



#### **SUPERB PICTURE QUALITY**



## High resolution, brightness, and contrast

Bright, detailed image reproduction is assured with the VPH-D50Q/D50QM. Assembled with newly developed 7-inch CRTs and numerous advanced circuits including 75MHz RGB bandwidth circuitry, this projector produces a light output of 160ANSI lumens and a resolution of

1280 x 1024 dots resulting in superb picture quality.

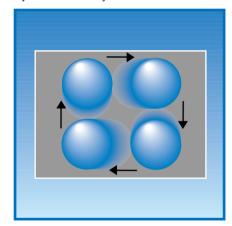
# Multiscan capability

Signals with a horizontal frequency of 15 to 64kHz can be reproduced with the VPH-D50Q/D50QM. Various signals, from conventional video signals up to high quality computer signals, can all be reproduced with excellent quality.

#### **CONVENIENT OPERATING FUNCTIONS**

# Picture orbiting function

Similar to "screen saver" functions for computer monitors, Sony's Picture orbiting feature reduces the risk of CRT burn in projectors. CRT burn is caused by prolonged still-image projection. The orbiting function rotates the projected image in intervals which cannot be detected by the human eye.



# Power saving mode

The VPH-D50Q/D50QM is extremely power efficient and therefore environmentally-friendly. When the power saving mode is set to on, the projector automatically enters power saving mode when an input signal has not been detected for over 10 minutes. When a signal is detected, the projector promptly resumes its operation status.

# Multi-language on-screen

Operations can be performed via the multi-language on-screen menu which can be selected in any of seven languages: English, French, German, Italian, Spanish, Japanese or Chinese.



## **ABG (Automatic Background)** on/off function

To ensure that white balance is not affected by aging of CRTs or temperature drift, the VPH-D50Q/D50QM has an ABG circuitry individually controlling each CRT. However, this circuit can be switched off if the gray line produced by the ABG circuit at the top of the picture is unacceptable. This is particularly useful in installations such as planetariums and in multi-screen systems.

\* The ABG circuit is set to on at default.

#### Special features for multiprojection applications ABL link function

In order to prevent CRT damage, the VPH-D50Q/D50QM has an Automatic Brightness Limiter (ABL). This circuitry controls the beam current so that it remains below the point where CRT damage may occur and overall screen brightness is affected. The ABL Linkage function is designed especially for multi-screen displays. If the ABL circuit is activated on any one projector in a multi-projector installation, then the beam current in all of the other projectors is similarly modified so that uniform brightness over the whole of the projected image is maintained.

#### Index operation

In a multi-projector application, index numbers can be assigned to each VPH-D50Q/D50QM to make it easier to control and adjust individual units.

## Loop-through remote connectors

With the supplied IFB-40 Interface Board, multi-projector remote control is easy and convenient for double and triple-stack applications. Simply connect a SIC-M cable from the 14-pin output connector of one projector to the 14-pin input connector of another.

# Optional built-in line doubler

The visibility of scanning lines especially noticeable in large screen reproduction—is greatly reduced and images are solidly reproduced with the optional internal Sony EXB-DS10 IDTV Board which also features motion compensation.

#### SYSTEM EXPANDABILITY AND VERSATILITY

#### Various input terminals

The VPH-D50Q/D50QM is equipped with RGB/Component (Y/R-Y/B-Y), HDTV\*1. Y/C and composite video input terminals as standard. In addition, this projector has a slot for an optional interface board from the Sony IFB Series\*2. By connecting an optional Sony signal switcher with IFB Series boards, several inputs can be simultaneously connected, thus expanding the projection system.

- \*1 HDTV: 1125/60 interlaced HDTV studio standard system.
- \*2 The IFB-40 is fitted as standard

# **RS-422A** communication port

An RS-422A serial communication port is available to link the projector with a computer, Full RS-422A control can be obtained via this port. thus enhancing system use.

#### Remote control capability Installation and setup

All operations and adjustments of the VPH-D50Q/D50QM can be performed using the supplied RM-PJ1000 remote commander. To increase control flexibility in

rear-projection and projection-wall applications, the optional RM-PJ10 infrared remote control receiver is also available.

#### Professional presentation

Additionally, the optional RM-PJM800 remote commander unit is a handy presentation tool. This convenient remote offers control of key presentation features such as input select and computer mouse functions via an optional RM-PJ20/21 mouse receiver.

### **CONVENIENT INSTALLATION, COMPACT DESIGN**

#### **Designed with mobility**

Thanks to its compact size, the VPH-D50Q/D50QM can be easily transported and installed under various conditions. Pop-out handles can be pulled out when needed and retracted when not in use.



# Universal air coupling for

Universal air coupling enables the VPH-D50Q/D50QM to be used with screen sizes ranging from 60 to 250 inches in size with the utmost simplicity. Fine adjustments can be quickly performed with the VPH-D50Q/D50QM in which the CRT and lens angle can be independently altered both horizontally and vertically, while still monitoring the reproduced image.

# Memory function for facilitated setup

With ease of use and installation in mind, 50 sets of input conditions such as picture control, registration and RGB size/shift can be stored in the INPUT MEMORY. Once this data is memorized, the projector automatically retrieves the most appropriate set-up condition for each signal. In addition, a Video Memory

function is provided to store up to 10 picture control settings. Each input signal can therefore be optimally reproduced depending on the nature of its image.

