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1-1 Color video monitors

19" PVM-20M4U (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- HR Trinitron CRT assures a high resolution of 800 TV lines
- Adopts SMPTE-C standard phosphors
- Accepts component (Y/R-Y/B-Y), RGB, Y/C and composite signals
- Beam current feedback circuit for stability in the color balance
- Optional Component Serial Digital Interface Kits BKM-101C (video)/102 (audio) available
- Switchable aspect ratio (4:3 and 16:9)
- Color temperature D65, D93 or user preset (3200 K to 10000 K) selectable
- On-screen display for adjustment/operation
- User preset function
- Underscan, Blue Only and H/V delay mode available
- Auto chroma/phase set-up*¹
- Accepts external sync
- Caption vision decoder (closed caption)
- Auto/manual degaussing
- Minimizes magnetic field emission
- Mountable into an EIA standard rack with the optional SLR-103A

Supplied accessories:

- 20-pin Remote Cable
- Tally Label
- AC Cord
- AC Plug Holder
- Operation Manual

Optional accessories:

- Component Serial Digital Interface Kit (video) BKM-101C
- Component Serial Digital Interface Kit (audio) BKM-102
- Serial Remote Control Kit (for RS-422) BKM-103
- Slide Rail Kit SLR-103A
- TV Tuner Unit TU-1041U

Specifications

CRT

AG pitch: 0.31 mm
 Phosphor: SMPTE-C
 CRT size: 53.3 cm (20-inch) diagonally
 Visible picture size: 48.3 cm (19-inch) diagonally
 Resolution: 800 TV lines
 Color system: NTSC, PAL, SECAM, NTSC_{4.43}*²
 Aperture correction: 0 to +6 dB
 Frequency response: LINE: 10.0 MHz (±3 dB) *Y signal only
 RGB: 10.0 MHz (±3 dB)
 Synchronization: AFC time constant 1.0 mS
 Normal scan: 7% over scan
 Under scan: 5% under scan
 Linearity: H: less than 5%
 V: less than 5%
 Convergence: center: 0.5 mm (typical)
 peripheral: 0.7 mm (typical)
 Raster size stability: H: 1.0%
 V: 1.5%
 HV regulation: 4.0%
 Color temperature: D65, D93, USER (3200 K to 10000 K)
 Audio out: 0.8 W (distortion: less than 5%)
 Power consumption: 125 W (with SDI: 135 W)
 AC input range: AC 100 to 240 V (50/60 Hz)
 Operation temperature: 0 to 35 °C (32 to 95 °F)
 Storage temperature: -10 to 40 °C (14 to 104 °F)
 Operating humidity: 35 to 85% (no condensation)
 Storage humidity: 0 to 90%
 Pressure: 880 to 1060 hPa
 Dimensions*³: 450 (W) × 458 (H) × 503 (D) mm
 (17³/₄ × 18¹/₈ × 19⁷/₈ inches)
 Mass: 30 kg (66 lb 2 oz)

Inputs / Outputs

LINE A/B*⁴

1.0 Vp-p ±6 dB
 Loop-through BNC automatic 75 Ω termination*⁵

LINE C*⁴

Y: 1.0 Vp-p ±6 dB
 C: 0.3 Vp-p ±6 dB
 Loop-through Mini DIN 4-pin automatic
 75 Ω termination*⁵



RGB/Component (selectable)*⁶

R/R-Y: 0.7 Vp-p ±6 dB
 G: 0.7 Vp-p ±6 dB
 Sync on G: 0.3 Vp-p ±6 dB
 Y: 0.7 Vp-p ±6 dB
 B/B-Y: 0.7 Vp-p ±6 dB
 Loop-through BNC automatic 75 Ω termination*⁵

External Sync

4.0 Vp-p ±6 dB, negative
 Loop-through BNC automatic 75 Ω termination*⁵

Safety Standards

UL-1950 / CSA-950, DHHS / DNHWS, FCC Class A / IC Class A

*¹ Phase set-up is for NTSC signals only.

*² The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*³ Excluding all protruding parts.

*⁴ The Y/C input has priority over the Composite video input.

*⁵ 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

*⁶ Video amplitude 100/0/100 color bars.

1-1 Color video monitors

19" PVM-20M2U (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- High resolution of 600 TV lines with dark tint CRT for high contrast image reproduction
- Accepts component (Y/R-Y/B-Y), RGB, Y/C and composite signals
- Beam current feedback circuit for stability in the color balance
- Optional Component Serial Digital Interface Kits BKM-101C (video)/ 102 (audio) available
- Switchable aspect ratio (4:3 and 16:9)
- Color temperature D65, D93 or user preset (3200 K to 10000 K) selectable
- On-screen display for adjustment/operation
- User preset function
- Underscan, Blue Only and H/V delay mode available
- Auto chroma/phase set-up^{*1}
- Accepts external sync
- Caption vision decoder (closed caption)
- Auto/manual degaussing
- Mountable into an EIA standard rack with the optional SLR-103A

Supplied accessories: 20-pin Remote Cable

Tally Label

AC Cord

AC Plug Holder

Operation Manual

Optional accessories: Component Serial Digital Interface Kit (video) BKM-101C

Component Serial Digital Interface Kit (audio) BKM-102

Serial Remote Control Kit (for RS-422) BKM-103

Slide Rail Kit SLR-103A

TV Tuner Unit TU-1041U

Specifications

CRT

AG pitch: 0.4 mm

Phosphor: P-22

CRT size: 53.3 cm (20-inch) diagonally

Visible picture size: 48.0 cm (19-inch) diagonally

Resolution: 600 TV lines

Color system: NTSC, PAL, SECAM, NTSC_{4.43}^{*2}

Aperture correction: 0 to +6 dB

Frequency response: LINE: 10.0 MHz (±3 dB) *Y signal only

RGB: 10.0 MHz (±3 dB)

Synchronization: AFC time constant 1.0 mS

Normal scan: 7% over scan

Under scan: 5% under scan

Linearity: H: less than 5%

V: less than 5%

Convergence: center: 0.6 mm (typical)

peripheral: 1.0 mm (typical)

Raster size stability: H: 1.0%

V: 1.5%

HV regulation: 4.0%

Color temperature: D65, D93, USER (3200 K to 10000 K)

Audio out: 0.8 W (distortion: less than 5%)

Power consumption: 125 W (with SDI: 135 W)

AC input range: AC 100 to 240 V (50/60 Hz)

Operation temperature: 0 to 35 °C (32 to 95 °F)

Storage temperature: -10 to 40 °C (14 to 104 °F)

Operating humidity: 35 to 85% (no condensation)

Storage humidity: 0 to 90%

Pressure: 880 to 1060 hPa

Dimensions^{*3}: 450 (W) × 458 (H) × 503 (D) mm

(17³/₄ × 18¹/₈ × 19⁷/₈ inches)

Mass: 30 kg (66 lb 2 oz)

Inputs / Outputs

LINE A/B^{*4}

1.0 Vp-p ±6 dB

Loop-through BNC automatic 75 Ω termination^{*5}

LINE C^{*4}

Y: 1.0 Vp-p ±6 dB

C: 0.3 Vp-p ±6 dB

Loop-through Mini DIN 4-pin automatic

75 Ω termination^{*5}



RGB/Component (selectable)^{*6}

R/R-Y: 0.7 Vp-p ±6 dB

G: 0.7 Vp-p ±6 dB

Sync on G: 0.3 Vp-p ±6 dB

Y: 0.7 Vp-p ±6 dB

B/B-Y: 0.7 Vp-p ±6 dB

Loop-through BNC automatic 75 Ω termination^{*5}

External Sync

4.0 Vp-p ±6 dB, negative

Loop-through BNC automatic 75 Ω termination^{*5}

Safety Standards

UL-1950 / CSA-950, DHHS / DNHW, FCC Class A /

IC Class A

^{*1} Phase set-up is for NTSC signals only.

^{*2} The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

^{*3} Excluding all protruding parts.

^{*4} The Y/C input has priority over the Composite video input.

^{*5} 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

^{*6} Video amplitude 100/0/100 color bars.

1-1 Color video monitors

19" PVM-20M2MDU (NTSC/PAL)

Color Video Monitor for medical use

•High resolution of 600 TV lines at center •Beam current feedback circuit for stable color reproduction •Component (Y/R-Y/B-Y or RGB) input facility •On-screen display in multiple languages for adjustment/operation •D65/D56/D93/ User preset color temperature selectable •Capable of observing two RGB input signals simultaneously with the RGB split mode •20% overscan/normal scan/underscan selection •Blue Only mode •Accepts external sync •RS-232C serial remote control capability •8 V DC out •Tally lamp •Mountable into a 19-inch EIA standard rack with the optional SLR-103A •White color cabinet •Complies with UL 2601-1, CSA 601.1 safety regulations

Supplied accessories: AC Power Cord
AC Plug Holder
Side Cover (2)
Control Panel Cover
Panel Hinge (2)
Remote Control Connector 8-pin mini DIN
Instructions for Use
RS-232C Protocol Manual

Optional accessory: Slide Rail Kit SLR-103A

Specifications

Color system: NTSC/PAL (automatically selected)
Picture tube: 20-inch CRT with P-22 phosphor, visible picture size 479.8 mm (19-inch) measured diagonally
Horizontal resolution: 600 TV lines at center (Video inputs)
Audio power output: Monaural, 0.8 W with built-in speaker
Power requirements: AC 100 to 240 V 1.5 to 0.6 A, 50/60 Hz
Dimensions*1: 450 (W) × 457.5 (H) × 503 (D) mm (17³/₄ × 18¹/₈ × 19⁷/₈ inches)
Mass: 30.0 kg (66 lb 2 oz)

VIDEO

LINE A Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*2

LINE B Loop-through Mini DIN 4-pin
Y (luminance):
1.0 Vp-p, sync negative, Automatic 75 Ω termination*2
C (chrominance):
NTSC: 0.286 Vp-p, Automatic 75 Ω termination*2
PAL: 0.3 Vp-p, Automatic 75 Ω termination*2

RGB/Component A: Loop-through BNC
R-Y/B-Y:
0.7 Vp-p, Automatic 75 Ω termination*2
Y/Sync on G:
1.0 Vp-p, sync negative, Automatic 75 Ω termination*2
R/G/B:
0.7 Vp-p, Automatic 75 Ω termination*2
Sync:
4.0 Vp-p negative, Automatic 75 Ω termination*2

B: BNC
R-Y/B-Y:
0.7 Vp-p, 75 Ω
Y/Sync on G:
1.0 Vp-p, sync negative, 75 Ω
R/G/B:
0.7 Vp-p, 75 Ω
Sync:
4.0 Vp-p negative, 75 Ω

AUDIO

LINE A Loop-through Phono
-5 dBu, high impedance

LINE B Loop-through Phono
-5 dBu, high impedance

RGB/Component A: Loop-through Phono
-5 dBu, high impedance
B: Phono
-5 dBu, high impedance



*1 Excluding all protruding parts.

*2 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

19" PVM-20N6U (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- Resolution of 500 TV lines
- Beam current feedback circuit for stability in the color balance
- Accepts composite video, Y/C and RGB signals
- Switchable aspect ratio (4:3 and 16:9)
- On-screen menu for adjustment/operation
- Input channel can be selected via REMOTE terminal (Phono)
- Built-in speaker
- One touch recall of last menu used (VOLUME, CONTRAST, BRIGHTNESS, CHROMA and PHASE)
- Mountable into a 19-inch EIA standard rack with the optional SLR-103A

Optional accessory: Slide Rail Kit SLR-103A

Specifications

Video signal system:	EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC _{4.43} *1
Picture tube:	53 cm (20-inch), HR Trinitron tube, visible picture size 48 cm (min.) (19-inch) measured diagonally, 90° deflection, P-22 phosphors
Horizontal resolution:	500 TV lines at center
Audio power output:	Monaural, 0.8 W with built-in speaker
Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	100 W
Dimensions*2:	449 (W) × 441 (H) × 502 (D) mm (17 ¹¹ / ₁₆ × 17 ³ / ₈ × 19 ³ / ₄ inches)
Mass:	28 kg (61 lb 11 oz)
VIDEO	
LINE A*3	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 Loop-through Mini DIN 4-pin Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4 PAL: 0.3 Vp-p, Automatic 75 Ω termination*4
LINE B*3	BNC 1.0 Vp-p, sync negative, 75 Ω Mini DIN 4-pin Y: 1.0 Vp-p, sync negative, 75 Ω C: NTSC: 0.286 Vp-p, 75 Ω PAL: 0.3 Vp-p, sync negative, 75 Ω
RGB/Sync	BNC R/G/B: 0.7 Vp-p, 75 Ω Sync on G: 0.3 Vp-p, 75 Ω Sync: 4.0 Vp-p, 75 Ω
AUDIO	
LINE A	Loop-through Phono -5 dBu, high impedance
LINE B	Phono -5 dBu, high impedance
RGB/Sync	Phono -5 dBu, high impedance



*1 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Including all protruding parts.

*3 The Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

19" PVM-20N5U (NTSC/PAL/SECAM/NTSC^{4.43})

Color Video Monitor

- Resolution of 500 TV lines
- Beam current feedback circuit for stability in the color balance
- Accepts composite video and Y/C signals
- On-screen menu for adjustment/operation
- Built-in speaker
- One touch recall of last menu used (VOLUME, CONTRAST, BRIGHTNESS, CHROMA and PHASE)
- Mountable into a 19-inch EIA standard rack with the optional SLR-103A

Optional accessory: Slide Rail Kit SLR-103A

Specifications

Video signal system:	EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC ^{4.43*1}
Picture tube:	53 cm (20-inch), HR Trinitron tube, visible picture size 48 cm (min.) (19-inch) measured diagonally, 90° deflection, P-22 phosphors
Horizontal resolution:	500 TV lines at center
Audio power output:	Monaural, 0.8 W with built-in speaker
Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	100 W
Dimensions*2:	449 (W) × 441 (H) × 502 (D) mm (17 ¹¹ / ₁₆ × 17 ³ / ₈ × 19 ³ / ₄ inches)
Mass:	28 kg (61 lb 11 oz)
VIDEO	
LINE A*3	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 Loop-through Mini DIN 4-pin Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4 PAL: 0.3 Vp-p, Automatic 75 Ω termination*4
LINE B*3	BNC 1.0 Vp-p, sync negative, 75 Ω Mini DIN 4-pin Y: 1.0 Vp-p, sync negative, 75 Ω C: NTSC: 0.286 Vp-p, 75 Ω PAL: 0.3 Vp-p, sync negative, 75 Ω
AUDIO	
LINE A	Loop-through Phono -5 dBu, high impedance
LINE B	Phono -5 dBu, high impedance



*1 The NTSC^{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Including all protruding parts.

*3 The Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

13" PVM-14M4U (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- HR Trinitron CRT assures a high resolution of 800 TV lines
- Adopts SMPTE-C standard phosphors
- Accepts component (Y/R-Y/B-Y), RGB, Y/C and composite signals
- Beam current feedback circuit for stability in the color balance
- Optional Component Serial Digital Interface Kits BKM-101C (video)/102 (audio) available
- Switchable aspect ratio (4:3 and 16:9)
- Color temperature D65, D93 or user preset (3200 K to 10000 K) selectable
- On-screen display for adjustment/operation
- User preset function
- Underscan, Blue Only and H/V delay mode available
- Auto chroma/phase set-up*1
- Accepts external sync
- Caption vision decoder (closed caption)
- Auto/manual degaussing
- Minimizes magnetic field emission
- Mountable into an EIA standard rack with the optional MB-502B and SLR-102

Supplied accessories: 20-pin Remote Cable

Tally Label

AC Cord

AC Plug Holder

Operation Manual

Optional accessories: Component Serial Digital Interface Kit (video)

BKM-101C

Component Serial Digital Interface Kit (audio)

BKM-102

Serial Remote Control Kit (for RS-422) BKM-103

Mounting Bracket MB-502B

Slide Rail Kit SLR-102

TV Tuner Unit TU-1041U

Specifications

CRT

AG pitch:

0.25 mm

Phosphor:

SMPTE-C

CRT size:

37.1 cm (14-inch) diagonally

Visible picture size:

33.2 cm (13-inch) diagonally

Resolution:

800 TV lines

Color system:

NTSC, PAL, SECAM, NTSC_{4.43}*2

Aperture correction:

0 to +6 dB

Frequency response:

LINE: 10.0 MHz (±3 dB) *Y signal only

RGB: 10.0 MHz (±3 dB)

Synchronization:

AFC time constant 1.0 mS

Normal scan:

7% over scan

Under scan:

5% under scan

Linearity:

H: less than 4%

V: less than 4%

Convergence:

Center: 0.4 mm (typical)

Peripheral: 0.5 mm (typical)

Raster size stability:

H: 1.0%

V: 1.5%

HV regulation:

3.5%

Color temperature:

D65, D93, USER (3200 K to 10000 K)

Audio out:

0.8 W (distortion: less than 5%)

Power consumption:

90 W (with SDI: 99 W)

AC input range:

AC 100 to 240 V (50/60 Hz)

Operation temperature:

0 to 35 °C (32 to 95 °F)

Storage temperature:

-10 to 40 °C (14 to 104 °F)

Operating humidity:

35 to 85% (no condensation)

Storage humidity:

0 to 90%

Pressure:

880 to 1060 hPa

Dimensions*3:

346 (W) × 340 (H) × 431 (D) mm

(13⁵/₈ × 13¹/₂ × 17 inches)

Mass:

16.7 kg (36 lb 13 oz)

Inputs / Outputs

LINE A/B*4

1.0 Vp-p ±6 dB

Loop-through BNC automatic 75 Ω termination*5

LINE C*4

Y: 1.0 Vp-p ±6 dB

C: 0.3 Vp-p ±6 dB

Loop-through Mini DIN 4-pin automatic

75 Ω termination*5



RGB/Component (selectable)*6

R/R-Y: 0.7 Vp-p ±6 dB

G: 0.7 Vp-p ±6 dB

Sync on G: 0.3 Vp-p ±6 dB

Y: 0.7 Vp-p ±6 dB

B/B-Y: 0.7 Vp-p ±6 dB

Loop-through BNC automatic 75 Ω termination*5

External Sync

4.0 Vp-p ±6 dB, negative

Loop-through BNC automatic 75 Ω termination*5

Safety Standards

UL-1950 / CSA-950, DHHS / DNHWS, FCC Class A / IC Class A

*1 Phase set-up is for NTSC signals only.

*2 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*3 Excluding all protruding parts.

*4 The Y/C input has priority over the Composite video input.

*5 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

*6 Video amplitude 100/0/100 color bars.

1-1 Color video monitors

13" PVM-14M2U (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- High resolution of 600 TV lines with dark tint CRT for high contrast image reproduction
- Accepts component (Y/R-Y/B-Y), RGB, Y/C and composite signals
- Beam current feedback circuit for stability in the color balance
- Optional Component Serial Digital Interface Kits BKM-101C (video)/102 (audio) available
- Switchable aspect ratio (4:3 and 16:9)
- Color temperature D65, D93 or user preset (3200 K to 10000 K) selectable
- On-screen display for adjustment/operation
- User preset function
- Underscan, Blue Only and H/V delay mode available
- Auto chroma/phase set-up^{*1}
- Accepts external sync
- Caption vision decoder (closed caption)
- Auto/manual degaussing
- Mountable into an EIA standard rack with the optional MB-502B and SLR-102

Supplied accessories: 20-pin Remote Cable
Tally Label
AC Cord
AC Plug Holder
Operation Manual

Optional accessories: Component Serial Digital Interface Kit (video) BKM-101C
Component Serial Digital Interface Kit (audio) BKM-102
Serial Remote Control Kit (for RS-422) BKM-103
Mounting Bracket MB-502B
Slide Rail Kit SLR-102
TV Tuner Unit TU-1041U

Specifications

CRT

AG pitch: 0.25 mm
Phosphor: P-22
CRT size: 37.1 cm (14-inch) diagonally
Visible picture size: 33.2 cm (13-inch) diagonally
Resolution: 600 TV lines
Color system: NTSC, PAL, SECAM, NTSC_{4.43}^{*2}
Aperture correction: 0 to +6 dB
Frequency response: LINE: 10.0 MHz (±3 dB) *Y signal only
RGB: 10.0 MHz (±3 dB)
Synchronization: AFC time constant 1.0 mS
Normal scan: 7% over scan
Under scan: 5% under scan
Linearity: H: less than 4%
V: less than 4%
Convergence: Center: 0.4 mm (typical)
Peripheral: 0.5 mm (typical)
Raster size stability: H: 1.0%
V: 1.5%
HV regulation: 3.5%
Color temperature: D65, D93, USER (3200 K to 10000 K)
Audio out: 0.8 W (distortion: less than 5%)
Power consumption: 90 W (with SDI: 99 W)
AC input range: AC100 to 240 V (50/60 Hz)
Operation temperature: 0 to 35 °C (32 to 95 °F)
Storage temperature: -10 to 40 °C (14 to 104 °F)
Operating humidity: 35 to 85% (no condensation)
Storage humidity: 0 to 90%
Pressure: 880 to 1060 hPa
Dimensions^{*3}: 346 (W) × 340 (H) × 431 (D) mm
(13⁵/₈ × 13¹/₂ × 17 inches)
Mass: 16.7 kg (36 lb 13 oz)

Inputs / Outputs

LINE A/B^{*4}
1.0 Vp-p ±6 dB
Loop-through BNC automatic 75 Ω termination^{*5}

LINE C^{*4}

Y: 1.0 Vp-p ±6 dB
C: 0.3 Vp-p ±6 dB
Loop-through Mini DIN 4-pin automatic^{*5}
75 Ω termination



RGB/Component (selectable)^{*6}

R/R-Y: 0.7 Vp-p ±6 dB
G: 0.7 Vp-p ±6 dB
Sync on G: 0.3 Vp-p ±6 dB
Y: 0.7 Vp-p ±6 dB
B/B-Y: 0.7 Vp-p ±6 dB
Loop-through BNC automatic 75 Ω termination^{*5}

External Sync

4.0 Vp-p ±6 dB, negative
Loop-through BNC automatic 75 Ω termination^{*5}
UL-1950 / CSA-950, DHHS / DNHWS, FCC Class A / IC Class A

Safety Standards

^{*1} Phase set-up is for NTSC signals only.

^{*2} The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

^{*3} Excluding all protruding parts.

^{*4} The Y/C input has priority over the Composite video input.

^{*5} 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

^{*6} Video amplitude 100/0/100 color bars.

1-1 Color video monitors

13" PVM-14M2MDU (NTSC/PAL)

Color Video Monitor for medical use

- High resolution of 600 TV lines at center
- Beam current feedback circuit for stable color reproduction
- Component (Y/R-Y/B-Y or RGB) input facility
- On-screen display in multiple language for adjustment/operation
- D65/D56/D93/ User preset color temperature selectable
- Capable of observing two RGB input signals simultaneously with the RGB split mode
- 20% overscan/normal scan/underscan selection
- Blue Only mode
- Accepts external sync
- RS-232C serial remote control capability
- 8 V DC out
- Tally lamp
- Mountable into a 19-inch EIA standard rack with the optional MB-502B and SLR-102
- White color cabinet
- Complies with UL 2601-1, CSA 601.1 safety regulations

Supplied accessories:

- AC Power Cord
- AC Plug Holder
- Side Cover (2)
- Control Panel Cover
- Panel Hinge (2)
- Remote Control Connector 8-pin mini DIN
- Instructions for Use
- RS-232C Protocol Manual

Optional accessories:

- Mounting Bracket MB-502B
- Slide Rail Kit SLR-102

Specifications

Color system: NTSC/PAL (automatically selected)

Picture tube: 14-inch CRT with P-22 phosphors, visible picture size 331.6 mm (13-inch) measured diagonally

Horizontal resolution: 600 TV lines at center (Video inputs)

Audio power output: Monaural, 0.8 W with built-in speaker

Power requirements: AC 100 to 240 V 1.2 to 0.5 A, 50/60 Hz

Dimensions*1: 346 (W) × 340 (H) × 430.5 (D) mm (13⁵/₈ × 13¹/₂ × 17 inches)

Mass: 16.7 kg (37 lb 8 oz)

VIDEO

LINE A Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*2

LINE B Loop-through Mini DIN 4-pin
Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*2
C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*2
PAL: 0.3 Vp-p, Automatic 75 Ω termination*2

RGB/Component A: Loop-through BNC
R-Y/B-Y: 0.7 Vp-p, Automatic 75 Ω termination*2
Y/Sync on G: 1.0 Vp-p, sync negative, Automatic 75 Ω termination*2
R/G/B: 0.7 Vp-p, Automatic 75 Ω termination*2
Sync: 4.0 Vp-p negative, Automatic 75 Ω termination*2
B: BNC
R-Y/B-Y: 0.7 Vp-p, 75 Ω
Y/Sync on G: 1.0 Vp-p, sync negative, 75 Ω
R/G/B: 0.7 Vp-p, 75 Ω
Sync: 4.0 Vp-p negative, 75 Ω

AUDIO

LINE A Loop-through Phono
-5 dBu, high impedance

LINE B Loop-through Phono
-5 dBu, high impedance

RGB/Component A: Loop-through Phono
-5 dBu, high impedance
B: Phono
-5 dBu, high impedance



*1 Excluding all protruding parts.

*2 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

13" PVM-14N6U (NTSC/PAL/SECAM/NTSC^{4.43})

Color Video Monitor

- Resolution of 500 TV lines •Beam current feedback circuit for stability in the color balance •Accepts composite video, Y/C and RGB signals •Switchable aspect ratio (4:3 and 16:9) •On-screen menu for adjustment/operation •Input channel can be selected via REMOTE terminal (Phono)
- Built-in speaker •One touch recall of last menu used (VOLUME, CONTRAST, BRIGHTNESS, CHROMA and PHASE) •Mountable into a 19-inch EIA standard rack with the optional MB-502B and SLR-102

Optional accessories: Mounting Bracket MB-502B
Slide Rail Kit (used with the MB-502B) SLR-102

Specifications

Video signal system: EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)

Color system: NTSC/PAL/SECAM/NTSC^{4.43*1}

Picture tube: 37.1 cm (14-inch), HR Trinitron tube, visible picture size 33.2 cm (min.) (13-inch) measured diagonally, 90° deflection, P-22 phosphors

Horizontal resolution: 500 TV lines at center

Audio power output: Monaural, 0.8 W with built-in speaker

Power requirements: AC 100 to 240 V, 50/60 Hz

Power consumption: 80 W

Dimensions*²: 346 (W) × 340 (H) × 414 (D) mm (13⁵/₈ × 13³/₈ × 16⁵/₁₆ inches)

Mass: 15 kg (33 lb 1 oz)

VIDEO

LINE A*³ Loop-through BNC
1.0 Vp-p, sync negative,
Automatic 75 Ω termination*⁴
Loop-through Mini DIN 4-pin
Y (luminance):
1.0 Vp-p, sync negative, Automatic 75 Ω termination*⁴
C (chrominance):
NTSC: 0.286 Vp-p, Automatic 75 Ω termination*⁴
PAL: 0.3 Vp-p, Automatic 75 Ω termination*⁴

LINE B*³ BNC
1.0 Vp-p, sync negative, 75 Ω
Mini DIN 4-pin
Y: 1.0 Vp-p, sync negative, 75 Ω
C: NTSC: 0.286 Vp-p, 75 Ω
PAL: 0.3 Vp-p, sync negative, 75 Ω

RGB/Sync BNC
R/G/B: 0.7 Vp-p, 75 Ω
Sync on G: 0.3 Vp-p, 75 Ω
Sync: 4.0 Vp-p, 75 Ω

AUDIO

LINE A Loop-through Phono
-5 dBu, high impedance

LINE B Phono
-5 dBu, high impedance

RGB/Sync Phono
-5 dBu, high impedance



*¹ The NTSC^{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*² Including all protruding parts.

*³ The Y/C input has priority over the Composite video input.

*⁴ 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

13" PVM-14N5U (NTSC/PAL/SECAM/NTSC^{4.43})

Color Video Monitor

- Resolution of 500 TV lines
- Beam current feedback circuit for stability in the color balance
- Accepts composite video and Y/C signals
- On-screen menu for adjustment/operation
- Built-in speaker
- One touch recall of last menu used (VOLUME, CONTRAST, BRIGHTNESS, CHROMA and PHASE)
- Mountable into a 19-inch EIA standard rack with the optional MB-502B and SLR-102

Optional accessories: Mounting Bracket MB-502B
Slide Rail Kit (used with the MB-502B) SLR-102

Specifications

Video signal system:	EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC ^{4.43*1}
Picture tube:	37.1 cm (14-inch), HR Trinitron tube, visible picture size 33.2 cm (min.) (13-inch) measured diagonally, 90° deflection, P-22 phosphors
Horizontal resolution:	500 TV lines at center
Audio power output:	Monaural, 0.8 W with built-in speaker
Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	80 W
Dimensions*2:	346 (W) × 340 (H) × 414 (D) mm (13 ⁵ / ₈ × 13 ³ / ₈ × 16 ⁵ / ₁₆ inches)
Mass:	15 kg (33 lb 1 oz)
VIDEO	
LINE A*3	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 Loop-through Mini DIN 4-pin Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4 PAL: 0.3 Vp-p, Automatic 75 Ω termination*4
LINE B*3	BNC 1.0 Vp-p, sync negative, 75 Ω Mini DIN 4-pin Y: 1.0 Vp-p, sync negative, 75 Ω C: NTSC: 0.286 Vp-p, 75 Ω PAL: 0.3 Vp-p, sync negative, 75 Ω
AUDIO	
LINE A	Loop-through Phono -5 dBu, high impedance
LINE B	Phono -5 dBu, high impedance



DISPLAY
PRODUCTS

*1 The NTSC^{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Including all protruding parts.

