VIDEO XTREME™ PORTFOLIO

VX-22d, VX-44d, VX-55d

THX CERTIFIED* HOME THEATER AND HOME CINEMA PROJECTORS

THX

RUNCO

THE WORLD'S FINEST HOME THEATER PRODUCTS™

VIDEO XTREME™ PORTFOLIO

Runco further solidifies its leadership role with the introduction of the THX certified* VX-22d, VX-44d and VX-55d projectors. These overachievers combines state of the art 1920 x 1080 SuperOnyx™ DLP™ resolution with advanced 3-chip engineering. The results are simply stunning, with jaw-dropping images that must be seen to be believed!

Runco has taken 1080p performance to a new level with these machines and harnessed the brightness and contrast capabilities inherent in 3-chip light engine design for a powerful presentation. They are all supplied with Runco's latest, next generation all digital DHD Controller, featuring advanced Vivix II™ video processing, superb scaling and aspect ratio control, to take full advantage of these engineering advances.

These marvels of technology are enhanced further by motorized AxiShift™ horizontal and vertical lens shift capability for maximum installation flexibility. Additional features include Runco's newest cinema-quality CinOptx™ lenses and O-Path™ light path enhancement technology for stunningly sharp video.

The VX-22d is offered with a selection of four Triton™ zoom lenses covering a broad range of throw distances, plus two fixed short throw lenses for rear projection applications. The VX-44d and VX-55d are available with four different, world class Telesto™ zoom lens options as well as a fixed, short throw lens for rear projection.

The VX-44d and VX-55d utilize an advanced Xenon lamp illumination system to bring astoundingly high performance and ultra high resolution to the very best home theaters on the planet. The VX-44d features an impressive 1000W Xenon lamp, while the VX-55d uses a tremendously powerful 1.2 kW Xenon lamp to produce Runco's brightest 1080p pictures ever.

Runco's exclusive, award winning CineWide™ and CineWide™ with AutoScope™ technology options are available with all models for cinema quality 2.35:1 presentations, eliminating those annoying black bars and ensuring every pixel of resolution is preserved.

VX VIDEO XTREME ™

VX-22d

O-Path™ CinOptx™

O-Path™ Technology and CinOptx™ Premium Grade Lens Systems are featured on the Video Extreme Portfolio projectors. O-Path efficiently collimates the light energy from the lamp though the optical path to maximize light output and eliminate stray light that can reduce brightness and compromise contrast ratio performance. The broad variety of lenses in the CinOptx family are designed to bring images faithfully to the screen without the geometric and color spectrum aberrations common among "production" lenses.

CSMS™

Runco International has carefully developed a full set of specification standards for our video projectors that is founded upon more realistic and easier to understand criteria for expressing the light output or brightness capability of a display device, as well as its contrast ratio. The Cinema Standards Measurement System™ was developed based on the actual experience one has in a movie theater, providing the consumer with an objective reference point to compare specifications.

CineWide™ Bringing Hollywood Home™

Runco's exclusive CineWide™ and CineWide with AutoScope™ technology ensures uncompromised widescreen reproduction of movies originally filmed in the CinemaScope 2.35:1 format. Through a combination of software, electronics and anamorphic optics, each projector is able to use the full pixel array on its DMD chips, thereby producing a 2.35 image with enhanced resolution and increased brightness. No resolution is lost to annoying black bars.

isf®

The new Video Xtreme Portfolio products incorporate the Imaging Science Foundation's "ISF 3c™" (Certified Calibration Configuration) setup and calibration standards in projector GUI menus to facilitate picture quality conforming to the highest standards in the industry.

THX®

THX™ has long been recognized as the leader in both the finest movie theater presentations and superb home theater performance. The THX Video Display Program has established the industry's highest standards of video performance for home video display products. Runco is proud to be the first home video display manufacturer to meet these demanding standards and offer THX Certified products to our customers. The THX moniker attests to the exacting performance of these products and your ability to bring Hollywood home without compromise.

