



Two high performance home theater projectors.  
With the emphasis on "theater"!



## DPX-1100 / LPX-510

Digital Cinema Projector    Home Cinema Projector



*d*-cinema

Yamaha brings a true theater experience into your living room, with a choice of two ultra high quality projectors.

Long known for its contributions in helping to create and advance the home theater experience through superb audio components, Yamaha now offers two projectors that greatly enhance the visual aspect. The DPX-1100 is a DLP™ projector featuring the latest high performance DMD™ device, an ultra high resolution lens system



and Yamaha Natural Black. The LPX-510 is an innovative LCD projector, which also utilizes Yamaha Natural Black as well as outstanding technology and functions. For a movie viewing experience that will leave you, your family and friends in breathless wonder, choose either of these projectors in your home cinema.



New High Resolution Lens and Advanced Video Technologies Deliver Extraordinary Picture Quality.



## Digital Cinema Projector DPX-1100



The DPX-1100 incorporates a new high resolution lens and a wide range of advanced video technologies to deliver extraordinary video performance. Contrast is an incredible 4,000:1, brightness is 800 ANSI lumens, picture sharpness is outstanding and color reproduction is stunningly natural. In short, if you want to watch movies with the full visual impact the directors aimed for, this is the projector to choose.



With an unmatched combination of the finest video technologies and superior convenience, the DPX-1100 takes movie viewing to new heights of enjoyment.

**Extreme sophistication results in incredible clarity and color**



**The Yamaha Natural Black Concept**

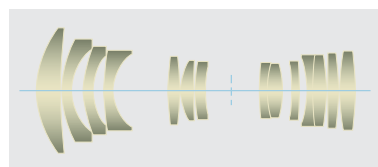
Even though you tend to notice the bright colors, how a projector reproduces gradations of black is extremely important. When you watch a movie, shadows should stand out from the background, black levels should be solid even in dark scenes, and blacks should maintain their depth when the scene becomes brighter. Yamaha developed the Natural Black concept, combining advanced technologies, parts and functions, to achieve truer, deeper levels of black than ever before.



Yamaha Natural Black makes subtle degrees of black in textures, shadows and so on stand out more clearly. With other projectors, black contrast may be soft and fuzzy rather than sharp and clear.

**High Resolution Lens**

The DPX-1100 goes beyond the capabilities of other projectors with the use of a new high resolution lens that maintains extreme resolution sensitivity all the way to the edges. Four anomalous dispersion glass components ensure negligible levels of chromatic aberration while maintaining a short focal point and high zoom magnification.



**High Performance HD2+ DMD™**

Naturally, Yamaha equipped the DPX-1100 with the latest DMD



Latest DMD™ Device HD2+

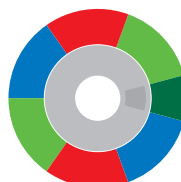


device, HD2+, which has narrow mirror gaps and no center pivot mark, improving contrast over the previous version. In addition, video processing is 10-bit from A/D conversion through to DMD output. magnification.

**Seven-Segment Color Wheel**

Yamaha debuts the use of a seven-segment color wheel, with an ND filter-equipped green segment having been added to the previous wheel. The seven-segment structure reduces dither, while color reproduction is excellent, with greens being more true to life than ever (achieving the HD monitor "green" standard). Green resolution is 10-bit, which also improves the representation of black tones. Better color balance contributes to a

30% improvement of actual brightness at D65 (the white reference color standard), compared to the previous Yamaha projector.



Seven-Segment Color Wheel Principle

**Faroudja TruLife Enhancer**

The DPX-1100 incorporates TruLife Enhancer technology from Faroudja, one of the world's top developers of video technology. It ensures that picture clarity is excellent, with clean, sharp edges and details.



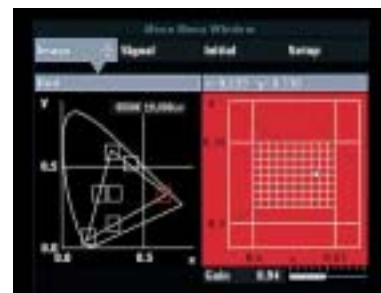
**Color Balance System**

The DPX-1100 offers three Color Balance modes. The first is the Standard mode and cannot be adjusted. The second is the WRGB mode, which allows adjustment of the white, red, green and blue colors by specifying x and y values for each (yellow, cyan and magenta

are derived from the three main colors). The third mode is WRGBYCM, which allows each of the seven colors to be directly specified by entering x and y coordinates. There are six memory presets for storing personal adjustments.

