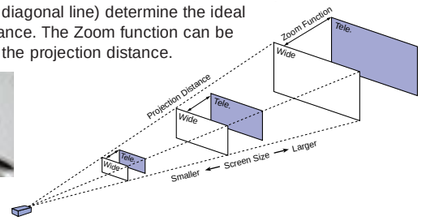
May We Suggest a Total Yamaha System?

To complement the superb picture quality of your DPX-1 projector, why not consider a Yamaha Digital Home Theater audio system? We offer a full range of individual components and system packages, all of which utilize our CINEMA DSP and other advanced technologies to deliver extraordinarily dynamic and realistic full-surround sound.

Installation Flexibility

The DPX-1 can be used with a wide range of screen sizes and projection distances. The screen aspect (4:3 or 16:9) and size (length of diagonal line) determine the ideal projection distance. The Zoom function can be used to adjust the projection distance.



Distance to Screen 4:3

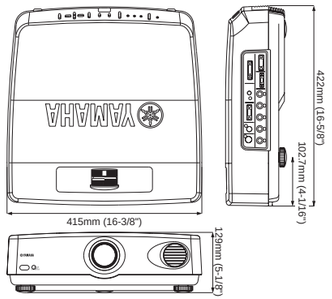
	Size (4:3)	Wide		Tele	
		m	feet	m	feet
Diagonal Image Size	60”	2.4	7.9	2.9	9.5
	80”	3.2	10.6	3.9	12.8
	100”	4.0	13.3	4.9	16.0
	120”	4.8	16.0	5.8	19.2
	150”	6.1	20.0	7.3	24.1
	200”	8.1	26.8	9.8	32.2

Distance to Screen 16:9

	Size (16:9)	Wide		Tele	
		m	feet	m	feet
Diagonal Image Size	60”	2.6	8.6	3.2	10.4
	80”	3.5	11.6	4.2	13.9
	100”	4.4	14.5	5.3	17.5
	120”	5.3	17.4	6.4	21.0
	150”	6.6	21.9	8.0	26.3
	200”	8.8	29.2	10.6	35.1

DPX-1 Specifications :

- Projection System: Digital Light Processing (DLP)™ technology
- Panel: 0.9 inch XGA DMD™ x 1
- Resolution: 1,024 x 768 pixels
- Brightness: 800 ANSI lumens
- Contrast Ratio: 900:1 (full on/off)
- Projection Lens: 1:1.2 manual zoom, manual focus
- Light Resource: 120 W VIP lamp
- Projection Distance: 1.2 – 10.6 m (3’ 9” – 35’ 1”)
- Image Size: 25” – 200”
- Video Standard: NTSC, PAL, NTSC4.43, SECAM, PAL60, PAL-M and PAL-N
- Input Accepted: SDTV (480i, 576i), HDTV (480p, 720p, 1080i), DVD component progressive or interlaced, TV/Satellite tuner, VCR, SXGA (compression), XGA, SVGA and VGA
- Horizontal Sync Range: 15 – 80 kHz
- Vertical Sync Range: 50 – 85 Hz
- Power Consumption: 185 W
- Dimensions (W x H x D): 415 x 129 x 422 mm; 16-3/8” x 5-1/8” x 16-5/8”
- Weight: 7.8 kg; 17.2 lbs.



DPX-1 Options

PJL-112
Optional Lamp Cartridge

PMT-L11
Optional Installation Brackets for Low Ceiling

PMT-H15
Optional Installation Brackets for High Ceiling

For details please contact:

- Digital Light Processing, DLP, Digital Micromirror Device and DMD are trademarks of Texas Instruments, Inc.
- Screen images are simulated.
- Product design and specifications subject to change without notice.

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YAMAHA

Digital Cinema Projector

DPX-1

DLP™
A TEXAS INSTRUMENTS TECHNOLOGY

The DPX-1 has been designed for one purpose only: to maximize movie viewing enjoyment.

If you love movies, you probably dream of watching them at home on a big screen, with film-like quality. Well, like all good movie dreams, this one has come true — with the DPX-1.

This is an ultra high performance projector designed specifically for watching movies in a home theater. On any size screen, even as large as 200” (16.6 feet!) you’ll be thrilled by the amazing degree of clarity, sharpness and contrast that this projector delivers. Install the DPX-1 in a full Yamaha home theater system, and you may have to start taking reservations!

Natural Black

Makes a Dramatic Difference

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. Which is exactly what happens with Yamaha Natural Black. Because even though it's usually the bright colors that you notice, how a video system reproduces gradations of black is extremely important. This is what determines contrast, and is very often the difference between an image that is merely good, and one that is sharp and rich at every level of brightness. Yamaha put a great deal of effort into improving black reproduction, and with Natural Black, we've achieved levels of black that are about 18% "blacker" than those of conventional projectors.

