



INSTALLATION INSTRUCTIONS

VividHorse 120VAC Power & CCT Selectable AC Engine Retrofit Kit

VJT120020AC9TWB

VividHorse 230-277VAC Power & CCT Selectable AC Engine Retrofit Kit

VJTMIE020AC9TWB

SEE www.fulham.com/install FOR COMPLETE INSTALLATION INSTRUCTIONS



LED LIGHT ENGINE APPLICATION PROGRAM

MANUAL FOR LED LIGHT ENGINE KIT INSTALLATION

1.0 INSTALLATION WARNINGS

1. "WARNING – RISK OF FIRE OR ELECTRIC SHOCK. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED."
2. "WARNING - Risk of fire or electric shock. Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and/or drawings."
3. "WARNING – Risk of fire. Input ratings may need to be determined based on any configuration(s) permitted by the installation instructions. Regardless of the configuration(s) of the retrofit kit, the input ratings of the overall retrofit kit shall not exceed the marked input ratings of the host luminaire."
4. "WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects."
5. "WARNING - Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED retrofit kit. Check for enclosed wiring and components."
6. "THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY THE 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."
7. Only those open holes indicated in these instructions may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.
Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.

1.0 AVERTISSEMENTS D'INSTALLATION

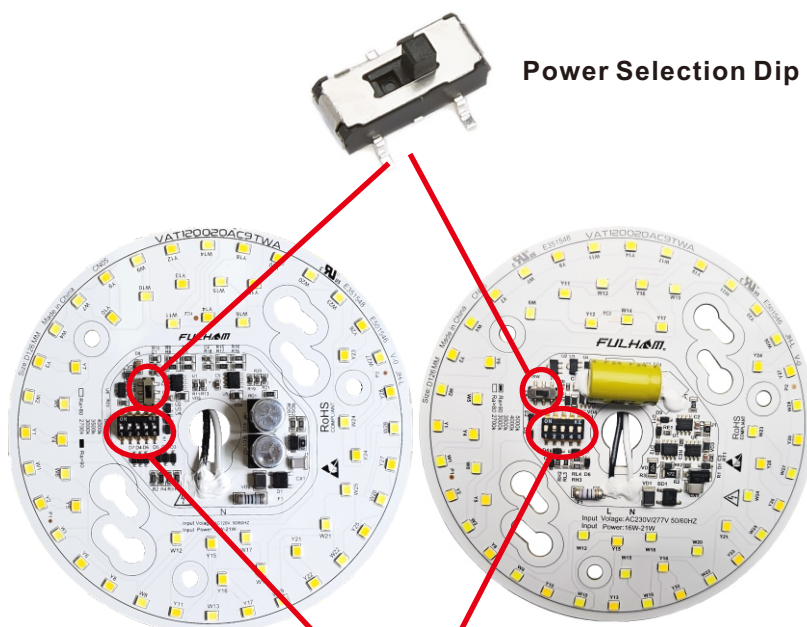
1. AVERTISSEMENT - Risque d'incendie ou de choc électrique. CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LE PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS.
2. AVERTISSEMENT - Risque d'incendie ou de choc électrique. N'installer ce nécessaire que dans les luminaires dont les caractéristiques de construction et les dimensions sont conformes à celles illustrées dans les photos et/ou les dessins et dont la puissance d'entrée nominale du nécessaire de modernisation ne dépasse pas celle du luminaire.
3. AVERTISSEMENT - Risque d'incendie ou de choc électrique. Il peut être nécessaire de déterminer la cote d'entrée en fonction de toute configuration autorisée par les instructions d'installation. Quelle que soit la configuration du kit de modification, la cote d'entrée de l'ensemble du kit de modification ne doit pas dépasser la cote d'entrée marquée du luminaire hôte.
4. 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.
5. AVERTISSEMENT - Risk d'incendie ou de choc électrique. Le câblage du luminaire et les pièces électriques peuvent être endommagés lors du forage pour l'installation d'un kit de reconditionnement LED. Vérifiez le câblage et les composants inclus.
6. 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. LES PRODUITS DOIVENT ÊTRE INSTALLÉS PAR UN ÉLECTRICIEN QUALIFIÉ CONFORMÉMENT AUX CODES ÉLECTRIQUES APPLICABLES ET APPROPRIÉS. LES LIGNES DIRECTRICES D'INSTALLATION NE REMPLACENT PAS LES RÈGLEMENTS LOCAUX OU NATIONAUX SUR L'INSTALLATION ÉLECTRIQUE.
7. Seules les ouvertures indiquées sur les photos et / ou les dessins peuvent être faites ou modifiées à la suite de l'installation du kit. Ne laissez aucune autre ouverture sur le câblage ou le boîtier des composants électriques.
Ne faites ni ne modifiez aucun trou ouvert dans le câblage ou le boîtier de l'élément électrique pendant l'installation du kit.

