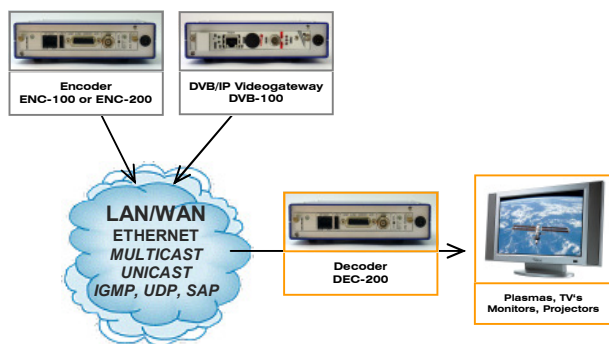


The DEC real-time decoder series is Teracue's direct answer and counterpart to the ENC real-time encoder series.

The DEC-200 is a compact, low cost H.264 SD and MPEG-2 SD video/audio stream receiver and decoding appliance.

It is designed for LAN and intranet network video applications. As an output point for streaming media, it provides easy access to professional DVB/DVD-quality streams.

Decode streams with the DEC-200 to provide networking video and audio on standard TV's, LCD's, plasmas, monitors and on projectors.



#### A high-quality network "video/audio port"

The DEC-200 provides versatile video/audio output in one simple and low-cost solution. Video-over-IP reception and DVB/DVD-quality processing of both H.264 and MPEG-2 SD streams are supported by the compact, flexible, yet robust and highly supportable DEC-200 'blade-based' appliance.

#### Easy to install and use

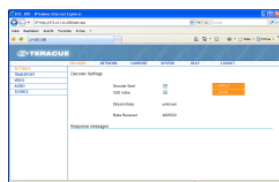
Installing and operating the DEC-200 is quick and simple: Connect LAN Ethernet and a display device and the DEC-200 decoder blade becomes a true video networking "port". It is able to receive streams that are present on your network and to deliver them in full DVD-quality video to connected TV's, monitors, plasmas, projectors - simply any kind of display.

When combined with the ENC encoder series or the DVB/IP videogateways the DEC-200 becomes part of a comprehensive real-time LIVE video transmission, collaboration, contribution, trunking, monitoring or publishing system.

#### Simple setup and maintenance

Configure and control through any standard web browser, no special tools required. Access the administrative interface and decoder configuration directly from your PC web browser to configure and start using the DEC-200. Full control via an intuitive graphical user interface.

Setup the reception stream address, output format, video decoding settings and much more with a couple of clicks.



The DEC-200 real-time decoder blades are robust 24/7 LIVE stream decoders for all types of operating conditions. The DEC-200 supports RGB, Component, S-Video, Composite and SDI with embedded audio.

All DEC-200 decoder blades process input streams in full DVB/DVD-quality for professional output on any kind of display device.

DEC-200 combines high-performance with unparalleled simplicity in a compact Ethernet video decoding appliance designed for commercial, institutional, and industrial applications such as:

- **Broadcast/TV Distribution over IP**
- **IPTV/Confidence Monitoring**
- **Security/Surveillance/Monitoring/Public Safety**
- **Medical/Corporate/Military/Industrial Training**
- **Education/Distance Learning/Tele-Teaching**
- **Finance/Brokerage Television**
- **Legal/Legislative Communications**
- **Manufacturing/Process Monitoring**
- **Hospitals/Clinics/Telemedicine**
- **News/Sports/Advertising Agencies – Air/Rail station advertising**

#### Incredibly flexible

Use the DEC-200 for LIVE video networking applications. Place the DEC-200 anywhere on the network to facilitate DVD-quality video viewing of camera signals, TV channels, monitoring feeds or any other standard H.264 SD and MPEG-2 SD streaming video and audio source on the network.

#### TALKBACK audio conferencing, integrated COM server\* and GPIO

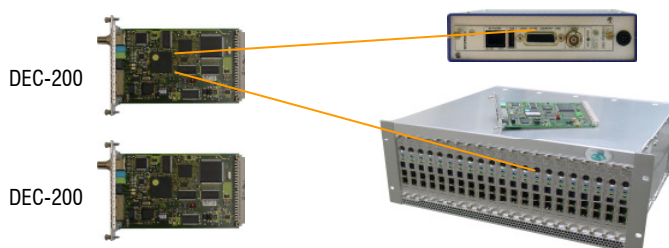
The DEC-200 supports TALKBACK. This allows audio conferencing between ENC encoder and DEC decoder series. Additionally remote control of peripheral serial equipment through it's integrated RS-232 port\*. The GPIO interface enables basic remote control of the DEC-200, e.g. switching devices on/off

#### Extremely robust and durable

The DEC-200 runs on an embedded Linux platform. This blade is designed without any moving parts, as hard drives/fans, to ensure system uptime, reliability and noiseless operation. The DEC-200 can be used in extreme operating conditions and at temperatures up to max. 60° C.

