

# USHIO Xenon Lamps for Cinema Projectors





## We love light

From our foundation in 1964 we have gained global recognition through unique innovation in lamps. From halogen to Xenon lamps, we manufacture products that are always on the cutting edge of technology. This makes us the world leader in specialty lamps.

We place a special focus on the development of lamps for cinema projectors: we were the first manufacturer worldwide to make Xenon short arc lamps specifically for use in cinemas. Cinema operators quickly realised that we deliver the best technology.

More than half of all cinemas around the world already use our high-quality lamps. It makes no difference whether our customers require USHIO lamps for just one screen or for an entire multiplex cinema chain. We offer the largest range of cinema lamps and therefore tailor-made solutions for every cinema size and almost all projector types.

Our company is certified for quality without compromise. You can always rely on our lamps, which are largely hand-produced. Be it the UXL-, DXL- or L-series, whether 35 mm or digital, you can always find the ideal lamp in the extensive USHIO product range.

The Svenska Bio Group has more than 110 screens: one of the biggest players in the Scandinavian cinema market and still expanding.



"We have been buying USHIO lamps for several years now. The great quality is not only a source of satisfaction to us but also to our visitors, who enjoy every film thanks to USHIO's innovative lighting technologies. We also love the individual service USHIO offers because it helps us find the perfect lamps for each projector."

Kent Andersson, Operator Winberg Kino Nyköping, Sweden



# There's more to it than you think

It's no coincidence that we are the world leader with our different lamp technologies; behind every single USHIO product stands countless hours of work and quality controls that ensure that the result is perfect.

In our research laboratories we use various analytical equipment to check that every product operates efficiently. We investigate different materials for the development of our light sources and have unique simulation technologies that calculate, for example, the flow of gas within the bulbs or optimise the spatial propagation of light.

Our quality management system supplies products and services to meet the high expectations of our customers. This, along with the continuous improvement of quality management earned USHIO the world-first ISO 9001 certification for a manufacturer of Xenon bulbs. We also strive for excellence in environmental terms! As illustrated by the ISO 14001, our environmental management is characterised by sustainability and environmental awareness.







We place great emphasis on precision and therefore many production processes are done by hand. Because of this we can guarantee the best quality goods and pay attention to every little detail. The result of this production process: first-class lamps.

That is exactly our goal: to produce impeccable lamps and to improve their quality time and again, so that they are ground-breaking innovations. Each product leaves our site only if it measures up to what USHIO stands for: 100% quality and 100% efficiency.



"All of our employees in production first undergo rigorous training that prepares them for the intricacies of dealing with glass and sophisticated technology. Thereby we guarantee our production staff have a thorough knowledge to ensure that the products are as they should be: uncompromising performance."

Hiroshi Matsubara, CEO USHIO Europe

# The right lamp with the best quality

With USHIO you have a choice; from the conventional short arc Xenon lamp for 35 mm film projection to the digital Xenon short arc lamp, or our new digital long-life L-series: we offer the right solution for every need. Our lamps are tested, approved and certified by every major projector manufacturer such as: Barco, Christie, NEC and Sony. Manufacturers already rely on USHIO brand quality: you can as well.

Our tip: The future lies in the range of long-life Xenon short arc lamps for digital projectors, because they achieve high, life-long DCI compliant brightness.

Jogchem's Theaters B.V., better known as JT, is one of the largest cinema chains in the Netherlands. It currently runs 93 screens with a new 8-plex cinema due soon, meaning 101 screens in total.



"Premium technology and high-quality equipment are essential to offer our visitors the best cinema experience. I have been working at JT for 24 years now and USHIO is the best partner in lamps and services we have ever had. We especially value the broad product range and the reliability. Delivery of every product is fast and whenever there is a problem, USHIO knows how to solve it. We feel that we are in very good hands and we are looking forward to many more successful years together."

Bert Willemse, Chief Technician and Theatre Manager JT Amersfoort, The Netherlands



## USHIO lamp types

#### TYPE UXL

UXL lamps are excellently suited to film projectors. Due to their durability and reliability, the Xenon lamps are a reliable light source, available in power ratings from  $500\,\mathrm{W}$  to  $10\,000\,\mathrm{W}$ .

