WJ-ND400

High Performance Network Disk Recoder

Security & Sound Systems Business Unit,
System Solutions Company

Overview

H.264, MPEG-4 and JPEG multi-encoding compatibility.

Up to 64 network cameras can be connected and recorded.

Flexible Recording Mode: Emergency, SCHEDULE including Schedule, Manual and Event.

Playback VMD Search

Up to 54 TB with 9 HDD slots in the main unit + 5x WJ-HDE400 Extension Units each with 9 HDD slots

RAID5/6, Embedded OS, Alteration detection for security and reliability.

WJ-ND400: Main unit with one HDD installed.

WJ-ND400K: Main unit without HDD.

WJ-HDE400: Extension Unit with 9 HDD slot

H.264/MPEG-4/JPEG

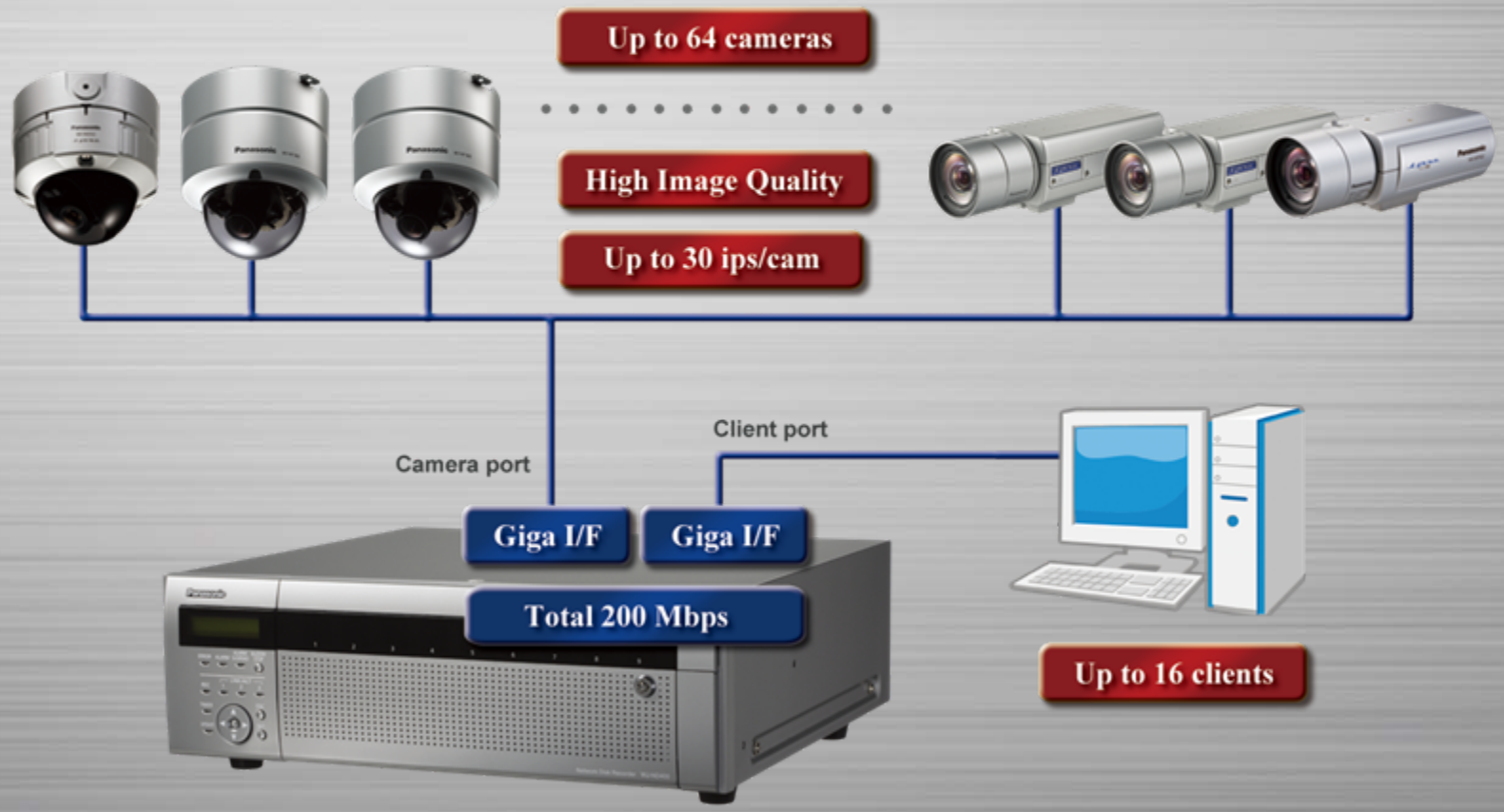
WJ-ND400 can record H.264, MPEG-4 and JPEG images simultaneously.

High resolution recording or high frame rate recording is at user's choice.

High Throughput

200 Mbps high throughput allows more cameras, higher image quality, faster frame rate and more clients. Best match with Megapixel i-Pro Network Cameras

Up to 64 network cameras can be connected without extra license fee and their images can be recorded simultaneously.

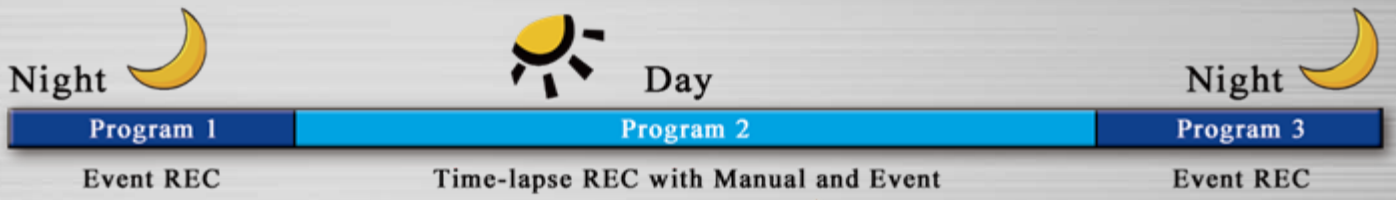


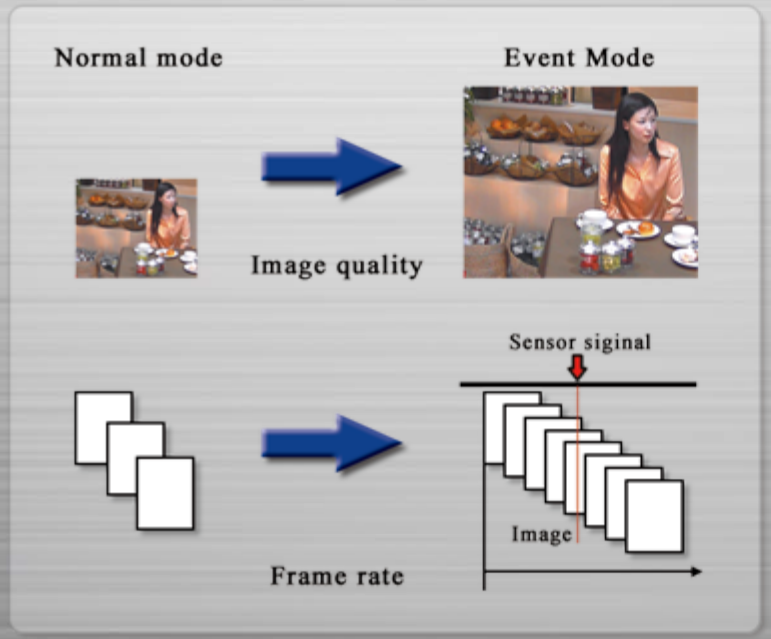
Note: One port or two ports operation is available. A total of the two ports is 200Mbps.
Total numer of Camera REC+Audio REC+Camera with VMD data is 96.

