



SM Series

Surface Mount Projector
Contour Projector



The Phantom Contour Projector SM Series (surface mount) is the most economical, easy to install framing projector for lighting pictures on the market today. The sleek design, precision optics and choice of adjustable shutters or custom cut template make the Phantom Contour Projector perfect for homes, offices, art galleries and fine restaurants. The projector is available with either a Standard canopy or Low Profile canopy. Custom Powdercoat finishes (Black or White) are available options in addition to the standard finish. Phantom Contour Projectors are designed by a professional installer and have been engineered so a novice, do it yourselfer or qualified electrician can successfully illuminate art. The patented mounting method, simplified optical system and the ability to use both shutters and custom templates make this one of the most versatile and easy to use lights for art gallery lighting on the market today. By shaping the light to only the canvas, the art takes on a "Lighted from within" look that can only be seen to appreciate.



LOW PROFILE
CANOPY



STANDARD
CANOPY

The Phantom SM Series Features

PROJECTOR: Constructed of .25 (SCH40) aluminum with two 60mm condensing lenses and two more 39mm, 75fl focal lenses standard (150fl focal lenses, engineered for longer, narrower throws, are available as a special order option.) See photometric chart on back of cut sheet or projector supplement for more information regarding lens selection.

LAMP: MR16 75-watt, 12-volt dichroic halogen lamp, 2-pin GU5.3 base with average lamp life of 3500 hours and color temperature of 3000K. Lamp Code: JCR12V-75W/FO

MOUNTING ARM: Constructed of .08 (#5052) aluminum, this heavy duty bracket and canopy are designed for a full 358 degree rotation and features a threaded locking mechanism. For track applications the canopy can be replaced with a pendant mount track adapter.

MOUNTING CANOPY: Constructed of .08 (#5052) our aluminum mounting canopies are available in two distinct profiles. The low profile canopy is designed specifically for remote transformer applications. The standard profile is designed to house the electronic transformer and box wiring.

TRANSFORMER: Located in the canopy the 120V step down transformer to 12V is designed for easy installation. The electronic transformer provides protection against over-lamping and short circuit conditions. 277V available by special order.



Phantom SM Series - Ordering Matrix

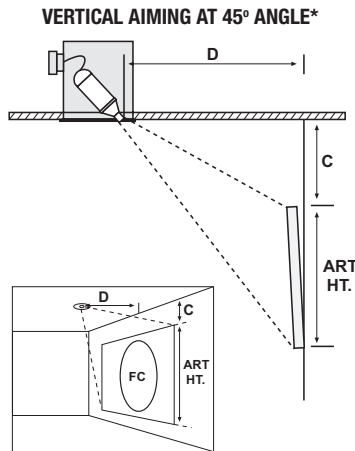
Sample Order Number: **SM-1-1-1-S-U**

Housing	Template	Transformer	Options	Mount	Color
SM	1	1	1	S	U
SM	1 - Shutters 2 - Metal Slide	1 - Electronic 120V 2 - Electronic 277V 3 - Magnetic 120V 4 - Magnetic 277V 5 - Electronic 230V	1 - None 2 - UV Filter 3 - 150fl Lenses 4 - Pin Hole Cover	S - Standard L - Low Profile T - Track	W - Matte White B - Matte Black C - Custom U - Unfinished

Surface Mount projector including 75 watt optical projector, adjustable shutters, 120V electronic transformer, 75FL lenses & unfinished cover plate.



Determine Location of Projector in Ceiling



*Standard Trim

FORMULA (Standard 75fl Lenses)

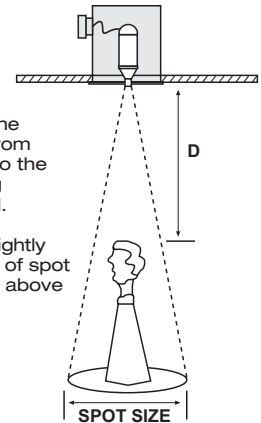
**Painting Size
(60"H x 50"W @ 32" from ceiling)**

C = Distance from ceiling to top of art
D = Distance from wall

$$C + 1/3 \text{ of art height} + 4 = D$$

(Example: 32" + 20" + 4" = 56" or 6' back from wall)
Your circle of light on the wall will be **63"**
Approximately **43** foot candles of light*

HORIZONTAL BEAM*



Estimate the distance from projector to the area being illuminated.

Select a slightly larger size of spot from chart above to ensure coverage.

*Pin Hole Trim

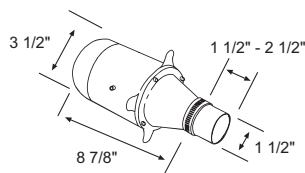
Phantom Contour Projector Photometrics

		Standard 75 Focal Length Lenses Distance to Object											
		2'		3'		4'		6'		8'		10'	
Beam Spread	Beam De-gree	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC
VNB	43°	20	456	30	186	42	99	63	43	75	24	107	14
NB	58°	26	269	44	121	53	70	71	33	106	18	120	12
WB	67°	31	206	47	96	62	55	102	25	128	14	156	9
VWB	77°	47	117	70	52	91	30	120	14	154	8	190	5

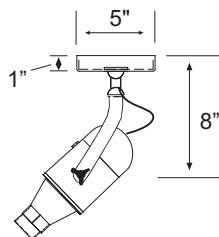
		Optional 150 Focal Length Lenses Distance to Object											
		2'		3'		4'		6'		8'		10'	
Beam Spread	Beam De-gree	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC	Spot Size (in.)	FC
VNB	31°	11	1850	18	840	27	200	38	150	53	75	67	42
NB	32°	12	1300	19	450	30	150	39	120	55	55	70	34
WB	35°	13	1100	22	420	32	135	43	100	61	50	79	31
VWB	36°	14	1000	23	384	33	129	46	91	63	49	81	30

SM Series Housing & Projector Dimensions

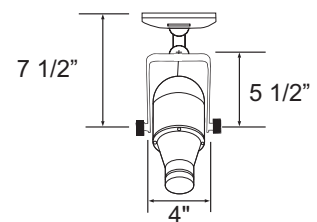
PROJECTOR DIMENSIONS



SIDE VIEW - STANDARD CANOPY

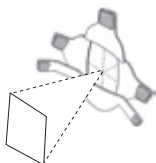


FRONT VIEW - LOW PROFILE CANOPY



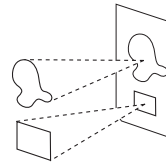
Contour Projector Template Methods

ADJUSTABLE SHUTTERS



Each Phantom Projector comes with 3 different shutter assemblies that are specially designed to compliment a particular beam configuration by adjusting the light to follow the curvature of the lens. This allows for clean, straight lines, regardless of the aiming angle.

METAL SLIDE



A Metal Slide is used on custom cut templates that contour the light to multiple or irregular objects such as sculptures. To illuminate multiple objects on the same wall they must be installed in a collage format.