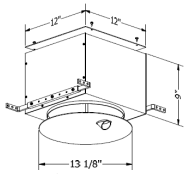
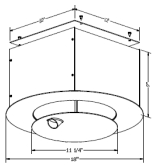
LED CONVERSION KIT INSTRUCTION SHEETS

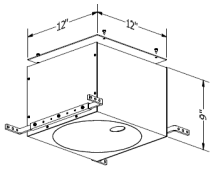
LED
CONVERSION KIT

Thank you for purchasing this LED conversion kit for your existing Phantom™ halogen contour projector. Specific kits are required for square and round housings as well as surface mount models. During this process you will be replacing the electrical hatch/power supply assembly as well as removing the halogen lamp, lamp holder and installing a new LED light engine. Please identify your model/housing type below before starting.

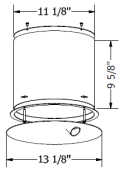


NC Housing

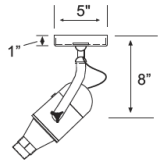

FF Housing



TA Housing



RM Housing



SM Canopy

PARTS INCLUDED WITH THE LED CONVERSION KITS

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. ETL labels – IC label and conversion label

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. ETL labels – IC label and conversion label

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. ETL labels – IC label and conversion label

READ AND UNDERSTAND THESE WARNINGS AND INSTRUCTIONS BEFORE STARTING:

WARNING: RISK OF FIRE OR ELECTRIC SHOCK. LED RETROFIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRES ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.

AVERTISSEMENT: RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. L'INSTALLATION DE CE NÉCESSAIRE DE MODERNISATION EXIGE UNE PERSONNE FAMILIÈRE AVEC LA CONSTRUCTION ET LE FONCTIONNEMENT DU SYSTÈME ÉLECTRIQUE DU LUMINAIRE ET DES RISQUES ASSOCIÉS. TOUTE PERSONNE QUI N'EST PAS QUALIFIÉE NE DOIT FAIRE AUCUNE TENTATIVE D'INSTALLATION ET DOIT CONTACTER UN ÉLECTRICIEN QUALIFIÉ.

WARNING: RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN LUMINAIRES THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINARIRE.

AVERTISSEMENT: RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. N'INSTALLEZ CE KIT QUE DANS LES LUMINAIRES QUI PRÉSENTENT LES CARACTÉRISTIQUES DE CONSTRUCTION ET LES DIMENSIONS INDIQUÉES DANS LES PHOTOGRAPHIES ET / OU LES DESSINS ET DANS LESQUELS LA PUISSANCE D'ENTRÉE DU KIT RETROFIT NE DÉPASSE PAS LA VALEUR D'ENTRÉE DU LUMINARIRE.

WARNING: TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.

AVERTISSEMENT: AFIN DE PRÉVENIR L'ENDOMMAGEMENT OU L'ABRASION DES CÂBLES, ÉVITER TOUT CONTACT ENTRE CES DERNIERS ET LE BORD D'UN OBJET TRANCHANT TEL QU'UNE TÔLE.

WARNING: THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.

AVERTISSEMENT: LE NÉCESSAIRE DE MODERNISATION EST ACCEPTÉ À TITRE DE COMPOSANT D'UN LUMINAIRE LORSQUE LA PERTINENCE DE LA COMBINAISON DOIT ÊTRE DÉTERMINÉE PAR LES AUTORITÉS COMPÉTENTES. CE PRODUIT DOIT ÊTRE MIS EN PLACE PAR UN ÉLECTRICIEN QUALIFIÉ CONFORMÉMENT AUX CODES ÉLECTRIQUES APPROPRIÉS APPLICABLES. LE GUIDE D'INSTALLATION NE SUPPLANTE PAS LES RÈGLEMENTS LOCAUX OU NATIONAUX EN MATIÈRE D'INSTALLATIONS ÉLECTRIQUES.

INSTALLATION PROCEDURE FOR PHANTOM PROJECTOR LED CONVERSION

Remove the LED light assembly, lens mounting hardware and electrical junction box/power supply assembly from the carton, identify all parts and read the following step by step instructions before starting. Save all parts, boxes and packing materials until you have completed the modifications. Retain these instructions for future reference!

