TURBO-RAID System Recorder

H.265/H.264 high-throughput and scalable embedded recorder featuring integrated GUI and robust embedded IP security enabling a secure end-to-end PC-less surveillance solution for mission-critical applications.

Support full data encryption streaming recording for all i-PRO Extreme cameras which comply to FIPS 140-2 Level 1 standards to keep your video secured from spoofing and snooping activities.

Secure high bandwidth recording
- 64 ch. expandable to 128 ch. camera input. Support H.265 / H.264 mixed recordings.
- 640 Mbps total throughput (including 384 Mbps recording bandwidth)
- Symantec device certificates pre-installed

PC-less non VMS surveillance solution
- No camera license fees, no annual license updates required
- Built-in GUI and Dual HDMI (4K/FHD) outputs
- Automatic camera configuration
- Sub-stream recording for mobile access and low bandwidth system environments

Scalable storage
- (9) integrated drive-bays RAID 5/6
- External storage expansion up to 324 TB

High reliability and redundancy
- Dynamic HDD power management increases HDD life*
- Redundant fail-over using 2nd recorder to enable seamless mission-critical recording*
- TURBO-RAID for quick RAID recovery without sacrificing recording bandwidth and performance

* Feature update

Applications
- Public safety (City / Road / Highway / Port)
- Transportation (Airport / Train / Subway)
- Bank / Retail
- Hospital / Education
- Casino / Stadium
- Factory
Specifications

### Supported Camera
- **Compatible vendor**: Panasonic i-PRO series Network cameras, ONVIF NNT conformance camera and encoder
- **Supported Image Format**: H.265(H.264), JPEG
- **Supported Image Resolution (Dependent on the camera)**: 4.096x3.000, 2.560x1.500, 1.380x0.960, 640x560, 640x480
- **Aspect ratio**: 16:9
- **Supported Audio Format**: S/PDIF for Onvif; G.726 (ADPCM); 29.032 kHz
- **Max. Number of Cameras**: MAX. 128*1 (Default number of cameras: 64)
- **Recording**: Event, Schedule, Emergency
- **Pre-alarm Recording**: Up to 15 seconds (When the delivery speed from the network camera is less than 3 Mbps)
- **Sub-stream Recording**: 768 Mbps (Fixed data width)
- **Synchronized Recording Mode**: 16 programs, Time conscious, Independent setup for each day of the week
- **Frame Rate/Frame**: Up to 60 fps (Depending on the camera)

### Main Unit Functions
- **Camera Control**: Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode, Click canceling, Wheel zoom, Zoom recall, Auto Back Focus, Aux, Wiper for WV-SUD838
- **Multiscreen Mode**: [Main monitor]: 16-Multi; [Sub monitor]: 4-Monitor (4/3 split screen display)
- **Playback Control**: PLAY, Rew, PLAY, Pause, Stop, FF, FR, Prev Record, Next Record, Prev Image, Next Image
- **Search Mode**: Search criteria: Time data, Playback by designating a timeline, VMD, Thumbnails
- **Copy**: Recorded data of selected cameras and time date range can be copied to the USB storage.
- **Camera Title**: Up to 16 Characters
- **Clock Display**: Time: 12H/24H, Date: 5 formats
- **System Log**: [Operator access (500)], [Network error (100)], [Error (1,000)], [Event (1000)], [Operation (500)]
- **System Setup**: Setup page in English, Italian, Spanish, German, Russian, Portuguese, Thai, Simplified Chinese, Japanese
- **380 Camera Viewer/swap**: Only 1ch display mode, re-loading: 2CPU only [When 8CPU mode on]
- **Browser**: Camera Control: Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode, Click canceling, Wheel zoom, Zoom recall, Aux, Wiper for WV-SUD838
- **Playback Control**: REC, PLAY, Rew, PLAY, Pause, Stop, FF, FR, Prev Record, Next Record, Prev Image, Next Image
- **Search Mode**: Search criteria: Time data, Event type, VMD, Camera number
- **Display Mode**: T: T-char text
- **Image Download**: Recorded data of selected camera and time range can be downloaded to a PC. Viewer software can be downloaded separately.
- **SD Memory Data Download**: Images recorded in the SD card in the i-PRO series cameras can be transferred to the recorder automatically. (H.265/H.264)
- **Copy**: Recorded data of selected cameras and time date range can be copied to the USB storage.
- **Camera Title**: Up to 16 Characters
- **Clock Display**: Time: 12H/24H, Date: 5 formats
- **Digital Zoom**: Low:1x, 2x, 4x (only for 1-screen)
- **System Log**: [Operator access (500)], [Network error (100)], [Error (1,000)], [Event (1000)], [Operation (500)]
- **GUI Language**: Setup page in English, French, Italian, Spanish, German, Russian, Portuguese, Thai, Simplified Chinese, Japanese
- **Search Criteria**: Time date, Event type, VMD, Thumbnail
- **Additional Functions**: Internet connection, Snap: 6 times zoom, Print, Copy

