

Sony Data Projector

# VPD-S1800Q/S1800QM



# The Ultra-Bright Projector for Large-Venue Applications

It is a challenge to project a rich, complex image effectively and persuasively on a big screen – especially before large audiences in exhibition halls, convention centers, classrooms, training areas and theaters.

Sony presents the solution: a new large-venue projector that delivers images of exceptional brightness, resolution and color accuracy. The Sony VPD-S1800Q/S1800QM incorporates advanced digital technology for large-screen image projection. Its Digital Light Processing<sup>TM</sup>(DLP<sup>TM</sup>) system employs Digital Micromirror Device<sup>TM</sup>(DMD<sup>TM</sup>) to dramatically increase the brightness of the projected image. Digital processing technology

#### **Features**

#### **Superior Picture Performance**

#### High Brightness

Utilizing the DLP technology, the VPD-S1800Q/S1800QM provides an outstanding light output of 1,800 ANSI lumens\*. Images can be vividly displayed even in brightly lit environments.

\* At AC200 to 240V in Light Boost On

#### **Excellent Color Reproduction**

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With Digital Light Processing technology, the VPD-S1800Q/S1800QM achieves rich, vivid color reproduction as well as accurate grayscale values. Being a reflective device, the Digital Micromirror Device makes it possible to display a smoother image across large-screen display areas. Using a Pulse Width Modulation process in which mirrors are modulated between on/off states, the light intensity can be controlled quite accurately over time - yielding a very impressive grayscale reproduction. And the projector's Xenon lamp has a flat-spectrum characteristic that allows the optimum display of red/green/blue elements while maintaining high brightness level.

This combination of advanced projection technologies gives the VPD-S1800Q/S1800QM spectacular picture quality.

#### **Maximum Impact On Large Screens**

The VPD-S1800Q/S1800QM can be used with screens ranging from 100 to 600 inches in size. Audiences of large numbers can be addressed in convention centers, event halls and other spaceous venues with maximum impact.

#### **Multiscan Capability**

With scan converter technology incorporated, the VPD-S1800Q/S1800QM is compatible with a wide variety of input sources: video, computer even HDTV\*1. The projector accepts signals with a horizontal frequencies ranging from fH: 15 to 65kHz. For RGB signals of greater than 16 KHz a convenient Scan Converter ON/OFF Switch can be used to observe the unprocessed signal.\*2

- \*1 The VPD-S1800Q/S1800QM is compatible with HDTV signals when an optional IFB-1301 Interface Board is installed. HDTV: 1125/60 interfaced HDTV studio standard system.
- With very high resolution images (1024 x 768 or greater) Scan Converter sometimes cannot be set to off.

#### Selectable Picture Mode\*1

When operating with 525/60 system signals, the VPD-S1800Q/ S1800QM will allow picture mode selection to accomodate both LETTER BOX and SQUEEZE\*2 (525 Wide-Screen) signals. When either mode is selected via the on-screen display, the signal-type selected will be automatically converted to 800 x 450 pixels

display for LETTER BOX and  $800 \times 480$  pixels display for SQUEEZE signals.

- \*1 Picture mode selection only appears when a 525/60 system signal is selected.
- \*2 Applicable only to composite and Y/C signals. Will be applicable to component signals in the future. For details, please consult your nearest Sony office.

#### **System Versatility**

#### Simultaneous Input Capability

In addition to component (Y/R-Y/B-Y), RGB, S Video and composite video inputs, the VPD-S1800Q/S1800QM provides a 14-pin multiconnector in INPUT B for connection with the optional Sony PC-1271/1271M Signal Interface Switcher, allowing several input sources to be connected simultaneously. To maximize system versatility, a variety of optional interface board from the Sony IFB series can be inserted into the INPUT B.

#### RS-422A Remote Interface

For convenient computer hookup, the VPD-S1800Q/S1800QM provides standard RS-422A interface connection to allow full control and expand system versatility.

#### Flexible Installation and Performance

#### Installation in a Wide Range of Locations

The Sony VPD-S1800Q/S1800QM can be installed in various locations: mounted on desktop, floor, even in rear projection display applications. The optional lens allows the image throwing distance to vary, allowing the projector to be positioned for maximum installation convenience.

