

Gateway 42-inch HD Plasma TV Specifications

Specifications are subject to change without notice or obligation.

Display Panel

Screen size	Diagonal 42-inch
Aspect ratio	16:9 wide
Number of pixels	1024 (Horizontal, RGB Trio) × 1024 (Vertical) pixels
Pixel Pitch	.90 mm × .51 mm
Luminance	1000 cd/m ² , at APL13%

Power Source

Input voltage	100 ~ 240 Vac, 50/60 Hz
Input current	3.3 A
Inrush current	60 A p-p/20 ms Max.
Power consumption	280 ± 10% Watts typical
Stand-by and Power Save	10 Watts Max.

Connector Types

RCA jacks for audio, video, Y/C _B /C _R , and Y/P _B /P _R
6 pin Din S-terminal for S-Video
9 pin D-SUB for RS232
15 pin D-SUB for RGB
24 pin DVI

Video/S-Video Signal	
Type	Analog
Polarity	Positive
Amplitude	Video 1Vp-p, (priority S-Video) Y=1Vp-p C=0.286Vp-p
Frequency	H: 15.734 KHz V: 60 Hz (NTSC) H: 15.625 KHz V: 50 Hz (PAL)
Input impedance	75 ohms
Y/C_B/C_R or Y/P_B/P_R Signal (Component 1 and 2)	
Type	Analog
Polarity	Positive
Amplitude	AV: 1Vp-p (with sync) S-Video: Y: 1Vp-p,C: 0.286Vp-p
Frequency	
Y/CB/CR	H: 15.734 KHz V: 60 Hz (NTSC)
Y/PB/PR: HDTV	H: 15.625 KHz V: 50 Hz (PAL) H: 31 KHz V: 60 Hz (480p) H: 45 KHz V: 60 Hz (720p) H: 33 KHz V: 60 Hz (1080i)
RGB Signal	
Type	Analog
Polarity	Positive or Negative
Amplitude	RGB: 0.7 Vp-p
Frequency	H: support to 31 K~91 KHz V: support to 50~85 Hz

DVI Signal

Type	Digital
Polarity	Positive or Negative
Frequency	H: support to 31 K~63 KHz V: support to 50~85 Hz

Audio Signal

Analog 500 mV rms /more than 22 Kohm

Pin Assignments for D-SUB Connector (In/Loop Out)

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	RED	6	RED GND	11	GND
2	GREEN	7	GREEN GND	12	SDA
3	BLUE	8	BLUE GND	13	H-SYNC
4	GND	9	NC	14	V-SYNC
5	GND	10	GND	15	SCL

Pin Assignments for 24 Pin DVI Connector (Digital Only)

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	TMDS Data 2-	9	TMDS Data 1-	17	TMDS Data 0-
2	TMDS Data 2+	10	TMDS Data 1+	18	TMDS Data 0+
3	TMDS Data 2/4 Shield	11	TMDS Data 1/3 Shield	19	TMDS Data 0/5 Shield
4	TMDS Data 4-	12	TMDS Data 3-	20	TMDS Data 5-
5	TMDS Data 4+	13	TMDS Data 3+	21	TMDS Data 5+
6	DDC Clock	14	+5V Power	22	TMDS Clock Shield
7	DDC Data	15	Ground (For +5V)	23	TMDS Clock +
8	No Connect	16	Hot Plug Detect	24	TMDS Clock -

RGB/DVI For VESA Standard							
Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	V-Sync Polarity (TTL)	H-Sync Polarity (TTL)	Dot Rate (MHz)
1	640 (VGA) × 480	60	31.5	59.94	-	-	25.175
2	640 (VGA) × 480	72	37.9	72.81	-	-	31.500
3	640 (VGA) × 480	75	37.5	75	-	-	31.500
4	640 (VGA) × 480	85	43.3	85.01	-	-	36.000
5	800 (SVGA) × 600	56	35.1	56.25	+	+	36.000
6	800 (SVGA) × 600	60	37.9	60.317	+	+	40.000
7	800 (SVGA) × 600	72	48.1	72.19	+	+	50.000
8	800 (SVGA) × 600	75	46.9	75	+	+	49.500
9	800 (SVGA) × 600	85	53.7	85.06	+	+	56.250
10	1024 (XGA) × 768	60	48.4	60.01	-	-	65.000
11	1024 (XGA) × 768	70	56.5	70.07	-	-	75.000
12	1024 (XGA) × 768	75	60.0	75.03	+	+	78.750
13	1024 (XGA) × 768	85	68.7	84.99	+	+	94.500
14	1280 (SXGA) × 1024	60	63.98	60.02	+	+	108.00
15*	1280 (SXGA) × 1024	75	79.98	75.03	+	+	135.00
16*	1280 (SXGA) × 1024	85	91.15	85.02	+	+	157.50
18	720 (DOS) × 400	70	31.46	70.08	+	-	28.320
19	640 (VGA) × 480	50	31.5	50	-	-	25.175
20*	1280 (HDTV) × 720p	60	45.15	60	-	-	74.250
21*	1920 (HDTV) × 1080i	60(i)	33.78	60	-	-	74.250
22	640 (VGA) × 350	70	31.50	70	-	-	25.175

* These modes are not supported in DVI mode.

