



Instruction Manual for the Data Recorder External Hookup Kit

Document Version 1.0

Model # FDR-EK2

Thank you for your purchase! This instruction manual will guide you through the installation and operation of your Data Recorder External Hookup Kit. Please read the manual carefully before proceeding. If, after you read the manual, you have further questions or problems, see the Support page on <http://www.eagletreesystems.com> for additional information, or email us at support@eagletreesystems.com.

Packing List

Your package should include the following: Circuit board with connectors, a plastic ZIP tie, and a printed version of this manual. Please check your box for printed addenda to this manual which may be included if changes were made after printing.

How the External Hookup Kit Works

The Electric Expander is compatible with our Flight Data Recorder V2, Car Data Recorder, and Boat Data Recorder products. It is not compatible with our Flight Data Recorder V1. The hookup kit connects to your recorder's LED, switch and USB connector, and after being attached to the side of your model give external access to these. The switch and LED permit control and status check of the recorder at the field without opening the model. The external LED is especially useful if you use the Recorder's battery level indication feature. The USB port on the kit's circuit board, when used with your existing Recorder USB cable, permits data download and live monitoring of the model without opening up the model.

Installing the External board on the side of your Model

Choose the best location to install the external board. Make sure that the board is clear of any other wiring or metallic objects, and that the board's hookup cables will reach your Recorder. Cut out the below template and tape it to the OUTSIDE of your model at the location you want to mount the board. Then drill and cut holes in your model corresponding to the template.

Use the included ZIP tie to fasten the board to your model, passing one end of the ZIP tie from the inside of your model through one of the holes in the circuit board, then to the outside of your model, and back through the other hole to the inside. Push the two cables which attach to the circuit board up against the circuit board, and pull the ZIP tie tight on top of these wires to provide added strain relief.

If you prefer, you can mount the circuit board with small nuts and bolts, but make sure that small plastic washers are used to keep the nuts from contacting the traces of the circuit board.

WARNING: Ensure that the back of the circuit board is not near metallic objects within your plane. Damage can occur to your Recorder or other parts of your plane if these instructions are not followed! If the surface of your plane is metallic, you must insulate the circuit board from the plane!

Connecting the Hookup Kit to your Recorder

After **disconnecting** all power to the Recorder and disconnecting the USB cable from the Recorder, connect the four wire male and three wire female flat connectors from the External Hookup circuit board to the Recorder as shown in Figure 1.

IMPORTANT: The External connector must be connected to the recorder as shown above. Connecting it otherwise could damage the Recorder and/or External kit.

Double check that you have connected the wires as indicated in Figure 1 before proceeding.

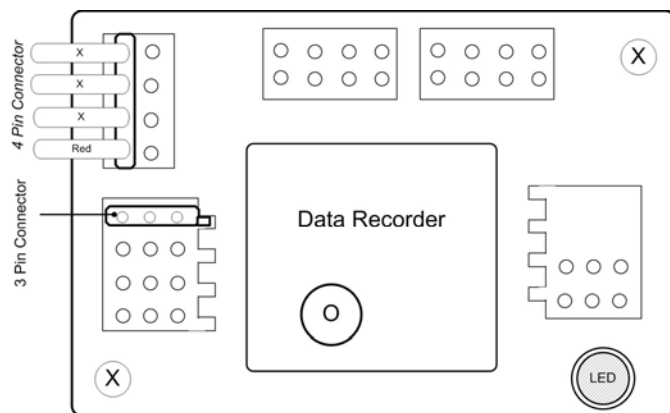


Figure 1

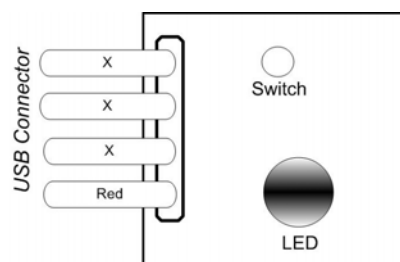
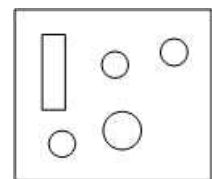


Figure 2



Template

Plugging the new USB connector into the External Board

Plug the black connector end of the USB connector into the external board as shown in Figure 2 above, and plug the other end into your PC. The Recorder should function as previous.

Testing and Range Checking

Before operating your model, verify that your model is functioning properly, as always.

Troubleshooting

Below is a list of problems that may be encountered, and steps to remedy them. If your particular issue is not addressed by the below, see the Support page on <http://eagletreesystems.com> or email info@eagletreesystems.com. Include a full description of your problem, your machine configuration, brands/models of receivers, transmitters and servos, application and Recorder firmware version if possible (from Help->About in the app) and any other relevant details.

Issue: I do not see the LED blinking on the external board after installation, and/or the switch on the external board doesn't function.

Solution:

- Doublecheck your connections to ensure that the recorder is connected correctly to the External board.
- Examine the external board and its connectors to see if any wires are broken or damaged.
- Ensure sure that the internal Recorder LED is blinking. If it is not, either power is not reaching the Recorder or the recorder has been damaged.
- Ensure that the internal Recorder switch is functional. If it is not, the Recorder has been damaged.

Issue: The recorder isn't recognized by my computer when hooked up with the USB cable.

Solution:

- Make sure that the USB connector is correctly connected to the External board.
- Doublecheck your connections to ensure that the recorder is connected correctly to the External board.
- Examine the external board and its connectors to see if any wires are broken or damaged.
- Ensure that the Recorder works with the original USB connector connected directly to it and your computer. If it does not, the Recorder has been damaged.

External Connector Specifications

Internal hookup cable lengths: approx. 11"

Limited Warranty

Eagle Tree Systems, LLC, warrants the Flight Data Recorder External Hookup Kit to be free from defects in materials and workmanship for a period of one (1) year from the date of original purchase. This warranty is nontransferable. If your unit requires warranty service during this period, we will replace or repair it at our option. Shipping cost to us is your responsibility.

To obtain warranty service, contact us by phone, fax or email to request an RMA number. No returns will be accepted without this number.

This limited warranty does not cover:

- The Software included with the Flight Data Recorder. See the Software license agreement for more information on Software restrictions.
- Problems that result from:
 - External causes such as accident, abuse, misuse, or problems with electrical power
 - Servicing not authorized by us
 - Usage that is not in accordance with product instructions
 - Failure to follow the product instructions

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