#### Stacking Capability

Outstandingly bright image reproduction can be achieved by stacking Sony projectors. Up to a maximum of four VPD-S1800Q/S1800QM projectors can be stacked and aligned for intensified light output. Stacking the projector also means the show will go on by providing an extra safety measure of redundancy.

#### Power Focus, Power Zoom and Picture Shift Functions

Power focus and power zoom\* can be easily controlled with the supplied remote commander. The projected image can be shifted up and down using the picture shift function.

\* Applicable only to optional lenses with zoom functions.

also increases the accuracy of both grayscale and color reproduction. However, high technology does not mean high complexity. The Sony VPD-S1800Q/S1800QM is easily transportable, quick to set up and simple to operate. Its flexibility includes Multiscan compatibility for a wide range of input signals – and extends to optional lenses that are interchangeable, allowing you to use the lens that is appropriate for any environment.

By bringing together advanced technologies and convenient operating functions, Sony VPD-S1800Q/S1800QM Multiscan Projector provides state-of -the-art performance that is ideal for a broad range of applications where uncompromising image quality is essential to the success of a large-venue presentation.



#### **Option Lenses**

An array of optional lenses allows the appropriate lens to be selected for any application or installation environment:

- VPDL-ZP50 [2.6~3.9:1 (Throw: Screen Width)] 1.5 times zoom standard focus lens
- VPDL-ZP80 [3.8~7.7:1 (Throw: Screen Width)] 2 times zoom long focus lens
- VPDL-FP30 [1.3:1 (Throw: Screen Width)] fixed short focus lens

#### Easy Setup

The DMD panel is fixed to an optical prism, which enables all colors to be in registration without the need for adjustment. In addition, the 36 preset memory data settings enable the projector to automatically recognize the connected signal source and display it correctly on the screen.

#### Mobility and Durability

With carrying handles, the projector can be easily transported and installed. Durability is assured with the unit's aluminum die cast construction.



VPDL-ZP50



VPDL-ZP80



VPDL-FP30

# Easy Operation

#### Remote Control Capability

A user-friendly joystick-type Sony RM-PJM800 Remote Commander can be used to control all projector adjustments and operations. By



RM-PJM800

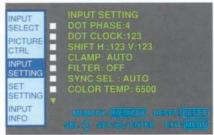


projector, the operational range of the remote commander can be extended. Furthermore, when the optional Sony RM-PJ21 Mouse Receiver is connected to a computer, the RM-PJM800 can also remotely operate the connected computer.

\*\*User-Friendly, Multi-language Menus\*\*

connecting the optional Sony RM-PJ10 Remote Control Receiver to the

All important functions and adjustment status indicators are displayed on screen, so the VPD-S1800Q/S1800QM can be amazingly simple to operate. Menus can be displayed in any of five languages: English, French, German, Spanish and Italian.



Example of an OSD menu

#### Selectable White Balance

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

#### **Others**

#### Power Saving Function

The VPD-S1800Q/S1800QM incorporates a power saving function. When power saving mode is set to ON, and the projector has not received any input or sync signal for over 10 minutes, the projector automatically reduces its power consumption. The projector automatically returns to its normal operating mode when recognizes any command from the control panel or remote commander.

#### TRIG Terminal

The VPD-S1800Q/S1800QM has a TRIG terminal to control the power switching for screens, curtains and lighting in an integrated projection room.

# **Optional Accessories**

#### Optional accessories for convenience and system flexibility

#### **INTERFACE BOARDS**



#### IFB-12

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

- Functions as an input/output\* board
   RGB bandwidth of 300MHz
   The VPD-S18000/S18000M does not contain the very second contains the very
- The VPD-S1800Q/S1800QM does not conform to the HDTV input signal when the IFB-12 is used.