RGB/DVI For Apple Standard

Mode No.	Resolution	Refresh Rate (Hz)	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	V-Sync Polarity (TTL)	H-Sync Polarity (TTL)	Dot Rate (MHz)
24	640 × 480	67	35.00	66.67	-	-	30.240
25	832 × 624	75	49.73	74.55	-	-	57.283
26	1152 × 870	75	68.68	75.06	-	-	100.000

Y/PB/PR For Component 1 and 2

Mode	Resolution	Refresh Rate
1	640 × 480p	60
2	1920 × 1080i	60
3	1280 × 720p	60

Maximum Resolution

Up to 1280 × 1024

Dimensions	Without/Stand	With/Stand
Width	40.94 in. (1040 mm)	40.94 in. (1040 mm)
Height	25.51 in. (648 mm)	27.16 in. (690 mm)
Depth	3.74 in. (95 mm)	11.32 in. (287.5 mm)

Package Dimensions

Width	48.42 in. (1230 mm)
Height	37.79 in. (960 mm)
Depth	18.50 in. (470 mm)

Weight

Net weight	68.8 lbs/31.2 Kgs (without stand) 77.2 lbs/ 35 Kgs (with stand)
Gross weight	101.4 lbs/46 Kgs

Operating

Temperature	0~40°C (32~104°F)
Relative humidity	20~80%
Pressure	800~1114 hpa

Non-Operating

Temperature	-20~60°C
Relative humidity	20~90%
Pressure	700~1114 hpa
Vibration	X/Y/Z, 0.5G/10~55 Hz (sweep), 10 minutes

Acoustics

(IHF A-weighted 1 meter)	40 dB Max.
--------------------------	------------

Sound

Residual hum (at volume max)	500 μW Max.
Practical max. Audio output (at 10% THD max.)	1.0 vp-p 1 KHz input 5 W + 5 W Max. /12 ohm
Sound distortion (at 250 mw 1 KHz)	1% Max.
Audio output (input at 1.4V _{P-P})	>=1.0 V _{P-P}

Reliability Requirement

The MTBF is 20000 hours under operation at 25±5°C (Half luminosity, motion picture)

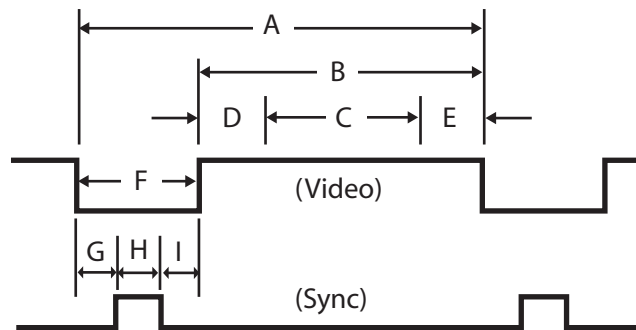
Emissions Requirement

Your plasma TV meets the EMI limits in all screen modes as qualified by FCC class B part 15.

Power Management

Mode	H-sync	V-sync	Video	Power dissipation
Normal	Pulse	Pulse	Active	Normal power
Stand-by	No pulse	No pulse	No video	Less than 10 watts
Power saving	Pulse	No pulse	blanked	Less than 10 watts
	No pulse	Pulse	blanked	Less than 10 watts

Preset Timing Chart



Item	Description:
A	Total time
B	Active display area including borders
C	Active display area excluding borders
D	Left/Top border
E	Right/bottom border
F	Blanking time
G	Front porch
H	Sync-width
I	Back porch

