

UEL and UELC Steady-Burning and Flashing Elevated Approach Light

Spare Parts

SP_3031, Rev. C, 2022/10/05

ADB SAFEGATE



A.0 Disclaimer / Standard Warranty

CE certification

The equipment listed as CE certified means that the product complies with the essential requirements concerning safety and hygiene. The European directives that have been taken into consideration in the design are available on written request to ADB SAFEGATE.

ETL certification

The equipment listed as ETL certified means that the product complies with the essential requirements concerning safety and FAA Airfield regulations. The FAA directives that have been taken into consideration in the design are available on written request to ADB SAFEGATE.

All Products Guarantee

ADB SAFEGATE will correct by repair or replacement per the applicable guarantee above, at its option, equipment or parts which fail because of mechanical, electrical or physical defects, provided that the goods have been properly handled and stored prior to installation, properly installed and properly operated after installation, and provided further that Buyer gives ADB SAFEGATE written notice of such defects after delivery of the goods to Buyer. Refer to the Safety section for more information on Material Handling Precautions and Storage precautions that must be followed.

ADB SAFEGATE reserves the right to examine goods upon which a claim is made. Said goods must be presented in the same condition as when the defect therein was discovered. ADB SAFEGATE furthers reserves the right to require the return of such goods to establish any claim.

ADB SAFEGATE's obligation under this guarantee is limited to making repair or replacement within a reasonable time after receipt of such written notice and does not include any other costs such as the cost of removal of defective part, installation of repaired product, labor or consequential damages of any kind, the exclusive remedy being to require such new parts to be furnished.

ADB SAFEGATE's liability under no circumstances will exceed the contract price of goods claimed to be defective. Any returns under this guarantee are to be on a transportation charges prepaid basis. For products not manufactured by, but sold by ADB SAFEGATE, warranty is limited to that extended by the original manufacturer. This is ADB SAFEGATE's sole guarantee and warranty with respect to the goods; there are no express warranties or warranties of fitness for any particular purpose or any implied warranties other than those made expressly herein. All such warranties being expressly disclaimed.

Standard Products Guarantee

Products manufactured by ADB SAFEGATE are guaranteed against mechanical, electrical, and physical defects (excluding lamps) which may occur during proper and normal use for a period of two years from the date of ex-works delivery, and are guaranteed to be merchantable and fit for the ordinary purposes for which such products are made.

Note

See your sales order contract for a complete warranty description. Replaced or repaired equipment under warranty falls into the warranty of the original delivery. No new warranty period is started for these replaced or repaired products.

FAA Certified products manufactured by ADB SAFEGATE

ADB SAFEGATE L858 Airfield Guidance Signs are warranted against mechanical and physical defects in design or manufacture for a period of 2 years from date of installation, per FAA AC 150/5345-44 (applicable edition).

ADB SAFEGATE LED products (with the exception of obstruction lighting) are warranted against electrical defects in design or manufacture of the LED or LED specific circuitry for a period of 4 years from date of installation, per FAA EB67 (applicable edition). These FAA certified constant current (series) powered LED products must be installed, interfaced and powered with and through products certified under the FAA Airfield Lighting Equipment Program (ALECP) to be included in this 4 (four) year warranty. This includes, but is not limited to, interface with products such as Base Cans, Isolation Transformers, Connectors, Wiring, and Constant Current Regulators.

Note

See your sales order contract for a complete warranty description.

Replaced or repaired equipment under warranty falls into the warranty of the original delivery. No new warranty period is started for these replaced or repaired products.

Liability



WARNING

Use of the equipment in ways other than described in the catalog leaflet and the manual may result in personal injury, death, or property and equipment damage. Use this equipment only as described in the manual.

ADB SAFEGATE cannot be held responsible for injuries or damages resulting from non-standard, unintended uses of its equipment. The equipment is designed and intended only for the purpose described in the manual. Uses not described in the manual are considered unintended uses and may result in serious personal injury, death or property damage.

Unintended uses, includes the following actions:

- Making changes to equipment that have not been recommended or described in this manual or using parts that are not genuine ADB SAFEGATE replacement parts or accessories.
- Failing to make sure that auxiliary equipment complies with approval agency requirements, local codes, and all applicable safety standards if not in contradiction with the general rules.
- Using materials or auxiliary equipment that are inappropriate or incompatible with your ADB SAFEGATE equipment.
- Allowing unskilled personnel to perform any task on or with the equipment.

