

# FLATRON™ Plasma

50" Plasma Display Monitor

## MU-50PZ41B



Featuring

**DCDi**™

by FAROUDJA

Emmy® Award Winning  
Video Technology



Digitally yours



# FIRST IMPRESSIONS LAST.

## WORLD CLASS TECHNOLOGY

A global leader in markets as diverse as optical storage devices and air conditioning, LG Electronics is today one of the world's *fastest growing* electronics companies.

With offices in 72 countries, more than 75,000 employees and over 60 subsidiary corporations, LG is already established across Europe and Asia as a premier brand, and has become a major player in sectors such as display monitors, cell-phones and CD/DVD optical storage technologies.

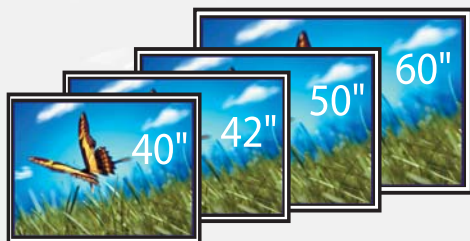
## WORLD CLASS PRODUCTION

LG Electronics has established itself as a leader in the field of advanced plasma screen production. All FLATRON Plasma screens, (and all component plasma modules) are *100% LG manufactured* in one of our two state-of-the-art automated production facilities in South Korea.

With a current 460,000 square feet of production space, LG already has the largest gas plasma module manufacturing capacity in the world, and plans to reach a volume of 1.5 million plasma modules per year by 2005. LG Electronics has an investment strategy to have the lead market share in plasma modules by this time.

## QUALITY AND CHOICE

LG is committed to ensuring that our FLATRON Plasma Displays are of maximum quality, adhering to strict quality assurance guidelines. We're proud also to offer the industry's widest range of screen sizes, to cater for all your display applications.



## The 50" MU-50PZ41B

### Versatile & Brilliant Display Solutions from LG

Capturing your audience's attention is one thing, holding it is another... The 50" FLATRON MU-50PZ41B will help you to achieve both, with a combination of its ultra-modern styling, crystal clear data images and high-definition video quality.

Equipped with a wide array of data and video inputs, the MU-50PZ41B is ideally suited to most any location or application. Exceptionally easy to use, you'll find functions such as Picture-in-Picture and side by side Twin Picture controls, Digital Zoom and DCDI™ Video Processing all help you get the most from your media. The MU-50PZ41B also has a built-in audio amplifier and offers DASP (Digital Auto Sound Processing) for automatically adjusting audio tone for selected content. Simply add speakers.

From boardrooms to shopping malls, from video conference suites to broadcast production studios: Nothing says "technologically sophisticated" quite like a Flatron MU-50PZ41B.

**DCDi**™  
by FAROUDJA

The **ONLY** Plasma Screens To Feature  
Emmy® Award Winning Faroudja Video

Directional Correlational Deinterlacing, known as DCDI™, is state-of-the-art video processing technology invented and patented by Faroudja, a division of Genesis Microchip Inc. Faroudja is a world leader in innovative high-performance video processing and creator of Emmy® Award winning technology with over 30 years of experience.

DCDI™ was designed for video based material like fast-paced sporting events. Its purpose is to eliminate jagged edges along diagonal lines caused by interpolation and achieves this by monitoring edge transitions, intelligently filling in the gaps.