#### TYPE UXL High Efficiency

These high-efficiency lamps are the perfect choice for your film projector: they offer either an average of 50% longer warranty period or 30% more lumens, compared with conventional Xenon lamps. These lamps can be differentiated by the "H" at the end of the type designation.

#### TYPE DXL

DXL models allow yet more brightness with digital projectors. We have even broken a world record with one of our DXL lamps: the DXL 70BA allowed a Barco projector to achieve an impressive 43 000 lumens on screen.

#### **TYPE L-SERIES**

The new L-series ensures you the best quality without compromise alongside a lifetime up to twice as long of that of a standard DXL bulb. Every standard model can be replaced by these new models and come approved by Barco, NEC and Sony for their digital projectors. The best choice when low operating costs and low maintenance are required.



#### Our tip: turn off

The lamps do not have to remain switched on between the films. With breaks of 8 minutes or more, turn off the lamp. This not only saves power and operating hours, but also prolongs the life of your USHIO lamp.





# UXL lamp for cinema

Our UXL Xenon short arc lamps are high-intensity point light sources, i.e. their light spreads out from a single point. The bright white light from a Xenon short arc lamp has a very strong resemblance to daylight, so the lamp is particularly suitable for commercial cinema projectors.

By the way: thanks to their radiant light our Xenon bulbs, in addition to cinema and digital projectors, are used for special lighting effects, such as for a Sky Tracker.

Even the ESA (European Space Agency) uses our special lamps in research and development of the BepiColombo Mercury Planetary Orbiter, that is planning to start its mission to Mercury in August 2015.

UXL LAMP

## Lineup

Model	Rated Input Power	Rated Voltage	Rated Current	Operating Current Range	Cold Arc Gap	Warranty (Eco Mode)	Average Lifetime
	W	V	А	А	mm	hours	hours
UXL-10SB	1 000	20	50	30 - 55	4.2	2000	2000
UXL-10SCB	1 000	20	50	30 - 55	4.2	2000	2000
UXL-10SCBH	1 000	20	50	48 - 55	3.5	2 000 (3 000)	2000
UXL-1001M0	1 000	23	43.5	37 - 46	4	500	2000
UXL-1000HK-0	900	20	45	32 - 47	5	2000	2000
UXL-16SB	1 430	22	65	45 - 70	4	2000	2000
UXL-16SCB	1 430	22	65	45 - 70	4	2000	2000
UXL-16SCBH	1 500	23	65	45 - 70	3.6	2 000 (3 000)	2000
UXL-1600-0	1 600	24	65	45 - 75	5.5	2000	2000
UXL-20SC	2000	25	80	50 - 85	6	2 400	2 400
UXL-20SCH	2000	25	80	70 - 85	4.4	2 400 (3 500)	2 400
UXL-2000HR	2000	29	70	50 - 85	6	2 400	2 400
UXL-2000HRH	2000	25	80	64 - 85	4.5	2 400 (3 500)	2 400
UXL-21SCB	2000	28	70	45 - 70	6	2 400	2 400
UXL-21SCBH	2000	28	70	45 - 70	5.5	2 400 (3 000)	2 400
UXL-2003HKL-0	1750	25	70	56 - 80	6	2400	2 400
UXL-25SC	2500	28	90	70 - 100	6	1500	1500
UXL-25SCH	2500	28	90	70 - 100	4.9	1 500 (2 200)	1 500
UXL-2500-0	2500	30	83	60 - 95	7	1500	1 500
UXL-30SC	3000	30	100	60 - 110	6	1 500	1 500

