

**Pioneer** *sound.vision.soul*



From the leader in PDP technology: a high-performance model that will meet your display needs now and into the future.

43-inch XGA Professional Plasma Display

**PDP-434CMX**

**PURE**  
VISION

**XGA 43** inch



## A 43-inch PDP Unmatched for Quality and Flexibility

Pioneer, the leader in PDP technology, proudly introduces the new high-performance 43-inch PDP-434CMX. Its superior contrast, color and clarity are unmatched by other PDPs, and its wide range of functions and ease of use add to its appeal. What's more, extensive compatibility and expandability make it well suited for all types of interior and exterior display applications, now and in the future. If the 43-inch size fits your needs, the PDP-434CMX will give you the quality and flexibility you want.



PURE  
VISION

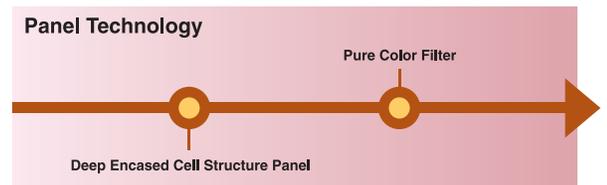
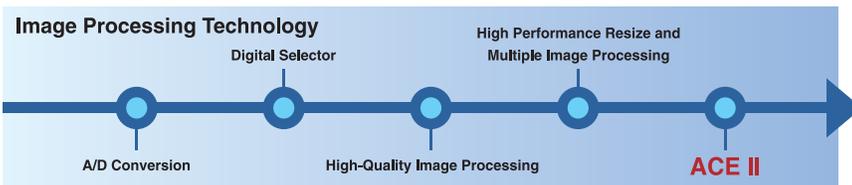
43-inch XGA Professional Plasma Display

**PDP-434CMX**



# PURE DRIVE

## Plasma Ultimate Reference Exclusive Drive



### Pure Drive Technology Delivers Stunningly Beautiful Images

Pioneer's Pure Drive technology encompasses the entire range of image generation and processing that gives the PDP-434CMX its astoundingly clear, smooth and natural picture. Unlike other PDP systems, Pure Drive maintains all signals in the digital domain, which eliminates loss, reduces distortion, and provides a far greater degree of control. An important step in this process is ACE II (Advanced Continuous Emission II), which processes the basic color elements enabling the reproduction of an astonishing 1.07 billion colors and eliminates false contouring within the PDP. Other displays can't match Pioneer's smoothness and subtlety of color or Pioneer's superb contrast even in dark scenes.

### Deep Encased Cell Structure

The cells of a plasma display panel, where light is generated, are a key part of its reproduction ability. Pioneer's Deep Encased Cell Structure is superior to other types. This proven technology has been further upgraded in the PDP-434CMX by using a new fluorescent body material (green), delivering ultra-high contrast and brightness of 1,100 cd/m<sup>2</sup>.

**More Gray Shades in the Low Brightness Range**

**Conventional PDP**

Brightness level vs. Input level graph showing a sharp drop-off in brightness at low input levels.