Flexible Recording

Flexible Recording Mode: Emergency, SCHEDULE including Schedule, Manual, Event.

Schedule mode includes 8 recording programs with individual recording mode for each camera, and 6 time schedules per day.





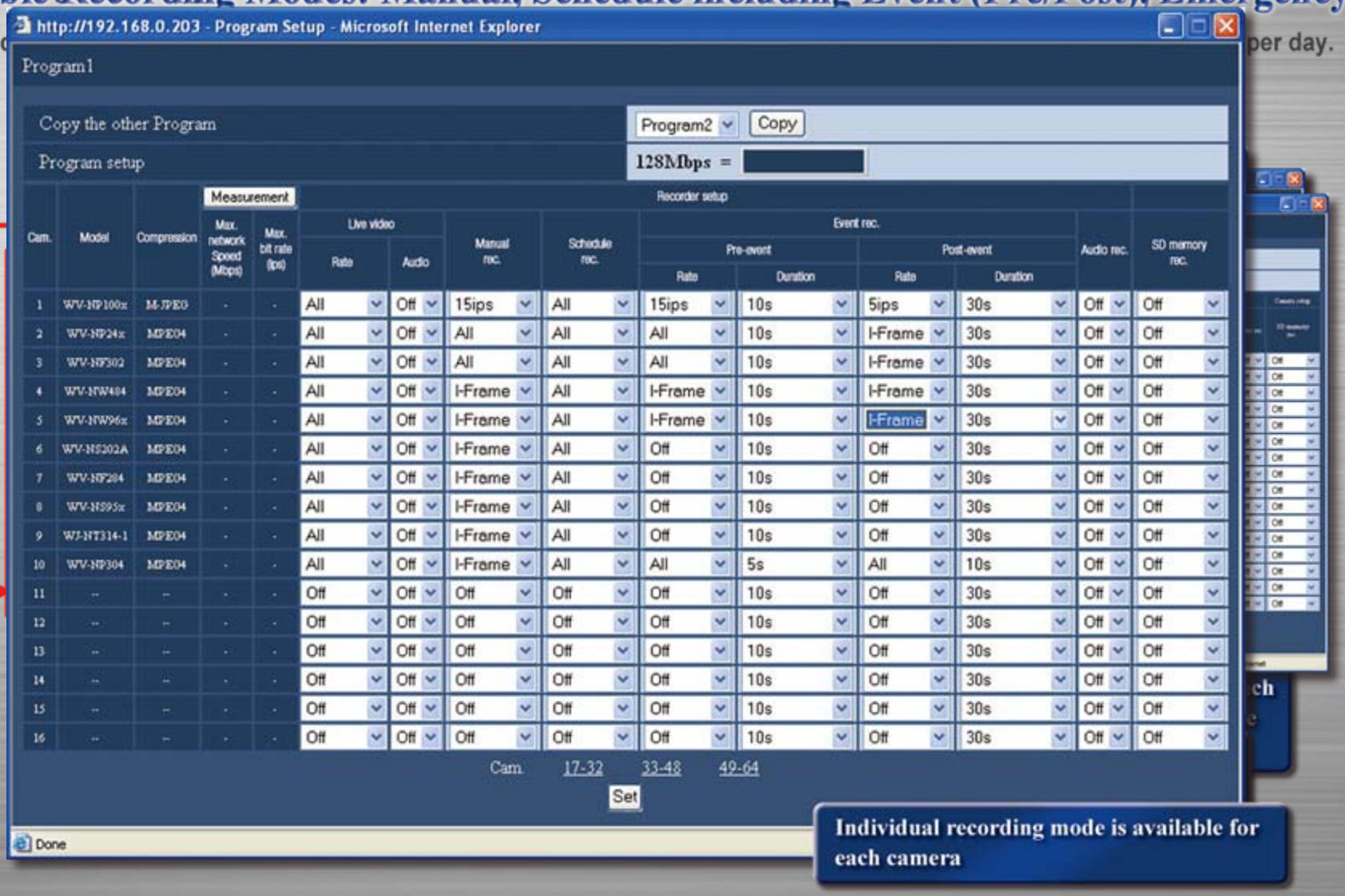
Emergency REC: Available at any time

Compression,
REC frame rate, Audio ON/OFF,
SD memory REC rate.

Flexible Recording

Flexible Recording Modes: Manual, Schedule including Event (Pre/Post), Emergency.

