

# USER GUIDE AND SPECIFICATIONS

# NI PMA-1115

## Portable Monitor Accessory

This document includes an overview and specifications for the NI PMA-1115 Portable Monitor Accessory.

## Overview

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The National Instruments PMA-1115 is a monitor and keyboard accessory for use with NI 8-slot PXI chassis. It includes the following features:

- 15 in. high-brightness TFT LCD touch screen panel
- 105-key English keyboard and touchpad
- Hardware for mounting to NI 8-slot PXI chassis
- Anti-glare tempered glass for LCD protection
- VGA and DVI connectivity to the LCD
- USB connectivity to the touch screen, keyboard, and touchpad
- Sheetmetal construction
- Universal AC/DC power supply with Y-cable for single wall connection
- RoHS compliance

For complete PXI system configuration information, refer to [ni.com/pxiadvisor](http://ni.com/pxiadvisor).

## Shipping Components

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The NI PMA-1115 kit includes the following items:

- NI PMA-1115
- Adapter plate and mounting hardware
- Y-splitter power cable
- 12 V DC/AC power adapter

- Video cabling to connect PMA-1115 to PXI controller
- Right-angle-to-vertical USB cable
- Driver CD
- Cable ties to organize power cabling
- Interlocking fastener to secure power adapter

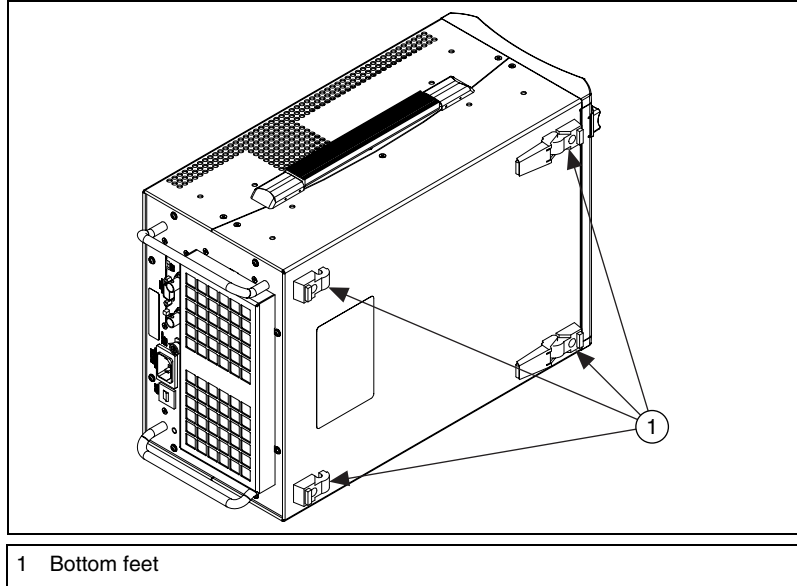
## Mounting

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The NI PMA-1115 includes a complete mounting kit for attachment to any NI 8-Slot PXI chassis. This kit contains an adapter plate with provisions to relocate the carrying handle as well as all required fasteners.

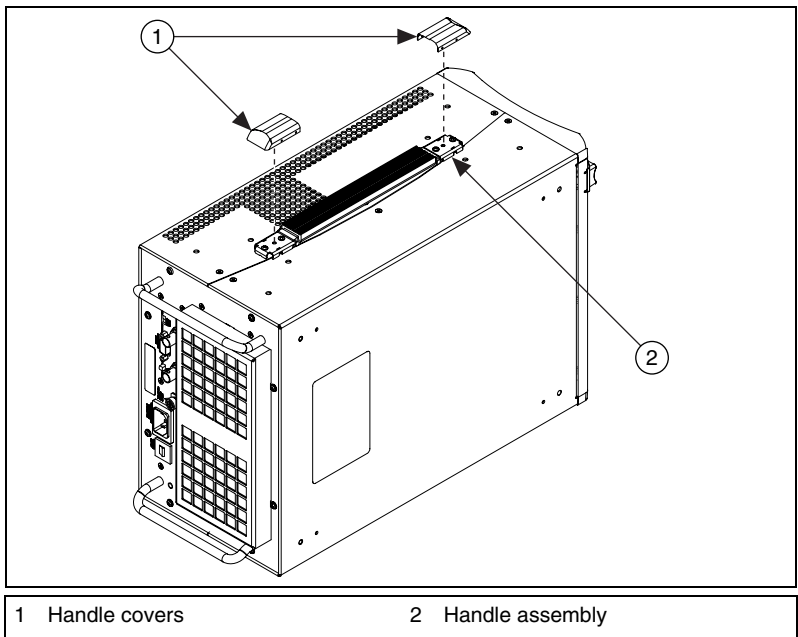
Complete the following instructions to install the NI PMA-1115.