Step 1: (Figure 1) Remove cover plate by releasing two stainless steel springs and set aside. (Figure 2) Unplug projector from 12V power supply. (Figure 3) Remove phenolic thumb screw, curved washer and projector assembly from mounting cradle and set aside. If necessary, remove pivoting mounting cradle by removing two phenolic thumb screws and disengage pivot points for additional room.

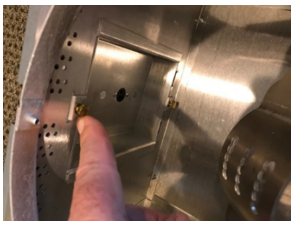
(Figure 1)

(Figure 2)

(Figure 3)

Step 2: (Figure 4) Remove two brass thumb screws from electrical hatch cover inside housing. (Figure 5) Gently remove electrical hatch pulling inside housing using avaialble slack in supply wires. (Figure 6) Remove 4" square junction box cover and disconnect (BLACK, WHITE) supply and (GREEN) ground wire wires from switch leg including wire connector disgarding hatch assembly once wires are disconnected.

(Figure 4)



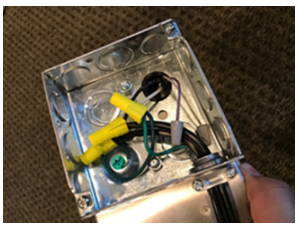
(Figure 5)

(Figure 6)

Step 3: (Figure 7) Taking new LED hatch assembly remove 4" square junction box cover to expose line voltage wiring comparment. Install wire connector to junction box, connect (black and white) supply wires, connect (green) ground wire. (Figure 8) Install 4" square cover plate and insert new LED junction box assembly into housing and secure with two brass thumb screws (Figure 9).

WARNING: Small gray and purple lead wires in junction box should remain capped off unless used with a 0-10VDC low voltage dimmer control. Damage will occur to the LED driver if these wires are connected to line voltage power. If you have any questions or concerns regarding these 0-10VDC control wires consult factory or dimmer manufacturer. If necessary, reinstall pivoting mounting cradle by disengaging pivot points and secure with two phenolic thumb screws.

(Figure 7)



(Figure 8)

(Figure 9)

Step 4: (Figure 10) Dismantle the projector by first removing Allen head screws on front of projector, front tapered focal cone, spacer and masking ring. (Figure 11) Carefully remove two glass condensing lenses, noting lens shape, orientation and position. (Figure 12) Remove Philips head screws and condensing tube. Set all aside and save for reuse.

(Figure 10)

(Figure 11)

(Figure 12)

Step 5: (Figure 13) Remove back cap, twist lock lamp holders and all internal anodized components inside projector body leaving only the (Figure 14) projector body. (Figure 15) shows all internal projector removed parts that may be discarded after conversion is complete.

(Figure 13)

(Figure 14)

(Figure 15)

Step 6: (Figure 16) Holding the projector body upright, install replacement condenser tube with flange and secure with Philips head screws in the same orientation as noted earlier. (Figure 17) Install new spring and inner condensing tube followed by two condensing lenses in the same orientation as noted earlier. (Figure 18) Verify that the flat side of the condensing lens is facing the masking ring.

(Figure 16)

(Figure 17)

(Figure 18)

Step 7: (Figure 19) Reinstall masking ring, spacer followed by front focal cone on front of body and secure with three Allen head screws for template ring or four brass thumb screws for shutter ring in the same orientation as noted earlier (Figure 20) Flip projector over and install LED light engine securing with three Philips head screws. Note: Make sure the flange is fully engaged and seated properly. (Figure 21) Reinstall projector into mounting cradle and secure using phenolic thumb screw with curved washer and securely lock into position and connect power cord to quick disconnect connector on electrical hatch.

(Figure 19)

(Figure 20)

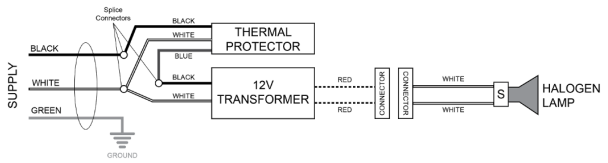
(Figure 21)

DIMMING NOTE: The electronic drivers supplied in this LED conversion kit operate on 120-277VAC 50/60Hz and are designed for use on forward phase, reverse phase line voltage dimmer controls as well as 0-10VDC low voltage dimmer controls. The independent electronic fan driver is non-dimming.

