

# MNA-240 decoder

4K IP-to-AV adapter for the OR and Hybrid OR



- AV-to-IP and IP-to-AV conversion
- Up to 4K resolution
- Medical-grade

The MNA-240 decoder converts RAW IP packets into DVI video signals and other signals such as audio and USB. End-to-end latency is amazingly short and is guaranteed not to exceed a single frame (< 15 ms). The video streams that are distributed over the Nexxis network can go up to a resolution of 4K.

- IP-to-AV conversion at the endpoint
- Seamless integration with Barco's 4K surgical displays
- Support for non-video traffic (e.g. keyboard, mouse and audio) via USB connectivity
- Easy integration via central API provided by the Nexxis OR Management Suite NMS
- Quad-view video composition
- Streaming of FHD and UHD video composition into the network
- 4K video output
- Quad-view composition with up to 4 FHD video streams
- Network stream-back of FHD video composition
- 4K Transcoding enabled by SW license
- WorkSpot functionality enabled by SW license
- Nexxis Plug&Play via NMS
- Provides advanced image processing capabilities such as de-interlacing, scaling, overlaying, color conversion

## Product specifications

## MNA-240 DECODER

### General specifications

Video conversion	Converts uncompressed IP-streams into Digital video signals
Processing	Up to 4096x2160@60Hz
Color depth	10 bits / color
Latency	End-to-end: genlocked subframe; not genlocked two frames
Security	Decryption of AES 128 encrypted video, data & control signals
Video Output	DisplayPort: 1 x DP 1.2 MST and SST, conversion to HDMI 2.0 via validated adapter cable DVI: 2 x DL-DVI
Network output	<ul style="list-style-type: none"><li>Compositor streamback mode: 1x FHD and 1x UHD video composition</li><li>Transcoding mode:  Transcode 2 FHD (up to 1920x1080@60) raw streams simultaneously to 2 FHD H.264 streams or 1 UHD/4K (up to 4096x2160@60) stream to a UHD/4K half framerate H.264 stream (up to 4096x2160@30). In addition to the video stream(s), the MNA-240 can also transcode 2 raw audio streams into 2 AAC 128kbps encoded audio streams. <ul style="list-style-type: none"><li>Note: Network output cannot be used in combination with video output.</li></ul></li></ul>
IP connectivity	2x 10GbE Fiber Optic Interface with SFP+ module
IP standards	Zeroconf, IPv4, IGMP, DHCP, RTP, RTCP, 802.1q, AES 128b, HTTP(s)
USB	1x micro-USB 2.0 + 3x USB 2.0 type-A
Audio	Line-in, line-out, headphones-out and mic-in (mono) 3.5mm connector
Nexxis integration	Transcoding supported from Nexxis 1.15 onwards. The MNA-240 decoder is compatible with MNA-1x0, MNA-240 and MNA-4x0 devices
PSU	External 12V Medical Approved PSU, 100-240VAC 60W, locking connector at DC side
Power consumption	< 37 W at an ambient temperature of 25 °C
Size	38 mm H x 170 mm W x 170 mm D   1.5" H x 6.7" W x 6.7" D (+/-2 mm / 0.1")
Weight	1±0.01kg (2.20lbs)
Temperature	Operating: 0°C to 40°C (32°F to 104°F)
Humidity	Max 85%
Storage	Storage temperature: -20°C to 60°C (-4°F to 140°F) Storage Relative Humidity: 10% to 93% Altitude: minimum 500hPa
Sound level	Typical 32dBA at 20°C at 1m
Mounting	Optional VESA adapter plate or 1U rack mount for 2 devices
Certifications	<ul style="list-style-type: none"><li>CB (IEC 60601-1) Informative report</li><li>CB (IEC 60950-1)</li><li>cRU, RU (cRUus)</li><li>Demko</li><li>CE medical device class I</li><li>UKCA</li><li>BIS Registration, IS 13252 (part 1)</li><li>KC</li><li>BSMI</li><li>RCM</li><li>EAC</li></ul>
Standards	<ul style="list-style-type: none"><li>IEC 60601-1:2005 + Am1:2012</li><li>IEC 60601-1-6:2010 + Am1:2013</li><li>IEC 60601-1-2:2014 (ed4)</li><li>ANSI/AAMI ES 60601-1: A1:2012 + C1:2009/(R)2012 + A2:2010/(R)2012</li><li>CAN/CSA-C22.2 No.60601-1-14</li><li>EN 60601-1:2006 + A1:2013 + A12:2014</li><li>EN 60601-1-6:2010 + A1:2015</li><li>EN 60601-1-2:2015 (ed4)</li><li>FCC class B</li><li>ICES-001 Level B</li></ul> <p>ITE Equipment:</p> <ul style="list-style-type: none"><li>IEC 60950-1:2005 + Am1:2009 + Am2:2013</li><li>EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011</li><li>IS 13252</li></ul>

Last updated: 08 Jul 2024

© 2024 Barco nv. All rights reserved. Reproduction in whole or in part without written permission is prohibited. All brand names and product names are trademarks, registered trademarks or tradenames of their respective holders. Due to continued innovation, information and technical specifications are subject to change without prior notice. Please check [www.barco.com](http://www.barco.com) for the latest specifications.