

Panasonic

ideas for life

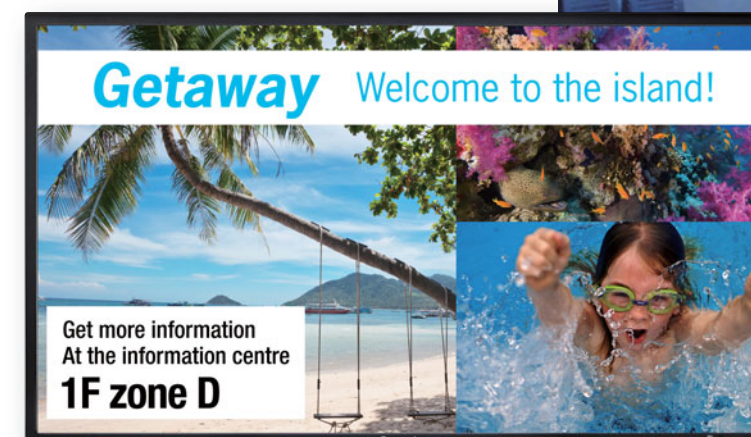
Professional LCD Displays for Digital Signage

42-inch / 47-inch



CODE	City	Flight	Scheduled
MAD	Madrid	IB6262	8:30
MAD	Madrid	AA6262	8:45
MAD	Madrid	AA6362	9:00
YYZ	Toronto	OH106	9:05
YYZ	Toronto	DL5208	9:05
JAX	Jacksonville	B6616	9:10
AMS	Amsterdam	DL88	9:10
FRA	Frankfurt	SQ20	9:10
FRA	Frankfurt	AQ515	9:15
SFO	San Francisco	JJ7088	9:15
SFO	San Francisco	NZ623	9:18
SFO	San Francisco	US5944	9:20
WAD	Washington	B61210	9:20
WAD	Washington	DL6324	9:30
CDG	Paris	AF110	9:30
CDG	Paris	DL8337	9:35
LHR	London	BA134	9:35
LHR	London	VS26	9:40
FCO	Rome	AZ661	9:40
ORD	Chicago	F86383	9:45
BOS	Boston	CH761	9:45
SDQ	Santo Domingo	B6772	9:50
ROC	Rochester	B526	9:50
PWM	Portland	B6505	9:55

Regional Weather Information
Anchorage: Mostly Cloudy 48F Washington, D.C:



Panasonic ideas for life



Control 

Simulated pictures on screen.
Specifications are subject to change without notice.
CT10LF-E01

High-Brightness LCD Displays Make Their Debut – Ideal for Wide Open Spaces.

Large-screen LCD displays designed especially for digital signage use transmit information with sharp, clear images, in open spaces such as airports, commercial facilities, cafes and restaurants.

1 | High Brightness

These LCDs have a high brightness of 700 cd/m². And they feature an IPS panel with full-HD resolution and a wide-viewing angle. They display clear images even in bright locations, and transmit information accurately.

2 | Slim Design, Light Weight

Their stylish designs catch people's attention, making them ideal for digital signage applications. They are also among the industry's leaders in ultra-lightweight LCD displays.

3 | Designed for Professional Use

The fanless design reduces the entry of dust during operation. Both the vertical installation and VESA standard compatibility enable a wider range of installation possibilities.

