

**SONY**<sup>®</sup>

Color Video Monitors

**PVM-8045Q/8042Q/8040**

**PVM-5041Q**



**T**he pursuit of excellence in both picture performance and operational features has always been key to the success of Sony professional monitors. The Sony 8-inch\* PVM-8045Q, 8042Q, 8040 and the 5-inch\* PVM-5041Q Video Monitors incorporate this concept in their design and embody the outstanding reliability and superb picture quality that are essential in professional image display devices.

With models that offer a range of features, these new additions to the PVM Series offer the flexibility that matches a broad range of requirements.

The PVM-8045Q is a picture evaluation monitor incorporating an HR (High Resolution) Trinitron® CRT that provides an excellent center resolution of 450 TV lines. The PVM-8042Q and 5041Q are suitable for use as functional monitors in multi-purpose applications.

The PVM-8045Q, 8042Q and 5041Q 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. They can also accept both 4:3 and 16:9 aspect ratio signals. Alternatively, for basic 4:3 monitoring, the PVM-8040 has composite video and Y/C inputs. These four monitors are also suited for studio installation with their rack mounting option.

So whether the application is picture evaluation or basic video monitoring, in the studio or on location, this full line of compact monitors includes a model to meet your needs.

*\*Viewable area, measured diagonally*



PVM-8045Q



PVM-8042Q

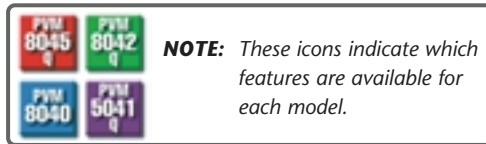


PVM-8040



PVM-5041Q

## Features



### High Quality Picture

#### High Resolution



The PVM-8045Q incorporates a HR (High Resolution) Trinitron CRT which provides a high horizontal resolution of 450 TV 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, all these monitors have a beam current feedback circuit. This stabilizes

the CRT drive by checking the cathode current at low-light signal levels. This effectively corrects black level drift, giving stable color reproduction over a long period of time and compensating for changes in CRT characteristics.

#### Comb Filter for NTSC



The comb filter improves luminance/chrominance separation which reduces cross color interference and produces high resolution.

### Input Facilities

#### Component (Y/R-Y/B-Y or RGB) Input



To maximize operational convenience and versatility, a component (Y/R-Y/B-Y or RGB) input is included, enabling the direct connection of equipment such as a Camera Control Unit (CCU) or a Betacam® VTR. In addition, the use of component signals produce a high picture quality for evaluation applications.

#### Y/C Input



In addition to composite inputs, a Y/C input is also provided so that luminance/chrominance video signals can be accepted, minimizing cross color/dot interference and realizes high quality video pictures.

#### External Sync



These monitors can accept external sync signal for synchronization with other equipment. The external sync can be set so that it will automatically switch according to the input selected.

### Convenient Operational Features

#### 4:3/16:9 Operation



The picture aspect ratio can be switched between 4:3 and 16:9, depending on the input signal. On the PVM-8045Q/8042Q, the "16:9" switch is located on the front panel. On the PVM-5041Q\*, aspect ratio is selected with the slide switch mounted on the rear panel.

\* 16:9 aspect images are available only in the underscan mode.

#### Wired Remote Control Capability



Mode selection of H/V delay, 4:3/16:9 aspect ratio\*, Underscan and External sync, together with input selection, can be operated from a custom-made selector connected to the remote input with the supplied Mini DIN 8-pin connector. Tally on/off can also be controlled.

\* PVM-8045Q/8042Q only

#### Underscan Switch



In the Underscan mode, the picture size is reduced and the entire active picture is displayed on the screen. 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.

#### Manual Degauss Switch



Manual degauss is available by pressing the "DEGAUSS" switch on the front panel.

#### Blue Only Mode



The Blue Only mode monochrome display allows easy VTR noise inspection and chroma adjustment.

#### AC/DC\* Operation



As well as operating from an AC power source, these monitors can be also powered from a 12 V DC source for field operation. The use of an optional DC-L10 Battery Adaptor utilizes the same Lithium-ion batteries that power Sony camcorders. The monitors can also be optionally operated from one or two internal NP-1B Battery Packs internally or an external BP-90A Battery Pack with a DC-210 Battery Adaptor.

