Barco LCD displays for air traffic control

The comfort of professional visualization

BARCO

Visibly yours

The comfort of professional visualization

Barco has been designing, manufacturing and servicing high-resolution displays for safety-critical visualization for many years. Barco's displays are designed for the ultimate user comfort and even exceed the specifications imposed by the ATC community. They offer breakthrough LCD technology at the lowest life cycle cost and offer the best optical performance (brightness, contrast and color behavior) for multi-display applications.

"The high-bright ISIS screens help us to provide qualitative air traffic services on a 24/7 basis."

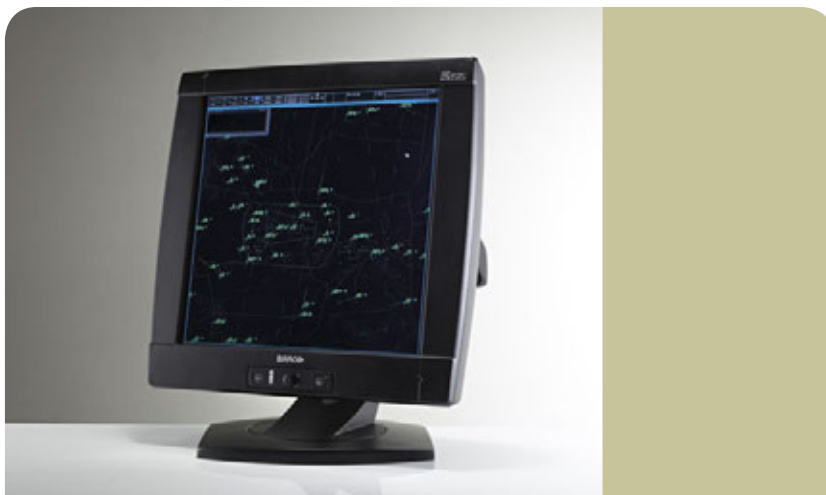Radek Prochazka, Radar system administrator, IATCC, Czech Republic

MAIN DISPLAYS

ISIS
2Kx2K LED backlit main display

ISIS is Barco's 2Kx2K LCD main display for ATC controller working positions. Since its introduction in 2000, ISIS has become the world's leading ATC display both in new installations and as a direct replacement for the Sony DDM CRT display.

The 4 MegaPixel LCD uses LED backlights, boasting, low life cycle cost, high performance and low power consumption. ISIS always features the latest LCD panel technologies and has real-time controlled brightness, which results in more detail, enhanced user comfort and less eye fatigue.

| 4 MP | 28" SCREEN | 1:1 RATIO | WIDE VIEW | OSD | BLOS | 5Y WARRANTY |

Key characteristics

> Low power consumption

> Outstanding visual performance

> Flexible implementation

> Extensive manufacturing capabilities

> Long-term support

> Worldwide acceptance

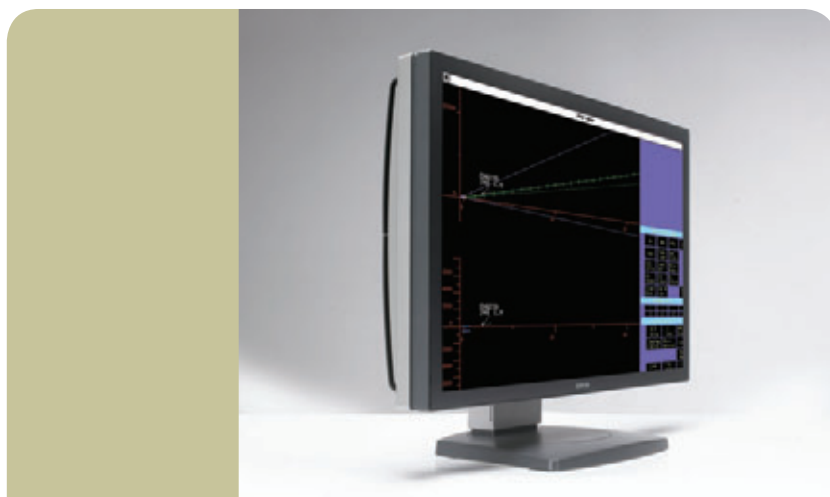### Ideal for:
• detailed high-tech monitoring
• light-weight and ergonomic installations
• replacement for Sony

