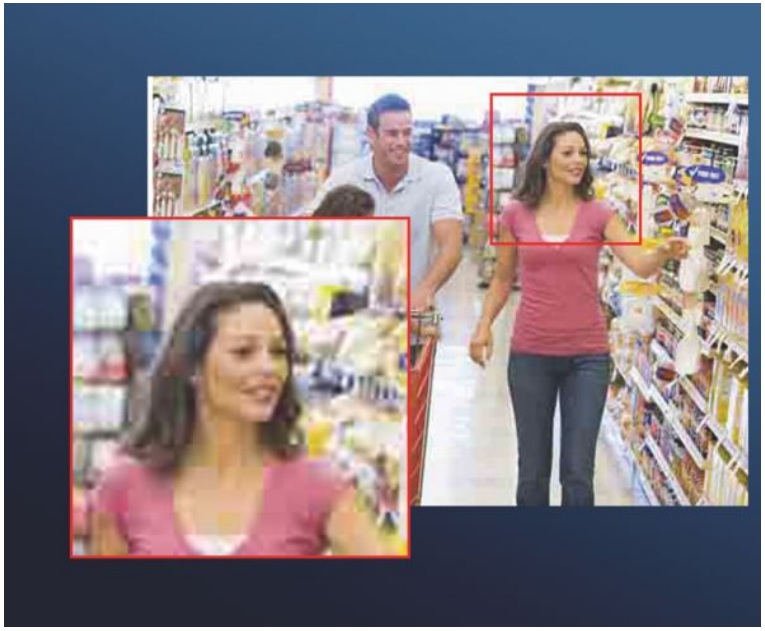
Min. illumination of CZ392/CZ492 is 0.5lx at color

High Resolution

650 TV lines (Color, B/W) high resolution Image allows precise identification



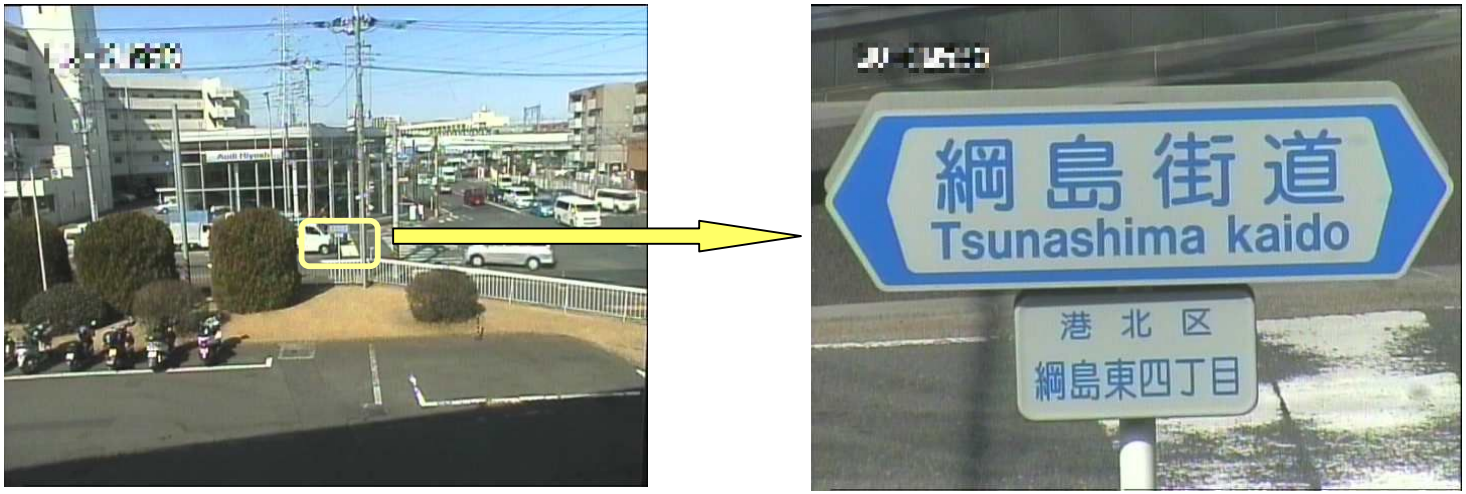
The person can easily be identified with clear detail.



Details are unclear.

36x Optical Zoom

36x optical zoom can provide wider surveillance view



Wide(1x)　　Tele(36x)

	CZ392/CZ492 (New)	CZ362 (Conventional)
Zoom Ration	Optical: 36x, Digital: 20x	Optical: 22x, Digital: 10x
Focal Length	3.3 mm ~ 119 mm	3.79 mm ~ 83.4 mm
Angular Field of View	H: 1.5° (Tele) ~ 60.2° (Wide) V: 1.2° (Tele) ~ 46.0° (Wide)	H: 2.6° (Tele) ~ 52.3° (Wide) V: 2.0° (Tele) ~ 39.9° (Wide)

Hyper Resolution

Hyper resolution detects and optimizes signal processing that the outline parts and texture areas are enhanced to look more finely detailed.

