

**Engineered
LIGHTING and
CONTROL
EQUIPMENT**



"Quality Since 1914!"

Hub Borderlights

INDIVIDUAL REFLECTOR TYPE — WITH GLASS ROUNDELS

AVAILABLE IN ANY SPECIFIED LENGTH

U.L. Approved



If short sections of portable borderlights are desired, see Page 4 of this section for alternate mounting arrangements.

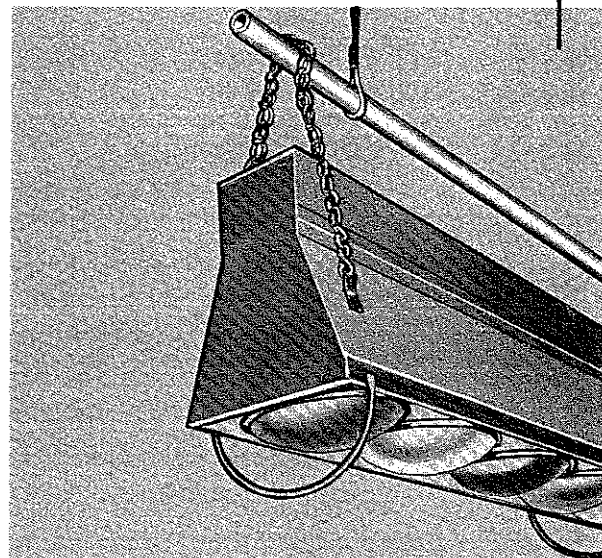
A superior quality borderlight suitable for blending with the spotlights and for toning. Also useful for providing general light for non-dramatic events.

SPECIFICATIONS: Furnished with individual, polished Lume Chrome reflectors (Also available with Alzak aluminum reflectors, when specified). Each reflector is fitted with a convex, heat-resisting pyrex glass roundel of color selected, held in place with an integral hinged retaining ring. Retaining ring can also hold gelatin frame, if desired, in place of roundel.

Housing is of 20-gauge galvanized steel, finished dull black. Furnished in any specified length, complete with heavy wire scenery guards and chain hangers, 48" on center, for hanging from pipe batten (not included).

Terminal box is placed at designated location — includes terminal block, bushing, and "U" bolt strain relief.

CIRCUITING: Each section is wired for three or more color circuits, as required, with 12-gauge, asbestos, color-coded wires. Additional circuit provided for down worklights, when specified. Pigtail leads (up to 3 ft., standard) or flush receptacles furnished, if specified, for connection of spotlights, floodlights, etc., at additional cost. (See Page 4 of this section.)

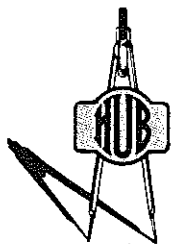


	Catalog No.	Lamp Accommodated	Center to Center Min. Outlet Spacing	Roundel Diameter	Width in Position	Approx. Net Wt. per Ft.
	23523	100 Watt, A-21	5"	4¼"	5½"	6 lbs.
	21623	100 Watt, A-21	6"	5⅝"	7½"	7 lbs.
	21625	150 Watt, A-23	6"	5⅝"	7½"	7 lbs.
	21830	200/300 Watt, PS-30	8"	7⅞"	9¼"	8 lbs.
	21235	300 Watt, PS-35 500 Watt, PS-40	12"	11¼"	14¼"	10 lbs.

Angle Type Reflectors — Preferred for First Borderlight Position

	21625-A	150 Watt, A-23	6"	5⅝"	7½"	7 lbs.
	21830-A	200/300 Watt, PS-30	8"	7⅞"	9¼"	8 lbs.

WHEN ORDERING: Specify borderlight length, roundel colors, number of circuits, and location of terminal box.



Hub Borderlights

CONTINUOUS REFLECTOR TYPE—USING COLORED TYPE "A" LAMPS
AVAILABLE IN ANY SPECIFIED LENGTH

U.L. Approved

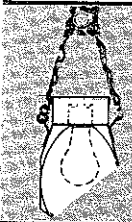
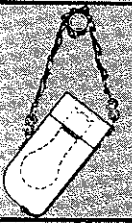
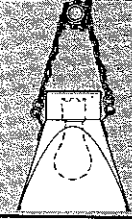
If short sections of portable borderlights are desired, see Page 4 of this section for alternate mounting arrangements.

The practical economy series, if budget is limited, or for a very small stage.

SPECIFICATIONS: For colored type "A" lamps up to 100 watts. Available with either a continuous baked white or Lume Crome reflector lining. Housing is of 20-gauge galvanized steel, finished dull black exterior. Furnished in any specified length, with heavy wire scenery guards (where required), and chain hangers, 48" on center, for hanging from pipe batten (not included).

Terminal box is placed at designated location—includes terminal block, bushing, and "U" bolt strain relief.

CIRCUITING: Each section is wired for three or more color circuits, as required, with 12-gauge, asbestos, color-coded wires. Additional circuit provided for down worklights, when specified. Pigtail leads (up to 3 ft., standard) or flush receptacles furnished, if specified, for connection of spotlights, floodlights, etc., at additional cost. (See Page 4 of this section.)

	Catalog Number		Center to Center Min. Outlet Spacing	Width in Position	Approx. Net Wt. per Ft.
	Baked White Reflecting Surface	Lume Crome* Reflector Lining			
	20804P	20804L	4"	5½"	5 lbs.
	20806P	20806L	6"	5½"	5 lbs.
	20808P	20808L	8"	5½"	5 lbs.
	20814P	20814L	4"	4¼"	4 lbs.
	20816P	20816L	6"	4¼"	4 lbs.
	20818P	20818L	8"	4¼"	4 lbs.
	20824P	20824L	4"	7½"	5 lbs.
	20826P	20826L	6"	7½"	5 lbs.
	20828P	20828L	8"	7½"	5 lbs.

*Alzak aluminum lining also available, if specified.

CAT. NO. 21629 BORDERLIGHT—utilizing R-40 or PAR-38 reflector lamps, and glass roundels.

Specifications of this borderlight are similar to those listed above. Housing is of 20-gauge galvanized steel, finished dull black inside and out. Utilizes 150 watt or 300 watt reflector lamps, 6" on center, with baffles between lamps. Furnished with convex, heat-

resisting PYREX glass roundels, in colors selected. Housing is hinged (approx. 18" doors) for servicing and to permit interchanging of gelatin frames, stripped glass filters, or glass roundels as required for specific applications. (Furnished standard with glass roundels.) Width in position, 7¼"; approximate net weight is 7 lbs. per foot.

WHEN ORDERING: To order any borderlight shown on this page, specify length, roundel colors (No. 21629 only), number of circuits, and location of terminal box.



Hub Borderlights With Flush Receptacles

U.L. LISTED

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

SEE SPOTLIGHT MOUNTING KIT ON REVERSE SIDE

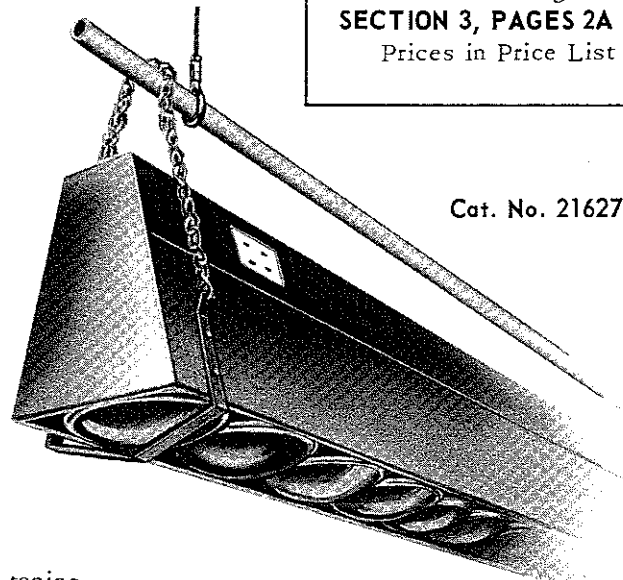
CATALOG SUPPLEMENT NO. 98

File in Catalog No. 100

SECTION 3, PAGES 2A AND 2B

Prices in Price List 101J

- Individual Reflector Type – with Glass Roundels
- Wired with Receptacles as Specified
- Available in any Specified Length



Cat. No. 21627

APPLICATION

A superior quality borderlight suitable for toning the set and for blending with spotlights in the acting area. Also useful for providing general light for non-dramatic events.

SPECIFICATIONS

Furnished with individual polished Lume-Crome reflectors*. Each reflector is fitted with a convex, heat-resisting Pyrex glass roundel of color selected, held in place with an integral hinged retaining ring. Retaining ring can also hold gelatin frame, if desired, in place of roundel.

Housing is of 20 ga. galvanized steel, finished dull black. Furnished in any specified length, complete with heavy wire scenery guards, chain and chain hangers, 48" on center, for hanging from pipe batten (pipe batten not furnished).

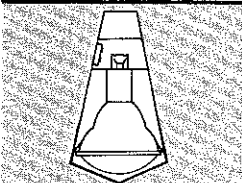
Terminal box is placed at designated location and includes terminal block, bushing and "U" bolt strain relief on 12 ga. plate and angle.

CIRCUIT SPECIFICATIONS

Each section is wired for three or more color circuits, as required, with 12 ga. asbestos, color-coded wires. Additional circuits provided for spotlights and worklights as specified. The number and type of receptacles will be as specified – flush pin plug receptacles with or without floating jack, twistlock receptacles, or parallel blade receptacles; all available with ground if desired. Such receptacles, when used in conjunction with Combination Border-Teaser Mounting Kit shown on the other side of this page, eliminates the need for separate batten plugging strips.

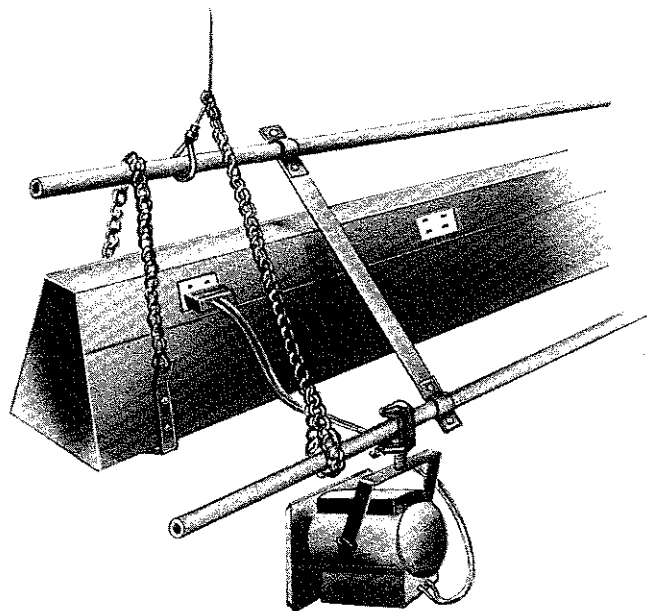
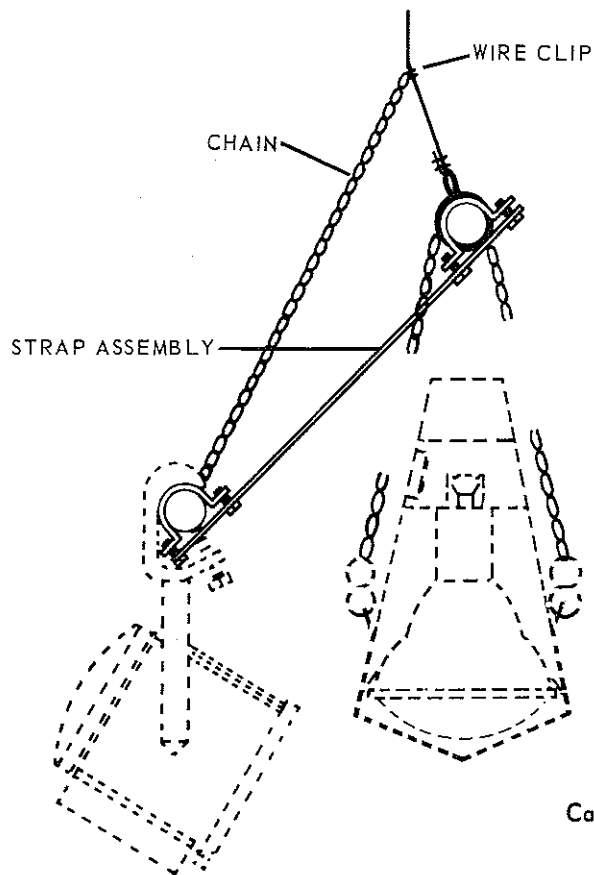
WHEN ORDERING: Specify borderlight length, roundel colors, number and arrangement of color circuits, number and arrangement of spotlight circuits, number, type and location of pin plug receptacles, and location of terminal box.

*Can be furnished with Alzak reflectors at no extra cost, when specified.

	CATALOG NUMBER	LAMP ACCOMMODATED	CENTER TO CENTER MIN. OUTLET SPACING	ROUND EL DIAMETER	WIDTH IN POSITION
	21624	100 Watt, A-21	6"	5-5/8"	8-1/4"
	21627	150 Watt, A-23	6"	5-5/8"	8-1/4"
	21833	200/300 Watt, PS-30	8"	7-9/16"	9-3/8"

Hub Combination Border-Teaser Mounting Kit

FOR USE WITH BORDERLIGHTS WIRED WITH PIN PLUG RECEPTACLES



Cat. No. 424 - Mounting Kit

APPLICATION

This Hub Combination Border-Teaser on a teaser batten Mounting Kit provides a secure, economical method of mounting spotlights in conjunction with borderlights provided with receptacles (see preceding page). Use of this kit eliminates need for a separate rigging set and a separate teaser plugging

strip — since lights can be plugged directly into borderlight circuitry.

SPECIFICATIONS

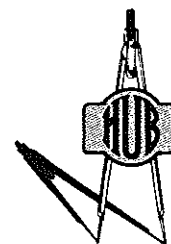
Kit consists of strap assembly, wire rope clip and chain. Method of use is as illustrated above.

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

HUB ELECTRIC COMPANY, INC. CHICAGO 12, ILLINOIS

Hub Borderlights

U.L. Approved



INDIVIDUAL REFLECTOR TYPE WITH GLASS COLOR SLIDES

AVAILABLE IN ANY SPECIFIED LENGTH

If short sections of portable borderlights are desired, see Page 4 of this section for alternate mounting arrangements.

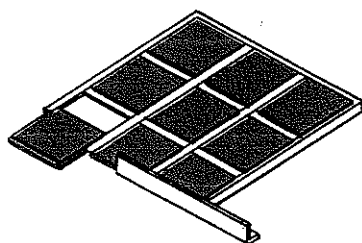
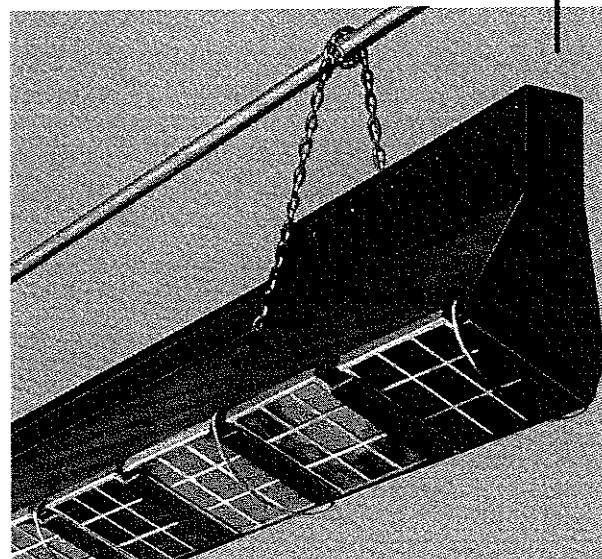
A unique type of borderlight for blending with the spotlights and for toning. Also useful for providing general lighting for non-dramatic events.

SPECIFICATIONS: Furnished with individual, polished Lume Crome reflectors. (Also available with Alzak aluminum reflectors, when specified.) Reflectors are fitted with removable sectional glass color slides of colors selected. No sectional glass slides supplied when "clear" is specified — lamps are unshielded.

Housing is of 20-gauge galvanized steel, finished dull black. Furnished in any specified length. Complete with heavy wire scenery guards and chain hangers, 48" on center, for hanging from pipe batten (not included).

Terminal box is placed at designated location — includes terminal block, bushing, and "U" bolt strain relief.

CIRCUITING: Each section is wired for three or more color circuits, as required, with 12-gauge asbestos, color-coded wires. Additional circuit provided for down worklights when specified. Pigtail leads (up to 3 ft. standard) or flush receptacles furnished, if specified, for connection of spotlights, floodlights, etc., at additional cost (See Page 4 of this section)



GLASS COLOR SLIDES ARE A HUB EXCLUSIVE

Each frame has nine glass segments, held loosely to allow for individual expansion and contraction. Any glass section can be removed or replaced without tools. In event of breakage of glass, danger of injury is reduced due to the small segments, and replacement is simple. All rails and mullions are of copper.

	Catalog No.	Lamp Accommodated	Center to Center Min. Outlet Spacing	Width in Position	Approx. Net Wt. per Ft.
	24623	100 Watt, A-21	8"	7½"	9 lbs.
	24625	150 Watt, A-23	8"	7½"	9 lbs.
	24830	200/300 Watt, PS-30	10"	10¼"	10 lbs.
	24235	300 Watt, PS-35 500 Watt, PS-40	12"	12½"	12 lbs.

Angle Type Reflectors — For First Borderlight Position

	24625A	150 Watt, A-23	8"	7½"	9 lbs.
	24830A	200/300 Watt, PS-30	10"	10¼"	10 lbs.

WHEN ORDERING: Specify borderlight length, glass slide colors, number of circuits, and location of terminal box.

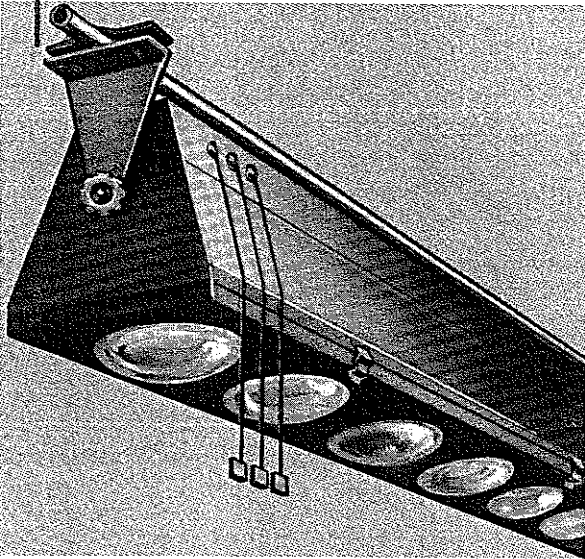


Hub Borderlights

PORTABLE TYPE — ALTERNATE MOUNTING POSITIONS

U.L. Approved

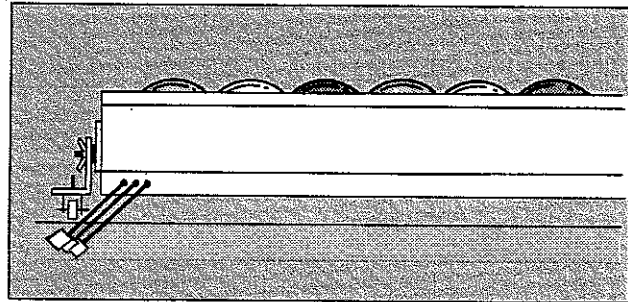
SPECIAL RECEPTACLES — UPPER WORKLIGHTS



Where it is desirable to order short sections of borderlights for portable use, all borderlights shown on pages 1, 2 and 3 of this section can be arranged for pipe clamp trunnion mounting, or mounting on castered cradle in addition to the standard chain hanger mounting. In either case, the maximum recommended length is 8 ft. 6 ft. sections are most commonly used. Each section is generally furnished with three 2-wire leads and connectors as illustrated, although any number of leads with any specified type of connector can be supplied, extending from one or both ends of each section. (Up to 3 ft. lead length is standard.)

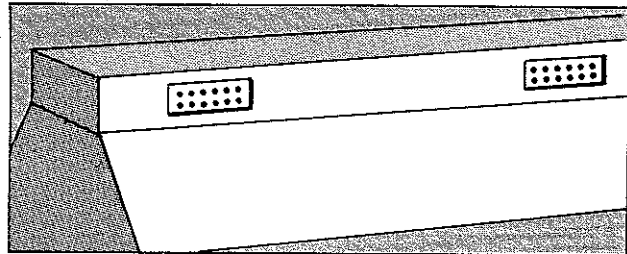
TRUNNION MOUNTING: Trunnion mounting to permit swivel action. Illustrated with three leads and pin plug connectors. To order, add suffix (TM) to catalog number of borderlight desired. Example: 21629-TM. Prices on application; give length of each section, number and location of pigtail leads, and type of connector desired.

CASTER CRADLE MOUNTING: Mounting on cradle with casters for mobile use on floor. Illustrated with three leads and pin plug connectors. To order, add suffix (CM) to catalog number of borderlight desired. Example: 21629-CM. Prices on application; give length of each section, number and location of pigtail leads, and type of connector desired.



FLUSH RECEPTACLES: All borderlights are available with pin plug type receptacles mounted flush in the borderlight wireway, ganged, spaced, and circuited as required. See illustration, showing two 6-gang groups.

All borderlights, in any length, are available with flush receptacles or with pigtail leads and pin plug or twistlock connectors. Any type receptacle or connector can be furnished. Prices on application.

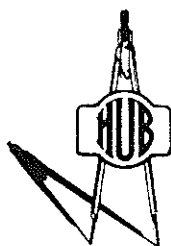


UPPER WORKLIGHT UNITS: Upper Worklight Units consist of reflector, glass roundel, retaining ring, attachment clamp, cable and plug to fit No. 526 receptacle (below).

No. WL-1625, with 100 or 150-watt reflector.

No. WL-1830, with 200-watt reflector.

WORKLIGHT RECEPTACLE: No. 526 Worklight Receptacle is a flush 15 amp., 125 volt, single standard receptacle mounted in top of borderlight. Specify when ordering borderlights.



Hub Portable Borderlights

U.L. Approved

QUALITY SINCE 1914

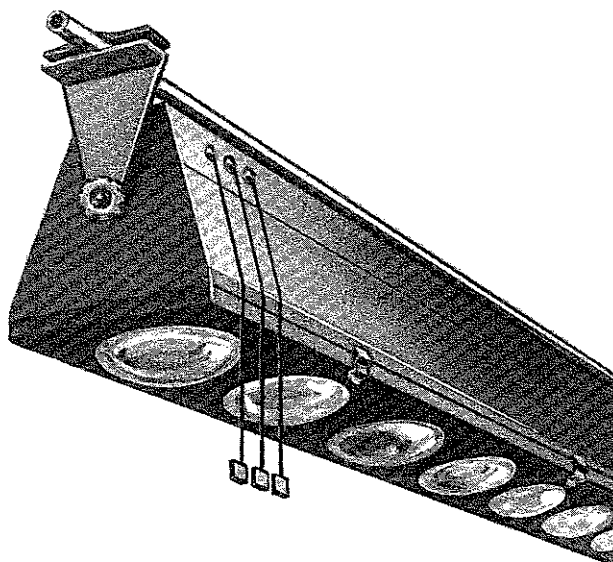
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 32

File in Catalog No. 100

SECTION 3, PAGES 4A AND 4B

Prices in Price List No. 101C



Cat. No. 21629-6

For use with PAR-38 or R-40 reflector lamps

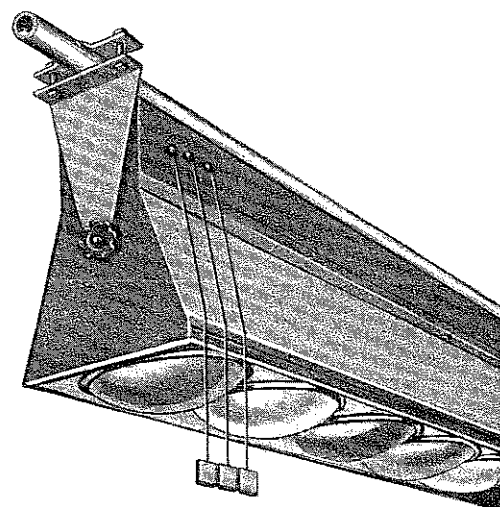
APPLICATION

These 6 ft. and 7½ ft. long borderlights are suitable for toning the set and for blending with the spotlights in the acting area.

SPECIFICATIONS

Six or 7½ foot long sections wired alternately for three colors and three circuits. Complete with six 24-in. pigtail leads and 15 A. pin-plug half-connectors (3 male at one end, 3 female at other end). 20 A. two-pole twistlock connectors available if desired. Adjustable bracket assembly for tilting adjustment furnished as illustrated. Complete with terminal box for feed cables. *Pipe Batten not included.*

Housing is of 20-gauge galvanized steel, finished dull black. Furnished standard with heat-resisting

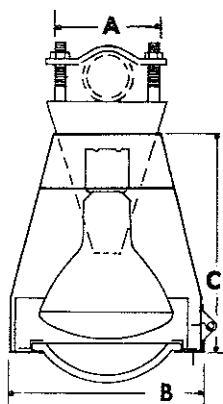


Cat. No. 21626-6

For use with 150 W. A-23 lamps and individual Lume-Crome* reflectors

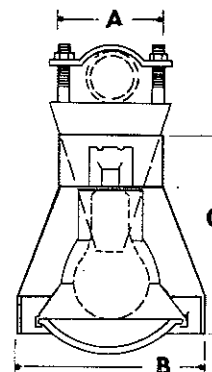
stippled glass roundels of colors selected. 50° spread convex, heat-resisting glass roundels or gelatin frames available in place of the stippled glass roundels at no extra cost. GELATIN NOT RECOMMENDED FOR USE WITH 300 WATT LAMPS.

BORDERLIGHTS FOR PAR-38 OR R-40 REFLECTOR LAMPS — Housing has individual baffles between lamps, 6 in. on center. Continuous hinged doors of convenient length. Combination hold-down assembly accommodates roundels or gelatin. Furnished with screw base receptacles.



CATALOG NUMBER	LENGTH	LAMPS ACCOMMODATED	DIMENSIONS		
			A	B	C
21629-6	6 ft.	12 - 150 W. PAR-38 or 150/300 W. R-40	4"	7-1/4"	8-5/8"
21629-7-1/2	7-1/2 ft.	15 - 150 W. PAR-38 or 150/300 W. R-40	4"	7-1/4"	8-5/8"

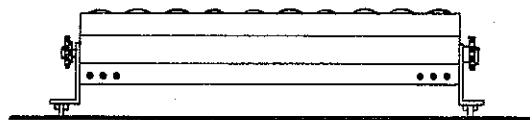
BORDERLIGHTS WITH INDIVIDUAL REFLECTORS - Furnished with polished Lume-Crome* reflector for each receptacle - each reflector is fitted with an integral hinged retaining ring to accommodate roundel or gelatin frame.



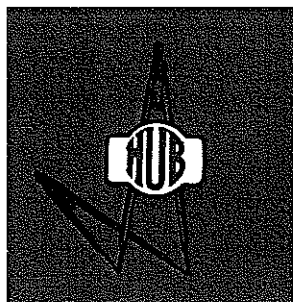
CATALOG NUMBER	LENGTH	LAMPS ACCOMMODATED	DIMENSIONS		
			A	B	C
21626-6	6 ft.	12 - 150 W. A-23	4"	7-1/2"	7-3/4"
21626-7½	7½ ft.	15 - 150 W. A-23	4"	7-1/2"	7-3/4"
21628-6	6 ft.	12 - 100 W. A-21	4"	7-1/2"	6-11/16"
21628-7½	7½ ft.	15 - 100 W. A-21	4"	7-1/2"	6-11/16"
21833-6	6 ft.	9 - 200/300 W. PS-30	4"	9-1/16"	10-1/16"
21833-7½	7½ ft.	12 - 200/300 W. PS-30	4"	9-1/16"	10-1/16"

AVAILABLE - Prices on Application

- Available less leads and connectors, or with three leads and connectors per section (at one end) instead of the standard six.
- Can be supplied wired for other than three circuits, with number of leads and connectors as specified.
- Available with any type grounded or ungrounded connector, when specified.
- Available in lengths shorter than 6 ft. Lengths longer than 7½ ft. not recommended.
- Available in caster cradle mounting for mobile use on floor as illustrated below. Add suffix (CM) to catalog number when ordering. Example: 21629-6CM or 21833-6CM.



*Also available with Alzak aluminum reflectors, when specified, at no extra cost.