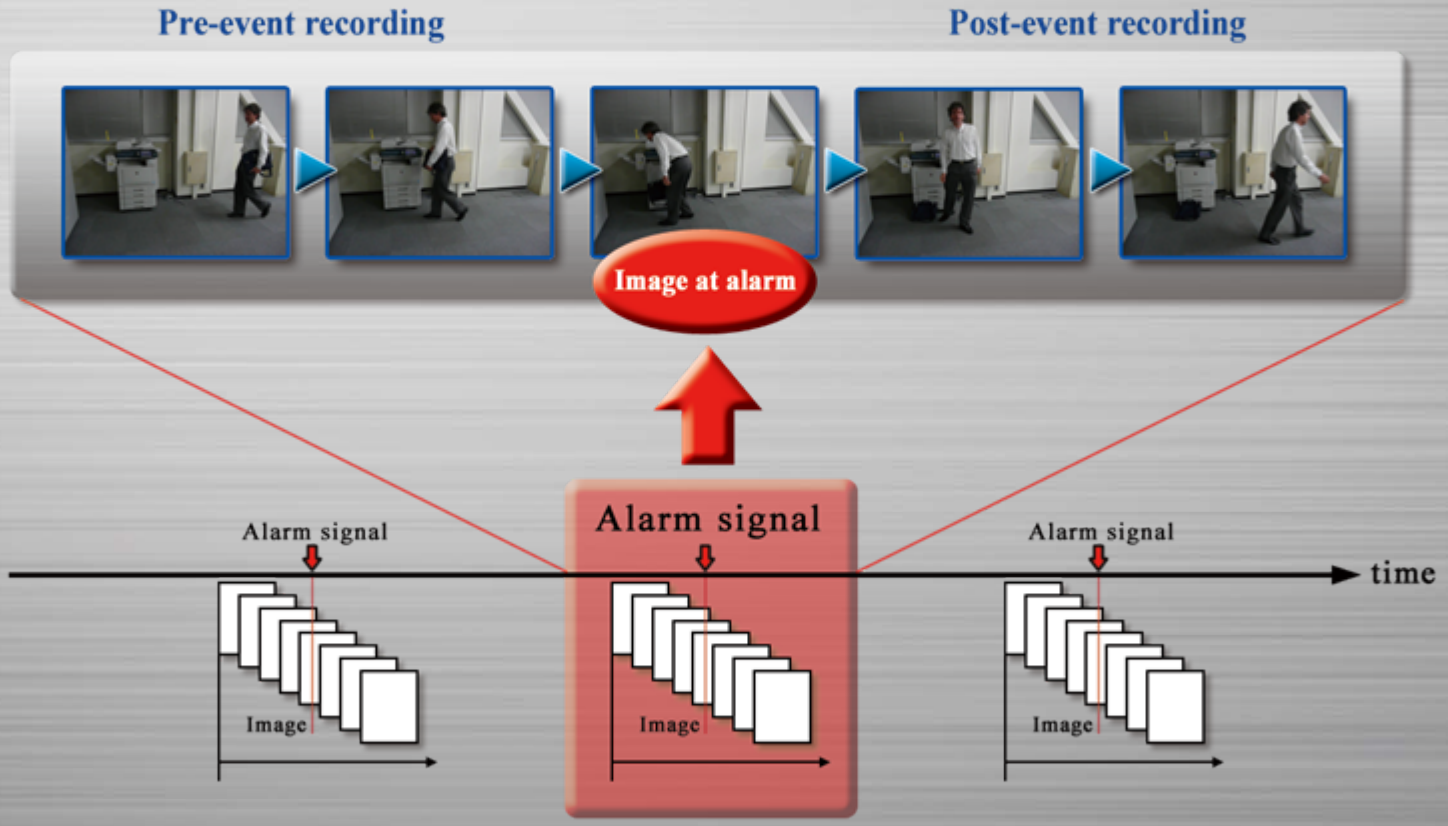
Sched ... per day.



Event Recording

Event recording mode provides effective use of disk space.

Images prior to the alarm can be recorded so that the critical moment is less likely lost.



Note: Up to 15 minutes with dedicated HDD for Pre-event.

User Friendly GUI

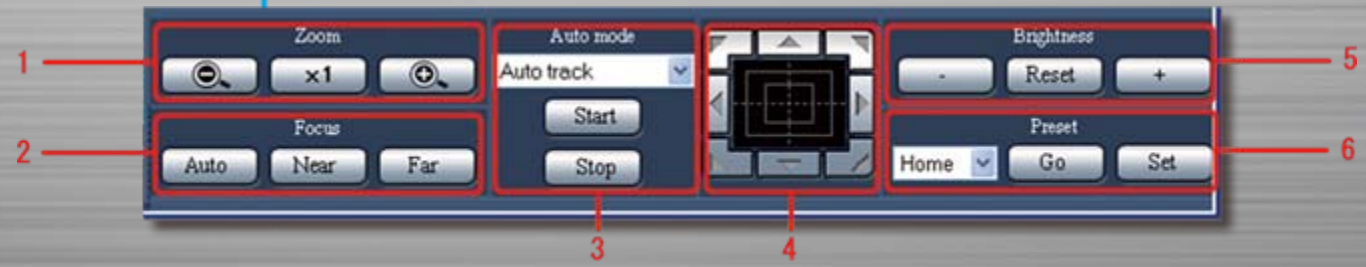
User friendly GUI including display mode control, camera control, recorder control and status monitoring allows intuitive operations, reducing the burden on operators.

Camera control

Pan/Tilt, Zoom, Focus, Brightness, Preset Position, Auto mode can be controlled from the browser GUI.

Camera control is available when the live image from a PTZ camera is displayed on the spot screen.

【CAM】tab



1. [Zoom] box

Click [-] or [+] to adjust the zoom. Click [x1] to return the zoom to normal.

2. [Focus] box

Click [Near] or [Far] to adjust the image focus.

Click [Auto] to adjust the focus automatically (auto focus).

3. [Auto mode] box

Select the camera's auto mode function (auto track, auto pan, preset sequence, sort, patrol) by pull-down menu.

4. Control pad/buttons

Click the buttons to move the camera pan/tilt.

Click in the control pad to adjust the horizontal/vertical position (pan/tilt) of the image.

5. [Brightness] box

Click [-] (Dark) or [+] (Bright) to adjust the lens iris.

6. [Preset] box

[Go] button: The camera moves to the pre-registered preset position.

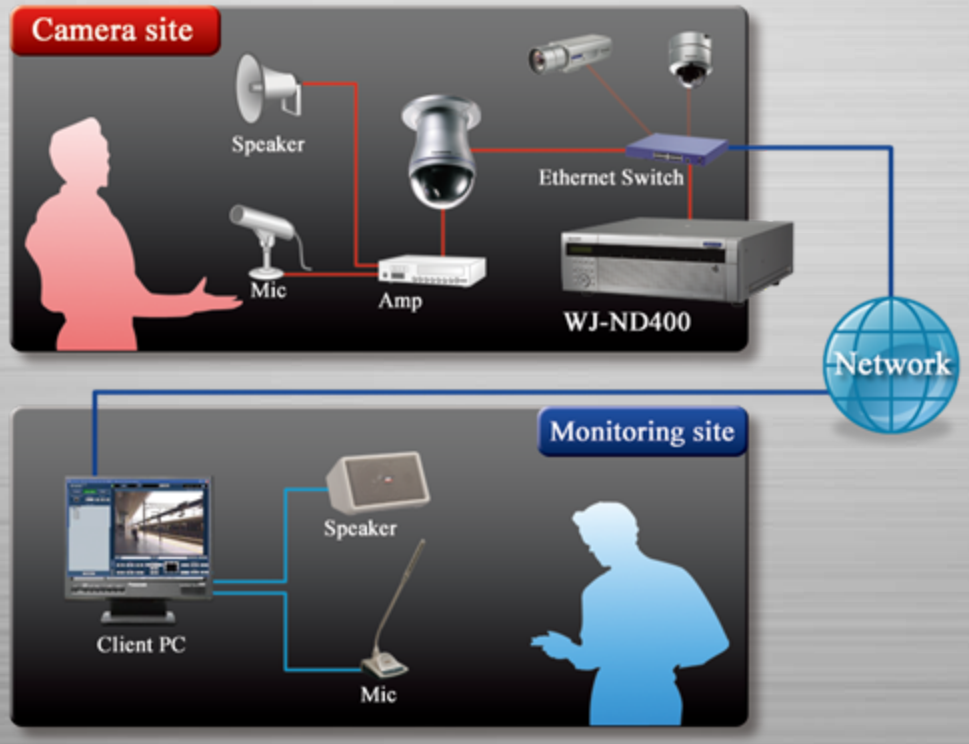
[Set] button: Register preset positions that specify the direction of the camera.