# **Precise registration**

# Delicate linear accuracy can be achieved with the Key Balance and Pin Balance. This precise image

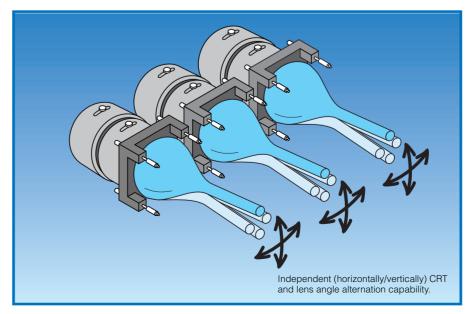
reproduction meets the high quality requirements of today's most demanding applications such as corporate presentations and home entertainment theaters.

# New simplified internal layout

The internal layout of the VPH-D50Q/D50QM is very straightforward, making access to controls for installation and servicing extremely easy. Opening the projector cover and removal of circuit boards requires no complicate operations.



simple screen size alternation



#### OPTIONAL ACCESSORIES FOR CONVENIENCE AND SYSTEM FLEXIBILITY

#### **REMOTE CONTROL**



#### RM-PJ1000\*

Infrared remote control unit

- Wired/wireless remote control unit for setup and operation

  Full remote operation
- Function keys can be illuminated for operation in dark rooms
- \* Supplied with the VPH-D50Q/D50QM



#### RM-PJ10

Infrared remote control receiver

• Remote control satellite for rear projection or out-of-sight projector applications

IFB Series Interface Boards can be

fitted in the VPH-D50Q/D50QM

Projector, the PC-1271/1271M Signal Interface Switcher and the

IFU-1271/1271M Interface Unit.

• Extends the operating range of the RM-PJ1000 and RM-PJM800



#### RM-PJM800

Infrared remote control unit

- Wireless remote control unit for presentations Can also be used to control the PC-1271/
- Power on/off and input selection operation.
- Computer mouse control when used with RM-PJ20
- ON and OFF via the remote commander or control panel Moving image correction circuitry is incorporated for natural reproduction of line-doubled

Extension board (internal line doubler board)

Compatible with composite video. Y/C video.

Aperture is adjustable horizontally and verti-

• Line doubler signal processing can be turned

cally to achieve crisp image reproduction

• Line doubler signal processing board designed to be fitted in the VPH-D50Q/D50QM

component and 15kHz RGB signals

**EXTENSION BOARD** 

fast-moving images

with any type of input signal

EXB-DS10

- Digital noise reducer incorporated
   Compatible with NTSC, PAL, SECAM, NTSC4.43 and PAL-M
- 3D comb filter or 3-line comb filter for NTSC and 3-line comb filter for PAL signals to reduce cross color and dot interference for clear image reproduction

# RM-PJ20/21\*1 Mouse receiver

• Enables operation of a connected computer with the RM-PJM800

#### **INTERFACE BOARD**



#### IFB-12

Analog RGB/Component (Y/R-Y/B-Y)/HDTV (Y/P<sub>B</sub>/P<sub>R</sub>, GBR)/Y/C/Composite video input/output\* (5 x BNC)

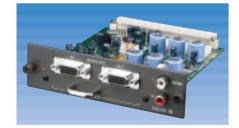
- Functions as an input/output\* board
- RGB bandwidth of 300MHz
- \* The IFB-12 can function as an output board when fitted in the VPH-D50Q/D50QM.



#### IFB-20\*2

Analog RGB input (D-sub 9-pin)

• RGB bandwidth of 120MHz



**IFB-21** 

Analog RGB input/output (HD D-sub 15-pin)

RGB bandwidth of 150MHz



#### **IFB-30**

Digital RGB input (D-sub 9-pin)

- Monochrome/8 color/16 color/64 color mode switchable
- RGB bandwidth of 30MHz



#### IFB-1000\*2

Composite/Y/C input (Loop-through BNC/ Loop-through Mini DIN 4-pin)

#### **INTERFACE CABLES**

RCC-5G/10G/30G

• 9-pin remote cable for RS-422A • D-sub 9-pin

Length: 5, 10 and 30 meters

SIC-21

Analog RGB

(female)

SIC-M\*2

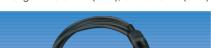
• D-sub 9-pin **←** 

Interface Cables are designed to connect IFB Series Interface Boards with various signal sources. Using a SIC cable, a signal can be simultaneously connected to a local monitor as well as to the projector or signal interface switcher.



#### SIC-20A/20B/20C

- Analog RGB
   D-sub 9-pin D-sub 15-pin (female)
  D-sub 15-pin (male) (female) • Length: overall 2m (6.6ft), branch 0.2m (0.7ft)





#### **SIC-30**

- Digital RGB input • D-sub 9-pin
- D-sub 9-pin (female)
  D-sub 9-pin (male) (female)
- Length: overall 2m (6.6ft), branch 0.2m (0.7ft)



#### SMF-400

- Length: overall 2m (6.6ft)



Multi-cable 14-pin → 14-pin

(female)

• Length: 1, 5, 15, 25 and 50 meters

D-sub 9-pin (female)
D-sub 9-pin (male)

(male)

• Length: overall 2m (6.6ft), branch 0.2m (0.7ft)

#### SMF-401

• HD D-sub 15-pin ← HD D-sub 15-pin Length: overall 2m (6.6ft)

### SIGNAL INTERFACE SWITCHER

#### PC-1271/1271M

- Provides eight slots for optional interface boards. By using two PC-1271/1271M Switchers, a maximum of 16 inputs can be connected simultaneously.
- Remote control capability with the RM-PJ1000 and RM-PJM800. The switcher can also be controlled with a custom-made remote control unit via the REMOTE 2 (D-sub 25-pin).
- The switcher can be connected to the projector using a SIC-M multi-cable\* (50m) via REMOTE 1. Incorporates a cable length compensation switch to maintain the RGB bandwidth of 70MHz when using the multicable. A 150MHz RGB bandwidth is guaranteed for Monitor OUT.
- When one of the input selection switchers is selected, the front panel of the chosen interface board automatically illuminates.
- When power is turned on, the PC-1271/ 1271M reconnects the channel that was in





use immediately prior to the power being turned off.

