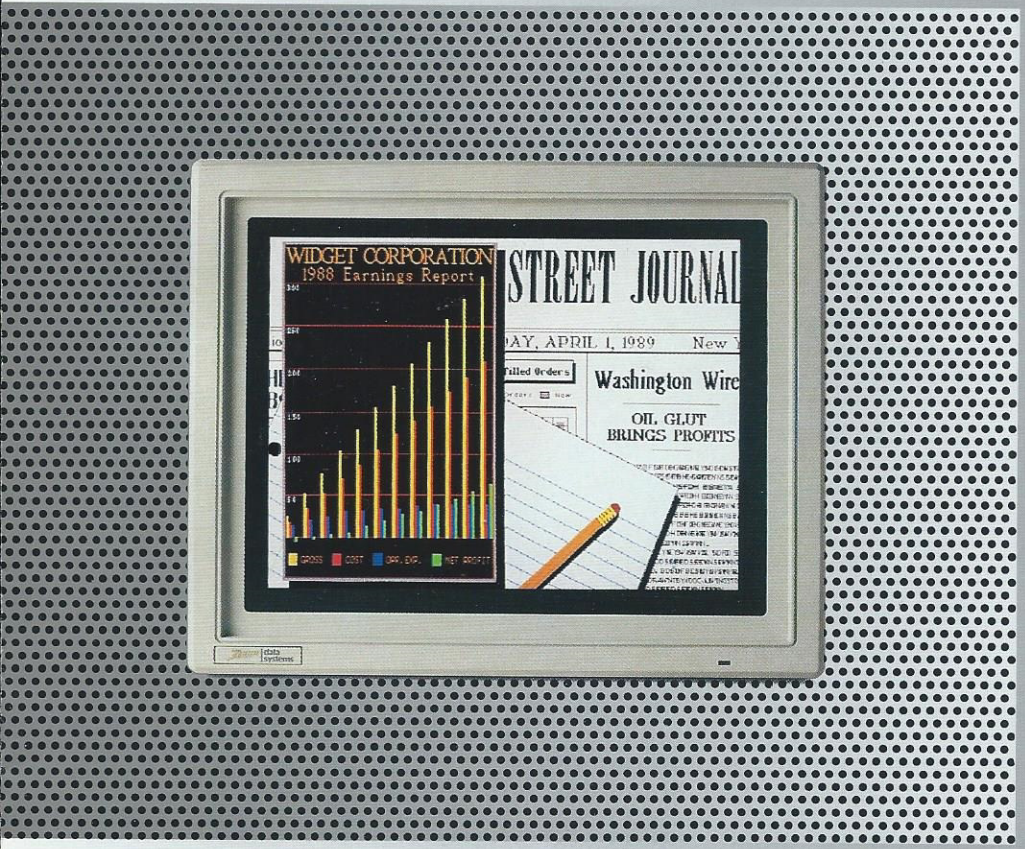
14″ Flat Technology Monitor

ZCM-1490

The display looks like a backlit slide. VGA—compatible resolution of 640 (H) x 480 (V) results in vivid, lifelike graphics.



It's the perfect monitor ...with a perfectly flat video display that virtually eliminates all glare, annoying reflections and creates color images that are nothing short of spectacular.

The ZCM-1490 color monitor represents the first leap in CRT display technology in over five decades. Zenith, renowned for being on the forefront of video technology, has developed a perfectly flat, nearly reflection-free video tube that produces a much more brilliant video image than any conventional color CRT.

The development of the "flat tension mask" is behind the breakthrough as it is capable of handling eight times more power than conventional shadow masks. Consequently, the monitor can be treated with a special contrast-enhancing coating that makes dark areas jet black, and allows highlights and soft colors to be much more pronounced.

The ZCM-1490 was a recipient of PC Magazine's 1987 Technical Excellence Award for hardware products.

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THE QUALITY GOES IN BEFORE THE NAME GOES ON®

Zenith Data Systems ZCM-1490. Dazzling graphics. Brilliant colors.

Proprietary Technology Reshapes Video Standards.
In most color CRTs, three electron beams (RGB) sweep back and forth across a dish-like metal screen called a shadow mask. The mask is perforated with thousands of tiny holes. In front of each hole is a cluster of red, green and blue phosphor dots. The mask is intended to ensure that the green electron beam strikes only green phosphors, the red electron beam strikes red phosphors, and the blue beam strikes blue phosphors.

However, as the electron beams scan across the mask, they cause it to heat up and expand. The expansion alters the location of the holes allowing the beams to hit phosphors they should not.

To prevent this, Zenith developed a perfectly flat mask that is held under high tension so that the holes in the mask do not move from their preferred locations as the mask heats up. More of the intended phosphors are hit by the beams, and the color images are brighter, bolder and more lifelike.

