Installation guide

ACL 1230

Powered model aircraft kit



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01 / WINGS

Prepare the leading-edge mounts

Start with the two wings. On the model shown, one slim LED module (item 1007) is fitted near the outer end of each leading edge.



Wing and leading edge



Marked mounting location



Prepared recess in the leading edge

Choose the mounting locations. Trial-fit both modules at matching positions on the left and right wings. Check the cable route from the leading edge to the wing root.

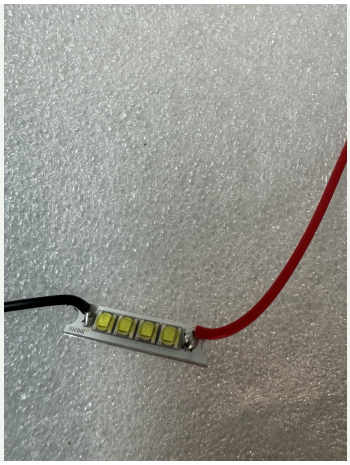
Prepare the recess and cable opening. Size the opening to suit the module and your model. Locate the spars and ribs before cutting. Use existing cable openings wherever possible.

Kit contents (item 1230)
2 × LED module 1007 · 1 × LED module 1008 · 1 × flash controller 1104

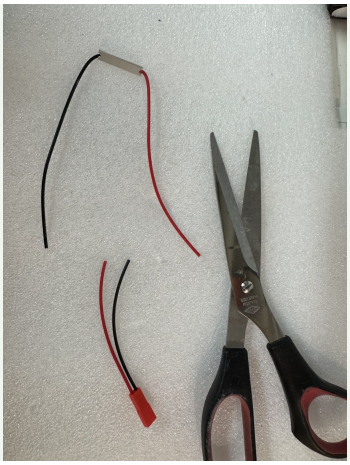
02 / WINGS

Prepare the wiring

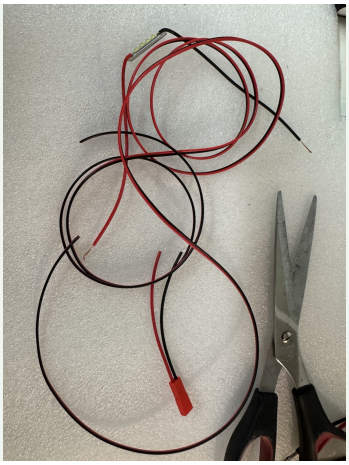
The photos show how to adapt the LED leads to your model’s cable route when necessary. Disconnect the power supply before working on the wiring.



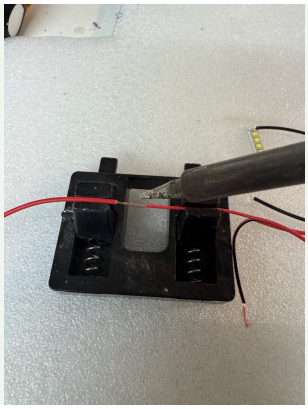
LED module 1007 with lead



Preparing the wire ends



Lead and connector



Hold the wire ends in a jig and solder them



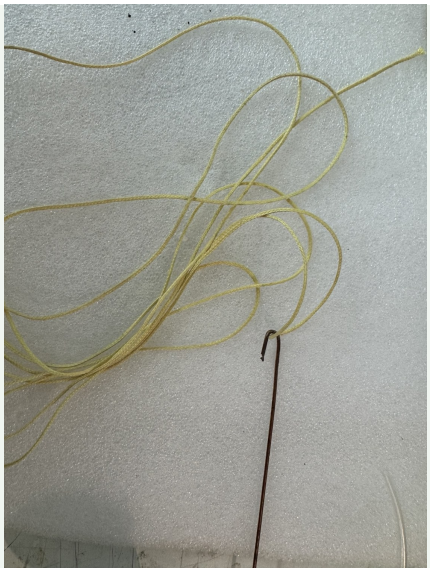
Mounting recess before installation

Secure and solder the wire ends. If needed, align the stripped wire ends in the jig, match their polarity and solder them. Insulate each solder joint separately and provide strain relief.