For Large Shopping Malls



For Transportation



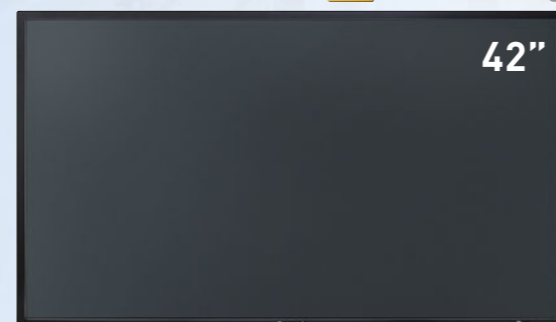
For Cafes and Restaurants



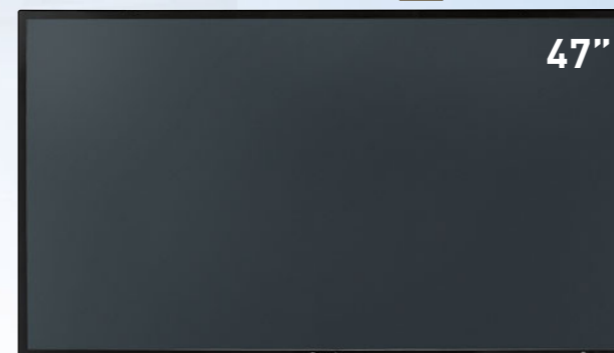
For Educational Institutions



For Financial Institutions



42" FULL HD LCD Display
TH-42LF20E



47" FULL HD LCD Display
TH-47LF20E


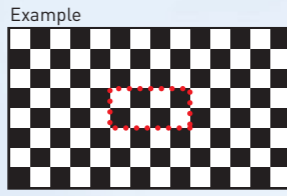
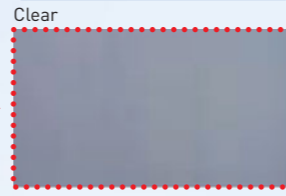
These Bright, Professional LCD Displays Mean Business!

» Tough Panel for Signage Use

This rugged liquid crystal display panel strongly resists afterimages and soiling to provide the long-time display durability that is essential for signage use.



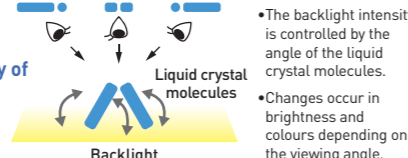
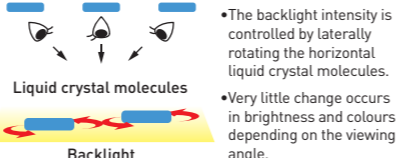
No Image Sticking

Field claims about image sticking hardly ever occur with tough panels.

TV panel Image Sticking  The chessboard pattern slightly remains	Example  Static Chessboard Pattern	LF 20 Series Clear  Image sticking hardly ever occurs
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» Wide Viewing Angle for Sharper Images

The IPS panel has a wide viewing angle, so colours don't change when the image is viewed from right or left angles. Information can be accurately relayed to groups of people in large areas, like public spaces.

VA Type  The pixel is separated. The viewing angle dependency is eased.	IPS Panel  The pixel is not separated. It is fundamentally a wide viewing angle.
Visibility of LCD  •The backlight intensity is controlled by the angle of the liquid crystal molecules. •Changes occur in brightness and colours depending on the viewing angle.	 •The backlight intensity is controlled by laterally rotating the horizontal liquid crystal molecules. •Very little change occurs in brightness and colours depending on the viewing angle.

» Flexible, Vertical Installation

The display can be installed either horizontally or vertically to match the content and installation location without being affected by "Mura" (unevenness). This is because the display has relatively uniform pressure distribution as compared to a TV panel, which results in far better stability. Regardless of the installation direction, the lamp life stays the same since a constant operating temperature is maintained.

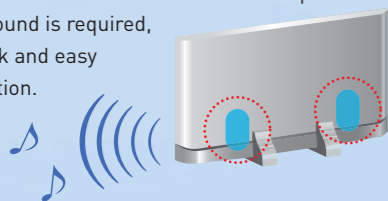
TV Panel  Mura (unevenness) may appear in Portrait mode.	LF 20 Series  Mura (unevenness) hardly ever appears in Portrait mode.
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» Dust-Resistant, Fanless Design

While raising heat dissipation efficiency, the unique Panasonic fanless design resists dust entry and lowers operating noise. Dust particles are not sucked inside, so the display can be installed just about anywhere.

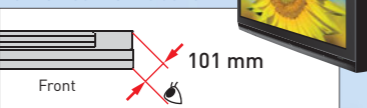

» Built-in Speakers

10-watt (5w + 5w) speakers are built-in to the left and right sides of the rear panel. This eliminates the need to attach external speakers when sound is required, for quick and easy installation.



» A Slim 101 mm Panel Thickness and 18 mm Bezel

A simple design with a slim bezel of approximately 18 mm and thickness of only 101 mm facilitates signage applications by enabling installation just about anywhere. In fact, with the thinnest part measuring only 52 mm, the display looks even slimmer than it is. This prevents it from appearing large and oppressive when suspended from the ceiling. The slim bezel also enhances this thin appearance and improves image visibility.

An Ordinary LCD An ordinary LCD design has a uniform cabinet depth. As viewed from above  101 mm	LF 20 Series In this stylish design, the thinnest part is only 52 mm. Thickest part is 101 mm. As viewed from above  52 mm
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» ECO Mode

In order to lower power consumption, a sensor detects the ambient lighting and automatically adjusts the backlight brightness to match the viewing environment. Power consumption can also be reduced by lowering the screen brightness.

