



Light is digital

XBO® is setting standards – on the screen  
and on your mobile device

Light is OSRAM

**OSRAM**

# Light is how we see the world

Our passion for light shines on the big screen



Going to the cinema is not just about watching blockbuster movies while eating popcorn. It's about escaping daily life and diving into another world. For more than 60 years, OSRAM XBO lamps have delighted audiences worldwide and transformed a visit to the cinema into an experience they will remember.

The age of digital cinema has placed huge demands on projection technology, but XBO cinema lamps have stayed one step ahead of the demands with continuous improvements and upgrades.

New digital cinema projectors and large screens require a high light output. OSRAM XBO cinema lamps rise to the challenge with a level of luminance that guarantees brilliant, high-resolution images while maintaining the quality of the image—all with an impressive lifespan.

## OSRAM XBO product highlights:

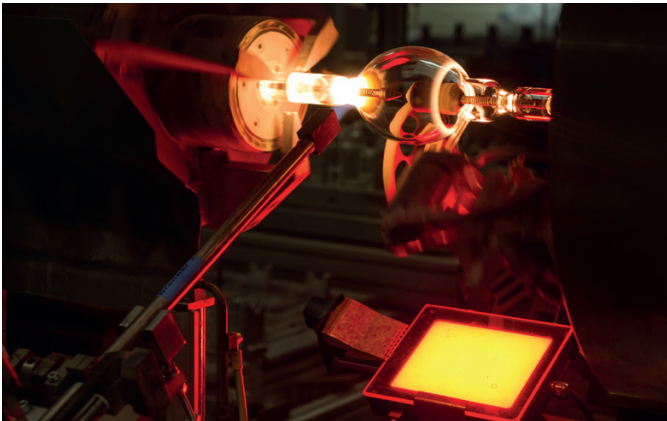
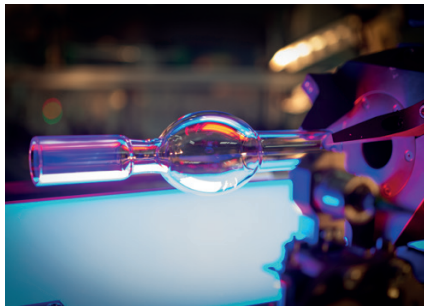
- Short arc with high luminance for brighter screen illumination
- A lifetime of reliable performances with constant 6000K color temperature
- Easy to maintain
- High level of arc stability
- Hot restart and instant light on screen
- Dimmable in a wide range
- Wattages from 1200W to 8000W
- Designed to perform best within the projectors of all major manufacturers





# OSRAM quality – automatically!

XBO cinema lamps are the product of genuine OSRAM production — “Made in Germany”. The automated processing of high-quality materials together with strict OSRAM Quality controls ensures a consistent high lamp standard. Experience our passion for cinema lighting by watching our latest video from our XBO production facility in Eichstätt — [www.osram.us/cinema](http://www.osram.us/cinema)



XBO delivers  
what it promises.  
Guaranteed!

Not only do XBO theater lamps set high-quality standards, they also deliver a warranty that is the best in the industry.

## Ordering Guide

XBO	3000W	/	DHP	L
XBO lamp	Wattage		DHP=Digital High Performance (Barco Projectors) DHS=Digital High Performance Short (Barco Projectors) DTP=Digital Threaded Pin (Christie Projectors) DTS=Digital Threaded Super Performance (Christie Projectors) HPN=High Performance NEC HPS=High Performance Sony	Long Life Version

