

Panasonic

PT-CW330 Series

Ultra-short Throw 1-Chip DLP™ Projectors

PT-CW331R
PT-CW330
PT-CW241R
PT-CW240
PT-CX301R
PT-CX300

Enhanced Lineup of High-brightness Ultra-short Throw Projectors



3D
PROFESSIONAL



Adding New Models with Interactive Function*1 to High-brightness Ultra-short Throw Projectors

These ultra-short throw projectors with a high-brightness of 3,100 lm*2, which allow you to project images onto a large 80-inch screen with a short projection distance of 0.60 m, are newly equipped with an interactive function*1. These projectors are especially effective in schools and business. Their 3D projections make events and exhibitions more impressive and effective, providing a new range of application.



PT-CW331R

3,100 lm WXGA
Interactive function

PT-CW241R

2,600 lm WXGA
Interactive function

PT-CX301R

3,100 lm XGA
Interactive function



PT-CW330

3,100 lm WXGA

PT-CW240

2,600 lm WXGA

PT-CX300

3,100 lm XGA

Wider Range of Applications

Classes to improve understanding **Compelling presentations** **Exhibitions and events with promotional effects**

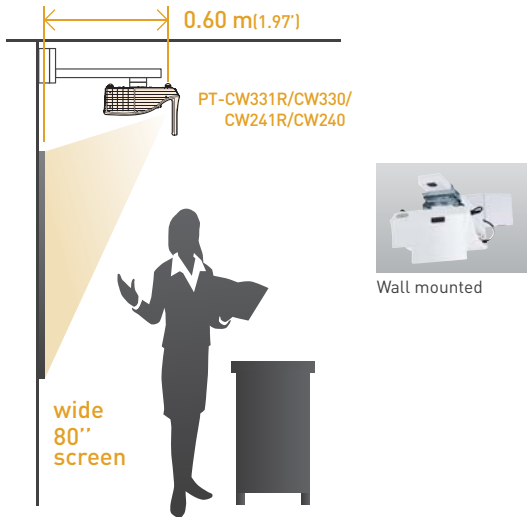
The interactive function makes your classes and presentations effective and enables better information sharing. The powerful large-screen 3D projection in a limited space adds dramatic impact to your events and exhibitions.

A Wide Variety of Functions Expands Projector Possibilities

Ultra-short Throw

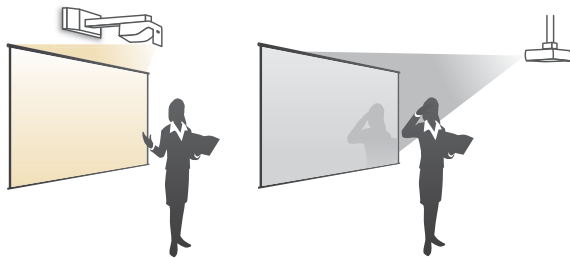
Projection onto a wide 80-inch screen with a short projection distance of 0.60 m*3

The ultra-short throw projector can be wall-mounted with an optional wall mount bracket (ET-PKC200W). There is no need to worry about the presenter's shadow on the screen and glare of the projection light.



PT-CW331R/CW330/
CW241R/CW240

Conventional model



High Brightness

High Brightness of 3,100 lm*2

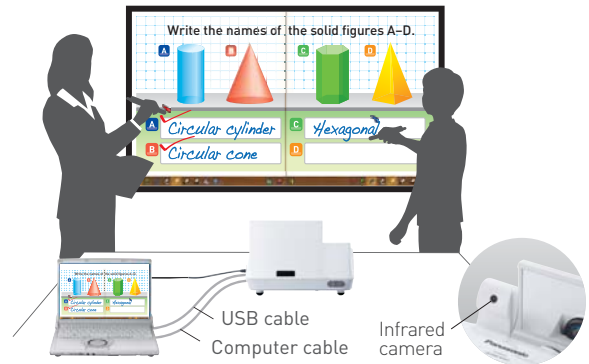
The high brightness of 3,100 lm*2 and high contrast ratio of 8,000:1*4, ensuring bright and easy-to-see image projection, is highly effective for lessons and presentations in classrooms and meeting rooms.



