

VC-970/VD-970

H.265 (MPEG-H/HEVC) Real-time Codec For 4K

The VC-970/VD-970 is a hardware-based half rack size CODEC, optimized for featuring 4k/60p with Ultra Low-Latency, fully supported by NEC'S original technology.

Compact body VC-970 requires lesser space & offers ease of installation. It realizes the 4K encoding. Besides providing flexibility for diverse usage, it can be utilized for 2K signal as well.



Encoder: VC-970



Decoder: VD-970

Features

- Ultra Low-Delay
 - Original low delay technology
 - Ultra low-delay mode
 - 120msec to 300msec (2160p)
 - 20msec to 300msec (1080p-480i)
 - 600msec to 1500msec of normal delay mode
- *Transmission delay is excluded
- Video Codec
 - H.265 | HEVC
 - Main10@Level5.1 High Tier
 - High Quality Video Coding supported by NEC unique algorithm
- Audio Codec
 - MPEG-2 AAC, MPEG-1Layer2,LPCM
 - MPEG4-AAC ELD (for Ultra Low Delay)
 - Dolby AC-3/ Dolby E pass through
- *Dolby AC-3® and Dolby-E® are registered trademark of Dolby Laboratories, Inc
- Ancillary Data
 - Transmission of Station control data
 - Transmission of Digital subtitle data (Closed caption data)
- IP Interface
 - Ethernet interface of 100 and 1000Base-T
 - Error correction of ProMPEG CoP#3
 - Support of SNMP, Telnet and HTTP
- Compact size
 - 1U half rack size
 - Lightness of approximately 3kg

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Specification

	Encoder VC-970	Decoder VD-970
Input signal Output signal	(1) Encoder Input Signal/Decoder Output Signal <ul style="list-style-type: none"> ■ 2160p serial digital component video Frame freq.: 59.94/50Hz, Interlace ratio: 1:1 ■ 1080p serial digital component video Frame freq.: 59.94/50Hz, Interlace ratio: 1:1 ■ 1080i serial digital component video Frame freq.: 29.97/25Hz, Interlace ratio: 2:1 ■ 480i/512i serial digital component video Frame freq.: 29.97, Interlace ratio: 2:1 ■ 576i/608i serial digital component video Frame freq.: 25Hz, Interlace ratio: 2:1 ■ Audio format Embedded Audio (16ch) * 2160p:32ch (2) Encoder Output Signal/Decoder Input Signal <ul style="list-style-type: none"> ■ MPEG-2 TS (Transport Stream), I/F : DVB-ASI, Ethernet 100/1000/Base-T Format : (204,188) or (188), Mode : byte or packet mode 	
Video codec	(1) H.265(HEVC) Main @L5.1 High Tier, Main 10@L5.1 High Tier Max. rate 160Mbps Chroma 4:2:0 / 4:2:2 Bit depth : 8bit / 10bit GOP structure : I-Only, Intra Slice, Long GOP	
	(2) H.264 High422 @L4.1 High422@L4.0, High@L4.1,High@L4.0, Main@L4.1 (option) Max. rate 160Mbps Chroma 4:2:0 / 4:2:2 Bit depth : 8bit / 10bit GOP structure : I-Only, Intra Slice, Long GOP	
	(3) MPEG-2 422P@HL,MP@HL,MP@H14L,SP@HL,SP@H14L, 422P@ML,MP@ML,SP@ML Max. rate 120Mbps Chroma 4:2:0 / 4:2:2 GOP structure : I-Only, Intra Slice, Long GOP	
Audio codec	MPEG-2 AAC-LC profile, MPEG-4 AAC-ELD, MPEG-1-Layer2, LPCM(SMPTE302M-2002)	
Ancillary	ARIB TR-B22, ARIB TR-B23, ITU-R BT. 1366	
Delay	<ul style="list-style-type: none"> • Low delay mode : 20ms~300ms(1080p~480i),120ms~300ms(2160p) • Normal delay mode : 600ms~1500ms 	
Reference	N/A	SMPTE170M,ITU-R BT.709-4
Control	I/F : Ethernet 10/100Base-TX Protocol : SNMP, HTTP	
Operation temperature	0°C~50°C	
Power Supply	AC85~264V, 50/60Hz	
Power Consumption	70VA or less	
Dimensions / Weight	210 (W) ×450 (D) ×44 (H) mm/3kg	

ISO/IEC 27001



JQA-IM1064
NEC Broadcast and Media Division

ISO 9001



JMI-0119
NEC Broadcast and Media Division

ISO 14001



JQA-E-90066
NEC



Safety precautions

To install, make connections and operate this product, please carefully read and observe instructions, precautions and recommendations in our instruction manuals.

- The colours in this brochure may differ from those of the actual unit. Designs and specifications of this product is subject to change without prior notice.

For additional information: Please contact your nearest NEC sales offices

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