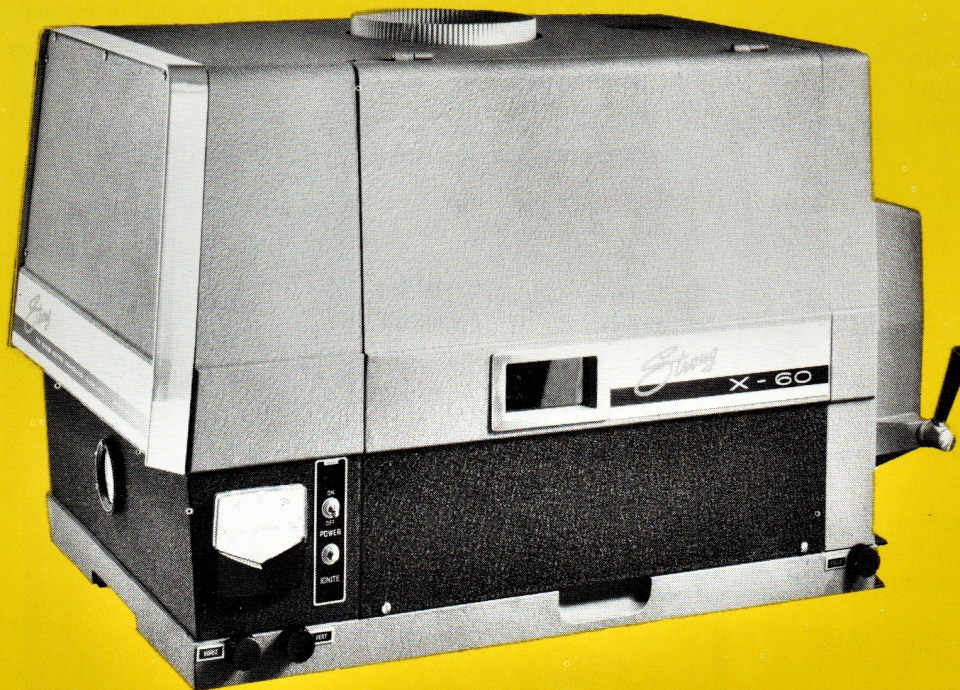
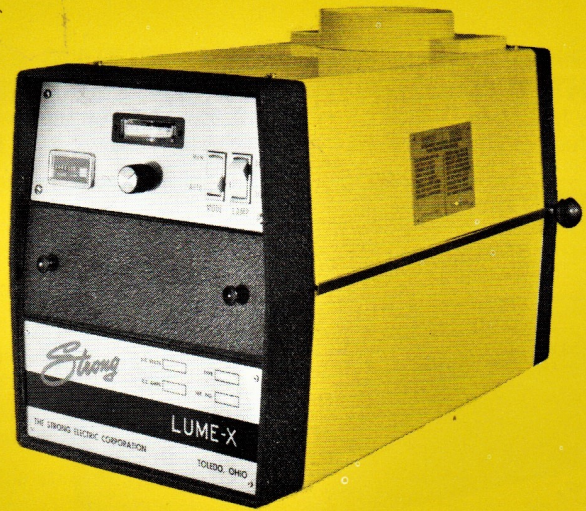


Strong

XENON PROJECTION SYSTEMS

For All Theatre Screens

Lume - X Systems
for Indoor Screens
up to 45 feet wide



X-60B Systems for
Indoor Screens over
40 feet wide and all
Drive In Screens

STRONG ELECTRIC DIVISION Holophane Company, Inc.
A JOHNS-MANVILLE COMPANY

Lume-X Xenon Projection Systems

Catalog numbers: 65099 Lume-X System 1600 Watt
65098 Lume-X System 1000 Watt

Lume-X lamphouse systems are available for use with 1000 and 1600 watt bulbs and are shipped from the factory equipped with adapters so that more than one manufacturer's bulbs may be used.

Systems are designed to fit a standard projector base and no special adapters are required for lamphouse mounting. Alignment instructions and necessary alignment tools are included with each pair of lamphouses.

All lamphouses are pre-wired for both automated and manual operating mode, and will adapt to most automation systems.

Both standard and "ozone free" Xenon bulbs may be used in Lume-X lamphouses. Heat generated by Xenon bulbs should be removed from projection rooms and, while some bulbs emit less ozone than others, all bulbs emit some ozone. Therefore, all Strong lamphouses are equipped with exhaust vents and Strong recommends all Xenon projection systems be vented by a forced air exhaust system to outside atmosphere.