Hub Junction Boxes and Connector Outlets

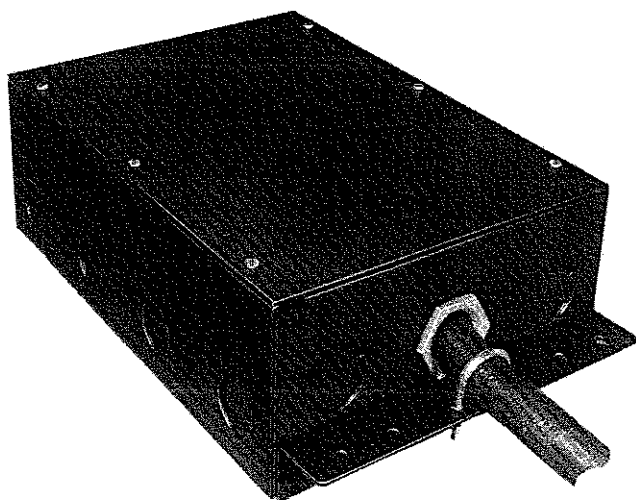
U.L. APPROVED

QUALITY SINCE 1914

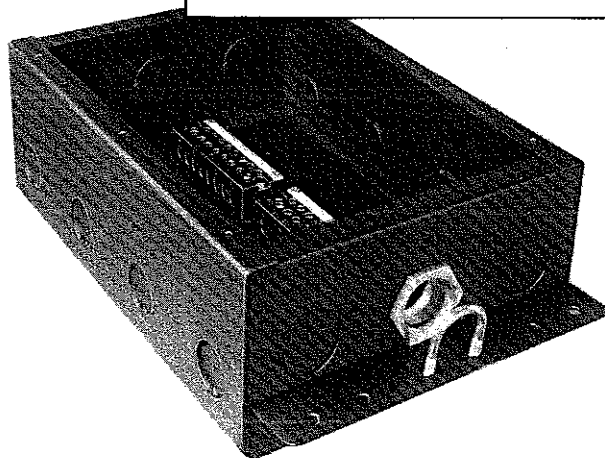
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 69

File in Catalog No. 100
SECTION 3, PAGES 4C AND 4D
Prices in Price List No. 101F



**SURFACE
MOUNTED**



PLASTER FRAME
INCLUDED

STAGE CABLE JUNCTION BOXES

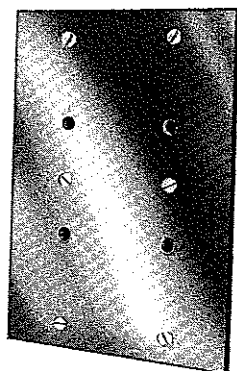
A safe, convenient connection between permanent Wiring and borderlight cable. Junction boxes can be mounted on the grid, ceiling or wall and are available in either surface or flush mounting models. Boxes are of code gauge steel, finished dull black inside and outside, with a heavy terminal strip and conduit knockouts on three sides. Cable entrances are provided with a bushing and heavy, strain-relief, "U" bolt clamps.

FLUSH MOUNTED – With Plaster Frame

OPTIONAL – Price on Application

- Larger sizes available, accommodating a greater number of conductors.
- Plaster frame available for flush mounted boxes at added cost.

Catalog Numbers		Max. No. of Conductors Accommodated	Dimensions in Inches		No. of 1" KO's per side	No. of 1 1/4" KO's per end	No. Cable Entrances
Surface Mtd.	Flush Mtd.		Housing	Flush Mtd. Face Plate			
10201	10301	8	10 x 14 x 5	11 1/2 x 15 1/2	4	3	1
10202	10302	16	10 x 14 x 5	11 1/2 x 15 1/2	4	3	1
10203	10303	24	10 x 22 x 5	11 1/2 x 23 1/2	6	3	1
10204	10304	32	10 x 30 x 5	11 1/2 x 31 1/2	8	3	2
10205	10305	40	10 x 30 x 5	11 1/2 x 31 1/2	8	3	2
10206	10306	48	10 x 34 x 5	11 1/2 x 35 1/2	9	3	2



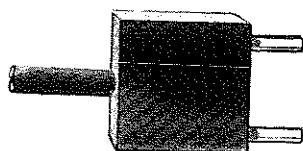
11028-2

FLUSH CONNECTOR OUTLETS

Available in 3 or more gang when specified.

Flush Connector Outlets are provided with a steel plate to fit standard outlet boxes. The female pin connector consists of floating, multi-finger type jacks. These floating jack receptacles readjust to insure positive contact at all times, even when male plugs become worn or out of alignment from use — eliminating overheating.

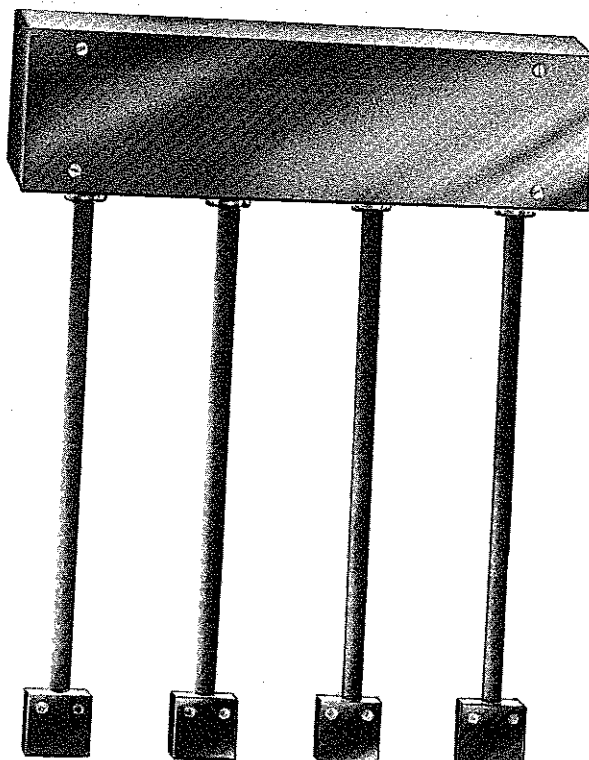
No. Gangs	Cap. Amps	Catalog Numbers	
		2-Pole	3-Wire Grounding
1	5	11027	11027-G
1	20	11028	11028-G
1	30	11029	11029-G
1	60	11030	11030-G
2	20	11028-2	11028-2-G
2	30	11029-2	11029-2-G



MALE PIN CONNECTORS

Male Pin Connectors are available for use with Flush Connector Outlets, Wall and Floor Pockets, etc. Order by catalog number.

Capacity, Amperes	Catalog Numbers			
	For Asbestos		For Cable	
	2-Pole	3-Wire Grounding	2-Pole	3-Wire Grounding
5	474-A	474-AG	474-C	474-CG
20	475-A	475-AG	475-C	475-CG
30	476-A	476-AG	476-C	476-CG
60	477-A	477-AG	477-C	477-CG



PLUGGING BOXES

Plugging Boxes provide a safe, convenient source of power to feed lights. Code gauge steel box finished dull black, with any number of female receptacles desired — these receptacles are either mounted flush on box or are on 18-inch pigtail leads of 2-wire rubber cable. Receptacle types available are 20 Amp., 2-pole floating multi-finger jack type pin plug, twistlock, or three-wire grounding type as specified.

Boxes are available in three mounting styles: 1. Surface Mounting, 2. Flush Mounting, and 3. Pipe Clamp Mounting, with clamps for 1-1/2-inch pipe.

ORDERING INFORMATION: Add number of pigtails or flush receptacles desired to catalog number (Example 20030-3). Two-wire plug receptacles are furnished standard; for twistlock receptacles add (-TL) to catalog number; for 3-wire grounding type receptacles, add (-G) to catalog number.

Mounting Type	Catalog Numbers	
	18" Pigtails	Flush Recept.
Surface	20030	20033
Flush	20031	20034
Pipe Clamp	20032	20035



Stage Lighting Accessories

QUALITY SINCE 1914

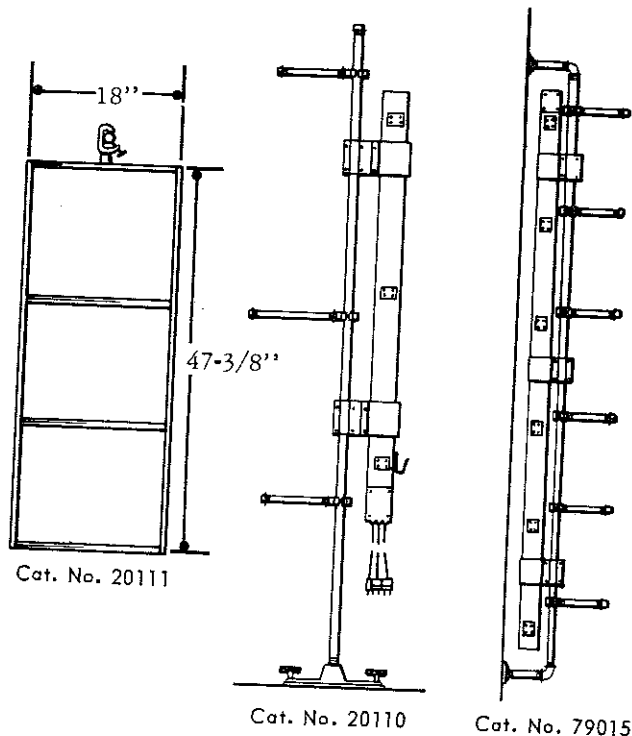
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 97A

File in Catalog No. 100

SECTION 3, PAGES 4E AND 4F

Prices in Price List 101J



Cat. No. 20111

Cat. No. 20110

Cat. No. 79015

SPOTLIGHT LADDER

CAT. NO. 20111 - For mounting of three spotlights or floodlights. Welded steel channel and 1" iron pipe construction. Equipped with "C" clamp at top for mounting to plugging strip pipe batten (not supplied). Ladder comes complete with three sets of 2-wire, No. 12 cables, each 6 ft. long and wired with male and female plugs (specify type of plugs desired).

TORMENTOR TREE

CAT. NO. 20110 - 3" x 5" x 6'6" long wireway with three flush duplex 20A pin plug receptacles wired on three circuits. Complete with three 5-ft. feed cables and 2-wire pin plugs. Wireway supplied with 10 ft. length of 1-1/2" pipe fitted with 24" dia. cast iron base, and three horizontal pipe arms for mounting of spotlights or floodlights. Designations supplied to identify circuits. Base, pipes, and fittings included; stage screws not supplied.

Variations in tree size, type of receptacles, number of receptacles, etc., can be supplied as specified.

TORMENTOR PLUGGING STRIP

CAT. NO. 79015 - 3" x 5" x 11 ft. long wireway with six flush duplex 20A pin plug receptacles and splice cover with terminal block and strain relief. Wireway supplied with 12 ft. length of 1-1/4" pipe fitted with mounting flanges and six pipe arms. Designations supplied to identify circuits.

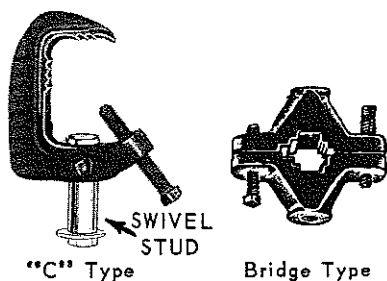
Available with any quantity and type of flush receptacles, pipe lengths, etc. Specify.



LIGHTING TOWERS

Mobile lighting tower with elevated platform. Welded angle iron construction, with ladder access to platform. Railing around front and sides of platform incorporate vertical, telescoping pipe stands and fittings for adjustable height mounting of lighting equipment. Tower bottom floored to hold additional lighting equipment as well as stabilizing counterweights. Storage hooks for stage cable under platform floor. Entire assembly on 4-in. heavy duty rubber-tired casters.

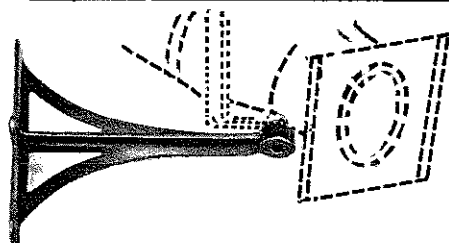
Catalog Number	Platform Dimensions	Height of Platform	No. of Pipe Stands
8700	24" x 30"	6 ft.	6
8720	30" x 42"	7 ft.	7



PIPE CLAMPS

For mounting of spotlights on pipes, in any position or angle.

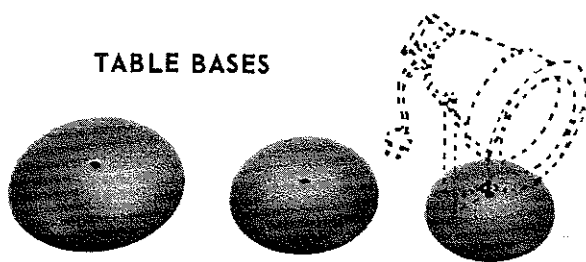
Catalog Number	Description
400-1/2	Bridge type, for 1-1/4" to 2" pipe. Tapped for 1/2-13 screw.
400-P	Bridge type, for 1-1/4" to 2" pipe. Tapped for 1/2" iron pipe.
401-5/16	"C" type, for 1" to 2" pipe, swivel stud. Tapped for 5/16-18 screw.
401-1/2	"C" type, for 1" to 2" pipe, swivel stud. Tapped for 1/2-13 screw.
401-P	"C" type, for 1" to 2" pipe, swivel nipple with 1/2 I.P. thread.
402	"C" type, for 1/2" to 1-1/4" pipe or on scenery flats 1/2" to 1-3/4" thick. Tapped for 1/4-20 screw.



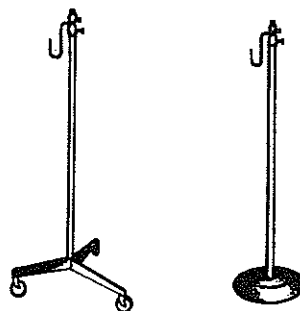
SPOTLIGHT WALL MOUNTING BRACKETS

Catalog Number	Description
500	For spotlights with max. 6" dia. lens. Tapped for 5/16"-18 screw.
501	For spotlights with 8" Fresnel lens. Tapped for 1/2"-13 screw.

TABLE BASES



Catalog Number	Base Dia.	Description
411	3-3/8"	For use with spotlights with 3" to 4" dia. lens
412	5-3/4"	For use with spotlights with max. 6" lens dia.
413	9-3/4"	For use with spotlights with max. 10" lens dia.

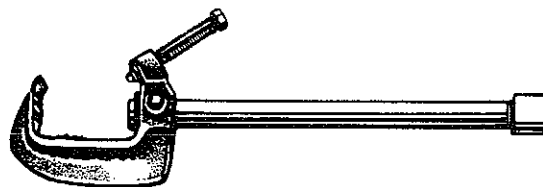


TELESCOPING FLOOR STANDS

Heavy case floor base or castered floor stand with adjustable extension pipe. Complete with cap screw fitting for mounting of spotlights and floodlights, and with hook for stage cable storage.

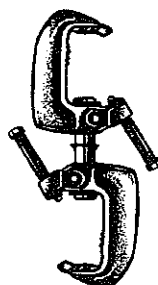
Catalog Number	Height of Stand		Base Type Dia.
	Min.	Max.	
8711-48	27"	48"	14" Round
8711-64	36"	64"	14" Round
8711-90	48"	90"	14" Round
8710-64	36"	64"	18" Round
8710-90	48"	90"	18" Round
8709-40	24"	40"	25" Casters
8709-64	36"	64"	25" Casters
8708-64	36"	64"	30" Casters
8708-88	48"	88"	30" Casters

SIDE ARM PIPE CLAMPS



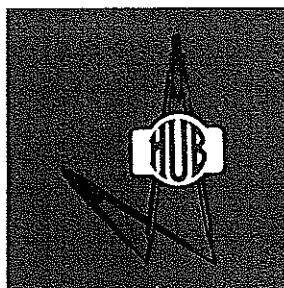
For mounting of spotlights in tormentor position or from borderlight pipe.

Catalog Number	Description
407	"C" clamp with 1/2" x 12" pipe
408	"C" clamp with 1/2" x 18" pipe
409	"C" clamp with 1" x 12" pipe
410	"C" clamp with 1" x 18" pipe



SPOTLIGHT BATTEN HANGER

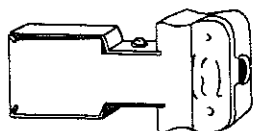
CAT. NO. 404 - Double "C" clamp with 1/2" I.P. spacer for suspending supplementary spotlight battens of 1" to 2" pipe. (Pipe by others.)



Stage Lighting Accessories

QUALITY SINCE 1914

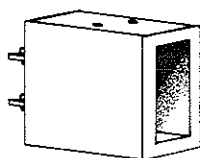
ENGINEERED LIGHTING AND CONTROLS

**STAGE PLUGS**

Fiber body, heavy flat brass contacts, spring loaded with built-in cable strain relief.

Capacity in Amps.	Catalog Number
25A	482
30A	472
50A	473
100A	478

All plugs are 2-wire types except 30A which is 2-wire plus ground.

**STAGE RECEPTACLES**

Porcelain body, heavy flat brass contacts.

Capacity in Amps.	Catalog Number
30A	486
50A	480
100A	481

All receptacles are 2-wire types except 30A which is 2-wire plus ground.

**RUBBER COVERED CABLE**

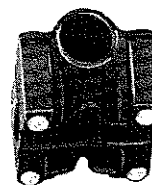
U.L. approved heavy-duty rubber covered cable; available with either two or three conductors. Specify length when ordering.

Catalog Number	Wire Size	Number of Conductors	Capacity (Amps.)
552-2	14	2	15
552-3	14	3	15
553-2	12	2	20
553-3	12	3	20

**STAGE BORDERLIGHT CABLE**

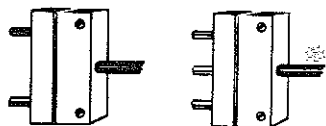
No. 12 AWG color-coded, 65/30 copper conductors with outer insulation of moisture and weather-resisting cotton braid. Specify length when ordering.

Catalog Number	No. of Conductors	Average Dia. (In.)
550-2	2	.40
550-3	3	.42
550-4	4	.48
550-6	6	.60
550-8	8	.69
550-10	10	.74
550-12	12	.79
550-14	14	.84
550-16	16	.86
550-18	18	.92
550-20	20	1.03
550-24	24	1.11
550-28	28	1.14
550-32	32	1.23

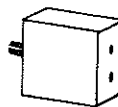
**CABLE CLAMP**

For holding borderlight cable at feeder end of borderlights (attaches to pipe batten) to prevent connection pull when borderlight is raised and lowered. Cast iron.

Catalog Number	Description
612	For 1-1/4" or 1-1/2" pipe
613	For 2" pipe



**PIN PLUG
CONNECTORS**



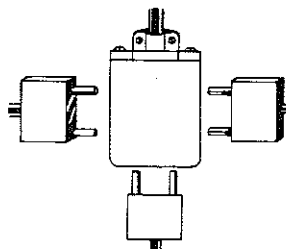
**FLOATING JACK
RECEPTACLES**

Stage Pin Plug Connectors

Capacity in Amps.	Catalog Numbers			
	Male Half			
	For Asbestos Cable		For Stage Cable	
	2-Pole	3-Wire Grounding	2-Pole	3-Wire Grounding
5A	474-A	474-AG	474-C	474-CG
20A	475-A	475-AG	475-C	475-CG
30A	476-A	476-AG	476-C	476-CG
60A	477-A	477-AG	477-C	477-CG
Female Half				
5A	490-A	490-AG	490-C	490-CG
20A	491-A	491-AG	491-C	491-CG
30A	492-A	492-AG	492-C	492-CG
60A	493-A	493-AG	493-C	493-CG

Multifinger, floating jack type receptacles for standard pin plugs. Ideal for panel mounting.

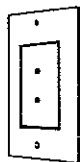
Capacity in Amps.	Catalog Numbers	
	2-Pole	2-Pole plus Ground
20A	494	494G
30A	495	495G
60A	496	496G



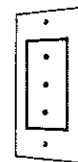
**3-WAY
BRANCH-OFF**

Multiple circuit connector.

CAT. NO. 485 – Pin plug type; 20A, 2-pole.



**STAGE PIN PLUG RECEPTACLES
MOUNTED ON WALL PLATES**



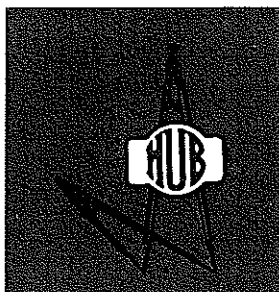
For flush mounting in standard boxes (by others)

Capacity in Amps.	No. of Gangs	Catalog Number		Wall Plate for (recess mounted standard boxes, by others)
		2-Pole	2-Pole plus Ground	
Standard grade solid sleeve type				
20A	1	479	479-G	2-1/8 x 4" handy box
30A	1	497	497-G	2-1/8 x 4" handy box
60A	1	498	498-G	4" sq. x 2-1/4" deep, 2-gang switch box
Multifinger floating jack type*				
20A	1	11028	11028-G	2-1/8 x 4" handy box
20A	2	11028-2	11028-2G	4" square outlet box
30A	1	11030	11030-G	4" sq. x 2-1/4" deep, 2-gang switch box
30A	2	11030-2	11030-2G	4 x 5-15/16 x 2-1/4" deep, 3-gang switch box
60A	1	11038	11038-G	4" sq. x 2-1/4" deep, 2-gang switch box
60A	2	11038-2	11038-2G	4 x 5-15/16 x 2-1/4" deep, 3-gang switch box

Note: Wall plates furnished standard for recessed boxes. To specify covers for surface mounted boxes add (-S) to Catalog Number. (Boxes not furnished.) Plates with greater number

of gangs available as specified.

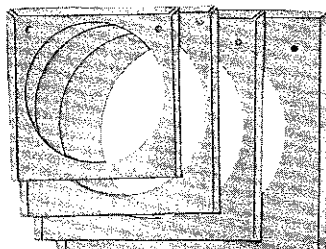
* Multifinger floating jacks insure positive contact ... even with worn and misaligned plugs.



Stage Lighting Accessories

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS



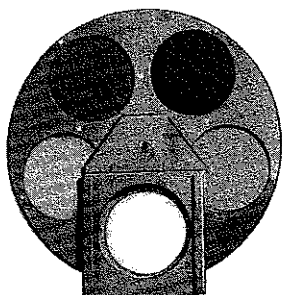
COLOR FRAMES

For Spotlights
and Floodlights

Metal frames for gelatin or plastic color mediums (square unless noted).

Catalog Number	Frame Size	For Hub Spotlight or Floodlight No.
320	3-3/4 x 3-3/4	8789
321	5-1/4 x 5-1/4	8766, 8790
322	7-1/2 x 7-1/2	8758, 8764, 8768, 8786
323	10" x 10"	8765, 8769, 8792, 8811
324	11 1/2" x 11 1/2"	8365, 8816
325	15-3/4 x 16"	8360 Flood
326	* 18" x 18"	8361 Flood
327	* 18 1/2" Octagon	8361 Flood

* Clip-on Type



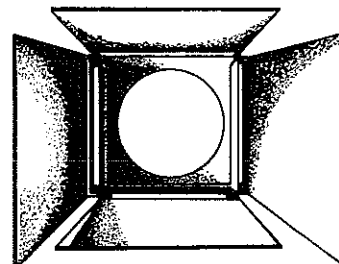
COLOR WHEELS

Available in both hand operated and motor-driven (AC) models with a choice of four or five color frames per wheel.

Catalog Number		No. of Frames	For Lens Dia.
Manual	Motor-Driven		
355	355-M	4	6"
356	356-M	5	6"
357	357-M	4	8"
358	358-M	5	8"

CATALOG SUPPLEMENT NO. 97C

File in Catalog No. 100
SECTION 3, PAGES 4I AND 4J
Prices in Price List 101J



BARN DOORS - For Fresnel Lens Spotlights

Barn doors limit beam spread of Fresnel Lens spotlights in photo and TV studios. Available in two-way and four-way models.

Catalog Number	Description	For Lens Dia.
361	2-way	6"
365	4-way	6"
362	2-way	8"
366	4-way	8"
363	2-way	10"
367	4-way	10"
364	2-way	12"
368	4-way	12"

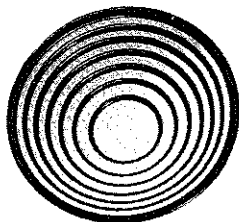


FRESNEL LENSES

Heat resisting glass of finest quality.

Catalog Number	Diameter
850-3	3"
850-4½	4½"
850-6	6"
850-8	8"
850-10	10"
850-12	12"
850-60	6" Oval Beam
850-80	8" Oval Beam

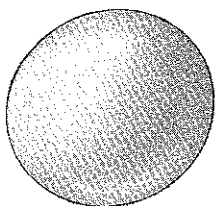
Note: All lenses available with black ceramic risers; to order add (-CR) to catalog number.



STEP LENSES

Finest heat-resisting glass lenses.

Catalog Number	Diameter	Focus
860-6x7¾	6"	7¾"
860-6x9	6"	9"
860-8x8	8"	8"
860-8x9	8"	9"
860-8x11	8"	11"
860-8x12	8"	12"

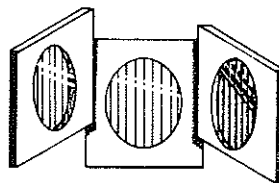


PLANO CONVEX LENSES

Clear, crystal, heat-resisting glass of exceptionally high quality. For use in ellipsoidal and condenser lens spotlights.

Catalog Number	Diameter	Focus
875-4½x6½	4½"	6½"
875-4½x7½	4½"	7½"
875-5x9	5"	9"
875-6x9	6"	9"
875-6x12	6"	12"
875-6x14	6"	14"
875-8x9	8"	9"
875-8x12	8"	12"
875-8x14	8"	14"

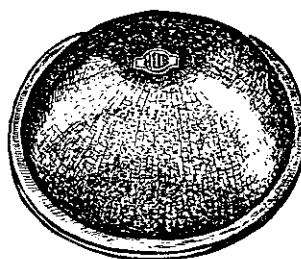
Note: Other sizes are available. Specify.



GLASS COLOR FILTERS

Color filters with sectionalized glass to prevent heat breakage. Furnished assembled in metal frames, to fit color frame holders of Hub spotlights and floodlights. Available in choice of red, amber, green, blue and surprise pink colors. Specify colors when ordering.

Catalog Number	Frame Size	For Hub Spotlight or Floodlight No.
313	5-1/4" x 5-1/4"	8766, 8790
314	7-1/2" x 7-1/2"	8758, 8764, 8768, 8786
315	10" x 10"	8765, 8769, 8792, 8811
316	11-1/2" x 11-1/2"	8365, 8816

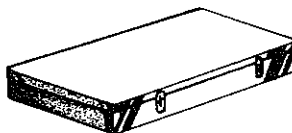


GLASS ROUNDELS

Stippled, heat-resisting, colored glass roundels are available in clear, red, amber, green, blue and surprise pink. Specify colors when ordering.

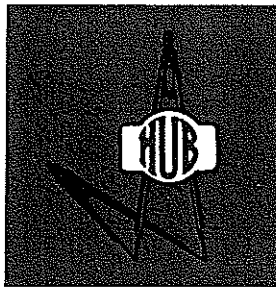
Catalog Number	Roundel Dia.
815	4-1/4"
818	5-5/8"
822	7-9/16"
842	11-1/4"

CAT. NO. 818-50 - 50° Spread Glass Roundels, 5-5/8" dia. These roundels give a wider spread which improves the color blending when the mounting height is restricted. Available in clear, red, amber, green, blue, and surprise pink. Specify colors when ordering.



GELATIN STORAGE AND CARRYING CASE

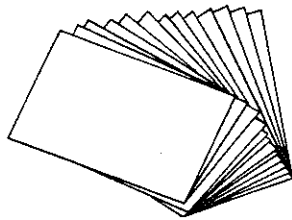
CAT. NO. 375 - All metal gelatin carrying and storage box to protect this color medium from damage. Dimensions: 20¼" x 24¼" x 2" deep.



Stage Lighting Accessories

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS



GELATIN AND PLASTIC COLOR FILTERS

Standard color mediums in sheets 20" x 24". Gelatin sheets are non-fading, durable and flexible, and may be cut to size without crumbling or tearing. Plastic color sheets have extra strength plus the added feature of moisture resistance.

Catalog Number		Color
Gelatin	Plastic	
380-201	381-801	Frost
380-202	381-802	Bastard Amber
380-205	381-805	Light Straw
380-207	381-807	Dark Lemon
380-209	381-809	Straw
380-213	381-813	Light Amber
380-215	381-815	Golden Amber
380-217	381-817	Dark Amber
380-218	318-818	Orange
380-219	381-819	Orange-Amber
380-221	381-821	Light Red
380-223	381-823	Medium Red
380-225	381-825	No-Color Pink
380-226	381-826	Flesh Pink
380-230	381-830	Medium Pink (Dubarry)
380-232	381-832	Rose Pink
380-237	381-837	Medium Magenta
380-239	381-839	Rose Purple
380-242	381-841	Surprise Pink
380-246	381-846	Medium Purple
380-244	--	Dark Lavender
380-251	381-851	Daylite Blue
380-255	381-855	Azure Blue
380-257	381-857	Medium Blue
380-258	381-858	Light Green Blue
380-259	381-859	Green Blue (Moonlight)
380-263	381-863	Medium Blue
380-265	--	Dark Blue
380-266	381-866	Dark Urban Blue
380-271	381-871	Light Green
380-272	381-874	Medium Green
380-276	381-877	Blue Green
380-278	381-878	Yellow Green
380-281	--	Chocolate

CATALOG SUPPLEMENT NO. 97D

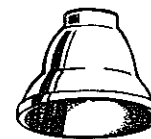
File in Catalog No. 100

SECTION 3, PAGES 4K AND 4L

Prices in Price List 101J



Distributing Type



Concentrating Type

REPLACEMENT REFLECTORS

DISTRIBUTING type with roundel retaining ring.