3 Emmy®  
Awards for  
Excellence in  
Video Technology



To learn more about DCDI™, visit [lgeus.com/dcdi](http://lgeus.com/dcdi)

# FLATRON™ Plasma

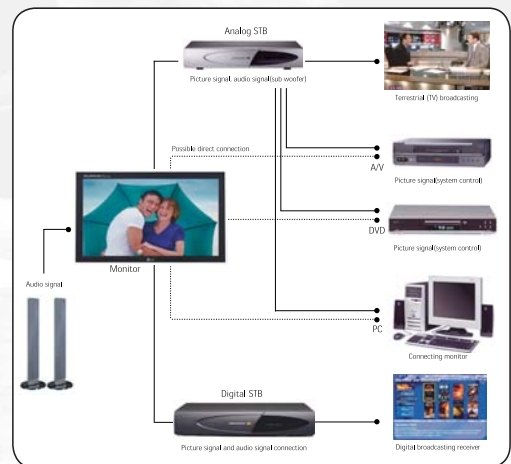


**FLATRON Plasma**  
Ideal for *your* business

- Boardroom Presentations
  - Conference Room Facilities
  - Video Conferencing Suites
  - Training Environments
  - Trade Show Booths
  - CAD / Graphic Design
- Broadcast / Video Editing
  - Operations Rooms
  - Monitoring Facilities
  - Reception Areas
  - Public Informations Displays
  - Home Theater Systems

## NETWORKING PERFECTION

The ability to integrate into any given environment or network is a speciality of the FLATRON MU-50PZ41B. Displaying data from a PC source (15-pin D-Sub VGA input), or from video sources such as DVD, VHS or digital/analog set top boxes (S-Video, Composite, DVI, 15-pin D-Sub RGB signal or Y,Pb,Pr component inputs), the MU-50PZ41B will effortlessly co-exist with your current corporate or home-based technologies. The input bay also includes an RS-232C input and a hardwired remote jack input for connecting to networking and control equipment.



## DRP - Digital Reality Picture™

All FLATRON Plasma Screens feature Digital Reality Picture™, LG's realtime contrast-analysis algorithm. Many plasma screens suffer low visible contrast when areas of the screen contain dark detail levels. DRP™ analyzes these dark areas and automatically resolves detail that would otherwise be missed across video or data input.



## P-Cubed (Power-Picture Control Process)

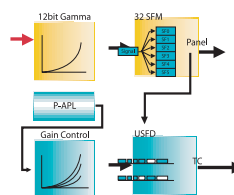
Picture brightness levels achieved on the MU-50PZ41B screen can reach more than 250% from source material, while power consumption is simultaneously decreased.

### 1. Picture Control Process

The MU-50PZ41B has an integrated brightness enhancement feature using 12-bit inverse gamma correction to achieve more than 1000 gray levels from an 8bit (256) gray level input signal.

### 2. Power Control Process

A built in signal-gain control process means that the MU-50PZ41B will run at the peak efficiency of performance with minimum power consumption.



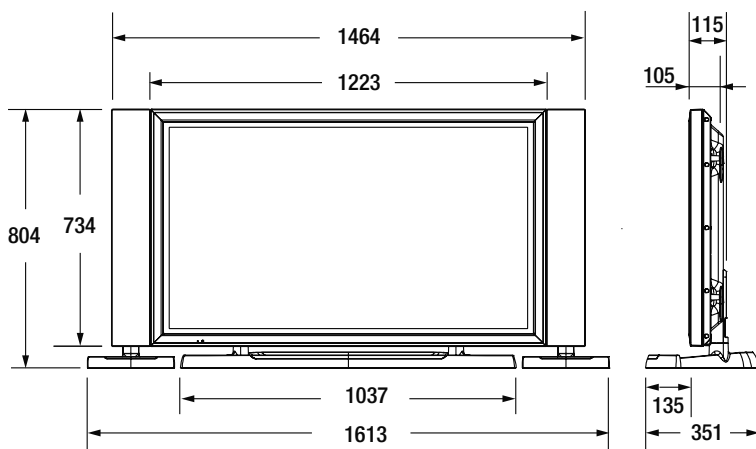
## TWIN PICTURE / PIP FUNCTIONS

To increase the networkability of the MU-50PZ41B, the monitor is equipped with our advanced Twin Picture (side by side) and Picture in Picture functions. Users can quickly and easily adjust these settings using the On Screen Display menu to route different video or data sources to windows on the screen, and even set the size and location of these windows. This makes the screen ideal for applications such as video & document conferencing, CAD, digital editing and many more.