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

#### Bias/Gain Control



Bias and Gain controls are provided on the front panel. Fine adjustment of white balance can be easily made from the front of the monitor while observing the screen.

## Features

### Additional Features

#### EIA Standard Rack Mountable



Up to two 8-inch monitors\* or three PVM-5041Q models\* can be mounted side by side into an EIA standard rack with the optional MB-507 rack mounting bracket. Any empty spaces can be covered with optional blank panels.

\* Exclusive



#### Audio Monitoring Facility



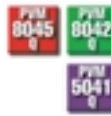
A speaker (0.5 W, monaural) is built into the monitor for sound monitoring.

#### High Durability



The heavy-duty construction of these monitors allows operation even under adverse conditions, with the metal cabinet minimizing electromagnetic interference between adjacent monitors. Whatever the application and situation, these rugged monitors can be relied on to provide a stable picture display.

#### Worldwide TV Standards



Operation is fully compatible with the three major TV standards; NTSC, PAL and SECAM. NTSC<sup>4.43</sup> can also be reproduced.

#### Carrying Handle



With their carrying handles, these monitors can be carried to any location.

#### Monitor ENG Kit



The optional ENG kit\* contains a monitor hood and cord reel for operational convenience in the field.

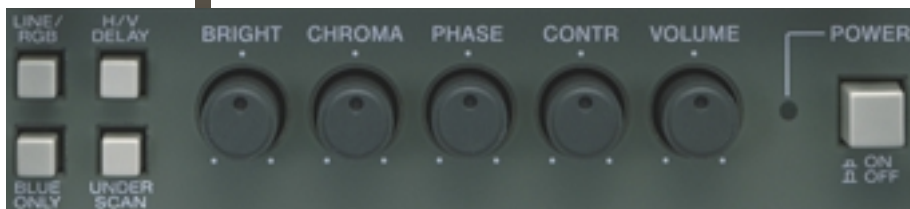
\* VF-505 for the PVM-8045Q/8042Q and VF-504 for the PVM-5041Q



PVM-8045Q/PVM-8042Q

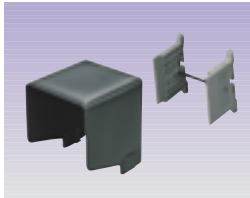


PVM-8040

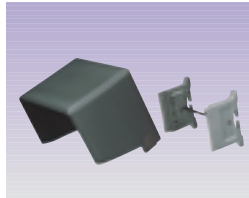


PVM-5041Q

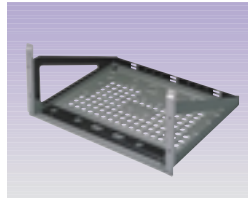
## Optional Accessories



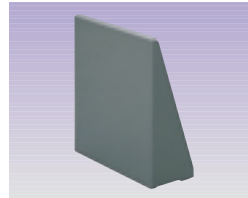
Monitor ENG Kit (Monitor hood and cord reel) for PVM-5041Q  
**VF-504**



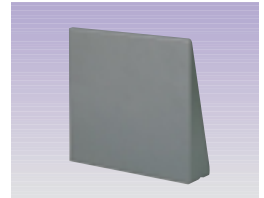
Monitor ENG Kit (Monitor hood and cord reel) for PVM-8045Q/8042Q  
**VF-505**



Rack Mounting Bracket  
**MB-507**



Blank Panel for PVM-5041Q  
**MB-508**



Blank Panel for PVM-8045Q/8042Q/8040  
**MB-509**



Car Battery Cord  
**DCC-XLR4**



Rechargeable Lithium-ion Battery Pack  
**BP-L90A**



Rechargeable Lithium-ion Battery Pack  
**BP-L60A**



Rechargeable Battery Pack  
**NP-1B**



Rechargeable Battery Pack  
**BP-90A**



Battery Case for BP-90A  
**DC-210**



Battery Charger for four BP-L60A or four BP-L90A  
**BC-L100**



Battery Charger for four NP-1B  
**BC-1WD**



Battery Charger for four NP-1B and four BP-90A  
**BC-410**



TV Tuner Unit  
**TU-1041U**

### Battery Adaptor

#### DC-L10

#### Features

- 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

#### Specifications

##### Operating time\*

<b>BP-L60A</b>	Approx. 100 min. (typical)
<b>BP-L90A</b>	Approx. 160 min. (typical)

\* Actual operating times may vary.