Lume-X Lamphouse Features



- Meets SMPTE standards for screen brightness on screens up to 45 feet wide (1600 watt bulb, 70 ampere) and up to 35 feet wide (1000 watt bulb, 50 amperes).
- Precision made deep metal reflector, aluminized, with over-coating of quartz.
- Projects a flat field, with a minimum uniformity of 80%.
- Interference coated heat filter (not required for 1000 watt use).
- Built-in blower for cooling bulb and lamphouse (to supplement recommended exhaust system).
- DC ammeter and hour meter.
- Safety interlock switches on lamphouse removable cover and blower system.
- Trouble free igniter provides instant automated or manual ignition.
- Solid construction using castings and heavy gauge aluminum.
- Horizontal bulb mounting.

Net Weight — 60 lbs. Length — 23"
Shipping Weight — 74 lbs. Width — 15¼"
Packed Dimensions — Height — 17"
27" x 17" x 23"

Lume-X Power Supply Features

- Compact, lightweight, using solid state components.
- Current regulated, operates from either 115 or 230 volt single phase AC line.
- Can be located adjacent to or remote from projector pedestal for easy installation.
- Built-in blower for cooling.
- Operates either 1000 or 1600 Watt Xenon bulbs.
- Continuous duty.
- Line control relay.

Net Weight — 156 lbs. Length — 21"
Shipping Weight — 166 lbs. Width — 17½"
Packed Dimensions — Height — 9"
25" x 19" x 12"



X-60B Xenon Projection Systems

Catalog Numbers: 81098 X-60B System 150 Ampere
81097 X-60B System 100 Ampere

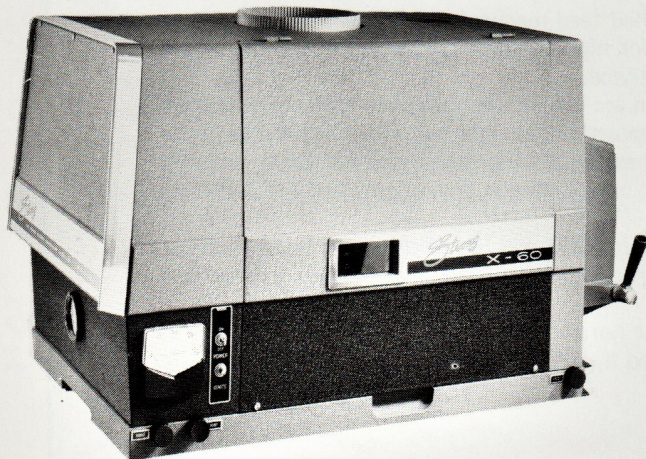
Strong X-60B Xenon projection systems are designed for use with large indoor screens and all drive-in screens. 100 ampere systems operating at 90 amperes project light equivalent to a 150 ampere 13.6 MM positive Carbon Arc lamphouse. 150 ampere systems project as much as 20% more light than a 13.6 Carbon Arc operating at 160 amperes.

All systems fit standard projector bases and are pre-wired for automation or manual operating mode.

A deep ellipsoidal interference coated TUF COLD reflector with an increased light collection angle is the heart of X60B lamphouse optical systems. Research has proven that, above 3000 Watts, a metal/heat filter combination light collection system is not as efficient as a glass reflector. Strong's TUF COLD reflector will pass between 15% and 20% more light through the aperture--without incurring film damage.

Xenon bulbs used in X-60B are built to strict specifications that provide the highest maintained light output throughout bulb life. Lumen output after 1000 hours of operation will be within 10% of lumens projected when the bulb was new.

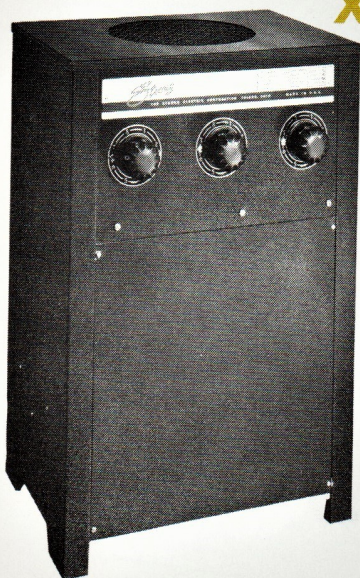
X-60B Lamphouse Features



Net Weight — 125 lbs. Length — 37 1/4"
Shipping Weight — 260 lbs. Width — 23-1/8"
Packed Dimensions — 45" x 32" x 32" Height — 21-5/16"