- Mountable in an EIA 19-inch rack with the supplied rack mount kit.
- - \*1 Will soon be available
  - \*2 Some items are not available in some areas. For further details, please consult your nearest Sony office.



#### SIC-10

- 5 x BNC **◄** →5 x BNC (R, G, B, HD/HV, VD) (R, G, B, HD/HV, VD)
- Length: overall 10m (32.8ft)



#### SIC-22

- Analog RGB with digital sync
  D-sub 9-pin D-sub 15-pin High Density (female) (female) ► D-sub 15-pin
- High Density (male) • Length: overall 2m (6.6ft), branch 0.2m (0.7ft)

#### **OTHER**

#### ADP-10

(Signal adapter, HD D-sub 15-pin to D-sub 9-pin for SIC cable)

#### ADP-20

(Signal adapter, Macintosh to VGA)

#### VPS-100FH

(100-inch flat screen)

#### VPS-120FH

#### (120-inch flat screen)

**PSS-70** 

(Projector suspension support)

# **PSS-10**

(Projector suspension support)

## SIGNAL INTERFACE UNIT





#### IFU-1271/1271M\*2

- Distributes an input signal from the IFB board to two outputs with 100MHz bandwidth.
   The IFU-1271/1271M converts signals from a digital signal level to an analog signal level
- (TTL to 0.7Vp-p) for output.

#### **SPECIFICATIONS**

#### **MULTISCAN PROJECTOR**

## VPH-D500/D500M

VD:

Y:

PB/PR:

HDTV\*2 (Y/PB/PR):

Vertical sync: 0.6 to 8Vp-p, high impedance, positive/negative

1Vp-p $\pm$ 2dB, 75 $\Omega$ 

±0.35Vp-p±2dB, 75Ω

Tri-level sync: ±0.3Vp-p, Bi-level sync: 0.3Vp-p

		HDTV*2 (GBF
Projection system:	3 picture tubes, 3 lenses, direct projection system	G with sy
Picture tube:	7-inch (phosphor size 5.5-inch) static focus	B/R:
Draination lane	Double focus, F1.0/135mm	Input B:
Projection lens: Screen coverage:	60 to 250-inch measured diagonally, factory	Supplied with
Screen coverage.	preset to 120-inch	CONTROL S
Light output:	ANSI*1: 160lm (fH: 64kHz, fV: 50Hz, 6500K) 130lm (fH: 15kHz, fV: 60Hz, 6500K)	IN PLUG IN
	800lm (peak white) 200lm (all white)	OUT:
Throwing distance:	60-inch 1902mm (6 ft 2 <sup>7</sup> / <sub>8</sub> inches)	REMOTE
O .	70-inch 2179mm (7 ft 1 <sup>25</sup> / <sub>32</sub> inches)	RS-422A:
	100-inch 3016mm (9 ft 10 <sup>3</sup> / <sub>4</sub> inches)	ABL Link
	120-inch 3571mm (11 ft 8 <sup>19</sup> / <sub>32</sub> inches)	IN:
	150-inch 4424mm (14 ft 6 <sup>3</sup> / <sub>16</sub> inches)	OUT:
	200-inch 5844mm (19 ft 2 3/32 inches)	TRIG:
	250-inch 7257mm (23 ft 9 <sup>23</sup> / <sub>32</sub> inches)	
IGNALS		
Color system:	NTSC, PAL, SECAM, NTSC4.43, PAL-M	SAFETY REGU
Resolution:	700TV lines (video)	VPH-D50Q:
	1000TV lines (HDTV)	
	1280 x 1024 pixel	VPH-D50QM:
	(RGB, measured at fH: 64kHz, fV: 60Hz)	ACCESSORIES
Scanning frequency:	Horizontal: 15 to 64kHz	Supplied access
DOD I I I III	Vertical: 38 to 150Hz	
RGB bandwidth:	75MHz-3dB	
Dower requirements	VPH-D50Q: AC 120V, 50/60Hz	
Power requirements:	VPH-D50QM: AC 220 to 240V, 50/60Hz	
Power consumption:	450W, Standby: 7W	
Heat dissipation:	1535.7BTU	Optional access
Operating temperature:	0 to 40°C (32 to 104°F)	
Operating humidity:	35 to 85%	
Storage temperature:	−20 to 60°C (−4 to 140°F)	
Storage humidity:	10 to 90%	
Dimensions:	603(W) x 345(H) x 671(D)mm	
Mana	(23 <sup>3</sup> / <sub>4</sub> x 13 <sup>5</sup> / <sub>8</sub> x 26 <sup>1</sup> / <sub>2</sub> inches)	
Mass:	Approx. 54kg (119 lb 1 oz)	
NPUTS/OUTPUTS Video:	Loop-through BNC	
video.	1Vp-p±2dB sync negative, 75Ω	
S Video:	p==as syns nogative, re	
Y IN:	BNC	
C IN:	1Vp-p±2dB sync negative, $75\Omega$ BNC	
C IIV.	Burst 0.286Vp-p±2dB (NTSC), $75\Omega$	
	$0.3\text{Vp-p}\pm2\text{dB}$ (PAL), $75\Omega$	
Y/C IN:	Loop-through mini DIN 4-pin	
Y (luminance):	1Vp-p±2dB sync negative, $75\Omega$	
C (chrominance):	Burst 0.286Vp-p±2dB (NTSC), $75\Omega$ 0.3±2dB (PAL), $75\Omega$	
Input A:	BNC x 5	
Analog RGB/Compor		
R/R-Y:	0.7Vp-p±2dB positive, 75Ω	
G:	$0.7\text{Vp-p}\pm2\text{dB}$ positive, $75\Omega$ ,	
G with sync/Y:	1Vp-p±2dB sync negative, 75Ω	*1 ANSI lumen is a
B/B-Y:	0.7Vp-p±2dB positive, 75Ω	*2 HDTV: 1125/60 in *3 Some items are it
Sync/HD:	•	consult your nea
-	0.6 to 8Vp-p, high impedance,	*4 Will soon be avai
	positive/negative	
	0.6 to 8Vp-p, high impedance,	<b>REAR PANEL C</b>
Horizontal sync:		
Horizontal sync:	positive/negative	