2.0 POWER & CCT SELECTION INDICATION

Power & CCT Selection Indication

1. The VividHorse DirectAC Engine Retrofit Kit is a dual-channel LED product that allows for Power & CCT selection via dip switches on the PCB. Available CCTs include 2700K, 3000K, 3500K, 4000K and 5000K.
2. A pre-set Power & CCT will come from the factory. Check the product label or packaging to see the pre-set level.
3. Change the Power dip switch for desired power level.
4. Change the CCT dip switch position to "ON" (1~5) to set the desired CCT level.
5. Setting all CCT dip switches to the "OFF" position will result in no light output.

NOTE: ONLY keep one CCT dip switch in the "ON" position; failing to do so may result in an undesired CCT.



Power Selection Dip Switch

CCT Indication

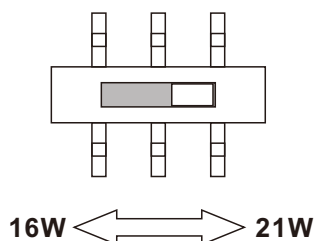
	1	2	3	4	5
2700K	ON	OFF	OFF	OFF	OFF
3000K	OFF	ON	OFF	OFF	OFF
3500K	OFF	OFF	ON	OFF	OFF
4000K	OFF	OFF	OFF	ON	OFF
5000K	OFF	OFF	OFF	OFF	ON
No Light	OFF	OFF	OFF	OFF	OFF

VJT120020AC9TWB

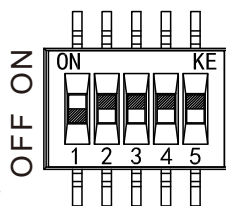
VJTMIE020AC9TWB

CCT Selection Dip Switch

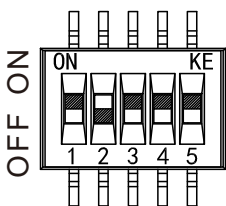
Power Indication



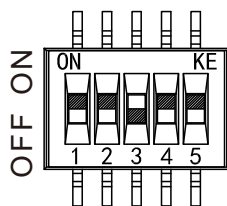
2700K



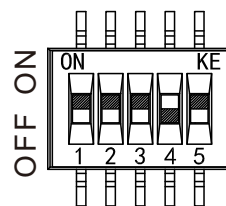
3000K



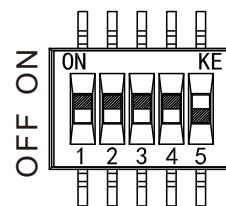
3500K



4000K



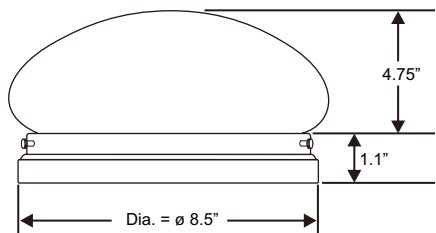
5000K



3.0 ORIGINAL LUMINAIRE DIMENSIONS

Original Luminaire

Mfr: Portfolio - Model: GL2301-WHES-I



Minimum Luminaire Dimensions

The retrofit Luminaire should be with original input power rating $\geq 16W$ when using VJTxxx020AC9TWB set to 16W input power.

The retrofit Luminaire should be with original input power rating $\geq 21W$ when using VJTxxx020AC9TWB set to 21W input power.