- Meets SMPTE Standards for screen brightness on indoor screens up to 85 feet wide and drive-in screens up to 115 feet wide (150 ampere bulb); or indoor screens up to 75 feet wide and drive-in screens up to 100 feet wide (100 ampere bulb).
- Deep precision built ellipsoidal TUF COLD glass reflector.
- Solid construction with all components mounted to heavy cast aluminum optical base.
- Magnetic arc stabilization.
- Built-in blower for cooling bulb and lamphouse (to supplement recommended exhaust system).
- DC ammeter and hour meter.
- Trouble free ignitor.
- Single control knob for focusing.
- Horizontal bulb mounting.
- Safety interlock switches on lamphouse door and blower system.

X-60B Power Supply Features



150 AMPERE

Net Weight — 385 lbs.
Shipping Weight — 415 lbs.
Packed Dimensions —
27" x 22" x 39"

Width — 24"
Depth — 17"
Height — 36"

- Heavy duty high reactance type transformers using class H (glass) insulation.
- Silicon diode rectifying elements.
- Operates from 230 volt, 60 hertz, 3 phase line.
- Over/under nominal line voltage variations corrected by four coarse line taps and three external tap changing dial switches with eight fine taps for each phase.
- Designed for continuous duty.
- Heavy duty cooling fan.
- Line control relay.

100 AMPERE



Net Weight — 240 lbs. Height — 19"
Shipping Weight — 300 lbs. Depth — 30"
Packed Dimensions — 36" x 18" x 24" Width — 13 1/4"

- Heavy duty high reactance type transformers using class H (glass) insulation.
- Silicon diode rectifying elements.
- Operates from 230 volt, 60 hertz, 3 phase line.
- Coarse and fine voltage adjustments for correcting over/under nominal line voltage variations.
- Compact size, can be installed adjacent to or remote from projector base.
- Line control relay.

THROUGH THE YEARS —

Strong Electric's half a century of experience in developing lamphouse systems that provide dependable service and performance over the long haul is proven. Strong has always given consideration to quality of workmanship, ease of service, maintenance and maximum performance. Strong has been the leader in developing lamphouses to satisfy the changing requirements of motion picture film projection.

Strong developed the first acceptable arc controlled feed mechanism for low intensity carbons in 1924, progressing into arc controlled feed systems for high intensity carbons in the 1930's. Many Strong lamphouses built during that period are still in service.

Strong developed the first rotating positive carbon arc lamphouses equipped with automatic arc crater positioning to satisfy the post World War II increased screen light requirements resulting from changes in film format and increased screen widths. These lamphouses have been constantly changed and improved to meet new screen lumen requirements, culminating in Strong's present FUTURA arc lamphouses.

Strong began testing vertical mount Xenon bulbs in 1959 and has been testing bulbs continuously since, 20 minutes on, 5 minutes off. Strong introduced the first U.S. built Xenon projection lamphouse system in 1961.

Strong initiated development of Xenon bulbs for horizontal mounting by various bulb manufacturers and began testing these bulbs in 1966, followed by the introduction of the first horizontally mounted Xenon projection system in 1968.

NOW —

Strong has developed and introduced the ultimate in Xenon systems, the X60B model projecting more screen light -- with less aperture heat -- than any other system, and the Lume-X model, a smaller, more compact lamphouse projecting maximum light from lower wattage bulbs. These two new systems with a choice of bulb sizes meet the requirements of all theatre screens.

LUME-X AND X-60B SYSTEMS FOR INDOOR SCREENS

TO MEET SMPTE STANDARDS — CINEMASCOPE 1.5 GAIN — FI. 7 LENS

Lume-X	1000 watt bulb, screens 10 to 35 feet wide
Lume-X	1600 watt bulb, screens 25 to 45 feet wide
X-60B	100 Ampere bulb, screens 40 to 75 feet wide
X-60B	150 Ampere bulb, screens 55 to 85 feet wide

X-60B SYSTEMS FOR DRIVE-IN SCREENS

TO MEET SMPTE STANDARDS — CINEMASCOPE MATTE SCREEN, FI. 7 LENS

X-60B	100 Ampere bulb, screens 55 to 100 feet wide
X-60B	150 Ampere bulb, screens 75 to 115 feet wide

All Strong motion picture projection systems are available for demonstrations in theatres. Contact your theatre equipment dealer or write to the factory for details.

