

AX family

Compact mission displays



Photo US Navy - Joshua J. Wahl





Compact mission displays for demanding airborne environments

Barco's line of AX displays has been specifically designed to deliver sunlight-readable images in demanding airborne environments. The AX display family combines a compact footprint with an excellent power/performance ratio, which makes them a perfect fit for FLIR, long range daylight video cameras, moving maps, computer and radar applications.

Features & benefits

- Available in 15-inch, 15-inch wide-screen and 17-inch format
- RTCA/DO-160F qualified for harsh airborne environments
- Minimum depth
- Full option display, including high brightness, NVIS and low-reflection touch screen
- Innovative thermal management system
- Fully sealed, fan-less design
- Minimum power consumption
- Quick start-up in cold conditions



AX-243 (17 inch)

AX-138 (15 inch)

AX-338 (15 inch)



Photo Wim Houquet

Full-option mission displays

Barco's AX displays feature a high-bright LCD panel, NVIS compatibility, low-reflection touch screen technology and low power consumption. That is why the AX line is the most versatile and trusted companion for mission-critical decision-making aboard aircraft and helicopters available today.

Various sizes to fit your needs

The AX family comprises a 15-inch, 15-inch wide screen and 17-inch model, which are all fully RTCA/DO-160F qualified for airborne use. Thanks to their low depth, compact form factor and limited weight, the AX display family will fit in virtually every aircraft cabin.

Optimum image performance

Innovative LED backlighting technology delivers exceptional image performance in high ambient light conditions (>100,000 Lux) and allows for low dimming in night conditions. Moreover, these LED backlights ensure a longer lifetime and reduced power consumption.

Touch screen interface

The AX display family is fitted with low-reflective analog resistive touch screen technology, which has high touch accuracy and is very resistant to dust and water. The AX display's touch screen technology allows interaction with finger tips, gloves or stylus.

Night vision

Barco's AX display series offers 10-bit video processing and advanced dithering technology, which makes it ideally suited for FLIR applications. The displays have been designed in accordance with the MIL-STD-3009 standard.

Thermal management system

The AX display is equipped with a unique thermal management system which significantly improves the LCD performance. In order to keep the AX operating over the full temperature range from -40°C up to 70°C, the AX displays have a thermal insulation system that isolates all internal heat sources from the liquid crystal display. Combined with an excellent light output/power ratio, the AX series makes a unique display that is truly fit for any mission aircraft, anywhere on the planet.

Technical specifications

	AX-138	AX-338	AX-243
Panel size	15 inch diagonal	15 inch diagonal, wide screen	17 inch diagonal
Resolution	1024 x 768 (XGA)	1920 x 1200 (WUXGA)	1280 x 1024 (SXGA)
ELECTRO-OPTICAL			
Panel specifications	16.7M colors, 256 greyscales		
Brightness	Max: >680 cd/m ² (200 fL) typical - Min: <0.343 cd/m ²		
Contrast ratio	700:1 @ dark environment		
Dimming ratio	>2000:1 (Typ.)		
Viewing angle	Horizontal @ CR = 10: ± 70° Vertical @ CR = 10: + 40° / - 70°		
INPUTS			
Standard	DVI, USB, RS232/422 (selectable), RGB, video		
Connectors	MIL-D-38999/3		
POWER			
Power supply	28 VDC		
Max. power consumption	50W @ 200 fL, 150W with heating active (for AX-338)		
ENVIRONMENTAL			
Environmental compliance	RTCA/DO-160F		
Low temperature	-40°C / -40°F (operational)		
High temperature	+55°C / +131°F (operational) +70°C / +160°F (30 min.)		
Low storage temperature	-46°C / -51°F		
High storage temperature	+75°C / +167°F		
Humidity	Up to 95% RH (40°C)		
Vibration	DO-160F Ch 8, cat R, curves B,B1 & U2 curves F, F1		
Shock	20 G		
EMI/EMC	DO-160F		
Ingress protection	IP65		
Altitude	Up to 40,000 ft (operational)		
Dust, salt fog	DO-160F		
MTBF	> 28,000 H (AIC 35°C)		
CONTROLS & INDICATORS			
Bezel controls	Up to 16 programmable function keys, dimmable backlight and key status indicators		
Touch Screen	Low reflection AR touch screen, USB/serial Control		



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 Technical specifications are subject to change without prior notice