

AGRILIGHT

User Manual

Installation Manual



AL2007CF



AL2007CF-BL



AL2007RD



AL2007



Visit us online at www.agrilight.ca

Or call us toll free at 1-800-263-0213

User Guide and Installation Manual for AGRILIGHT Fixtures



AL2007CF



AL2007CF-BL



AL2007RD



AL2007

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Dear Customer

Thank you for purchasing an Agrilight Inc. product. These light fixtures were specifically designed for the agricultural industry and wet environments. Through strenuous research and development our team of experts have incorporated the latest in science and technology into a variety of Agrilight products.

This information package and user manual has been provided as a reference guide for mounting, installation, upkeep and safety. Keep this manual with your documents in a safe place. If an issue should arise, consult this booklet. If the issue persists do not hesitate to contact your service technician or Agrilight Inc. for additional information.

Use/Lighting Layout

Depending on the type of livestock you are housing, Agrilight has specifically designed a light and a light plan to suit your exact barn specifications.

Our advanced reflector technology provides even light distribution throughout your barn taking into account any obstacles to insure uniformity.

Each fixture has been designed to keep out dust, dirt and other impurities. Our fixtures are also watertight making them ideal for wet environments. This allows our fixtures to be easily maintained and cleaned.

Designated Use

The following light fixtures are intended for indoor agricultural use only. Agrilight Inc. does not accept any responsibility for damage, loss or injury resulting from any other use than that for which the light fixtures have been developed and designed.

For your Safety: Note!


Agrilight Inc. attaches the greatest importance to the light fixtures being used and maintained in a manner that gives priority to user safety.

To insure safe and reliable use, proceeds as follows:

1. Read this manual before installing the light fixture.
2. Make sure that all people involved in the light fixture installation know and understand the relevant information from this manual before installation and use. Insure the instructions are actually understood.

Responsibility for this rests with the person who is in charge of installation.

CSA Approval Marking

 All of our Products are
CSA Approved.

Electric Power



There is live power on components in the light fixture .

Safety Instructions



Always comply with the safety instructions in this manual. Any failure to comply with the safety instructions, warnings and labels may result in damage to the installation.

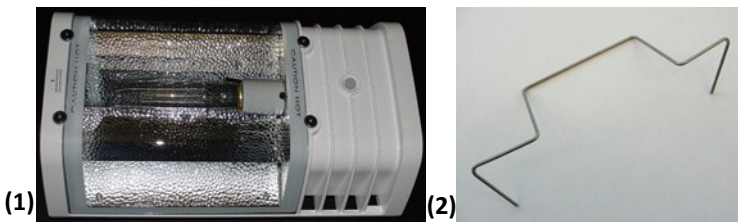
Installation

To enable optimum performance of these light fixtures it is crucial that they are installed and put into use by a recognized installer, in accordance with the lighting layout (installation drawing).

The Package Contains (Figure One)

No.	Quantity	Description
(1)	1	Fixture specific to your order, Either: AL2007 - AL2007CF- AL2007CF-BL - AL2007RD
OPTIONAL COMPONENTS		
(2)	1	Wire Steel light support
(3)	2	Suspension Bracket- Chain Mounting
(4)	1	Mounting Bracket (For Bracket Installation)
(5)	2	(5a) 47cm support (5b) 19.5cm support (5c) 2.5cm support (For Bracket Installation)

Other fasteners (if and to the extent that they have been ordered)



Service and Parts

To ensure proper operation of the unit, only original Agrilight Inc. components should be used, or components of the same quality.

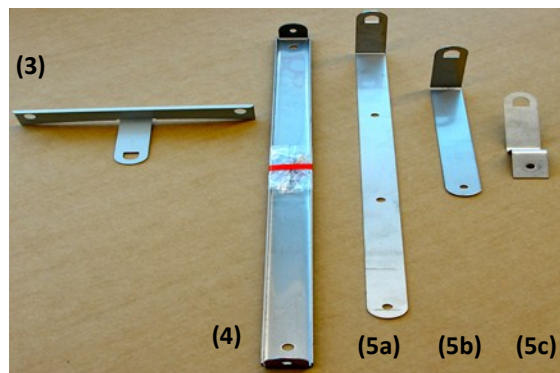
*The trigger-switch does not comprise of any serviceable parts.

Unpacking and Inspecting

Carefully unpack the light fixture

Immediately inspect it for any damage due to transport or other causes.

