**JVC**
The Perfect Experience

NETWORK VIDEO RECORDER [16ch+]
# VR-N1600U(A)
# Ver.5.4

*Hardware Upgrade Version !!*

milestone
Milestone XProtect
Enterprise embedded
Powered by Milestone
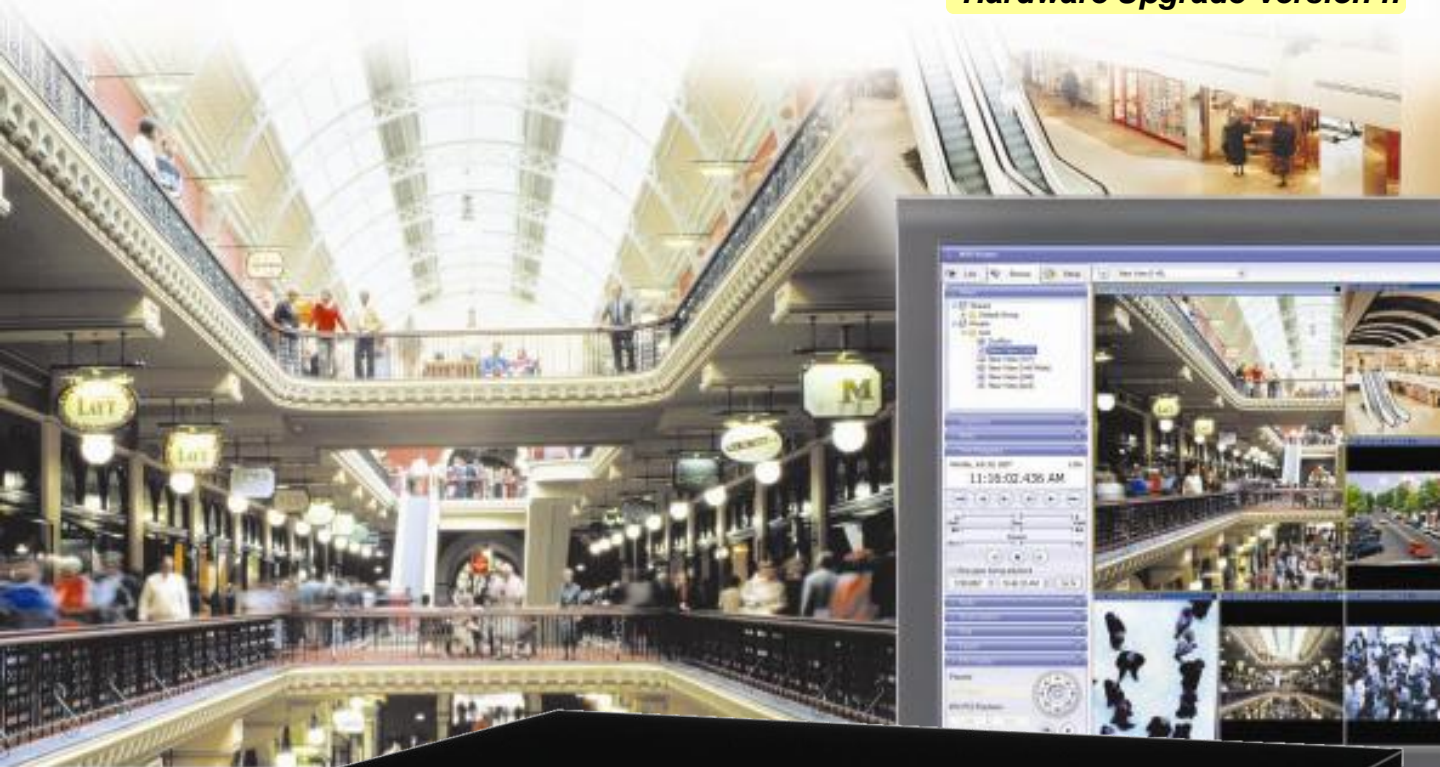
# New Features

## • Additional camera license up to total 32 channel
You can enhance the 16 channel NVR (the factory default) up to total 32 channels by adopting separately purchased "JVC NVR Additional Camera License".

## • Master / Slave configuration by VR-N900/1600 ( A)
Multiple NVRs can be configured as one integrated Master/Slave system without using PC .