1. Place chassis on its left side, as shown in Figure 1. Remove and discard the bottom feet and screws.



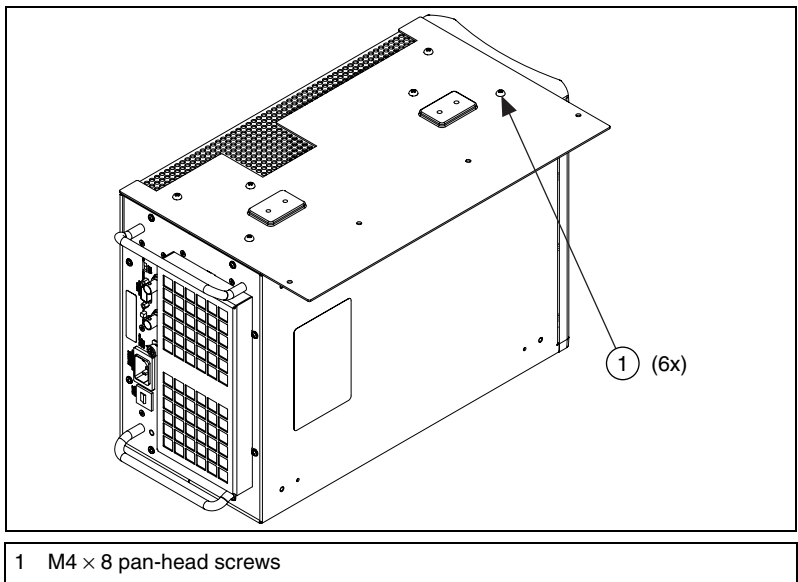
**Figure 1.** PXI 8-Slot Chassis On Left Side

2. Using a small flat-head screwdriver, carefully remove the handle covers, as shown in Figure 2.



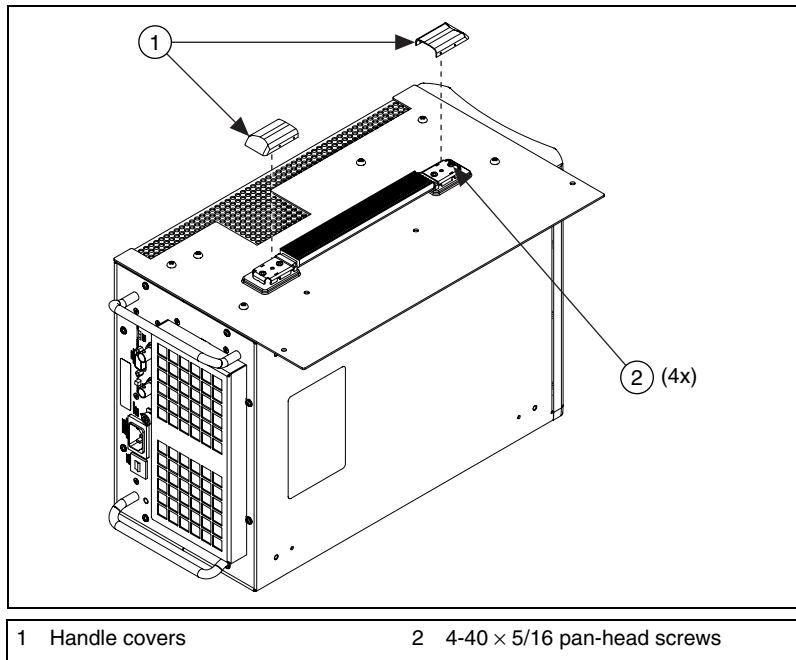
**Figure 2.** Removing the Handle

3. Remove the handle from the chassis. Retain the handle. Discard the screws.
4. Attach the adapter plate to the chassis using the supplied M4 × 8 pan-head screws, as shown in Figure 3.



