

SONY[®]

Multiscan Projector

VPH-G70Q/G70QM



***A Sony Projector for
Clear Demonstrations
of Excellence***

WPA





If your goal is projecting a better image, Sony has the solution: a new Multiscan Projector that offers bright images and super-sharp focusing - plus amazing ease of installation and operation.

The Sony VPH-G70Q/G70QM lets you view large-screen images from a wide variety of signal input sources, at horizontal frequencies ranging from 15 to 110kHz. That's a range broad enough to accommodate even high-frequency signals from computer workstations.

Projected images will demonstrate the benefit of the newly developed electromagnetic-focus CRT design and circuitry, with universal optical coupling to achieve excellent, high-contrast reproduction.

Superb reproduction and reliable performance are only a part of the picture. Even those unfamiliar with projectors will appreciate all the user-friendly features we've built into the VPH-G70Q/G70QM - and for installation, this is one projector that's simple to operate.

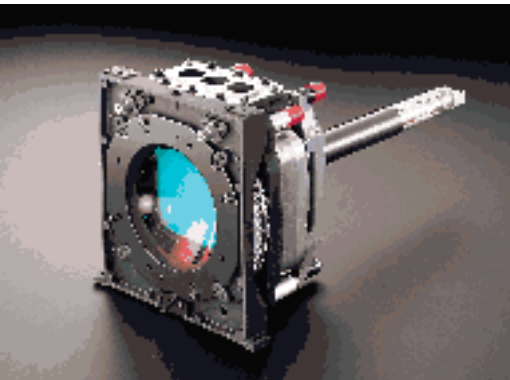
By bringing together advanced technologies and convenient operating functions, Sony's VPH-G70Q/G70QM Multiscan Projector provides state-of-the-art performance over a wide range applications in the corporate environment, education and training, sports and entertainment, computer-generated simulation and command and control installations.

VPH-G70



SUPERB PICTURE QUALITY

●●●
High resolution, brightness, and contrast



The combination of numerous advanced technologies including newly developed 8-inch electromagnetic focus CRTs, new hybrid HACC lenses and a 120MHz RGB bandwidth is your assurance of a high resolution of 1700 x 1200 dots and a high brightness of 240 ANSI lumen. Both a wide RGB bandwidth and high brightness are achieved by incorporating an advanced CRT drive circuit, which assures uncompromising reproduction of the highest frequency computer images. In addition, the liquid contained in

the universal optical coupling enables the projector to provide high picture contrast for exceptionally accurate picture reproduction.

●●●
Multiscan capability

The VPH-G70Q/G70QM accepts signals within the wide range of fH: 15 to 110kHz and fV: 38 to 150Hz. Even if the horizontal frequency of the input signal changes from one end of this range to the other, the VPH-G70Q/G70QM handles this change with a minimum of disturbance.

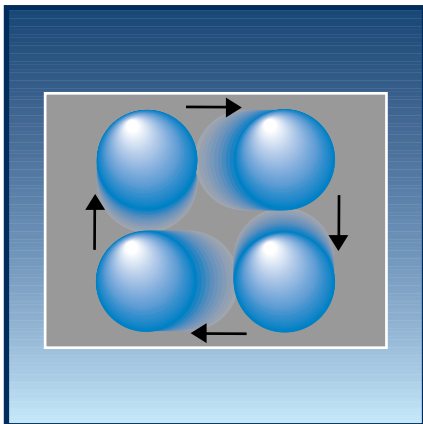
CONVENIENT OPERATING FUNCTIONS

●●●
Independent brightness and color uniformity adjustments

Excellent uniformity from screen corner to corner is assured with the brightness and color uniformity adjustments. Moreover, these two adjustments can be performed independently; this means that extremely even and precise adjustments can be made across the entire screen.

●●●
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.

