SONY

VPH-G70VRU
VPH-G70VRM

The Sony VPH-G70VRU/G70VRM is a new, high performance graphics projector, specifically designed for use in Virtual Reality and Simulation applications. With its deep focussing area, high resolution lenses, and extended geometry range, the VPH-G70VRU/G70VRM is suitable for use with curved and dome-style screens. Providing a very high level of performance, this projector reproduces the effective Virtual Reality and Simulation environments that are key factors in your installation.

▶ Specifications

▌OPTICAL

Projection system:	3 picture tubes, 3 lenses, direct projection
Picture tube:	8-inch (phosphor size 6-inch) high luminance optical doubled, electromagnetic focus tubes
Projection lens:	Double focus, F1.2/135 mm (Color purity improved: C element of Red/Green)
Screen coverage[1]:	60 to 300 inches (viewable area, measured diagonally) (factory preset to 120 inches)
Acceptable screen radius:	Flat to 2500 mm radius
Acceptable throw angle:	$-2°$ to $+30°$
Light output:	ANSI[2]: 200 lm (fH: 110 kHz, fV: 60 Hz, 6500K) ANSI[2]: 170 lm (fH: 15 kHz, fV: 60 Hz, 6500K) Peak white: 1000 lm, All white 290 lm

Throwing distance[1]:		
	60-inch	1668 mm (5 ft 5 $^{21}/_{32}$ inches)
	70-inch	1921 mm (6 ft 3 $^{5}/_{8}$ inches)
	100-inch	2689 mm (8 ft 9 $^{7}/_{8}$ inches)
	120-inch	3200 mm (10 ft 5 $^{31}/_{32}$ inches)
	150-inch	3972 mm (13 ft $^{3}/_{8}$ inches)
	200-inch	5254 mm (17 ft 2 $^{27}/_{32}$ inches)
	250-inch	6539 mm (21 ft 5 $^{7}/_{16}$ inches)
	300-inch	7831 mm (25 ft 8 $^{5}/_{16}$ inches)

▌SIGNALS

Color system:	NTSC, PAL, SECAM, NTSC4.43, PAL-M (automatically selected)
Resolution:	700 TV lines (video), 1100 TV lines (HDTV) 1700 × 1200 pixels (RGB, measured at fH: 74 kHz, fV: 60 Hz)
Scanning frequency:	Horizontal: 15 to 110 kHz Vertical: 38 to 150 Hz
RGB bandwidth:	120 MHz (–3 dB)
Test signals:	Crosshair, Hatch (9 × 9/17 × 17) reverse, Dot (9 × 9), Dot (17 × 17) & Hatch (5 × 5) H/H reverse, ME/ME reverse, All white, Window, Window and line, Color bar, Pluge, Stair-step, Sub-pattern, Cross (9 × 9)

▌GENERAL

Power requirements:	VPH-G70VRU: AC 120 V, 50/60 Hz VPH-G70VRM: AC 220 to 240 V, 50/60 Hz
Power consumption:	VPH-G70VRU: 750 W (Max.), 7 W (Standby) VPH-G70VRM: 720 W (Max.), 7 W (Standby)
Heat dissipation:	VPH-G70VRU: 2559.4 BTU VPH-G70VRM: 2457.0 BTU
Temperature:	Operating: 0 to 40°C (32 to 104°F) Storage: –20 to 60°C (–4 to 140°F)
Humidity:	Operating: 35 to 85% Storage: 10 to 90%
Dimensions:	695 (W) × 358 (H) × 948 (D) mm (27 $^{3}/_{8}$ × 14 $^{1}/_{8}$ × 37 $^{5}/_{16}$ inches)
Mass:	Approx. 83 kg (183 lbs)

▌SAFETY REGULATIONS

VPH-G70VRU:	UL 1950, cUL 950, DHHS, DNHW, FCC Class A, IC Class A
VPH-G70VRM:	EN 60 950 (TÜV), CE, PTB

Control Panel   Connector Section

▌INPUTS/OUTPUTS

INPUT A:	
Analog RGB/Component:	BNC
R/R-Y:	0.7 Vp-p ± 2 dB positive, 75 Ω terminated
G/Y:	0.7 Vp-p ± 2 dB positive, 75 Ω terminated
G with sync:	1.0 Vp-p ± 2 dB sync negative, 75 Ω terminated
B/B-Y:	0.7 Vp-p ± 2 dB positive, 75 Ω terminated
SYNC/HD:	
Composite sync:	0.6 - 8 Vp-p high impedance, sync positive/negative
Horizontal sync:	0.6 - 8 Vp-p high impedance, sync positive/negative
VD:	
Vertical sync:	0.6 - 8 Vp-p high impedance, sync positive/negative
HDTV[3] (Y/P$_B$/P$_R$):	BNC
Y:	1.0 Vp-p ± 2 dB, 75 Ω terminated
P$_B$/P$_R$:	Tri-sync: ±0.3 Vp-p, bi-sync: 0.3 Vp-p ±0.35 Vp-p ± 2 dB, 75 Ω
HDTV[3] (GBR):	BNC
G with sync:	1.0 Vp-p ± 2 dB, 75 Ω terminated Tri- sync: ±0.3 Vp-p, bi-sync: 0.3 Vp-p
B/R:	0.7 Vp-p ± 2 dB, 75 Ω terminated
INPUT B:	Open slot for optional IFB board
CONTROL S/	Stereo mini-jack 5 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini-jack, 5 Vp-p
REMOTE:	
RS-422A IN:	D-sub 9-pin (female)
ABL Link:	
IN:	Mini-jack
OUT:	Mini-jack
Trig:	Mini-jack Power ON: DC 12 V, output impedance 4.7 kΩ Power OFF: 0 V

▌ACCESSORIES

Supplied accessories:
- Remote commmander RM-PJ1000
- Adjustment plate
- AC power cord
- Installation manual
- Remote commander cable (15 m)
- AA size battery (×3)
- Operation manual

Optional accessories:
- Interface board IFB-12/20/21/1000[4]
- Signal interface cable SIC-10/20A/20B/20C/21/22/M1/5/15/25/50/CCQ-BRS2/5/10/25/50[4]
- Signal interface switcher PC-1271/1271M
- Extension board EXB-DS10 (internal line doubler board)
- Interface unit IFU-1271/1271M
- Suspension support PSS-70
- Suspension support PSS-10
- Remote commander RM-PJM800
- Infrared remote control receiver RM-PJ10
- Mouse receiver RM-PJ20
- Signal adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin)
- Signal adaptor ADP-20 (Macintosh® to VGA)
- Monitor cable SMF-400 (HD D-sub 15-pin to 5 BNC)
- 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[4]

[1] Throw angle: 15.2°, screen radius = 0 mm.
[2] ANSI lumen is a measuring method of the American National Standards Institute IT7.215.
[3] HDTV: 1125/60 interlaced HDTV studio standard system.
[4] Some items are not available in some areas. For further details, please contact your nearest Sony office.

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