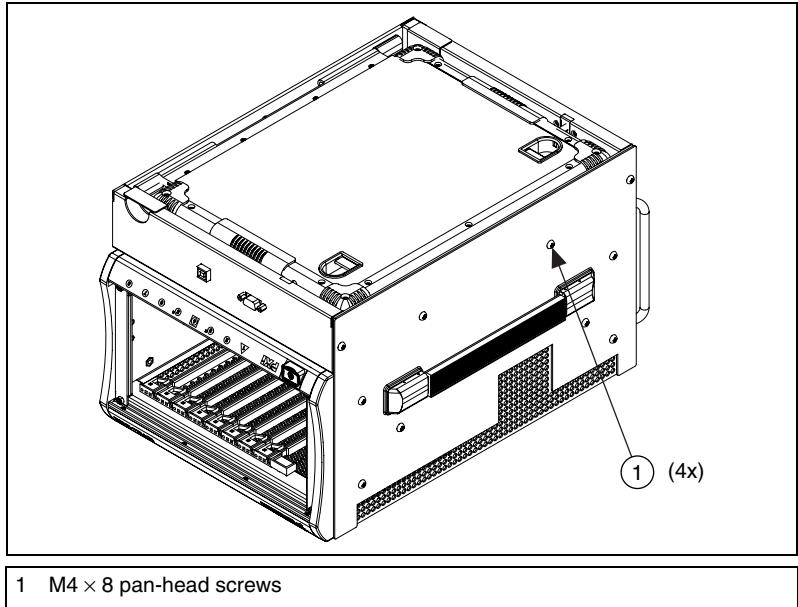
**Figure 3.** Installing the Adapter Plate

5. Reinstall the handle using the supplied 4-40 × 5/16 pan-head screws, as shown in Figure 4. Reinstall the handle covers by snapping them over the handle mounting plates.



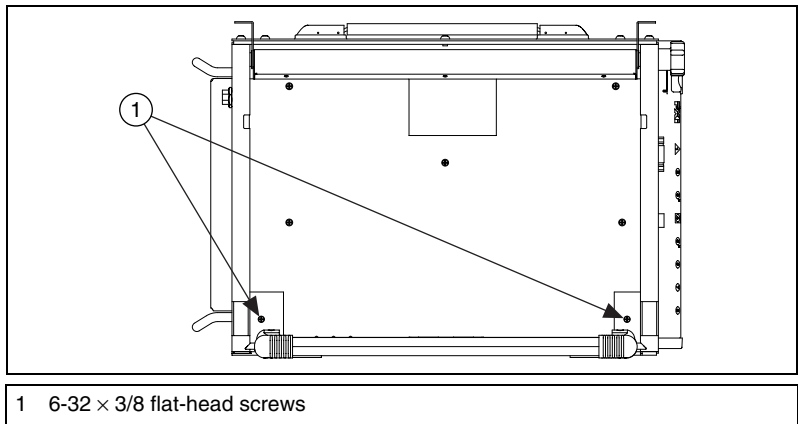
**Figure 4.** Reinstalling the Handle and Handle Covers