Gateway 42-inch HD Plasma TV Specifications

Mode	1	2	3	4	5	6	7	8	9	
H Resolution	640	640	640	640	800	800	800	800	800	
V Resolution	480	480	480	480	600	600	600	600	600	
Refresh Rate	60	72	75	85	56	60	72	75	85	Hz
Pixel	25.175	31.5	31.5	36	36	40	50	49.5	56.25	MHz
Horizontal visible	640	640	640	640	800	800	800	800	800	Dots
Horizontal total	800	832	840	832	1024	1056	1040	1056	1048	Dots
Horizontal front porch	24	32	16	56	24	40	56	16	32	Dots
Horizontal sync	96	40	64	56	72	128	120	80	64	Dots
Horizontal back porch	48	128	120	80	128	88	64	160	152	Dots
Horiz blanking time	160	192	200	192	224	256	240	256	248	Dots
Vertical visible	480	480	480	480	600	600	600	600	600	Lines
Vertical total	525	520	500	509	625	628	666	625	631	Lines
Vertical front porch	18	17	1	1	1	1	37	1	1	Lines
Vertical sync	2	3	3	3	2	4	6	3	3	Lines
Vertical back porch	33	28	16	25	22	23	23	21	27	Lines
Vertical blanking time	45	40	20	29	25	28	66	25	31	Lines
Horizontal frequency	31.469	37.9	37.5	43.3	35.1	37.9	48.1	46.9	53.7	KHz
Vertical frequency	59.94	72.81	75	85.01	56.25	60.317	72.19	75	85.06	Hz
Vertical sync polarity	-	-	-	-	+	+	+	+	+	TTL
Horiz sync polarity	-	-	-	-	+	+	+	+	+	TTL
Dot rate	25.175	31.5	31.5	36	36	40	50	49.5	56.25	MHz

Mode	10	11	12	13	14	15	16	18	
H Resolution	1024	1024	1024	1024	1280	1280	1280	720	
V Resolution	768	768	768	768	1024	1024	1024	400	
Refresh Rate	60	70	75	85	60	75	85	70	Hz
Pixel	65	75	78.75	94.5	108	135	157.5	28.320	MHz
Horizontal visible	1024	1024	1024	1024	1280	1280	1280	720	Dots
Horizontal total	1344	1328	1312	1376	1688	1688	1728	900	Dots
Horizontal front porch	24	24	16	48	48	16	64	18	Dots
Horizontal sync	136	136	96	96	112	144	160	108	Dots
Horizontal back porch	160	144	176	208	248	248	224	54	Dots
Horiz blanking time	320	304	288	352	408	408	448	180	Dots
Vertical visible	768	768	768	768	1024	1024	1024	400	Lines
Vertical total	806	806	800	808	1066	1066	1072	449	Lines
Vertical front porch	3	3	1	1	1	1	1	12	Lines
Vertical sync	6	6	3	3	3	3	3	2	Lines
Vertical back porch	29	29	28	36	38	38	44	35	Lines
Vertical blanking time	38	38	32	40	42	42	48	49	Lines
Horizontal frequency	48.4	56.5	60	68.7	63.98	79.98	91.15	31.46	KHz
Vertical frequency	60.01	70.07	75.03	84.99	60.02	75.03	85.02	70.08	Hz
Vertical sync polarity	-	-	+	+	+	+	+	+	TTL
Horiz sync polarity	-	-	+	+	+	+	+	-	TTL
Dot rate	65	75	78.75	94.5	108	135	157.5	28.32	MHz

Mode	19	20	21	22	24	25	26	
H Resolution	640	1280	1920	640	640	832	1152	
V Resolution	480	720p	1080i	350	480	624	870	
Refresh Rate	50	60	60i	70	67	75	75	Hz
Pixel	25.175	74.250	74.25	25.175	30.240	57.283	100.000	MHz
Horizontal visible	640	1266	1901	640	640	832	1152	Dots
Horizontal total	800	1650	2201	800	864	1152	1456	Dots
Horizontal front porch	16	42	68	16	64	32	32	Dots
Horizontal sync	96	63	63	96	64	64	128	Dots
Horizontal back porch	48	279	169	48	96	224	144	Dots
Horiz blanking time	160	384	300	160	224	320	304	Dots
Vertical visible	480	687	518	350	480	624	870	Lines
Vertical total	629	750	562.5	449	525	667	915	Lines
Vertical front porch	62	1	0.5	37	3	1	3	Lines
Vertical sync	2	6	6	2	3	3	3	Lines
Vertical back porch	85	56	38	60	39	39	39	Lines
Vertical blanking time	149	63	44.5	99	45	43	45	Lines
Horizontal frequency	31.5	45.15	33.78	31.50	35.00	49.73	68.68	KHz
Vertical frequency	50	60	60	70	66.667	74.55	75.06	Hz
Vertical sync polarity	-	-	-	-	-	-	-	TTL
Horiz sync polarity	-	-	-	-	-	-	-	TTL
Dot rate	25.175	74.25	74.25	25.175	30.24	57.283	100.000	MHz

Many products for Gateway and its subsidiaries are custom engineered by our suppliers to Gateway specifications and may vary from similarly marketed products.

MAN MON 42" HD PLASMA SPEC R0 8/03



8509360