No need for preparing extra Software license, just enable the Master / Slave configuration on your surveillance system using multiple NVR. JVC NVR, VR-N900 and VR-N1600(A) ensure your larger surveillance system under same easy-to-use concept as before.
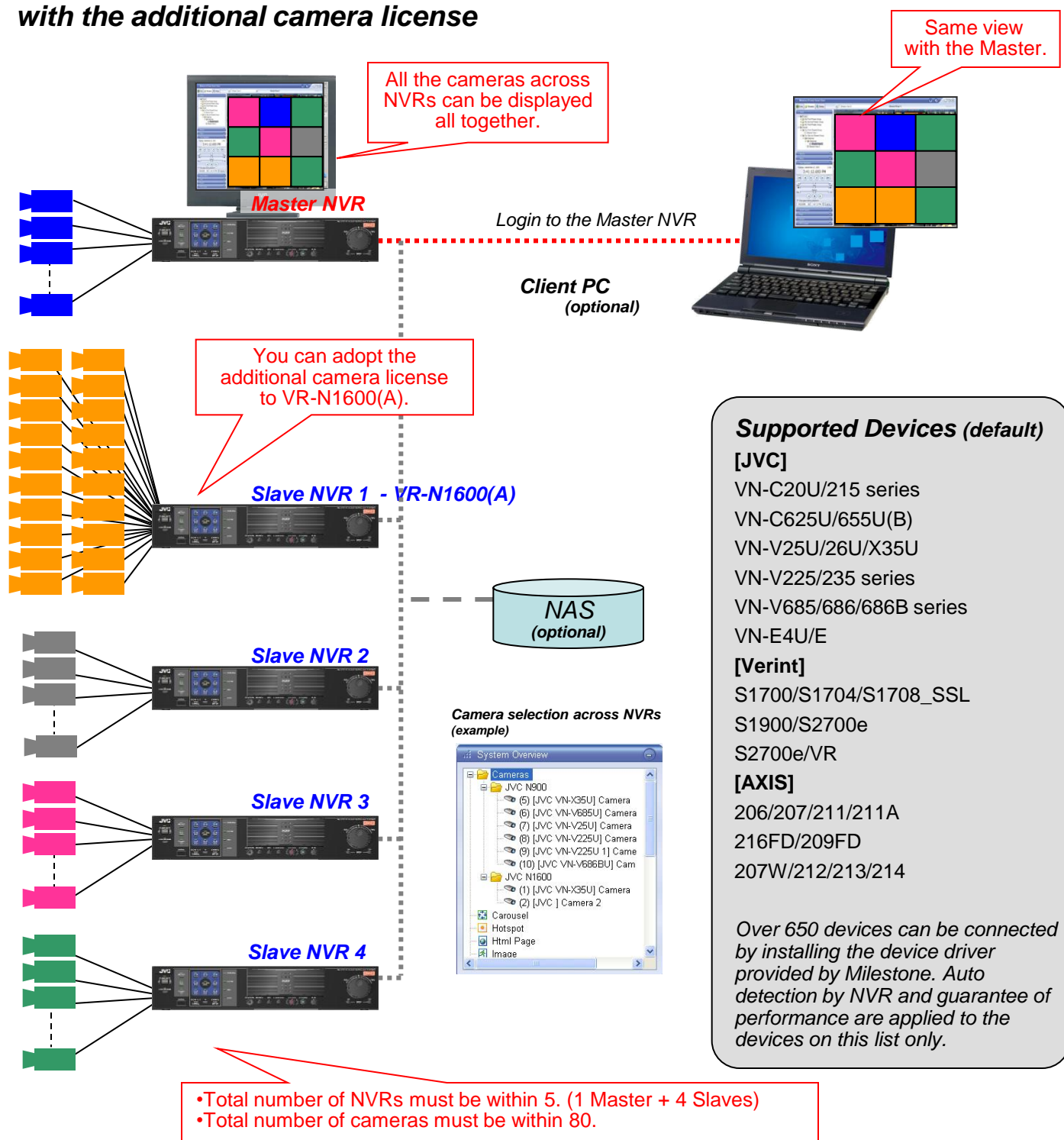
## • Increased Frame Rate
Thanks to the doubled memory capacity of the VR-N1600U(A), the viewing frame rate and network distributing frame rate are increased to 160 ips each.  (previously 80ips each)

## • Preinstalled camera drivers
VN-X35U, VN-V685U, VN-V686B series, VN-V225 series, VN-X235 series and AXIS209FD

## NVR Master / Slave System configuration example with the additional camera license

Same view with the Master.

All the cameras across NVRs can be displayed all together.

**Master NVR**

*Login to the Master NVR*

**Client PC** *(optional)*

You can adopt the additional camera license to VR-N1600(A).

