

## PWS-110NM1

### IP Live System Manager Station



**NETWORKED LIVE**

#### Overview

The PWS-110NM1 IP Live System Manager Station comes with IP Live System Manager software that allows you to set-up, control and reconfigure an IP live production system.

\*1 For more details on the JT-NM Tested program at NAB 2019 and its test results please see [https://jt-nm.org/jt-nm\\_tested](https://jt-nm.org/jt-nm_tested).

#### Features

##### **System Configuration**

The IP Live System Manager provides a variety of configuration functionalities such as router setting, monitoring setting, redundancy setting, device registration, workgroup registration, and user registration. These configuration settings can be flexibly modified, and the user can build a several production systems under one networked system of AV devices.

##### **Video and Audio Routing Capability**

The IP Live System Manager software provides video and audio routing functionality that is similar to video routers. Control buttons and its layout can be flexibly configured at users discretion.

##### **Network Monitoring**

You can monitor the status of devices in a network topology view, helping users to intuitively understand the portion where

an error is occurring. A variety of status indicators are available such as network switch status indication and device status indication.

## **System Maintenance Functionality**

The PWS-110NM1 collects status logs from AV and network devices, providing basic system maintenance functionality.

## **XVS Integration**

The PWS-110NM1 can be integrated with Sony live production switcher XVS series by NS-BUS system for router cross-point switching, XVS cross-point switching, name display link or tally. In this case if the number of NS-BUS device is three or less, PWSL-NM10 IP Live System manager basic license and PWSL-NM20 System Controller license are not required.

## **A Variety of Software Update Packs<sup>\*1</sup>**

### **1. PWSU-NM10 1yr Software Update Pack For**

**PWSL-NM10:** To activate software updates of PWSL-NM10 for one year

### **2. PWSU-NM11 1yr Software Update Pack For**

**PWSL-NM11:** To activate software updates of PWSL-NM11 for one year

### **3. PWSU-NM12 1yr Software Update Pack For**

**PWSL-NM12:** To activate software updates of PWSL-NM12 for one year

### **4. PWSU-NM13 1yr Software Update Pack For**

**PWSL-NM13:** To activate software updates of PWSL-NM13 for one year

### **5. PWSU-NM14 1yr Software Update Pack For**

**PWSL-NM14:** To activate software updates of PWSL-NM14

for one year

**6. PWSU-NM15 1yr Software Update Pack For PWSL-NM15:** To activate software updates of PWSL-NM15 for one year

**7. PWSU-NM16 1yr Software Update Pack For PWSL-NM16:** To activate software updates of PWSL-NM16 for one year

**8. PWSU-NM17 1yr Software Update Pack For PWSL-NM17:** To activate software updates of PWSL-NM17 for one year

**9. PWSU-NM18 1yr Software Update Pack For PWSL-NM18:** To activate software updates of PWSL-NM18 for one year

**10. PWSU-NM20 1yr Software Update Pack For PWSL-NM20:** To activate software updates of PWSL-NM20 for one year

\*1 Software updates require the installation of a Software Update Pack with a one-year expiration date.

### **A Variety of Software Licenses<sup>\*1</sup>**

The variety of IP Live System manager functionality is enabled by installing the software licenses. You can configure the IP Live System manager by choosing necessary functionalities that are just fit to your system requirement.

**1. PWSL-NM10 IP Live System Manager License:** Basic license. Up to 128 I/O. Up to 20 simultaneous user access

**2. PWSL-NM11 128 I/O Port License:** Additional NMI 128 I/O

**3. PWSL-NM12 Redundant System License:** Necessary for redundant LSM configuration

**4. PWSL-NM13 10 User License:** Additional 10 simultaneous user access

**5. PWSL-NM14 UHD License:** Enables 4K/8K

**6. PWSL-NM15 Audio Control License:** Provides Audio over IP control

**7. PWSL-NM16 Gateway License for Ember+:** to support Ember+ Protocol

**8. PWSL-NM17 Tally License:** to support TSL UMD Protocol

**9. PWSL-NM18 NMOS License:** to support NMOS Media Node

**10. PWSL-NM20 System Controller License:** to control XVS Switcher and SDI Router matrix, which supports NS-BUS protocol<sup>\*2</sup>

<sup>\*1</sup> Software updates require the installation of a Software Update Pack with a one-year expiration date.

<sup>\*2</sup> The license is necessary for activating more than three NS-BUS External Control devices.

## **NMOS IS-09 Support**

In addition to NMOS IS-04 and IS-05 support already provided by Sony Live System Manager (LSM), NMOS IS-09 is newly supported when optional license PWSL-NM18 is installed. This will allow automatic system parameter setting such as PTP domain numbers without time consuming manual preset.

## **LSM integration with system camera**

Link between LSM and Sony HDC series camera system realized for easy and convenient live productions.

