

Christie IMB

Frequently Asked Questions (FAQs)

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Christie IMB FAQs

What makes the Christie integrated media block different?

The Christie integrated media block (IMB) was designed and built by Christie - designed by the same engineers who designed the projector the IMB is in. We have a complete understanding of power requirements and projector thermals and vibrations of our projectors. We designed the Christie IMB to be the most reliable integrated media block when it's used with Christie projectors.

The Christie IMB uses commodity storage solutions for better availability, robustness, and value.

Designed, built and maintained by the same trusted company that has designed and built the digital cinema projector also provides ease of maintenance with reliable software upgrades, tested and approved by Christie engineers on Christie projectors. Christie's design approach also includes a single source for customer support so you only ever have to call one support number.

How does the Christie IMB provide full-color 3D?

The Christie IMB physically resides in the projector, eliminating the bandwidth limitations caused by the dual HD-SDI cables linking an external server to a projector. Without the bandwidth limitations, a projector can retain all the color information for 3D presentations.

Is the Christie IMB DCI compliant?

The Christie IMB was the first IMB to pass the DCI Compliance Test Plan (CTP) in a 4K DLP Cinema® projector, in both 2K and 4K modes of operation. It joins the DCI-compliant Christie Series 2 Solaria projectors, making this the world's only, single-manufacturer DLP Cinema projector and IMB combination that meet the DCI specifications. As part of the testing process, the Christie IMB was also tested to the rigorous FIPS 140-2 security tests mandated by DCI in the CTP.

Does the Christie IMB come *standard* with high frame rate and 4K support?

No. But the Christie IMB can be upgraded to 2K high frame rate (HFR) and 4K by field-upgradable license keys.

What frame rates are supported with the Christie IMB?

These are the frame rates supported by the Christie IMB:

- **Without the HFR upgrade** - 2K cinema content up to 60 frames per second in 2D, or up to 30 frames per second per eye in 3D.
- **With HFR upgrade** - 3D support up to 60 frames per second per eye for 2K content.
- **With the 4K upgrade** - 4K 2D up to 30 frames per second.



What are high frame rates? Will they become the new standard in digital cinema?

Traditional films are shot and produced at 24 frames per second (fps). This frame rate standard was introduced in the 1920s. Film shot at 24 fps have a number of motion artifacts, including motion blur, judder and strobing. These artifacts are accentuated in 3D productions.

High frames rates in cinema typically refers to 48 or 60 fps. Films produced at these frame rates have significantly-reduced motion artifacts. As a result, moviegoers perceive higher-detailed image reproduction and fewer of the discomforts of 3D.

Movies shot and displayed at high frame rates have more realistic and sharper images - something that producers of high-action and 3D films value. Peter Jackson and James Cameron have both announced that their next feature films will be released using high frame rates, starting with Peter Jackson's "The Hobbit" in December 2012.

Christie is working with partners in the film-making community to ensure that the right technology is available to support directors' artistic vision and provide opportunities for the cinema exhibition community make their movie going experiences stand out.

Why is an integrated media block required to show HFR and 4K content?

The standard media block requires two HD-SDI cables to transfer the content from the storage device/server to the projector. These HD-SDI cables have bandwidth limitations and cannot facilitate the bandwidth requirements of 4K or HFR 2K projection. Putting the media block in the projector solves this bandwidth issue. This system architecture also provides a more secure environment.

What are the projector requirements to support the Christie IMB?

All of Christie's Solaria Series 2 digital cinema projectors with Solaria 2.2 firmware or higher installed in them can support the Christie IMB and display 2K HFR. Customers with Series 2 projectors with Solaria 2.1 or earlier software can download the Solaria 2.2 firmware from the Christie website. To accommodate the 4K upgrade, the 4K Solaria projector needs to have Solaria 3.1 firmware upgrade or higher. This firmware upgrade will be available from the Christie website in August 2012. There's no cost for these firmware upgrades.

Can the Christie IMB work with competitive Series 2 digital cinema projectors?

No. The Christie IMB was specifically designed to work with only the Christie Solaria Series 2 projectors. An IMB with a 'one-size-fits-all' design opens the door to major system compromises and ongoing maintenance complications. To provide our customers with the most reliable projection system on the market, we designed our own IMB meant to be used exclusively with our projectors.



Can the Christie IMB work with Dolby, Doremi or GDC storage solutions?

No. The Christie IMB was designed to work with commonly-available, more flexible, lower cost, and highly-reliable commodity storage solutions. There are many low-cost storage solutions and network architectures that will increase performance, reduce costs, and don't require locking into proprietary systems. For the most basic installs, we've developed a list of recommended storage solutions that work reliably and seamlessly with the Christie IMB. Contact your Christie sales representative for specific details.

Does the Christie IMB support the new "Dolby ATMOS" audio format?

Yes. The Christie IMB was first to market with Dolby ATMOS capability. The IMB must have the firmware upgraded to v1.3 or later to support the ATMOS interface to the Dolby CP850.

What does the Christie IMB Screen Management Software do?

The Christie IMB's Screen Management Software (SMS) provides a simple and intuitive projector-level content management solution that runs right on the projector's Touch Panel Controller (TPC) or any compatible Internet browser on the network. With the SMS, you can build your play list and provide user controls to play, pause and stop content. The SMS can also provide controls to a venue's automation control system.

How can you play alternative content with the Christie IMB?

The Christie IMB allows for playback of streaming MPEG2 files directly from the same storage device the DCP-packaged cinema content is in.

Can the Christie IMB be controlled by theater management systems?

The Christie IMB works seamlessly with the Christie Avias-TMS theater management system. The Christie IMB has also been designed to work with competitive theater management solutions already installed in theaters.