CINEWIDE™ AND CINEWIDE WITH AUTOSCOPE™

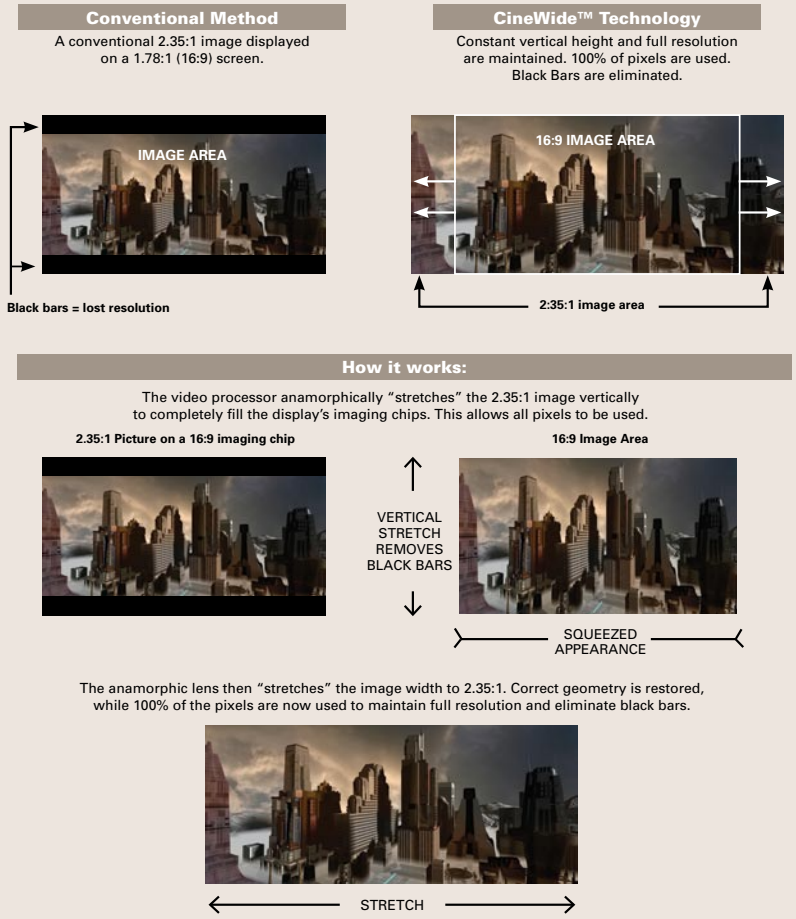
NO MORE BLACK BARS ABOVE AND BELOW THE PICTURE!

Runco's award winning development of CineWide™ and CineWide with AutoScope™ technology has created a revolution in faithful movie reproduction, for the first time transforming *home theater* into *home cinema*.

This technology provides uncompromised widescreen reproduction of movies originally filmed in the CinemaScope™ 2:35:1 format. It maintains constant vertical height on the screen just as in a movie theater. When a viewer transitions from 1.78:1 (16:9) program material to superwide 2.35:1, the image simply gets wider while full screen height is maintained, eliminating black bars.

This is done through an ingenious combination of software, electronics and precision anamorphic optics. With the AutoScope option, the anamorphic lens is motorized and remote controlled.

With CineWide the projection system is able to use the full pixel array on its SuperOnyx™ DMD™ chips, thereby producing a 2.35:1 image with enhanced resolution and increased brightness. No resolution or image area is lost to useless black bars on the top and bottom of the screen that contain no picture information.



CineWide requires the use of a 2.35:1 or similar aspect ratio superwide format screen.

CineWide and AutoScope technology is the talk of the industry.
These are among the awards and acknowledgements we have already received.

2005 Overall Most Creative New Product

Best Video Product 2005

Manufacturer's Excellence Award Best New Product 2005

Electronic House Product of the Year 2005

Best New Product 2005

DHD™ CONTROLLER

The Video Xtreme Portfolio projection systems include the DHD controller/processor. The DHD is engineered with advanced, Vivix II™ digital video processing to produce stunning video imagery, even elevating standard NTSC material to near high definition levels. Superb scaling capabilities output all signals at the native display resolution of the projectors.

DHD Controller for VX-22d

The DHD provides for a pure digital signal path from input to output and resides outboard of the projector chassis. This simplifies installation by placing the DHD and its associated input connections in the equipment rack. Only one digital signal cable is then required to the projector. These projection systems can also take full advantage of Runco's exclusive LiveLink™ digital cable solution to preserve HD signal quality and bandwidth over much longer runs than conventional digital signal cables.

DHD CONTROLLER SPECIFICATIONS

Aspect Ratios:	4:3, 16:9, Letterbox, VirtualWide™, Cinema, 2.35 Cinema
Video Standards:	NTSC, PAL, ATSC
Output Resolution:	1080P
Outputs:	**VX-22d:** (1) DVI-D Dual Link **VX-44d, VX-55d:** (1) HDMI
Inputs:	**VX-22d:** (1) Composite; (1) S-Video; (1) HD Video, R (Pr), G (Y), B (Pb), H, V – RCA connectors; (1) HD Video/Computer, R (Pr), G (Y), B (Pb), H, V – BNCs; (1) HD Video/Computer – 15-pin D-Sub connector; (2) HDMI with HDCP **VX-44d/VX-55d:** (1) Composite; (2) S-Video; (1) Component; (2) HD-R (Pr), G (Y), B (Pb), H, V; (2) HDMI