At 46x zoom of figure. (36x optical and 1.3x electronic zoom)

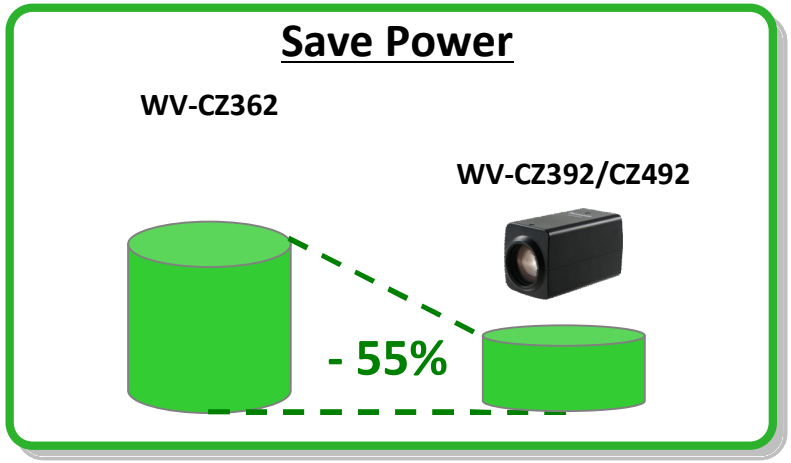
Hyper Resolution ON

This feature is normally ON. Not selectable.

Hyper Resolution OFF

Eco-friendly & Maintenance free

Reduced Power consumptions 55% compared to Current Model



	Current Model WV-CZ362	SR image processor WV-CZ392/CZ492
DC12V	490 mA	220 mA

55% Reduction

Higher reliability for long term usage without any additional repair cost

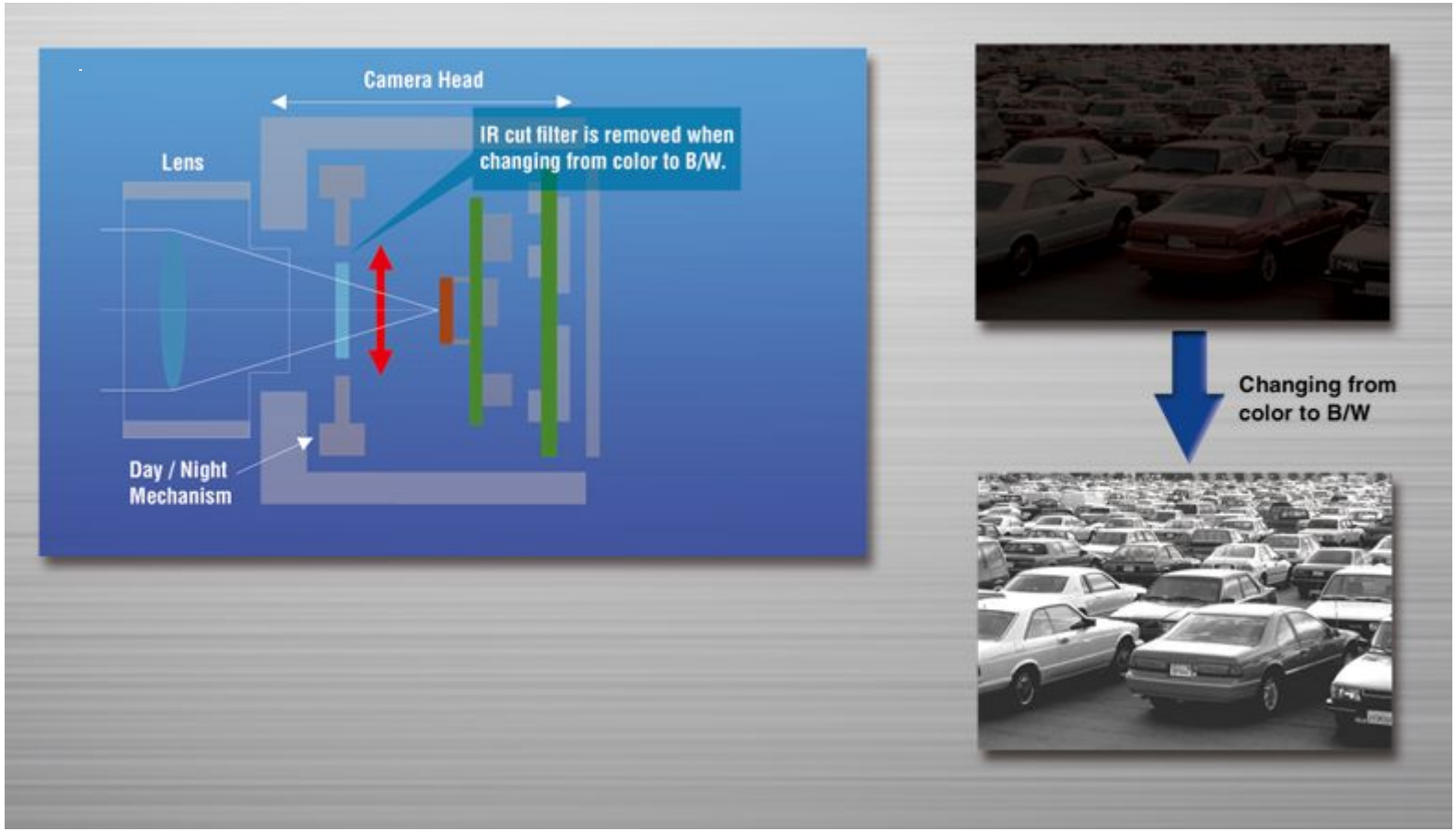
Lens: 3.7 million operation
→7 years* (preset by one minute)

