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.

Features

System Configuration

The IP Live System Manger 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 devices 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[1]
1. PWSU-NM10 One-Year Software Update Pack For PWSL-NM10: To activate software updates of PWSL-NM10 for one year

2. PWSU-NM11 One-Year Software Update Pack For PWSL-NM11: To activate software updates of PWSL-NM11 for one year

3. PWSU-NM12 One-Year Software Update Pack For PWSL-NM12: To activate software updates of PWSL-NM12 for one year

4. PWSU-NM13 One-Year Software Update Pack For PWSL-NM13: To activate software updates of PWSL-NM13 for one year

5. PWSU-NM14 One-Year Software Update Pack For PWSL-NM14: To activate software updates of PWSL-

NM14 for one year

6. PWSU-NM15 One-Year Software Update Pack
For PWSL-NM15: To activate software updates of PWSL-NM15 for one year

7. PWSU-NM16 One-Year Software Update Pack
For PWSL-NM16: To activate software updates of PWSL-NM16 for one year

8. PWSU-NM17 One-Year Software Update Pack
For PWSL-NM17: To activate software updates of PWSL-NM17 for one year

9. PWSU-NM18 One-Year Software Update Pack
For PWSL-NM18: To activate software updates of PWSL-NM18 for one year

10. PWSU-NM20 One-Year 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[1]
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 the necessary functionalities that fit your system requirements exactly.

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[2]

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

[2] 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: These 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 frame rate 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
	Type A (1)

HDMI	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-LEO1 [Live Element Orchestrator]

System orchestration and management

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

software for IP Live production.

XVS-9000

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

ICP-X7000

Control panel for MLS-X1 and XVS series switchers

NXL-FR316

SDI-IP signal processing unit

MKS-R1620

16 Button remote control panel

MKS-R3210

32 Button remote control panel

HDCU-3500

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

MKS-R1630

Remote control panel of NS-BUS system

OTM-25GLR

SFP28 Optical Transceiver Module (LR)

NXLK-IP50Y

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

OTM-10GSR1

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

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

OTM-100GSR

QSFP28 Optical Transceiver Module (SR)

OTM-25GSR

SFP28 Optical Transceiver Module

Gallery

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