DISTRIBUTED BY:

STRONG ELECTRIC DIVISION
Holophane Company, Inc.
87 City Park Avenue
P. O. Box 1003, Toledo, Ohio 43697
(419) 248-3741 Telex: 286033

Holophane

Strong

Strong Electric Division
P.O. Box 1003, 87 City Park Avenue
Toledo, Ohio 43697
419-248-3741/Telex: 286-033

STRONG HELPS YOU ENTERTAIN
YOUR CUSTOMERS

WE COVER THE U.S.A. FOR YOU

WEST: Red Hughes; Telephone: 213-776-4925

MIDWEST: Lou Brandl; Telephone: 419-248-3741

EAST: Ken Wilson; Telephone: 201-573-0700

WE HAVE A LIGHT FOR ALL SCREENS

INDOOR: From 10 To 45 Feet Wide (LUME-X)

From 40 To 85 Feet Wide (X-60B)

DRIVE-IN: From 55 To 115 Feet Wide (X-60B)

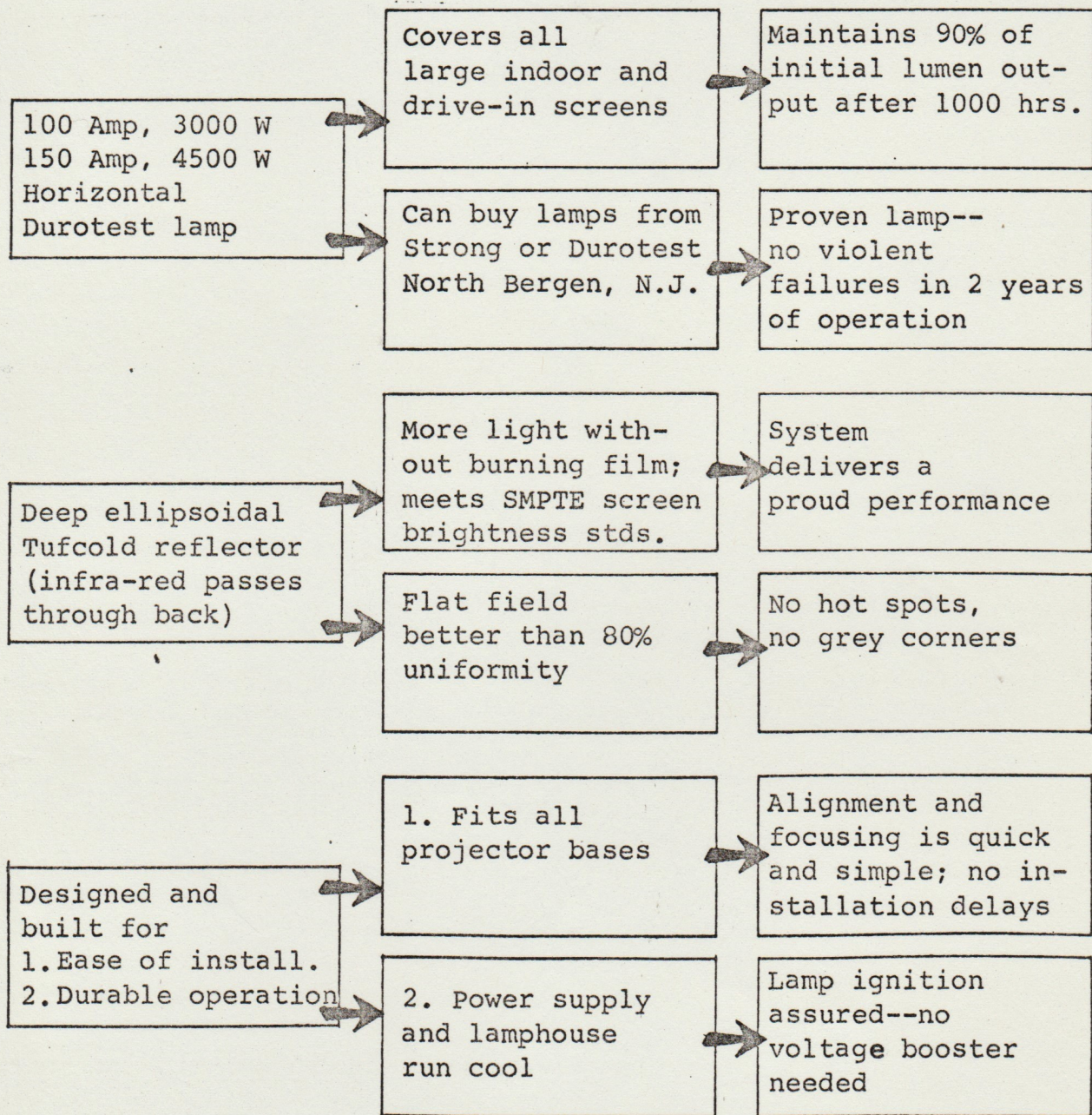
WE'LL MAKE DEMONSTRATIONS FOR YOU.
CALL YOUR DEALER OR US.



