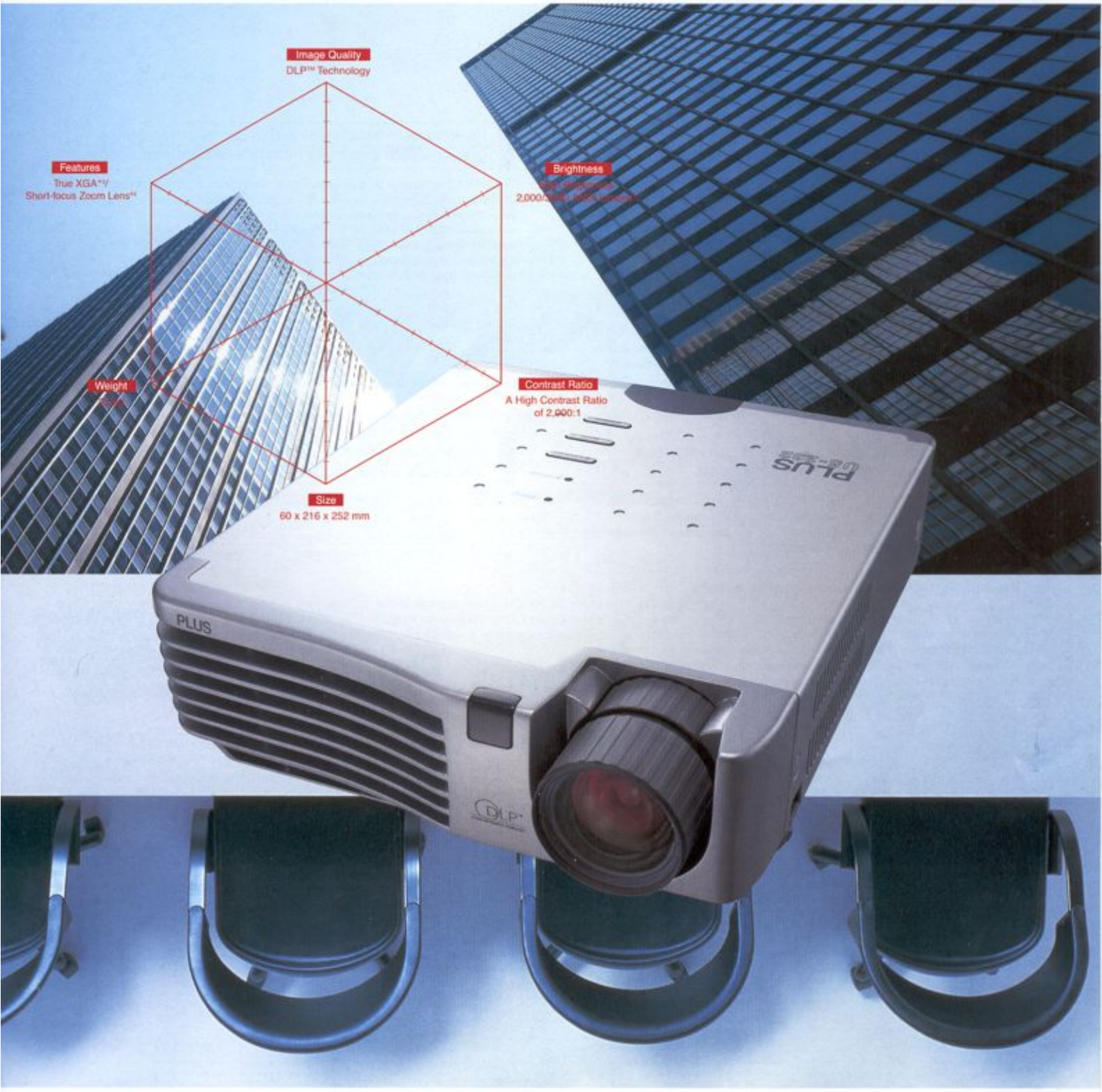
PLUS

Japan's No.1 DLP™ Projector Manufacturer*1

U5 Series
Digital Projectors

This unit is all you need!



The power of an ultra-short focus zoom lens*2 and 2,000/3,000 ANSI lumens*3 of brightness packed into a body weighing only 2 kg.