*3 The Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

8" PVM-8045Q (NTSC/PAL/SECAM/NTSC_{4.43})

For picture evaluation in studio, ENG/EFP applications

•Aspect ratio is switchable (4:3 and 16:9) with the 16:9 button on the front panel •High resolution CRT provides 450 TV lines at center (composite video) •Stable color temperature from beam current feedback circuit •Analog component level selectable between BETA and SMPTE/N10 by a rear panel slide switch •NTSC comb filter •Accepts external sync/sync on Green •Tally input •Color temperature D65 •Blue Only, H/V delay, Underscan capability •Built-in speaker and monitoring amplifier •AC/DC operation •Front panel degauss button •EIA standard rack mountable with a second PVM-8045Q (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

Supplied accessories:	AC Power Cord Mini DIN 8-pin Connector with cable (cable length 350 mm, 13 7/8 inches) Tally Number Plates (12 pcs: No.1 to 5, A, B, C, P, R, white × 2 pcs) Operation Manual
Optional accessories:	TV Tuner Unit TU-1041U Monitor ENG Kit VF-505 (Monitor hood and cord reel) Mounting Panel MB-509 Mounting Bracket MB-520 Battery Adaptor DC-L10 Rechargeable Lithium-ion Battery BP-L60A Rechargeable Lithium-ion Battery BP-L90A Rechargeable Battery Pack NP-1B Rechargeable Battery Pack BP-90A Battery Case (for BP-90A battery) DC-210 Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L50 Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L100 Battery Charger (for four NP-1B batteries) BC-1WD Battery Charger (for four NP-1B and four BP-90A batteries) BC-410

Specifications

Video signal system:	EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC _{4.43} *1 (automatically selected)
Picture tube:	22 cm (9-inch) HR Trinitron tube, visible picture size 19.7 cm (8-inch) measured diagonally, 70° deflection
Horizontal resolution:	450 TV lines at center
Audio power output:	Monaural, 0.5 W with built-in speaker
Power requirements:	AC: 100 to 240 V 0.7 to 0.4 A, 50/60 Hz DC: 12 V 3.7 A
Power consumption:	AC: 45 W max. DC: 38 W
Dimensions*2:	217 (W) × 217 (H) × 352.5 (D) mm (8 5/8 × 8 5/8 × 14 inches)
Mass:	8.2 kg (18 lb)
VIDEO	
LINE A	
Composite*3:	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4
Y/C*3:	Loop-through Mini DIN 4-pin Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4 PAL: 0.3 Vp-p, Automatic 75 Ω termination*4
LINE B	
Composite:	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4



RGB/Component*5	BNC
R/R-Y:	Non-composite: 0.7 Vp-p, 75 Ω
Sync on Green/G/Y:	Composite: 1.0 Vp-p, sync negative, 75 Ω Non-composite: 0.7 Vp-p, 75 Ω
B/B-Y:	Non-composite: 0.7 Vp-p, 75 Ω
External sync	Loop-through BNC 4.0 Vp-p negative, Automatic 75 Ω termination*4
Tally	Mini DIN 8-pin
DC	XLR 4-pin
AUDIO	
LINE A	Loop-through Phono -5 dBu, high impedance
LINE B	Loop-through Phono -5 dBu, high impedance
RGB/Component	Phono -5 dBu, high impedance

*1 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Excluding all protruding parts.

*3 The Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

*5 Video amplitude 100/0/100 color bars.

1-1 Color video monitors

8" PVM-8042Q (NTSC/PAL/SECAM/NTSC_{4.43})

For multi-purpose use in various applications

•Aspect ratio is switchable (4:3 and 16:9) with the 16:9 button on the front panel •Stable color temperature from beam current feedback circuit •Analog component level selectable between BETA and SMPTE/N10 by a rear panel slide switch •NTSC comb filter •Accepts external sync/sync on Green •Tally input •Color temperature D65 •Blue Only, H/V delay, Underscan capability •Built-in speaker and monitoring amplifier •AC/DC operation •Front panel degauss button •EIA standard rack mountable with a second PVM-8042Q (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

Supplied accessories:	AC Power Cord
	Mini DIN 8-pin Connector with cable (cable length 350 mm, 13 7/8 inches)
Optional accessories:	Tally Number Plates (12 pcs: No.1 to 5, A, B, C, P, R, white × 2 pcs)
	Operation Manual
Optional accessories:	TV Tuner Unit TU-1041U
	Monitor ENG Kit VF-505 (Monitor hood and cord reel)
	Mounting Panel MB-509
	Mounting Bracket MB-520
	Battery Adaptor DC-L10
	Rechargeable Lithium-ion Battery BP-L60A
	Rechargeable Lithium-ion Battery BP-L90A
	Rechargeable Battery Pack NP-1B
	Rechargeable Battery Pack BP-90A
	Battery Case (for BP-90A battery) DC-210
	Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L50
	Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L100
	Battery Charger (for four NP-1B batteries) BC-1WD
	Battery Charger (for four NP-1B and four BP-90A batteries) BC-410

Specifications

Video signal system:	EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC _{4.43} *1 (automatically selected)
Picture tube:	22 cm (9-inch) Trinitron tube, visible picture size 19.7 cm (8-inch) measured diagonally, 70° deflection
Horizontal resolution:	250 TV lines at center
Audio power output:	Monaural, 0.5 W with built-in speaker
Power requirements:	AC: 100 to 240 V 0.7 to 0.4 A, 50/60 Hz DC: 12 V 3.7 A
Power consumption:	AC: 45 W max. DC: 38 W
Dimensions*2:	217 (W) × 217 (H) × 352.5 (D) mm (8 7/8 × 8 7/8 × 14 inches)
Mass:	8.2 kg (18 lb)
VIDEO	
LINE A	
Composite*3:	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4
Y/C*3:	Loop-through Mini DIN 4-pin Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4 C (chrominance): NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4 PAL: 0.3 Vp-p, Automatic 75 Ω termination*4
LINE B	
Composite:	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination*4



RGB/Component*5	BNC
R/R-Y:	Non-composite: 0.7 Vp-p, 75 Ω
Sync on Green/G/Y:	Composite: 1.0 Vp-p, sync negative, 75 Ω
B/B-Y:	Non-composite: 0.7 Vp-p, 75 Ω
External sync	Loop-through BNC 4.0 Vp-p negative, Automatic 75 Ω termination*4
Tally	Mini DIN 8-pin
DC INPUT	XLR 4-pin
AUDIO	
LINE A	Loop-through Phono -5 dBu, high impedance
LINE B	Loop-through Phono -5 dBu, high impedance
RGB/Component	Phono -5 dBu, high impedance

*1 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Excluding all protruding parts.

*3 The Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

*5 Video amplitude 100/0/100 color bars.

1-1 Color video monitors

8" PVM-8040 (NTSC)

Color Video Monitor

- Employs a beam current feedback circuit for stability in the color balance
- Composite video or Y/C input with audio input
- Built-in speaker
- 19-inch EIA standard rack mountable with a second PVM-8040 (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

- Supplied accessories: AC Power Cord
Operation Manual
- Optional accessories: TV Tuner Unit TU-1041U
Mounting Panel MB-509
Mounting Bracket MB-520

Specifications

- Video signal system: EIA 525 lines, 50 fields
Color system: NTSC
Picture tube: 22 cm (9-inch) Trinitron tube,
visible picture size 19.7 cm (8-inch) measured
diagonally, 70° deflection
- Horizontal resolution: 250 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC: 120 V*1 0.7 to 0.4 A, 50/60 Hz
Power consumption: AC: 39 W max.
Dimensions*2: 217 (W) × 217 (H) × 352.5 (D) mm
(8⁵/₈ × 8⁵/₈ × 14 inches)
Mass: 8.2 kg (18 lb)

VIDEO

LINE

- Composite*3: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω
termination*4

- Y/C*3: Loop-through 4-pin Mini DIN
Y (luminance): 1.0 Vp-p, sync negative, Automatic 75 Ω
termination*4
C (chrominance): 0.286 Vp-p, Automatic 75 Ω termination*4

AUDIO

LINE

- Loop-through Phono
-5 dBu, high impedance



*1 Capable of 100 to 240 V operation.
*2 Excluding all protruding parts.
*3 The Y/C input has priority over the Composite video input.
*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

5" PVM-5041Q (NTSC/PAL/SECAM/NTSC^{4,43})

Suitable for picture confirmation in ENG/EFP application and multiple camera monitoring

•Employs a beam current feedback circuit for stability in the color balance •Switchable aspect ratio (4:3 and 16:9) •Two inputs: Component (Y/R-Y/B-Y or RGB) input and Composite video input •Accepts external sync and sync on Green •Blue Only, H/V delay, Underscan capability •AC/DC operation capability using one NP-1B battery pack or a BP-90A with DC-210 adaptor •Wired remote control capability •Built-in speaker •Tally input •19-inch EIA standard rack mountable with another two units of PVM-5041Q (or two optional Mounting Panel MB-508) by using the optional Mounting Bracket MB-520

Supplied accessories:	AC Power Cord Mini DIN 8-pin Connector with cable (cable length 350 mm, 13 ⁷ / ₈ inches) Operation Manual
Optional accessories:	TV Tuner Unit TU-1041U Monitor ENG Kit VF-504 (Monitor hood and cord reel) Mounting Panel MB-508 Mounting Bracket MB-520 Battery Adaptor DC-L10 Rechargeable Battery Pack BP-L60A Rechargeable Battery Pack BP-L90A Rechargeable Battery Pack NP-1B Rechargeable Battery Pack BP-90A Battery Case (for BP-90A battery) DC-210 Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L50 Battery Charger (for four BP-L60A or BP-L90A batteries) BC-L100 Battery Charger (for four NP-1B batteries) BC-1WD Battery Charger (for four NP-1B and four BP-90A batteries) BC-410

Specifications

Video signal system:	EIA 525 lines, 60 fields /CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC ^{4,43*1} (automatically selected)
Picture tube:	14.7 cm (6-inch) Trinitron tube, visible picture size 13 cm (5-inch) measured diagonally, 70° deflection
Horizontal resolution:	250 TV lines at center
Audio power output:	Monaural, 0.5 W with built-in speaker
Power requirements:	AC: 120 V ² , 50/60 Hz, DC: 12 V 3.2 A
Power consumption:	AC: 42 W max., DC: 40 W
Dimensions ³ :	146 (W) × 173 (H) × 352.5 (D) mm (5 ³ / ₄ × 6 ⁷ / ₈ × 14 inches)
Mass:	5.5 kg (12 lb 2 oz)

VIDEO

LINE	Loop-through BNC 1.0 Vp-p, sync negative, Automatic 75 Ω termination ⁴
RGB/Component ⁵	BNC
R/R-Y:	0.7 Vp-p, 75 Ω
G/Sync on Green/Y:	Composite: 1.0 Vp-p, sync negative, 75 Ω Non-composite: 0.7 Vp-p, 75 Ω
B/B-Y:	0.7 Vp-p, 75 Ω
External sync	BNC 4.0 Vp-p negative, 75 Ω

AUDIO

LINE	Loop-through Phono -5 dBu, high impedance
RGB/Component	Phono -5 dBu, high impedance



*1 The NTSC^{4,43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Capable of 100 to 240 V operation.

*3 Excluding all protruding parts.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

*5 RGB and Component (Y/R-Y/B-Y) input is selectable with a switch.

1-1 Color video monitors

27" PVM-2950Q (NTSC/PAL/SECAM/NTSC_{4.43})

Cubic Style Monitor

- Switchable aspect ratio (4:3 and 16:9) •A high resolution of 600 TV lines •Beam current feedback circuit for stability in the color balance •On-screen menu for adjustment/operation
- Accepts Composite video, Y/C and Component(Y/R-Y/B-Y or RGB) signals •Supplied wireless remote control unit RM-854 controls all monitor functions

Supplied accessories: AC Power Cord
AC Plug Holder
Remote Commander RM-854
Battery for RM-854
Operation Manual

Optional accessories: Speaker System SS-X7A
TV Tuner Unit TU-1041U

Specifications

Video signal system: EIA 525 lines, 60 fields /CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)

Color system: NTSC/PAL/SECAM/NTSC_{4.43}*1 (automatically selected)

Picture tube: 72.9 cm (29-inch), Super Trinitron tube, visible picture size 67.5 cm (27-inch) measured diagonally, 110° deflection

Horizontal resolution: 600 TV lines

Audio power output: 7 W + 7 W, 8 to 16 Ω

Power requirements: AC 120 V, 50/60 Hz

Power consumption: 165 W (typical)

Dimensions*2: 687 (W) × 538 (H) × 529 (D) mm (27¹/₈ × 21¹/₄ × 20⁷/₈ inches)

Mass: 52 kg (114 lb 10 oz)

VIDEO

LINE 1/2

Composite*3: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*4

Y/C*3: Loop-through 4-pin Mini DIN
Y (luminance):
1.0 Vp-p, sync negative, Automatic 75 Ω termination*4
C (chrominance):
NTSC: 0.286 Vp-p, Automatic 75 Ω termination*4
PAL: 0.3 Vp-p, Automatic 75 Ω termination*4

LINE 3

RGB/Component: BNC

R/R-Y: 0.7 Vp-p, 75 Ω

Sync on G/G/Y:

Composite: 1.0 Vp-p, sync negative, 75 Ω
Non-composite: 0.7 Vp-p, 75 Ω

B/B-Y: 0.7 Vp-p, 75 Ω

Sync: Composite sync: BNC
Analog level: 0.5 to 5.0 Vp-p, high impedance, positive/negative
TTL level: positive/negative

HD/VD separate: BNC
Analog level: 0.5 to 5.0 Vp-p, high impedance, positive/negative
TTL level: positive/negative

AUDIO

LINE 1/2 Loop-through Phono (×2)
-5 dBu, high impedance

LINE 3 Phono (×2)
-5 dBu, high impedance



RM-854

*1 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*2 Excluding all protruding parts.

*3 Y/C input has priority over the Composite video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-1 Color video monitors

18" PVM-20S1WU (NTSC/PAL/SECAM/NTSC_{4.43})

Color Video Monitor

- 16:9 aspect ratio CRT with dark panel for high contrast image reproduction
- Accepts component (Y/R-Y/B-Y), RGB, Y/C and composite signals
- Beam current feedback circuit for stability in the color balance
- Optional Component Serial Digital Interface Kits BKM-101C (video)/102 (audio) available
- Switchable aspect ratio (4:3 and 16:9)
- Color temperature D65, D93 or user preset (3200 K to 10000 K) selectable
- On-screen display for adjustment/operation
- User preset function
- Underscan, Blue Only and H/V delay mode available
- Auto chroma/phase set-up^{*1}
- Accepts external sync
- Digital 3-line comb filter
- Auto/Manual degaussing
- Mountable into an EIA standard rack with the optional Slide Rail Kit SLR-103A

Supplied accessories:

- 20-pin Remote Cable
- Tally Label
- AC Power Cord
- AC Plug Holder
- Blind Panel Kit for SLR-103A*
- Operation Manual

Optional accessories:

- Component Serial Digital Interface Kit (video) BKM-101C
- Component Serial Digital Interface Kit (audio) BKM-102
- Serial Remote Control Kit (for RS-422A) BKM-103
- Slide Rail Kit* SLR-103A

*Because the bezel protrudes from the rack when you mount the PVM-20S1WU, you cannot completely insert the SLR-103A.
The Blind Panel Kit is supplied to cover the exposed part of the slide rail.

Specifications

CRT: AG pitch: Variable pitch 0.65 to 0.75 mm
Phosphor: P-22
Visible screen size: 46 cm (18inch) diagonally

Resolution: 300TV lines

Color system: NTSC, PAL, SECAM, NTSC_{4.43}^{*2}

Aperture correction: 0 to +6 dB

Frequency response: LINE: 6 MHz (±3 dB) *Y signal only
RGB: 6 MHz (±3 dB)

Synchronization: AFC time constant 1.0 mS

Normal scan: 7% over scan

Under scan: 5% under scan

Linearity: H: less than 8% (typical)
V: less than 7% (typical)

Convergence
Center: 0.6 mm (typical)
Peripheral: 1.2 mm (typical)

Raster size stability: H: 1.0%
V: 1.5%

HV regulation: 4.0%

Color temperature: D65, D93, USER (3200 K to 10000 K)

Speaker out: 0.8 W (distortion: less than 5%)

Power consumption: 100 W (with SDI: 110 W)

AC input range: AC 220 to 240 V (50/60 Hz)

Operation temperature: 0 to 35 °C (32 to 95 °F)

Storage temperature: -10 to 40 °C (14 to 104 °F)

Operation humidity: 35 to 85% (no condensation)

Storage humidity: 0 to 90%

Dimensions^{*3}: 482 (W) × 397 (H) × 503 (D) mm
(19 × 15³/₄ × 19⁷/₈ inches)

Mass: Approx. 25 kg (55 lb 2 oz)
(including SDI: 26 kg (57 lb 5 oz))



Inputs/Outputs

Line A/B:^{*4} 1.0 Vp-p ±6 dB
Loop-through BNC automatic 75 Ω termination^{*5}

Line C:^{*4} Y: 1.0 Vp-p ±6 dB
C: (NTSC): 0.286 Vp-p ±6 dB
(PAL): 0.3 Vp-p ±6 dB
Loop-through Mini DIN 4-pin automatic 75 Ω termination^{*5}

RGB/Component (selectable):^{*6}
R/R-Y: 0.7 Vp-p ±6 dB
G: 0.7 Vp-p ±6 dB
Sync on G: 0.3 Vp-p ±6 dB
Y: 1.0 Vp-p ±6 dB
B/B-Y: 0.7 Vp-p ±6 dB
Loop-through BNC automatic 75 Ω termination^{*5}

External sync: 4.0 Vp-p ±6 dB, negative
Loop-through BNC automatic 75 Ω termination^{*5}

Regulation Compliance:

UL1950, DHHS, FCC Class-A, CSA, DNHWW,
IC Class-A, EN60950, EN55022 Class-B,
EN50082-1, EN60555-2

^{*1} Phase set-up is for NTSC signals only.

^{*2} The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

^{*3} Excluding all protruding parts.

^{*4} The Y/C input has priority over the Composite video input.

^{*5} 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

^{*6} Video amplitude 100/0/100 color bars.

1-1 Color video monitors

27" PGM-200R2U

Color Graphic Monitor

- Capable of displaying VGA graphics (fH: 31.5 kHz, fV: 60 Hz), line-doubled NTSC signals (fH: 31.5 kHz, fV: 60 Hz) and line-doubled PAL signals (fH 31.25 kHz, fV 50 Hz)
- Optional Cooling Fan Unit BKM-202FN can be installed to provide extra ventilation for enclosed areas such as custom-built cabinets (note: Call your authorized Sony dealer for installation details)
- Optional remote control unit RM-921
- Wide range power supply switchable between 100 to 120 V and 220 to 240 V AC

Supplied accessories:	AC Power Cord
	AC Plug Holder
Optional accessories:	Ferrite Core (2)
	Operating Instructions
	Remote Commander RM-921
	Cooling Fan Unit BKM-202FN

Specifications

Picture performance

CRT:	29-inch Super Trinitron tube, visible picture size 675 mm (27-inch viewable area, measured diagonally), AG pitch (variable) 0.70 to 0.85 mm, Aniti-glare and Anti-static
Resolution:	640 × 480 dots max.
Scanning frequency:	fH: 31.5 kHz fV: 60 Hz fH: 31.25 kHz fV: 50 Hz
Frequency response:	16 MHz (-3 dB)
Line pull range:	Horizontal: ±500 Hz Vertical: -8 Hz
Zooming:	Within 5%
Color temperature:	9300 K (standard)/6500 K switchable

Input/Output

Input:	R, G, B:	BNC 0.714 Vp-p/non-composite, 75 Ω terminated 1.0 Vp-p/composite, 75 Ω terminated
	HD/COMP, VD:	BNC H (or composite) sync, V sync 5.0 Vp-p, high impedance
	Audio (L, R):	Phono 5 dBu, high impedance
Output:	R, G, B:	BNC 0.714 Vp-p/non-composite, 75 Ω terminated
	HD/COMP, VD:	BNC H (or composite) sync, V sync 5.0 Vp-p, high impedance
	Audio (L, R):	Phono Audio gain ±1.0 dB typical Total harmonic distortion less than 1%, 5 dBu
12 V DC OUT (for BKM-202FN):		
12 V DC 200 mA max.		
Control S IN/OUT: Mini jack		

General

Power requirements:	100 V to 120 V/220 V to 240 V AC selectable, 50/60 Hz
	Preset: 100 to 120 V (UL listed for 100 to 120 V operation)
Power consumption:	183 W max.
Operating temperature:	0 to 35 °C (32 to 95 °F)
Dimensions*:	687 (W) × 538 (H) × 520 (D) mm (27 ¹ / ₈ × 21 ¹ / ₄ × 20 ¹ / ₂ inches)
	Mass: Approx. 51.5 kg (113 lb 8 oz)

Regulation Compliance:

UL1950, CSA 22.2 No.950, EN60950,
FCC Class-A, IC Class-A, EN55022 Class-B,
EN50082-1, EN60555-2, VCCI, DHHS, DNHWW, PTB



* Including all protruding parts.

1-1 Color video monitors

13" PGM-100P1MD

Color Graphic Monitor for medical use

•High contrast anti-reflection coated Trinitron CRT •Light output of 160 nits •Multiscan capability: fH: 30 to 65 kHz, fV: 50 to 120 Hz, 640 × 480 to 1280 × 1024 dots •BNC input with loop-through output •Built-in speaker •DC 5 V/1 A output •World-wide medical safety approval for professional medical use •Control inhibit function prevents the inadvertent touching of control panel from changing the settings •Fluid resistant cabinet and flush surface using a sheet-key •GCX mount or optional swivel stand installation capability •Power saving function

Supplied accessories: AC Power Cord
Instruction Manual
Optional accessories: Monitor Stand SU-556
Signal Cable SMF-400
(D-sub 15-pin to 5 BNC cable)

Specifications

General

Scanning frequency: VGA to SVGA
Horizontal: 30 to 65 kHz
Vertical: 50 to 120 Hz
Power requirements: 100 to 120 V, 220 to 240 V, 50/60 Hz
Power consumption: 130 W (max.), 7 W (standby)
Dimensions*: 368 (W) × 343 (H) × 391 (D) mm
(14½ × 13⅝ × 15½ inches)
Mass: Approx. 15 kg (33 lb 1 oz)

CRT performance

CRT type: 37 cm (14-inch) Trinitron CRT with P-22 phosphors,
visible picture size 35.4 cm (13-inch) (min.)
measured diagonally, AG pitch 0.25 mm,
90° deflection

Resolution: 640 × 480 to 1280 × 1024 dots

Color temperature: 9300 K/5000 K/USER

Input performance

R/G/B: Loop-through BNC
0.7 Vp-p, Automatic 75 Ω termination
HD/VD: Loop-through BNC
TTL level, Automatic 2.2 kΩ termination

Audio performance

Speaker out: Loop-through phono jack -5 dBu, more than 47 kΩ
0.2 W, monaural



*Including all protruding parts.

1-2 Flat panel monitor

PFM-510A2WU

Flat Panel Monitor

•16:9 aspect, 42-inch diagonal Plasma Display Panel
•1024 × 1024 pixels resolution, 16.8 million colors •Accepts video (NTSC/PAL/SECAM/NTSC_{4.43}/PAL60 and DTV^{*1}) and computer signals up to UXGA with new high performance scan converter •Option slot •On-Screen display in six languages •Carrying handles and unique retractable feet for easy handling capability •Self diagnosis function and detachable power supply block for easy maintenance access •Various remote control capabilities: supplied remote control unit RM-921, Control-S or RS-232C •7 W + 7 W built-in amplifier •Audio monitor out

Supplied accessories: AC Power Cord
AC Plug Holder
Remote Commander RM-921
AA (R6) Battery (2)
Connector Cover (2)
Foot Support Bracket (2)
Ferrite Core (2)
Operation Manual

Optional accessories: Speaker System SS-X500A
Mounting Bracket MB-514
SDI 4:2:2 Input Adaptor BKM-501D

Specifications

Picture performance

Panel:

Resolution: 1024 × 1024 pixels
Pixel pitch: 0.90 × 0.51 mm
Active area (W/H): 920 × 518 mm
42-inch/1,058 mm (measured diagonally)
Driver: 10-bit RGB
Colors: 16.8 million simultaneously
Type: AC-type Plasma Display Panel with anti-reflection screen

Color system: NTSC/PAL/SECAM/NTSC_{4.43}/PAL60
Sampling rate: 13.5 to 140 MHz offset phase max.
Preset signals: 39 formats

Inputs/Outputs

RGB 1:

BNC
RGB: 0.714 Vp-p/non-composite, 1.0 Vp-p/composite,
75 Ω automatic termination, loop-through
YUV: 0.7 Vp-p/non-composite (U/V), 1.0 Vp-p/composite
(Y), 75 Ω automatic termination, loop-through

HD/COMP, VD: H (or composite) sync, V sync, 1.0 to 5.0 Vp-p,
high impedance, loop-through

Audio (L/R):

Phono, 500 mV rms, high impedance, loop-through
D-sub 15-pin

RGB 2:

RGB: 0.714 Vp-p/non-composite, 75 Ω, 1.0 Vp-p/composite
External sync: H (or composite) sync, V sync, 1.0 to 5.0 Vp-p,
high impedance, loop-through

Audio (L/R):

Phono, 500 mV rms, high impedance, loop-through

LINE:

Composite: BNC, 1.0 Vp-p, sync negative,
75 Ω automatic termination, loop-through

Y/C: Mini DIN 4-pin connector

Y: 1.0 Vp-p, sync negative

C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL),
75 Ω automatic termination, loop-through

Audio (L/R): Phono, 500 mV rms, high impedance, loop-through
Sync signal: External H/V separate sync or composite sync,
Sync-on-Green, automatic

*Tri-level sync is available for HDTV

Audio output:

Speakers terminal: 6 to 16 Ω, 7 W + 7 W (at 8 Ω)

Monitor out (L/R): Phono, 500 mV rms at Volume max.,
attenuation 0 dB to ∞ (variable),
total harmonic distortion less than 1%

Remote:

RS-232C: Mini DIN 8-pin

Control S IN/OUT: Stereo mini jack, 5.0 Vp-p



(L)



(R)

General

Power requirements/

Power consumption: 100 to 120V, 50/60 Hz, 4.7 A, 410 W

Operating temperature: 0 to 35 °C (32 to 95 °F)

Storage temperature: -10 to 40 °C (14 to 104 °F)

Humidity: 20 to 90%, no condensation

Dimensions*2: 1036 (W) × 636 (H) × 152 (D) mm
(40¾ × 25 × 6¾ inches)

Mass: Approx. 45 kg (99 lb 3 oz)

Regulation compliance

UL 1950 listed, CSA 22.2 No.950, TÜV EN 60 950
(CE LVD), C-Tick, FCC Class A, IC Class A,
CE EN 55 022 Class-A/EN 50 082-2/EN 60 555-2,
VCCI-A

*1 1080/24PsF, 1080/50i, 575/50P, 480/60P, 1080/60i and 720/60P DTV signals are supported.

*2 Including all protruding parts.

1-2 Flat panel monitor

PFM-500A3WU

Flat Panel Monitor

•16:9 aspect, 42-inch diagonal Plasma Display Panel
 •852 × 480 pixels resolution, 16.8 million colors •Accepts video (NTSC/PAL/SECAM/NTSC_{4.43}/PAL60 and DTV^{*1}) and computer signals up to UXGA with new high performance scan converter •Option slot •On-Screen display in six languages •Carrying handles and unique retractable feet for easy handling capability •Self diagnosis function and detachable power supply block for easy maintenance access •Various remote control capabilities: supplied remote control unit RM-921, Control-S or RS-232C •7 W + 7 W built-in amplifier •Audio monitor out

Supplied accessories: AC Power Cord
 AC Plug Holder
 Remote Commander RM-921
 AA (R6) Battery (2)
 Connector Cover (2)
 Foot Support Bracket (2)
 Ferrite Core (2)
 Operation Manual

Optional accessories: Speaker System SS-X500A
 Mounting Bracket MB-514
 SDI 4:2:2 Input Adaptor BKM-501D

Specifications

Picture performance

Panel:

Resolution: 852 × 480 pixels
 Pixel pitch: 1.08 × 1.08 mm
 Active area (W/H): 920 × 518 mm
 42-inch/1,056 mm (measured diagonally)
 Driver: 8-bit RGB
 Colors: 16.8 million simultaneously
 Type: AC-type Plasma Display Panel with anti-reflection screen

Color system: NTSC/PAL/SECAM/NTSC_{4.43}/PAL60

Sampling rate: 13.5 to 140 MHz offset phase max.

Preset signals: 39 formats

Inputs/Outputs

RGB 1:

BNC
 RGB: 0.714 Vp-p/non-composite, 1.0 Vp-p/composite,
 75 Ω automatic termination, loop-through
 YUV: 0.7 Vp-p/non-composite (U/V), 1.0 Vp-p/composite
 (Y), 75 Ω automatic termination, loop-through

HD/COMP, VD: H (or composite) sync, V sync, 1.0 to 5.0 Vp-p,
 high impedance, loop-through

Audio (L/R): Phono, 500 mV rms, high impedance, loop-through

RGB 2:

D-sub 15-pin
 RGB: 0.714 Vp-p/non-composite, 75 Ω, 1.0 Vp-p/composite
 External sync: H (or composite) sync, V sync, 1.0 to 5.0 Vp-p,
 high impedance, loop-through

Audio (L/R): Phono, 500 mV rms, high impedance, loop-through

LINE:

Composite: BNC, 1.0 Vp-p, sync negative,
 75 Ω automatic termination, loop-through

Y/C: Mini DIN 4-pin connector

Y: 1.0 Vp-p, sync negative

C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL),
 75 Ω automatic termination, loop-through

Audio (L/R): Phono, 500 mV rms, high impedance, loop-through
 Sync signal: External H/V separate sync or composite sync,
 Sync-on-Green, automatic
 *Tri-level sync is available for HDTV

Audio output:

Speakers terminal: 6 to 16 Ω, 7 W + 7 W (at 8 Ω)
 Monitor out (L/R): Phono, 500 mV rms at Volume max.,
 attenuation 0 dB to ∞ (variable),
 total harmonic distortion less than 1%

Remote:

RS-232C: Mini DIN 8-pin
 Control S IN/OUT: Stereo mini jack, 5.0 Vp-p



(L)



(R)

General

Power requirements/

Power consumption: 100 to 120 V, 50/60 Hz, 3.9 A, 380 W

Operating temperature: 0 to 35 °C (32 to 95 °F)

Storage temperature: -10 to 40 °C (14 to 104 °F)

Humidity: 20 to 90%, no condensation

Dimensions^{*2}: 1036 (W) × 636 (H) × 152 (D) mm
 (40³/₄ × 25 × 6³/₄ inches)

Mass: Approx. 45 kg (99 lb 3 oz)

Regulation compliance

UL 1950 listed, CSA 22.2 No.950, TÜV EN 60 950
 (CE LVD), C-Tick, FCC Class A, IC Class A,
 CE EN 55 022 Class-A/EN 50 082-2/EN 60 555-2,
 VCCI-A

^{*1} 1080/24PsF, 1080/50i, 575/50P, 480/60P, 1080/60i and 720/60P DTV signals are supported.