Note: Supported function depends on the camera model.

Audio recording

Audio from up to 64 i-Pro network cameras can be recorded and played back.

Audio streaming can be set ON or OFF for each camera individually.



【Control】Panel

Rec. event list

Speaker icon: Record with audio.

Note: G.726 (ADPCM) 32 kbps mode only

Total number of Camera REC+Audio REC+Camera with VMD data is 96.

Group display

Cameras can be grouped for easier browsing. Up to 8 groups are available.

Up to 16 alphanumeric characters can be used for a group title.

Group1:Entrance

Group2:Parking

Group3:Shopping Floor

Group4:Gymnasium

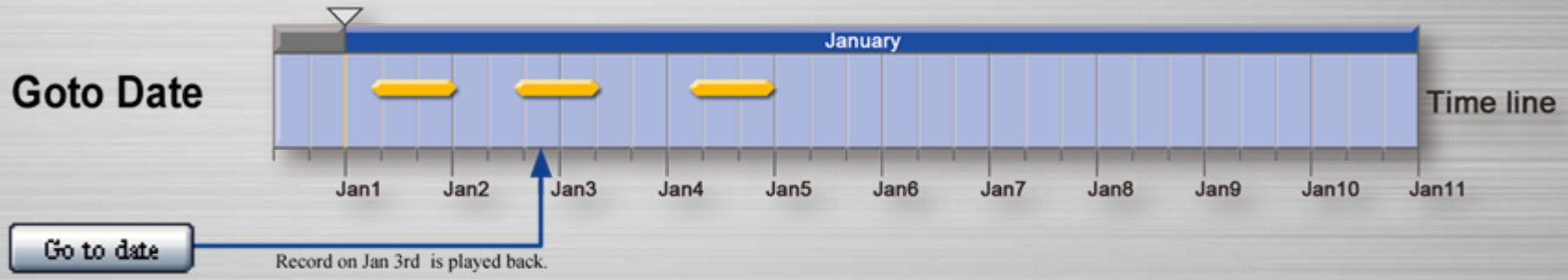
【Cam. select】Panel

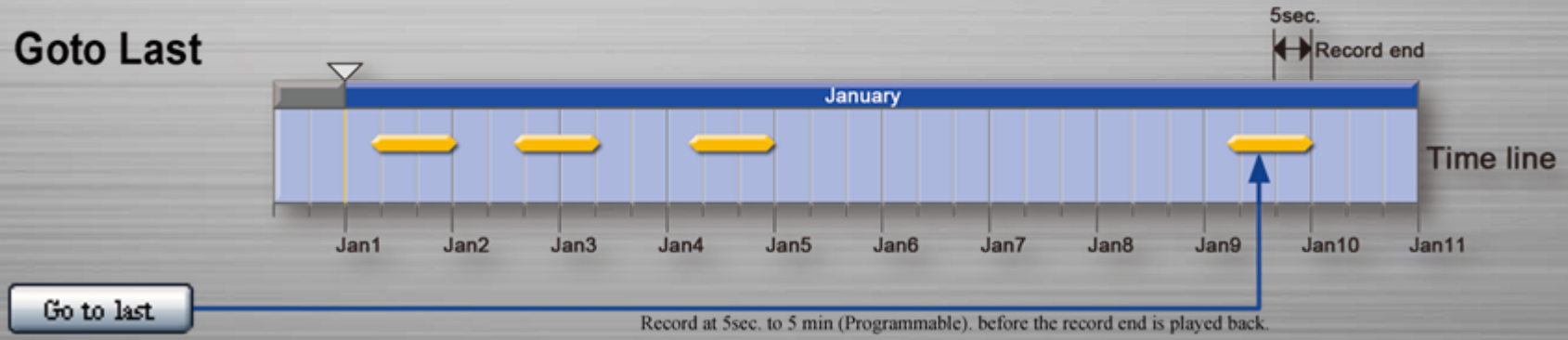
Note: A camera cannot belong to more than a group.

Flexible playback

Up to 100x speed play, Goto Date and Goto Last allows flexible playback operations.

Goto Date (Jump to specific time/date), Goto Last (Jump to 5 sec. ~ 5 min. before the record end).





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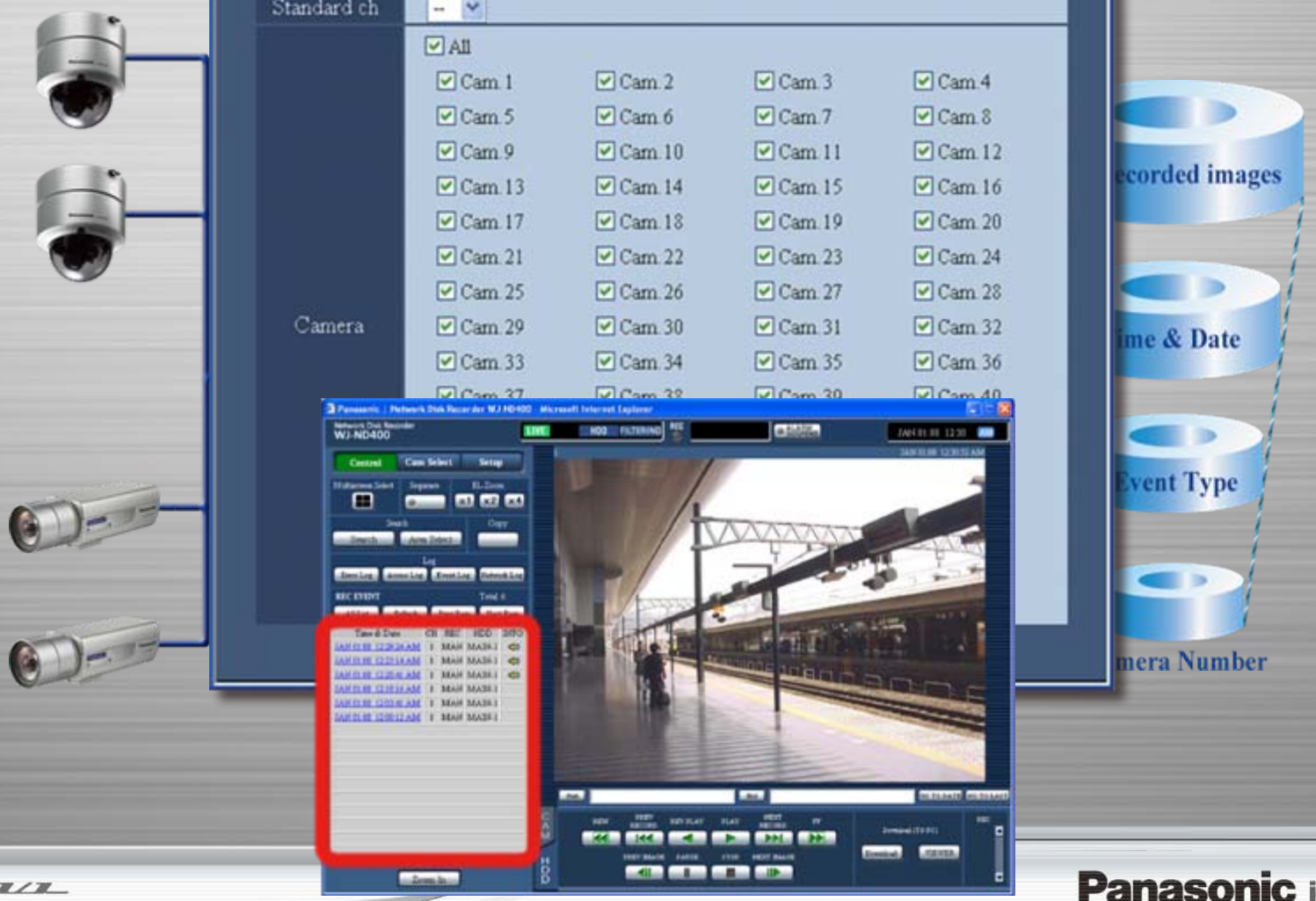


