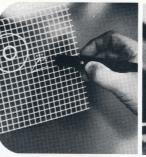
MONITOR DISPLAYS

an AYDIN company





Data Sheet 8011

MODEL 8011 CRT GRAPHICS MONITOR for COMPUTER GRAPHIC TERMINALS

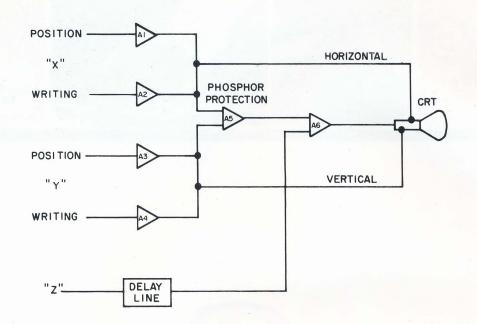


The MONITOR Model 8011 CRT GRAPHICS MONITOR is a direct-writing, alphanumeric/graphic computer output display. Characters, dots, vectors or conics may be displayed. Gamma correction and delay time cancellation are provided so that special circuits are not required in the appropriate generators. The tube 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 500,000 inches/second. A complete line of character, vector, circle, ellipse and arc generators is available from MONITOR to work with this unit.

DESIGN FEATURES

- SINGLE MAGNETIC COIL DEFLECTION
- ALL SILICON SOLID STATE CIRCUITRY
- LARGE DISPLAY AREA (12" x 12")
- ZERO DIFFERENTIAL DELAY INTERFACE FOR FAITHFUL REPRODUCTION OF CHARACTERS, VECTORS, AND CONICS.
- BONDED FACEPLATE
- GAMMA CORRECTION
- PHOSPHOR PROTECTION
- PINCUSHION CORRECTION
- LOW POWER CONSUMPTION



A1 through A4 are wideband amplifiers used for positioning and writing. All amplifiers are dc coupled and have 75-of inputs. Self-contained adjusments are available to set up each channel. A5 is the phosphorprotectionamplifierwhose 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.

SPECIFICATIONS

SIZE AND TYPE 21" with P31 phosphor

and bonded faceplate.

DISPLAY AREA 12" x 12"

LINEARITY..... ±1%
PINCUSHIONING.....±2%

LIGHT OUTPUT50 foot-lamberts

WRITING SPEED500,000 inches/second

SPOT SIZE0.020"

Z-AXIS

INPUT SENSITIVITY +3 v for full intensity

INPUT IMPEDANCE75-ohm termination is

standard.

RISE TIME 50 nsec

GAMMA CORRECTION Light output is linear with

respect to input voltage DELAY TIME Zero differential delay

of the z-axis with respect

to the X and Y signals.

MAJOR DEFLECTION

INPUT SENSITIVITY5 v p-p for 12" deflection.

INPUT IMPEDANCE75-ohm termination is standard.

LARGE SIGNAL RESPONSE... 20 kHz.

SMALL SIGNAL RESPONSE... 500 kHz @ -3db.

X-Y PHASE SHIFT Less than 1 line separation

@ 15 kHz.

SETTLING TIME......14 microseconds for full deflec-

tion within 12" x 12" viewing area to settle within 0.25%

3 microseconds for 0.5" deflec-

tion to settle within 0.25%

MINOR DEFLECTION

FREQUENCY RESPONSE 1 MHz @ -3db.

X-Y DIFFERENTIAL PHASE

SHIFT..... Less than 1 line separation

@ 1 MHz.

INPUTS: (BNC Connectors, rear)

- 1. X-input Major Deflection
- 2. X-input Minor Deflection
- 3. Y-input Major Deflection
- 4. Y-input Minor Deflection
- 5. Z-input

OPERATOR CONTROLS: (Front)

On/off

Focus

Intensity

SERVICE ADJUSTMENTS: (Rear).

X-input deflection sensitivity

X-input D.C. level

Y-input deflection sensitivity

Y-input D.C. level

Z-axis D.C. level

POWER REQUIREMENTS..... 115 v ± 10%, 60 Hz, 300 watts

ENVIRONMENT50° F to 100° F.

SIZE 24½" H x 19" W x 27½" D.

OPTIONS:

RACK MOUNTABLE Includes Parts for mounting

in 19" relay rack.

COVER HOOD 20%" H x 24" W x 33" D.

CRT Horizontal.

OTHER OPTIONS Higher performance

- Custom configurations
- Daisy chain operation.
- Ruggedized units.
- MIL or NASA Specifications



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