

# IOSONO CORE

## Audio processor for immersive sound experiences



The IOSONO CORE processor is the heart of Barco's IOSONO immersive sound systems. It comes with a variety of features ensuring an easy installation and adaptation to individual venues. The IOSONO CORE supports object-based audio as well as all standard and future discrete multi-channel audio formats.

The IOSONO CORE comes with standard audio interfaces, a remote control software and synchronization with other media, guaranteeing a smooth integration into show control or simulation systems. IOSONO sound systems are scalable, adapting to your preferences and the characteristics of your venue and application. By supporting a flexible number of loudspeakers as well as 2D and 3D setups, the systems fit in perfectly.

### **No dedicated mixes needed**

Thanks to object-based mixing, the need to create dedicated mixes for different venue, room and system configurations belongs to the past. With the Spatial Audio Workstation plug-in, immersive soundscapes are easily and precisely created. The VST plug-in supports up to 128 audio channels.

### **Venues & Hospitality – create moments to remember**

Be it for concerts and live events or visitor attractions like museums or dome shows, IOSONO sound systems offer reliability, an easy integration into other show systems and a listening experience your audience won't forget.

### **Retail & Branding – amplify your message with sound**

Let your brand message stand out with a truly immersive media experience. The IOSONO CORE engages your customers in showrooms, flagship stores or at product events.

### **Simulation – realistic environments at any time**

Barco's immersive sound offers a lifelike sound experience matching the visual quality of simulation environments. An unobtrusive integration of speakers and reliable systems convince research and business customers alike.

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## Product specifications

## IOSONO CORE

<b>Housing</b>	19 in. / 4RU
<b>Power supply</b>	Voltage / Frequency range: 100-240 VAC / 50-60 Hz
<b>Display</b>	7" color display with resistive touchscreen provides basic controls and preset selection
<b>Volume control</b>	Hardware volume wheel and remote control software
<b>Remote control</b>	Remote control software for Microsoft Windows provides control of all functionalities over standard TCP/IP network connection. Static IP and DHCP possible. Media control commands can be received via network and RS232.
<b>Connectors</b>	<ul style="list-style-type: none"><li>■ USB: 2 x USB 2.0, Type A</li><li>■ Ethernet ports: 1 x Gigabit ethernet, RJ45 (Remote control) / 1 x Gigabit ethernet, RJ45 (Extension/s)</li><li>■ RS232: 1 x Sub-D (DE-9M with UNC 4-40)</li><li>■ Wordclock input / output: 1 x BNC 75 ohm / 1 x BNC 75 ohm</li><li>■ Video sync input: 1 x BNC 75 ohm</li><li>■ Linear timecode (LTC) input: 1 x BNC ohm</li></ul>
<b>Audio connectors</b>	<ul style="list-style-type: none"><li>■ MADI optical input / output: 1 x SC per 64 channels / 1 x SC per 64 channels</li><li>■ MADI electrical input / output: 1 x BNC 75 ohm per 64 channels / 1 x BNC 75 ohm per 64 channels</li><li>■ AES/EBU input / output: 1 x Sub-D (DB-25F with UNC 4-40) per 8 mono input / output channels</li></ul>
<b>Standard software</b>	<ul style="list-style-type: none"><li>■ 2D rendering for loudspeaker setups consisting of one single layer</li><li>■ Object-based and discrete multi channel audio formats</li><li>■ Synchronization via audio input, wordclock input and video input</li><li>■ Rendering of 128 audio objects simultaneously to all available audio outputs with up to 24 bit / 48 kHz</li></ul>
<b>Software options</b>	<ul style="list-style-type: none"><li>■ Player: playback of object based IOSONO content from internal storage as well as streamed content from external devices. Playback of 48 kHz multichannel wave files from internal storage. Synchronization possible over LTC timecode input</li><li>■ 3D renderer: upgrade from 2D to 3D Rendering. Speaker setups with multiple layers and dome shapes supported.</li><li>■ Render+: real-time processing of 5.1 and 7.1 audio inputs for enhanced spatial distribution of audio scenery</li><li>■ System tuning: acoustical tuning and sound improvement of an IOSONO system based on multiple microphone measurements and individual FIR filters for every loudspeaker</li><li>■ Remote convolver: real-time convolution of audio signals and FIR filters generated in MATLAB</li><li>■ Processing at 96 kHz sample rate</li></ul>
<b>Hardware configurations</b>	<ul style="list-style-type: none"><li>■ All configurations also available with redundant power supply</li><li>■ 64 MADI input / output mono channels</li><li>■ 128 MADI input / output mono channels</li><li>■ 32 AES input / output mono channels</li><li>■ 64 MADI input / output mono channels + 16 AES input / output mono channels</li></ul>
<b>Hardware extension</b>	IOSONO CORE extension: extends the number of output channels by steps of 128 per extension. Two or more units can be connected to a IOSONO CORE processor which works as the head unit.
<b>Dimensions (W x H x D)</b>	485 x 178 x 615 mm / 19 x 7 x 24.2 inches Installation depth (without connectors): 555 mm (21.9 in.)
<b>Weight</b>	20 kg / 44.1 lbs
<b>Certifications</b>	CE, KC, CCC, UL, RCM

Last updated: 18 Nov 2016  
Technical specifications are subject to change without prior notice.  
Please check [www.barco.com](http://www.barco.com) for the latest information.

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