Interactive function

The interactive function*1 allows you to write on a projected image.

You can write or draw figures on the projected image with the Interactive Pen/Pointer. The scanning camera frame rate of PT-CW331R/CW241R/CX301R, which is twice as high as that of our existing products*5; ensures smooth writing. In addition, two users can write simultaneously, to make classes and presentations more effective. It is easy to store the words and figures in a computer for information sharing.



Convenient features of Interactive functions

Auto calibration

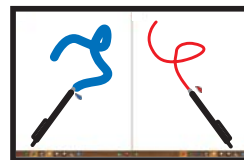
The auto calibration helps to reduce setting time. Manual calibration is also available by touching four points with the Interactive Pen/Pointer.

Dual pen support*6

Select the dual pen mode (Half screen mode/Full screen mode). Two users can write simultaneously, making your classes and presentations more efficient.

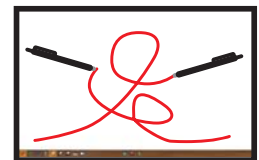
Half screen mode

The drawing screen is divided into two sections. Individually select color and line width for each screen.



Full screen mode

Write on the full screen. The color and line width of the two pens are same.



Two Interactive Pens provided

Lightly touch the screen with the pen to write.

* Interactive Pointer available as an option.



Functionality improved

The faster frame rate ensures smooth, comfortable writing.

*1 Only PT-CW331R/CW241R/CX301R have this function.

*2 PT-CW241R/CW240 has brightness of 2,600 lm.

*3 Available for PT-CW331R/CW330/CW241R/CW240.

*4 During RGB signal input, Lamp power: Normal.

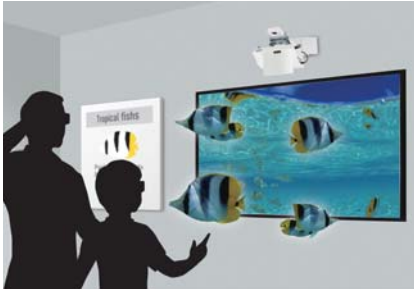
*5 The frame rate of PT-CW331R/CW241R/CX301R is 60 fps; that of our existing model, PT-TW231R, is 30 fps.

*6 Available for Windows® operating system.

3D Ready

3D Projection Ensuring powerful images

The projector delivers 3D images. You can enjoy powerful 3D images with a reproduction apparatus and the 3D glasses*⁷. The combination of this system with the short-throw function enables space-saving 3D projection, helping you create innovative and attractive presentations.



* The left is an image only for explanation. The screens and photos illustrating the functions look different from the real things.

Supporting Various 3D Systems

HDMI Input Terminal Supports 3D

The HDMI input terminal supports 3D. Connect a 3D Blu-ray player to the projector to project Blu-ray 3D images.

DLP™ Link™

As synchronized signals are contained between the frames (images) for the left and right eyes, you can build a 3D system without the need for the optional emitter.

- Configuration: 3D Contents + Reproduction apparatus + 3D Glasses*⁷ (DLP™ Link™ system)

3D-compatible Signal

Supports Frame Packing, Side-by-Side, Top-and-Bottom, and Frame Sequential method.

[Viewing 3D images]

View 3D images at a distance at least three times further than the height of the screen. Each person views and feels the 3D images differently. In some cases, the effects may cause viewers to feel sick. If you see double 3D images or do not see stereoscopic images, you may feel fatigue or discomfort. If you feel sick, immediately stop viewing 3D images. Children younger than five or six years old should not view 3D images.

The DLP™ System

The DLP™ System Maintains Long-lasting, Stable Performance.

In the DLP™ system, the image quality does not degrade with time due to long life of the device. You can use the projector for various systems over a long period without worry of quality loss. *⁸



Superb Performance

10 W High-output Speaker Meet Your Meeting/Seminar Room Needs.

The volume level of the 10 W high-output speaker is enough for meeting rooms and classrooms; you do not need to use an external speaker. You can make multi-media presentations.