Immediately report any damage to the light fixture to the carrier, the insurance company and Agrilight Inc. referring to the delivery documents and to request a (RA) *Return Authorization*. We advise you not to put a damaged light fitting into use, even if the damage seems to be only superficial. If you are considering putting a damaged light fitting into use, first consult Agrilight Inc.



An Introduction to the Different Types of Light Fittings

The AL2007 series comprises of four types of light fittings, each of which is available in various watt ratings (see also technical specifications) -AL2007 AL250Watts, AL400Watts

-AL2007RD AL250Watts, AL400Watts - Red L.E.D.

-AL2007CF AL70Watts

-AL2007CF-BL AL70Watts with Blue L.E.D.

Type: AL2007CF/AL2007CF-BL

The AL2007CF/AL2007CF-BL light fitting has a dimmable option and has been designed specifically for lighting poultry houses. The light fittings have white 4pin 70W fluorescent bulbs. The light level of this type of bulb can be dimmed from 100% to 6% of the bulbs' power, which will lower their current consumption by a proportionate level. This fixture is also available with optional dimming Blue L.E.D's.

-Optional L.E.D.- 0-10v Blue L.E.D. Strips



Type: AL2007/AL2007RD

-The AL2007/AL2007RD light fitting was designed specifically for lighting cattle houses. Depending on your requirements and the results of the lighting layout, the light fittings have high-quality:

-High Pressure Sodium Bulbs

-Optional-L.E.D. – 0-10v Red L.E.D. Strips

(A) (White Light) (B) (Yellow Light)

-Metal Halide Bulbs (*Canada Only)

(C) (White Light)



Installation



WARNING



If the following instructions and safety warnings are not complied with, serious bodily harm, death and damage to the equipment may occur.

- Some caution is required when handling the fixture, also to prevent damage being caused to the components due to mechanical stress. Avoid shocks and other kinds of stresses or loads during transport, when assembling, mounting and using the fixture.
- Always block off any traffic in the vicinity where the Agrilight fixture is being installed before commencing any work on the installation.
- Always disconnect the fixture from the power source before carrying out any work on the installation. Ensure that the power supply is not turned on accidentally.
- Keep the direct vicinity free from animals and any internal transport while carrying out installation activities.
- Only use insulated tools!
- In order to prevent thermal damage to the LED lighting; the LED lighting (secondary light source) may never be switched on at the same time as the primary light source. The LED lighting must be connected in such a manner that it cannot be switched on at the same time as the primary light source.
- Ensure that the power supply and voltage corresponds to the power supply and voltage required by the fixture. These are clearly indicated on the fixtures labeled sticker.
- When connecting, consult the circuit diagram in this manual and always ensure that you comply with the legally applicable connecting requirements.

The lighting plan shows the conditions that must be taken into account during installation. These instructions must be fully complied with in order to ensure uniformity and to reach a proper illumination level.



Agrilight Inc. cannot be held liable for damage and/or injury resulting from improper mounting and installation.

Installing a Light Fitting Using a Mounting Bracket

1. Install the bulb in the light fixture. Consult the section “replacing bulbs” on page 4 for the work procedure.



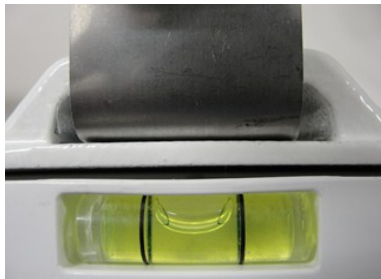
2. Install the mounting bracket to the ceiling mounting structure or support beam. Properly anchor the bracket to prevent it from coming loose!



3. Attach the two supports to the mounting bracket



4. Push the (2) supports into the slots at the top of the light fitting until the lugs click into the support ends, locking them to prevent them coming loose. In principal, this connection cannot be undone.



Leveling:


Each fixture is equipped with a spirit level vial that is installed on the electronic or ballast side of the light fixture. This allows for accurate, level installation while hanging the fixture.