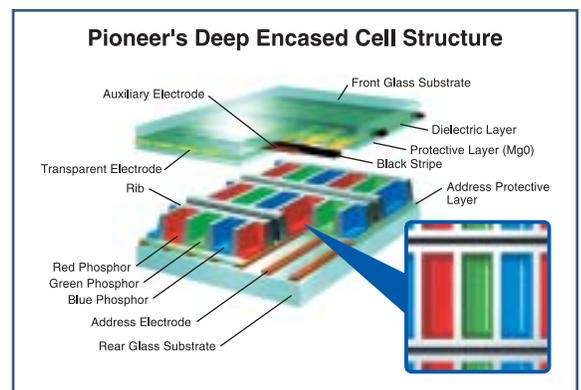
**Pioneer PDP-434CMX**

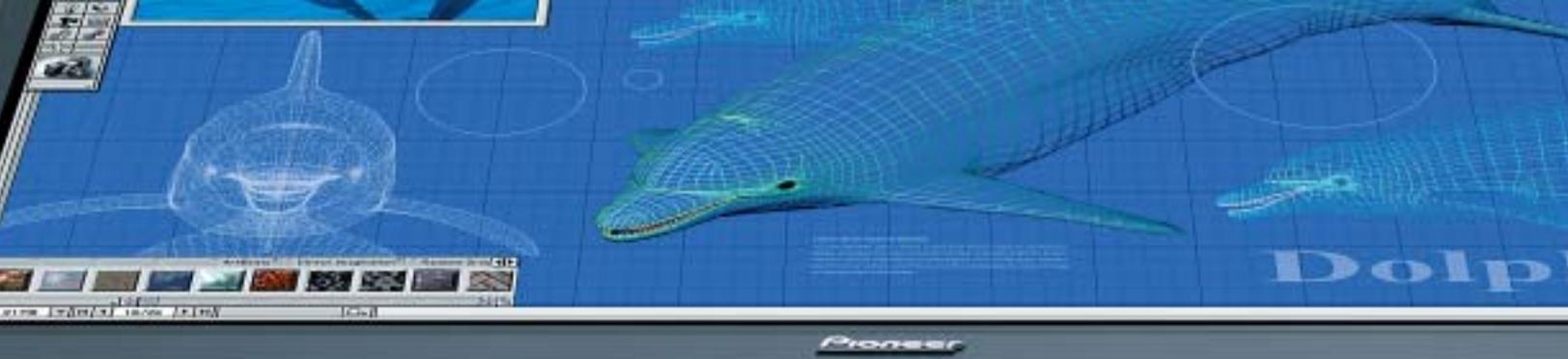
Brightness level vs. Input level graph showing a more gradual and consistent reproduction of gray shades in the low brightness range.

**ACE II virtually eliminates false contouring**

**Conventional PDP**

**ACE II**





## Easy Operation with Numerous Convenient Functions

### Compatibility with a Wide Range of PC Signals

With a native resolution of 1024 x 768, this high precision panel can accurately display personal computer signals ranging from 640 x 400 and 640 x 480 (VGA) to 1024 x 768 (XGA). It can also support compression display of 1280 x 768 (Wide XGA), 1280 x 1024 (SXGA) and 1600 x 1200 (UXGA) signals. In addition, Pioneer's proprietary scaling technology enables a circle to be displayed as a circle onto 1024 x 768 at 16:9 with 1280 x 768 signal input.

### Intelligent Auto Setup

The Intelligent Auto Setup feature improves both performance and convenience, allowing image adjustment via the remote control. This display incorporates a new function, Auto Adjust, which detects the PC signal and automatically adjusts the position of the image, making it unnecessary to have to push the Auto Setup button.

### Three Dual Picture Modes

The PDP-434CMX offers a choice of three Dual Picture modes for simultaneous display of images from two connected sources. Split screen shows two images side by side, Picture-In-Picture superimposes a small picture over the full-screen picture in any of the four corners, and Picture-Out-Picture displays the second image on the right side of the screen.



Side by Side

Picture-In-Picture

Picture-Out-Picture

### Enhanced Point Zoom

The Enhanced Point Zoom function lets you instantly expand any portion of a PC image in three steps (1.5x, 2x, 3x), great for emphasizing key points in presentations. The Zoom Area sub-display area makes it easy to confirm the expanded portion.



1x

3x

### 2 x 2 Image Expansion

This mode allows a 2 x 2 data wall using four units without the need for an expansion device. Two display modes are available,\* one that enlarge all picture elements so the entire picture is visible, and one that enlarges the whole image so lines between units are not visible.

\* With the use of a Pioneer authorized card.



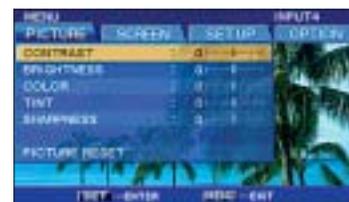
### Color Detail Adjustment

Color adjustment can be performed for any specific color without affecting the other colors. For example, you can change the purplish red of a sports car to crimson without changing other colors in the image.



### Large GUI Display

Having a GUI display is a definite advantage, making operation considerably easier, but if it is too small to see when the unit is mounted, its usefulness is limited. The PDP-434CMX provides an extra-large display, which is visible even when the unit is mounted in a high location.