#### Blade based operation

The DEC-200 blades are operated inside the FR chassis series. Blades can be used in a single channel chassis (FR-110, as shown above) or in the FR-210 dual channel chassis. High-density requirements are solved by operating the DEC blades in the FR-2000 multi-channel rack, which can hold up to max. 21 Teracue blades. Different types of DEC decoder blades, ENC encoder blades and DVB/IP videogateways can be "mixed and matched" in the FR-2000 frame.



## DEC-200 Technical Data

The DEC-200 is used for streaming applications and scenarios that take place at the edge of a network. The DEC-200 series H.264 SD and MPEG-2 SD decoder is designed as a video and audio output for professional IP video solutions. The DEC-200 is a blade based decoder and can be operated in either single or dual channel chassis' and in multi-channel rack frame configurations.

### DEC-200:

DEC-200 H.264 SD and MPEG-2 SD decoder blade with analog video output and with SDI output, embedded audio supported. The BNC connector on the front panel can be configured as Composite output or as SDI output via jumper.

The DEC-200 is delivered with the BREAK-OUT cable S as standard.  
Teracue also offers a professional BREAK-OUT cable P which must be ordered separately.

S - YC (MiniDIN), CVBS (RCA plug), Analogue Audio In (MiniJack), Analogue Audio Out (RCA plug)

P - RGB, Sync, YP<sub>B</sub>P<sub>R</sub>, YC, CVBS, Genlock, AES-3id (all BNC), Audio Out/In (RCA plug), GPI In/Out (Sub D 9pin), RS-232 (Sub D 9pin)

### DECODING SPECIFICATIONS

#### Standards

PAL, NTSC

#### Video Outputs

SDI Output: 0,8 V<sub>pp</sub>, 75 Ohm (BNC , embedded audio support) or Composite: 1 V<sub>pp</sub>, 75 Ohm (BNC); This can be configured via jumper

Break-out cable outputs: Composite: 1 V<sub>pp</sub>, 75 Ohm  
S-Video: 1 V<sub>pp</sub> (Y), 0,3 V<sub>pp</sub> (C - Pal), 0,286 V<sub>pp</sub> (C - NTSC), 75 Ohm  
Component: 1 V<sub>pp</sub> (Y), 0,7 V<sub>pp</sub> (P<sub>B</sub>P<sub>R</sub>), 75 Ohm  
RGB: 0,7 V<sub>pp</sub>, 75 Ohm, Sync: 0,3 V<sub>pp</sub>  
Genlock: Blackburst 0,3 V<sub>pp</sub>, 75 Ohm

#### Video Output Resolutions

Full D1: 720h x 480/576v, Half-D1: 352h x 480/576v, CIF/SIF: 360/384h x 288/240v, QCIF: 176h x 144/120v

#### Audio Outputs

Unbalanced Analog Stereo, Consumer Line level  
AES-3id, 75 Ohm, 1 V<sub>pp</sub>, Unbalanced

#### Audio Inputs (Talkback)

Analog Stereo, Consumer Line- and MIC-level

#### Video Codecs

MPEG-2 (ISO/IEC 13818-2), Main Profile at Main Level (MP@ML), 4:2:0  
MPEG-4 AVC/H.264 (ISO/IEC 14496-10), Main Profile at Level 3.1 (MP@L3),  
Baseline Profile at Level 3.1 (BP@L3), 4:2:0

#### Stream types

ISO/IEC 13818-1 Transport Streams  
Elementary A/V

#### Audio Codecs

MPEG-1 Audio Layer 1, 2 (ISO/IEC 11172-3 Layer 1, 2)  
MPEG-4 AAC LC (ISO/IEC 14496-3)

### I/O SPECIFICATIONS

#### Network

10/100TX Ethernet, RJ45, half/full duplex, Auto-sensing

#### Streaming traffic

Unicast and Multicast traffic supported

#### IP Protocols

HTTP (Web Browser), TCP/IP Control Protocol, UDP/IP Streaming, IGMPv2/3, SNMP\*, RTP\*, RTCP\*, RTSP\*, DHCP

#### RS-232 port

RS-232 connection via console (Remote control for non IP devices via TCP/IP RS-232 command tunnelling\*)

#### GPI in\*

1 INPUT, (for device control: Streaming on/off configuration\*)

#### GPI out

1 OUTPUT, for switching peripheral devices on/off

#### USB Port

(For saving of recording at an USB-Stick)\*

### ENVIRONMENTAL

#### Agency Approvals

CE, RoHS compliant

#### Humidity

Up to 90%, non-condensing

#### Temperature

0 to +60°C environment temperature; fanless when operated in FR-110 or FR-210 frames

#### Weight

Approx. 160 grams

#### Blade dimensions (H/W/D)

20mm x 130mm x 190mm, Europe Card (160mm x 100mm, 3HE), Conform to IEC60297-3/-4

#### Power

5Vdc ±10% / 4W per blade

#### Limited Warranty

1 year standard limited warranty. Warranty extensions available.

\*\*\*PLEASE NOTE: Live streaming/Multicast Streaming requires specially designed and configured networks.

Minimum Requirements include: Layer-3 Switched Ethernet, Multicast Enabled, IGMPv2/3, Network and Multicast Routing Supported.

\* = Will be supported in future firmware versions.



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