



# 19" LED-Backlit Monitor Saves Energy and Reduces Eye Fatigue

### **LED Backlight**

With an energy-saving LED backlight, the FlexScan S1923 uses only 16 watts during typical operation. The LED backlight does not contain any mercury for minimal environmental impact when the monitor is eventually disposed of.

### **Digital and Analog Inputs**

With both DVI-D and D-Sub mini 15-pin inputs, you can use a computer that has either a digital or an analog graphics board (or both if connected to two comput-



ers), and quickly switch between the inputs via a front panel button.

### **Built-In Speakers**

0.5-watt speakers are tucked away at the back of the monitor and out of view so you can enjoy sound while bezel size is kept to a minimum. A headphone jack is also built into the monitor.



### Sync-On-Green Signal Support

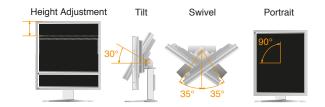
Support for sync-on-green ensures this monitor can be used with legacy graphics boards that output this signal.

### **Auto Image Adjustment**

The monitor discerns the input signal from the PC and automatically adjusts the clock, phase, image location, size, etc. In addition, the signal cables that are bundled were developed by EIZO to reduce noise.

## Viewing Comfort with an Ergonomic Stand

Adjust the screen to the most comfortable position with 100 mm height adjustment, 30° tilt, 70° swivel, and 90° rotation for portrait mode.

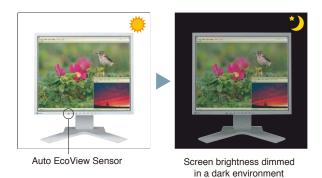


### **VESA Mount Version**

For customers that will provide their own VESA-compatible mounting solutions, the FlexScan S1923 is available without a stand.

### **Optimized Brightness with Auto EcoView**

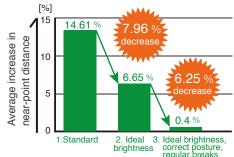
The Auto EcoView function is a sensor on the front of the monitor that measures ambient light and optimizes the screen's brightness to a level akin to viewing a sheet of paper under typical office lighting conditions. Since the screen is never too bright, eye strain is reduced while power consumption is cut by up to 50% compared to operating the monitor with Auto EcoView turned off and set to the default factory brightness of 100%.



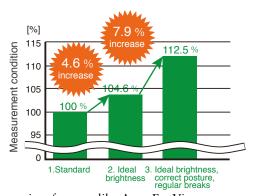
# Improved Work Efficiency, Reduced Visual Fatigue

EIZO conducted a survey to establish the relationship between eye fatigue and monitor use. The survey found that when you properly adjust your monitor's brightness, the reduction in your ability to focus drops by half (Graph 1). In addition, maintaining correct working posture and taking regular breaks further reduced fatigue levels and increased work efficiency by 12.5% (Graph 2).

# Comparison between fatigue levels after monitor use



# Quantity of VDT work per unit of time



EIZO monitor features like Auto EcoView, ergonomic stands, and the EyeCare utility help reduce eye fatigue and increase work efficiency.

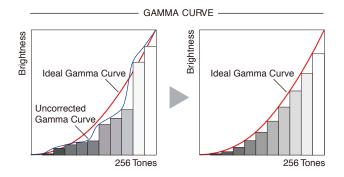
#### **Anti-Glare Treatment**

A non-glare screen reduces eye fatigue by dissipating reflective light that otherwise makes the screen difficult to view. Furthermore, the surface of the bezels is treated to prevent light reflection.



### 10-Bit Gamma Correction

This technology helps achieve accurate color by converting the 8-bit PC data to 10-bit, and assigning the ideal gamma values with a 10-bit look-up table (LUT) then returning the data to 8-bit format for display.

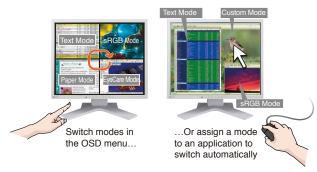


### **Preset Modes for Optimum Viewing**

With EIZO's Fine Contrast function you can choose from several preset modes for the various applications you work with. Toggling between modes can be done manually in the OSD menu or automatically by assigning a mode to a particular application with the bundled ScreenManager Pro for LCD software.



Select the best mode depending on content



### **Prevents Eye Fatigue in Dimly-Lit Offices**

Fine Contrast includes an EyeCare mode that reduces the screen's brightness to just 3 cd/m². This ultra-low brightness helps prevent eye fatigue and increase productivity when working in an environment with very dim ambient lighting such as a CAD studio.

### **Optional LCD Panel Protector**

This protector fits easily between the LCD screen and bezel, has a light transmission rate of more than 90%, and includes both an anti-glare coating side to reduce light reflection and a glossy side for crisper, more vibrant images.



# What is Paper Mode?

Simply put, it is a mode which adjusts the brightness, contrast ratio, and color temperature of a monitor to simulate those of printed paper. Over the course of a work day PC users must constantly adjust to the difference between how monitors and paper appear. This overworks the muscles of the eyes and is thought to be a source of eye fatigue and stress. Paper mode was developed to alleviate the eye fatigue and stress that PC users feel.

