

# LED PROJECTOR CONVERSION KIT

Job Name:

Catalog #:

Notes:

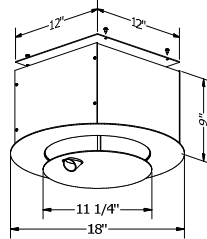
Conversion kit for existing Phantom Contour Projectors, including both square (**FF, NC, TA**) and round (**RM, SM**) housings.

## LED CONVERSION KITS

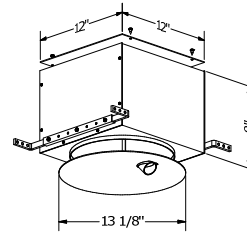
Looking for an LED solution for your Phantom™ halogen contour projector? LED conversion kits are now available for all projector models including those with square or round housings as well as surface mount models. This is not a simple lamp change, but a major upgrade that improves light levels, energy efficiency and overall performance. The conversion process involves changing the electrical power supply, updating the optical system and installing a high output LED light engine for maintenance free operation. The unique tri-dimming driver is compatible with forward phase (MLV), reverse phase (ELV) and 0-10V dimming. If you have any questions or need help identifying the right model for your application, contact our technical support at (800) 863-1184 for assistance.

**NOTE: LED RETROFIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRES ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN IN YOUR AREA.**

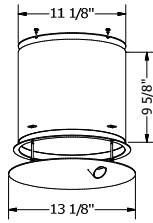
## EXISTING PROJECTOR HOUSING TYPES



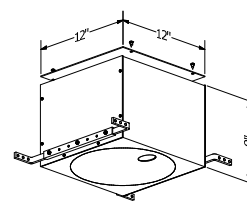
**FF Series Housing**  
(flat)



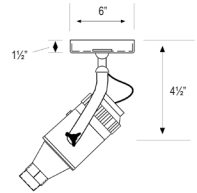
**NC Series Housing**  
(flat)



**RM Series Housing**  
(curved)



**TA Series Housing**  
(flat)



**SM Series**  
(canopy base)

ETL CLASSIFIED



Intertek  
73355

Conforms to  
UL STD 1598C  
Requirements

CERTIFIED TO  
CSA STD C22.2 NO.250.1

## CONVERSION KIT ORDERING MATRIX

### SQUARE HOUSING MODELS

#### PRP-LED-KIT-F

#### KIT F CONTENTS:



1. LED light engine with active cooling fan
2. Power assembly, flat hatch with LED Drivers
3. Two-part condensing lens holders and spring
4. Focal cone, focal lens spacer, & focal lens clip
5. Achromatic focal lenses (2 x 75fl standard)
6. Brass thumb screws and allen wrench
7. ETL labels (x2)

### ROUND HOUSING MODELS

#### PRP-LED-KIT-C

#### KIT C CONTENTS:



1. LED light engine with active cooling fan
2. Power assembly, curved hatch with LED Drivers
3. Two-part condensing lens holders and spring
4. Focal cone, focal lens spacer, & focal lens clip
5. Achromatic focal lenses (2 x 75fl standard)
6. Brass thumb screws and allen wrench
7. ETL labels (x2)

### CANOPY MOUNTED MODELS

#### PRP-LED-KIT-S

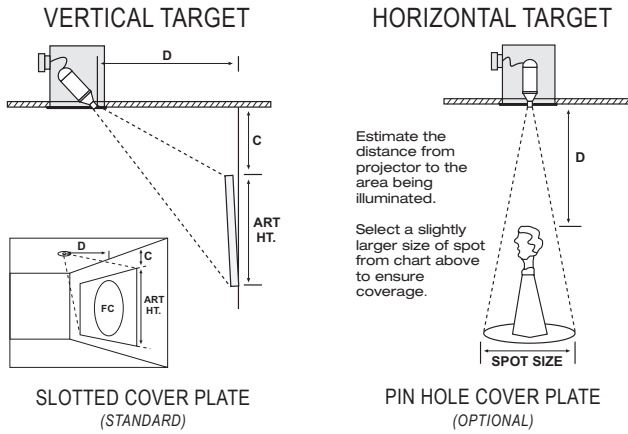
#### KIT S CONTENTS:



1. LED light engine with active cooling fan
2. Mounting canopy with LED drivers (round std)
3. Two-part condensing lens holders and spring
4. Focal cone, focal lens spacer, & focal lens clip
5. Achromatic focal lenses (2 x 75fl standard)
6. Brass thumb screws and allen wrench
7. ETL labels (x2)

