

## MultiSync® V404-RPi LCD 40" Value Large Format Display

# Datasheet



### The smartest choice for digital signage

For compelling Digital Signage results, NEC's MultiSync® V404-RPi combines professional display capabilities with the smartness of Raspberry Pi computing at the lowest operational investment.

Pre-installed into the 40" signage display, the NEC Edition of the Raspberry Pi 3 Compute Module boosts the display performance to suit any visual application and opens a gateway to the IoT. The NEC Edition tops the standard Raspberry Pi performance with extended memory capabilities and intelligent digital signage support such as the Watch Dog Timer and Real Time Clock for scheduling. Convincing visibility under common light conditions is guaranteed thanks to the combination of 500 cd/m<sup>2</sup> brightness output and an anti-glare surface. The modern and slim design is the perfect fit to complement the surrounding architecture as well as for integration into any application and environment.

The MultiSync® V404-RPi provides the smartest combination of embedded computing power with professional digital signage displays for shorter viewing distances or big messages in retail environments, leisure and museum applications, quick service restaurants, for corporate information and all other public spaces.

## Benefits

**Designed for professional Digital Signage** – the NEC Edition features an extended onboard memory of 16 GB, a Watch Dog Timer and a Real Time Clock as well as pre-loaded licences for video decoding to meet the particular demands of professional signage applications

**Powerful possibilities** – the Quad Core 1.2 GHz processor provides amazing performance for crisp Full HD playback with an unrivalled price-performance ratio.

**Unlimited versatility** – supporting a broad range of operating systems, this open platform offers high flexibility for digital signage software providers and system integrators.

**Reliable colour reproduction** – due to 10-bit colour performance, extreme viewing angles and hardware calibratable LUT, viewers benefit from consistently accurate image rendering.

**Ease of use and operation** – Smart installation, operation and maintenance functionality ensures accurate performance over the entire lifetime of the display saving time, effort and resources.

**Modern and slim design** – robust yet elegant allowing for an unobtrusive integration into any application and environment.

**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.

**Cost Saving Device Management** – save effort whilst managing all connected NEC devices from a centralised location by using the NaViSet Administrator 2 software tool.

## Product Information

Product Name	MultiSync® V404-RPi
Product Group	LCD 40" Value Large Format Display
Order Code	60004405

## Display

Panel Technology	S-PVA with edge LED backlights
Active Screen Area (W x H) [mm]	885.6 x 498.2
Screen Size [inch/cm]	40 / 101.6
Brightness [cd/m²]	500, 350 Eco (shipment setting)
Contrast Ratio (typ.)	4000:1
Viewing Angle [°]	178 / 178 (at contrast ratio > 10:1)
Colour Depth [bn]	1.073 (10bit)
Response Time (typ.) [ms]	8 (grey-to-grey)
Haze Level [%]	Pro (25)
Supported Orientation	Landscape, Portrait, Face Up, Face Down

## Synchronisation Rate

Horizontal Frequency [kHz]	31.5 - 91.1 (analog and digital)
Vertical Frequency [Hz]	24 - 85

## Resolution

Native Resolution	1920 x 1080			
Supported Resolutions	4096 x 2160; 3840 x 2160; 1920 x 2160; 1920 x 1200; 1920 x 1080;	1680 x 1050; 1600 x 1200; 1440 x 900; 1400 x 1050; 1366 x 768;	1360 x 768; 1280 x 1024; 1280 x 960; 1280 x 800; 1280 x 720;	1024 x 768; 800 x 600; 640 x 480

## Connectivity

Input Video Analogue	1 x VGA
Input Video Digital	1 x DVI-D (with HDCP); 2 x DisplayPort (with HDCP); 2 x HDMI (with HDCP)
Input Audio Analogue	2 x 3,5 mm jack
Input Audio Digital	2 x DisplayPort; 2 x HDMI
Input Control	1 x LAN 100Mbit; 1 x Remote Control (3.5 mm jack); 1 x RS232
Input Data	1 x microSD (MediaPlayer); 1 x USB 2.0 (MediaPlayer); 1 x USB 2.0 (Service); 1 x USB Type-B (Upstream); 2 x USB 2.0 (Compute Module, 1 x 5V/2A powered)
Output Video Digital	1 x DisplayPort (loop through: DisplayPort, OPS slot-in PC)
Output Audio Analogue	1 x 3,5 mm jack
Output Control	1 x LAN 100Mbit

