## 1-Chip DLP™ Projectors

# **Specifications**Main unit

Power supply			AC 100-240V, 50Hz	/60Hz (Taiwan:110V, 60Hz)					
Power consumption <sup>1</sup>	Maximum power co	nsumption	480 W (500 VA)						
BTU value  DLPTM chip  Refresh rate  Light source  Light output 1  Time until light output declines to 50%3  Resolution  Contrast ratio1  Screen size (diagonal)  Center to corner zone rather to corner zone rathers  Lens shift (From the origin particular)	On-mode power	[Normal]	390 W	* Operating Temperature: 25 °C (77 °F), Altitude: 700 m (2,297 ft),					
	consumption	[Eco]	310 W	HDMI input All White (1920*1200@60) no other input,					
	(Operating mode)	[QUIET]	310 W	Picture mode: Standard, Dynamic Contrast [2]					
	Standby mode	[Normal]	10 W						
	power consumption	[Eco]	0.5 W						
BTU value			Max. 1,640 BTU						
DLP™ chip	Size		16.5 mm [0.65 in] (	liagonal (16:9 aspect ratio)					
	Display system		1chip DLP™ projec	tion sysytem					
	consumption (Operating mode)  Standby mode power consumption  Size  Display system Number of pixels 2  Operation mode  [Eco] [QUIET]  Operation mode  [Eco] [QUIET]  Operation mode  RGB signal input  YCBCB/YPBR signal input  HDMI signal input  DIGITAL LINK signal input  COMPUTER IN  RGB si  YPBR HDMI 1 IN/HDMI 2 IN  RGB si  YPBR  HDMI 2 IN		2,073,600 (1920 x	1080 pixels)					
Refresh rate			240 Hz Refresh rat	e varies depending on scanning frequency.					
Light source			Laser diode						
Light output 1	Operation mode	[Normal]	5,200 lm / 5,400* li	m (center)					
			*Average light-outpu	at value of all shipped products measured at center of screen in [NORMAL] Mo					
		[Eco]	4,100 lm						
		[QUIET]	4,100 lm						
Time until light output	Operation mode	[Normal]	20,000 hours						
declines to 50% <sup>3</sup>		[Eco]	24,000 hours						
		[QUIET]	20,000 hours						
Resolution			3840 x 2160 pixels	(with Quad Pixel Drive)					
Contrast ratio <sup>1</sup>		20,000:1 (All White)	'All Black)						
			[PICTURE MODE] is s	et to [DYNAMIC], [OPERATING MODE] is set to [NORMAL], Dynamic Contrast [1].					
Screen size (diagonal)			40-300 in						
Center to corner zone ra	tio¹		90%	90%					
Lens			Manual zoom (throw ratio 1.46-2.93:1),						
			Manual focus F 2.0-3.4, f 21.5-43.0 mm						
Lens shift (From the origin p	point of the lens mounter)		Vertical (Max) +71% -48%, Horizontal (Max) +34% -27%						
Installation			Ceiling/floor, front/rear, free 360-degree installation						
Compatible Signal	RGB signal		Resolution: 640 x 480 to 1920 x 1200						
	input		Dot clock frequency: 162 MHz or less						
			PIAS (Panasonic Intelligent Auto Scanning) system						
ens shift (From the origin po			Resolution: 480p/576p to 1920 x 1080						
	signal input		Dot clock frequency: 148.5 MHz or less						
	LIDAM			D terminals do not support 3 value SYNC.					
				al resolution: 480p/576p to 4096 x 2160					
	Signal Input		0 0	solution: 640 x 480 to 1920 x 1200 (non-interlace) : 25 MHz to 594 MHz					
	DIGITAL LINK			al resolution: 480p/576p to 4096 x 2160					
				·					
ens shift (From the origin poinstallation Compatible Signal	oighai input		Still image signal resolution: 640 x 480 to 1920 x 1200 (non-interlace)  Dot clock frequency: 25 MHz to 297 MHz						
Terminals	COMPUTER IN		D-sub HD 15-pin (fe						
		RGB signal	- '	(NC ON GREEN: 1.0 V [p-p] 75 Ω)					
Power consumption¹  BTU value  DLP™ chip  Refresh rate Light source Light output ¹  Fime until light output declines to 50%³  Resolution Contrast ratio¹  Screen size (diagonal) Center to corner zone rati Lens Lens shift (From the origin points and the compatible Signal			SYNC/HD	TTL high impedance, automatic positive/negative polarity compatible					
			VD	TTL high impedance, automatic positive/negative polarity compatible					
		YP <sub>B</sub> P <sub>R</sub> signal	Y: 1.0 V [p-p] includ	ing synchronization signal, $P_BP_R$ : 0.7 V [p-p] 75 $\Omega$					
	MONITOR OUT		D-sub HD 15-pin (fe						
		RGB signal		'NC ON GREEN: 1.0 V [p-p] 75 Ω)					
			SYNC/HD	TTL high impedance, automatic positive/negative polarity compatible					
			VD	TTL high impedance, automatic positive/negative polarity compatible					
		YP <sub>B</sub> P <sub>R</sub> signal	Y: 1.0 V [p-p] includ	ing synchronization signal, $P_BP_R$ : 0.7 V [p-p] 75 $\Omega$					
	HDMI 1 IN/HDMI 2 II	N	HDMI 19-pin x 2	Compatible with HDCP 2.3, Deep Color, 4K/60p signal input <sup>4</sup> , CEC supported					
		Audio signal	Linear PCM (sampli	ng frequency: 48 kHz/44.1 kHz/32 kHz)					
	AUDIO IN		M3 stereo mini jack	x 1 0.5 V [rms], input impedance 22 kΩ or more					
	AUDIO OUT		M3 stereo mini jack	$\times$ x 1 0 V [rms] to 2.0 V [rms] (variable), output impedance 2.2 k $\Omega$ or lower					
	SERIAL IN		D-Sub 9 p x 1	RS-232C compliant, for computer control					
			RJ-45 x 1	for network and DIGITAL LINK connections (HDBaseT™ compliant),					
				PJLink (class 2) compatible, 100Base-TX, Art-Net compatible,					
			PJLink (class 2) compatible, 100Base-TX, Art-Net compatible, HDCP 2.3 compatible, Deep Color compatible, 4K/60p signal input <sup>8</sup>						

