3 Product Specifications

3-1 Specifications

Item	Description
Picture Tube:	17-Inch (43 cm): 15.7-inch (39.80 cm) viewable; Full-square flat-face tube, 90˚ Deflection, 0.28 mm Dot pitch, Semi- tint, Non-glare, Invar shadow mask, Anti-static silica coating
Scanning Frequency	Horizontal : 30 kHz to 70 kHz (Automatic) Vertical : 50 Hz to 160 Hz (Automatic)
Display Colors	Unlimited colors
Maximum Resolution	Horizontal : 1280 Dots Vertical : 1024 Lines
Input Video Signal	Analog, 0.714 Vp-p positive at 75 Ω, internally terminated
Input Sync Signal	Separate Sync : TTL level positive/negative Composite Sync : TTL level positive/negative
Maximum Pixel Clock rate	110 MHz
Active Display	Horizontal : 306 mm ± 3 mm (4:3 ratio) Vertical : 230 mm ± 3 mm
Input Voltage	AC 90 to 264 Volts, 60 Hz or 50 Hz ± 3 Hz
DC Output	DC 12 Volt (CKG7507LM)
Power Consumption	100 Watt (max)
Dimensions Unit (W x D x H) Carton (W x D x H)	 16.7 x 17.5 x 16.7 Inches (424 x 446 x 425 mm) 21.5 x 21.9 x 21.2 Inches (545 x 554 x 538 mm)
Weight	38.7 lbs (17.4 kg) / 48.5 lbs (22.0 kg)
Environmental Considerations	Operating Temperature : 32°F to 104°F (0°C to 40°C) Humidity : 10 % to 80 % Storage Temperature : -4°F to 113°F (-20°C to 45°C) Humidity : 5 % to 95 %
• Above models comply with SWEDAC (MPR II) recommendations for reduced electromagnetic fields. • Designs and specifications are subject to change without prior notice.	

3-2 Pin Assignments

Sync Type / Pin No.	15-Pin Signal Cable Connector (Figure 3-1)		Cable Adapter (Figure 3-2)
	Separate	Composite	Macintosh
1	Red	Red	GND-R
2	Green	Green	Red
3	Blue	Blue	H/V Sync
4	GND	GND	Sense 0
5	DDC Return	DDC Return	Green
6	GND-R	GND-R	GND-G
7	GND-G	GND-G	Sense 1
8	GND-B	GND-B	Reserved
9	Reserved	Reserved	Blue
10	GND-Sync/Self-raster	GND-Sync/Self-raster	Sense 2
11	GND	GND	GND
12	DDC Data	DDC Data	V-Sync
13	H-Sync	H/V-Sync	GND-B
14	V-Sync	Not Used	GND
15	DDC Clock	DDC Clock	H-Sync

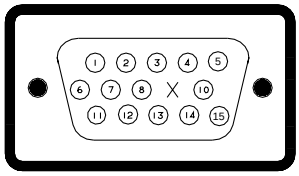


Figure 3-1. Male Type

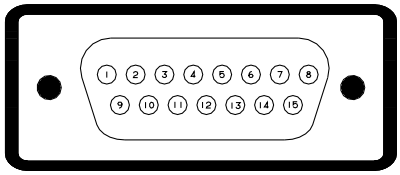


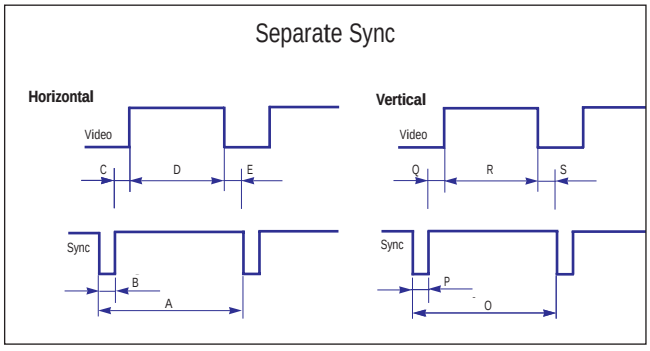
Figure 3-2. Male Type

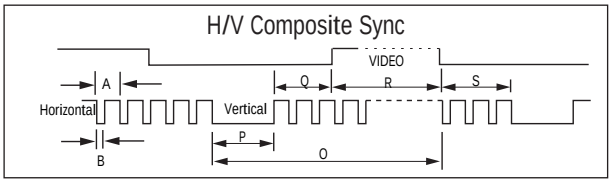
3-3 Timing Chart

This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

Table 3-1. Timing Chart

Mode / Timing	IBM		VESA					Apple MAC.
	VGA2/70 Hz 720 x 400	VGA3/60 Hz 640 x 480	640/75 Hz 640 x 480	800/75 Hz 800 x 600	800/85Hz 800 x 600	1024/75 Hz 1024 x 768	1024/85 Hz 1024 x 768	832/75 Hz 832 x 624
fH (kHz)	31.469	31.469	37.500	46.875	53.674	60.023	68.677	49.726
A µsec	31.778	31.778	26.667	21.333	18.631	16.660	14.561	20.110
B µsec	3.813	3.813	2.032	1.616	1.138	1.219	1.016	1.117
C µsec	1.907	1.907	3.810	3.232	2.702	2.235	2.201	3.910
D µsec	25.422	25.422	20.317	16.162	14.222	13.003	10.836	14.524
E µsec	0.636	0.636	0.508	0.323	0.569	0.203	0.508	0.559
fv (Hz)	70.087	59.940	75.000	75.000	85.061	75.029	84.997	74.551
O msec	14.268	16.683	13.333	13.333	11.756	13.328	11.765	13.414
P msec	0.064	0.064	0.080	0.064	0.056	0.050	0.044	0.060
Q msec	1.080	1.048	0.427	0.448	0.503	0.466	0.524	0.784
R msec	12.711	15.253	12.800	12.800	11.179	12.795	11.183	12.549
S msec	0.413	0.318	0.027	0.021	0.019	0.017	0.015	0.020
Clock Freq. (MHz)	28.322	25.175	31.500	49.500	56.250	78.750	94.500	57.284
Polarity H.Sync	Negative	Negative	Negative	Positive	Positive	Positive	Positive	Negative
V.Sync	Positive	Negative	Negative	Positive	Positive	Positive	Positive	Negative
Remark	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Composite





A : Line time total	B : Horizontal sync width	O : Frame time total	P : Vertical sync width
C : Back porch	D : Active time	Q : Back porch	R : Active time
E : Front porch		S : Front porch	

Memo