	HATCH TYPE	LENS COMBINATION	DRIVER	CANOPY	COLOR
<b>PRP-LED-KIT</b>	<b>F</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>U</b>
	F – NC, TA, FF	1 – Achromatic 75fl Lenses (Wide Flood Lenses)	1 – 1750mA Electronic Driver 120-277V Auto Sensing 50/60Hz Forward/Reverse/0-10V Dimming (Standard)	0 – No Canopy 1 – Round 2 – Square	U – Unfinished W – White B – Black
	C – RM	2 – Achromatic 100fl Lenses (Flood Light Lenses)			
	S – SM	3 – Achromatic 150fl Lenses (Narrow Spot Lenses)	2 – 1750mA Electronic Driver 120-277V Auto Sensing 50/60Hz Forward/Reverse/0-10V Dimming (With Onboard Dimmer Control)		

**LOCATION OF PROJECTOR IN CEILING**



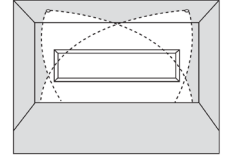
**CALCULATING THROW DISTANCE:**

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

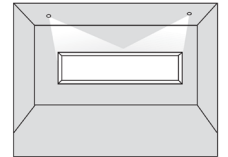
C = Distance down from ceiling to top of the art  
D = Distance out from wall where projector mounts

Example: Let's say you have a painting that is 36" High x 24" Wide and it is down from the ceiling roughly 20" to top of canvas. Doing the math, you get 20" + 12" + 4" = 36" out from the wall to the front of the housing as a starting point. The projector can be moved back, left or right as needed to avoid obstructions in the ceiling or to address reflective glare and frame shadows.

An oversized painting can be accommodated in the same way by using two (2) Contour Projectors, mounted at oblique angles. Complimentary design assistance is available from the factory.



Overlapping Beam Diagram



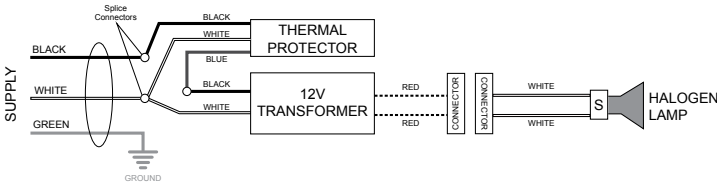
Oversize Beam Spread Result

**ACHROMATIC FOCAL LENS PERFORMANCE CHART**

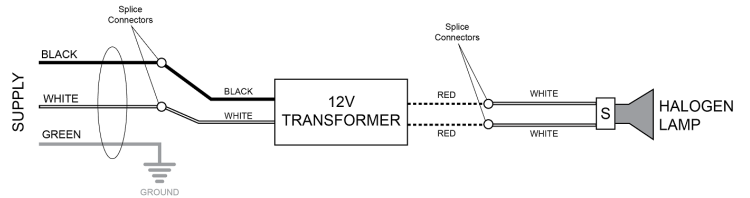
THROW DISTANCE			1'		2'		3'		4'		5'		6'		7'		8'		9'		10'	
Beam Spread	Lens Combo	Beam Angle	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC
Wide Flood Lens	75/75	60°	14"	750	28"	194	42"	101	55"	56	69"	37	83"	26	97"	20	111"	14	125"	11	139"	9
Flood Light	100/100	48°	11"	968	21"	458	32"	194	43"	120	53"	79	64"	55	75"	41	85"	31	96"	26	107"	20
Narrow Spot	150/150	28°	6"	1968	12"	1210	18"	471	24"	267	30"	181	36"	120	42"	88	48"	67	54"	55	60"	44
THROW DISTANCE			11'		12'		13'		14'		15'		16'		17'		18'		19'		20'	
Beam Spread	Lens Combo	Beam Angle	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC	Spot Size	FC
Wide Flood Lens	75/75	60°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flood Light	100/100	48°	118"	16	128"	13	139"	11	150"	9	160"	7	-	-	-	-	-	-	-	-	-	-
Narrow Spot	150/150	28°	66"	37	72"	33	78"	25	84"	22	90"	17	98"	17	102"	15	108"	13	114"	11	120"	9

**REFERENCE WIRING DIAGRAMS**

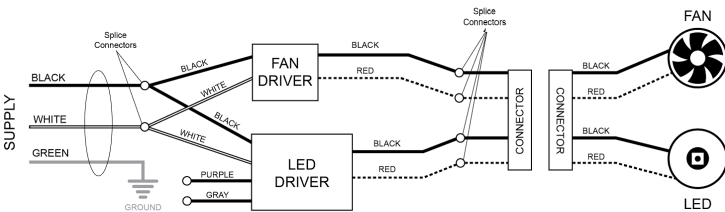
**EXISTING WIRING (NC, FF, RM, TA SERIES)**



**EXISTING WIRING (SM SERIES)**



**NEW WIRING (NCL, FFL, RML, TAL SERIES)**



**NEW WIRING (SML SERIES)**

