SONY
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7000 XGA
Installation Projector

VPL-FX500L

3LCD

BrightEra™
Long Lasting Optics

VPL-FX500L

Peace of Mind Operation, Installation Flexibility and Trouble-free Maintenance

With its outstanding image quality, the VPL-FX500L delivers amazing installation flexibility and trouble-free maintenance in challenging installations. The projector also offers peace of mind with its twin-lamp system which eliminates downtime.

This VPL-FX500L has a very wide lens shift range, enabling excellent flexibility when installing the unit. Lamp and air filter maintenance cycles are synchronised and are exceptionally long compared to single and dual-lamp systems, cutting maintenance time and cost. In addition, the projector is designed to deliver a low total cost of ownership, and includes eco-friendly features such as long-lasting lamps and low power consumption.

Packing the most advanced projector technologies into an unobstrusive design, the VPL-FX500L is an excellent choice, delivering a dramatic brightness of 7,000 lumens and high-quality images with XGA resolution.

Features

High Picture Quality

High Picture Quality and Bright Images
By combining a new-generation optical system that uses Sony's BrightEra™ Long Lasting Optics technology* and a 3LCD projection system, the VPL-FX500L offers high picture quality in XGA (1024 x 768) resolution and a high brightness of 7000 lumens.

* BrightEra with Long Lasting Optics is the brand name for a new generation of optical system, which is a more advanced version of Sony's original BrightEra technology. In addition to the adoption of LCD panels that have pixels with large aperture ratios and inorganic alignment layers, BrightEra with Long Lasting Optics technology also uses an inorganic layer for polarisation plates to greatly enhance reliability.

BrightEra™
Long Lasting Optics

Unobstrusive Design
The VPL-FX500L showcases a newly designed low profile chassis, so the projector appears to blend into the ceiling on which it is mounted. The connector panel is located on the front of the unit so its cables cannot be seen by the audience.

Optional High-resolution Lenses
The optional VPLL-Z4015, VPLL-Z4019, VPLL-Z4025 and VPLL-Z4045 are known as All Range Crisp Focus (ARC-F) lenses. Each with a large diameter and fine pitch, they ensure crisp pictures.

ARC-F Lens

Normal Lens

12-bit 3D Gamma Correction
The VPL-FX500L incorporates 12-bit 3D Gamma Correction circuitry to perform highly accurate gamma correction, achieving smoother gradations and a richer grey-scale.

12-bit

10-bit

I/P Conversion and Film Mode
The video signal processing technology that Sony has incorporated in the VPL-FX500L offers I/P conversion and 2-3 pull-down to generate high-quality images with outstanding clarity.

Excellent Total Cost of Ownership and ECO-friendly Design
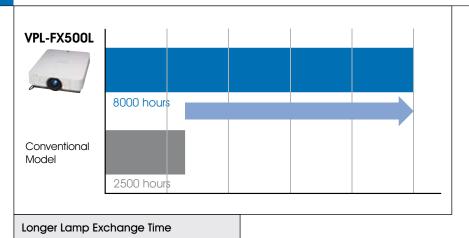**Long-lasting Lamp**
By incorporating newly developed high-performance lamps and advanced lamp-control technology, the VPL-FX500L delivers a recommended lamp replacement time of approximately 8,000 hours.*

* In Standard mode (with two lamps).

Fail Safe Twin-lamp System
The VPL-FX500L's twin-lamp system provides peace of mind and economical operation. One lamp can output a total of 7,000 lumens but a second lamp is built in to provide automatic backup should the primary lamp fail. The two lamps can be alternately used, achieving a recommended lamp replacement time of approximately 8,000 hours, saving maintenance time and cost.

Low Power Consumption
The VPL-FX500L offers remarkably low power consumption, allowing users to make significant savings on electricity costs.

VPL-FX500L

8000 hours

Conventional Model

2500 hours

Longer Lamp Exchange Time

Fail Safe Twin-lamp System

ECO MODE

Eco Mode optimises combinations of the following functions.
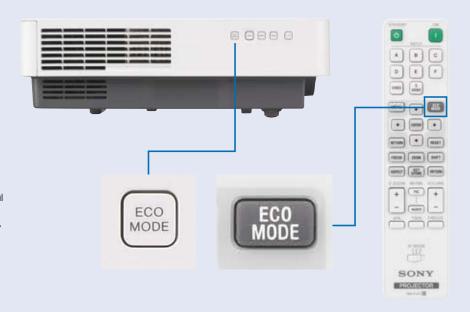
- **Lamp mode**
  "High / Standard"

- Saving the consumption of lamp wattage.

