Panasonic
BUSINESS

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.
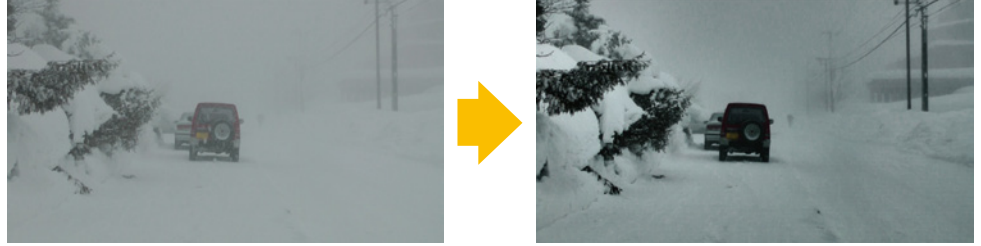
WV-ASE204

- Decoder registration : Up to 10 decoders

WV-ASE205

- Visibility Enhancement Function

Spatial Tonal Correction

Snowfall and Rainfall Noise Reduction

Multi-frame Synthesis Noise Reduction

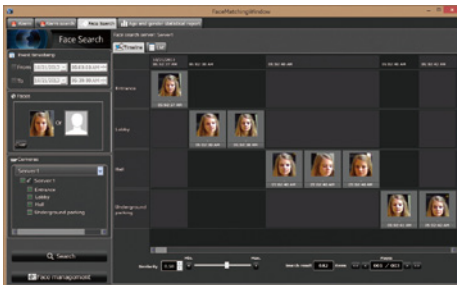Spatial Tonal Correction , Snowfall and Rainfall Noise Reduction

WV-ASE231

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

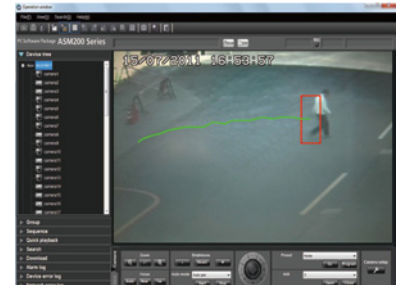**Face Search** **Face Matching** **People Counting, Age and Gender Statistics** *WV-ASF900 is necessary.

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

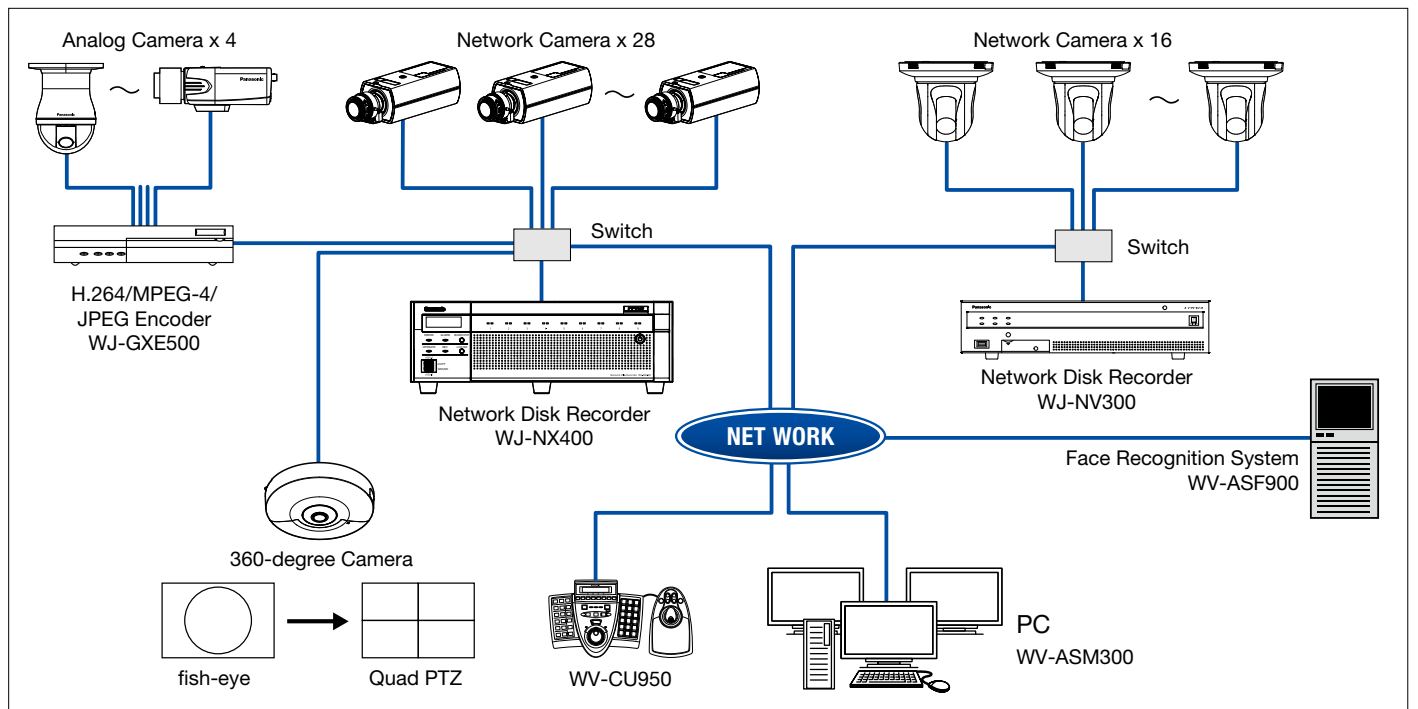Ethernet System Controller with
3D-Joystick & Jog/Shuttle
WV-CU950

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,						
		DVR	WJ-HD716/616, WJ-HD300A series						
		Recording Server							Video Insight 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-GXE500)		Max. 1,280[1]				
		Via Decoder							
	Recorder		100		500[1]				
	Encoder		64		320[1]				
	Decoder					10			
	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

Analog Camera x 4

Network Camera x 28

Network Camera x 16

H.264/MPEG-4/ JPEG Encoder WJ-GXE500

Switch

Switch

Network Disk Recorder WJ-NX400

Network Disk Recorder WJ-NV300

NET WORK

Face Recognition System WV-ASF900

360-degree Camera

fish-eye → Quad PTZ

WV-CU950

PC WV-ASM300

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 faste
		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-megapixcel 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-megapixcel 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 Software	Playback Control	Play, Rev Play, Pause, FF, REW, Prev Record, Next Record, Prev Image, Next Image
	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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