

**SONY**<sup>®</sup>

NTSC/PAL/SECAM/NTSC<sub>4.43</sub>

# 8-inch Color Video Monitors

PVM-8044Q/8041Q/8040



## The PVM 8-inch Series Monitors

*The Sony 8-inch range of monitors has been specifically introduced to meet the need for portable monitors which offer stable performance and excellent features. The long experience of Sony in the development of image display devices is behind the design of this range of monitors, the PVM 8-inch series, ensuring their outstanding reliability and superb picture quality. Low in weight, compact and rugged, these monitors are ideally suited for field operation but are equally at home when rack mounted in a fixed installation.*

*Although these monitors use a common chassis design and the same basic circuit technologies, they vary in features and performance to match varying requirements. The PVM-8044Q is a picture evaluation monitor designed especially for use in field production. The HR (High Resolution) Trinitron CRT fitted to this monitor provides an excellent center resolution of 450 TV lines for superb picture reproduction. The PVM-8041Q is suitable as a functional monitor for multi-purpose application. Both the PVM-8044Q and PVM-8041Q are equipped with a component (Y/R-Y/B-Y or RGB) input facility and can be operated on AC and DC power supplies for ENG/EFP applications. These monitors can also accept both 4:3 and 16:9 aspect ratio signals. For those who require a basic monitoring device, the PVM-8040 is available with both composite video and Y/C inputs.*

*Whether the requirement is picture evaluation or basic picture viewing, the PVM 8-inch series provides the superb picture quality with the facilities that you need.*



**PVM-8044Q**  
Ideal for picture evaluation in  
studio, ENG/EFP applications



**PVM-8041Q**  
For multi-purpose use in  
various applications



**PVM-8040**  
For basic monitoring device

## HIGH QUALITY PICTURE

### • High resolution

The PVM-8044Q incorporates a HR (High Resolution) Trinitron CRT which provides a high horizontal resolution of 450TV lines.

### • Stable color reproduction

Black level stability is a very significant parameter in professional monitoring because of its importance in providing stable, accurate color reproduction. To achieve this stability, the PVM 8-inch series employs a beam current feedback circuit which stabilizes the CRT drive by checking the cathode current at low light signal levels. This effectively corrects the black level drift, giving stable color reproduction over a long period of time and compensating for changes in CRT characteristics.

### • Comb filter for NTSC\*

Both PVM-8044Q/8041Q employ a comb filter for improved luminance/chrominance separation. This reduces cross color interference and contributes to a higher resolution.

## VARIOUS INPUT FACILITIES

### • Component (Y/R-Y/B-Y or RGB) input\*

For maximum convenience and versatility, both the PVM-8044Q and PVM-8041Q have component (Y/R-Y/B-Y or RGB) inputs. This enables direct connection with equipment such as a Camera Control Unit (CCU) and a Betacam SP VTR. This ensures that a high quality picture is monitored for picture evaluation.

*Y/R-Y/B-Y or RGB input is selected via the input selection switch.*

### • Y/C Inputs

Y/C input is standard in the PVM 8-inch series so that luminance/chrominance video signals can be input to the monitor. This minimizes cross color/dot interferences and realizes high quality video pictures.

### • External sync/Sync on Green\*

The PVM-8044Q/8041Q have external sync inputs so that they can be synchronized with other equipment fed with the same sync signal. These monitors can also accept sync on Green signals.

## CONVENIENT OPERATIONAL FEATURES

### • 4:3/16:9 operation capability\*

The PVM-8044Q/8041Q picture aspect ratio can be selected between 4:3 and 16:9 depending on the input signal.

Switch operation		
Underscan mode switch on the front panel	Underscan switch	Underscan switch
4:3/16:9 switch	4:3 normal scan	4:3 underscan
4:3/16:9 switch	16:9 normal scan	16:9 underscan

### • Underscan/Normal scan switch\*

In the Underscan mode, the picture size is reduced and the entire active picture is displayed on the monitor. This facility allows picture edges to be observed.

### • H/V delay\*

With the H/V delay mode, both the horizontal and the vertical blanking areas can be displayed simultaneously for inspection of horizontal and vertical syncs.

### • Blue only mode\*

The Blue only mode monochrome display allows easy VTR noise inspection and chroma/phase adjustment.

### • Wired remote control capability\*

Mode selection for Blue only, H/V delay, Underscan and External sync together with input selection can be operated from a custom-made selector when connected to the remote input with the supplied Mini Din 8-pin connector. Tally on/off can also be controlled.

### • AC/DC operation\*

As well as operating from an AC power source, the PVM-8044Q/8041Q can also be DC powered for field operation. The monitors can be operated from one or two NP-1B battery packs or a BP-90A battery pack with a DC-210 battery adaptor. When the battery becomes weak, the power LED starts blinking as a warning indication of low battery voltage.

