



L-810 SBOL - Steady Burning Obstruction Light Single and Dual

User Manual

96A0006, Rev. O, 2020/06/26


**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 further 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 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 of ADB SAFEGATE manufacture 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.

FAA Certified product installed in the United States and purchased or funded with monies through the Airport Improvement Program (AIP) installations guarantee

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 L858(L) Airfield Guidance Signs 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).

ADB SAFEGATE LED light fixtures (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).



Note

See your sales order contract for a complete warranty description.

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.

© ADB SAFEGATE BV

This manual or parts thereof may not be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, nor otherwise, without ADB SAFEGATE BV's prior written consent.

This manual could contain technical inaccuracies or typographical errors. ADB SAFEGATE BV reserves the right to revise this manual from time to time in the contents thereof without obligation of ADB SAFEGATE BV to notify any person of such revision or change. Details and values given in this manual are average values and have been compiled with care. They are not binding, however, and ADB SAFEGATE BV disclaims any liability for damages or detriments suffered as a result of reliance on the information given herein or the use of products, processes or equipment to which this manual refers. No warranty is made that the use of the information or of the products, processes or equipment to which this manual refers will not infringe any third party's patents or rights. The information given does not release the buyer from making their own experiments and tests.

TABLE OF CONTENTS

1.0 Safety	1
1.1 Safety Messages	1
1.1.1 Introduction to Safety	2
1.1.2 Intended Use	2
1.1.3 Material Handling Precautions: Storage	3
1.1.4 Maintenance Safety	3
1.1.5 Material Handling Precautions, ESD	3
2.0 L-810 SBOL	5
2.1 Introduction	5
2.1.1 How to work with the manual	5
3.0 Introduction	7
3.1 Incandescent Steady Burning Obstruction Light	7
3.2 Options	7
3.2.1 Lamp-Out Relay	7
3.2.2 Alarm Terminal	7
3.3 L-810 Obstruction Light: Required Equipment	8
4.0 Specifications	9
4.1 Lamp-Out Relay Operation	9
5.0 Installation	11
5.1 Unpacking	11
5.2 Installation	11
5.2.1 Placement	11
5.2.2 Single L-810 (6.6A or 120 Vac) Wiring Procedure	12
5.3 Dual L-810 (6.6 A) Wiring Procedure (Without Lamp-Out Relay)	12
5.4 Dual L-810 (120 Vac) Wiring Procedure (Without Lamp-Out Relay)	13
5.5 Dual L-810 (120 Vac) Wiring Procedure (With Lamp-Out Relay)	13
6.0 Maintenance	15
7.0 Parts	17
7.1 Spare Components	17
7.2 L-810 Obstruction Light Parts List	18
7.2.1 Single L-810 Obstruction Light	18
7.2.2 Dual L-810 Obstruction Light (Without Lamp-Out Relay)	19
7.2.3 Dual L-810 Obstruction Light (With Lamp-out Relay)	20
7.2.4 Dual-with-Relay L-810 Wiring Schematic	21
A.0 SUPPORT	23
A.1 ADB SAFEGATE Website	23
A.2 Recycling	24
A.2.1 Local Authority Recycling	24
A.2.2 ADB SAFEGATE Recycling	24

1.0 Safety

Introduction to Safety






This section contains general safety instructions for installing and using ADB SAFEGATE equipment. Some safety instructions may not apply to the equipment in this manual. Task- and equipment-specific warnings are included in other sections of this manual where appropriate.

1.1 Safety Messages


HAZARD Icons used in the manual

For all HAZARD symbols in use, see the Safety section. All symbols must comply with ISO and ANSI standards.

Carefully read and observe all safety instructions in this manual, which alert you to safety hazards and conditions that may result in personal injury, death or property and equipment damage and are accompanied by the symbol shown below.

	WARNING Failure to observe a warning may result in personal injury, death or equipment damage.
	DANGER - Risk of electrical shock or ARC FLASH Disconnect equipment from line voltage. Failure to observe this warning may result in personal injury, death, or equipment damage. ARC Flash may cause blindness, severe burns or death.
	WARNING - Wear personal protective equipment Failure to observe may result in serious injury.
	WARNING - Do not touch Failure to observe this warning may result in personal injury, death, or equipment damage.
	CAUTION Failure to observe a caution may result in equipment damage.

Qualified Personnel

	Important Information The term qualified personnel is defined here as individuals who thoroughly understand the equipment and its safe operation, maintenance and repair. Qualified personnel are physically capable of performing the required tasks, familiar with all relevant safety rules and regulations and have been trained to safely install, operate, maintain and repair the equipment. It is the responsibility of the company operating this equipment to ensure that its personnel meet these requirements. Always use required personal protective equipment (PPE) and follow safe electrical work practice.
---	--

1.1.1 Introduction to Safety



CAUTION

Unsafe Equipment Use

This equipment may contain electrostatic devices, hazardous voltages and sharp edges on components

- Read installation instructions in their entirety before starting installation.
- Become familiar with the general safety instructions in this section of the manual before installing, operating, maintaining or repairing this equipment.
- Read and carefully follow the instructions throughout this manual for performing specific tasks and working with specific equipment.
- Make this manual available to personnel installing, operating, maintaining or repairing this equipment.
- Follow all applicable safety procedures required by your company, industry standards and government or other regulatory agencies.
- Install all electrical connections to local code.
- Use only electrical wire of sufficient gauge and insulation to handle the rated current demand. All wiring must meet local codes.
- Route electrical wiring along a protected path. Make sure they will not be damaged by moving equipment.
- Protect components from damage, wear, and harsh environment conditions.
- Allow ample room for maintenance, panel accessibility, and cover removal.
- Protect equipment with safety devices as specified by applicable safety regulations
- If safety devices must be removed for installation, install them immediately after the work is completed and check them for proper functioning prior to returning power to the circuit.