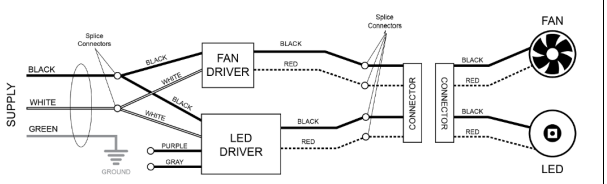
Congratulations! You just successfully converted your existing Phantom contour projector from a halogen light source to our new high performance, maintenance free and energy efficient LED light source! Adjust projector and fine tune masking method to fit art as needed and reinstall cover plate when completed.

REFERENCE WIRING DIAGRAMS

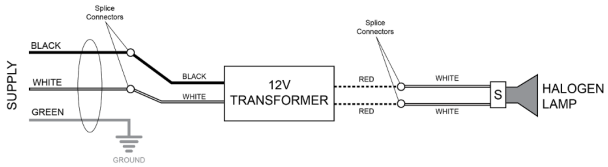
EXISTING WIRING DIAGRAM
(NC, FF, RM, TA SERIES)



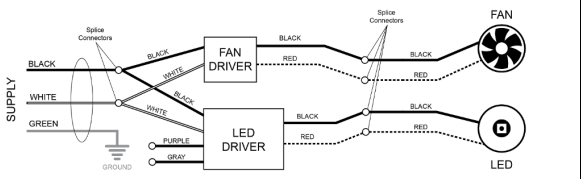
NEW WIRING DIAGRAM
(NC, FF, RM, TA SERIES)



EXISTING WIRING DIAGRAM
(SM SERIES)

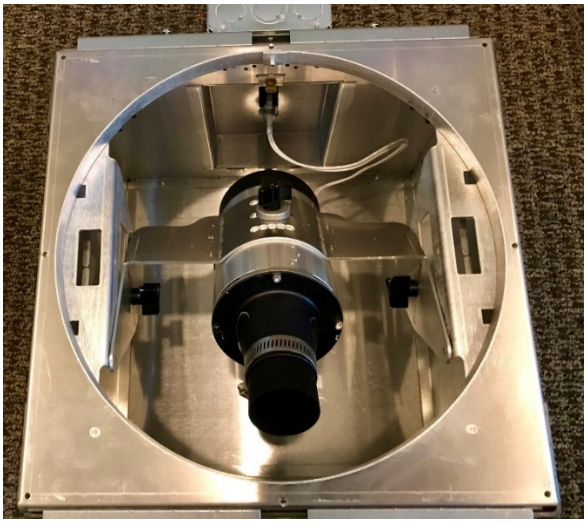


NEW WIRING DIAGRAM
(SM SERIES)



REFERENCE PHOTOGRAPHS

BEFORE CONVERSION
(NC, FF, RM, TA SERIES)



AFTER CONVERSION
(NC, FF, RM, TA SERIES)

