



PURPOSE

This document will aid in the management, installation, and recycling of Xenon bulbs.

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INSTALLATION

1. Wear the necessary protective clothing and face protection (welder's bib apron, heat-resistant gloves, face-shield, and nylon sleeve) when installing Xenon bulbs. If the necessary tools are not on site, open a DSSP ticket to order the Xenon Bulb Safety Kit from ICS.
2. Turn off the 3-phase power at the breaker before opening the lamp house.
3. Verify that the bulb has cooled for a minimum of 15 minutes prior to replacing.
4. Open the lamp house to gain access to the Xenon bulb.
5. Remove the old Xenon bulb (reference the job aids in this document's endnotes). ^{i/ii/iii/iv}
6. Remove the new bulb from the protective cover and install into the lamp house making sure all terminations are tight, and the anode lead cable is secured to the same post where the previous bulb was connected.
7. Ensure that the anode lead cable is clear of the metal lamp house housing before closing the access door.
8. Ensure all lamp house doors/panels are closed and secure.
9. Turn the 3-phase breaker back on.
10. Enter the required information from the new bulb (serial number, lamp information, lamp code) into the projector system using the PJT or TPC display.

Note: When installing an LTI brand Xenon bulb into a Christie projector it is paramount to select the Christie equivalent lamp type. Do not select "Other" as a lamp type. Refer to the tables in the [Lamp Replacement](#) section for equivalent lamp selection.

11. Strike the bulb and allow it to reach operating temperature (5-10 minutes). Perform the approved alignment procedure and take a light reading to ensure proper light levels.
12. Retain and return the old bulb as directed in the [Xenon Bulb Recycling](#) section of this document.
13. Place the box with the return label and all packaging materials (for when the newly installed lamp is ready to be returned) near the projector in plain sight (or a theatre-designated location) for future use.
14. Complete the steps for ordering and warranty review, as directed in this document.

PROPER LIGHT LEVELS

Managers must complete light readings to ensure that lamps are performing at the appropriate level:

Format	2D	3D
Target Light Level	14 fL	4.5 fL
Allowable Range	+/- 3 fL	+/- 1 fL



ORDERING

- Ensure that current inventory matches the required spare Xenon bulb inventory table below. If inventory does not match, place Xenon bulb orders through [Cinema Solutions](#).
- **New Locations:** Order two lamps for single projector setups and four lamps for dual-projector setups to ensure appropriate spare lamps after initial install. Order through [Cinema Solutions](#).

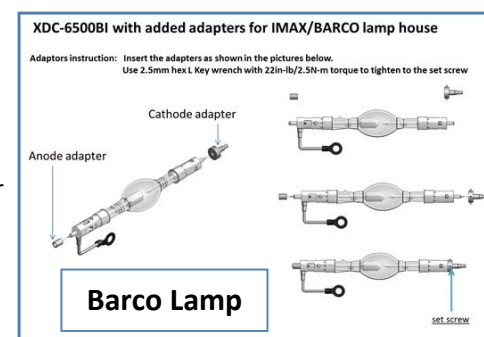
Format	Additional Lamps – Not in a Projector	Format	Additional Spare/Lamps
2D	1 for every 4 of each bulb size in use	Premium Large Format (i.e., IMAX, Dolby, Prime)	1 for single projector setups
3D	1 for every 2 of each bulb size in use		2 for dual projector setups

XENON BULB WARRANTY

1. Review the Replacement table below to identify whether a warranty claim needs to be processed when Xenon lamps are no longer performing at established guidelines prior to reaching the maximum allowable hours. Any bulb failure resulting in equipment damage or performance issue that appears to be equipment related must be reported to theatre's TSE.
2. File a claim with the manufacturer using the lamp warranty card provided in the lamp box. Accurate bulb operating hours, bulb model, serial number, and failure description will be required.

IMAX DIGITAL XENON BULBS

1. Replace lamps in both IMAX projectors at the same time.
2. Change lamps.
 - Ensure that proper procedures are followed for Christie projectors.ⁱⁱ
 - Follow instructions included with the adapter for Barco projectors.^{iv} If adaptors become damaged or replacements are needed, they are available on Cinema Solutions through the LTI guide as part number ADAPTER-6500BI.
3. Follow the lamp recycling instructions to return your **USHIO** lamp to LTI (where they can reclaim the Xenon).





LAMP REPLACEMENT

Important: The target operational hours indicate the maximum acceptable hours a bulb can be operated before replacement is required. Weekly light readings must be completed once a bulb will be operated beyond warranty hours (but below maximum acceptable hours) to ensure performance meets established guidelines.