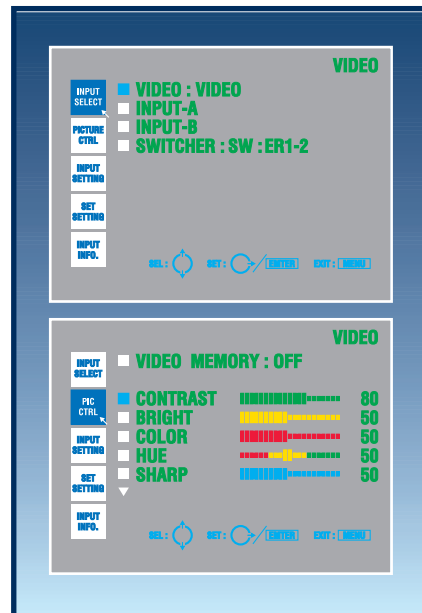


●●●
Power saving mode

To protect the environment, power consumption can be reduced when the power saving mode of the VPH-G70Q/G70QM is set to on.

When the projector detects that there has been no input signal for over 10 minutes, it automatically enters power saving mode. The projector quickly returns to full operation as soon as an input signal is detected.

●●●
Multi-language on-screen menu



The multi-language on-screen menu is provided to simplify operations. The on-screen menus can be selected in any of seven languages: English, French, German, Italian, Spanish, Japanese or Chinese.

●●●
Simplified operation for multi-projection applications

ABL link function

In order to prevent CRT damage, the VPH-G70Q/G70QM 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

An index number can be assigned to each VPH-G70Q/G70QM to facilitate operation and adjustment of individual projectors in a multi-projection application.

●●●
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 internal line-doubler board

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-G70Q/G70QM is equipped with an RGB/Component (Y/R-Y/B-Y), HDTV*¹, Y/C and composite video input terminal as standard. In addition, this projector also 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 interface is available as a communication port between the projector and a connected computer. Full RS-422A control can be obtained via this port, thus greatly enhancing system use.



Remote control capability

Installation and setup

All operation and adjustments of the VPH-G70Q/G70QM 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.

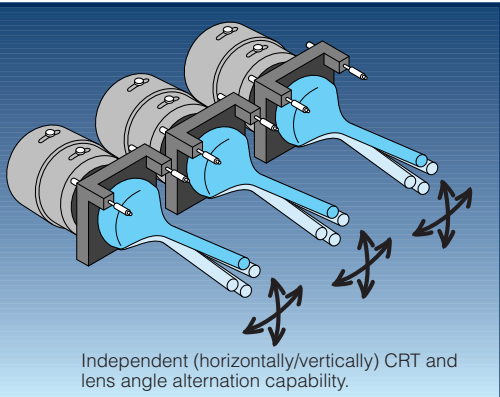
Professional presentation

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.

SIMPLE INSTALLATION AND ADJUSTMENTS



Universal optical coupling for flexible projection size



Universal optical coupling enables the projector to be simply set up to reproduce images on screens with sizes ranging from 60 to 300 inches. Furthermore, fine adjustments can be quickly performed with the VPH-G70Q/G70QM. For example, the CRT and lens angle can be independently altered both horizontally and vertically, while still monitoring the reproduced image.



Memory function facilitates setup

With ease of use and ease of set up in mind, 100 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 be optimally reproduced depending on the nature of its image.



Precise registration

Precise registration can be attained with Key/Pin balance mode and 25-point zone adjustment. Combined use of these features greatly reduces image distortion for an accurate, dynamic image reproduction even in the most demanding applications such as simulation, where special curved screens are typically used.



Optical alignment and polarity change

Optical alignment and polarity changes can be easily performed simply by opening the projector's front cover with a coin or screwdriver. The power automatically shuts off for safety when the cover for optical alignment and polarity change is removed.



Fine adjustment with simple operation

The spot shape can be adjusted over the whole screen area because of built-in Axis Quadrupole/Diagonal Quadrupole (AQP/DQP) technology. 2/4 pole magnet adjustment is included to optimize picture focus. Both of these adjustments can be readily performed with the supplied Sony RM-PJ1000 Remote Commander.



Selectable white balance

The appropriate white balance is automatically retrieved when the operator selects the screen type—beads or matte—via the on-screen display.



ABG (Automatic Background) on/off function

To ensure that white balance is

not affected by aging of CRTs or temperature drift, the VPH-G70Q/G70QM 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.