## 1-Chip DLP™ Projectors

## PT-FRQ50

Terminals	LAN	RJ-45 x 1 for network connection, PJLink (class 2) compatible, 10Base-T/100Base-TX,			
		Art-Net compatible			
	USB	USB connector (type A) x 1 for power supply (DC 5V, maximum 2A),			
		for connecting USB memory and optional Wireless Module AJ-WM5			
Power cord length		3.0 m [118-1/8 in], 2.0 m [78-3/4 in] (for Taiwan)			
Cabinet materials		Molded plastic			
Dimension (W x H x D)		498 x 168 <sup>5</sup> x 492 mm [19-5/8 x 6-5/8 <sup>5</sup> x 19-3/8 in]			
Weight <sup>6</sup>		Approx. 16.1 kg (35.8 lbs)			
Operating noise <sup>1</sup>		35 dB [Normal][Eco] / 28 dB [QUIET]			
Laser Classification	Laser Class	Class 1 (IEC/EN 60825-1:2014)			
		China: Class 3R (IEC60825-1:2007)			
	Risk Group	Risk Group 2 (IEC 62471-5:2015)			
Operating environment	Operating temperature	0-45 °C (32-113 °F) <sup>7</sup>			
	Operating humidity	10-80% (no condensation)			

#### Remote control unit

Power supply	3V DC (AAA/R03/LR03 battery x 2)
Operation range	Approx. 30 m [98 ft 5 in] (when operated directly in front of signal receiver)
Dimensions (W x H x D)	48 x 145 x 27 mm [1-7/8 x 5-23/32 x 1-1/16 in]
Weight	Approx. 102 g (3.60 ozs.) including batteries

#### Other Applications

Multi Monitoring Control Software (for Windows)

Logo Transfer Software (for Windows)

Geometry Manager Pro (for Windows) \*Feature only available after May 2022

#### Supplied accessories

Wireless remote control unit (x 1)

Power cord with secure lock (x 1) (x 2 for Europe/ASIA models)

Batteries for remote control (AAA/R03 or AAA/LR03 battery x 2)

### Optional accessories

Ceiling Mount Bracket ET-PKD120H (for high ceiling)

ET-PKD120S (for low ceiling)

Projector Mount Bracket ET-PKD130B DIGITAL LINK Switcher ET-YFB200G ET-YFB100G Digital Interface Box

Early Warning Software ET-SWA100 Series \*The suffix of the Model No. differs according to the license type.

Wireless module AJ-WM50 Series \*The suffix at the end of the model number is omitted. Operating temperature: 0-40°C (32-104 °F).

Product availability may vary by country or region.

Geometry Manager Pro Upgrade kit (preactivated) ET-UK20 \*Feature only available after May 2022

Auto Screen Adjustment Upgrade kit (preactivated) ET-CUK10/CUK10P \*Feature only available after May 2022

Measurement, measuring conditions, and method of notation all comply with ISO/IEC 21118: 2020 international standards When using a signal other than 120Hz/240hz, this resolution cannot be displayed.

Around this time, light output will have decreased by approximately 50%. IEEG2087: 2008 Broadcast contents, NORMAL Mode, Dynamic Contrast [2], under conditions with 30°C (86°F), 700m (2,297ft) above sea level, and 0.15 mg/m³ of particulate matter. Estimated time until light output declines to 50% varies depending on environment.

4K/60p signals are converted to the projector's resolution upon projection. Supported terminals: DIGITAL LINK/HDMI®.

With legs at shortest position.

Average value. May differ depending on the actual unit.