Failure to follow this instruction can result in serious injury or equipment damage

Additional Reference Materials



Important Information

- IEC - International Standards and Conformity Assessment for all electrical, electronic and related technologies.
- IEC 60364 - Electrical Installations in Buildings.
- FAA Advisory: AC 150/5340-26 (current edition), Maintenance of Airport Visual Aid Facilities.
- Maintenance personnel must refer to the maintenance procedure described in the ICAO Airport Services Manual, Part 9.
- ANSI/NFPA 79, Electrical Standards for Metalworking Machine Tools.
- National and local electrical codes and standards.

1.1.2 Intended Use



CAUTION

Use this equipment as intended by the manufacturer

This equipment is designed to perform a specific function, do not use this equipment for other purposes

- Using this equipment in ways other than described in this manual may result in personal injury, death or property and equipment damage. Use this equipment only as described in this manual.

Failure to follow this instruction can result in serious injury or equipment damage

1.1.3 Material Handling Precautions: Storage



CAUTION

Improper Storage

Store this equipment properly

- If equipment is to be stored prior to installation, it must be protected from the weather and kept free of condensation and dust.

Failure to follow this instruction can result in equipment damage

1.1.4 Maintenance Safety



DANGER

Electric Shock Hazard

This equipment may contain electrostatic devices

- Do not operate a system that contains malfunctioning components. If a component malfunctions, turn the system OFF immediately.
- Disconnect and lock out electrical power.
- Allow only qualified personnel to make repairs. Repair or replace the malfunctioning component according to instructions provided in its manual.

Failure to follow these instructions can result in death or equipment damage

1.1.5 Material Handling Precautions, ESD



CAUTION

Electrostatic Sensitive Devices

This equipment may contain electrostatic devices

- Protect from electrostatic discharge.
- Electronic modules and components should be touched only when this is unavoidable e.g. soldering, replacement.
- Before touching any component of the cabinet you shall bring your body to the same potential as the cabinet by touching a conductive earthed part of the cabinet.
- Electronic modules or components must not be brought in contact with highly insulating materials such as plastic sheets, synthetic fiber clothing. They must be laid down on conductive surfaces.
- The tip of the soldering iron must be grounded.
- Electronic modules and components must be stored and transported in conductive packing.

Failure to follow this instruction can result in equipment damage

2.0 L-810 SBOL

Steady Burning Obstruction Light

2.1 Introduction

This manual shows the information necessary to:

- Install
- Carry Out Maintenance
- Carry Out Troubleshooting on the SBOL.

2.1.1 How to work with the manual

1. Familiarize yourself with the structure and content.
2. Carry out the actions completely and in the given sequence.

3.0 Introduction

This section describes the L-810 Single ([Figure 1](#)) and Dual ([Figure 2](#)) SBOL steady burning obstruction light.

The Dual Assembly utilizes two single SBOL Assemblies connected with standard pipe fittings. The dual assembly joints are tack welded to prevent misalignment of individual assembled fittings.

3.1 Incandescent Steady Burning Obstruction Light

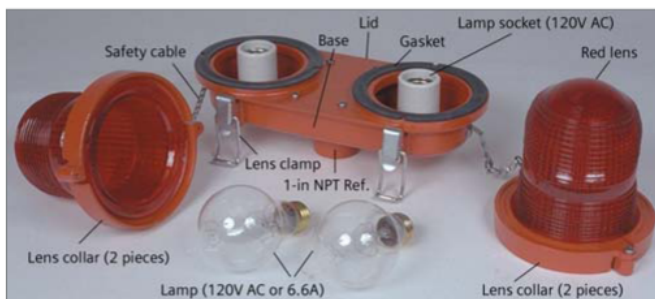
Compliance with Standards

FAA:	L-810 AC 150/5345-43 (Current Edition). ETL Certified.
ICAO:	Annex 14, Vol. 1, para. 6.3.11 for use as low-intensity obstacle light.

Uses

FAA L-810 ICAO Steady-burning red light fixture marking all fixed obstructions to eliminate air navigational hazards.

Construction



Lamp-Out Relay Operation

120 VAC input power to the dual L-810 fixture energizes a relay and the normally operating lamp #1. If lamp #1 fails, the relay is de-energized causing the 120 VAC to be switched to the backup lamp #2. At the same time, 120 VAC power is also switched to the alarm terminal, which can be used to activate a user-supplied alarm.

3.2 Options

This subsection describes optional parts for the L-810 obstruction light.

3.2.1 Lamp-Out Relay

An optional lamp-out relay is available for the dual 120 Vac L-810 fixtures only. The lamp-out relay switches the 120 Vac power to the backup lamp in case the normally operating lamp fails. A terminal connection is provided for a customer-supplied alarm indicator when failure occurs in the normally operating lamp.

3.2.2 Alarm Terminal

An optional alarm terminal is provided on units with lamp-out relay that can activate a customer-supplied alarm in case of lamp failure.

3.3 L-810 Obstruction Light: Required Equipment

Refer to [Table 1](#) for required equipment that is supplied. Refer to [Table 2](#) for required equipment that is not supplied. Refer to the “[Parts](#)” on page 13.

Table 1: Required Equipment Supplied

Description	Quantity	Note
L-810 obstruction light	1	A
Instruction manual	1	
NOTE A: See Figure 3 and Figure 4 for options.		