- **Power Saving mode**
  "Lamp Cutoff / Projector Standby"

- When set to "On", the projector goes into power saving mode if there is no operation for 10 minutes without any signal input.

    Lamp Cutoff ; The lamp goes off. The lamp lights again when a signal is input or any key is pressed.

    Projector Standby ; "Standard / Low" In "Standard", power consumption is 12W and is reduced to 0.3W in "Low"*.

*Network function cannot be operated

ECO MODE Key
With a single push of the ECO MODE key on either the projector or the supplied Remote Commander™ unit, the user can select an energy-saving setting in the ECO Mode menu.
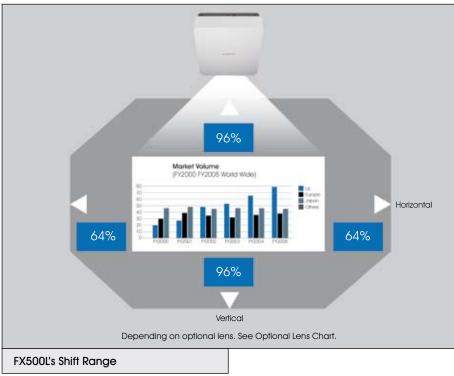
Installation Advantages

Lens Shift Function

The VPL-FX500L is equipped with a lens shift function which is controlled from the projector control panel or the supplied Remote Commander unit. Using this function, the position of the projected image can be moved vertically by -96% to +96% and horizontally by -64% to +64%. Images can be easily adjusted to the desired settings during installation.

96%

Horizontal

64%   64%

96%

Vertical

Depending on optional lens. See Optional Lens Chart.

FX500L's Shift Range

Features

Trouble-free Maintenance

Easy Lamp and Filter Maintenance

When the lamps and air filter are due for replacement, a timely message is clearly displayed on screen. The lamps and air filter are accessible from both sides, so their replacement can be performed without uninstalling the projector. Like the lamps, the replacement filter has an approximate 8,000-hour replacement cycle in standard mode. This synchronised replacement is achieved, even in tough environments, by a Quad Filter System Plus, saving maintenance time and cost.

The Quad Filter System Plus is composed of four pleated electrostatic filters This substantial unit is designed to maintain high performance for a long period of time, requiring air filter replacement only when lamp replacement is also required (included with replacement lamp).
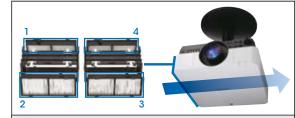
Choice of Sony Lenses

Various optional zoom lenses are available for the VPL-FX500L which can be used for many different applications.

Centered Lens Design

The centered lens provides symmetry for a balanced installation and makes set up very simple.

One-way Intake with Quad Filter System Plus

To keep all internal parts clean, the projector design unifies air intake through just one hole which is equipped with a Quad Filter System Plus.

Lamp Replacement

Air Filter Replacement

One-way Intake with Quad Filter System Plus

Presentation Functions

Freeze Function
Freezes the projected image

Digital Zoom Function
Enlarges a section of the image

Picture/Audio Muting
Mutes the image/audio

Other Features

Quiet Noise Operation
Low frequency sound

Closed Captioning
Official teletext broadcasting, developed by the NCI, USA

Security Pack
Security lock (password and mechanical), security bar, panel key lock and security label

Test Pattern Key
For easy screen adjustment

ID Mode
For individual control of multiple projectors

Audio Monitor Function
Allows audio to be selected based on input selection

Smart APA
Auto pixel alignment

Direct Power On/Off
Direct power control using the circuit breaker on the switch board

High Altitude Mode
For projector operation at high altitude

Network and Control
Controls and monitors projector status
Compatible with various control systems

Ziris Manage (optional)
Monitoring and reporting software for all Sony projectors and displays within a network

PrimeSupport

All Sony Professional's business projectors sold into the EU, Norway and Switzerland come supplied with a 3 year PrimeSupport pack. This offers unique services and benefits over and above standard warranty:-

3 Years Cover
Freephone telephone helpdesk support **(00800 7898 7898)** in 5 languages.
Collection, repair and return anywhere in EU, Norway and Switzerland.