**Color Temperature Adjustment**

You can adjust the correlated color temperature in 100K increments between 5,000K and 10,000K, in order to achieve accurate color fidelity. A graph on the color temperature menu facilitates this operation. In order to maintain perfect color balance when the settings are changed, automatic color balance calculation and adjustment is provided.







## Elegant, simple, convenient – a pleasure to use

### Mounting Flexibility

Mounting the DPX-1100 is easy and versatile. Lens-to-screen distance can be anywhere from 9 ft. 10 in. to 15 ft. 9 in. (100" screen) thanks to the powerful 1.6x zoom lens. Motorized vertical lens shift is  $\pm 50\%$  of projection height, so the projector can be used at any height between the top and bottom of the screen. Iris, zoom and focus adjustments are also motorized.

### Six Memory Settings

There are six memory positions each of which can store different combinations of parameter settings, depending on the source. The projector automatically adjusts when the source is changed, so you do not have to select a different memory position.

### Lamp Power Selector

The multi-step Lamp Power Selector makes it possible to adjust for optimum brightness and contrast with different levels of room lighting and video sources. It can also be used to extend lamp life (at 80% brightness, lamp life goes from 2,000 to 2,500 hours).

### Extensive Menus Plus Handy One-Line Menu

The DPX-1100 has an extensive range of menus, viewable on-screen and managed via the remote control. There are four main menu groups (Image, Signal, Initial and Setup), each offering a wide range of adjustable parameters, some of which have submenus. In addition, a one-line menu can be superimposed on the screen while viewing a movie or other source, for "fine-tuning" the image as you watch.



### Custom Installation Solutions

The DPX-1100 facilitates custom installation with an RS-232C interface, IR control in/out ports for using an optional wired connection to the IR remote control, front and rear IR sensors and a powerful DC12V, max. 200mA trigger out with selectable trigger timing.

### Silent Operation

The DPX-1100 runs with the quiet efficiency you expect from a high quality home theater projector. It uses effective DMD and power supply ducting, while minimizing cooling fan operation by continually adjusting it in accordance with picture brightness.

### HDMI Terminal

Most high-end projectors provide DVI connection, but the DPX-1100 goes further with an HDMI connection. HDMI can handle digital signals like DVI, and a variety of other information as well, such as component type, scan status and colorimetry, which can be adjusted.



### Full-Function Remote Control

The remote control unit gives you total control over all of the projector's functions and settings. It is designed for easy gripping and use, and can be pointed at either the front or the back of the projector, from as far as 7m (23 feet) away.



Control Panel

### Other Convenient Functions

- Smart Zoom for projecting 4:3 broadcasts onto a full 16:9 screen with no distortion in the middle
- Cinema Zoom with Zoom Up and Zoom Out for eliminating bars on the top and bottom of the 16:9 screen
- Selectable video scan (100% or 94%)
- Automatic aspect conversion
- Manual display aspect selection (8 modes)
- Still (freeze frame) function
- Operation status lock
- Test pattern selection
- Message display keeps you informed of operating status
- Four warning indicators (lamp, cover, temperature, fan)



In addition to the Input A and Input B (Component Video and RGB signal) terminals, the DPX-1100 rear panel offers an HDMI input terminal, composite video input terminals, D4 video input terminal, remote in/out terminal, and RS-232C and Trigger out (12V/200mA) terminals.

### DPX-1100 Main Specifications

- Projection System Digital Light Processing (DLP)™ Technology
- Device Type Size: 0.8 inch DMD™ HD2+ x1 Pixel 1,280 x 720
- Projection Lens F=2.7 - 5.0, f=24.3 - 38.9mm Functions Zoom (Motorized): x1.6; Focus (Motorized); Lens Shift (Motorized): Vertical Up/Down 50%; Iris (Motorized): 3-Step Projection Ratio 1.355-2.168 (3.0 - 4.8m, 100" 16:9) Screen Size 60 - 200 inch (16:9) • Lamp 270W SHP, 2,000 hours • Brightness 800 ANSI lumens (White Boost: On, Iris: Off), 400 ANSI lumens (White Boost: On, Iris: Fully On) • Contrast Ratio 4,000:1 (White Boost: On, Iris: Fully On), 2,000:1 (White Boost: On, Iris: Off) • Color Format NTSC, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60 • Scan Frequency Horizontal: 15-8 kHz Vertical: 50-85 Hz (Analog), 60 Hz/50 Hz (Digital) • Power Consumption 375 W (Standby: 0.1 W) • Dimensions (W x H x D) 495 x 189.5 x 465.4 mm; 19-1/2" x 7-7/16" x 18-5/16" • Weight 13.8 kg; 30.4 lbs.