Sony Projectors (compatible with SRX-R220 & SRX-R320)

Wattage	LTI Lamp Model	Warranty Hours	Target Ops Hours	Notes
2000	XDC 2000S	2400	3000	
3000	XDC 3000S-14	1400	1750	
4200	XDC 4200S	700	875	For 3D-capable houses
4200	XDC 4200SL	1000	1250	Long life lamp for 2D-only houses



Christie Projectors

Wattage	LTI Lamp Model	Christie Lamp Model	Warranty Hours	Target Ops Hrs	Compatible CP Models
1400	XDC 1400C	CDXL-14M**	3000	3750	Solaria One/One+, 2208, 2210, 2215
1600	XDC 1600C	CDXL-16M**	3000	3750	Solaria One/One+, 2208, 2210, 2215
1800	XDC 1800C	CDXL-18SD**	1750	2188	2210, 2215, 2000-M
2000	XDC 2000C	CDXL-20**	2400	3000	2220, 2230, 4220, 4230, 2000-SB, 2000-XB, 2000-ZX
	XDC 2000CL*	CDXL-20SP**	3000	3750	2220, 2230, 4220, 4230, 2000-SB, 2000-XB, 2000-ZX
	XDC 2001C	CDXL-20SD**	1100	1375	2210, 2215, 2000-M
3000	XDC 3000C	CDXL-30**	1500	1875	2220, 2230, 4220, 4230, 2000-SB, 2000-XB, 2000-ZX
	XDC 3000CL*	CDXL-30SP**	1900	2375	2220, 2230, 4220, 4230, 2000-SB, 2000-XB, 2000-ZX
	XDC 3001C	CDXL-30SD**	1000	1250	2220, 4220, 2000-ZX
4500	XDC 4500C	CDXL-45**	1000	1250	2230, 4230, 2000-SB
	XDC 4500CL*	CDXL-45SP**	1300	1625	2230, 4230, 2000-SB
6000	XDC 6000C	CDXL-60**	600	750	2230, 4220
	XDC 6000CL*	CDXL-60SP**	800	1000	2230, 4320, 2000-XB
IMAX	Use Christie	CDXL-60	600	800	IMAX only: Gen I or II
		CDXL-60SP	800	1000	IMAX only: Gen I or II
		CDXL-60UP	1000	1250	IMAX only: Gen I or II



* Long-life lamps for 2D-only houses. **Previously used lamp models for reference only.

**Barco Projectors - Xenon Bulbs**

Wattage	LTI Lamp Model	Ushio Lamp Model	Warranty Hours	Target Operational Hours	Compatible Barco Models			See Table Below for the Necessary Adapters for LTI Lamps in Barco Projectors
					DP-2K	DP-4K	DP	
1200	XDC 1200B	DXL-12BAF**	3000	3750	8S, 10S, 12C, 15C, 19B, 20C, 23B	19B, 23B	1200, 1500, 2000	
2000	XDC 2000B	-	2400	3000	10S, 12C, 15C, 19B, 20C, 23B	19B, 23B	1500, 2000	
	XDC 2000BL*	DXL-20BAF/L**	3300	4125	8S, 10S, 12C, 15C, 19B, 20C, 23B	19B, 23B	1200, 1500, 2000	
2200	XDC 2200B	DXL-22BAF/L**	1500	1875	10S, 12C, 15C, 19B, 20C, 23B	23B	1500, 2000	
3000	XDC 3000B	DXL-30BAF**	1500	1875	15C, 19B, 20C, 23B	19B, 23B	1500, 2000	
	XDC 3000BL*	DXL-30BAF/L**	1700	2125	15C, 19B, 20C, 23B	19B, 23B	1500, 2000	
	XDC 3001B	DXL-30BA/L**	1500	1875	32B	32B	90, 100, 3000	
4000	XDC 4000B	DXL-40BAF**	1100	1375	20C, 23B	23B	1500, 2000	
	XDC 4000BL*	DXL-40BAF/L**	1300	1625	20C, 23B	23B	1500, 2000	
4500	XDC 4500B	-	1150	1438	32B	32B	90, 100, 3000	
	XDC 4500BL*	DXL-45BA/L**	1350	1688	32B	32B	90, 100, 3000	
6000	XDC 6000B	-	650	813	32B	32B	90, 100, 3000	
	XDC 6000BL*	DXL-60BA2/L**	800	1000	32B	32B	90, 100, 3000	
6500	XDC 6500B	DXL-65BA2**	500	625	32B	32B	90, 100, 3000	
	XDC 6500BL*	-	700	875	32B	32B	90, 100, 3000	
IMAX	XDC 6500BI	DXL-65BA3**	700	875	IMAX only: Gen III			

* Long-life lamps for 2D-only houses.