### Function Lock

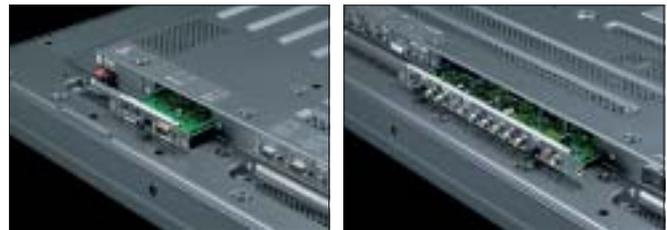
A number of functions can be locked, making the display system more secure. Lock modes are on/off, main unit buttons, remote control, main unit buttons plus remote control, and memory lock, which selects input and volume default settings when the unit is turned on.

## Expandability to Meet a Wide Variety of Present and Future Needs — ES\* Card Slot Interface



The PDP-434CMX is designed to be ready for any type of application with the integration of two ES Card Slot interfaces, one for communication and one for enhanced data. The PDP-434CMX comes supplied with a communication card that includes RS-232C and combination I/O interfaces. This card can be removed. The second slot can be used to enable video capabilities through the input of a wider range of analog or digital signals, and additional control. As a result, one PDP-434CMX can be used for multiple tasks, including various applications that other PDPs can't handle.

You can use it any way you need to, and it is also ready for additional tasks you may develop in the future. Pioneer's "Expansion Solutions" are one more reason why the PDP-434CMX should be your first choice for a professional plasma display. \* Expansion Solutions



## Outstanding Reliability and Durability

### Extremely Low Power Consumption

This PDP-434CMX consumes only 298W of power while producing bright images. This is extremely low for a 43-inch XGA-class plasma display. Standby power is a mere 0.8W.

### Four Energy Save Modes

In addition to the normal operating mode, the PDP-434CMX provides a choice of four energy save modes that further reduce power consumption. These modes are Power Save, Intermediate, Linear Brightness, which decreases the peak intensity of high-brightness images, and Auto Brightness Control, which uses a sensor to automatically adjust the brightness depending upon room lighting.



### Three Image Burn-In Prevention Modes

The PDP-434CMX employs powerful tools to prevent burn-in. These include RGB separate full mask, side mask brightness adjustment, Orbiter mode for one-pixel-at-a-time movement of displayed images at fixed intervals, and an Inverse mode that displays images as negative. Full mask and Inverse can be controlled by the on/off timer via the Screen Management function.

### Smart Cooling System

Internal fans are activated only when needed, keeping fan noise to a minimum and conserving power.

### Peak Pattern Detection System

This system also helps to prevent burn-in by monitoring the prolonged display of still images and the concentration of brightness in any segment of the panel. \* Even so, displaying the same images for long periods should be avoided.

### Display of Error Information

In order to minimize downtime, the PDP-434CMX provides comprehensive error information on the screen. Many different errors, their causes, and part serial numbers can be displayed and identified by symbols. In addition, various errors are indicated by the two front LEDs, so even if the display malfunctions, the cause can be quickly identified and corrected.

