

Elecraft KPA3 12V Sense Modification

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Introduction

This modification adds a diode to the KPA3 12V sense circuit to hold the voltage to no more than 0.6V when the K3 is turned off. Without it, some K3s refuse to turn off when the POWER button is tapped because the 12V sense circuit does not drop to a low enough level to shut down the K3's MCU.

The diode is a common leaded part. No work with SMDs is required. A minimum of disassembly is required and no boards need be removed to perform this modification.

A single 1N4148 diode is required. If desired, Elecraft will supply the diode for only the shipping expense. Call or visit www.elecraft.com to order Part E560002.

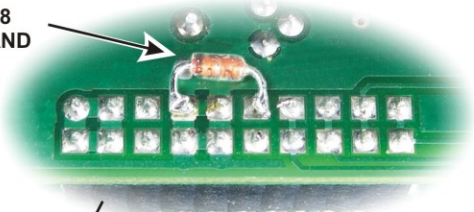
Was This Change Already Incorporated in My K3?

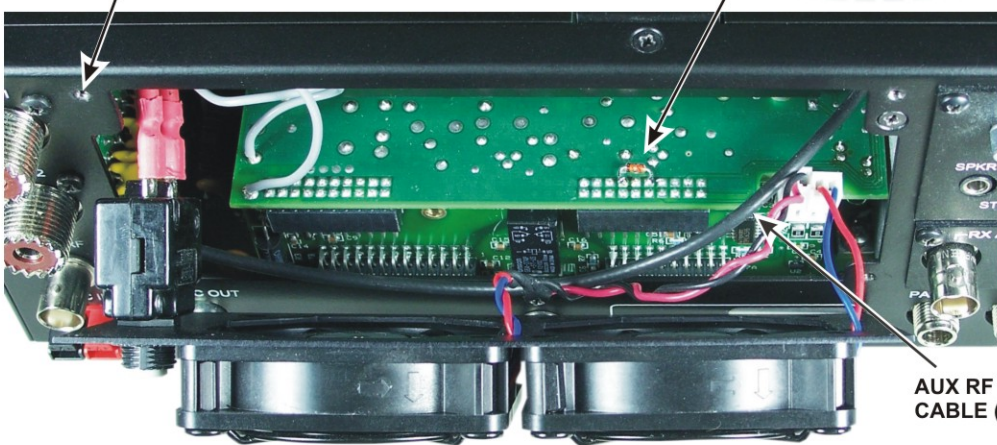
Look for the diode on the KPA3 module as shown below.

Tools Required

You will need a 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 K3.

Procedure

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1 REMOVE THE FOUR CORNER SCREWS AND PULL THE FAN PANEL AWAY FROM THE K3. IF DESIRED, UNPLUG THE FANS AND CIRCUIT BREAKER AND SET THE PANEL ASIDE.
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2 SOLDER THE 1N4148 DIODE TO PINS 11 AND 7 OF P68A. BE SURE CATHODE BAND IS TO THE LEFT AS SHOWN.

AUX RF CONNECTOR CABLE (IF INSTALLED)
- 3 REPLACE FAN PANEL AND TIGHTEN ALL FOUR SCREWS. BE SURE THE FAN PLUGS ARE ORIENTED WITH THE RED WIRE TO THE LEFT AND THE WIRES ARE DRESSED SO THEY DON'T TOUCH THE FAN BLADES WHEN THE PANEL IS MOUNTED .
- 4 **IMPORTANT:** MAKE SURE BOTH FANS TURN FREELY AFTER REPLACING THE FAN PANEL. THIS CAN BE DONE BY APPLYING POWER AND SELECTING CONFIG:KPA3, THEN TURN VFO A TO CYCLE THROUGH PA Fn 1 THROUGH Fn 4 WHILE WATCHING THE FANS TO BE SURE BOTH FANS TURN. BE SURE TO RETURN VFO A TO CONFIG:KPA3, PA *nor* BEFORE EXITING.