*The monitors are not equipped with battery chargers. To charge batteries, an appropriate battery charger for each battery type should be used.*

### Front Panel



PVM-8044Q/8041Q



PVM-8040

• **Bias/Gain control\***

Bias and Gain control volumes are accessible on the front panel of the PVM-8044Q/8041Q. Fine adjustment of white balance can be easily done from the front of the monitor while observing the screen.

**OTHER FEATURES**

• **EIA standard rack mountable**

Two PVM 8-inch series can be mounted side by side into an EIA standard rack with the optional MB-507 rack mounting bracket. If only a single monitor is fitted, the empty space can be covered with an optional MB-509 blank panel.



• **Audio monitoring facility**

A speaker (0.5W, monaural) is built into the monitor for sound monitoring.

• **High durability**

The PVM 8-inch series are of heavy duty construction to cope with operation under adverse conditions. In addition, the metal cabinet minimizes electromagnetic interference between adjacent

monitor. Guard bars are fitted to the PVM-8044Q/8041Q as protection for the front panel controls. Whatever the application and situation, the PVM 8-inch series can always be relied on to provide a stable picture display.

• **Worldwide TV standard\***

The PVM-8044Q/8041Q are fully compatible with the three major TV standards; NTSC, PAL and SECAM. NTSC<sub>4:3</sub> can be reproduced as well.

• **Carrying handle**

The PVM 8-inch series can be easily carried on location with the carrying handle.

• **Monitor ENG kit\***

The optional VF-505 ENG kit contains a monitor hood and cord reel for the PVM-8044Q/8041Q monitors for operational convenience in the field.



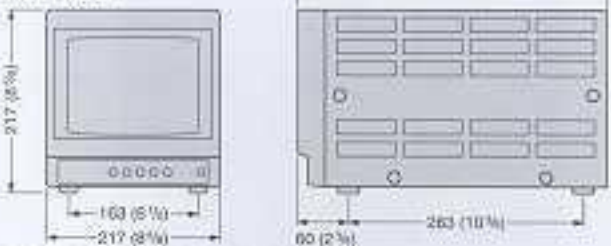
\*Applicable for PVM-8044Q/8041Q only.

**Dimensions**

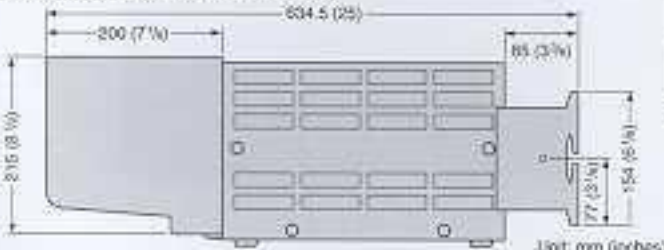
**PVM-8044Q/8041Q**



**PVM-8040**



**PVM-8044Q/8041Q with VF-505**



**Feature Reference Chart**

Model	PVM-8044Q	PVM-8041Q	PVM-8040
Color system	NTSC/PAL/SECAM/NTSC <sub>4:3</sub>	NTSC/PAL/SECAM/NTSC <sub>4:3</sub>	NTSC
Resolution (TV lines)	450	250	250
Composite video input	2	2	1
Y/C input	1	1	1
RGB/Component IN (3 BNC)	Y	Y	N
Audio IN	3	3	1
Ext.sync IN	Y	Y	N
Tally/Remote	Y	Y	N
DC operation	Y	Y	N
Battery charge	N	N	N
Switchable aspect ratio (4:3/16:9)	Y	Y	N
Underscan	Y	Y	N
H/V delay	Y	Y	N
Blue only	Y	Y	N
Bias/Gain control	Y	Y	N
MB-507 Rack mounting bracket	Y	Y	Y
MB-509 Blank panel	Y	Y	Y
VF-505 Monitor ENG kit	Y	Y	N

