

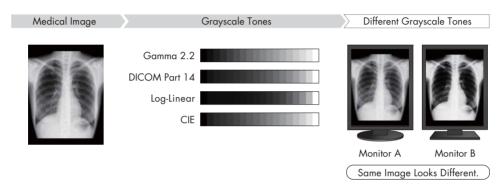
# FlexScan MX-Series



### Selecting the Optimum Monitor for Clinical Review

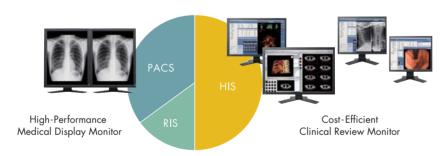
#### **Display Differs Depending Upon Grayscale Tones**

Standard monitors for general office use have grayscale tone characteristics which may vary even between the same models. In the medical field, monitors must display medical images accurately and consistently. Digital Imaging and Communications in Medicine (DICOM) Part 14 specifies a display function for grayscale which is now used as a standard to adjust the grayscale tone characteristics of monitors used in the medical field.



#### **Cost-Efficiency Demanded Under Clinical Review Applications**

Medical images can now be reviewed with clinical record applications. However, it is costly for hospitals to install high-performance, DICOM calibration compatible medical display monitors throughout the entire hospital, and a cost-efficient solution is demanded for clinical review application usage environment.



#### FlexScan MX-Series with Calibration to the DICOM Part 14 Compliant and Superior Cost Performance

With the bundled RadiCS LE quality control software installed, a self-diagnosis function using a built-in backlight sensor periodically checks the brightness of FlexScan MX-Series monitors. When a change in the brightness is detected, the self-calibration function performs a simplified calibration compliant with the DICOM Part 14 standard to correct grayscale tones and brightness of the monitor. Superior cost performance will be achieved when installing a large number of monitors compliant to DICOM Part 14 in clinical review application usage environment.





MX300W 76 cm [29.8"] COLOR LCD MONITOR



MX240W 61 cm [24.1"] COLOR LCD MONITOR

Calibration compliant with the DICOM Part 14 standard. Widescreen format with 16:10 aspect ratio gives you more horizontal space.





#### **MX240W**

#### 4 Megapixel Bezel-Less Widescreen

Displaying 4 megapixel information volume on one monitor improves your working efficiency and cost performance. No bezels in between

requires less eye movement with less stress as compared with dual 2 MP monitors.



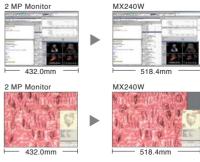
#### DUE for Brightness Uniformity

The Digital Uniformity Equalizer (DUE) function provides optimum backlight luminance uniformity which is considered difficult to attain due to the characteristics of LCD monitors, especially with larger screen sizes.



#### More Comfortable Working Space with Widescreen

With a 16:10 aspect ratio, you can view patient charts and DICOM medical images with no overlap. The increased horizontal space this affords means you can also view whole intestinal images along with the navigation window.



[ MX240W Comparison ]

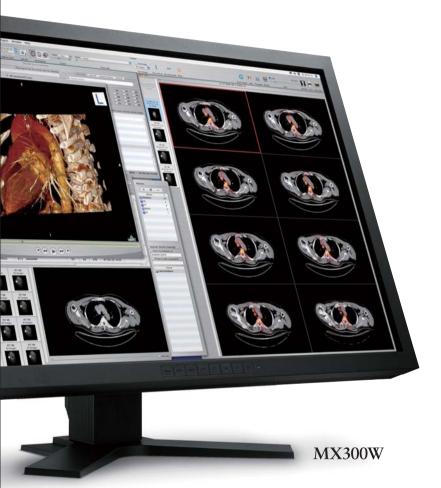


MX210 54 cm [21.3"] COLOR LCD MONITOR



MX190S 48 cm [19"] COLOR LCD MONITOR

Calibration compliant with the DICOM Part 14 standard. Ideal for viewing patient charts with MRI and CT medical images.



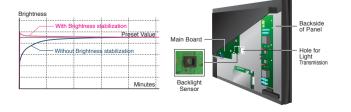


**MX190S** 

#### **Brightness Stabilization**

At startup or upon wakeup, the EIZO patented drift correction function quickly stabilizes the brightness level. In addition, a sensor measures the backlight brightness and compensates for brightness fluctuations caused by the ambient temperature and the passage of time.

This brightness stabilization function is EIZO patented technology (Japan patent numbers 3171808 and 3193315, US patent number 6188380).