Playback VMD Search

i-Pro cameras can send motion meta data when used with WJ-ND400 so that motions in the specified area in the recorded images can quickly be searched.

Sensitivity depends on the VMD setup of the camera.

Display modes

Flexible display modes include Spot, Quad (16 patterns), Spot Sequence and Quad Sequence (Live only).

Spot

Quad

Spot SEQ

Each dwell time is selectable from 2s./3s./5s./10s./20s.

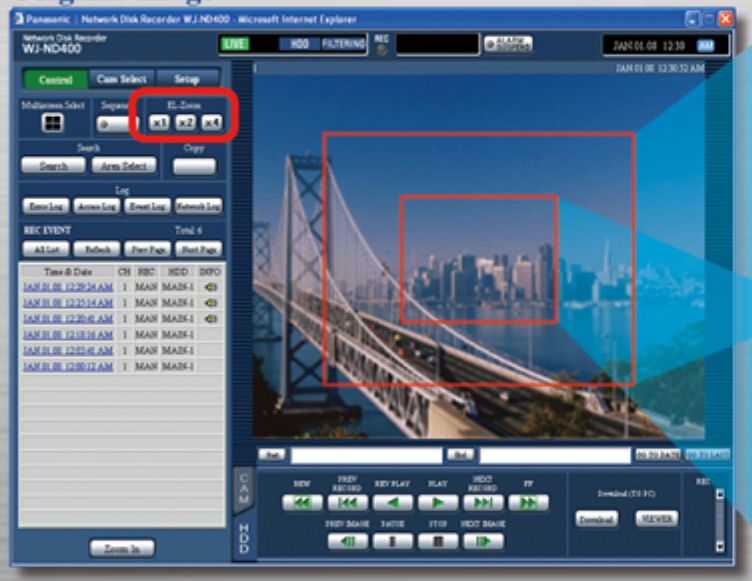
Quad SEQ

Digital zoom

2x, 4x Digital zoom (Live/Playback) enables precise verification.

Pan/Tilt control is also available for zoomed area.

Original image



2x
digital zoom

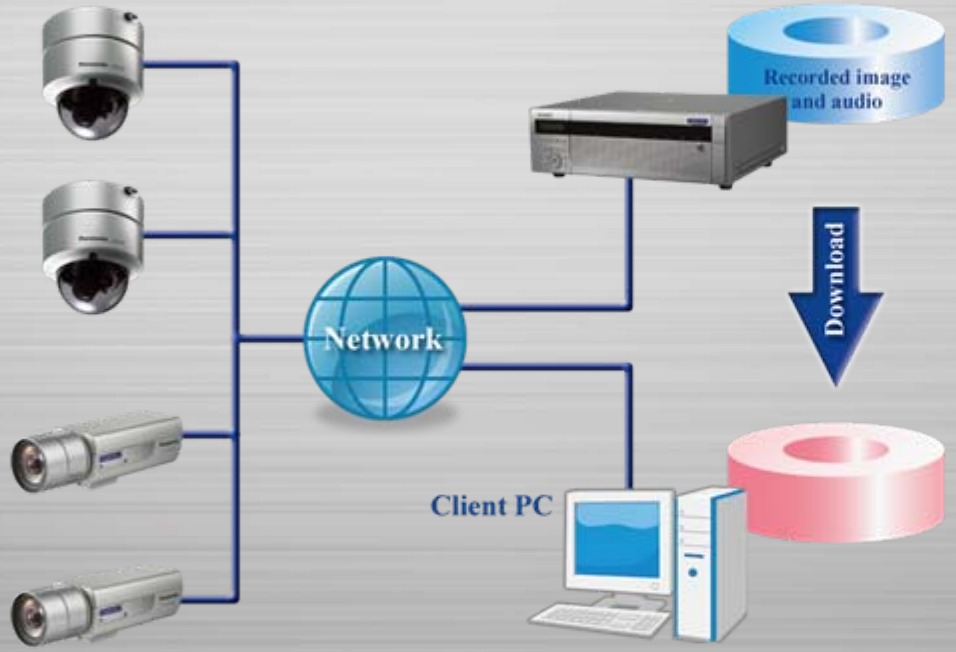
Pan/Tilt control is available

4x
digital zoom

Image download

Recorded data can be downloaded to a PC via network.

Downloadable viewer software allows playback of video and audio of the downloaded record.



