



VM 4438

17" high-resolution monochrome videomonitor



CRT

- 17" diagonal, deflection angle 110°, antireflective coated panel
- Phosphor P4 white, medium-short persistence
- Display area 320 mm x 240 mm (4x3)
- Resolution approx. 1500 TV-Lines at a luminance of 68,5 cd/m² in the middle of the picture
- Luminance approx. 250 cd/m² at middle brightness, approx. 500 cd/m² max. brightness

Deflection

- Video-Memory-System: Conversion of a CCIR-Signal (15,625 kHz/50Hz) to a Non-interlaced-Signal (46,875 kHz/75 Hz)
- Composite Video
- Automatic scan of pos.- neg.-Sync-signals
- VCR-Sync-switch on the frontpanel
- Geometry distortion better than 2%
- Linearity distortion better than 2% within the vertical circle and 3% outside

Video Amplifier

- Linear analogue wide-band amplifier with DC-controlled contrast adjustment
- Input-Difference-Amplifier
- Video-Memory with switchable Live- and Freeze-Frame Picture
- Video input 1 V_{ss} positiv / 0.3 V Sync
- Impedance switchable 1 k Ω / 75 Ω
- Video loop through
- Bandwith 40 MHz -3 db typ.
- Increase-/decrease-time approx. 7 ns with 30 V_{ss} at the cathode
- Back level damping on the back porch
- Contrast ratio 1:10

Video Input

- BNC-connector for video signal

Power Supply

- Mains voltage 110 V AC / 230 V AC, 50 Hz / 60 Hz rearside switchable
- Power consumption approx. 80 W
- Mains voltage connector with integrated primary fuses
- Mode control with green LED frontside

Environmental

- Working temperature: +5 ...+50°C
- Storage temp.: -40 ...+55°C
- Humidity < 80%, non condensing
- Altitude max. 3000 m operating

Security

- acc. VDE 0750 / IEC 601
- X-Radiation < 0.5 mR/h acc. RÖV 1973

High Voltage

- 17 kV regulated, independent of horizontal deflection
- Focus static and double dynamic

Protections

- Overvoltage arresters protects the electronics against high voltage flashovers.
- Spot suppression guards the CRT while switching off the monitor
- Scan-Watch traces the CRT dark if vertical deflection breaks down or picture width is too small



Options

	VM 4438-1	VM 4438-2	VM 4438-3
• Basic-Monitor as VM 4438	✓	✓	✓
• Controlled by a Microcontroller	✓		✓
• Low-Profile-Keys frontside for adjustment of: - Brightness - Contrast - Picture position - Picture size	✓		✓
• internal Pattern-Generator for the Monitor Test		✓	✓
• frontside switchable		✓	
• frontside switchable			✓

