### Barco LCD displays for air traffic control

The comfort of professional visualization



# 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 multidisplay 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 until today, ISIS is and remains 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.





#### **Key characteristics**

> Low power consumption
> Outstanding visual performance
> Flexible implementation
> Extensive manufacturing capabilities
> Long-term support
> Worldwide acceptance

#### Ideal for:

- Air Traffic Control centers
- Analog ATC display replacements
- Technology insertion

Resolution	2,048 x 2,048
Display size	28 inch
Pixel pitch	0.246 x 0.246 mm
Brightness	$> 240 \text{ cd/m}^2$ stabilized maximum white
Contrast ratio	1,000:1
Viewing angle	170°
Dimensions	Various models refer to technical specification
Dimming ratio	100:1 (min 3 to max 240)



### 4 30" 16:10 MP SCREEN RATIO

### 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.

#### **Key characteristics**

- > Ambient light compensation technology (ALC)
- > Backlight output stabilization technology
- > Maximum comfort
- > Extensive manufacturing capabilities
- > Long-term support
- > Worldwide acceptance

Resolution	2,560 x 1,600
Display size	30 inch
Pixel pitch	0.250 x 0.250 mm
Brightness	250 cd/m <sup>2</sup> stabilized maximum white
Contrast ratio	1,000:1
Viewing angle	178°
Dimensions	696 x 455 x 104 mm (27.4 x 17.9 x 5.91″)

#### Ideal for:

- Specific Air Traffic Control centers
- Rooms with changing ambient light conditions (thanks to Ambient Light Compensation technology)

### 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 offers extra visualization capabilities with respect to display size and resolution.

### **MDRC-1119/TS**

19" 1MP auxiliary display with optional touch screen interface

#### **Key characteristics**

- > 1,280 x 1024 resolution
- > 5:4 aspect ratio
- Backlight output stabilization technology
- Allows for easy integration into consoles
- > Optional protective front cover
- > MDRC-1119 TS: with user-friendly touch screen interface



### MDRC-2120 ATM

20" 2MP auxiliary display



### **2**<br/>MP**4:3**<br/>SCREEN**4:3**<br/>WIDE VIEW**1**<br/>SLOS**1**<br/>SLOS**1**<br/>PIVOT

#### **Key characteristics**

- > 1,600 x 1,200 resolution
- > 4:3 aspect ratio
- Backlight output stabilization technology
- Allows for easy integration into consoles
- > Optional protective front cover
- > Worldwide acceptance

### **MDRC-2124**

24" 2MP auxiliary display



- > 1,920 x 1,200 resolution
- > 16:10 aspect ratio
- > Backlight output stabilization technology
- > Allows for easy integration into consoles
- > Optional protective front cover



	ISIS	MDPW-476	MDRC-1119/TS
Diagonal	28″	30″	19″
Screen technology	TFT AM-LCD SPVA	TFT AM-LCD SPVA	TFT color 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"	301 x 376 mm 11.85 x 14.80"
Aspect ratio	1:1	16:10	5:4
Native resolution	2048 x 2048	2560 x 1600	1280 x 1024
Pixel pitch	0.246 x 0.246 mm	0.250 x 0.250 mm	0.294 x 0.294 mm
Viewing angles (H,V)	170°	178°	178°
Brightness (stabilized maximum white)	240 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	180 cd/m <sup>2</sup>
Contrast ratio	1000:1	1000:1	1300:1
Dimming ratio	>100:1	20:1 (BLOS not active)	
Video input signals	DVI, RBG/HV	DVI	DVI, VGA
BLOS (sensor)	yes	yes	yes
Dimensions	Various models refer to technical specification	696 x 455 x 104 mm	Without Stand: Landscape: 418 x 346 x 70 mm
Ambient light compensation	NO	yes	no
Protective front	yes, various front glasses possible	yes	optional
Bonded front glass	NO	no	no
Touch screen	NO	no	optional

MDRC-2120	MDRC-2124
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20.1"	24.1″
TFT color LCD	TFT color LCD
480 x 306 mm 16.06 x 12.5″	518.4 x 324 mm 20.4 x 12.8″
4:3	16:10
1600 x 1200	1920 x 1200
0.255 x 0.255 mm	0.270 x 0.270 mm
178°	178°
180 cd/m²	250 cd/m <sup>2</sup>
800:1	1000:1
DVI, VGA	DVI-I, DP
yes	yes
Without Stand: Landscape: 455 x 354 x 157 mm	Without Stand: Landscape: 579 x 382 x 106 mm
NO	NO
optional	optional
NO	NO
NO	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 guarantee minimum separation and guide aircraft safely and efficiently to their destination. 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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