Viewer Software

【HDD】Tab

Downloads recorded images and audio

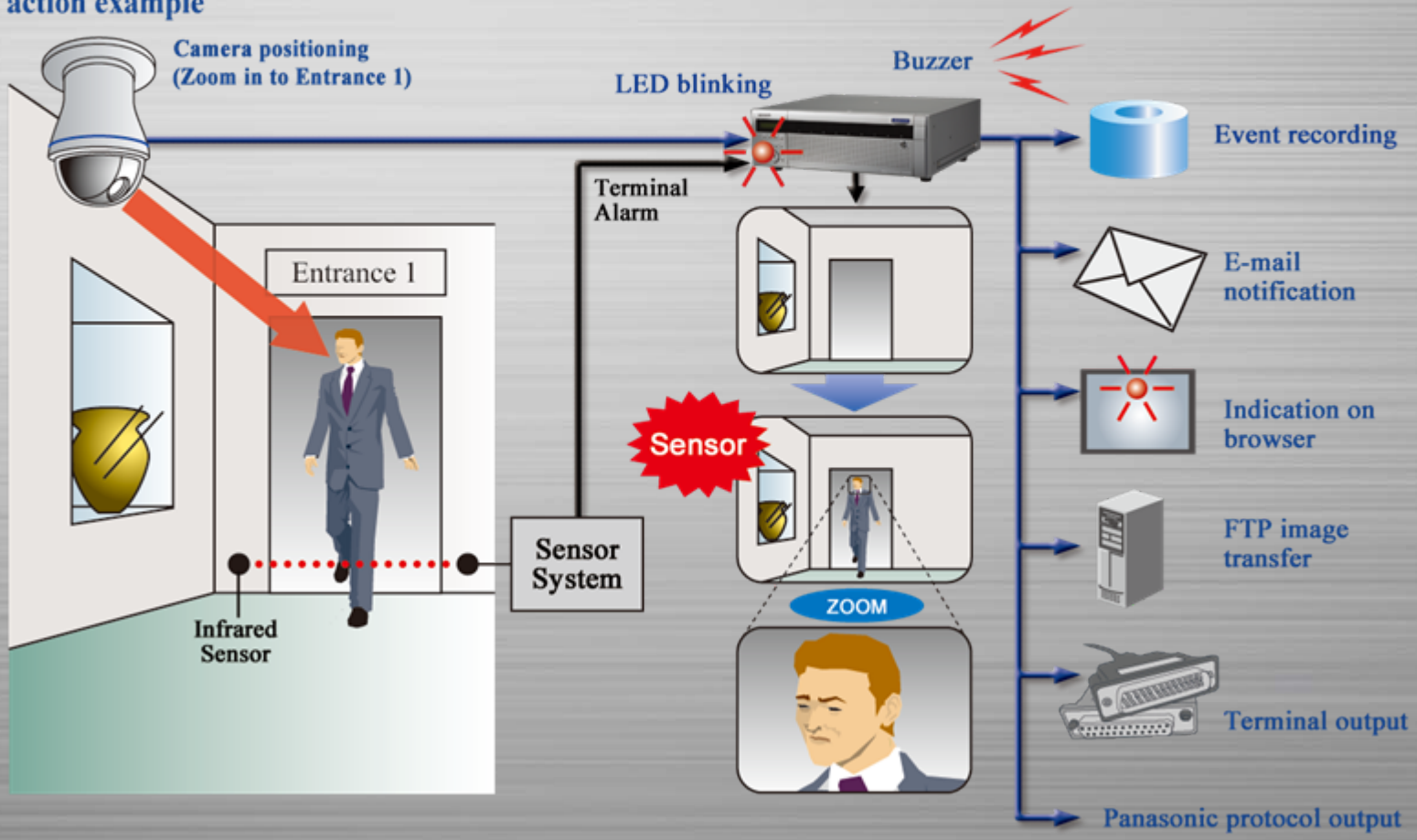
Downloads viewer software

Alarm actions

Various alarm sources and actions are available for flexible alarm control.

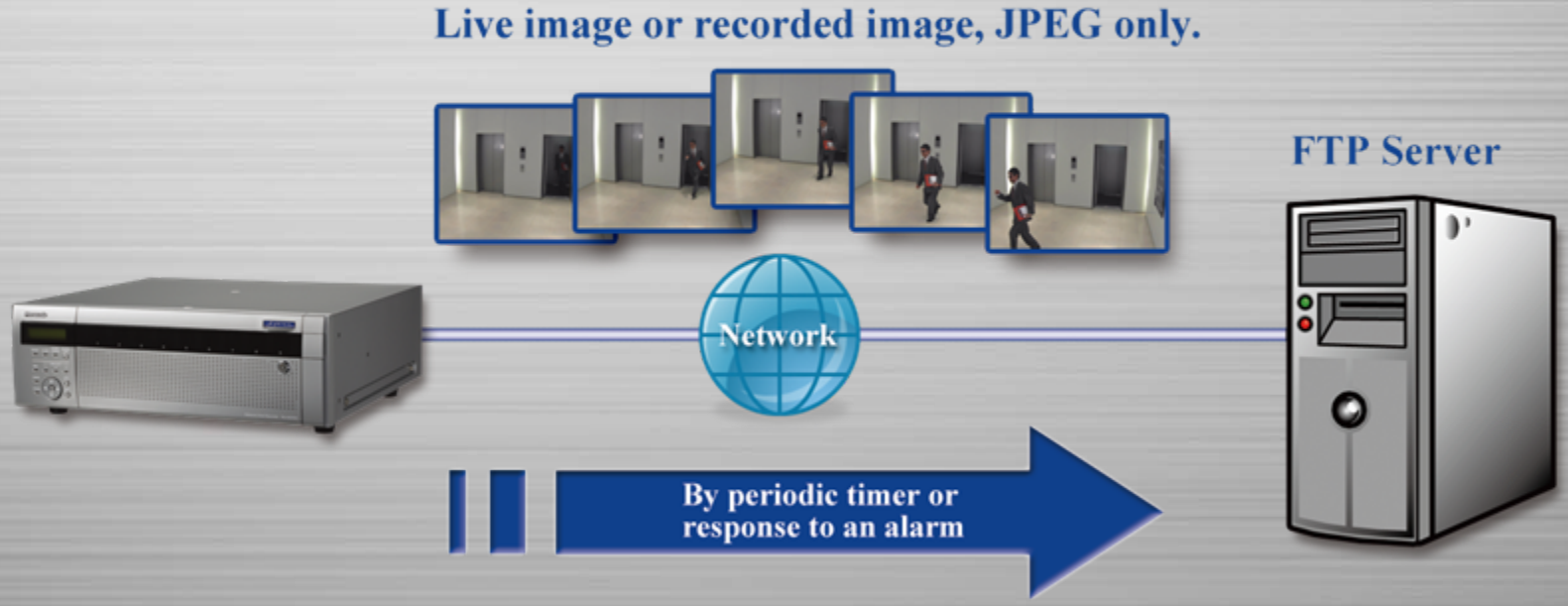
Alarm sources include 32x Terminal inputs, 64x Camera alarms, Panasonic Alarm Protocol.

Alarm action example



FTP Client

FTP client function enables periodic live image transfer or recorded image transfer in response to an alarm.



SD Memory Backup

When the network experiences a problem, images can automatically be backed up in the SD memory card in i-Pro cameras

1. Network trouble

2. Stored in the SD Memory Card

It works when used with a FTP server or an i-Pro network recorder.
SD memory recording is available only in JPEG mode.

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SD Memory Backup

Images recorded in the SD memory card in i-Pro network cameras during a network failure can be transferred to the recorder automatically.

Images can be transferred even when the recorder is in recording status.