- **Dimensions:** 315 (W) x 146 (H) x 100 (D) mm (12 1/2 x 5 3/4 x 4 inches)
- **Weight:** 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

DC-L10  
with PVM-8045Q



## Feature Reference Chart

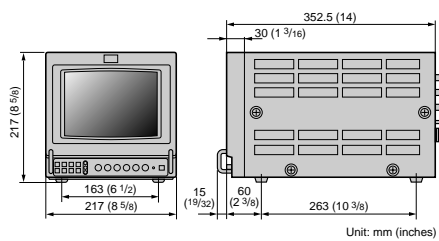
	PVM-8045Q	PVM-8042Q	PVM-8040	PVM-5041Q
Color system	NTSC/PAL/SECAM/NTSC <sub>4.43</sub>	NTSC/PAL/SECAM/NTSC <sub>4.43</sub>	NTSC	NTSC/PAL/SECAM/NTSC <sub>4.43</sub>
CRT Viewable area (measured diagonally)	8-inch	8-inch	8-inch	5-inch
AG pitch	0.25 mm	0.5 mm	0.5 mm	0.4 mm
Resolution (TV lines)	450	250	250	250
Composite video input	2	2	1	1
Y/C input	1	1	1	N
RGB/Component IN (3 BNC)	Y	Y	N	Y
Audio IN	3	3	1	2
Ext. sync IN	Y	Y	N	Y
Tally/Remote	Y	Y	N	Y
DC operation	Y	Y	N	Y
Switchable aspect ratio (4:3/16:9)	Y	Y	N	Y
Underscan	Y	Y	N	Y
H/V delay	Y	Y	N	Y
Blue only	Y	Y	N	Y
Bias/Gain control	Y	Y	N	N
MB-507 Rack mounting bracket	Y	Y	Y	Y
MB-508 Blank panel	N	N	N	Y
MB-509 Blank panel	Y	Y	Y	N
VF-504 Monitor ENG kit	N	N	N	Y
VF-505 Monitor ENG kit	Y	Y	N	N
DC-L10 Battery adaptor	Y	Y	N	Y

