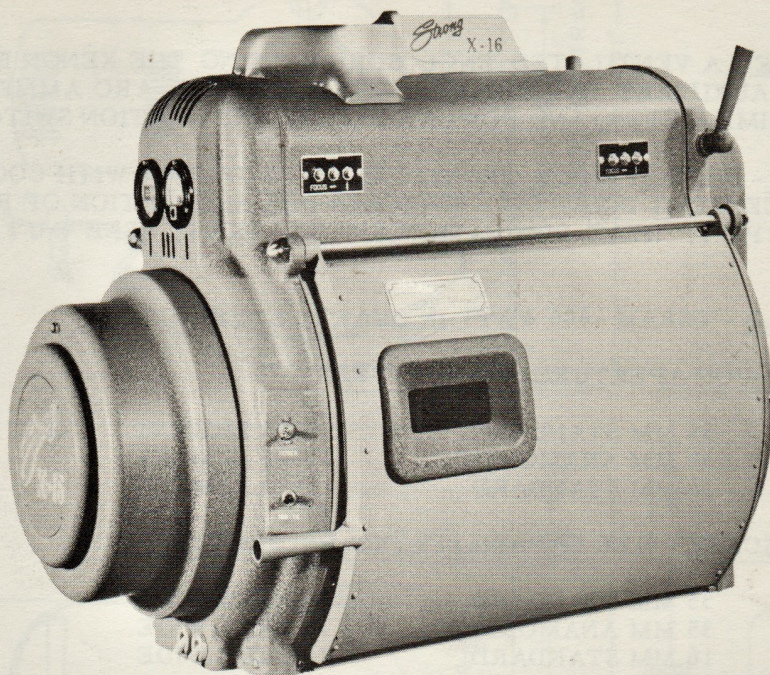


Strong

X - 16 XENON LAMP



HARDIN THEATRE SUPPLY CO.
714 S. HAMPTON RD. WH6-2232
DALLAS, TEXAS

DEVELOPED PRINCIPALLY FOR 35 AND 16 MM MOVING PICTURE PROJECTION THE STRONG X-16 LAMP WITH ASSOCIATED SILICON DIODE TRANSFORMER-RECTIFIER IS EQUIVALENT IN LIGHT OUTPUT TO A 46 AMPERE CARBON ARC. EMPLOYING A 1600 WATT OSRAM XENON BULB THE LAMP CAN ADEQUATELY ILLUMINATE A 24 FT. WIDE PICTURE.

THE XENON SOURCE IS IN REALITY AN ARC ENCLOSED IN A QUARTZ GLOBE AND POSSESSES ALL THE ADVANTAGES OF A CLEAN SOURCE. BECAUSE THE ELECTRODES ARE CONSUMED EXTREMELY SLOW THERE IS NOT PRESENT A PROBLEM OF FEEDING OR POSSIBILITY OF SHIFT OF FOCUS AS WHEN FASTER CONSUMING ELECTRODES ARE USED.

AN ELLIPSOIDAL MAIN REFLECTOR IS USED IN CONJUNCTION WITH A SPHERICAL AUXILIARY REFLECTOR TO GATHER AND MAGNIFY THE SOURCE TO THE REIMAGING POINT. THE IGNITER IS BUILT INTO THE X-16 LAMPHOUSE AND PROVIDES THE PROPER STARTING OR IGNITION VOLTAGE.

THE ASSOCIATED RECTIFIER IS SPECIALLY DESIGNED TO PROVIDE THE EXACT CURRENT CHARACTERISTIC AND REGULATION CAPABILITY FOR OPTIMUM OPERATION OF THE XENON SOURCE.

THE X-16 CAN BE UTILIZED FOR OTHER LIGHT OR HEAT SOURCE REQUIREMENTS WHERE AN INTENSE REIMAGED SPOT IS NECESSARY. SUCH SYSTEMS INCLUDE SOLAR SIMULATION, ARC IMAGING, ETC.

THE STRONG ELECTRIC CORPORATION

CITY PARK AVENUE • TOLEDO 1, OHIO

A SUBSIDIARY OF GENERAL PRECISION EQUIPMENT CORPORATION



TENTATIVE SPECIFICATIONS

LAMPHOUSE - A VENTILATED ENCLOSURE HOUSING THE XENON BULB, MAIN AND AUXILIARY REFLECTORS, THE IGNITER, ARC AMMETER, ELAPSED TIME METER, AND POWER CONTROL AND IGNITION SWITCHES.

RECTIFIER - SILICON DIODE TRANSFORMER RECTIFIER WITH COOLING FAN. THREE EIGHT POINT DIAL SWITCHES FOR REGULATION OF RECTIFIER OUTPUT. HEAT DISSIPATION 850 BTU/HOUR. (SEE OUTLINE DRAWING.)

XENON BULB - OSRAM 1600 WATT IN QUARTZ ENVELOPE.