^{*2} Including all protruding parts.

1-3 LCD monitor

10.2" LMD-1041

Multi-input LCD Monitor

•Lightweight and compact design •Accepts not only computer signals (fH: 15 to 36 kHz), but also a wide variety of video signals •Remarkably beautiful color reproduction with the brilliant full-color, high resolution LCD panel
•Underscan function available •ID remote control available for easy operation when using multiple monitors •Stereo speaker available •Kensington MicroSaver Security System® wire can be attached as a security measure •On-screen menu for facilitated operation

Supplied accessories: Stand
Screws to secure stand (x2)
AC Power Cord
Remote Commander RM-LMD1041
Operating Instructions

Specifications

General

Video signal system: EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields*
Color system: NTSC/PAL*
Scanning frequency: VGA, Macintosh 13-inch mode
(fH: 15 to 36 kHz, fV: 45 to 73 Hz)
Panel type: a-Si TFT Active Matrix LCD
10.4-inch (264 mm) diagonal, viewable area
10.2-inch (259.3 mm) (NTSC) diagonal
10.4-inch (264 mm) (PAL, Computer)
Pixel area: 211 (H) × 158 (V) mm
(8³/₈ × 6¹/₄ inches)
10.4-inch (264 mm) diagonal
Number of dots: RGB 640 × 480 dots
Display color: Analog full color
Backlight: Cold cathode fluorescent light
Power requirements: AC 100 to 240 V, 50/60 Hz
Power consumption: 28 W max. (normal operation)
7 W max. (standby)
Storage temperature: -20 to 60 °C (-4 to 140 °F)
Operating temperature: 5 to 35 °C (41 to 95 °F)
Dimensions: 305 (W) × 215.3 (H) × 57.4 (D) mm
(12 × 8⁵/₈ × 2¹/₄ inches)
(stand not included)
Mass: Approx. 2 kg (4 lb 6 oz)
(stand not included)

Video

Line A: Loop-through BNC
1.0 Vp-p ±2 dB sync negative, 75 Ω
Line B: Loop-through Mini DIN 4-pin
Y: 1.0 Vp-p ±2 dB sync negative, 75 Ω
C: NTSC 0.286 Vp-p ±2 dB,
PAL 0.3 Vp-p ±2 dB, 75 Ω
Line C: HD D-sub 15-pin
YUV: R-Y/B-Y: 0.7 Vp-p
Y: 1.0 Vp-p (sync 0.3 V)
RGB: R/B/G: 0.7 Vp-p
C sync: 1.0 Vp-p

Computer

Computer: HD D-sub 15-pin (Line C)
RGB: 0.7 Vp-p, 75 Ω
Sync:
Composite sync: TTL level negative
Separate sync: TTL level negative/positive
Sync on G: 0.3 Vp-p, negative

Audio

Audio signal: Mini jack
Input: Audio input -5 dBu, 47 kΩ or more
Output: Headphone 16 Ω or more
Speaker 0.5 W + 0.5 W



* Line reduction for PAL signals.

1-4 Monochrome video monitors

13" PVM-136 (EIA/CCIR)

Black & White Monitor

•EIA/CCIR automatic selection •Switchable aspect ratio (4:3 and 16:9) •A high resolution of 1000 TV lines at center
•Incorporates a CRT with D65 •H/V delay and Underscan capability •Equipped with a notch filter •Built-in speaker for audio monitoring •Accepts external sync •Tally input •Rack mountable with the optional Mounting Bracket MB-502B and Slide Rail Kit SLR-102

Supplied accessories: AC Power Cord, AC Plug Holders, Number Plate (1 set), Remote Connector 8-pin, Operation Manual
Optional accessories: Mounting Bracket MB-502B
Slide Rail Kit SLR-102

Specifications

General

Video signal system: EIA 525 lines, 60 fields /CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 34.0 cm (14-inch) CRT, 32.1 cm (13-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 1000 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*1, 50/60 Hz
Power consumption: 30 W
Dimensions*2: 346 (W) × 340 (H) × 330 (D) mm (13⁵/₈ × 13¹/₂ × 13 inches)
Mass: 11 kg (24 lb 4 oz)



VIDEO

Line A/B:

External sync:

AUDIO

Line A/B:

Loop-through BNC

1.0 Vp-p, sync negative, Automatic 75 Ω termination*3

Loop-through BNC

1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*3

Loop-through Phono

−5 dBu, high impedance

*1 Capable of 100 to 240 V operation.

*2 Excluding all protruding parts.

*3 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

DISPLAY
PRODUCTS

13" PVM-137*1 (EIA/CCIR)

Black & White Monitor

•EIA/CCIR automatic selection •A high resolution of 1000 TV lines at center •Underscan capability •Built-in speaker for audio monitoring •Accepts external sync •Tally input •Rack mountable with the optional Mounting Bracket MB-502B and Slide Rail Kit SLR-102

Supplied accessories: AC Power Cord, AC Plug Holders, Number Plate (1 set), Operation Manual
Optional accessories: Mounting Bracket MB-502B
Slide Rail Kit SLR-102

Specifications

General

Video signal system: EIA 525 lines, 60 fields /CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 34.0 cm (14-inch) CRT, 32.1 cm (13-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 1000 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*2, 50/60 Hz
Power consumption: 30 W
Dimensions*3: 346 (W) × 340 (H) × 330 (D) mm (13⁵/₈ × 13¹/₂ × 13 inches)
Mass: 11 kg (24 lb 4 oz)

VIDEO

Line A/B:

External sync:

AUDIO

Line A/B:

Loop-through BNC

1.0 Vp-p, sync negative, Automatic 75 Ω termination*4

Loop-through BNC

1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*4

Loop-through Phono

−5 dBu, high impedance



*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 Capable of 100 to 240 V operation.

*3 Excluding all protruding parts.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-4 Monochrome video monitors

13" PVM-135*1 (EIA/CCIR)

Black & White Monitor

- EIA/CCIR automatic selection •A high resolution of 1000 TV lines at center
- Built-in speaker for audio monitoring
- Accepts external sync •Rack mountable with the optional Mounting Bracket MB-502B and Slide Rail Kit SLR-102

Supplied accessories: AC Power Cord, AC Plug Holders, Operation Manual
Optional accessories: Mounting Bracket MB-502B
Slide Rail Kit SLR-102

Specifications

General

Video signal system: EIA 525 lines, 60 fields /CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 34.0 cm (14-inch) CRT, 32.1 cm (13-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 1000 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*2, 50/60 Hz
Power consumption: 30 W
Dimensions*3: 346 (W) × 340 (H) × 330 (D) mm (13⁵/₈ × 13¹/₂ × 13 inches)
Mass: 11 kg (24 lb 4 oz)

VIDEO

Line A/B: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*4
External sync: Loop-through BNC
1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*4

AUDIO

Line A/B: Loop-through Phono
-5 dBu, high impedance



*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 Excluding all protruding parts.

*3 Capable of 100 to 240 V operation.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

9" PVM-96 (EIA/CCIR)

Black & White Monitor

- EIA/CCIR automatic selection •Switchable aspect ratio (4:3 and 16:9) •A high resolution of 900 TV lines at center
- Incorporates a CRT with D65 •H/V delay and Underscan capability •Equipped with a notch filter •Built-in speaker for audio monitoring
- Accepts external sync •Tally input
- Rack mountable with a second PVM-96 (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

Supplied accessories: AC Power Cord, AC Plug Holders, Remote Connector 8-pin, Operation Manual
Optional accessories: Mounting Panel MB-509
Mounting Bracket MB-520

Specifications

General

Video signal system: EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 23.0 cm (9-inch) CRT, 21.7 cm (9-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 900 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*1, 50/60 Hz
Power consumption: 28 W
Dimensions*2: 217 (W) × 218 (H) × 250 (D) mm (8⁵/₈ × 8⁵/₈ × 9⁷/₈ inches)
Mass: 5.5 kg (12 lb 2 oz)



VIDEO

Line A/B: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*3
External sync: Loop-through BNC,
1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*3

AUDIO

Line A/B: Loop-through Phono
-5 dBu, high impedance

*1 Capable of 100 to 240 V operation.

*2 Excluding all protruding parts.

*3 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-4 Monochrome video monitors

9" PVM-97*¹ (EIA/CCIR)

Black & White Monitor

•EIA/CCIR automatic selection •A high resolution of 900 TV lines at center •Underscan capability •Built-in speaker for audio monitoring •Accepts external sync •Tally input
•Rack mountable with a second PVM-97 (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

Supplied accessories: AC Power Cord, AC Plug Holders, Operation Manual

Optional accessories: Mounting Panel MB-509
Mounting Bracket MB-520

Specifications

General

Video signal system: EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 23.0 cm (9-inch) CRT, 21.7 cm (9-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 900 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*², 50/60 Hz
Power consumption: 28 W
Dimensions*³: 217 (W) × 218 (H) × 250 (D) mm (8⁵/₈ × 8⁵/₈ × 9⁷/₈ inches)
Mass: 5.5 kg (12 lb 2 oz)

VIDEO

Line A/B: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*⁴
External sync: Loop-through BNC
1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*⁴

AUDIO
Line A/B:

Loop-through Phono
–5 dBu, high impedance



DISPLAY
PRODUCTS

*¹ Not available in some areas. For details, please contact your nearest Sony office.

*² Capable of 100 to 240 V operation.

*³ Excluding all protruding parts.

*⁴ 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

9" PVM-95*¹ (EIA/CCIR)

Black & White Monitor

•EIA/CCIR automatic selection •A high resolution of 900TV lines at center •Built-in speaker for audio monitoring
•Accepts external sync •Rack mountable with a second PVM-95 (or an optional Mounting Panel MB-509) by using the optional Mounting Bracket MB-520

Supplied accessories: AC Power Cord, AC Plug Holders, Operation Manual

Optional accessories: Mounting Panel MB-509
Mounting Bracket MB-520

Specifications

General

Video signal system: EIA 525 lines, 60 fields/CCIR 625 lines, 50 fields (switching of EIA to CCIR or vice versa is automatically done)
Picture tube: 23.0 cm (9-inch) CRT, 21.7 cm (9-inch) visible picture measured diagonally, 90° deflection
Horizontal resolution: 900 TV lines at center
Audio power output: Monaural, 0.5 W with built-in speaker
Power requirements: AC 120 V*², 50/60 Hz
Power consumption: 28 W
Dimensions*³: 217 (W) × 218 (H) × 250 (D) mm (8⁵/₈ × 8⁵/₈ × 9⁷/₈ inches)
Mass: 5.5 kg (12 lb 2 oz)

VIDEO

Line A/B: Loop-through BNC
1.0 Vp-p, sync negative, Automatic 75 Ω termination*⁴
External sync: Loop-through BNC,
1.0 to 4.0 Vp-p negative, Automatic 75 Ω termination*⁴

AUDIO

Line A/B: Loop-through Phono
–5 dBu, high impedance



*¹ Not available in some areas. For details, please contact your nearest Sony office.

*² Capable of 100 to 240 V operation.

*³ Excluding all protruding parts.

*⁴ 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

1-4 Monochrome video monitors

4" PVM-4B1U (EIA/CCIR)

Black and White Video Monitors

•Ideal for camera monitoring in video studio and surveillance systems with multiple camera installations •Compatible with EIA and CCIR systems (automatically selected) •High resolution of 500 TV lines •Stable picture reproduction with the high voltage regulation circuit •Accepts an external sync signal •Loop-through video and sync terminals with automatic 75 Ω termination •Can be mounted in a standard 19-inch rack •Individual power and individual controls available

Supplied accessories: AC Power Cord
AC Plug Holder (1 set)
Operating Instructions

Specifications

General

System: EIA 525 lines/60 fields, CCIR 625 lines/50 fields (automatically selected)

Frequency response: 10 MHz (-3 dB)

Power requirements: AC 100 to 240 V*, 50/60 Hz

Power consumption: 59 W

Dimensions: 483 (W) × 133 (H) × 356 (D) mm
(19¹/₈ × 5¹/₄ × 14¹/₈ inches)

Mass: 11.7 kg (25 lb 13 oz)

Operating temperature: 0 to 35°C (32 to 95°F)

Operating humidity: 0 to 90%

CRT performance

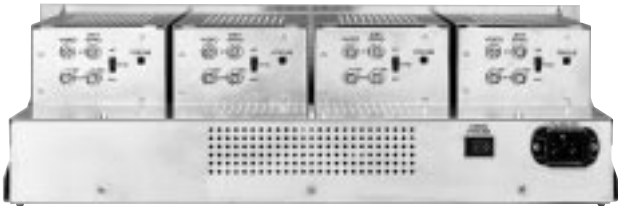
CRT type: 10.0 cm (4-inch) CRT, visible picture size 9.4 cm (3³/₄ inches) (min.) measured diagonally, 50° deflection

Resolution: 500 TV lines

Picture performance

Normal scan: 7% overscan

Linearity: H: less than 8%, V: less than 7%



Input performance

VIDEO: Loop-through BNC
1.0 Vp-p ±6 dB, sync negative, automatic 75 Ω termination

EXT SYNC: Loop-through BNC
0.5 to 4.0 Vp-p, sync negative, automatic 75 Ω termination

Safety regulations: UL1950, CSA950, DHHS, DNHW, FCC Class A, IC Class A

*UL listed for 120 V operation.

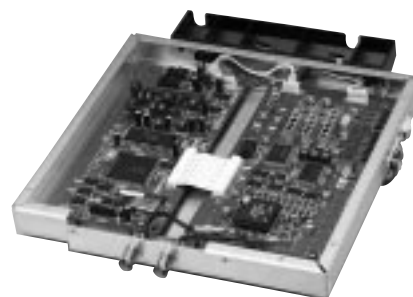
1-5 Monitor accessories

BKM-101C/102

Component Serial Digital Interface Kit 101C (video)/102 (audio)

•Component serial digital interface for PVM-20M4U/20M2U/20S1WU/14M4U/14M2U

Mass:	BKM-101C:	820 g (1 lb 13 oz)
		870 g (1 lb 15 oz)
		(with installation kit for PVM-20M4U/20M2U/20S1WU)
	BKM-102:	130 g (4.6 oz)



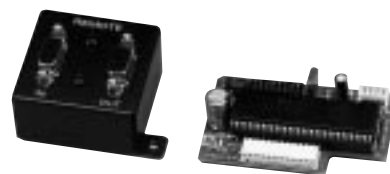
BKM-101C/102

BKM-103

Serial Remote Control Kit

•RS-422 serial remote control kit for PVM-20M4U/20M2U/20S1WU/14M4U/14M2U

Mass:	157 g (5.5 oz)
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DISPLAY
PRODUCTS

RM-921

Remote Commander

•Remote control unit for PGM-200R2U

Dimensions:	43 (W) × 213 (H) × 25 (D) mm
	(1¾ × 8½ × 1 inches)
Mass:	125 g (4 oz) with batteries



BKM-202FN

Cooling Fan Unit

- Designed exclusively for the PGM-200R2U
- Prevents heat build up inside the cabinet by powerfully ventilating the air out of the monitor
- DC 12 V supplied from the monitor

Dimensions:	80 (W) × 80 (H) × 25 (D) mm
	(3¼ × 3¼ × 1 inches)
Mass:	125 g (4 oz)



1-5 Monitor accessories

BKM-501D

SDI 4:2:2 Input Adaptor

- Input adaptor for PFM-510A2WU/500A3WU
- SDI video and audio decoding

Dimensions: 53 (W) × 359 (H) × 260 (D) mm
(2 $\frac{1}{8}$ × 14 $\frac{3}{4}$ × 10 $\frac{3}{4}$ inches)

Mass: Approx. 1.8 kg (3 lb 15 oz)



MB-502B

Mounting Bracket

- Bracket for PVM-14M4U/14M2U/14M2MDU/14N6U/14N5U/136/137/135

Dimensions: 483 (W) × 355 (H) × 302 (D) mm
(19 $\frac{1}{8}$ × 14 × 12 inches)

Mass: 3.8 kg (8 lb 6 oz)



MB-508

Mounting Panel

- Blank panel for PVM-5041Q

Dimensions: 146 (W) × 168.5 (H) × 63 (D) mm
(5 $\frac{3}{4}$ × 6 $\frac{3}{4}$ × 2 $\frac{1}{2}$ inches)

Mass: 200 g (7 oz)



MB-509

Mounting Panel

- Blank panel for PVM-8045Q/8043MD/8042Q/8040/96/97/95

Dimensions: 217 (W) × 212.5 (H) × 63 (D) mm
(8 $\frac{5}{8}$ × 8 $\frac{3}{8}$ × 2 $\frac{1}{2}$ inches)

Mass: 400 g (14 oz)



1-5 Monitor accessories

MB-510

Mounting Bracket

- Bracket for TU-1041U

Dimensions (with 2 TU-1041U):

482 (W) × 49.3 (H) × 361 (D) mm
(19 × 2 × 14¹/₄ inches)

Mass: 300 g (10 oz)



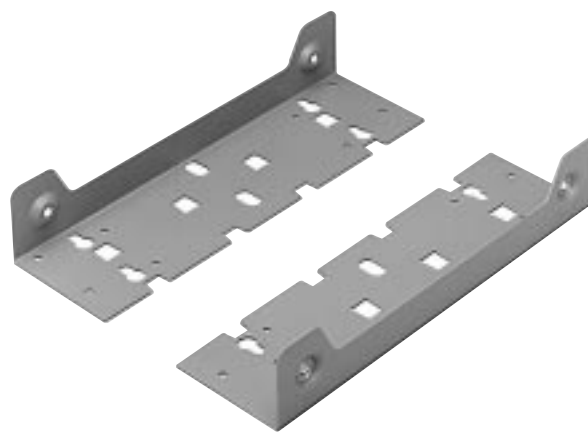
MB-512

Mounting Bracket

- Bracket for attaching TV Tuner Unit TU-1041U to the PVM-8045Q/8042Q/8040/5041Q

Dimensions: 63 (W) × 40 (H) × 210 (D) mm
(2¹/₂ × 1⁵/₈ × 8³/₈ inches)

Mass: 260 g (9 oz)



DISPLAY
PRODUCTS

MB-514

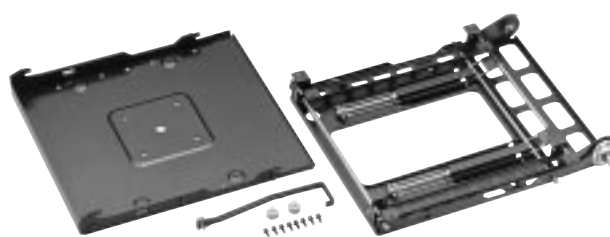
Mounting Bracket for PFM-510A2WU/500A3WU

- For wall-mounting installation
- Monitors can be tilted 0 to 20 degrees downward from the wall
- Separate parts for easy installation

Dimensions: Bracket for wall: 455 (W) × 500 (H) × 57 (D) mm
(18¹/₂ × 19¹/₁₆ × 2¹/₄ inches)

Bracket for monitor: 470 (W) × 535 (H) × 56.5 (D) mm
(18⁵/₈ × 21¹/₈ × 2¹/₄ inches)

Mass: Bracket for wall: Approx. 5.2 kg (11 lb 7 oz)
Bracket for monitor: Approx. 5.8 kg (12 lb 13 oz)



MB-520

Mounting Bracket

- 19-inch rack mount kit for 6-inch and 9-inch monitors

Dimensions: 479 (W) × 222 (H) × 422.3 (D) mm
(18⁷/₈ × 8³/₄ × 16³/₄ inches)

Mass: 2.7 kg (5 lb 15 oz)



1-5 Monitor accessories

VF-504

Monitor ENG Kit

•Monitor hood and cord reel for PVM-5041Q

Dimensions: Hood:
159 (W) × 172 (H) × 160 (D) mm
(6³/₈ × 6⁷/₈ × 6³/₈ inches)
(with PVM-5041Q):
159 (W) × 178 (H) × 567.5 (D) mm
(6³/₈ × 7¹/₈ × 22³/₈ inches)
Mass: 400 g (14 oz)



VF-505

Monitor ENG Kit

•Monitor hood and cord reel for PVM-8045Q/8042Q

Dimensions: Hood:
230 (W) × 215 (H) × 200 (D) mm
(9¹/₈ × 8¹/₂ × 7⁷/₈ inches)
(with PVM-8044Q/8041Q):
230 (W) × 222 (H) × 607.5 (D) mm
(9¹/₈ × 8³/₄ × 24 inches)
Mass: 500 g (1 lb 1 oz)



DC-L10

Battery Adaptor

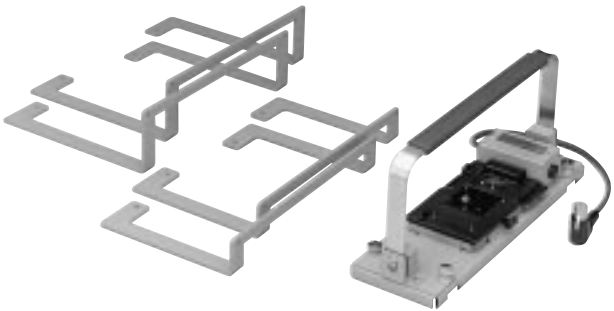
•Attaches a rechargeable Lithium-ion battery pack BP-L60A or BP-L90A to PVM-8045Q/8042Q/5041Q

•Retractable handle

•Easily detachable upper part of adaptor bracket

Operating time*:
BP-L60A Approx. 100 min. (typical)
BP-L90A Approx. 160 min. (typical)
*Actual operating times may vary.

Dimensions: 315 (W) × 146 (H) × 100 (D) mm
(12¹/₂ × 5³/₄ × 4 inches)
Mass: With attachment frames for 9-inch monitor: 2.35 kg (5 lb 19 oz)
With attachment frames for 6-inch monitor: 2.15 kg (4 lb 28 oz)
DC output: DC 12 V, Right angle XLR 4-pin connector (female)
DC fuse: 5 A



DCC-XLR4

Car Battery Cord

•Car battery cord for PVM-8045Q/8042Q/5041Q and TU-1041U

Power requirements:
12 V/24 V DC
Output voltage: 12 V: Max. 5 A
24 V: Max. 5 A
Cord length: 3 m (9 ft 9 inches)
Mass: 175 g (6 oz)



1-5 Monitor accessories

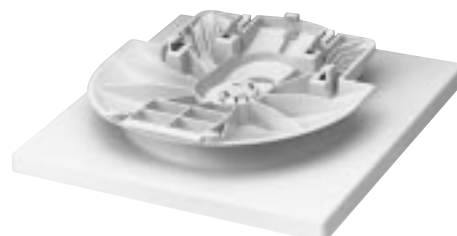
SU-556

Monitor Stand

•Stand for PGM-100P1MD

Dimensions: 240 (W) × 57 (H) × 238 (D) mm
(9½ × 2¼ × 9⅝ inches)

Mass: Approx. 450 g (1 lb)



SS-X7A

Speaker System

•High quality stereo sound by two-way bass-reflex speaker system with cone-type woofer and tweeter

Dimensions: 183 (W) × 280 (H) × 90 (D) mm
(7¼ × 11¼ × 3⅝ inches)

Mass: Approx. 1.9 kg per speaker
(4 lb 3 oz)



DISPLAY
PRODUCTS

SS-X500A

Speaker System

•Speaker design matches that of PFM-510A2WU/500A3W
•Can be attached to the monitor or mounted separately
•Effective frequency range: 70 to 20000 Hz
•Characteristic sensitivity level: 88 dB (1 W, 1 m)
•Input capability: 120 W

Dimensions: 159 (W) × 634 (H) × 90.3 (D) mm
(2¼ × 25 × 3⅝ inches)

Mass: Approx. 3.5 kg per speaker
(Approx. 7 lb 11 oz)



TU-1041U

TV Tuner Unit

•Receives Multi-band American TV standards VHF/UHF and Cable TV channels
•DC operation capability
•Mountable with 5 and 8-inch monitors with the optional Mounting Bracket MB-512

Dimensions: 212 (W) × 49.3 (H) × 361 (D) mm
(8⅜ × 2 × 14¼ inches)

Mass: Approx. 2 kg (4 lb 7 oz)

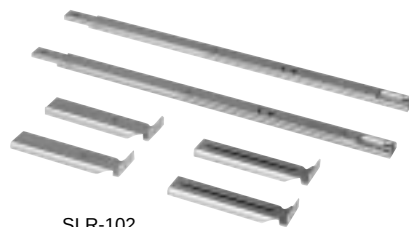


1-5 Monitor accessories

SLR-102/103A

Slide Rail Kit

- SLR-102 for PVM-14M4U/14M2U/
14M2MDU/14N6U/14N5U/136/137/135
(used with MB-502B)
- SLR-103A for PVM-20M4U/20M2U/
20M2MDU/20N6U/20N5U/2950Q/20S1WU



SLR-102



SLR-103A

2-1 Multiscan projectors

VPH-G90U*1 (NTSC/PAL/SECAM/NTSC_{4.43})

- Multiscan capability: horizontal 15 to 150 kHz, vertical 35 to 150 Hz
- Incorporates new, high resolution 9-inch electromagnetic focus CRTs
- Incorporates a universal optical coupling
- Remarkable light output of 350 ANSI lumens*2 (150 kHz: 50 Hz, 6500 K), 1300 ANSI lm (peak white), 500 ANSI lm (all white)
- High resolution of 700 TV lines (video), 1100 TV lines (HDTV) 2500 x 2000 pixels (RGB, measured at fH: 102 kHz, fV: 50 Hz)
- Wide RGB bandwidth of 135 MHz
- Wider range of registration adjustments for accurate registration
- HACC lens for superior and stable picture performance
- Video decoder circuit for enhanced video picture quality
- Sony Digital Reality Creation™
- Responds to both analog/digital RGB signals
- Supplied wired/wireless remote control unit RM-PJ1001 controls all the projector functions such as set-up adjustments and operational functions
- Various optional accessories available for system versatility
- Desk top mounted projection, ceiling mounted projection, floor mounted projection and rear projection capabilities
- Can be used with screens from 90 to 300 inches in size (viewable area, measured diagonally)



Supplied accessories:	Remote Commander RM-PJ1001
	Remote Commander Cable (15 m)
Optional accessories:	Adjustment Plate
	AA size Battery (3)
Optional accessories:	AC Power Cord
	Operating Manual
Optional accessories:	Installation Manual
	Interface Board IFB-12A/20*1/21*1/40/50/101*1/1000/1200*1/1301
Optional accessories:	Signal Interface Cable SIC-10/20A*1/20C*1/22*1/M1*1/M5*1/M15*1/M25*1/M50*1
	Signal Interface Switcher PC-3000*1/1271*1
Optional accessories:	Interface Unit IFU-1271*1
	Suspension Support PSS-10/90
Optional accessories:	Remote Commander RM-PJD50
	Remote Control Receiver RM-PJ10
Optional accessories:	Signal Adaptor ADP-20 (Macintosh to VGA)
	Signal Cable SMF-400/401
Optional accessories:	Projection Lens VPHL-9270*1
	100-inch Flat Screen VPS-100FH*1
Optional accessories:	120-inch Flat Screen VPS-120FH*1

Specifications

General

Video signal system:	CCIR 625 lines, 50 fields/EIA 525 lines, 60 fields (switching of CCIR to EIA or vice versa is automatically done)
Color system:	NTSC/PAL/SECAM/NTSC _{4.43} automatically selected
Brightness:	350 ANSI lumens*2 (fH: 150 kHz, fV: 50 Hz, 6500 K) 130 ANSI lumens (fH: 15 kHz, fV: 60 Hz, 6500 K)
Peak white:	1300 lm
All white:	500 lm
Color temperature:	6500 K
RGB bandwidth:	135 MHz (-3 dB)
Resolution:	700 TV lines (video), 1100 TV lines (HDTV) 2500 x 2000 pixels (RGB, measured at fH: 102 kHz, fV: 50 Hz)
Scanning frequency:	Horizontal: 15 to 150 kHz Vertical: 38 to 150 Hz
Test signals:	Cross hair, Hatch reverse (9 x 9/17 x 17), Dot (9 x 9), Dot (17 x 17) & Hatch (5 x 5), H/H reverse, ME/ME reverse, All white, Window, Window and line color bar, Pluge, Stair-step, Sub-pattern, Cross (9 x 9), Hatch (5 x 5), 10 IRE, 100 IRE
Power requirements:	AC 120 V, 50/60 Hz
Power consumption:	Max. 1050 W, Standby 14 W, Power saving mode 600 W
Heat dissipation:	3563.1 BTU
Mass:	Approx. 110 kg (242 lb 8 oz)
Operating temperature:	0 to 40 °C (14 to 104 °F)
Operating humidity:	35 to 85%

Inputs/Outputs

Video:	Composite*3: Loop-through BNC 1.0 Vp-p, ± 2 dB sync negative, 75 Ω automatic termination*4
Y IN:	BNC, 1.0 Vp-p ± 2 dB sync negative, 75 Ω terminated
C IN:	BNC, Burst 0.286 Vp-p ± 2 dB (NTSC), 75 Ω terminated or 0.3 Vp-p ± 2 dB (PAL), 75 Ω terminated
Y/C IN*3:	Loop-through Mini DIN 4-pin
Y (luminance):	1.0 Vp-p ± 2 dB sync negative, 75 Ω automatic termination*4
C (chrominance):	Burst 0.286 Vp-p ± 2 dB (NTSC) 75 Ω automatic termination*4, 0.3 Vp-p ± 2 dB (PAL) 75 Ω automatic termination*4
Input A:	Analog RGB/
Component:	BNC
R/R-Y/P _R :	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/P _B :	0.7 Vp-p, ± 2 dB positive, 75 Ω terminated
SYNC/HD:	Composite sync: 0.6 to 8.0 Vp-p, high impedance positive/negative Horizontal sync: 0.6 to 8.0 Vp-p, high impedance positive/negative Vertical sync: 0.6 to 8.0 Vp-p, high impedance positive/negative
VD:	BNC
HDVS (Y/P _B /P _R):	Y: 1.0 Vp-p ± 2 dB, 75 Ω terminated Tri-sync: ± 0.3 Vp-p, bi-sync: 0.3 Vp-p, ± 0.35 Vp-p ± 2 dB, 75 Ω
P _B /P _R :	BNC
HDVS (GBR):	1.0 Vp-p ± 2 dB, 75 Ω terminated Tri-sync: ± 0.3 Vp-p, bi-sync: 0.3 Vp-p
G with sync:	0.7 Vp-p ± 2 dB, 75 Ω terminated
B/R:	Open slot for optional IFB boards
INPUT B:	Stereo mini jack 5.0 Vp-p
CONTROL S IN/	Plug in power DC 5 V, Max. output: 60 mA
PLUG IN POWER:	CONTROL S OUT: Stereo mini jack 5.0 Vp-p
CONTROL S OUT:	REMOTE:
REMOTE:	RS-232C/RS-422A: IN: D-sub 9-pin (female)
RS-232C/RS-422A: IN:	PJ COM (RS-485): IN: D-sub 9-pin (female)
PJ COM (RS-485): IN:	OUT: D-sub 9-pin (female)
OUT: D-sub 9-pin (female):	LINK:
LINK:	IN: Stereo mini jack
IN: Stereo mini jack:	OUT: Stereo mini jack
OUT: Stereo mini jack:	TRIG:
TRIG:	Mini jack
Mini jack:	Power ON: DC 12V, Output impedance 4.7 k Ω
Power ON: DC 12V, Output impedance 4.7 k Ω :	Power OFF: 0 V
Power OFF: 0 V:	

*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 ANSI lumens is a measuring method of the American National Standards Institute ANSI IT7.215.