New Business Standard

U5-232 True XGA Short-focus zoom lens 2,000/3,000 ANSI lumens

U5-132 True XGA Short-focus zoom lens 2,000 ANSI lumens

U5-112 True SVGA Zoom lens 1,600 ANSI lumens

U5-111 True SVGA Fixed-focus lens 1,600 ANSI lumens

*1 Study by Fuji Chimera Research Institute, Inc., 2002 *2: U5-232, U5-132 *3: U5-232 in Bright Mode (B/W) projection

In bright places, in tight places, it delivers high-qual
A projector that gives you everything you're looking

Smaller than the size of a magazine and with a weight of only 2 kg*1, these projectors are capable of delivering a brightness of 2,000/3,000 ANSI lumens*2 and an enhanced contrast ratio of 2,000:1. Add to this the superior image quality possible only with DLP™ (Digital Light Processing) and a short-focus zoom lens*1 that can project images onto a 60-inch screen from only 1.6 m away, and you have projectors that will meet all your demands for the highest quality: PLUS 's U5 Series of DLP™ technology projectors.

*1: U5-232, U5-132 *2: U5-232 in Bright Mode (B/W) projection

High brightness and contrast give you superior projection quality no matter where you are.

Thanks to a new-generation Texas Instruments DMD (Digital Micromirror Device) chip and a redesign of key optical elements beginning with the color wheel, these projectors achieve a brightness of 2,000/3,000 ANSI lumens*2. And with the contrast ratio upgraded to 2,000:1, images seem even brighter than these specs would indicate. You can project in a bright room without even dimming the lights, and get clear, crisp images in a conference room. *2: U5-232 in Bright Mode (B/W) projection

PLUS expertise in optical technology leverages the strengths of the DLP™ system.

DLP™ technology offers a variety of advantages, such as high picture contrast, precise reproduction of digital signals and stable picture quality without image deterioration. PLUS maximizes these inherent advantages of DLP™ technology through its own inhouse optical expertise. This industry leading expertise has been built on PLUS's years of experience as a pioneer in the design and manufacturing of DLP™ projectors.

Excellent color uniformity and zero convergence problems ensure effective presentations.

The one-chip DLP™ projection system used in PLUS projectors reproduces images through RGB sequential illumination with a color wheel. This allows superb color uniformity, even against solid-color backgrounds. It also ensures perfect color alignment for clear images of small-font text and colorful charts.

Seamless high-resolution imaging means no visible pixelations.

The DMD system, the key element in DLP™ technology, controls images with the backside of each micromirror. Each micromirror corresponds to one pixel. This allows the grid between each micromirror to be less than one micron. Therefore, DLP™ projectors can deliver seamless, smooth, and accurate images.

From lectern to whiteboard, desk to office wall — great picture quality is possible in confined spaces.

The short-focus zoom lens*1 is a revolutionary advance for projectors in the 2 kg class, allowing you to project images onto a 60-inch screen from a distance of only 1.6 m. From a classroom lectern to the whiteboard, or from your desk to the office wall — since you can now use it in confined spaces, the range of applications is broader than ever before. *1: U5-232, U5-132

In addition to XGA models, affordable SVGA models are part of our lineup.

U5-232	True XGA	2,000/3,000 ANSI lumens	Short-focus zoom lens
U5-132	True XGA	2,000 ANSI lumens	Short-focus zoom lens
U5-112	True SVGA	1,600 ANSI lumens	Zoom lens
U5-111	True SVGA	1,600 ANSI lumens	Fixed-focus lens