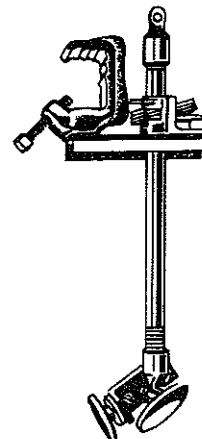
Catalog Number	For Lamp Size	For Roundel	
		No.	Size
3521	100 W.	815	4-1/4"
3621	100 W.	818	5-5/8"
3623	150 W.	818	5-5/8"
3823	150 W.	822	7-9/16"
3830	200/300 W.	822	7-9/16"

CONCENTRATING type with roundel retaining ring.

Catalog Number	For Lamp Size	For Roundel	
		No.	Size
1419-H	60/75 W.	815	4-1/4"
1621	100 W.	818	5-5/8"
*1621-A	100 W.	818	5-5/8"
1623	150 W.	818	5-5/8"
*1623-A	150 W.	818	5-5/8"
1830	200/300 W.	822	7-9/16"
*1830-A	200/300 W.	822	7-9/16"
**1240	300/500 W.	842	11-1/4"

* Neck angled at 22-1/2°.

** Without neck, no retaining ring.



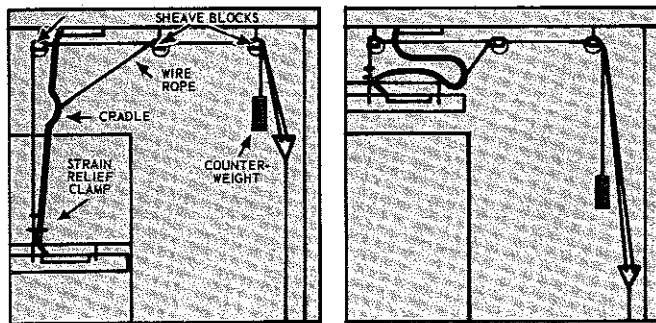
ADJUSTABLE SPOTLIGHT HANGER

CAT. NO. 403 - "C" clamp mounted extension, ending in bar knob stud. 24" I.P. length standard.

BORDERLIGHT CABLE INSTALLATION KITS

CAT. No. 650 (Not Shown) — For use on stages with counterweight rigging systems. Kit includes Strain Reliefs, Cradle, and Clamp to protect cable and keep it out of sight when borderlight, teaser, etc., are in raised position.

CAT. No. 660 (Shown Below) — For use on stages with winch rigging systems. Kit includes all necessary parts (except counterweight) to protect cable and automatically lift it out of sight when borderlight, teaser, etc. are in raised position.



LOWERED POSITION

RAISED POSITION

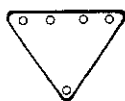
KIT NO. 660



**BORDERLIGHT
CABLE SUPPORT**

Used to take up feeder cable slack and prevent drooping when borderlights are in raised position (these cradles are provided with the No. 650 and 660 kits or can be purchased alone).

Catalog Number	Description
610	For cable 5/8" to 1-3/4" dia.
611	For cable 1-1/2" to 2-1/2" dia.



CLEWS

Used to gather 3, 4 or 5 rigging lines for attachment to winch. Made of heavy gauge steel.

Catalog Number	No. of Lines
640-3	3
640-4	4
640-5	5



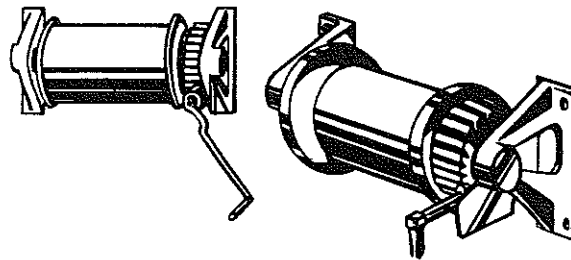
**RIGGING
CLIP**



**RIGGING
THIMBLES**

CAT. NO. 642 — Clip for 1/4" wire rope.

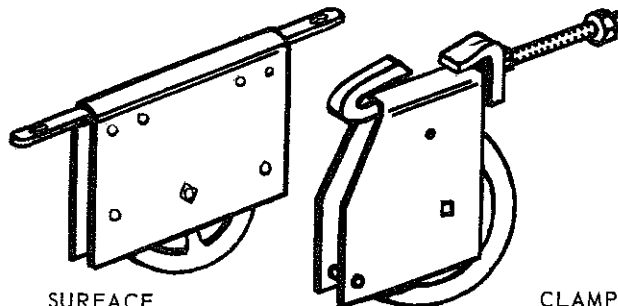
CAT. NO. 641 — Thimbles for 1/4" wire rope.



SAFETY WORM GEAR WINCHES

For use in raising and lowering borderlights and related equipment. Wall mounting, with cast steel housing, machined gears and removable crank.

Catalog Number	Capacity (Lbs.)	Gear Ratio	Drum Dia.
625	500	18 to 1	4"
626	1000	25 to 1	5 1/2"



SURFACE

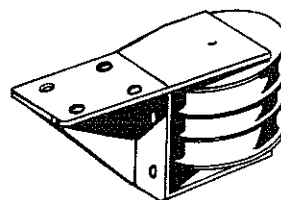
CLAMP

SHEAVE BLOCKS

Steel plate construction with 6" dia. sheaves and self-lubricating bronze bushings, underhang type.

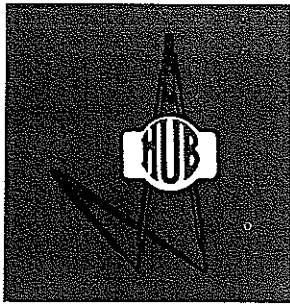
Catalog Number	No. of Sheaves	Mounting
630-1	1	Surface mounting, with flanges for bolting to building structure.
630-2	2	
630-3	3	
630-4	4	
631-1	1	For clamping to exposed roof beams with flanges. Will clamp flange from 4 to 9-1/2".
631-2	2	
631-3	3	
631-4	4	

Note: 8" dia. sheaves available for heavy duty applications.



**HORIZONTAL
MOUNTING BLOCKS**

For horizontal blocks with multiple sheaves for right angle change of direction of wire ropes, add suffix (-H) to Surface Sheave Block catalog number shown above.



Lamp Reference Guide for Hub Spots, Floods

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

A Complete Listing of Lamps Recommended for Hub
Spotlights, Floodlights and Projectors.

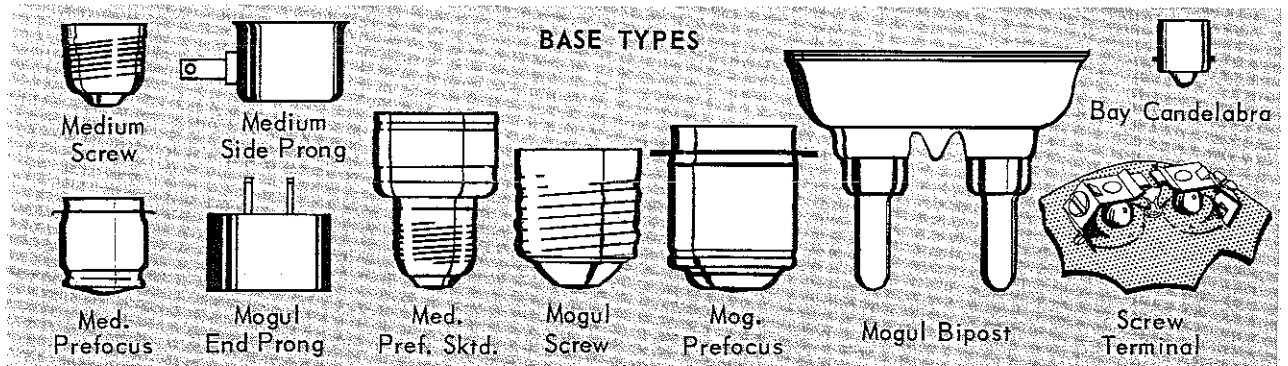
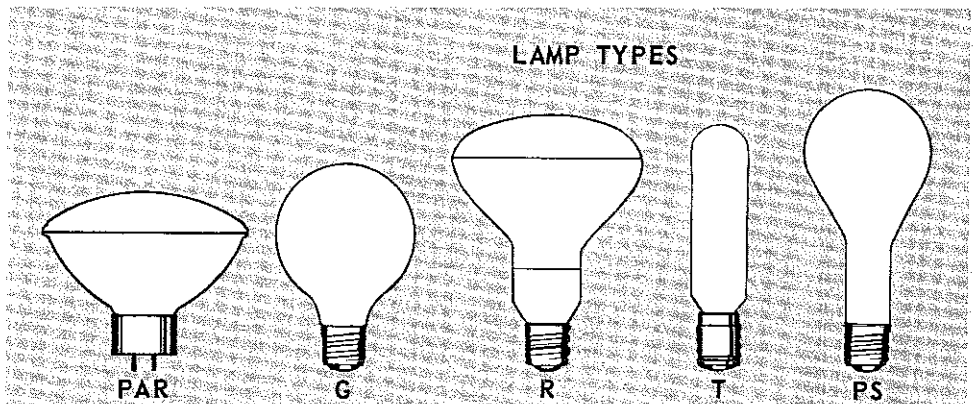
CATALOG SUPPLEMENT NO. 120

File in Catalog No. 100

SECTION 3, PAGES 4M AND 4N

Prices in Price List 101L

Use this handy reference guide to assure that your Hub equipment is lamped with the proper lamp type. The lamps recommended will give you maximum output and greatest efficiency of operation for your specific lighting equipment.



Hub Equipment CAT. NO.	LAMP SIZE AND CODE NO.	BASE TYPE	Approx. LAMP LIFE In Hours
8359	250G/FL 400G/FL	Med. Screw Med. Screw	800 800
• 8360	300PS30/IF 500PS30/IF	Mogul Screw Mogul Screw	1000 1000
• 8361	750PS52/IF 1000PS52/IF 1500PS52/IF	Mogul Screw Mogul Screw Mogul Screw	1000 1000 1000
• 8365	200PS30/IF 300PS30/IF	Med. Screw Med. Screw	1000 750
• 8703	Same as 8361		
• 8704	Same as 8361		
• 8725	150R/SP 150R/FL 150PAR/SP in Color 300R/SP 300R/FL	Med. Screw Med. Screw Med. Screw Med. Screw Med. Screw	2000 2000 2000 2000 2000

Hub Equipment CAT. NO.	LAMP SIZE AND CODE NO.	BASE TYPE	Approx. LAMP LIFE In Hours
• 8727	200PAR46/3NSP	Med. Side Prong	2000
• 8731	4535 (6 volt)	Screw Term.	100
• 8735	300PAR56/NSP 300PAR56/MFL 300PAR56/WFL 300PAR56/STD 300PAR56/COOL BEAM Q500PAR56 Quartz-Iodine	Mog. End Prong Mog. End Prong Mog. End Prong Mog. End Prong Mog. End Prong Mog. End Prong	2000 2000 2000 2000 2000 2000
• 8736	500PAR64/WFL 500PAR64/MFL 500PAR64/NSP Q1000PAR64 Quartz-Iodine	Mog. End Prong Mog. End Prong Mog. End Prong Mog. End Prong	2000 2000 2000 2000
8738	250G/SP 250G/FL 400G/SP 400G/FL	Med. Screw Med. Screw Med. Screw Med. Screw	200 800† 200 800†

Continued on reverse side

Hub Equipment CAT. NO.	LAMP SIZE AND CODE NO.	BASE TYPE	Approx. LAMP LIFE In Hours
8739	Same as 8359		
8742	250T20/47 500T20/48 500T20/64	Med. Prefocus Med. Prefocus Med. Prefocus	200 200 500†
8743	Same as 8742		
8745	Same as 8738		
• 8746	1000PAR56/FAT	Mog. End Prong	100
8758	250T20/47 500T20/48 500T20/64 750T20P/SP	Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus	200 200 500† 200
8761	750T12/9 1000T12/2 Q1000T12/4 (Quartz-Iodine)	Med. Prefocus Med. Prefocus Med. Prefocus	200 200 400
8764	250T12/7 250T12/8 500T12/9 500T12/8 Q500T12/4 (Quartz-Iodine) 750T12/9 Q750T12/4 (Quartz-Iodine)	Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus Med. Prefocus	200 800† 200 800† 800† 800† 200
8765	Same as 8761		
8766	Same as 8764		
8767	400G/SP 500T20/45	Med. Screw Med. Screw	200 500
8768	Same as 8764		
8769	1M/T24/5 1500/T24/6 2M/T30/1	Mogul Bipost Mogul Bipost Mogul Bipost	200 200 200
8770	1M/G40SP5-1/4 1500/G40/10	Mogul Screw Mogul Screw	200 200
8771	1M/G40PSP	Mogul Prefocus	200
8773	1500G40/15 2M/G48/4	Mogul Prefocus Mogul Prefocus	200 200
8774	Same as 8769		
8775	Same as 8758		
8777	PH/1M/T20/40 PH/1500T20/39	Mogul Prefocus Mogul Prefocus	25 25
8778	Same as 8770		
8779	Same as 8770		
8781	Same as 8770		
8782	(No lamp, carbon arc type, requires two 6MM x 7" AC carbons)		
8783	(No lamp, carbon arc type, requires one 7MM x 12" Suprex positive carbon)		

Hub Equipment CAT. NO.	LAMP SIZE AND CODE NO.	BASE TYPE	Approx. LAMP LIFE In Hours
8784	Same as 8779		
8785	3M/T32/2	Mogul Bipost	100
8786	Same as 8758		
8787	Same as 8770		
8788	2100T24/8 (60 volt)	Mogul Bipost	50
8789	100G16½/DC 150G16½/DC	Bay Candelabra Bay Candelabra	200 200
8790	250G/SP 400G/SP	Med. Screw Med. Screw	200 200
8792	3M/T32/2	Mogul Bipost	100
8805	Same as 8764		
8807	Same as 8758		
8809	1M/G40/PSP 1500G40/21	Mogul Prefocus Mogul Prefocus	200 200
8811F	500G/FL/4¼ 1M/G40FL/4¼	Mogul Screw Mogul Screw	800 800
8811S	Same as 8809		
8812	Same as 8809		
8813	Same as 8809		
8816	1M/G48/11 2M/G48/17	Mogul Bipost Mogul Bipost	200 200
8820	Same as 8816		
8821	5M/T64/1	Mogul Bipost	75
• 8825	120PAR64 (6 volt)	Screw Terminal	100
• 8826	120PAR58 (6 volt)	Screw Terminal	100
79030	2100T24/8 (60 volt)	Mogul Bipost	50
79031	PH/1500/T20/39 DTJ PH/1M/T20/40 DSB	Mog. Prefocus Mog. Prefocus	25 25
79032	PH/1000/20MP DRS PH/750/T12P DDB PH/500/T10P CZX	Med. Prefocus Med. Prefocus Med. Prefocus	25 25 25
79033	PH/500T10P CZX	Med. Prefocus	25

† This lamp can be used for longer life when a nominal loss of lumen output and color temperature are not important.

- Lamps for those units indicated with a dot are generally available from local sources. All others are not readily available in local stocks and are therefore carried in Hub stock for quick shipment.

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

Hub Plugging Strips and Mounting Devices

U.L. Approved

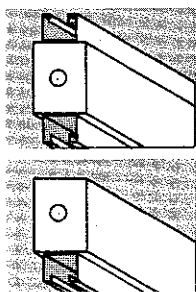
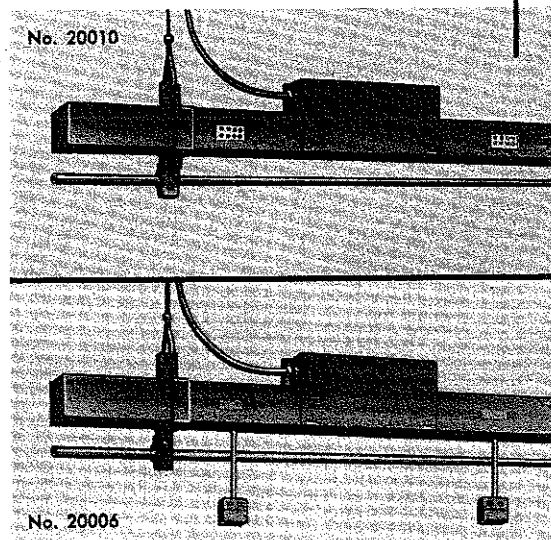


HUB BATTEN PLUGGING STRIPS: For plugging spotlights, floodlights, etc., at auditorium ceiling, tormentor, or teaser locations. 3" x 5", 20-gauge galvanized steel wireway furnished in any desired length. Pipe straps are furnished for clamping wireway to pipe batten (not included). Furnished with flush receptacles or pigtail leads, ganged, spaced, and wired as specified to terminal box at designated location. Terminal box has 1/8" thick steel end plate, terminal block, bushing, and "U" bolt strain relief. A designation is installed adjacent to each cable or receptacle location to match designation at the cross connecting panel of the switchboard.

Receptacles, connectors, and mounting arrangements illustrated are typical. Available for mounting to one, two, or three pipe battens, as required. Available with flush receptacles or connectors on pigtails of 2-wire or 3-wire type, grounded or ungrounded, in any wattage rating. Add suffix (-G) to catalog number for grounded type receptacle. Rigging and borderlight cable not included.

Cat. No. 20010: Plugging strip wireway furnished standard with flush, 2-wire, 15A., pin plug receptacles, ganged, spaced and wired as specified. Furnished in any length.

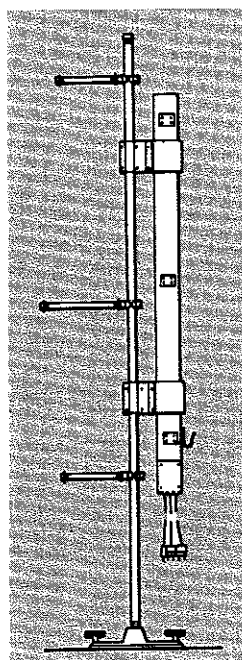
Cat. No. 20006: Plugging strip wireway furnished standard with pigtail leads (up to 3 ft., standard) and 2-wire, female, 15 A., pin plug connectors. Pigtail leads spaced and wired as specified. Furnished in any length.



Cat. No. 20050 Series: Plugging strip wireway furnished standard with flush, 20 A., 2-wire, twistlock receptacles spaced and wired as specified. Furnished any length. Unistrut mounting channel furnished along top and bottom length of strip for mounting lighting fixtures. (Lighting fixtures supplied, when ordered, with necessary fittings to mount to the Unistrut channel.)

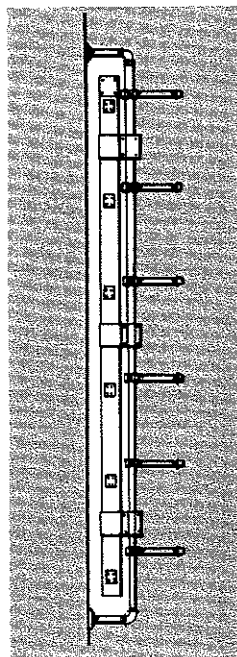
Cat. No. 20020 Series. Same as No. 20050 Series except Unistrut channel is along bottom length of strip only.

WHEN ORDERING: Specify length, mounting desired, type, arrangement and spacing of flush receptacles or pigtail leads, location of terminal box.



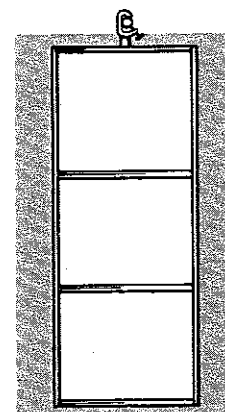
**TORMENTOR TREE
No. 20110:**

3" x 5" x 6'6" long wireway with three duplex, 15 A., pin plug receptacles wired on three circuits; complete with 5-ft. cables and three male pin plugs. Wireway mounted on 10 ft. length of pipe fitted with 24" diameter, cast iron base, and three horizontal pipe arms for mounting of spotlights or floodlights. Designation discs supplied to identify circuits. Base, pipes, and fittings included. Stage screws not supplied.



**TORMENTOR PLUGGING
STRIP No. 79015:**

3" x 5" x 11' long wireway with six duplex, 15 A., pin plug receptacles and splice cover with terminal block and strain relief. Designation discs supplied to identify circuits. Wireway mounted on 12 ft. length of pipe fitted with mounting flanges and six pipe arms. Pipes, fittings, clamps, and mounting flanges included.



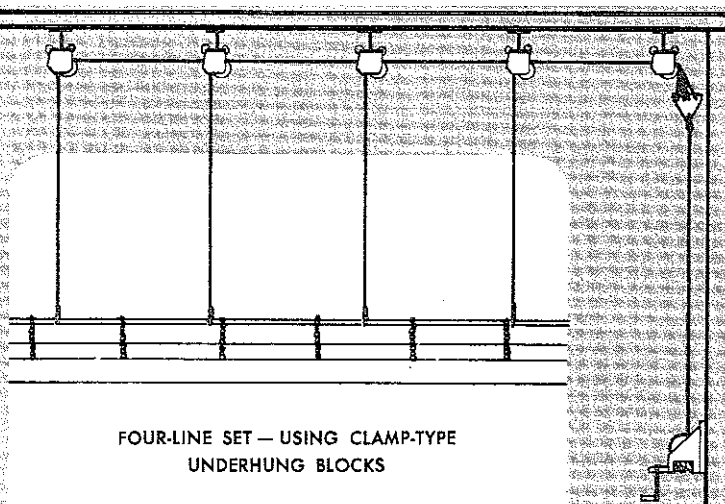
**BORDERLIGHT LADDER
No. 20111:**

For mounting of three spotlights or floodlights. Welded steel channel and 1" iron pipe, equipped with C-clamp at top for mounting to plugging strip pipe batten (not supplied). Ladder comes complete with 3 sets of 2-wire, No. 12 cables, each 6 ft. long and wired with male and female plugs.



Hub Safety Worm Gear Winch Rigging

THREE RIGGING TYPES HANDLE ALL CEILING CONDITIONS
—PLUS TWO BORDERLIGHT CABLE STRAIN RELIEF SYSTEMS



FOUR-LINE SET — USING CLAMP-TYPE
UNDERHUNG BLOCKS

Hub Safety Worm Gear Winch Rigging Systems are used for the raising and lowering of teaser plugging strips and borderlights, when there is no gridiron. There are three rigging systems available, differing chiefly in the mounting of the sheave blocks—the clamp type underhung blocks (illustrated) are used where the ceiling "I" beams are exposed, and the surface mounting blocks are used where the ceiling is finished; both types are listed below. The third type uses overhung blocks and prices for these are available on application.

Each rigging set will support a 1½" pipe batten on which borderlight or plugging strip is mounted, and includes ¼", 6x7 flexible steel cable, 6x19 steel cable, single sheave loft blocks, a lead block, clamps, clew, thimbles, clips, and a safety worm gear winch. Maximum spacing between sheave blocks is 12 ft.; therefore the length of the borderlight will determine the number of lines you should have in your rigging system.

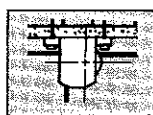
SUGGESTED SPECIFICATIONS

The Electrical Contractor will furnish and install a complete Hub Electric Corporation, Chicago, (two, three, four, or five) line set, winch rigging system for raising and lowering the Borderlights specified and located on the plans.

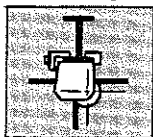
Borderlights shall be mounted on 1½" pipe battens and suspended on wire cables over a system of blocks, a single cable being brought to a winch of proper load capacity. Cable shall be of sufficient length to permit lowering of Borderlights to within

four feet of the stage floor. All cables to the clew shall be ¼" 6x7 wire rope — from clew to winch, 6x19 flexible hoisting wire rope. All Sheave Loft blocks shall be of the (surface mounting, clamp type underhang, clamp type overhang) type. Provide necessary thimbles, clips and eye batten rings.

All rigging equipment must be especially designed to meet job conditions; and blocks, cables and all component parts must be designed and selected with ample factor of safety as required for this type of installation.



Surface
Mounting



Clamp
Mounting

Type	Catalog Number		Maximum Length of Borderlight or Plugging Strip (Ft.)
	Surface Mounting	Clamp Mounting	
Two-Line Set	541	542	18
Three-Line Set	543	544	30
Four-Line Set	546	545	42
Five-Line Set	547	548	54

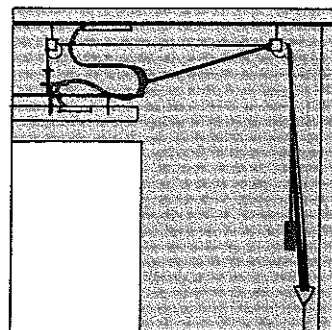
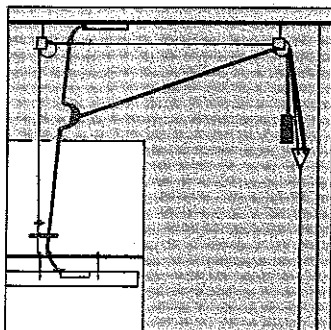
Information above is for straight line conditions. Construction involving right angle turns (where winch is out of line with borderlight or plugging strip) available; prices on application.

BORDERLIGHT CABLE COUNTERWEIGHT SYSTEM No. 660

A suitable system for automatically lifting borderlight cable out of sight as borderlight is raised and lowered—and to supply proper strain relief between borderlight terminal box and gridiron junction box. The No. 660 system consists of a borderlight cable strain relief clamp, strain relief cradle, wire rope clips, stop blocks, and two single sheave blocks (wire rope and counterweight not included). See page 11 of Hub bulletin SL56 for details of gridiron junction box and borderlight cable. (Section 14 of this catalog.)

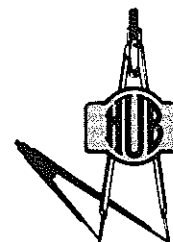
SYSTEM No. 650

For use with gridiron. Includes gridiron strain relief clamp instead of sheave blocks—does not use counterweight.



Hub Flush Floor Pockets

U.L. Approved

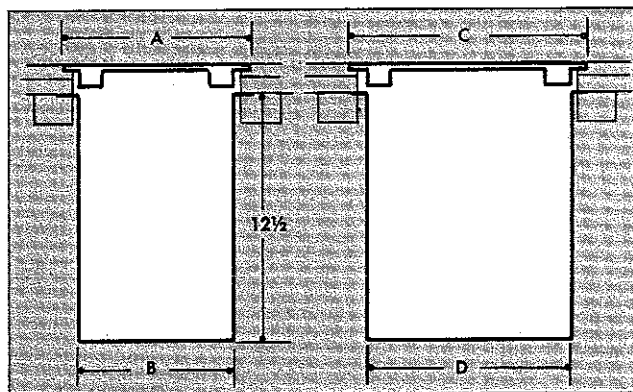
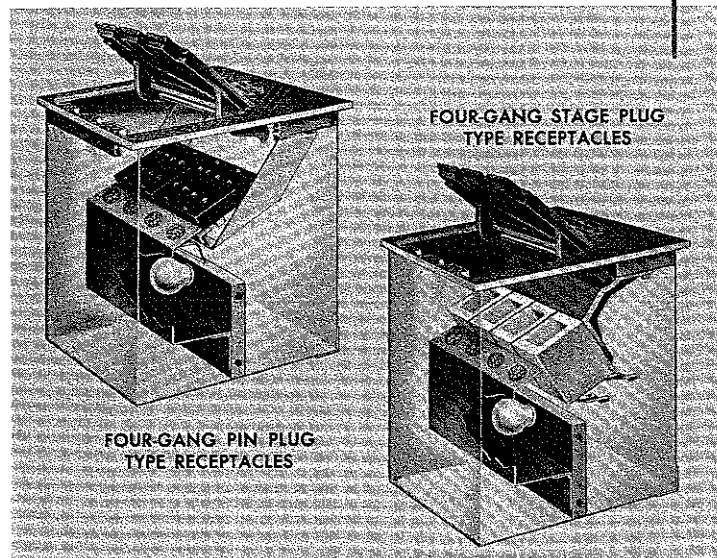


WITH 2-WIRE, 250 VOLT RECEPTACLES FOR PLUGGING IN PORTABLE STAGE LIGHTING UNITS

To accommodate portable and auxiliary stage lighting equipment, receptacles in the form of pockets are required at strategic locations in the stage floor. These pockets should have one 2-wire circuit for each gang receptacle extending to the stage switchboard. Pockets are mounted flush in the stage floor and are usually placed 8 to 15 ft. apart — at both sides (2 ft. beyond proscenium lines), at rear (5 to 8 ft. from rear wall), and in footlight locations.




Hub flush floor pockets have recessed housing of heavy, cold gauge steel, with hinged bottom for easy cleaning, and cast iron, non-skid, safety-tred top with self-closing flush doors. Doors are notched for entrance of stage cables. Housing is finished inside and out with aluminum lacquer; safety-tred top, finished dull black.

These flush floor pockets are available in a range of one, two, three, or four-gang receptacles, in your choice of three of the most popular 2-wire, 250 volt plug types — 15 Amp. duplex pin plug, 20 Amp. twist lock, or 50 Amp. stage plug. Each pocket receptacle is fitted with a designation, and comes complete with a male plug of the receptacle type selected (One male plug per gang).



DIMENSIONS

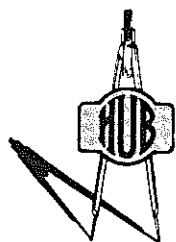
	A	B	C	D
1 and 2-gang pockets	8 1/4"	6 3/4"	11 3/4"	10 1/4"
3 and 4-gang pockets	13 3/4"	12 1/4"	11 3/4"	10 1/4"

CATALOG NUMBERS					
	Receptacle Types	1-gang	2-gang	3-gang	4-gang
	15 Amp. Duplex Pin Plug	10031	10032	10033	10034
	20 Amp. 2-Wire Twist Lock	10001	10002	10003	10004
	50 Amp. Stage Plug	10051	10052	10053	10054

PILOT LIGHT — All floor pockets can be furnished, at additional cost, with a pilot light which automatically lights when door is opened. To order pocket with pilot light, add suffix (-P) to catalog number. Example: 10032-P.