Ensuring a Long Lamp Replacement Cycle

The lamp replacement cycle for the PT-CW331R/CW330/CX301R/CX300 is 4,000 hours*⁹; and for the PT-CW241R/CW240 is 5,000 hours*⁹. Such long replacement cycles reduce the hassle and the cost of maintenance, while minimizing environmental impact.



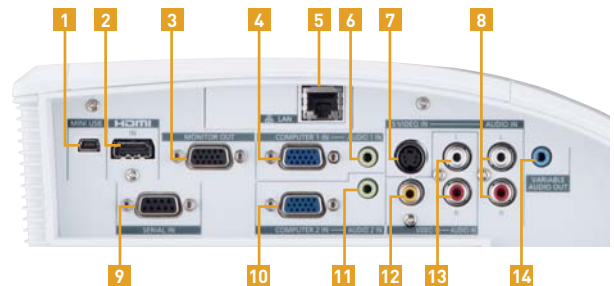
* Featured image: ET-LAC300
(Exclusively for the PT-CW331R/CW330/CX301R/CX300)

0.5 W*¹⁰ Standby Power Consumption

The standby power consumptions is as low as 0.5 W *¹⁰, reducing running cost and effects on the environment.

Extensive Interfaces with an HDMI Input Terminal

Extensive interfaces, including two sets of computer (RGB) input terminals, one set of computer (RGB) output terminals and an HDMI input terminal, allows a wide range of system configurations.



- | | |
|-----------------------|------------------------|
| 1 Mini USB | 8 S-VIDEO AUDIO IN |
| 2 HDMI IN | 9 SERIAL IN |
| 3 MONITOR OUT | 10 COMPUTER IN 2 |
| 4 COMPUTER IN 1 | 11 COMPUTER AUDIO IN 2 |
| 5 LAN | 12 VIDEO IN |
| 6 COMPUTER AUDIO IN 1 | 13 VIDEO AUDIO IN |
| 7 S-VIDEO IN | 14 AUDIO OUT |

Audio Can Be Output in Standby Mode

Audio can be output from the audio output terminal in Standby mode*¹¹. This function is useful when the audio output terminal is connected to the external audio system *¹² via the projector.

“Crestron RoomView™” Compatible

The wired LAN terminal supports Crestron's application software, “Crestron RoomView™”, which can control various system devices by using a personal computer connected to the network.

Convenient Functions

“Wall Color Setting” Convenient for a Classroom with no Screen

The PT-CW331R/CW330/CW241R/CW240/CX301R/CX300 has an image mode performing optimal correction when projecting onto a blackboard and wall.

Easy to Replace the Lamp

Replace the lamp from the side of the projector. When replacing the lamp, there is no need to detach the projector from the ceiling bracket or the wall mount bracket.



“Security Bar” Useful for Protection against Theft

The PT-CW331R/CW330/CW241R/CW240/CX301R/CX300 is equipped with the “security bar” for preventing theft.



Wireless Remote Control is Convenient When Using More Than One Projector.

A maximum of seven IDs (ALL, ID1-ID6) can be set up, allowing individual remote control of each projector.



Eco-friendly

- No halogenated flame retardants are used in the cabinet.
- Lead-free glass is used for the lens.
- Coating-free cabinet for easy recycling.
- Low standby power of 0.5 W*10
- Switchable lamp mode

Optional accessories

Ceiling mount bracket for high ceilings*13
ET-PKV100H



Ceiling mount bracket for low ceilings*13
ET-PKV100S



Bracket assembly
ET-PKC200B



Wall mount bracket
ET-PKC200W



Replacement lamp unit
ET-LAC300

*Exclusively for PT-CW331R/CW330/CX301R/CX300



Replacement lamp unit
ET-LAC200

*Exclusively for PT-CW241R/CW240



Interactive pen*14
ET-PEN100

*Exclusively for PT-CW331R/CW241R/CX301R



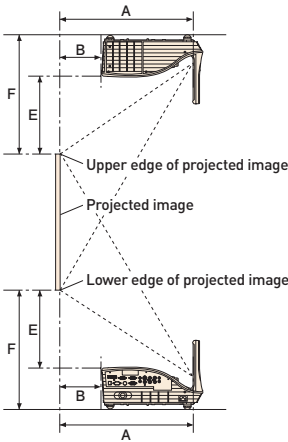
Interactive pointer
ET-PNT100

*Exclusively for PT-CW331R/CW241R/CX301R



Projection distance

unit: meters (feet)