*3 The Y/C input has priority over the Video input.

*4 75 Ω termination is automatically set to OFF when connection is made to the OUT connector.

2-1 Multiscan projectors

VPH-G70Q*¹ (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M)

•Multiscan capability: horizontal 15 to 110 kHz, vertical 38 to 150 Hz
 •Incorporates newly developed 8-inch electromagnetic focus CRTs
 •Incorporates a universal optical coupling •Remarkable light output of 240 ANSI lumens*² (fH: 110 kHz, fV: 60 Hz, 6500 K) /200 ANSI lumens (fH: 15 kHz, fV: 60 Hz), Peak white: 1200 lm •High resolution of 700 TV lines (video)/1100 TV lines (HDTV*³)/1700 × 1200 pixel (RGB in at fH: 74 kHz, fV: 60 Hz) •Wide RGB bandwidth of 120 MHz •New hybrid HACC lens for superb, stable picture performance •Precise registration with the Key/Pin balance mode and 25-point zone adjustment •Input memory and Video memory available to facilitate set-up •Independent brightness and color uniformity adjustments •Incorporates picture orbiting function •Simplified operation for multi-projection applications such as ABL link and Index operation functions •Optional internal line-doubler board available •Video decoder circuit for enhanced video picture quality •Various optional accessories available for system versatility •Desk top mounted projection, ceiling mounted projection, floor mounted projection and rear projection capabilities •Can be used with screens from 60 to 300 inches in size (viewable area, measured diagonally)

Supplied accessories:	Remote Commander RM-PJ1000 Remote Commander Cable (15 m) Adjusting Plate AA size (R6) Battery (3) AC Power Cord Operation Manual Installation Manual
Optional accessories:	Interface Board IFB-12A/20* ¹ /21* ¹ /40/50/1000/1200* ¹ /1301/1400 Signal Interface Cable SIC-10/20A* ¹ /20C* ¹ /21* ¹ /22* ¹ /M1* ¹ / M5* ¹ /M15* ¹ /M25* ¹ /M50* ¹ CCQ-BRS Cable CCQ-2BRS/5BRS/10BRS/25BRS/50BRS Signal Interface Switcher PC-1271* ¹ Extension Board EXB-DS10 Interface Unit IFU-1271* ¹ Suspension Support PSS-10/70 Remote Commander RM-PJM800* ¹ Remote Control Receiver RM-PJ10 Mouse Receiver RM-PJ20* ¹ Signal Adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin for SIC cable) Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401 Remote Control Cable RCC-5G/10G/30G (for RS-422A) 100-inch Flat Screen VPS-100FH* ¹ 120-inch Flat Screen VPS-120FH* ¹

Specifications

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, F1.1/135 mm
Screen coverage:	60 to 300 inches measured diagonally, factory preset to 120 inches
Light output:	ANSI* ² : 240 lm (fH: 110 kHz, fV: 50 Hz, 6500 K) 200 lm (fH: 15 kHz, fV: 60 Hz, 6500 K) 1200 lm (peak white) 320 lm (all white)
Throwing distance:	60-inch 1668 mm (5 ft 5 ³ / 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 ³ / ₃₂ inches) 150-inch 3972 mm (13 ft 3 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, NTSC _{4.43} , PAL-M
Resolution:	700 TV lines (video) 1100 TV lines (HDTV) 1700 × 1200 pixel (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
General	
Power requirements:	AC 120 V, 50/60 Hz
Power consumption:	750 W, Standby 7 W
Heat dissipation:	2593.4 BTU
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) × 358 (H) × 948 (D) mm (27 ³ / ₈ × 14 ¹ / ₈ × 37 ⁵ / ₁₆ inches)
Mass:	Approx. 83 kg (183 lb)



Inputs/Outputs

Video:	
Composite:	Loop-through BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω 1.0 Vp-p ±2 dB sync negative, 75 Ω Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
Y IN:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C IN:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
Y/C IN:	Loop-through Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
Input A:	BNC × 5
Analog RGB/Component:	
R/R-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
Sync/HD:	Composite sync: 0.6 to 8.0 Vp-p, high impedance, positive/negative Horizontal sync: 0.6 to 8.0 Vp-p, high impedance, positive/negative
VD:	
Vertical sync:	0.6 to 8.0 Vp-p, high impedance, positive/negative
HDTV* ³ (Y/Pb/Pr):	
Y:	1.0 Vp-p ±2 dB, 75 Ω
Pb/Pr:	Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB, 75 Ω
HDTV* ³ (GBR):	
G with sync:	1.0 Vp-p ±2 dB, 75 Ω Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p 0.7 Vp-p ±2 dB, 75 Ω
B/R:	
Input B:	
Supplied with optional IFB-40:	14-pin multi connector (input: male, output: female)
CONTROL S IN/	Stereo mini jack 5.0 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-422A:	D-sub 9-pin (female)
ABL Link	
IN: Mini-jack	
OUT:	Mini jack
TRIG:	Mini jack Power On: DC 5 V, output impedance 4.7 kΩ Power Off: 0 V
Safety regulations	UL 1950, CSA950, DHHS, DNHWS, FCC class A, IC class A

*¹ Not available in some areas. For details, please contact your nearest Sony office.

*² ANSI lumens is a measuring method of the American National Standards Institute IT7.215.

*³ HDTV: 1125/60 interlaced HDTV studio standard system.

2-1 Multiscan projectors

VPH-G70VRU*1 (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M)

- Designed specifically for use in Virtual Reality and Simulation applications
- Deep focussing area, high resolution lenses and extended geometry for use with curved and dome-style screens
- Multiscan capability: horizontal 15 to 110 kHz, vertical 38 to 150 Hz
- Accepts composite and S Video signals when an appropriate optional interface board is installed
- Incorporates newly developed 8-inch electromagnetic focus CRTs
- Incorporates a universal optical coupling
- High resolution of 700 TV lines (video)/1100 TV lines (HDTV*)/1700 × 1200 pixels (RGB measured at fH: 74 kHz, fV: 60 Hz)
- Wide RGB bandwidth of 120 MHz
- New hybrid HACC lens for superb, stable picture performance
- Precise registration with the Key/Pin balance mode and 25-point zone adjustment
- Input memory and Video memory available for facilitated set-up
- Independent brightness and color uniformity adjustments
- Incorporates the picture orbiting function
- Simplified operation for multi-projection applications such as ABL link and Index operation functions
- Optional internal line-doubler board available
- Video decoder circuit for enhanced video picture quality
- Various optional accessories available for system versatility
- Can be used with screens from 60 to 300 inches in size (viewable area, measured diagonally)
- Black cabinet suitable for Virtual Reality and Simulation installations

Supplied accessories:	Remote Commander RM-PJ1000 Remote Commander Cable (15 m) Adjusting Plate AA size (R6) Battery (3) AC Power Cord Operation Manual Installation Manual
Optional accessories:	Interface Board IFB-12A/20*/21*/40/50/1000/1400 Signal Interface Cable SIC-10/20A*/120C*/21*/22*/M1*/M5*/M15*/M25*/M50* CCQ-BRS Cable CCQ-2BRS/5BRS/10BRS/25BRS/50BRS Signal Interface Switcher PC-1271* Extension Board EXB-DS10 Interface Unit IFU-1271* Suspension Support PSS-10/70 Remote Commander RM-PJM800* Remote Control Receiver RM-PJ10 Mouse Receiver RM-PJ21* Signal Adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin for SIC cable) Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401 Remote Control Cable RCC-5G/10G/30G (for RS-422A) 100-inch Flat Screen VPS-100FH* 120-inch Flat Screen VPS-120FH*

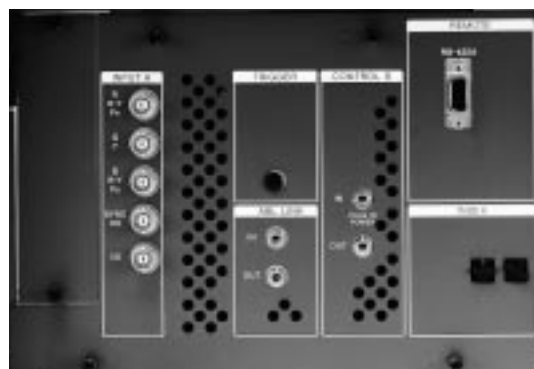
Specifications

Optical

Projection system:	3 picture tubes, 3 lenses, direct projection system
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*3:	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:	200 ANSI lumens*4 (fH: 110 kHz, fV: 60 Hz, 6500K) 170 ANSI lumens (fH: 15 kHz, fV: 60 Hz, 6500K) Peak white: 1000 lm, All white: 290 lm
Throwing distance:	60-inch 1668 mm (5 ft 5 ³ / 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 ³ / ₃₂ inches) 150-inch 3972 mm (13 ft 3 ⁵ / ₈ inches) 200-inch 5254 mm (17 ft 2 ⁷ / 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, NTSC _{4.43} , 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 120 MHz (-3 dB)
RGB bandwidth:	120 MHz (-3 dB)
General	
Power requirements:	AC 120 V, 50/60 Hz
Power consumption:	750 W, Standby 7 W
Heat dissipation:	2559.4 BTU
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) × 358 (H) × 948 (D) mm (27 ³ / ₈ × 14 ¹ / ₈ × 37 ⁵ / ₁₆ inches)
Mass:	Approx. 83 kg (183 lb)
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 to 8.0 Vp-p, high impedance, sync positive/negative
Horizontal sync:	0.6 to 8.0 Vp-p, high impedance, sync positive/negative
VD:	
Vertical sync:	0.6 to 8.0 Vp-p, high impedance, sync positive/negative
HDTV*1 (Y/Pb/Pr):	BNC
Y:	1.0 Vp-p ±2 dB, 75 Ω terminated
Pb/Pr:	Tri-sync: ±0.3 Vp-p, bi-sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB, 75 Ω
HDTV*1 (GBR):	BNC
G with sync:	1.0 Vp-p ±2 dB, 75 Ω terminated Tri-sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p 0.7 Vp-p ±2 dB, 75 Ω terminated
B/R:	
Input B:	Open slot for optional IFB board
CONTROL S IN/	Stereo mini jack 5.0 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-422A:	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
Safety regulations	UL 1950, cUL 950, DHHS, DNHWS, FCC class A, IC class A

*1 Not available in some areas. For details, please contact your nearest Sony office.

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

*3 Throw angle: 15.2°, screen radius = 0 mm.

*4 ANSI lumens is a measuring method of the American National Standards Institute ANSI IT7.215.

2-1 Multiscan projectors

VPH-D50Q*1 (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M)

- Multiscan capability: horizontal 15 to 64 kHz, vertical 38 to 150 Hz
- Incorporates newly developed 7-inch static focus CRTs
- Incorporates a universal air coupling
- Remarkable light output of 160 ANSI lumens*2 (fH: 64 kHz, fV: 50 Hz, 6500 K)/130 ANSI lumens (fH: 15 kHz, fV: 60 Hz), Peak white: 800 lm
- High resolution of 700 TV lines (video)/1000 TV lines (HDTV*3)/1280 × 1024 pixels (RGB in at fH: 64 kHz, fV: 60 Hz)
- Wide RGB bandwidth of 75 MHz
- Precise registration with the Key/Pin balance mode
- Input memory and Video memory available to facilitate set-up
- Video decoder circuit for enhanced video picture quality
- Incorporates the picture orbiting function
- Simplified operation for multi-projection applications such as ABL link and Index operation functions
- Optional internal line-doubler board available
- Various optional accessories available for system versatility
- Desk top mounted projection, ceiling mounted projection, floor mounted projection and rear projection capabilities
- Can be used with screens from 60 to 250 inches in size (viewable area, measured diagonally)



Supplied accessories:	Remote Commander RM-PJ1000 Remote Commander Cable (15 m) Adjusting Plate AA size (R6) Battery (3) AC Power Cord Operation Manual Installation Manual
Optional accessories:	Interface Board IFB-12A/20*1/21*1/40/50/1000/1200*1/ 1301/1400 Signal Interface Cable SIC-10/20A*1/20C*1/21*1/22*1/ M1*1/M5*1/M15*1/M25*1/M50*1 CCQ-BRS Cable CCQ-2BRS/5BRS/10BRS/25BRS/ 50BRS Signal Interface Switcher PC-1271*1 Extension Board EXB-DS10 Interface Unit IFU-1271*1 Suspension Support PSS-10/70 Remote Commander RM-PJM800*1 Remote Control Receiver RM-PJ10 Mouse Receiver RM-PJ20*1 Signal Adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin for SIC cable) Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401 Remote Control Cable RCC-5G/10G/30G (for RS-422A) 100-inch Flat Screen VPS-100FH*1 120-inch Flat Screen VPS-120FH*1

Specifications

Optical

Projection system:	3 picture tubes, 3 lenses, direct projection system
Picture tube:	7-inch (phosphor size 5.5-inch) static focus CRT
Projection lens:	Double focus, F1.0/135 mm
Screen coverage:	60 to 250-inch measured diagonally, factory preset to 120-inch

Light output:	160 ANSI lumens*2 (fH: 64 kHz, fV: 50 Hz, 6500 K) 130 ANSI lumens (fH: 15 kHz, fV: 60 Hz, 6500 K) Peak white: 800 lm, All white: 200 lm
Throwing distance:	60-inch 1902 mm (6ft 2 ⁷ / ₈ inches) 70-inch 2179 mm (7ft 1 ²⁵ / ₃₂ inches) 100-inch 3016 mm (9ft 10 ³ / ₄ inches) 120-inch 3571 mm (11ft 8 ¹⁹ / ₃₂ inches) 150-inch 4424 mm (14ft 6 ³ / ₁₆ inches) 200-inch 5844 mm (19ft 2 ³ / ₃₂ inches) 250-inch 7257 mm (23ft 9 ²³ / ₃₂ inches)

Signals

Color system:	NTSC, PAL, SECAM, NTSC _{4.43} , PAL-M
Resolution:	700 TV lines (video) 1000 TV lines (HDTV) 1280 × 1024 pixels (RGB, measured at fH: 64 kHz, fV: 60 Hz)
Scanning frequency:	Horizontal: 15 to 64 kHz Vertical: 38 to 150 Hz
RGB bandwidth:	75 MHz -3 dB

General

Power requirements:	AC 120 V, 50/60 Hz
Power consumption:	450 W, Standby 7 W
Heat dissipation:	1535.7 BTU

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) × 345 (H) × 671 (D) mm (23 ³ / ₄ × 13 ³ / ₈ × 26 ¹ / ₂ inches) Approx. 54 kg (119 lb 1 oz)
Mass:	
Inputs/Outputs	
Video:	Loop-through BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
S Video:	
Y IN:	BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
C IN:	BNC Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω 0.3 Vp-p ±2 dB (PAL), 75 Ω
Y/C IN:	Loop-through mini DIN 4-pin Y (luminance): 1.0 Vp-p ±2 dB sync negative, 75 Ω C (chrominance): Burst 0.286 ±2 dB (NTSC), 75 Ω 0.3 ±2 dB (PAL), 75 Ω
Input A:	BNC × 5
Analog RGB/Component:	
R/R-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
Sync/HD:	Composite sync: 0.6 to 8.0 Vp-p, high impedance, positive/negative Horizontal sync: 0.6 to 8.0 Vp-p, high impedance, positive/negative
VD:	Vertical sync: 0.6 to 8.0 Vp-p, high impedance, positive/negative
HDTV*2 (Y/Pb/Pr):	
Y:	1.0 Vp-p ±2 dB, 75 Ω
Pb/Pr:	Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB, 75 Ω
HDTV *2(GBR):	
G with sync:	1.0 Vp-p ±2 dB, 75 Ω
Tri-level sync:	±0.3 Vp-p, Bi-level sync: 0.3 Vp-p
B/R:	0.7 Vp-p ±2 dB, 75 Ω
Input B:	Supplied with an IFB-40: 14-pin multi connector (input: male, output: female)
CONTROL S IN:	Stereo mini jack 5.0 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-422A:	D-sub 9-pin (female)
ABL Link	
IN:	Stereo mini jack
OUT:	Stereo mini jack
TRIG:	Mini jack Power On: DC 5 V, output impedance 4.7 kΩ Power Off: 0 V
Safety regulations	UL1950, CSA950, DHHS, DNHWS, FCC (Class B), IC (ClassB)

*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 ANSI lumens is a measuring method of the American National Standards Institute IT7.215.

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

2-1 Multiscan projectors

VPH-D50HTU (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M)

- Multiscan capability: horizontal 15 to 64 kHz, vertical 38 to 150 Hz
- Incorporates newly developed 7-inch static focus CRTs
- Incorporates a universal air coupling
- Remarkable light output of 160 ANSI lumens*¹ (fH: 64 kHz, fV: 50 Hz, 6500 K)/130 ANSI lumens (fH: 15 kHz, fV: 60 Hz), Peak white: 800 lm
- High resolution of 700 TV lines (video)/1000 TV lines (HDTV*²)/1280 × 1024 pixels (RGB in at fH: 64 kHz, fV: 60 Hz)
- Wide RGB bandwidth of 75 MHz
- Precise registration with the Key/Pin balance mode
- Input memory and Video memory available for facilitated set-up
- Video decoder circuit for enhanced video picture quality
- Incorporates the picture orbiting function
- Simplified operation for multi-projection applications such as ABL link and Index operation functions
- Internal line-doubler board included as a standard feature
- Various optional accessories available for system versatility
- Table-top projection, ceiling mounted projection, floor mounted projection and rear projection capabilities
- Can be used with screens from 60 to 250 inches in size (viewable area, measured diagonally)

Supplied accessories:	Remote Commander RM-PJ1001/PJD50
	Remote Commander Cable (15 m)
Optional accessories:	Adjusting Plate
	AA size (R6) Battery (3)
	Button Battery CR2025
	AC Power Cord
	Operation Manual
	Installation Manual
	Signal Interface Cable SIC-10
	Interface Unit IFU-1271* ³
	Suspension Support PSS-10/70
	Remote Commander RM-PJM800* ¹
	Remote Control Receiver RM-PJ10
	Mouse Receiver RM-PJ21* ³
	Signal Cable SMF-400
	Remote Control Cable RCC-5G/10G/30G (for RS-422A)
	100-inch Flat Screen VPS-100FH* ³
	120-inch Flat Screen VPS-120FH* ³

Specifications

Optical

Projection system:	3 picture tubes, 3 lenses, direct projection system
Picture tube:	7-inch (phosphor size 5.5-inch) high luminance air coupled (Color corrected: Red/Green), static focus tubes
Projection lens:	Double focus, F1.0/135 mm
Screen coverage:	60 to 250 inches measured diagonally (factory preset to 100 inches)
Light output:	160 ANSI lumens* ¹ (fH: 64 kHz, fV: 50 Hz, 6500 K) 130 ANSI lumens (fH: 15 kHz, fV: 60 Hz, 6500 K) Peak white: 800 lm, All white: 200 lm
Throwing distance:	60-inch 1902 mm (6 ft 2 ⁵ / ₈ inches)
(in 4:3 mode)	70-inch 2179 mm (7 ft 1 ²⁵ / ₃₂ inches) 100-inch 3016 mm (9 ft 10 ³ / ₄ inches) 120-inch 3571 mm (11 ft 8 ¹⁹ / ₃₂ inches) 150-inch 4424 mm (14 ft 6 ³ / ₁₆ inches) 200-inch 5844 mm (19 ft 2 ³ / ₃₂ inches) 250-inch 7257 mm (23 ft 9 ²³ / ₃₂ inches)

Signals

Color system:	NTSC, PAL, SECAM, NTSC _{4.43} , PAL-M
Resolution:	700 TV lines (video) 1000 TV lines (HDTV) 1280 × 1024 pixels (RGB, measured at fH: 64 kHz, fV: 60 Hz)
Scanning frequency:	Horizontal: 15 to 64 kHz Vertical: 38 to 150 Hz
RGB bandwidth:	75 MHz (-3 dB)

General

Power requirements:	AC 120 V, 50/60 Hz
Power consumption:	450 W, Standby 7 W
Heat dissipation:	1535.7 BTU
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) × 345 (H) × 671 (D) mm (23 ³ / ₄ × 13 ⁵ / ₈ × 26 ¹ / ₂ inches)
Mass:	Approx. 54 kg (119 lb 1 oz)
Inputs/Outputs	
Video	
Composite:	Loop-through BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω automatic termination
Y IN:	BNC, 1.0 Vp-p ±2 dB sync negative, 75 Ω terminated
C IN:	BNC, Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω terminated or 0.3 Vp-p ±2 dB (PAL), 75 Ω terminated
Y/C IN:	Loop-through Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω automatic termination
C:	Burst 0.286 ±2 dB (NTSC), 75 Ω automatic termination or 0.3 ±2 dB (PAL), 75 Ω automatic termination
Input A/B	
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 to 8.0 Vp-p, high impedance, sync positive/negative
Horizontal sync:	0.6 to 8.0 Vp-p, high impedance, sync positive/negative
VD	
Vertical sync:	0.6 to 8.0 V p-p, high impedance, sync positive/negative
HDTV* ² (Y/Pb/Pr):	BNC
Y:	1.0 Vp-p ±2 dB, 75 Ω terminated
Pb/Pr:	Tri- sync: ±0.3 Vp-p, bi-sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB, 75 Ω
HDTV*² (GBR):	
G with sync:	BNC 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
Video (YC)*⁴	
Y:	BNC, 1.0 Vp-p ±2 dB sync negative, 75 Ω terminated
C:	BNC, Burst 0.286 ±2 dB (NTSC), 75 Ω terminated or 0.3 ±2 dB (PAL), 75 Ω terminated
Video (Composite)*⁴	
VIDEO:	1.0 Vp-p ±2 dB sync negative, 75 Ω automatic termination
CONTROL S IN/	Stereo mini jack 5.0 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-422A:	D-sub 9-pin (female)
ABL Link	
IN:	Mini jack
OUT:	Mini jack
TRIG:	Mini jack
Safety regulations	
Power On: DC 12 V, output impedance 4.7 kΩ	
Power Off: 0 V	
UL 1950, cUL 950, DHHS, DNHV, FCC class B, IC class B	

*1 ANSI lumens is a measuring method of the American National Standards Institute ANSI IT7.215.

*2 HDTV: 1125/60/2:1 and 1125/59.94/2:1 (SMPTE-240M/274M) HDTV systems.

*3 Not available in some areas. For details, please contact your nearest Sony office.

*4 Input B only.

2-2 Video projector

VPH-V20U*1 (NTSC/PAL/SECAM/NTSC_{4.43})

- Remarkable light output of 700 lumens (peak white)
- Accepts Component (Y/R-Y/B-Y or RGB), Y/C and Composite Video signals
- A high resolution of 700 TV lines (composite video)/1000 TV lines (RGB)
- Supplied remote control unit RM-PJV20 controls all projector functions
- Desk top mounted projection, ceiling mounted projection, floor mounted projection and rear projection capabilities
- Can be used with screens from 70 to 250 inches in size (viewable area, measured diagonally)

Supplied accessories:	Remote Commander RM-PJV20
	AA size Battery (2)
Optional accessories:	Spacer (0.2 mm) for 254 cm (70 to 100 inches) rear projection
	Spacer (0.8 mm) for 254 cm (70 to 100 inches) rear projection
Optional accessories:	Operation Manual
	Installation Manual
	Signal Interface Cable SIC-10
	Interface Unit IFU-1271*1
	Suspension Support PSS-10/722
	Remote Control Receiver RM-PJ10
	100-inch Flat Screen VPS-100FH*1
Optional accessories:	120-inch Flat Screen VPS-120FH*1
	70-inch Rear Screen VPS-702R*1

Specifications

Optical

Projection system:	3 picture tubes, 3 lenses, direct projection system
CRT:	7-inch (Phosphor size: 5.5-inch) liquid cooled high brightness monochrome tubes
Projection lens:	High performance hybrid multi-coated lens F1.0/130 mm
Screen	70-inch (177.8 cm) to 250-inch (635 cm) measured diagonally (Factory preset: 100-inch (254 cm))
Light output:	100 ANSI lumens*2 (15 kHz, 60 Hz, 6500 K) Peak white: 700 lm, All white: 140 lm
Throwing distance:	100-inch (254 cm): 3301 mm (Approx. 11 ft) 200-inch (508 cm): 6417 mm (Approx. 21 ft)

Signals

Color system:	NTSC, PAL, SECAM, NTSC _{4.43} *3 automatically selected
Resolution:	700 TV lines (Composite video input) 1000 TV lines (RGB input)
Test signals:	Cross hair

General

Power requirements:	AC 220 to 240 V, 50/60 Hz
Power consumption:	210 W
Operating temperature:	0 to 40 °C (14 to 104 °F)
Operating humidity:	35 to 85 %
Storage temperature:	-20 to 60 °C (-4 to 140 °F)
Storage humidity:	10 to 90 %
Dimensions:	532 (W) × 288 (H) × 597 (D) mm
Mass:	Approx. 30 kg (66 lb 2 oz)
Heat dispersion:	716.6 BTU



Inputs/Outputs

VIDEO IN:	
Video*4:	BNC 1.0 Vp-p ±2 dB, sync negative, 75 Ω
S video*4:	Mini DIN 4-pin Y (luminance): 1.0 Vp-p ±2 dB, sync negative, 75 Ω C (chrominance): Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
VIDEO OUT:	
Video:	BNC 1.0 Vp-p ±2 dB, 75 Ω
INPUT A:	
Analogue RGB/Component:	
BNC	
R/R-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
G:	0.7 Vp-p ±2 dB, positive, 75 Ω
G with Sync/Y:	1.0 Vp-p ±2 dB, sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
SYNC/HD:	
Composite sync:	0.6 to 8.0 Vp-p, high impedance negative
Horizontal sync:	0.6 to 8.0 Vp-p, high impedance negative
VD:	
Vertical sync:	0.6 to 8.0 Vp-p, high impedance negative
Control S:	Loop-through Stereo mini jack
Safety Regulations	EN60 065 (TÜV), CE, C-Tick, PTB

*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 ANSI lumens is a measuring method of the American National Standards Institute ANSI IT7.215.

*3 The NTSC_{4.43} system refers to an NTSC color system in which the subcarrier frequency is modified to 4.43 MHz.

*4 S VIDEO input has priority over Composite video input.

2-3 LCD projectors

VPL-FE100U (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M)

LCD Data Projector

•SXGA (1280 × 1024) resolution LCD (Liquid Crystal Display)-based data projector •Three 1.8-inch LCD panels for a total of 3,932,160 pixels •Four 120 W UHP lamps •Outstanding light output of 3500 ANSI lumens*1 •Excellent uniformity assured with 3D Digital gamma correction •Exclusive Sony Digital Reality Creation generates video pictures with effectively four times the resolution of a conventional video signal •Multiscan capability with a built-in scan converter: fH: 15 to 100 kHz, fV: 40 to 120 Hz •Power zoom, power focus and picture shift functions for installation flexibility •Graphical on-screen menus with a choice of seven languages for adjustment/operation •Supplied remote control unit RM-PJ1001 controls all the projector functions •Wide range of optional lenses available •Can be used with screens from 40 to 500 inches in size (viewable area, measured diagonally) •Power saving mode available

Supplied accessories:	Remote Commander RM-PJ1001 Remote Commander Cable (15 m) AA size (R6) Battery (3) AC Power Cord PJ COM Terminator Lens Ring Operation Manual Installation Manual
Optional accessories:	Quad Projector Lamp (for replacement) LMP-Q120 Projector Lamp (for replacement) LMP-S120 1.3 times zoom Standard Focus Lens VPLL-Z3020 1.3 times zoom Standard Focus Lens VPLL-Z2019 1.6 times zoom Long Focus Lens VPLL-Z2025 1.5 times zoom Long Focus Lens VPLL-Z2039 Fixed Long Focus Lens VPLL-3050 Fixed Long Focus Lens VPLL-2075 Fixed Short Focus Lens VPLL-2014 Fixed Short Focus Lens VPLL-2009 Suspension Support PSS-10/2000 Stack Stand SU-PJ2000 Interface Board IFB-12A/21/50/1000 Signal Interface Cable SIC-20A*2/20C*2/22*2 Signal Interface Switcher PC-3000*2 Remote Commander RM-PJ3000S*3 Remote Control Receiver RM-PJ10 Signal Adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin for SIC cable) Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401 Remote Control Cable RCC-5G/10G/30G (for RS-422A) 100-inch Flat Screen VPS-100FH*2

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection
LCD panel:	1.8-inch TFT LCD panel, 3,932,160 pixels (1,310,720 pixels × 3)
Lamp:	120 W UHP lamp (4)
Light output:	3500 ANSI lumens*1
Projection picture size:	40 to 500 inches (viewable area, measured diagonally)

General

Color system:	NTSC/PAL/SECAM/NTSC _{4.43} /PAL-M (automatically selected)
Resolution:	Video: 600 TV lines RGB: 1280 × 1024 pixels
Scanning frequency:	fH: 15 to 100 kHz fV: 40 to 120 Hz Display area: >6.4 μsec

Speaker:

Power requirements:	AC 220 to 240 V, 50/60 Hz
Power consumption:	Max. 770 W (approx.), Standby 20 W
Heat dissipation:	2628 BTU
Dimensions:	562 (W) × 237 (H) × 649 (D) mm (22 $\frac{3}{4}$ × 9 $\frac{3}{8}$ × 25 $\frac{5}{8}$ inches)

Mass:	Approx. 34.5 kg (75 lb 14 oz)
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85% (no condensation)
Storage temperature:	-20 to 60 °C (-4 to 140 °F)
Storage humidity:	10 to 90%

Input/Output

VIDEO IN	Composite video: Loop-through BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
S VIDEO IN	
Y IN:	BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
C IN:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or BNC 0.3 Vp-p ±2 dB (PAL), 75 Ω
Y/C IN:	Loop-through Mini DIN 4-pin
Y (luminance):	1.0 Vp-p ±2 dB sync negative, 75 Ω
C (chrominance):	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
AUDIO IN:	Phono, stereo, 500 mV rms, impedance more than 47 kΩ



INPUT A

Analog RGB/Component:	BNC × 5
R/R-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
Horizontal sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
VD	
Vertical sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
HDTV*4 (Y/Pb/P _R):	BNC
Y:	1.0 Vp-p ±2 dB positive, 75 Ω, Tri-level sync: ±0.3 Vp-p Bi-level sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB positive, 75 Ω
Pb/P _R :	BNC
HDTV*4 (GBR):	
G with sync:	1.0 Vp-p ±2 dB, 75 Ω, Tri-level sync: ±0.3 Vp-p Bi-level sync: 0.3 Vp-p 0.7 Vp-p ±2 dB positive, 75 Ω
B/R:	
Audio IN:	Phono, stereo, 500 mV rms, impedance more than 47 kΩ
AUDIO OUT:	Phono, Max. 1 V rms when input is 500 mV rms, impedance more than 1 kΩ Open for optional IFB board
INPUT B/C:	Stereo mini jack 5.0 Vp-p
CONTROL S IN:	Stereo mini jack 5.0 Vp-p
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-232C/RS-422A*5:	D-sub 9-pin (female)
PJ COM*6:	D-sub 9-pin (2) (female)
TRIG:	Mini jack Power ON: 12 V, output impedance 4.7 kΩ Power OFF: 0 V
Safety Regulations	EN 60 950 (TUV), CE, C-tick

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*2 Not available in some areas. For details, please contact your nearest Sony office.