#### **IFB-20**

Analog RGB input (D-sub 9-pin)

· RGB bandwidth of 120MHz



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

· RGB bandwidth of 150MHz



#### **IFB-30**

Digital RGB input (D-sub 9-pin)

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



IFB-1000

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



IFB-1301

HD (Y/C P<sub>B</sub>/P<sub>R</sub>) Input (3 x BNC)

- Color, Hue and Sharpness adjustment available

#### **INTERFACE CABLES**



#### RCC-5G/10G/30G

- • D-sub 9-pin ◀
- . Length: 5, 10 and 30 meters



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

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



#### SIC-M\*2

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



#### SMF-400

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



#### SMF-401

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



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

#### SIC-22

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



#### SIGNAL INTERFACE SWITCHER





#### PC-1271/1271M

- Provides eight slots for optional interface boards. By using two PC-1271/1271M Switchers, a maximum of 16 inputs can be connected simultaneously.
- · Remote control capability with the RM-PJ1000 and RM-PJM800. The switcher can also be controlled with a custom-made remote control unit via the REMOTE 2 (D-sub 25-pin).
- . The switcher can be connected to the projector using a SIC-M multi-cable\* (50m) via REMOTE 1. Incorporates a cable length compensation switch to maintain an RGB bandwidth of 70MHz when using the multi-cable. A 150MHz RGB bandwidth is guaranteed for Monitor OUT.
- When one of the input selection switchers is selected, the front panel of the chosen interface board automatically illuminates.
- When power is turned on, the PC-1271/ 1271M reconnects the channel that was in use immediately prior to the power being turned off.
- . Mountable in an EIA 19-inch rack with the supplied rack mount kit.

#### OTHER

#### ADP-10

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

#### ADP-20

(Signal adapter, Macintosh to VGA)

#### VPS-100FH

(100-inch flat screen)

#### VPS-120FH

(120-inch flat screen)