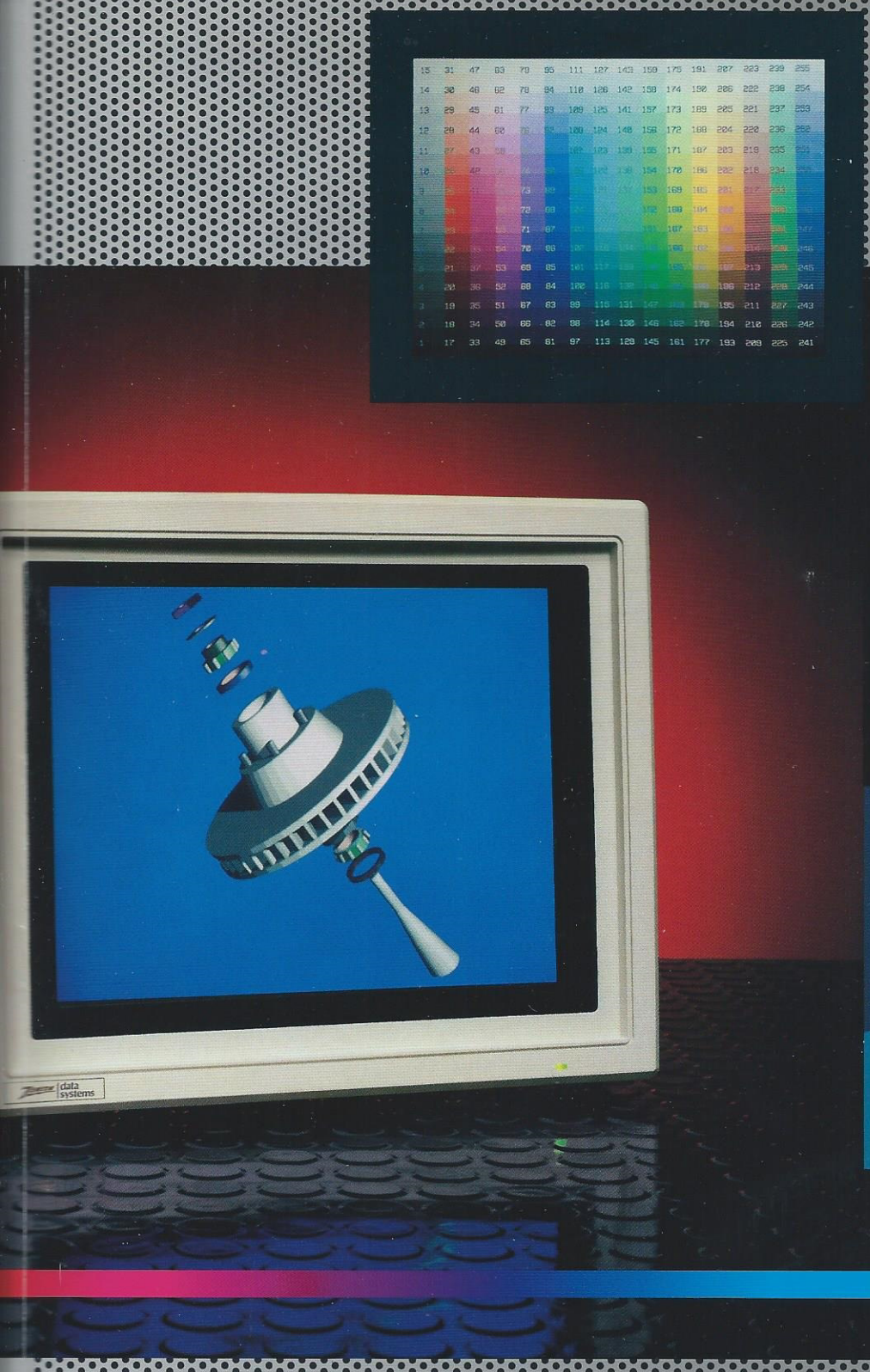
Up to 50% Brighter and 70% Greater Contrast.
The flat tension mask CRT is capable of handling eight times more power than conventional spherical-mask tubes. Translated into performance, that means Zenith's new ZCM-1490 monitor displays "truer" color at much higher intensity levels. With higher color intensity, contrast is also dramatically improved over standard color tubes. Special glare-reducing coatings have been applied to the screen, making dark areas appear darker, soft colors more pronounced, and images more realistic in general.