Communication Control Ports:	Discrete infrared remote Serial commands via RS-232 Front-panel controls
Screen Trigger/ Masking Outputs:	(3) +12 VDC, each rated at 750 mA and thermal fuse-protected
Bandwidth:	150 Mega Samples per Second (MSPS)
Power Requirements:	100 – 240V AC (auto sensing) 50/60 Hz, 160W
Operating Environments:	41°– 95° F, (5° – 35° C), 0% – 90% Humidity (non-condensing)

Dimensions: (w/out feet)	Width: 17 1/2 in. (444.50 mm), Depth: 11 3/16 in. (284.10 mm), Height: 3 3/4 in. (95.25 mm), Weight: 13 lbs. (5.9 kg)
Included Accessories:	Rack mounting brackets
Regulatory Approvals:	Complies with FCC, CE, C-Tick
Limited Warranty:	(2) Two years parts and labor from the date of delivery to the end user

Specifications:	VX-22d	VX-44d	VX-55d
Projector Type:	Digital Light Processing™ (DLP™), 3-Chip, 16:9 SuperOnyx™ DMD™	Digital Light Processing™ (DLP™), 3-Chip, 16:9 SuperOnyx™ DMD™	Digital Light Processing™ (DLP™), 3-Chip, 16:9 SuperOnyx™ DMD™
Native Resolution:	1920x1080 (1080p)	1920x1080 (1080p)	1920x1080 (1080p)
Aspect Ratios:	Determined by Supplied Video Processor	Determined by Supplied Video Processor	Determined by Supplied Video Processor
Video Standards:	Determined by Supplied Video Processor	Determined by Supplied Video Processor	Determined by Supplied Video Processor
DTV Compatibility:	480p, 720p, 1080i, 1080p	480p, 720p, 1080i, 1080p	480p, 720p, 1080i, 1080p
Picture Size (16:9 screens):	Recommended Width: 80 – 180 in. Maximum Width: 250 in.	Recommended Width: 72–192 in. Maximum Width: 300 in.	Recommended Width: 92–240 in. Maximum Width: 360 in.
Throw Distance Factor x Screen Width: ***(All CineWide Throws are specified using a 2.35:1 screen)***	**Triton Lens Options:** **A-1:** Fixed 0.70 (for rear-screen applications) **A-2:** Fixed 1.155 (for rear-screen applications) **B:** Zoom 1.40–1.81 **C:** Zoom 1.85–2.53 (with CineWide (McKinley lens only): 1.40–1.90) **D:** Zoom 2.57–4.20 (with CineWide (McKinley lens only): 1.90–3.15) **E:** Zoom 4.30–7.00 (with CineWide (Rainier lens only): 3.14–5.50)	**Telesto Lens Options:** **B:** Zoom 1.37–1.64 **C:** Zoom 1.69–2.27 **D:** Zoom 2.38–4.00 (with CineWide (McKinley lens only): 1.79–3.09) **E:** Zoom 4.18–6.60 (with CineWide (Rainier lens only): 3.18–5.06)	**Telesto Lens Options:** **B:** Zoom 1.37–1.64 **C:** Zoom 1.69–2.27 **D:** Zoom 2.38–4.00 (with CineWide (McKinley lens only): 1.79–3.09) **E:** Zoom 4.18–6.60 (with CineWide (Rainier lens only): 3.18–5.06)
Horizontal and Vertical Offset Without CineWide Option: ***(Note: With CineWide option offsets vary per lens. Please contact Runco Technical Support for more information.)***	Varies per lens option: **Triton A-1:** Vertical- 10% up, 10% down; 5% Horizontal **Triton A-2:** Vertical- 31% up, 71% down; 17% Horizontal **Triton B:** Vertical- 30% up, 61% down; 12% Horizontal **Triton C:** Vertical- 32% up, 62% down; 12% Horizontal **Triton D:** Vertical- 28% up, 65% down; 12% Horizontal **Triton E:** Vertical- 30% up, 63% down; 12% Horizontal	Varies per lens option: **Telesto B:** Vertical- 60% up, 60% down; 22% Horizontal **Telesto C:** Vertical- 60% up, 60% down; 22% Horizontal **Telesto D:** Vertical- 60% up, 60% down; 20% Horizontal **Telesto E:** Vertical- 60% up, 60% down; 21% Horizontal	Varies per lens option: **Telesto B:** Vertical- 60% up, 60% down; 22% Horizontal **Telesto C:** Vertical- 60% up, 60% down; 22% Horizontal **Telesto D:** Vertical- 60% up, 60% down; 20% Horizontal **Telesto E:** Vertical- 60% up, 60% down; 21% Horizontal
Light Output:	CSMS** Specifications: Home Theater Calibration: 1391 ANSI Lumens; 58.7 Foot-Lamberts (fL); 2850 ANSI Lumens†	CSMS** Specifications: Home Theater Calibration: 2780 ANSI Lumens; 87 Foot-Lamberts (fL); 4000 ANSI Lumens†	CSMS** Specifications: Home Theater Calibration: 3475 ANSI Lumens; 107 Foot-Lamberts (fL); 6000 ANSI Lumens†
Contrast Ratio:	CSMS** Contrast Ratio: 321:1; 4000:1 ANSI	CSMS** Contrast Ratio: 230:1–280:1; 1500:1–2000:1 ANSI	CSMS** Contrast Ratio: 222:1–278:1; 1500:1–2000:1 ANSI
Lamp:	300W	1000W Xenon lamp module	1.2kW Xenon lamp module
Lamp Life:	2000 hours	1000 Hours	1000 Hours
Inputs:	(1) DVI-D Dual Link	(1) DVI with HDCP	(1) DVI with HDCP
12V Output:	See Controller for Specifications	See Controller for Specifications	See Controller for Specifications
Power Requirements:	100 – 240V AC, 50/60 Hz, 530 W	100-240V AC, 50/60Hz, 1650 W	200-240V AC, 50/60Hz, 2100 W *(Note: Will not operate with 110VAC)*
Operating Environments:	40 to 95ºF (5 to 35ºC); 20-80% humidity (non-condensing)	40 to 95ºF (5 to 35ºC); 20-80% humidity (non-condensing)	40 to 95ºF (5 to 35ºC); 20-80% humidity (non-condensing)
Dimensions (w/o feet):	Width: 20 7/8 in. (531 mm) Depth: 29 5/8 in. (753 mm) Height: 10 1/8 in. (258 mm) Weight: 99.21 lbs. (45kg)	Width: 29 1/8 in. (740 mm) Depth: 28 1/4 in. (718 mm) Height: 12 1/4 in. (311 mm) Weight: 120 lbs. (54.43kg) (without lens)	Width: 29 1/8 in. (740 mm) Depth: 28 1/8 in. (718 mm) Height: 12 1/4 in. (311 mm) Weight: 130 lbs. (58.97kg) (without lens)
Regulatory Approvals:	Complies with FCC Class B, CE, C-Tick	Complies with FCC Class B, CE, C-Tick	Complies with FCC Class B, CE, C-Tick
Limited Warranty:	Projector: (2) Two years parts and labor from the date of delivery to the end user. Lamp Warranty: 1000 hours or (6) Six months, which ever comes first.	Projector: (2) Two years parts and labor from the date of delivery to the end user. Lamp Warranty: 1000 hours or (6) Six months, which ever comes first.	Projector: (2) Two years parts and labor from the date of delivery to the end user. Lamp Warranty: 1000 hours or (6) Six months, which ever comes first.