Technical Specifications of AL2007, AL2007RD, AL2007CF, AL2007CF-BL

Specifications	AL2007CF 70 Watts	AL2007 250 Watt	AL2007 400 Watts	Secondary LED Lighting LED Red / LED Blue
Dimensions L x W x H	48 x 37 x 24 (cm)			
Weight (fully assembled)	21 Pounds	29 Pounds	31 Pounds	RED 0.025/BLUE 0.065 EA
Bulb Type	Compact Fluorescent	HPS or MH	HSP or MH	LED RED / LED Blue
Bulb Power	70 Watts	250 Watts	400 Watts	6 x 3 Watts
Mains Voltage**/Frequency	120-277V/ 60Hz	240v/ 60Hz	240v/ 60Hz	120V/60Hz
Current	0.4 Amp	1.3 Amp	2.3 Amp	0.2 Amp

Making the Electrical Connections

**Other Voltage Ratings

 **Never remove the glass cover of the light fitting, otherwise the gasket in the cover might not seal properly anymore. Removing the glass cover invalidates your guarantee rights! Only carry out assembly and disassembly work via the plastic end covers of the light fitting**

Replacing Bulbs



Always use the correct bulb in a light fitting, otherwise the light fitting, may be damaged. The correct type of bulb is stated on the rating sticker on the light fitting.

AL2007 CF-AL2007 CF-BL: (70W 4Pin)

AL2007-AL2007RD: HPS or MH (250W/400W)



The fixture glass must never be detached or removed as this will cause damage to the seal. The warranty becomes invalid if the fixture glass is detached or removed. A lamp may only be removed or inserted through the opening in the side of the light compartment. This opening can be accessed only when the plastic cover is detached.



Before replacing the bulb interrupt the power supply to the light fitting to ensure a safe work situation. Do not touch the bulb with your bare hands but wear clean gloves. This prevents from dirt and oils being burnt into the glass.



Please be aware that both the fixture glass and the light can be very hot and cause severe burns. Leave the light to cool down for at least half an hour before removing and handling.

Removing the End Cover

1. Remove the two Torx screws from the plastic cover of the light compartment using a Torx (T25) screwdriver.
2. Use the two tabs to release and remove the cover. In the resulting opening there is a reflector with a rectangular window that provides manual access to the light.

Installing/ replacing bulbs of AL2007 and AL2007RD Light Fixtures

Carefully turn the bulb in a counter clockwise direction to unscrew it and screw the new bulb into the light fitting in the opposite direction until it is finger-tight. Make sure you do not deform the reflector plates while replacing bulbs (CAUTION! Reflector plates are very sharp). After installing the bulb, we recommend carefully centering it in respect to the reflector/bulb axis by hand. The slight lateral clearance of the bulb in the fitting can be used for this. Slightly pushing the glass of the bulb from the side should suffice.

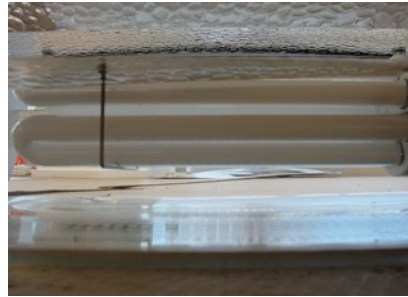
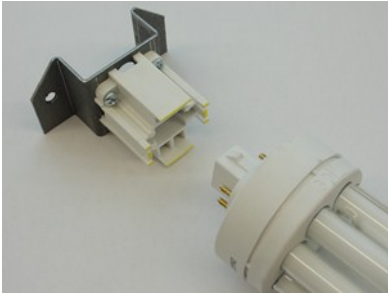


Installing/replacing bulbs/lamp support of AL2007CF and AL2007CF-BL Light fixtures

The compact fluorescent light (CFL) is provided with a steel wire light brace that supports the ends of the fluorescent light. This ensures the 'straight and horizontal' insertion and support of the fluorescent bulb in relation to the reflector assembly. The lamp brace is designed to support the fluorescent tubes of General Electric (4 Pin) 70 Watt bulbs.

Replacing the Bulb/Lamp Support

1. Lamp replacement: remove the steel wire light support mounted between the reflector wings and remove the light by carefully pulling it straight out of the fitting. Make sure that the reflector parts are not distorted in anyway as these are essential for ensuring a proper and optimum distribution of light.
2. Fit the light into position by inserting it straight and horizontally into the light fitting.
3. Mount the steel wire support for the light by sliding it carefully below the bulb whilst sliding it into position at both ends of the reflector wings. Slide the light support into position within a distance of approx, 4-6cm from the end of the light (see photos below) and at right angles to the length of the light.. Make sure that the reflector parts are not distorted in any way, as these are essential for ensuring a proper and optimum distribution of light.