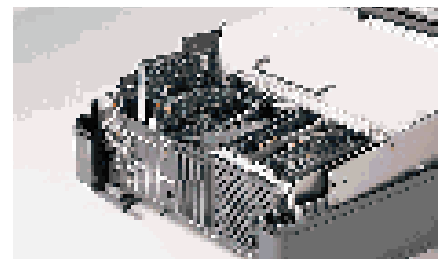
Handles for mobility

A set of pop-out handles is attached on the front, back and sides of the projector for easy mobility. These handles can easily be pulled out when needed and retracted when not in use.



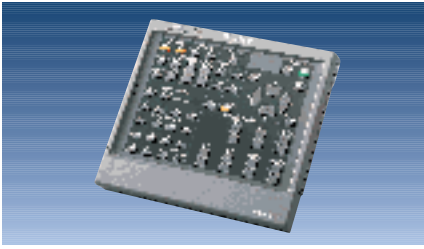
New modular construction

The modular construction of the projector is designed to make it very quick and easy to reach internal controls for installation and servicing. This is a real advantage when the projector is mounted in a difficult location, such as a high ceiling.



OPTIONAL ACCESSORIES FOR CONVENIENCE AND SYSTEM FLEXIBILITY

REMOTE CONTROL

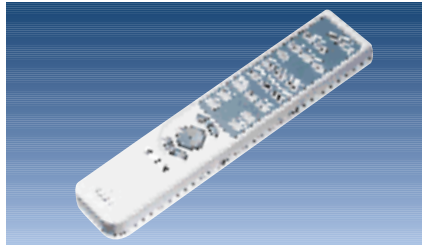


RM-PJ1000*

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-G70Q/G70QM.



RM-PJM800

Infrared remote control unit

- Wireless remote control unit for presentations
- Can also be used to control the PC-1271/1271M
- Power on/off and input selection operation
- Computer mouse control when used with RM-PJ20



RM-PJ10

Infrared remote control receiver

- Remote control satellite for rear projection or out-of-sight projector applications
- Extends the operating range of the RM-PJ1000 and RM-PJM800

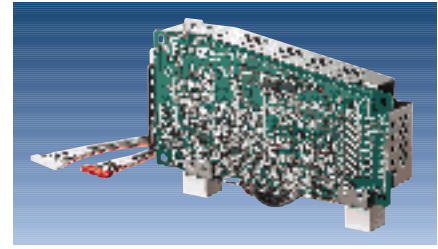


RM-PJ20/21*1

Mouse receiver

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

EXTENSION BOARD



EXB-DS10

Extension board (internal line doubler board)

- Line doubler signal processing board designed to be fitted in the VPH-G70Q/G70QM
- Compatible with composite video, Y/C video, component and 15kHz RGB signals
- Aperture is adjustable horizontally and vertically to achieve crisp image reproduction with any type of input signal
- Line doubler signal processing can be turned ON and OFF via the remote commander or control panel
- Moving image correction circuitry is incorporated for natural reproduction of line-doubled fast-moving images
- Digital noise reducer incorporated
- Compatible with NTSC, PAL, SECAM, NTSC_{4.43} 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

INTERFACE BOARD

IFB Series Interface Boards can be fitted in the VPH-G70Q/G70QM Projector, the PC-1271/1271M Signal Interface Switcher and the IFU-1271/1271M Interface Unit.

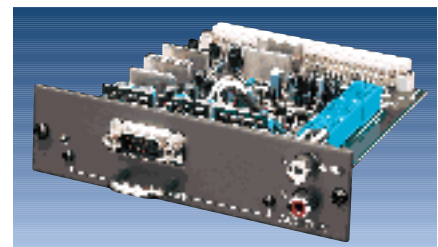


IFB-12

Analog RGB/Component (Y/R-Y/B-Y)/HDTV (Y/Pb/Pr, GBR)/Y/C/Composite video input/output* (5 x BNC)

- Functions as an input/output* board
- RGB bandwidth of 300MHz

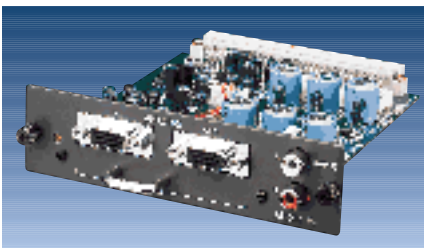
* The IFB-12 can function as an output board when fitted in the VPH-G70Q/G70QM.