» Energy-Saving

Power Management: Power is automatically turned on or off in response to a sync signal from the equipment connected to the built-in PC* input terminal.

Auto Power Off: When you're using a device connected to the terminals, the display panel goes into standby mode after about 10 minutes if no sync signal is received.

Standby Power Save Mode: Reduces power consumption when on standby.

* DPMS compliant

» Tamper-Resistant Settings

You can prevent operating errors in public places by making tamper-resistant settings in advance.

Maximum Volume Level: Sets the maximum sound volume.

Button Lock: Restricts the button operations for the display.

Remote User Level: Restricts the key operations for the remote control.

» Screen Saver

The screen saver reduces the possibility of afterimages or image retention that can occur when displaying still images with constant, unchanging brightness for long periods of time. The Auto Power Off setting can also be set to automatically turn the power off when the screen saver operation ends.

» Remote System Monitoring

The status of the display, such as the power supply, input signal, display temperature and accumulated hours of use, can be remotely monitored via an RS-232C interface. This enables a quicker response to problems when operating systems for advertising purposes or information display.

» Power Restore Mode

When the power plug has been removed and re-inserted, or when the power has temporarily gone off due a power outage, the display can be set to turn its own power back on once the power supply has been restored.

» Power-On Delay Function

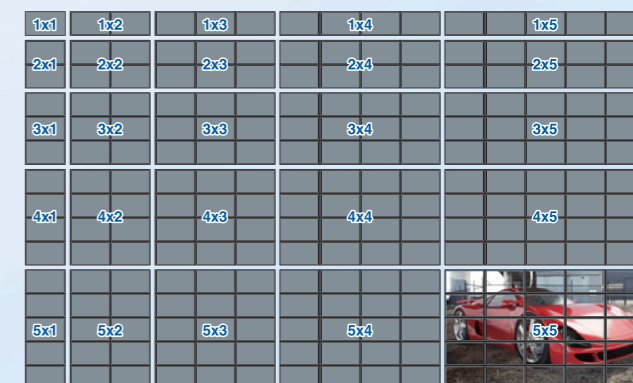
For video walls and other multi-unit applications, this function automatically shifts the power-on time slightly for each display unit in the system, so there's less load on the power supply.

» Multi-Screen System Dynamically Displays Images in Large Spaces

The Multi-Display function enlarges images up to five times their original size, both vertically and horizontally. It enlarges images by the same zoom ratio in both vertical and horizontal directions, such as 2x2, 3x3, 4x4 and 5x5, or by different ratios in order to effectively use vertically or horizontally elongated spaces. LCD display versatility can be further enhanced by freely selecting the zoom ratio to match the installation space.

* Some degradation occurs when images are enlarged.

* Provide an appropriate air-conditioned environment because the ambient temperature varies depending on the installation condition and location.



Images can be enlarged in 24 different ways

» Seam Hides Video Mode

When this mode is turned off, a full-screen image of the display panel, including edges (the entire width of the frame), is displayed. This is especially suitable for displaying text information, since no words are hidden by the frame.



On

Off

» Automatic Picture Positioning

Simply press the Auto Setup key on the remote control to position the picture. This function automatically corrects the horizontal and vertical picture positions, the Clock Phase, and the Dot Clock when an RGB signal is input. The adjustment results in optimal standard values for horizontal and vertical picture sizes.

* When digital RGB signal input, Dot Clock and Clock Phase cannot be made.

» 1:1 Pixel Mode

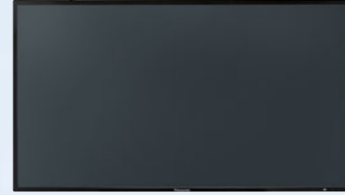
The 1:1 Pixel mode maps the 1920 x 1080 video content to full-HD panel pixels to display 100% of the original content. By skipping the scaling process, this mode is able to produce high-definition images in their original, 1:1 pixel form.