OPTIONAL PLUGS AND RECEPTACLES — Available with 30 Amp. or 100 Amp. plugs and receptacles, and with 2-wire plus ground

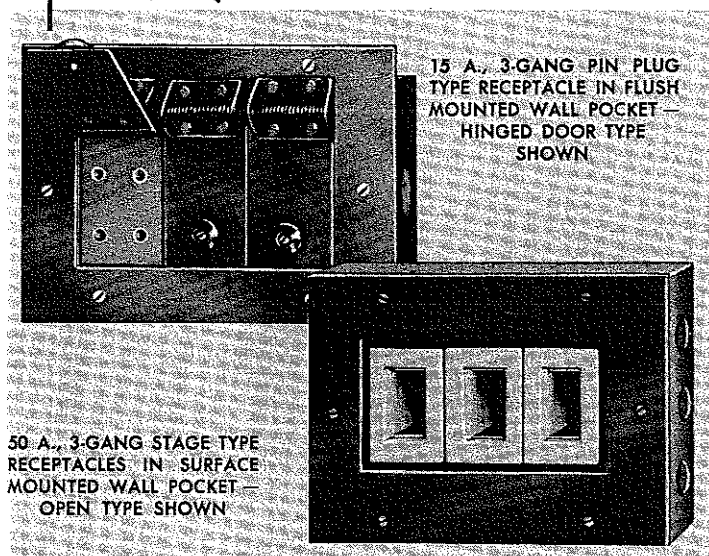
and 3-wire ungrounded type plugs and receptacles. (Add suffix (-G) to catalog number of pocket to obtain grounded type plug and receptacle.) Range type receptacles also available. All pockets can also be furnished with the new Hub 25 Amp. duplex, floating spring-sleeve receptacles, which provide superior contact with pin plugs. Prices on pockets with these and other optional plugs and receptacles on application.



Hub Wall Pockets

U.L. Approved

**2-WIRE, 250 VOLT RECEPTACLES FOR LIGHTING FLEXIBILITY—
BOTH FLUSH AND SURFACE MOUNTED TYPES, UP TO 6-GANG CAPACITY**



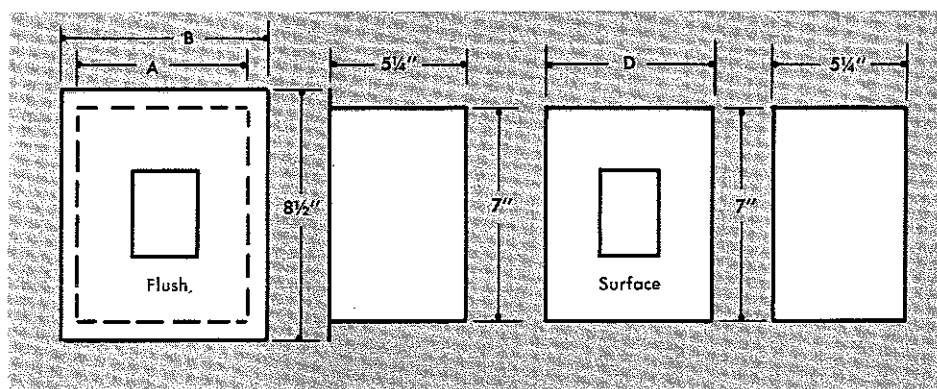
To give spotlights, floodlights and other portable units and electrical devices adequate flexibility, a series of conveniently located receptacles in the form of wall pockets are desirable. These pockets should have one 2-wire circuit for each gang, extending to the stage switchboard.

Wall pockets can be either flush or surface mounted for side walls or proscenium walls of stage, above the gridiron, in the side or soffit surfaces of the balcony front, and in auditorium ceiling behind the ceiling spotlights.

Hub Wall Pockets are of heavy, code gauge steel available in open type or with self-closing doors over each receptacle gang. Finished inside and out with matte black lacquer. These pockets, either flush or surface mounted, come in a range of one to six-gang receptacles in your choice of three of the most popular 2-wire, 250 volt plug types — duplex, 15 Amp. pin plug, 20 Amp. twist lock or 50 Amp. stage type. Each pocket receptacle is fitted with a designation, and comes complete with a male plug of the receptacle type selected. (One male plug per gang.)

DIMENSIONS

	FLUSH MOUNTED		SURFACE MOUNTED
	A	B	D
1-gang	6"	7½"	6"
2-gang	7¾"	9¼"	7¾"
3-gang	9⅞"	11⅝"	9⅞"
4-gang	12"	13½"	12"
5-gang	14½"	15⅝"	14½"
6-gang	16¼"	17¾"	16¼"



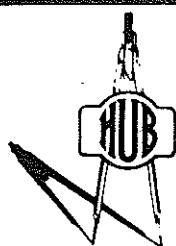
	Receptacle Type	Mounting Type	CATALOG NUMBERS—For Pockets with Hinged Doors					
			1-gang	2-gang	3-gang	4-gang	5-gang	6-gang
	15 Amp. Duplex Pin Plug	Flush Surface	11031 11301	11032 11302	11033 11303	11034 11304	11035 11305	11036 11306
	20 Amp. 2-Wire Twist Lock	Flush Surface	11001 11551	11002 11552	11003 11553	11004 11554	11005 11555	11006 11556
	50 Amp. Stage Plug	Flush Surface	11051 11501	11052 11502	11053 11503	11054 11504	11055 11505	11056 11506

OPEN TYPE POCKETS—If wall pockets are desired without the individual self-closing doors over each receptacle gang, add the suffix "O" to the catalog number. Example, 11032-O.

BRASS FACE PLATES—Available at extra cost; specify when ordering.

LOCK TYPE DOOR—Wall pockets are available, at extra cost, with lock-type doors (with two keys) which fit over multiple receptacles—not over each receptacle.

OPTIONAL PLUGS AND RECEPTACLES—Pockets are available with 30 Amp. or 100 Amp. plugs and receptacles, and with 2-wire plus ground (add suffix -G to catalog number for ground type), and 3-wire ungrounded type plugs and receptacles. All wall pockets are also available with the new Hub 25 Amp. duplex, floating spring-sleeve receptacles which provide superior contact with pin plugs. Prices on pockets with these and other optional receptacles on application.



Hub Floor Pockets and Wall Pockets

20 A. FLOATING JACK TYPE

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 2

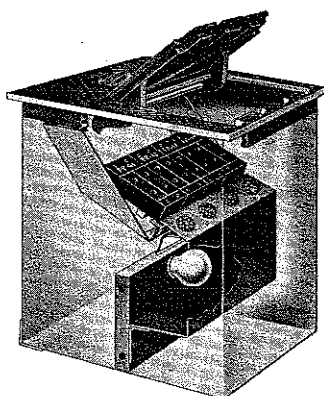
File in Catalog No. 100

SECTION 3, PAGES 8A, 8B

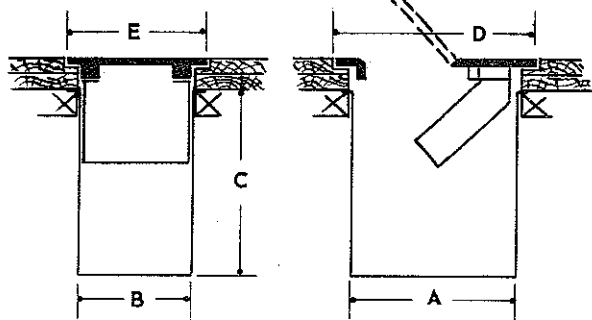
Prices in Price Sheet No. 101A

These new floating jack, 20 A. receptacles permit positive contact with the male pin plug at all times. As the male pin plugs become worn or out of alignment from use, the floating, multi-finger jack receptacle readjusts itself to insure positive contact at all times. This eliminates the overheating caused by poor contacts.

The main blocks are engraved with circuit numbers as specified. One 20 A. male pin plug is supplied with each gang. Each gang (two receptacles) should be fed by one 2-wire circuit.



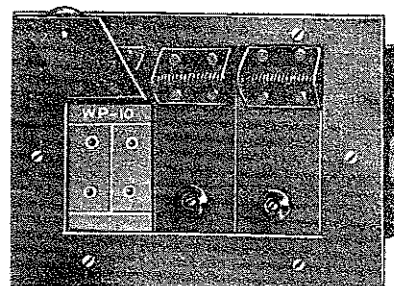
Cat. No. 104



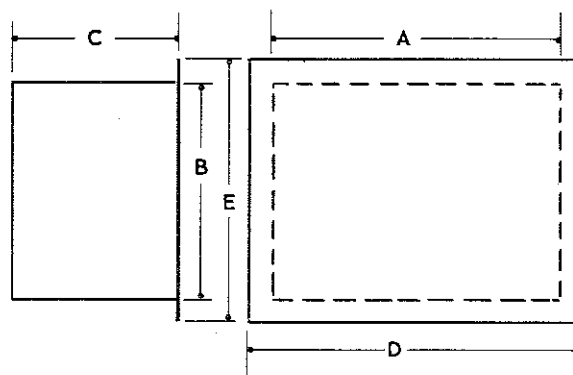
SPECIFICATIONS (Floor Pockets)

Cast iron frame and hinged door. Heavy gauge steel recessed housing sprayed aluminum interior and exterior. Bottom of housing has hinged clean-out door. Floating, multi-finger jack assembly. One male pin plug supplied per gang.

Available with pilot light and mercury switch, at extra cost. To specify, add suffix (-P) to catalog number. Example: 102-P.



Cat. No. 303



SPECIFICATIONS (Wall Pockets)

Furnished with removable face plate with individual, spring-hinged door and knob over each receptacle gang. Doors have continuous rabbet, top and bottom.

Housing and frame of cold rolled steel with baked dull black finish. Floating multi-finger jack assembly. One male pin plug supplied per gang. Bakelite strip below each door is engraved with specified circuit number for quick identification of circuits.

(CONTINUED ON REVERSE SIDE)

FLOOR POCKETS

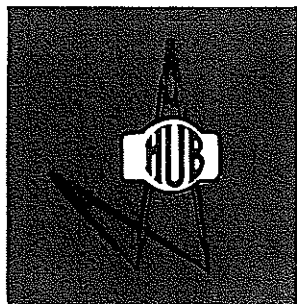
CATALOG NO.	NO. OF GANGS	DIMENSIONS IN INCHES				
		A	B	C	D	E
101	1	10 1/4	6 3/4	6 3/4	11 3/4	8 1/4
102	2	10 1/4	6 3/4	6 3/4	11 3/4	8 1/4
103	3	10 1/4	12 1/4	6 3/4	11 3/4	13 3/4
104	4	10 1/4	12 1/4	6 3/4	11 3/4	13 3/4

FLUSH MOUNTED WALL POCKETS

CATALOG NO.	NO. OF GANGS	DIMENSIONS IN INCHES				
		A	B	C	D	E
301	1	5	7	5 1/4	6 1/2	8 1/2
302	2	9	7	5 1/4	10 1/2	8 1/2
303	3	13	7	5 1/4	14 1/2	8 1/2
304	4	17	7	5 1/4	18 1/2	8 1/2

SURFACE MOUNTED WALL POCKETS

201	1	5	7	5 1/4	-	-
202	2	9	7	5 1/4	-	-
203	3	13	7	5 1/4	-	-
204	4	17	7	5 1/4	-	-



Hub Projectors For Controlled Beam Reflector Lamps

U.L. Listed

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

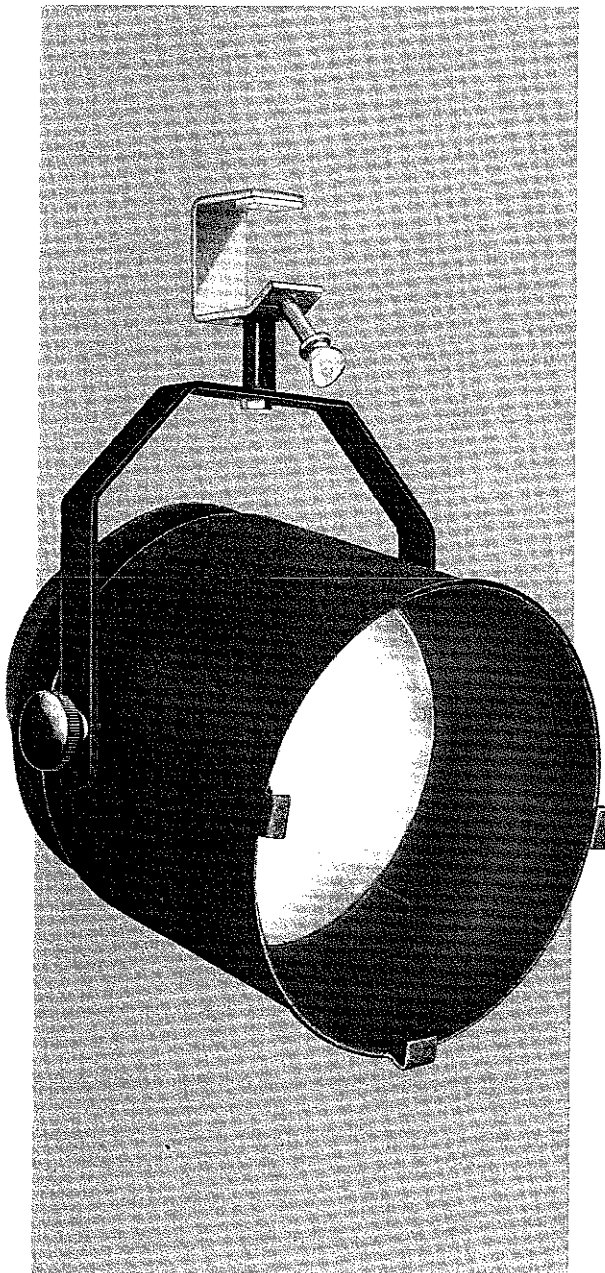
- Projectors available for PAR Cool Beam, PAR-Q, FAT and conventional PAR lamps.
- Available for Low Voltage PAR lamps
- Projectors available for 300, 500 and 1000 watt lamps.

CATALOG SUPPLEMENT NO. 113

File in Catalog No. 100

SECTION 3, PAGES 8C AND 8D

Prices in Price List 101K



APPLICATIONS

This Hub Projector series has been developed to provide an economical, practical housing for the new PAR Cool Beam, PAR-Q and FAT lamps as well as for some of the conventional PAR lamps (see chart on reverse side).

Since many of these lamps come in a variety of beam spreads, as many as three in one instance, this projector can be used as a spotlight or floodlight, interchangeably, in stage lighting, night clubs, arenas, TV studios, displays and other areas where high intensity lighting is desired.

The use of PAR Cool Beam or FAT lamps provide a more efficient means of incandescent display lighting with minimum heat on subject.

All projectors are furnished standard with a pipe clamp for convenient mounting on pipe battens, towers and tormentor trees. Clamp is removable to allow mounting on standard table bases or floor stands (see page 4F, Section 3).

SPECIFICATIONS

Vented housing is constructed of steel finished in baked black wrinkle enamel, and comes complete with color frame holder brackets. Steel adjusting yoke is locked in position with two large molded plastic knobs, and is furnished standard with a plated pipe clamp. All projectors are provided with a socket to accept the lamps specified (lamps furnished by others), wired to a 36 inch lead with a 20 amp. parallel blade, U-ground plug (or specify type required). All projectors are vented at the rear.

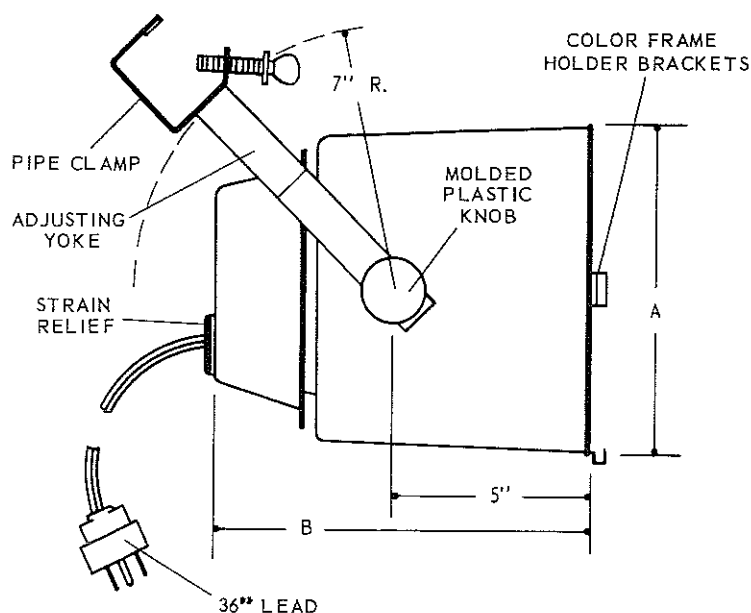
Optional at extra cost

- Color frame

Cat. No.	SPECIFICATIONS OF LAMPS ACCOMMODATED					
	Watts	Type	Beam	Beam Spread	Lumens	Hours
8735	300	Par 56	Narrow Spot	15° x 20°	3840	2000
		Par 56	Medium Flood	20° x 30°	3840	2000
		Par 56	Flood	30° x 60°	3840	2000
	300 Cool Beam	Par 56	Narrow Spot	15° x 20°	3840	2000
		Par 56	Medium Flood	20° x 35°	3840	2000
		Par 56	Wide Flood	35° x 70°	3840	2000
	500 Par-Q	Par 56	Narrow Spot	32° x 15°	7000	4000
		Par 56	Medium Flood	42° x 20°	7000	4000
		Par 56	Wide Flood	66° x 34°	7000	4000
8736	500	Par 64	Narrow Spot	13° x 20°	6500	2000
		Par 64	Medium Flood	20° x 35°	6500	2000
		Par 64	Wide Flood	35° x 65°	6500	2000
8746	1000	Fat-Par 56	Flood	68°		100

DIMENSIONS

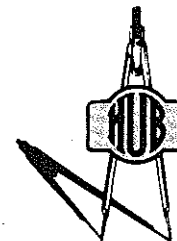
Cat. No.	Dimensions in Inches	
	A	B
8735	8	9½
8736	9	9½
8746	8	10



All units can be modified to accommodate low voltage PAR lamps, with step down transformer remotely located or supplied as an integral part of unit. Complete information and data available on request.

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

Hub Low Budget Spots and Floods

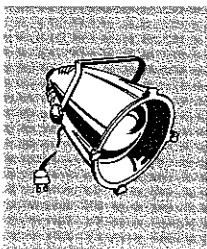


All units illustrated below are suitable for accent and general lighting for small stages, and also for clubrooms, dining rooms, dance halls, night clubs, churches, etc. All have adjustable yokes and fittings for mounting to unistrut channel—see plugging strips 20050 and 20020 on opposite side of this page.

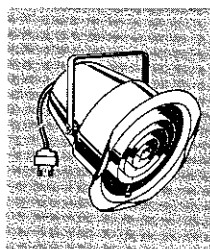
Since all units except Catalog No. 8738-U have no provision for focusing and control, these units are recommended only for low budget installations. For higher wattage spotlights, of recommended design, for any size stage, with provision for

focusing and control, see Hub bulletin SL-56 (Section 14, this catalog).

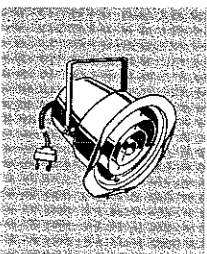
Each unit furnished standard with color frame holder and one color frame, 20" two-wire lead, and 20 Amp., two-pole, twist-lock plug. Housing for all units finished dull black. Catalog Nos. 8727-U and 8729-U furnished standard with concentric louvers to cut down stray light; concentric louvers are also available for Catalog Nos. 8725-U and 8731-U at additional cost.



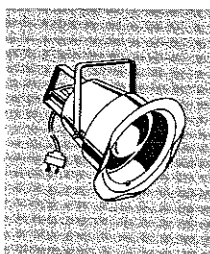
Cat. No. 8725-U—TORPEDO UNIT. Cast zinc alloy housing for 150 watt PAR flood or spot lamp. Recommended for teaser position. Suitable also for general lighting. Colored lamps can be obtained locally.



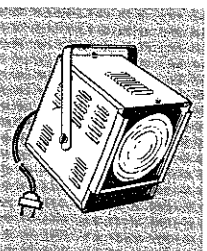
Cat. No. 8729-U—Spun aluminum housing for 300 watt PAR flood or spot lamp. Versatile unit for use from auditorium ceiling or teaser position.



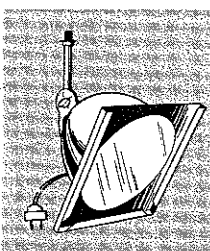
Cat. No. 8727-U—Spun aluminum housing for 200 watt PAR lamp. Narrow beam spotlight, throwing high-intensity beam on a specific performance area. Suitable for use in teaser or tormentor positions.



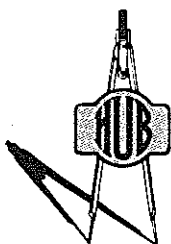
Cat. No. 8731-U—Pin spot with spun aluminum housing for 30 watt PAR-46 lamp. Complete with 120/6 volt step-down transformer. Ideal for accent lighting—projects a narrow circle of light to play on an individual performer. Can be used from any position on stage, and balcony rail.



Cat. No. 8738-U—Accommodates 250-400 watt G-30 lamp. Adjusting and focusing mechanism used in conjunction with Alzak reflector and 4½" diameter fresnel lens. Reflector and lamp-holder are on an adjustable carriage for focusing. Control for 20° minimum and 40° maximum beam spread. Used in teaser and tormentor positions.



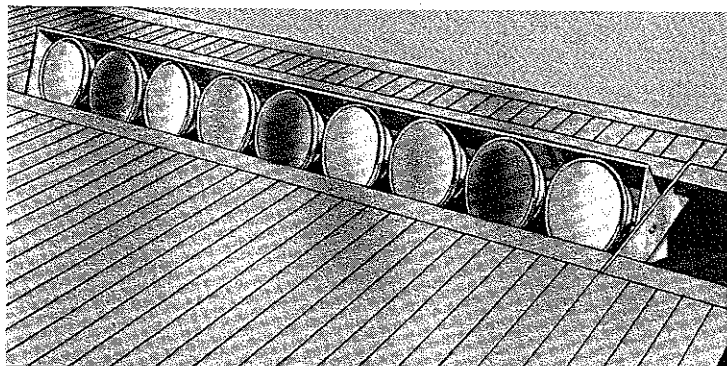
Cat. No. 8739-U—Spun Alzak aluminum reflector housing for 250-400 watt, G-30 flood lamp. Wide beam distribution. Suitable for teaser or cyclorama positions. With angle adjustment thumbscrew and ½" dia. threaded steel rod, nut and washer to take the unistrut fittings supplied.



Hub Disappearing Footlights

U.L. Approved

5-FT. SECTIONS WITH MAPLE HARDWOOD COVERS AND TRIM — BOTH INDIVIDUAL AND CONTINUOUS REFLECTOR TYPES



DISAPPEARING FOOTLIGHT INSTALLATION



A convenient and simple means of providing suitable lighting on the stage—where it is desirable to conceal footlights below the floor when not in use. These footlights are ideal for toning stage setting, affording illumination onto stage from below, and for general lighting on stage for non-dramatic events.

Open, these footlights present an almost unbroken front, and project but slightly above stage floor. Closed, the maple cover fits flush with stage floor.

Each unit furnished standard in five foot lengths with kiln-dried maple door and trim made up of selected lengths of clear-grained lumber, mortised, tenoned, glued, and treated with a transparent moisture-retardant to prevent warping.

Units swing easily on rotational joints and each 5-ft. section is supplied with three, all-steel, concealed latches, with safety-type, self cleaning, Allen-Hex head spindles to hold footlight in closed or open position. Hex key wrench is supplied.

Lamp carriage is of 20-ga. steel, finished dull black. Each 5-ft. section wired standard for three color circuits with No. 12 asbestos, color-coded wire. Three, metal-clad mercury switches are furnished to disconnect color circuits when not in use. A 3 foot length of flexible, steel armored cable and junction box are included.

Additional color circuits available when specified. Price on application.

INDIVIDUAL REFLECTOR TYPES

Individual spun Lume-Crome* reflectors with heat-resisting PYREX glass roundels, held in hinged retaining rings.** (Colors as selected.)

	CATALOG NO.	NO. OF OUTLETS	LAMP WATTAGE	ROUND EL DIAMETER	TYPE OF REFLECTOR	FRAME WIDTH	REQUIRED TROUGH SIZE	
							Width	Depth
	43523	12	60/100	4 1/4"	Dist.	14"	12"	9"
	41623	9	100	5 3/4"	Conc.	18"	16"	9 3/4"
	41625	9	150	5 3/4"	Conc.	18"	16"	9 3/4"

CONTINUOUS REFLECTOR TYPES—For Natural or Colored Lamps

		40004-L	15	40/100	Continuous Lume Crome† reflector lining.	14"	12"	9"
		40004-P	15	40/100	Continuous baked white interior reflecting surface.	14"	12"	9"

*Available with Alzak finish reflectors, when specified, at no additional cost.

**Roundel retainer rings will hold gelatine frames, available in place of roundels. No extra cost.

†Available with continuous Alzak reflector lining, when specified. No extra cost.



Trap Door Design Disappearing Footlights

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

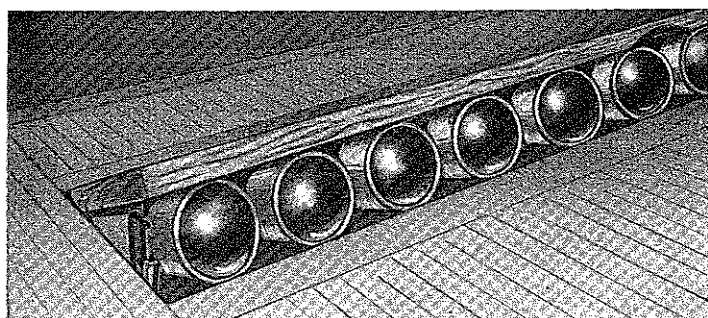
CATALOG SUPPLEMENT NO. 3

File in Catalog No. 100

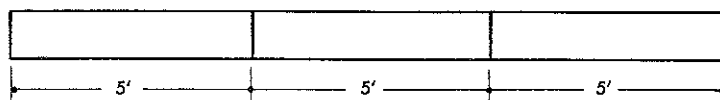
SECTION 3, PAGE 10A

Prices in Price Sheet No. 101A

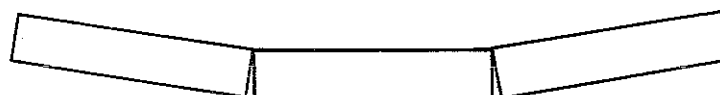
INDIVIDUAL REFLECTOR TYPE - FOR
60/100 W. TYPE "A" LAMPS



DISAPPEARING FOOTLIGHT INSTALLATION



STRAIGHT-LINE INSTALLATION



CURVED INSTALLATION - WITH BLOCK INSERTS (BY OTHERS)

A convenient and simple means of providing suitable lighting on the stage, where it is desirable to conceal footlights when not in use. Ideal for toning stage setting and affording illumination onto stage from below.

Open, these footlights present an almost unbroken front. Closed, the cover fits flush with stage floor. The opening is adjustable with ratchet support bar.

SPECIFICATIONS

Furnished standard in five foot sections. Kiln-dried selected lengths of clear grained hard maple door and rails, carefully treated to resist moisture and prevent warping.

Steel lamp carriage finished baked dull black. Each 5-ft. section is wired for three color circuits with No. 14 asbestos color coded wires. Three metal clad mercury switches are furnished to disconnect color circuits when door is closed.

Furnished with terminal box, terminal block and junction box.

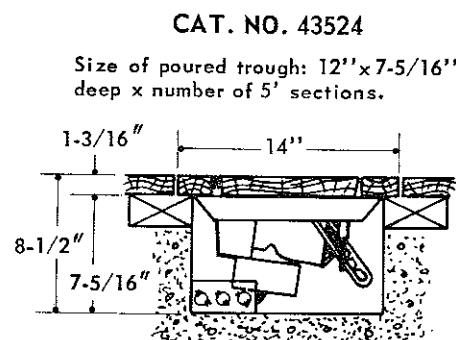
Each 5-ft. section supplied with 12 Lume Crome* individual, distributing type, reflectors and heat-resisting PYREX glass roundels held in hinged retaining rings**. Colors of roundels as specified (Standard: red, green and blue).

Each section has two safety-type, spring loaded latches with release cord and self-cleaning Allen Hex-head spindles. Hex key wrench is supplied. Footlights lock automatically when closed and they cannot be opened accidentally.

Available with four or more color circuits per 5-ft. section when specified, at extra cost.

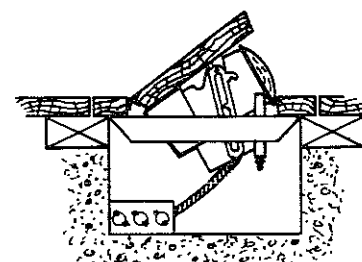
* Also available with Alzak finish reflectors, when specified, at no extra cost.

** Hinged roundel retainer rings can also accommodate gelatine frames, which can be furnished in place of glass roundels, if specified, at no extra cost.