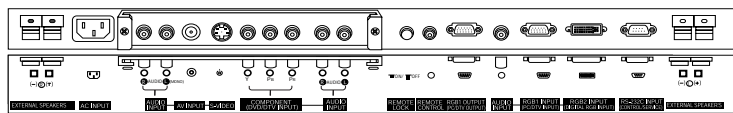
## ISM (Burn-In Minimization)

The MU-50PZ41B features ISM, a complex screen monitoring process to minimize possible phosphor burn-in. A variety of pixel shift, brightness-decrease steps and pattern deviation detection algorithms, coupled with the option to activate a White Wash function to remove light permanent images, will ensure your MU-50PZ41B will enjoy a clear image and a long life.





## INPUT/OUTPUT CONNECTORS



## RESOLUTIONS & FREQUENCIES

### • Component Video Input (Y, Cb/Pb, Cr/Pr)

Resolution	H-Freq (kHz)	V-Freq (Hz)
704 x 480	15.73	59.94
704 x 480	31.47	59.94
704 x 576	31.25	50.00
720 x 480	31.50	59.94
1280 x 720	45.00	60.00
1280 x 720	44.96	59.94
1920 x 1080	33.75	60.00
1920 x 1080	33.72	59.94
1920 x 1080	28.13	50.00

### • RGB1 (D-Sub) & RGB2 (DVI) Inputs

Resolution	H-Freq (kHz)	V-Freq (Hz)
RGB1&2 640 x 350	31.468	70.09
RGB1&2 640 x 350	37.861	85.08
RGB1&2 720 x 400	31.469	70.08
RGB1&2 720 x 400	37.927	85.03
RGB1&2 640 x 480	31.469	59.94
RGB1&2 640 x 480	35.000	66.66
RGB1&2 640 x 480	37.861	72.80
RGB1&2 640 x 480	37.900	75.00
RGB1&2 640 x 480	43.269	85.00
RGB1 Only 640 x 480	45.913	80.03
RGB1 Only 640 x 480	53.011	100.04
RGB1 Only 640 x 480	64.062	120.00
RGB1&2 800 x 600	35.156	56.25
RGB1&2 800 x 600	37.879	60.31
RGB1&2 800 x 600	46.875	75.00
RGB1&2 800 x 600	53.674	85.06

### • RGB1 (D-Sub) & RGB2 (DVI) Inputs

Resolution	H-Freq (kHz)	V-Freq (Hz)
RGB1 Only 800 x 600	56.000	90.00
RGB1 Only 800 x 600	64.016	100.00
RGB1&2 832 x 624	49.725	74.55
RGB1&2 1024 x 768	48.363	60.00
RGB1&2 1024 x 768	56.476	70.06
RGB1&2 1024 x 768	60.023	75.02
RGB1&2 1024 x 768	68.677	84.98
RGB1&2 1365 x 768	47.700	60.00
RGB1&2 1365 x 768	59.625	75.02
RGB1&2 1365 x 768	67.575	84.98
RGB1&2 1152 x 864	54.348	60.05
RGB1&2 1152 x 864	63.995	70.01
RGB1&2 1152 x 864	67.500	75.00
RGB1&2 1152 x 864	77.487	85.05
RGB1&2 1152 x 870	68.681	75.06
RGB1&2 1280 x 960	75.000	75.00
RGB1&2 1280 x 1024	63.981	60.02
RGB1&2 1280 x 1024	79.796	75.02

### • DTV

Resolution	H-Freq (kHz)	V-Freq (Hz)
RGB1&2 720 x 480	31.25	60.00
RGB1&2 1280 x 720	45.00	60.00
RGB1&2 1280 x 720	44.96	59.94
RGB1&2 1920 x 1080	33.75	60.00
RGB1&2 1920 x 1080	33.72	59.94
RGB1 Only 1920 x 1080	28.13	50.00