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)

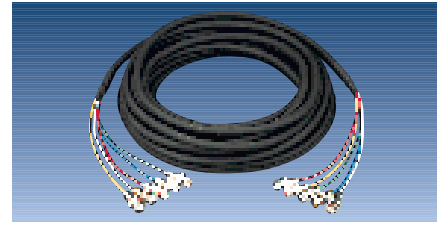
INTERFACE CABLES

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.



RCC-5G/10G/30G

- 9-pin remote cable for RS-422A
- D-sub 9-pin ↔ D-sub 9-pin
- Length: 5, 10 and 30 meters



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)



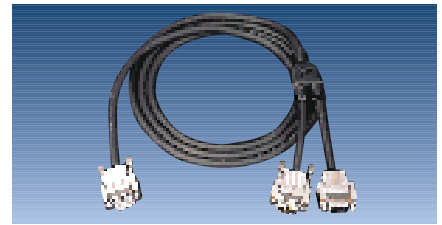
SIC-20A/20B/20C

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



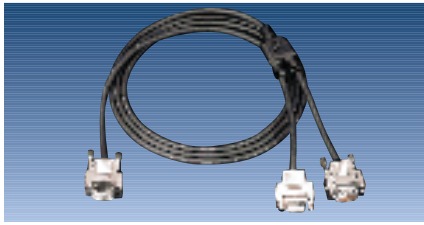
SIC-21

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



SIC-22

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



SIC-30

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



SIC-M*2

- Multi-cable 14-pin (female) ↔ 14-pin (male)
- Length: 1, 5, 15, 25 and 50 meters



SMF-400

- HD D-sub 15-pin ↔ 5BNC
- Length: overall 2m (6.6ft)



SMF-401

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

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)

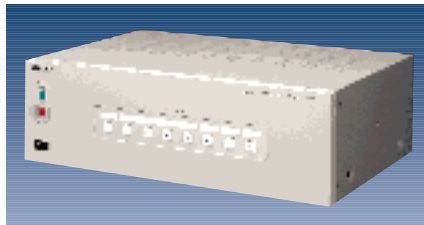
PSS-10

(Projector suspension support)

SIGNAL INTERFACE 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 multi-cable. 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

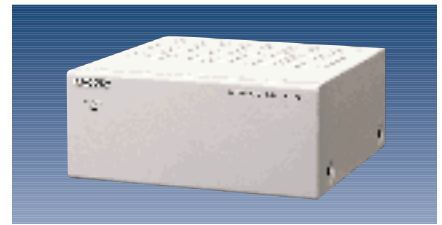


- use immediately prior to the power being turned off.
- Mountable in an EIA 19-inch rack with the supplied rack mount kit.

*1 Will soon be available.

*2 Some items are not available in some areas. For further details, please consult your nearest Sony office.

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.

MULTISCAN PROJECTOR

VPH-G70Q/G70QM

OPTICAL

Projection system:	3 picture tubes, 3 lenses, direct projection system
Picture tube:	8-inch (phosphor size 6-inch) high luminance, electromagnetic focus tubes
Projection lens:	Double focus, F1.1/135mm
Screen coverage:	60 to 300-inch measured diagonally, factory preset to 120-inch
Light output:	ANSI*1: 240lm (fH: 110kHz, fV: 50Hz, 6500K) 200lm (fH: 15kHz, fV: 60Hz, 6500K) 1200lm (peak white) 320lm (all white)
Throwing distance:	60-inch 1668mm (5 ft 5 ²¹ / ₃₂ inches) 70-inch 1921mm (6 ft 3 ⁵ / ₈ inches) 100-inch 2689mm (8 ft 9 ⁷ / ₈ inches) 120-inch 3200mm (10 ft 5 ³¹ / ₃₂ inches) 150-inch 3972mm (13 ft 3 ³ / ₈ inches) 200-inch 5254mm (17 ft 2 ²⁷ / ₃₂ inches) 250-inch 6539mm (21 ft 5 ⁷ / ₁₆ inches) 300-inch 7831mm (25 ft 8 ⁵ / ₁₆ inches)