CAT. NO. 43524

Size of poured trough: 12"x7-5/16" deep x number of 5' sections.



Hub Portable Footlights

U.L. Approved

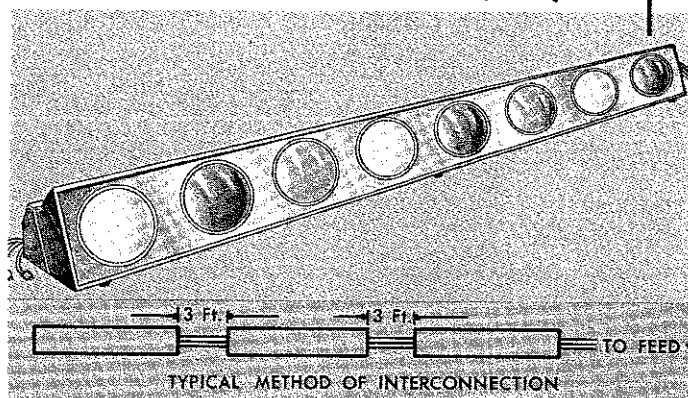


INDIVIDUAL AND CONTINUOUS REFLECTOR TYPES

— IN SECTIONS UP TO 8 FT. MAXIMUM LENGTH

For the small stage without permanent footlights, or for the conversion of a non-stage area into a temporary stage, these portable footlights are excellent in providing the basic utilitarian lighting needed for both dramatic and non-dramatic events. All portable footlights are available in sections up to 8 ft. maximum length each (6 ft. lengths generally recommended), and are complete with connecting cables and 2-wire pin plug or other type separable connectors, or twist-lock couplings for interconnection of sections as required. Three pole and multiple pole connectors of various types also available. Specify footlight length and connector type when ordering, also number of sections, length of cable from last section to feed (up to 5 ft. standard) and location of feed as referred to facing auditorium from stage.

All models wired for three colors but additional colors and circuits can be supplied as specified. Wired with No. 12, asbestos, color-coded wire.



INDIVIDUAL REFLECTOR TYPES — These portable footlights have individual Lume-Crome† reflectors. Each reflector has a heat-resisting, PYREX glass roundel of selected color, held in a hinged-

type retaining ring.* Reflector outlets are spaced 6 inches on center, minimum. Housing is of code gauge steel, finished in dull black.

	CATALOG NUMBER	REFLECTOR TYPE	LAMP WATTAGE AND TYPE	ROUND EL DIAMETER
	73523	Distributing	100 W., A-21	4 1/4"
	73625	Concentrating	150 W., A-23	5 5/8"

CONTINUOUS REFLECTOR TYPES — Open footlights with continuous reflecting surfaces. Colors are secured through the use of colored

lamps. Housings are of code gauge steel, finished dull black. Furnished in sections, each in lengths up to 8 ft. maximum. (6 ft. lengths generally recommended.)

	CATALOG NUMBERS		CTR. TO CTR. MIN. OUTLET SPACING	LAMP WATTAGE
	BAKED WHITE REFLECTING SURFACE	LUME-CROME** REFLECTOR LINING		
	70004-P	70004-L	4"	40/100
	70014-P	70014-L	4"	40/100

HUB CONCEALABLE FOOTLIGHTS — Similar to the Continuous Reflector Type described above, but hinged for concealment under a removable wood cover supplied by others. Wired standard in

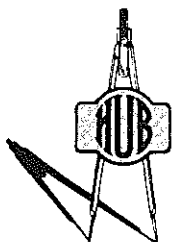
3 color circuits. Available in multiple sections not exceeding 7 ft. Also available with mercury disconnect switches at extra cost. (One per circuit—necessary for UL approval.)

	60024-P	60024-L	4"	40/100
	60026-P	60026-L	4"	40/100

*Roundel retainer rings will hold gelatine frames, available in place of roundels. No extra cost.

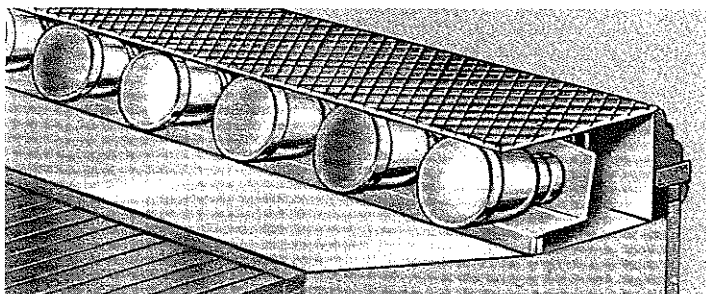
**Also available with Alzak Aluminum reflector lining when specified at no extra charge.

†Available with Alzak finish reflector, when specified, at no additional cost.



Hub Permanent Semi-Flush Footlights

INDIVIDUAL REFLECTOR TYPE AND CONTINUOUS REFLECTOR TYPE
— FURNISHED IN ANY SPECIFIED LENGTHS U.L. Approved



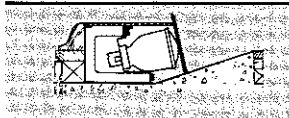
Hub Permanent Semi-Flush Footlights are the standard footlight types, built to specified length, and fitted into a recess at the front edge of a stage. Wired for three standard colors, but additional colors and other required circuits can be supplied as specified at no additional cost. Wired with No. 12 asbestos, color-coded wire.

INDIVIDUAL REFLECTOR TYPES—These footlights have individual Lume-Crome reflectors.* Each reflector has a heat-resisting PYREX glass roundel held in a hinged-type, retaining ring.** (Colors as selected.)

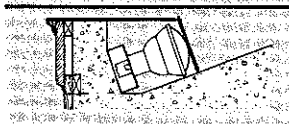
The **Saftred** models have a 9½" wide, ¼" thick steel tread plate with safety, non-slip tread, as illustrated, and are furnished

with distributing type reflectors. **Open type** models are supplied without the tread plate and utilize concentrating type reflectors. Raceways are of code gauge steel. Entire footlight is finished dull black, and the splice cover and knockouts are at designated end (as referred to when facing auditorium). Furnished standard in straight construction in any length desired. Center to center minimum outlet spacing is 6 inches.

SAFTRED TYPE
(Tread plate included)



OPEN TYPE
(Tread plate not supplied)

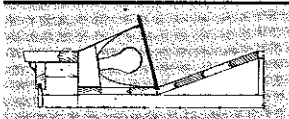


CATALOG NUMBER	REFLECTOR TYPE	LAMP WATTAGE	ROUND EL DIAMETER
63520	Distributing	60/100	4¼"
63620	Distributing	150 W., A-23	5½"
61623	Concentrating	100 W., A-21	5½"
61625	Concentrating	150 W., A-23	5½"

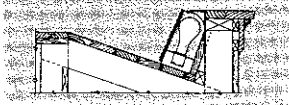
CONTINUOUS REFLECTOR TYPES—These open footlights have continuous reflecting surfaces. Colors are obtained through the use of colored lamps. Splice cover with terminal block and knockouts

are at designated end (as referred to when facing auditorium). Furnished standard in straight construction in any length desired.

TYPE A



TYPE B



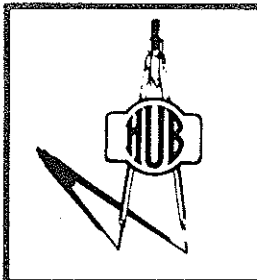
CATALOG NUMBERS		CTR. TO CTR. MIN. OUTLET SPACING	LAMP WATTAGE
BAKED WHITE REFLECTING SURFACE	LUME-CROME† REFLECTOR LINING		
60004-P	60004-L	4"	40/100
60006-P	60006-L	6"	40/100
60014-P	60014-L	4"	40/100
60016-P	60016-L	6"	40/100

CURVED CONSTRUCTION: When curved construction is required, specify outside radius. Such construction is available at additional cost.

*Available with Alzak finish reflector, when specified, at no additional cost.

†Available with continuous Alzak reflector lining, when specified. No extra cost.

**Roundel retainer rings will hold gelatine frames, available in place of roundels. No extra cost.



Hub Ellipsoidal Spotlights

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

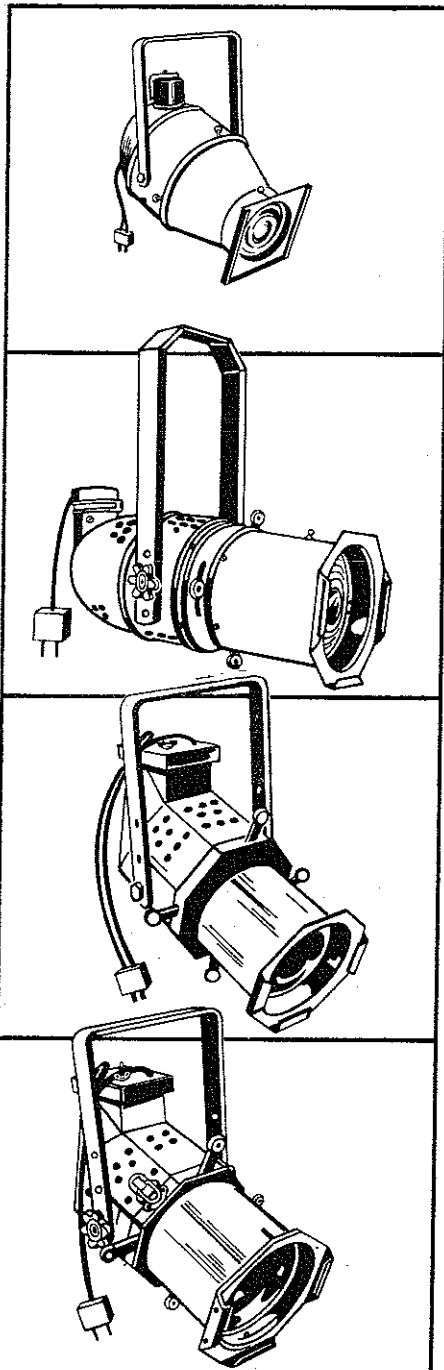
All units furnished standard with one color frame, 5 ft. of 2-wire asbestos lead, pin plug (twist-lock plug, if specified), yoke, "C" clamp for up to 2" pipe, four individual framing shutters, black wrinkle finish housing, ellipsoidal Alzak reflector, heat-resisting lenses and hard or soft edge focus adjustment.

CATALOG SUPPLEMENT NO. 12

File in Catalog No. 100

SECTION 3, PAGES 13 AND 14

Prices in Price List No. 101B

**Catalog No. 8764**

APPLICATION: Used as auditorium ceiling spotlights at 20 ft. to 30 ft. projection distance, and for side or overhead lighting on stage.

DESCRIPTION: 250/750 W. spotlight with 1-6" plano convex lens. (Available with one-6" co-louvered stepped lens for soft edge beam, when specified, at no additional cost).

Catalog No. 8765

APPLICATION: Same as for 8764 above except that projection distance is 20 ft. to 40 ft.

DESCRIPTION: 500/750 W. spotlight with one - 8" step lens, with opaque ceramic risers.

Catalog No. 8766

APPLICATION: Used as auditorium ceiling spotlight at less than 20 ft. projection distance. Also useful on large stage as teaser spotlight.

DESCRIPTION: 250/500 W. spotlight with two 4½" plano-convex lenses.

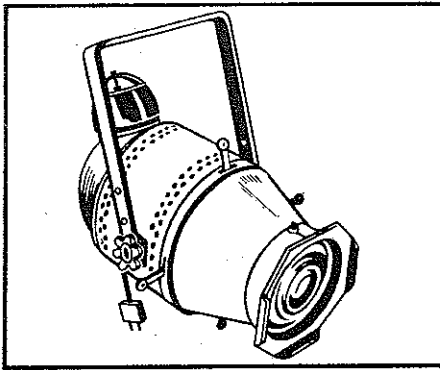
Catalog No. 8768

APPLICATION: Used as auditorium ceiling spotlight at 20 ft. to 30 ft. projection distance and for modelling lighting from side or overhead locations on stage.

DESCRIPTION: 500/750 W. spotlight with two 6" plano-convex lenses.

PERFORMANCE DATA ON REVERSE SIDE

HUB ELECTRIC COMPANY, INC., 2255 West Grand Avenue, Chicago 12, Illinois



Catalog No. 8769

APPLICATION: Used as auditorium ceiling spotlight at 20 ft. to 60 ft. projection distance.

DESCRIPTION: 1000/1500/2000 W. spotlight with single 8" step lens, with opaque ceramic risers.

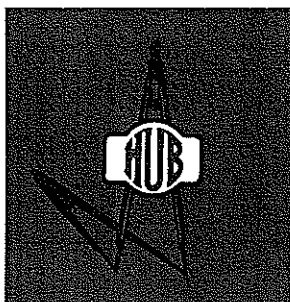
AVAILABLE FOR ALL UNITS - At extra cost

- Built-in iris shutter in addition to framing shutters. When ordering, add suffix (RI) to catalog number. If iris shutter only (no framing shutters) add suffix (I) to catalog number.
- Telescoping pipe stand with cast iron base, or stand with casters, and 25 ft. of rubber-covered cable with pin plug or twist-lock connectors.
- Available with 2-pc. pipe clamp with iron pipe to permit mounting of spotlights to vertical stand. When ordering, add suffix (-V) to catalog number.
- 3-wire, or 2-wire plus ground, plug of any type attached to spotlight lead.
- 20" x 24" colored gelatin sheets.
- Sectional glass color filters.

PERFORMANCE DATA

CATALOG NUMBER	LAMP SIZE IN WATTS	BEAM SPREAD	PROJECTION DISTANCE	DIA. OF SPOT	FOOT CANDLE INTENSITY		
8764	250 T-12/7	22 °	20"	8'	50		
			30"*	12'	22		
	500 T-12/9		20"	8'	110		
			30"	12'	48		
			40"*	16'	27		
	750 T-12/9		20"	8'	178		
			30'	12'	78		
			40'	16'	44		
8765	500 T-12/9	23 °	20"	8.25"	120		
			30"	16.5'	67		
			40"*	24.75	30		
	750 T-12/9		20"	8.25'	194		
			30'	16.5	108		
			40"	24.75	49		
	8766		250 T-12/7	45 °	10"	8.25'	144
					20"	16.5	36
			500 T-12/9		10"	8.25	320
20'		16.5			80		
30'		24.75			35		
8768	500 T-12/9	36 °	20'	13"	110		
			30"	20"	48		
			40"*	26'	27		
8769	1000 T-24/5	20 °	20"	7'	134		
			40"*	14"	33.5		
			60"*	21'	15		
	1500 T-24/6		20"	7'	232		
			40"	14'	58		
			60"*	21'	26		
	2000 T-30/1		20"	7'	330		
			40'	14"	82.5		
			60"*	21'	37		
* Not recommended for throws of this distance.							

* Not recommended for throws of this distance.



Hub Adjustable Flush Mounted Spotlight Ports

U.L. APPROVED

QUALITY SINCE 1914

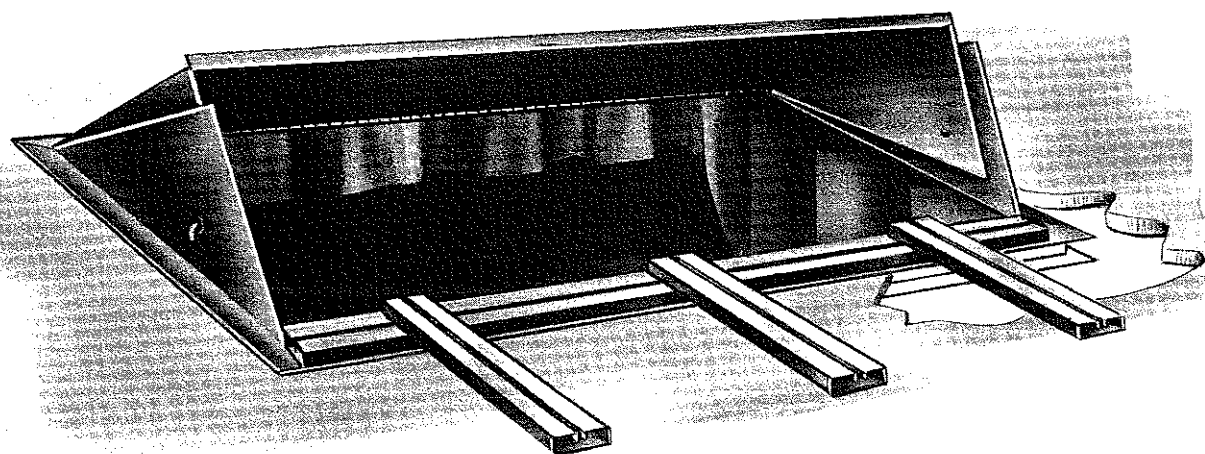
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 70

File in Catalog No. 100

SECTION 3, PAGES 14A AND 14B

Prices in Price List No. 101F



Cat. No. 8997-3 – for three spotlights

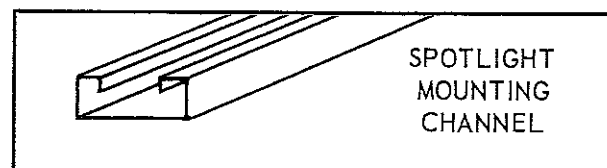
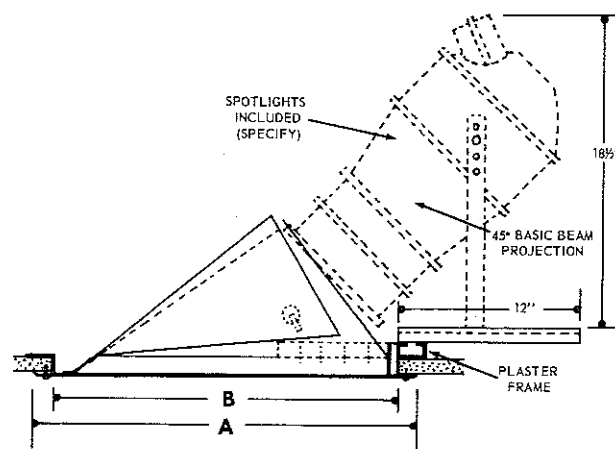
APPLICATION

Hub adjustable, flush mounted spotlight ports provides a semi-concealed, recessed mounting port for two, three, or four spotlights. These ports make it possible to use spotlights to frame-in different portions of the acting area from one ceiling opening. The spotlights can be used individually, each with a different color, or in a group for high intensity output. These ports have a hinged adjustable cover to allow an increase or decrease in the height of the aperture—for varied angling of the spotlights.

Note on location of ceiling ports: These ports are designed for a 45° basic beam projection and the standard aiming point for ceiling spotlights is 5-ft. behind proscenium opening (on stage floor).

SPECIFICATIONS

Spotlight ports are of steel, housing finished black and trim white, and are furnished complete with a full length piano-type hinge and thumbscrew adjustment, spotlight mounting channels, and plaster frame.

SPOTLIGHT
MOUNTING
CHANNEL

Catalog No. of Ports (includes spotlights)	Spotlights Accommodated (Specify)		Dimensions in Inches		
	No.	Cat. Nos.	A	B	Vert. Clearance
8997-2	1 or 2 *	8764, 8768	21 x 35	18 x 32	21
8998-2	1 or 2 *	8765, 8769	28 x 47	25 x 44	32
8997-3	3	8764, 8768	21 x 51	18 x 48	21
8998-3	3	8765, 8769	28 x 69	25 x 66	32
8997-4	4	8764, 8768	21 x 67	18 x 64	21
8998-4	4	8765, 8769	28 x 91	25 x 88	32

DATA ON RECOMMENDED HUB SPOTLIGHTS (Specify when ordering)

Catalog Number	Wattage	Beamspread	Projection Distance	Refer to:
8764	250/750	23°	20' to 40'	Sec. 3, Pps. 13, 14
8765	500/750	23°	20' to 40'	Sec. 3, Pps. 13, 14
8768	500/750	36°	20' to 30'	Sec. 3, Pps. 13, 14
8769	1000/1500/2000	20°	20' to 40'	Sec. 3, Pps. 13, 14

*Furnished standard with two spotlights; specify spotlight desired.



Hub Flush Mounted Motor Driven Spotlight Port

U.L. APPROVED

QUALITY SINCE 1914

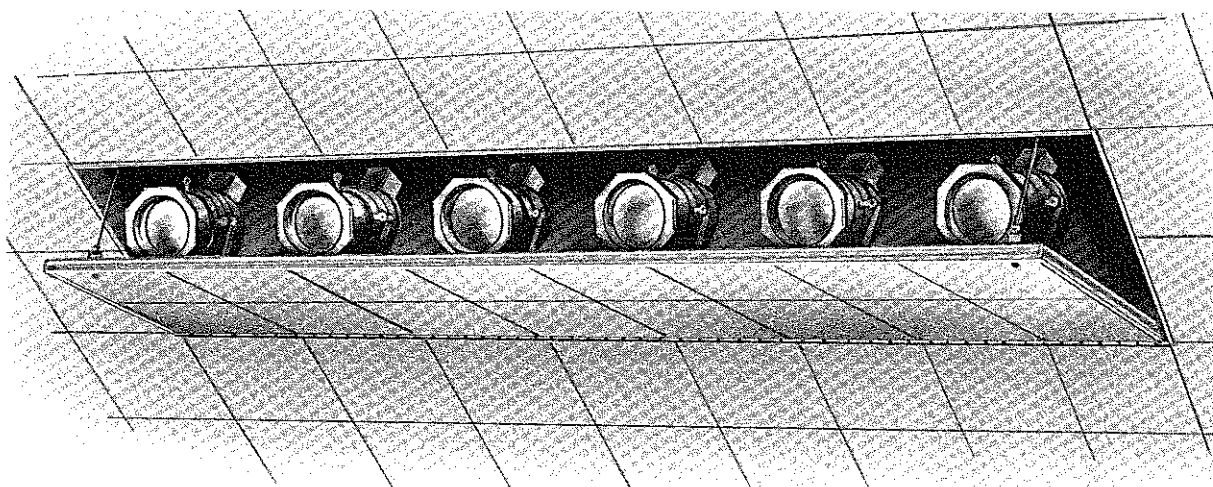
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 87

File in Catalog No. 100

SECTION 3, PAGES 14C AND 14D

Prices in Price List No. 101H



Cat. No. 98902 – for six spotlights

APPLICATION

Hub flush mounted, motor driven spotlight port provides a fully concealed, recessed mounting port for six 500-watt spotlights. This port makes it possible to light the very important front area of the stage – and to have the opening fully concealed when the auditorium, room, or restaurant is used for other activities.

The spotlights can be used individually, each with a different color, or in a group controlled from the switchboard.

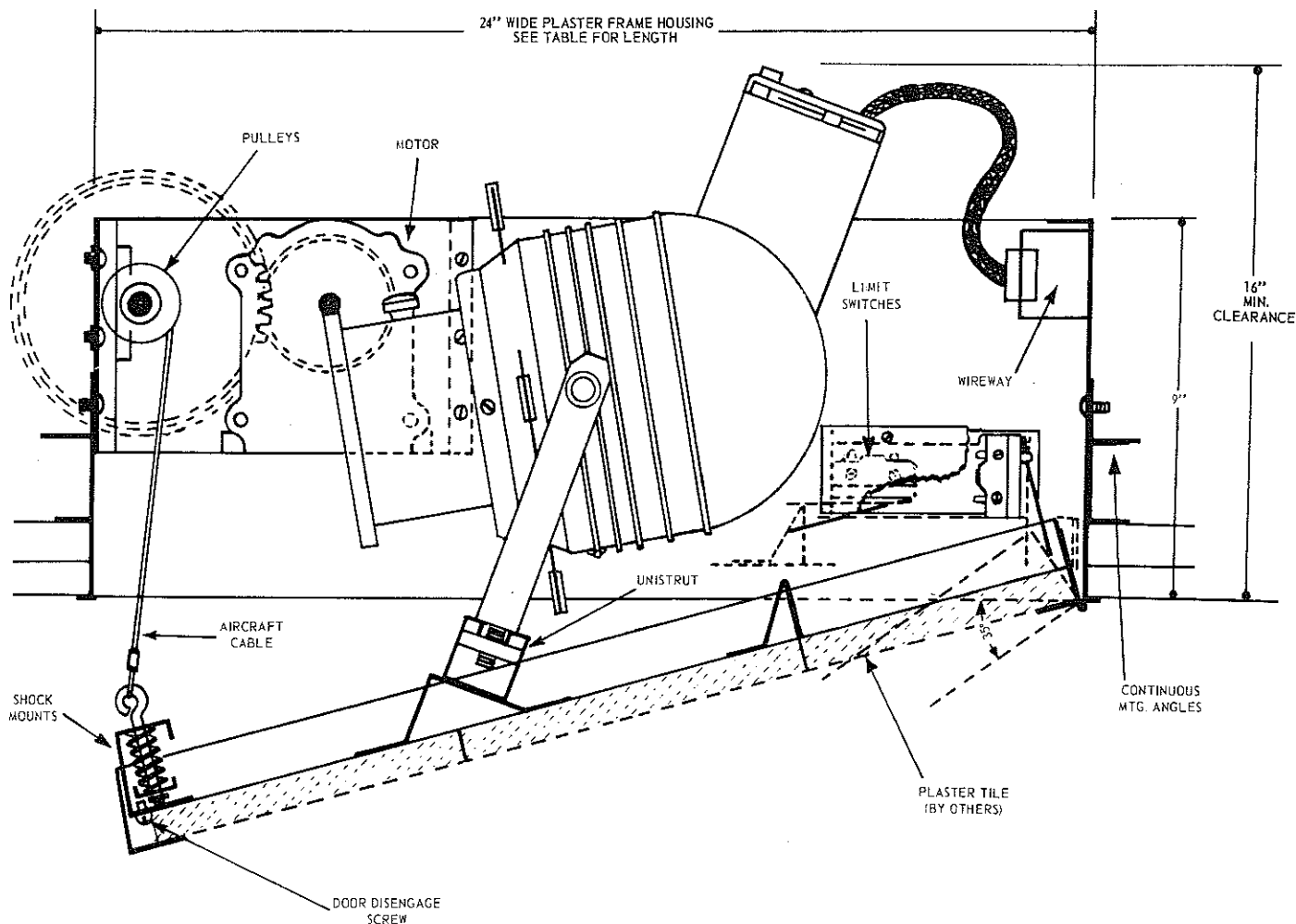
Note on location of ceiling ports: This port is designed for a 35° basic beam projection and the standard aiming point for ceiling spotlights is 5-ft. behind proscenium opening (on stage floor). Two of these ports should be installed, each placed just within a point opposite each side of the proscenium opening.

This port is of steel finished in flat black enamel. The port door has a steel frame (finished in gray

SPECIFICATIONS

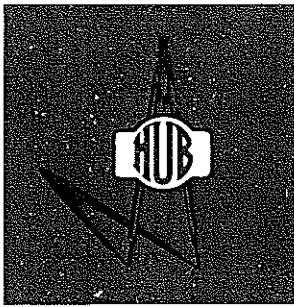
lacquer) for insertion of ceiling tile and is supplied with a continuous hinge for the full 96" of length. Port is complete with a geared reversible motor and two 'micro' limit switches to stop motor current when door is closed or when door is open at maximum of 35°. Spotlights mount approximately 15" o.c. to continuous Unistrut and can be adjusted through openings in top of port housing. In event of motor failure, door and shock mounting assembly can be disengaged by removing two screws (see sectional drawing). Control switch (single pole, double throw, momentary contact) provided for wall mount or control switchboard.

This port is available in lengths to accommodate three, four or six 500 watt ellipsoidal spotlights (Nos. 8764, 8766, 8768) or fresnel spotlights (Nos. 8758, 8786) – or both. These spotlights are listed in Section 3, Pages 13, 14, 15 and 16 of the Hub catalog.



Catalog Number	Maximum Number of 500 Watt Spotlights	Length of Port
98900	3	48"
98901	4	72"
98902	6	96"

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.