*3 Laser Type: Class II
Wavelength: 645 nm
Output: 1 mW

*4 The VPL-FE100U supports 1125/60/2:1 and 1125/59.94/2:1 (SMPTE-240M/274M) HDTV systems.

*5 RS-232C/RS-422A selectable.

*6 PJ COM complies with RS-485.

2-3 LCD projectors

VPL-FX200U (NTSC/PAL/SECAM/NTSC^{4,43}/PAL-M) LCD Data Projector

- XGA (1024 × 768) resolution LCD (Liquid Crystal Display)-based data projector
- Three LCD panels for a total of 2,359,296 pixels
- Four 120 W UHP lamps
- Outstanding light output of 3100 ANSI lumens^{*1}
- Excellent uniformity assured with 3D Digital gamma correction
- Exclusive Sony Digital Reality Creation generates video pictures with effectively four times the resolution of a conventional video signal
- Multiscan capability with a built-in scan converter: fH: 15 to 94 kHz, fV: 50 to 120 Hz
- Power zoom, power focus and picture shift functions for installation flexibility
- Graphical on-screen menus with a choice of seven languages for adjustment/operation
- Supplied remote control RM-PJ1001 controls all the projector functions
- Six optional lenses available
- Can be used with screens from 40 to 500 inches in size (viewable area, measured diagonally)
- Power saving mode available

Supplied accessories:	Remote Commander RM-PJ1001
	Remote Commander Cable (15 m)
Optional accessories:	Size AA (R6) Battery (3)
	AC Power Cord
	PJ COM Terminator
	Lens Ring
	Operation Manual
	Installation Manual
	Quad Projector Lamp (for replacement) LMP-Q120
	Projector Lamp (for replacement) LMP-S120
	1.3 times zoom Standard Focus Lens VPLL-Z2019
	1.6 times zoom Long Focus Lens VPLL-Z2025
	1.5 times zoom Long Focus Lens VPLL-Z2039
	Fixed Long Focus Lens VPLL-2075
	Fixed Short Focus Lens VPLL-2014
	Fixed Short Focus Lens VPLL-2009
	Suspension Support PSS-10/2000
	Stack Stand SU-PJ2000
	Interface Board IFB-12A/21/50/1000
	Signal Interface Cable SIC-20A ^{*2} /20C ^{*2} /22 ^{*2}
	Signal Interface Switcher PC-3000 ^{*2}
	Remote Commander RM-PJ3000S ^{*3}
	Remote Control Receiver RM-PJ10
	Signal Adaptor ADP-10
	(HD D-sub 15-pin to D-sub 9-pin for SIC cable)
	Signal Adaptor ADP-20 (Macintosh to VGA)
	Signal Cable SMF-400/401
	Remote Control Cable RCC-5G/10G/30G
	(for RS-422A)
	100-inch Flat Screen VPS-100FH ^{*2}

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection
LCD panel:	1.8-inch TFT LCD panel, 2,359,296 pixels (786,432 pixels x 3)
Lamp:	120 W UHP lamp (4)
Light output:	3100 ANSI lumens ^{*1}
Projection picture size:	40 to 500 inches (viewable area, measured diagonally)
Optional projection lenses:	

	Throwing distance (unit: mm)		
	40-inch	100-inch	300-inch
VPLL-Z2019 (1.3 times zoom lens)	1,490 - 1,890	3,870 - 4,880	11,820 - 14,840
VPLL-Z2025 (1.6 times zoom lens)	N.A.	5,020 - 7,750	15,430 - 23,580
VPLL-Z2039 (1.5 times zoom lens)	N.A.	7,990 - 11,480	24,300 - 34,760
VPLL-2075 (fixed long focus lens)	N.A.	15,000	44,660
VPLL-2014 (fixed short focus lens)	1,030	2,760	8,520
VPLL-2009 (fixed short focus lens)	640	1,800	5,670

General

Color system:	NTSC/PAL/SECAM/NTSC ^{4,43} /PAL-M (automatically selected)
Resolution:	Video: 600 TV lines RGB: 1024 x 768 pixels
Scanning frequency:	fH: 15 to 94 kHz fV: 50 to 120 Hz Display area: >6.4 μsec
Speaker:	5 W stereo
Power requirements:	AC 220 to 240 V, 50/60 Hz
Power consumption:	Max. 770 W (approx.), Standby 20 W
Heat dissipation:	2628 BTU
Dimensions:	562 (W) × 237 (H) × 649 (D) mm (22¼ × 9⅜ × 25⅝ inches)
Mass:	Approx. 34.5 kg (75 lb 14 oz)
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85% (no condensation)
Storage temperature:	-20 to 60 °C (-4 to 140 °F)
Storage humidity:	10 to 90%

Input/Output

VIDEO IN	Composite video: Loop-through BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
S VIDEO IN	
Y IN:	BNC 1.0 Vp-p ±2 dB sync negative, 75 Ω
C IN:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or BNC 0.3 Vp-p ±2 dB (PAL), 75 Ω
Y/C IN:	Loop-through Mini DIN 4-pin
Y (luminance):	1.0 Vp-p ±2 dB sync negative, 75 Ω



C (chrominance):	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
AUDIO IN:	Phono, stereo, 500 mV rms, impedance more than 47 kΩ
INPUT A	
Analog RGB/Component:	BNC × 5
R/R-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
Horizontal sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
VD	
Vertical sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative
HDTV ^{*4} (Y/P _B /P _R):	BNC
Y:	1.0 Vp-p ±2 dB positive, 75 Ω, Tri-level sync: ±0.3 Vp-p Bi-level sync: 0.3 Vp-p
P _B /P _R :	±0.35 Vp-p ±2 dB positive, 75 Ω
HDTV ^{*4} (GBR):	BNC
G with sync:	1.0 Vp-p ±2 dB, 75 Ω, Tri-level sync: ±0.3 Vp-p Bi-level sync: 0.3 Vp-p
B/R:	0.7 Vp-p ±2 dB positive, 75 Ω
Audio IN:	Phono, stereo, 500 mV rms, impedance more than 47 kΩ
AUDIO OUT:	Phono, Max. 1 V rms when input is 500 mV rms, impedance more than 1 kΩ
INPUT B/C:	Open for optional IFB board
CONTROL S IN:	Stereo mini jack 5.0 Vp-p,
PLUG IN POWER:	Plug in power DC 5 V, Max. output: 60 mA
CONTROL S OUT:	Stereo mini jack 5.0 Vp-p
REMOTE	
RS-232C/RS-422A ^{*5} :	D-sub 9-pin (female)
PJ COM ^{*6} :	D-sub 9-pin (2) (female)
TRIG:	Mini jack
	Power ON: 12 V, output impedance 4.7 kΩ
	Power OFF: 0 V
Safety Regulations	EN 60 950 (TÜV), CE, C-tick

^{*1} ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

^{*2} Not available in some areas. For details, please contact your nearest Sony office.

^{*3} Laser Type: Class II
Wavelength: 645 nm
Output: 1 mW

^{*4} The VPL-FX200U supports 1125/60/2:1 and 1125/59.94/2:1 (SMPTE-240M/274M) HDTV systems.

^{*5} RS-232C/RS-422A selectable.

^{*6} PJ COM complies with RS-485.

2-3 LCD projectors

VPL-PX30 (NTSC/PAL/SECAM/NTSC^{4,43}/PAL-M/PAL-N) LCD Data Projector

- XGA (1024 × 768) resolution LCD (Liquid Crystal Display)-based portable presentation projector
- Three 1.3-inch TFT LCD panels for a total of 2,359,296 pixels
- 200 W UHP lamp incorporated (LOW power mode selectable: 150 W)
- Brightness of 2400 ANSI lumens*¹
- Advanced technologies including 3D Gamma Correction, RGB Enhancer and Digital Keystone for outstanding picture quality
- Handles VGA, SVGA, XGA, SXGA*² with a horizontal frequency of 15 to 91 kHz, composite video, Y/C video, component video and DTV*³ signals
- Wide range of input terminals (5 BNC, Monitor out, RS-232C, Digital RGB DFP 20-pin)
- USB hub function with PROJECTOR STATION software, Advanced APA (Auto Pixel Alignment) and Digital Zoom for enhanced presentations
- Lightweight, compact body
- Seven-language on-screen display
- Remote control unit with laser pointer and mouse control
- Desktop, ceiling and rear projection capabilities
- Can be used with screens from 40 to 300 inches in size (viewable area, measured diagonally)
- Built-in three-speaker stereo

Supplied accessories:	Remote Commander RM-PJM610, Signal Cable SMF-410, Mouse Cable SIC-S21/S22, Audio Visual Cable (1.5 m), USB Cable (2 m), USB Application Software PROJECTOR STATION, AA size Battery (2), Lens Cap, Strap for Remote Commander, Air Filter, Operation Manual, Quick Reference Sheet, Installation Manual
Optional accessories:	Projector Lamp (for replacement) LMP-P200 1.3 times zoom Short Focus Lens VPLL-ZM31 1.5 times zoom Long Focus Lens VPLL-ZM101 Fixed Short Focus Lens VPLL-FM21 Carrying Case VLC-600 Suspension Support PSS-610 Mouse Cables SIC-S20/S21/S22 Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401/410/D102/D110 50-inch Portable Screen VPS-50C* ⁴

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	1.3-inch p-Si TFT LCD panel, 2,359,296 pixels (786,432 pixels × 3) with Micro Lens Array
Projection lens:	Approx. 1.3 times zoom lens, F1.7 to 2.0, f36.7 to 47.8 mm
Lamp:	200 W UHP Lamp
Screen coverage:	40 to 300 inches (viewable area, measured diagonally)
Light output:	2400 ANSI lumens* ¹
Throwing distance:	
40-inch:	1490 to 1820 mm (58¾ to 71¾ inches)
60-inch:	2280 to 2780 mm (89⅞ to 109½ inches)
80-inch:	3060 to 3740 mm (120½ to 147¾ inches)
100-inch:	3850 to 4700 mm (151½ to 185¾ inches)
120-inch:	4630 to 5660 mm (182¾ to 222⅞ inches)
150-inch:	5810 to 7100 mm (228¾ to 279⅞ inches)
200-inch:	7770 to 9500 mm (306 to 374¾ inches)
300-inch:	11700 to 14300 mm (460¾ to 563 inches)

Signals

Color system:	NTSC/PAL/SECAM/NTSC ^{4,43} /PAL-M/PAL-N (automatically/manually selected)
Resolution:	Video: 750 TV lines, RGB: 1024 × 768 pixels
Acceptable signals:	RGB (fH: 15 to 91 kHz, fV: 43 to 85 Hz), 15 kHz component 50/60 Hz system, Progressive component 60 Hz system, DTV (480/60P, 575/50P, 1080/50i, 720/60P, 720/50P), Composite video, Y/C video

General

Cabinet color:	Silky Silver / Turquoise Blue
Speaker:	Max. 5 W Wide frequency range 3 speakers Woofer: 65 mm (2½ inches) diameter, Max. 3 W Tweeter: 45 mm (1¾ inches) diameter, Max. 1 W × 2 (Stereo)
Power requirements:	100 to 240 V, 50/60 Hz
Power consumption:	Max. 290 W, Standby 5 W, Power saving mode 50 W
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85%
Dimensions:	339 (W) × 142 (H) × 335 (D) mm (13⅜ × 5⅝ × 13¼ inches)
Mass:	Approx. 7.2 kg (15 lb 14 oz)
Heat dissipation:	989.6 BTU
Fan noise:	Less than 34 dB (when lamp mode set to LOW: 30 dB)

Input/Output VIDEO

Composite:	Phono type, 1.0 Vp-p ±2 dB sync negative, 75 Ω
Y/C IN:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
INPUT A:	HD D-sub 15-pin (female)/5 BNC (female)/Digital Interface Switched
Analog RGB:	HD D-sub 15-pin (female)
R:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync:	1.0 Vp-p ±2 dB sync negative, 75 Ω



B:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Analog RGB/Component:	5 BNC (female)
R/R-Y/Pr:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y/Pe:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Digital RGB:	DFP 20 pin (TMD5)
USB HUB:	Up (B type: female) × 1, Down (A type: female) × 1
MOUSE IN:	Square 13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
INPUT B	
Analog RGB:	HD D-sub 15-pin (female)
R:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
MOUSE IN:	Square 13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
OUTPUT	
MONITOR OUT* ⁵ :	HD D-sub 15-pin (female) R/R-Y, G/Y, B/B-Y: Gain Unity, 75 Ω SYNC/HD, VD: 4.0 Vp-p (open), 1.0 Vp-p (75 Ω) Stereo mini jack, Max. 1 V rms, when the input signal is 500 mV rms, impedance less than 5 kΩ
AUDIO OUT:	
(Variable out)	
REMOTE	
RS-232C:	D-sub 9-pin (female)
CONTROL S IN/	Stereo mini jack
PLUG IN POWER:	5.0 Vp-p, plug in power, DC 5 V
Safety regulations	UL1950, CSA No.950, DHHS (Laser), FCC Class A, IC Class A, EN 60 950 (Nemko), CE, EN 60 825-1 (Laser), C-Tick, CCIB, VCCI class B, JEIDA (Laser)
Laser beam	
Laser type:	Class II
Wavelength:	645 nm
Output:	1 mW

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*2 Compressed SXGA signal is reproduced while maintaining the 5:4 aspect ratio.

*3 The VPL-PX30 supports 480/60P, 575/50P, 1080/50i, 720/60P, and 720/50P DTV signals.

*4 Not available in some areas. For details, please contact your nearest Sony office.

*5 DIGITAL RGB signal is not output from the MONITOR OUT terminal.

2-3 LCD projectors

VPL-PX20 (NTSC/PAL/SECAM/NTSC^{4,43}/PAL-M/PAL-N) LCD Data Projector

•XGA (1024 × 768) resolution LCD (Liquid Crystal Display)-based portable presentation projector •Three TFT 1.3-inch LCD panels for a total of 2,359,296 pixels •200 W UHP lamp incorporated (LOW power mode selectable: 150 W) •Brightness of 1400 ANSI lumens*¹ •Advanced technologies including 3D Gamma Correction, RGB Enhancer and Digital Keystone for outstanding picture quality •Handles VGA, SVGA, XGA, SXGA*² with a horizontal frequency of 15 to 91 kHz, composite video, Y/C video, component video and DTV*³ signals •Wide range of input terminals (5 BNC, Monitor out, RS-232C, Digital RGB DFP 20-pin) •USB hub function with PROJECTOR STATION software, Advanced APA (Auto Pixel Alignment) and Digital Zoom for enhanced presentations •Lightweight, compact body •Seven-language on-screen display •Remote control unit with laser pointer and mouse control •Desktop, ceiling and rear projection capabilities •Can be used with screens from 40 to 300 inches in size (view area, measured diagonally) •Built-in three-speaker stereo

Supplied accessories:	Remote Commander RM-PJM610, Signal Cable SMF-410, Mouse Cable SIC-S21/S22, Audio Visual Cable (1.5 m), USB Cable (2 m), USB Application Software PROJECTOR STATION, AA size Battery (2), Lens Cap, Strap for Remote Commander, Air Filter, Operation Manual, Quick Reference Sheet, Installation Manual
Optional accessories:	Projector Lamp (for replacement) LMP-P200 1.3 times zoom Short Focus Lens VPLL-ZM31 1.5 times zoom Long Focus Lens VPLL-ZM101 Fixed Short Focus Lens VPLL-FM21 Carrying Case VLC-600 Suspension Support PSS-610 Mouse Cables SIC-S20/S21/S22 Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401/410/D102/D110 50-inch Portable Screen VPS-50C* ⁴

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	1.3-inch p-Si TFT LCD panel 2,359,296 pixels (786,432 pixels × 3)
Projection lens:	Approx. 1.3 times zoom lens, F1.7 to 2.0, f36.7 to 47.8 mm
Lamp:	200 W UHP Lamp
Screen coverage:	40 to 300 inches (viewable area, measured diagonally)
Light output:	1400 ANSI lumens* ¹
Throwing distance:	
40-inch:	1490 to 1820 mm (58¾ to 71¾ inches)
60-inch:	2280 to 2780 mm (89½ to 109½ inches)
80-inch:	3060 to 3740 mm (120½ to 147¾ inches)
100-inch:	3850 to 4700 mm (151½ to 185½ inches)
120-inch:	4630 to 5660 mm (182¾ to 222½ inches)
150-inch:	5810 to 7100 mm (228¾ to 279¾ inches)
200-inch:	7770 to 9500 mm (306 to 374¾ inches)
300-inch:	11770 to 14300 mm (460¾ to 563 inches)

Signals

Color system:	NTSC/PAL/SECAM/NTSC ^{4,43} /PAL-M/PAL-N (automatically/manually selected)
Resolution:	Video: 750 TV lines, RGB: 1024 × 768 pixels
Acceptable signals:	RGB (fH: 15 to 91 kHz, fV: 43 to 85 Hz), 15 kHz component 50/60 Hz system, Progressive component 60 Hz system, DTV (480/60P, 575/50P, 1080/50I, 720/60P, 720/50P), Composite video, Y/C video

General

Cabinet color:	Silky Silver / Turquoise Blue
Speaker:	Max. 5 W Wide frequency range 3 speakers Woofer: 65 mm (2½ inches) diameter, Max. 3 W Tweeter: 45 mm (1¾ inches) diameter, Max. 1 W × 2 (Stereo)
Power requirements:	100 to 240 V, 50/60 Hz
Power consumption:	Max. 290 W, Standby 5 W, Power saving mode 50 W
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85%
Dimensions:	339 (W) × 142 (H) × 335 (D) mm (13 ⅜ × 5 ⅝ × 13 ¼ inches)
Mass:	Approx. 7.2 kg (15 lb 14 oz)
Heat dissipation:	989.6 BTU
Fan noise:	Less than 34 dB (when lamp mode set to LOW: 30 dB)

Input/Output

VIDEO	
Composite:	Phono type, 1.0 Vp-p ±2 dB sync negative, 75 Ω
Y/C IN:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
INPUT A:	HD D-sub 15-pin (female)/5 BNC (female)/Digital Interface Switched
Analog RGB:	HD D-sub 15-pin (female)
R:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync:	1.0 Vp-p ±2 dB sync negative, 75 Ω



B:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Analog RGB/Component:	5-BNC (female)
R/R-Y/Pr:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y/Pa:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Digital RGB:	DFP 20-pin (TMD5)
USB HUB:	Up (B type: female) × 1, Down (A type: female) × 1
MOUSE IN:	Square 13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
INPUT B	
Analog RGB:	HD D-sub 15-pin (female)
R:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with Sync:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
MOUSE IN:	Square 13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
OUTPUT	
MONITOR OUT* ⁵ :	HD D-sub 15-pin (female) R/R-Y, G/Y, B/B-Y: Gain Unity, 75 Ω SYNC/HD, VD: 4.0 Vp-p (open), 1.0 Vp-p (75 Ω) Stereo mini jack, Max. 1 V rms, when the input signal is 500 mV rms, impedance less than 5 kΩ
AUDIO OUT:	
(Variable out)	
REMOTE	
RS-232C:	D-sub 9-pin (female)
CONTROL S IN/	Stereo mini jack
PLUG IN POWER:	5.0 Vp-p, plug in power, DC 5 V
Safety regulations	UL1950, CSA No.950, DHHS (Laser), FCC Class A, IC Class A, EN 60 950 (Nemko), CE, EN 60 825-1 (Laser), C-Tick, CCIB, VCCI class B, JEIDA (Laser)
Laser beam	
Laser type:	Class II
Wavelength:	645 nm
Output:	1 mW

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*2 Compressed SXGA signal is reproduced while maintaining the 5:4 aspect ratio.

*3 The VPL-PX30 supports 480/60P, 575/50P, 1080/50I, 720/60P, and 720/50P DTV signals.

*4 Not available in some areas. For details, please contact your nearest Sony office.

*5 DIGITAL RGB signal is not output from the MONITOR OUT terminal.

2-3 LCD projectors

VPL-S900U (NTSC/PAL/SECAM/NTSC^{4.43})

LCD Data Projector

- SVGA (800 × 600) resolution LCD (Liquid Crystal Display)–based portable presentation projector
- Three dual actuated 1.3-inch p-Si TFT LCD panels for true SVGA resolution
- Output of 1000 ANSI lumens*¹ achieved through the use of metal mask technology on the LCD panels, high brightness projection lenses and a 120 W UHP lamp
- Excellent uniformity and accurate color reproduction with advanced technologies including fly eye light integrators and bilinear interpolation method of Advanced Scan Conversion (ASC)
- Handles VGA, SVGA, XGA*² and SXGA*² resolution with horizontal frequencies of 15 to 91 kHz as well as composite video, Y/C video and component video signals
- Simple set-up using 38 preset data and unique APA (Auto Pixel Alignment) function
- Input B or Monitor out function easily switchable
- Slim, contoured magnesium diecast body
- Seven-language on-screen display: English, French, German, Italian, Spanish, Japanese or Chinese
- Grip-contoured remote control unit RM-PJM600 with laser pointer and mouse control function
- Desktop, ceiling, front or rear projection
- Optional lenses available to project optimum images on screens from 40 to 300 inches in size (viewable area, measured diagonally)
- Built-in three-speaker stereo

Supplied Accessories:	Remote Commander RM-PJM600 Mouse Cable SIC-S21/S22 Macintosh Adaptor Signal Cable SMF-401 Audio Visual Cable (1.5 m) AA size Battery (2) Front Cover Lens Cap Strap for Remote Commander Air Filter AC Power Cord Operation Manual Quick Reference Sheet Installation manual
Optional Accessories:	Projector Lamp (for replacement) LMP-600 2 times zoom Long Focus Lens VPLL-ZM100* ³ Fixed Short Focus Lens VPLL-FM30 Fixed Short Focus Lens VPLL-FM20 Carrying Case VLC-600 Suspension Support PSS-600* ³ Mouse Cable SIC-S20/S21/S22 Remote Control Receiver RM-PJ10 Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401/402 100-inch Flat Screen VPS-100FH* ³ 120-inch Flat Screen VPS-120FH* ³ 80-inch Flat Screen VPS-80C* ³

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	1.3-inch p-Si TFT LCD panel with Metal Mask, 1,440,000 pixels (480,000 pixels × 3)
Projection lens:	1.3 times zoom lens, F2.0 to 2.4, f54 to 70 mm
Lamp:	120 W UHP
Screen coverage:	40 to 300 inches (viewable area, measured diagonally)
Light output:	1100 ANSI lumens* ¹
Throwing distance:	
40-inch:	1570 to 2000 mm (61 $\frac{1}{8}$ to 78 $\frac{3}{4}$ inches)
60-inch:	2400 to 3040 mm (94 $\frac{1}{2}$ to 119 $\frac{3}{4}$ inches)
80-inch:	3240 to 4090 mm (127 $\frac{5}{8}$ to 161 $\frac{1}{8}$ inches)
100-inch:	4070 to 5130 mm (160 $\frac{3}{8}$ to 202 inches)
120-inch:	4900 to 6180 mm (193 to 243 $\frac{3}{8}$ inches)
200-inch:	8240 to 10360 mm (324 $\frac{1}{2}$ to 408 inches)
300-inch:	12410 to 15580 mm (488 $\frac{3}{4}$ to 613 $\frac{1}{2}$ inches)

General

Color system:	NTSC/PAL/SECAM/NTSC ^{4.43} /PAL-M (automatically/manually selected)
Resolution:	Video: 600 TV lines, RGB: 800 × 600 pixels
Acceptable signals:	RGB (fH: 15 to 91 kHz, fV: 43 to 85 Hz), 15 kHz component 50/60 Hz system, composite video, Y/C video



Speaker:	Wide frequency range 3 speakers system (Woofer: 57 mm (2 $\frac{1}{4}$ inches) diameter, Max. 1 W, Tweeter: 28 mm (1 $\frac{1}{8}$ inches) diameter, Max. 0.2 W × 2)
Power requirements:	AC 220 to 240 V, 50/60 Hz (CE listed for 220 to 240 V AC operation)
Power consumption:	Max. 220 W, Standby 2 W
Heat dissipation:	750.7 BTU
Dimensions:	339 (W) × 136 (H) × 322 (D) mm (13 $\frac{3}{8}$ × 5 $\frac{3}{8}$ × 12 $\frac{3}{4}$ inches)
Mass:	Approx. 5.9 kg (13 lb)
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85%
Input/Output	
VIDEO IN:	
Composite video:	Phono type × 1, 1.0 Vp-p ±2 dB sync negative, 75 Ω
S video:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
AUDIO IN:	Phono type × 2 (stereo), 500 mV rms, impedance more than 47 kΩ
INPUT A/B:	
Analogue RGB/Component:	
	HD D-sub 15-pin (female)
R/R-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync/Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC:	HD D-sub 15-pin (female)
C sync/HD:	
Composite sync:	1.0 to 5.0 Vp-p high impedance, sync positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p high impedance, sync positive/negative
VD:	
Vertical sync:	1.0 to 5.0 Vp-p high impedance, sync positive/negative
MOUSE IN:	Square 13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
INPUT B:	
Monitor out:	HD D-sub 15-pin (female)
Video signal:	Gain unity
Sync signal:	4.0 Vp-p, high impedance/1.0 Vp-p, 75 Ω
AUDIO OUT (variable out)	
	Stereo mini jack, max. 1 V rms, when an output signal is 500 mV rms, impedance less than 5 kΩ
Laser beam	
Laser type:	Class II
Wavelength:	645 nm
Output:	1 mW
Safety regulations	
	UL1950, cUL 1950, FCC Class A, IC Class A, DHHS (Laser)

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.
*2 Compressed XGA and SXGA signals are reproduced while preserving the detail of the image.
*3 Not available in some areas. For details, please contact your nearest Sony office.

2-3 LCD projectors

VPL-PX1 (NTSC/PAL/SECAM/NTSC^{4.43}/PAL-M) LCD Data Projector

•XGA (1024 × 768) resolution LCD (Liquid Crystal Display)-based data projector •Three 0.9-inch LCD panels for a total of 2,359,296 pixels •120 W UHP lamp •High light output of 1000 ANSI lumens*¹ •Excellent uniformity and accurate color reproduction assured with advanced technologies •Built-in zoom lens •Accepts VGA, SVGA, XGA and SXGA*² with a horizontal frequency of 15, 24 to 91 kHz •Lightweight at approx. 4.0 kg •Seven-language on-screen menu •Supplied remote control unit RM-PJM600 controls all the projector functions •Mouse function operation for remote control of the connected computer source •Can be used with screens from 40 to 200 inches in size (viewable area, measured diagonally) •Built-in stereo speakers

Supplied accessories:	Remote Commander RM-PJM600 Signal Cable SMF-410 Mouse Cable SIC-S22 Audio Visual Cable (1.5 m) AA size Battery (2) Air Filter Operation Manual Quick Reference Sheet
Optional accessories:	Projector Lamp (for replacement) LMP-P120 Carrying Case VLC-SC50 Interface Selector IFU-SC50 Mouse Cable SIC-S20/S21/S22 Signal Adaptor ADP-10 Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400/401/402 50-inch Portable Screen VPS-50C* ³ 80-inch Portable Screen VPS-80C* ³

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	0.9-inch p-Si TFT LCD panel with Micro Lens Array, 2,359,296 pixels (786,432 pixels × 3)
Projection lens:	1.3 times zoom lens, F1.7 to 2.0, f37.3 to 48.5 mm
Lamp:	120 W plus UHP
Screen coverage:	40 to 200 inches (viewable area, measured diagonally)
Light output:	1000 ANSI lumens* ¹
Throwing distance:	
40-inch:	1590 to 2040 mm (63 to 80 inches)
60-inch:	2440 to 3100 mm (96 to 122 inches)
80-inch:	3280 to 4160 mm (129 to 164 inches)
100-inch:	4120 to 5220 mm (162 to 206 inches)
120-inch:	4970 to 6280 mm (196 to 247 inches)
150-inch:	6230 to 7870 mm (245 to 310 inches)
200-inch:	8340 to 10520 mm (328 to 414 inches)

General

Color system:	NTSC/PAL/SECAM/NTSC ^{4.43} /PAL-M (automatically/manually selected)
Resolution:	750 TV lines (video), 1024 × 768 pixels (RGB)
Acceptable signals:	RGB (fH: 15, 24 to 91 kHz, fV: 50 to 85 Hz), 15 kHz component 50/60 Hz system, composite video, Y/C video
Speaker:	Max. 1 W × 2 (stereo)
Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	Max. 190 W, Standby 2 W
Heat dissipation:	648.4 BTU
Dimensions:	108 (W) × 223 (H) × 337 (D) mm (4 ³ / ₈ × 8 ⁷ / ₈ × 13 ³ / ₈ inches)
Mass:	Approx. 4 kg (8 lb 13 oz)
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85%



Input/Output

VIDEO IN:	
Composite:	Phono type, 1.0 Vp-p ±2 dB, sync negative, 75 Ω
Y/C IN:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB, sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
INPUT A:	
Analog RGB/Component:	
	HD D-sub 15-pin (female)
R/R-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
G:	0.7 Vp-p ±2 dB, positive, 75 Ω
G with Sync/Y:	1.0 Vp-p ±2 dB, sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
SYNC/HD:	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD:	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
MOUSE IN:	Square13-pin (female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
AUDIO OUT (variable out):	Stereo mini jack, max. 1 V rms, when the input signal is 500 mV rms, impedance less than 5 kΩ

Laser beam

Laser type:	Class II
Wavelength:	645 nm
Output:	1 mW

Safety regulations

UL 1950, cUL 950 (CSA No.950), DHHS (Laser), FCC Class A, IC Class A, EN 60 950 (TÜV), CE, C-Tick, EN 60 825-1 (Laser)

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*2 Compressed SXGA signal is reproduced while preserving the detail of the image.

