Panasonic
ideas for life

Professional LCD Displays
for Digital Signage
42-inch / 47-inch

Panasonic ideas for life

CERTIFIED
CRESTRON
Integrated Partner

AMX

Control4

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Departures

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

Getaway Welcome to the island!

Get more information
At the information center
1F zone D

Panasonic

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" Class FULL HD LCD Display
TH-42LF20U

47" Class FULL HD LCD Display
TH-47LF20U

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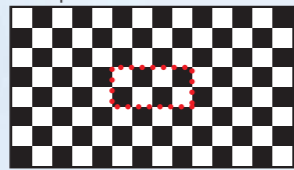Field claims about image sticking hardly ever occur with tough panels.

TV panel
Image Sticking

Example

LF 20 Series
Clear

The chessboard pattern slightly remains

Static Chessboard Pattern

Image sticking hardly ever occurs

≫ Wide Viewing Angle for Sharper Images

The IPS panel has a wide viewing angle, so colors 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.
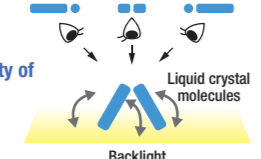
VA Type

IPS Panel

Viewing angle

The pixel is separated.
The viewing angle dependency is eased.

The pixel is not separated.
It is fundamentally a wide viewing angle.

Visibility of LCD

Liquid crystal molecules

- The backlight intensity is controlled by the angle of the liquid crystal molecules.
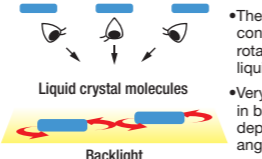- Changes occur in brightness and colors depending on the viewing angle.
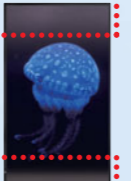
Liquid crystal molecules

- The backlight intensity is controlled by laterally rotating the horizontal liquid crystal molecules.
- Very little change occurs in brightness and colors depending on the viewing angle.

Backlight

Backlight

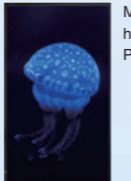## ≫ Flexible, Vertical Installation

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
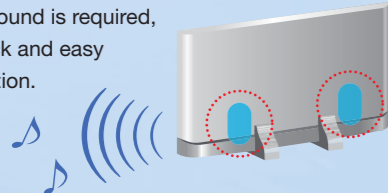Mura (unevenness) hardly ever appears in Portrait mode.

Mura(unevenness)

≫ 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.

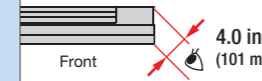## ≫ A Slim 4.0 inches (101 mm) Panel Thickness and 0.7 inch (18 mm) Bezel

A simple design with a slim bezel of approximately 0.7 inch (18 mm) and thickness of only 4.0 inches (101 mm) facilitates signage applications by enabling installation just about anywhere. In fact, with the thinnest part measuring only 2.0 inches (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
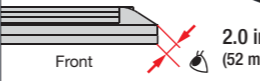An ordinary LCD design has a uniform cabinet depth.

LF 20 Series
In this stylish design, the thinnest part is only 2.0 inches (52 mm).

Thickest part is 4.0 inches (101 mm).

As viewed from above
Front
4.0 inches (101 mm)

As viewed from above
Front
2.0 inches (52 mm)

≫ 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.
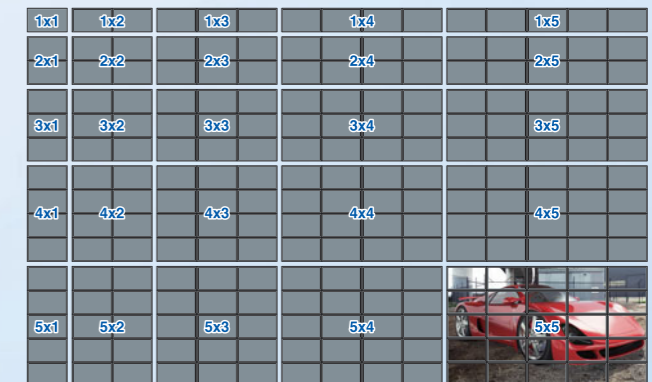
≫ Power-On Delay Function

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 2×2, 3×3, 4×4 and 5×5, 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.