### RS-232C Get Command

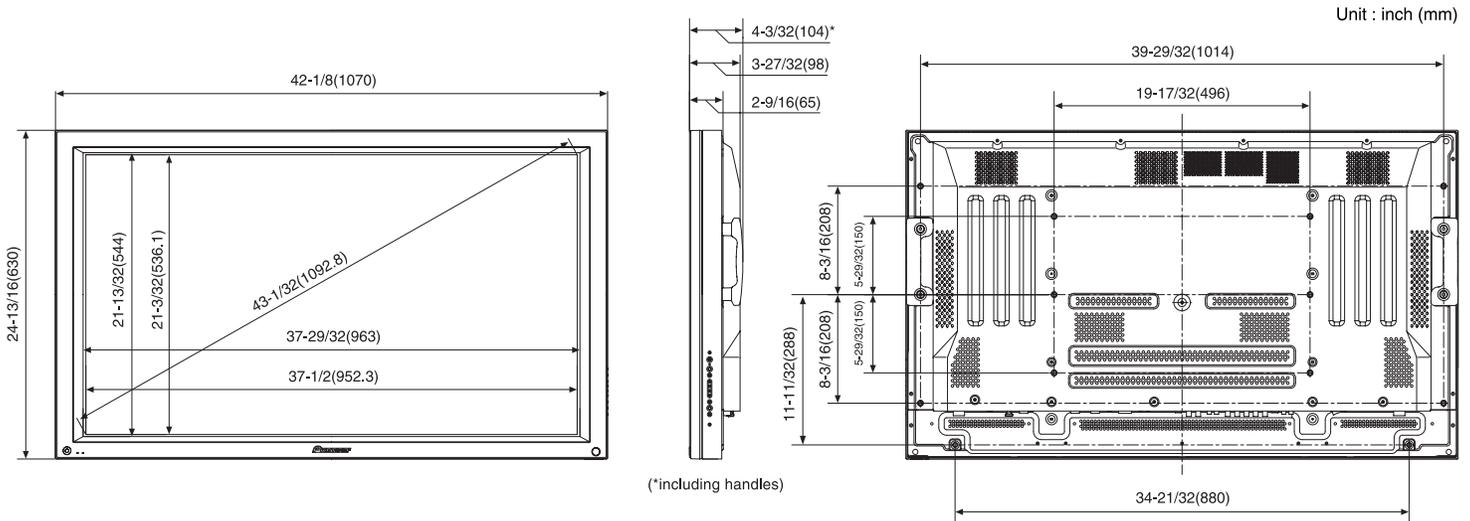
The PDP-434CMX can transmit various information to a PC via the RS-232C link using the Get command, including power on/off, input number, signal detection and complete error data. This ensures that remote monitoring is worry-free.

### WHQL Compatibility

Pioneer's plasma displays are the industry's first to receive the Windows Hardware Qualification Labs (WHQL) certification of compliance. The PDP-434CMX continues this tradition by providing Plug & Play drivers to support Microsoft® Windows® and other operating systems. This is a display you can use with confidence. \* Compatible with Microsoft Plug & Play (VESA DDC 1/2B)



## Dimensions



## Terminal Configuration



## Specifications

Effective Screen Size (W x H)	37-1/2" x 21-3/32" (952.3 x 536.1mm)(43in. Diag.)
Aspect Ratio	16:9
Number of Pixels	1024 (Hor.) x 768 (Ver.)
Pixel Pitch	0.930 (Hor./RGB trio) x 0.698 (Ver.) mm
Color Resolution	1024 grey scale, 1.07billion colors
Brightness	1100cd/m <sup>2</sup> (white peak)
Dimensions (W x H x D*)	42-1/8" x 24-13/16" x 3-27/32" (1070 x 630 x 98 mm)
Weight	72 lbs. 12 oz (33 kg)
Power Consumption	298W (0.8W at stand by)
Power Requirements	AC 100-120V ±10% 50/60Hz
Operating Temperature	32° F-104° F (0° C-40° C)
Operating Humidity	20%-80%
Safety Regulations	UL 1950, FCC 15B class B, C-UL

\*Not including handles

## Input/Output Terminals

	Connector	Signal	Level/Impedance
INPUT 1	IN	Mini D-sub 15-pin	Analog RGB Signal (G on Sync compatible) RGB : 0.7Vp-p/75 Ω G on Sync : 1Vp-p/75 Ω HD/CS, VD : TTL level/2.2k Ω Compatible with Microsoft Plug & Play (VESA DDC 1/2B)
		Mini D-sub 15-pin	Analog RGB Signal (G on Sync compatible) 75 Ω
INPUT 2	IN	DVI-D	Digital RGB Signal (DVI Standard)*
		24 Pin	Compatible with Microsoft Plug & Play (VESA DDC 2B)

\*Not compatible with Copy Protection (HDCP)

## Audio Input/Output Terminals

	Connector	Level/Impedance
AUDIO INPUT (INPUT1)	IN	Stereo mini L/R: 500mVrms/more than 10k Ω
AUDIO INPUT (INPUT2)	IN	Stereo mini L/R: 500mVrms/more than 10k Ω
AUDIO OUTPUT	OUT	Stereo mini L/R: 500mVrms/less than 5k Ω (FIX) L/R: 0-500mVrms/less than 5k Ω (VARIABLE)
SPEAKER	OUT	L/R: 8-16 Ω/7W +7W(8 Ω)