#### **Outstanding Contrast Ratio**

Makes images on dark backgrounds appear more vivid, brings out the subtle differences in similar shades of color, and ensures that colors retain their richness even in brightly lit rooms.





Low Contrast (Image)

High Contrast (Image)

#### Wide Viewing Angles

Wide Viewing angles with minimal color shift when viewed from the side.

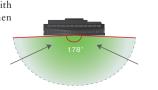


Image viewed from the side



#### **Backlight Saver with Screen Saver**

With ScreenManager Pro for Medical utility software installed, the Backlight Saver function turns off the monitor's backlight when the screen saver is activated, and turns it on again when the computer comes out of screen saver mode. This function helps to reduce power consumption when the monitor is used for a prolonged period of time.



[ Without Backlight Saver ]

[ With Backlight Saver ]

#### Backlight Saver with Viewer Application

By setting the Backlight Saver function to operate with viewer application, the monitor's backlight is on while the viewer is being used and the backlight is off while the viewer is not being used.



#### **Ergonomic Design**

Narrow bezels require less eye movement in a multi-panel environment. The height and pivot adjustable stand offers added flexibility and viewing comfort.



# Portrait Mode Support

90° pivot for portrait mode gives you versatility with images or applications requiring more vertical viewing space. *Graphics board that supports portrait mode is required.* 

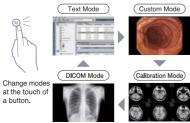


**MX210** 

[ MX300W Usage Example ]

#### CAL Calibration Mode Selection

Selectable with the front panel buttons, the CAL Switch function allows for various calibration modes of different modalities such as CR, CT, and endoscope images. Furthermore, auto mode settings can be made with the Auto CAL Switch function.



[ MX240W Usage Example ]

#### **RadiCS LE Quality Control Software Included**

The bundled RadiCS LE quality control software comes with a Status Analyzer function which observes the monitor's status. When the self-diagnosis function detects a change in luminance, a warning icon appears on the desktop taskbar enabling prompt detection and correction. This reduces the time spent administering to the monitor.



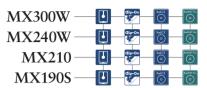
#### **Full 5-Year Warranty**

EIZO and its authorized distributors offer a five-year limited warranty for all FlexScan MX-Series monitors.





## **Quality Control Solutions**



#### More Precise Calibration with UX1 Sensor

By using the UX1 sensor (sold separately) with the bundled RadiCS LE software, more precise calibration compliant with the DICOM Part 14 standard can be performed.



#### Clip-On Swing Sensor

Once attached to the top of the monitor, the Clip-On Swing Sensor G1 (sold separately) can remain in place and is ready for use. This saves the time and trouble of attaching and removing it when

performing quality control tasks.



#### Monitor Quality Control Standards Compliance

Quality control tool RadiCS UX1 (sold separately) enables you to perform basic quality checks necessary for clinical review monitors. In addition, high-performance calibration compliant with the DICOM Part 14 standard corrects the fluctuation in monitor quality.







#### Centralized Management of All Monitors

RadiNET Pro (sold separately) enables centralized management of calibration tasks, history data of multiple RadiCS clients via a network, and remote QC functions.



### Accessory Compatibility

	Flexible Arm	Wall Mount Arm		Dual Height Adjustable Stand	Panel Protector
	LA-131-D	LA-030-W	LA-011-W	LS-HM1-D	PANEL PROTECTOR
		-			
MX300W	_				(MX300W-C:Built-In Panel Protector)
MX240W	0	0	0		FP-2400W
MX210	0	0	0	0	FP-2101
MX190S	0	0	0	0	FP-702

Monitor Cleaning Kit
ScreenCleaner

### **Environment Awareness**

#### EIZO Eco Products — A Commitment to Environmental Preservation over the Product Life Cycle

The development, implementation, and revision of the EIZO Eco Products internal environmental label stems from EIZO's longstanding commitment to manufacturing environmentally sound products as well as a desire to provide consumers with an instantly recognizable means to assess their environmental performance. Based on the 3Rs (Reduce, Reuse, Recycle) and energy savings, EIZO has introduced three versions of this label with EIZO Eco Products 2006 being the most recent.