PT-CW331R/CW330/CW241R/CW240 (16:10 aspect ratio; throw ratio: 0.35:1)

Diagonal image size	Distance from the edge of the projection window to the screen (A)	Distance from the projector front to the screen (B)	Height from the edge of the screen to the top of the projector (E)	Height from the edge of the screen to the bottom of the projector (F)
1.78 [70"]	0.52 (1.71')	0.18 (0.59')	0.16 (0.52')	0.24 (0.79')
2.03 [80"]	0.60 (1.97')	0.26 (0.85')	0.19 (0.62')	0.27 (0.89')
2.29 [90"]	0.68 (2.23')	0.34 (1.12')	0.23 (0.75')	0.30 (0.98')
2.54 [100"]	0.76 (2.49')	0.42 (1.38')	0.26 (0.85')	0.34 (1.12')

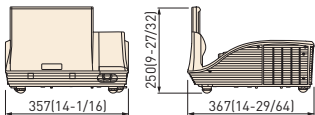
PT-CX301R/CX300 (4:3 aspect ratio; throw ratio: 0.44:1)

Diagonal image size	Distance from the edge of the projection window to the screen (A)	Distance from the projector front to the screen (B)	Height from the edge of the screen to the top of the projector (E)	Height from the edge of the screen to the bottom of the projector (F)
1.52 [60"]	0.52 (1.71')	0.19 (0.62')	0.18 (0.59')	0.26 (0.85')
1.78 [70"]	0.62 (2.00')	0.28 (0.92')	0.23 (0.75')	0.30 (0.98')
2.03 [80"]	0.71 (2.33')	0.38 (1.25')	0.27 (0.89')	0.34 (1.12')
2.29 [90"]	0.80 (2.62')	0.47 (1.54')	0.31 (1.02')	0.39 (1.28')

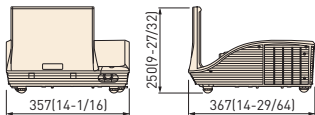
Dimensions

unit: mm (inch)

PT-CW331R/CW241R/CX301R



PT-CW330/CW240/CX300



* 7 To view 3D images, DLP™ Link™ active-shutter 3D glasses are separately required. (In the active shutter system, the right/left liquid crystal shutter is opened and closed alternately according to projected images.) [The active-shutter 3D glasses with refresh rate of 96 – 144 Hz are recommended. 3D images of 60 Hz can also be viewed by a 120 Hz compatible device.]

* 8 Twenty-four-hour continuous operation is not available.

* 9 This is the maximum value when the lamp power is set to Eco mode where the lamp is turned on for 2 hours and off for 0.25 hours. If the lamp is turned on more times or kept on for a long time, the lamp replacement cycle will shorten. In Normal mode, the lamp replacement cycle is 3,000 hours (3,500 hours for PT-CW241R/CW240). The usage environment affects the duration of the lamp.

* 10 When [LAN (Standby)]/[VGA Out (Standby)]/[In Standby Mode (Audio)] are all set to [Off].

* 11 Select the Menu for setting.

* 12 In addition to the speaker, an audio amplifier is necessary.

* 13 This product is used together with an optional bracket assembly (sold separately).

* 14 The Interactive Pen is the same as those which are supplied with PT-CW331R/CW241R/CX301R.

