JVC
The Perfect Experience

NETWORK VIDEO RECORDER
VR-N100U

VR-N100U-480: 480GB HDD model
VR-N100U-960: 960GB HDD model

Key Features

- Integrated network video recorder and IP camera management
- Easy access to live and archived video from anywhere and anytime
- Plug and Watch - Automatic camera discovery and configuration
- A single static IP address can support thousands of IP cameras
- Manages the cameras' access to network preserving scarce bandwidth
- Storage of 480GB or 1TB available (4 x HDDs in RAID-set)
- Control via JVC VR-N100U Controller or Microsoft Internet Explorer
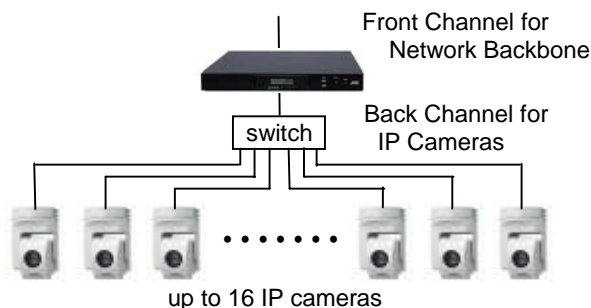
Compatible IP Cameras

VN-C11U
Fix JPEG/MPEG4 Camera

VN-C30U
P/T/Z JPEG/MPEG1 Camera

VN-A1U
Single Channel Encoder

System Example (minimum system)

Front Channel for
Network Backbone

Back Channel for
IP Cameras

switch

up to 16 IP cameras

Design, dimensions and specifications are subject to change without notice

VR-N100U NETWORK VIDEO RECORDER

The VR-N100U includes the following features:

Integrated network video recorder and camera management

Excellent picture quality

Records network cameras at up to 30 images per second for each camera

Networks over standard 100 Mbps Ethernet

A single static IP address can support thousands of IP cameras

Individual images per second and resolution per camera

Controls and records 16 network cameras

Storage of 480 GB or 1 TB available

Uses standard Microsoft Internet Explorer® Browser

Eliminates the need for bulky coaxial cable

Uses commonly available CAT 5, CAT 5e or CAT 6 cable

Manages the camera's access to network preserving scarce bandwidth

Write Once Read Many (WORM) stores data in unalterable file.

Plug and Watch - camera are added to VR-N100U by self discovery data and self configured to the dynamic firewall

If Network is down all cameras continue to be recorded and can be retrieved once the network is restored.

The JVC VR-N100U, Network Video Recorder offers a convenient recording solution for your network video cameras. It allows you manage and record thousands of JVC network IP cameras over an Ethernet LAN, WAN or VPN.

The VR-N100U solves the bandwidth overload issues currently associated with most IP camera solutions. The VR-N100U allows you to finally have the benefits of network video without over taxing your 100 Base-TX network.

The VR-N100U provides management and recording for 16 network cameras on a local network not part of your LAN. Cameras are recorded full time on the VR-N100U on a 480GB or 1 TB local hard disk drive. Critical cameras are transmitted to the LAN for constant monitoring while less important video is recorded locally. The user may predetermine how alarms and events may transmit other cameras to the LAN for monitoring.

All cameras attached to VR-N100U servers are available for review by any user on the network. Live video and well as archived video can be quickly and easily reviewed at any work station on the network. The video can be reviewed via a Microsoft Internet Explorer® Browser. Additional features access can be available if JVC VR-N100U Controller is used.

The VR-N100U records and controls JVC VN-C11U fixed camera, VN-C30U pan tilt zoom camera and VN-A1U over your existing Ethernet or VPN.

System configuration

All IP cameras are connected directly to the VR-N100U network recorder. The VR-N100U records all cameras to the local hard disk drive according to the rules selected for each camera.

Each camera may be recorded at an individual frame rate and resolution.

The VR-N100U is connected to the facility 100 Base-TX network and will respond to requests to send live images or previously recorded images from any camera connected to it.

The central monitoring station views only the cameras that are needed and the VR-N100U records all cameras. This conserves scarce bandwidth.

