



- **20" Flat Profile
High Resolution**
- **Multi-frequency
Monochrome**
- **Microprocessor
Controlled**
- **Custom ASIC
Interface**

MR2000HB-MED Medical Hi-Brite

The Richardson Electronics MR2000HB-MED Hi-Brite monitor is a 20", flat profile, high-resolution display, controlled by an embedded Microprocessor and custom ASIC. The unit is designed for use as a 1000 line display for MRI, CT and other digital based modalities at high

brightness. Multi-frequency scanning from 31 to 88 kHz horizontal provides compatibility with standard VGA to custom formats at flicker-free vertical rates of 48 to 150 Hz. A passive loop-thru feature is built-in along with an optional table mounting configuration.

User access to controls is via three push buttons to control eleven functions that appear sequentially on-screen with a digital value. The RS-232 port along with optional software will permit the unit to be set up and calibrated from a Personal Computer. The user controls, if desired, can be disabled from software to prevent unwanted manipulation. A Dispenser Cathode is standard to assure long tube life. Contrast enhancement is optimized with an anti-reflective coating, minimizing ambient glare.

Specify Richardson for superior performance, digital accuracy, and consistent quality at a competitive price.





POWER REQUIREMENTS:

<i>Input Voltage:</i>	88 - 132VAC or 180 - 264 VAC, Auto - switching
<i>Power Frequency:</i>	47 - 63Hz
<i>Power Consumption:</i>	110 Watts Max @ 88KHz
<i>Power Factor Correction:</i>	IEC 555-2

CRT SPECIFICATIONS:

<i>Size:</i>	20" Flat Profile
<i>Focusing:</i>	Electrostatic
<i>Deflection:</i>	Electromagnetic
<i>Deflection Angle:</i>	110° Diagonal
<i>Neck Angle:</i>	29mm
<i>Phosphor:</i>	AP (PC 104) Std.
<i>Std. Transmission:</i>	Approx. 34%
<i>with (AR):</i>	Approx. 30%
<i>Long-Life Cathode:</i>	Dispenser
<i>Screen Coating:</i>	OCLI ARAS

ENVIRONMENT & OPERATING CONDITION:

TEMPERATURE:	
<i>Operating:</i>	0°C to + 40° C
<i>Storage:</i>	-40°C to +65°C
HUMIDITY:	
<i>Operating:</i>	10 to 90%
	non-condensing
<i>Storage:</i>	5 to 95% non-condensing
VIBRATION:	
<i>Operating:</i>	0.25 G Peak, .8mm p-p Max
<i>Non-Operating:</i>	1.0 G Peak, 4mm p-p Max
SHOCK:	
<i>Operating:</i>	5 G's Peak
<i>Non-Operating:</i>	30 G's Peak
<i>Safety:</i>	UL, CSA, TUV, CE - LVD, DHHS
EMI:	FCC Class B, CE - EMC
<i>Environmental:</i>	MPRII, NUTEK, Energy Star available
<i>Ergonomic:</i>	ISO 9241 - 3

GENERAL PERFORMANCE:

SCANNING FREQUENCY:

Horizontal: 31 - 88kHz

Vertical: 48 - 150Hz

VIDEO AMPLIFIER:

Video Bandwidth: 250MHz Typical

DISPLAY PERFORMANCE:

DISPLAY AREA:

Width: 14.25"/362mm

Height: 10.7"/272mm

Non-Linearity: ≤10%

Raster Stability: 0.05mm Max jitter/swim

High Voltage Regulation: .5% Max size change

Nominal Brightness: 100 ft. L with AR Coating

INTERFACES:

VIDEO INPUT SIGNALS:

Analog Level: 0.7 V p-p Typical
(75 Ohm external
termination loop-thru)

ECL Video: Optional

SYNC INPUT SIGNALS:

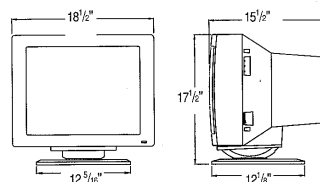
Separate: TTL Levels

Options: Full Composite/Separate
Composite

Input Connector: BNC

ON SCREEN CONTROLS:

Horizontal size & centering	Vertical size & centering
Brightness	Contrast
Pin	Bow
Trap	Skew
Rotation	Power on/off (switch)



Weight:
approx. 60 lbs.