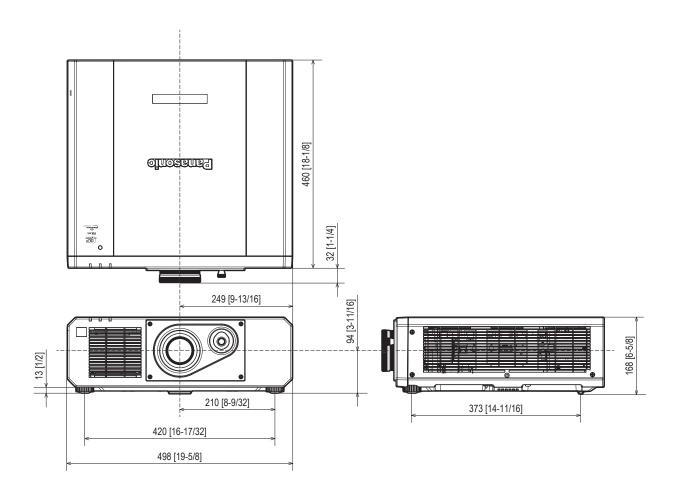
When using the projector at an altitude lower than 2700m (8858ft) above sea level, and the operating environment temperature becomes 29°C (84°F) or higher, the light output may be reduced to protect the projector. When using the projector at an altitude between 2700m (8858ft) and 4200m (13780ft), and the operating environment temperature becomes 25°C (77°F) or higher, the light output may be reduced to protect the projector.

1-Chip DLP™ Projectors

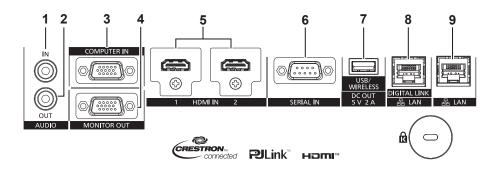
# PT-FRQ50

## **Dimensions**

unit : mm [inch] NOTE: This illustration is not drawn to scale.



## **Terminals**



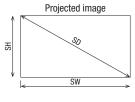
1	AUDIO IN	6	SERIAL IN
2	AUDIO OUT	7	USB (DC OUT)
3	COMPUTER IN	8	DIGITAL LINK/LAN
4	MONITOR OUT	9	LAN
5	HDMI 1 IN/HDMI 2 IN		

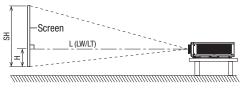
### 1-Chip DLP™ Projectors

## Projected image and throw distance

Install the projector referring to the projected image size and projection distance. Image size and image position can be adjusted in accordance with the screen size and screen position.

• Following illustration is prepared on the assumption that the projected image size and position have been aligned to fit full in the screen.





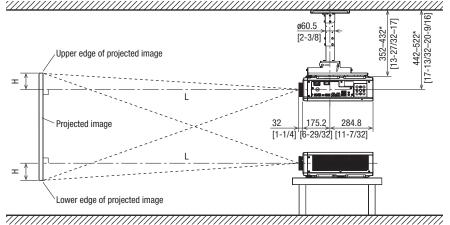
L (LW/LT) <sup>1</sup>	Projection distance
SH	Projected image height
SW	Projected image width
Н	Distance from the lens center to the bottom edge of the projected image
SD	Projected image size

LW : Minimum projection distance
 LT : Maximum projection distance



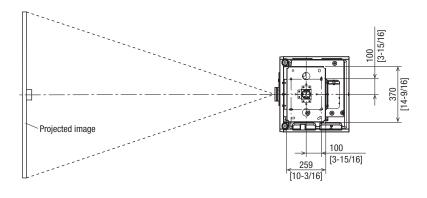
## **Standard setting-up position**

Illustrations show the projector installed using optional ceiling mountbracket ET-PKD120H, optional bracket assembly ET-PKD130B.



unit: mm [inch] NOTE: This illustration is not drawn to scale.

\* Adjustable in 40 mm [1-9/16 in] steps.

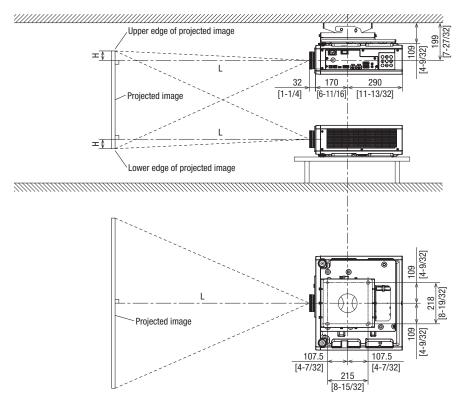


- All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket. Furthermore, in order to prevent it from falling down from the ceiling, use the supplied wire on the mounting bracket.

## 1-Chip DLP™ Projectors

## **Standard setting-up position**

Illustrations show the projector installed using optional ceiling mountbracket ET-PKD120S, optional bracket assembly ET-PKD130B.



unit : mm [inch] NOTE: This illustration is not drawn to scale.

#### Caution

- All construction work should be done by a qualified technician.
- When mounting to the ceiling, use the special mounting bracket.
   Furthermore, in order to prevent it from falling down from the ceiling, use the supplied wire on the mounting bracket.