6. Orient the chassis and PMA-1115 as shown in Figure 5. Install the remaining M4 × 8 pan-head screws.



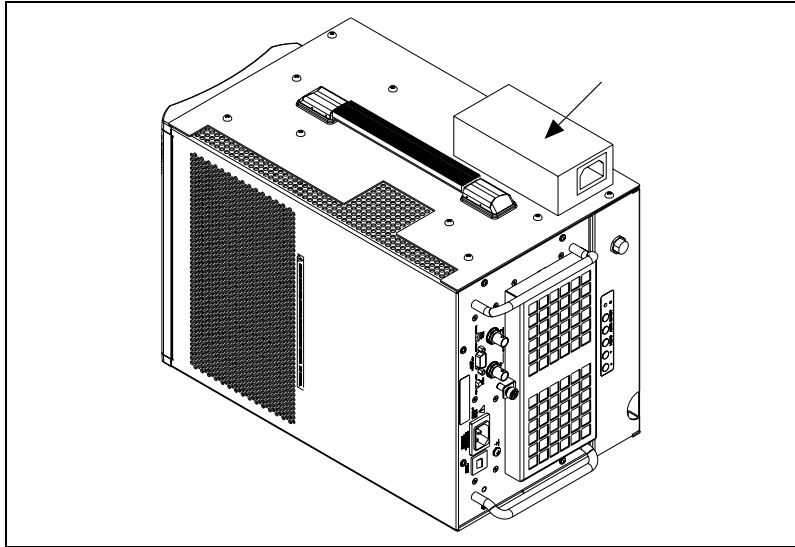
**Figure 5.** Installing the PMA-1115

7. Open the keyboard and LCD, as shown in Figure 6. Install the supplied 6-32 × 3/8 flat-head screws in the lower corners of the PMA-1115.



**Figure 6.** Installing the Lower Mounting Screws

8. If desired, use the provided interlocking fastener to attach the AC adapter to the unit. One suggested location is shown in Figure 7. Cable ties are also provided to organize the power cabling.



**Figure 7.** Suggested Location for Attaching AC Adapter



**Note** Do not place the AC adapter over any vent holes on the chassis cover, as this may cause chassis cooling issues.

## System Configuration

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The On-Screen Display (OSD) controls on the side of the PMA-1115 provide standby functionality, as well as standard video adjustments for the LCD. The touch screen can be configured and calibrated through the TouchKit software found on the provided driver CD.



**Note** The video resolution of the PXI Controller must be set to 1024 × 768 or lower.

# Ordering Information

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To order the NI PMA-1115 kit or power cords, refer to the following kit numbers.

## NI PMA-1115 Kit

NI PMA-1115 Portable  
Monitor Accessory ..... 780215-01

## Additional Power Cords

North American 240 VAC ..... 763068-01  
Japanese 100 VAC ..... 763634-01  
United Kingdom 240 VAC ..... 763064-01  
Swiss 220 VAC ..... 763065-01  
Australian 240 VAC ..... 763066-01  
Universal Euro 240 VAC ..... 763067-01

# Specifications

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## AC/DC Adapter

Input ..... 100 to 240 VAC, 47 to 63 Hz,  
1.8 A maximum  
Output ..... 12 VDC, 5 A

## LCD

Input ..... 12 VDC, 5 A  
Type ..... TFT LCD touch screen  
Auto-power switch ..... LCD goes into standby when  
no signal is present  
Power switch ..... Left side of product (STDBY)  
Diagonal size ..... 15 in. (38.11 cm)  
Maximum resolution ..... 1024 × 768

Display area .....	11.97 × 8.98 in. (30.41 × 22.81 cm)
Contrast ratio .....	500:1
Brightness .....	300 NTS
Frame rate .....	60 Hz (typical), 75 Hz (maximum)
Color .....	16.2 M colors
Viewing angle.....	160° up and down 160° right and left
Control system.....	On screen display
Connectivity.....	VGA or DVI-I

## Keyboard and Mouse

Keyboard .....	105-key, English language
Mouse .....	Touchpad
Connectivity.....	USB

## Mechanical

Overall dimensions .....	14.75 × 2.31 × 11 in. (37.47 × 5.87 × 27.94 cm) without mounting plate
Weight .....	5.0 kg (11 lb)
LCD monitor folding angle .....	Up to 80°

## Environmental

Maximum altitude.....	2,000 m (800 mbar) (at 25 °C ambient)
Pollution Degree .....	2
For indoor use only.	