*3 Not available in some areas. For details, please contact your nearest Sony office.

2-3 LCD projectors

VPL-CS1 (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M) LCD Data Projector

•SVGA (800 × 600) LCD (Liquid Crystal Display)-based data projector •Three 0.7-inch SVGA LCD Panels for a total of 1,440,000 pixels •120 W UHP lamp •Light output of 600 ANSI lumens*¹ •Excellent uniformity and accurate color reproduction assured with advanced technologies •Built-in 1.3 times zoom lens •Accepts VGA, SVGA, XGA*² and SXGA*² with a horizontal frequency of 15, 24 to 91 kHz •Extremely compact and lightweight at 2.9 kg •On-screen menus with a choice of seven languages for adjustment/operation •Supplied remote commander RM-PJM1 controls all the projector functions •Mouse function operation for remote control of the connected computer source •Can be used with screens from 40 to 150 inches in size (viewable area, measured diagonally) •Built-in stereo speakers

Supplied accessories:	Remote Commander RM-PJM1
	Signal Cable SMF-410
Optional accessories:	Mouse Cable SIC-S22
	USB Cable
	USB Application Software PROJECTOR STATION
	Carrying Bag
	AAA size Battery (2)
	Air Filter
	Operation Manual
	Quick Reference Sheet
	Projector Lamp (for replacement) LMP-C120
	Signal Adaptor ADP-20 (Macintosh to VGA)
	Signal Cable SMF-400/402/410
	50-inch Portable Screen VPS-50C* ³

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	0.7-inch p-Si TFT LCD panel, 1,440,000 pixels (480,000 pixels x 3)
Lamp:	120 W UHP
Screen coverage:	40 to 150 inches (viewable area, measured diagonally)
Light output:	600 ANSI lumens* ¹
Throwing distance	
40-inch:	1580 to 2010 mm (62¼ to 78 ²⁵ / ₃₂ inches)
60-inch:	2390 to 3060 mm (94¾ to 120½ inches)
80-inch:	3210 to 4100 mm (126 ½ to 161½ inches)
100-inch:	4030 to 5150 mm (158 ¹¹ / ₁₆ to 202 ⁷ / ₈ inches)
120-inch:	4850 to 6200 mm (191 to 244¾ inches)
150-inch:	6080 to 7780 mm (239½ to 306¾ inches)

Signals

Color system:	NTSC/PAL/SECAM/NTSC _{4.43} /PAL-M/PAL-N (automatically/manually selected)
Resolution:	600 TV lines (video), 800 × 600 pixels (RGB)
Acceptable signals:	RGB (fH: 15 to 91 kHz, fV: 43 to 85 Hz), 15 kHz component 50/60 Hz system, composite video, Y/C video

General

Speaker:	Max. 0.5 W x 2 (stereo)
Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	Max. 190 W, Standby 4.2 W
Operating temperature:	0 to 35 °C (32 to 95 °F)
Operating humidity:	35 to 85%
Dimensions:	277 (W) × 70 (H) × 214 (D) mm (11 × 2 ⁷ / ₈ × 8½ inches)
Mass:	Approx. 2.9 kg (6 lb 6 oz)
Heat dissipation:	648.4 BTU

Input/Output

VIDEO IN:	
Composite:	Phono type, 1.0 Vp-p ±2 dB, sync negative, 75 Ω
Y/C IN:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB, sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω



INPUT A:	
Analog RGB/	
Component:	HD D-sub 15-pin (female)
R/R-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
G:	0.7 Vp-p ±2 dB, positive, 75 Ω
G with Sync/Y:	1.0 Vp-p ±2 dB, sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB, positive, 75 Ω
SYNC/HD:	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD:	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
MOUSE IN:	6-pin (female)
USB HUB:	UP (B type female), Down (A type female)
AUDIO IN:	Stereo mini jack, 500 mV rms, impedance more than 47 kΩ
Safety regulations	
UL1950, CSA No.950, FCC Class A, IC Class A, EN 60 950 (Nemko), CE, C-Tick, CCIB, VCCI Class B	

*¹ ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*² Compressed XGA and SXGA signals are reproduced while preserving the detail of the image.

*³ Not available in some areas. For details, please contact your nearest Sony office.

2-3 LCD projectors

VPL-VW10HT (NTSC/PAL/SECAM/NTSC_{4.43}/PAL-M/PAL-N) LCD Video Projector

•Wide XGA (1366 × 768) LCD (Liquid Crystal Display)-based projector designed for a home theater •Three 16:9 1.35-inch LCD panels •200 W UHP lamp •Light output of 1000 ANSI lumens*¹ (In the “normal” mode, 16:9 aspect) •Superb picture quality with Digital Reality Creation - Multi Function™, 3D gamma correction and 3D*²/3-line YC separation/DNR circuit •Cinema black mode •Video memory •Through mode for one to one mapping •Low fan noise •White cabinet •Short throwing distance •RGB input acceptable •Remote control unit RM-PJVW10 supplied

Supplied accessories:	Remote commander RM-PJVW10 AA size Battery (2) Air Filter Operation Manual
Optional accessories:	Projector Lamp (for replacement) LMP-P200 Suspension Support PSS-610 Signal Adaptor ADP-20 (Macintosh to VGA) Signal Cable SMF-400

Specifications

Optical

Projection system:	3 LCD panels, 1 lens projection system
LCD panel:	1.35-inch p-Si TFT LCD panel, 3,147,264 pixels (1,049,088 pixels × 3)
Projection lens:	1.2 times zoom lens, F2.2 to 2.5, f44.6 to 53.6 mm
Lamp:	200 W UHP
Screen coverage:	40 to 300 inches (16:9, viewable area, measured diagonally)
Light output:	1000 ANSI lumens* ¹ (16:9), 750 ANSI lumens (4:3)
Throwing distance:	

<16:9>

40-inch:	1260 to 1470 mm	(49 $\frac{5}{8}$ to 57 inches)
60-inch:	1930 to 2240 mm	(76 to 88 $\frac{3}{4}$ inches)
80-inch:	2600 to 3010 mm	(102 $\frac{3}{8}$ to 118 $\frac{5}{32}$ inches)
100-inch:	3270 to 3780 mm	(128 $\frac{7}{8}$ to 148 $\frac{7}{8}$ inches)
120-inch:	3930 to 4550 mm	(154 $\frac{3}{4}$ to 179 $\frac{1}{4}$ inches)
150-inch:	4940 to 5710 mm	(194 $\frac{5}{8}$ to 224 $\frac{7}{8}$ inches)
180-inch:	5940 to 6860 mm	(234 to 270 $\frac{1}{2}$ inches)
200-inch:	6610 to 7630 mm	(260 $\frac{3}{8}$ to 300 $\frac{1}{2}$ inches)
250-inch:	8270 to 9560 mm	(325 $\frac{3}{4}$ to 376 $\frac{1}{2}$ inches)
300-inch:	9940 to 11480 mm	(391 $\frac{1}{2}$ to 452 $\frac{1}{8}$ inches)

<4:3>

40-inch:	1560 to 1820 mm	(61 $\frac{1}{2}$ to 71 $\frac{3}{4}$ inches)
60-inch:	2380 to 2760 mm	(93 $\frac{3}{4}$ to 108 $\frac{3}{4}$ inches)
80-inch:	3200 to 3700 mm	(126 to 145 $\frac{3}{4}$ inches)
100-inch:	4020 to 4650 mm	(158 $\frac{1}{16}$ to 183 $\frac{3}{8}$ inches)
120-inch:	4830 to 5590 mm	(190 $\frac{1}{4}$ to 220 $\frac{3}{8}$ inches)
150-inch:	6060 to 7000 mm	(238 $\frac{5}{8}$ to 275 $\frac{5}{8}$ inches)
180-inch:	7290 to 8420 mm	(287 $\frac{1}{8}$ to 331 $\frac{5}{8}$ inches)
200-inch:	8100 to 9360 mm	(319 to 368 $\frac{5}{8}$ inches)
250-inch:	10150 to 11720 mm	(399 $\frac{3}{4}$ to 461 $\frac{1}{2}$ inches)
300-inch:	12190 to 14070 mm	(480 to 554 $\frac{1}{8}$ inches)

Signals

Color system:	NTSC/PAL/SECAM/NTSC _{4.43} /PAL-M/PAL-N (automatically/manually selected)
Resolution:	750 TV lines (video), 1100 TV lines (HD), 1366 × 768 pixels (RGB)
Acceptable signals:	DTV (480i, 480P, 720P, 1080i), progressive component, 15 kHz component 50/60 Hz system, composite video, Y/C video, RGB (fH: 15 to 91 kHz, fV: 50 to 85 Hz)

General

Power requirements:	AC 100 to 240 V, 50/60 Hz
Power consumption:	Max. 300 W, Standby 6 W
Heat dissipation:	1023.7 BTU
Dimensions:	395 (W) × 168 (H) × 427 (D) mm (15 $\frac{5}{8}$ × 6 $\frac{5}{8}$ × 16 $\frac{7}{8}$ inches)
Mass:	Approx. 8 kg (17 lb 10 oz)
Operating temperature:	0 to 40 °C (32 to 104 °F)
Operating humidity:	35 to 85%



Input/Output

VIDEO IN:	
Composite:	Phono type, 1.0 Vp-p ±2 dB sync negative, 75 Ω
Y/C IN:	Mini DIN 4-pin
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C:	Burst 0.286 Vp-p ±2 dB (NTSC), 75 Ω or 0.3 Vp-p ±2 dB (PAL), 75 Ω
INPUT A/B:	
Component/Progressive:	Phono type
Component/YPbPr/	
Analog RGB:	
G:	0.7 Vp-p ±2 dB positive, 75 Ω
G with sync /Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
B/CB/Pb:	0.7 Vp-p ±2 dB positive, 75 Ω
R/CR/Pr:	0.7 Vp-p ±2 dB positive, 75 Ω
SYNC/HD:	
Composite sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
Horizontal sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
VD:	
Vertical sync:	1.0 to 5.0 Vp-p, high impedance positive/negative
CONTROL S IN/	Stereo mini jack 5.0 Vp-p
PLUG IN POWER:	Plug in power DC 5 V
TRIGGER:	Mini jack
Power on:	DC 12 V, output impedance: 4.7 kΩ
Power off:	0 V
REMOTE (RS-232 C):	D-sub 9-pin (female)
Safety regulations	UL, cUL (CSA), FCC Class B, IC Class B, EN 60 950 (Nemko), CE, C-Tick, VCCI class B, JEIDA

*1 ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*2 This function is only applicable to NTSC signals.

2-4 Data projector

VPD-LE100 (NTSC/PAL/SECAM/NTSC^{4.43}/PAL-M)

- Multiscan projector with DLP™ (Digital Light Processing™) technology
- Outstanding brightness of 10000 ANSI lumens*¹
- Three SXGA (1280 × 1024) DMD™ (Digital Micromirror Device™) panels for a total of 3,932,160 pixels
- Xenon lamp
- Sony Digital Reality Creation as standard, while 2-3 pull down FILM mode*² can be selected
- Accepts VGA, SVGA, XGA, SXGA and UXGA*³ with a horizontal frequency of 15 to 100 kHz, component video, RGB video and HDTV/DTV signals
- Power Zoom, Power Focus and horizontal/vertical Power Lens Shift functions for installation flexibility
- A wide range of optional lenses covering various installation demands
- Optional IFB boards available including 4:2:2 SDI and HD SDI
- Can be used with screens from 70 to 700 inches in size (viewable area, measured diagonally)



Supplied accessories:	Remote Commander RM-PJ1001
	Remote Commander Cable (15 m)
Optional accessories:	AA size Battery (3)
	AC Power Cord
	PJ COM Terminator
	Lens Ring
	Operation Manual
	Installation Manual
	Projector Lamp (for replacement) LMP-L2000
	1.3 times zoom Short Focus Lens VPDL-Z1014
	1.2 times zoom Standard Focus Lens VPDL-Z1019
	1.6 times zoom Middle Focus Lens VPDL-Z1023
	1.8 times zoom Long Focus Lens VPDL-Z1037
	Suspension Support PSS-10/2000
	Stack Stand SU-PJ2000
	Interface Board IFB-12A/20* ⁴ /21/30* ⁴ /50/1000/LE100
	Signal Interface Cable SIC-20A* ⁴ /20C* ⁴ /21* ⁴ /22* ⁴
	Signal Interface Switcher PC-3000* ⁴
	Remote Commander RM-PJ3000S
	Remote Control Receiver RM-PJ10
	Signal Adaptor ADP-10 (HD D-sub 15-pin to D-sub 9-pin for SIC cable)
	Signal Adaptor ADP-20 (Macintosh to VGA)
	Signal Cable SMF-400/401
	Remote Control Cable RCC-5G/10G/30G (for RS-422A)
	100-inch Flat Screen VPS-100FH* ⁴
	120-inch Flat Screen VPS-120FH* ⁴

Specifications

Optical

Projection system:	3 DMD panels, 3 panel prism color integration system
DMD panel:	SXGA DMD panel, 3,932,160 pixels (1,310,720 pixels × 3)
Lamp:	Xenon lamp
Light output:	10,000 ANSI lumens* ¹
Screen coverage:	70 to 700 inches (viewable area, measured diagonally)

General

Color system:	NTSC/PAL/SECAM/NTSC ^{4.43} /PAL-M automatically selected
Resolution:	600 TV lines (video) 1280 × 1024 pixels (RGB)
Scanning frequency:	Horizontal: 15 to 100 kHz Vertical: 40 to 120 Hz Display area: >6.4 usec
Power requirements:	AC 220 to 240 V, 50/60 Hz
Power consumption:	Approx. 2.8 kW, Standby approx. 40 W
Heat dissipation:	9556 BTU
Operating temperature:	10 to 35 °C (50 to 90 °F)
Operating humidity:	35 to 85% (No condensation)
Storage temperature:	0 to 35 °C (32 to 90 °F)
Storage humidity:	10 to 90%
Dimensions:	724 (W) × 347.5 (H) × 948.2 (D) mm (28 ⁵ / ₈ × 13 ³ / ₄ × 37 ⁵ / ₈ inches)
Mass:	Approx. 95 kg (209 lb)



Input/Output

Input A:

Analog RGB/

Component:

R/R-Y:	BNC × 5 0.7 Vp-p ±2 dB positive, 75 Ω
G:	0.7 Vp-p ±2 dB positive, 75 Ω
Y/G with sync:	1.0 Vp-p V ±2 dB sync negative, 75 Ω
B/B-Y:	0.7 Vp-p ±2 dB positive, 75 Ω

SYNC/HD

Composite sync:	0.6 to 8.0 Vp-p, high impedance, sync positive/negative
Horizontal sync:	0.6 to 8.0 Vp-p, high impedance, sync positive/negative
Vertical sync:	0.6 to 8.0 Vp-p high impedance, sync positive/negative

STV/HDVS (Y/P_B/P_R):

BNC	
Y:	1.0 Vp-p ±2 dB positive, 75 Ω Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p ±0.35 Vp-p ±2 dB positive, 75 Ω

P_B/P_R:

DTV/HDVS (GBR):

BNC	
G with sync:	1.0 Vp-p ±2 dB, 75 Ω Tri-level sync: ±0.3 Vp-p, Bi-level sync: 0.3 Vp-p

B/R:

Input B/C:

Input D:

CONTROL S IN/

PLUG IN POWER:

CONTROL S OUT:

REMOTE I/F

RS-232C/422A:

TRIG:

Open for optional IFB boards	
Open for optional IFB-LE100	
Stereo mini-jack 5.0 Vp-p,	
Plug in power DC 5 V, Max. output: 60 mA	
Stereo mini jack 5.0 Vp-p	

D-sub 9-pin (female) selectable	
Mini-jack	

Power On: 12 V

Power Off: 0 V

Output impedance: 4.7 kΩ

Safety regulations

UL1950, cUL950, FCC Class A, IC Class A, VCCI Class A, JEIDA, EN60 950 (TÜV), CE, C-tick

*¹ ANSI lumens is a measuring method of the American National Standards Institute IT7.228.

*² Applicable only to NTSC (525/60), NTSC^{4.43} and PAL-M signals.

*³ Compressed UXGA signal is reproduced while preserving the detail of the image.

*⁴ Not available in some areas. For details, please contact your nearest Sony office.

2-5 Projector accessories

VID-P50

Video Presentation Stand

•Clear image reproduction with a high horizontal resolution of over 460 TV lines •12 times powered zoom capability •Fully automatic functions (auto focus, auto iris, auto white balance) for easy operation •Lighting unit as standard •Flip up and tilt camera head up to 90 degrees to capture images within the room •One-touch detachable close-up lens •Video output and S-video (Y/C) output connector •Document area is (300 × 300 mm) enabling the use of A4 or letter size documents or other presentation materials •Light weight, easy-to-carry design

Supplied accessories: AC cable
Operation manual

Specifications

General

Pickup device: 1/3 inch Interline-transfer CCD × 1
Picture element: 768 (H) × 494 (V)
Resolution: More than 460 TV lines (horizontal)
S/N ratio: More than 48 dB
Lens: F1.8 f=5.4~64.8 mm (× 12 power zoom)
Shooting area: 300 × 225 mm (WIDE)
(11⁷/₈ × 10¹/₈ inches)
25 × 19 mm (TELE)
(1 × ³/₄ inches)
Focus: Full Auto
Iris: Full Auto
Lighting: 4W fluorescent lamp ×1
White balance: Full Auto
Outputs: Video (Phono connector ×1)
1Vp-p sync negative
S-video (4pin mini DIN ×1)
Y: 1Vp-p, 75 b sync negative
C: 0.286Vp-p, 75 b



Dimensions: 335 (W) × 525 (H) × 355 (D) mm
(13 1/4 × 20 3/4 × 14 inches)
<when folded>
335 (W) × 70 (H) × 550 (D) mm
(13 1/4 × 2 7/8 × 21 3/4 inches)
Mass: 4.1 kg (9 lb 1 oz)
Power requirement: AC 120 V 60 Hz 150 mA

VID-P110

Video Presentation Stand

•Three-dimensional objects just as well as flat objects such as charts, drawings, books etc. can be displayed on TV monitors and projectors •1/3-inch CCD camera provides a high horizontal resolution of over 460 TV lines •Auto focus, auto iris control and auto white balance •Two pattern memories •One-touch, swing out, close-up lens •12 times powered zoom capability •Flip up, pan and tilt camera head •Dual arm lights, each with two 9 w fluorescent lamps •Built-in back light function •Input selector •S-video input / output connections (Y/C separate/mix circuit) •Black and white mode •RS-232C interface for control from a PC •Light-weight, compact and easy-to carry design

Supplied accessories: AC power code (1)
Operation manual (1)
Interface manual (1)

Specifications

Pick-up device: 1/3 inch interline transfer, CCD
Picture element: 768 (H) × 494 (V)
Resolution: More than 460 TV lines
Shooting Area: 325 × 240 mm (max.)
29 × 22 mm (min.)
Lens: F=1.8 to 2.7, f=5.4 to 64.8 mm
Output selector: Camera/Video 1/Video 2
Arm light: 9 W twin-fluorescent lamp (2)
Built-in backlight: 2.5 W cold cathode ray lamp (2)
Input connectors: Video in: Phono (2) 1Vp-p, 75 Ω, sync negative
S video in: 4-pin mini DIN (2)
Y: 1 Vp-p, 75 Ω sync negative
C: 0.286 Vp-p, 75 Ω
Audio in: Phono (2) pair, stereo
Input impedance: 47k Ω
Level: -10 dBu, unbalanced
Mic in: Standard jack (1)
Input impedance: 3.3k Ω
Level: -60 dBu, unbalanced



Output connectors: Phono (1), BNC (1)
Video out: 1Vp-p, 75 Ω, sync negative
S video out: 4-pin mini DIN (1)
Y: 1 Vp-p, 75 Ω sync negative
C: 0.286 Vp-p, 75 Ω
Audio out: Phono (1) pair, stereo
Output impedance: less than 600 Ω
Level: -10 dBu, unbalanced
RS-232C connector: D-sub 9-pin, male
Baud rate: 9600 bps
Power requirements: 120 V AC, 60 Hz
Power consumption: 120 V, 0.3 A
AC outlet: Max. 300W, unswitched
Mass: 8.0 kg (17 lb 10 oz)
Dimensions: 446 (W) × 583 (H) × 622 (D) mm
(17 5/8 × 23 × 24 1/2 inches)
446 (W) × 166 (H) × 634 (D) mm
(17 5/8 × 6 5/8 × 25 inches)

2-5 Projector accessories

VID-P150 Video Presentation Stand

•Three-dimensional objects just as well as flat objects such as charts, drawings, books etc. can be displayed on TV monitors and projectors •1/3-inch CCD camera provides a high horizontal resolution of over 460 TV line •Auto focus, auto iris control and auto white balance •Four pattern memories •One-touch, swing out, close-up lens •12 times powered zoom capability •Flip up, pan and tilt camera head •Motorized (remotely controlled) pan and tilt camera head •Home position for quick return to standard camera position •Dual arm lights, each with two 9 w fluorescent lamps •Built-in back light function •Input selector •S-video input / output connections (Y/C separate/mix circuit) •Black and white mode •Wireless Remote Commander supplied as standard •RS-232C interface for control from a PC •Light-weight, compact and easy-to carry design

Supplied accessories: Wireless remote commander (1)
AC power code (1)
Operation manual (1)
Interface manual (1)
Dry battery (2) (for remote commander)

Specifications

Pick-up device: 1/3 inch interline transfer, CCD
Picture element: 768 (H) × 494 (V)
Resolution: More than 460 TV lines
Shooting Area: Approx. 325 × 260 mm (max.)
Approx. 31 × 23 mm (min.)
Lens: F=1.8 to 2.7, f=5.4 to 64.8 mm
Output selector: Camera / Video 1 / Video 2
Arm light: 9 W twin-fluorescent lamp (2)
Built-in backlight: 2.5 W cold cathode ray lamp (2)
Input connectors:
Video in Phono (2) 1Vp-p, 75 Ω, sync negative
S video in 4-pin mini DIN (2)
Y: 1 Vp-p, 75 Ω sync negative
C: 0.286 Vp-p, 75 Ω
Audio in Phono (2) pair, stereo
Input impedance: 47k Ω
Level: -10 dBu, unbalanced
Mic in Standard jack (1)
Input impedance: 3.3k Ω
Level: -60 dBu, unbalanced
Output connectors:
Video out Phono (1), BNC (1)
1Vp-p, 75 Ω, sync negative



S video out 4-pin mini DIN (1)
Y: 1 Vp-p, 75 Ω, sync negative
C: 0.286 Vp-p, 75 Ω
Audio out Phono (1) pair, stereo
Output impedance: less than 600 Ω
Level: -10 dBu, unbalanced
Camera monitor out Phono jack (1)
1 Vp-p, 75 Ω, sync negative
Wireless remote commander:
Supplied as standard
Service Area 60°, 5 m
D-sub 9-pin, male
Baud rate: 9600 bps
RS-232C connector:
Power requirements:
Power consumption: 120 V AC, 60 Hz
120 V, 3 A
AC outlet: max. 300 W, unswitched
Mass: 8.8 kg (19 lb 6 oz)
Dimensions: 446 (W) × 625 (H) × 622 (D) mm
(17 3/8 × 24 3/8 × 24 1/2 inches)
446 (W) × 190 (H) × 711 (D) mm (when folded)
(17 3/8 × 7 1/2 × 28 inches)

2-5 Projector accessories

PC-3000*1

Signal Interface Switcher for VPH-G90U and VPL-FE100U/FX200U*2

•Provides eight slots for optional interface boards and one fixed output with 150 MHz cable compensation •Up to eight PC-3000 units can be connected, enabling up to 57 different signals to be connected in a system •RGB bandwidth of 300 MHz •Equipped with an RS-232C/RS422A communication port •Equipped with a PJ COM port, in accordance with RS-485 •Incorporates an LCD display in the front panel for easier setting and adjustments •Input selection of a connected projector, as well as the input selection of the PC-3000 itself, can be controlled via the front panel •Last channel memory •Can be easily controlled with optional remote control unit RM-PJ3000S •Trig terminal to provide control of an integrated projection room •19-inch EIA standard rack mountable with the supplied mount kit

- Supplied accessories: AC cable
Mount Kit for 19-inch EIA standard rack
Operating Instructions
Terminator
- Optional accessories: Remote Commander RM-PJ3000S
Remote Control Cable RCC-5G/10G/30G
(for PJ COM and RS-422A)

Specifications

General

RGB bandwidth: 300 MHz -3 dB
Power requirements: 100 to 240 V, 50/60 Hz
Power consumption: 80 W
Dimensions: 424 (W) × 133 (H) × 420 (D) mm
(16¹/₁₆ × 5¹/₄ × 16¹⁷/₃₂ inches)
Mass: 9.3 kg (20 lb 7 oz)

Output

BNC connector (8), DIN 4-pin (1)
Video signal: Gain unity, impedance 75 Ω
Sync signal: 5 Vp-p (Impedance high)
1 Vp-p (Impedance 75 Ω)
Audio: Gain unity, impedance 1 kΩ
Control S
IN/ PLUG IN POWER: Stereo mini jack, 5 Vp-p
DC 5 V maximum output 60 mA
OUT: Stereo mini jack, 5 Vp-p
TRIG: Mini jack
Power ON: DC 12 V, output impedance 4.7 kΩ
Power OFF: 0 V

Remote

RS-232C/422A: D-sub 9-pin (female)
PJ COM IN/OUT: D-sub 9-pin (female)
Remote 2: Half pitch 26-pin

*1 Not available in some areas. For details, please contact your nearest Sony office.
*2 With the optional IFB-40, the PC-3000 is also compatible with other current projectors.



2-5 Projector accessories

IFU-1271*1

Interface Unit for VPH-G90U/G70Q/ G70VRU/D50Q/D50HTU/V20U

- One in/two out signal distributor with 100MHz bandwidth*2
- Converts digital signal level to analog signal level for output
- Sync output mode selection

Input: (Open for an optional IFB Series input module)
 Output: BNC ×5 (×2)
 Phono (×2)
 (stereo or monaural selectable)
 Bandwidth: 120 MHz (−3 dB)
 Power requirements: AC 120 V, 50/60 Hz
 Dimensions: 180 (W) × 105 (H) × 185 (D) mm
 (7¹/₈ × 4¹/₄ × 7³/₈ inches)
 Mass: 3 kg (6 lb 9.8 oz)
 Supplied accessories:
 AC power cord
 Operation manual



*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 The output signal from IFB-1000 is the same as the input. The output signal from IFB-1200 can be changed according to the selection switch on the board (component/RGB).

IFU-SC50

Interface Unit for the VPL-S900U/PX1

- Two input, one output signal selector - allows two computers to be simultaneously connected to one projector
- Built-in mouse receiver for wireless mouse control

Frequency response:
 Up to fH: 80 kHz
 (SXGA 1280 × 1024, fV: 75 Hz)
 Cable length: 0.5 m (19 3/4 inches)
 Dimensions: 108 (W) × 48.5 (H) × 108 (D) mm
 (4³/₈ × 1¹⁵/₁₆ × 4³/₈ inches)
 Mass: Approx. 370 g (13 oz)

Input/Output
 INPUT 1/2:
 HD D-sub 15-pin (female)
 OUTPUT: HD D-sub 15-pin (male)
 Mouse IN: Square 13-pin (female)
 Audio IN/OUT:
 Stereo mini jack



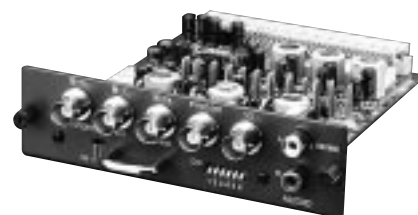
DISPLAY
PRODUCTS

IFB-12A

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q, VPL-FE100U/ FX200U, VPD-LE100, PC-3000 and IFU-1271

- Accepts analog RGB, component (Y/R-Y/B-Y), HDTV (Y/Pb/Pr, GBR), composite video and Y/C video signals
- RGB bandwidth of 300 MHz -3 dB
- Cable compensation function for output signals (150 MHz)

Input/Output
 Video: BNC (5)
 Audio: Phono (2)
 (stereo or monaural selectable)
 Dimensions: 129 (W) × 35 (H) × 138 (D) mm
 (5¹/₈ × 1⁷/₁₆ × 5¹/₂ inches)
 Mass: Approx. 200 g (7 oz)



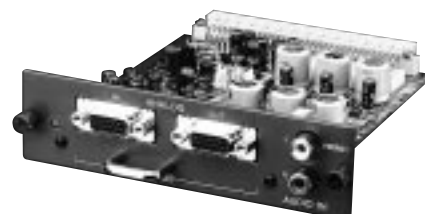
*For input only. Acceptable signals vary according to the connected projector.

