

VC-7700/VD-7700

H.264 Ultra Low Delay Codec

VC/VD-7700 are encoder/decoder of half rack size, employing ultra-low delay technology of NEC original. These devices support H.264 | MPEG-4/AVC High422 profile@Level4.1 and are equipped with DVB-ASI and IP. These can be used in a variety of contribution system like FPU, SNG and IP network. Also these are applied powerful original error collection. The encoder can transmit high quality video and audio signal even under the low quality IP network.



Encoder: VC-7700



Decoder: VD-7700

Features

Ultra Low Delay

- Adaption of original ultra low delay technology
- Approx. 10msec to 120ms of low delay mode
- Approx. 300msec or more of normal delay mode (not included the transmission delay)

Video Codec

- Adaption of H.264 | MPEG-4/AVC
- Adaption of High422profile@Level4.1(8bit)
- High Quality Video Coding by original algorithm at not only ultra low delay mode but also low bit rate

Audio Codec

- Adaption of MPEG-2/4 AAC-LC and MPEG-1Layer2
- Adaption of LPCM (Non-compression)
- 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) in ancillary area of video signal

IP Interface

- Ethernet interface of 10, 100 and 1000Base-T
 - Error correction of Pro-MPEG cop#3 r 2
- Additionally, Powerful Original Error correction
- Support of SNMP, Telnet and HTTP

Compact size

- Compact size of 1U half rack size
- Lightness of approx. 3kg
- Portable operation

VC-7700/VD-7700 H.264 Ultra Low Delay Codec

Specification

	VC-7700	VD-7700
Input signal Output signal	(1) Encoder Input Signal/Decoder Output Signal 1080i serial digital component video Standard: SMPTE-274M, I/F: SMPTE-292M, Frame freq.: 29.97/25Hz, Interlace ratio: 2:1 720p serial digital component video Standard: SMPTE-296M, I/F: SMPTE-292M, Frame frequency: 59.94/50Hz, Interlace ratio: 1:1 480i/512i serial digital component video Standard: ITU-R BT.601, I/F: SMPTE-259M, Frame freq.:29.97/25Hz, Interlace ratio: 2:1 576i/608i serial digital component video Standard: ITU-R BT.601, I/F: SMPTE-259M, Frame freq.:25Hz, Interlace ratio: 2:1 - Audio format Embedded Audio (8ch) / AES/EBU (8ch) (2) Encoder Output Signal/Decoder Input Signal - MPEG-2 TS (Transport Stream) I/F: DVB-ASI, Format: (204,188) or (188), Mode: byte or packet mode - IP Interface Algorithm: Pro-MPEG cop#3r2 or original, Format: RTP/UDP/IP(Pro-MPEG) or UDP/IP(original), I/F: Ethernet (3) Encoder External TS Clock input - Maximum: 160MHz	
Video codec	H.264 High422@L4.1(8bit), High@L4.1 Max rate 120Mbps ALL-I, M=1 to 3, Intra Refresh Mode	H.264 High422@L4.1(8bit), High422@L4.0(8bit) High@L4.1, High@L4.0, Main@L4.1, Main@L4.0 MPEG2 422P@HL, MP@HL, MP@H14L, SP@HL, SP@H14L, 422P@ML, MP@ML, SP@ML
Audio codec	MPEG-2 AAC-LC profile, MPEG-1 Layer2, LPCM (SMPTE302M-2002) MPEG-4 AAC-LC profile Dolby AC-3/ Dolby E pass through	
Ancillary	ARIB TR-B23	
Reference	N/A	SMPTE170M, ITU-R BT.709-4
Codec Delay	Low Delay mode: 10msec~120msec, Normal Delay mode: 300msec or more	
Control	Ethernet	Ethernet
Network	I/F: Ethernet 10/100/1000Base-T FEC: Pro-MPEG cop#3r2, original Management: SNMP, Telnet, HTTP	I/F: Ethernet 10/100/1000Base-T FEC: Pro-MPEG cop#3r2, original Management: SNMP, Telnet, HTTP
Operation Temperature	0 °C to 50°C	
Power Supply	85 to 264V AC, 50/60Hz	
Power Consumption	50VA or less	
Dimensions	44 (H) × 210 (W) × 450 (D) mm	
Weight	3kg	

ISO 9000 Series



ISO 9001 JMI-0119
NEC Broadcast and Video

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.

NEC Corporation International Sales Division Broadcast and Video Systems

7-1, Shiba 5-chome, Minato-ku, Tokyo,
108-8001, Japan
Tel: +81-3-3798-5463
Fax: +81-3-3798-8476

NEC Europe Ltd. Network Solutions Division

NEC House, 1 Victoria Road, London
W3 6BL, United Kingdom
Tel: +44-(0)20-8993-8111
Fax: +44-(0)20-8752-3735

NEC India Pvt. Limited

7th Floor, Ashoka Estate
24 Barakhamba Road, New Delhi - 110 001
Tel: +91-(0)11-2331-3633
Fax: +91-(0)11-2332-4259

NEC de Colombia S.A.

Carrera 9 No. 80 – 32
Bogotá, D.C. – Colombia
Tel: +57-1-644-5600
Fax: +57-1-644-5648