SIGNALS

Color system:	NTSC, PAL, SECAM, NTSC4.43, PAL-M
Resolution:	700TV lines (video) 1100TV lines (HDTV) 1700 x 1200 pixel (RGB, measured at fH: 74kHz, fV: 60Hz)
Scanning frequency:	Horizontal: 15 to 110kHz Vertical: 38 to 150Hz
RGB bandwidth:	120MHz-3dB

GENERAL

Power requirements:	VPH-G70Q: AC 120V, 50/60Hz VPH-G70QM: AC 220 to 240V, 50/60Hz
Power consumption:	VPH-G70Q: 750W, Standby: 7W VPH-G70QM: 720W, Standby: 7W
Heat dissipation:	2593.4BTU
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:	695(W) x 358(H) x 948(D)mm (27 ³ / ₈ x 14 ¹ / ₈ x 37 ⁵ / ₁₆ inches)
Mass:	Approx. 83kg (183 lb)

INPUTS/OUTPUTS

Video:	
Composite:	Loop-through BNC 1Vp-p±2dB sync negative, 75Ω
Y IN:	1Vp-p±2dB sync negative, 75Ω
C IN:	Burst 0.286Vp-p±2dB (NTSC), 75Ω or 0.3Vp-p±2dB (PAL), 75Ω
Y/C IN:	Loop-through Mini DIN 4-pin
Y:	1Vp-p±2dB sync negative, 75Ω
C:	Burst 0.286Vp-p±2dB (NTSC), 75Ω or 0.3Vp-p±2dB (PAL), 75Ω
Input A:	
BNC x 5	
Analog RGB/Component:	
R/R-Y:	0.7Vp-p±2dB positive, 75Ω
G:	0.7Vp-p±2dB positive, 75Ω,
G with sync/Y:	1Vp-p±2dB sync negative, 75Ω
B/B-Y:	0.7Vp-p±2dB positive, 75Ω
Sync/HD:	
Composite sync:	0.6 to 8Vp-p, high impedance, positive/negative
Horizontal sync:	0.6 to 8Vp-p, high impedance, positive/negative
VD:	
Vertical sync:	0.6 to 8Vp-p, high impedance, positive/negative
HDTV*2 (Y/P _B /P _R):	
Y:	1Vp-p±2dB, 75Ω Tri-level sync: ±0.3Vp-p, Bi-level sync: 0.3Vp-p
P _B /P _R :	±0.35Vp-p±2dB, 75Ω

HDTV*2 (GBR):	
G with sync:	1Vp-p±2dB, 75Ω 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	
PLUG IN POWER:	Stereo mini-jack 5Vp-p, plug in power DC5V, maximum output 60mA
OUT:	Stereo mini-jack 5Vp-p

REMOTE	
RS-422A:	D-sub 9-pin (female)

ABL Link	
IN:	Mini-jack
OUT:	Mini-jack

TRIG:	
Mini-jack	
Power On: DC5V, output impedance 4.7kΩ	
Power Off: 0V	

SAFETY REGULATIONS

VPH-G70Q:	UL 1950, CSA950, DHHS, DNHW, FCC class A, IC class A
VPH-G70QM:	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 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)*3 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 screen VPS-100FH 120-inch flat screen VPS-120FH

*1 ANSI lumen is a measuring method of American National Standard IT7.215.

*2 HDTV: 1125/60 interlaced HDTV studio standard system.

*3 Some items are not available in some areas. For further details, please consult your nearest Sony office.

*4 Will soon be available.