## ACCESSORIES



Remote Control Included



Desktop Stand AP-50DA40B (Optional)



Speakers AP-50SA40B  
Speaker Stands (AP-50SA40DB) (Both Optional)

## MONITOR SPECIFICATIONS

Video	Aspect Ratio	16:9	
	Display	WXGA (1366 x 768)	
	Screen Size (H x V)	36.3" x 20.5" (921.2 x 519.4 mm)	
	Resolution	1366 x 768 (WXGA)	
	Cell Pitch (H x V)	0.25 x 0.81 mm	
	Picture Mode	4:3, 16:9, Zoom	
	Peak Bright	620 cd/m <sup>2</sup>	
	Contrast Ratio (Darkroom)	600:1	
	Color Temperature	8000°K	
	Viewing Angle	>160°	
	Colors (RGB)	16.7 Million	
	Plasma Type	RGB Stripe (Black Matrix)	
	Input Signal	NTSC, HD, VGA-XGA	
Features	Digital Comb Filter	Yes	
	Digital Reality Picture™	Yes	
	Picture In Picture	Yes (Variables Sizes/Positions), Side By Side	
	DCDI™ Video Processor	Yes	
Input / Output	RGB Input (D-SUB15)	PC (VGA-SXGA), HD (480P/720P/1080i)	
	RGB Output (D-SUB15)	RGB (PC/HD), Monitor Loop Through	
	Composite Video Input	Yes (Phono Type)	
	S-Video Input	Yes (Standard 4 Pin Mini-Din)	
	Component Video Input (Y,Pb,Pr)	SD & HD (Y/Y, Pb/Cb, Pr/Cr)	
	DVI Input (DVI-I)	Digital RGB Input	
	Audio Input	L/R, Phono Type	
	Audio Output	10W x 10W, 8 Ohm (Nominal)	
	Speaker Output Terminals	L/R, Push Terminals	
	Control	Hardwired IR Control Jack	1/8" Mini Phone Jack
	RS232C Control	9 Pin D-Sub	
Monitor Controls	Power (Main & Standby), Input Select, Volume +/-		
Remote Function Controls	Power, Sleep, Input Select, APC, DASP, ARC, PIP ARC, PIP, Twin Picture, Swap, Sub Input, Menu, Mute, Vol +/-, Select +/-, OK (Enter) 0 ~ 9 keys, Win Size, Win Position, Split Zoom, Zoom +/-		
On Screen Adjustments	VIDEO :	APC (Auto Picture Control), ACC (Auto Color Control), Color Temp., Contrast, Brightness, Color, Sharpness, Tint	
	AUDIO :	DASP (Digital Audio Sound Processing), Auto Volume Level, Treble, Bass, Balance	
	TIME :	Clock, On/Off Timer, Auto Off (OSD Selectable)	
	SCREEN:	Auto Configuration, ARC (Picture format of 16:9, 4:3 or Zoom) Zoom In/Out, Position, Manual Configuration, Screen Adj., Reset	
	SPECIAL :	Language (English, French, Dutch, Spanish, Italian), Key Lock, Orbiter, White Wash, Set ID	
	TWIN :	Input, Dual Window, PIP, Sub Input, Win. Size, Win. Position, PIP ARC	
	Operating Temperature	32°F ~ 104°F (0°C ~ 40°C)	
	Operating Humidity	30% ~ 80%	
	AC Input	120V	
	Power Consumption	500W Max.	
Size (WxHxD)	48.2" x 28.9" x 4.1" (1223 x 734 x 105 mm)		
Size (WxHxD) with stand (Optional)	48.2" x 31.7" x 13.8" (1223 x 804 x 351 mm)		
Weight (Net)	99.9 lbs (45.3 Kg)		
Shipping Weight	115.7 lbs (52.5 Kg)		
UPC#	719192165380		