Comparison between paper, EIZO square monitors, and Paper Mode

	Newspaper	Recycled Copy Paper	EIZO Square Monitors	Paper Mode
Brightness		70 % reflection rate, 112 cd/m <sup>2*</sup>	267 cd/m <sup>2†</sup>	50 - 70 % reflection rate
Contrast Ratio	6.2:1	10.7:1	1167:1 <sup>†</sup>	About 30:1
Color Temperature	3,477 K	3,828 K	6500 K (when shipped)	4,000 – 5,000 K

<sup>\*</sup> Measured at an ambient brightness of 500 lx. † Average maximum brightness of FlexScan square monitors .

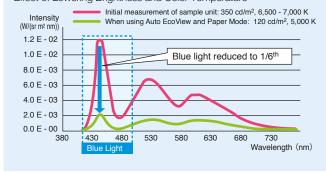
# Color Temperature, Brightness and the Effect on Blue Light

In the visible light spectrum, blue light has wavelengths adjacent to ultraviolet light. Compared to the factory preset setting of 6,500 K of typical LCD monitors, Paper Mode is closer to the spectral distribution with long reddish wavelengths so it reduces the amount of blue light, a cause of eye fatigue.



The combination of Paper Mode and the Auto EcoView brightness adjustment function reduces blue light even more. In a monitor with an LED backlight where Paper Mode and Auto EcoView were used, the blue light was measured and found to have only 1/6th the intensity of the factory setting.

Effect of Lowering Brightness and Color Temperature



#### **SPECIFICATIONS**

Cabinet Colors	Gray, Black	
Panel Type	VA	
Backlight	LED	
Size	19" / 48 cm (481 mm diagonal)	
Native Resolution	1280 x 1024 (5:4 aspect ratio)	
Display Size (H x V)	376.3 x 301.0 mm	
Pixel Pitch	0.294 x 0.294 mm	
Display Colors	16.77 million from a palette of 1.06 billion	
Viewing Angles (H / V, typical)	178°, 178°	
Brightness (typical)	250 cd/m <sup>2</sup>	
Contrast Ratio (typical)	2000:1	
Response Time (typical)	20 ms (black-white-black)	
Video Signals	D-Sub mini 15 pin, DVI-D 24 pin (with HDCP)	
Digital Scanning Frequency (H / V)	31 - 64 kHz, 59 - 61 Hz (VGA Text: 69 - 71 Hz)	
Analog Scanning Frequency (H / V)	31 - 80 kHz, 50 - 75 Hz	
Sync Formats	Separate, Sync on green	
Speakers	0.5 W + 0.5 W	
Input Terminals	3.5 mm stereo jack	
Output Terminals	3.5 mm headphone jack	
Sound Adjustment	Volume	
Power Requirements	AC 100 - 120 V / 200 - 240 V, 50 / 60 Hz	
Maximum Power Consumption	41 W	
Typical Power Consumption	16 W	
Power Save Mode	Less than 0.5 W	
Power Management	Power Save (VESA DPM and DVI DMPM), Eco Timer	
Preset Modes	FineContrast (Text, sRGB, EyeCare, Paper, Custom)	
Auto EcoView	Yes	
OSD Languages	English, French, German, Italian, Japanese, Simplified and Traditional Chinese, Spanish, Swedish	
Others	Screen Adjustment (Clock, Phase, Position, Range (Auto), Smoothing (5 stages), Color Adjustment (Brightness, Contrast, Temperature, Gain, Reset), Input Signal, Power Indicator, Product Information (name, serial number, resolution, operating time, etc.), OSD Menu Position, Adjustment Lock, DDC/Cl Lock, Reset	
Dimensions (Landscape, W x H x D)	405 x 406.5 - 506.5 x 205 mm	
Dimensions (Without Stand, W x H x D)	405 x 334 x 61.5 mm	
Net Weight	6 kg	
Net Weight (Without Stand)	4.2 kg	
Height Adjustment Range	100 mm	
Tilt	30° Up, 0° Down	
Swivel	35° Right / 35° Left	
Pivot	90°	
Hole Spacing (VESA Standard)	100 x 100 mm	
Temperature	5 - 35 °C	
Humidity (R.H., non condensing)	20 - 80 %	
Certifications & Standards	TUV/Ergonomics (including ISO9241-307), TUV/GS, C-Tick, CE, CB, cTUVus, FCC-B, Canadian ICES-003-B, TUV/S, VCCI-B, EPA Energy Star, RoHS, WEEE, China RoHS, CCC, GOST-R	
Supplied Accessories	AC power cord, signal cables (D-Sub - D-Sub, DVI-D - DVI-D), audio cable, setup guide, CD-ROM (PDF user's manual, ScreenManager Pro for LCD [DDC/CI], ScreenSlicer software), 4 screws for mount option	
Warranty	Five Years	
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### **EIZ** Corporation

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