U5-112

U5-111

U5 Series Specifications

	U5-232 True XGA	U5-132 True XGA	U5-112 True SVGA	U5-111 True SVGA
Projection System	DLP™			
Panel	DMD XGA x 1		DMD SVGA x 1	
Resolution	1024 pixels x 768 pixels		800 pixels x 600 pixels	
Brightness	Normal mode: 2000 ANSI lumens Bright mode: 3000 ANSI lumens (Eco-mode: approximately 20% less brightness)	Normal mode: 2000 ANSI lumens (Eco-mode: approximately 20% less brightness)	Normal mode: 1600 ANSI lumens (Eco-mode: approximately 20% less brightness)	Normal mode: 1600 ANSI lumens (Eco-mode: approximately 20% less brightness)
Contrast Ratio	2000:1 (Full on/off)			
Aspect Ratio	4:3, supports 16:9			
Projection Lens	F2.6-2.9, f= 18.4-22.1 mm 1:1.2 Manual Zoom, Manual Focus		F2.6-2.9, f= 20-24 mm 1:1.2 Manual Zoom, Manual Focus	F2.6, f= 19 mm Manual Focus
Light Resource	200-watt High Performance Compact Lamp			
Color Palette	16.7 million colors			
Projecting Position	Front/Rear, Table/Ceiling			
Projection Distance	1.2-8.0 m		1.2-11.1 m	1.2-10.6 m
Image Size	38"-300" diagonal		28"-300" diagonal	34"-300" diagonal
RGB Signal (Input)	SXGA (Compression), XGA (True), SVGA/VGA (Expansion/True)		XGA (Compression), SVGA (True), VGA (Expansion/True),	
Video Signal	NTSC3.58, NTSC4.43, PAL, PAL_N, PAL_M, PAL60, SECAM, YCbCr (NTSC, PAL), YPbPr (480p, 576p, 1080i, 720p)			
Horizontal Synch Range	15-80 kHz			
Vertical Synch Range	50-85 Hz			
Audio	Mono 0.8-watt			
Terminals (Input)	RGB/YCbCr/YPbPr: Mini D-Sub 15 pin x 1, Composite Video: RCA x 1, S-Video: Mini DIN 4 pin x 1, Audio (RGB/Video): ø3.5 mm Stereo Mini Jack x 1, PC Control: D-Sub 9 pin x 1, Remote Mouse: USB Type B x 1		RGB/YCbCr/YPbPr: Mini D-Sub 15 pin x 1, Composite Video: RCA x 1, S-Video: Mini DIN 4 pin x 1, Audio (RGB/Video): ø3.5 mm Stereo Mini Jack x 1	
Color	Silver			
Dimensions Excluding lens and stand	60 mm (H) x 216 mm (W) x 252 mm (L)		60 mm (H) x 216 mm (W) x 240 mm (L)	60 mm (H) x 216 mm (W) x 240 mm (L)
Weight	2.0 kg	2.0 kg	1.9 kg	1.9 kg
Power Supply	100-240 V AC at 50/60 Hz			
Power Consumption	280 watts (Normal mode), 250 watts (Eco-mode)			
Environment	32-95 F/5-35 C			
On-Screen Display Languages	English/German/French/Italian/Spanish/Swedish/Korean/Chinese/Japanese			
Functions	Full-Auto Adjustment, Digital Keystone Correction (20 degrees), Digital Zoom (8x), Freeze, Mute, Color-B/W Switching, Quick Color Adjustment, Presentation Timer, Security Password	Full-Auto Adjustment, Digital Keystone Correction (20 degrees), Digital Zoom (8x), Freeze, Mute, Quick Color Adjustment, Presentation Timer, Security Password		
Accessories	Lens Cap x 1, IR Remote Control (with Laser Pointer) x 1, AAA Batteries (for Remote Control) x 2, Power Cable (1.8 m) x 1, VGA Cable (Mini D-sub 15 pin/2 m) x 1, S-Video Cable (Mini DIN 4 pin/2 m) x 1, Video Cable (RCA/2 m) x 1, Audio Cable (ø3.5 mm Mini Plug/2 m) x 1, Mini Jack to RCA Adapter (ø3.5 mm Stereo Mini Jack - RCA/0.15 m) x 1, USB Cable (Mini-B - Type A/2 m) x 1, Soft Case x 1, User's Manual (CD-ROM) x 1, User's Manual (Simplified Edition) x 1		Lens Cap x 1, IR Remote Control (Card type) x 1, CR2025 (3V Lithium Battery) x 1 (for Remote Control) , Power Cable (1.8 m) x 1, VGA Cable (Mini D-sub 15 pin/2 m) x 1, S-Video Cable (Mini DIN 4 pin/2 m) x 1, Video Cable (RCA/2 m) x 1, Audio Cable (ø3.5 mm Mini Plug/2 m) x 1, Mini Jack to RCA Adapter (ø3.5 mm Stereo Mini Jack - RCA/0.15 m) x 1, Soft Case x 1, User's Manual (CD-ROM) x 1, User's Manual (Simplified Edition) x 1	
Optional Accessories	Ceiling Mount Kit, User-Replaceable Lamp Unit			

* YPbPr signals from some DVD and Pay Per View sources are not available.