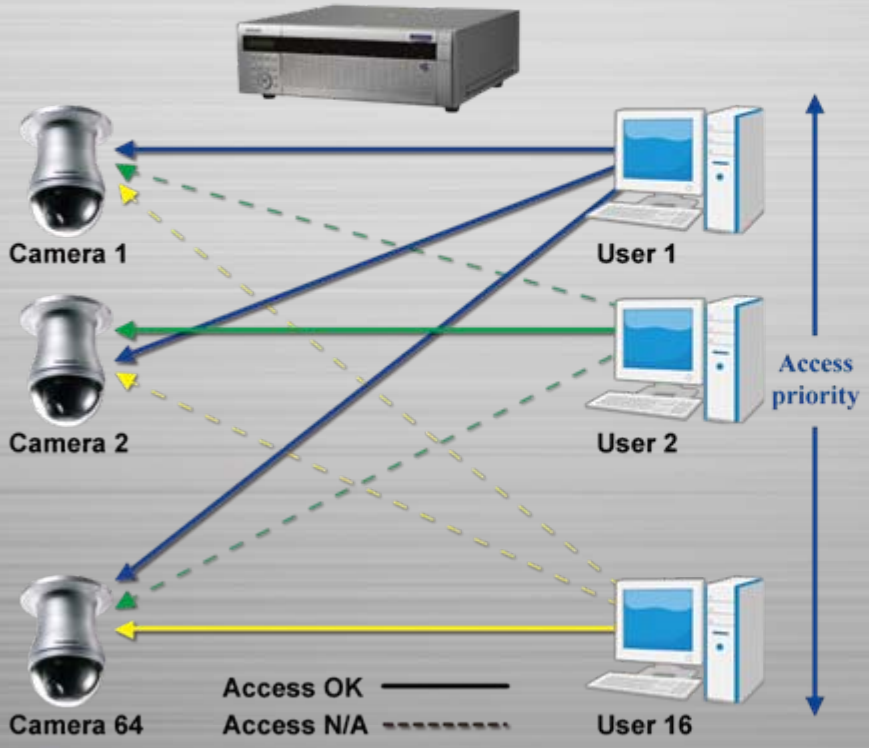
Note: It is impossible to retrieve backup images to the FTP server automatically.

User management

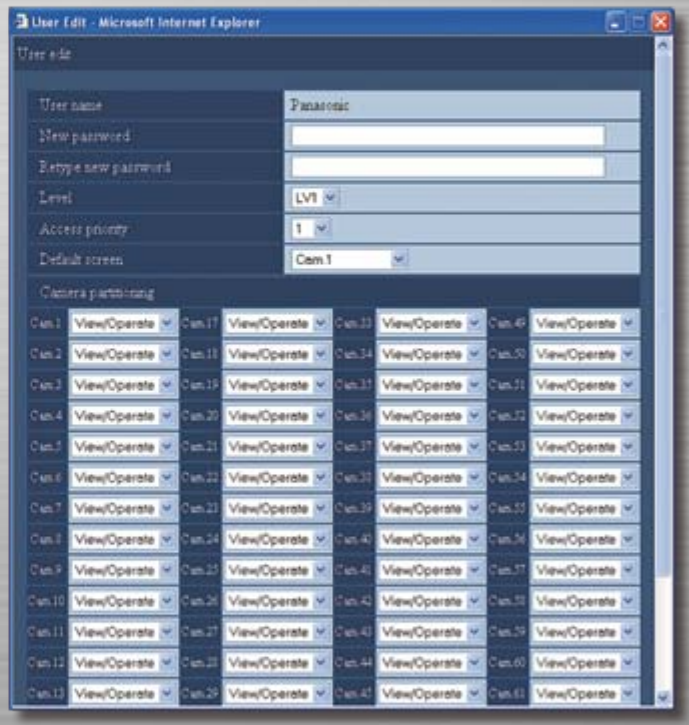
Sophisticated user management includes User/Host authentication, 4 user levels, 16 user priorities and User-Camera View/Control partitioning.

Up to 16 users can monitor images and control WJ-ND400 simultaneously.

User - Camera View/Control partitioning



【User】 Setup Menu



Note: Up to 32 Users and up to 32 PCs (Host) that can access the camera over a network can be registered.

User management

Sophisticated user management includes User/Host authentication, 4 user levels, 16 user priorities and User-Camera View/Control partitioning.

Up to 16 users can monitor images and control WJ-ND400 simultaneously.

4 User Levels

- Setup
  - Quick
  - Camera
  - Server
  - Network
  - User mng.
  - Maintenance
- Camera control
- Error log status
- Access log status
- Event log status
- Network log status
- Alarm reset
- Error reset
- Alarm suspend
- Copy
- Manual rec. operation
- Playback operation

LV 1 (Admin.)

- Setup
  - Server
  - Network
- Camera control
- Error log status
- Access log status
- Event log status
- Network log status
- Alarm reset
- Error reset
- Alarm suspend
- Manual rec. operation
- Playback operation

LV 2

【User level】 Setup Menu

- Camera control
- Event log status
- Playback operation

LV 3

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LV 4 (Monitoring only)

Note: Factory default of user levels is as above condition.

9 HDD slots

Up to 9x 1TB serial ATA HDDs can be installed with the provided canisters.
With hot plug support, the HDDs can be removed without interrupting the recording.

Note: Factory default: 1x 500GB HDD installed.

54TB HDD capacity

Up to 54 TB with 9 HDD slots in the main unit and five WJ-HDE400 Hard Disk Extension Units each with 9 HDD slots.

9 x 1TB

Max 9TB

6 x 9 TB = Max 54TB

RAID5/6

With the RAID redundancy even if one (RAID5) or two (RAID6) HDDs are damaged, recorded images can still be recovered.

Reliability

With the embedded OS and the purpose built hardware, WJ-ND400 ensures 24/7 operation.

In contrast with PC-based network recorder, WJ-ND400 obtains stable reliability under even the harshest conditions.

Ideal for any surveillance application

Bank

Town Center Monitoring

Industrial

Transportation

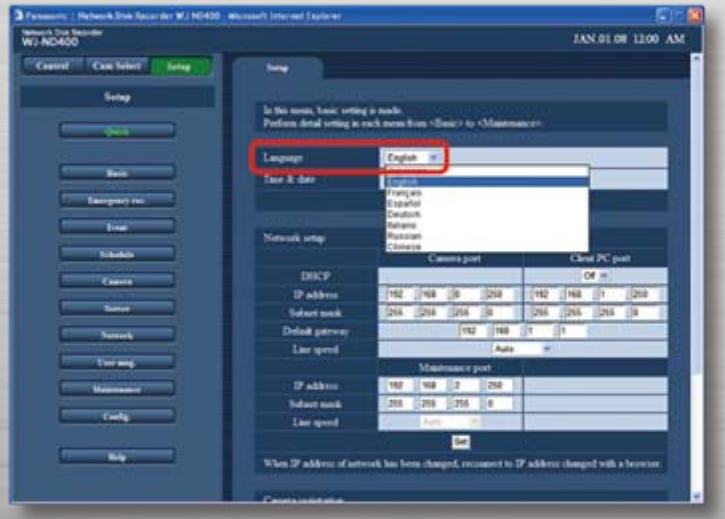
For safety operation and immediate action in emergencies

