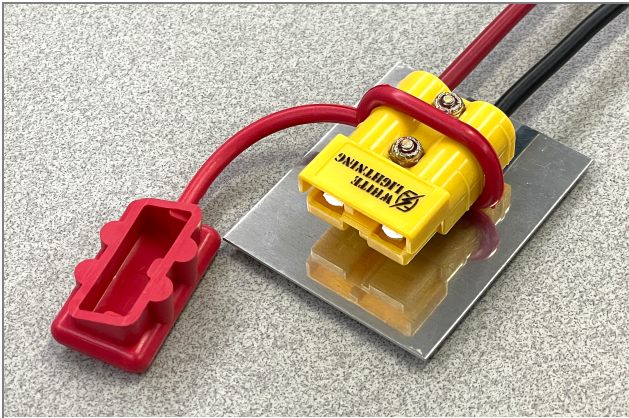# External Power Connector Kit
for Experimental Aircraft
PN 670-530

This kit provides the connector parts for installing an external power receptacle suitable for using a ground power unit, up to 50A. This kit is supplied as part of the Model M1435-EXP Mini-GPU. Please read the GPU manual completely for details and wiring options for Experimental/Amateur-Built aircraft before proceeding.

Parts List:

PART NO.	QTY	DESCRIPTION
716-504	1	Connector, SB-50, Yellow (12/14V) with 2 contacts for up to 6 AWG wire
713-367	1	Elastomeric dust cover
713-078	8	Washer, ¼" ID ½" OD black nylon

In addition to these special parts, the installer must provide some standard aviation grade hardware (minimum 8 AWG primary wire, ring terminals, fasteners, etc.) and fabricate a mounting scheme/bracket for the connector to position it in a convenient location.

Connector Assembly Instructions:

1) Strip wire to expose 9/16" (14mm)
2) Solder contact to wire as follows:
    i) Melt rosin core solder into contact well, about ½ full. (Chef's torch works well for this.)
    ii) Insert stripped wire into well and continue heating until solder flows into wire.
    iii) Avoid spilling solder outside the well onto contact surface. Remove if necessary.
3) Observing correct polarity, place contacts in housing with notched side of tongue against spring.
4) Push contact and cable into housing until it snaps over the end of the leaf spring; tug slightly to verify contact is locked in place.

Connector Mounting Instructions:

1) Pull the dust cover lanyard strap over the connector between the two mounting holes.
2) Use a stack of 4 washers for each fastener to provide about ¼" clearance for the dustcover.
3) Secure to mounting surface with 2 each 6-32 x 1" screw, washer, and stop nut.

Mark aircraft as follows:

Label plug: **EXTERNAL 12-14VDC POWER**

Placard: **AIRFRAME POWER ONLY 50A MAX NOT FOR ENGINE START**

Update AFM/POH electrical description section.

Enter the installation into the airframe maintenance log noting any limitations.

WHITE LIGHTNING
AVIATION GROUND POWER

www.audioauthority.com Lexington, KY USA 859-233-4599

752-791 Rev. 20231023