X-60B XENON PROJECTION SYSTEM

Product Features

Owner Benefits

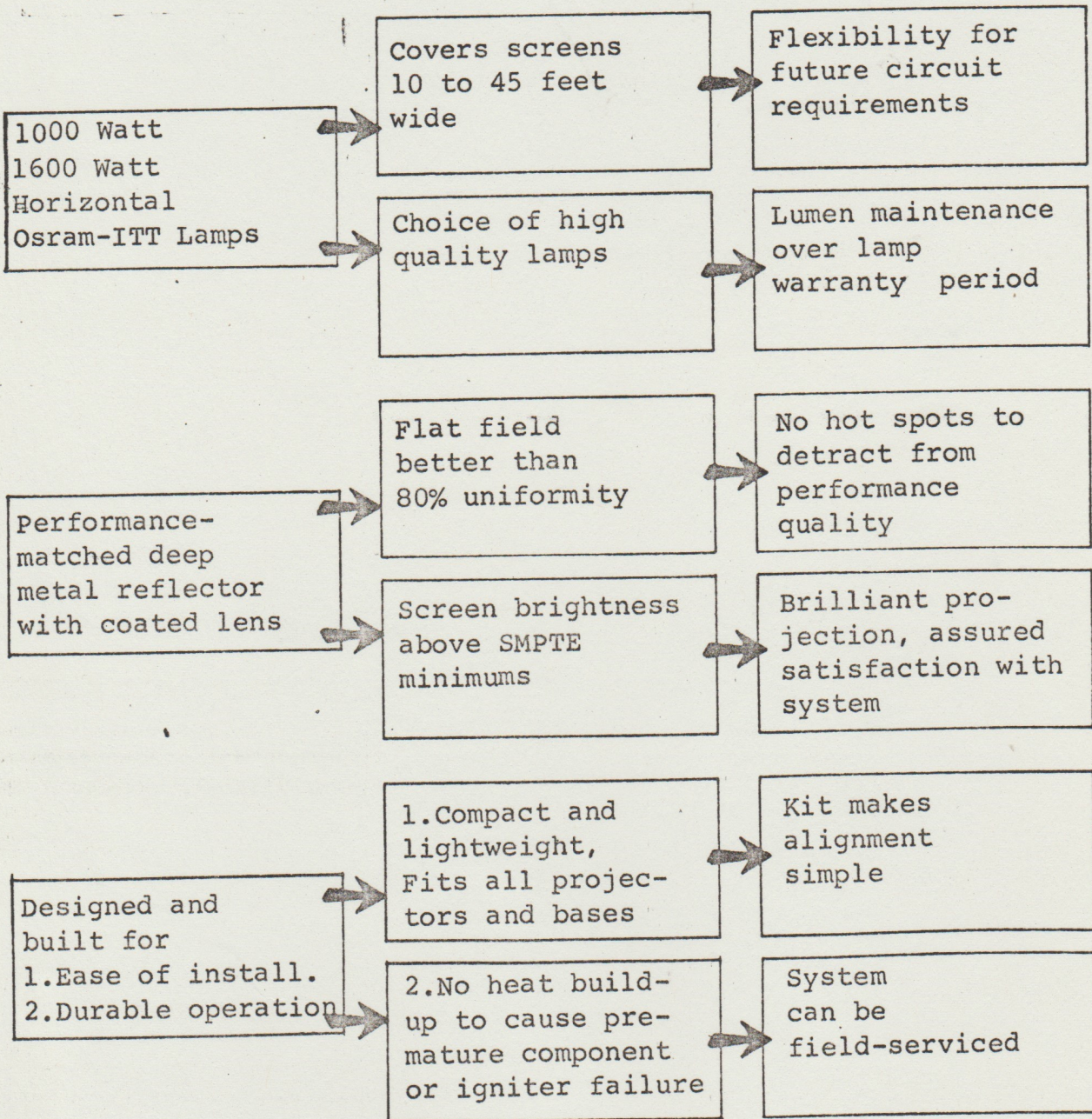




LUME-X XENON PROJECTION SYSTEM

Product Features

Owner Benefits



NEWS

FOR ADDITIONAL INFORMATION:

From: THE STRONG ELECTRIC DIVISION

WENDT ADVERTISING AGENCY, INC.
SPITZER BUILDING • TOLEDO, OHIO 43604
PHONE 243-9253

For:

A FIRST IN RICHMOND

Cloverleaf Twin Theatres score a first in Richmond as the only theatre located in the largest enclosed mall in the Richmond area.

