



© Pascal Claeren

The **AMB171FH** is the first 171" 4K DCI-SDR/HDR compliant Direct View Screen using microled, able to play SDR/HDR DCP at Residential, Yachting, Hospitality, Corporate, Post-Production/Vision^(*) premises; The embedded Dolby IMS Server renders 2K-4K DCPs in 5.1/7.1, Dolby Atmos sound rendering (Option).

Specifications :

- 4096x2160 (4K) flat DCI, pitch 0.9375mm, microled techno
- DCI-P3 XYZ' color gamut, 68 billions colors 4:4:4 / 36 bits, R: (x,y) = (0.68, 0.32) G: (x,y) = (0.265, 0.690) B: (x,y) = (0.15, 0.06)
- Color temperature white: (x, y) = (0.314, 0.351) P3 theater
- Chromaticity uniformity white within ± 0.015 x, ± 0.015 y
- Gray scale linearity >20 bits (1M:1), lowest grey 0.0003 nit
- DCI luminance SDR 48 nits and HDR 300 nits
- Embedded Dolby IMS3000 Server with 3.6TB Raid-5 Flash
- HDMI 2.x alternative input, Rec709 to XYZ' DCI conversion, Consumer Atmos rendered in Theatrical Atmos

- Size 384cm W x 202.5cm H, fitting premium decks height
- Weight 285 Kg, 100-240Vac 1.9KW (SDR), 3.6KW (HDR)
- Operating 0-40°C temperature and 10-80% humidity
- Screen depth of 7 cm, except at bottom 20 cm (IMS)
- High quality iron/aluminium frame, rear service access (DCI)
- 24x cabinets (8xW, 3xH), 144 tiles (6 per cabinet 2xW, 3xH)
- Operating lifetime >100 000 hours (>11 years in 24x24 & 7x7)

(*) with optional 12G –SDI input module

Available in DCI Day&Date Experiential Pack with DCP Library at Bel Air Cinema (www.belaircinema.com)

www.ambiancecinema.com - sales@ambiancecinema.com

Direct View Screen part number		AMB171FH
Optical parameters	Led pitch	0.9375mm
	Led package / Display technology	MicroLed
	Screen ratio	Flat DCI (1.89:1)
	Number of cabinets	24 total arranged in 3 rows of 8 columns
	Screen resolution	4096 x 2160 (4K DCI)
	Black and white contrast (Dark measurement)	Infinite to 1
	Supported frame rate in 2D	24 fps/25 fps/30 fps/48 fps/50 fps/60 fps
	Supported frame rate in 3D	TripleFlash 144 fps, E3S active glasses & sync for emitter
	Screen refreshing frequency from 16x to 128x of frame speed	3072 Hz for 24 fps (128x) & 48 fps (64x), 3200 Hz for 25 fps (128x) & 50 fps (64x), 1920 Hz for 60 fps (32x), 2304 Hz for 3D (16x)
	Calibrated Brightness	48 nit (DCI-SDR) & 300 nit (DCI-HDR)
	Contrast range	DCI-SDR & DCI-HDR
	Horizontal & Vertical view angle	Both $\geq 140^\circ$
	Color gamut (R, G, B)	DCI - P3 Theater, R: (x,y) = (0.68, 0.32) G: (x,y) = (0.265, 0.690) B: (x,y) = (0.15, 0.06)
	Color processing	12 bits per R, G, B, total 36 bits for 68B colors (DCI)
	Chromaticity / Uniformity	White uniformity within +/-0.015 x, +/-0.015 y
	Color temperature (white)	(x, y) = (0.314, 0.351) / DCI-P3 Theater
	Grayscale resolution	20 bits (1M :1), mini grey (HDR) = 0.0003 nit
Physical parameters	Module (Tile) arrangement	6x per cabinet in 2W x 3H (Total 144 tiles)
	Module (Tile) size & resolution	240mm W, 225mm H, 256x240pix, total 61440pix
	Cabinet size & resolution	480mm W, 675mm H, 68mm D, 512x720pix, total 368640pix
	Whole screen size	3 840 mm W x 2 025 mm H (Surf. 7.8m ²)
	Screen depth	68 mm except at Server box 270 mm
	Screen construction	Iron & Aluminium
	Whole screen weight	285 Kg (without mounting frame), main cabinet 32 Kg, 23x secondary cabinets 11 Kg
	Maintenance mode	Rear access on keylock per DCI specs
DCI Server	Manufacturer / Part number	DOLBY IMS3-L-NB-S2TB, 3.6TB of flash Raid-5 storage, 7.1 audio licence
Electrical parameters	Power supply	100-240 Vac, 50/60 Hz
	Peak whole screen consumption in 48 nit W & 300 nit W	1.9 KW & 3.6 KW
Service environment	Operating BTU in 48 nit W, 300 nit W & Black	6 880 BTU/h , 13 000 BTU/h & 900 BTU/h
	Operating temperature and humidity	0 C to +40 C with 10% to 80% HR NC
	Storage Temperature and humidity	-20 C to +60 C with 5% to 85% HR NC
	Storage Temperature and humidity	-20 C to +60 C with 5% to 85% HR NC
	Service life (MTBF)	$\geq 100,000$ operating hours (> 11 years in 24x24 7x7)
	Calibrated spare modules (Tiles)	4x spare modules supplied per screen
	Initial certification	CTP 1.4 (Direct View as SDR Projection)
	Compliance	CE, FCC Class A, UL

DCI Compliant Equipment - Direct View Displays tested according CTP 1.4

(**List March 2025** - <https://www.dcimovies.com/compliant-equipment>)

Manufacturer

Model

Report Date

Ambiance

AMB171F-01

2024-04-25