## Control Terminals

	Connector	D-sub 9 Pin
RS-232C (for control of computer)	Connector	Baud Rate 1200, 2400, 4800, 9600, 19200, 38400 bps
Combination IN/OUT	Connector	Mini DIN 6 Pin (x2)

## Computer Input Signal

Resolution (dot x line)	Vertical Frequency	Horizontal Frequency	Digital RGB	Usage
640x400	56.4Hz	24.8kHz		NEC PC-9800
720x400	70.1Hz	31.5kHz		NEC PC-9800
640x480	85.1Hz	37.9kHz		
	60Hz	31.5kHz	YES	Apple Macintosh 13"
	66.7Hz	35.0kHz		
	72.8Hz	37.9kHz		
	75Hz	37.5kHz		
848x480	85Hz	43.3kHz		
	60Hz	31.0kHz	YES	
	56Hz	35.2kHz	YES	
	60Hz	37.9kHz	YES	
	72Hz	48.1kHz		
800x600	75Hz	46.9kHz		
	85Hz	53.7kHz		
	74.6Hz	49.7kHz		Apple Macintosh 16"
	60Hz	48.4kHz	YES	
	70Hz	56.5kHz		
1024x768	75Hz (74.9Hz)	60.0kHz (60.2kHz)		( ) Indicates Apple Macintosh 19"
	85Hz	68.7kHz		
	56Hz	45.1kHz	YES	
	60Hz	47.8kHz	YES	
1280x768*	70Hz	56.1kHz		
	60Hz	53.7kHz	YES	
	72Hz	64.9kHz		
1152x864*	75Hz	67.5kHz		
	75.1Hz	68.7kHz		Apple Macintosh 21"
	66Hz	61.8kHz		Sun Microsystems LO
1152x900*	76Hz	71.7kHz		Sun Microsystems HI
	60Hz	60.0kHz	YES	
1280x960*	60Hz	64.0kHz	YES	
1280x1024*	75Hz	80.0kHz		
	85Hz	91.2kHz		
	60Hz	65.3kHz	YES	
1400x1050*	75Hz	82.3kHz		
	85Hz	93.9kHz		
	60Hz	75.0kHz		
	65Hz	81.3kHz		
1600x1200*	70Hz	87.5kHz		
	75Hz	93.8kHz		
	85Hz	106.3kHz		
	60Hz	75.0kHz		
	65Hz	81.3kHz		

\*Compressed or partial display

## Accessories

Power Code x 1, Remote Control Unit x 1, Remote Control Unit Holder x 1, AA(R6) batteries x 2, Cleaning cloth(for screen) x 1, Speed clamps x 2, Bead bands x 2, Display stands x 2, Washers x 2, Hex hole bolts(M8x40) x 2, Operating Instructions x 1, Warranty x 1

## Notice

This equipment is sold on the condition that it will be installed by a competent professional engineer with sufficient training and skill to carry out proper installation. Be sure to entrust the installation and setup of this machine only to a competent professional or retail service engineer. Pioneer cannot accept liability in case where the equipment is damaged due to inappropriate installation location, improper assembly, installation, setup, operation or renovation, or by natural disasters.

## Options

### BNC Connector Interface Card **PDA-5003**

Enables the ability to display High Definition video through RGB/component, S-Video and composite input terminals.



■ **VIDEO INPUT/OUTPUT** 3.58NTSC, 4.43NTSC, PAL, SECAM, PAL-N, PAL-M

INPUT3	IN	Connector	Signal	Level/Impedance
		Mini DIN 4Pin (S terminal)	Y/C Separate Video Signal	Y: 1Vp-p/75 Ω C: 0.286Vp-p/75 Ω (NTSC) 0.3Vp-p/75 Ω (PAL)
INPUT4	IN	BNC	Composite Video Signal	1Vp-p/75 Ω
	OUT	BNC	Composite Video Signal	75 Ω
INPUT5	IN	BNCx5	Analog RGB Signal (Compatible with G on Sync)	RGB: 0.7Vp-p/75 Ω G on Sync: 1Vp-p/75 Ω HD/CS_VD: TTL level/75 Ω or 2.2k Ω switchable
			Component Video Signal	Y: 1Vp-p/75 Ω Pb/Cb, Pr/Cr: 0.525Vp-p/75 Ω (75% saturation)

■ **AUDIO INPUT/OUTPUT**

	Connector	Level/Impedance
AUDIO INPUT(INPUT3/4)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω
AUDIO INPUT(INPUT5)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω

### RCA Connector Interface Card **PDA-5004**

Enables the ability to display High Definition video through component, S-Video and composite input terminals.