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TABLE OF CONTENTS

1.0 Introduction 1.1 Steady-Burning and Flashing Elevated Approach Light (US and Canada)	1 1
2.0 Parts	3
2.1 Assemblies and Exploded Views Overview	
2.1.1 Exploded views 2.2 Spare Components	7
A.0 SUPPORT	9
A.1 ADB SAFEGATE Website	9
A.2 Recycling	9
A.2.1 Local Authority Recycling	9
A.2.2 ADB SAFEGATÉ Recycling	



1.0 Introduction

The UEL steady-burning approach, threshold runway end high-intensity elevated light is available with a synthetic rear housing, which is UV-resistant and results in a low weight, or with an aluminum rear housing. The fixture uses low power and long life lamps 1000 hours, 150W only for approach, threshold and threshold wing bar, 100W for runway end and 45W for ICAO stop bar and the fixture's reduced dimensions improve frangibility characteristics and resistance against jet blast and wind load. The UEL also offers easy lamp changes without tools due to a hinged, removable front cartridge, and it mounts straight onto standard 2" EMT (60 mm O.D.), breakable coupling or frangible mast head.

1.1 Steady-Burning and Flashing Elevated Approach Light (US and Canada)

Compliance with Standards

FAA:	AC 150/5345-46 (Current Edition) and FAA-E-982 for mechanical and environmental properties.	
ICAO:	Annex 14, Volume I, para. 5.3.4, 5.3.4.17, 5.3.7, 5.3.8, 5.3.10, 5.3.11, and 5.3.19.4.	
IEC:	IEC 61827	
NATO:	STANAG 3316	
T/C:	Transport Canada TP 312	

Uses

- Precision approach lighting Cat. I, II and III, white and red
- Threshold and threshold wing bar lighting Cat. I, II and III
- Runway end lighting Cat. I, II and III
- Supplementary ICAO stop bar lights Cat. I, II and III
- Flashing light head, in conjunction with a FCU cabinet

Operating Conditions

Temperature:	-67 °F to +131 °F (-55 °C to +55 °C)
Humidity:	0 to 100%
Altitude:	0 to 10,000 ft (3,000 m)
Wind:	Velocities up to 302 knots (560 km/hr)

Electrical Supply

From a 2.8 to 6.6 A series circuit, through a suitably rated isolation transformer. Use a 2-core 2.5 mm² (AWG 12) silicon rubber insulated cable between the transformer and the light. For flashing system, see catalog sheet 2091.



2.0 Parts

Ordering Code ²	1UE X X X X X X X X 1
Lamp Power 2 = 45 W (ICAO stop bar) 4 = 100 W (runway end) 5 = 150 W (other applications) ¹ 9 = 120 W (flashing light)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Beam Color C = White G = Green R = Red	•
For Mounting On 0 = Ground (with secondary cable) 2 = Pole or mast (no cable)	•
Finish (Aluminum) Y = Aviation yellow	
Low Intensity Top Light 0 = Without	•
Lock 0 = No lock 1 = Vandal proof lack for optical cart	t I
Special requirements 00 = None	
Version 1	•
Accessories Adjustment tools (vertical and horize With clinometer using electronic ser	
With clinometer using spirit level	1570.05.410
Note ¹ Extension cables, conduits, conn- couplings, frangible masts, (need separately). For assistance, please ADB Safegate sales.	ls to be ordered

² Complete, delete or modify as necessary.

Elevated Flasher Aiming Device

This aiming device is used to adjust the vertical elevation of the elevated flash head. For elevated flashing fixture, the aiming device is available either as an electronic or as a simple mechanical (bubble level) based unit. Both aiming devices are accurate to within $\pm 0.5^{\circ}$.

Aimina	Device	Ordering	Code

Remote Digital Aiming Device ¹	1570.05.400
Bubble Level Aiming Device ²	1570.05.410

Notes

¹ For inaccessible fixture mounting heights up to 33 ft (10 m).

² For fixture mounting heights accessible from the ground, a ladder or a bucket truck.

Aluminum UEL

Used in Canadian and other harsh environments.

Ordering Code Direction 1 = Elevated Incandescent	UELC - 1 - X X X - X - X X		
Lamp Power 100 = 100W (Runway End) 150 = 150W (Approach centerlir side row, threshold & threshold XXX = No lamp WS = MOD for WS Tower only			
Color C = White G = Green R = Red			
Special Option LL = Extra long cord 0.75M (29.	5″)		
Accessories Adjustment tools (vertical and h With clinometer using electroni With clinometer using spirit leve Note	c sensors 1570.05.400		
 Extension cables, conduits, connector kits, breakable couplings, and frangible masts, need to be ordered separately. For assistance, please contact ADB SAFEGATE. To order a Standard Digital Aiming Device for use on readily accessible fixture mounting heights, use Part No. 080604. 			