### 1. Link with RCP assignment

Camera monitor source in shading room is automatically linked by RCP assignment. RCP assignment can also be set by MKS-R series remote control panel.

### 2. Link with CCU assignment

Camera number can be re-assigned by the LSM integration according to CCU assignment. In addition to the camera control, all I/O such as main video, program audio, return video, intercom and tally can be re-assigned automatically. CCU assignment can also be set by MKS-R series remote control panel.

### 3. Link with RCP Joystick override

LSM can control monitoring source including status of RCP or CCU assignment without any GPIO wiring or tailor-made equipment.

### 4. Link with MSU camera select

LSM can control monitoring select by MSU's camera select button including status of CCU assignment without any GPIO wiring. Note: those features will require firmware update of HDCU, MSU and RCP.

## **Audio Follow Video Function**

A new feature is added to the Ember+ support license PWSL-NM16 to support Audio Follow Video function. Audio fader on a mixing console is automatically controlled by source tally command from Sony XVS video switcher.

## **Dante IP Audio integration**

Dante IP audio stream auto-discovery is supported by the latest PWSL-NM15 Optional Audio Control License. LSM can route AES 67 device to AES 67 device. It can also route Dante ST2110-30 Tx to Native ST2110-30 Rx.

### Camera RCP Override

Source of a monitor can be switched by an RCP (Remote Control Panel) preview operation.

### JPEG XS and lower frame rate support in UHD

NDCP protocol is upgraded to support JPEG XS and low framerate in UHD mode. 29.97p/25p/24p/23.98p mode are newly supported in both UHD uncompressed mode and UHD JPEG XS mode.

## Specifications

### General specifications

Power requirement	100 V to 240 V AC 50/60 Hz
Power consumption	235 W
Standby power consumption	3 W or lower
Operating temperature	5 °C to 35 °C (41 °F to 95 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity	20% to 90% (relative humidity)
Storage humidity	5% to 80%

Mass	10.4 kg (22 lb. 15 oz.)
Dimensions	440 × 43.6 × 507 mm (17 3/8 × 1 3/4 × 20 in.) (width / height / depth)
Processor	Intel Core i7-6700TE(2.4 GHz)
Memory	8 GBytes SO-DIMM (DDR4) (2)
Drive (SSD)	128 GBytes
Expansion bus	PCIe Gen2 8Lane (30 W) (2)

## Inputs/outputs

LAN	RJ-45 (2) 1000BASE-T 100BASE-TX
USB (front panel/rear panel)	Super Speed USB (USB 3.0) Type A (6, 2 on front and 4 on rear) Front: Power delivery support (900 mA/port) Rear: Power delivery support on bottom right port (900 mA), not supported on other three ports
HDMI	Type A (1) HDMI Ver. 1.4a,

1920 × 1200 maximum resolution,  
60 Hz

DisplayPort

DisplayPort (1)  
DisplayPort Ver. 1.1a  
2560 × 1600 maximum resolution,  
60 Hz

## Supplied accessories

Help (Web manual) (1)  
Operation Manual (1)

## Related products



### **NXL-FR318**

SDI-IP signal processing unit



### **NXLK-IP40F**

SDI-IP converter board with 3G-SDI and SFP+ ports



### **NXLK-IP45F**

AV Multiplexer/Demultiplexer Board



### **NXL-IP4F**

SDI-IP Converter Unit



### **PWA-LE01 [Live Element Orchestrator]**

System orchestration and management software for IP Live production.



### **XVS-6000**

Entry-level 4K/3G/HD video switcher for IP and SDI



### **XVS-7000**

Mid-range 4K/3G/HD video switcher for IP and SDI




### **XVS-8000**

4K/3G/HD multi-format IP-ready video switcher

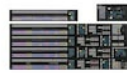




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## XVS-9000


4K / 3G / HD multi-format IP-ready video switcher



## ICP-X7000

Control panel for MLS-X1 and XVS series switchers




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## NXL-FR316

SDI-IP signal processing unit



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## MKS-R1620

16 Button remote control panel




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## MKS-R3210

32 Button remote control panel




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## HDCU-3500

IP-ready Camera Control Unit (CCU) for HDC-3500 4K/HD system camera




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## MKS-R1630

Remote control panel of NS-BUS system



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## OTM-25GLR

SFP28 Optical Transceiver Module (LR)




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## NXLK-IP50Y

SDI-IP Converter Board with eight 1.5/3G-SDI ports, supporting SMPTE ST 2110 in HD/4K and HDR




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## OTM-10GSR1

10GBASE-SR SFP+ Transceiver for Sony Networked Media Interface products




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## NXLK-IP51Y

12G SDI-IP Converter Board with two 1.5/3G-SDI and two 12G-SDI ports, supporting SMPTE ST 2110 in HD/4K and HDR



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## OTM-100GSR

QSFP28 Optical Transceiver Module (SR)



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## OTM-25GSR

SFP28 Optical Transceiver Module (SR)

## Gallery

