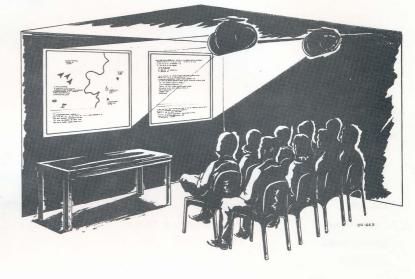
# MONITOR DISPLAYS





Data Sheet 8060



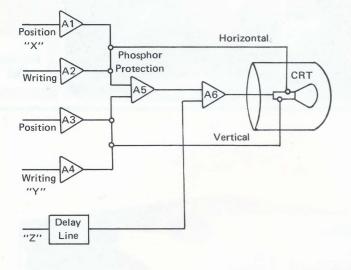
### MODEL 8060 PROJECTION DISPLAY FOR COMPUTER GRAPHIC TERMINALS SYSTEMS

The MONITOR Model 8060 Projection Display is a direct-writing, alphanumeric/graphic computer output display. Characters, dots, vectors, or conics may be displayed. Gamma correction and delay time cancellation are provided so that special circuits are not required in the appropriate generators. The tube is protected from phosphor burns as a result of failure in the deflection circuitry or absence of input signal. Up to 1000 characters may be displayed at a refresh rate of 60 Hz; the writing rate for vectors and graphics is 1,000,000 inches/second. A complete line of character, vector, circle, and arc generators is available from MONITOR to work with this unit. Projection is accomplished thru a Schmidt optical system. The projection head is separate from the display electronics thus allowing optimum positioning of the projection head.

#### **DESIGN FEATURES**

- Single Magnetic Coil Deflection
- All Silicon Solid State Circuitry
- Large Display Area (48" x 48")
- Zero differential delay interface for faithful reproduction of characters, vectors, and conics.
- Gamma Correction
- Phosphor Protection
- Low Power Consumption
- Separate Projection Head





14" Schmidt Optics

A1 through A4 are wideband amplifiers used for positioning and writing. All amplifiers are DC coupled and have 75-ohm inputs. Self-contained adjustments are available to set up each channel. A5 is the phosphor protection amplifier whose output inhibits the z-axis amplifier, A6, should there be no deflection signal at the outputs of A1-A4. A6 is the z-axis amplifier with gamma correction which is DC coupled and accepts an analog signal. A delay line is added in series with the input to match the delay of the x and y amplifiers.

1 MHz @ 3db

#### SPECIFICATIONS

**Projection Head** Size and type **Throw Distance Display Area** Linearity **Light Output** Writing Speed Line Width

**Z-Axis** 

**Input Sensitivity** Input Impedance **Rise Time Gamma Correction** 

**Delay Time** 

#### **Major Deflection**

**Input Sensitivity** Input Impedance Large Signal Response **Small Signal Response** X-Y Phase Shift Settling Time

**Minor Deflection Input Sensitivity** Input Impedance

8060 4-70 10M

i i boinnat option		
13' – 18'	X-Y Differential Phase Shift	Less than 1 line separation @ 1 MHz
48'' X 48''	Phase Shift	
±1%	Inputs (BNC Connectors, rear)	
5 foot-lamberts at 13 feet	1, X-Input Major Deflection	
1,000,000 inches/second	2. X-Input Minor Deflection 3. Y-Input Major Deflection	
	4. Y-Input Minor Deflection	
0.100"	5. Z-Input	
+3v for full intensity	Operator Controls	
75-ohm termination is standard.	On/Off Focus	
50 nsec.	Focus Intensity	
	Intensity	
Light output is linear with respect to input voltage.	Service Adjustments: (Rear) X-Input deflection sensitivity	
Zero differential delay of the z-axis with respect to the X and Y signals.	X-Input D.C. level	
	Y-Input deflection sensitivity	
	Y-Input D.C. level	
5 vpp for 48" deflection	Z-Input D,C, level	and a function of the second second second
	Power Requirements	115V $\pm$ 10% 60 Hz, 300 watts
75-ohm termination is standard	Environment	50 <sup>0</sup> F to 100 <sup>0</sup> F
20 KHz	Size	Electronics Unit 9"H x 14%"W x 28½"D
500 KHz @ -3db		Projection Head 20"H x 16"W x 30"D
Less than 1 line separation at 15 KHz	Weight	Electronics Unit – 75 pounds
25 microseconds for full screen deflection to settle to within 0.25%. 3 microseconds		Projection Head – 35 pounds

**Other Options** 

**Frequency Response** 

Higher performance

- Custom configuration
- Daisy chain operation
- **Ruggedized units**
- **MIL or NASA Specifications**

Monitor Displays reserves the right to change specifications without notice.

## ADNITOR DISPLAYS

for 1.0 inch to settle to within 0.25%.

5vpp for 2 inch deflection

75 ohm (termination)

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