HDTV*² (GBR):	
G with sync:	1Vp-p±2dB, 75Ω
G With Syrio.	Tri-level sync: ±0.3Vp-p, Bi-level sync: 0.3Vp-p
B/R:	0.7Vp-p±2dB, 75Ω
Input B:	
Supplied with an IFB-40:	14-pin multi connector (input: male,
	output: female)
CONTROL S	
IN PLUG IN POWER:	
	5Vp-p, plug in power DC5V,
	maximum output 60mA
OUT:	Stereo mini-jack, 5Vp-p
REMOTE	D 10: (( 1)
RS-422A: ABL Link	D-sub 9-pin (female)
ABL LINK IN:	Mini ingle
OUT:	Mini-jack Mini-jack
TRIG:	Mini-jack
THIC.	Power On: DC5V, output impedance $4.7k\Omega$
	Power Off: 0V
SAFETY REGULATION	
VPH-D50Q:	UL1950, CSA950, DHHS, DNHW,
	FCC (ClassB), IC (ClassB)
VPH-D50QM:	EN60 950 (TÜV), CE, PTB, C-TickMark
ACCESSORIES	
Supplied accessories:	Remote commander RM-PJ1000
	Remote commander cable (15m)
	Adjusting plate
	AA size (R6) battery x 3
	AC power cord
	Operation manual
Ontinual	Installation manual
Optional accessories:	Interface board IFB-12/20/21/30/1000*3
	Extension board EXB-DS10 (internal line-
	doubler board) Signal interface cable SIC-
	10/20A/20B/20C/21/22/30
	SIC-M (Signal interface cable, 1/5/15/25/50m)*
	Signal interface switcher PC-1271/1271M
	Interface unit IFU-1271/1271M*3
	Suspension support PSS-70
	Suspension support PSS-10
	Remote commander RM-PJM800
	Infrared remote control receiver RM-PJ10
	Mouse receiver RM-PJ20/21*4
	Signal adapter ADP-10 (HD D-sub 15-pin to
	D-sub 9-pin for SIC cable)
	Signal adapter ADP-20 (Macintosh® to VGA)
	Monitor cable SMF-400 (HD D-sub 15-pin to
	5BNC)
	Monitor cable SMF-401 (HD D-sub 15-pin to
	HD D-sub 15-pin) 9-pin remote cable RCC-5G/10G/30G (D-sub
	9-pin to D-sub 9-pin for RS-422A)
	100 inch flat agreen VDC 100FL

100-inch flat screen VPS-100FH 120-inch flat screen VPS-120FH

#### CONNECTOR SECTION



#### SIGNAL INTERFACE SWITCHER

# PC-1271/1271M

GENERAL		
RGB bandwidth:	150MHz for N	Monitor out
	70MHz for Re	emote 1 out
Power requirements:	PC-1271:	AC 120V, 50/60Hz
	PC-1271M:	AC 220 to 240V, 50/60Hz
Power consumption:	Approx. 60W	
Dimensions:	424 (W) x 133	3 (H) x 290 (D)mm
	(16 <sup>3</sup> / <sub>4</sub> x 5 <sup>1</sup> / <sub>4</sub>	x 11 <sup>1</sup> / <sub>2</sub> inches)
Mass:	8kg (17 lb 10	oz)
NPUTS		
Input 1 to 8 (open for c	ptional IFB Serie	es input modules)
Remote 1:	14-pin (male)	, from a second PC-1271/1271M
Remote 2:	D-sub 25-pin	(female), from an external
	control unit	
Control S:	Loop-through	n mini jack
DUTPUTS		
Monitor out		
Video*	BNC	
	1Vp-p±2dB,	sync negative, 75Ω
Y/C*:	4-pin mini DII	V
	Y (luminance)	): 1Vp-p±2dB, sync negative, 75Ω
	C (chrominan	nce): Burst 0.286Vp-p±2dB (NTSC), 75Ω
		0.3Vp-p±2dB (PAL), 75Ω
R/B:	BNC	, , , , , , , , , , , , , , , , , ,
•	0.7Vp-p±2dB	3. 75Ω
G/Sync on G:	BNC	
,	G: 0.7Vp-p±	-2dB. 75Ω
	p p=	- ,

HD/VD/HV:	BNC
	1Vp-p $\pm$ 2dB, positive/negative, 75 $\Omega$
Audio:	Phono x 2
	-5dBu, impedance 1kΩ (stereo or monaural
	selectable)
Remote 1:	14-pin (female), to VPH-D50Q/D50QM or
	PC-1271/1271M
ACCESSORIES	
Supplied accessories	Wireless remote control unit RM-1270S
	AA size battery x 2 (for RM-1270S)
	Rack mount kit with screws (for 19-inch EIA
	standard rack)
	Operation manual
Optional accessories	Interface board: IFB-12/20/21/30/1000
	Signal interface cable: SIC-10/20A/20B/20C/
	21/22/30

<sup>\*</sup> The Y/C input has priority over the video input.