### Additional Information
- **No. of Simultaneous Users**: Up to 32 users
- **User Identification**: Up to 30 levels (Programmable)
- **Partitioning**: User level - Camera (View & Control), No Access
- **Security Method**: User authentication (ID and Password), Host authentication, Alteration detection, SSL/TLS
- **Maximum Capacity**: 512 to 640 Mbps or less
- **Supported Protocol**: IPv4: TCP, UDP, ICMP, HTTP, HTTPS, FTP, SMTP, DNS, NTP, SNMP, RTP, RTSP, ICMP, ARP
- **E-mail**: User definable (using menu setup)
- **Remote Monitoring on**: Smartphone/Tablet
- **HD Type**: WJ-NX400: 8.89 cm (3.5 inch) Serial ATA HDD, Up to 9x HDDs can be installed (with Panasonic hard disk as standard accessory)
- **Maximum Capacity**: Up to 6 TB will be supported.*5
- **RAID (Hardware RAID)**: Single, RAID1, 5, 6
- **Viewer Software**: Playback Control: Play, Rew, Play, Pause, FF, FR, Prev Record, Next Record, Preview Image, Next Image
- **Additional Functions**: Internet connection, Snap: 6 times zoom, Print, Copy
- **Supported GUI Language**: Language of the software will be English or Japanese
- **General Specifications**
  - **Safety / EMC Standard**: WJ-NX400K: UL (UL60065), FCC (Part15 ClassA), C-UL (CSA22.2 No.60065), DOC (ICES-003 ClassB), CE (EN60065, EN55032 ClassB, EN50244, EAC
  - **Power Source**: WJ-NX400: 100 ~ 240 V AC, 50/60 Hz
  - **Power Consumption**: approx. 125 W (200 W) (w/o alarm and indicator)
  - **Ambient Operating Temperature**: Main body: +5°C to +45°C (41°F to 113°F) Mouse (provided): +5°C to +40°C (41°F to 104°F)
  - **Ambient Operating Humidity**: 10% to 90% (non-condensation)
  - **Maximum Operating Altitude**: 2,000 m (6,562 feet) above sea level
  - **Dimensions**: 430 mm (W) x 132 mm (H) x 400 mm (D) (16-1/16 inches x 5-1/4 inches x 15-1/2 inches) (excluding rubber feet and projections)
  - **Mass (approx.)**: 11.5 kg (25.4 lbs) When 8 HDDs are installed; 22 kg (48 lbs)

### Optional Accessories
- **Hard Disk Extension Unit**: WJ-HXE400
  - **Power Source**: 120 V AC, 60 Hz
  - **Power Consumption**: 220 ~ 240 V AC, 50/60 Hz
- **Power Source**: WJ-NX400K: 100 ~ 240 V AC, 50/60 Hz
- **Weight**: approx. 4 kg (9 lbs)
- **Dimensions**: 430 mm (W) x 132 mm (H) x 400 mm (D) (16-1/16 inches x 5-1/4 inches x 15-1/2 inches) (excluding rubber feet and projections)

### Security Communication Kits
- **The Security Communication Kits are licensed to use the security function of the network disk recorder (WJ-NX400K). Each Security Communication Kit allows the following number of cameras to be registered.**

<table>
<thead>
<tr>
<th>Security Kit</th>
<th>Camera</th>
<th>Minimum</th>
<th>Maximum</th>
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<tbody>
<tr>
<td>WJ-NXS011</td>
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</tr>
<tr>
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<tr>
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<td>64</td>
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- All other trademarks identified herein are the property of their respective owners.

### Important
- **Safety Precaution**: Carefully read the Important Information, Installation Guide and operating instructions before using this product.
- **Panasonic cannot be responsible for the performance of the network and/or other manufacturers’ products used on the network.
- **Masses and dimensions are approximate.** Specifications are subject to change without notice.

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### Notes
1. Two Additional Camera Kits WJ-NK400K are necessary.**
2. Open collector output, 24 V DC, -200 ma max.**
3. Please check the following URLs for the latest information. (http://security.panasonic.com/download/library/)
4. 16-1/16 inches x 5-1/4 inches x 15-1/2 inches (excluding rubber feet and projections)
5. When 8 HDDs are installed; 22 kg (48 lbs)