High Quality Home Theater LCD Projector Provides  
Excellent Performance with Flexible Installation Capability.



## Home Cinema Projector LPX-510

**DCDi** **HDMI** **NATURAL BLACK**  
BY FAROU DJA

Utilizing high resolution LCD technology, the LPX-510 provides excellent image quality with lifelike color, and a number of features that you'll find extremely useful. It is equipped with three high-performance 0.7" 720p liquid crystal panels and 10-bit gradation control that permits representation of 1.07 billion colors. Brightness is a high 1,000 ANSI lumens, allowing viewing in relatively bright rooms.



## NATURAL BLACK

### Film-Like Quality with Yamaha Natural Black

As with the DPX-1100, Yamaha put a great deal of effort into improving black reproduction. Our Natural Black design concept enables the LPX-510 to achieve much deeper levels of black than conventional projectors.



Yamaha Natural Black makes subtle degrees of black in textures, shadows and so on stand out more clearly.

With other projectors, black contrast may be soft and fuzzy rather than sharp and clear.

### High Performance LCD Panels, 10-bit Processing, High Brightness

The LPX-510 uses three TFT Active Matrix LCD panels capable of projecting high resolution 720p (1,280 x 720-pixel) HDTV images. It also employs 10-bit video processing, giving it the ability to reproduce 1.07 billion colors, while 16:9 aspect ratio compatibility means that widescreen movies can be viewed in their entirety, with the correct perspective. 1,000 ANSI lumens brightness allows the projector to be used even in relatively bright rooms.



### 3D Linear Color Balance

Ideally, the three signals (R, G, B) from the three LCD panels should have the same linearity, but due to various factors, their linearity continuously varies. The 3D Linear Color Balance function helps maintain the proper balance between them, adjusting color irregularities through a range of 15,360 correction points (640 points x 8 steps x 3 colors) for accurate color in any type of scene from dark to bright.



No 3D Linear Colour Balance    3D Linear Colour Balance

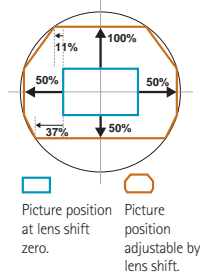
### Cinema Balance Filter

The LPX-510 introduces a new Cinema Balance Filter that enhances color reproduction when viewing in a dark room, such as typically used for movies. It reduces the green level (and blue to a lesser degree), and is an optical filter so dynamic range is not affected. The filter moves to the on or off position (motorized operation) according to

the Picture Mode, being on in the Standard, Cinema, Cinema Black and PC modes.

### Lens Shift, Motorized Iris and Zoom Control

Vertical and horizontal lens shift capability means that the projector does not have to be carefully positioned directly in front of the screen. Maximum range of movement is 100% vertically and 50% horizontally, much greater than conventional projectors. You can use the motorized iris control to improve contrast and focusing, and to give the image a more three-dimensional feel. The motorized zoom control will expand the image up to 1.5 times to give you a closer view of the scene and for projecting a 16:9 picture on a 4:3 screen. Settings can be adjusted in six steps (100%–75%) and stored in the picture memory. There are also six lamp power settings, so the LPX-510 provides a total of 36 brightness variations.



### Extensive Image Control

Six Picture Modes provide a variety of color and brightness balance settings by adjusting gamma values, the Cinema Balance Filter and lamp power to optimize the picture for varying home theater conditions. The six modes are Dynamic, Bright, Standard, Cinema, Cinema Black and PC.

### DCDi Processing

Faroudja, one of the world's leading video technology companies, developed the DCDi processing used in this projector. It ensures smooth and natural images without staircasing or jaggies.



### Menus Put You in Total Control

On-screen menus present a wide range of parameters that you can select for initial setup and later adjustment. You can be sure of achieving the best possible picture for all conditions.



Control Panel

### Lamp Power Selector

The multi-step Lamp Power Selector makes it possible to adjust for optimum brightness and contrast with different levels of room lighting and video sources. Lower power settings will extend lamp life, reduce power consumption and reduce cooling fan noise.

