

# SystemManager

SERVER AND STORAGE SYSTEM ADMINISTRATION



SystemManager acts as the administrative hub of Harmonic ingest, storage and playout systems, including Spectrum™ media servers, Harmonic MediaGrid shared storage and the Media Application Server (MAS) asset management platform. The controller's streamlined and intuitive browser-based user interface allows quick configuration of new systems, rapid adjustment of existing configurations, and simplified integration of new components. Real-time fault reporting and alerting capabilities allow users to head off issues before they become critical.

## Workflow Control

SystemManager integrates with the user's existing data network to allow administrators and technicians to monitor and manage Spectrum X, MediaDirector, MediaCenter and MediaDeck servers, MediaGrid storage systems and MAS workflow applications from any web-enabled computer in real time.

## Active Monitoring

SystemManager constantly monitors dozens of characteristics of every component in the system, alerting administrators to abnormal conditions such as temperature, power, data connectivity, etc. If a fault is discovered, SystemManager automatically sends an email or page to the system administrator.

## Configurations

SystemManager is available in three variants:

- **NSM-2017** is a hardware and software solution for managing any combination of Spectrum, MediaGrid and MAS systems.
- **NSM-2017K** utilizes the same hardware and software as NSM-2017, with the addition of a rack-mountable keyboard, monitor and trackpad module (KMM).
- **NSM-2017SW** is a software-only version which can be installed and configured on customer-supplied hardware.

## HIGHLIGHTS

- Facility-wide control of Harmonic Spectrum and MediaGrid systems
- Active monitoring and alerting
- Integrates with existing data networks
- Intuitive web-based GUI

## SPECIFICATIONS

### NSM-2017 SERVER SPECIFICATIONS

Processor	Intel® Xeon® E3-1220 v5 processor
Memory	4GB UDIMM, 3 GHz
Storage	2 x 500GB 7.2k RPM SATA 3Gbps, 3.5 in
Ethernet	On-board dual Gigabit network adapter

### POWER

Power Supply	Single
Voltage	100-240 V
Power Consumption	250 W

### PHYSICAL

Dimensions (WxHxD)	17.60 x 1.68 x 21.50 in (1 RU) 44.70 x 4.27 x 54.6 cm
Weight	26.0 lbs/11.8 kg

### ENVIRONMENTAL

Operating Temperature	+50° F to 95° F +10° C to 35° C
Storage Temperature	-40° to 149°F -40° to 65°C
Operating Relative Humidity	20-80% (non-condensing) with a maximum humidity gradation of 10%/hr
Storage Relative Humidity	5% to 95% (non-condensing)
Operating Maximum Vibration	0.26 Grms @ 5 Hz to 350 Hz
Operating Maximum Shock	31 G, 2.6 ms, 20 in/sec, bottom side
Operating Altitude	10,000 ft maximum 3,048 m maximum
Safety	FCC Part 15 Class A EN61000-3-2, A1, A2: Current Harmonics EN61000-3-3: Voltage Flicker EN55022: 1998 and CISPR 22: 1997 Class A VCCI Class 1 MIC Class A BSMI EN55024: 1998 and CISPR 24: 1997 IEC 61000-4-2: Electrostatic Discharge specification IEC 61000-4-3: Radiated Immunity IEC 61000-4-4: EFT/Bursts Immunity IEC 61000-4-5: Surge Immunity IEC 61000-4-6: Conducted Immunity 0.15-80MHz IEC 61000-4-8: Power Frequency H-Field IEC 61000-4-11: Voltage Dips/Interruptions/Variation

### INCLUDED ACCESSORIES

Qty	Item	Description
1	Power Cord	NSM-2017
2	Power Cords	NSM-2017K
1	Rack-Mount Hardware Kit	1 RU/2 RU Static Rails for 2-Post and 4-Post Racks

### NSM-2017K KMM MODULE SPECIFICATIONS (INCLUDED WITH NSM-2017K)

Connectors	Integrated USB KVM, HD15 VGA, USB Type A for KB/MS
Video	Samsung grade A industrial TFT LCD Panel. Resolution 1,280 x 1,024 with 60/70/75 Hz

### POWER

Power Supply	AC adapter (12 V, 5 A)
Voltage	110/220 V
Line Frequency	50/60 Hz

### PHYSICAL

Dimensions (WxHxD)	17.4 x 1.75 x 23.6 in 44.2 x 4.45 x 60 cm 1-RU rack mounting on slide-out rails
Weight	35.27 lbs/16 kg

### ENVIRONMENTAL

Operating Temperature	+32° F to 122° F 0° C to 50° C
Storage Temperature	23° to 149°F -5° to 65°C
Operating Relative Humidity	5-90% (non-condensing)
Operating Maximum Shock	10 G acceleration, 11 ms duration
Maximum Vibration	5-500 Hz, 1 G RMS random vibration
Safety	FCC CE VCCI 3C

### NSM-2017SW MINIMUM HARDWARE REQUIREMENTS

Processor	Intel® Celeron® Processor 336 at 2.8GHz/256K Cache, 533MHz FSB
Memory	1-GB RAM
Storage	80-GB, SATA II, 3.5-in, 7.2k rpm HDD and DVD-ROM
Ethernet	Dual Gigabit Network Adapter
Operating System	Windows Server 2012 R2, Windows Server 2008 R2 Service Pack 1, Windows 7 Pro 64-bit