Natural Black and other Yamaha innovations take home theater image quality to an entirely new level.

Digital Cinema Projector
DPX-1

Simulated image for descriptive purposes.

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

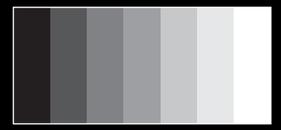
With other projectors, black contrast may be soft and fuzzy rather than sharp and clear.

Superior 900:1 Contrast Ratio

The DPX-1 has an exceptionally high contrast ratio of 900:1. This is the key to achieving the fine gradations from white to black that make Natural Black so effective.

Black reproduction by DPX-1 and conventional projectors.

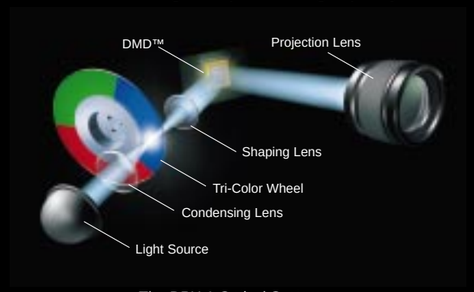
A DPX-1: Deep blacks are clearly defined, all dark gradations are sharply and cleanly rendered.



B Conventional projectors: due to "floating black" effect, rendering of deep blacks is very difficult.

DLP™ Optical System Provides Numerous Quality Benefits

Digital Light Processing™ technology, developed by Texas Instruments, has a number of advantages that caused Yamaha to choose it as the basis for this projector. Its single panel architecture allows the use of a small, lightweight optical system, and the fact that it is a reflective rather than transmissive technology provides greater efficiency. In addition, the all-digital nature of the DLP™ system, as opposed to the analog nature of other systems, means that color and motion are more accurately controlled, resulting in superior image quality.



The DPX-1 Optical System

DLP™
A TEXAS INSTRUMENTS TECHNOLOGY

Extra-Large DMD™ Semiconductor

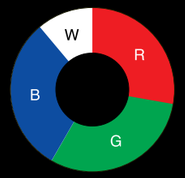
The key component of the DLP™ system is the Digital Micromirror Device™ optical semiconductor chip. This DMD™ switching unit has an array of 786,432 hinged, microscopic mirrors which operate as optical switches to create a high resolution, full color image. To maximize DMD™ quality, Yamaha uses a large 0.9-inch semiconductor that generates greater light output than the smaller 0.7-inch chip used in other DLP™ projectors, so less magnification is required and greater detail is obtained.

The 0.9-inch DMD™ chip has 786,432 mirrors (picture elements) that are set at a 17 micron pitch. Each element is mechanically switched +/- 10° in 15 micro-seconds by the attractive force of static electricity. The device has a service life of more than 100,000 hours.

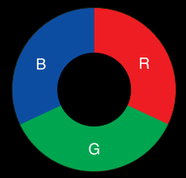
Unique Tri-Color Wheel Optimizes Movie Images

The DPX-1 is the first home theater projector to employ a true tri-color wheel. Conventional color wheels contain a W, or white (transparent), section to brighten them for presentations via computer. The W section is not used in movie mode, but its presence reduces movie contrast because of the extra light transmission.

By eliminating the W section, the tri-color wheel provides greater area for each of the three primary colors (red-green-blue, or RGB) that create the images. This results in much higher movie image contrast, which is 40% better than that of conventional DLP™ projectors (and note that other projectors' contrast ratios often refer to computer mode, not movie mode). In terms of color reproduction, the tri-color wheel improves the depth and solidity of images in colorful scenes which were previously difficult to capture, and Texas Instruments' latest RGB movie sequencing further boosts color performance.



Conventional Color Wheel (RGBW)



DPX-1 Tri-Color Wheel (RGB)

"Fine-tuning" the video signal to achieve the highest possible quality.

The DPX-1 ensures that movies are seen at maximum quality by automatically choosing between a **3:2 Pull-Down Cinema Progressive Circuit** for film and an ordinary progressive circuit for video.

A highly precise 13-Bit Digital Gamma Correction Circuit is used to realize the full potential of the excellent gradation-producing properties of the DMD™ element. The system chooses from among five gamma correction curves depending on the input format to ensure maximum image quality.

In order to decrease video noise levels without affecting sharpness, a **Field-Adaptive Noise Reduction Circuit** detects the changes in brightness of the images, analyzes the images to distinguish between outlines/edges and surface areas, and provides the optimum filtering for each area.