### Custom Installation Solutions

The DPX-510 facilitates custom installation with a powerful DC12V, max. 200mA trigger out function.

### Other Convenient Functions

- Smart Zoom for projecting 4:3 broadcasts onto a full 16:9 screen with no distortion in the middle
- Selectable video scan (PC: 100%, 95%; Video: 95%, 92%)
- Six presettable memories
- Operation status lock (zoom, focus and lens shift)



In addition to the Input A (5 composite) and Input B (5 composite) terminals, the LPX-510 rear panel offers the HDMI input terminal, S-Video and composite video input terminals, D4 video input terminal, and RS-232C and Trigger out (12V/200mA) terminals.

### LPX-510 Main Specifications

- Device 0.7 inch HTIPS TFT x 3
- Pixel 1,280 x 720
- Projection Lens F=2.1 - 4.3, f=21.4 - 31.7 mm; zoom (motorized): x1.5
- Lens Shift Vertical up: 100%/down: 50%, horizontal left/right 50%
- Motorized Iris 100% - 75%
- Projection Ratio 1.355 - 2.038
- Screen Size 30 - 300 inch (16:9)
- Lamp 200W - 150W UHP; 1,700 hours (200W continuous); 3,000 hours (150W continuous)
- Brightness 1,000 ANSI lumens (iris: off, Cinema Balance Filter: off) 350 ANSI lumens (iris: fully on, Cinema Balance Filter: on)
- Contrast Ratio 1,200:1 (iris: 75%, Cinema Balance Filter: on) 1,000:1 (iris: 100%, Cinema Balance Filter: on)
- Color Format NTSC, PAL, SECAM, NTSC4.43, PAL-M, PAL-N and PAL60
- Compatible Signal 480i, 480p, 576i, 576p, 720p, and 1080i
- PC Signal SVGA, XGA, MAC13", MAC16", MAC19", iMAC\_VGA, iMAC\_SVGA
- HDMI Input VGA: 480p, 576p, 720p, and 1080i Digital YPbPr and Digital RGB
- Fan Noise 27 dB (lamp power min.); 34 dB (lamp power max.)
- Power Consumption 290 W
- Standby Power Consumption 0.4 W (RS-232C off); 3 W (RS-232C on)
- Dimensions (W x H x D) 440 x 137 x 321 mm; 17-5/16" x 5-3/8" x 12-5/8"
- Weight 6.3 kg; 13.9 lbs.

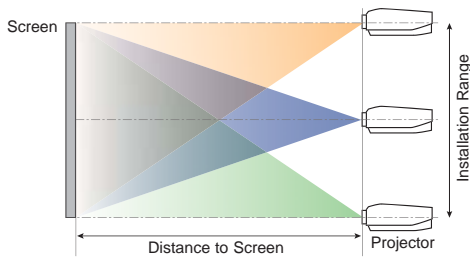


## DPX-1100 Throw Distance and Offset

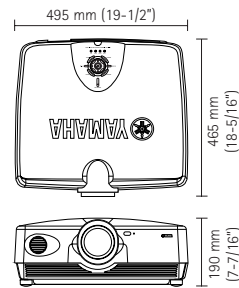
Screen Size (inch)	4: 3 Screen		Distance (feet)		Distance L (feet)	
	Width	Height	Wide	Tele	Wide	Tele
30	24	18	2.58	4.24	3.43	5.65
40	32	24	3.50	5.71	4.67	7.62
60	48	36	5.35	8.67	7.13	11.55
70	56	42	6.27	10.14	8.36	13.52
80	64	48	7.20	11.62	9.60	15.49
90	72	54	8.12	13.09	10.83	17.46
100	80	60	9.05	14.57	12.06	19.42
110	88	66	9.97	16.04	13.30	21.39
120	96	72	10.90	17.52	14.53	23.36
130	104	78	11.82	18.99	15.75	25.33
150	120	90	13.67	21.95	18.23	29.26
170	136	102	15.52	24.90	20.69	33.20
200	160	120	18.29	29.32	24.39	39.10
230	184	138	21.07	33.75	28.09	45.00
300	240	180	27.54	44.08	36.72	58.77