#### **EIZO Eco Products 2006 Requirements**

- 1) Power consumption less than 1 watt when turned off.
- 2) User's manual made with chlorine-free, recycled paper.
- 3) Subject to an internal product environmental assessment.
- 4) Partial use of recycled plastic.
- 5) Power consumption less than two watts in power save mode.
- 6) Partial use of soy ink with supplied printed materials.
- 7) Use or partial use of plastic containing raw plant materials.
- 8) Use of recycled Styrofoam or paper in packaging cushioning materials.
- 9) Meets VOC (volatile organic compounds) guidelines for PCs as established by JEITA\*.
- 10) Complies with the RoHS directive.

Previous versions of this label are EIZO Eco Products 2004 which covers the first six and EIZO Eco Products 2002 which covers the first three requirements.

\*JEITA is the Japan Electronics and Information Technology Industries Association. JEITA established guidelines to limit emission levels of VOCs from PCs. The guidelines are a countermeasure against health hazards caused by VOC contaminants released from furniture, everyday objects, and building materials that accumulate indoors. EIZO carries out evaluations based on these guidelines.

### Monitor Specifications







54 cm [21.3"] Color LCD Mor



76 cm	29.8"	Color I	CD	Monitor

**MX300W** 

61 cm [24.1"] Color LCD Monitor MX300W: without Panel Protector MX300W-C: with Panel Protector

_			

U	WIA 1903			
nitor	48 cm [19"] Color LCD Monitor			
	-			
	Black, Gray			
	TFT Color LCD Panel (VA)			
	376.3 x 301.0 mm			
	Diagonal: 481 mm			
	1280 x 1024			
	0.294 x 0.294 mm			
billion colors	16.77 million from a palette of 1.06 billion colors			
	178°, 178°			
	250 cd/m <sup>2</sup> (typical)			
	1000:1 (typical)			
	20 ms (typical)			
	-			
(VGA Text:	Digital: 31 - 64 kHz, 59 - 61 Hz (VGA Text 69 - 71 Hz)			
600 x 1200:	Analog: 24.8 - 80 kHz, 50 - 75 Hz			
31 Hz				
Hz	Digital: 108 MHz, Analog: 135 MHz			
RGB Analog	Digital: DVI Standard 1.0, Analog: RGB Analog			

Panel	
Active Display Size (H x V)	

Viewable Image Size

Model Variations

Cabinet Color

TFT Color LCD Panel (VA)

16.77 million from a palette of 1.06 billion colors

Viewing Angles (H. V)

Contrast Ratio 1000:1 (typical) On/Off Response Time 12 ms (typical)

Midtone Response Time 1 6 ms (typical) Scanning Frequency (H, V)

Digital: 31 - 100 kHz, 25.5 - 61 Hz (VGA Text: 69 - 71 Hz)
Frame synchronous mode: 59 - 61 Hz

Dot Clock Digital: 269 MHz Input Signals DVI Standard 1.0

Sync Formats Input Terminal DVI-D 24 pin  $\times$  2 (dual link supported by Signal 1 only)

USB Ports 1 unstream 2 downstream

USB Standard Standard Rev. 2.0 AC 100 - 120 V. 200 - 240 V: 50 / 60 Hz Power Requirements 170 watts

Power Save Mode Less than 2 watts Sensor Backlight Sensor Power Management Digital: DVI DMPM

Power Consumption

OSD Languages English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese

With Stand: MX300W 15.7 kg / MX300W-C 16.4 kg, Without Stand: MX300W 11.2 kg / MX300W-C 11.9 kg Net Weight

VESA standard (100 x 100 mm) Hole Spacing

TÜV/GM (EN60601-1), CE (Medical Device Directive), CB (IEC60601-1), UL (cTÜVus), CSA (cTÜVus), FCC-B, Canadian ICES-003-B, c-Tick, FDA 510(k)², VCCI-B, EIZO Eco Products 2006, CCC, RoHS Certifications and Standards

AC power cord, dual link signal cable (DVI-D~DVI-D), signal cable (DVI-D~DVI-D), usignal cable (DVI-D~DVI-D), usb cable, EIZO LCD Utility Disk (user's manual, RadiCS LE, ScreenManager Pro for Medical), ScreenCleaner (MX300W-C only), warranty card

Black, Gray TFT Color LCD Panel (VA)

16.77 million from a palette of 1.06 billion colors

850:1 (typical) 6 ms (typical)

Digital: 31 - 76 kHz, 59 - 61 Hz (VGA Text: 69 - 71 Hz) Analog: 24 - 94 kHz, 49 - 86 Hz (1600 x 1200: 76 Hz, 1920 x 1200: 61 Hz) Frame synchronous mode: 59 - 61 Hz