1 Other applications include approach, threshold, and threshold wing bar.

2.1 Assemblies and Exploded Views Overview

It is recommended to create a sufficiently large stock of spare parts to maintain the fittings. It will mainly consist of consumables like lamps, gaskets, etc. Other components that may need replacement, such as front glasses, hardware and sub-assemblies should be stocked in smaller quantities. The stock should also contain some optical cartridges and complete fittings of each type.

Adjustment tools (elevation and azimuth) With electronic clinometer 1570.05.400 Without electronic clinometer 1570.05.410

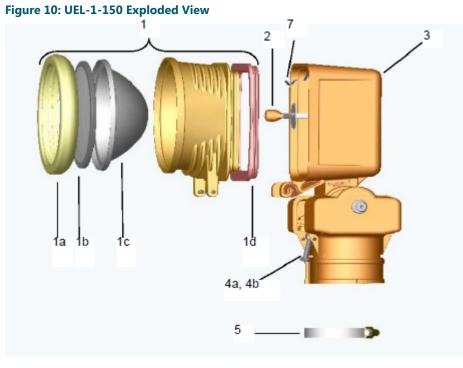
Note

Extension cables, conduits, connector kits, frangible couplings and, frangible masts, that need to be ordered separately. For assistance, please contact ADB.

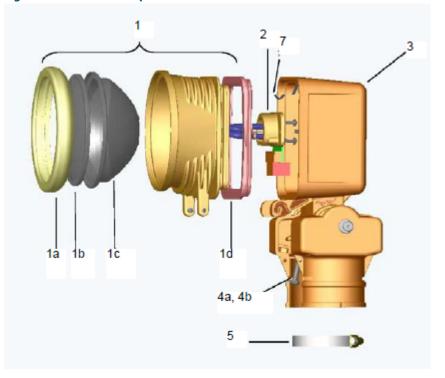


2.1.1 Exploded views

The illustration below shows the exploded view of the UEL-1-150.



The illustration below shows the exploded views of the UEL–1-120. **Figure 11: UEL–1-120 Exploded View**



In the table below you will find all parts of the UEL-1-150 and UEL-1-120 lights.

Table 1: Parts List

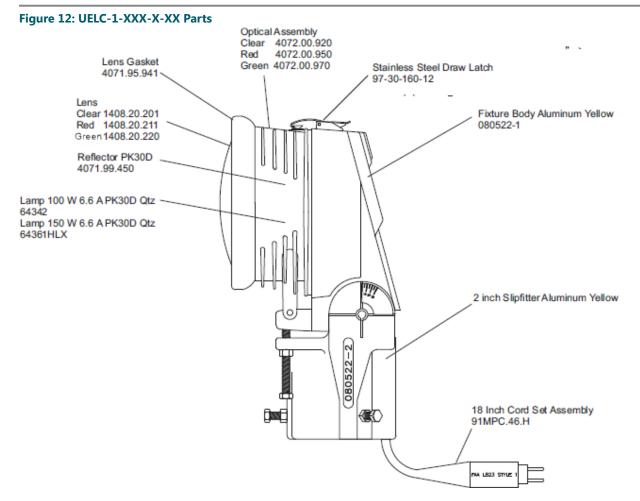
References related to exploded view		es related to exploded view UEL White		UEL Green	UEL flash
Comple	ete fitting (with or without L.I. top light)	(*)	(*)	(*)	(*)
1	Optical front cartridge assy. (aviation yellow) Optical front cartridge for:	4072.00.920		4072.00.971	4072.00.980
	Appr.side rows		4072.00.951		
	Runway end		4072.04.941	-	
	Suppl stop bars		4072.04.951	-	
1a	Lens / reflector seal	4071.95.943	4071.95.943	4071.95.943	4071.95.943
1b	Front glass or lens	1408.21.201		1408.20.220	1408.20.230
	Approach (150W)		1408.20.211	-	
	End (100W)		1408.20.240	-	
	Suppl. Stop bar (45W)		1408.20.250	-	
1c	Reflector	4071.99.450	4071.99.450	4071.99.450	4071.98.151
1d	Front cartridge gasket	4071.95.953	4071.95.953	4071.95.953	4071.95.953
2	Lamp PK30D			-	
	Halogen 45W-6.6A		2990.48.330		
	Halogen 100W-6.6A		2990.48.325		
	Halogen 150W-6.6A	2990.48.340	2990.48.340	2990.48.340	-
	Flashing lamp 400V 60J	-	-	-	SP.011868
	Lamp Connection Kit	6120.00.010	6120.00.010	6120.00.010	-
	Flasher Trigger PCB	-	-	-	-
4a	Leveling screw M6 x 40 Stainless steel DIN 933	7100.08.593	7100.08.593	7100.08.593	7100.08.593
	Cable clamp	4071.95.992	4071.95.992	4071.95.992	4071.95.992
5	Bracing clamp with screw	1409.07.100	1409.07.100	1409.07.100	1409.07.100