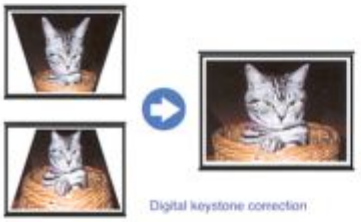
ity large screen images for.

U5-232, U5-132

A variety of convenient functions help you make the most effective presentations.

Easy Setup

Auto-source: Identifies and projects RGB and video input sources automatically.
Auto-adjustment: Automatically tunes the RGB phase, clock frequency, and resolution to achieve the optimal image.
One-touch foot adjustment: Easily adjusts the position of the projector using front foot adjuster.
Digital keystone correction (vertical): Image skewing resulting from a screen that is out of vertical alignment with the projector (keystoning) can be corrected digitally.



Digital keystone correction

Special Features for Presentations

Presentation timer: Indicates the remaining presentation time on screen, and allows you manage time without keeping an eye on your watch.
Digital zoom (8x): Magnifies any portion of the projected image, making small characters and numbers easy to read.
Remote control with remote mouse function: The remote control can be used to control your computer, and it is also equipped with a laser pointer (U5-132, U5-232).
Full-function remote-control card: This compact and convenient remote is a standard accessory with the U5-112 and U5-111 models.
Eco-mode: Extends the lamp life by reducing the brightness to about 80% of the normal mode.

Presentation timer
The blue gauge indicates the remaining time.

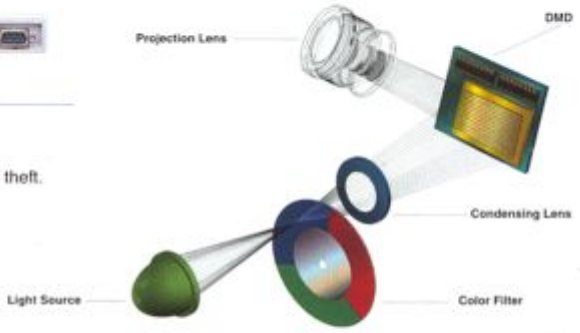
Remote control (Card type)

Remote control with laser pointer

High-resolution image reproduction

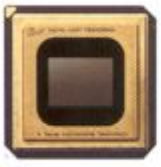
Rich selection of input devices: Projectors are compatible with a variety of input source modes, beginning with analog RGB.
Compatible with progressive DVD input (480p, 576p) and HDTV broadcast (1080i, 720p): With the component video cable you can input progressive DVD and HDTV (1080i, 720p) signals. A 16:9 aspect ratio is also supported.
Line-doubling function: I-P conversion makes possible even smoother reproduction of video images.

Terminals (U5-232, U5-132)



Double security

Security password: Projectors can be set to require the input of a password at startup.
We recommend affixing a label to your projector indicating that it is password-protected to prevent tampering or theft.
Security slot: This feature accommodates the use of third-party security cable locks.



Business projectors enter the DLP™ era

PLUS was one of the first companies to see the enormous potential in the DLP™ system, marketing its first DLP™ projector based on a single-chip DMD in 1998. Since that time we have used the strengths of DLP™ technology to offer a variety of models that have bridged the gap between compact size and high brightness and image quality, creating a new standard: the projector as a highly portable "mobile tool." PLUS is currently the top manufacturer of DLP™ projectors in Japan in terms of market share*.