03 / WINGS

Use a pull cord to route the cable

Use a thin cord to pull the LED cable through the wing to the wing root. A small hook bent from wire makes it easier to catch the loop.



Pull cord and wire hook



Cord at the mounting location



Cord loop at the wing root

Feed the cord through the wing. Guide it along the existing cable route and retrieve it at the wing root with the wire hook. Leave one end accessible at the mounting location.

Attach the cable to the cord. Wrap the joint neatly with tape to keep it slim enough to slide through the openings.

Pull the cable through. Pull steadily from the wing root while feeding the cable in at the leading edge. If it snags, back it out slightly and try again.

Repeat on both wings. Leave enough slack at both ends to make the connections and remove the wings later.

04 / WINGS

Install both wing strobes

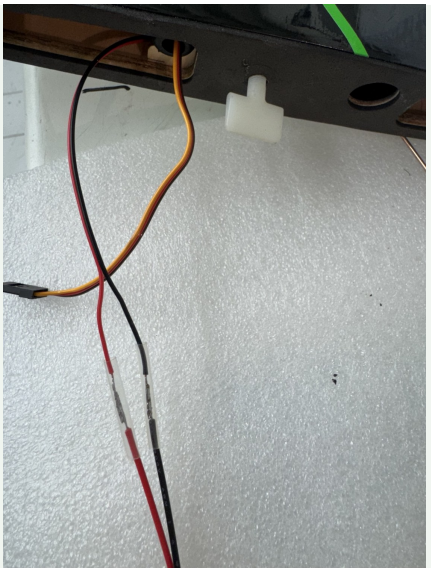
Once the cable is in place, fit the LED module into the leading edge and bring the cable out at the wing root for later connection.



Cable access at the leading edge



LED module fitted in the leading edge



Cable exiting at the wing root

Align and secure the module. Point the LED face outwards. Secure the module using a method suited to the mounting surface and check that it is firmly in place. Protect the lead from chafing where it enters the wing.

Check the cable exit. Secure the cable so it cannot get pinched when you fit the wing. Move the control surfaces and linkages through their full range of travel.

Complete the other wing. Repeat the same installation sequence on the opposite wing.

05 / FUSELAGE

Install the third strobe

On the model shown, the larger LED module (item 1008) is fitted to the outside of a screwed-on cover on the underside of the fuselage.



Location on the underside of the fuselage



LED module mounted on the cover

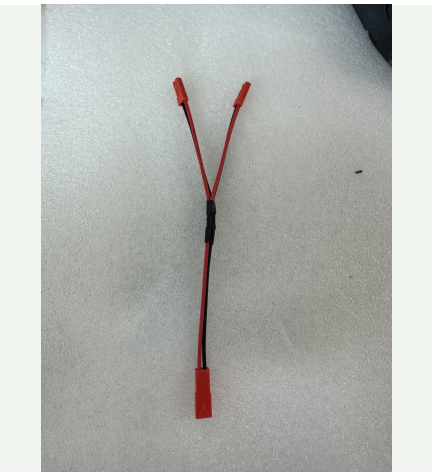
Mount the module on the cover. Check the mounting location on your model. Point the LED face outwards and secure the module so the cover remains accessible.

Route the lead into the fuselage. Protect it from chafing at the opening and keep it clear of linkages and servos. Refit the cover and check that it is secure.

06 / CONNECTION AND TESTING

Connect and test the lights

Follow the wiring instructions for flash controller 1104. The controller has two LED outputs, each rated at a maximum of 30 W. See the wiring diagram on the following page.



Y-lead for connecting two modules



Model with strobes operating (video still)



Fuselage strobe operating (video still)

Connect the LED modules. With the power disconnected, connect module 1008 to one LED output. Use the Y-lead to connect both 1007 modules to the other output only if their combined load is within that output's rating. Check polarity and make sure the plugs are fully seated.

Connect the flash controller. Plug the JR connector into the receiver. Connect a suitable 3S LiPo (11–13 V), observing polarity and following the instructions for item 1104. Disable the model's propulsion system before ground testing.