1x1	1x2	1x3	1x4	1x5
2x1	2x2	2x3	2x4	2x5
3x1	3x2	3x3	3x4	3x5
4x1	4x2	4x3	4x4	4x5
5x1	5x2	5x3	5x4	5x5

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.

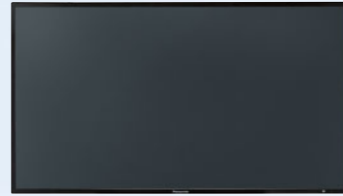* When digital RGB signal input, Dot Clock and Clock Phase cannot be made.

≫ 1:1 Pixel Mode

The 1:1 Pixel mode maps the 1920 × 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

TH-42LF20U
42" Class FULL HD LCD Display

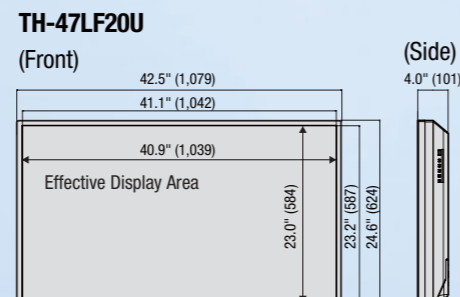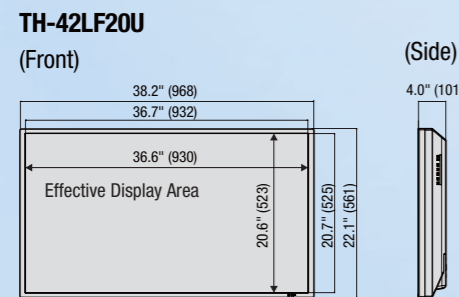**TH-47LF20U**
47" Class FULL HD LCD Display

		TH-42LF20U	TH-47LF20U
DISPLAY PANEL	Screen Size (Diagonal)	42.0-inch	46.9-inch
	Aspect Ratio	16:9	16:9
	Effective Display Area (W × H)	36.6" × 20.6" (930 × 523 mm)	40.9" × 23.0" (1,039 × 584 mm)
	Number of Pixels (H × V)	1,920 × 1,080 pixels	1,920 × 1,080 pixels
	Pixel Pitch	0.0191" × 0.0191" (0.485 × 0.485 mm)	0.0213" × 0.0213" (0.5415 × 0.5415 mm)
	Brightness (Typ)	700 cd/m²	700 cd/m²
	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*1	50,000 hours	50,000 hours
CONNECTION TERMINAL	VIDEO IN	BNC × 1	
	AUDIO IN (for VIDEO)	RCA (L/R) × 1 set	
	S-VIDEO IN	Mini DIN 4-pin × 1	
	AUDIO IN (for S-VIDEO)	RCA (L/R) × 1 set	
	COMPONENT/RGB IN	BNC × 3	
	AUDIO IN (for COMPONENT)	RCA (L/R) × 1 set	
	HDMI IN	HDMI TYPE A connector × 2	
	DVI-D IN	DVI-D 24-pin (HDCP compatible) × 1	
	AUDIO IN (for DVI-D)	M3 JACK × 1	
	PC IN	MINI D-SUB 15-pin × 1, Plug & Play (VESA DDC 2B)	
	AUDIO IN (for PC)	M3 JACK × 1	
	SERIAL	D-SUB 9-pin × 1 (Male) (EXTERNAL CONTROL TERMINAL), RS-232C COMPATIBLE	
AUDIO	Built-in Speakers	10W [5W + 5W] (10% THD)	
ELECTRICAL	Power Requirements	110-127 V AC, 50 Hz/60 Hz	110-127 V AC, 50 Hz/60 Hz
	Rated Power Consumption	250 W	300 W
	On Mode Average Power Consumption*2	173 W (ENERGY STAR Displays 5.0.)	178 W (ENERGY STAR Displays 5.0.)
	Power off Condition	0.1 W	0.1 W
	Stand-by Condition	0.1 W	0.1 W
MECHANICAL	Dimensions (W×H×D)	38.2" × 22.1" × 4.0" (968 × 561 × 101 mm)	42.5" × 24.6" × 4.0" (1,079 × 624 × 101 mm)
	Bezel Width	0.72" (18.3 mm)	0.73" (18.6 mm)
	Weight	approx. 39.0 lbs. (18.0 kg)	approx. 50.7 lbs. (23.0 kg)
	VESA Mount	15.8" × 15.8" (400 × 400 mm) (Installed by: M6 screws/ Screw hole depth 0.46"(11.4 mm))	
ENVIRONMENTAL	Operating Environment	Temperature: 32°F to 104°F (0°C to 40 °C) Humidity: 20% to 80% (Non condensation)	
STANDARD (CERTIFICATIONS)	Radiation Regulations	FCC Part 15 Class-B, ICES-003, NOM approval	
	Safety Regulations	UL60065 7th ed., CAN/CSA-22.2No60065:03, NOM approval	