Table 2: Required Equipment Not Supplied

Description	Quantity (Single L-810)	Quantity (Dual L-810)
Wire, input power	As required	As required
Wire. Refer to for 120 V wiring size.	36 inch	32 inch
Wire nuts	2	2
Wire grommets	2	4
Wire for alarm (if used) for dual L-810 with relay	Not applicable	As required
Alarm (if used) for dual L-810 with relay	Not applicable	1
Isolation transformer for series circuit powered units. Refer to Table 4 .	1	1

Table 3: Wiring Size (120 V)

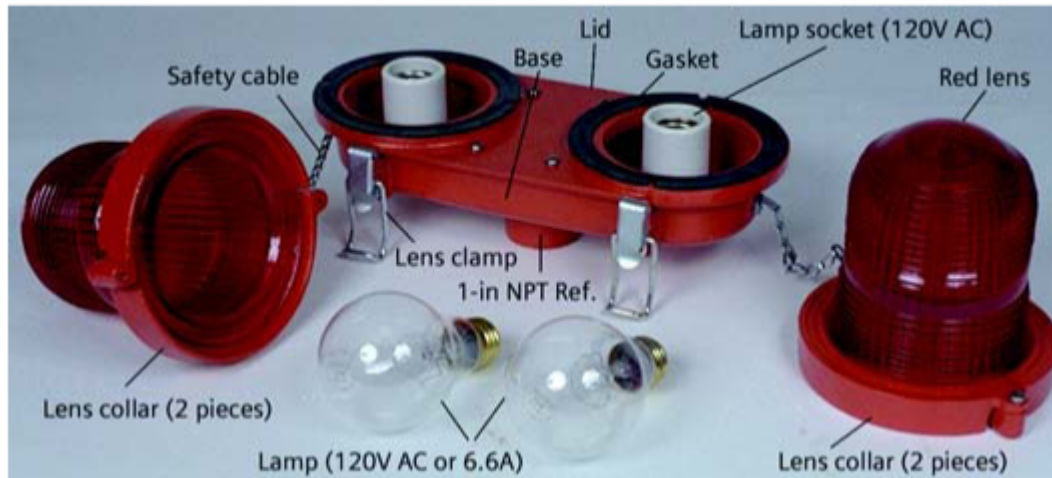
Obstruction Light	AWG
Single L-810 without relay	14
Dual L-810 without relay	14
Single with relay	16 (600 V, minimum)
Dual L-810 with relay	16 (600 V, minimum)

Table 4: Isolation Transformers Series Circuit

For a...	Using this lamp...	And this series circuit...	Then use this isolation transformer...
Single obstruction light	45 W	6.6 A	L-830-1
Single obstruction light	45 W	20 A	L-830-2
Dual obstruction light	45 W	6.6 A	L-830-4
Dual obstruction light	45 W	20 A	L-830-5

4.0 Specifications

This subsection provides specifications for the L-810 obstruction light fixtures.



4.1 Lamp-Out Relay Operation

120 VAC input power to the dual L-810 fixture energizes a relay and the normally operating lamp #1. If lamp #1 fails, the relay is de-energized causing the 120 VAC to be switched to the backup lamp #2. At the same time, 120 VAC power is also switched to the alarm terminal, which can be used to activate a user-supplied alarm.

5.0 Installation



WARNING

Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

This section provides instructions for installing the L-810 obstruction lights. Refer to the airport project plans and specifications for the specific installation instructions.

5.1 Unpacking

The equipment is shipped ready for installation. Handle equipment very carefully to prevent component damage. Unpack the carton upon receipt and check the contents and their condition. Note any exterior damage to the carton that might lead to detection of equipment damage.

If you note any damage to any equipment, file a claim with the carrier immediately. The carrier may need to inspect the equipment.

5.2 Installation

This subsection provides installation instructions for L-810 obstruction light fixtures.

5.2.1 Placement

The placement and number of L-810 light fixtures required to adequately mark an obstruction for any approaching aircraft is determined by

- height, size, and shape of obstruction
- area in which an obstruction is located

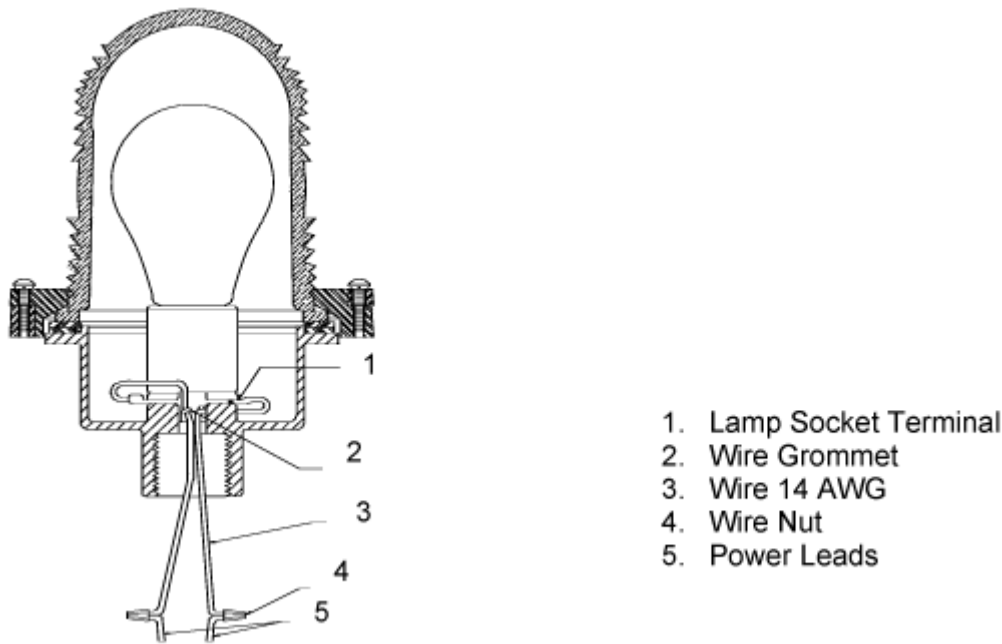
Refer to FAA Advisory Circular 70/7460-1 for more specific information regarding placement of obstruction lights on locations such as poles, towers, buildings, and smokestacks.