**Previously used lamp models for reference only.





Barco Projectors - Lamp Adapters

Barco Projector Model		LTI Lamp (Wattage)	Cathode Adapter	Anode Adapter
DP	1200, 1500, 2000	All compatible lamps (above)	2130740 (R858100K)	-
	90, 100, 3000	3001B	2130742 (R8436061K)	2130731 (R859987K)
		4500B, 4500BL	2130627 (R8436081K)	2130741 (R859986K)
		6000B, 6000BL	2130627 (R8436081K)	2130629 (R864132K)
		6500B, 6500BL	2130682 (R8436111K)	-
DP-2K	8S, 10S, 12C, 15C, 20C	All compatible lamps (above)	2130740 (R858100K)	-
	19B, 23B	All compatible lamps (above)	2130762 (R865555K)	-
	32B	3001B	2130742 (R8436061K)	2130731 (R859987K)
		4500B, 4500BL	2130627 (R8436081K)	2130741 (R859986K)
		6000B, 6000BL	2130627 (R8436081K)	2130629 (R864132K)
		6500B, 6500BL	2130682 (R8436111K)	-
DP-4K	19B, 23B	All compatible lamps (above)	2130762 (R865555K)	-
	32B	3001B	2130742 (R8436061K)	2130731 (R859987K)
		4500B, 4500BL	2130627 (R8436081K)	2130741 (R859986K)
		6000B, 6000BL	2130627 (R8436081K)	2130629 (R864132K)
		6500B, 6500BL	2130682 (R8436111K)	-
IMAX	Gen III	XDC 6500BI	2130627 (R8436081K)	2130629 (R864132K)





NEC Projectors

Wattage	Lamp Model	Warranty Hours	Target Operational Hours	Compatible NC Models
2000	XDC 2000N	2500	3125	1200C, 1600C, 2000C
	XDC 2000NL*	3100	3875	1200C, 1600C, 2000C
3000	XDC 3000N	1600	2000	1600C, 2000C
	XDC 3000NL*	1800	2250	1600C, 2000C
4000	XDC 4000N**	700	875	1600C, 2000C
	XDC 4000NL*	1150	1438	1600C, 2000C
	XDC 4001N**	1500	1875	1600C, 2000C
	XDC 4002N**	1000	1250	1600C, 2000C
4500	XDC 4500N	1100	1375	2500S, 3200S, 340S
	XDC 4500NL*	1350	1688	2500S, 3200S, 340S
6000	XDC 6000N	650	813	2500S, 3200S, 340S
	XDC 6000NL*	900	1125	2500S, 3200S, 340S
7000	XDC 7000N	300	375	2500S, 3200S, 340S

* Long-life lamps for 2D-only houses.

** Brightest to dimmest – 4000N, 4002N, 4001N





RETURNING XENON BULBS

Lighting Technologies International (LTI) has developed a process to reclaim the Xenon gas in used lamps upon return. To recycle the gas, the **bulbs must not be broken or damaged** when they arrive at LTI. To safely ship the lamp, we recommend using the original packaging materials if available.

XENON BULB RECYCLING

1. Ensure that protective clothing and face protection (welder's apron, gloves, face shield) are worn when disposing of Xenon bulbs.
2. Review the projector-specific lamp change procedures then perform the steps below.
3. Re-package the bulb in the manufacturer-supplied container as follows:
 - Open the top of the lamp box, remove the endcap, and retrieve the felt.



- Place the felt on the table and remove the straps.



- Gently wrap the lamp in the felt with the lamp anode (+) on the left, and the cathode (-) on the right.



- Wrap the felt with and secure the felt straps about 3.5 inches from the base of the lamp.





Xenon Bulb User Guide

AMC ☒

AMC Classic ☒

AMC Dine In ☒

- Insert the felt-wrapped, strapped lamp into the air tube.



- Add the endcap, close and seal the box.



- Add the shipping label to the top of the box.
- Write **RECLAIM** on the top of the box.



4. Return via FedEx (UPS is not available). If you don't have the original return label, email [LTI](#) and request one. They will create a replacement and email back to your theatre.

ⁱ [SS-6-05a, Job Aid - Xenon Lamp Replacement - Sony Projector](#)

ⁱⁱ [SS-6-05b, Job Aid - Xenon Lamp Replacement - Christie Projector](#)

ⁱⁱⁱ [SS-6-05c, Job Aid - Xenon Lamp Replacement - NEC Projector](#)

^{iv} [SS-6-05d, Job Aid - Xenon Lamp Replacement - Barco Projector](#)