† **ANSI Lumen specification:**
This is the typical projector luminosity (brightness) specification found in most sales literature. This measurement is included in RUNCO literature to allow for direct comparison with other manufacturer's projectors. These measurements can be taken at 9,000 to 13,000º Kelvin to get expected performance data when the projector is used in professional, commercial, and industrial displays.

****CSMS Home Theater Calibration ANSI Lumen Specification:**
These measurements are taken from the projector as set up in a home theater environment. The projector is calibrated to ISF specifications including setting the color temperature to 6500º Kelvin, the standard for reproducing video.

****CSMS Home Theater Calibration foot-Lambert (fL) Specification:**
This is the unit of measurement used in commercial movie theaters to express image brightness. The Society of Motion Picture and Television Engineers (SMPTE) specifies 16 fL as the target image brightness for film-based projectors using an open gate (without film in the projector). More importantly, today SMPTE specifies 12 fL as the target image brightness in Digital Cinema theaters using DLP™ technology. The foot-Lambert is dependant on screen size, screen gain, and projector light output.

All measurements are made at RUNCO to ANSI/NAPM IT7.228-1997 specifications using the Photo Research PR-650 SpectraColorimeter and Minolta LS-100 Luminance Meter, Video Essentials test DVD, and a Da-Lite 1.5 gain, 100-inch wide screen. The projector is calibrated to a color temperature of 6500º Kelvin and has a minimum of 150 hours of usage.

Engineered for ISF® calibration.

**THX certification is pending final testing and approval by THX, Ltd.*

Specifications are subject to change without notice.
Optional ceiling bracket available.

Theater installation photo courtesy of Aurant, Salt Lake City, UT

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