LIGHT THROUGH APERTURE, NO SHUTTER.

35 MM STANDARD	9500 LUMENS
35 MM ANAMORPHIC	11000 LUMENS
16 MM STANDARD	5500 LUMENS

MAXIMUM SCREEN SIZE CAPABILITY FOR PROJECTION

35 MM STANDARD	28 FEET WIDE
35 MM ANAMORPHIC	32 FEET WIDE
16 MM STANDARD	24 FEET WIDE

OPTICAL SPEED - f2.1

DIAMETER MAIN REFLECTOR - 14"

WORKING DISTANCE - (FROM REAR OF MAIN REFLECTOR TO REIMAGING POINT OR FILM LINE) ----- 33 INCHES

OPTICAL HEIGHT - CENTERLINE OF OPTICS IS 9 INCHES ABOVE OUTSIDE BOTTOM OF BASE PAN.

DRAFT STACK - A SIX INCH DIAMETER DRAFT STACK CONNECTED TO A FAN OF 100 CU. FT/MINUTE CAPACITY IS REQUIRED FOR EACH LAMP. (PROVIDED BY USER.)

D.C. INPUT TO LAMP - 50 TO 70 AMPERES AT 25 VOLTS, LOAD. NO LOAD VOLTAGE 95.

CONTROL CIRCUITS - FOUR #14 AWG WIRES BETWEEN RECTIFIER AND LAMP TERMINAL PANELS. (PROVIDED BY USER.)

A. C. INPUT TO RECTIFIER - 3 PHASE, 230 VOLTS, 60 CYCLE, 13 AMPERES PER PHASE (RECTIFIERS FOR OTHER VOLTAGES OR FREQUENCIES AVAILABLE ON SPECIAL ORDER.)

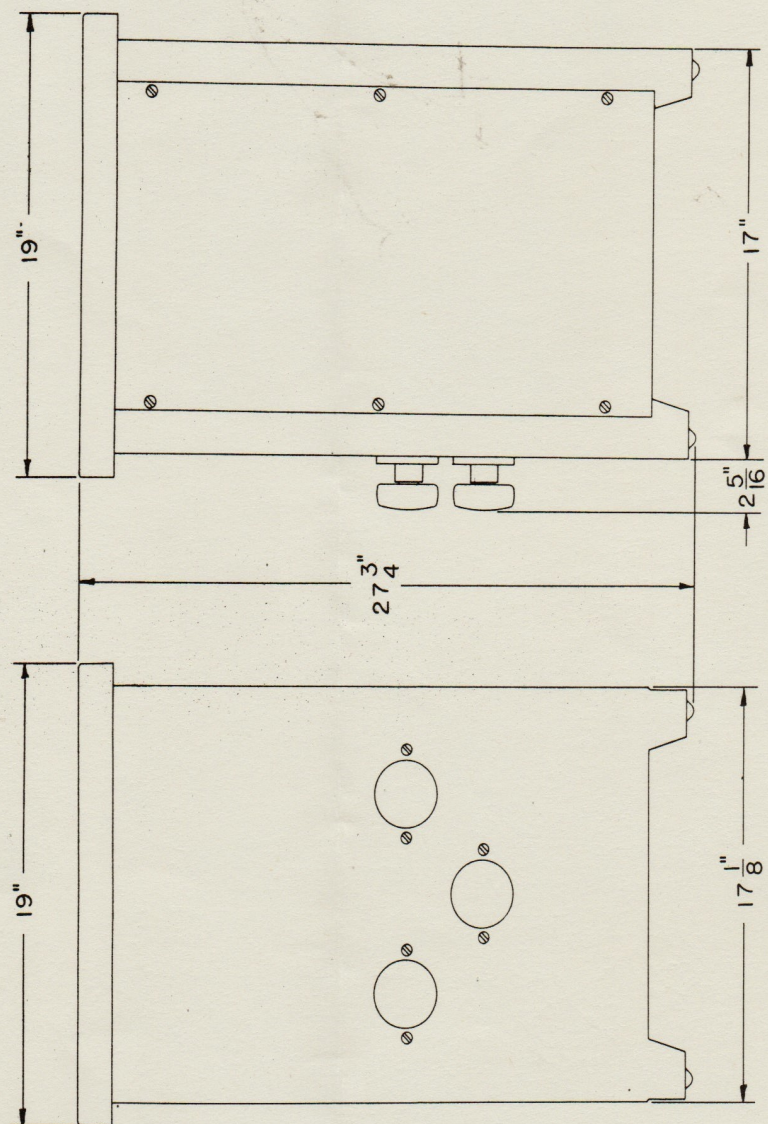
RECTIFIER PRIMARY PROTECTION - 20 AMPERE SUPERLAG FUSES AT SAFETY SWITCH. (PROVIDED BY USER.)

APRIL 15, 1962

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Plate 1800

PLATE 1801



WIRING DIAGRAM
PLATE 1799

