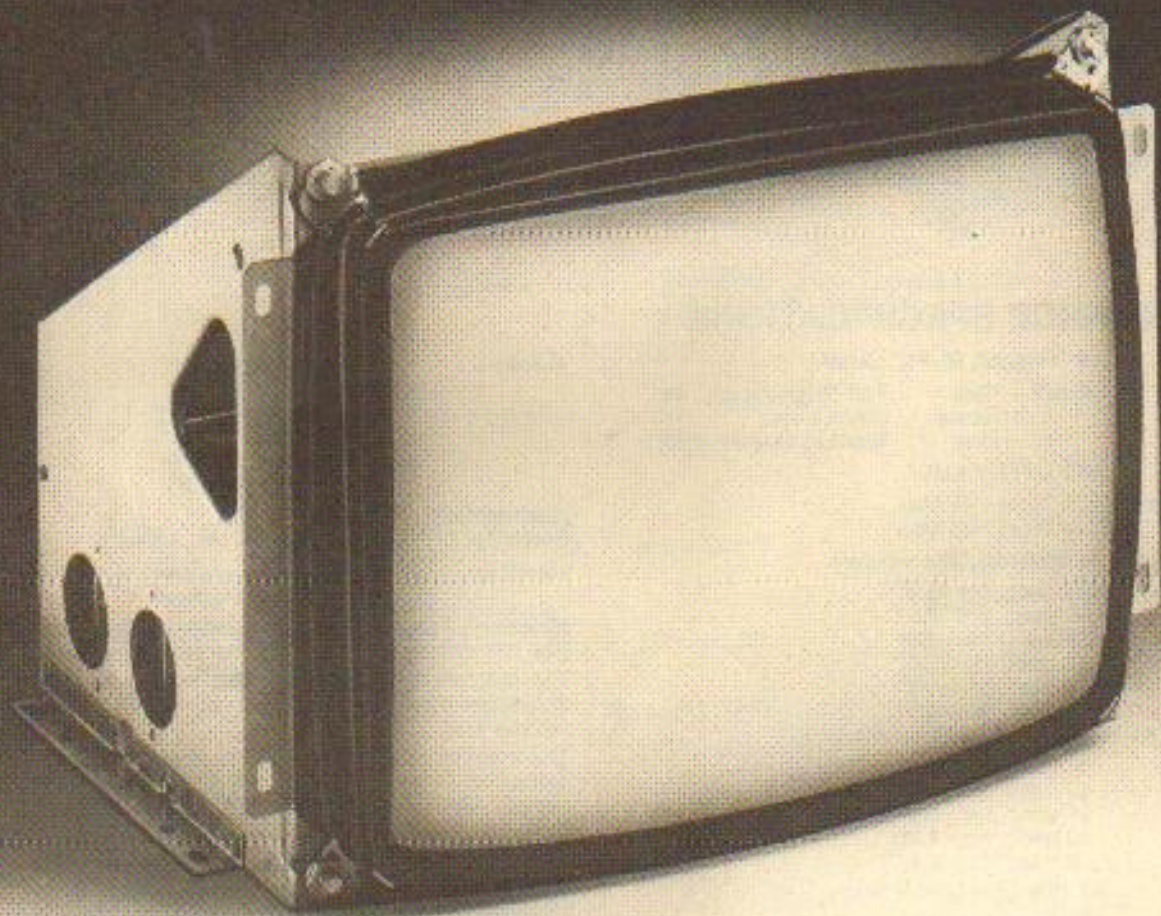


ELECTROHOME G17 COLOR X-Y MONITOR



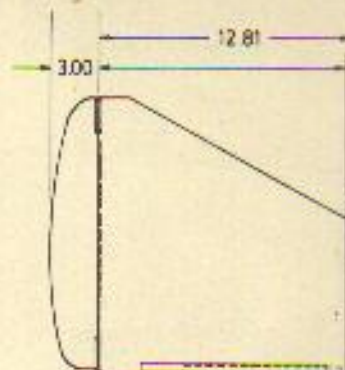
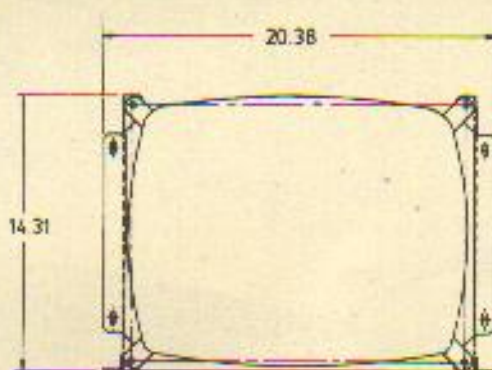
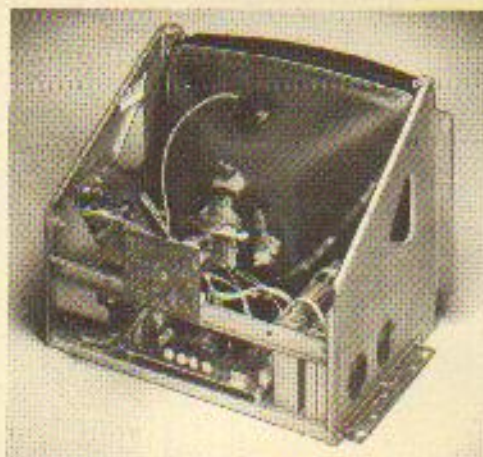
The new G17 Medium Speed color X-Y Monitor has been designed to meet the high reliability and performance standards demanded in the games industry.