Owned by District Theatres Corporation, headquartered in Washington, D.C., the Cloverleaf Twins boast 4 Strong LUME-X Xenon Lamp Systems. Mr. Joe Mona, General Manager, says LUME-X has provided "the finest picture in any of his theatres".

Cloverleaf Twin Theatres are fully automated and have in excess of 1,000 seats.

Strong Electric, the most experienced manufacturer of projection arc lamps, promises more light, less heat and better lumen maintenance with the LUME-X Xenon Lamp.

LUME-X systems are available with 1000 watt bulbs for small screens and 1600 watt bulbs for screens up to 45 feet wide. They are adaptable to any automation system.

The new Strong LUME-X fits any standard projector base, with no adapters required, and adapts to any standard exhaust system. The bulb is installed through the top of the lamphouse without disturbing alignment. The entire system is designed for easy and simple maintenance. A trouble-free ignitor

Cloverleaf Twin Theatres
Strong Electric Division
Page Two

provides instant ignition. Models for 16mm projection are also available.

For complete information, write The Strong Electric Division, City Park Avenue, Toledo, Ohio 43601.

The Strong Electric Division is a subsidiary of Holophane Company, Inc.

STRONG MOTION PICTURE PROJECTION EQUIPMENT PRICE LIST

November 1, 1972

(Supersedes Price List Dated April 5, 1971)

SPECIAL COMBINATION LAMP AND RECTIFIER PRICE

Type	Xenon Arc Model Combinations (Less Bulbs)	Price Each	Net Each Additional For Export Packing
81098	X-60B, XENON LAMP AND RECTIFIER, 150 C.R. for 35mm; 120-155 amperes, includes: 1 - #81000 X-60B Lamp w/15-3/4" Tufcold Reflector Spec. 271 1 - #77008 X-60 Silicon Rectifier 220 Volt, 60 Hz, 3 Phase	3,750.00	45.00
81097	X-60B, XENON LAMP AND RECTIFIER, 100 C.R. for 35mm; 80-100 Amperes, includes: 1 - #81000 X-60B Lamp w/15-3/4" Tufcold Reflector Spec. 271 1 - #84002 Silicon Rectifier, 208V. Nom., 60 Hz., 3 phase	3,550.00	45.00
82099	X-25 XENON LAMP & RECTIFIER, 100 Ampere for 35mm; 80-100 Amperes, includes: 1 - #82000 X-25 Lamp w/15" Tufcold Reflector Spec. 269 1 - #84002 X-25 Silicon Rectifiers 208V. Nom., 60 Hz., 3 phase	3,100.00	40.00
82098	X-25, XENON LAMP & RECTIFIER, 80 Ampere for 35mm; 65-85 Amperes: 1 - #82000 X-25 Lamp w/15" Tufcold Reflector Spec. 269 1 - #84003 X-25 Silicon Rectifiers 208V. Nom., 60 Hz., 3 phase	3,100.00	40.00
65099	Lume-X System - 1600 W. includes: 65000 Lamphouse, 88001 Power Supply, 115/230 Volt, 60 Hertz., single phase for use with 1600 W. horizontal xenon bulb, 65122 Heat Filter	2,410.00	40.00
65098	Lume-X System - 1000 W. includes: 65000 Lamphouse, 88001 Power Supply, 115/230 Volt, 60 hertz., single phase for use with 1000 W. horizontal xenon bulb	2,370.00	40.00

Note: The heat filter required for 1600 W. operation is the only difference in systems 65099 & 65098. The heat filter must be used with 1600 W. bulbs.

STRONG PRICE LIST

Nov. 1, 1972

Type	Mighty Mite Xenon Lamp and Rectifier for 35mm presentation, furnished with #23629 field flattener lens kit, adapter brackets, nose cone.	Price Each	Net Each Additional For Export Packing
80099	1 - #80000 MIGHTY MITE 1600 Watt Lamp w/9-1/4" Silver Reflector, Spec. 265 1 - #79003 MIGHTY MITE Silicon Rectifier 230 Volt, 60 Hz, 1 Phase	2,325.00	40.00
80098	1 - #80000 MIGHTY MITE 1600 Watt Lamp w/9-1/4" Silver Reflector, Spec. 265 1 - #84004 MIGHTY MITE Silicon Rectifier 230 Volt, 60 Hz, 3 Phase	2,500.00	40.00

NOTE: Add \$75.00 List if Tufcold Reflector, Spec. 262 is required.
For use with automation equipment, advise manufacturer and model.