- Remove all the original luminaire parts, lamp, lampholder and ballast (only for Fluorescent) in order to begin the retrofit.
- Original luminaire diffuser and original ground wire will need to be kept for this retrofit.
- This Kit can be retrofitted into any surface wall or ceiling luminaire with a similar shape and diameter/height greater or equal to the minimum dimensions described above, and volume greater or equal to 173.92 cubic inches.
- All target luminaires shall conclude a metal back plate at size diameter 5.2" or larger with grounding means.
- Suitable for operation in luminaires with ambient not exceeding 50°C.
- SUITABLE FOR DAMP LOCATIONS.
- Suitable for open type luminaires. Suitable for closed type luminaires.
- Suitable for use with luminaires with maximum one lamps.

NOTE: Wire on dedicated lighting branch circuit. Do not wire on same branch circuit as motors, heating elements, inductive type loads or heavy machinery which may introduce spikes, noise and other abnormalities onto the Line. Doing so may result in damage to the unit or abnormal lighting conditions.

4.0 RETROFIT KIT COMPONENTS

Retrofit kit components will be provided as listed below:



Direct AC LED Engine



Mounting Hardware



or

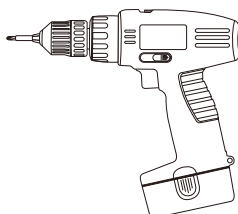


Input Power Connector

This luminaire has been modified to operate LED lamps. Do not attempt to install or operate original lamps in this luminaire.
REPLACE ONLY WITH FULHAM ELECTRONIC CO. : VJT***020AC9TWB
Ce luminaire a été modifié et ne peut plus utiliser la lampe prévue à l'origine.
REEMPLACER UNIQUEMENT AVEC FULHAM ELECTRONIC CO. : VJT***020AC9TWB

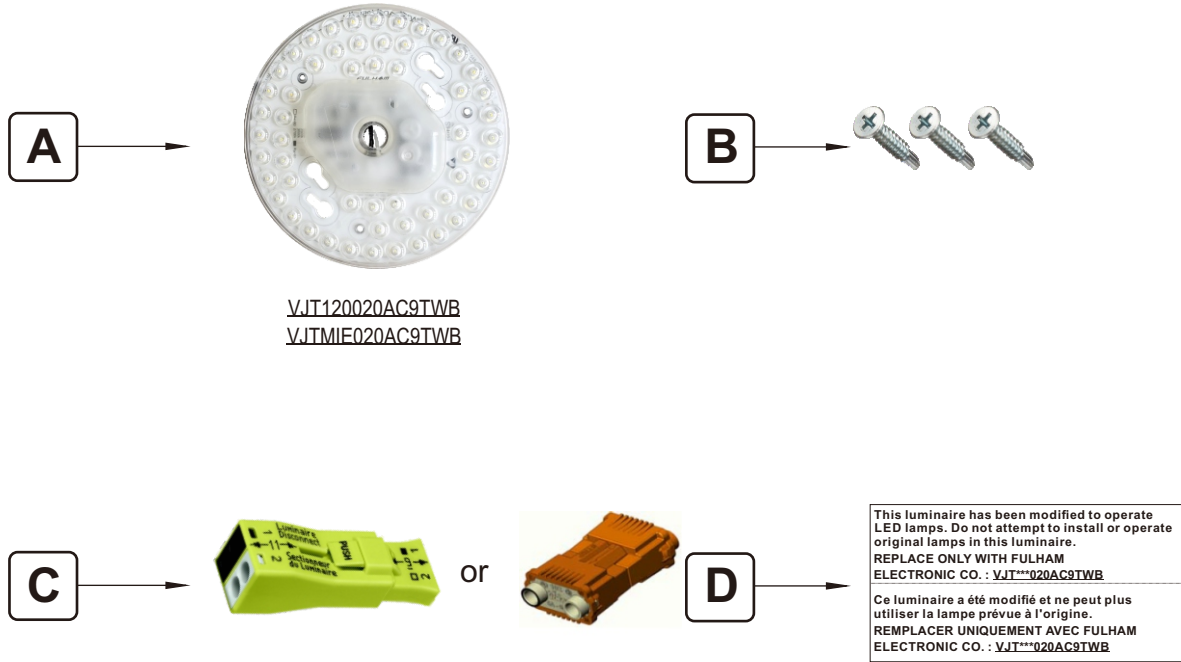
Retrofit Label

5.0 RECOMMENDED TOOLS (Not Included)



Power Drill W/ Philips Bit

6.0 RETROFIT KIT DESCRIPTION



ITEM	DESCRIPTION	QTY
A.	Direct AC LED Engine	1
B.	6-20 X 5/8" Flat Head Self Drilling Screws	3
C.	Input Power Connector	1
D.	Retrofit Label	1

Note:

- Installers should not disconnect existing wires from lampholder terminals to make new connections at lampholder terminals. Instead installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors.
- Installers should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.
- Prior to installation, review all environmental designation locations in the retrofit kit installation instructions. Only install in damp or wet locations if so indicated in the installation instructions.