#### SIGNAL INTERFACE UNIT

## IFU-1271/1271M

GENERAL						
RGB bandwidth:	100MHz (-3dB)					
Power requirements:	IFU-1271: AC 120V, 50/60Hz					
	IFU-1271M: AC 220 to 240V, 50/60Hz					
Power consumption:	10W					
Dimensions:	180 (W) x 105 (H) x 185 (D)mm					
	(7 <sup>1</sup> / <sub>8</sub> x 4 <sup>1</sup> / <sub>4</sub> x 7 <sup>3</sup> / <sub>8</sub> inches)					
Mass:	3kg (6 lb 9.8 oz)					
NPUTS						
Open for an optional IFE	3 Series input module					
DUTPUT						
Out:	5 x BNC (x2)					
	Phono x 2 (stereo or monaural selectable)					

G with sync: 1Vp-p±2dB, sync negative,  $75\Omega$ 

ACCESSORIES	
Supplied accessories	AC power cord
	Operation manual
Optional accessories	Interface board: IFB-12/20/21/30/1000
	Signal interface cable: SIC-10/20A/20B/20C/
	21/22/30

a measuring method of American National Standard IT7.215.
Dinterlaced HDTV studio standard system.
e not available in some areas. For further details, please earest Sony office.

<sup>/</sup>ailable.

#### **INSTALLATION EXAMPLES**

#### FLOOR INSTALLATION USING FRONT PROJECTION FLAT SCREEN

- The distances in light blue are the factory preset settings.
- Unit: mm (inches)

250	200	180	150	120	100	90	80	70	60	Screen size (inches)
<b>3810</b> (150)	<b>3048</b> (120)	<b>2743</b> (108)	<b>2286</b> (90)	<b>1829</b> (72)	<b>1524</b> (60)	<b>1372</b> (54)	<b>1219</b> (48)	<b>1067</b> (42)	<b>914</b> (36)	A (Vsize)
<b>2005</b> (79)	<b>1662</b> (65 <sup>1</sup> / <sub>2</sub> )	<b>1526</b> (60 <sup>1</sup> /8)	<b>1320</b> (52)	<b>1114</b> (43 <sup>1</sup> /8)	<b>980</b> (38 <sup>5</sup> / <sub>8</sub> )	<b>912</b> (36)	<b>845</b> (33 <sup>3</sup> / <sub>8</sub> )	<b>777</b> (30 <sup>5</sup> /8)	<b>710</b> (28)	B (Hcent)
				<b>32<sup>c)</sup></b> (1 <sup>5</sup> / <sub>16</sub> )	<b>28<sup>a)</sup> 32<sup>b)</sup></b> 1 <sup>1</sup> /8)(1 <sup>5</sup> / <sub>16</sub> )	(				C (Width)
<b>7466</b> (294)	<b>6012</b> (236 <sup>3</sup> / <sub>4</sub> )	<b>5425</b> (213 <sup>5</sup> / <sub>8</sub> )	<b>4551</b> (179 <sup>1</sup> / <sub>4</sub> )	<b>3673</b> (144 <sup>5</sup> /8)	<b>3102</b> (122 <sup>1</sup> / <sub>4</sub> )	<b>2816</b> (110 <sup>7</sup> /8)	<b>2529</b> (99 <sup>5</sup> / <sub>8</sub> )	<b>2240</b> (88 <sup>1</sup> / <sub>4</sub> )	<b>1956</b> (77)	D (TD)
<b>7257</b> (285 <sup>3</sup> / <sub>4</sub> )	<b>5844</b> (230 <sup>1</sup> /8)	<b>5274</b> (207 <sup>5</sup> /8)	<b>4424</b> (174 <sup>1</sup> / <sub>4</sub> )	<b>3571</b> (140 <sup>5</sup> /8)	<b>3016</b> (118 <sup>7</sup> / <sub>8</sub> )	<b>2738</b> (107 <sup>7</sup> /8)	<b>2459</b> (96 <sup>7</sup> /8)	<b>2179</b> (85 <sup>7</sup> /8)	<b>1902</b> (74 <sup>7</sup> /8)	E (XIens)
<b>7389</b> (291)	<b>5976</b> (235 <sup>3</sup> /8)	<b>5405</b> (212 <sup>7</sup> /8)	<b>4556</b> (179 <sup>3</sup> /8)	<b>3703</b> (145 <sup>7</sup> /8)	<b>3148</b> (124)	<b>2869</b> (113)	<b>2591</b> (102)	<b>2310</b> (91)	<b>2033</b> (80 <sup>1</sup> /8)	F (Lhole)
<b>7890</b> (310 <sup>3</sup> / <sub>4</sub> )	<b>6477</b> (255 <sup>1</sup> /8)	<b>5907</b> (232 <sup>5</sup> /8)	<b>5057</b> (199 <sup>1</sup> /8)	<b>4204</b> (165 <sup>5</sup> /8)	<b>3649</b> (143 <sup>3</sup> / <sub>4</sub> )	<b>3371</b> (132 <sup>3</sup> / <sub>4</sub> )	<b>3092</b> (121 <sup>3</sup> / <sub>4</sub> )	<b>2812</b> (110 <sup>3</sup> / <sub>4</sub> )	<b>2535</b> (99 <sup>7</sup> /8)	G (Lmax)
<b>7219</b> (284 <sup>1</sup> / <sub>4</sub> )	<b>5806</b> (228 <sup>5</sup> / <sub>8</sub> )	<b>5236</b> (206 <sup>1</sup> / <sub>4</sub> )	<b>4386</b> (172 <sup>3</sup> / <sub>4</sub> )	<b>3533</b> (139 <sup>1</sup> / <sub>8</sub> )	<b>2978</b> (117 <sup>3</sup> /8)	<b>2700</b> (106 <sup>3</sup> / <sub>8</sub> )	<b>2421</b> (95 <sup>3</sup> / <sub>8</sub> )	<b>2141</b> (84 <sup>3</sup> / <sub>8</sub> )	<b>1864</b> (73 <sup>1</sup> / <sub>2</sub> )	H (Lfront)