Digital: 162 MHz, Analog: 202.5 MHz Digital: DVI Standard 1.0, Analog: RGB Analog

Separate, Composite DVI-I 29 pin x 2

1 unstream 2 downstream

Standard Rev. 2.0 AC 100 - 120 V. 200 - 240 V: 50 / 60 Hz

Less than 2 watts

Backlight Sensor

Digital: DVI DMPM, Analog: VESA DPMS English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese

With Stand: 10.4 kg, Without Stand: 7.4 kg

VESA standard (100 × 100 mm)

TCO'03, TÜV/Ergonomics (including ISO 13406-2), TÜV/GS, c-Tick, CE, CB, UCTÜVUS, CSA (cTÜVUS), FCC-B, Canadian ICES-003-B, TÜV/S, VCCI-B, EPA ENERGY STAR®, EIZO Eco Products 2006, CCC, RoHS

AC power cord, signal cables (DVI-D ~ DVI-D, DVI-I ~ D-Sub mini 15 pin), USB cable, EIZO LCD Utility Disk (user's manual, RadiCS LE, ScreenManager Pro for Medical), warranty card

Black, Gray

TFT Color LCD Panel (VA)

16.77 million from a palette of 1.06 l

300 cd/m2 (typical)

1000:1 (typical) 16 ms (typical)

8 ms (typical) Digital: 31 - 76 kHz, 59 - 61 Hz (69 - 71 Hz) Analog: 24 - 80 kHz, 49 - 76 Hz (161 Hz)

Frame synchronous mode: 59 - 6

Digital: 162 MHz, Analog: 162 MHz

Digital: DVI Standard1.0, Analog: R

Separate Composite DVI-I 29 pin, D-Sub mini 15 pin

1 upstream, 2 downstream

Standard Rev. 2.0 AC 100 - 120 V. 200 - 240 V: 50 / 60 Hz

70 watts

Less than 2 watts Backlight Sensor

Digital: DVI DMPM, Analog: VESA DPMS English, German, French, Italian, Japanese, Spanish, Swedish

With Stand: 9.7 kg, Without Stand: 6.7 kg

VESA standard (100 x 100 mm)

TCO'03, TÜV/Ergonomics (including ISO 13406-2), TÜV/GS, c-Tick, CE, CB, UL (CTÜVUS), CSA (cTÜVUS), FCC-B, Canadian ICES-003-B, TÜV/S, VCCI-B, EPA ENERGY STAR®, EIZO Eco Products 2006, CCC, RoHS

AC power cord, signal cables (DVI-D ∼ DVI-D, D-Sub mini 15 pin ∼ D-Sub mini 15 pin), USB cable, EIZO LCD Utility Disk (user's manual, RadiCS LE, ScreenManager Pro for Medical), warranty card

DVI-D 24 pin, D-Sub mini 15 pin 1 upstream

Standard Rev. 2.0 AC 100 - 120 V. 200 - 240 V: 50 / 60 Hz

Less than 0.8 watts

Backlight Sensor Digital: DVI DMPM, Analog: VESA DPMS

English, German, French, Italian, Japanese, Simplified Chinese, Spanish, Swedish, Traditional Chinese

With Stand: 7.2 kg, Without Stand: 5.2 kg

VESA standard 100 x 100 mm

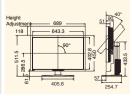
c-Tick, CE, CB, FCC-B, Canadian ICES-003-B, TÜV/S, VCCI-B, EPA ENERGY STAR®, EIZO Eco Products 2006, RoHS

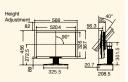
AC power cord, signal cables (DVI-D ~ DVI-D, D-Sub mini 15 pin ~ D-Sub mini 15 pin), USB cable, EIZO LCD Utility Disk (user's manual, RadiC'S LE, ScreenManager Pro for Medical), warranty card

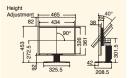
1 Average response time measured between each grayscale level of 31, 63, 95, 127, 159, 191, and 223. 2 FlexScan MX-Series does not support the display of mammography images for diagnosis.

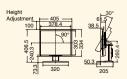


Supplied Accessories













#### **EIZO NANAO CORPORATION**

153 Shimokashiwano, Hakusan, Ishikawa 924-8566 Japan Phone +81-76-277-6792 Fax +81-76-277-6793

radiforce.com

All product names are trademarks or registered trademarks of their respective companies. EIZO, FlexScan, and ScreenManager are registered trademarks of Eizo Nanao Corporation. Specifications are subject to change without notice.