Resolution	2,048x2,048
Display size	28 inch
Pixel pitch	0.246 x 0.246 mm
Brightness	> 300 cd/m^2
Contrast ratio	1000:1
Viewing angle	170°
Dimensions	Various models refer to technical specification

MDPW-476
30" main supervisor display

The MDPW-476 is a wide-screen 30-inch Main Display specifically designed for Air Traffic Control applications. Equipped with the latest LCD technology, the display provides excellent sharpness and brightness, along with a very wide viewing angle. Integrated backlight output stabilization technology (BLOS) ensures that the light output remains stable at all times.

| 4 MP | 30" SCREEN | 16:10 RATIO | WIDE VIEW | OSD | BLOS |

Key characteristics

> Excellent visual performance

> Backlight output stabilization technology

> Flexible implementation

> Extensive manufacturing capabilities

> Long-term support

> Worldwide acceptance

Resolution	2,560x1,600
Display size	30 inch
Pixel pitch	0.250 x 0.250 mm
Brightness	>300 cd/m^2
Contrast ratio	1000:1
Viewing angle	178°
Dimensions	696x455x104 mm (27.4 x 17.9 x 5.91")

Ideal for:
- high-demanding monitoring performance
- BLOS required environments
- Ambient Light Compensation requirements
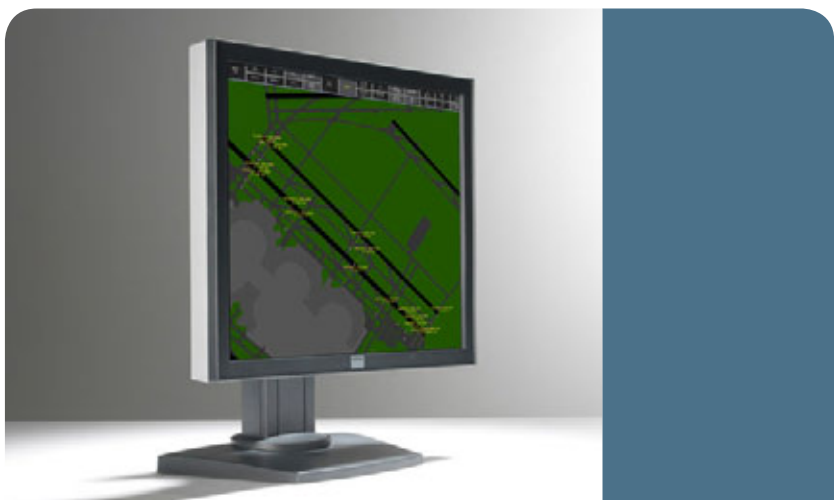
AUXILIARY DISPLAYS

The growing reliance on advanced software tools in today's ATC and ATM environments creates a need for more diverse HMI display surfaces. That is why Barco's series of auxiliary displays offer extra visualization capabilities with respect to display size and resolution.

MDRC-1119 ATM
19" 1MP auxiliary display

Key characteristics

> 1,280x1024 resolution

> 5:4 aspect ratio

> Backlight output stabilization technology

> Allows for easy integration into consoles

> Optional protective front cover

> Optional touch screen (MDRC-1119 ATM/TS)

