

i-PRO Management Software

i-PRO **WV-ASM300** video management software enables a secure, scalable H.265/H.264 ready, multi-camera, multi-recorder, multi-site surveillance management environment suitable for any large to small scaled video security network systems which require centralized operation and ease-of-use.

The **WV-ASM300** can connect up to 100 network video recorders (NVRs) and digital video recorders (DVRs), 64 encoders, and 256 directly connected cameras. Up to 6,400 cameras registered in the recorders and 256 cameras registered in the encoders are automatically indexed in the software. Adding Panasonic WV-CU950 system controller provides direct joystick control of your camera and a jog/shuttle for easy playback, manual REC control for you recorder. Also the new built-in camera/recorder configuration wizard helps speed up your system configuration set-up time dramatically.

WV-ASM300 software supports 16:9, 4:3 and 9:16 corridor format aspect ratio video streams to be displayed on the same monitor. All LIVE, MAP, and OPERATION monitors support 4K resolution for demanding high-resolution operation.

With the combination using i-PRO Extreme cameras and recorders provide full end-to-end AES-256bit encryption system with for mission critical applications. Also, camera SD card full-encryption-video-recording on the edge can be quickly downloaded and decrypted under a secured environment.

FULLY INTEGRATED

- Integrated camera control, viewing and recorder management
- Integrates i-PRO Extreme H.265 & i-PRO H.264 equipment

POWERFUL USER INTERFACE

- NEW user-interface design & 4K native GUI enhances usability
- Automatic camera configuration wizard speeds system set-up
- **WV-ASM300** now includes multi-monitor and WV-CU950 support as standard

EXTREME DATA SECURITY

- Support SSL communication using Symantec device certification
- Support Panasonic "AES-256bit" encryption video

SCALABLE AND EXTENDABLE

- Base : 100 recorders, 64 encoders and 256 cameras
- Expandable to thousands of cameras, recorders and encoders
- Full array of software extension modules available



(System Controller WV-CU950 and monitor displays are optional.)

Extension Softwares

Key Features :

WV-ASE202

- Expand the maximum numbers of screens to 64.
- Up to 4 live windows.
- Multi-monitor function using up to 6 PC monitors.
- To display the operation window, the map window and the 4 live windows simultaneously.

WV-ASE203

- Expand the maximum numbers of registered recorders, encoders and cameras to 100, 64 and 256 respectively.
- Up to 4 licenses for the WV-ASE203 can be added.

WV-ASE204

- Decoder registration : Up to 10 decoders

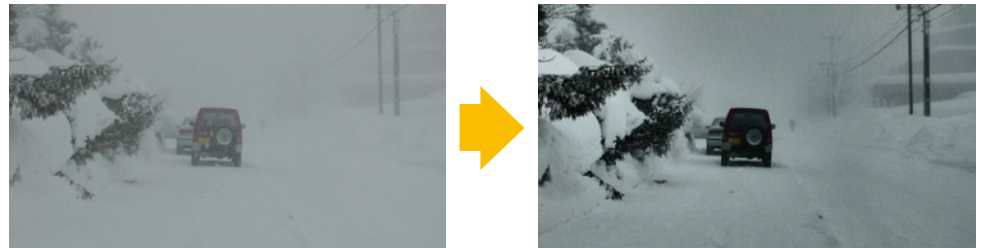
WV-ASE205

- Visibility Enhancement Function

Spatial Tonal Correction

Snowfall and Rainfall Noise Reduction

Multi-frame Synthesis Noise Reduction



Spatial Tonal Correction , Snowfall and Rainfall Noise Reduction

WV-ASE231

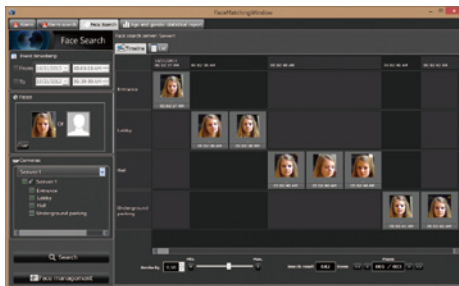
- Extension software for connecting to Face Recognition System (WV-ASF900)