900 Watt systems available in Mighty Mite series.

Carbon Arc Model Combinations

93095	FUTURA II LAMP AND BI-POWR RECTIFIER 135 to 160 ampere, includes: 2 - #93001-9 FUTURA II, 13.6mm, Tufcold Reflector 1 - #74001 BI-POWR rectifier	7,000.00	75.00
93096	FUTURA II LAMP AND BI-POWR RECTIFIER 120 to 135 ampere, includes: 2 - #93001-8 FUTURA II, 13.6mm, Tufcold Reflector 1 - #74000 BI-POWR rectifier	6,650.00	75.00
93097	FUTURA II LAMP AND BI-POWR RECTIFIER 100 to 125 ampere, includes: 2 - #93001-7 FUTURA II, 11mm, Tufcold Reflector 1 - #74000 BI-POWR rectifier	6,600.00	75.00
93093	FUTURA I LAMP AND BI-POWR RECTIFIER 130 to 160 amperes, includes: 2 - #93000-5 FUTURA I, 13.6mm, Tufcold Reflector 1 - #74001 BI-POWR rectifier	6,900.00	75.00
93092	FUTURA I LAMP AND BI-POWR RECTIFIER 120 to 135 amperes, includes: 2 - #93000-6 FUTURA I, 13.6mm, Tufcold Reflector 1 - #74000 BI-POWR rectifier	6,550.00	75.00

IMPORTANT

1. Specify exact amperage
2. Specify if water or air cooled contacts
3. Specify if for 35mm or 35/70mm projector.

STRONG PRICE LIST

Nov. 1, 1972

Type	Carbon Arc Model Combinations	Price Each	Net Each Additional For Export Packing
93094	FUTURA I LAMP AND BI-POWR RECTIFIER 110 to 125 amperes, includes: 2 - #93000-4 FUTURA I, 11mm, Tufcold Reflector 1 - #74000 BI-POWR rectifier	6,500.00	75.00
93099	FUTURA I LAMP AND BI-POWR RECTIFIER 75 to 105 amperes, includes: 2 - #93000-3 FUTURA I, 11mm, Tufcold Reflector 1 - #74003 BI-POWR rectifier	6,250.00	75.00
93098	FUTURA I LAMP AND BI-POWR RECTIFIER 75 to 95 amperes, includes: 2 - #93000-3 FUTURA I, 11mm, Silvered Reflector 1 - #74003 BI-POWR rectifier	6,000.00	75.00

Note: Shipping weight for Futura/Bi-Powr combinations average 1150 lbs.

IMPORTANT

1. Specify exact amperage
2. Specify if water or air cooled contacts.
3. Specify if for 35mm or 35/70mm projection.

PROJECTION LAMPS FOR 35mm AND/OR 70mm OPERATION

CARBON ARC

93001-9	FUTURA II Lamp, complete with 18" Tufcold reflector, automatic crater positioning, 13.6mm W/C pos. contacts, 135-160 ampere.	2,350.00	30.00
93001-8	FUTURA II Lamp, complete with 18" Tufcold reflector, automatic crater positioning, 13.6mm water or air cooled positive contacts, 120 to 135 amperes.	2,350.00	30.00
93001-7	FUTURA II Lamp, complete with 18" Tufcold reflector, automatic crater positioning, 11mm water or air cooled positive contacts, 100-125 amperes.	2,325.00	30.00

STRONG PRICE LIST

Nov. 1, 1972

Type		Price Each	Net Each Additional For Export Packing
93000-5	FUTURA I Lamp, complete with 18" Tufcold reflector, 13.6mm water cooled positive contacts, 130-160 ampere.	2,300.00	30.00
93000-6	FUTURA I Lamp, complete with 18" Tufcold reflector, 13.6mm water or air cooled positive contacts, 120-135 ampere.	2,300.00	30.00
93000-4	FUTURA I Lamp, complete with 18" Tufcold reflector, 11mm water cooled or air cooled positive contacts, 110-125 ampere.	2,275.00	30.00
93000-3	FUTURA I LOW CURRENT Lamp, complete with 18" Tufcold reflector 11mm water or air cooled positive contacts, 75-105 ampere.	2,275.00	30.00
*93000-3	FUTURA I LOW CURRENT Lamp, complete with 18" silvered reflector, 11mm water or air cooled positive contacts, 75-95 ampere. Shipping Weight 320 pounds.	2,150.00	30.00
*Not recommended for 70mm when operated under 90 amps.			
2599-1	MAGNARC 45/80 ampere, 7, 8 or 9mm positive, 6, 7 or 8mm negative. Shipping Weight 128 pounds.	1,450.00	30.00
48004	UNIVARC - 40 amp. (35mm) Shipping weight 90 pounds. (Indicate if for Simplex Projector)	950.00	15.00