Restoring the End Cover

Clean the contact surfaces of the fixture and cover using a mild detergent on a damp cloth. Inspect the rubber seal and gasket and replace if necessary.

Rub some mild soap or acid-free Vaseline onto the seal end gasket. This will enable the cover to be fitted more easily.

Close the fixture by replacing the cover and by screwing the two Torx (25) screws tightly into position. To prevent damage to the cover or to the seal do not use a battery-powered device to do this. Nor apply excessive force. When closed, the cover should fit just inside the rim of the cast aluminum fixture housing.

Maintenance



Always remove the voltage from the light fixture before carrying out maintenance work on the light fitting!

Pollution may negatively affect the service life of the light fixture. To maintain optimum light output we recommend regularly checking the state of the bulbs and cleaning the light fixture. A special cleaning kit is available for all light fixtures, consisting of a rounded brush, a telescopic bar, a customized bucket and special detergent. For additional information or to order this cleaning kit, contact Agrilight Inc. or an approved Agrilight dealer.

Malfunction:

When checking malfunctions, be aware of the risk of electrically live components. Although the fixtures are designed with safety in mind and are grounded, hazards due to malfunctions can never be ruled out. Only certified technicians are permitted to handle the electrical installation or to perform measurements on the unit.

Always disconnect the fixture before opening the plastic cover (turn off the main switch and secure it, e.g. with the use of a padlock).

Be aware of and prevent any accidental activation by others or by an automated control and/or dimmer switch. In the event of a malfunction, never touch the fixture while the power supply is still connected or if the casing of the fixture is damaged or wet.

Note! *Light fixtures that can be dimmed have no loose starters or capacitors. Replace the ballast kit unit if the new bulb does not work.*

The Light Fixture Does Not Work:

Check the main voltage:

- Check the switch panels;
- Check the fuses;
- Check your computer settings (if computer-controlled);
- Check/replace the bulb.

Check to determine whether the bulb has reached the end of its lifecycles:

- The bulb is flashing on and off;
- The end of the bulb is starting to turn black;
- Brown discoloration on the glass of the bulb;
If the bulb does not work: replace the bulb as soon as possible or disconnect the light fixture from its power supply.

If the bulb still does not work;

- Contact your dealer or Agrilight Inc. for support.

Installing a Light fitting Using Chains



1. Ensure that the building structure (ceiling or a suspended construction or a support beam) is able to carry the weight of the fixture.
2. Push the 2 suspension brackets (Figure 1.) (3) into the slots at the top of the light fitting until the lugs click into the bracket ends, locking them to prevent them coming loose. In principle, this connection cannot be undone.
3. Install the chains to the ceiling, mounting structure or supporting beam.
4. Attach the light fitting by engaging the chains in the holes. ^

Secondary LED Lighting for AL2007RD and AL2007CF-BL Fixtures

The Agrilight Red and Blue fixtures can be controlled by a controller or switch. The LED lighting produces a bright red or blue monochromatic light of a lower intensity than the primary light source and operates as night lighting. Red light does not disturb livestock during the night, which means that inspection rounds can be performed without disturbing the animals. The same concept applies for the Blue light as it is not distinguishable by poultry animals in the night setting, making it noticeably easier for catching the birds. The integration of this night lighting no longer necessitates the installation of two separate fixtures.

The LED lighting is fully integrated into the fixture and can be switched on 10 minutes after switching off the primary light source.

Placing and replacing the LED light Source



Fitting and replacing is NOT described in this section. LED lighting may only be fitted, replaced or repaired by specialized personnel at Agrilight Inc.

Malfunctions in the Secondary LED Lighting

In essence, the LED lighting consists of a number of LEDs that are arranged either on a bracket (Red) or arranged on the back of both winged reflectors.



In order to prevent thermal damage to the LED lighting, the LED lighting may never be switched on at the same time as the primary light source. The LED lighting must be connected in this way so as to prevent it from illuminating while the primary light source is switched on.

If none of the LED lights illuminate (no sign of illumination) check:

- The electrical power supply;
- Determine whether the primary lighting has been switched off for more than 10 minutes;
- Whether the LED lighting is switched on (check switch);
- Whether the power supply unit is intact (correct voltage);
- Inspect the fuses to determine whether these are still intact;
- Whether the control unit is properly configured (if present, check: timer, PLC and the operation of the dimmer switch);
- There is probably a defect in the LED light configuration that can only be repaired by specialized and/or certified personnel.
- Consult Agrilight Inc. for the necessary action to be taken.