Face Search

Face Matching

People Counting, Age and Gender Statistics

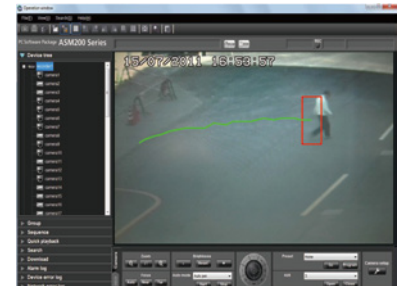
*WV-ASF900 is necessary.



Face Search



People Counting,
Age and Gender Statistics



i-VMD
(Intelligent Video Motion Detection)
track path display

* WV-ASE200 is required for each cameras.

WV-ASE306

- Extension software for controlling Video Insight server

Optional Accessory

Ethernet System Controller with
3D-Joystick & Jog/Shuttle
WV-CU950



Operation Window



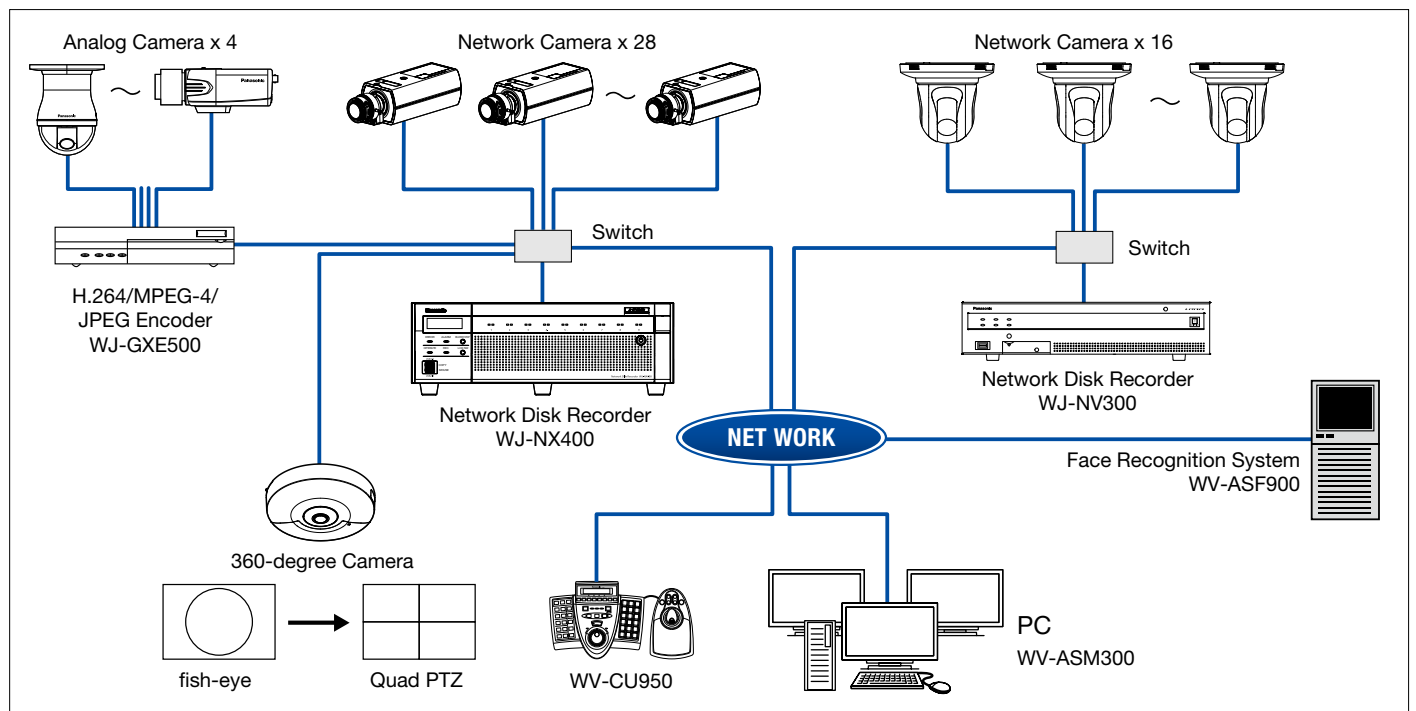
Software Comparison Chart

| Functions | | | WV-ASM300 Management Software - Basic | +WV-ASE202 Extension Software | +WV-ASE203 Extension Software | +WV-ASE204 Extension Software | +WV-ASE205 Extension Software | +WV-ASE231 Extension Software | +WV-ASE306 Extension Software |
|--|-------------|----------------------|--|-------------------------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Main Functions / Description | | | Live / Playback / Control | | | | | | |
| Supported Devices | Camera | Direct | i-PRO series | | | | | | |
| | | Via Recorder | i-PRO series | | | | | | |
| | Recorder | NVR | WJ-NX400, WJ-ND400 series, WJ-NV300, WJ-NV200 series WJ-ND300 series, WJ-ND200 series, WJ-HD716/616, WJ-HD300A series | | | | | | |
| | | DVR | | | | | | | |
| | | Recording Server | | | | | | | |
| | Encoder | WJ-GXE500, WJ-GXE100 | | | | | | | |
| | Decoder | | | | | | WV-GXD400 | | |
| Controller | WV-CU950 | | | | | | | | |
| Max. Devices | Camera | Direct | 256 | | Max. 1,280 ^{*1} | | | | |
| | | Via Recorder | 6,400 (with WJ-NX400 series) | | Max. 32,000 (with WJ-NX400 series) ^{*1} | | | | |