ELECTROHOME
ELECTRONICS

809 Wellington St. N., Kitchener, Ontario Canada N2G 4J6 Telephone (519) 744-7111 Telex 089-56449

ELECTROHOME

G17 Medium Speed Color X-Y Video Monitor



PERFORMANCE SPECIFICATIONS

CRT: 19" (Visual) 90 PIL Color
Video: Inputs - Red Full Brightness 4V
- Green Black Level 1V
- Blue Blanking Level 0.5V

Resolution: 370 x 277 Pixels

X-Y Amplifiers: X — input +4V Max.
Y — input +3V Max.

Writing Speed: At Nominal Line Voltage

X-Axis
100 usec. for 14.5"
55 usec. for 8.0"
26 usec. for 4.0"
17 usec. for 2.0"
9 usec. for 1.0"
6 usec. for 0.5"

Y-Axis
108 usec. for 10.5"
84 usec. for 8.0"
42 usec. for 4.0"
21 usec. for 2.0"
10 usec. for 1.0"
6 usec. for 0.5"

At 15% Low Line Voltage

X-Axis
115 usec. for 14.5"
63 usec. for 8.0"
35 usec. for 4.0"
20 usec. for 2.0"
11 usec. for 1.0"
7 usec. for 0.5"

Y-Axis
135 usec. for 10.5"
105 usec. for 8.0"
52 usec. for 4.0"
26 usec. for 2.0"
13 usec. for 1.0"
7 usec. for 0.5"

Geometric Distortion: Less than 1% NS, 3.5% EW

Linearity: 10% distortion overall worst case (crosshatch method)

Maximum Power Output Capability of the X-Y Amplifiers: (for X-Y supply at 10% high line voltage)

The maximum duty cycle of the beam held at 60% deflection in any one direction off center is 10% of the refresh rate.

The maximum duty cycle of the beam held at 100% deflection in any one direction off center is 60% of the refresh rate.

Exceeding these specs will activate the protection circuits which will bring the beam back to the center of the screen.

Power

Requirements: 91 VAC (with center tap) 50/60 Hz
Max 250W
6.3 VAC Filament Voltage + 10% 5W max.

Safety: UL and CSA approved as a component

NOTE: Above specifications may be altered to meet customer needs on an individual basis. Please contact Electrohome for details.

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VIDEO DISPLAY MARKETING

Due to constant research, specifications are subject to change without notice.

Electrohome Limited
809 Wellington St. N., Kitchener, Ontario Canada N2G 4J6
Telephone (519) 744-7111 Telex 089-55449

ELECTROHOME Limited — ENGINEERING SPECIFICATION

SPEC. NO.

DIVISION	SHEET	SPEC. NO.
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SPECIFICATION	MIN PERFORMANCE SPECIFICATIONS G17-101	

1. Input Power Requirements

Voltage: 91 VAC CT. nominal (adjust to comply with the X-Y supply requirements as shown in item 2) Max. 250 W.
6.3 VAC FILAMENT VOLTAGE $\pm 10\%$ 5W

2. POWER SUPPLY

X-Y Power Amp. Supply

- nominal + 63.5 VDC
- 63.5 VDC

- Absolute max (under any condition)
+ 70 VDC
- 70 VDC

- Absolute min. (under any condition)
+ 52 VDC
- 52 VDC

Video amplifier supply

+ 70 VDC $\pm 10\%$

EHT Supply

45 V nominal

EHT Voltage

21.0 KV $\pm 3\%$

EHT Voltage regulation

1.5% change from 0 to 300 μ A beam current

3. Geometric Distortion

N-S pincushion/Trapezoid (each top & bottom) 1% max.
E-W pincushion/Trapezoid (each side) 3.5% max.

OCT 08 1982

Iss.	Date	REVISIONS	Sig.	Iss.	Date	REVISIONS	Sig.
2	Oct. 8, 82	ITEM 2 91VAC C.T. 2. D.					
1	8-10-82	ORIGINAL					
PREPARED BY		DATE	MECHANICAL APPR.		DATE	ELECTRICAL APPR.	
J. D. [Signature]		April 9/82				[Signature]	



ELECTROHOME Limited — ENGINEERING SPECIFICATION

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SPEC. NO.

4. Linearity Distortion

Vertical 10% max.

Horizontal 10% max.

5. Hysterisis and Closure

Any vector or number of vectors drawn from any direction or sequence and drawn to the same end point shall terminate within $\pm 0.2\%$ of the horizontal width of the actual end point.