*1: An approximate time until the panel brightness decreases to half of its original value.   *2: Based on IEC 62087 Ed. 2 measurement method.

Dimensions
Cautions: This drawing is not a scale
Units: inches (mm)

TH-42LF20U
(Front) (Side)

4.0" (101)
38.2" (968)
36.7" (932)
36.6" (930)
Effective Display Area
20.6" (523) 20.7" (525) 22.1" (561)

TH-47LF20U
(Front) (Side)

4.0" (101)
42.5" (1,079)
41.1" (1,042)
40.9" (1,039)
Effective Display Area
23.0" (584) 23.2" (587) 24.6" (624)

Option
Pedestal
TY-STLF20

Connection Terminals (Rear)

SERIAL PORT | AVI IN | AUDIO IN (DVI-D, PC) | AUDIO IN (COMPONENT) | HDMI IN | DVI-D IN | PC-IN | COMPONENT/RGB IN

	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	640×400@70Hz	31.46	70.07			Y (25.17)	Y (25.17)	Y (25.17)	
	640×400@85Hz	37.86	85.08			Y (31.5)	Y (31.5)	Y (31.5)	
	640×480@60Hz	31.43	59.88			Y (25.15)	Y (25.15)	Y (25.15)	
	640×480@60Hz	31.47	59.94			Y (25.18)	Y (25.18)	Y (25.18)	Y
	640×480@67Hz	35.00	66.67			Y (30.24)	Y (30.24)	Y (30.24)	
	640×480@72Hz	37.86	72.81			Y (31.5)	Y (31.5)	Y (31.5)	
	640×480@75Hz	37.50	75.00			Y (31.5)	Y (31.5)	Y (31.5)	
	640×480@85Hz	43.27	85.01			Y (36.0)	Y (36.0)	Y (36.0)	
	720×400@70Hz	31.47	70.08			Y (28.32)	Y (28.32)	Y (28.32)	
	800×600@55Hz	34.50	55.38			Y (35.33)	Y (35.33)	Y (35.33)	
	800×600@56Hz	35.16	56.25			Y (36.0)	Y (36.0)	Y (36.0)	
	800×600@60Hz	37.88	60.32			Y (40.0)	Y (40.0)	Y (40.0)	Y
	800×600@72Hz	38.00	60.51			Y (40.13)	Y (40.13)	Y (40.13)	
	800×600@72Hz	48.08	72.19			Y (50.0)	Y (50.0)	Y (50.0)	
	800×600@75Hz	46.88	75.00			Y (49.5)	Y (49.5)	Y (49.5)	
	800×600@85Hz	53.67	85.06			Y (56.25)	Y (56.25)	Y (56.25)	
	852×480@60Hz	31.47	59.94			Y (33.54)	Y (33.54)	Y (33.54)	
	1024×768@50Hz	39.55	50.00			Y (51.89)	Y (51.89)	Y (51.89)	
	1024×768@60Hz	48.36	60.00			Y (65.0)	Y (65.0)	Y (65.0)	Y
	1024×768@60Hz	48.50	60.02			Y (64.99)	Y (64.99)	Y (65.18)	
	1024×768@70Hz	56.48	70.07			Y (75.0)	Y (75.0)	Y (75.0)	
	1024×768@75Hz	60.24	74.93			Y (80.0)	Y (80.0)	Y (80.0)	
	1024×768@75Hz	60.02	75.03			Y (78.75)	Y (78.75)	Y (78.75)	
	1024×768@75Hz	61.01	75.70			Y (80.05)	Y (80.05)	Y (81.0)	
	1024×768@85Hz	68.68	85.00			Y (94.5)	Y (94.5)	Y (94.5)	
	1024×768@120Hz	97.55	119.99				Y (115.5)	Y (115.5)	
	1066×600@60Hz	37.64	59.94			Y (53.0)	Y (53.0)	Y (53.0)	