rear panel

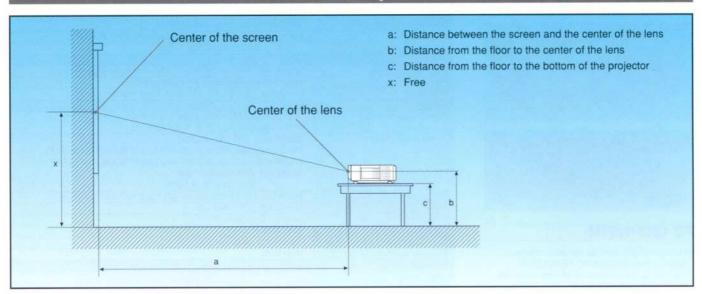
# Specifications

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Optical	
Projection system:	3 DMD panels, 1 lens projection system
DMD panel:	0.7-inch x 3, total of 1,526,400 pixels
Light source:	1kW Xenon lamp
Screen coverage:	100 to 600-inch measured diagonally
Light output:	ANSI*1: 1800lm (at AC 200 to 240V in LIGHT BOOST ON)
***************************************	1200im (at AC 100 to 120V)
Signals	
Color system:	NTSC, PAL, SECAM, NTSC4.43, PAL-M Automatically selected
Resolution:	848 x 600 pixel (RGB), 500TV Lines (VIDEO)
RGB input:	Horizontal: 15 to 65kHz Vertical: 50 to 120Hz
General	
Power requirements:	VPD-S1800Q: AC 100 to 240V*², 50/60Hz
	VPD-S1800QM: AC 220 to 240V, 50/60Hz
Power consumption:	1500W max. (AC 100 to 120V)
	1500W max. (AC 200 to 240V, with LIGHT BOOST set to OFF)
	1700W max. (AC 200 to 240V, with LIGHT BOOST set to ON)
	STAND BY VPD-S1800Q 30W
	VPD-S1800QM 100W
Dimensions:	726(W) x 274(H) x 684(D)mm (28 5/8 x 10 7/8 x 27 inches)
Mass:	Approx 60kg (132 lb 4 oz)
Operating temperature:	10 to 35°C (50 to 95°F)
Operating humidity:	35 to 85%
Storage temperature:	-20 to 60°C (-4 to 104°F)
Storage humidity:	10 to 90%
Inputs/Outputs	
Video IN:	
Composite video:	Loop-through BNC
0101	1Vp-p±2dB sync negative, 75Ω
S Video:	
Y IN:	BNC
0.00	1Vp-p±2dB sync negative, 75Ω
C IN:	BNC
	Burst 0.286Vp-p±2dB (NTSC), 75Ω
	0.3Vp-p±2dB (PAL), 75Ω
Y/C IN:	Loop-through mini DIN 4-pin
Y (luminance):	1Vp-p±2dB sync negative, 75Ω
C: (chrominance):	Burst 0.286Vp-p±2dB (NTSC), 75Ω
	0.3Vp-p±2dB (PAL), 75Ω
Input A:	
Analog	
RGB/Component:	BNC x 5
R/R-Y:	0.7Vp-p±2dB positive, 75Ω
G:	0.7Vp-p±2dB positive, 75Ω,
G with sync/Y:	1Vp-p±2dB sync negative, 75Ω
B/B-Y:	0.7Vp-p±2dB positive, 75Ω
Sync/HD:	
Composite sync:	0.6 to 8Vp-p, high impedance, positive/negative
Horizontal sync:	0.6 to 8Vp-p, high impedance, positive/negative
VD:	0.04-00/
Vertical sync:	0.6 to 8Vp-p, high impedance, positive/negative
Input B:	14 pin Multi connectors (Input: Male, Output: Female)
CONTROLS	Stores mini lank EVa a DO EV maninum autout 60-A
IN/PLUG IN POWER: OUT:	Stereo mini-jack, 5Vp-p, DC 5V, maximum output 60mA
RS-422A:	Stereo mini-jack, 5Vp-p
TRIG:	D-Sub 9pin (female) Mini-jack
riud.	Power On: DC 5V, output impedance 4.7kΩ
	Power Off: 0V
Safety Regulations	ELECTRICAL DE LA CONTRACTOR DE LA CONTRA
VPD-S1800Q:	UL1950, CSA950, FCC ClassA, IC Class A
VPD-S1800QM:	EN60 950 (TÜV), CE Class B
Accessories	
Supplied accessories:	Remote Commander RM-PJM800
	Remote Commander cable (15m)
	Size AA (R6) battery (x2)
	AC power cord
	Operating manual
Optional accessories:	Projector lamp (for replacement) PK-PJ1800
	1.5 times zoom standard focus lens VPDL-ZP50
	2 times zoom long focus lens VPDL-ZP80
	Fixed Short focus lens VPDL-FP30
	Signal Adapter HD D-sub15-pin to D-sub 9-pin for SIC Cable) ADP-10
	Signal Adapter Macintosh-VGA Adapter ADP-20
	D-sub HD15-pin to 5BNC cable SMF-400
	D-sub HD15-pin - D-sub HD15-pin SMF-401
	Interface board IFB-12 / 20 / 21 / 30 / 1000 / 1301
	Signal interface cable SIC-20A / 20B / 20C / 21 / 22
	Signal interface cable SIC-M 1 / 5 / 15 / 25 / 50
	Signal interface switcher PC-1271/1271M
	9 pin remote cable RCC-5G / 10G / 30G (for RS-422A)
	Remote control unit RM-PJ1000
	Mouse receiver RM-PJ21 Remote control receiver RM-PJ10
	100-inch Flat Screen VPS-100FH
The second secon	120-inch Flat Screen VPS-120FH
A ANCI lumas is massurament ma	thod defined by American National Standard IT7 215

ANSI lumen is measurement method defined by American National Standard IT7.215.
 UL listed for 120V operation.

# **Installation Example**

# Desk top



# When using the VPDL-ZP50 1.5 times zoom standard focus lens

Screen	size (inches)	100	120	150	180	200	250	300	350	400	500	600
	Minimum	5200 (204 7/s)	6250 (246 1/8)	7820 (307 7/s)	9390 (369 %)	10430 (410 ¾)	13050 (513 ¾)	15660 (616 %)	18280 (719 %)	20890 (822 ½)	26120 (1028 ½)	31350 (1234 %)
а	Maximum	7860 (309 ½)	9430 (371 ½)	11780 (463 7/6)	14130 (556 ½)	15700 (618 %)	19630 (772 ¾)	23550 (927 1/8)	27470 (1081 ½)	31390 (1236)	39240 (1544 ¾)	47080 (1853 %)
b	Minimum	x-762 (30)	x-914 (36)	x-1143 (45)	x-1372 (54)	x-1524 (60)	x-1905 (75)	x-2286 (90)	x-2667 (105)	x-3048 (120)	x-3810 (150)	x-4572 (180)
	Maximum	x+762 (30)	x+914 (36)	x+1143 (45)	x+1372 (54)	x+1524 (60)	x+1905 (75)	x+2286 (90)	x+2667 (105)	x+3048 (120)	x+3810 (150)	x+4572 (180)
С	Minimum	x-942 (37 1/s)	x-1094 (43 1/8)	x-1323 (52 1/8)	x-1552 (61 1/s)	x-1704 (67 1/8)	x-2085 (82 1/s)	x-2466 (97 1/8)	x-2847 (112 1/8)	x-3228 (127 1/s)	x-3990 (157 1/a)	x-4752 (187 1/s)
	Maximum	x+602 (23 3/4)	x+754 (29 ¾)	x+983 (38 ¾)	x+1212 (47 ¾)	x+1364 (53 ¾)	x+1745 (68 ¾)	x+2126 (83 ¾)	x+2507 (98 ¾)	x+2888 (113 ¾)	x+3650 (143 3/4)	x+4412 (173 ¾)