IFB-21*

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q, VPL-FE100U/ FX200U, VPD-LE100 and IFU-1271

- RGB bandwidth of 150 MHz

Input
 RGB: Analog, HD D-sub 15-pin
 AUDIO: Phono
 (stereo or monaural selectable)
 Dimensions: 129 (W) × 35 (H) × 138 (D) mm
 (5¹/₈ × 1⁷/₁₆ × 5¹/₂ inches)
 Mass: Approx. 200 g (7 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

2-5 Projector accessories

IFB-40

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q and PC-3000

- 14-pin multi-connector input/output board (for SIC-M/CCQ cable)
- Used to connect projector to signal interface switcher PC-3000*
- RGB bandwidth of 70 MHz
- Cable compensation function for output signal (70 MHz)

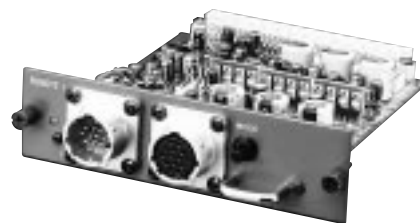
Input/Output: 14-pin multi connectors
(Input: male, Output: female)

Power requirements: DC 12 V

Power consumption: Max. 2 W

Dimensions: 129 (W) × 35 (H) × 138 (D) mm
(5 $\frac{1}{8}$ × 1 $\frac{7}{16}$ × 5 $\frac{1}{2}$ inches)

Mass: Approx. 200 g (7 oz)



*The IFB-40 can also be used to connect the VPH-G90U to the interface switcher PC-1271 with 5 BNC mode

IFB-50

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q, VPL-FE100U/ FX200U, VPD-LE100, PC-3000 and IFU-1271

- Component SDI
- Serial Digital Interface board for SMPTE-259 M-C/ITU-R BT656-3 4:2:2 video signals
- IFB-50 manages video signals only. Serial digital audio signals are not supported.

Input/Output

In: BNC, Component SDI

Out: BNC, Active loop-through

Dimensions: 129 (W) × 35 (H) × 138 (D) mm
(5 $\frac{1}{8}$ × 1 $\frac{7}{16}$ × 5 $\frac{1}{2}$ inches)

Mass: Approx. 200 g (7 oz)



IFB-1000

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q, VPL-FE100U/ FX200U and IFU-1271

Input

Composite*: Loop-through BNC

Y/C*: Loop-through 4-pin mini DIN

Audio: Phono
(stereo or monaural selectable)

Dimensions: 129 (W) × 35 (H) × 138 (D) mm
(5 $\frac{1}{8}$ × 1 $\frac{7}{16}$ × 5 $\frac{1}{2}$ inches)

Mass: 160 g (5.6 oz)



* The Y/C IN has priority over the Composite IN.

IFB-1200*1

Interface Board for VPH-G70Q/ D50Q*2 and IFU-1271

- Can provide component input to a projector

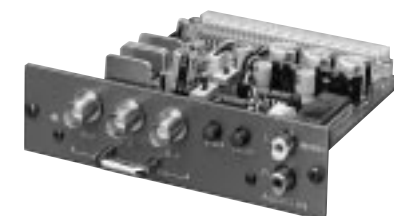
Input

Component: BNC (x3)
(Y/R-Y/B-Y)

Audio: Phono
(stereo or monaural selectable)

Dimensions: 129 (W) × 35 (H) × 138 (D) mm
(5 $\frac{1}{8}$ × 1 $\frac{7}{16}$ × 5 $\frac{1}{2}$ inches)

Mass: 0.18 kg (6.3 oz)



*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 Component (Y/R-Y/B-Y) input capability can be attained with IFB-12A.

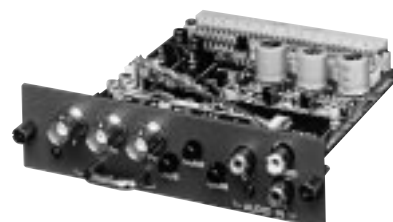
2-5 Projector accessories

IFB-1301

Interface Board for VPH-G70Q/ D50Q and IFU-1271

- HD (Y/P_B/P_R) input
- Converts Y/P_B/P_R signals to RGB signals
- Color, Hue and Sharpness adjustment available
- Audio (Left (Mono)/Center/Right) input

Input	
HD:	BNC
	Y (luminance): 1.0 Vp-p ±2 dB, 75 Ω
	P _B /P _R (component): ±0.35 Vp-p, 75 Ω
Output	
G/Y:	1.0 Vp-p ±2 dB, 75 Ω
B/R:	0.7 Vp-p ±2 dB, 75 Ω
P _B /P _R :	0.35 Vp-p, 75 Ω
Audio*:	Phono (stereo/monaural)
	250 mV rms, impedance more than 47 kΩ
Dimensions:	129 (W) × 35 (H) × 138 (D) mm
	(5 1/8 × 1 7/16 × 5 1/2 inches)
Mass:	200 g (7 oz)



IFB-1400

Interface Board for VPH-G90U/ G70Q/G70VRU/D50Q

- Accepts progressive (525P/480P) component

Input	
Progressive component:	BNC type
Y:	1.0 Vp-p ±2 dB sync negative, 75 Ω
C _B :	0.7 Vp-p ±2 dB positive, 75 Ω
C _R :	0.7 Vp-p ±2 dB positive, 75 Ω
Dimensions:	129 (W) × 35 (H) × 138 (D) mm
	(5 1/8 × 1 7/16 × 5 1/2 inches)
Mass:	Approx. 140 g (5 oz)



DISPLAY
PRODUCTS

EXB-DS10

Extension Board for VPH-G70Q/ G70VRU/D50Q/D50HTU*

- Line-doubler signal processing board
- 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 control unit 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



*Pre-installed in VPH-D50HTU.

EXB-5010

Extension Board for PC-3000

- Designed to connect an RGB monitor to the PC-3000
- Converts HDTV (GBR, Y/P_B/P_R) and component (Y/R-Y/B-Y) signals to RGB signal
- Color, Hue and Sharpness can be controlled with EXB-5010



2-5 Projector accessories

SIC-10

Signal Interface Cable for
VPH-G90U/G70Q/G70VRU/D50Q/
D50HTU/V20U

Connector: 5 BNC/5 BNC
Length: 10 m (32.8 ft)



SIC-20A*/20C*

Signal Interface Cable for VPH-G90U/
G70Q/G70VRU/D50Q, VPL-FE100U/
FX200U and VPD-LE100

•SIC-20A for Macintosh II Series
•SIC-20C for Power Macintosh, Macintosh LC,
PowerBook, Quadra and Centris

Connector: D-sub 15-pin to local monitor
(female)
D-sub 15-pin to computer (male)
D-sub 9-pin to IFB-20 (female)
Length: 2 m (6.6 ft) overall, 0.2 m (0.7 ft)
branch



SIC-20C

* Not available in some areas. For details, please contact your nearest Sony office.

SIC-21*

Signal Interface Cable for VPH-G70Q/
G70VRU/D50Q and VPD-LE100

Connector: D-sub 9-pin to local monitor
(female)
D-sub 9-pin to computer (male)
D-sub 9-pin to IFB-20 (female)
Length: 2 m (6.6 ft) overall, 0.2 m (0.7 ft)
branch



* Not available in some areas. For details, please contact your nearest Sony office.

SIC-22*

Signal Interface Cable for VPH-G90U/
G70Q/G70VRU/D50Q, VPL-FE100U/
FX200U and VPD-LE100

Connector: High Density 15-pin to local
monitor (female)
High Density 15-pin to computer
(male)
D-sub 9-pin to IFB-20 (female)
Length: 2 m (6.6 ft) overall, 0.2 m (0.7 ft)
branch



* Not available in some areas. For details, please contact your nearest Sony office.

2-5 Projector accessories

SIC-S20/S21/S22

Mouse Cables for VPL-PX30/PX20/S900U/PX1

•Enables operation of a connected computer with the RM-PJM600/PJM610

Connector:

SIC-S20 for Macintosh

Mini DIN 4-pin (male) to computer

Square 13-pin (male) to MOUSE port of a projector

SIC-S21 for Serial

D-sub 9-pin (male) to Serial port

Square 13-pin (male) to MOUSE port of a projector

SIC-S22 for PS/2 (IBM PC/AT compatible) and Macintosh

Mini DIN 6-pin (male) to PS/2 port

Square 13-pin (male) to MOUSE port of a projector

Length:

2 m (6.6 ft)



SIC-S20/S22



SIC-S21

SMF-400

Signal Cable for VPH-G90U/G70Q/ G70VRU/D50Q/D50HTU, VPL-FE100U/ FX200U/PX30/PX20/S900U/PX1/CS1 and VPD-LE100

Connector: HD D-sub 15-pin (male) to BNC x 5 (male)

Length: 2 m (6.6 ft)



DISPLAY
PRODUCTS

SMF-401

Signal Cable for VPH-G90U/G70Q/ G70VRU/D50Q, VPL-FE100U/FX200U/ PX30/PX20/S900U/PX1 and VPD-LE100

Connector: HD D-sub 15-pin (male) to HD D-sub 15-pin (male)

Length: 2 m (6.6 ft)



SMF-402

Signal Cable for VPL-PX30/PX20/S900U/ PX1/CS1

Connector: HD D-sub 15-pin (male) to Phono x 3 (male)

Length: 5 m (16.4 ft)

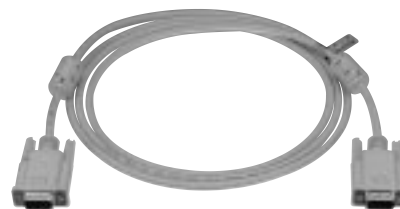


2-5 Projector accessories

SMF-410

Monitor Cable for VPL-PX30/PX20/CS1

Connector: HD D-sub 15-pin (male) to
HD D-sub 15-pin (male)
Length: 2 m (6.6 ft)



SMF-D102

Digital Signal Cable for VPL-PX30/PX20

Connector: DFP 20-pin (male) to
DFP 20-pin (male)
Length: 2 m (6.6 ft)



SMF-D110

Digital Signal Cable for VPL-PX30/PX20

Connector: DFP 20-pin (male) to
DFP 20-pin (male)
Length: 10 m (32.8 ft)



RM-PJ10

Remote Control Receiver for VPH-G90U/G70Q/G70VRU/ D50Q/D50HTU/V22U, VPL-FE100U/FX200U/S900U and VPD-LE100

Power requirements:
DC 6 V
Dimensions: 100 (W) × 50 (H) × 57 (D) mm
(4 × 2 × 2¹/₄ inches)
(including Mounting Bracket)
Mass: 0.1 kg (3.5 oz)
(including Mounting Bracket)
Supplied accessories:
Remote control cable: 15 m (45 feet)
Screws



2-5 Projector accessories

RM-PJD50

Remote Commander for VPH-G90U/D50HTU*

- Card type design
- Power on/off and input selection operation
- Direct video memory selection

Power requirements:

CR2025 lithium battery (1)

Dimensions: 54 (W) × 86 (H) × 6.5 (D) mm

(2¼ × 3½ × ¼ inches)

Mass: Approx. 21.7 g (0.8 oz)



*The RM-PJD50 is supplied with the VPH-D50HTU.

RM-PJM610

Remote Commander for VPL-PX30*/ PX20*/S900U/PX1/CS1

- Wireless remote control unit for presentations
- Digital zoom, function and help keys
- Equipped with a laser pointer

Laser beam

Laser type: Class II

Wave length: 645 nm

Output: 1 mW

Power requirements:

DC 3 V (Size AA (R6) battery (2))

Dimensions: 51 (W) × 42 (H) × 162 (D) mm

(2½ × 6½ × 1½ inches)

Mass: Approx. 130 g (4.6 oz)



*The RM-PJM610 is supplied with the VPL-PX30/PX20.

RM-PJ1001

Remote Commander for VPH-G90U*/G70Q/G70VRU/D50Q/ D50HTU*, VPL-FE100U*/FX200U* and VPD-LE100*

- Wired/wireless remote control unit for set-up and operation
- Full remote operation
- System set up (SYS SET) key for use with PJ COM (RS-485) system
- Keys can be illuminated for operation in dark rooms

Power requirements:

DC 5 V (Size AA (R6) battery (3))

Dimensions: 165 (W) × 35 (H) × 141 (D) mm

(6 ½ × 1 7/16 × 5 ¾ inches)

Mass: Approx. 285 g (10 oz)



* The RM-PJ1001 is supplied with the VPH-G90U/D50HTU, VPL-FE100U/FX200U and VPD-LE100.

RM-PJ3000S

Remote Commander for VPH-G90U/G70Q/G70VRU/D50Q, VPL-FE100U/FX200U and VPD-LE100

- Wireless remote control unit for simple remote control
- Function keys can be illuminated for operation in dark rooms
- Equipped with a laser pointer for use in presentations

Laser beam

Laser type: Class II

Wave length: 645 nm

Output: 1 mW

Power requirements:

DC 3 V (Size AA (R6) battery (2))

Dimensions: 45 (W) × 24 (H) × 178 (D) mm

(1 13/16 × 31/32 × 7 1/8 inches)

Mass: Approx. 93 g (3.3 oz)



2-5 Projector accessories

VPS-50C* Portable Screen

	VPS-50C
Screen size	50-inch
Construction	Beaded glass flat screen
Dimensions	Folded: 870 (W) × 88 (H) × 80 (D) mm (34 3⁄8 × 3 ½ × 3 ¼ inches) Assembled: 1131 (W) × 870 (H) × 240 (D) mm
Mass	2.3 kg (5 lb)



* Not available in some areas. For details, please contact your nearest Sony office.

VPS-120FH*/100FH* Video Screen

	VPS-120FH	VPS-100FH
Screen size	120-inch	100-inch compatible
Construction	Beaded glass high-efficiency flat screen with winding mechanism	
Dimensions	2780(W) × 2545(H) mm (109½ × 100¼ inches)	2200(W) × 1765(H) mm (86¾ × 69½ inches)
Mass	21 kg (46 lb 5 oz)	8 kg (17 lb 10 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

2-5 Projector accessories

PSS-10/70/90/610/722/2000

Suspension Support:

PSS-10 for PSS-70/90/722/2000

PSS-70 for VPH-G70Q/G70VRU/D50Q/D50HTU

PSS-90 for VPH-G90U

PSS-610 for VPL-PX30/PX20/VW10HT

PSS-722 for VPH-V20U

PSS-2000 for VPL-FE100U/FX200U

1. Direct installation on the ceiling – PSS-70/90/610/722/2000
2. Installation on the ceiling (height adjustable) – PSS-10 + PSS-70 or PSS-90 or PSS-722 or PSS-2000

Mass:

PSS-10:	10.3 kg (22 lb 11 oz)
PSS-70:	9 kg (19 lb 13 oz)
PSS-90:	15 kg (33 lb 11 oz)
PSS-610:	2.7 kg (5 lb 15 oz)
PSS-722:	1.8 kg (3 lb 15 oz)
PSS-2000:	5.5 kg (12 lb 2 oz)



PSS-10



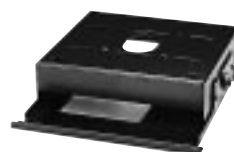
PSS-70



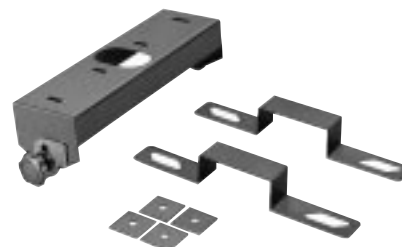
PSS-90



PSS-610



PSS-2000



PSS-722

2-5 Projector accessories

PK-PJ500*

**Projector Lamp (for replacement) for
VPL-S500U/W400Q**
•250W metal halide lamp

Dimensions: 104 (W) × 122 (H) × 115 (D) mm
(4¹/₈ × 4⁷/₈ × 4⁵/₈ inches)

Mass: 390 g (14 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

PK-PJ800*

**Projector Lamp (for replacement) for
VPL-S800U**
•400W metal halide lamp

Dimensions: 140 (W) × 142 (H) × 147 (D) mm
(5⁵/₈ × 5⁵/₈ × 5⁷/₈ inches)

Mass: 820 g (1 lb 13 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

PK-PJ1800*

**Projector Lamp (for replacement) for
VPD-S1800Q**
•1kW Xenon lamp

Dimensions: 105 (W) × 156 (D) × 100 (H) mm
(4¹/₄ × 6¹/₄ × 4 inches)

Mass: Approx. 1900 g (4 lb 3 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

LMP-600

**Projector Lamp (for replacement) for
VPL-S900U**
•120 W UHP compact lamp

Dimensions: 75 (W) × 105 (D) × 83.5 (H) mm
(2⁵/₁₆ × 4¹/₈ × 3⁵/₁₆ inches)

Mass: Approx. 210 g (7.4 oz)



2-5 Projector accessories

LMP-C120

Projector Lamp (for replacement) for VPL-CS1

•120 W UHP lamp

Dimensions: 65 (W) × 62.5 (H) × 91 (D) mm
(2 $\frac{5}{8}$ × 2 $\frac{1}{2}$ × 3 $\frac{5}{8}$ inches)

Mass: Approx. 164 g (6 oz)



LMP-P120

Projector Lamp (for replacement) for VPL-PX1

•120 W UHP lamp

Dimensions: 75 (W) × 83.5 (H) × 105 (D) mm
(3 × 3 $\frac{3}{8}$ × 4 $\frac{1}{4}$ inches)

Mass: Approx. 210 g (7.4 oz)



LMP-P200

Projector Lamp (for replacement) for VPL-PX30/PX20/VW10HT

•200 W UHP lamp

Dimensions: 74.5 (W) × 91.5 (H) × 107.5 (D) mm
(3 × 3 $\frac{5}{8}$ × 4 $\frac{1}{4}$ inches)

Mass: Approx. 280 g (10 oz)



LMP-Q120

Quad Projector Lamp (for replacement) for VPL-FE100U/FX200U

•Four 120 W UHP lamps

Dimensions: 220 (W) × 105 (H) × 147 (D) mm
(8 $\frac{3}{4}$ × 4 $\frac{1}{4}$ × 5 $\frac{7}{8}$ inches)

Mass: 1.4 kg (3 lb)



2-5 Projector accessories

LMP-S120

Projector Lamp (for replacement) for LMP-Q120

•120 W UHP lamp

Dimensions: Approx. 70 (W) × 84 (H) × 65 (D) mm
(Approx. 2 $\frac{7}{8}$ × 3 $\frac{3}{8}$ × 2 $\frac{5}{8}$ inches)

Mass: 140 g (4 oz)



LMP-Q2000*

Quad Projector Lamp (for replacement) for VPL-X2000U

•Four 120 W UHP lamps

Dimensions: 220 (W) × 105 (H) × 147 (D) mm
(8 $\frac{3}{4}$ × 4 $\frac{3}{4}$ × 5 $\frac{7}{8}$ inches)

Mass: 1.4 kg (3 lb)



* Not available in some areas. For details, please contact your nearest Sony office.

LMP-S2000*

Projector Lamp (for replacement) for LMP-Q2000

•120 W UHP lamp

Dimensions: Approx. 70 (W) × 84 (H) × 65 (D) mm
(2 $\frac{7}{8}$ × 3 $\frac{3}{8}$ × 2 $\frac{5}{8}$ inches)

Mass: 140 g (5 oz)



* Not available in some areas. For details, please contact your nearest Sony office.

LMP-L2000

Projector Lamp (for replacement) for VPD-LE100

•Xenon lamp

Dimensions: 165 (W) × 165 (H) × 250 (D) mm
(6 $\frac{1}{2}$ × 6 $\frac{1}{2}$ × 9 $\frac{7}{8}$ inches)

Mass: 3.4 kg (7 lb 4 oz)



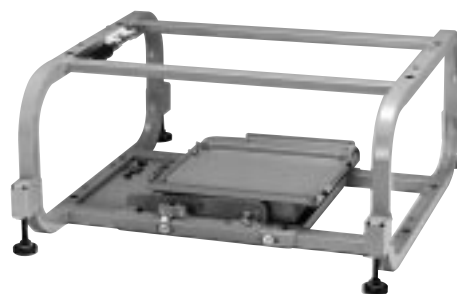
2-5 Projector accessories

SU-PJ2000

Projector Stand (for twin and triple stacking) for VPL-FE100U/FX200U

Dimensions: 840 (W) × 360 (H) × 840 (D) mm
(33 1/8 × 14 1/4 × 33 1/8 inches)

Mass: Approx. 32 kg (70 lb 6 oz)



VLC-600

Carrying Case for VPL-PX30/PX20/S900U

- Soft case with removable strap and grip
- Can store peripherals with projector

Dimensions: 358 (W) × 361 (H) × 138 (D) mm
(14 1/8 × 14 1/8 × 6 5/8 inches)

Mass: Approx. 1.4 kg (3 lb 1 oz)



DISPLAY
PRODUCTS

VLC-SC50*

Carrying Case for VPL-PX1

- Soft case with strap and easy opening double fasteners
- Can store projector, peripherals and a notebook PC

Dimensions: 320 (W) × 250 (H) × 200 (D) mm
(12 5/8 × 9 7/8 × 7 7/8 inches)

Mass: Approx. 0.8 kg (1 lb 12 oz)



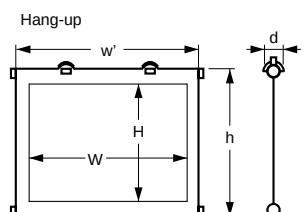
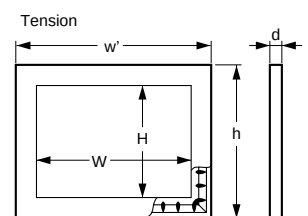
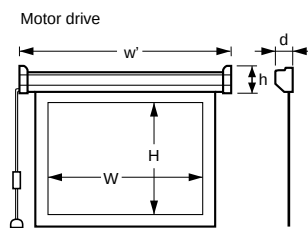
* Not available in some areas. For details, please contact your nearest Sony office.

2-5 Projector accessories

VPE/VPL/VPM series (by Aurora)

Video Screen

Type	Model name	Material	Screen size (W × H)mm	Dimensions (W × H × D)mm	Mass (kg)	Screen seam
Motor drive	VPE-150 (150-inch)	micro beads on white mat	3048 × 2286 (120 × 90.0 inches)	3455 × 150 × 118 (136 × 5.9 × 4.6 inches)	26	horizontal (1)
	VPE-170 (170-inch)	micro beads on white mat	3454 × 2591 (136 × 102 inches)	3862 × 150 × 118 (152 × 5.9 × 4.6 inches)	30	horizontal (1)
	VPE-200 (200-inch)	micro beads on white mat	4064 × 3048 (160 × 120 inches)	5812 × 310 × 248 (228.8 × 12.2 × 9.8 inches)	129	horizontal (1)
	VPE-220 (220-inch)	micro beads on white mat	4470 × 3353 (176 × 132 inches)	6238 × 310 × 248 (245.6 × 12.2 × 9.8 inches)	140	horizontal (1)
	VPE-250 (250-inch)	micro beads on white mat	5080 × 3810 (200 × 150 inches)	6928 × 310 × 248 (272.8 × 12.2 × 9.8 inches)	150	horizontal (2)
Tension	VPL-150 (150-inch)	micro beads on white mat	3048 × 2286 (120 × 90 inches)	3448 × 2286 × 55 (135.8 × 90 × 2.2 inches)	36	vertical (1)
	VPL-170 (170-inch)	micro beads on white mat	3454 × 2591 (136 × 102 inches)	3854 × 2991 × 55 (151.7 × 117.7 × 2.2 inches)	41	vertical (1)
	VPL-200 (200-inch)	micro beads on white mat	4064 × 3048 (160 × 120 inches)	4664 × 3648 × 55 (183.6 × 143.6 × 2.2 inches)	48	vertical (2)
	VPL-220 (220-inch)	micro beads on white mat	4470 × 3353 (176 × 132 inches)	5070 × 3953 × 55 (199.6 × 155.6 × 2.2 inches)	53	vertical (2)
	VPL-250 (250-inch)	micro beads on white mat	5080 × 3810 (200 × 150 inches)	5680 × 4410 × 55 (223.6 × 173.6 × 2.2 inches)	60	vertical (2)
Hang-up	VPM-150 (150-inch)	micro beads on white mat	3048 × 2286 (120 × 90 inches)	3292 × 2456 × 35 (129.6 × 96.7 × 1.4 inches)	9.5	horizontal (1)
	VPM-170 (170-inch)	micro beads on white mat	3454 × 2591 (136 × 102 inches)	3698 × 2761 × 35 (145.6 × 108.7 × 1.4 inches)	11	horizontal (1)
	VPM-200 (200-inch)	micro beads on white mat	4064 × 3048 (160 × 120 inches)	4584 × 3488 × 35 (180.5 × 137.3 × 1.4 inches)	12	horizontal (1)
	VPM-220 (220-inch)	micro beads on white mat	4470 × 3353 (176 × 132 inches)	5010 × 3813 × 35 (197.2 × 150.1 × 1.4 inches)	13	horizontal (1)
	VPM-250 (250-inch)	micro beads on white mat	5080 × 3810 (200 × 150 inches)	5700 × 4350 × 35 (224.4 × 171.2 × 1.4 inches)	15	horizontal (2)



2-6 Projector lenses

VPLL-FM20

Projection Lens for VPL-S900U

- Fixed short focus lens
- For rear projection

Lens: f24.24 mm/F3.0
Screen coverage: 50-200 inches
Throwing distance:
100-inch: 1800 mm
200-inch: 3300 mm
Dimensions: 120 (W) × 120 (H) × 204 (D) mm
(4¾ × 4¾ × 8½ inches)
Mass: Approx. 1.5 kg (3 lb 4 oz)



VPLL-FM21

Projection Lens for VPL-PX30/PX20

- Fixed short focus lens

Lens: f24.5 mm/F2.0
Screen coverage: 40-300 inches
Throwing distance:
100-inch: 1800 mm
200-inch: 3690 mm
300-inch: 5580 mm
Dimensions: 140 (W) × 140 (H) × 233 (D) mm
(5½ × 5½ × 9¼ inches)
Mass: Approx. 1.9 kg (4 lb)



DISPLAY
PRODUCTS

VPLL-FM30

Projection Lens for VPL-S900U

- Fixed short focus lens

Lens: f37 mm/F3.5
Screen coverage: 40-280 inches
Throwing distance:
100-inch: 2810 mm
200-inch: 5680 mm
280-inch: 7960 mm
Dimensions: 120 (W) × 120 (H) × 209 (D) mm
(4¾ × 4¾ × 8¼ inches)
Mass: Approx. 2.1 kg (4 lb 10 oz)



VPLL-ZM31

Projection Lens for VPL-PX30/PX20

- 1.1 times zoom short focus lens

Lens: f41.4-45.6/F1.9-2.0
Screen coverage: 40-300 inches
Throwing distance:
100-inch: 3150-3300 mm
200-inch: 6410-6710 mm
300-inch: 9680-10120 mm
Dimensions: 154 (W) × 154 (H) × 252 (D) mm
(6½ × 6½ × 10 inches)
Mass: 3.1 kg (6 lb 13 oz)



2-6 Projector lenses

VPLL-ZM101

Projection Lens for VPL-PX30/ PX20/S900U

•1.5 times zoom long focus lens

Lens: f89-133.5 mm/F2.0-2.6
Screen coverage:
40-300 inches
Throwing distance:
VPL-PX30/PX20
100-inch: 6810-10030 mm
200-inch: 13840-20270 mm
300-inch: 20870-30500 mm
VPL-S900U
100-inch: 6870-10120 mm
200-inch: 13960-20440 mm
300-inch: 21040-30760 mm

Dimensions: 100 (W) × 100 (H) × 221.9 (D) mm
(4 × 4 × 8¾ inches)
Mass: 1.8 kg (3 lb 15 oz)



VPLL-2009

Projection Lens for VPL-FE100U/ FX200U

•Fixed short focus lens

Lens: f34.2 mm/F3.0
Screen coverage:
VPL-FE100U (5:4):
42-500 inches
VPL-FE100U (4:3):
40-500 inches
VPL-FX200U:
40-500 inches

Throwing distance:
VPL-FE100U (5:4)
42-inch: 650 mm
100-inch: 1730 mm
300-inch: 5460 mm
VPL-FE100U (4:3)
40-inch: 660 mm
100-inch: 1860 mm
300-inch: 5830 mm
VPL-FX200U
40-inch: 640 mm
100-inch: 1800 mm
300-inch: 5670 mm
Dimensions: 160 (W) × 160 (H) × 307 (D) mm
(6¾ × 6¾ × 12¾ inches)
Mass: 4.2 kg (9 lb 4 oz)



VPLL-2014

Projection Lens for VPL-FE100U/ FX200U

•Fixed short focus lens

Lens: f51.9 mm/F3.0
Screen coverage:
VPL-FE100U (5:4):
42-500 inches
VPL-FE100U (4:3):
40-500 inches
VPL-FX200U:
40-500 inches

Throwing distance:
VPL-FE100U (5:4)
42-inch: 1040 mm
100-inch: 2650 mm
300-inch: 8200 mm
VPL-FE100U (4:3)
40-inch: 1060 mm
100-inch: 2840 mm
300-inch: 8760 mm
VPL-FX200U
40-inch: 1030 mm
100-inch: 2760 mm
300-inch: 8520 mm
Dimensions: 160 (W) × 160 (H) × 294.5 (D) mm
(6¾ × 6¾ × 11¾ inches)
Mass: 4.9 kg (10 lb 12 oz)



VPLL-2075

Projection Lens for VPL-FE100U/ FX200U

•Fixed long focus lens

Lens: f269.1 mm/F3.5
Screen coverage:
VPL-FE100U (5:4):
82-500 inches
VPL-FE100U (4:3):
80-500 inches
VPL-FX200U:
80-500 inches

Throwing distance:
VPL-FE100U (5:4)
100-inch: 14460 mm
200-inch: 28760 mm
300-inch: 43050 mm
VPL-FE100U (4:3)
100-inch: 15420 mm
200-inch: 30680 mm
300-inch: 45930 mm
VPL-FX200U
100-inch: 15000 mm
200-inch: 29830 mm
300-inch: 44660 mm
Dimensions: 158 (W) × 115 (H) × 263.5 (D) mm
(6¼ × 4¾ × 10¾ inches)
Mass: 3.1 kg (6 lb 13 oz)



2-6 Projector lenses

VPLL-3050

Projection Lens for VPL-FE100U

•Fixed long focus lens

Lens: f181.2 mm/F2.0

Screen coverage:

(5:4): 84-500 inches

(4:3): 80-500 inches

Throwing distance:

(5:4)

100-inch: 14460 mm

200-inch: 28760 mm

300-inch: 43050 mm

(4:3)

100-inch: 15420 mm

200-inch: 30680 mm

300-inch: 45930 mm

Dimensions: 158 (W) × 117 (H) × 211 (D) mm
(6¼ × 4⅝ × 8⅜ inches)

Mass: 3.4 kg (7 lb 7 oz)