5.2.2 Single L-810 (6.6A or 120 Vac) Wiring Procedure

To connect the wiring for a single L-810 (6.6A or 120 Vac), perform the following procedure:

1. Disassemble the L-810 light assembly by removing the lens clamps, lens, and lamp socket.

Figure 1: Single L-810 Wiring



2. See [Figure 1](#). Feed two 14 AWG wires (3) through the light base and connect the wires to the lamp socket terminals (1). Add customer-supplied wire grommets (2) to wires for strain relief before feeding through the lamp base.
3. Connect two power leads (5) to the two L-810 light leads with customer-supplied wire nuts (4).
4. Reassemble the L-810 light assembly with lamp and lens.
5. Install the L-810 light assembly into the lighting system.



CAUTION

Failure to observe a caution may result in equipment damage.

5.3 Dual L-810 (6.6 A) Wiring Procedure (Without Lamp-Out Relay)



Note

This procedure is for dual L-810 (6.6A) light fixtures not using lamp-out relays.

To connect the dual L-810 wiring without lamp-out relay, perform the following procedure:

1. Disassemble the dual L-810 light assembly by removing lens clamps, lenses, lid, and lamp sockets.
2. See [Figure 1](#). Connect the ends of one 14 AWG customer-supplied wire (3) between terminals B and C.
3. Feed two customer-supplied 14 AWG wires (3) through the light base and connect the wires to the lamp socket terminals A and D. Add customer-supplied wire grommets (2) to wires for strain relief before feeding through the lamp base.
4. Connect two power leads (5) to the two L-810 light fixture power leads (the wires connected to terminals A and D) with customer-supplied wire nuts (4).
5. Reassemble L-810 light assembly with 45-watt lamp and lenses.
6. Install the L-810 light assembly into the lighting system.



CAUTION

Take up the wire slack as needed. Do not put tension on the wires.

5.4 Dual L-810 (120 Vac) Wiring Procedure (Without Lamp-Out Relay)

To connect the dual L-810 120 Vac wiring without lamp-out relay, perform the following procedure:

1. Disassemble the dual L-810 light assembly by removing lens clamps, lenses, lid, and lamp sockets.
2. See [Figure 1](#). Feed four 14 AWG customer-supplied wires (3) through the light base and connect the wires to the lamp socket terminals A, B, C, and D. Add customer-supplied wire grommets (2) to wires for strain relief before feeding through the lamp base.
3. Connect one power lead (5) to the ends of the two wires from terminals B and D and connect the other power lead wire to wires from terminals A and C with customer-supplied wire nuts (4).
4. Reassemble the L-810 light fixture with two 69-watt lamps and lenses.
5. Install the L-810 light fixture into the lighting system.



CAUTION

Take up the wire slack as needed. Do not put tension on the wires.

5.5 Dual L-810 (120 Vac) Wiring Procedure (With Lamp-Out Relay)



Note

This procedure is for dual L-810 (120 Vac) light fixtures with lamp-out relays. Refer to Lamp-Out Relay in the Description section.

To connect the dual L-810 120 Vac wiring with lamp-out relay, perform the following procedure:

1. Disassemble the dual L-810 light assembly by removing lens clamps, lenses, and lid.
2. See [Figure 2](#). Feed 120 Vac power supply lines (14 AWG, 300 V) through the port (either bottom or side).



Note

You must special order the optional side port.

3. See [Figure 6](#). Connect the terminal block TB1 terminals TB1-1 (neutral) and TB1-2 (120 Vac).



Note

Before connecting wires to the terminal block, add wire grommets for strain relief.

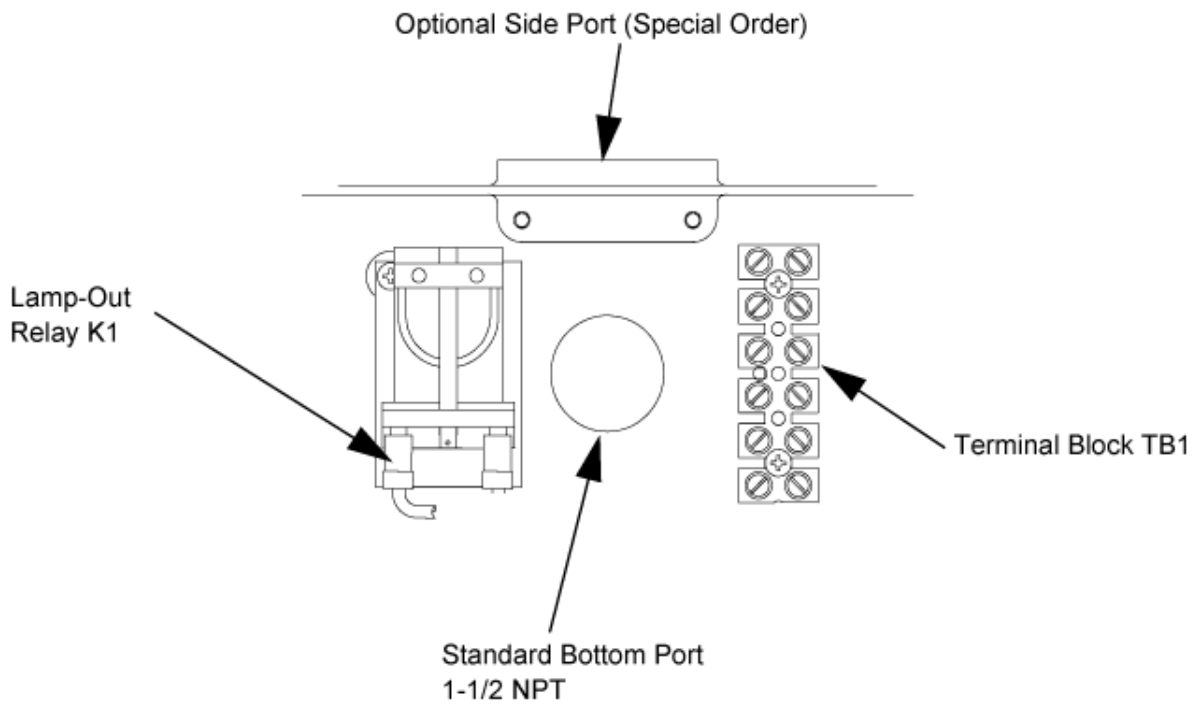
4. Connect alarm leads to TB1 pin 5 and pin 1.
5. Reassemble the L-810 light fixture and install two 69-watt lamps.