1-Chip DLP™ Projectors

## **Projection distance**

A  $\pm 5\%$  error in listed projection distances may occur.

When [SCREEN ADJUSTMENT] is used, distance is corrected to become smaller than the specified image size.

Unit: meters

Projected image size		Aspect rat	io 16:9		Aspect rati	o 16:10	Aspect ratio 4:3			
Projecteu iiiage size	Projection (	distance (L)	11-1-1-1	Projection (	distance (L)	Height position (H)	Projection (	distance (L)	Height position (H)	
Diagonal (SD)	Min. (LW)	Max. (LT)	Height position (H)	Min. (LW)	Max. (LT)	neight position (n)	Min. (LW)	Max. (LT)	neight position (n)	
1.02/ 40	1.26	2.57	-0.10 - 0.49	1.36	2.78	-0.11 - 0.49	1.55	3.15	-0.13 - 0.60	
1.27/ 50	1.59	3.22	-0.13 - 0.61	1.72	3.49	-0.14 - 0.61	1.95	3.95	-0.16 - 0.75	
1.52/ 60	1.91	3.88	-0.16 - 0.73	2.07	4.19	-0.17 - 0.73	2.35	4.75	-0.19 - 0.90	
1.78/ 70	2.24	4.53	-0.18 - 0.85	2.43	4.90	-0.20 - 0.85	2.75	5.55	-0.22 - 1.05	
2.03/ 80	2.57	5.18	-0.21 - 0.98	2.78	5.60	-0.23 - 0.98	3.16	6.35	-0.26 - 1.19	
2.29/ 90	2.90	5.83	-0.24 - 1.10	3.14	6.31	-0.25 - 1.10	3.56	7.15	-0.29 - 1.34	
2.54/100	3.22	6.49	-0.26 - 1.22	3.49	7.02	-0.28 - 1.22	3.96	7.95	-0.32 - 1.49	
3.05/120	3.88	7.79	-0.31 - 1.46	4.20	8.43	-0.34 - 1.46	4.76	9.54	-0.38 - 1.79	
3.81/150	4.86	9.75	-0.39 - 1.83	5.26	10.54	-0.42 - 1.83	5.96	11.94	-0.48 - 2.24	
5.08/200	6.50	13.01	-0.52 - 2.44	7.03	14.07	-0.57 - 2.44	7.97	15.93	-0.64 - 2.99	
6.35/250	8.14	16.28	-0.65 - 3.05	8.81	17.60	-0.71 - 3.05	9.98	19.93	-0.80 - 3.73	
7.62/300	9.78	19.54	-0.78 - 3.66	10.58	21.13	-0.85 - 3.66	11.98	23.92	-0.96 - 4.48	

Unit: feet

Projected image size	Aspect ratio 16:9				Aspect rati	0 16:10	Aspect ratio 4:3			
Projecteu iiiage size	Projection (	distance (L)	Unight position (U)	Projection (	distance (L)	Height position (H)	Projection (	distance (L)	Height position (H)	
Diagonal (SD)	Min. (LW)	Max. (LT)	Height position (H)	Min. (LW)	Max. (LT)	neight position (n)	Min. (LW)	Max. (LT)		
1.02/ 40	4.13	8.43	-0.33 - 1.61	4.46	9.12	-0.36 - 1.61	5.09	10.33	-0.43 - 1.97	
1.27/ 50	5.22	10.56	-0.43 - 2.00	5.64	11.45	-0.46 - 2.00	6.40	12.96	-0.52 - 2.46	
1.52/ 60	6.27	12.73	-0.52 - 2.39	6.79	13.75	-0.56 - 2.39	7.71	15.58	-0.62 - 2.95	
1.78/ 70	7.35	14.86	-0.59 - 2.79	7.97	16.08	-0.66 - 2.79	9.02	18.21	-0.72 - 3.44	
2.03/ 80	8.43	16.99	-0.69 - 3.22	9.12	18.37	-0.75 - 3.22	10.37	20.83	-0.85 - 3.90	
2.29/ 90	9.51	19.13	-0.79 - 3.61	10.30	20.70	-0.82 - 3.61	11.68	23.46	-0.95 - 4.40	
2.54/100	10.56	21.29	-0.85 - 4.00	11.45	23.03	-0.92 - 4.00	12.99	26.08	-1.05 - 4.89	
3.05/120	12.73	25.56	-1.02 - 4.79	13.78	27.66	-1.12 - 4.79	15.62	31.30	-1.25 - 5.87	
3.81/150	15.94	31.99	-1.28 - 6.00	17.26	34.58	-1.38 - 6.00	19.55	39.17	-1.57 - 7.35	
5.08/200	21.33	42.68	-1.71 - 8.01	23.06	46.16	-1.87 - 8.01	26.15	52.26	-2.10 - 9.81	
6.35/250	26.71	53.41	-2.13 - 10.01	28.90	57.74	-2.33 - 10.01	32.74	65.39	-2.62 - 12.24	
7.62/300	32.09	64.11	-2.56 - 12.01	34.71	69.32	-2.79 - 12.01	39.30	78.48	-3.15 - 14.70	

## **Calculation of the projection distance**

To use a projected image size not listed in this manual, check the projected image size SD (m) and use the respective formula to calculate the value.

