



Product Description

The simulated F/A-18C/D DDI is a high-performance 5-inch x 5-inch color, raster Data Display Indicator for avionics simulation applications. RS170-type video interface can be sync-on-green or separate/composite video sync. This display features:

- § Complete remote adjustment, calibration and diagnostics using a standard PC.
- § High-brightness, fine dot pitch color CRT. Available with NVIS compatibility.
- § Precision scan electronics and wide bandwidth video.
- § Same functional controls and form-factor as the flight display, plus contrast enhancement filter for improved readability.
- § Built for durability and low life-span cost in simulator applications only, including full motion platforms. Cannot be used in aircraft.

Simulated F/A-18C/D DDI Data Display Indicator



F-18 Cockpit



DDI Rear View

Simulated F/A-18C/D DDI Data Display Indicator

Performance Specifications

Resolution: 640 x 480 to 1280 x 1024 multi-sync
 Vertical Frequency: 30-80Hz
 Horizontal Frequency: 30-76kHz
 Video Bandwidth: 100MHz, -3db
 Input Impedance: 75 Ohms
 Connectors: 30 Pin Bayonet Connector
 Synchronization: Composite Video (R, G, B) with sync on G or separate composite sync (Optional Horizontal/Vertical sync)
 Frequency Detect: Automatic upon change of Video input
 Brightness: 150ft-L screen center, without filter
 Video Signal Sensitivity: 0.7 volts peak-peak (1.0 volts peak-peak including composite sync). Input circuits are designed to withstand up to 5 volts peak-peak without damage
 Horizontal Linearity: 2% of picture width, (Ball chart method)
 Vertical Linearity: 2% of picture height, (Ball chart method)
 Geometric Distortion: 2% vertical, 3% horizontal.
 Size Changes: 2% maximum
 Position Changes: 2% maximum
 Display Jitter: 0.005 inch peak-peak
 Phosphor Protect: Automatically blanks screen if missing sweep
 Overscan: Horizontal overscan is standard allowing 1:1 display of 4:3 video.
 Degaussing: Automatic upon power-up

Operating Specifications

Power Requirement: 90/264 V AC, 47-400 Hz; 110 watts maximum consumption, 70 watts nominal
 Temperature: 0 to 40 C operating, -20 to 70 C non-operating
 Altitude: 0 to 10,000 ft operating, 0 to 40,000 ft non-operating
 Relative Humidity: Up to 90% (non-condensing) operating, up to 95% (non-

Warranty

These units are offered with the standard Precision Display Technologies (PDT) warranty of one (1) year on parts and labor for design and/or manufacturing defects in PDT supplied components only (original manufacturers warranty applies to all HUD optics, and CRTs), and specifically does not include customer-induced failures or damage caused by shippers.

Mechanical Specifications

Enclosure Height: 7.20" exclusive of mounting foot; 7.0" high behind mounting foot
 Enclosure Width: 6.75"
 Enclosure Depth: 16" (from front flat surface of bezel)
 Enclosure Material: Aluminum
 Cooling: Forced air, rear intake fan
 I/O: Video - R, G, B (75 Ohm BNC)
 Horizontal/Vertical Sync - (75 Ohm BNC). 110/220 V AC power - 3-prong IEC power cord
 Monitor Control I/O: 30 pin Round Connector
 Bezel Control I/O: RS232 in Round Connector

CRT Specifications

CRT Type: Precision in-line gun avionics type
 Screen Type: High contrast, black matrix
 Deflection Method: Magnetic
 Convergence Method: Magnetic: mechanical, static, or dynamic
 Focusing Method: Electrostatic
 Phosphor Dot Pitch: 0.31 mm
 Useable Display Area: 4.93" x 4.97"
 Phosphor Type: P22 (medium short persistence)
 Light Transmittance: 30% (filter)
 Linearity: +/- 2% of picture height over full screen
 Line Width: @150 microAmp, 0.020" center, 0.024" corner
 Luminance: @150 microAmp, White 150 ft-L without filter
 Convergence: Within 0.2 mm center, 0.3 mm corner

Remote Adjustments

- RGB gain and cutoff
- Contrast
- Brightness
- Horizontal size and center
- Vertical size and center
- Horizontal linearity
- E-W pincushion
- Horizontal bow
- Horizontal trapezoidal
- Horizontal parallelogram
- Horizontal s-correction
- HVPS
- Focus
- Convergence
- User brightness-contrast
- High/Low limits both day and night mode