Specifications

Model		PT-CW331R	PT-CW330	PT-CW241R	PT-CW240	PT-CX301R	PT-CX300
Power supply		100 – 240 V AC, 50/60 Hz					
Power consumption		340 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL.)		310 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL.)		340 W (0.5 W when STANDBY MODE set to ECO,*1 6.0 W when STANDBY MODE set to NORMAL.)	
DLP™ chip	Panel size	16.5 mm [0.65 inches] [16:10 aspect ratio]				14 mm [0.55 inches] [4:3 aspect ratio]	
	Display method	DLP™ chip x 1 DLP™ system					
Pixels		1,024,000 [1,280 x 800] pixels				786,432 [1,024 x 768] pixels	
Lens		Fixed/manual focus F = 2.6 f = -5.27 mm					
Lamp		280 W UHM lamp (The lamp replacement cycle is 4,000 hours*2)		240 W UHM lamp (The lamp replacement cycle is 5,000 hours*2)		280 W UHM lamp (The lamp replacement cycle is 4,000 hours*2)	
Screen size (diagonal)		1.78 – 2.54 m (70 – 100 inches) [16:10 aspect ratio]				1.52 – 2.29 m [60 - 90 inch] [4:3 aspect ratio]	
Color reproducibility		Full color [16.77 million colors]					
Brightness*3		3,100 lm		2,600 lm		3,100 lm	
Center-to-corner uniformity*3		80%					
Contrast*3		8,000:1 [full on/off][During RGB signal input, Lamp power:Normal]					
Resolution		1,280 × 800 pixels (Input signals that exceed this resolution will be converted to 1,280 × 800 pixels.)				1,024 × 768 pixels (Input signals that exceed this resolution will be converted to 1,024 × 768 pixels.)	
Scanning frequency	HDMI	[Horizontal] 15–100 kHz; [Vertical] 24–120 Hz; [Dot clock] 25–162 MHz					
	RGB (analog)	[Horizontal] 15–100 kHz; [Vertical] 24–120 Hz; [Dot clock] 162 MHz or lower					
	YPbPr [YCbCr]	fh: 15.75 kHz, fv: 60 Hz [480i(525i)] fh: 31.50 kHz, fv: 60 Hz [480p(525p)] fh: 45.00 kHz, fv: 60 Hz [720(750)/60p] fh: 33.75 kHz, fv: 60 Hz [1080(1125)/60i] fh: 27.00 kHz, fv: 24 Hz [1080(1125)/24p]		fh: 15.63 kHz, fv: 50 Hz [576i(625i)] fh: 31.25 kHz, fv: 50 Hz [576p(625p)] fh: 37.50 kHz, fv: 50 Hz [720(750)/50p] fh: 28.13 kHz, fv: 50 Hz [1080(1125)/50i] fh: 67.50 kHz, fv: 60 Hz [1080(1125)/60p]		fh: 56.25 kHz, fv: 50 Hz [1080(1125)/50p]	
	Video/S-Video	[fh] 15.75/15.63 kHz [fv] 50/60 Hz [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM]					
Keystone correction range		Vertical: ± 15°					
Installation		Ceiling/floor, front/rear [Menu setting]					
Built-in speaker		7 cm x 3 cm Oval x1 output power 10 W [Monaural]					
Terminals	HDMI IN	(HDMI 19-pin) x 1 [Deep color, compatible with HDCP] Audio signal Linear PCM [Sampling frequency: 48 kHz/44.1 kHz/32 kHz]					
	COMPUTER IN 1	D-sub HD 15-pin (female) x 1 [RGB/YPb(Cb)/Pr(Cr) x 1]					
	COMPUTER IN 2	D-sub HD 15-pin (female) x 1 [RGB/YPb(Cb)/Pr(Cr) x 1]					
	MONITOR OUT	D-sub HD 15-pin (female) x 1 [The signal selected from computer input 1/2 is output.]					
	VIDEO IN	Pin jack x 1					
	S-VIDEO IN	Mini DIN 4-pin x 1					
	COMPUTER AUDIO IN	M3 x 2 [L-R x 1]					
	VIDEO AUDIO IN	Pin jack x 2 [L-R x 1]					
	S-VIDEO AUDIO IN	Pin jack x 2 [L-R x 1]					
	AUDIO OUT	M3 x 1 [L-R x 1]					
	SERIAL IN	D-sub 9-pin (female) x 1 for external control [RS-232C compliant]					
	LAN	[RJ-45] x 1 [for network connection, 100BASE-TX/10BASE-T, compliant with PLink™ (class 1)]					
	Mini USB	1 for servicemen [for interactive function*4]					
Cabinet materials		Molded plastic [PC]					
Dimensions [W x H x D]		357 x 250 x 367 mm [14-1/16" x 9-27/32" x 14-29/64"] [with legs at shortest position]					
Weight		Approx.7.8 kg [17.2 lbs]*5	Approx.7.7 kg [17.0 lbs]*5	Approx.7.6 kg [16.7 lbs]*5	Approx.7.5 kg [16.5 lbs]*5	Approx.7.8 kg [17.2 lbs]*5	Approx.7.7 kg [17.0 lbs]*5
Noise level		37 dB (Lamp power: Normal); 33 dB (Lamp power: Eco)		35 dB (Lamp power: Normal); 30 dB (Lamp power: Eco)		37 dB (Lamp power: Normal); 33 dB (Lamp power: Eco)	
Operating environment		Operating temperature: 5°C – 40°C(41°F – 104°F) [Less than 750 m (2,500 ft) above sea level]; 5°C – 35°C(41°F – 95°F) [750 – 1,500 m (2,500 – 5,000 ft) above sea level] 5°C – 30°C(41°F – 86°F) [1,500 – 3,000 m(5,000 – 10,000 ft) above sea level] Operating humidity: 20% - 80% [no condensation]					
Supplied accessories		Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1, Interactive pen x 2, Batteries (AAA type x 4), USB cable (5.0 m) x 1, Application software (Light Pen III) CD-ROM x 1	Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1	Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1, Interactive pen x 2, Batteries (AAA type x 4), USB cable (5.0 m) x 1, Application software (Light Pen III) CD-ROM x 1	Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1	Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1, Interactive pen x 2, Batteries (AAA type x 4), USB cable (5.0 m) x 1, Application software (Light Pen III) CD-ROM x 1	Power cord (3 m) x 1*, Power cord cover x 1, Wireless remote control unit x 1, Lithium coin cell battery x 1, Computer cable (1.8 m) x 1