7.0 RETROFIT KIT ASSEMBLY

1. Start by removing the original lamp, lampholder and ballast (only for Fluorescent) from the luminaire. See figure 1.

NOTE: The original luminaire ground wire will need to be kept for this retrofit.

2. Drill a Ø0.43" (Ø11mm) hole in the center of the luminaire housing. Center the DirectAC Engine (A) in the luminaire so that the line voltage cables are aligned with the new hole in the luminaire. See figure 2.

NOTE: LED Engine must make direct contact with the back plate when installed in order to provide sufficient heat sinking to properly manage thermals for safety and warranty purposes.

3. Use the supplied self-drilling screws (B) to attach the DirectAC Engine (A) to the luminaire's housing. See figure 3.

NOTE: All screws provided must be used to ensure good thermal contact to surface.

4. Feed line voltage cables from the DirectAC Engine (A) through the central hole in the luminaire. See figure 4.

5. Place the provided Retrofit Label (E) on the inner areas of the luminaire where DirectAC Engine (A) was just installed. Label must be clearly visible and should not be obscured by line voltage cables. See figure 5 and Illustration 1.

6. Completed assembly should look like figure 5.

7. Luminaire is now ready to be installed. Please see below for instructions on connecting line voltage to the luminaire.

8. Re-attach and secure the lens once installation is completed.



Figure 1

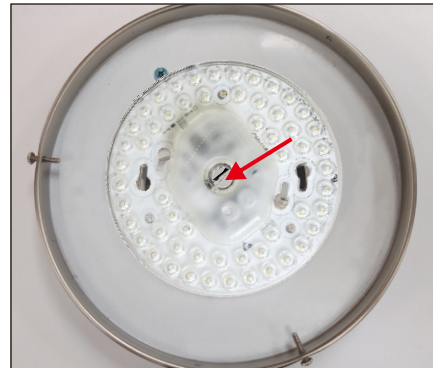


Figure 2

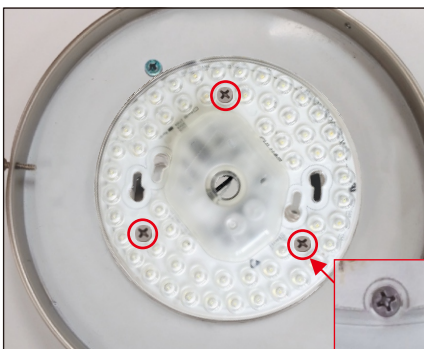


Figure 3



Figure 4



Figure 5

This luminaire has been modified to operate LED lamps. Do not attempt to install or operate original lamps in this luminaire.
REPLACE ONLY WITH FULHAM ELECTRONIC CO. : VJT-16/21W-RD
Ce luminaire a été modifié et ne peut plus utiliser la lampe prévue à l'origine.
REPLACER UNIQUEMENT AVEC FULHAM ELECTRONIC CO. : VJT-16/21W-RD

Note: For all models, live parts should not be accessible after installation.

Connecting Power to the DirectAC Engine:

- 1) Connect the green wire (Ground) from the luminaire to the Ground that is being fed by the power source. Connect these two wires by using a wire connector with a minimum 18AWG rating.
- 2) Connect the white wire (Neutral) from the DirectAC Engine to the Neutral being fed by the power source. Connect these two wires by using a wire connector with a minimum 18AWG rating.
- 3) Connect the Black wire (Line) from DirectAC Engine to the Line being fed by the power source. Connect these two wires by using a wire connector with a minimum 18AWG rating.

8.0 WARRANTY

- Please refer to DirectAC Engine kit spec sheet for warranty information