In addition, optional PrimeSupport Plus packs can be purchased which can further enhance the 3 year support to give extra peace of mind:-

• A 2 year extension to give long-term assurance of expert support and technical assistance
• Provision of a loan unit throughout the 3 year of PrimeSupport cover to minimise disruption to business
• Free replacement lamp throughout the 3 year PrimeSupport cover to reduce unexpected running costs

Optional Accessories

LMP-F330	**PSS-630**	**PSS-630P**	**PK-F500LA1**	**PK-F500LA2**
Projector Lamp (Replacement filters included)	Projector Suspension Support	Projector Suspension Support Joint Pole	Projection Lens Adapter	Projection Lens Adapter

Optional Lenses

Premium Series

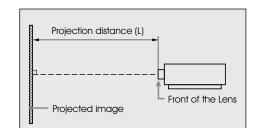| Projection Lens	VPLL-Z4015	VPLL-Z4019	VPLL-Z4025	VPLL-Z4045
Throw ratio	2.06:1 to 2.72:1	2.67:1 to 3.42:1	3.36:1 to 6.23:1	6.19:1 to 10.72:1
Zoom / Focus	Powered / Powered	Powered / Powered	Powered / Powered	Powered / Powered
Lens shift	Vertical: Upward 86% to Downward 86% Horizontal: Right 57% to Left 57%	Vertical: Upward 96% to Downward 96% Horizontal: Right 64% to Left 64%	Vertical: Upward 96% to Downward 96% Horizontal: Right 64% to Left 64%	Vertical: Upward 96% to Downward 96% Horizontal: Right 64% to Left 64%
Aperture	f/2.20 to 2.60	f/1.70 to 2.10	f/2.20 to 3.10	f/2.20 to 3.60
Screen size*	40" to 600"	40" to 600"	40" to 600"	60" to 600"
Dimensions	W 148 x H 133 x D 231 mm (W 5 13/16 x H 5 1/4 x D 9 3/32 in)	W 148 x H 133 x D 212 mm (W 5 13/16 x H 5 1/4 x D 8 11/32 in)	W 148 x H 133 x D 243 mm (W 5 13/16 x H 5 1/4 x D 9 9/16 in)	W 148 x H 133 x D 235 mm (W 5 13/16 x H 5 1/4 x D 9 1/4 in)
Mass	3.00 kg / 6 lb 10 oz	3.06 kg / 6 lb 12 oz	2.80 kg / 6 lb 3 oz	3.00 kg / 6 lb 10 oz

* Viewable area, measured diagonally.

Optional Lenses

Value Series

Projection Lens	VPLL-FM22PK	VPLL-ZM32PK	VPLL-ZM42PK	VPLL-ZP41PK
	PK-F500LA2 Projector Lens Adapter	PK-F500LA2 Projector Lens Adapter	PK-F500LA2 Projector Lens Adapter	PK-F500LA1 Projector Lens Adapter
Throw ratio	0.89:1	1.48:1 to 1.62:1	1.87:1 to 2.30:1	2.53:1 to 3.08:1
Zoom / Focus	- / Manual	Manual / Manual	Manual / Manual	Powered / Powered
Lens shift	-	Vertical: Upward 50% to Downward 50% Horizontal: Right 32% to Left 32%	Vertical: Upward 50% to Downward 50% Horizontal: Right 32% to Left 32%	Vertical: Upward 96% to Downward 96% Horizontal: Right 64% to Left 64%
Aperture	f/2.00	f/1.76 to 1.96	f/1.74 to 2.28	f/1.70 to 2.00
Screen size*	40" to 300"	40" to 300"	40" to 300"	40" to 300"
Dimensions	W 88 x H 88 x D 169 mm (W 3 15/32 x H 3 15/32 x D 6 21/32 in)	W 88 x H 88 x D 159 mm (W 3 15/32 x H 3 15/32 x D 6 1/4 in)	W 88 x H 88 x D 159 mm (W 3 15/32 x H 3 15/32 x D 6 1/4 in)	W 117 x H 110 x D 198 mm (W 4 19/32 x H 4 11/32 x D 7 25/32 in)
Mass	0.95 kg / 2 lb 2 oz	1.00 kg / 2 lb 3 oz	0.65 kg / 1 lb 7 oz	1.46 kg / 3 lb 3 oz