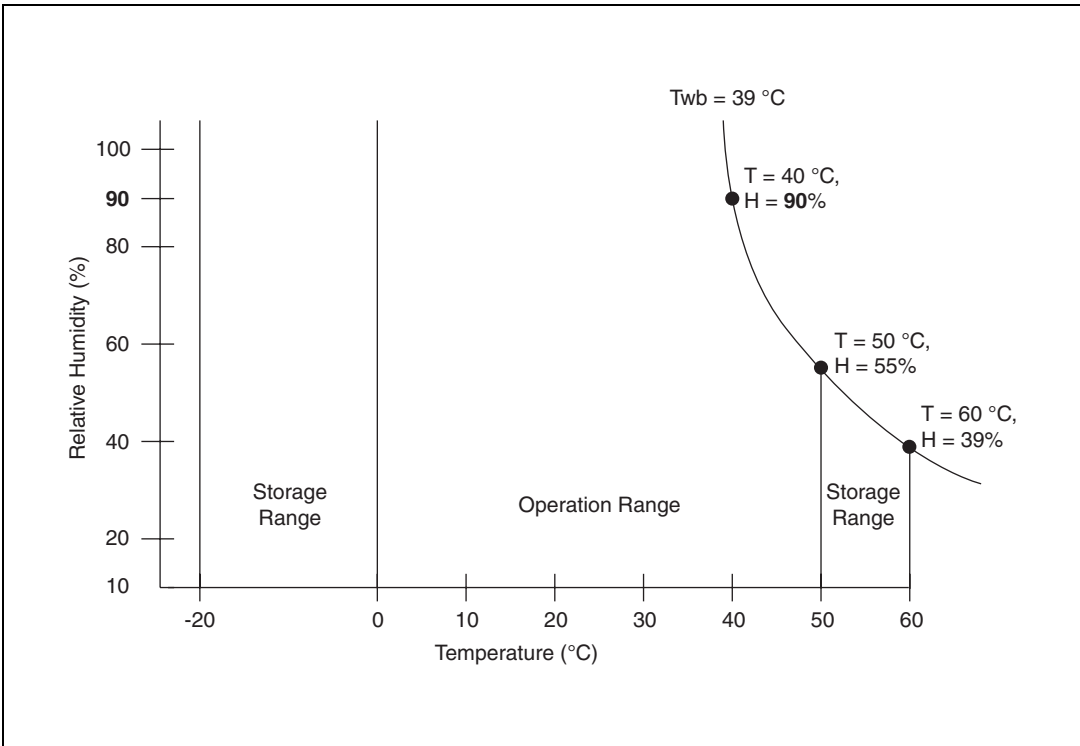


## Operating Environment

Ambient temperature range.....	0 to 50 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2. Meets MIL-PRF-28800F Class 3 low temperature limit.)
Relative humidity range .....	10 to 90%, noncondensing. (Refer to Figure 8 for the correlation between temperature and humidity. Tested in accordance with IEC-60068-2-56.)

## Storage Environment

Ambient temperature range.....	-20 to 60 °C (Tested in accordance with IEC-60068-2-1 and IEC-60068-2-2.)
Relative humidity range .....	10 to 90%, noncondensing. (Refer to Figure 8 for the correlation between temperature and humidity. Tested in accordance with IEC-60068-2-56.)



**Figure 8.** Temperature/Humidity Relationship

## Shock and Vibration

Operational shock .....10 g peak, half-sine, 11 ms pulse  
(Tested in accordance with IEC-60068-2-27.)

### Random Vibration

Operating .....5 to 500 Hz, 0.31 g<sub>rms</sub>

Nonoperating .....5 to 500 Hz, 2.46 g<sub>rms</sub>  
(Tested in accordance with IEC-60068-2-64. Nonoperating test profile exceeds the requirements of MIL-PRF-28800F, Class 3.)

# Safety and Compliance

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## Safety

This product is designed to meet the requirements of the following standards of safety for information technology equipment:

- IEC 60950-1, EN 60950-1
- UL 60950-1, CSA 60950-1



**Note** For UL and other safety certifications, refer to the product label or visit [ni.com/certification](http://ni.com/certification), search by model number or product line, and click the appropriate link in the Certification column.