CAUTION

Take up the wire slack as needed. Do not put tension on the wires.

Figure 2: Dual-with-Relay L-810 Wiring



6.0 Maintenance

To keep the L-810 obstruction light fixtures operating efficiently, follow a preventive maintenance schedule. Refer to [Table 6](#).

Table 5: L-810 Obstruction Light Fixture Maintenance


Interval	Maintenance Task	Action
Daily	Check visually and by automatic indicator for lamp failure.	<p>Replace lamp, if necessary. Refer to Table 6 and “Spare Components” on page 13 for lamp replacement.</p> <div>  Note During lamp replacement, clean lens and receptacle and check all wiring for defects. </div>
Annually	When obstruction lights are mounted on disconnect hangers, check lowering devices.	<p>Clean and lubricate all lowering devices such as wire guides, pulleys, all fittings, supports, and cables. Clean the contact surfaces of the electrical disconnect.</p>

Table 6: Lamp Replacement Schedule

If you have the following lamp wattage...	Replace lamp after...
45	750 hours
69	6000 hours
116	6000 hours

7.0 Parts

To order parts, call ADB Safegate Customer Service Center or your local representative. Use the accompanying illustrations, part number callouts and descriptions to identify and order parts correctly.

L-810 Single/Dual Fixture without Lamp-Out Relay

Ordering Code

44C100 X - X

Fixture

- 5 = Single Light Fixture*
- 7 = Dual Light Fixture*

Lamp Wattage

- 1 = 120 VAC Fixture With 69 W Lamp*
- 2 = 6.6 A Fixture With 45 W Lamp
- 3 = 120 VAC Fixture Only (No Lamps)
- 4 = 6.6 A Fixture Only (No Lamps)

L-810 Dual Light Fixture with Lamp-Out Relay

Ordering Code

44C1532 - X X 1 X

Lamp Wattage

- 1 = 120 VAC Fixture With 69 W Lamp

Include Lamp

- 0 = Fixture Without Lamps
- 1 = Fixture With Lamps

1

Port Size/Location

- 1 = 1-inch, 11.5 TPI, NPT Bottom Port (Standard)
- 2 = 1-inch, 11.5 TPI, NPT Side Port (Special Order)
- 3 = 0.75-inch, 14 TPI, NPT Side Port (Special Order)

Notes

* ETL Certified

7.1 Spare Components

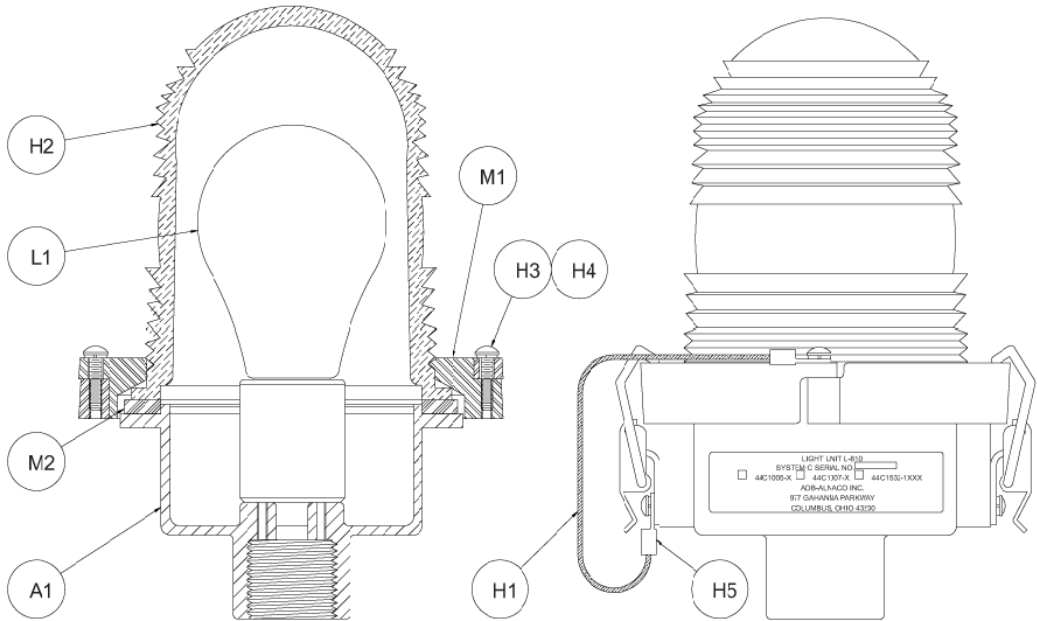
Description	Part No.
Gasket	63B0015-1
Lamp, 45 W/6.6 A	48A0007
Lamp, 69 W/120 VAC	48A0009
Lamp, 116 W/120 VAC	48A0010
Lamp-out relay	53A0232
Lens clamp (clamp lever)	61A0130
Lens, collar (2 required per lens)	62B0457S
Lens, red	63A0149
Socket, 45 W/6.6 A	49A0002
Socket, 69 W, 116 W/120-130 VAC	49A0014

7.2 L-810 Obstruction Light Parts List

This subsection describes the parts for the single and dual L-810 obstruction light, and the dual L-810 obstruction light with lamp-out relay.