REAR PANEL CONNECTOR SECTION



SIGNAL INTERFACE SWITCHER

PC-1271/1271M

GENERAL

RGB bandwidth:	150MHz for Monitor out 70MHz for Remote 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 (H) x 290 (D)mm (16 3/4 x 5 1/4 x 11 1/2 inches)
Mass:	8kg (17 lb 10 oz)

INPUTS

Input 1 to 8 (open for optional IFB Series 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 mini jack

OUTPUTS

Monitor out	
Video*	BNC 1Vp-p±2dB, sync negative, 75Ω
Y/C*	4-pin mini DIN Y (luminance): 1Vp-p±2dB, sync negative, 75Ω C (chrominance): Burst 0.286Vp-p±2dB (NTSC), 75Ω 0.3Vp-p±2dB (PAL), 75Ω
R/B:	BNC 0.7Vp-p±2dB, 75Ω
G/Sync on G:	BNC G: 0.7Vp-p±2dB, 75Ω G with sync: 1Vp-p±2dB, sync negative, 75Ω

HD/VD/HV:	BNC 1Vp-p±2dB, positive/negative, 75Ω
Audio:	Phono x 2 -5dBu, impedance 1kΩ (stereo or monaural selectable)
Remote 1:	14-pin (female), to VPH-G70Q/G70QM 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

* 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 1/8 x 4 1/4 x 7 3/8 inches)
Mass:	3kg (6 lb 9.8 oz)

INPUTS

Open for an optional IFB Series input module

OUTPUT

Out:	5 x BNC (x2) Phono x 2 (stereo or monaural selectable)
------	---

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

INSTALLATION EXAMPLES

FLOOR INSTALLATION USING FRONT PROJECTION FLAT SCREEN

- 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	300
A (Vsize)	914 (36)	1067 (42 1/8)	1219 (48)	1372 (54 1/8)	1524 (60)	1829 (72 1/8)	2286 (90)	2743 (108)	3048 (120)	3810 (150)	4572 (180)
B (Hcent)	725 (28 5/8)	794 (31 3/8)	865 (34 1/8)	935 (36 7/8)	1005 (39 5/8)	1145 (45 1/8)	1356 (53 1/2)	1566 (61 3/4)	1707 (67 1/4)	2058 (81 1/8)	2410 (95)
C (Width)					28 ^{a)} 32 ^{b)} (1 1/8)(1 5/16)	32 ^{c)} (1 5/16)					
D (TD)	1727 (68)	1990 (78 3/8)	2256 (88 7/8)	2522 (99 3/8)	2787 (109 3/4)	3316 (130 5/8)	4117 (162 1/8)	4916 (193 5/8)	5446 (214 1/2)	6778 (266 7/8)	8117 (319 5/8)
E (Xlens)	1668 (65 3/4)	1921 (75 3/4)	2177 (85 3/4)	2434 (92 1/4)	2689 (105 7/8)	3200 (126)	3972 (156 1/2)	4743 (186 3/4)	5254 (206 7/8)	6539 (257 1/2)	7831 (308 3/8)
F (Lhole)	1888 (74 3/8)	2141 (84 3/8)	2397 (94 3/8)	2654 (104 1/2)	2910 (114 5/8)	3420 (134 3/4)	4193 (165 1/8)	4964 (195 1/2)	5475 (215 5/8)	6760 (266 1/4)	8051 (317)
G (Lmax)	2575 (101 1/2)	2828 (111 3/8)	3084 (121 1/2)	3341 (131 5/8)	3596 (141 5/8)	4107 (161 3/4)	4879 (192 1/8)	5650 (222 1/2)	6161 (242 5/8)	7446 (293 1/4)	8738 (344 1/8)
H (Lfront)	1627 (64 1/8)	1880 (74 1/8)	2136 (84 1/8)	2393 (94 1/4)	2648 (104 3/8)	3159 (124 3/8)	3931 (154 7/8)	4702 (185 1/8)	5213 (205 1/4)	6498 (255 7/8)	7790 (306 3/4)