| | | | 6,400 (with WJ-ND400 series) | | Max. 32,000 (with WJ-ND400 series) ^{*1} | | | | |
| | | | 3,200 (with WJ-ND300 series) | | Max. 16,000 (with WJ-ND300 series) ^{*1} | | | | |
| | | | 1,600 (with WJ-ND200 series / WJ-NV200 series) | | Max. 8,000 (with WJ-ND200 series / WJ-NV200 series) ^{*1} | | | | |
| | | Via Encoder | 256 (with WJ-GXE500 / WJ-GXE100) | | Max. 1,280 ^{*1} | | | | |
| | Via Decoder | | | | | | | | |
| | Recorder | 100 | | | 500 ^{*1} | | | | |
| | Encoder | 64 | | | 320 ^{*1} | | | | |
| | Decoder | | | | | | | | |
| Controller | 1 | | | | | | | | |
| Supported Image Format | | | H.265, H.264, MPEG-4(i-PRO series), M-JPEG (depending on the source equipment) | | | | | | |
| Supported Image Resolution | | | Depending on the source equipment (Current i-PRO Network Cameras, Encoders) | | | | | | |
| Max. screens | | | 20 | | 68 | | | | |
| AVMD Display (Frame and Tracking Line) | | | | | | | | Yes | |
| Multiple Monitors Supported | | | Yes (Up to 3 monitors : Operation / Live / Map) | | Yes (Up to 6 monitors : Operation / Live / Map) | | | | |
| Map Function | | | Yes | | | | | | |
| Audio | | | Yes (Live : 2-way, Playback : 1-way) | | | | | | |
| Event Search (T&D, Event type etc.) | | | Yes | | | | | | |
| VMD Search | | | Yes (with WJ-NX400, WJ-ND400 series, WJ-HD716/616, WJ-NV300, WJ-NV200) | | | | | | |
| Image Download | | | Yes | | | | | | |
| Visibility Enhancement | | | | | | | | Yes | |
| Face Search^{*2} | | | | | | | | Yes | |
| Face Matching^{*2} | | | | | | | | Yes | |
| People counting^{*2} | | | | | | | | Yes | |
| Age and Gender Statistics^{*2} | | | | | | | | Yes | |

*1 WV-ASE203 x 4 licenses and 500 recorders are necessary.