Hub Adjustable Spotlight Port Combination

U. L. LISTED

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

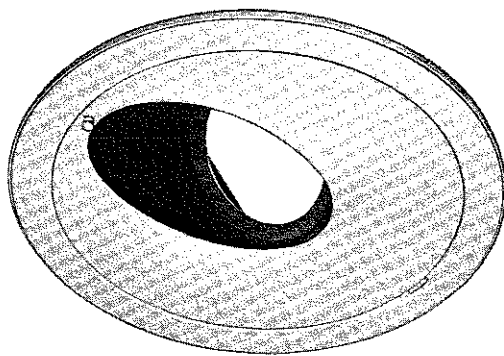
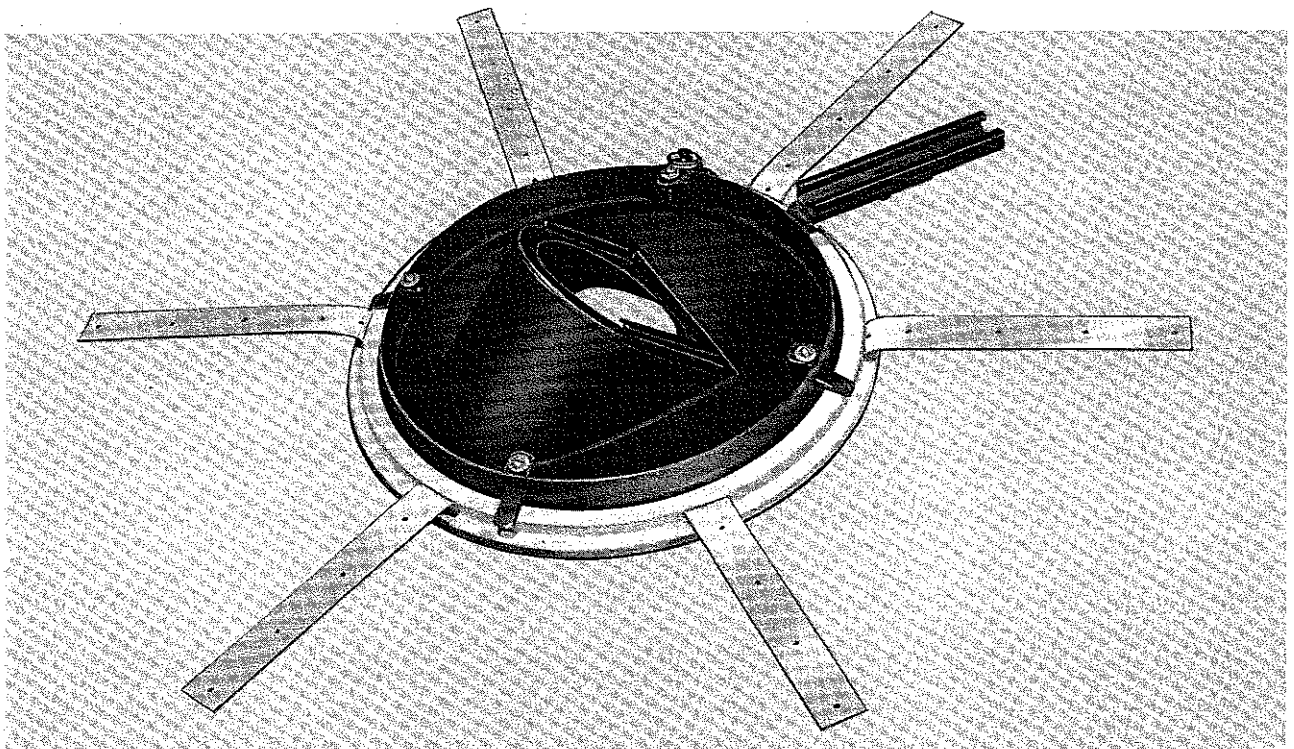
Cat. No. 8932-8764

CATALOG SUPPLEMENT NO. 103

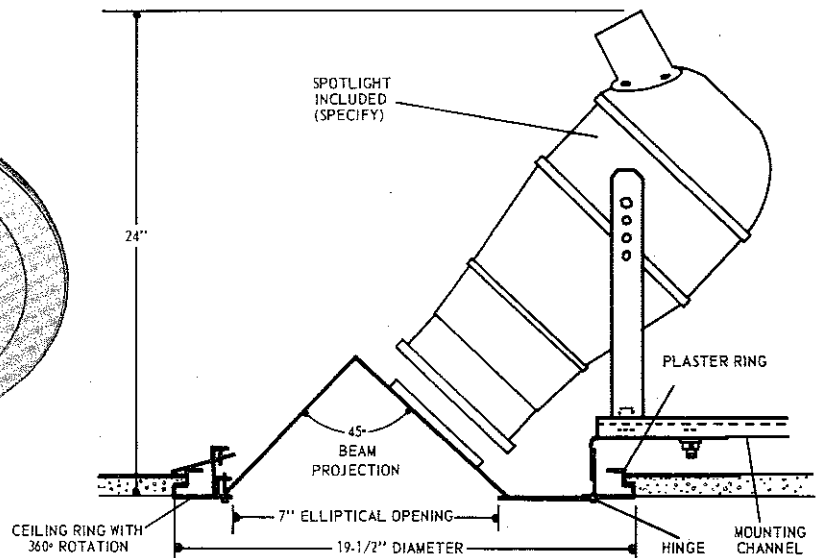
File in Catalog No. 100

SECTION 3, PAGES 14E AND 14F

Prices in Price List No. 101J



Reflected View



See following page for details.

APPLICATION

Hub spotlight and port combination provide a flush mounted, semi-concealed mounting of extreme importance in lighting the front areas of the stage. Also can be used in a church to light pulpit, for feature lighting, and in night clubs for special lighting, etc.

These ports are designed for a 45° basic beam projection and the standard aiming point for the spotlights is 5 feet behind the proscenium opening, on the stage floor. The construction of the port permits 360° rotation and may be serviced from above or below ceiling.

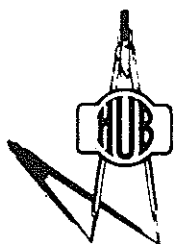
Port comes complete with integral plaster ring and mounting straps and because of its rotation feature, it cannot be mounted in the wrong direction. Available with your choice of any of three Hub spotlights as listed in the chart below.

SPECIFICATIONS

Spotlight ports are of steel, finished dull black, and steel ceiling ring and plaster ring are finished with baked white enamel. Ceiling ring is hinged for bottom service and has 360° rotation adjustment. Complete with spotlight and spotlight mounting channel.

Catalog No. of Port and Spotlight Combination	Data on Recommended Hub Spotlight				
	Cat. No.	Wattage	Beamspread	Projection Distance	Refer to:
8932-8764	8764	250/750	22°	20' to 40'	Sec. 3, Pps. 13, 14
8932-8766	8766	250/500	45°	10' to 30'	Sec. 3, Pps. 13, 14
8932-8768	8768	500/750	36°	20' to 30'	Sec. 3, Pps. 13, 14

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.



Hub Fresnel Lens Spotlights

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

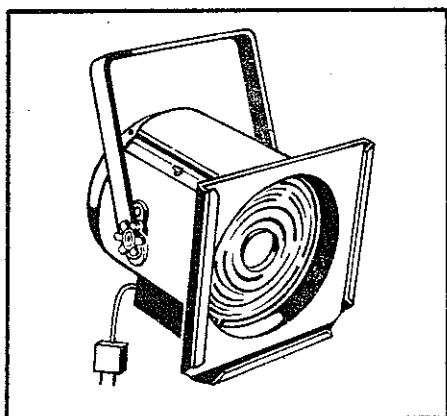
All units furnished standard with one color frame, 5 ft. of 2-wire asbestos lead, pin plug (twist-lock plug, if specified), yoke, and "C" clamp for up to 2-in. pipe (Catalog No. 8789 also comes with a low mounting base in place of "C" clamp, if specified, at no extra charge), heat-resisting Fresnel lens, polished spherical Alzak reflector with beam-spread adjustment, and with black wrinkle finish housing.

CATALOG SUPPLEMENT NO. 13

File in Catalog No. 100

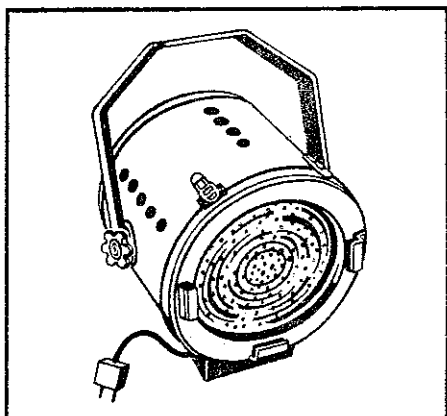
SECTION 3, PAGES 15 AND 16

Prices in Price List No. 101B

**Catalog No. 8758**

APPLICATION: Area spotlighting on stage, generally from teaser location.

DESCRIPTION: 250/500/750 W. spotlight with 6-in. Fresnel lens. Uses 250 W., T-20/47, 500 W., T-20/48, or 750 W. T-20 P/SP lamps with medium prefocus base, 2 3/16 in. L.C.

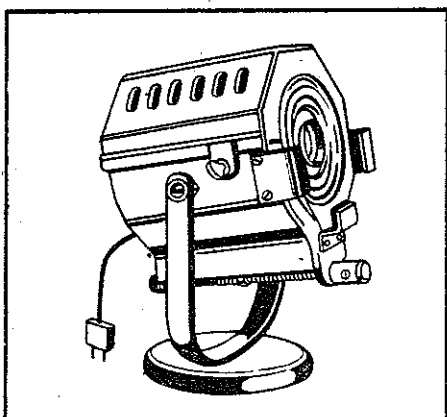
**Catalog No. 8786**

Same as No. 8758 above, except that it is more convenient to operate. Has lead-screw type front and back knobs for beam-spread adjustment.

Catalog No. 8811-F

APPLICATION: High intensity area spotlighting from overhead on stage.....also can be used as auditorium ceiling spot-floodlight, or as teaser spotlight on large high-proscenium stages.

DESCRIPTION: 500/1000 W. spotlight with 8-in. Fresnel lens. Uses 500 W., G-40 Fl. 4 1/4", or 1000 W., G-40 Fl. 5 1/4" mogul screw base.

**Catalog No. 8811-S**

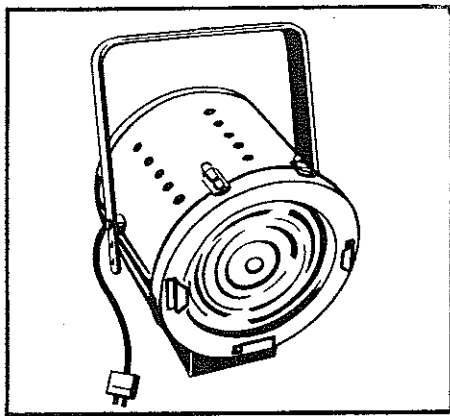
Same as 8811-F above, except with 1000 W., 3 15/16" L.C., G-40 mogul prefocus base.

Catalog No. 8789

APPLICATION: For use as special, low-intensity accent spotlight in restricted spaces, such as in floodlight location or behind small scenic units or properties on stage.

DESCRIPTION: 100/150 W. midget size spotlight with 3-in. Fresnel lens. Uses G-16 1/2 S.C. lamp with bayonet candle base.

PERFORMANCE DATA ON REVERSE SIDE



Catalog No. 8816

APPLICATION: High intensity area spotlighting from overhead on stage.....also can be used as auditorium ceiling spot-floodlight, or as teaser spotlight on large, high-proceniun stages.

DESCRIPTION: 2000 W. spotlight with 10-in. Fresnel lens. Uses G-48/17 lamp with mogul bipost base, 5" L.C.

AVAILABLE FOR ALL UNITS - At extra cost

- 20" x 24" colored gelatin sheets.
- Sectional glass color filters.
- 2-way and 4-way barn doors.
- Telescoping pipe stand with cast iron base, or stand with casters, and 25 ft. of rubber-covered cable with pin plug or twist-lock connectors.
- 3-wire, or 2-wire plus ground, plug of any type attached to spotlight lead.
- Available with two-piece pipe clamp with iron pipe to permit mounting of spotlights to vertical stand. When ordering, add suffix (V) to catalog number.

PERFORMANCE DATA

CATALOG NUMBER	LAMP SIZE IN WATTS	BEAM SPREAD	PROJECTION DISTANCE	DIA. OF SPOT	FOOTCANDLE INTENSITY
8758	500 T-20/48	17°	10'	3'	433
			20'	6'	109
			30'	9'	48
		62°	10'	12'	72
			20'	24'	18
			30'	36'	8
8811-F	500 G-40/F1.	20°	10'	3½'	256
			20'	7'	64
			30'	8½'	28
		62°	10'	12'	102
			20'	24'	26
			30'	36'	11.5
8811-S	1000 G-40/PSP	20°	10'	3½'	576
			20'	7'	144
			30'	8½'	64
			40'	11½'	36
		62°	10'	12'	231
			20'	24'	58
			30'	36'	26
			40'	48'	14
8816	2000 G-48/17	15°	20'	5¼'	920
			30'	8'	410
			40'	16'	100
		45°	20'	16'	90
			30'	24'	40
			40'	48'	10



Hub Condenser Spotlights

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

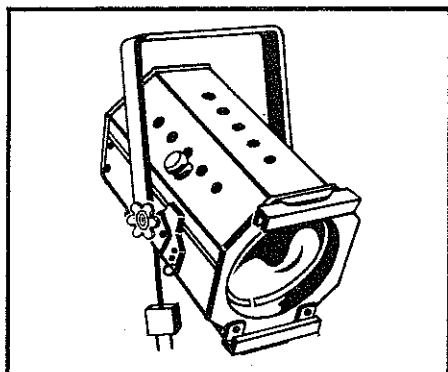
CATALOG SUPPLEMENT NO. 14

File in Catalog No. 100

SECTION 3, PAGES 17 AND 18

Prices in Price List No. 101B

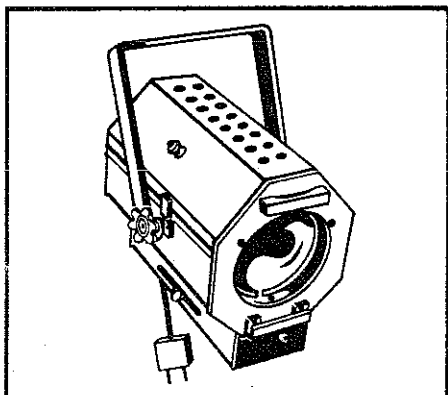
All units furnished standard with one color frame, 5 ft. of 2-wire asbestos lead, pin plug (twist-lock, if specified), yoke, and "C" clamp for up to 2-in. pipe, ground heat-resisting condenser lens, polished spherical reflector, beam-spread adjustment, and with black wrinkle finish housing.



Catalog No. 8767

APPLICATION: For medium intensity spotlighting on stage where hard focus is required; 14° to 53° variable beam spread.

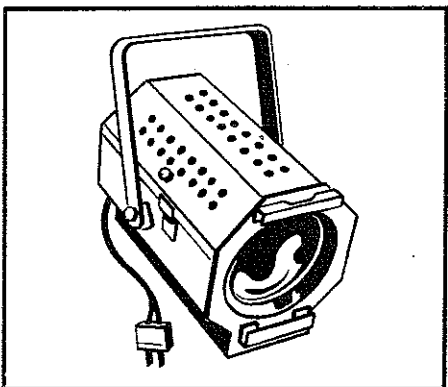
DESCRIPTION: 400/500 W. spotlight with 4½-in. ground condenser lens. Uses 400 W., G-30, or 500 W., T-20/45 lamps with medium screw base, 3-in. L. C.



Catalog No. 8770

APPLICATION: For medium intensity spotlighting from balcony front or stage locations where hard focus beam and sharp masking are required.

DESCRIPTION: 500/1000 W. spotlight with 6-in. ground condenser lens. Uses 500 W., G/SP or 1000 W., G-40/SP 4¼" lamps with mogul screw base, 4¼-in. L.C.



Catalog No. 8773

Same as No. 8770 above except that it is for 1000/1500 W. lamps. Has 8-in. heat-resisting, ground condenser lens. Uses 1500 W., G-40/15, or 2000 W., G-48/4 lamps with mogul prefocus base, 3 15/16-in. L.C.

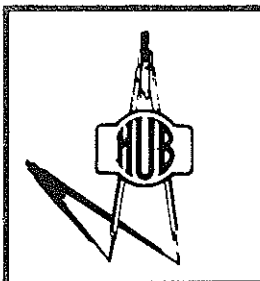
PERFORMANCE DATA ON REVERSE SIDE

AVAILABLE FOR ALL UNITS - At extra cost.

- 20" x 24" colored gelatin sheets.
- Sectional glass color filters.
- Telescoping pipe stand with cast iron base, or stand with casters, and 25 ft. of rubber-covered cable with pin plug or twist-lock connectors.
- Available with two-piece pipe clamp with iron pipe to permit mounting of spotlights to vertical stand. When ordering, add suffix (V) to catalog number.
- 3-wire, or 2-wire plus ground, plug of any type attached to spotlight lead.

PERFORMANCE DATA

CATALOG NUMBER	LAMP SIZE IN WATTS	BEAM SPREAD	PROJECTION DISTANCE	DIA. OF SPOT	FOOTCANDLE INTENSITY
8767	500 T-20/45	14°	10'	2.5'	298
			20'	5.0'	77
			30'	7.5'	33
		53°	10'	10'	18.6
			20'	20'	4.7
			30'	30'	2.1
8770	1000 G-40/SP-4¼"	7°	10'	1.2'	1190
			20'	2.4'	298
			30'	3.6'	133
		21°	10'	7.7'	142.9
			20'	15.4'	35.9
			30'	23.2'	15.9
		43°	10'	10'	58
			20'	20'	14.4
			30'	30'	6.5
		8°	20'	3'	213
			30'	5'	95
			40'	6'	53
8773	1500 G-40/15	22°	20'	12'	100
			30'	18'	47
			40'	24'	26
		48°	20'	21.4'	30
			30'	32.1'	13.4
			40'	42.8'	7.5



Hub Narrow and Wide Beam Floodlights

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

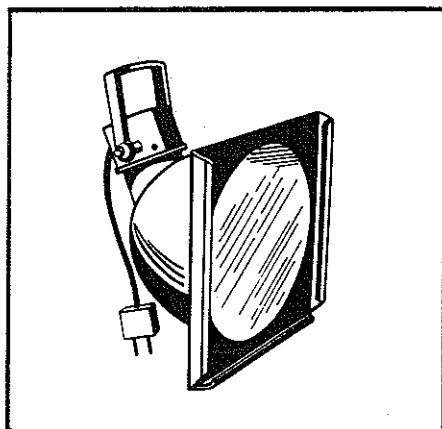
All units furnished standard with one color frame, 5 ft. of 2-wire asbestos lead, pin plug (twist lock plug, if specified), yoke, and "C" clamp for up to 2-in. pipe. Housings are of Alzak aluminum, finished dull black.

CATALOG SUPPLEMENT NO. 15

File in Catalog No. 100

SECTION 3, PAGES 19 AND 20

Prices in Price List No. 101B



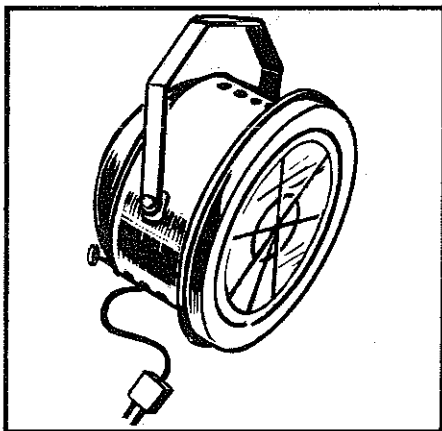
Catalog No. 8360

APPLICATION: Wide beam, diffuse pattern floodlight for use as tonal flood, on teaser batten, or for medium intensity floodlighting for miscellaneous purposes elsewhere on stage.

DESCRIPTION: 300/500 W. floodlight with 15-in. matte-surface ellipsoidal Alzak reflector. Uses PS-40 lamps with mogul screw base.

Catalog No. 8361

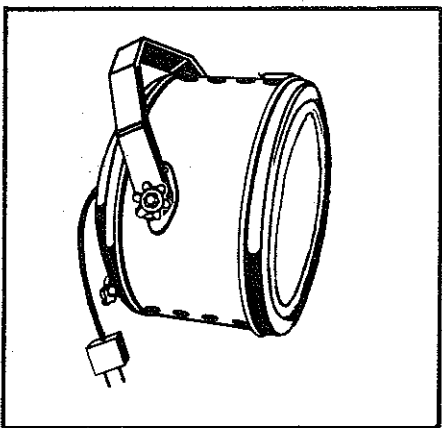
Same as No. 8360 above except that it is a 1000 W. wide beam floodlight with 18-in. matte-surface reflector. Uses 750, 1000 or 1500 watt, PS-52 lamps with mogul screw base.



Catalog No. 8779

APPLICATION: Narrow beam, projector type floodlight for high intensity, concentrated floodlighting with diffuse edges.... such as backlighting and for beams of sunlight and moonlight.

DESCRIPTION: 1000/1500/2000 W. floodlight with 16-in. parabolic reflector and circular louvers. Uses 1000 W., G-40 SP or 1500 W., G-40/10 lamps with mogul screw base, 5 1/4 in. L. C.



Catalog No. 8775

APPLICATION: Narrow beam, projector type floodlight with asymmetric soft edge beam. Useful for non-theatrical attention-focusing lighting of front stage areas from auditorium ceiling location.

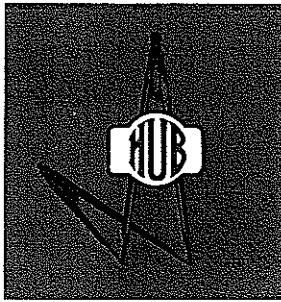
DESCRIPTION: 500 W. floodlight with 11-in. parabolic reflector, with beam-spread adjustment and horizontal louvers for restricting beam within proscenium height. Uses 500 W. T-20/64 lamp with medium prefocus base, 2 3/16 in. L. C. AVAILABLE WITH PARALLEL LOUVERS at additional cost. When ordering, add suffix (PL) to catalog number.

OPTIONAL EQUIPMENT LISTED ON REVERSE SIDE

HUB ELECTRIC COMPANY, INC., 2255 West Grand Avenue, Chicago 12, Illinois

AVAILABLE FOR ALL UNITS - At extra cost

- Telescoping pipe stand with cast iron base, or stand with casters, and 25 ft. of rubber-covered cable with pin plug or twist-lock connectors.
- Available with two-piece pipe clamp with iron pipe to permit mounting of floodlights to vertical stand. When ordering, add suffix (-V) to catalog number.
- 3-wire, or 2-wire plus ground, plug of any type attached to floodlight lead.
- 20" x 24" colored gelatin sheets.



Hub 500 W. Spotlight With Cast Aluminum Housing

U.L. APPROVED

QUALITY SINCE 1914

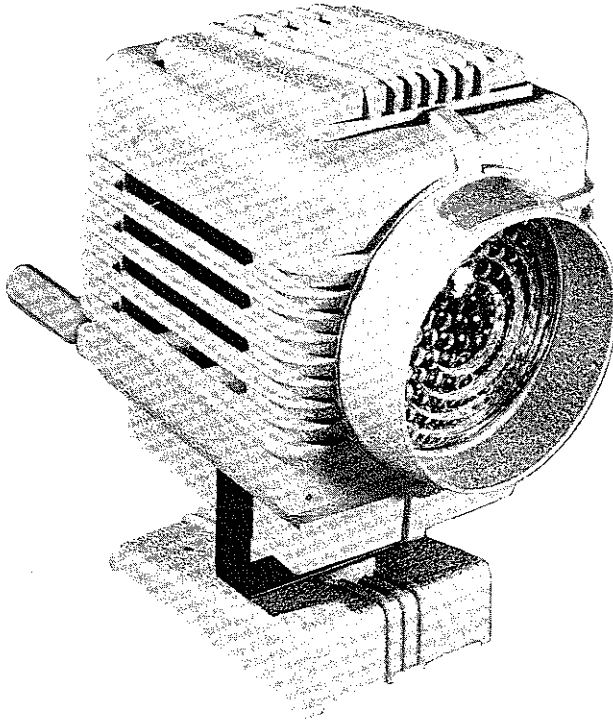
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 80

File in Catalog No. 100

SECTION 3, PAGES 20A AND 20B

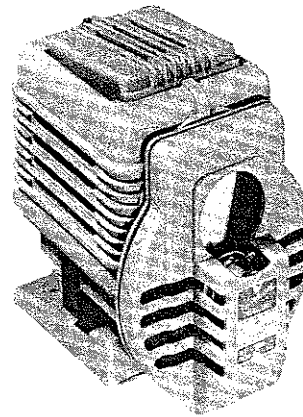
Prices in Price List No. 101G



Cat. No. 8742

APPLICATION

A compact, lightweight spotlight for use in nite clubs, churches, window displays, and photo studios. When used with Snoot accessory, this spotlight is ideal for highlighting ceremonial or architectural features with a very sharply focused beam.



Cat. No. 8743 - Automatic color spot with unbreakable filters.

SPECIFICATIONS

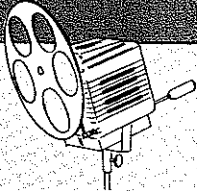
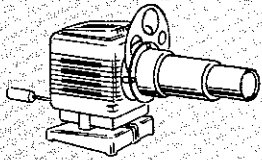
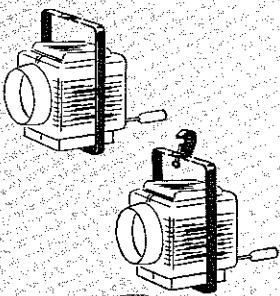
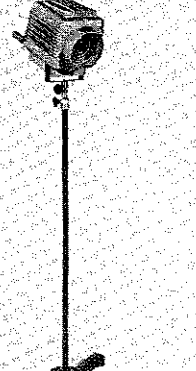
Strong, lightweight cast aluminum housing and table base finished in silver-brown wrinkle enamel. Table base is removable for mounting spotlight on floor stand or in ceiling bracket. Equipped with 4½ inch diameter, heat-resisting fresnel lens for soft-edge beam. Smooth action push-pull beam spread control. Complete with 9-ft. cord with on-off switch and porcelain socket for 500 watt T-20/48 120 volt medium prefocus 200 hour spotlight lamp. A 500 watt T-20/64 500 hour spotlight can be used but intensity of spot will be 13.6% less.

Available with accessories as listed below.

ACCESSORIES

	Description of Accessory	To order, add this suffix to Cat. No.
	* COLOR OR DIFFUSER FRAMES and accessory adapter.	- 1
	* BLINDER and accessory adapter. * Fits Cat. No. 8742 only.	- 2

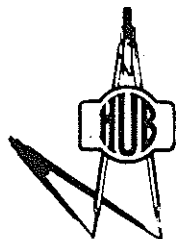
ACCESSORIES (CONTINUED)

	Description of Accessory	To order, add this suffix to Cat. No.
	*HAND COLOR WHEEL and accessory adapter. Five apertures, each with a different gelatin color. Hand operated.	- 3
	*SNOOT (narrow beam) for bright sharp edge at long distances. Five apertures for varied effects.	- 4
	*SNOOT (wide beam) same as Snoot described above except for beam width.	- 5
	*SNOOT COLOR FRAME, with spring mounting clips.	- 6
	CEILING BRACKET for permanent mounting. Allows 360° rotation.	- 7
	PIPE CLAMP. Only to be used with ceiling bracket. Fits over any pipe up to 1¼ inch diameter.	- 8
	FLOOR STAND. Adjustable height - from 3 feet to 5-1/2 feet. With universal swivel and	- 9
	FLOOR STAND WITH CASTERS. Adjustable height from 3-1/2 feet to 9 feet. With wide span cast iron base with ball bearing casters; universal swivel and positive lock.	-10
	* Fits Cat. No. 8742 only.	

PERFORMANCE DATA

Catalog Number	Lamp Size	Beam Angle	Projection Distance	Diameter of Spot	Max. Foot-Candle Intensity			
8742 with Std. Fresnel Lens	500T20/48	12° Min.	5'	1'0½"	410			
			10'	2'1"	102			
			20'	4'3"	26			
			30'	6'4"	11			
			5'	3'5"	140			
		38° Max.	10'	6'11"	35			
			20'	13'10"	9			
			30'	20'9"	4			
			8742 with Narrow Beam Snoot Attachment	500T20/48	4° (Aper. 1)	5'	5"	553
						10'	10"	138
20'	1'8"	35						
13° (Aper. 5)	30'	2'6"			16			
	5'	1'2"			553			
	10'	2'4"			138			
	20'	4'8"			35			
	30'	7'			16			
	8742 with Wide Beam Snoot Attachment	500T20/48			8° (Aper. 1)	5'	9"	312
						10'	1'6"	78
20'			3'	19				
26° (Aper. 5)			30'	4'6"	9			
			5'	2'4"	283			
			10'	4'9"	71			
			20'	9'6"	18			
			30'	14'2"	8			
			8743	500T20/48	14° Min.	5'	1'3"	see note below
						10'	2'6"	
20'	5'0"							
48° Max.	5'	4'6"						
	10'	9'0"						
	20'	18'0"						

NOTE: Intensity varies with each color. Total effect will depend upon contrast with background



Hub-Strong® Incandescent Spotlight

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

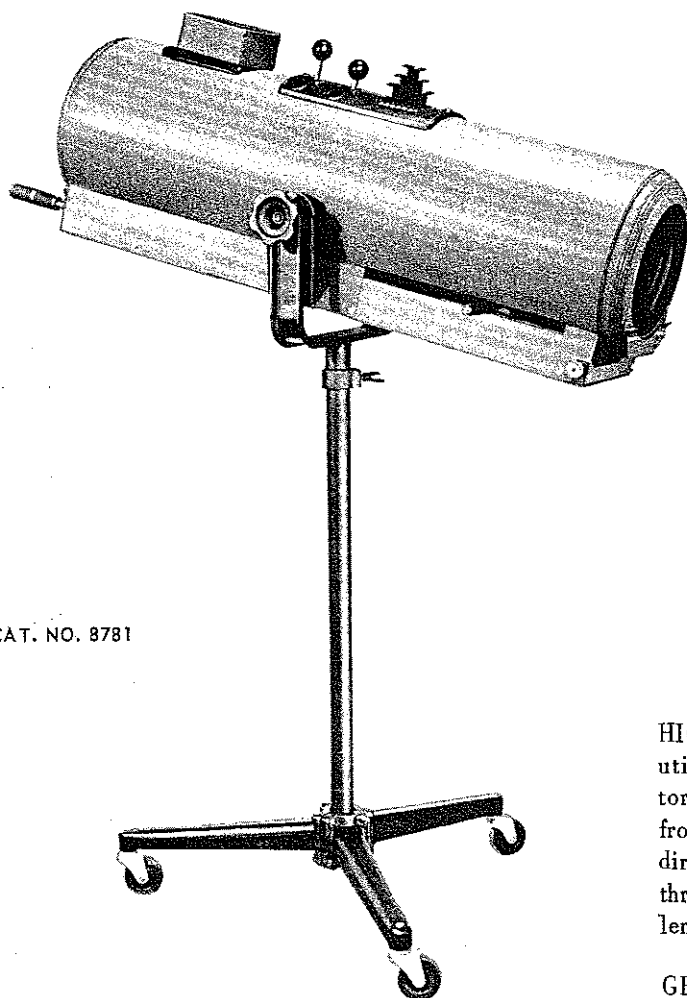
CATALOG SUPPLEMENT NO. 16

File in Catalog No. 100

SECTION 3, PAGES 21 AND 22

Prices in Price List No. 101B

FURNISHED WITH LAMP . . .



