DM-NE300U (NTSC)  MPEG-2 Network Encoder
DM-NE300E (PAL)  MPEG-2 Network Encoder
DM-ND300U  MPEG-2 Network Decoder

Now you can deliver high-quality MPEG-2 moving pictures and sound over your network in real time.

Taking advantage of the high-compression picture technology developed for digital broadcasting, JVC has created a network-ready video encoding/decoding system that allows you to easily deliver high-quality, real-time MPEG-2 pictures and sound over a network. Ideal for conferencing, live concert transmission, and remote surveillance systems, these high-performance encoders and decoders offer a reliable, efficient solution for multimedia content delivery.

**FEATURES**

**Real-time transmission**
Pictures are compressed in real time as high-quality MPEG-2 stream and output to the network (100BASE-TX), ensuring smooth, interactive conversation.

A low-delay mode is incorporated to minimize the delay time used for encoding and decoding.

*In the low-delay mode, the total delay time for encoding and decoding is approx. 0.3 sec. In the high-quality picture mode, the delay time is approx. 0.7 sec. (Not including network delay.)

**Broadcast-quality pictures**
The MPEG-2 format is currently used for digital broadcasting and DVD, so you can easily set up a broadcast-quality picture transmission system. Optimum bit rate and picture quality can be selected to suit the network transmission rate. (1.0 Mbps – 15 Mbps)

**Remote control capability**
RS-232C/RS-422 serial interfaces are provided, enabling remote operation of a surveillance camera, switcher or VTR. Proprietary user data can also be transmitted over the network.

*Various control applications must be developed separately.

**Multicast**
In addition to unicasting (in which audio and video data is transmitted from one sender to one receiver), these units support multicasting in which a single transmitter sends data to more than one receiver (1 to N and M to N). The audience (people receiving pictures and sound decoded with the DM-ND300) can select one of the DM-NE300s with a remote control unit.

*Routers that support IGMPv2 are required for an internet multicasting.

**APPLICATIONS**

**Distance Learning System**
Conferences, classroom teaching, experiments, external court broadcasts, remote surveillance, external/public assembly broadcasts, etc.

**ENG System**
ENG control transmission system, weather report cameras, sports, events, news gathering by public assembly, etc.

**Bi-Directional Remote Class Session**
Remote class sessions, etc.

**Easy operation**
You can specify encoder settings such as IP address using a Web browser. Once the encoder has been set up, you can start or stop the streaming or change the bit rate or delay mode without using a PC.

*The IP address must be set via a PC when the system is established.

*Browsers that support Microsoft® Internet Explorer Ver. 5.5 or higher. (Other browsers are not supported.)

**Built-in Web server function**
Various DM-NE300 settings can be done with via a Web browser.

**DV connector provided (DM-NE300U/E)**
Allows to connect directly to the DV equipment such as a digital video camera.
DM-NC40U MPEG-4 Network Codec

Real-time MPEG-4 network moving picture and sound transmission and reception.

JVC’s MPEG-4 network codec allows you to transmit or receive MPEG-4 moving pictures and sound in real time over a network. For example, lessons can be sent to the students who are in different classrooms. It’s also possible to set up a remote surveillance system that can be operated and monitored via a network.

FEATURES

High-quality MPEG-4 codec
- The DM-NC40 is a high-quality codec that can encode signals at up to 2 Mbps in the MPEG-4 format. Moving pictures can be displayed at the standard video frame rate of up to 30fps with resolution of 352 x 240.
- An echo canceler is built into the main unit. This makes setting up a high-quality TV conferencing system on an IP network easy and affordable.

Remote surveillance system
- CCTV equipment can be controlled via the control connectors (RS-232C/RS-485).
- Picture-in-picture (PinP) enables signals from 2 cameras to be displayed on a PC or monitor. When the DM-NC40 is used as a decoder, sound can be sent bi-directionally.
- With the built-in compact flash Type I slot for JPEG recording.