Screen Size (inch)	16: 9 Screen		Distance (feet)		Offset (inch)	
	Width	Height	Wide	Tele	Min.	Max
30	26.1	14.7	2.81	4.62	-14.7	0
40	34.9	19.6	3.81	6.23	-19.6	0
60	52.3	29.4	5.83	9.44	-29.4	0
70	61.0	34.3	6.83	11.05	-34.3	0
80	69.7	39.2	7.84	12.66	-39.2	0
90	78.4	44.1	8.85	14.26	-44.1	0
100	87.2	49.0	9.86	15.87	-49.0	0
110	95.9	53.9	10.86	17.48	-53.9	0
120	104.6	58.8	11.87	19.09	-58.8	0
130	113.3	63.7	12.88	20.69	-63.7	0
150	130.7	73.5	14.89	23.91	-73.5	0
170	148.2	83.3	16.91	27.12	-83.3	0
200	174.3	98.1	19.93	31.95	-98.1	0
230	200.5	112.8	22.95	36.77	-112.8	0
300	261.5	147.1	30.00	48.02	-147.1	0

- Distance L (m): Screen Surface to Lens Center
- Offset: Lower Edge of Image to Lens Center
- margin of error is  $\pm 5\%$



### Dimensions



### Accessories



**PMT-L31:** Optional installation brackets for low ceiling



**PMT-L31:** Optional installation brackets for low ceiling



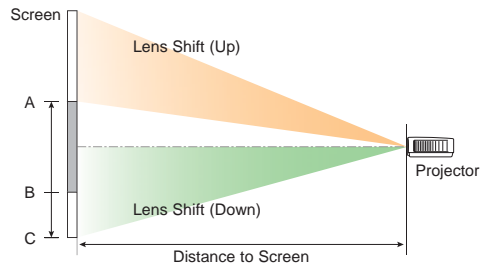
**PJA-427:** Optional lamp cartridge

## LPX-510 Throw Distance and Offset

Screen Size (inch)	4: 3 Screen		16: 9 Screen		4: 3 Image	
	Width	Height	Wide	Tele	Wide	Tele
30	24	18	2.62	4.00	3.49	5.34
40	32	24	3.54	5.38	4.72	7.17
60	48	36	5.38	8.13	7.17	10.83
70	56	42	6.30	9.50	8.40	12.67
80	64	48	7.22	10.88	9.62	14.50
90	72	54	8.14	12.25	10.85	16.33
100	80	60	9.05	13.62	12.07	18.17
110	88	66	9.97	15.00	13.30	20.00
120	96	72	10.89	16.37	14.52	21.83
130	104	78	11.81	17.75	15.75	23.66
150	120	90	13.65	20.50	18.20	27.33
170	136	102	15.49	23.24	20.65	30.99
200	160	120	18.24	27.37	24.33	36.49
230	184	138	21.00	31.49	28.00	41.99
300	240	180	27.44	41.11	36.58	54.82

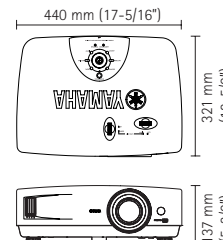
Screen Size (inch)	16: 9 Screen		Distance (feet)		Offset (inch)	
	Width	Height	Wide	Tele	Min.	Max
30	26.1	14.7	2.85	4.36	-14.71	7.35
40	34.9	19.6	3.86	5.86	-19.61	9.81
60	52.3	29.4	5.86	8.85	-29.42	14.71
70	61.0	34.3	6.86	10.35	-34.32	17.16
80	69.7	39.2	7.86	11.85	-39.22	19.61
90	78.4	44.1	8.86	13.35	-44.12	22.06
100	87.2	49.0	9.86	14.84	-49.03	24.51
110	95.9	53.9	10.87	16.34	-53.93	26.96
120	104.6	58.8	11.87	17.84	-58.83	29.42
130	113.3	63.7	12.87	19.33	-63.73	31.87
150	130.7	73.5	14.87	22.33	-73.54	36.77
170	148.2	83.3	16.87	25.32	-83.34	41.67
200	174.3	98.1	19.88	29.82	-97.05	49.03
230	200.5	112.8	22.88	34.31	-112.76	56.38
300	261.5	147.1	29.89	44.79	-147.08	73.54

- Offset: refers to movement range from A to C
- margin of error is  $\pm 5\%$



A: Bottom of screen at 100% lens shift up B: Bottom of screen at normal position  
C: Bottom of screen at 50% (maximum) lens shift down

### Dimensions



### Accessories



**PMT-H55:** Optional installation brackets for high ceiling



**PMT-L51:** Optional installation brackets for low ceiling



**PJA-520:** Optional lamp cartridge

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YAMAHA CORPORATION  
P.O. Box 1, Hamamatsu, Japan