7.2.1 Single L-810 Obstruction Light

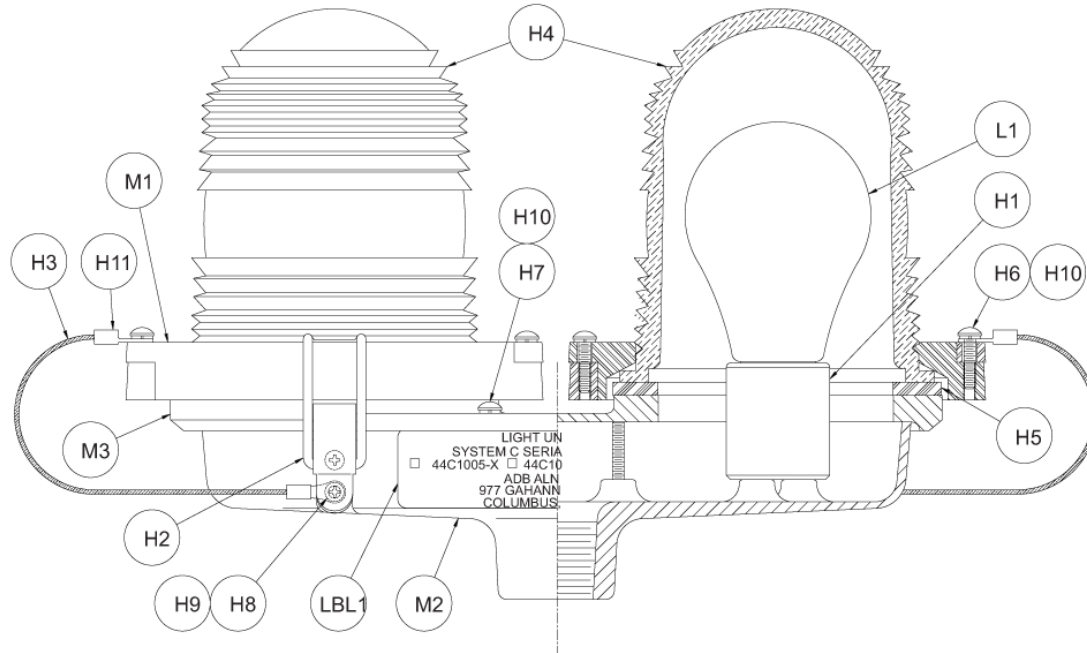
Figure 3: Single L-810 Obstruction Light



GENERALASSEMBLY BILL OF MATERIAL				
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY
A1	Spare Components	L810 SINGLE HEAD ASSY.	EA	1
L1	Spare Components	LAMP	EA	1
H1	61A0239	1/16" SST CABLE	FT	0.75'
M1	62B0457	COLLAR CASTING L810	EA	2
H2	63A0149	LENS RED L861	EA	1
M2	63B0015/1	GASKET	EA	1
H3	64A0191/12	8-32 X 3/4 PAN HD PHIL	EA	2
H4	66A0026/15	#8 SPLIT LOCKWASHER	EA	1
H5	70A0056	TERM RING 16-12AWG #8 NOINSUL	EA	2

7.2.2 Dual L-810 Obstruction Light (Without Lamp-Out Relay)

Figure 4: Dual L-810 Obstruction Light (Without Lamp-Out Relay)