## Electromagnetic Compatibility

This product is designed to meet the requirements of the following standards of EMC for electrical equipment for information technology equipment:

- EN 55024, CISPR 24
- EN 55022, CISPR 22
- CE, C-Tick, ICES, and FCC Part 15 Emissions; Class A



**Note** For EMC compliance, operate this device according to product documentation.

## CE Compliance

This product meets the essential requirements of applicable European Directives, as amended for CE marking, as follows:

- 2006/95/EC; Low-Voltage Directive (safety)
- 2004/108/EC; Electromagnetic Compatibility Directive (EMC)



**Note** Refer to the Declaration of Conformity (DoC) for this product for any additional regulatory compliance information. To obtain the DoC for this product, visit [ni.com/certification](http://ni.com/certification), search by model number or product line, and click the appropriate link in the Certification column.

# Environmental Management

National Instruments is committed to designing and manufacturing products in an environmentally responsible manner. NI recognizes that eliminating certain hazardous substances from our products is beneficial not only to the environment but also to NI customers.

For additional environmental information, refer to the *NI and the Environment* Web page at [ni.com/environment](http://ni.com/environment). This page contains the environmental regulations and directives with which NI complies, as well as other environmental information not included in this document.

## Waste Electrical and Electronic Equipment (WEEE)



**EU Customers** At the end of their life cycle, all products *must* be sent to a WEEE recycling center. For more information about WEEE recycling centers and National Instruments WEEE initiatives, visit [ni.com/environment/weee.htm](http://ni.com/environment/weee.htm).

## 电子信息产品污染控制管理办法（中国 RoHS）



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# Where to Go for Support

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The National Instruments Web site is your complete resource for technical support. At [ni.com/support](http://ni.com/support) you have access to everything from troubleshooting and application development self-help resources to email and phone assistance from NI Application Engineers.

National Instruments corporate headquarters is located at 11500 North Mopac Expressway, Austin, Texas, 78759-3504. National Instruments also has offices located around the world to help address your support needs. For telephone support in the United States, create your service request at [ni.com/support](http://ni.com/support) and follow the calling instructions or dial 512 795 8248. For telephone support outside the United States, contact your local branch office:

Australia 1800 300 800, Austria 43 662 457990-0,  
Belgium 32 (0) 2 757 0020, Brazil 55 11 3262 3599,  
Canada 800 433 3488, China 86 21 5050 9800,  
Czech Republic 420 224 235 774, Denmark 45 45 76 26 00,  
Finland 358 (0) 9 725 72511, France 01 57 66 24 24,  
Germany 49 89 7413130, India 91 80 4190000, Israel 972 3 6393737,  
Italy 39 02 41309277, Japan 0120-527196, Korea 82 02 3451 3400,  
Lebanon 961 (0) 1 33 28 28, Malaysia 1800 887710,  
Mexico 01 800 010 0793, Netherlands 31 (0) 348 433 466,  
New Zealand 0800 553 322, Norway 47 (0) 66 90 76 60,  
Poland 48 22 3390150, Portugal 351 210 311 210, Russia 7 495 783 6851,  
Singapore 1800 226 5886, Slovenia 386 3 425 42 00,  
South Africa 27 0 11 805 8197, Spain 34 91 640 0085,  
Sweden 46 (0) 8 587 895 00, Switzerland 41 56 2005151,  
Taiwan 886 02 2377 2222, Thailand 662 278 6777,  
Turkey 90 212 279 3031, United Kingdom 44 (0) 1635 523545

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The PMA-1115 is warranted against defects in materials and workmanship for a period of one year from the date of shipment, as evidenced by receipts or other documentation. National Instruments will, at its option, repair or replace equipment that proves to be defective during the warranty period. This warranty includes parts and labor.

The media on which you receive National Instruments software are warranted not to fail to execute programming instructions, due to defects in materials and workmanship, for a period of 90 days from date of shipment, as evidenced by receipts or other documentation. National Instruments will, at its option, repair or replace software media that do not execute programming instructions if National Instruments receives notice of such defects during the warranty period. National Instruments does not warrant that the operation of the software shall be uninterrupted or error free.

A Return Material Authorization (RMA) number must be obtained from the factory and clearly marked on the outside of the package before any equipment will be accepted for warranty work. National Instruments will pay the shipping costs of returning to the owner parts which are covered by warranty.

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