* Compatible signal format: 1,125/50i, 60i, 24sF, 24p, 25p, 30p, 50p, 60p, 1,250/50i

Specifications



TH-42LF20E
42" FULL HD LCD Display



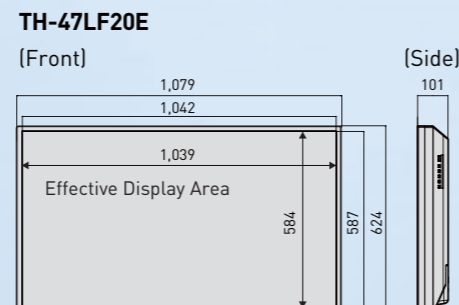
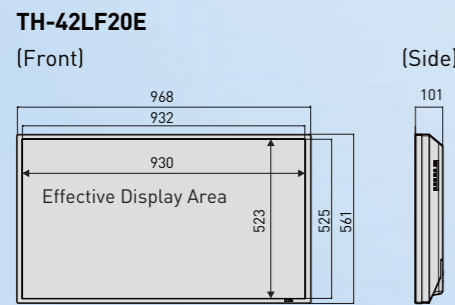
TH-47LF20E
47" FULL HD LCD Display

	TH-42LF20E	TH-47LF20E
DISPLAY PANEL		
Screen Size (Diagonal)	42-inch	47-inch
Aspect Ratio	16:9	16:9
Effective Display Area (W x H)	930 x 523 mm	1,039 x 584 mm
Number of Pixels (H x V)	1,920 x 1,080 pixels	1,920 x 1,080 pixels
Pixel Pitch	0.485 x 0.485 mm	0.5415 x 0.5415 mm
Brightness [Typ]	700 cd/m ²	700 cd/m ²
Contrast Ratio	1,200:1	1,200:1
Response Time	9 ms [G to G]	9 ms [G to G]
Viewing Angle (Horizontal/Vertical)	178°/178°	178°/178°
Operating Life*	50,000 hours	50,000 hours
CONNECTION TERMINAL		
VIDEO IN	BNC x 1	
AUDIO IN (for VIDEO)	RCA (L/R) x 1 set	
S-VIDEO IN	Mini DIN 4-pin x 1	
AUDIO IN (for S-VIDEO)	RCA (L/R) x 1 set	
COMPONENT/RGB IN	BNC x 3	
AUDIO IN (for COMPONENT)	RCA (L/R) x 1 set	
HDMI IN	HDMI TYPE A connector x 2	
DVI-D IN	DVI-D 24-pin (HDCP compatible) x 1	
AUDIO IN (for DVI-D)	M3 JACK x 1	
PC IN	MINI D-SUB 15-pin x 1, Plug & Play (VESA DDC 2B)	
AUDIO IN (for PC)	M3 JACK x 1	
SERIAL	D-SUB 9-pin x 1 (Male) [EXTERNAL CONTROL TERMINAL], RS-232C COMPATIBLE	
AUDIO		
Built-in Speakers	10W [5W + 5W] [10% THD]	
ELECTRICAL		
Power Requirements	220-240 V AC, 50 Hz/60 Hz	220-240 V AC, 50 Hz/60 Hz
Rated Power Consumption	240 W	290 W
Power off Condition	0.2 W	0.2 W
Stand-by Condition	0.2 W	0.2 W
MECHANICAL		
Dimensions (WxHxD)	968 x 561 x 101 mm	1,079 x 624 x 101 mm
Bezel Width	18.3 mm	18.6 mm
Weight	approx. 18.0 kg	approx. 23.0 kg
VESA Mount	400 x 400 mm [Installed by: M6 screws/ Screw hole depth 11.4 mm]	
ENVIRONMENTAL		
Operating Environment	Temperature: 0°C to 40 °C Humidity: 20% to 80% (Non condensation)	
STANDARD (CERTIFICATIONS)		
Radiation Regulations	EN55022 Class-B, EN55024, EN6100-3-2, EN61000-3-3	
Safety Regulations	EN60065 Ver.7	

*An approximate time until the panel brightness decreases to half of its original value.