Projection Lens	VPLL-ZM102PK	VPLL-ZM101PK
	PK-F500LA2 Projector Lens Adapter	PK-F500LA1 Projector Lens Adapter
Throw ratio	3.35:1 to 4.92:1	4.47:1 to 6.58:1
Zoom / Focus	Manual / Manual	Manual / Manual
Lens shift	Vertical: Upward 50% to Downward 50% Horizontal: Right 32% to Left 32%	Vertical: Upward 96% to Downward 96% Horizontal: Right 64% to Left 64%
Aperture	f/2.04 to 2.57	f/2.00 to 2.60
Screen size*	40" to 300"	40" to 300"
Dimensions	W 88 x H 88 x D 198 mm (W 3 15/32 x H 3 15/32 x D 7 25/32 in)	W 100 x H 100 x D 222 mm (W 3 15/16 x H 3 15/16 x D 8 3/4 in)
Mass	1.50 kg / 3 lb 5 oz	1.81 kg / 3 lb 16 oz

* Viewable area, measured diagonally.

Projection distance (L)

Front of the Lens

Projected image

Installation Diagram

Projection Distance

Projection Image Size		Projection Distance (L)									
Diagonal	Width x Height	VPLL-FM22PK	VPLL-ZM32PK	VPLL-ZM42PK	VPLL-ZP41PK	VPLL-ZM102PK	VPLL-ZM101PK	VPLL-Z4015	VPLL-Z4019	VPLL-Z4025	VPLL-Z4045
2.03 m (80-inch)	1.63 x 1.22 (64 x 48)	1.42 (56)	2.39 – 2.64 (94 – 103)	3.05 – 3.82 (120 – 150)	4.11 – 5.01 (162 – 197)	5.40 – 8.01 (213 – 315)	7.29 – 10.71 (287 – 421)	3.22 – 4.24 (127 – 167)	4.19 – 5.35 (165 – 210)	5.26 – 9.74 (207 – 383)	9.69 – 16.78 (382 – 660)
2.54 m (100-inch)	2.03 x 1.52 (80 x 60)	1.79 (71)	3.00 – 3.31 (118 – 130)	3.82 – 4.79 (151 – 188)	5.16 – 6.29 (203 – 247)	6.79 – 10.05 (268 – 395)	9.16 – 13.44 (361 – 529)	4.05 – 5.33 (160 – 210)	5.27 – 6.72 (208 – 264)	6.61 – 12.21 (261 – 481)	12.17 – 21.03 (479 – 828)
3.05 m (120-inch)	2.44 x 1.83 (96 x 72)	2.16 (85)	3.61 – 3.98 (143 – 157)	4.60 – 5.76 (181 – 227)	6.20 – 7.57 (245 – 298)	8.18 – 12.09 (323 – 476)	11.03 – 16.17 (435 – 636)	4.89 – 6.42 (193 – 252)	6.35 – 8.08 (250 – 318)	7.97 – 14.69 (314 – 578)	14.64 – 25.28 (577 – 995)
3.81 m (150-inch)	3.05 x 2.29 (120 x 90)	2.72 (107)	4.53 – 4.99 (179 – 196)	5.76 – 7.22 (227 – 284)	7.77 – 9.49 (306 – 373)	10.27 – 15.16 (405 – 597)	13.84 – 20.26 (545 – 797)	6.13 – 8.05 (242 – 317)	7.96 – 10.14 (314 – 399)	10.00 – 18.40 (394 – 724)	18.35 – 31.66 (723 – 1,246)
5.08 m (200-inch)	4.06 x 3.05 (160 x 120)	3.64 (143)	6.06 – 6.68 (239 – 263)	7.70 – 9.64 (303 – 379)	10.39 – 12.69 (409 – 499)	13.75 – 20.27 (542 – 798)	18.53 – 27.09 (730 – 1,066)	8.21 – 10.77 (324 – 424)	10.66 – 13.56 (420 – 533)	13.38 – 24.58 (527 – 968)	24.54 – 42.29 (967 – 1,665)

Unit: m (inches)