Y: Yes N: No

## Optional Accessories



Monitor ENG kit  
(Monitor hood & cord reel)  
VF-505\*



Rack-mounting bracket  
MB-507



Blank panel  
MB-509



Car battery cord  
DCC-XLR4\*



Rechargeable battery pack  
NP-1B\*



Rechargeable battery pack  
BP-90A\*



Battery case for BP-90A  
DC-210



Battery charger for four NP-1Bs  
BC-1WD



Battery charger for four NP-1Bs  
and four BP-90As  
BC-410



TV tuner unit  
TU-1040



Component digital monitor interface  
DMIF-1000\*



Composite digital monitor interface  
DMIF-2000

\*Applicable for PVM-8044Q/8041Q only

## Rear Panel

PVM-8044Q/8041Q



PVM-6040



## Specifications

		PVM-8044Q	PVM-8041Q	PVM-8040
<b>GENERAL</b>				
Color system	NTSC/PAL/SECAM/NTSC-4.43			NTSC
CRT type	9-inch HR Trinitron Tube, visible picture size 8-inch measured diagonally, 70° deflection, AG pitch 0.25mm	9-inch Trinitron Tube, visible picture size 8-inch measured diagonally, 70° deflection, AG pitch 0.5mm		
Resolution	Composite video: 450 TV lines at center		Composite video: 250 TV lines at center	
Frequency response	6.0MHz (-3.0dB)			
Aperture correction	-4.0dB to +6.0dB (at 3.0MHz)			
Synchronization	AFC time constant: 1.0 ms			
Normal scan	6% overscan			
Underscan	3% underscan			—
H linearity	Less than 7% (typical)			
V linearity	Less than 7% (typical)			
Convergence	Center: 0.43mm (typical) Corner: 0.53mm (typical)			
Raster size stability	H: 1.0%, V: 1.5%			
HV regulation	3.0% (cut off to high light)			
Color temperature	6500K (D65)			
Operating temperature	0 to 35°C (32 to 85°F)			
Storage temperature	-10 to 40°C (14 to 104°F)			
Humidity	0 to 90%			
Power requirements	AC: 100 to 240V <sup>1)</sup> , 50/60Hz DC: 12V		AC: 100 to 240V <sup>1)</sup> , 50/60Hz	
Power consumption	AC: 45W (max.) 40W (typical) DC: 3.7A		AC: 45W (max.)	
<b>INPUT</b>				
VIDEO INPUT	LINE A/ LINE	Composite video <sup>2)</sup>	Loop-through BNC 1Vp-p±6dB, sync negative, Automatic 75Ω termination <sup>3)</sup>	
		Y/C <sup>4)</sup>	Loop-through Mini DIN 4-pin Y (luminance): 1Vp-p±6dB, sync negative, Automatic, 75Ω termination <sup>3)</sup> C (chrominance): (NTSC): 0.286Vp-p±6dB, Automatic 75Ω termination <sup>3)</sup> (PAL): 0.3Vp-p±6dB, Automatic 75Ω termination <sup>3)</sup>	Loop-through Mini DIN 4-pin Y (luminance): 1Vp-p±6dB, sync negative, Automatic, 75Ω termination <sup>3)</sup> C (chrominance): (NTSC): 0.286Vp-p±6dB, Automatic 75Ω termination <sup>3)</sup>
	LINE B	Composite Video	Loop-through BNC 1.0Vp-p±6dB, sync negative, Automatic 75Ω termination <sup>3)</sup>	—
	Component (RGB/Y, R-Y, B-Y) <sup>5)</sup>	BNC Red/R-Y: Non-composite: 0.7Vp-p±6dB, positive, 75Ω Sync on Green/Green/Y: Composite: 1Vp-p±6dB, positive Blue/B-Y: Non-composite: 0.7Vp-p±6dB, positive, 75Ω		—
External sync	Loop-through BNC 4.0Vp-p±6dB, negative, Automatic 75Ω termination <sup>3)</sup>		—	
DC		XLR 4-pin	—	
TALLY		Mini DIN 8-pin	—	
AUDIO INPUT	LINE A/LINE		Loop-through Phono -5dBu, high impedance	—
	LINE B		Loop-through Phono -5dBu, high impedance	—
	RGB/Y, R-Y, B-Y		Phono -5dBu, high impedance	—
<b>OUTPUT</b>				
Speaker out	0.5W, 8Ω, monaural			
<b>PHYSICAL CHARACTERISTICS</b>				
Weight	Approx. 7.8kg (17 lb 3 oz) without batteries			
Dimensions	Approx. 217(W) x 217(H) x 352.5(D)mm (8 5/8 x 8 5/8 x 14 inches)			
<b>SUPPLIED ACCESSORIES</b>				
AC power cord, Mini DIN 8-pin connector <sup>6)</sup> (350mm, 13 3/8 inches), Tally number plates <sup>7)</sup> (12 pcs, No. 1 to 5, A, B, C, P, R, white x 2 pcs), Operation manual				

<sup>1)</sup> UL approved for 120V operation only.

<sup>2)</sup> The Y/C input has priority over the composite video input.

<sup>3)</sup> 75Ω termination is automatically set to OFF when connection is made to the OUT connector.

<sup>4)</sup> RGB and Y/R-Y/B-Y input is switch selectable.

<sup>5)</sup> For PVM-8044Q/8041Q only.

<sup>6)</sup> 0.08m±0.775W.m.s.