** It does not mean warranty period is 7 years*

Day Night Function

Day/Night feature automatically switches the camera from color to B/W and vice versa depending on the illumination, an ideal solution for 24-hour surveillance.

With moving IR cut filter, high sensitivity and accurate focus are ensured.



Proactive 2D+3D Digital Noise Reduction

2D-DNR for motion area and 3D-DNR for static area are effectively combined, realizing a clear low noise Image with less motion blur and resolution deterioration.
Additionally, with combining the edge of moving object of 2D-DNR image and 3D-DNR image, the edge noise of moving object is more improved.

AGC OFF: Image is too dark

AGC ON: Image is too noisy

Conventional DNR:
Motion blur on moving subject.

Motion adaptive DNR:
Clear image without motion blur.

Auto Image Stabilizer

Auto image stabilizer digitally cancels the vibration on images by the advanced digital signal processing.

It enables the camera to be installed where vibration or window is a concern.

Stabilizer: ON

Stabilizer: OFF

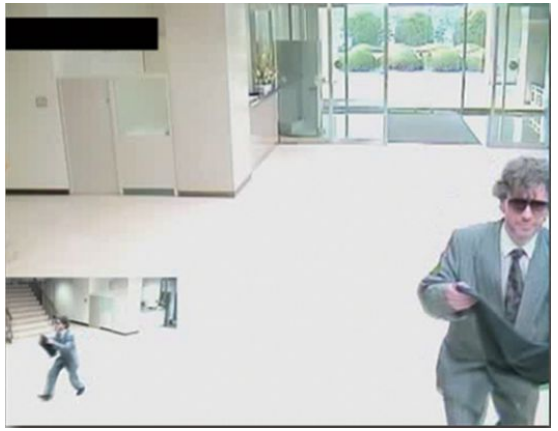
Scene Change Detection

Scene change detection can be detect interference to the camera and sends an alarm.

It can detect manual change in the camera angle, removal of the camera lens, defocus, blockage of the camera lens with cloth or paint.

Lens defocused

Splay painted



Lens covered by cloth

Privacy Zone

Privacy zone masking provides the ability to masking sensitive areas of the image from view.

Specification

	WV-CZ392	WV-CZ492	WV-CZ362(conventional)
Appearance			
Image Sensor	1/4 CCD	1/4 CCD	1/4 CCD
Effective Pixels	PAL ：976H × 582V	PAL ：976H × 582V	PAL ：752H × 582V
Horizontal Resolution	650TVL	650TVL	510TVL(CL)/570TVL(BW)
Synchronization	INT	INT	INT/VD2
Minimum Illumination	0.5 lx（C/L） 0.04 lx（B/W）	0.5 lx（C/L） 0.04 lx（B/W）	0.6 lx（C/L） 0.04 lx（B/W）
BLC	BLC	SD6	BLC
Ele. Sensitivity UP	Max. 32x (Auto) Max. 512x (Fix)	Max. 32x (Auto) Max. 512x (Fix)	Max. 32x (Auto/Fix)
Day/Night	Yes (ICR filter removable)	Yes (ICR filter removable)	Yes (ICR filter removable)
Optical Zoom	36x (3.3mm-119mm)	36x (3.3mm-119mm)	22x (3.79mm-83.4mm)
Digital Zoom	Max. 20x	Max. 20x	Max. 10x
Preset Position	256pos.	256pos.	64pos.
Control I/F	Co-axial RS-485(2-Wire)	Co-axial RS-485(2-Wire)	Co-axial, Lens/ A-D control RS-485(2/4-Wire)
RS-485 Support Protocol	Panasonic、Pelco-P/D	Panasonic、Pelco-P/D	Panasonic
Alarm I/O	IN：4ch / OUT：1ch	IN：4ch / OUT：1ch	IN：4ch / OUT：1ch
Operating Temperature	-10~50 deg C (14~122 deg F)	-10~50 deg C (14~122 deg F)	-10~50 deg C (14~122 deg F)
Dimensions	58(W)x68(H)x118(D) mm	58(W)x68(H)x118(D) mm	62(W)x78(H)x119(D) mm

Panasonic
ideas for life