| 1 MP | 19" SCREEN | 5:4 RATIO | WIDE VIEW | OSD | TOUCH | PIVOT |

MDRC-2120 ATM

20" 2MP auxiliary display
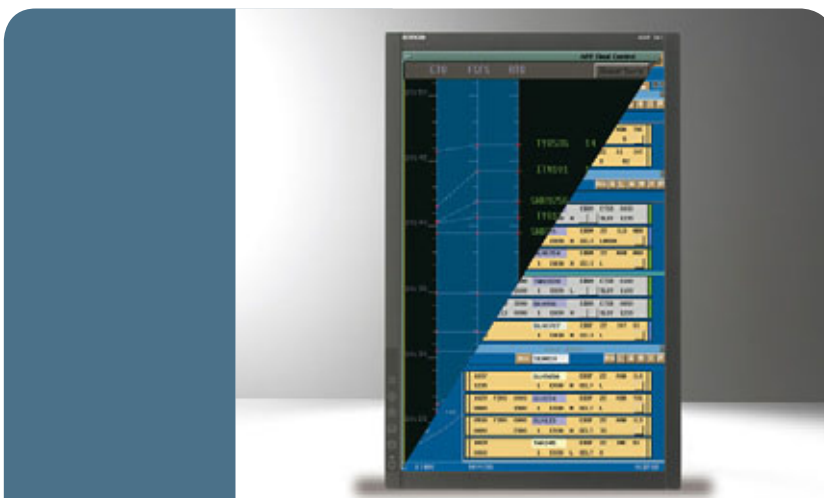

Key characteristics

> 1,600x1,200 resolution

> 4:3 aspect ratio

> Backlight output stabilization technology

> Allows for easy integration into consoles

> Optional protective front cover

> Worldwide acceptance

2 MP	**20"** SCREEN	**4:3** RATIO	WIDE VIEW	OSD	PIVOT

ADP-361

24" auxiliary display

Key characteristics

> 1,200x1,920 resolution

> 16:10 aspect ratio

> In portrait mode extends display surface of most of today's 2Kx2K main displays

> Backlight output stabilization technology

> High dimming

> Ambient light compensation technology

> Allows for easy integration into consoles

> Hardware-based display rotator

3 MP	**24"** SCREEN	**16:10** RATIO	WIDE VIEW	OSD	BLOS	ALC	PIVOT

TOWER DISPLAYS

Barco's Tower Control Displays present the most detailed information with superior image quality at all times and hereby significantly reduce eye fatigue. Offering high brightness during daytime, as well as low dimming in darker conditions, Barco's tower display series deliver a stunning performance.

MDCC-2121 ATM
21" 2MP high brightness display

Key characteristics

> 1,600x1,200 resolution

> 4:3 aspect ratio

> Backlight output stabilization technology

> High brightness

> Ambient light compensation technology

> Allows for easy integration into consoles

> Hardware-based display rotator

> Optional touch screen

| 2 MP | 21" SCREEN | 4:3 RATIO | OSD | ALC | ULT | I-GUARD | 10 BIT | PIVOT | 5Y WARRANTY |

TCD-361
24" high brightness display

| 3 MP | 24" SCREEN | 16:10 RATIO | OSD | BLOS | ALC | TOUCH | PIVOT |

Key characteristics

> 1,920x1,200 resolution

> 16:10 aspect ratio

> Backlight output stabilization technology

> High brightness

> High dimming

> Ambient light compensation technology

> Allows for easy integration into consoles

> Hardware-based display rotator

> Optional touch screen

Icons explained

Icon	Description
1:1 RATIO	Screen aspect ratio of 1:1
4:3 RATIO	Screen aspect ratio of 4:3
5:4 RATIO	Screen aspect ratio of 5:4
16:10 RATIO	Screen aspect ratio of 16:10
1 MP	1 MegaPixel resolution
2 MP	2 MegaPixel resolution
3 MP	3 MegaPixel resolution
4 MP	4 MegaPixel resolution
5Y WARRANTY	5 year warranty
10 BIT	10 bit look up table
19" SCREEN	19-inch screen diagonal
20" SCREEN	20-inch screen diagonal
21" SCREEN	21-inch screen diagonal
24" SCREEN	24-inch screen diagonal
28" SCREEN	28-inch screen diagonal
30" SCREEN	30-inch screen diagonal
ALC	Integrated ambient light compensation
BLOS	Backlight output stabilization (BLOS) on board
I-GUARD	Integrated front screen sensor
OSD	On screen display
PIVOT	Usable in portrait and landscape mode
TOUCH	Touch screen interface
ULT	Uniform luminance technology
WIDE VIEW	Exceptionally wide viewing angle