a) Sony VPS-100FH
 b) Sony VPS-100FM
 c) Sony VPS-120FH and VPS-120FM

CEILING INSTALLATION USING FRONT PROJECT	~-!(*)/=- =/5-=/2 - - -

- The distances in light blue are the factory preset settings.
- Unit: mm (inches)

Screen size (inches)	60	70	80	90	100	120	150	180	200	250	
A (Vsize)	<b>914</b> (36)	<b>1067</b> (42)	<b>1219</b> (48)	<b>1372</b> (54)	<b>1524</b> (60)	<b>1829</b> (72)	<b>2286</b> (90)	<b>2743</b> (108)	<b>3048</b> (120)	<b>3810</b> (150)	
B (Hcent)	<b>825</b> (32 <sup>1</sup> / <sub>2</sub> )	<b>892</b> (35 <sup>1</sup> / <sub>8</sub> )	<b>960</b> (37 <sup>7</sup> /8)	<b>1027</b> (40 <sup>1</sup> / <sub>2</sub> )	<b>1094</b> (43 <sup>1</sup> / <sub>8</sub> )	<b>1229</b> (48 <sup>3</sup> / <sub>8</sub> )	<b>1435</b> (56 <sup>1</sup> / <sub>2</sub> )	<b>1640</b> (64 <sup>5</sup> /8)	<b>1777</b> (70)	<b>2120</b> (83 <sup>1</sup> / <sub>2</sub> )	
C (Width)				(	<b>28<sup>a)</sup> 32<sup>b)</sup></b> (1 <sup>1</sup> /8)(1 <sup>5</sup> / <sub>16</sub> )	<b>32°</b> ) (1 <sup>5</sup> / <sub>16</sub> )					
D (TD)	<b>1956</b> (77)	<b>2240</b> (88 <sup>1</sup> / <sub>4</sub> )	<b>2529</b> (99 <sup>5</sup> /8)	<b>2816</b> (110 <sup>7</sup> /8)	<b>3102</b> (122 <sup>1</sup> / <sub>4</sub> )	<b>3673</b> (144 <sup>5</sup> /8)	<b>4551</b> (179 <sup>1</sup> / <sub>4</sub> )	<b>5425</b> (213 <sup>5</sup> /8)	<b>6012</b> (236 <sup>3</sup> / <sub>4</sub> )	<b>7466</b> (294)	
E (Xlens)	<b>1902</b> (74 <sup>7</sup> /8)	<b>2179</b> (85 <sup>7</sup> /8)	<b>2459</b> (96 <sup>7</sup> /8)	<b>2738</b> (107 <sup>7</sup> /8)	<b>3016</b> (118 <sup>7</sup> /8)	<b>3571</b> (140 <sup>5</sup> /8)	<b>4424</b> (174 <sup>1</sup> / <sub>4</sub> )	<b>5274</b> (207 <sup>5</sup> /8)	<b>5844</b> (230 <sup>1</sup> / <sub>8</sub> )	<b>7257</b> (285 <sup>3</sup> / <sub>4</sub> )	
F' (Lpss)	<b>2166</b> (85 <sup>3</sup> / <sub>8</sub> )	<b>2442</b> (96 <sup>1</sup> / <sub>4</sub> )	<b>2723</b> (107 <sup>1</sup> / <sub>4</sub> )	<b>3001</b> (118 <sup>1</sup> / <sub>4</sub> )	<b>3280</b> (129 <sup>1</sup> / <sub>4</sub> )	<b>3835</b> (151)	<b>4688</b> (184 <sup>5</sup> /8)	<b>5537</b> (218 <sup>1</sup> /8)	<b>6108</b> (240 <sup>1</sup> / <sub>2</sub> )	<b>7521</b> (296 <sup>1</sup> / <sub>8</sub> )	
G (Lmax)	<b>2535</b> (99 <sup>7</sup> /8)	<b>2812</b> (110 <sup>3</sup> / <sub>4</sub> )	<b>3092</b> (121 <sup>3</sup> / <sub>4</sub> )	<b>3371</b> (132 <sup>3</sup> / <sub>4</sub> )	<b>3649</b> (143 <sup>3</sup> / <sub>4</sub> )	<b>4204</b> (165 <sup>5</sup> /8)	<b>5057</b> (199 <sup>1</sup> / <sub>8</sub> )	<b>5907</b> (232 <sup>5</sup> /8)	<b>6477</b> (255 <sup>1</sup> /8)	<b>7890</b> (310 <sup>3</sup> / <sub>4</sub> )	
H (Lfront)	<b>1864</b> (73 <sup>1</sup> / <sub>2</sub> )	<b>2141</b> (84 <sup>3</sup> / <sub>8</sub> )	<b>2421</b> (95 <sup>3</sup> / <sub>8</sub> )	<b>2700</b> (106 <sup>3</sup> / <sub>8</sub> )	<b>2978</b> (117 <sup>3</sup> / <sub>8</sub> )	<b>3533</b> (139 <sup>1</sup> / <sub>8</sub> )	<b>4386</b> (172 <sup>3</sup> / <sub>4</sub> )	<b>5236</b> (206 <sup>1</sup> / <sub>4</sub> )	<b>5806</b> (228 <sup>5</sup> /8)	<b>7219</b> (284 <sup>1</sup> / <sub>4</sub> )	