The unit of all the formulae is m. (Values obtained by the following calculation formulae contain a slight error.) When calculating the value using image size designation (value in inches), multiply the value in inches by 0.0254 and substitute it into SD in the formula.

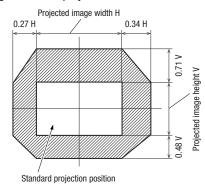
	Aspect ratio 16:9	Aspect ratio 16:10	Aspect ratio 4:3
Projected image size Height (SH)	= SD x 0.490	= SD x 0.530	= SD x 0.6
Projected image size Width (SW)	= SD x 0.872	= SD x 0.848	= SD x 0.8
Minimum projection distance (LW)	= 1.2906 x SD - 0.0534	= 1.3952 x SD - 0.0534	= 1.5795 x SD - 0.0534
Maximum projection distance (LT)	= 2.5693 x SD - 0.0398	= 2.7776 x SD - 0.0398	= 3.1444 x SD - 0.0398

1-Chip DLP™ Projectors

## Adjustment range by the lens position shift (optical shift)

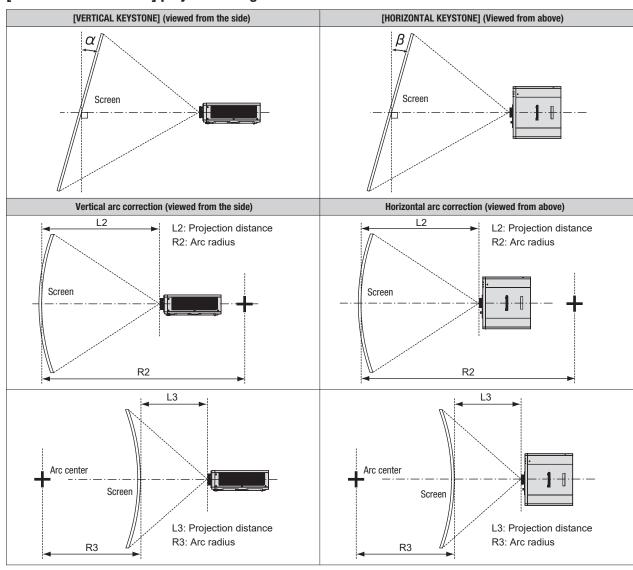
Based on the standard projection position using the optical axis shift function, the projection position can be adjusted in the range shown in the following figure.

Following figure shows the adjustment range when the projector is installed on the floor.



 Optimal image can be achieved by installing the projector squarely in front of the screen and adjusting the lens shift lever to center.

## [SCREEN ADJUSTMENT] projection range



Only [KEYS	TONE] used		[KEYSTONE] and [CU	Only [CURVED] used			
Vertical keystone correction angle α (°)	Horizontal keystone correction angle β (°)	Vertical keystone correction angle α (°)	Horizontal keystone correction angle β (°)	Min. value of R2/L2	Min. value of R3/L3	Min. value of R2/L2	Min. value of R3/L3
±40	±20	±20	±15	0.9	1.8	0.5	1.0

When [SCREEN ADJUSTMENT] is used, the focus of the entire screen may be lost as correction increases.

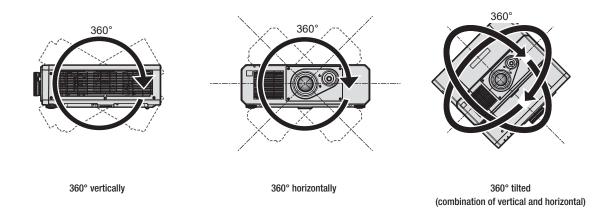
Make the curved screen a circular arc shape with one part of a perfect circle removed.

## 1-Chip DLP™ Projectors

## Installable angle

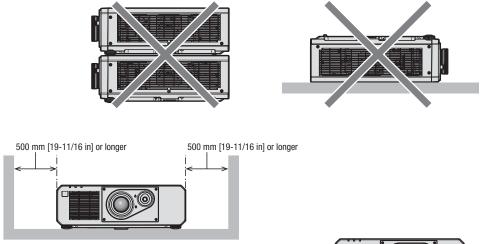
Install the projector at an angle within the range shown below.

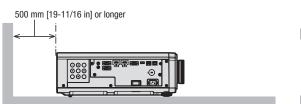
### Projection in all 360° direction

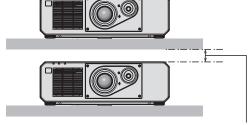


## Cautions when setting up the projector

- Do not stack projectors on top of each other.
- Do not use the projector supporting it by the top.
- Do not block the intake and exhaust vents of the projector.
- Prevent hot and cool air from the air conditioning system to blow directly to the intake and exhaust vents of the projector.







100 mm [3-15/16 in] or longer

• Do not install the projector in a confined space.