Hardware

- Embedded Server Motherboard with CPU and RAM
- Embedded Video UX Operating System
  - Preinstalled on non-volatile flash
  - OS based on Linux Kernel
- Embedded VR-N100U Application
  - Preinstall on non-volatile flash
  - Storage Proprietary Application
  - Networked Server Appliance
  - LAN & WAN Implementation
  - Multi-Network Support
  - Single IP Address for Appliance and 16 cameras
  - Multi-Level Security
  - Camera Level Security
- Dual 10Base-T/100Base-TX Network Interface Cards
  - Front Channel for Connectivity to Network Backbone
  - Back Channel for Cameras
- SCSI
  - Support for Upcoming RAID Expansion Rack
- PCI Expansion Slot
  - Support for Upcoming Video Life Cycle Management Implementation
- 6 ATAPI Channels
  - Support for onboard RAID set

HARDWARE CONFIGURATION:
- 19" 1U Rack mount Chassis
- 1x 300 Watt ATX Power Supply
- 4x HDDs (RAID-set, 5th HDD optional)
- 1x X1 Server Motherboard w/CPU/Fan/RAM/OS/APP
- 1x LCD/LED Display

Software

- 16 Camera License
    - Automatic Camera Discovery and Configuration
    - Software RAID
    - 24x7x365 Operation
    - Simultaneous Real-Time Recording From 16 Cameras at 30fps supported
    - Video Motion Detection (camera must support)
    - Pan/Tilt/Zoom (camera must support)
    - Random Access Search
    - Customized Setting for Each Camera
- Enterprise Client Management Windows Software Utility (JVC VR-N100U Controller)
    - Unlimited License
    - Unlimited Customized Software Multiplexer Switch
    - Unlimited VDR & Camera Support

Model Numbers

VR-N100U -480   Network Video Recorder with 480 GB Hard Disk Drives
VR-N100U -960   Network Video Recorder with 960GB Hard Disk Drives

Mechanical

Dimensions: 22-13/16 x 16-3/4 x 1-3/4 inches (LxWxH)
              580x426x45 mm (LxWxH)
Weight: 25 lbs.
              11.34 kg.

Electrical

Input voltage: 120V AC
Power Consumption: 0.5A

Temperature Range

Operating Temperature: 0°C to 40°C
Storage Temperature: -20°C to 60°C
Humidity: 30% to 80% RH

Regulatory
Emissions/ Immunity

FCC Part 15 Subpart B, Class A

Safety

UL 60950-1
TUV/GS

Client PC minimum requirements

Operating System: Microsoft ®Windows XP® or Windows 2000
Processor: Pentium 4, 2.8 GHz
Memory: 512MB
Video Card: 128MB
Screen Resolution: XGA, 1024 x 768 Pixels
Connectivity: 100 Base-TX
Web-Browser: Microsoft® Internet Explorer 6.0
Plug-in Software: JRE (JAVA Java 2 Runtime Environment v 1.4.2

Compatible Components

VN-C11U   Network Video Camera
1/3" CCD sensor, 1.5 Lux, CS mount, Selectable JPEG/ MPEG4
Compression Ethernet connection, JPEG Multicast, Pre/Post
alarm recording, Includes analog monitor output

VN-C3OU   Network Video Cameras
1/3" CCD sensor, Pan/Tilt, 15X optical zoom, Selectable JPEG/
MPEG1 Compression Ethernet connection, JPEG Multicast,
Pre/Post alarm recording, Includes analog monitor output

VN-A1U   Single Channel Encoder
Connection for analog cameras, Ethernet connection, RS-
422/RS-232C, Pre/Post Alarm recording, Motion detection,
Camera control software, Built in web server

VR-N100U System Diagram

External LAN for Client PC or Other Servers

Internet

Client PC
Method: DHCP

Router

192.168.6.xxx

Method: Static
IP Address: 192.168.6.100
DHCP Server: ON

VR-N100U

Method: DHCP Server Auto On (default)

Switch Hub   **Cisco Switch**

DHCP IP Range: 192.168.7.100 ~ 254

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V.NETWORKS Cameras (×16)

Internal LAN for Camera

Method: DHCP
Password: no password

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