a) Sony VPS-100FH

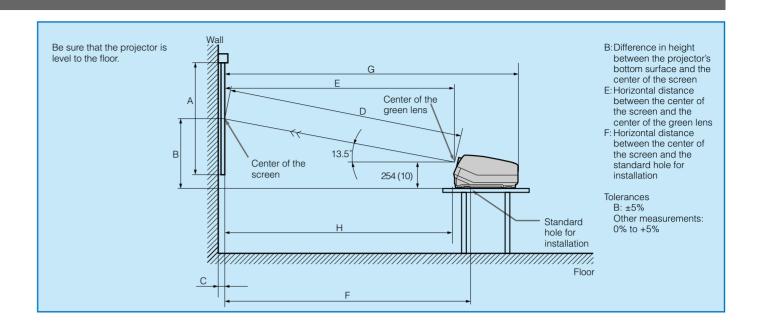
b) Sony VPS-100FM c) Sony VPS-120FH ar VPS-120FM

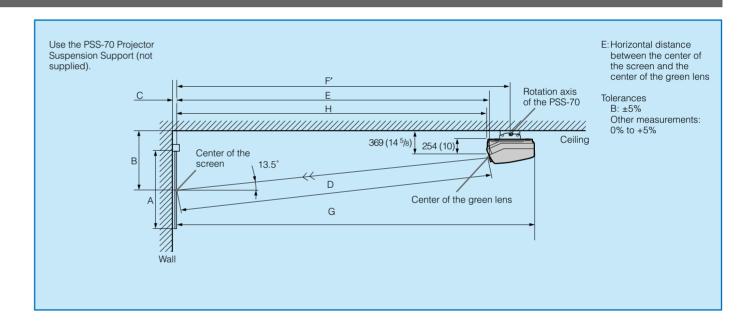
	(36)	(42)	(48)	(54)	(60)	(72)	(90)	(108)	(120)	(150)
B (Hcent)	<b>825</b> (32 <sup>1</sup> / <sub>2</sub> )	<b>892</b> (35 <sup>1</sup> /8)	<b>960</b> (37 <sup>7</sup> /8)	<b>1027</b> (40 <sup>1</sup> / <sub>2</sub> )	<b>1094</b> (43 <sup>1</sup> /8)	<b>1229</b> (48 <sup>3</sup> / <sub>8</sub> )	<b>1435</b> (56 <sup>1</sup> / <sub>2</sub> )	<b>1640</b> (64 <sup>5</sup> /8)	<b>1777</b> (70)	<b>2120</b> (83 <sup>1</sup> / <sub>2</sub> )
C (Width)				(	<b>28<sup>a)</sup> 32<sup>b)</sup></b> (1 <sup>1</sup> /8)(1 <sup>5</sup> / <sub>16</sub> )	<b>32<sup>c)</sup></b> (1 <sup>5</sup> / <sub>16</sub> )				
D (TD)	<b>1956</b> (77)	<b>2240</b> (88 <sup>1</sup> / <sub>4</sub> )	<b>2529</b> (99 <sup>5</sup> / <sub>8</sub> )	<b>2816</b> (110 <sup>7</sup> /s)	<b>3102</b> (122 <sup>1</sup> / <sub>4</sub> )	<b>3673</b> (144 <sup>5</sup> /8)	<b>4551</b> (179 <sup>1</sup> / <sub>4</sub> )	<b>5425</b> (213 <sup>5</sup> /8)		<b>7466</b> (294)
E (XIens)	<b>1902</b> (74 <sup>7</sup> /8)	<b>2179</b> (85 <sup>7</sup> /8)	<b>2459</b> (96 <sup>7</sup> /8)	<b>2738</b> (107 <sup>7</sup> /8)	<b>3016</b> (118 <sup>7</sup> /8)	<b>3571</b> (140 <sup>5</sup> /8)	<b>4424</b> (174 <sup>1</sup> / <sub>4</sub> )	<b>5274</b> (207 <sup>5</sup> /8)	<b>5844</b> (230 <sup>1</sup> /8)	<b>7257</b> (285 <sup>3</sup> / <sub>4</sub> )
F' (Lpss)	<b>2166</b> (85 <sup>3</sup> / <sub>8</sub> )	<b>2442</b> (96 <sup>1</sup> / <sub>4</sub> )	<b>2723</b> (107 <sup>1</sup> / <sub>4</sub> )	<b>3001</b> (118 <sup>1</sup> / <sub>4</sub> )	<b>3280</b> (129 <sup>1</sup> / <sub>4</sub> )	<b>3835</b> (151)	<b>4688</b> (184 <sup>5</sup> /8)	<b>5537</b> (218 <sup>1</sup> / <sub>8</sub> )	6108 (240 <sup>1</sup> / <sub>2</sub> )	<b>7521</b> (296 <sup>1</sup> /8)
G (Lmax)	<b>2535</b> (99 <sup>7</sup> / <sub>8</sub> )	<b>2812</b> (110 <sup>3</sup> / <sub>4</sub> )	<b>3092</b> (121 <sup>3</sup> / <sub>4</sub> )	<b>3371</b> (132 <sup>3</sup> / <sub>4</sub> )	<b>3649</b> (143 <sup>3</sup> / <sub>4</sub> )	<b>4204</b> (165 <sup>5</sup> /8)	<b>5057</b> (199 <sup>1</sup> /8)	<b>5907</b> (232 <sup>5</sup> /8)		<b>7890</b> (310 <sup>3</sup> / <sub>4</sub> )
H (Lfront)	<b>1864</b> (73 <sup>1</sup> / <sub>2</sub> )	<b>2141</b> (84 <sup>3</sup> / <sub>8</sub> )	<b>2421</b> (95 <sup>3</sup> / <sub>8</sub> )	<b>2700</b> (106 <sup>3</sup> / <sub>8</sub> )		<b>3533</b> (139 <sup>1</sup> / <sub>8</sub> )	<b>4386</b> (172 <sup>3</sup> / <sub>4</sub> )	<b>5236</b> (206 <sup>1</sup> / <sub>4</sub> )	<b>5806</b> (228 <sup>5</sup> /8)	<b>7219</b> (284 <sup>1</sup> / <sub>4</sub> )

