# SHARP/NEC

NEC MultiSync® MA431 LCD 43" Message Advanced Large Format Display

# **Datasheet**





#### Meticulously powerful signage

When true-to-life colour rendition is essential, the MA Series' advanced feature set delivers calibrated precision, without compromise. For specialist applications, the wide colour gamut panel, SpectraView engine technology and 8K signal processing, positions the MA series at the high end of professional content delivery.

The MA series' modular design includes Intel® Smart Display Module (Intel® SDM) technology integrated into the display, facilitating powerful media playback for the most intuitive signage creation and delivery. Featuring an integral audio amplifier, multi-picture mode technology and extensive connectivity including video out, the MA series offers versatile functionality for corporate signage and prestige retail applications.

#### **Benefits**

**Unhindered readability** – no reflections from windows or other light sources means no disruption to the visibility of signage content or meeting room presentation

Wide colour gamut - high-performance panel technology delivers a wider spectrum of colours for a superb visual experience

**Safe for public environments** – a metal back cover and intelligent heat management ensure safe use in public spaces where fire-retardancy is mandatory

**Enhanced imaging performance** – advanced settings of all relevant visual parameters allow full control of brightness, colour, gamma and uniformity via the SpectraView Engine for precise, natural images.

**Mission-critical 24/7 ready operation** – the meticulous selection of industrial-grade components and careful design focused on demanding usage scenarios accompany an impressive and continuous viewer experience.

#### **Product Information**

Product Name	NEC MultiSync® MA431	
Product Group	LCD 43" Message Advanced Large Format Display	
Order Code	60005046	

## **Display**

Panel Technology	IPS with Edge LED backlights
Screen Size [inch/cm]	43 / 108
Aspect Ratio	16:9
Brightness [cd/m²]	500
Contrast Ratio	≥ 8000:1 ¹
Viewing Angle [°]	178 horizontal / 178 vertical (typ. at contrast ratio 10:1)
Colour Depth [bn]	1.073 (10bit)
Colour Gamut	86% of DCI
Response Time (typ.) [ms]	8
Panel Refresh Rate [Hz]	60
Haze Level [%]	Pro (28)
Supported Orientation	Face Up <sup>2</sup> ; Landscape; Portrait

## **Synchronisation Rate**

Horizontal Frequency [kHz]	15 - 135
Vertical Frequency [Hz]	23 - 86

#### Resolution

Native Resolution	3840 x 2160			
Supported Resolutions	7680 x 4320;	2560 x 1440;	1600 x 1200;	1360 x 768;
	4096 x 2160;	1920 x 2160;	1440 x 900;	1280 x 1024;
	3840 x 2160;	1920 x 1200;	1400 x 1050;	1280 x 720;
	2560 x 1600;	1920 x 1080;	1366 x 768;	1024 x 768

## Connectivity

Input Video Digital	2 x DisplayPort (with HDCP); 2 x HDMI (with HDCP)	
Input Audio Digital	1 x DisplayPort; 2 x HDMI	
Input Control	LAN 100Mbit; remote control wire (3,5mm jack); RS232	
Input Data	1 x USB 2.0 (Downstream); 1 x USB 2.0 (Powered 5V/2A, Firmware Updates); 1 x USB 2.0 Type-B (Downstream)	
Output Video Digital	$1\ x$ DisplayPort (loop through: DisplayPort, SDM slot-in PC); $1\ x$ HDMI (loop through: HDMI, SDM slot-in PC)	
Output Audio Analogue	1 x 3,5 mm jack	
Output Control	1 x LAN 100Mbit	
Input Detect	Custom; First; Last	
PiP/PbP	Dual-Split; Quad-Split; scalable picture size	

#### **Calibration**

Factory Calibration	Gamma; Intensity; RGB; Uniformity; White Point
Sensor Calibration (through USB)	PC-less Calibration with USB Sensor MDSVSensor3; White Copy (post self-calibration)
Calibration with Software	Corner Uniformity; Gamma; Intensity; RGB; Update Factory Calibration; White Point
Calibration Software	NEC Display Wall Calibrator

# **Open Modular Intelligence**

Intel® SDM	accepts Intel® Smart Display Modules Large and Small up to 66 W
Compute Module Slot	RPi Compute Module 4

#### **Sensors**

Ambient Light Sensor	Integrated, triggered actions programmable
Temperature Sensor	Integrated, 3 sensors, triggered actions programmable

#### **Electrical**

Power Consumption Eco/max. [W]	70 shipping
Power Savings Mode [W]	< 0.5; < 2 (Networked Standby)
Power Management	VESA DPMS
Power Supply	100-240 V AC; 50/60 Hz; internal

#### **Environmental Conditions**

Operating Temperature [°C]	+0 to +40
Operating Humidity [%]	20 to 80
Storage Humidity [%]	10 to 90
Storage Temperature [°C]	-20 to 60

#### Mechanical

Dimensions (W x H x D) [mm]	968.2 x 561 x 67.1	
Weight [kg]	18.5	
Bezel Width [mm]	11 (left, right and top); 15.6 (bottom)	
VESA Mounting [mm]	300 x 300 (FDMI); 4 holes; M6	
Ingress Protection	IP5x (front); IP2x (back)	
Packaging Dimensions (W x H x D) [mm]	1,120 x 700 x 203	
Packaging Weight [kg]	23	
Colour Bezel	Pantone 426M (black)	
Material	Metal	

## **Available Options**

Accessories	Feet (ST-401/ST-43M); Soundbar (passive: SP-PSCM-IQ / SP-PSCM); Speaker (SP-TF1, SP-RM3);
	Trolley (PDMHM-L); Wall mount (PDW C L and P, PD02W T M L, PD03W T M P)

#### **Green Features**

Energy Efficiency	Energy consumption: 85 kWh/1000 h; Energy efficiency class: G; LED backlight
Ecological Standards	EnergyStar 8.0

## **Additional Features**

Special Characteristics	DICOM Simulation; HDMI ARC; Powered USB Port (10 W); Removable Logo
Safety and Ergonomics	BSMI; CE; EAC; EMC Class B; Energy Star 8; FCC Class B; KC/KCC; PSB; RCM; RoHS; VCCI
Pixel Failure Class	ISO 9241-307, Class 1
Shipping Content	2x AAA batteries; Display; HDMI Cable; Power Cable; Remote Control; Setup Manual
Warranty	3 years warranty incl. backlight; additional services available; optional 4. $\pm$ 5. year warranty extension $^3$
Operating Hours	24/7

External Control	AMX NetLinx Support; ASCII Control Commands; Crestron Connected; Crestron RoomView; HDMI CEC; HTTP Browser; PJLink; Scheduled Timer; SNMP
Remote Management	Automated Email Alerts; NEC NaViSet Administrator 2
Security	Disable HW Buttons; Disable IR Functionality; Emergency Notification

 $<sup>^{\</sup>mathrm{1}}$  out of the box conditions, local dimming ON

<sup>&</sup>lt;sup>3</sup> please refer to terms and conditions of warranty extensions



VCCI



CE





**RCM** 



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<sup>&</sup>lt;sup>2</sup> adjusted usage conditions for face up/down installations, please refer to operational guidelines or contact our support