UXL LAMP

## Lineup

Model	Rated Input Power	Rated Voltage	Rated Current	Operating Current Range	Cold Arc Gap	Warranty (Eco Mode)	Average Lifetime
	W	V	А	А	mm	hours	hours
UXL-30SCH	3000	30	100	60 - 110	5.4	1500 (2200)	1500
UXL-3000HR	3000	26	100	60 - 100	7	1500	1500
UXL-3000HRH	3000	27	110	88 - 120	5.5	1500 (2200)	1500
UXL-3000HK-0	2500	27	90	70 - 110	7	1500	1500
UXL-3600HN	3360	28	120	85 - 120	7	1200	1 200
UXL-3601HK-0	3360	28	120	85 - 120	7	1200	1200
UXL-4000K-0	4000	33	120	60 - 140	8	1200	1200
UXL-40SC	4000	29	135	80 - 150	7	1 200	1200
UXL-40SCH	4000	29	135	80 - 150	6.4	1 000 (1 500)	1 000
UXL-50SC	5000	35	140	100 - 150	8	1000	1 000
UXL-50SCH	5000	35	140	124 - 150	7	1 000 (1 500)	1 000
UXL-5000HN	4200	30	140	100 - 140	8	1 000	1 000
UXL-5000H	4200	30	140	100 - 140	8	1 000	1 000
UXL-5000HR	5 000	35	140	100 - 150	8	1 000	1 000
UXL-5000HRH	5 000	35	140	100 - 150	7	1 000 (1 500)	1 000
UXL-60SC	6 000	37	160	120 - 170	9	600	600
UXL-60SCH	6 000	39	155	149 - 165	8	500 (750)	500
UXL-6000HK-0	4960	32	155	100 - 160	8	600	600
UXL-70SC	7 000	43	160	120 - 170	11	500	500
UXL-70SCH	7 000	43	160	120 - 170	10	500 (650)	500



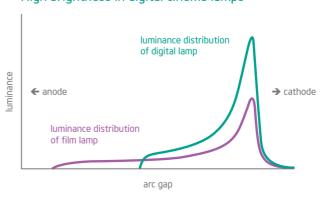


# DXL lamp for digital projectors

The best-selling lamps for digital projectors are our DXL series. The use of the right DXL lamp guarantees DCl compliant brightness on the screen. In this way, films are shown with natural colours and vivid contrast. Naturally, we guarantee a high resistance and reliability for the DXL, as well as the UXL series, to ensure continued enjoyment of these digital lamps.

Only USHIO lamps are approved by all manufacturers.

### High brightness in digital cinema lamps





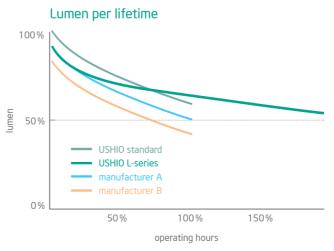




# Long-life Xenon lamps

Our successful DXL range is now even stronger: as we place great value in innovation and new technologies at USHIO, we have developed the long-life, short L-series. These new lamps have a 15% up to 100% longer life on average depending on the type of lamp compared to the standard DXL lamps.

For you, that means less frequent replacement of your lamps and therefore lower costs for your cinema. For us, the future is long-life lamps, so you can look forward to more types in the L-series.





