

Applications

- Digital Cinema Live Events
- UltraHD Broadcasting

Features

- HEVC Video Decoding
- 4K Support
- High Frame Rates up to 60 fps
- TSolP video input
- 10-bit video support
- AES3 digital audio outputs
- HDMI output up to 4K @ 60fps

Pro Cinema 4K Decoder

The highest quality 4K UltraHD images delivered at up to 60 frames per second with stunning 10-bit video.

The future of live event cinema has arrived

IDC has a legacy of delivering live events with immersive images and sound to theatres worldwide. The Pro Cinema 4K Decoder is IDC's latest solution for live events, supporting HEVC decoding of 4K content to bring stunning content to theatre screens in vibrant 10-bit color. With support for High Frame Rates up to 60 fps, the Pro Cinema 4K Decoder was the perfect choice for the ground-breaking UltraHD broadcasts of the 2014 FIFA World Cup Final from Rio De Janeiro.

HEVC video compression for 4K—the perfect combination

In order to deliver live events using existing satellite infrastructure deployed at thousands of theatres worldwide, a more efficient compression algorithm must be used to transmit 4K content. With 4 times the pixels of High Definition video, existing live event networks based on MPEG-2 or H.264 simply cannot compress 4K video such that live event transmission is economical. HEVC offers greater compression efficiency to allow existing live event satellite networks to carry both 4K and HD events in the same bandwidth.

Upgrade your existing network

The Pro Cinema 4K designed to be easily integrated with IDC's widely deployed Pro Cinema Cache Servers and SFX Pro Video receivers, instantly adding 4K HEVC capability to an existing IDC installation. The Decoder features Gigabit IP inputs which can receive an HEVC stream over IP from an IDC satellite receiver, with virtually no limit on cabling distances in the typical theatre.

Designed for Cinemas

The Pro Cinema 4K Decoder design has benefited from IDC's years of experience designing professional cinema equipment. From the HDMI outputs with support for 4K at 60 frames per second, to the flexible digital audio output that is compatible with any cinema audio system, and support for video bitrates up to 40 Mb/s, the Decoder is always ready for the next big live event.

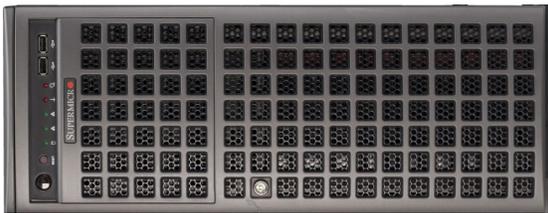
Immersive images are the keys to 4K

While everything else is important, the key to successful deliver of 4K events are immersive images that captivate audiences. Decoding of 10-bit video provides support for the widest color gamuts which are critical to reproducing the images captured by 4K cameras. Sports competitions with high motion and extreme sports will be crisper and sharper when captured with High Frame Rates, and the Pro Cinema 4K Decoder can deliver up to 60 frames per second in 4K to a cinema projector.

Future-proof and backwards-compatible!

The Pro Cinema 4K Decoder features support for H.264 compression in addition to HEVC, providing support for new and existing live event networks in a single device. The HDMI output can be connected to existing 2K projectors as well as the newest 4K units. The audio outputs can provide up to 8 channels of decoded audio or passthrough of multi-channel audio to existing theatre sound systems, ensuring great sound in any auditorium.

TECHNICAL SPECIFICATIONS—Pro Cinema 4K Decoder



REAR PANEL CONNECTORS					
Ethernet Input standard	<ul style="list-style-type: none"> • 2x 100/1000 Base-T (MPEG TS over IP) 				
Video Outputs standard	<ul style="list-style-type: none"> • 4x HDMI outputs supporting signals up to 4K at 60 frames per second 				
Audio Outputs standard	<ul style="list-style-type: none"> • Stereo audio on HDMI • 8 channels AES3 on 25-pin D-Sub 				
VIDEO AND AUDIO CAPABILITIES					
Compression Standard standard	<ul style="list-style-type: none"> • HEVC / H.264 • 4:2:0 • 10-bit decoding 				
Video Decoding HEVC Profiles	<table border="0"> <tr> <td style="padding-right: 20px;">Main</td> <td> <ul style="list-style-type: none"> • Up to L5.1 (.1-40 Mb/s) </td> </tr> <tr> <td>Main 10</td> <td> <ul style="list-style-type: none"> • Up to L5.1 (.1-40 Mb/s) </td> </tr> </table>	Main	<ul style="list-style-type: none"> • Up to L5.1 (.1-40 Mb/s) 	Main 10	<ul style="list-style-type: none"> • Up to L5.1 (.1-40 Mb/s)
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Video Resolutions standard	<ul style="list-style-type: none"> • 3840x2160 • 1920x1080 				
Frame Rates standard	<ul style="list-style-type: none"> • 60/59.94/50/30/29.97/25/24 fps 				
Audio Compression standard	<ul style="list-style-type: none"> • MPEG-2 AAC • MPEG-2 AAC+SBR • MPEG-4 AAC • MPEG-4 HE-AACv1,v2 • Sampling rate: 48 kHz 				
Audio Channels standard	<ul style="list-style-type: none"> • Up to two Elementary Streams: mono (1/0), stereo(2/0), dual mono(1/0+1/0), 5.1ch(3/2+LFE), 				

STATUS AND CONTROL INTERFACES	
<ul style="list-style-type: none"> • Console Interface 	
POWER REQUIREMENTS	
Supply Voltage	Dual redundant power supplies 100 to 240 VAC, 50 or 60 Hz
Power Consumption	1280 Watts maximum
PHYSICAL PARAMETERS	
Chassis	4RU (rack mount optional)
Dimensions (H, W, D)	17.8 cm x 43.7 cm x 67.3 cm (7" x 17.2" x 26.5")
Weight	25.5 kg (56.2 lbs.)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	10° to 35° C (50° to 95° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Humidity	Up to 90% humidity

International Datacasting Corporation is a technology provider for the world's premiere broadcasters in radio, television, data and digital cinema. IDC's products and solutions are in demand for radio and television networks, targeted ad insertion, digital cinema, 3D live events, VOD, and IPTV. IDC is headquartered in Ottawa, Canada, has installations in over 100 countries, and a strong world-wide network of value-added partners and distributors. For more information visit: www.datacast.com.

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