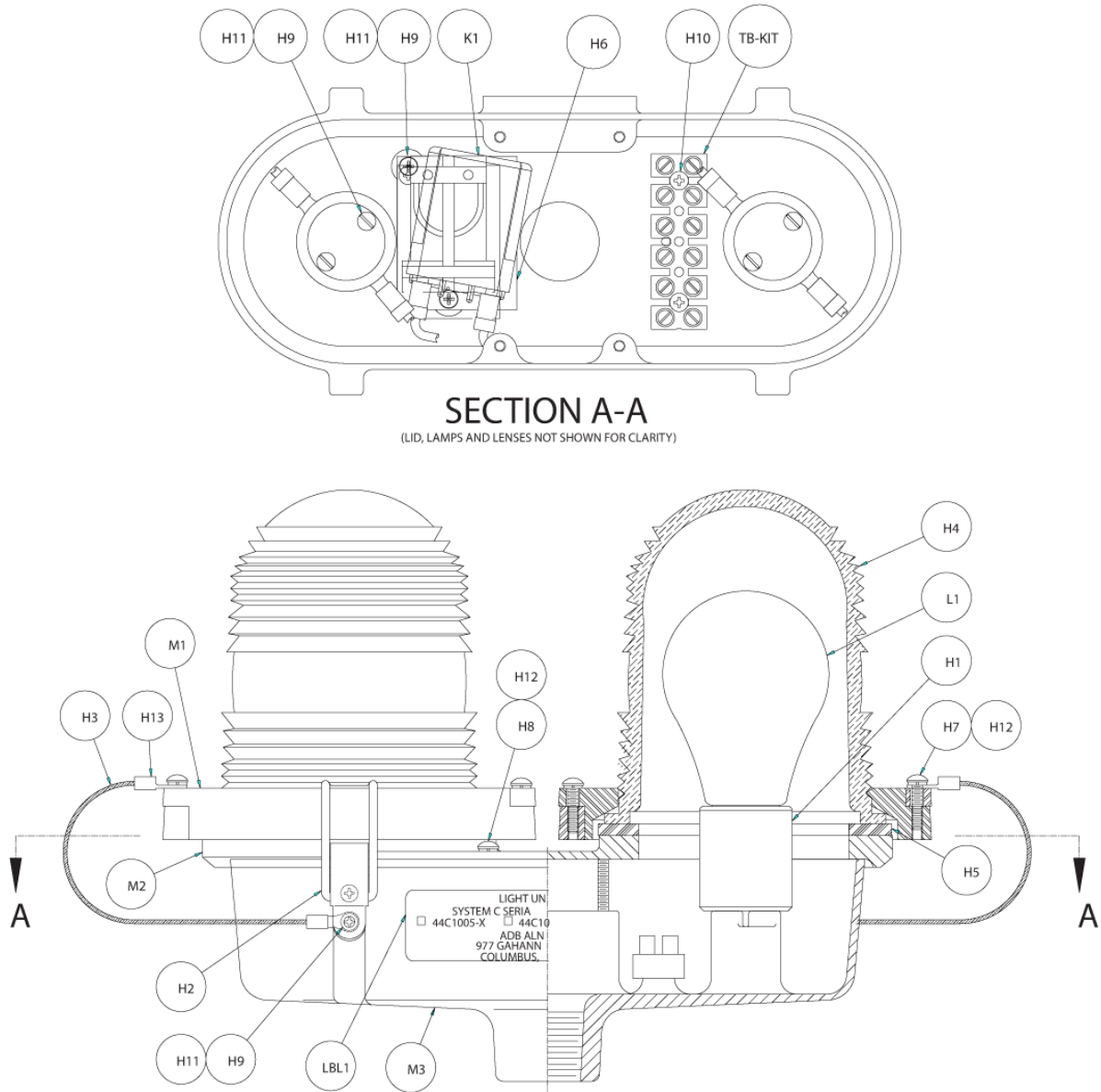


GENERAL ASSEMBLY BILL OF MATERIAL

ITEM NO.	PART NUMBER	PARTNAME/DESCRIPTION	UNITS	QTY
LBL1	42A0252	LABEL L810	EA	1
L1	See Spare Components	LAMP	EA	2
H1	Spare Components	LAMP SOCKET	EA	2
H2	61A0130	CLAMP LEVER	EA	4
H3	61A0239	1/16" SST CABLE	FT	1.5
M1	62B0457	COLLAR CASTING L810	EA	4
M2	62C0467	BASE L810 DUAL	EA	1
M3	62C0468	LID L810 DUAL	EA	1
H4	63A0149	LENS RED L861	EA	2
H5	63B0015/1	GASKET	EA	2
H6	64A0191/12	8-32 X 3/4 PAN HD PHIL	EA	4
H7	64A0191/20	8-32 X 1 1/4 PAN HD PHIL	EA	4
H8	64A0198/6	6-32 X 3/8 PAN HD PHIL	EA	8
H9	66A0026/11	#6 SPLIT LOCKWASHER	EA	8
H10	66A0026/15	#8 SPLIT LOCKWASHER	EA	8
H11	70A0056	TERM RING 16-12AWG #8 NOINSUL	EA	4

7.2.3 Dual L-810 Obstruction Light (With Lamp-out Relay)

Figure 5: Dual L-810 Obstruction Light (With Lamp-out Relay)



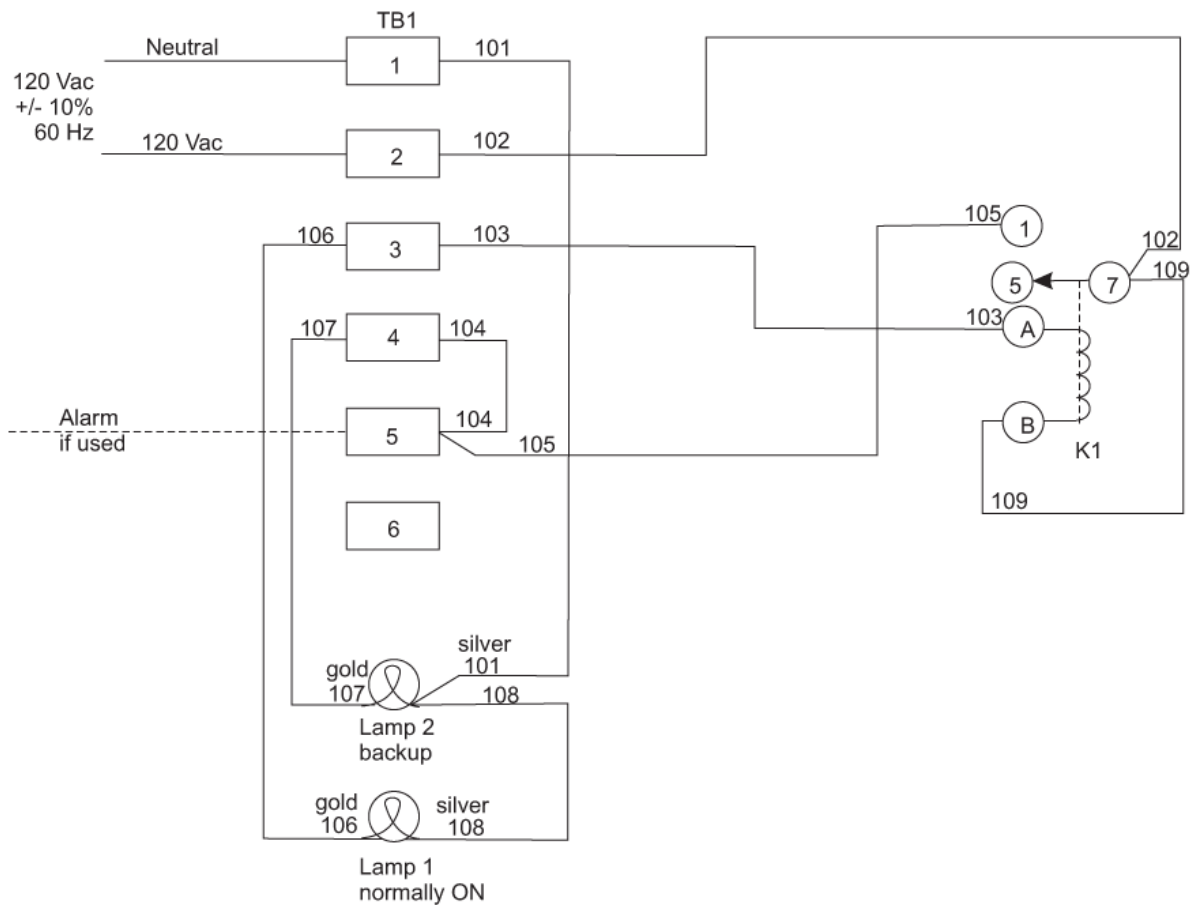
GENERAL ASSEMBLY BILL OF MATERIAL				
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY.
LBL1	42A0252	LABEL L810	EA	1
L1	Spare Components	LAMP	EA	2
H1	49A0014	LAMP SOCKET 660W 250V ROUND	EA	2
K1	53A0232	RELAY	EA	1
H2	61A0130	CLAMP LEVER	EA	4
H3	61A0239	1/16" SST CABLE	FT	1.5'
M1	62B0457	COLLAR CASTING L810	EA	4
M2	62C0468	LID L810 DUAL	EA	1
M3	SEE CHART	L810D BASE BOTTOM HUB	EA	1