When installing the projector in a confined space, provide air conditioning or ventilation separately. Exhaust heat may accumulate when the ventilation is not enough, triggering the protection circuit of the projector.

1-Chip DLP™ Projectors

## PT-FRQ50

### List of compatible signals

The following table specifies the image signals that the projector can project. This projector supports the signal with 🗸 in the compatible signal column.

• The content of the signal type column is as follows.

-V: Video signal -C: Computer signal

lenni	Signal name	Resolution	Scannir	ig freq.	Dot clock	Compatible signal				
_	(SIGNAL FORMAT)	(Dots)	Horizontal (kHz)	Vertical (Hz)	freq. (MHz)	COMPUTER	НДМІ	DIGITAL LINK		
	480/60p	720 x 480	31.5	59.9	27.0	✓	✓	✓		
Signal type  V	576/50p	720 x 576	31.3	50.0	27.0	✓	✓	✓		
	720/60p	1280 x 720	45.0	60.0 <sup>1</sup>	74.3	✓	✓	✓		
	720/50p	1280 x 720	37.5	50.0	74.3	✓	✓	/		
	1080/60i	1920 x 1080i	33.8	60.0 <sup>1</sup>	74.3	✓	1	1		
	1080/50i	1920 x 1080i	28.1	50.0	74.3	1	✓	✓		
	1080/24p	1920 x 1080	27.0	24.0 <sup>1</sup>	74.3	1	✓	/		
	1080/24sF	1920 x 1080i	27.0	48.0¹	74.3	1	✓	1		
	1080/25p	1920 x 1080	28.1	25.0	74.3	1	✓	✓		
	1080/30p	1920 x 1080	33.8	30.0 <sup>1</sup>	74.3	1	✓	/		
	1080/60p	1920 x 1080	67.5	60.0¹	148.5	✓	✓	✓		
	1080/50p	1920 x 1080	56.3	50.0	148.5	1	1	1		
1080/\(1080\)\	1080/120p	1920 x 1080	135.0	120.0¹	297.0	_	/	/		
	3840 x 2160/24p	3840 x 2160	54.0	24.01	297.0	_	1	1		
		3840 x 2160	56.3	25.0	297.0	_	√	/		
	3840 x 2160/30p	3840 x 2160	67.5	30.0¹	297.0	_	/	/		
		3840 x 2160	135.0	60.0 <sup>1</sup>	297.0	_	✓ <sup>2</sup>	✓ <sup>2</sup>		
	3840 x 2160/60p	3840 x 2160	135.0	60.0¹	594.0		/			
		3840 x 2160	112.5	50.0	297.0		✓ <sup>2</sup>	✓ <sup>2</sup>		
	3840 x 2160/50p	3840 x 2160	112.5	50.0	594.0		<i>'</i>			
	4006 v 2160/24n	4096 x 2160	54.0	24.0¹	297.0		<b>√</b>	/		
		4096 x 2160	56.3	25.0	297.0		<b>√</b>	<b>√</b>		
		4096 x 2160	67.5	30.0¹	297.0		<b>√</b>	<b>√</b>		
	4090 X 2100/30p		135.0	60.0¹	297.0		✓ 2	✓ <sup>2</sup>		
	4096 x 2160/60p	4096 x 2160			594.0		-	V -		
		4096 x 2160	135.0	60.0¹		_	✓ ✓ ²			
	4096 x 2160/50p	4096 x 2160	112.5	50.0	297.0	_	•	-		
	C40 ·· 400/C0	4096 x 2160	112.5	50.0	594.0		<b>√</b>			
		640 x 480	31.5	59.9	25.2	<b>√</b>	<b>√</b>	<b>√</b>		
		1024 x 768	39.6	50.0	51.9	<b>√</b>	<b>√</b>	<b>√</b>		
		1024 x 768	48.4	60.0	65.0	<b>√</b>	<b>√</b>	<b>√</b>		
		1280 x 800	41.3	50.0	68.0	<b>√</b>	<b>√</b>	<b>√</b>		
	3840 x 2160/60p  3840 x 2160/50p  4096 x 2160/24p  4096 x 2160/30p  4096 x 2160/60p  4096 x 2160/60p  4096 x 2160/50p  640 x 480/60  1024 x 768/50  1024 x 768/60  1280 x 800/50  1280 x 1024/50  1280 x 1024/50  1366 x 768/50  1366 x 768/60  1400 x 1050/60  1440 x 900/50	1280 x 800	49.7	59.8	83.5	✓	✓	1		
		1280 x 1024	52.4	50.0	88.0	✓	✓	1		
V		1280 x 1024	64.0	60.0	108.0	✓	✓	1		
		1366 x 768	39.6	49.9	69.0	✓	✓	✓		
		1366 x 768	47.7	59.8	85.5	✓	1	✓		
	1400 x 1050/50	1400 x 1050	54.1	50.0	99.9	✓	✓	✓		
		1400 x 1050	65.2	60.0	122.6	✓	✓	✓		
C	1440 x 900/50	1440 x 900	46.3	49.9	86.8	✓	✓	✓		
J	1440 x 900/60	1440 x 900	55.9	59.9	106.5	✓	✓	✓		
	1600 x 900/50	1600 x 900	46.4	49.9	96.5	✓	✓	✓		
	1600 x 900/60	1600 x 900	55.9	60.0	119.0	✓	1	✓		
	1600 x 1200/50	1600 x 1200	61.8	49.9	131.5	✓	1	✓		
	1600 x 1200/60	1600 x 1200	75.0	60.0	162.0	✓	1	1		
	1680 x 1050/50	1680 x 1050	54.1	50.0	119.5	1	✓	1		
V (\$\frac{3}{3} \) (\$\frac{1}{3} \) (\$\f	1680 x 1050/60	1680 x 1050	65.3	60.0	146.3	1	1	1		
	1920 x 1080/240	1920 x 1080	291.6	240.0	583.2	-	/	-		
	1920 x 1200/50	1920 x 1200	61.8	49.9	158.3	✓	/	/		
	1920 x 1200/60RB	1920 x 1200 <sup>3</sup>	74.0	60.0	154.0	1	/	/		
	2560 x 1600/50	2560 x 1600	82.4	50.0	286.0	_	1	/		
	576/50p 720/60p 720/60p 720/60p 720/50p 1080/60i 1080/50i 1080/50i 1080/24p 1080/24sF 1080/25p 1080/30p 1080/60p 1080/50p 1080/50p 3840 x 2160/24p 3840 x 2160/25p 3840 x 2160/25p 3840 x 2160/30p 3840 x 2160/60p 4096 x 2160/50p 4096 x 2160/25p 4096 x 2160/30p 4096 x 2160/60p 1024 x 768/50 1024 x 768/50 1024 x 768/60 1280 x 800/60 1280 x 800/60 1280 x 1024/50 1366 x 768/50 1366 x 768/60 1400 x 1050/50 1400 x 1050/50 1400 x 1050/50 1400 x 900/50 1600 x 900/50 1600 x 1200/60 1680 x 1050/50 1690 x 1200/60 1690 x 1200/60 1690 x 1200/60 1690 x 1200/60 1920 x 1200/60 1920 x 1200/60 1920 x 1200/60 1920 x 1200/60	2560 x 1600 <sup>3</sup>	98.7	60.0	268.5	_	√	1		