6. Writing Speed

At Nominal Line Voltage

X-axis 100 μ sec. for 14.5"55 μ sec. for 8.0"26 μ sec. for 4.0"17 μ sec. for 2.0"9 μ sec. for 1.0"6 μ sec. for .5"Y-axis 108 μ sec. for 10.5"84 μ sec. for 8.0"42 μ sec. for 4.0"21 μ sec. for 2.0"10 μ sec. for 1.0"6 μ sec. for .5"

Iss.	Date	REVISIONS	Sig.	Iss.	Date	REVISIONS	Sig.
2	Dec 2, 72	ITEM 1	J.D.				
1	8-10-82	ORIGINAL					
PREPARED BY		DATE	MECHANICAL APPR.	DATE	ELECTRICAL APPR.	DATE	
Z. Dizgardoni		Apr 3/82			H. Muna	Apr 8/82	

E ELECTROHOME Limited — ENGINEERING SPECIFICATION

SPEC. NO.	DIVISION	SHEET	SPEC. NO.
	ELECTRONICS	3 of 5	00-15100-01
SPECIFICATION			
MIN PERFORMANCE SPECIFICATIONS G17-101			

6. Writing Speed

At 15% Low Line Voltage

X-axis	115 μ sec. for 14.5"
	63 μ sec. for 8.0"
	35 μ sec. for 4.0"
	20 μ sec. for 2.0"
	11 μ sec. for 1.0"
	7 μ sec. for .5"
Y-axis	135 μ sec. for 10.5"
	105 μ sec. for 8.0"
	52 μ sec. for 4.0"
	26 μ sec. for 2.0"
	13 μ sec. for 1.0"
	7 μ sec. for .5"

7. Max. Power Output Capability of the X-Y Amplifiers

(for X-Y supply voltage of ± 70 VDC)

- 100% (a) The max. duty cycle of the beam held at 60% deflection in any one direction off centre is 100% of the refresh rate.
- (b) The max. duty cycle of the beam held at 100% deflection in any one direction off centre is 60% of the refresh rate.

100% Exceeding these specs. will activate the protection circuits which will bring the beam back to the center of the screen.

2	OCT. 9, 82	ITEM 1	2.0				
1	8-16-82	ORIGINAL					
Iss.	Date	REVISIONS	Sig.	Iss.	Date	REVISIONS	Sig.
PREPARED BY		DATE	MECHANICAL APPR.	DATE	ELECTRICAL APPR.	DATE	
J. D. Gardner		April 8/82			J. D. Gardner	Apr. 8/82	

E ELECTROHOME Limited — ENGINEERING SPECIFICATION

SPEC. NO.:

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ELECTRONICS	00-15100-01
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MIN PERFORMANCE SPECIFICATIONS G17-101	

8. Beam Modulation: for each Z-input (red, green, blue)

Blanking level 0.5V or less
 Beam cut-off (black level) 1.0V
 Beam full on 4.0V
 Video amp. Freq. response 6 meg Hz -3 dB

9. X-Y Deflection Delay with respect to Z

2 μ s max.

10. Input Signal

X-axis +4V
 Y-axis +3V

11. Centering

Within 0.187" radius of geometric centre of CRT.

12. Power Up X-Y Signal Detection Threshold

A negative pulse of $\frac{1}{2}$ -full screen level deflection on either the X or Y channel will maintain the EHT supply operative for a duration of 25 mS min.
 50 mS max.

13. Convergence

1.5 mm worst case in corners
 See YOKE PRINT 21-145-01

14. Product Quality

AQL (a) major defects 1.5% max.
 (b) minor defects 4% max.

15. Reliability MTBF

Target 20,000 hours.

Iss.	Date	REVISIONS	Sig.	Iss.	Date	REVISIONS	Sig.
2	OCT 8, 82	ITEM 1	Z.D				
1	8-10-82	ORIGINAL					
PREPARED BY	DATE	MECHANICAL APPR.	DATE	ELECTRICAL APPR.	DATE		
JCH & HEIDE	9-8-82			Z. D. ...	August 9/82		

ELECTROHOME Limited — ENGINEERING SPECIFICATION

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SPECIFICATION MIN PERFORMANCE SPECIFICATIONS G17-101		

16. Environmental

Operating Temperature range 0 to +55 C
 Storage Temperature range -40 to +65 C
 Operating Humidity to 90% (non condensing)
 Storage Humidity to 80% (non condensing)

Vibration: The monitor shall withstand a vibrational input of 0.5 g with a logarithmic sweep rate of 1 octave per minute for 30 minutes between 10 Hz and 100 Hz and a vibrational input of 0.5 g at 28 Hz for 30 minutes.

17. Safety:

(a) CSA & UL approved as a component.

(b) X-ray Radiation:

For a worst case chassis under worst single fault condition 0.5 mr/hr max.

2	0.6.8.82	ITEM 1	J.D.				
1	8-10-82	ORIGINAL					
Iss.	Date	REVISIONS	Sig.	Iss.	Date	REVISIONS	Sig.
PREPARED BY	DATE	MECHANICAL APPR.	DATE	ELECTRICAL APPR.	DATE		
JOHN HEIDE	9-8-82			J. Deyouville			