*2 WV-ASF900 is necessary.

System Example



Specifications : WV-ASM300

| | | | |
|-----------------------|--|--|---|
| GUI Function | Camera Control (depending on the Camera) | Pan/Tilt, Zoom, Focus, Brightness, Preset position call and program (up to 256), Auto mode (SEQ, SORT, AUTO PAN, PATROL, AUTO TRACK), AUX 1 - 3, Click centering, Wheel zoom, Drag and zoom | |
| | Recorder Control (depending on the Recorder) | REC, PLAY, Rev PLAY, Pause, Stop, FF (up to 96x), REW (up to 96x), Prev Record, Next Record, Prev Image, Next Image, Skip (up to 60 min.), Rev Skip. (up to 60 min.) Text | |
| | Event Search | Target : Recorder (Camera) / Group / Map, Search criteria : Time date, Event type, Text | |
| | VMD Search | Target : Recorder (Camera), Search criteria : Time date, Area In case with WJ-ND400 series, WJ-HD716/616, WJ-NV200 | |
| | Thumbnail Search | Target : Camera, Search criteria : Time date, Stream, Interval | |
| | Multiscreen Mode | 1, 2, 3, 4, 5, 6, 7, 10, 13, 16 split | |
| | Sequence Display | 20 programs, 64 steps/pattern, 1, 2, 3, 4, 5, 6, 7, 10, 13, 16 split Dwell time : 3 s / 5 s / 10 s / 15 s / 20 s / 25 s / 30 s / 35 s / 40 s / 45 s / 50 s / 55 s / 1 min | |
| | Display Performance | 30 ips x 16 screens at H.264 1.5 Mbps, 30 ips x 16 screens at MPEG-4 2 Mbps, 30 ips x 16 screens at H.265 768Kbps (VGA) | |
| | Multi-Monitor | Up to 3 monitors (Operation / Live / Map). Up to 20 cameras can be displayed (Operation-4, Live-16) | |
| | Camera Group Display | Up to 400 groups with 16 alphanumeric titles | |
| | Number of Maps | Up to 100 maps (JPEG or Bitmap), Link : 128 cameras and 20 maps / map | |
| | Image Download | Recorded images of up to 64 cameras (in case with WJ-ND400) can be downloaded Manual download only. Viewer software can be extracted from the main software. | |
| | Quick download | Quick download the operation monitor image. | |
| | SD memory Download | Indicates the function featured in some Panasonic's cameras that transfers H.264 / H.265 video files (mp4 files) saved on the SD memory card equipped with the camera to a PC using the FTP function. | |
| | Recorder/Camera Access | The access to the Recorder and Camera Web pages when logged in as admin | |
| | File Conversion | Convert a n3r file to the standard format (mp4) | |
| | Camera Title Display | On the GUI, Up to 16 characters | |
| | Clock Display | On the GUI. Time : 12H/24H, Date : 5 formats (When the image comes from the recorder) | |
| | Alarm Source | Panasonic alarm protocol | |
| | Alarm Control | Reset, Auto reset (OFF / 10 s / 20 s / 30 s / 1 min / 5 min) | |
| | Alarm Action | Up to 16 alarm images can be displayed on the live monitor. Corresponding camera icon on the map lights up. Alarm message on the GUI and buzzer. | |
| | Digital Zoom | Up to 4 times | |
| | Text Attachment | Free comment can be attached for each record and reviewed at later time. Up to 200 characters | |
| | System Log | Operation (100,000), System (1,000), Network error (1,000), Rec order error (1,000), Alarm (30,000) | |
| Recorder Log Download | Operator access, Network error, Error, Event | | |
| User Management | Registration : Up to 32 users + Administrator, ID : 4-32 digit, PW* : 8-32 digit, User level : 6 levels (Programmable), PW time limit : OFF / 31 / 92 / 184 / 366 days, Auto login : ON / OFF * Two or more must be mixed from alphabet (case sensitive), numbers, symbols | | |
| Security Method | User authentication (ID and Password), Host authentication (IP address), Alteration detection, Activation Key Card | | |
| System Setup | Setup page in English, French, Italian, Spanish, German, Russian, Chinese, Thai, Japanese | | |