CAT. NO. 8781

FEATURES

HIGHLY EFFICIENT OPTICAL SYSTEM ... utilizes a combination of silvered glass reflector and Fresnel lens to collect the illumination from the 1000-watt incandescent source and direct it through the circular aperture and then through the two element variable focal length lens system.

GREATER BRILLIANCIES ... the single lever controlled, two element, variable focal length lens system eliminates the necessity of a light-wasting iris through a greater portion of the spot size range. Brilliances range up to as much as *nine times* that obtained with equal wattage conventional incandescent spotlights.

UNIFORMLY ILLUMINATED SPOT ... with sharp, clean cut edges is obtained throughout the variation of spot sizes for any length of throw.

VERSATILE CONTROL ... this spotlight projects a minimum spot diameter equal to 1/100 of the length of throw and a maximum flood diameter equal to 1/3 the length of throw.

APPLICATION

Designed especially for use in night clubs, small theatres, schools, TV studios, industrial shows and conventions, where physical dimensions and price are prime factors, and where the tremendous volume of light from an arc lamp is not required.

Suggested Operating Range 30 ft. to 80 ft.
 Diameter of beam at unit 7 in.
 Max. Dia. of beam with 100 ft. throw 44 ft.
 Min. Dia. of beam with 100 ft. throw 20 in.
 Lumens 1500

NO SPECIAL WIRING ... the 120 volt, 1000 watt projection type lamp draws only 9 amperes and consequently the spotlight can be plugged into any 110 volt A.C. or D.C. convenience outlet, without the necessity of special wiring.

COMPACT SIZE ... the length of the spotlight housing is 38 in., the span of the three-legged stand is 25 in., and the height of the stand is adjustable between 45 and 70 in. from the floor.

SPECIFICATIONS

Spotlight No. 8781 furnished complete with lamp, lens system and stand. Spotlight shall operate from 110 V., A.C. convenience outlet and shall include a silent type, on-off single pole switch, a silvered glass reflector, a porcelain mogul-base socket to accommodate a 1000 watt prefocused mogul base, burn-base-down projection lamp, a Fresnel lens, corrector

lens, a nichrome steel iris, a horizontal masking control, 6 color boomerang and a spot focus adjusting knob. Spotlight shall include vertical tilt locking knob.

The lens system shall be a two element variable focal length lens system controlled by one lever and shall increase light intensity as spot sizes are decreased. Smallest spot obtainable with variable lens system at a 60 ft. throw shall be 62 in. with a light measurement of 1500 lumens. Smallest spot obtainable at a 60 ft. throw using iris shall be 14 in.

The stand shall include three legs mounted on rubber casters. Height adjustments shall be from 45 in. to 70 in. from the floor. Horizontal sweep shall be 360°.

Lead cord shall be 16-2 rubber covered wire 12 feet in length.

RANGE OF VARIABLE LENS SYSTEM

THROW IN FEET	MAXIMUM FLOOD		SMALL SPOT		MINIMUM SPOT DIA. WITH IRIS	
	DIA.	FOOT CANDLES	DIA. (IN.)	FOOT CANDLES	DIA. (IN.)	FOOT CANDLES
10	4½ ft.	146	15	1900		
15	6½ ft.	70	19	850		
20	9 ft.	37	24	475		
30	13 ft.	18	34	210	9	210
40	18 ft.	9	43	128	11	128
60	26 ft.	4½	62	61	14	61
80	36 ft.	2½	83	34	17	34
90	39 ft.	2	93	27	18	27
100	44 ft.	1½	103	23	20	23
120	52 ft.	1¼	122	16	23	16



Hub-Strong 1000 W. Incandescent Spotlight

U.L. Approved

QUALITY SINCE 1914

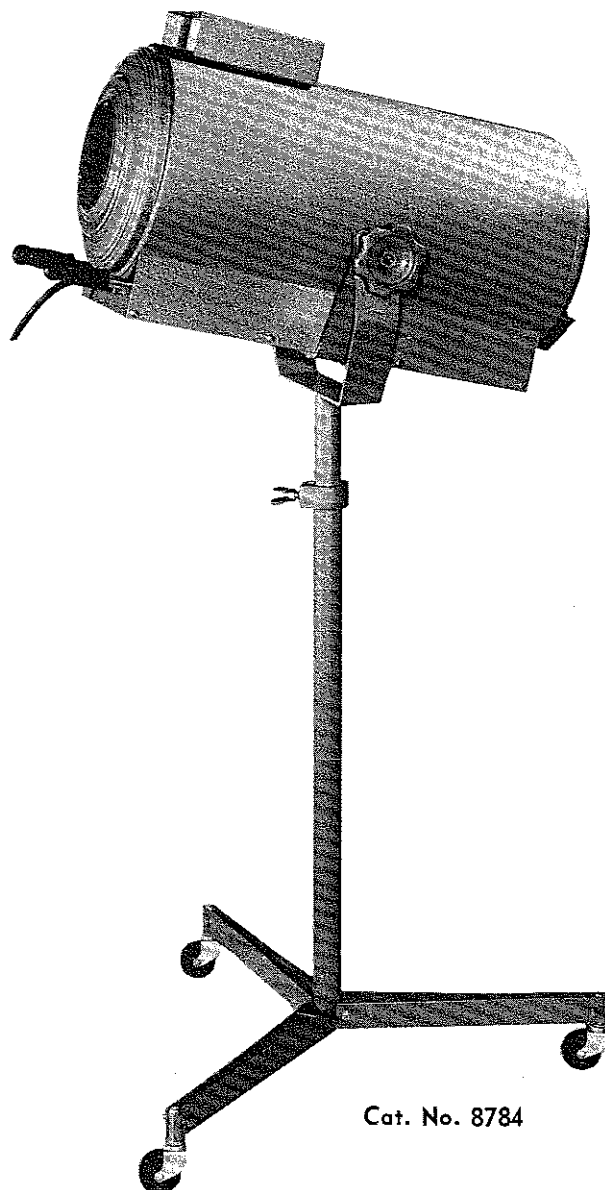
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 86

File in Catalog No. 100

SECTION 3, PAGES 22A AND 22B

Prices in Price List No. 101H



Cat. No. 8784

SPECIFICATIONS

Suggested Operating Range 10 ft. to 50 ft.
Diameter of beam at unit 5 in.
Max. Dia. of beam with 50 ft. throw 22 ft.
Min. Dia. of beam with 50 ft. throw 18 in.
Lumens 1500

Spotlight is equipped with "on-off" single pole switch, aluminized metal reflector, porcelain mogul pre-focus base socket, fresnel lens, with a two element condenser lens system, nichrome steel iris, vertical tilt locking knob and a spot focus adjusting knob.

The stand includes three legs mounted on casters. Height adjustments are from 44 to 64 inches from the floor. Horizontal sweep is 360°. Width of stand at base is 25 inches.

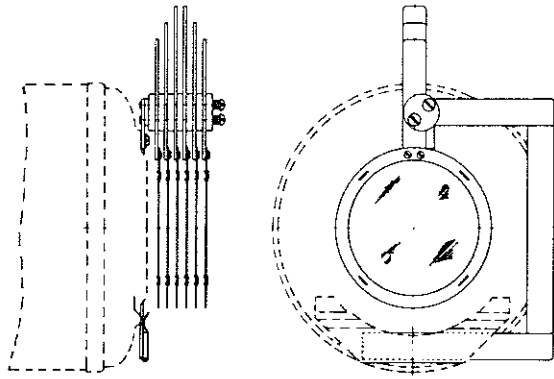
Supplied with a No. 16-3 wire grounded rubber covered cable 12 feet in length with a two wire adapter. Operates on 110 V. AC.

Length of spotlight housing is 24 inches.

APPLICATION

Here is the ideal baby follow spot that should be basic equipment for almost every small theatre, school, fraternal organization, church and night club. This is a compact, low priced unit that can be used where the tremendous volume of light from an arc lamp is not required.

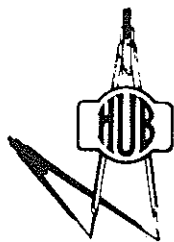
OPTIONAL ACCESSORIES AVAILABLE



SIX COLOR BOOMERANG

- Table stand available in place of floor stand which is supplied standard. Price on application.
- Six color boomerang. To order add suffix (-B) to catalog number.
- 1000 watt lamp (Type PH/IM/T-20/40). To order, add suffix (-L) to catalog number.

Range of Lens System				
Throw In Feet	Max. Dia.	Spot FC	Min. Dia.	Spot FC
10	4'	354	3"	354
20	9'	73	7"	73
30	13-1/2'	31	11"	31
40	18-1/2'	18	14-1/2"	18
50	22'	12	18"	12
60	26-1/2'	8	22"	8
70	31'	6	25"	6



Hub-Strong® Portable High Intensity Carbon Arc Spotlight

U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 17

File in Catalog No. 100

SECTION 3, PAGES 23 AND 24

Prices in Price List No. 101B



CAT. NO. 8782

APPLICATION

This spotlight is the answer to a long felt need for a small, high intensity arc spotlight for use in theatres, auditoriums and night clubs.

Suggested Operating Range . . . 75 ft. to 200 ft.
Diameter of beam at unit . . . 7 in.
Max. Dia. of beam with 100 ft. throw . . . 50 ft.
Min. Dia. of beam with 100 ft. throw . . . 20 in.
Lumens . . . 6000

FEATURES

NO SPECIAL WIRING ... this complete arc spotlight, with its self-contained power conversion unit in the base, will draw only 10 amperes from any 110 volt A.C. convenience outlet.

UNIFORMLY ILLUMINATED SPOT ... this unit produces a snow white, uniformly illuminated spot, crisp on the edges, that supplies essential sparkle to a presentation obtainable only with the use of high intensity arcs.

GREATER SPOT BRILLIANCY ... far surpassing in brilliancy of spot of any incandescent or vertical arc-type spotlight, this unit will actually equal many of the large theatre type spotlights.

SIMPLE OPERATION ... engineered with an eye toward simplicity and ease of operation, this spotlight is capable of being easily operated by a "new" man on "opening night".

HIGHLY EFFICIENT OPTICAL SYSTEM ... uses a silvered glass reflector to collect the illumination from the source and direct it to a circular aperture, from where it is projected to the stage by means of a two element variable focal length lens system, controlled by a single lever.

VERSATILE CONTROL ... for a 150 ft. length of throw, the size of the projected spot is variable from a minimum of 27 in. "head spot" to a maximum of 75 ft. "flood".

AUTOMATIC CARBON FEED ... carbons are fed automatically by an electric motor which maintains a constant arc gap. This results in a steady light, free from hiss or flicker.

ADJUSTABLE HEIGHT ... the length of the spotlight housing is 62 in., the base diameter is 28 in., and the vertical tilt pivot is adjustable between 46 in. and 48 in. from the floor.

SPECIFICATIONS

Carbon Arc Spotlight No. 8782 furnished with base and self-contained power conversion unit, lens mechanism and a color boomerang. Spotlight shall operate from 110 volt A.C. line with a current draw of 10 amperes.

Lamphouse shall include a heavy duty on-off switch, a door operated pilot light to provide illumination for operator retrimming, front and rear carbon holders to hold a trim (2 carbons) of 6mm x 7 in. AC carbons, a motor driven mechanism to provide automatic feeding of carbons, a 10-1/4 in. diameter silvered glass reflector, horizontal adjusting knob and vertical adjusting knob for the reflector, an arcscope mirror and screen for maintaining image of the carbon arc, an arc focus adjusting knob, and a manual feed control knob. Burning time for a trim of carbons shall be one hour and 20 minutes at 21 volts and 45 amperes arc current. Projected light shall have color temperature measurement of 6500° Kelvin.

Lens mechanism shall include horizontal masking control, nichrome steel iris, a spot focus adjusting knob, and a 2 element variable focal length lens system controlled by one lever. Variable lens system shall increase light intensity as spot sizes are decreased. Smallest spot obtainable with variable lens system of 100 foot throw shall be 103 in. with a light measurement of 6000 lumens. Smallest spot obtainable at 100 foot throw using iris shall be 20 inches.

Color boomerang shall mount at front of lens mechanism and shall include 6 color holders and 1 ultra-violet filter holder.

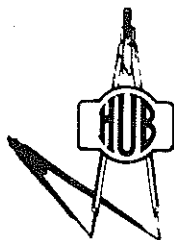
Lamp base shall include power conversion unit, tap changing switch to adjust for variances in AC line voltage and an indicating meter. Base shall be mounted on 3 rubber casters and shall include 3 adjustable feet for stationary positioning. Base shall provide adjustment in spotlight height of 46 to 58 inches from the floor and for vertical tilt lock and horizontal sweep lock. Vertical tilt shall be 45° downward and 25° upward. Horizontal sweep shall be 360°. Power lead cord shall be 14-2 rubber covered wire 12 feet in length.

OPTIONAL AT EXTRA COST

- Ultra-violet filter
- Metal reflector substituted for glass
- 6 mm x 7 in. AC carbons (Pkg. of 50 or box of 250)
- Other voltages and/or cycles.

RANGE OF VARIABLE LENS SYSTEM

THROW IN FEET	MAXIMUM FLOOD		SMALL SPOT		MINIMUM SPOT DIA. WITH IRIS	
	DIA.	FOOT CANDLES	DIA. (IN.)	FOOT CANDLES	DIA. (IN.)	FOOT CANDLES
10	5 ft.	300	15	8500		
20	10 ft.	75	24	3350		
40	20 ft.	20	43	1000	11	1000
60	30 ft.	9	62	500	14	500
80	40 ft.	5	83	280	17	280
100	50 ft.	3	103	180	20	180
120	60 ft.	2½	122	130	23	130
140	70 ft.	2	141	95	26	95
200	100 ft.	¾	198	50	34	50



Hub-Strong® High Intensity Carbon Arc Spotlight

U.L. Approved

QUALITY SINCE 1914

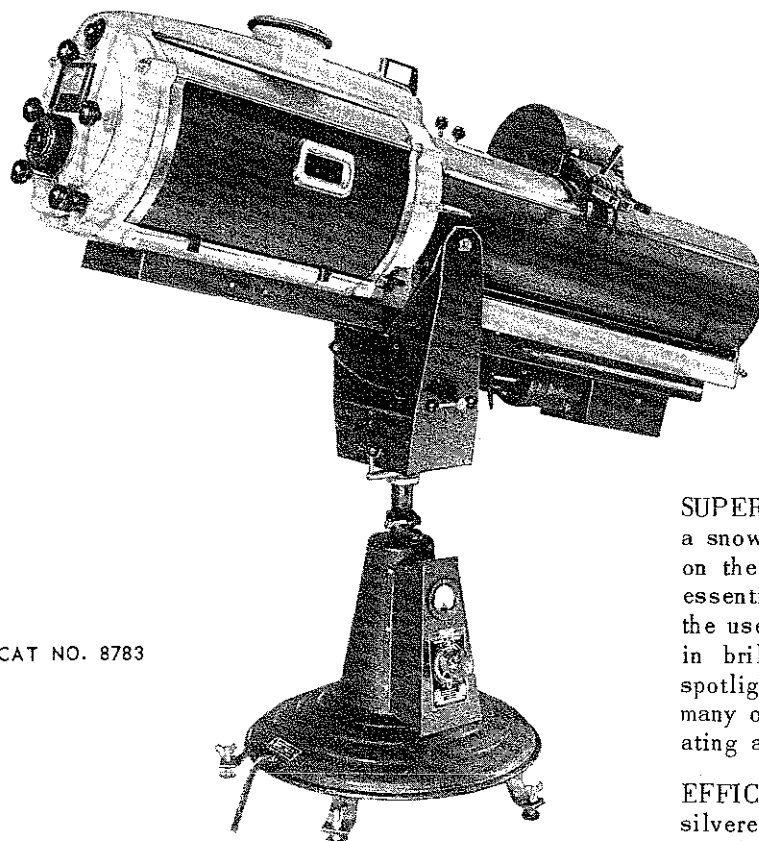
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 18

File in Catalog No. 100

SECTION 3, PAGES 25 AND 26

Prices in Price List No. 101B



CAT NO. 8783

APPLICATION

This spotlight fills a long felt need for a simple, easily operated, direct current, high intensity, arc spotlight for use in large theatres, auditoriums and arenas.

Suggested Operating Range. . . . 100 ft. or over.
Diameter of beam at unit 11 in.
Max. Dia. of beam with 100 ft. throw 25 ft.
Min. Dia. of beam with 100 ft. throw 17 in.
Lumens. 13000

FEATURES

SELF-CONTAINED POWER SUPPLY ... this complete arc spotlight, with its self-contained power supply unit, consisting of a transformer and selenium rectifier, eliminates the need for maintaining separate and expensive rectifiers or generators. It draws only 10 amperes from a 230 volt single phase line supply, or can also be supplied for 110 volt, 20 ampere operation.

SUPER BRILLIANCY ... this spotlight produces a snow white, uniformly illuminated spot, crisp on the edges. It gives any presentation that essential sparkle that is obtainable only with the use of high intensity arcs. Far surpassing in brilliancy of spot any vertical arc type spotlight, this unit will actually equal or exceed many of the large theatre type spotlights operating at much higher amperage.

EFFICIENT OPTICAL SYSTEM ... uses a silvered glass reflector to collect the illumination from the source and direct it to a circular aperture, from where it is projected to the stage by means of a two element variable focal length lens system, controlled by a single lever.

DIMMING CONTROL ... this spotlight is equipped with an aperture iris and a dimming control which provides a means for gradually fading out the light.

VERSATILE CONTROL ... for a 400 ft. throw, the size of projected spot is variable from a minimum of 47 in. "head spot" to a maximum of 100 ft. "flood". For spots up to 18 ft. in diameter at this 400 ft. throw, the intensity is 85 foot candles at the center.

For a 200 ft. length of throw, the size of the projected spot is variable from a minimum of 27 in. "head spot" to a maximum of 50 ft. "flood". Without iris, a spot as small as 9 ft. in diameter can be projected, with 300 ft. candles at the center. For a 150 ft. throw, spot sizes range from 22 in. to 38 ft. in diameter, and without iris, a spot as small as 7 ft. in diameter can be projected with 480 ft. candles at the center.

SPECIFICATIONS

Carbon Arc Spotlight No. 8783 furnished complete with lamphouse, base, and lens mechanism. Lamp shall operate from 110 volt AC line with current draw of 20 amperes.

Lamphouse shall include a heavy duty 2 pole on-off switch, door operated pilot light to provide illumination for operator retrimming, front carbon holder to hold 7mm x 12 in. Suprex positive carbon, rear carbon holder to hold 6mm x 9 in. Orotip negative carbon, horizontal adjusting knob and vertical adjusting knob for rear negative carbon holder, motor driven mechanism to provide automatic feeding of carbons, an indicating ammeter, a motor control rheostat, an 11-3/8 in. diameter silvered glass reflector, horizontal adjusting knob and vertical adjusting knob for the reflector, an arcscope mirror and screen for maintaining image of carbon arc, focus adjusting knob for focusing the arc and, a manual feed knob. Burning time for a trim of carbons shall be 1 hour and 20 minutes at 30 volts DC and 43 amperes arc current. Projected light shall have color temperature measurement of 5700° Kelvin.

Lens Mechanism shall include horizontal masking control, nichrome steel iris, dimming device, a 6 color boomerang with automatic changing device, an ultra-violet filter and holder, a spot focus adjusting knob, and a 2 element variable focal length lens system controlled by one lever. Variable lens system

shall increase light intensity as spot sizes are decreased. Smallest spot obtainable with variable lens system at 200 foot throw shall be 110 in. with a light measurement of 13000 lumens. Smallest spot obtainable at 200 foot throw using iris shall be 27 in.

A selenium rectifier unit and blower motor assembly shall be mounted underneath the frame supporting the lamphouse and lens mechanism.

Lamp Base shall include power conversion transformer, tap changing switch to adjust for variances in AC line voltage, and indicating meter and increase-decrease voltage adjusting switch. Base shall be mounted on 5 rubber casters and shall include 5 adjustable feet for stationary positioning. Base shall provide adjustment in spotlight height of 52 to 65 inches from the floor and for vertical tilt lock and horizontal sweep lock. Vertical tilt shall be 45° downward and 25° upward. Horizontal sweep shall be 360°. Power lead cord shall be 12-2 rubber covered wire 12 feet in length.

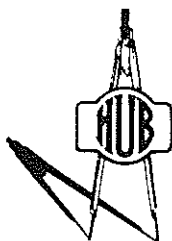
Complete spotlight and base shall weigh 395 pounds. Overall length of spotlight shall be 80 inches and width of base shall be 28 inches.

OPTIONAL: (When specifying 220 volt operation)

Lamp shall operate from 220 volt AC line with a current draw of 10 amperes. Power lead cord shall be 14-3 rubber covered wire 12 feet in length and shall include a 3 wire receptacle.

RANGE OF VARIABLE LENS SYSTEM

Throw in Feet	MAXIMUM FLOOD		SMALL SPOT		MINIMUM SPOT DIA. WITH IRIS	
	Dia. (ft.)	Foot Candles	Dia. (In)	Foot Candles	Dia. (In.)	Foot Candles
20	5-1/2	1000	19	11000		
40	11	255	29	3800		
60	15	120	40	2200	11	2200
80	20	72	50	1500	14	1500
100	25	43	60	930	17	930
120	30	31	70	685	19	685
140	35	23	80	525	21	525
160	40	17-1/2	90	415	23	415
180	45	14	100	350	25	350
200	50	11-1/2	110	300	27	300
220	55	9-1/2	120	250	29	250
240	60	8	130	215	31	215
260	65	6-1/2	140	185	33	185
280	70	5-1/2	150	160	35	160
300	75	5	160	140	37	140
320	80	4-1/2	170	125	39	125
340	85	4	180	115	41	115
360	90	3-1/2	190	100	43	100
380	95	3	200	90	45	90
400	100	2-1/2	210	85	47	85



Hub 1000-1500 Watt Incandescent Follow Spotlight

U.L. Approved

QUALITY SINCE 1914

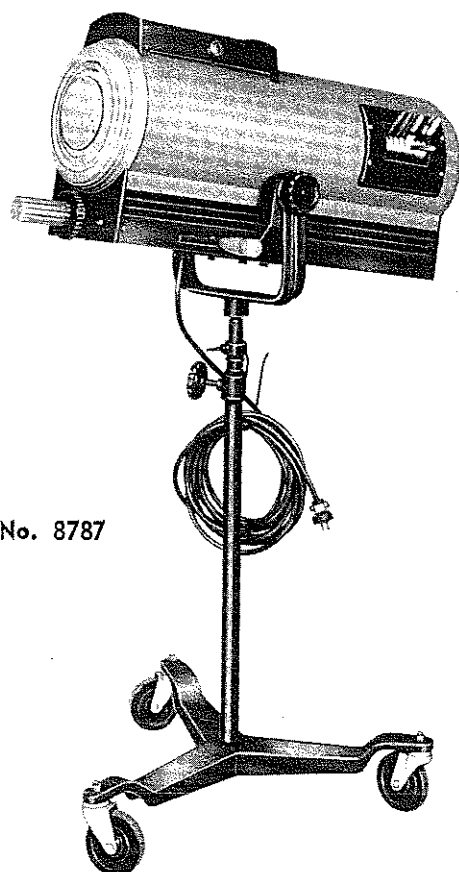
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 19

File in Catalog No. 100

SECTION 3, PAGES 27 AND 28

Prices in Price List No. 101B



Cat. No. 8787

FEATURES

- Three lens system for either a soft edge or sharp, clear-cut edge spot.
- Uniformly illuminated, clear white spot — adjustable from 18-in. head spot at 100 ft., to full stage flood.
- Built-in douser with six different colors — fingertip control.
- Lens adjustment handle for quick outside focusing.
- Housing quickly set on stand, or removed from stand, with simple knob and nut control.
- Built-in, heat-resisting rear controlled iris.
- Rear-operating beam-shape control — iris and shutter controls produce a variety of beam shapes.

APPLICATION

This is a compact, easy-to-operate, incandescent spotlight suitable for use at rear or on balcony of small to medium-size auditorium. Powerful and versatile, it can spotlight both individual performers or groups.

SPECIFICATIONS

Lamp Used: 1000 W. T20 C13 or 1500 W. T20 C13D spot lamp, mogul prefocus, burn base down.

Furnished with telescoping stand, heavy-duty floor stand, three rubber-tired casters, and 25-ft. two-conductor, rubber covered cord with pin plug connector. Has Alzak reflector, one stationary prismatic lens, and two dual-focusing plano convex lenses. Steel housing finished in two-tone black and gray wrinkle. Built-in on-off switch. Hinged louvered cover for simple lamp replacement. Full-length vent louvers.

ALTERNATES AVAILABLE (Price on Application)

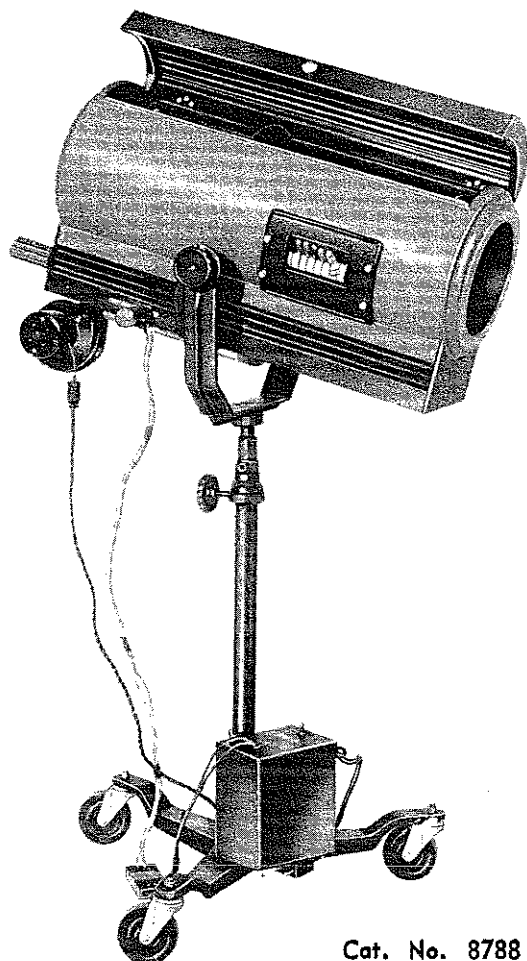
- Three-wire lead and plug.
- Twistlock plug in place of pin plug.
- 15-ft. cord instead of standard 25-ft.

PERFORMANCE CHART

DISTANCE OF THROW (FT.)	DIA. OF SPOT (FT.)	FOOT CANDLE INTENSITY	
		1000 W. T20 SPOT	1500 W. T20 SPOT
10	1-1/2	453	603
20	3	117	154
50	7-1/2	20	26
75	11-1/4	9	12
100	15	6	6.7

Hub 2100 Watt Incandescent Follow Spotlight

U.L. Approved



Cat. No. 8788

FEATURES

- Built-in, rear-controlled, heat resisting iris and framing shutters, producing a variety of beam shapes.
- Fingertip color control, with six colors and a built-in douser.
- Spot or flood lighting for distances up to 175 ft. Uniformly illuminated, snow-white spot adjustable from 18 in head spot at 175 ft. to full stage flood.
- Precision, triple lens system, designed for uniform brilliance. Beam size can be increased or decreased without loss of intensity. Beam edges stay crisp and clean.

- Front lens focusing lever and spread lens control.
- Maximum beam spread 16° – projection distance, 20 to 175 ft.

APPLICATION

This very powerful spotlight is used at the rear or on the balcony of large auditoriums, to spotlight individual performers or groups.

SPECIFICATIONS

Lamp Used: 2100 W. T-24 C13D filament, 60 V., mogul bipost, burn base down.

This spotlight is furnished with telescoping stand, heavy-duty floor stand, three rubber-tired casters, and 25-ft. two-wire, rubber covered cord with pin plug connector. Has Alzak reflector, one prismatic, one 4-7/16 in., and one 8 in. plano convex lens, ventilation louvers, air circulation blower, and hinged louvered door for easy lamp replacement. Complete with transformer to convert 110-120 V. current* to 60 V. Steel housing finished in two-tone black and gray wrinkle.

ALTERNATES AVAILABLE (Price on Application)

- Three-wire lead and plug.
- Twistlock plug in place of pin plug.
- 15-ft. cord instead of standard 25-ft.