### **DXL LAMP**

## Lineup for Barco Projectors

Model	Rated Input Power	Rated Voltage	Rated Current	Operating Current Range	Cold Arc Gap	Warranty	Average Lifetime
	W	V	А	W/A	mm	hours	hours
DXL-8BAF	800	18	45	560-800 (W)	5.5	tbc	3000
DXL-9BAF	tbc	tbc	tbc	tbc	tbc	tbc	tbc
DXL-12BAF	1 200	20	60	800-1200 (W)	4.5	3500 (3000*)	3500
DXL-16BAF	1 600	21,3	75	1120-1600 (W)	3.5	3000	3000
DXL-20BAF2	2000	23,5	85	60-90 (A)	4.1	2400	2400
DXL-22BAF	2 200	26,5	83	1600-2500 (W)	4.0	1500	2000
DXL-30BA	3 000	26	115	90-120 (A)	5.5	1 900 (1 500*)	1 900
DXL-30BAF	2800	28	100	94-107 (A)	4.5	1 500	1500
DXL-40BAF	4200	35	120	95-127 (A)	6	1 000	1 000
DXL-45BA	4500	31,5	145	95 - 155 (A)	6	1 300 (1 000*)	1 300
DXL-60BA2	6 000	37,5	160	110-170 (A)	8	800 (600*)	800
DXL-65BA	6500	39,5	165	110-178 (A)	8	500	500
DXL-65BA2	6 500	39,5	165	110-178 (A)	8	500	500
DXL-70BA	7 000	40±3	175	4900-7000 (W)	7.4	300	500
DXL-20BAF/L	2000	25	80	1400-2000 (W)	4.5	3200	3500
DXL-30BA/L	3 000	26	115	2100-3000 (W)	5.5	1900	2000
DXL-30BAF/L	2800	30	93	1960-2800 (W)	5	1700	1700
DXL-40BAF/L	4200	33,5	125	2940-4200 (W)	6	1300	1700
DXL-45BA/L	4500	31,5	145	3150-4500 (W)	6	1300	1500
DXL-60BA2/L	6000	39	155	4200-6000 (W)	8	800	1100

## L-SERIES

## Cross reference

Barco Projectors	Lamp Types					
DP2K-8S(x)	DXL-9BAF	DXL-12BAF	DXL-16BAF	DXL-20BAF2	DXL-22BAF	
DP2K-10S(x)	DXL-9BAF	DXL-12BAF	DXL-16BAF	DXL-20BAF2	DXL-20BAF/L	DXL-22BAF
DP2K-12C	DXL-8BAF	DXL-12BAF	DXL-20BAF2	DXL-20BAF/L		
DP2K-15C /	DVI 0D45	DVI 12D15	DVI 20D452	DVI 20D45/I	DVI 20D45	DVI 20DAE/I
DP2K-19B	DXL-8BAF	DXL-12BAF	DXL-20BAF2	DXL-20BAF/L	DXL-30BAF	DXL-30BAF/L
DP2K-20C	DXL-40BAF	DXL-40BAF/L				
DP2K-23B	DXL-12BAF	DXL-20BAF2	DXL-20BAF/L	DXL-30BAF	DXL-30BAF/L	
DP4K-23B	DXL-40BAF	DXL-40BAF/L				
DP2K-32B /	DXL-30BA	DXL-30BA/L	DXL-45BA	DXL-45BA/L	DXL-60BA2	
DP4K-32B	DXL-60BA2/L	DXL-65BA	DXL-65BA2	DXL-70BA		

## Lineup for NEC Projectors

Model	Rated Input Power	Rated Voltage	Rated Current	Operating Current Range	Cold Arc Gap	Warranty	Average Lifetime
	W	V	Α	W	mm	hours	hours
DXL-12SN	1 200	20	60	840-1200	4.5	3 000	3 200
DXL-12SN2	1 200	20	60	840 - 1 200	4.5	3000	3 200
DXL-15SN	1 500	22	68	1050-1500	3.5	3 000	3 000
DXL-15SN2	1 500	22	68	1050-1500	3.5	3000	3000
DXL-20SN3	2000	26	75	1400-2000	4	2400	3 000
DXL-21SN3	2000	26	75	1 400 - 2 000	4	2400	3000
DXL-30SN	3 000	30	100	2100-3000	5.4	1 500	1 500
DXL-30SN2	3000	28.5	105	2100-3000	5.4	1 200	1 200
DXL-31SN2	3 000	28.5	105	2100-3000	5.4	1 200	1 200
DXL-40SN	4000	32	125	2800-4000	5	650	650
DXL-40SCN	4000	29	135	2800-4000	7	1 500	1 500
DXL-40SN2	4000	32	125	2800-4000	6	1 000	1 000
DXL-41SN	4000	32	125	2800-4000	5	650	650
DXL-41SCN	4000	29	135	2800-4000	7	1 500	1 500
DXL-41SN2	4000	32	125	2800-4000	6	1 000	1 000
DXL-45SN	4500	31.5±3	145	3150-4500	6	1 000	1 000
DXL-60SN	6000	39±3	155	4200-6000	8	600	1 000
DXL-70SN	7 000	40±3	175	4900-7000	7.4	300	500
DXL-45SN/L	4500	31.5	145	3150-4500	6	1200	1500
DXL-60SN/L	6000	39	155	4200-6000	8	800	1100