Preset Signal Chart

Computer Signal

Resolution	fH [kHz] / fV [Hz]	Input Connector	
		RGB	DVI-D
640 x 350	31.5/70	●	
	37.9/85	●	
640 x 400	31.5/70	●	
	37.9/85	●	
640 x 480	31.5/60	●	●
	35.0/67	●	
	37.9/73	●	
	37.5/75	●	
	43.3/85	●	
800 x 600	35.2/56	●	
	37.9/60	●	●
	48.1/72	●	
	46.9/75	●	
	53.7/85	●	
832 x 624	49.7/75	●	
1024 x 768	48.4/60	●	●
	56.5/70	●	
	60.0/75	●	
	68.7/85	●	
1152 × 864	64.0/70	●	
	67.5/75	●	
	77.5/85	●	
1152 x 900	61.8/66	●	
1280 x 960	60.0/60	●	●
	75.0/75	●	
1280 x 1024	64.0/60	●	●
	80.0/75	●	
	91.1/85	●	
1400 x 1050	65.3/60	●	●
1600 x 1200	75.0/60	●	●
1280 x 768	47.8/60	●	●
1280 x 720	45.0/60	●	●
1920 x 1080	67.5/60		●
1360 x 768	47.7/60	●	●
1440 x 900	55.9/60	●	●
1680 x 1050	65.3/60	●	●
1280 x 800	49.7/60	●	●
1920 x 1200	74.0/60	●*1	●*1

Digital TV Signal

Signal	fV [Hz]	Input Connector	
		RGB*2/YPBPR	DVI-D
480i	60	●	●
576i	50	●	●
480p	60	●	●
576p	50	●	●
1080i	60	●	●
1080i	50	●	●
720p	60	●	●*3
720p	50	●	●
1080p	60		●*3
1080p	50		●

Analogue TV Signal

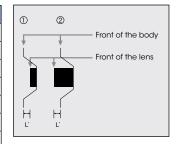| Signal	fV [Hz]	Input Connector
		VIDEO/S VIDEO
NTSC	60	●
PAL/SECAM	50	●

*1: Available for VESA Reduced Blanking signals. *2: With INPUT A only. *3: Determine as a computer signal.

- When a signal other than the signals listed in table is input, the picture may not be displayed properly.
- An input signal meant for screen resolution different from that of the panel will not be displayed in its original resolution. Text and lines may be uneven.
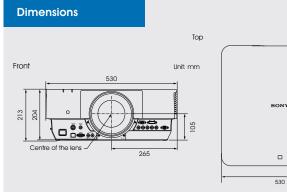
Dimensions

Front

Unit: mm

530
213
204
105
265

Centre of the lens

Top

SONY

530
545

The distance between the front of the lens (centre) and the front of the cabinet

Lens	L'	Type
VPLL-FM22PK	30.9 (1 7/32)	①
VPLL-ZM32PK	42.5 (1 11/16)	①
VPLL-ZM42PK	40.1 (1 19/32)	①
VPLL-ZP41PK	9.1 (1 1/32)	②
VPLL-ZM102PK	3.0 (1/8)	①
VPLL-ZM101PK	41.3 (1 5/8)	②
VPLL-Z4015	47.8 (1 7/8)	②
VPLL-Z4019	26.7 (1 1/16)	②
VPLL-Z4025	55.4 (2 3/16)	②
VPLL-Z4045	53.0 (2 3/32)	②

Unit: mm (inches)

① ②
Front of the body
Front of the lens
L' L'