	1152×864@60Hz	53.70	60.00			Y (81.62)	Y (81.62)	Y (81.62)	
	1152×864@75Hz	67.50	75.00			Y (108.0)	Y (108.0)	Y (108.0)	
	1152×900@65Hz	61.20	65.20			Y (92.0)	Y (92.0)	Y (92.0)	
	1152×900@66Hz	61.85	66.00			Y (94.5)	Y (94.5)	Y (94.5)	
	1152×900@75Hz	71.40	75.60			Y (105.1)	Y (105.1)	Y (105.1)	
	1280×768@60Hz	47.78	59.87			Y (79.50)	Y (79.50)	Y (79.50)	
	1280×800@50Hz	41.20	50.00			Y (68.55)	Y (68.55)	Y (68.55)	
	1280×960@60Hz	60.00	60.00			Y (108.0)	Y (108.0)	Y (108.0)	
	1280×960@85Hz	85.94	85.00			Y (148.5)	Y (148.5)	Y (148.5)	
	1280×1024@50Hz	52.70	50.00			Y (89.38)	Y (89.38)	Y (89.38)	
	1280×1024@60Hz	63.34	59.98			Y (108.18)	Y (108.18)	Y (108.18)	
	1280×1024@60Hz	63.90	60.00			Y (107.35)	Y (107.35)	Y (107.35)	
	1280×1024@60Hz	63.37	60.01			Y (107.5)	Y (107.5)	Y (107.5)	
	1280×1024@60Hz	63.74	60.02			Y (108.1)	Y (108.1)	Y (108.1)	
	1280×1024@60Hz	63.98	60.02			Y (108.0)	Y (108.0)	Y (108.0)	Y
	1280×1024@60Hz	63.79	60.18			Y (108.19)	Y (108.19)	Y (108.19)	
	1280×1024@66Hz	70.66	66.47			Y (119.84)	Y (119.84)	Y (119.84)	
	1280×1024@75Hz	79.98	75.02			Y (135.0)	Y (135.0)	Y (135.0)	
	1280×1024@76Hz	81.13	76.11			Y (135.0)	Y (135.0)	Y (135.0)	
	1280×1024@85Hz	91.15	85.02			Y (157.5)	Y (157.5)	Y (157.5)	
	1360×768@60Hz	47.71	60.02			Y (85.5)	Y (85.5)	Y (85.5)	
	1366×768@50Hz	39.55	50.00			Y (69.92)	Y (69.92)	Y (69.92)	
	1366×768@60Hz	48.36	60.00			Y (86.71)	Y (86.71)	Y (87.44)	
	1400×1050@60Hz	65.12	59.91			Y (121.38)	Y (121.38)	Y (122.43)	
	1400×1050@60Hz	65.32	59.98			Y (121.75)	Y (121.75)	Y (121.75)	
	1400×1050@60Hz	65.35	60.12			Y (121.81)	Y (121.81)	Y (121.85)	
	1400×1050@75Hz	82.28	74.87			Y (156.0)	Y (156.0)	Y (156.0)	
	1600×1200@60Hz	75.00	60.00			Y (162.0)	Y (162.0)	Y (162.0)	
	1920×1080@60Hz	67.50	60.00			Y (148.5)	Y (148.5)	Y (148.5)	
	1920×1200@60Hz	74.04	59.95				Y (154.0)	Y (154.0)	
	Macintosh13"(640×480)	35.00	66.67			Y (30.24)	Y (30.24)	Y (30.24)	
	MacintoshLC13"(640×480)	34.97	66.60			Y (31.33)	Y (31.33)	Y (31.33)	
	Macintosh16"(832×624)	49.72	74.55			Y (57.28)	Y (57.28)	Y (57.28)	
	Macintosh19"(1024×768)	60.24	75.08			Y (80.0)	Y (80.0)	Y (80.0)	
	Macintosh21"(1152×870)	68.68	75.06			Y (100.0)	Y (100.0)	Y (100.0)	
	Macintosh II (1280×1024)	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.