

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 <sup>1</sup>                                       |
| 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 | 1024 x 768;  | 1366 x 768;  | 1920 x 1080; | 2560 x 1600; |
|                       | 1280 x 1024; | 1400 x 1050; | 1920 x 1200; | 3840 x 2160; |
|                       | 1280 x 720;  | 1440 x 900;  | 1920 x 2160; | 4096 x 2160; |
|                       | 1360 x 768;  | 1600 x 1200; | 2560 x 1440; | 7680 x 4320  |

# 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.<br>[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); Presence Sensor (KT-RC3); Soundbar (passive: SP-PSCM-IQ); Speaker |
|-------------|---|
|             | (SP-RM3); Trolley (PD04-Tipster Trolley); Wall mount (PDW S 32-65 L, PDW S 32-65 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