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

CEILING INSTALLATION USING FRONT PROJECTION FLAT SCREEN

- 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	300
A (Vsize)	914 (36)	1067 (42 1/8)	1219 (48)	1372 (54 1/8)	1524 (60)	1829 (72 1/8)	2286 (90)	2743 (108)	3048 (120)	3810 (150)	4572 (180)
B (Hcent)	822 (32 3/8)	891 (35 1/8)	961 (37 7/8)	1032 (40 3/4)	1102 (43 1/2)	1241 (48 7/8)	1452 (57 1/4)	1663 (65 1/2)	1804 (71 1/8)	2155 (84 7/8)	2507 (98 3/4)
C (Width)					28 ^{a)} 32 ^{b)} (1 1/8)(1 5/16)	32 ^{c)} (1 5/16)					
D (TD)	1727 (68)	1990 (78 3/8)	2256 (88 7/8)	2522 (99 3/8)	2787 (109 3/4)	3316 (130 5/8)	4117 (162 1/8)	4916 (193 5/8)	5446 (214 1/2)	6778 (266 7/8)	8117 (319 5/8)
E (Xlens)	1668 (65 3/4)	1921 (75 3/4)	2177 (85 3/4)	2434 (92 1/4)	2689 (105 7/8)	3200 (126 1/4)	3972 (156 1/2)	4743 (186 3/4)	5254 (206 7/8)	6539 (257 1/2)	7831 (2086 3/8)
F' (Lpss)	1990 (78 3/8)	2243 (88 3/8)	2500 (98 1/2)	2756 (108 5/8)	3012 (118 5/8)	3523 (138 3/4)	4295 (169 1/8)	5066 (199 1/2)	5577 (219 5/8)	6862 (270 1/4)	8154 (321 1/8)
G (Lmax)	2575 (101 1/2)	2828 (111 3/8)	3084 (121 1/2)	3341 (131 5/8)	3596 (141 5/8)	4107 (161 3/4)	4879 (192 1/8)	5650 (222 1/2)	6161 (242 5/8)	7446 (293 1/4)	8738 (312 1/8)
H (Lfront)	1627 (64 1/8)	1880 (74 1/8)	2136 (84 1/8)	2393 (94 1/4)	2648 (104 3/8)	3159 (124 3/8)	3931 (154 7/8)	4702 (185 1/8)	5213 (205 1/4)	6498 (255 7/8)	7790 (304 3/4)

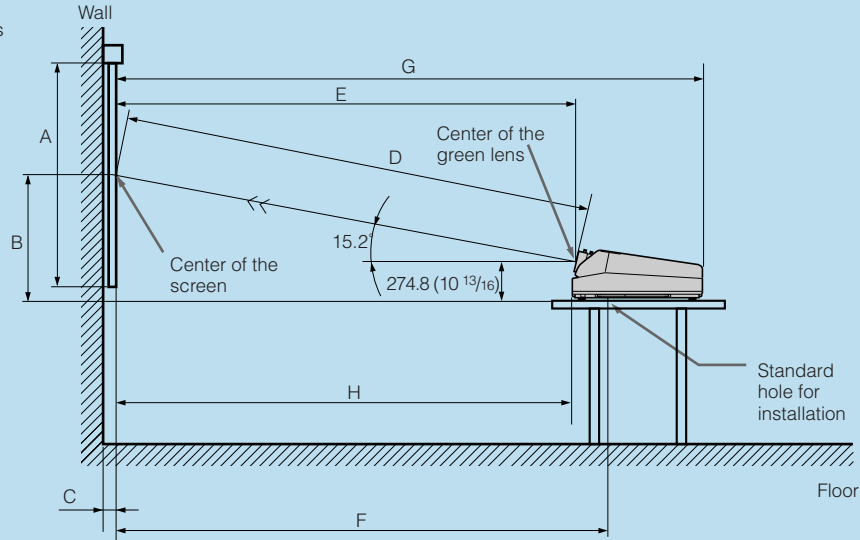
- ^{a)} Sony VPS-100FH
- ^{b)} Sony VPS-100FM
- ^{c)} Sony VPS-120FH and VPS-120FM