## OSRAM XBO technical data

Product Name	Product Number	Warranty Hours (hrs)	Service Warranty Lifetime (hrs) <sup>1</sup>	Rated Wattage (W)	Minimum Power (W)	Maximum Power (W)	Minimum Current (A)	Maximum Current (A)
XBO 1200W/DHP	69596	3000	3800	1200	840	1200	41	63
XBO 1600W/DHP	69840	3000	3800	1600	1120	1600	55	85
XBO 2000W/DHP	69150	2400	3000	2000	1400	2000	64	95
XBO 2000W/DHP L	68884	3300	3500	2000	1400	2000	60	90
XBO 2200W/DHP	67484	1500	2000	2200	1540	2200	68	95
XBO 2500W/DHP	69089	1700	2000	2500	1700	2500	63	95
XBO 3000W/DHP	69480	1500	1900	3000	2100	3000	77	113
XBO 3000W/DHP L	69048	1900	2100	3000	2100	3000	76	111
XBO 3000W/DHS	69462	1500	2000	3000	2100	3000	79	115
XBO 4000W/DHP	69481	1100	1400	4000	2940	4200	91	130
XBO 4000W/DHP L	69049	1300	1500	4000	2940	4200	95	137
XBO 4500W/DHP	69463	1000	1300	4500	3150	4500	108	155
XBO 4500W/DHP L	69050	1300	1500	4500	3150	4500	108	155
XBO 6000W/DHP	69476	650	800	6000	4500	6000	140	175
XBO 6000W/DHP L	69053	800	1000	6000	4500	6000	140	175
XBO 6500W/DHP L	54337	700	800	6500	5000	6500	133	173
XBO 6500W/DHP XL	55225	800	900	6500	5000	6500	133	173
XBO 7000W/DHP	55226	300	400	7000	4900	7000	130	175
XBO 1400W/DTS	68891	3000	3500	1400	1000	1400	40	70
XBO 1600W/DTS	68892	3000	3500	1600	1100	1600	50	80
XBO 1800W/DTS	68880	1750	2100	1800	1260	1800	50	83
XBO 2000W/DTS	68881	1100	1500	2000	1400	2000	60	90
XBO 2000W/DTP <sup>2</sup>	69155	2400	3500	2000	1400	2000	50	85
XBO 2000W/DTP L <sup>2</sup>	68882	3300	4000	2000	1400	2000	64	95
XBO 2100W/DTS	68879	1000	1500	2100	1610	2100	60	85
XBO 2300W/DTS	68889	1000	1200	2300	1610	2300	60	90
XBO 3000W/DTP <sup>2</sup>	69154	1500	2500	3000	2100	3000	90	120
XBO 3000W/DTP L <sup>2</sup>	17106	1900	2800	3000	2100	3000	74	109
XBO 3000W/DTS	69063	1200	1500	3000	2100	3000	77	113
XBO 4500W/DTP <sup>2</sup>	69459	1000	1300	4500	3150	4500	108	155
XBO 4500W/DTP L <sup>2</sup>	69052	1300	1500	4500	3150	4500	108	155
XBO 6000W/DTP <sup>2</sup>	69460	600	750	6000	4500	6000	140	175
XBO 6000W/DTP L <sup>2</sup>	69055	800	1100	6000	4500	6000	140	175
XBO 2000W/HPS L	68883	3000	3500	2000	1400	2000	60	87
XBO 3000W/HPS	69487	1000	1300	3000	1500	3000	77	113
XBO 4200W/HPS	60009	700	850	4200	2100	4200	73	137
XBO 4200W/HPS L	60008	1000	1200	4200	2100	4200	69	131
XBO 1200W/HPN	69079	3000	3500	1200	840	1200	40	63
XBO 2000W/HPN L	68885	3000	3500	2000	1400	2000	60	85
XBO 3000W/HPN	69084	1500	1900	3000	2100	3000	77	108
XBO 3000W/HPN L	68840	1900	2100	3000	2100	3000	76	105
XBO 4000W/HPN	69060	650	750	4000	2900	4000	90	125
XBO 4000W/HPN L	69085	1100	1500	4000	2800	4000	90	125
XBO 4500W/HPN	69113	1000	1300	4500	3150	4500	108	150
XBO 4500W/HPN L	69051	1300	1500	4500	3150	4500	108	150
XBO 6000W/HPN	69123	650	800	6000	4500	6000	135	167
XBO 6000W/HPN L	69054	800	1100	6000	4500	6000	135	167
XBO 7000W/HPN	55227	300	400	7000	4900	7000	135	175

<sup>1</sup> Service Warranty Lifetime: Warranted hours in the event of a lamp rupture. Covers the cost of damage to the optical and mechanical parts of a projector that is caused solely due to a defect in the lamp's material or workmanship. For details, see our latest revision of OSRAM XBO Xenon Short Arc Lamp Limited Warranty.

