Elecraft K2 AGC Level

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Introduction

Normal variations in the 8-volt voltage regulator may make it impossible to adjust the AGC threshold voltage to 3.80 volts as recommended in the Owner's manual. The voltage range may be adjusted as needed by adding one 15K-ohm 1/4 watt resistor to the K2 control board as described below.

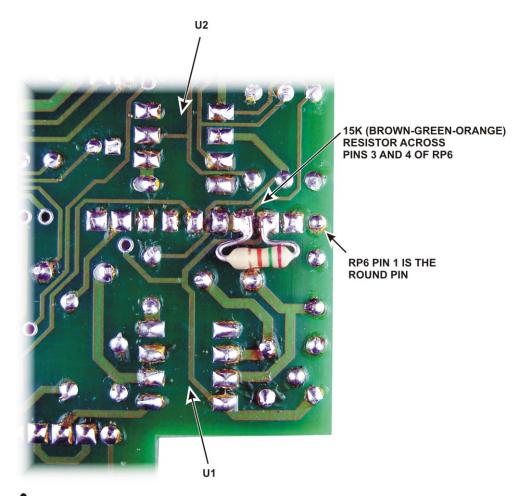
If needed, a suitable resistor may be ordered from Elecraft. Order the K2AGCRES kit.

Tools Required

You will need a DMM for making resistance checks, No. 1 Phillips screwdriver, diagonal cutters, long nose pliers and a temperature controlled ESD-safe soldering iron with rosin core small diameter solder. A grounded wrist strap and ESD dissipating mat are recommended whenever you work inside your K2.

A Observe ESD precautions when working inside your K3. Wear an ESD wrist strap or touch an unpainted, metal ground frequently while working.

Procedure If your K2 is fully assembled, open the top by removing the QRP cover or the KPA100 module. See your K2 Owner's manual for details if needed. Remove the Control Board. That's the board standing vertically directly behind the front panel. It is held in place by two screws threaded into standoffs on the front panel assembly. Use the long-handled Allen wrench provided with you K2 or a similar wrench to left the board, placing the end in the hole near the bottom of the Control Board and resting the wrench against the screw head marked LIFT on the RF board. Locate resistor pack RP6 on the Control Board. It's near the top left corner between U1 and U2. On the reverse side of the board, solder the 15K-ohm (brown-green-orange) 1/4 watt resistor between pins 3 and 4 of RP6 (See Figure 1 on the next page). Check the resistance across the new resistor after it is installed. The resistance should be about 3.5K-ohms (the new resistor is in parallel with a 5.1K resistor in RP6). Inspect the board carefully to insure you have not caused any shorts or solder bridges. Replace the control board and replace both mounting screws. Perform Setting the AGC Threshold adjustment in your K2 Owner's Manual. Reassemble your K2, replacing the top cover or KPA100 module or, if you are doing the initial assembly of your kit, continue on with the assembly procedure in the Owner's Manual.



THE EXACT PATTERN OF TRACES ON YOUR BOARD MAY BE DIFFERENT DUE TO CHANGES AS THE BOARD WAS REVISED OVER TIME. THE LOCATION AND U1, U2 AND RP6 REMAINED THE SAME.

Figure 1. Resistor Installed on K2 Control Board.

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