ISMA (Internet Streaming Media Alliance) streaming
- As a result, various popular players including MediaPlayer, RealPlayer and QuickTime Player can play back pictures and sound.

Easy operation
- To ensure stable encoding/decoding, the DM-NC40 can only be started by turning the power ON. By setting the system when the DM-NC40 is introduced, a streaming system can be established that doesn’t require a PC.

Maintenance
- Upgrading the version for the DM-NC40 can be performed with a compact flash memory.

JPEG support
- In addition to the MPEG-4 transmission, JPEG picture transmission is possible. The DM-NC40 has no JPEG decoding function. JPEG data can be displayed with a web browser.

Unicast and multicast transmission supported
- In addition to unicast transmission, multicast transmission is supported, allowing incorporation of the DM-NC40 in a large-scale system.
- *Multicast transmission requires a multicast-ready network (IGMPv2).

Built-in Web server function
- Various DM-NC40 settings can be done with via a Web browser. Preset values suitable for various applications are available, making setup easier.

Pass-through function
- When a DM-NC40 is used to control external devices, the DM-NC40’s serial port can be used as a pass-through connector, allowing remote control of external equipment.
- *Various control applications must be developed separately.

Alarm input/Pin output
- 4 input terminals able to detect high or low level of TTL signals are provided. These input terminals can be linked with JPEG recordings. 8 output terminals are provided to output high or low TTL signals.

Decode and capture software for DM-NC40
- Live display function: Decodes streams from the DM-NC40 on PC and displays them live.
- Live recording function: Records streams from the DM-NC40 on a hard disk in the PC.

APPLICATIONS

Content providing mode
- Studio A

Remote surveillance system
- Remote cameras using the designated software.

Network requirements for DM series
- Megabyte-class bandwidth (more than 3MB) required.
- Physical and logical lease line recommended.
- Connect to the 100M SW-HUB (not repeater HUB).
- VLAN or QoS (Quality of Service) recommended.
- When signals are sent via router, check for influence of jitter, multicast routing, etc.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Interface</th>
<th>DM-NE300U (NTSC)</th>
<th>DM-ND300U (PAL)</th>
<th>DM-NC40U</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Video</strong></td>
<td>Analog composite input: BNC x 1</td>
<td>Analog composite output: RCA x 1</td>
<td>Input: NTSC/PAL analog composite, BNC x 2, Video through output: analog composite, BNC x 2</td>
</tr>
<tr>
<td></td>
<td>S-video input: 4-pin Mini DIN x 1</td>
<td>S-video output: 4-pin Mini DIN x 1</td>
<td>Output: NTSC/PAL analog composite, BNC x 1</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Input: analog, unbalanced (full scale: 2 Vrms), RCA x 2 (L/R)</td>
<td>Output: analog, unbalanced (full scale: 2 Vrms), RCA x 2 (L/R)</td>
<td>Input: Analog, unbalanced: RCA x 1</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th><strong>Function</strong></th>
<th><strong>Description</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Live recording function</td>
<td>Records streams from the DM-NE300 on a hard disk in the PC.</td>
</tr>
<tr>
<td>Live display function</td>
<td>Decodes streams from the DM-NE300 on PC and displays them live.</td>
</tr>
</tbody>
</table>

**Software for DM-NE300U**
- Live display function
- Live recording function

**Related Equipment**
- DILA Series
- Plasma Series
- GY-DV300
- BR-DV3000
- BR-DV300
- System Camera

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**Related Equipment**
- DILA Series
- Plasma Series
- GY-DV3000
- GY-DV300

**Software for DM-NE300U**
- Live display function
- Live recording function

**Rear Panel**
- DM-NE300U: DM-NC40U
- DM-ND300U: DM-NC40U

**System Camera**
- QCN-9026
- CEna300KN0354

*The Hachioji Plant of Victor Company of Japan, Ltd. has received ISO14001 and ISO9001 Certifications under the global standard for environmental management.*