■ **VIDEO INPUT/OUTPUT** 3.58NTSC, 4.43NTSC, PAL, SECAM, PAL-N, PAL-M

INPUT3	IN	Connector	Signal	Level/Impedance
		Mini DIN 4Pin (S terminal)	Y/C Separate Video Signal	Y: 1Vp-p/75 Ω C: 0.286Vp-p/75 Ω (NTSC) 0.3Vp-p/75 Ω (PAL)
INPUT4	IN	RCA	Composite Video Signal	1Vp-p/75 Ω
	OUT	RCA	Composite Video Signal	75 Ω
INPUT5	IN	RCAX3	Component Video Signal	Y: 1Vp-p/75 Ω Pb/Cb, Pr/Cr: 0.525Vp-p/75 Ω (75% saturation)

■ **AUDIO INPUT/OUTPUT**

	Connector	Level/Impedance
AUDIO INPUT(INPUT3)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω
AUDIO INPUT(INPUT4)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω
AUDIO INPUT(INPUT5)	RCA pin x 2	L/R: 500mVrms/more than 10k Ω

### Optional Side-Mount Speakers **PDP-S07-LR**

2-way speakers with a dome tweeter and a newly designed perpendicularly installed oval unit. These speakers are compact, yet deliver wide-range performance.

**Maximum input** 12W/8 ohms  
**Dimensions (WxHxD)** 2-29/32" x 24-13/16" x 3-31/32" (74 x 630 x 101 mm)  
**Weight** 3 lbs. 8 oz (1.6 kg.) (one unit)



**PSA-1**  
ADJUSTABLE HEIGHT  
SUSPENSION ADAPTER



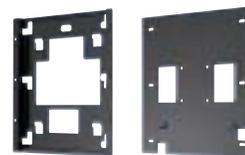
**PSA-2**  
ADJUSTABLE HEIGHT  
SUSPENSION ADAPTER



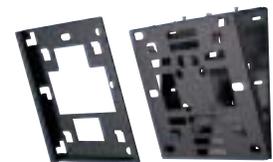
**PCA-1**  
1-1/2" NTP (SINGLE)  
CEILING ADAPTER



**PCA-2**  
2" NTP (DUAL)  
CEILING ADAPTER



**PDWB-5003**  
FLAT WALL MOUNTING  
BRACKET for 43" PLASMA



**PWM-503**  
TILTING WALL MOUNTING  
BRACKET for 43" PLASMA

\*These items have been manufactured by Premier Mounts. If you need further information please call 1-800-368-9700 or access to <http://www.premiermounts.com/>.

# Unlimited Applications

Pioneer PDPs are ideal for a wide variety of applications, such as public information displays, visual displays at trade shows, industrial control and monitoring, trading room displays, electronic advertising and business presentations.



## The world leader in PDP quality and innovation.

Pioneer's reputation as the world's leading manufacturer of plasma display panels was solidified in 1997 with the release of the world's first 50-inch WXGA model, and is further confirmed by our fourth generation display, the PDP-434CMX. We lead the industry not only in terms of performance and functions, but also in the development of fundamental PDP technology. We proudly offer the highest quality of development, design and manufacture of all of our PDPs. We ensure strict adherence to the highest quality standards, allowing Pioneer Corporation to achieve ISO 14001 certification.



Pioneer Corporation and Pioneer Display Products Corporation where PDP products are developed have both achieved ISO 14001 certification.

\*For more details, contact one of the addresses below. \*All product names and company names are registered trademarks of their respective owners.

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- PIONEER CORPORATION URL : <http://www.pioneer.co.jp/>
- PIONEER ELECTRONICS (USA) INC. URL : <http://www.pioneerelectronics.com/>

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