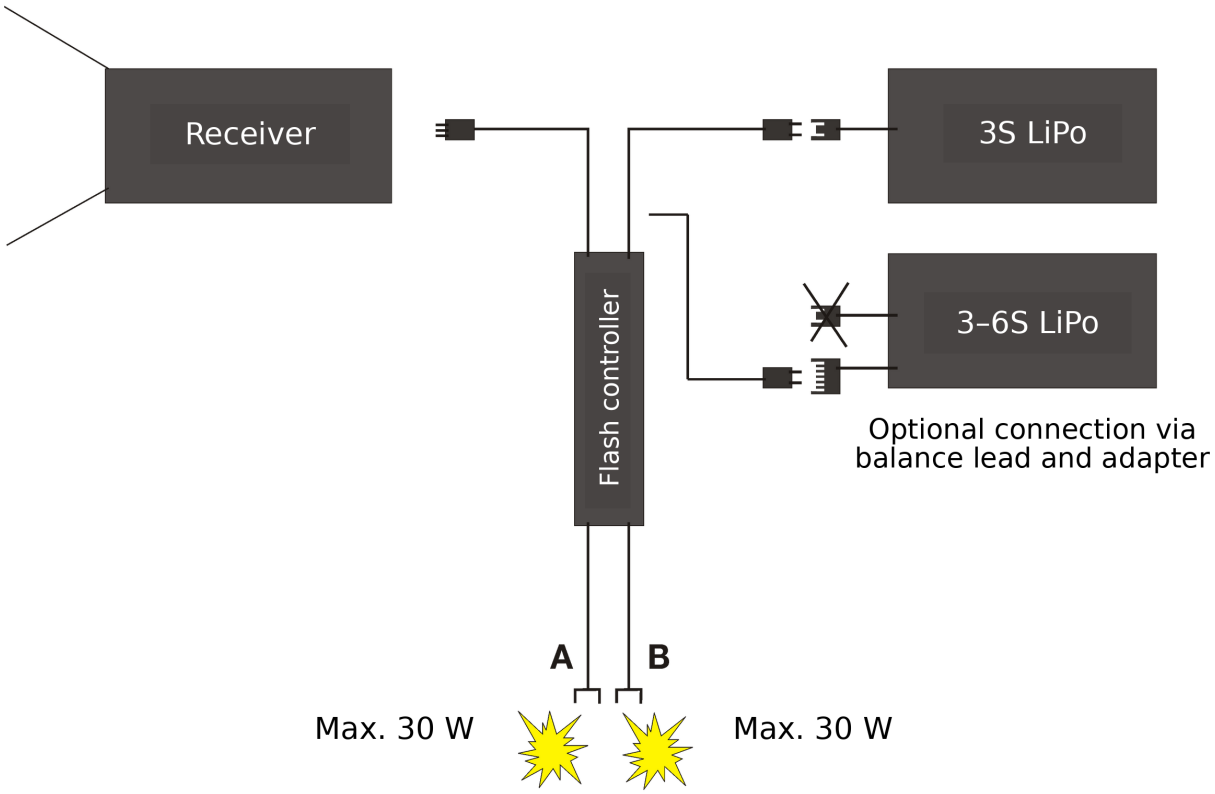
Check all three strobes. Verify that both wing strobes and the fuselage strobe operate. Check that they switch on and off, then move the control surfaces through their full range of travel.

▶ **Watch the original test video**

07 / WIRING DIAGRAM

Flash controller 1104

The JR plug connects to the receiver. The power supply and LED outputs use JST connectors. Follow step 06 for the ACL 1230 kit’s 3S LiPo connection (11–13 V).



Example loads per output
A: 6 × 5 W and B: 6 × 5 W
A: 1 × 30 W and B: 1 × 30 W
A: 1 × 20 W and B: 1 × 20 W

Other combinations are possible within the output ratings. A Y-lead at the receiver can control several flash controllers.

Source: ASC Safetylight wiring diagram for item 1104