PERFORMANCE CHART

DISTANCE OF THROW (FT.)	DIA. OF SPOT (FT.)	FOOT CANDLE LIGHT INTENSITY
20	4-1/2	1295
30	6-3/4	585
50	11-1/4	215
100	22-1/2	49
150	33-3/4	25

HUB ELECTRIC COMPANY, INC. CHICAGO 12, ILLINOIS



Hub 1000-1500 Watt Incandescent Follow Spotlight

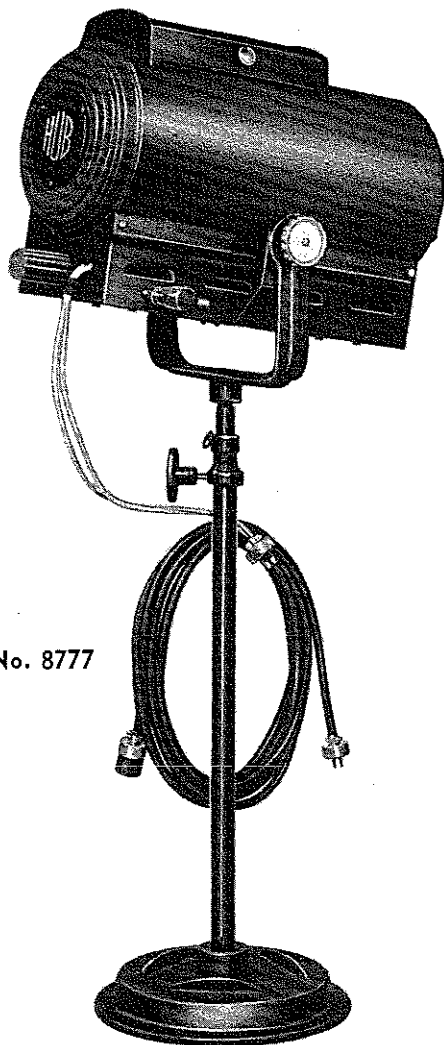
U.L. Approved

QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 90
File in Catalog No. 100
SECTION 3, PAGES 28A AND 28B
Prices in Price List 101H

Cat. No. 8777



FEATURES

- Three lens system for either a soft edge or sharp, clear-cut edge spot.
- Uniformly illuminated, clear white spot — adjustable from 18-in. head spot at 100 ft., to full stage flood.
- Color frame holder.

- Lens adjustment handle for quick outside focusing.
- Housing quickly set on stand, or removed from stand, with simple knob and nut control.
- Built-in, heat-resisting rear controlled iris.
- Rear-operating beam-shape control — iris and shutter controls produce a variety of beam shapes.

APPLICATION

This is a compact, easy-to-operate, incandescent spotlight suitable for use at rear or on balcony of small to medium-size auditorium. Powerful and versatile, it can spotlight both individual performers or groups.

SPECIFICATIONS

Lamp Used: PH/IM/T20/40 or PH/1500/T20/39 spot lamp, mogul prefocus, burn base down.

Furnished with telescoping stand, heavy-duty floor base, cast iron 14" and 25-ft. two-conductor, rubber covered cord with pin plug connector. Has Alzak reflector, one stationary prismatic lens, and two

dual-focusing plano convex lenses. Steel housing finished in two-tone black and gray wrinkle. Hinged louvered cover for simple lamp replacement. Full-length vent louvers.

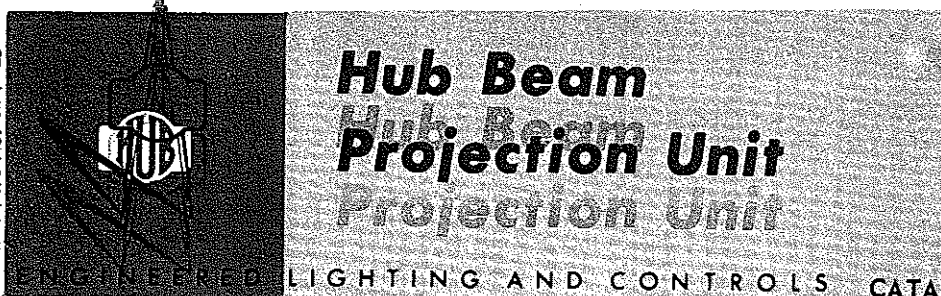
PERFORMANCE CHART

DISTANCE OF THROW (FT.)	DIA. OF SPOT (FT.)	FOOT CANDLE INTENSITY	
		1000 W. T20 SPOT	1500 W. T20 SPOT
10	1-1/2	453	603
20	3	117	154
50	7-1/2	20	26
75	11-1/4	9	12
100	15	6	6.7

ALTERNATES AVAILABLE (Price on Application)

- Three-wire lead and plug.
- Twistlock plug in place of pin plug.
- 15-ft. cord instead of standard 25-ft.

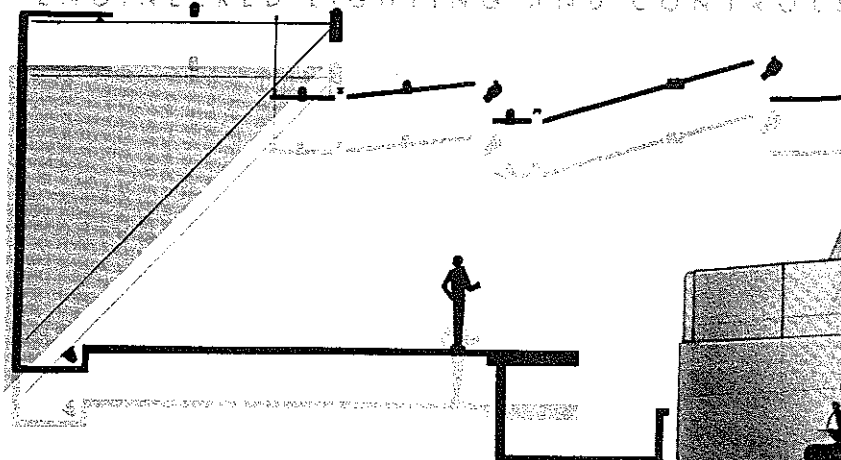
Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.



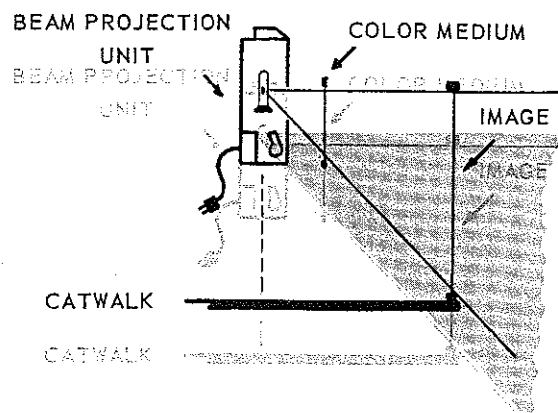
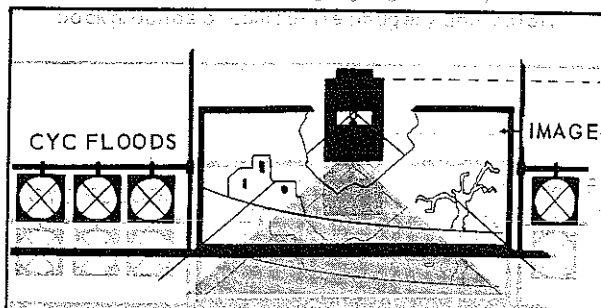
QUALITY SINCE 1914

CATALOG SUPPLEMENT NO. 66

File in Catalog No. 100
SECTION 3, PAGES 29 AND 30
Prices in Price List No. 101E
SECTION 3, PAGES 29 AND 30
Prices in Price List No. 101E

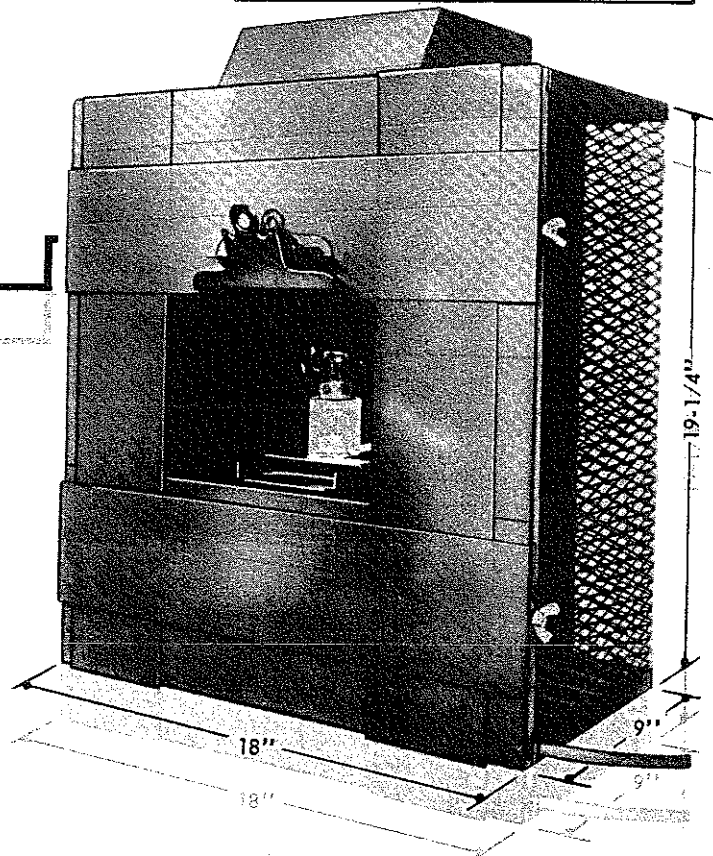


This unit is perfect for striking but economical set piece staging against dynamic backgrounds of composite imagery and color.



Details of Composite Background Projection

Details of Composite Background Projection



APPLICATION

Hub Beam Projection Units project scenery or imagery on the cyclorama or a rear curtain from an overhead position, or through a translucent screen from a floor position (rear projection).

The principle incorporated in this projection unit allows a distance of about 4 feet between the filament point and the image plane. With this separation of the image from the lamphouse comes many advantages:

1. Greatly increased clarity of the projection.
2. Elimination of any distortion of the image on the projected surface.
3. Elimination of any distortion of the image on the projected surface.

3. The image is not affected by the filament heat, thus increasing the range of materials from which the image can be fashioned – including silhouettes of real objects.

4. Color media for overall toning can be introduced into the path of light, either from a color frame clipped to the lamphouse, or placed at intermediate points between image and lamphouse.

Images can be fashioned from cut-outs in heavy wrapping paper filled in with gelatin patches, or complete gelatin or plastic color mosaics, or transparent lacquer dyes or lamp dip on clear acetate sheets, or even potted foliage or branches placed in the image area.

All images projected in this manner have slightly diffused outlines to produce a pleasing soft-toned appearance.

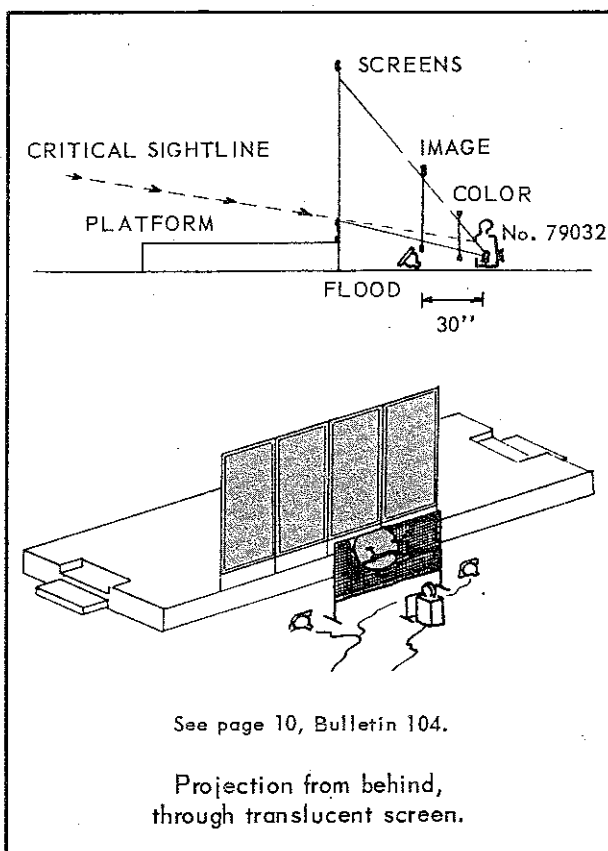
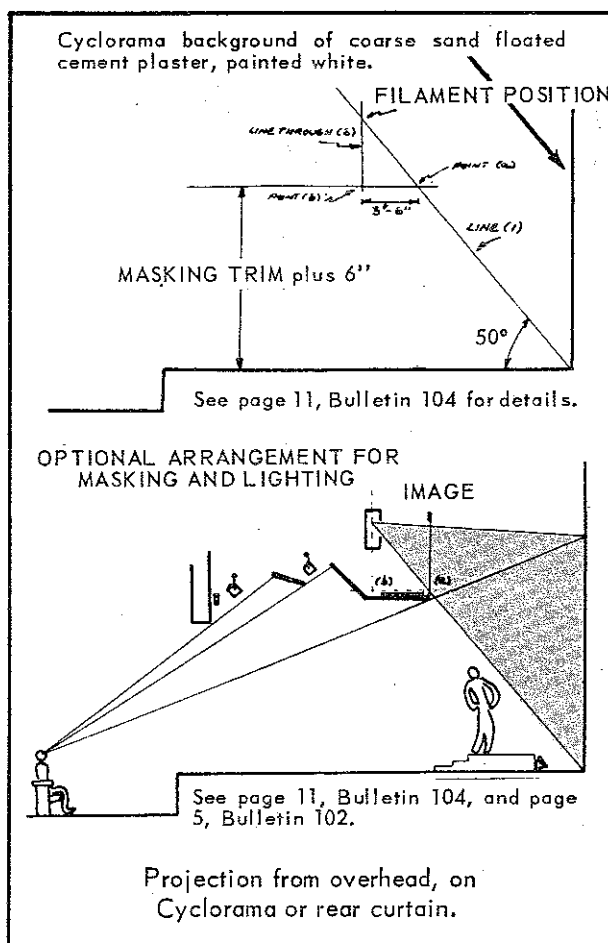
Technical details of stage scenery projection with this unit can be found in Hub Bulletin No. 102 (Open Stage Theatres) and No. 104 (Children's Theatres).

SPECIFICATIONS

Housing and shutters are of steel, with sides of expanded steel mesh, finished in flat black enamel. Projection opening in housing is 12" wide and 6-3/4-in. high. Furnished complete with four chain hanger hooks, gelatin color frame clip-holder, handle, exhaust vent, blower motor, projector lamp, rubber bumper feet, and 6-ft. lead of No. 16 SJ rubber cord with male connector. Projector lamp is adjustable through a 4-inch horizontal and 6-inch vertical movement.

CAT. NO.	LAMP SUPPLIED	
	Wattage	Type
79032	500	PH/500/T10-P
79031	1000	PH/1M/T-20/40
79030	2100	T-24/8*

* Step down Transformer 110-120 Volt to 60 Volt furnished.





Hub Incandescent Costume Mirror Strip Lights

U.L. APPROVED

QUALITY SINCE 1914

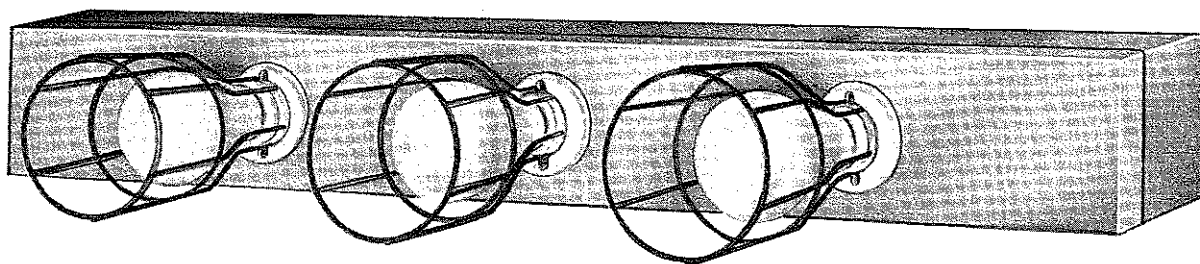
ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 88

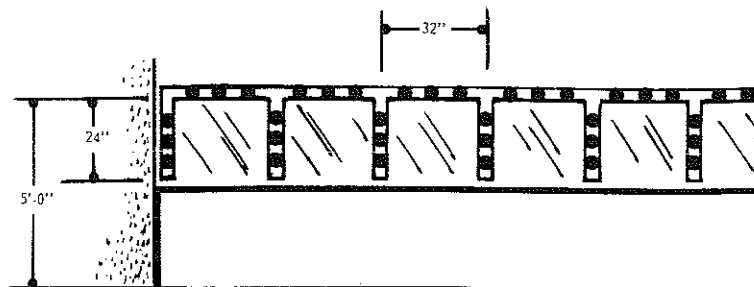
File in Catalog No. 100

SECTION 3, PAGES 31 AND 32

Prices in Price List No. 101H



Cat. No. 5662



APPLICATION

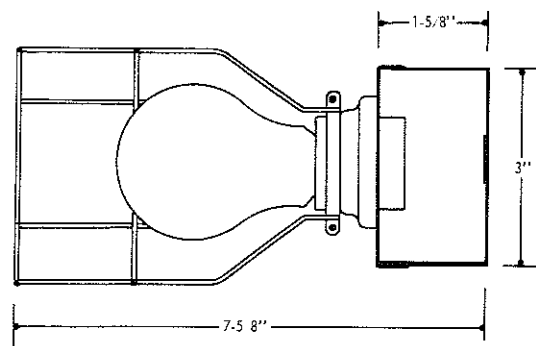
These strip lights are used to frame the dressing table mirrors in stage dressing rooms.

SPECIFICATIONS

Wireway is of code gauge steel finished with baked white enamel. Each strip has three medium base porcelain receptacles wired for 75-watt A-19 lamps, each supplied with a wire guard.

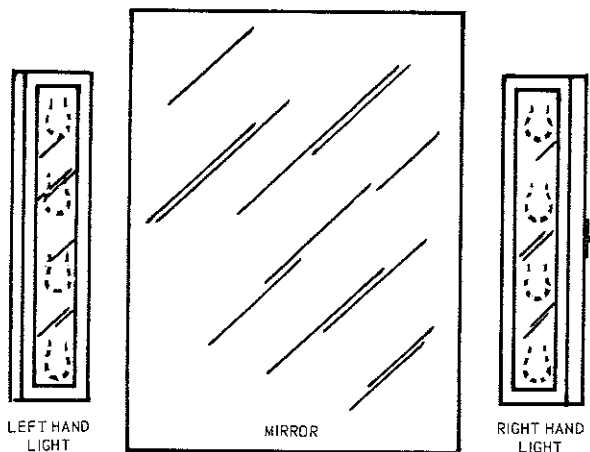
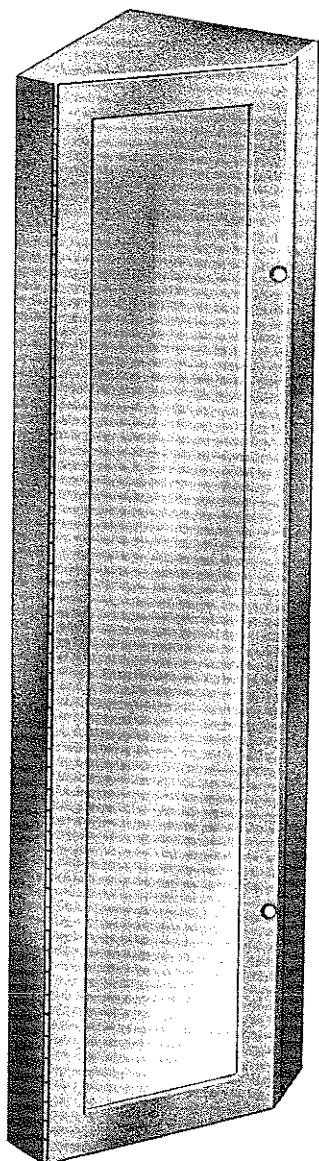
AVAILABLE

- Special finishes and other metals.
- Special lengths and number of receptacles.



Catalog No.	Length	Lamp Spacing
5663-24	24"	7" O.C.
5663-32	32"	10" O.C.

Hub Incandescent Costume Mirror Light Units



APPLICATION

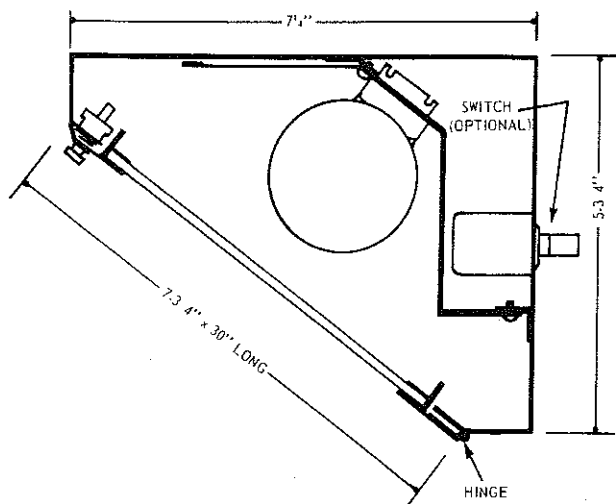
A matched pair of costume mirror light units to furnish required illumination for stage dressing room tables.

SPECIFICATIONS

Housing is of code gauge steel finished with baked silver hammertone enamel; steel reflector is finished with baked white enamel. Housing face or door has a continuous piano-type hinge with an Alba-lite, opal, pebbled glass panel. Each unit is complete with four angle receptacles for A-19, 75 watt lamps, wiring as required. Furnished with SP switch, if desired. Housing has mounting holes and knockout.

AVAILABLE

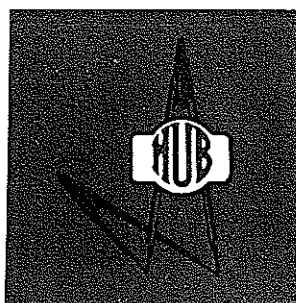
- Other metals and special finishes.
- Special lengths and number of receptacles.



Catalog No. For 2-unit Set	Description
5662	No switch required
5662-R	Switch on right hand unit only
5662-L	Switch on left hand unit only
5662-R/L	Switch on both units.

HUB ELECTRIC COMPANY, INC., 2255 West Grand Avenue, Chicago 12, Illinois

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

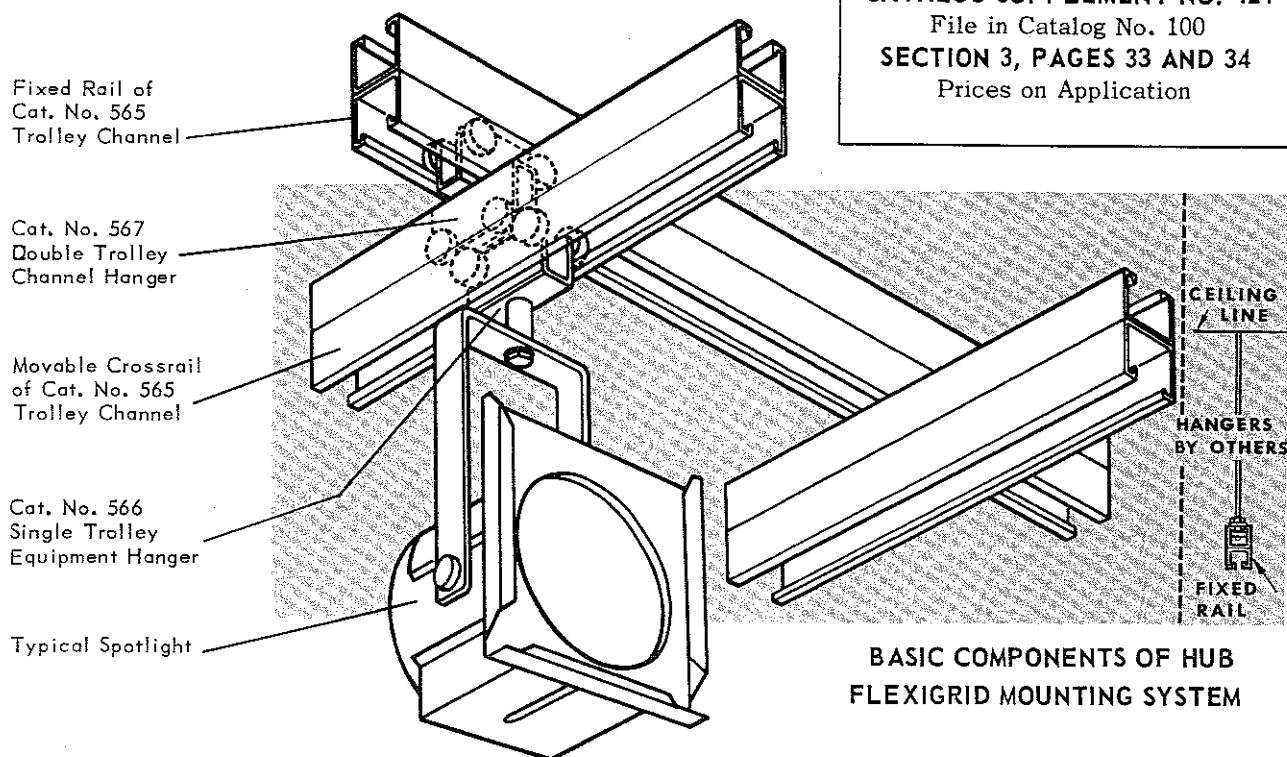


Hub Flexigrid Mounting System For TV Studios

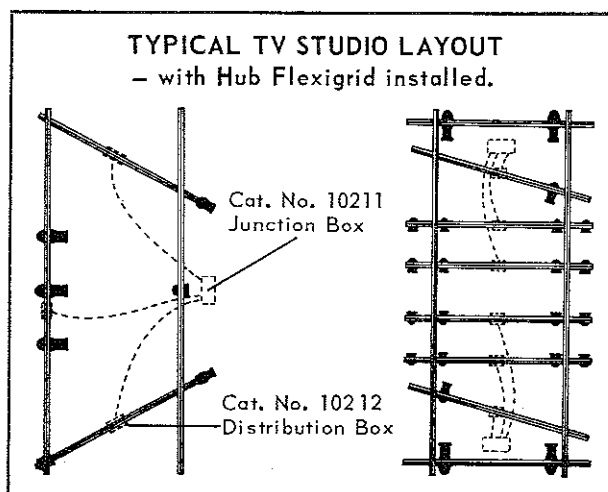
QUALITY SINCE 1914

ENGINEERED LIGHTING AND CONTROLS

CATALOG SUPPLEMENT NO. 121
File in Catalog No. 100
SECTION 3, PAGES 33 AND 34
Prices on Application



**BASIC COMPONENTS OF HUB
FLEXIGRID MOUNTING SYSTEM**



**TYPICAL TV STUDIO LAYOUT
— with Hub Flexigrid installed.**

Hub Flexigrid mounting system is a practical, economical method for the overhead mounting of lighting equipment in TV studios and audio-visual centers of schools and colleges.

Flexigrid mounting has the advantage of clearing all equipment, stands, cables, etc. from the floor and wall areas and yet affords a precise, mobile method of exact positioning of all lighting equipment.

The heart of the Flexigrid mounting system consists of pairs of fixed parallel Unistrut rails with movable Unistrut crossrails suspended with Hub Trolley Hangers. Crossrails are usually of a length equal to twice the distance between the fixed rails. Exact positioning of spotlights and floodlights, (which are also on Hub Trolleys) horizontal, vertical or diagonal, are made through use of a hooked pole from floor level.

Complete lighting arrangements, or lighting changes can be made in a matter of minutes...all out of range of the camera.

Electrical connections are made by flexible cable from centrally located ceiling junction boxes to distribution boxes mounted on each crossrail. Lights on each crossrail are then plugged into these distribution boxes.

Since the cost of this system is determined entirely by the size of the studio or stage—and the proposed number of lights to be used—prices are available on application only.

BASIC FLEXIGRID COMPONENTS

	<p>CAT. NO. 565 – T ROLLEY CHANNEL. Steel channel used for both fixed and movable rails. Finished in baked green enamel and available in specified lengths. Couplings are furnished for continuous runs and each run – or crossrail length comes complete with stop nut, bolt and washer at each end.</p>
	<p>CAT. NO. 567 – DOUBLE TROLLEY CHANNEL HANGER. A unique hanger, with a swivel-action in the center, for the mounting of movable cross-rails to the fixed rails. Steel ball bearing wheels combined with friction brakes allow for ready movement that can be stopped at exact points.</p>
	<p>CAT. NO. 566 – SINGLE TROLLEY EQUIPMENT HANGER. A steel trolley with four ball bearing wheels and a friction brake for exact positioning of lighting equipment. The bolt for the spotlight or floodlight yoke is provided with swivel action to allow for pivot movement of such equipment.</p>
	<p>CAT. NO. 569 – CABLE HANGING TROLLEY. A two-wheeled, steel trolley with hooked bolt to keep cables above camera line of sight. This same trolley is also ideal for hanging curtains or draperies.</p>
	<p>CAT. NO. 10212 – DISTRIBUTION BOX. Baked dull black finish steel box for mounting on crossrails. Complete with multi-pin connector and feed cable for connection to Junction Box (Cat. No. 10211) and any specified number of 18 inch 3-conductor cables for connection to spot and flood lights. These are furnished standard with 20A female Twistlock connectors (2 wire plus ground).</p>
	<p>CAT. NO. 10211 – JUNCTION BOX. Baked dull black finish steel box for ceiling mounting. Complete with terminal block assembly and receptacles wired to the terminals with No. 12AF stranded wires. Receptacles are for connection to Distribution Boxes (Cat. No. 10212); specify number of receptacles and number of circuits.</p>

Hub Electric Company, Inc. reserves the right to make engineering refinements on all its products. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.