### When using the VPDL-ZP80 2 times zoom long focus lens

Screen	size (inches)	100	120	150	180	200	250	300	350	400	500	600
	Minimum	7790 (306 %)	9360 (368 %)	11710 (461 ½)	14070 (553 7/a)	15640 (615 %)	19560 (770 1/8)	23480 (924 ½)	27400 (1078 %)	31330 (1233 %)	39170 (1542 1/8)	47010 (1851)
а	Maximum	15620 (614 7/8)	18750 (738 %)	23460 (923 ¾)	28170 (1109)	31300 (1232 ½)	39150 (1541 %)	46990 (1850 ½)	54840 (2159)	62680 (2467 %)	78370 (3085 ½)	94060 (3703 1/s)
b	Minimum	x-762 (30)	x-914 (36)	x-1143 (45)	x-1372 (54)	x-1524 (60)	x-1905 (75)	x-2286 (90)	x-2667 (105)	x-3048 (120)	x-3810 (150)	x-4572 (180)
	Maximum	x+762 (30)	x+914 (36)	x+1143 (45)	x+1372 (54)	x+1524 (60)	x+1905 (75)	x+2286 (90)	x+2667 (105)	x+3048 (120)	x+3810 (150)	x+4572 (180)
С	Minimum	x-942 (37 1/8)	x-1094 (43 1/8)	x-1323 (52 1/8)	x-1552 (61 1/s)	x-1704 (67 ½)	x-2085 (82 1/8)	x-2466 (97 ½)	x-2847 (112 1/e)	x-3228 (127 1/s)	x-3990 (157 1/s)	x-4752 (187 1/8)
	Maximum	x+602 (23 ¾)	x+754 (29 ¾)	x+983 (38 3/4)	x+1212 (47 ¾)	x+1364 (53 ¾)	x+1745 (68 ¾)	x+2126 (83 ¾)	x+2507 (98 ¾)	x+2888 (113 ¾)	x+3650 (143 ¾)	x+4412 (173 3/4)

# When using the VPDL-FP30 fixed short focus lens

Screen	size (inches)	100	120	150	180	200	250	300	350	400	500	600
a		2600 (102 1/4)	3120 (122 7/8)	3900 (153 ¾)	4690 (184 %)	5210 (205 1/4)	6520 (256 ¾)	7830 (308 1/s)	9130 (359 %)	10440 (411 1/s)	13060 (514)	15670 (617)
b	Minimum	x-762 (30)	x-914 (36)	x-1143 (45)	x-1372 (54)	x-1524 (60)	x-1905 (75)	x-2286 (90)	x-2667 (105)	x-3048 (120)	x-3810 (150)	x-4572 (180)
	Maximum	x+762 (30)	x+914 (36)	x+1143 (45)	x+1372 (54)	x+1524 (60)	x+1905 (75)	x+2286 (90)	x+2667 (105)	x+3048 (120)	x+3810 (150)	x+4572 (180)
С	Minimum	x-942 (37 1/8)	x-1094 (43 1/8)	x-1323 (52 1/8)	x-1552 (61 1/8)	x-1704 (67 1/8)	x-2085 (82 1/s)	x-2466 (97 1/8)	x-2847 (112 1/s)	x-3228 (127 1/8)	x-3990 (157 1/8)	x-4752 (187 1/8)
	Maximum	x+602 (23 3/4)	x+754 (29 3/4)	x+983 (38 ¾)	x+1212 (47 ¾)	x+1364 (53 ¾)	x+1745 (68 ¾)	x+2126 (83 ¾)	x+2507 (98 ¾)	x+2888 (113 ¾)	x+3650 (143 ¾)	x+4412 (173 ¾)