Three-Dimensional Noise Reduction decreases the noise component related to the frame memory time axis, thus helping to effectively minimize noise that causes the reproduction of coarse images.

Digital Video Signal Processing Circuits

This “Silent” Projector

Gives You a Lot to Like . . .

The DPX-1’s beauty is more than screen deep — it’s also a pleasure to use. We began with the actual environment, knowing it’s hard to enjoy a movie when you can hear the projector. Even a small noise is annoying. So we tasked our engineers with the development of a “silent” projector, and they succeeded admirably. You’ll also love the on-screen display. Not only does it give you more (and more useful!) capabilities than ever before, it’s also a breeze to use. Everything else, from source compatibility to set-up, is designed to eliminate any potential problems. All you have to worry about is . . . the snacks.

The DPX-1 gives you everything you want . . .
and none of what you don’t want (noise!).

Digital Cinema Projector
DPX-1

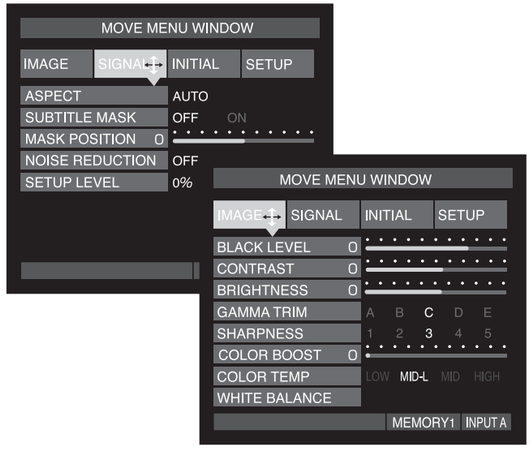
Ultra-Low 30dB Noise Level Means You’ll Hear Every Sigh and Whisper

Yamaha went to extreme lengths to make the DPX-1 as noiseless as possible. We started with a low-noise yet powerful Sirocco fan to cool the lamp housing, and designed the unit with innovative duct architecture and a silencing chamber in the front of the body. The hot exhaust air passes through the duct below the lens barrel and is led to the silencing chamber, which is lined with porous foam to absorb sound. Finally, the air is exhausted from the front so it won’t annoy viewers and in a direction that prevents the temperature difference from causing an air current in front of the screen and swaying the image.

Sirocco fan and silencing chamber

On-Screen Display with Extensive Menus

The on-screen display, selectable via the remote control unit, offers a wide range of parameters that can be adjusted to provide the highest possible image quality in all situations. There are Setup and Initial (default) menus, and for detailed adjustments, Image and Signal menus. This extremely detailed assortment of choices ensures that you can achieve the best looking picture for all input formats, sources and room conditions. You can even vary the position of the menu on the screen!



Selecting parameters calls up sub-menus for more detailed adjustment. A Status Memory allows various combinations of settings to be memorized and factory default settings can be easily recalled.

Numerous Inputs for Full Compatibility

A full complement of professional grade inputs are provided for a variety of sources, including component video with BNC terminals for maximum connection integrity, analog RGB and DVI (Digital Visual Interface), composite video and S-video. An RS-232C serial interface and a +12V trigger out jack output signals to activate other components when the projector is powered on.

It is also designed to be compatible with a wide range of formats, from digital satellite broadcasting with high image quality at 1080i, 720p, 480p and 480i, to ordinary media such as DVD, LD and VCR. If the RGB output from a personal computer is input directly through the D-Sub 15-pin terminal, native solution and expanded XGA images are possible, as well as compatibility with compressed SXGA images.

Connection panel

The rear panel with operating controls glows with a soft green light so you can change settings in the dark.

Elegant, Practical Design

Considering its high performance, the DPX-1 is relatively compact and lightweight, presenting no difficulties with tabletop use or ceiling installation (it can also be installed behind a semi-translucent screen). As this projector is a single-lens type, installation is much easier than with a three-tube type; all you need to do is adjust the size of the screen and bring the image into focus. The lens barrel is recessed inside the body and a focus/zoom ring is provided on the top. The exterior has an attractive pearl-mica finish.

A Remote You’ll Enjoy Using

The remote control is styled for comfortable one-hand operation. It controls a wide range of functions, including Still (freezes the image), Hide (turns off the image), Aspect (selects display aspects) and of course all the menu selections. You can also use it to access the Digital Keystone Correction function in the Setup menu, which compensates for trapezoidal distortion when screen and projector are at different heights. You can select two types of correction, Normal and Full Height. A light switch lights up the buttons for 10 seconds.

Keystone Correction Off

Keystone Correction On