## Open Modular Intelligence

OPS Slot	Slot Technology: Open pluggable specification (NEC / Intel OPS standard)
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OPS Max. Current / Power Consumption [A / W]	10 / 61
Compute Module Slot	Slot Technology: Compute Module Slot (NEC proprietary standard) with pre-installed Raspberry Pi 3 Compute Module NEC Edition
Compute Module Specification	Realtime clock; Watchdog Timer CPU: Quad Core 64-bit ARM Cortex A53 @ 1.2GHz; VideoCore IV GPU Graphics: 1.2GPixel / sec OpenGL ES 2.0 3D; Hardware video encode / decode (MPEG2, MPEG4, H.264, VC-1 up to 1080p60) Memory: 16GByte on-board eMMC RAM: 1GByte LPDDR2 SDRAM OS: Standard: Raspbian Jessie with PIXEL Other supported OS: RISC OS; Various Linux flavours (Arch, Ubuntu); Win10 IoT

## Sensors

Ambient Light Sensor	Integrated, triggered actions programmable
Human Sensor	Optional, external, 4-5m range, triggered actions programmable
Temperature Sensor	Integrated, 3 sensors, triggered actions programmable
NFC Sensor	Integrated, 2cm range, free NEC Android App required

## Electrical

Power Consumption [W]	75 Eco (shipment setting), 95
Power Savings Mode [W]	< 0.5 (ECO Standby); < 3 (Networked Standby)
Power Management	VESA DPMS

## Environmental Conditions

Operating Temperature [°C]	+0 to +40
Operating Humidity [%]	20 to 80

## Mechanical

Dimensions (W x H x D) [mm]	918 x 530.6 x 54.7
Weight [kg]	14.5
Bezel Width [mm]	13.2 (left and right); 13.2 (top and bottom)
VESA Mounting [mm]	300 x 300 (FDMI); 4 holes; M6
Ingress Protection	IP5X (front); IP2X (back)

## MediaPlayer

Supported Image Formats	JPG (baseline, progressive, RGB, CMYK); max. resolution 5000 x 5000; PNG (interlace, alpha channel); max. resolution 4000 x 4000
Supported Video Formats	MP4 / MOV / FLV (video H.264, audio MP3, AAC); max. resolution 1080p at 30 Hz, 1080i at 60 Hz; MPG (video mpeg1/2, audio mpeg audio layer2/3, AAC-LC); MP @ ML, MP @ HL; WMV (video H.264, wmv advanced L3, wmv simple / main, audio mp3 wmv std); max. resolution 1080p at 30 Hz, 1080i at 60 Hz
Supported Audio Formats	MP3 (MP3); max. bit-rate 320 kBit/s; WAV (LPCM); max. 48 kHz sampling
Supported File Storage / File System	MicroSDHC / FAT16, FAT32; USB 2.0 / FAT16, FAT32

## Available Options

Accessories	Feet (ST-401); Speaker (SP-TF1); Trolley (PDMHM-L); Wall mount (PDW S 32-55 L and P, PD02W T M L, PD03W T M P)
Compute Module Slot	NEC Compute Module; Raspberry Pi Compute Module 1 and 3
OPS Slot	HD-SDI 1.5G, 3G; HDBaseT receiver; Intel® Atom, Celeron and Core CPUs; OPS-2C HDMI + DP Interface; OPS-2C Quad 3G SDI

## Green Features

Energy Efficiency	Ambient light sensor; Annual energy consumption: 124 kWh (based on 4 operating hours per day); Carbon savings meter; ECOMode; Energy efficiency class: B; Human Sensor
Ecological Materials	Manuals on CD; Optional feet

## Additional Features

Special Characteristics	Ambient Light Sensor; AMX NetLinx Support; ASCII Control Commands; Auto ID assignment; Auto tiling function; Automated Email Alert; CEC Support; Crestron RoomView Support; DICOM Simulation; Display Browser Control; Emergency Notification; Full System Scheduler; Hardware colour calibration possible; Image flip; Intelligent Wireless Data (based on NFC); KeyGuide; MediaPlayer with Browser Control; NaViSet Administrator 2; OmniColor Control; OSD rotation for portrait mode; PJLink Support; Point Zoom Function; Powered USB-Port; Programmable 12-bit LUT with 3 memory banks; Removable Logo; Secure Mode Operation; Slim LED Indicator; SNMP Support; TileMatrix (10 x 10); User readable log function; Various picture in picture options
Colour Versions	Black Front Bezel, Black Back Cabinet; optional coloured overframes
Safety and Ergonomics	Display: C-Tick; CE; EMC Class B; FCC; PSB; RoHS; TÜV GS; UL/C-UL Compute Module: CE; FCC
Audio	Integrated Speakers (10 W + 10 W); Optional Speakers (15 W + 15 W)
Shipping Content	CD-ROM (User Guides/Manuals); Display; DVI-D cable; Power Cable; Remote Control
Warranty	3 years warranty incl. backlight; additional services available; optional 4. + 5. year warranty extension
Operating Hours	24/7

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