Notes
^(*) For ordering codes, see § #unique_7

Table 2: Optional items for UEL-1-150

Description	Part Number	Order quantity (each)
Secondary cable with molded-on L823 style 1 2-pole connector, 0,5m for ground mounting	1MC3DA050C01	1
Red lens assy, for LI top light	1480.03.315	1
Clear lens assy, for LI top light	1480.03.295	1
Lamp for L.I. top light Gy 9.5 45W 6.6A	2990.40.820	1
Lamp socket for L.I. top light	6114.00.080	1
6-pole plug with leads for UEL with top light	6104.40.200	1





2.2 Spare Components

Description	Part No.
Optical assembly, clear	4072.00.920
Optical assembly ¹ , red	4072.00.950
Optical assembly ¹ , green	4072.00.970
Lens gasket	4071.95.941
Lens only, clear	1408.20.201
Lens only, red	1408.20.211
Lens only, green	1408.20.220
Reflector PK30D	4071.99.450
Lamp, 45 W, 6.6 A	2990.48.330
Lamp, 100W, 6.6 A	2990.48.325
Lamp, 150W, 6.6 A	2990.48.340

Notes

¹ Includes gasket, reflector, and lens



Appendix A: SUPPORT

Our experienced engineers are available for support and service at all times, 24 hour/7 days a week. They are part of a dynamic organization making sure the entire ADB SAFEGATE is committed to minimal disturbance for airport operations.

ADB SAFEGATE Support

Live Technical Support - Americas

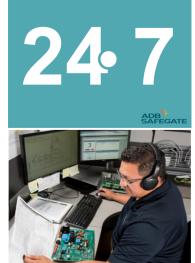
If at any time you have a question or concern about your product, just contact ADB SAFEGATE's technical service department. Trained in all areas of system issues, troubleshooting, quality control and technical assistance, our highly experienced Technical support specialists are available 24 hours a day, seven days a week to provide assistance over the phone.

ADB SAFEGATE Americas Technical Service & Support (US & Canada): +1-800-545-4157 ADB SAFEGATE Americas Technical Service & Support (International): +1-614-861-1304 During regular business hours, you can also Chat with a Service Technician. We look forward to working with you!

Before You Call

When you have an airfield lighting or system control system problem it is our goal to support airfield maintenance staff as quickly as possible. To support this effort we ask that you have the following information ready before calling.

- The airport code
- If not with an airport, then company name (prefer customer id number)
- Contact phone number and email address
- Product with part number preferable or product number
- Have you reviewed the product's manual and troubleshooting guide
- Do you have a True RMS meter available (and any other necessary tools)
- Be located with the product ready to troubleshoot



Note

For more information, see www.adbsafegate.com, or contact ADB SAFEGATE Support via email at support@adbsafegate.com or Brussels: +32 2 722 17 11 Rest of Europe: +46 (0) 40 699 17 40 Americas: +1 614 861 1304. Press 3 for technical service or press 4 for sales support. China: +86 (10) 8476 0106

A.1 ADB SAFEGATE Website

The ADB SAFEGATE website, www.adbsafegate.com, offers information regarding our airport solutions, products, company, news, links, downloads, references, contacts and more.

A.2 Recycling

A.2.1 Local Authority Recycling

The disposal of ADB SAFEGATE products is to be made at an applicable collection point for the recycling of electrical and electronic equipment. The correct disposal of equipment prevents any potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling. The recycling of materials helps to conserve natural resources. For more detailed information about recycling of products, contact your local authority city office.

A.2.2 ADB SAFEGATE Recycling

ADB SAFEGATE is fully committed to environmentally-conscious manufacturing with strict monitoring of our own processes as well as supplier components and sub-contractor operations. ADB SAFEGATE offers a recycling program for our products to all customers worldwide, whether or not the products were sold within the EU.

ADB SAFEGATE products and/or specific electrical and electronic component parts which are fully removed/separated from any customer equipment and returned will be accepted for our recycling program.

All items returned must be clearly labeled as follows:

- For ROHS/WEEE Recycling
- Sender contact information (Name, Business Address, Phone number).
- Main Unit Serial Number.

ADB SAFEGATE will continue to monitor and update according for any future requirements for *EU directives* as and when *EU member states* implement new *regulations* and or *amendments*. It is our aim to maintain our *compliance plan* and assist our customers.



Company Addresses

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Contact: Tel.: +1 (614) 861 1304, Fax: +1 (614) 864 2069	Email: sales.us@adbsafegate.com Internet: www.adbsafegate.com	
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