Dimensions

Cautions: This drawing is not a scale
Units: mm



Option

Pedestal

TY-STLF20



Connection Terminals (Rear)



Applicable Input Signals

	Signal name	Horizontal frequency [kHz]	Vertical frequency [kHz]	VIDEO S-VIDEO	COMPONENT IN [Dotclock [MHz]]	RGB IN [Dotclock [MHz]]	PC IN [Dotclock [MHz]]	DVI-D IN [Dotclock [MHz]]	HDMI1 HDMI2
Video Signals	NTSC	15.73	59.94	Y					
	PAL	15.63	50.00	Y					
	PAL60	15.73	59.94	Y					
	SECAM	15.63	50.00	Y					
	NTSC 4.43	15.73	59.94	Y					
	PAL M	15.73	59.94	Y					
	PAL N	15.63	50.00	Y					
Component Signals	525(480)/60i	15.73	59.94		Y [13.5]			Y [27.0]	
	525(480)/60p	31.47	59.94		Y [27.0]			Y [27.0]	Y
	625(575)/50i	15.63	50.00		Y [13.5]				
	625(576)/50i	15.63	50.00					Y [27.0]	Y
	625(575)/50p	31.25	50.00		Y [27.0]				Y
	625(576)/50p	31.25	50.00					Y [27.0]	Y
	750(720)/60p	45.00	60.00		Y [74.25]			Y [74.25]	Y
	750(720)/50p	37.50	50.00		Y [74.25]			Y [74.25]	Y
	1125(1080)/60p	67.50	60.00		Y [148.5]*1			Y [148.5]	Y
	1125(1080)/60i	33.75	60.00		Y [74.25]*1			Y [74.25]	Y
	1125(1080)/50p	56.25	50.00		Y [148.5]*1			Y [148.5]	Y
	1125(1080)/50i	28.13	50.00		Y [74.25]*1			Y [74.25]	Y
	1125(1080)/24sF	27.00	48.00		Y [74.25]*2				
	1125(1080)/30p	33.75	30.00		Y [74.25]*1			Y [74.25]	Y
	1125(1080)/25p	28.13	25.00		Y [74.25]*1			Y [74.25]	Y
1125(1080)/24p	27.00	24.00		Y [74.25]*1			Y [74.25]	Y	
PC Signals	640x400@70Hz	31.46	70.07			Y [25.17]	Y [25.17]	Y [25.17]	
	640x400@85Hz	37.86	85.08			Y [31.5]	Y [31.5]	Y [31.5]	
	640x480@60Hz	31.43	59.88			Y [25.15]	Y [25.15]	Y [25.15]	
	640x480@60Hz	31.47	59.94			Y [25.18]	Y [25.18]	Y [25.18]	Y
	640x480@67Hz	35.00	66.67			Y [30.24]	Y [30.24]	Y [30.24]	
	640x480@72Hz	37.86	72.81			Y [31.5]	Y [31.5]	Y [31.5]	
	640x480@75Hz	37.50	75.00			Y [31.5]	Y [31.5]	Y [31.5]	
	640x480@85Hz	43.27	85.01			Y [36.0]	Y [36.0]	Y [36.0]	
	720x400@70Hz	31.47	70.08			Y [28.32]	Y [28.32]	Y [28.32]	
	800x600@55Hz	34.50	55.38			Y [35.33]	Y [35.33]	Y [35.33]	
	800x600@56Hz	35.16	56.25			Y [36.0]	Y [36.0]	Y [36.0]	
	800x600@60Hz	37.88	60.32			Y [40.0]	Y [40.0]	Y [40.0]	Y
	800x600@60Hz	38.00	60.51			Y [40.13]	Y [40.13]	Y [40.13]	
	800x600@72Hz	48.08	72.19			Y [50.0]	Y [50.0]	Y [50.0]	
	800x600@75Hz	46.88	75.00			Y [49.5]	Y [49.5]	Y [49.5]	
	800x600@85Hz	53.67	85.06			Y [56.25]	Y [56.25]	Y [56.25]	
	852x480@60Hz	31.47	59.94			Y [33.54]	Y [33.54]	Y [33.54]	
	1024x768@50Hz	39.55	50.00			Y [51.89]	Y [51.89]	Y [51.89]	
	1024x768@60Hz	48.36	60.00			Y [65.0]	Y [65.0]	Y [65.0]	Y
	1024x768@60Hz	48.50	60.02			Y [64.99]	Y [64.99]	Y [64.99]	
	1024x768@70Hz	56.48	70.07			Y [75.0]	Y [75.0]	Y [75.0]	
	1024x768@75Hz	60.24	74.93			Y [80.0]	Y [80.0]	Y [80.0]	