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	300
A (Vsize)	914 (36)	1067 (42 1/8)	1219 (48)	1372 (54 1/8)	1524 (60)	1829 (72 1/8)	2286 (90)	2743 (108)	3048 (120)	3810 (150)	4572 (180)
B (Hcent)	118 (4 3/4)	109 (4 3/8)	99 (4)	90 (3 5/8)	81 (3 1/4)	62 (2 1/2)	33 (1 5/16)	5 (7/32)	-14 (-9/16)	-61 (21/32)	-109 (-4 3/8)
E (Xlens)	1757 (69 1/4)	2024 (79 3/4)	2294 (90 3/8)	2564 (101)	2834 (111 5/8)	3371 (132 3/4)	4185 (164 7/8)	4997 (196 3/4)	5536 (218)	6889 (271 1/4)	8250 (324 7/8)
F (Lhole)	2036 (80 1/4)	2302 (90 3/4)	2573 (101 3/8)	2843 (112)	3112 (122 5/8)	3650 (143 3/4)	4464 (175 3/4)	5276 (207 3/4)	5814 (229)	7168 (282 1/4)	8529 (335 7/8)
G (Lmax)	2700 (106 3/8)	2966 (116 7/8)	3236 (127 1/2)	3507 (138 1/8)	3776 (148 3/4)	4314 (169 7/8)	5128 (202)	5940 (233 7/8)	6478 (255 1/8)	7832 (308 3/8)	9193 (362)

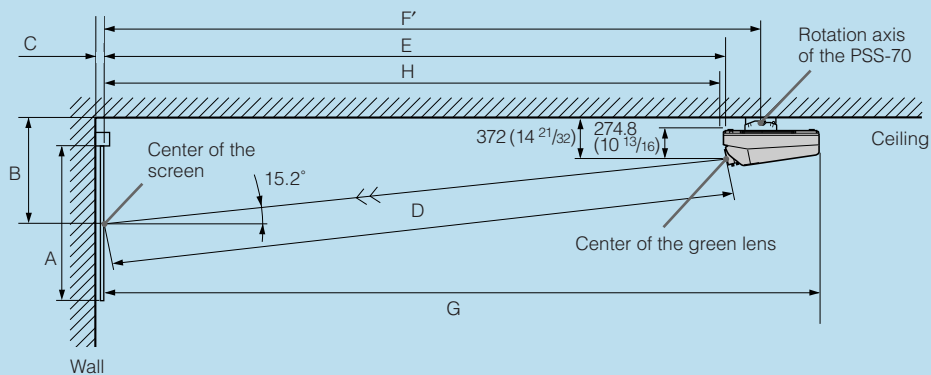
Be sure that the projector is level to the floor.



B: Difference in height between the projector's bottom surface and the center of the screen
 E: Horizontal distance between the center of the screen and the center of the green lens
 F: Horizontal distance between the center of the screen and the standard hole for installation

Tolerances
 B: ±5%
 Other measurements: 0% to +5%

Use the PSS-70 Projector Suspension Support (not supplied).



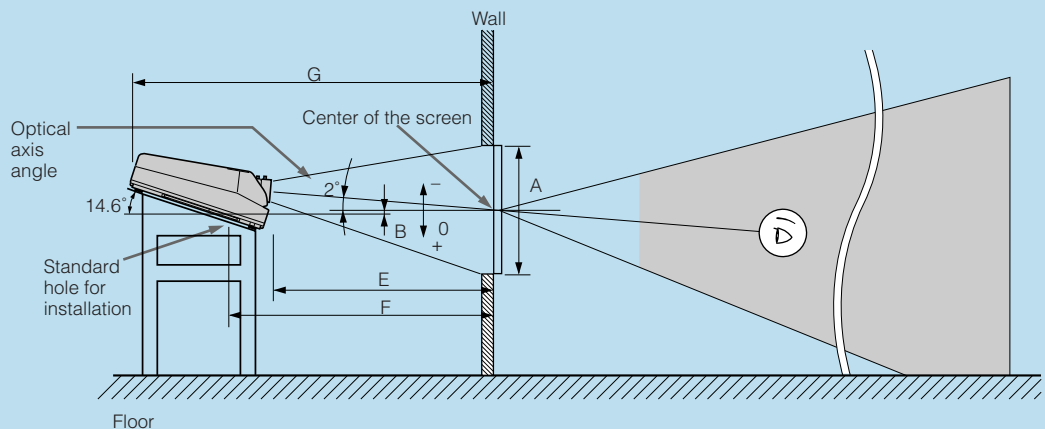
E: Horizontal distance between the center of the screen and the center of the green lens

Tolerances
 B: ±5%
 Other measurements: 0% to +5%

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



SONY®

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.