L·SERIES

## Cross reference

NEC Projectors	Lamp Types				
NC1200C (	DXL-12SN	DXL-15SN	DXL-20SN3		
NC1600C	DXL-12SN	DXL-15SN	DXL-20SN3	DXL-30SN2	
NC2000C	DXL-40SN	DXL-40SCN	DXL-40SN2		
NC2500S *	DV// 4.25N/2	DVI 456NO	DVI 24 CN2	DVI 24CN2	
NC3200S *	DXL-12SN2	DXL-15SN2	DXL-21SN3	DXL-31SN2	
NC3240S *	DXL-41SN	DXL-41SCN	DXL-41SN2		
NC2500S **					
NC3200S **	DXL-21SN3	DXL-31SN2	DXL-41SN	DXL-41SCN	DXL-41SN2
NC32003	DXL-45SN	DXL-45SN/L	DXL-60SN	DXL-60SN/L	DXL-70SN
NC3240S **					
NC1500C *** 〈	DXL-30SN				

#### **DXL LAMP**

## Lineup for Sony Projectors

	Model	Rated Input Power	Rated Voltage	Operating Current Range	Cold Arc Gap	Warranty	Average Lifetime
		W	V	W	mm	hours	hours
	DXL-20SRX	2000	25.5	1000 - 2000	4.5	3 0 0 0 (2 4 0 0 *)	3 000
	DXL-30SRX	3 000	30	1890 - 3000	4.5	1 000	1 000
,	DXL-40SRX	4200	31	2650 - 4200	4.5	700	850
L·series	DXL-20SRX/L	2000	25	1 260 - 2 000	4.5	3500	3 500
	DXL-30SRX/L	3000	31	1500 - 3000	5	1800	1 800
	DXL-40SRX/L	4000 - 4200	31-32	2650 - 4200	5	650/750** (325*)/(375*)	650/750**
	DXL-40SRX/LL	4000	34	2100 - 4000	6	1 000	1 000

## Cross reference

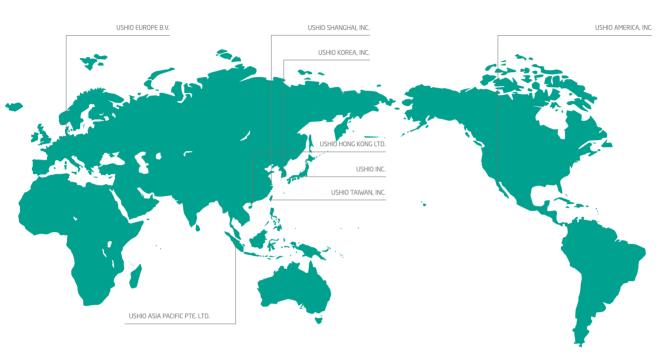
Sony Projectors	Lamp Types			
SRX-R220	DXL-20SRX	DXL-30SRX	DXL-40SRX	
SRX-R320	DXL-20SRX/L	DXL-30SRX/L	DXL-40SRX/L	DXL-40SRX/LL

## Lineup for Cinemeccanica & Kinoton

Model	Rated Input Power	Rated Voltage	Operating Current Range	Cold Arc Gap	Warranty	Average Lifetime
	W	V	W/A	mm	hours	hours
DXL-65SC	6 500	39.5	110 - 178 (A)	8	500	650
DXL-70SCH	7000	40	4900 - 7000 (W)	7.4	300	400

## USHIO around the World

Do you have questions about our products, need help with the installation, or want to find out more about products easily? Then contact us: we offer our services all around the world. Just select the office in your area and we will be happy to support you.



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### Worldwide USHIO has ...

- → 5713 employees
- → 45 sales offices
- → 9 production sites
- → An annual turnover of €1.5 billion