	ISIS	MDPW-476	ADP-361
Diagonal	28″	30″	24″
Screen technology	TFT AM-LCD SPVA	TFT AM-LCD SPVA	TFT AM-LCD
Active screen size	503.8 x 503.8 mm 19.83 x 19.83″	641.3 x 400.8 mm 25.24 x 15.78″	324 x 518 mm 12.76 x 20.4″
Aspect ratio	1:1	16:10	16:10
Native resolution	2048x2048	2560x1600	1200x1920
Pixel pitch	0.246 x 0.246 mm	0.250 x 0.250 mm	0.270 x 0.270 mm
Viewing angles (H,V)	170°	178°	178°
Brightness	>250 cd/m²	>300 cd/m²	350 cd/m²
Brightness stabilized	150 cd/m²	250 cd/m²	250 cd/m²
Contrast ratio	1000:1	1000:1	1000:1
Dimming ratio	>100:1	20:1 (BLOS not active)	>50:1
Video input signals	DVI, RBG/HV	DVI	DVI, VGA
BLOS (sensor)	yes	yes	yes
Dimensions	Various models refer to technical specification	696x455x104 mm (27.4 x 17.9 x 5.91″)	Without Stand: 366 x 564 x 67 mm
Ambient light compensation	no	yes	yes
Protective front	yes, various front glasses possible	yes	no
Bonded front glass	no	no	no
Touch screen	no	no	no

MDRC-1119 ATM	MDRC-2120 ATM	TCD-361	TCD-361/TS	MDCC-2121 ATM
19″	20.1″	24″	24″	21.3″
TFT color LCD	TFT color LCD IPS	TFT AM-LCD	TFT AM-LCD	TFT AM-LCD IPS color dual domain
301 x 376 mm 11.85 x 14.80″	480 x 306 mm 16.06 x 12.5″	518 x 324 mm 20.4 x 12.76″	518 x 324 mm 20.4 x 12.76″	432 x 324 mm 17.0 x 12.8″
5:4	4:3	16:10	16:10	4:3
1280x1024	1600x1200	1920x1200	1920x1200	1600x1200
0.294 x 0.294 mm	0.255 x 0.255 mm	0.270 x 0.270 mm	0.270 x 0.270 mm	0.207 x 0.207 mm
178°	178°	178°	178°	170°
300 cd/m^2	300 cd/m^2	500 cd/m^2	500 cd/m^2	700 cd/m^2
180 cd/m^2	180 cd/m^2	350 cd/m^2	350 cd/m^2	300 cd/m^2
1300:1	800:1	1000:1	1000:1	900:1
		>100:1	>100:1	
DVI, VGA	DVI, VGA	DVI, VGA	DVI, VGA	DVI
no	no	yes	yes	I-Guard front sensor
Without Stand: Landscape: 418 x 346 x 70 mm	Without Stand: Landscape: 455 x 354 x 70 mm	Without Stand: 564 x 366 x 67 mm	568 x 374 x 74.1 mm	Without Stand: Landscape: 477 x 504 - 606-284.5 mm
				Without Stand: Portrait: 369 x 558 - 661-284.5 mm
no	no	yes	yes	yes
optional	optional	optional (see TCD-361/TS)	yes	yes
no	no	no	yes	no
optional	no	optional (see TCD-361/TS)	yes	no

20,000 air traffic controllers rely on Barco every day

In major airports all over the world, teams of air traffic controllers work around the clock tirelessly to prevent collisions between airplanes. With a worldwide installed base of over 10,000 display products, 20,000 air traffic controllers use Barco visualization every day to ensure the safety of air passengers.

About Barco

Barco designs, manufactures and markets innovative hard- and software visualization solutions for a variety of applications, such as traffic management, surveillance, command and control, broadcasting and telecom networks and utilities and process control.

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www.barco.com/airtrafficcontrol

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