<sup>1</sup> The signal with 1/1.001x vertical scanning frequency is also supported. 2 YP<sub>B</sub>P<sub>R</sub> 4:2:0 format only

### Note

- A signal with a different resolution is converted to the number of display dots. The number of display dots is as follows. 3840 x 2160 However, when the input signal is 1080/120p or 1920 x 1080/240, the number of display dots is as follows. 1920 x 1080
- The "i" at the end of the resolution indicates an interlaced signal.
- When interlaced signals are connected, flickering may occur on the projected image.

   When the DIGITAL LINK connection is made with the long-reach communication method, the signal that the projector can receive is up to 1080/60p (1920 x 1080 dots, dot clock frequency 148.5 MHz).
- Even if it is the signal listed in the list of compatible signals, it may not be displayed by the projector if the image signal is recorded in a special format.

<sup>3</sup> VESA CVT-RB (Reduced Blanking)-compliant

## 1-Chip DLP™ Projectors

## List of Plug and play compatible signals

The following table specifies the image signals compatible with plug and play.

Signal with 🗸 in the plug and play compatible signal column is the signal described in the EDID (extended display identification data) of the projector. For the signal without 🗸 in the plug and play compatible signal column, the resolution may not be selected on the computer even if the projector is supporting it.

	Resolution (Dots)	Scanning freq.			Plug and play compatible signal							
Signal name				Dot clock	HDMI DIGITAL LINK							
(SIGNAL FORMAT)		Horizontal (kHz)	Vertical (Hz)	freq. (MHz)	COMPUTER	4K/60p/HDR 4K/60p/SDR	4K/30p	2K	4K/60p	4K/30p/HDR 4K/30p/SDR	2K	
480/60p	720 x 480	31.5	59.9	27.0	-	/	1	<b>✓</b>	1	1	/	
576/50p	720 x 576	31.3	50.0	27.0	-	/	/	/	1	1	1	
720/60p	1280 x 720	45.0	60.0	74.3	_	1	1	/	1	/	/	
720/50p	1280 x 720	37.5	50.0	74.3	_	1	1	/	1	/	/	
1080/60i	1920 x 1080i	33.8	60.0	74.3	_	1	/	/	1	/	1	
1080/50i	1920 x 1080i	28.1	50.0	74.3	_	/	/		1	/		
1080/24p	1920 x 1080	27.0	24.0	74.3	_	/	/		/	1		
1080/24sF	1920 x 1080i	27.0	48.0	74.3	_		-		_	_	<u> </u>	
1080/25p	1920 x 1080	28.1	25.0	74.3	_	/	/		/	/	/	
1080/30p	1920 x 1080	33.8	30.0	74.3	_	<b>✓</b>	1		/	/		
				148.5					<del>                                     </del>			
1080/60p	1920 x 1080	67.5	60.0		-	<b>√</b>	1		<b>/</b>	<b>√</b>		
1080/50p	1920 x 1080	56.3	50.0	148.5	-	<b>√</b>	1	1	/	<b>✓</b>	✓	
1080/120p	1920 x 1080	135.0	120.0	297.0	-	<b>√</b>	<b>✓</b>		/	<b>✓</b>		