<sup>2</sup> OSRAM does not recommend and will not warranty XBO lamps on "H" type power supplies because of excessive inrush current and high ripple current exceeding the OSRAM lamp specifications. With respect to other power supplies used in Christie digital projectors, they must meet OSRAM lamp specifications. Contact your OSRAM representative for additional details.

## OSRAM XBO cross reference list

Product reference	Projector type
<b>BARCO projectors</b>	
XBO 1200W/DHP	8S, <sup>3</sup> 10S, <sup>3</sup> 12C, <sup>3</sup> 15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B <sup>5,6</sup>
XBO 1600W/DHP	8S, <sup>3</sup> 10S, <sup>3</sup> 12C, <sup>3</sup> 15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup>
XBO 2000W/DHP	10S, <sup>3</sup> 12C, <sup>3</sup> 15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 1200
XBO 2000W/DHP L	10S, <sup>3</sup> 12C, <sup>3</sup> 15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 1200
XBO 2200W/DHP	10S, <sup>3</sup> 12C, <sup>3</sup> 15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup>
XBO 2500W/DHP	15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 32B, <sup>5,6</sup> 1500, 2000
XBO 3000W/DHP	15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 32B, <sup>5,6</sup> 1500, 2000
XBO 3000W/DHP L	15C, <sup>3</sup> 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 1500, 2000
XBO 3000W/DHS	32B, <sup>7</sup> 90, 100, 3000
XBO 4000W/DHP	15C, 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup> 90, 100, 2000, 3000
XBO 4000W/DHP L	15C, 20C, <sup>3</sup> 19B, <sup>4</sup> 23B, <sup>4</sup> 32B, <sup>5,6</sup>
XBO 4500W/DHP	32B, <sup>5</sup> 90, 100, 3000
XBO 4500W/DHP L	32B, <sup>5</sup> 90, 100, 3000
XBO 6000W/DHP	32B, <sup>5</sup> 90, 100, 3000
XBO 6000W/DHP L	32B, <sup>5</sup> 90, 100, 3000
XBO 6500W/DHP L	32B, <sup>5</sup> 90, 100, 3000
XBO 6500W/DHP XL	32B, <sup>5</sup> 90, 100, 3000
XBO 7000W/DHP	32B, <sup>5</sup> 90, 100, 3000
<b>CHRISTIE projectors</b>	
XBO 1400W/DTS	Solaria One, Solaria One+, CP2208, CP2210, CP2215
XBO 1600W/DTS	Solaria One, Solaria One+, CP2208, CP2210, CP2215
XBO 1800W/DTS	CP2210, CP2215, CP2000M
XBO 2000W/DTS	Solaria One, Solaria One+, CP2208, CP2210, CP2215, CP2000M
XBO 2000W/DTP	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX, CP2000ZX
XBO 2000W/DTP L	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX, CP2000ZX
XBO 2100W/DTS	Solaria One, Solaria One+, CP2208, CP2210, CP2215
XBO 2300W/DTS	CP2210, CP2215
XBO 3000W/DTP	CP2000, CP2220, CP4220, CP2230, CP4230, CP2000ZX, CP2000SB/XB/SX
XBO 3000W/DTP L	CP2000, CP2220, CP4220, CP2230, CP4230, CP2000ZX, CP2000SB/XB/SX
XBO 3000W/DTS	CP2000, CP2220, CP4220, CP2230, CP4230, CP2000ZX
XBO 4500W/DTP	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX
XBO 4500W/DTP L	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX
XBO 6000W/DTP	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX
XBO 6000W/DTP L	CP2000, CP2220, CP2230, CP4220, CP4230, CP2000SB/XB/SX
<b>SONY projectors</b>	
XBO 2000W/HPS L	SRX-R210, SRX-R220, SRX-R320
XBO 3000W/HPS	SRX-R210, SRX-R220, SRX-R320
XBO 4200W/HPS	SRX-R220, SRX-R320
XBO 4200W/HPS L	SRX-R220, SRX-R320
<b>NEC projectors</b>	
XBO 1200W/HPN	1200C, 1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 2000W/HPN L	1200C, 1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 3000W/HPN	1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 3000W/HPN L	1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 4000W/HPN	1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 4000W/HPN L	1600C, 2000C, 2500S, <sup>6</sup> 3200S, <sup>6</sup> 3240S, <sup>6</sup>
XBO 4500W/HPN	2500S, 3200S, 3240S
XBO 4500W/HPN L	2500S, 3200S, 3240S
XBO 6000W/HPN	2500S, 3200S, 3240S
XBO 6000W/HPN L	2500S, 3200S, 3240S
XBO 7000W/HPN	2500S, 3200S, 3240S