GENERAL ASSEMBLY BILL OF MATERIAL				
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY.
H4	63A0149	LENS RED L861	EA	2
H5	63B0015/1	GASKET	EA	2
H6	63B0517	MTG PLATE L810	EA	1
H7	64A0191/12	8-32 X 3/4 PAN HD PHIL	EA	4
H8	64A0191/20	8-32 X 1&1/4 PAN HD PHIL	EA	4
H9	64A0198/6	6-32 X 3/8 PAN HD PHIL	EA	10
H10	64A0274/12	#4 X 3/4 TEK II PH PH HD SD/ST	EA	2
H11	66A0026/11	#6 SPLIT LOCKWASHER	EA	10
H12	66A0026/15	#8 SPLIT LOCKWASHER	EA	8
H13	70A0056	TERM RING 16-12AWG #8 NOINSUL	EA	4
H17	64A0026/10	#6-32 x 5/8 FLATHEAD PHILLIPS SCREW	EA	1
TB-KI	T 94A0457	TERM BLK & WIRE KIT	EA	1

7.2.4 Dual-with-Relay L-810 Wiring Schematic

Figure 6 shows the wiring schematic for the dual-with-relay L-810.

Figure 6: Dual-with-Relay L-810 Wiring Schematic



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

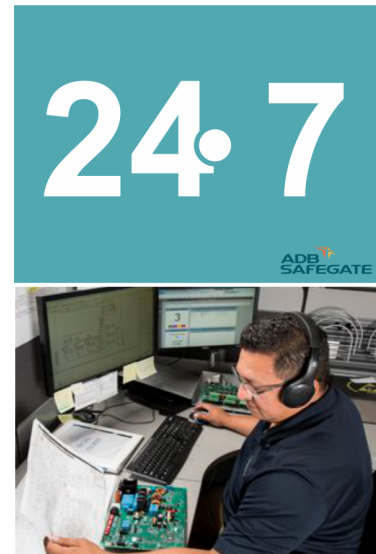
ADB SAFEGATE Americas Technical Service & Support (International): +1-614-861-1304

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



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

ADB SAFEGATE	ADB SAFEGATE, Belgium: Leuvensesteenweg 585, B-1930 Zaventem Belgium
Contact: Tel.: +32 2 722 17 11, Fax: +32 2 722 17 64	Email: marketing@adbsafegate.com Internet: www.adbsafegate.com
Americas LLC	ADB SAFEGATE, Americas: 977 Gahanna Parkway, Columbus, OH 43230 USA
Contact: Tel.: +1 (614) 861 1304, Fax: +1 (614) 864 2069	Email: sales.us@adbsafegate.com Internet: www.adbsafegate.com
ADB SAFEGATE Sweden AB	ADB SAFEGATE, Sweden: Djurhagegatan 19 SE-213 76 Malmö Sweden
Contact: Tel.: +46 (0)40 699 17 00, Fax: +46 (0)40 699 17 30	Email: marketing@adbsafegate.com Internet: www.adbsafegate.com
ADB SAFEGATE Airfield Technologies Ltd. China	ADB SAFEGATE, China: Unit 603, D Block, CAMIC International Convention Center, No 3, Hua Jia Di East road, ChaoYang district, Beijing 100102 P.R. China
Contact: Tel.: +86 (10) 8476 0106, Fax: +86 (10) 8476 0090	Email: china@safegate.com Internet: www.adbsafegate.com
ADB SAFEGATE Germany GmbH	ADB SAFEGATE Germany GmbH, Mannheim: Konrad-Zuse-Ring 6, D-68163 Mannheim Germany
Contact: Tel.: +49 (621) 87 55 76-0, Fax: +49 (621) 87 55 76-55	Email: marketing@adbsafegate.com Internet: www.adbsafegate.com



**Powering Your Airport Performance
from Approach to Departure**

adbsafegate.com

Copyright © ADB SAFEGATE, all rights reserved