3840 x 2160/24p	3840 x 2160	54.0	24.0	297.0	-	✓	1	-	/	1	_	
3840 x 2160/25p	3840 x 2160	56.3	25.0	297.0	-	✓	1		1	1	_	
3840 x 2160/30p	3840 x 2160	67.5	30.0	297.0	-	✓	✓	_	1	1	-	
3840 x 2160/60p	3840 x 2160	135.0	60.0	297.0	-	<b>√</b> 1	-	-	<b>√</b> 1	-		
00-10 х 2100/00р	3840 x 2160	135.0	60.0	594.0	-	✓	-	-	-	-	-	
3840 x 2160/50p	3840 x 2160	112.5	50.0	297.0	-	<b>√</b> 1	-	-	<b>√</b> 1	_	-	
3040 X 2100/30p	3840 x 2160	112.5	50.0	594.0	-	1	-	-	-	_	-	
4096 x 2160/24p	4096 x 2160	54.0	24.0	297.0	-	/	1	_	1	1	-	
4096 x 2160/25p	4096 x 2160	56.3	25.0	297.0	-	1	1	-	1	1	-	
4096 x 2160/30p	4096 x 2160	67.5	30.0	297.0	_	1	1	_	1	1	_	
·	4096 x 2160	135.0	60.0	297.0	_	<b>√</b> ¹	-	_	<b>✓</b> 1	_	_	
4096 x 2160/60p	4096 x 2160	135.0	60.0	594.0	_	1	_		_	_	_	
	4096 x 2160	112.5	50.0	297.0	_	✓ <sup>1</sup>	_		<b>√</b> 1	_		
4096 x 2160/50p	4096 x 2160	112.5	50.0	594.0	_	/	_		_	_		
640 x 480/60	640 x 480	31.5	59.9	25.2	/		1		/	/	/	
1024 x 768/50	1024 x 768	39.6	50.0	51.9	_	_	_		_	_	•	
1024 x 768/60	1024 x 768	48.4	60.0	65.0	/		_			_		
					-	-			1	-		
1280 x 800/50	1280 x 800	41.3	50.0	68.0	-	-	-		_	-		
1280 x 800/60	1280 x 800	49.7	59.8	83.5	-	_	-		_	-		
1280 x 1024/50	1280 x 1024	52.4	50.0	88.0	-	_	-		-	-		
1280 x 1024/60	1280 x 1024	64.0	60.0	108.0	-	_	-		-	-		
1366 x 768/50	1366 x 768	39.6	49.9	69.0	-	_	-		-	-		
1366 x 768/60	1366 x 768	47.7	59.8	85.5	-	_	-		-	-	_	
1400 x 1050/50	1400 x 1050	54.1	50.0	99.9	-	-	-	_	_	-	_	
1400 x 1050/60	1400 x 1050	65.2	60.0	122.6	1	✓	1	1	1	1	1	
1440 x 900/50	1440 x 900	46.3	49.9	86.8	-	-	-	-	-	_	-	
1440 x 900/60	1440 x 900	55.9	59.9	106.5	-	_	-	-	_	_	-	
1600 x 900/50	1600 x 900	46.4	49.9	96.5	-	_	-	-	-	-	-	
1600 x 900/60	1600 x 900	55.9	60.0	119.0	1	<b>√</b>	1	1	1	1	1	
1600 x 1200/50	1600 x 1200	61.8	49.9	131.5	-	_	-	-	_	-	-	
1600 x 1200/60	1600 x 1200	75.0	60.0	162.0	1	/	1	1	1	1	1	
1680 x 1050/50	1680 x 1050	54.1	50.0	119.5	_	_	-	_	_	_	_	
1680 x 1050/60	1680 x 1050	65.3	60.0	146.3	_	_	_	_	-	_		
1920 x 1080/240	1920 x 1080	291.6	240.0	583.2	_	1	_	_	_	_	_	
1920 x 1000/240	1920 x 1200	61.8	49.9	158.3	_	_	_		_	_		
1920 x 1200/30 1920 x 1200/60RB	1920 x 1200 <sup>2</sup>	74.0	60.0	154.0	_		<i>-</i>		/	- ✓		
1920 X 1200/00ND		82.4	50.0	286.0								
2560 x 1600/50	2560 x 1600				_	_		_	I —			

- The "i" at the end of the resolution indicates an interlaced signal.
- When interlaced signals are connected, flickering may occur on the projected image.

<sup>1</sup> YP<sub>B</sub>P<sub>R</sub> 4:2:0 format only 2 VESA CVT-RB (Reduced Blanking)-compliant