	1024x768@75Hz	60.02	75.03			Y [78.75]	Y [78.75]	Y [78.75]	
	1024x768@75Hz	61.01	75.70			Y [80.05]	Y [80.05]	Y [80.05]	
	1024x768@85Hz	68.68	85.00			Y [94.5]	Y [94.5]	Y [94.5]	
	1024x768@120Hz	97.55	119.99			Y [115.5]	Y [115.5]	Y [115.5]	
	1066x600@60Hz	37.64	59.94			Y [53.0]	Y [53.0]	Y [53.0]	
	1152x864@60Hz	53.70	60.00			Y [81.62]	Y [81.62]	Y [81.62]	
	1152x864@75Hz	67.50	75.00			Y [108.0]	Y [108.0]	Y [108.0]	
	1152x900@65Hz	61.20	65.20			Y [92.0]	Y [92.0]	Y [92.0]	
	1152x900@66Hz	61.85	66.00			Y [94.5]	Y [94.5]	Y [94.5]	
	1152x900@75Hz	71.40	75.60			Y [105.1]	Y [105.1]	Y [105.1]	
	1280x768@60Hz	47.78	59.87			Y [79.50]	Y [79.50]	Y [79.50]	
	1280x800@50Hz	41.20	50.00			Y [68.55]	Y [68.55]	Y [68.55]	
	1280x960@60Hz	60.00	60.00			Y [108.0]	Y [108.0]	Y [108.0]	
1280x960@85Hz	85.94	85.00			Y [148.5]	Y [148.5]	Y [148.5]		
1280x1024@50Hz	52.70	50.00			Y [89.38]	Y [89.38]	Y [89.38]		
1280x1024@60Hz	63.34	59.98			Y [108.18]	Y [108.18]	Y [108.18]		
1280x1024@60Hz	63.90	60.00			Y [107.35]	Y [107.35]	Y [107.35]		
1280x1024@60Hz	63.37	60.01			Y [107.5]	Y [107.5]	Y [107.5]		
1280x1024@60Hz	63.74	60.02			Y [108.1]	Y [108.1]	Y [108.1]		
1280x1024@60Hz	63.98	60.02			Y [108.0]	Y [108.0]	Y [108.0]	Y	
1280x1024@60Hz	63.79	60.18			Y [108.19]	Y [108.19]	Y [108.19]		
1280x1024@66Hz	70.66	66.47			Y [119.84]	Y [119.84]	Y [119.84]		
1280x1024@75Hz	79.98	75.02			Y [135.0]	Y [135.0]	Y [135.0]		
1280x1024@76Hz	81.13	76.11			Y [135.0]	Y [135.0]	Y [135.0]		
1280x1024@85Hz	91.15	85.02			Y [157.5]	Y [157.5]	Y [157.5]		
1366x768@60Hz	47.71	60.02			Y [85.5]	Y [85.5]	Y [85.5]		
1366x768@50Hz	39.55	50.00			Y [69.92]	Y [69.92]	Y [69.92]		
1366x768@60Hz	48.36	60.00			Y [86.71]	Y [86.71]	Y [86.71]		
1400x1050@60Hz	65.12	59.91			Y [121.38]	Y [121.38]	Y [122.43]		
1400x1050@60Hz	65.32	59.98			Y [121.75]	Y [121.75]	Y [121.75]		
1400x1050@60Hz	65.35	60.12			Y [121.81]	Y [121.81]	Y [121.85]		
1400x1050@75Hz	82.28	74.87			Y [156.0]	Y [156.0]	Y [156.0]		
1600x1200@60Hz	75.00	60.00			Y [162.0]	Y [162.0]	Y [162.0]		
1920x1080@60Hz	67.50	60.00			Y [148.5]	Y [148.5]	Y [148.5]		
1920x1200@60Hz	74.04	59.95			Y [154.0]	Y [154.0]	Y [154.0]		
Macintosh 13" (640x480)	35.00	66.67			Y [30.24]	Y [30.24]	Y [30.24]		
Macintosh LC13" (640x480)	34.97	66.60			Y [31.33]	Y [31.33]	Y [31.33]		
Macintosh 16" (832x624)	49.72	74.55			Y [57.28]	Y [57.28]	Y [57.28]		
Macintosh 19" (1024x768)	60.24	75.08			Y [80.0]	Y [80.0]	Y [80.0]		
Macintosh 21" (1152x870)	68.68	75.06			Y [100.0]	Y [100.0]	Y [100.0]		
Macintosh II (1280x1024)	80.00	75.00			Y [134.4]	Y [134.4]	Y [135.2]		

*1: Based on SMPTE 274M standard. *2: Based on SMPTE RP211 standard.