VPLL-Z2019

Projection Lens for VPL-FX200U

•1.3 times zoom standard focus lens

Lens: f71.0-92.3mm/F2.5-3.0

Screen coverage:

40-500 inches

Throwing distance:

40-inch: 1490-1890 mm

100-inch: 3870-4880 mm

300-inch: 11820-14840 mm

Dimensions: 158 (W) × 115 (H) × 211 (D) mm
(6¼ × 4⅝ × 8⅜ inches)

Mass: 2.4 kg (5 lb 4 oz)



DISPLAY
PRODUCTS

VPLL-Z2025

Projection Lens for VPL-FE100U/ FX200U

•1.6 times zoom long focus lens

Lens: f92.1-147.3mm/F2.6-3.5

Screen coverage:

VPL-FE100U (5:4):

84-500 inches

VPL-FE100U (4:3):

80-500 inches

VPL-FX200U:

80-500 inches

Throwing distance:

VPL-FE100U (5:4)

100-inch: 4830-7460 mm

200-inch: 9850-15090 mm

300-inch: 14860-22720 mm

VPL-FE100U (4:3)

100-inch: 5170-7970 mm

200-inch: 10520-16120 mm

300-inch: 15870-24260 mm

VPL-FX200U

100-inch: 5020-7750 mm

200-inch: 10220-15660 mm

300-inch: 15430-23580 mm

Dimensions: 158 (W) × 115 (H) × 277 (D) mm
(6¼ × 4⅝ × 11 inches)

Mass: 3.8 kg (8 lb 6 oz)



VPLL-Z2039

Projection Lens for VPL-FE100U/ FX200U

•1.5 times zoom long focus lens

Lens: f144.4-216.5mm/F2.8-3.6

Screen coverage:

VPL-FE100U (5:4):

84-500 inches

VPL-FE100U (4:3):

80-500 inches

VPL-FX200U:

80-500 inches

Throwing distance:

VPL-FE100U (5:4)

100-inch: 7690-11060 mm

200-inch: 15560-22280 mm

300-inch: 23420-33490 mm

VPL-FE100U (4:3)

100-inch: 8220-11810 mm

200-inch: 16610-23780 mm

300-inch: 25000-35750 mm

VPL-FX200U

100-inch: 7990-11480 mm

200-inch: 16150-23120 mm

300-inch: 24300-34760 mm

Dimensions: 158 (W) × 118.5 (H) × 321 (D) mm
(6¼ × 4⅝ × 12¾ inches)

Mass: 4.1 kg (9 lb)



2-6 Projector lenses

VPLL-Z3020

Projection Lens for VPL-FE100U

•1.3 times zoom standard focus lens

Lens: f74.5-97.0 mm/F2.0-2.4
Screen coverage:
(5:4): 42-500 inches
(4:3): 40-500 inches

Throwing distance:
(5:4) 100-inch: 3900-4920 mm
200-inch: 7920-9960 mm
300-inch: 11940-15000 mm
(4:3) 100-inch: 4170-5260 mm
200-inch: 8460-10040 mm
300-inch: 12750-16020 mm
Dimensions: 158 (W) × 115 (H) × 222.5 (D) mm
(6¼ × 4½ × 8⅞ inches)
Mass: 2.7 kg (5 lb 15 oz)



VPDL-Z1014

Projection Lens for VPD-LE100

•1.3 times zoom short focus lens

Lens: f33.5-44.6 mm/F3.0
Screen coverage:
70-700 inches
Throwing distance:
(5:4) 100-inch: 2830-3770 mm
200-inch: 5760-7670 mm
300-inch: 8690-11580 mm
(4:3) 100-inch: 3030-4030 mm
200-inch: 6150-8190 mm
300-inch: 9270-12360 mm

Dimensions: 184 (W) × 184 (H) × 329 (D) mm
(7¼ × 7¼ × 13 inches)
Mass: 8.5 kg (18 lb 11 oz)



VPDL-Z1019

Projection Lens for VPD-LE100

•1.2 times zoom standard focus lens

Lens: f44.6-54.5 mm/F3.0
Screen coverage:
70-700 inches
Throwing distance:
(5:4) 100-inch: 3840-4660 mm
200-inch: 7740-9480 mm
300-inch: 11630-14190 mm
(4:3) 100-inch: 4100-4980 mm
200-inch: 8250-10060 mm
300-inch: 12410-15150 mm

Dimensions: 184 (W) × 184 (H) × 335.5 (D) mm
(7¼ × 7¼ × 13¼ inches)
Mass: 6.5 kg (14 lb 5 oz)



VPDL-Z1023

Projection Lens for VPD-LE100

•1.6 times zoom middle focus lens

Lens: f54.5-87.0 mm/F3.0
Screen coverage:
70-700 inches
Throwing distance:
(5:4) 100-inch: 4610-7390 mm
200-inch: 9380-15000 mm
300-inch: 14150-22600 mm
(4:3) 100-inch: 4930-7900 mm
200-inch: 10010-16010 mm
300-inch: 15100-24120 mm

Dimensions: 184 (W) × 184 (H) × 285.7 (D) mm
(7¼ × 7¼ × 11¼ inches)
Mass: 6.5 kg (14 lb 5 oz)



2-6 Projector lenses

VPDL-Z1037

Projection Lens for VPD-LE100
•1.8 times zoom long focus lens

Lens: f87.0-152.3 mm/F3.0
Screen coverage:
70-700 inches
Throwing distance:
(5:4)
100-inch: 7430-13040 mm
200-inch: 15050-26370 mm
300-inch: 22670-39700 mm
(4:3)
100-inch: 7940-13930 mm
200-inch: 16070-28150 mm
300-inch: 24200-42360 mm

Dimensions: 184 (W) × 184 (H) × 383 (D) mm
(7¼ × 7¼ × 15½ inches)
Mass: 8.5 kg (18 lb 11 oz)



3-1 Projection wall units

RVP-411DS*1 (NTSC/PAL/SECAM/NTSC^{4.43})

•41-inch projection wall unit for various projection wall applications •Lightweight (75 kg) and a short cabinet depth (1044 mm) for easier handling and stacking •Input capability: double scan video signals and computer signals which conform to VGA mode 3 (31.469 kHz/59.94 Hz) standard •Optional Video Input Board PWB-411D available for composite, Y/C, component and 15 kHz RGB video signals •Double scan capability for flicker free signal reproduction when used with the optional PWB-411D •Adopts optical coupling CRT for high contrast image display •Color temperature selection: 3200 K/6500 K/9300 K/User preset (factory preset: 6500 K) •Two-part construction enables the CRT assembly, together with the electronic chassis, to be easily separated from the cabinet •Wide viewing angle: horizontal 160 degrees, vertical 60 degrees •Optional Rear Screens VPS-415RF/411RF with ultra-thin screen surround are available •Optional Projection Wall Chassis CHP-411D available for system versatility •Optional wired/wireless remote control unit RM-PJ1292*2 with address function for all projector control functions, including input selection, picture control, RGB size and shift and centering controls



Supplied accessories:	Remote Commander Cable (1.2 m) AC Power Cord Operation Manual
Optional accessories*1:	Rear Screen with 0.2 mm screen surround VPS-415RF Rear Screen with 1.7 mm screen surround VPS-411RF System Control Kit PWK-411D Video Input Board PWB-411D Base Stand PWR-B411A Position Beam PWR-P412A (for dual mount) Position Beam PWR-P413A (for triple mount) Remote Control Receiver RM-PJ10 Remote Cable RCC-1W2 (for RS-422)

Specifications

Optical

Projection System:	3 picture tubes, 3 lenses, rear projection
Picture Tube:	7.7-inch (5.5-inch raster size) high-luminance monochrome optical coupled with sealed coolant
Projection Lens:	High performance lens, F1.1/77 mm
Screen:	Optional (See Optional Accessories)
Light Output*3:	ANSI*4: 280 cd/m ² (fH: 31.5 kHz, fV: 60 Hz) Color temperature: 6500 K Peak white: 2056 cd/m ²

Electrical

Scan Frequency:	31.25 kHz/50 Hz/1:1, 31.25 kHz/100 Hz/2:1 31.5 kHz/60 Hz/1:1, 31.5 kHz/120 Hz/2:1 (Horizontal Frequency/Vertical Frequency/Interlace Ratio)
Resolution:	800 × 580 dots (measured at RGB 31.25 kHz input)
RGB Bandwidth:	30 MHz (-3 dB)
Test Signal:	Cross hair, Hatch (fine), Diagonal hatch, Circle hatch, Dot pattern, H pattern, ME, Window, All white (100 IRE), Black RGB: BNC × 5
Input:	
31 kHz:	R: 0.7 Vp-p ±2 dB, 75 Ω G: 0.7 Vp-p ±2 dB, 75 Ω G on sync: 1.0 Vp-p ±2 dB, 75 Ω, sync negative B: 0.7 Vp-p ±2 dB, 75 Ω H sync/C sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative V sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative

15 kHz:

Control-S:

Remote:

Output:

Control-S:

Remote:

General

Power Supply:	AC 120 V, 50/60 Hz
Power Consumption:	100-120 V, 2.8 A, 300 W
Dimensions (max.):	830 (W) × 641 (H) × 1044 (D) mm (32 ³ / ₄ × 25 ¹ / ₄ × 41 ¹ / ₈ inches)
Mass:	75 kg (165 lb 6 oz)

*Available when an optional Video Input Board PWB-411D is inserted. See PWB-411D specifications.

Mini jack (mono)

RS-422: D-sub 9-pin connector (female)

Linked ABL: Mini jack (mono)

Mini jack (mono)

RS-422: D-sub 9-pin connector (female)

Linked ABL: Mini jack (mono)

*1 Some items are not available in some areas. For details, please contact your nearest Sony office.

*2 RM-PJ1292 is included in the PWK-411D.

*3 In the case of the RVP-411DS with the VPS-411RF.

*4 ANSI is a measuring method of the American National Standards Institute ANSI IT7.215.

3-1 Projection wall units

RVP-511DS*1 (NTSC/PAL/SECAM/NTSC_{4.43})

- 50-inch projection wall unit for various projection wall applications
- Lightweight (88 kg) and a short cabinet depth (1236 mm) for easier handling and stacking
- Input capability: double scan video signals and computer signals which conform to VGA mode 3 (31.469 kHz/59.94 Hz) standard
- Optional Video Input Board PWB-411D available for composite, Y/C, component and 15 kHz RGB video signals
- Double scan capability for flicker free signal reproduction when used with the optional PWB-411D
- Adopts optical coupling CRT for high contrast image display
- Color temperature selection: 3200 K/6500 K/9300 K/User preset (factory preset: 6500 K)
- Two-part construction enables the CRT assembly, together with the electronic chassis, to be easily separated from the cabinet
- Wide viewing angle: horizontal 150 degrees, vertical 70 degrees
- Optional Rear Screens VPS-515RF/511RF with ultra-thin screen surround are available
- Optional Projection Wall Chassis CHP-411D available for system versatility
- Optional wired/wireless remote control unit RM-PJ1292*2 with address function for all projector control functions, including input selection, picture control, RGB size and shift and centering controls



Supplied accessories:	Remote Commander Cable (1.2 m) AC Power Cord Operation Manual
Optional accessories*1:	Rear Screen with 0.2 mm screen surround VPS-515RF Rear Screen with 1.7 mm screen surround VPS-511RF System Control Kit PWK-411D Video Input Board PWB-411D Base Stand PWR-B511A Position Beam PWR-P512A (for dual mount) Position Beam PWR-P513A (for triple mount) Remote Control Receiver RM-PJ10 Remote Cable RCC-1W2 (for RS-422)

Specifications

Optical

Projection System:	3 picture tubes, 3 lenses, rear projection
Picture Tube:	7.7-inch (5.5-inch raster size) high-luminance monochrome optical coupled with sealed coolant
Projection Lens:	High performance lens, F1.1/77 mm
Screen:	Optional (See Optional Accessories)
Light Output*3:	ANSI*4: 125 cd/m ² (fH: 31.5 kHz, fV: 60 Hz) Color temperature: 6500 K Peak white: 977 cd/m ²

Electrical

Scan Frequency:	31.25 kHz/50 Hz/1:1, 31.25 kHz/100 Hz/2:1 31.5 kHz/60 Hz/1:1, 31.5 kHz/120 Hz/2:1 (Horizontal Frequency/Vertical Frequency/Interlace Ratio)
Resolution:	1000 × 580 dots (measured at RGB 31.25 kHz input)
RGB Bandwidth:	30 MHz (-3 dB)
Test Signal:	Cross hair, Hatch (fine), Diagonal hatch, Circle hatch, Dot pattern, H pattern, ME, Window, All white (100 IRE), Black
Input:	RGB: BNC × 5
31 kHz:	R: 0.7 Vp-p ±2 dB, 75 Ω G: 0.7 Vp-p ±2 dB, 75 Ω G on sync: 1.0 Vp-p ±2 dB, 75 Ω, sync negative B: 0.7 Vp-p ±2 dB, 75 Ω H sync/C sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative V sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative

15 kHz:	*Available when an optional Video Input Board PWB-411D is inserted. See PWB-411D specifications.
Control-S:	Mini jack (mono)
Remote:	RS-422: D-sub 9-pin connector (female) Linked ABL: Mini jack (mono)
Output:	Mini jack (mono)
Control-S:	RS-422: D-sub 9-pin connector (female)
Remote:	Linked ABL: Mini jack (mono)
General	
Power Supply:	AC 120 V, 50/60 Hz
Power Consumption:	100-120 V, 2.8 A, 300 W
Dimensions (max.):	1018 (W) × 781 (H) × 1236 (D) mm (40 ³ / ₈ × 30 ³ / ₄ × 48 ³ / ₄ inches)
Mass:	88 kg (194 lb)

*1 Some items are not available in some areas. For details, please contact your nearest Sony office.

*2 RM-PJ1292 is included in the PWK-411D.

*3 In the case of the RVP-511DS with the VPS-511RF.

*4 ANSI is a measuring method of the American National Standards Institute ANSI IT7.215.

3-2 Projection wall accessories

VPS-515RF*/415RF*

- Screen with ultra-thin 0.2 mm screen surround for RVP-511DS/411DS
- Suitable for permanent applications

Dimensions:

VPS-515RF: 1011.4(W) × 84.2(D) × 760.4(H) mm
(39⁷/₈ × 3³/₈ × 30 inches)

VPS-415RF: 823.4(W) × 84.2(D) × 620.4(H) mm
(32¹/₂ × 3³/₈ × 24¹/₂ inches)

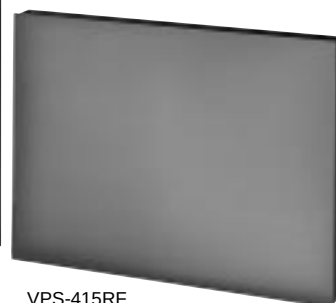
Mass:

VPS-515RF: 5.2 kg (11 lb 7 oz)

VPS-415RF: 3.7 kg (8 lb 3 oz)



VPS-515RF



VPS-415RF

* Not available in some areas. For details, please contact your nearest Sony office.

VPS-511RF*/411RF*

- Screen with durable 1.7 mm screen surround for RVP-511DS/411DS
- Suitable for general applications

Dimensions:

VPS-511RF: 1011 (W) × 87.1(D) × 760 (H) mm
(39⁷/₈ × 3¹/₂ × 30 inches)

VPS-411RF: 823 (W) × 87.1(D) × 620 (H) mm
(32¹/₂ × 3¹/₂ × 24¹/₂ inches)

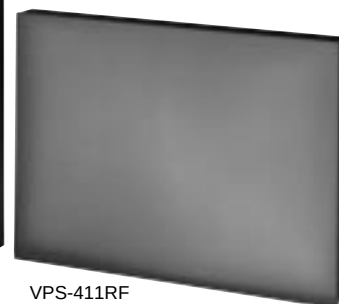
Mass:

VPS-511RF: 7.9 kg (17 lb 7 oz)

VPS-411RF: 6.2 kg (13 lb 11 oz)



VPS-511RF



VPS-411RF

* Not available in some areas. For details, please contact your nearest Sony office.

PWR-B511A*1/B411A*1

Installation Stand for RVP-511DS/411DS

- Base stand for the RVP-511DS/411DS with casters and height-adjuster
- For up to 8 (PWR-B511A for RVP-511DS) or 10 (PWR-B411A for RVP-411DS) vertical stacks*2

Dimensions: PWR-B511A: 878 (W) × 587.7 (H) × 1126 (D) mm
(34⁵/₈ × 23¹/₄ × 44³/₈ inches)

PWR-B411A: 690 (W) × 587.7 (H) × 934 (D) mm
(27¹/₄ × 23¹/₄ × 36⁷/₈ inches)

Mass: PWR-B511A: 50 kg (110 lb 4 oz)

PWR-B411A: 44 kg (97 lb)



PWR-B511A



PWR-B411A

*1 Not available in some areas. For details, please contact your nearest Sony office.

*2 In some cases, reinforcement against earthquakes may be required.

PWR-P512A*/P513A*/P412A*/P413A*

Position Beams for RVP-511DS/411DS

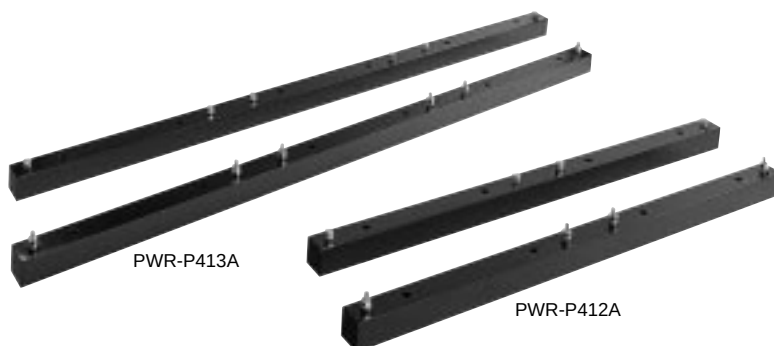
- A pair of position beams for dual or double mount horizontally of RVP-511DS/411DS
- Can be utilized in combination with other PWR-P513A/P512A/P412A/P413A beams for more than triple mount.
- PWR-P512A for dual mount of the RVP-511DS
- PWR-P513A for triple mount of the RVP-511DS
- PWR-P412A for dual mount of the RVP-411DS
- PWR-P413A for triple mount of the RVP-411DS

Dimensions: PWR-P512A: 1940(W) × 80(H) × 80(D) mm
(76¹/₂ × 3¹/₄ × 3¹/₄ inches)

PWR-P513A: 2952(W) × 80(H) × 80(D) mm
(116¹/₄ × 3¹/₄ × 3¹/₄ inches)

PWR-P412A: 1564(W) × 80(H) × 80(D) mm
(61⁵/₈ × 3¹/₄ × 3¹/₄ inches)

PWR-P413A: 2388(W) × 80(H) × 80(D) mm
(94¹/₈ × 3¹/₄ × 3¹/₄ inches)



PWR-P413A

PWR-P412A

Mass: PWR-P512A: 24 kg (52 lb 15 oz)
PWR-P513A: 36 kg (79 lb 6 oz)
PWR-P412A: 20 kg (44 lb 1 oz)
PWR-P413A: 30 kg (66 lb 2 oz)

*1 Not available in some areas. For details, please contact your nearest Sony office.

3-2 Projection wall accessories

PWB-411D*

Composite Video Input Board for RVP-511DS/411DS

- Accepts composite, Y/C, component and 15 kHz RGB video signals
- Compatible with NTSC/PAL/SECAM/NTSC^{4.43}
- Includes field doubling circuit

Input

Composite video:

BNC × 1
1.0 Vp-p, sync negative, 75 Ω

Y/C:

BNC × 2

Y (luminance): 1.0 Vp-p ±2 dB, sync negative, 75 Ω

C (chrominance): 0.286 Vp-p ±2 dB, 75 Ω (NTSC), 0.3 Vp-p ±2 dB, 75 Ω (PAL)

RGB/component:

BNC x5

R/R-Y: 0.7 Vp-p ±2 dB, 75 Ω

G: 0.7 Vp-p ±2 dB, 75 Ω

G on sync/Y: 1.0 Vp-p ±2 dB, sync negative, 75 Ω

B/B-Y: 0.7 Vp-p ±2 dB, 75 Ω

H sync/C sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative

V sync: 1.0 to 4.0 Vp-p, 75 Ω, positive/negative



* Not available in some areas. For details, please contact your nearest Sony office.

PWK-411D*

System Control Kit for

RVP-511DS/411DS

Includes accessories for system control:

- Remote Commander RM-PJ1292
 - Wired/wireless remote control unit
 - Full remote operation
 - Function keys can be illuminated for operation in dark rooms
- SIRCS Cable (10m)
- AA size Battery (3)
- System Manual



RM-PJ1292

* Not available in some areas. For details, please contact your nearest Sony office.

CHP-411D*

Projection Wall Chassis for

RVP-511DS/411DS

- Provides flexibility in various applications
- For added flexibility, can be combined with the RVP-511DS/411DS cabinet
- Can be used as a back-up chassis unit for RVP-511DS/411DS

Mass: 48kg (105 lb 13 oz)

Dimensions: 671 (W) × 469 (H) × 450 (D) mm
(26 1/2 × 18 1/2 × 17 3/4 inches)

Supplied accessories:

AC Power Cord
Remote Control Cable (1.0 m)
Operation Manual



* Not available in some areas. For details, please contact your nearest Sony office.

RM-PJ10

Remote Control Receiver for RVP-511DS/411DS

Power requirements:

DC 6 V

Dimensions: 100 (W) × 50 (H) × 57 (D) mm
(4 × 2 × 2 1/4 inches)

(including Mounting Bracket)

Mass: 0.1 kg (3.5 oz)

(including Mounting Bracket)

Supplied accessories:

Remote Control Cable: 15 m (45 feet)
Screws



4-1 JJTRON

ADN-8080 (NTSC/PAL/SECAM)

JJTRON Display System

•16:9 aspect, 80-inch LED-based display for indoor advertising •8 mm pitch Surface Mounted Device type LEDs, with each pixel made up of individual R, G and B LEDs
 •High brightness of 1,000 cd/m² for indoor use •224 x 120 pixel resolution •Signal processor and screen in one "Plug and Play" system •High contrast and reliability assured with the "Black Mask" on the screen surface •Lightweight and compact •Full 10-bit digital processing (1024 color gradation)
 •Advanced color reproduction with the color compensation circuit •On-screen menu for adjustment/setting •Various remote control capabilities: supplied remote control unit RM-JJ100, Control S and RS-422

Supplied accessories: Remote Commander RM-JJ100
 Remote Commander Cable (15 m)
 Optional accessories: Video Input Board BKJ-100
 Remote Control Receiver RM-PJ10



Specifications

Picture performance

Device: Full color one-chip SMD type LED
 Pixel pitch: 8 mm × 8 mm
 Viewable picture area: 1792 (W) × 960 (H) mm (70⁵/₈ × 37⁷/₈ inches)
 2033 mm (measured diagonally) (80 inches)
 Aspect ratio: 16:9
 Color system: NTSC/PAL/SECAM automatic switching
 (When BKJ-100 is attached)
 Brightness: 1,000 cd/m² (white peak initial value)
 Pixel density: 15,625 pixels/m²
 Number of pixels (RGB trio):
 224 (W) × 120 (H) = 26,880 dots
 color temperature: 7000 K
 Signal processing: Full 10 bit
 Viewing angle: Horizontal 145°
 Vertical 145°

LED half brightness period:
 40000 H (Video), 70000 H (All white)

General

Dimensions: 1880 (W) × 1060 (H) × 260 (D) mm (approx.)
 (74¹/₈ × 41³/₄ × 10³/₄ inches)
 Current consumption: Max. 12 A
 Power requirements: AC 200 to 240 V ±10%, 50/60 Hz
 Mass: 110 kg (approx.) (50 lbs)
 Waterproofing: Not applicable (indoor use only)
 Operating temperature: 0 to 40 °C (32 to 104 °F)
 Operating humidity: 35 to 85% (without condensation)
 Storage temperature: -20 to 60 °C (-4 to 140 °F)
 Storage humidity: 10 to 90% (without condensation)

Input

INPUT A

Frequency (fH/fV): 31.25 kHz/50 Hz, 31.5 kHz/60 Hz
 Double scanned RGB: BNC × 5
 R: 0.7 Vp-p ±2 dB positive, 75 Ω terminated
 G: 0.7 Vp-p ±2 dB positive, 75 Ω terminated
 Sync on G: 1.0 Vp-p ±2 dB sync negative, 75 Ω terminated
 B: 0.7 Vp-p ±2 dB positive, 75 Ω terminated

HD/COMP SYNC

Composite sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated
 Horizontal sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated

VD

Vertical sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated

Remote

Control S IN/OUT: Mini jack, 5.0 Vp-p
 RS-422 IN/OUT: D-sub 9-pin (female)



INPUT B (when BKJ-100 is attached)

Frequency (fH/fV): 15.625 kHz/50 Hz, 15.75 kHz/60 Hz
 Composite video: BNC × 1, 1.0 Vp-p, sync negative, 75 Ω terminated
 Analog RGB/YUV: BNC × 5
 R/R-Y: 0.7 Vp-p ±2 dB positive, 75 Ω terminated
 G: 0.7 Vp-p ±2 dB positive, 75 Ω terminated
 Sync on G/Y: 1.0 Vp-p ±2 dB sync negative, 75 Ω terminated
 B/B-Y: 0.7 Vp-p ±2 dB positive, 75 Ω terminated

HD/COMP SYNC

Composite sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated
 Horizontal sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated

VD

Vertical sync: 1.0 to 4.0 Vp-p sync positive/negative, 75 Ω terminated

Regulation compliance

UL (1950), c-UL (CSA C 22.2 No. 950),
 TUV (EN 60950), FCC Class A, IC Class A,
 CE Class B, C-Tick, VCCI Class A, JEIDA

4-2 JJTRON accessory

BKJ-100

JJTRON Accessory Board

- Video input board for ADN-8080
- Composite, YUV, RGB inputs

Dimensions: 41.5 (W) × 187 (H) × 55 (D) mm
(1¹¹/₁₆ × 7³/₈ × 2¹/₄ inches)

Mass: 200 g (7 oz)



RM-PJ10

Remote Control Receiver for ADN-8080

Power requirements:

DC 6 V

Dimensions: 100 (W) × 50 (H) × 57 (D) mm
(4 × 2 × 2¹/₄ inches)

(including Mounting Bracket)

Mass: 0.1 kg (3.5 oz)

(including Mounting Bracket)

Supplied accessories:

Remote Control Cable: 15 m (45 feet)

Screws



DISPLAY
PRODUCTS

5. Other

DSC-1024HD

Digital Scan Converter

•Versatile upward and downward digital scan converter
•Input accepted in the 15.6 to 70 kHz horizontal frequency range and the 50 to 120 Hz vertical frequency range and output at an industry standard 15.6 kHz, 31.5 kHz, 33.75 kHz (1080I*), 37 kHz, 48 kHz or 64 kHz frequency
•Built-in transcoder for universal conversions between video signal formats •Genlock function is available •PAL/NTSC conversion capability •Scan doubler capability •Automatic input signal recognition •Variable offset sampling and high-density vertical interpolation capability for conversion resolutions •Adjustable aspect ratios •Built-in test pattern generator •Zoom, pan and freeze frame functions provided for easy operation •On-screen display for adjustment/operation

* When a 1080I signal is output, a fV (60 Hz/59.94 Hz) is selectable on the on-screen display menu.

Supplied accessories: D-sub 15-pin to 5 BNC cable (6 ft.)
Operation Manual
Optional accessories: Mounting Bracket MB-510
Signal Cable SMF-400/401
Remote Commander RM-854/PJ1292/PJ1001, etc.

Specifications

General

Power requirements: AC 100 to 120V, 0.4 A (max.), 50/60 Hz
AC 220 to 240 V, 50/60 Hz
Power consumption: 30 W (max. power on), 3 W (typical power off)
Operating temperature: 0 to 35 °C (50 to 96 °F)
Dimensions: 424 (W) × 44 (H) × 354 (D) mm
(16¾ × 1¾ × 14 inches)
Mass: 4.1 kg (9 lb 1 oz)

Input connector

Video 1: Composite: Loop-through BNC
S Video: Loop-through Mini DIN 4-pin
Video 2: Composite (composite/-/-),
Component (G/B/R, Y/B-Y/R-Y): Loop-through
D-sub 15-pin
Video 3: Component (G/B/R, Y/B-Y/R-Y): Loop-through
D-sub 15-pin

Audio1/2/3: L/R RCA jack

Output connector

Video out: Composite: BNC
S Video: Mini DIN 4-pin
Component (G, B, R, B-Y/R-Y):
D sub 15-pin
Audio: L/R RCA jack

Signal level

Composite: 1.0 Vp-p (typical), (Video 1: Automatic 75 Ω termination, Video 2: 75 Ω/Hi-Z)
S Video: Y: 1.0 Vp-p (typical), sync negative
C: 0.286 Vp-p (NTSC)/0.3 Vp-p (PAL) (typical)
Automatic 75 Ω termination
Component: G/B/R input: 0.714 Vp-p (typical) (Video 2: auto sync, Video 3: sync on G/external sync, switchable), 75 Ω/Hi-Z
HV.sync/c.sync: 1.0 to 5.0 Vp-p
G/B/R output: 0.714 Vp-p (typical) (with external sync), 75 Ω (typical)
HV.sync/c.sync: TTL
Y/B-Y/R-Y input: 0.7 Vp-p (typical) (NTSC/PAL, sync on Y), 75 Ω/Hi-Z
Y/B-Y/R-Y output: 0.7 Vp-p (typical) (with sync on Y), 75 Ω (typical)



Format conversion

Capture range: fH: 15.6 to 70 kHz, fV: 50 to 120 Hz
Sampling rate: 14.3 to 40 MHz offset phase max.
(Equivalent to 80MHz sampling)
14.3 to 50 MHz
Output pixel clock: Line doubled vertically for each field
Line doubler: Reference: Black/burst signal on VIDEO1 input
Genlock: Applicable to NTSC/PAL outputs only
Genlock ON/OFF, SCH adjustment
Picture adjustment: CONTRAST/PHASE (except for GBR/YBR/PAL)/
CHROMA (except for GBR)
SIZE/CENTER/ZOOM (×2, ×3, ×4)/APERTURE
(ON/OFF)/STILL (ON/OFF)

Regulation compliance

UL mark (UL-1950)/FCC 15-J class B
CSA mark (C22.2 No. 950)/IC class B