| GUI Language | English, French, Italian, Spanish, German, Russian, Chinese, Thai, Japanese | | |
| General | Supported OS ¹ | Microsoft® Windows® 10 Pro 32bit/64bit ² , Microsoft® Windows® 8.1 Pro 32bit/64bit ² , Microsoft® Windows® 7 Professional SP1 32bit/64bit ² The language of the OS must be same as selected GUI language. *4K cameras (WV-SFV781L / WV-SPV781L) are available only on Microsoft® Windows® 10 Pro 64bit, Microsoft® Windows® 8.1 Pro 64bit. | |
| | Required PC ³ | CPU | Intel® Core™ i5-6500, Intel® Core™ i7-6700 or faster When adding the license for WV-ASE202 and displaying images on a 64-screen : Intel® Core™ i7-6700 or faster When adding the license for WV-ASE205 (Visibility enhancement function) : Intel® Core™ i7-6700 or faster *Recommend a PC exclusively for WV-ASE205. When using the network microphone (WV-SNR10 / WV-SNR10N3) : Intel® Core™ i7-6700 or faster When using the 9-megapixel network camera (WV-SFV481 / WV-SFN480) : Intel® Core™ i7-6700 or faster When using the 4K network camera (WV-SFV781L / WV-SPV781L) : Intel® Core™ i7-6700 or faster When using the H.265 camera : Intel® Core™ i7-6700 or faster |
| | | Memory | 4 GB or more, When using the 9-megapixel network camera (WV-SFV481 / WV-SFN480) : 8 GB* or more When using the 4K network camera (WV-SFV781L / WV-SPV781L) : 8 GB* or more When using the H.265 camera : 8 GB* or more *Using the dual channel corresponding memory, it is the memory of the same performance and requires the use of in pairs. (Example : In the case of 8 GB, use 2pcs of 4 GB memory) |
| | Graphic accelerator ³ | VRAM : 512 MB or more, compatible with Microsoft® DirectX® 9.0c or later When using WV-ASE202 : NVIDIA NVS510 x 2 When using WV-ASE205 (Visibility enhancement function) : NVIDIA GeForce® GTX 660 or more (The version GeForce® 332.21 or later is recommended for the driver software) When using the 4K monitor* : NVIDIA NVS 510 *To display 4K2K resolution on a monitor at 60 Hz, connection on the display port 1.2 is required. | |
| | CD-ROM drive | Necessary to install this software | |
| | Required HDD space | Approx. 3 GB | |
| | Monitor | 1280 x 800 pixels or more (1920 x 1080 pixels recommended), 24-bit True color or better (Full color recommended) | |
| | Network interface ³ | Having a 100/1000 Mbps network port | |
| | Web browser | Microsoft® Internet Explorer® 7, 8, 9 | |
| | Network | Proxy | HTTP proxy supported (IP address and port No.) |
| FTP | | Passive/Active | |
| Viewer | Playback Control | Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image | |
| Software | Additional Functions | Alteration detection, Save as JPEG, Two times zoom, Print | |

*1 Microsoft® Windows Vista®, Microsoft® Windows® 8 not supported When using H.265 mode, 64 bit OS is required.

*2 It is out of warranty that you use the two graphical board together.

In case of 4 monitor output in a graphical board, you should design the followings only.

+ Operational monitor, Map monitor, live monitor 1 and live monitor 2

+ Operational monitor, live monitor 1, live monitor 2 and live monitor 3

*3 For further and latest information, refer to our website. (<http://security.panasonic.com/pss/security/support/technical/testedpc.html>).

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• All TV pictures are simulated.

• Specifications are subject to change without notice.


Important

- Panasonic recommends a dedicated PC to prevent installation errors and to keep best performance.
- 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.
- When remote monitoring, please pay attention to the network design.
For details, please contact your local Panasonic sales representatives.

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