◀ DMD (Digital Micromirror Device)

*Sales results from April 2002 to March 2003. (Study by Fuji Chimera Research Institute, Inc., 2002)

PICTURE BY DLP

Iruma Factory of PLUS Vision Corp. has ISO 9001 certification.
Certificate No. 12 100 17398 TMS

Iruma Office/Iruma Factory of PLUS Vision Corp. has ISO 14001 certification.
Certificate No. NQE-0210118A

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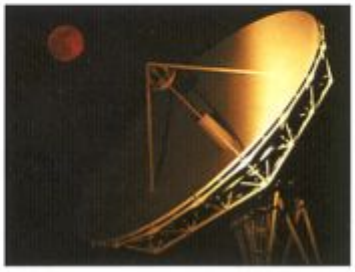
U5 Series
Digital Projectors

Which Image Quality Do You Want?

A: Image delivered by a projector with a 2000:1 contrast ratio

B: Image delivered by a projector with the same brightness, but a 15% lower contrast ratio

C: Image delivered by a projector with the same brightness, but a 30% lower contrast ratio

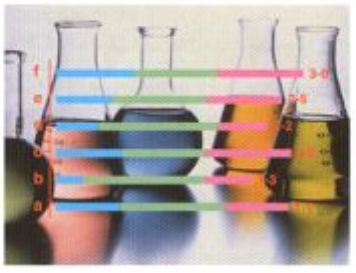


A: Image delivered by a projector with a 2000:1 contrast ratio

B: Image delivered by a projector with the same brightness, but a 15% lower contrast ratio

C: Image delivered by a projector with the same brightness, but a 30% lower contrast ratio

A: Image delivered by a projector with a 2000:1 contrast ratio



B: Image delivered by a projector with the same brightness, but a 15% lower contrast ratio

C: Image delivered by a projector with the same brightness, but a 30% lower contrast ratio

Contrast ratio determines the quality of a projected image. High brightness alone is not enough.

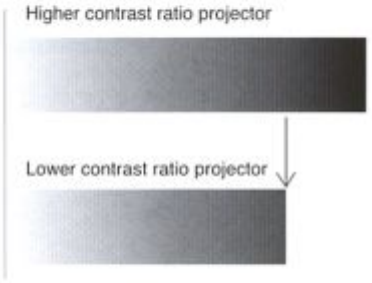
High Contrast Ratio Is the Key to Crisp, Sharp Image Quality.

Contrast ratio is the key factor in sharpness, a crucial quality for projectors used in business and education where superior visibility is required for charts and small-font documents. The U5 series offers superior contrast performance enabled by the DLP™ projection system.
This PLUS projector delivers a high contrast ratio of 2000:1; and thus the sharpest image quality.

Crisp, Sharp Image Quality: Reason 1

Black looks truly black.

A high-brightness but low-contrast projector displays a whitish image with poor visibility. Visibility largely depends on how dark black is reproduced, and is critical in projecting business and education materials which involve heavy use of black text and lines. Higher contrast means improved visibility and ensures a crisp image with pure black text.



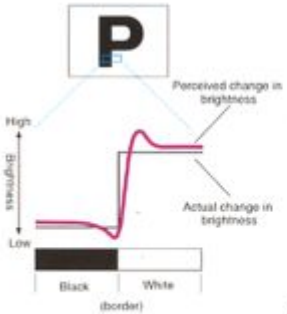
Contrast ratio influences the range of tonal gradation a projector can express.

Crisp, Sharp Image Quality: Reason 2

Pictures appear clear and vibrant.

Because of an optical illusion called the Mach band effect, the human eye perceives a change in brightness between two neighboring pixels more intensely than the actual change in the amount of light. High-contrast projectors accurately reproduce the difference between the lightest and darkest portions of an image, providing crisp pictures. Look at the photos below. The photo with the black border appears sharper than the photo with the white border, even though the photos themselves are actually the same.

The diagram below describes how the human eye perceives the change in brightness between black and white.



Crisp, Sharp Image Quality: Reason 3

Charts set against photos are delivered with excellent clarity.

Combined images of colorful charts and photos sometimes look flat and unclear when projected, even if they look beautiful on the computer screen. But this never happens with PLUS projectors. Our projectors' high-contrast ratio ensures rich tonal gradations, allowing a chart to stand out sharply from a background photo.

Higher contrast ratio projector

Lower contrast ratio projector

* All the photos are conceptual renderings.
* DLP and the DLP mega3on are trademarks of Texas Instruments.
* DMD, developed by Texas Instruments, is an ultraprecision electronic component alternative to LCD.