REFERENCE WIRING PHOTOS

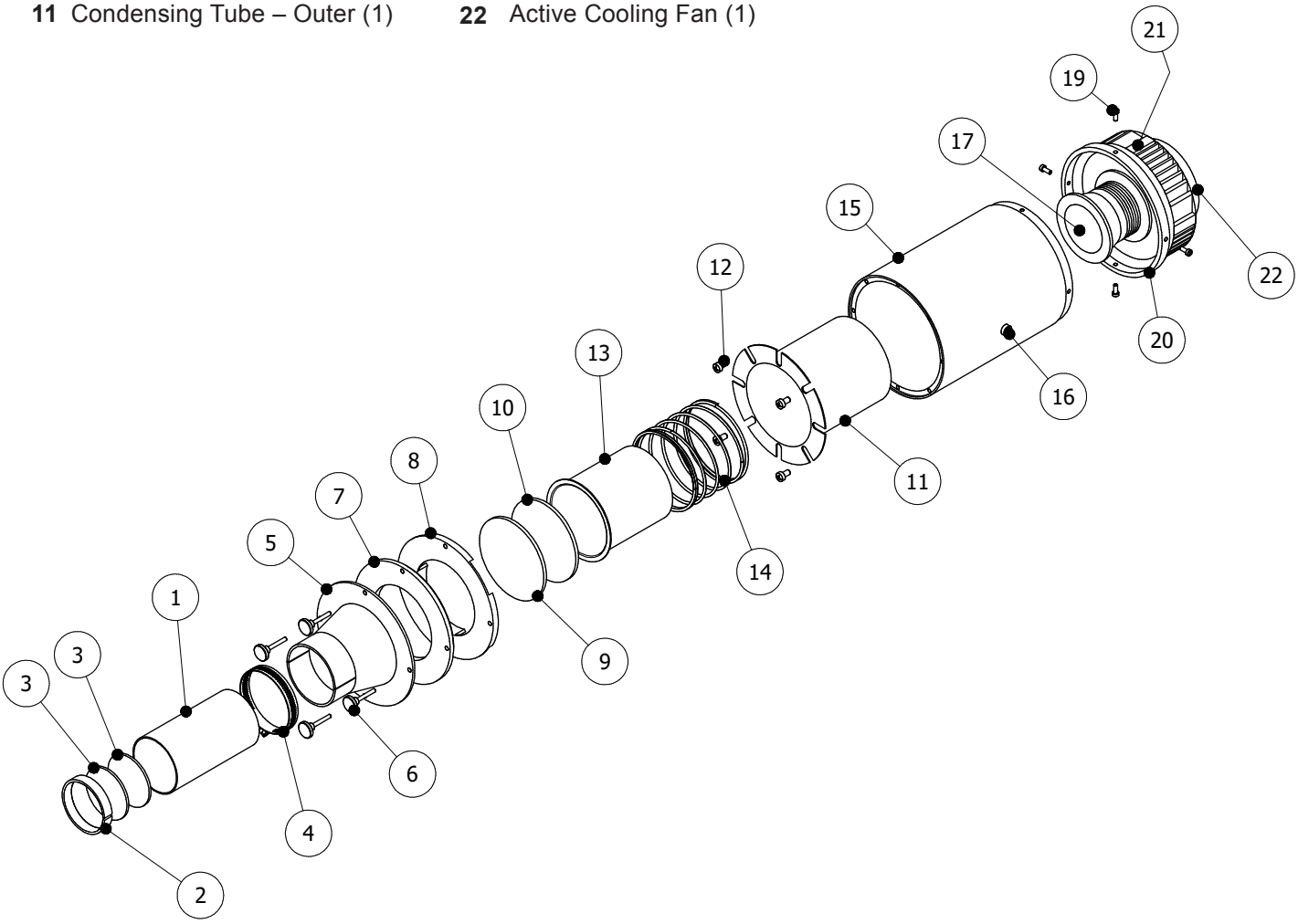
BEFORE CONVERSION
(SM SERIES)

AFTER CONVERSION
(SM SERIES)

REFERENCE PARTS KEY

1 Focal Cone (1)
2 Focal Lens Clip (1)
3 Focal Lenses (2)
4 Focal Hose Clamp (1)
5 Focal Tapered Cone (1)
6 Brass Thumb Screws (3-4)
7 Masking Ring – Front (1)
8 Masking Ring – Back (1)
9 Condensing Lens – Plano (1)
10 Cond. Lens – Bi-Convex (1)
11 Condensing Tube – Outer (1)
12 Condensing Tube Screws (2)
13 Condensing Tube – Inner (1)
14 Condensing Spring (1)
15 Projector Body (1)
16 Cradle Mount (3)
17 LED CPC Reflector (1)
18 LED Light Source (1)
19 Cap Retaining Screws (3)
20 Back Cap (1)
21 Heat Sink (1)
22 Active Cooling Fan (1)

NOTE: (7) NOT USED IN CONJUNCTION WITH LED CONVERSION KITS



PHANTOM™ LIGHTING SYSTEM

ETL CLASSIFIED
Intertek 73355

Conforms to UL STD 1598C Requirements
Certified to CSA STD C22.2 NO.250.1

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