If not all LED lights illuminate:

- The Agrilight system is designed in such a manner that there will generally be a suitable light intensity in the event that one or more LEDs become defective. Please refer to the terms of the warranty. If and as soon as any repair or replacement of defective LEDs is needed: The replacement of defective LEDs may only be performed by certified personnel. Consult Agrilight Inc. for the necessary actions to be taken.

Thank you!

For Choosing



AGRILIGHT!

CONDITIONS OF WARRANTY

General

If it appears that your product does not function well, even though you have used it in the correct manner and in accordance with the user manual and assembly instructions, the product will be replaced free of charge within a period of *one year* after purchase. In order to claim this warranty the customer must submit the product invoice to Agrilight Inc. within the 1 year warranty period unless otherwise negotiated.

The product must be returned to Agrilight Inc. within 30 days following the occurrence of the defect or malfunction for the purpose of verification.

The product must be provided with a project name and sent to the following address:

Agrilight Inc.
Attn.: Service Dept.
4800 Hinan Drive.
Beamsville ON, Canada,
LOR 1B1

When Agrilight Inc. sends the replacement parts you will receive an invoice that will be credited to your account when and if it can be verified that the malfunction of the defect is covered by the warranty.

If Agrilight Inc. has not received the defective product by return mail within 30 days of the invoice date, the warranty invoice will be treated as a sales invoice, after which period the invoiced amount must be paid to Agrilight Inc. within 30 days.

The warranty does not cover the following situations for which the customer will be invoiced during the warranty period:

Defects or damage resulting from fire, earthquakes, flood, lightning strikes, other natural disasters, as well as environmental pollution and problems related to power supply.

Defects resulting from sand, mud, dirt etc. entering the cabinet of the product.

Defects resulting from transport, accidents, shock and vibrations etc. following the purchase from and delivery of the product by Agrilight Inc.

Defect resulting from carelessness or incorrect storage, improper maintenance etc.

Defects resulting from improper use (such as the use of the unit for purposes not listed in the user manual and/or assembly instructions etc.)

Defects resulting from (uncertified) repairs and modifications.

If the invoice cannot be submitted together with the product when warranty claims are made.

If changes have been made to the original purchase invoice or to the customer name on the invoice.

The liability on the part of Agrilight Inc. is limited to the scope of this warranty and only includes the replacement and/or repair of the product. Agrilight Inc. Accepts no liability for damages incurred directly or indirectly as a result of any defects in the product. Agrilight Inc. is not liable for expenses incurred as a result of disassembly and assembly/mounting, or expenses incurred as a result of travel and accommodation.

Any damage resulting from transport or incomplete delivery must be reported to the transport company, insurance company and Agrilight Inc. immediately.

Labour charge and freight are not included.

Warranty on Light Bulbs

A warranty period of 1 year or 5,000 hours applies to the bulbs of fixtures supplied by Agrilight Inc.

This warranty applies only to normal use and normal operating conditions with regard to power/voltage and frequency.

In the case of all lights supplied by Agrilight Inc. approx. 1% failure per 1000 lighting hours must be taken into account.

With regards to Agriled fixtures, a defect or damage to fewer than 2 LEDs per LED-strip is considered to be an esthetic defect which does not affect the normal operation of the fixture.

Lights that fail prematurely during the course of the warranty period will be replaced by Agrilight Inc. Lights that fail as a result of abnormal external effects, due to breakage of the exterior bulb following thermo-shock or due to theft, do not fall under the replacement warranty.

The warranty does not apply to failure of the lights applied to systems in which those light types were used. If such a system is not in compliance with CSA or equivalent standards and requirements.

Aging and Tolerances in the Intensity of the Lights Applied.

The light will age during use and will eventually emit less light as the number of total life-cycle lighting hours increases. The drop in light intensity is increased by a voltage that exceeds the prescribed rated power.

LIABILITY

Agrilight Inc. states emphatically that it cannot be held liable for damages of any kind or magnitude, caused by non-compliance with the instructions in this manual or as a result of non-compliance with the connecting and installing requirements. We reserve the right to make amendments without further notification.