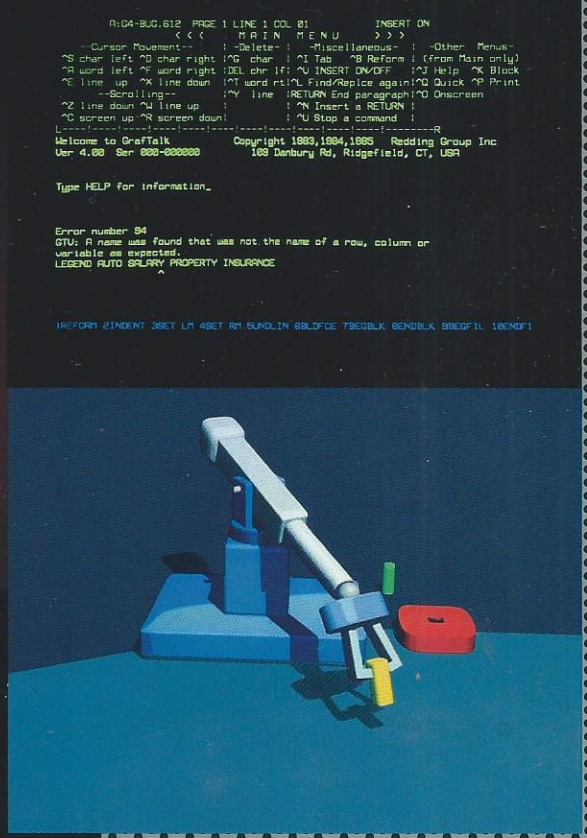
Perfectly Flat Screen Dramatically Reduces Eye-Strain.
The perfectly flat design of the tube virtually eliminates the reflective glare experienced with curved screen tubes. Less glare results in significant relief from headaches and eye strain common with prolonged work sessions in front of conventional CRTs.

Take Measurements Directly From Screen.
The ZCM-1490 monitor measures 14 inches, having 15% more viewing area than 12 inch monitors and 8% more viewing area than 13 inch monitors. Because the screen is flat, there is no distortion of images. Accurate measurements can be taken directly off the screen, and high quality photographs can be taken as well.

Supports CGA, MDA/Hercules,® EGA and VGA Modes.
The ZCM-1490 has been designed to work with the video output of IBM Personal System/2® computers and comparable video solutions such as those offered by ZDS's Z-449 video card. When used with IBM PS/2 computers or VGA-class video cards, the monitor can display software written for various popular graphics standards including: CGA, MDA/Hercules, EGA, and VGA. All modes are displayed at 31.5 KHz scan frequency on the ZCM-1490.

ZDS Quality, Warranty and Service.
Zenith Data Systems backs the ZCM-1490 monitor with full support and service, plus a limited one year warranty. Should service ever be necessary, hundreds of factory authorized service centers can provide quick assistance.





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ZCM-1490 Technical Specifications

CRT Size:	14″ measured diagonally
Active Display Area:	9.84″ horizontal (approximate) 7.09″ vertical (approximate)
Dot Pitch:	.28 mm
Type:	Zenith Electronics Proprietary Flat Tension Mask with high contrast, non-glare Optical Coating Lab, Inc. (OCLI) treatment
Phosphor:	P22
Brightness Performance:	Up to 50% greater than conventional CRTs
Contrast Performance:	Up to 70% greater than conventional CRTs
Non-glare Performance:	Up to 95% less glare than conventional CRTs
Convergence:	0.4 mm (A Zone) 0.68 mm (B Zone)
Power Source:	110V/220V AC 48-62 HZ single phase
Input Signal:	Analog, 0-.714 volts
Bandwidth:	25 Mhz (approximate)
Horizontal Scan Frequency:	31.49 kHz, constant frequency
Vertical Refresh Rate:	60-70 Hz
Resolution:	Up to 640 (H) x 480 (V) under IBM VGA Standard
Recommended # of Characters to Display:	Up to 80 characters/line x 25 lines (2000 characters)
Dimensions:	12.25(H) x 14.75″(W) x 15.50″(D)
Weight:	40 lbs.
Regulatory Approvals:	FCC Class B, CSA, VDE, UL

Interface Pin Assignments: ZCM-1490

Pin 1 = Red Video
Pin 2 = Green Video
Pin 3 = Blue Video
Pin 5 = Self Test
Pin 6 = Ground for Red
Pin 7 = Ground for Green
Pin 8 = Ground for Blue
Pin 10 = Digital Sync/Ground
Pin 11 = Digital Ground (Mode)
Pin 13 = Horizontal Sync
Pin 14 = Vertical Sync

COMPATIBILITY GUIDE

COMPUTER	COMPATIBLE	COMPUTER	COMPATIBLE
IBM PC/XT	YES*	COMPAQ DSKPRO 286	YES*
IBM PC AT	YES*	COMPAQ DSKPRO 386/16	YES*
IBM XT 286	YES*	COMPAQ DSKPRO 386/20	YES*
IBM MODEL 30	YES	ZENITH Z-159	YES*
IBM MODEL 50	YES	ZENITH Z-248	YES*
IBM MODEL 60	YES	ZENITH Z-286	YES*
IBM MODEL 80	YES	ZENITH Z-386	YES*

*Zenith Z-449 VGA-Type Video Adapter, IBM Display Adapter/2 or Compatible VGA-Class Video Card Required

Specifications subject to change.

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