NOTE: Water cooled positive contacts recommended for 11mm trim operating 115 amperes or higher and 13.6mm trim operating 130 amperes or higher.

Approximate shipping weight for Futura lamps 320 pounds.

IMPORTANT

1. Specify exact amperage.
2. Specify if water or air cooled contacts.
3. Specify if for 35mm or 35/70mm projection.

STRONG PRICE LIST

Nov. 1, 1972

CARBON ARC RECTIFIERS - SILICON TYPE

Type		Price Each	Net Each Additional For Export Packing
74001	BI-POWR 120/160 Amp., 208/220V, 60 Hz., 3 phase for angle trim. Line current 39.5 amperes. Shipping Weight 540 pounds.	2,700.00	25.00
74000	BI-POWR 90/135 Amp., 208/220V, 60 Hz., 3 phase for angle trim. Line current 38 amperes. Shipping Weight 430 pounds.	2,100.00	25.00
74003	BI-POWR 75/105 Amp., 208/220V, 60 Hz., 3 phase for angle trim. Line current 25 amperes. Shipping Weight 390 pounds	1,850.00	25.00
74002	BI-POWR 45/85 Amp., 208/220V, 60 Hz., 3 phase for coaxial trim. Line current 13 amperes. Shipping Weight 315 pounds.	1,750.00	25.00
94000	RED ARROW, 90/135 Amp., 220V, 60 Hz., 3 phase for angle trim. Line current 33.5 amperes. Shipping Weight 290 pounds.	1,500.00	25.00

CARBON ARC RECTIFIERS - SELENIUM TYPE

94001	RED ARROW, 135/180Amp., 220V, 60 Hz., 3 phase for angle trim. Line current 49 amperes. Shipping Weight 320 pounds.	1,980.00	25.00
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CARBON ARC RECTIFIERS - TUBE TYPE

16200	UTILITY 40 Amp., 220 Volt, Single Phase Line Current 9 Ampere less tubes. Shipping Weight 165 pounds.	625.00	15.00
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Note: For other single phase rectifiers consult the factory for price and delivery.

Rectifiers for odd voltage and/or Hertz add 10% to the list price. For 25 Hertz rectifier refer to factory for price and delivery.

ACCESSORIES

74914	KIT - BI-POWR Automation	275.00	
23479	Water Circulator, capacity 1 lamp or 1 projector	165.00	5.00
23578	DC Switching Unit for BI-POWR rectifier	125.00	

STRONG PRICE LIST

Nov. 1, 1972

Net Each
Additional
For Export
PackingPrice
Each

Type

XENON ACCESSORIES

80949	Ozone Filter, Mighty Mite	160.00
76920	Beam Expander Lens for 70mm or screening room	210.00
81910	X-60B Modification Kit	650.00
65122	Heat Filter for 1600 W. Lume-X Operation	40.00

XENON LAMPHOUSE BULBS

81918	150 C.R. (1000 Hour Rated) (Horizontal Bulb) for X-60B	1,195.00
81934A	100 C.R. (1000 Hour Rated) (Horizontal Bulb) for X-60B	765.00
82961	100 C.R. (1000 Hour Rated) (Horizontal Bulb) for X-25	765.00
82960	80 C.R. (1250 Hour Rated) (Horizontal Bulb) for X-25	750.00
65120	1600 W. (Horizontal Bulb) For Lume-X	350.00
65168	1000 W. (Horizontal Bulb) For Lume-X	250.00
76215	2500 Watt Vertical Bulb	475.00
76171	1600 Watt Vertical Bulb	345.00
76190	900 Watt Vertical Bulb	231.00

IMPORTANT!

MENTION LAMPHOUSE OR RECTIFIER TYPE AND SERIAL NUMBER WHEN ORDERING PARTS. ALL PRICES ARE F.O.B. TOLEDO, OHIO AND ARE SUBJECT TO CHANGE WITHOUT NOTICE.