*Slave NVR 1 - VR-N1600(A)*

**NAS** *(optional)*

*Slave NVR 2*

**Camera selection across NVRs** *(example)*

System Overview
- Cameras
  - JVC N900
    - (5) [JVC VN-X35U] Camera
    - (6) [JVC VN-V685U] Camera
    - (7) [JVC VN-V25U] Camera
    - (8) [JVC VN-V225U] Camera
    - (9) [JVC VN-V225U 1] Came
    - (10) [JVC VN-V686BU] Cam
  - JVC N1600
    - (1) [JVC VN-X35U] Camera
    - (2) [JVC ] Camera 2
- Carousel
- Hotspot
- Html Page
- Image

*Slave NVR 3*

*Slave NVR 4*

### Supported Devices *(default)*

**[JVC]**
VN-C20U/215 series
VN-C625U/655U(B)
VN-V25U/26U/X35U
VN-V225/235 series
VN-V685/686/686B series
VN-E4U/E

**[Verint]**
S1700/S1704/S1708_SSL
S1900/S2700e
S2700e/VR

**[AXIS]**
206/207/211/211A
216FD/209FD
207W/212/213/214

*Over 650 devices can be connected by installing the device driver provided by Milestone. Auto detection by NVR and guarantee of performance are applied to the devices on this list only.*

•Total number of NVRs must be within 5. (1 Master + 4 Slaves)
•Total number of cameras must be within 80.

NOTE:

● VR-N900 and VR-N1600(A) can be mixed in the Master/Slave system, and either model can run as a Master or Slave, but to get the official technical support from the factory, the number of Slave NVR per 1 Master NVR should be up to 4 and total number of the camera per 1 Master/Slave system should be up to 80, which is currently the maximum configuration at the factory testing. And when configuring NVR Master/Slave system, all NVR version has to be same, and no Milestone XProtect Enterprise Slave is supported by the Master NVR. Lastly the Master NVR can not be specified as a Slave from another Master NVR or Master XPE.

● NVR Ver1.5 or later version can be updated to Ver5.x using provided update program. In case of Ver1.4 or earlier, please update to Ver1.5 first then update to Ver5.x.

## VR-N1600U(A) Specification

| | |
|---|---|
| HDD | 500 GByte (Internal S-ATA) |
| CPU | Intel E8400 Embedded (3GHz) |
| RAM | 1GByte (DDR3) |
| Frame rate | Recording / Local viewing / Network distribution frame rate are as follows.<br><br>[When not using NAS]<br>160 ips / 160 ips / 160 ips<br>240 ips /    0 ips / 160 ips    (* when not using local viewing)<br><br>[When using NAS]<br>  80 ips / 160 ips / 160 ips<br>  80 ips /    0 ips / 160 ips    (* when not using local viewing)<br><br>When playing back recorded video and the total number of live and playback views is over 13, adjust the viewing frame rate less than total 80ips instead of 160ips. |
| Number of supported channels | Up to 16<br>(can be extended up to total 32 by separately purchased additional camera license) |
| Master Slave configuration | Yes with another same version VR-N900U or VR-N1600/(A). Up to 5 NVRs within total 80 cameras. |
| Video Compression | JPEG / MPEG-4 |
| Audio Compression | µ-law (64kbps) A/D 8 bit, Fs 8KHz |
| SNMP Client | Yes (SNMP Ver1 and Ver2c) |
| System Requirement (for NVR Viewer) | OS :Microsoft Windows 2000 Professional / 2000 Server / XP professional / Vista Business / Vista Ultimate / Server 2003 / Windows 7<br>CPU : Intel Pentium-4 or higher (Xeon recommended), minimum 2.4GHz<br>RAM : Minimum 512MByte<br>VGA : AGP or PCI-Express minimum 1024 x 768 (1280 x 1024 recommended), 16 bit color or higher<br>Network : 100Mbps or higher<br>HDD : at least 50MByte free space<br>Other : Microsoft .Net Framework 2.0, DirectX 9.0 or higher, Internet Explorer 6.0 or 8.0 |
| Preinstalled camera driver | [JVC]<br>VN-V25U/26U/X35U<br>VN-V225U/V225VPU/X235U/X235VPU<br>VN-V685U/V686U/V686WPU/V686BU/V686WPBU<br>VN-C20U/C215U series<br>VN-C625U/C655U(B)<br>VN-E4U/VN-E4E<br>[Verint]<br>S1700/S1704/S1708/S1900/S2700e<br>[AXIS]<br>206/207/209FD/211/212/213/214/216/225 |
| USB | USB2,0 A-Type x 5 |
| VGA | Up to 1600 x 1200 pixels |
| Audio Input | Analog audio RCA x 2 (8dBs 50kΩ) |
| Audio Output | Analog audio RCA x 1 (8dBs 600Ω) |
| I/O terminals | Input x 12 / Output x 5/ GND x 3 |
| Power Supply | AC220 – 240V, 50Hz/60Hz |
| Operating Temperature | 5℃ ~ 40℃ |
| Storage Temperature | -20℃ to 60℃ |
| Mass | Approx. 7.8Kg |

DISTRIBUTED BY:

**JVC**
The Perfect Experience