<sup>3</sup> Barco Adapter Part Number for Cathode: R858100<sup>4</sup> Barco Adapter Part Number for Cathode: R865555<sup>5</sup> Barco Adapter Part Number for Cathode: R8436081<sup>6</sup> Projector/Lamp combinations identified may require an anode adapter. Contact OSRAM if this is necessary.<sup>7</sup> Barco Adapter Part Number for Cathode: R8436061 and Anode: R859987



# Troubleshooting tips

## Unexpected decreased LAMP LIFE

XBO lamps usually reach the end of their life through wear of the electrodes, which leads to an increase of flickering and decrease of light output. In case of early lamp failure, the sections below provide valuable troubleshooting help. Check them carefully before a new lamp is installed.

### Lamp does not ignite

If the lamp ignites poorly or not at all, the following should be checked:

- Is the lamp type suitable for this projector?
- Is the lamp correctly installed and secured in the lamphousing as instructed by the projector and lamp manufacturer?
- Is the power lead between lamp and lamphouse connected?
- Have you selected the correct lamp type in the projector menu?
- Has the lamp already reached the end of lifetime?
- Does the cooling system work sufficiently?
- Is the projector using the latest software?

### Visible flicker on screen

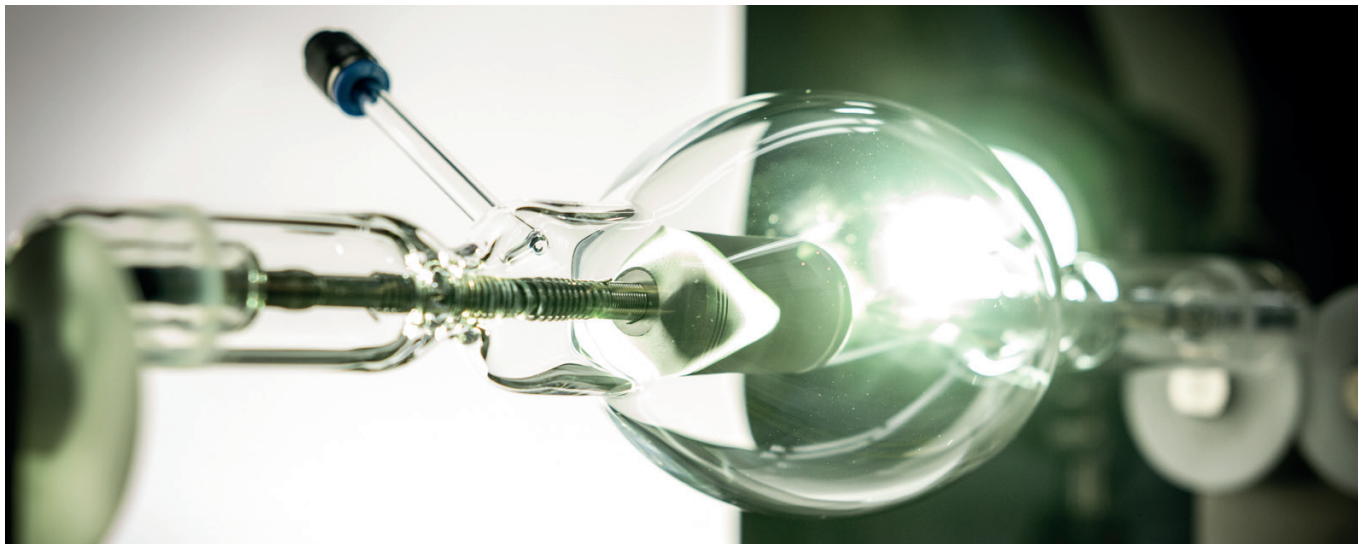
If flicker is observed after installing a new lamp, the following should be checked:

- Is the lamp type suitable for this projector?
- Has the lamp been turned on for at least 10 minutes to obtain thermal stabilization?
- Have you selected the correct lamp type in the projector menu?
- Is the lamp being operated within the correct projector settings for current and power range?
- Please check for strong vibration.
- Is the lamp correctly adjusted within the optical system (reflector)?

If flicker is observed during lamp lifetime, the previous and following notes on "flicker" need to be checked:

- Adjust the lamp one more time in the optical system (reflector)! Due to the burn back effect of the electrode, the brightest point of the light arc will shift out of alignment within the reflector focus
- Set the lamp power to at least 85% of maximum power





### Discoloration of lamp bases, cable and cable lugs

XBO lamps produce an extremely high level of heat. Most of the heat is dissipated by convection and radiation. Thermal blockages and excessive temperatures must be avoided. If the upper limit of 230°C is exceeded, the lamp bases and cable discolor from light yellow to brown and blue. If this happens:

- Check the lamp cooling and exhaust fans
- Check air filters for lamp cooling, they may be blocked
- Loose screws or insufficient electrical cable connection may decrease the contact
- Wrong electrical current and/or lamp power settings may be in place
- Check the adjustment of the lamp in the optical system (reflector)

Due to an incorrect lamp adjustment in the optical system, emitted radiation can focus on lamp bases and cable.

### Burst lamp

XBO lamps are made of quartz glass and have a high-internal pressure (about 60 bar in operation). Possible reasons for a burst lamp:

- Lamp life beyond the OSRAM "Service Warranty"
- Incorrect lamp installation
- Wrong electrical current and lamp power settings
- Insufficient lamp cooling system, blocked air filters
- Scratches on the outer skin of the quartz
- Slightly damaged by heavy shocks, which were caused by rough transportation
- Recrystallization on the surface of the quartz glass bulb caused by fingerprints, which have not been removed
- Strong bulb blackening degrades the emission of radiation by the quartz bulb and causes a rise in lamp bulb temperature and pressure

### Not enough light

If the initial light output is too low or has decreased rapidly, the following must be checked:

- Is the lamp type suitable for this projector?
- Has the lamp been turned on for at least 10 minutes to obtain the initial brightness?
- Have you selected the correct lamp type in the menu?
- Is the lamp being operated within the correct lamp current and power range?
- Is strong bulb blackening visible?
- Is the optical system (reflector, lenses) dusty or dirty?
- Is the lamp correctly adjusted to the optical system (reflector)?

# XBO® Service Platform App

Your all-access pass to our expertise

The OSRAM XBO Service Platform puts the comprehensive knowledge of OSRAM cinema lighting professionals at your fingertips. Our new app for Android and iOS is an industry first, designed with cinema technicians in mind.

The XBO Service Platform is an easy to use and time-saving tool offering the following functions:

## General XBO product information

- Find product-related information, such as technical data and warranty timeframes, for each lamp type according to the projector type

## Training & technical support

- Get a view of the XBO lamp production
- Learn how to install OSRAM XBO lamps in various projector types
- Troubleshoot the lamp issues with helpful videos and step-by-step instructions

## News

- Get the latest scoop on events, product launches and promotions

## OSRAM XBO contacts

- Reach our local and global XBO experts easily



The XBO customers ordering lamps directly from OSRAM are even able to submit the claims within the OSRAM XBO Service Platform.

Download the app and have more than 60 years of XBO lighting expertise with you at all times!

**Download now!**



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