

# VC-7010/VD-7010 Terrestrial Digital Broadcasting Codec of One segment broadcasting

VC-7010/VD-7010 codec are suitable for the one segment broadcasting.

Encoding is adopted the MPEG-4/AVC(H.264) for video and the HE-AAC v2 for the audio that achieve less deterioration in the video and the audio quality.



## Features

### High compress coding

High quality of Video and Audio under the low bit rate

### Compact and Low Power Consumption

1RU size and 80VA

### HDTV/SDTV input

Input signal is for Both HDTV and SDTV

### Frame Rate

It is can be serelected 30fps or 15fps

### Ancillary Control

Video display aspect ratio and audio mode can be controlled in real time by the inter-stationary control signal (compliant with ARIB STD B-39).

### Digital Closed Caption Data Packetization

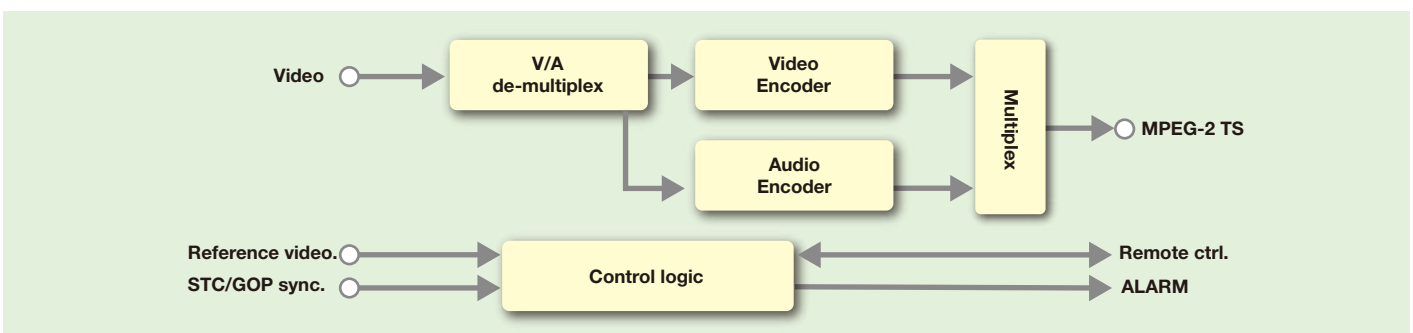
It is possible to extract the closed caption data (compliant with ARIB STD-37) embedded on the video signal and to multiplex it with the stream signal.

# VC-7010/VD-7010 Codec of One segment broadcasting for ISDB-T

## Specifications

INPUT and OUTPUT signal	<p>(1) Encoder video input signal: HDTV serial digital based on SMPTE-292M 75Ω or SDTV serial digital based on SMPTE-259M 75Ω one input</p> <p>(2) Decoder video output SDTV serial digital based on SMPTE-259M 75Ω 3 outputs</p> <p>(3) Decoder audio output AES/EBU 75Ω output</p> <p>(4) Encoder TS output / Decoder TS input DVB-ASI Encoder Output:One route 3 distribution / Decoder input:one route</p> <p>(5) Encoder audio input /Decoder audio output Embedded (on video input signal)</p> <p>(6) Encoder STC/GOP synchronies input signal ISO/IEC13818-1, DVB-ASI(75Ω)</p> <p>(7) Encoder/Decoder Video/Audio reference sync. Analogue black burst based on RS-170A (75Ω)</p>
Control	RS-422A , Ethernet
Video codec	<ul style="list-style-type: none"> <li>•Coding MPEG-4/AVC(H.264) Baseline profile @ L1.3</li> <li>•Coding Pixel (Horizontal pixel x Vertical line) SQVGA 60(H)×120(V) with Aspect 4:3, 160(H) × 90(V) Aspect 16:9 QVGA 320(H)×240(V) with Aspect 4:3, 320(H)×180(V) Aspect 16:9 CIF 352(H)×288(V)</li> </ul>
Audio codec	<ul style="list-style-type: none"> <li>•Coding MPEG-2 : AAC LC profile , HE-AACv1 MPEG-4 : AAC LC profile , HE-AACv1 , HE-AACv2</li> <li>•Audio coding mode 1/0, 2/0,1/0+1/0</li> <li>•Audio bit rate range 24 to 192kbps (depend on coding mode)</li> <li>•Streaming Format LATM/LOAS and ADTS</li> </ul>
Operation Temperature	10°C to 35°C
Power Supply	85 to 264 V AC, single phase
Power Consumption	80VA
Dimensions	44(H) x 430(W) x 550(D) 19" rack mount 1RU
Weight	10kg or less

## Block Diagram



### 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

ISO 9000 Series  
  
ISO 9001 JMI-0119  
NEC Broadcast and Video

ISO 14001  
  
JQA-E-90066  
NEC