Specifications

		VPL-FX500L
Display system		3 LCD system
Display device	Size of effective display area	0.99" (25.0 mm) x 3, BrightEra, Aspect ratio: 4:3
	Number of pixels	2,359,296 (1024 x 768 x 3) pixels
Projection lens	Zoom	Powered / Manual (Depends on lens)
	Focus	Powered / Manual (Depends on lens)
	Lens shift	Powered (Depends on lens)
Light source		High-pressure mercury lamp 330W type (Twin-lamp system)
Recommended lamp replacement time*[1]		6000 H (Lamp mode: High), 8000 H (Lamp mode: Standard) *[2]
Filter replacement cycle		Same time as the lamp replacement
Screen size		40" to 600" (1.02 m to 15.24 m)*[3]
Light output		7000 lm (Lamp mode: High)*[4], 5600 lm (Lamp mode: Standard)
Colour light output		7000 lm (Lamp mode: High)*[4], 5600 lm (Lamp mode: Standard)
Contrast ratio (full white / full black)*[5]		2500:1
Displayable scanning frequency	Horizontal	14 kHz to 93 kHz
	Vertical	47 Hz to 93 Hz
Display resolution	Computer signal input	Maximum display resolution: 1920 x 1200 dots*[6] (resizing display), Panel display resolution: 1024 x 768 dots
	Video signal input	NTSC, PAL, SECAM, 480/60i, 576/50i, 480/60p, 576/50p, 720/60p, 720/50p, 1080/60i, 1080/50i, 1080/60p, 1080/50p
Colour system		NTSC3.58, PAL, SECAM, NTSC4.43, PAL-M, PAL-N, PAL60
Keystone correction		Vertical: Max. +/- 30 degrees*[7]
OSD language		20-languages (English, Dutch, French, Italian, German, Spanish, Portuguese, Turkish, Polish, Russian, Swedish, Norwegian, Japanese, Simplified Chinese, Traditional Chinese, Korean, Thai, Vietnamese, Arabic, Persian)
Computer and video signal input/output	INPUT A	RGB / Y P_B P_R input connector: 5BNC (female)
	INPUT B	RGB input connector: Mini D-sub 15-pin (female)
	INPUT C	DVI-D input connector: DVI-D 24-pin (Single link), supported HDCP
	S VIDEO IN	S video input connector: Mini DIN 4-pin
	VIDEO IN	Video input connector: BNC
	OUTPUT	Monitor output connector*[8]: Mini D-sub 15-pin (female)
Control signal input/output		RS-232C connector: D-sub 9-pin (female) LAN connector: RJ45, 10BASE-T/100BASE-TX Control S input connector: Stereo mini jack, Plug in power DC5V Control S output connector: Stereo mini jack
Operating temperature (Operating humidity)		0°C to 40°C / 32°F to 104°F (35% to 85% (no condensation))
Storage temperature (Storage humidity)		-20°C to +60°C / -4°F to +140°F (10% to 90%)
Power requirements		AC 100 V to 240 V, 4.8 A to 2.0 A, 50/60 Hz
Power consumption	AC 100 V to 120 V	480 W
	AC 220 V to 240 V	460 W
Standby mode power consumption	AC 100 V to 120 V	13 W (Standby mode: Standard) / 0.1 W (Standby mode: Low)
	AC 220 V to 240 V	12 W (Standby Mode: Standard) / 0.2 W (Standby mode: Low)
Heat dissipation	AC 100 V to 120 V	1638 BTU
	AC 220 V to 240 V	1570 BTU
Outside dimensions		W 530 x H 213 x D 545 mm (W 20 7/8 x H 8 3/8 x D 21 15/32 in)
Mass		20 kg / 44 lb 1 oz
Supplied accessories		RM-PJ19 Remote Commander (1), Size AA (R6) batteries (2), AC power cord (1), Cable ties (2), Lens installation screws (4), Lens gap cover (1), Quick Reference Manual (1), Security Label (1), Operating Instructions (1)

*1 The figures are expected maintenance time and not guaranteed. They will depend on the environment or how the projector is used. *2 With two lamp sequential use. *3 Viewable area, measured diagonally.
*4 When attaching the VPLL-ZP41PK. *5 The value is average. *6 Available for VESA Reduced Blanking signal. *7 Depend on resolution. *8 From INPUT A and INPUT B.

About Sony Professional Sony Professional is the leading supplier of AV/IT solutions to businesses across a wide variety of sectors including, Media and Broadcast, Video Security and Retail, Transport & Large Venue markets. It delivers products, systems and applications to enable the creation, manipulation and distribution of digital audio-visual content that add value to businesses and their customers. With over 25 years' experience in delivering innovative market-leading products, Sony Professional is ideally placed to deliver exceptional quality and value to its customers. Sony's Professional Services division, its systems integration arm, offers its customers access to the expertise and local knowledge of skilled professionals across Europe. Collaborating with a network of established technology partners, Sony Professional delivers end to end solutions that address the customer's needs, integrating software and systems to achieve each organisations' individual business goals. For more information please visit www.pro.sony.eu

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