*1 When [LAN (Standby)]/[VGA Out (Standby)]/[In Standby Mode (Audio)] are all set to [Off].

*2 This is the maximum value when the lamp power is set to Eco mode where the lamp is turned on for 2 hours and off for 0.25 hours. If the lamp is turned on more times or kept on for a long time, the lamp replacement cycle will shorten. In Normal mode, the lamp replacement cycle is 3,000 hours [3,500 hours for PT-CW241R/CW240]. The usage environment affects the duration of the lamp.

*3 Measurement, measuring conditions, and method of notation all comply with ISO 21118 international standards.

*4 Exclusively for PT-CW331R/CW241R/CX301R.

*5 Average value. Actual values may be different according to the product.

*6 Power code (x2) for the PT-CW331REA/CW330EA/CW241REA/CW240EA/CX301REA/CX300EA.

Caution

Do not install the projector in locations that are subject to excessive water, humidity, steam or oily smoke. Doing so may result in fire, malfunction or electric shock.

NOTE ON USE

- The projector uses a high-voltage mercury lamp under high internal pressure. This lamp may break, emitting a popping sound, or fail to illuminate, due to impact or extended use.
- The high-wattage lamp becomes very hot during operation. Please observe the following precautions:
 - Never place objects on top of the projector while it is in operation.
 - Make sure there is an unobstructed space of 500 mm (19-11/16 in) or more around the projector's exhaust openings.
 - If stacking projector units, care must be taken to provide the recommended space between units. These space requirements also apply to installation where only one projector unit is operating at one time and the other unit is used as a backup.

- If the projector is placed in a box or enclosure, the temperature of the air surrounding the projector must match the operating temperature listed in the specifications table during use. Also, make sure the projector's intake and exhaust openings are not blocked. Ensure there is sufficient ventilation to prevent hot air from the exhaust openings being recirculated into the intake opening.
- The lamp replacement cycle duration becomes shorter if the projector is operated repeatedly for short periods.
- The lamp replacement cycle varies greatly depending on individual lamp characteristics and usage conditions.
 - The brightness of the lamp will gradually decrease with use.
- Due to natural characteristics of lamps, screen brightness may fluctuate. This is not an indication of faulty lamp performance.

Panasonic®

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