# Specifications

# Features

	8045Q	8042Q	8040	5041Q
<b>GENERAL</b>				
Color system	NTSC/PAL/SECAM/NTSC <sub>4.43</sub>		NTSC	NTSC/PAL/SECAM/NTSC <sub>4.43</sub>
CRT type	22 cm (9-inch) HR Trinitron Tube, viewable area 19.1 cm (8-inch) measured diagonally, 70° deflection, AG pitch 0.25 mm	22 cm (9-inch) Trinitron tube, viewable area 19.7 cm (8-inch) measured diagonally, 70° deflection, AG pitch 0.5 mm		15 cm (6-inch) Trinitron tube, viewable area 12.7 cm (5-inch) measured diagonally, 70° deflection, AG pitch 0.4 mm
Resolution	Composite video: 450 TV lines at center			
Frequency response	6.0 MHz (-3 dB)			
Aperture correction	-4.0 dB to 6.0 dB (at 3.0 MHz)			
Synchronization	AFC time constant 1.0 ms			
Normal scan	6 % overscan			
Underscan	3 % underscan			3%
H linearity	Less than 5 % (typical)			Less than 7 % (typical)
V linearity	Less than 5 % (typical)			Less than 7 % (typical)
Convergence	Central: 0.43 mm (typical) Corner: 0.53 mm (typical)			Central: 0.5 mm (typical) Corner: 0.6 mm (typical)
Raster size stability	H: 1.0 %, V: 1.5 %			2.0 % (typical)
HV regulation	3.0 % (cut off to high light)			
Color temperature	D 65			
Operating temperature	0 to 35° C (32 to 95° F)			
Storage temperature	-10 to 40° C (14° F to 104° F)			
Humidity	0 to 90 % (no condensation)			
Power requirements	AC: 100 to 240 V (UL approved for 120 V operation), 0.7 to 0.4 A, 50/60 Hz DC: 12 V, 3.7 A		AC: 100 to 240 V (UL approved for 120 V operation), 0.7 to 0.4 A DC: 12 V, 3.2 A	AC: 100 to 240 V (UL approved for 120 V operation), 0.7 to 0.4 A, 50/60 Hz
Power consumption	AC: 45 W, DC: 41 W		AC: 39 W	AC/DC: 40W (typical)
<b>INPUT</b>				
<b>VIDEO INPUT</b>				
LINE A/LINE				
Composite video*1	Loop-through BNC 1 Vp-p ±6 dB, sync negative, automatic 75 Ω termination*2			
Y/C*1	Loop-through Mini DIN 4-pin Y (luminance): 1 Vp-p ±6 dB, sync negative, automatic 75 Ω termination*2 C (chrominance): NTSC: 0.286 Vp-p ±6 dB, automatic 75 Ω termination*2 PAL: 0.3 Vp-p ±6 dB, automatic 75 Ω termination*2		Loop-through Mini DIN 4-pin Y (luminance): 1 Vp-p ±6 dB, sync negative, automatic 75 Ω termination*2 C (chrominance): PAL: 0.3 Vp-p ±6 dB, automatic 75 Ω termination*2	
LINE B				
Composite video	Loop-through BNC 1 Vp-p ±6 dB, sync negative, automatic 75 Ω termination*2			
RGB/COMPONENT (Y, R-Y, B-Y)	BNC Red/R-Y: Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω Sync on Green/Green/Y: Composite: 1.0 Vp-p ±6 dB, sync negative Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω Blue/B-Y: Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω			BNC Red/R-Y: Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω Sync on Green/Green/Y: Composite: 1.0 Vp-p ±6 dB, sync negative Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω Blue/B-Y: Non-composite: 0.7 Vp-p ±6 dB, sync positive, 75 Ω
<b>AUDIO INPUT</b>				
LINE A/LINE	Loop-through Phono, -5 dBu, high impedance			
LINE B	Loop-through Phono, -5 dBu, high impedance			
RGB/COMPONENT (Y, R-Y, B-Y)	Phono, -5 dBu, high impedance			
External sync	Loop-through BNC 4.0 Vp-p ±6 dB, sync negative, automatic 75 Ω termination*2			
DC	XLR 4-pin			
Remote	Mini DIN 8-pin (with Tally)			
<b>OUTPUT</b>				
Speaker out	0.5 W, monaural			
<b>PHYSICAL CHARACTERISTICS</b>				
Weight	Approx. 8.2 kg (18 lb) without batteries			Approx. 5.5 kg (12 lb 2 oz)
Dimensions	Approx. 217 (W) x 217 (H) x 352.5 (D) mm (8 5/8 x 8 5/8 x 14 inches)			146 (W) x 173 (H) x 352.5 (D) mm (5 3/4 x 6 7/8 x 14 inches)
<b>SUPPLIED ACCESSORIES</b>				
	AC power cord Mini DIN 8-pin connector w/cable (cable length: 350 mm (13 7/8 inches)) Tally number plated (12 pcs. (No.1 to 5, A, B, C, P, R, white x 2 pcs.)) Operation instructions			AC power cord Mini DIN 8-pin connector w/cable (cable length: 350 mm (13 7/8 inches)) Operation instructions
<b>REGULATION COMPLIANCE</b>				
	UL-6500 listed, C-UL (CAN/CSA-E65-94), FCC Class-A, IC Class-A, DHHS, DNHW			

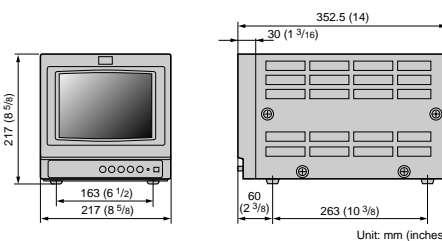
0 dBu = 0.775 V rms  
 \*1 The Y/C input has priority over the Composite input.  
 \*2 75 Ω termination is automatically set to OFF when a connection is made to the OUT connector.



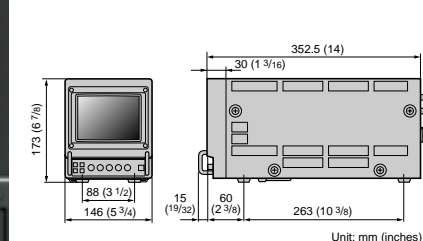
PVM-8045Q/8042Q



PVM-8040



PVM-6041QM



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**Sony Electronics Inc.**  
Broadcast and Professional Group  
1 Sony Drive  
Park Ridge, NJ 07656  
[www.sony.com/professional](http://www.sony.com/professional)

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