

Elecraft KPA3 12V Sense Modification

Revision A, January 23, 2009
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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.

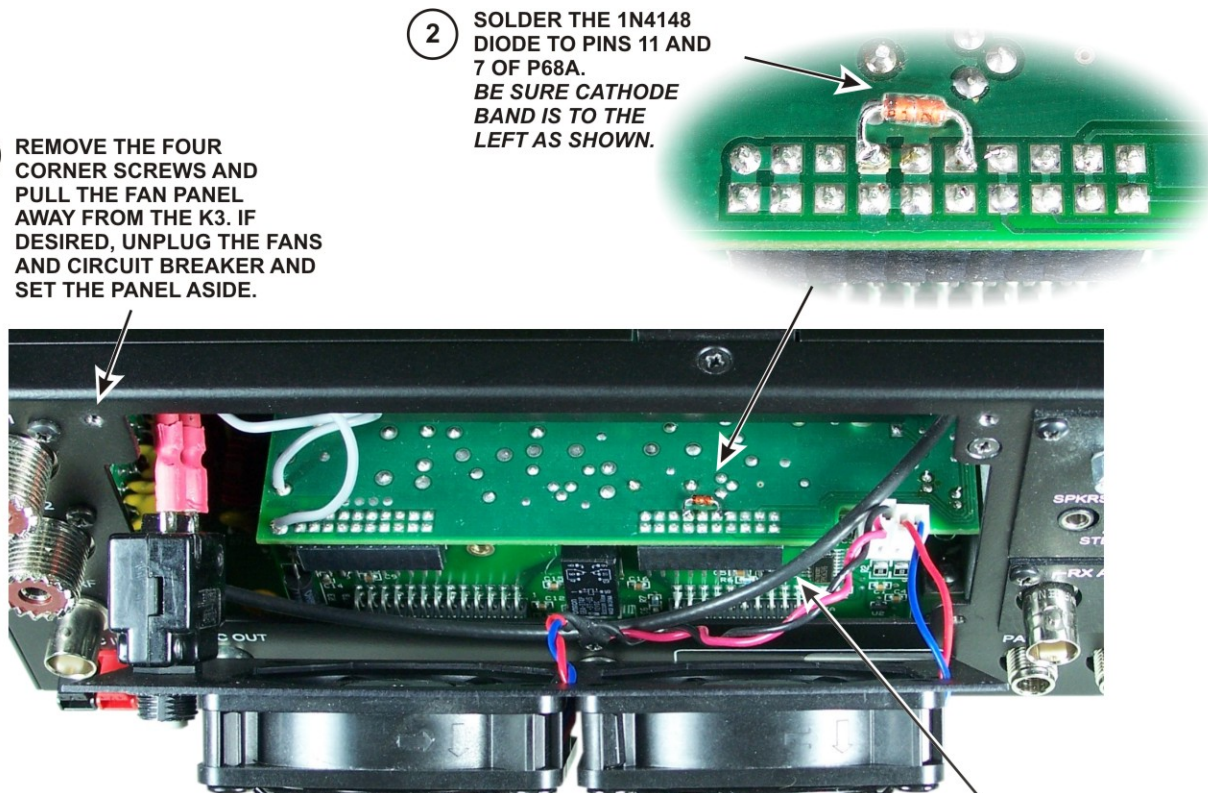
Tools Required

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

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.

2 SOLDER THE 1N4148 DIODE TO PINS 11 AND 7 OF P68A. BE SURE CATHODE BAND IS TO THE LEFT AS SHOWN.



3 REPLACE FAN PANEL AND TIGHTEN ALL FOUR SCREWS. BE SURE THE FAN PLUGS ARE ORIENTED WITH THE RED WIRE TO THE LEFT. IF THE AUX RF CONNECTOR IS INSTALLED, THE COAXIAL CABLE PASSES OVER THE EDGE OF THE KPA3 BOARD BETWEEN THE BOARD AND THE FANS AS SHOWN.

AUX RF CONNECTOR CABLE (IF INSTALLED)