Easy setup

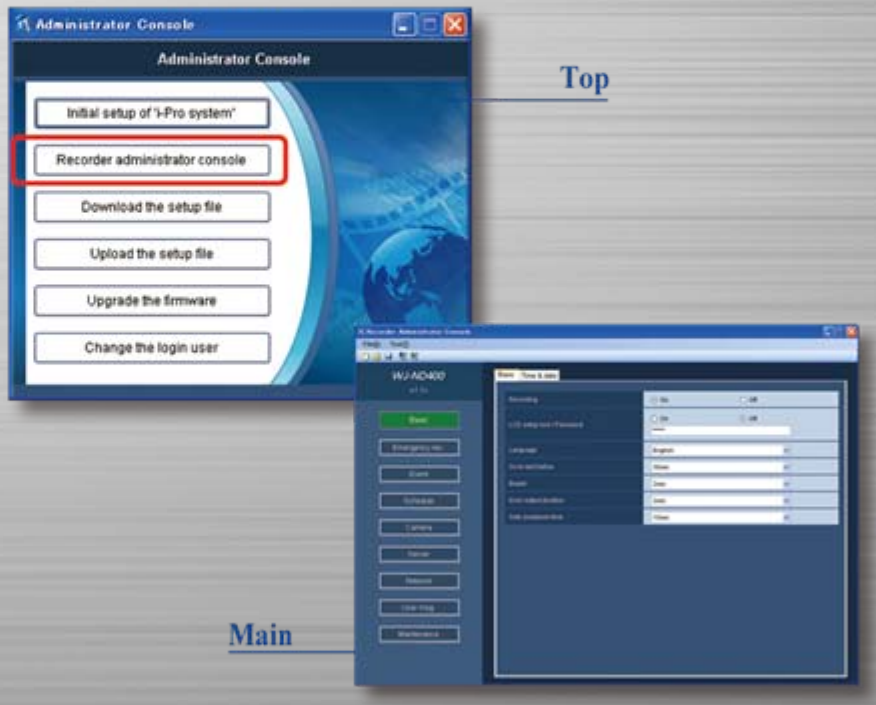
Setup can be made with the own multilingual GUI or System configuration software.

GUI language: English/French/Spanish/Germany/Italian/Russian/Chinese/Japanese

【Quick】Setup Menu



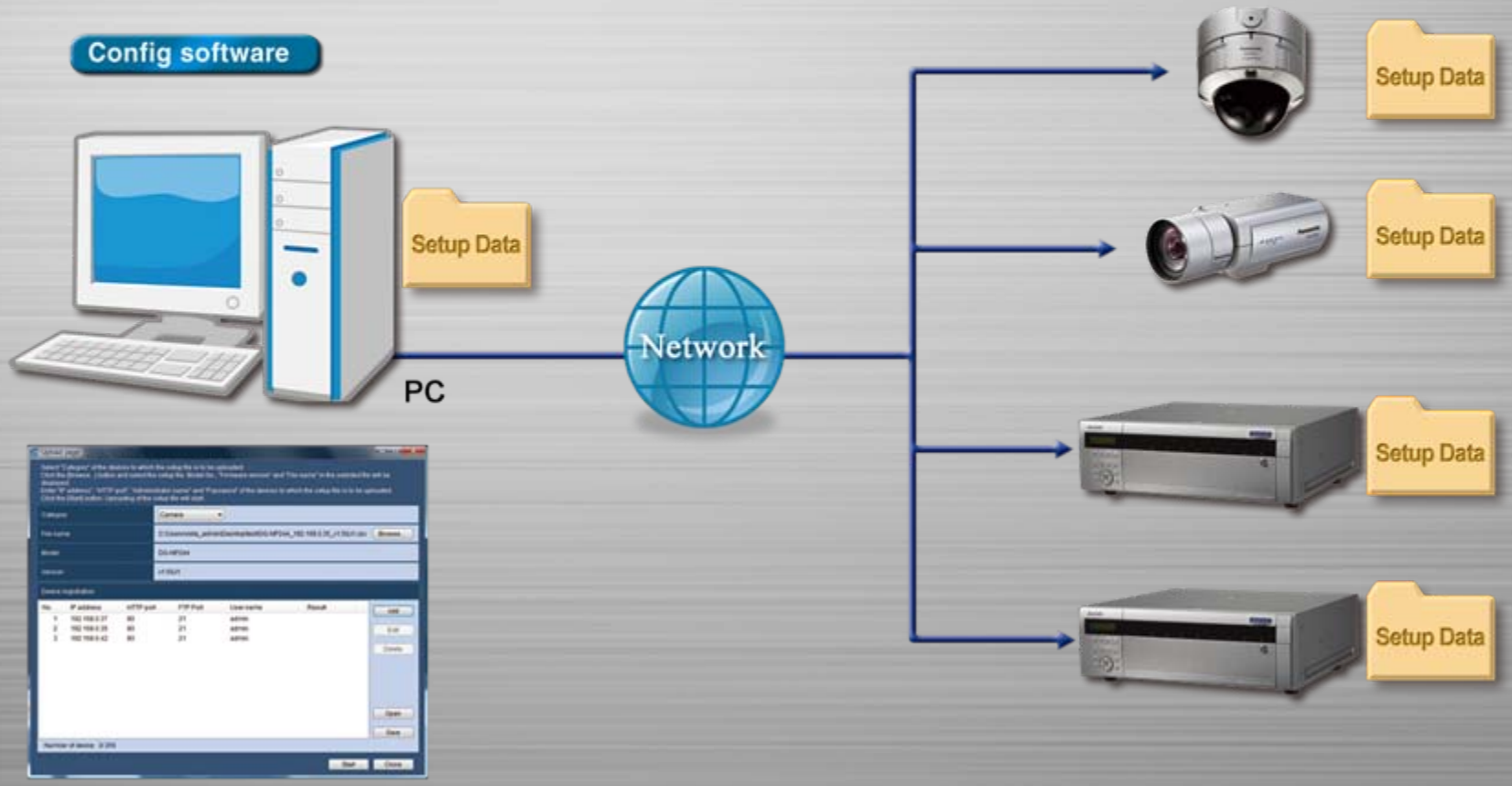
Configuration Software



Configuration Software

Setup data of the Encoders, Recorders and Decoders can be programmed with the System Configuration Software, reducing setup time.

System Configuration Software is especially effective when using the same setup data to the multiple units.



Multi site System

Multi-recorder-Multi-site system can be made with optional WV-ASM100 i-Pro Management Software.

WV-ASM100 enables large scale multi-site surveillance system with management efficiency and user-friendly operation.