#### FLOOR INSTALLATION USING REAR PROJECTION FLAT SCREEN

- · When the optical axis angle is 2°
- The distances in light blue are the factory preset settings.
- Unit:mm (inches)

Screen size inches)	60	70	80	90	100	120	150	180	200	250
A (Vsize)	<b>914</b> (36)	<b>1067</b> (42)	<b>1219</b> (48)	<b>1372</b> (54)	<b>1524</b> (60)	<b>1829</b> (72)	<b>2286</b> (90)	<b>2743</b> (108)	<b>3048</b> (120)	<b>3810</b> (150)
B (Hcent)	<b>140</b> (5 <sup>5</sup> /8)	<b>130</b> (5 <sup>1</sup> / <sub>4</sub> )	<b>120</b> (4 <sup>3</sup> / <sub>4</sub> )	110 (4 <sup>3</sup> / <sub>8</sub> )	<b>100</b> (4)	<b>80</b> (3 <sup>1</sup> / <sub>4</sub> )	<b>49</b> (1 <sup>15</sup> / <sub>16</sub> )	18 ( <sup>23</sup> / <sub>32</sub> )	<b>-3</b> (-1/8)	<b>-54</b> (-2 <sup>1</sup> /8)
E (Xlens)	<b>1977</b> (77 <sup>7</sup> /8)	<b>2265</b> (89 <sup>1</sup> / <sub>4</sub> )	<b>2556</b> (100 <sup>3</sup> / <sub>4</sub> )	<b>2846</b> (112 <sup>1</sup> /8)	<b>3136</b> (123 <sup>1</sup> / <sub>2</sub> )	<b>3712</b> (146 <sup>1</sup> / <sub>4</sub> )	<b>4599</b> (181 <sup>1</sup> / <sub>8</sub> )	<b>5482</b> (215 <sup>7</sup> /8)	<b>6075</b> (239 <sup>1</sup> / <sub>4</sub> )	<b>7544</b> (297 <sup>1</sup> /8)
F (Lhole)	<b>2172</b> (85 <sup>5</sup> /8)		<b>2751</b> (108 <sup>3</sup> / <sub>8</sub> )	<b>3041</b> (119 <sup>3</sup> / <sub>4</sub> )	<b>3331</b> (131 <sup>1</sup> /8)	<b>3907</b> (153 <sup>7</sup> / <sub>8</sub> )	<b>4794</b> (188 <sup>3</sup> / <sub>4</sub> )	<b>5677</b> (223 <sup>5</sup> /8)	<b>6270</b> (246 <sup>7</sup> /8)	<b>7739</b> (304 <sup>3</sup> / <sub>4</sub> )
G (Lmax)	<b>2655</b> (104 <sup>5</sup> /8)	<b>2943</b> (115 <sup>7</sup> / <sub>8</sub> )	<b>3234</b> (127 <sup>3</sup> / <sub>8</sub> )	<b>3524</b> (138 <sup>3</sup> / <sub>4</sub> )	<b>3814</b> (150 <sup>1</sup> / <sub>4</sub> )	<b>4390</b> (172 <sup>7</sup> /8)	<b>5277</b> (207 <sup>7</sup> /8)	6160 (242 <sup>5</sup> /8)	<b>6753</b> (265 <sup>7</sup> / <sub>8</sub> )	<b>8222</b> (323 <sup>3</sup> / <sub>4</sub> )

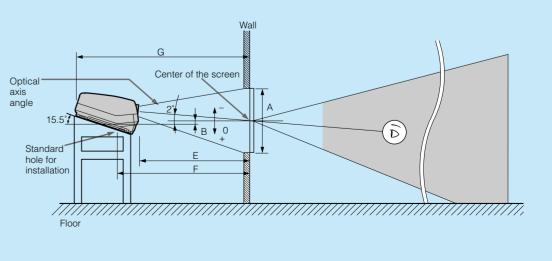




# WHAT IS THE OPTICAL AXIS **ANGLE?**

The optical axis angle is the angle between the horizontal level line and the straight line from the center of the projector's green lens to the center of the screen. When using a rear projection screen, you can get the brightest picture when the center of the screen is aligned with a straight line extension of the center of the green lens.
Therefore, the most suit-

able optical axis angle varies depending on the height of the screen and your line of sight.





# Distributed by

Features and specifications are subject to change without notice. Copyright 1997 Sony Corporation. All rights reserved. Reproduction in whole or in part without written Sony permission is prohibited.

Business and Professional Group 1 Sony Drive Park Ridge, NJ 07656 Printed in U.S.A. © SONY