SORTING-OUT THE HK401B GYRO

By: Cletus Berkeley

The HK401B Gyro design emulates the ubiquitous “workhorse” Futaba GY401 gyro at around one-tenth the price. However, out of the package one would find that the HK401B leaves much to be desired in terms of stability and all too often, we hear users condemn this very affordable gyro as “useless garbage”.

So, let’s cut right to the chase and sort-out this little electronics marvel:

Step 1:
Pop the four screws at the back and yank out the circuit board. You’ll actually find a motherboard with two daughter boards soldered to it (figs 1 & 2):

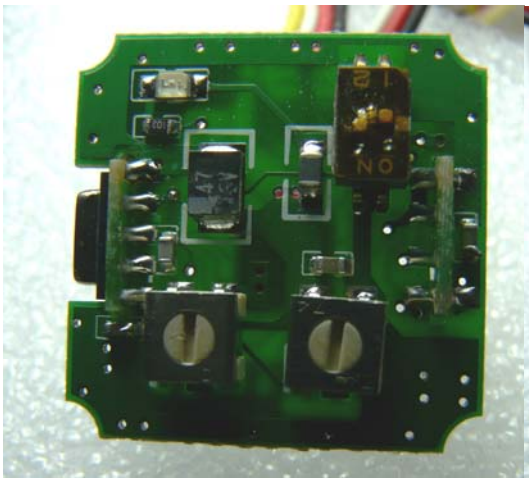


Fig 1

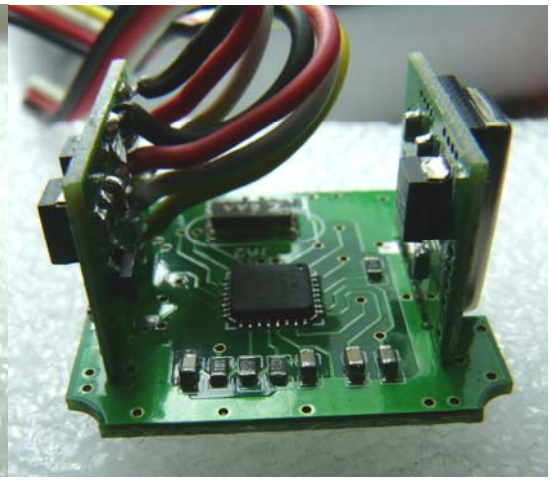
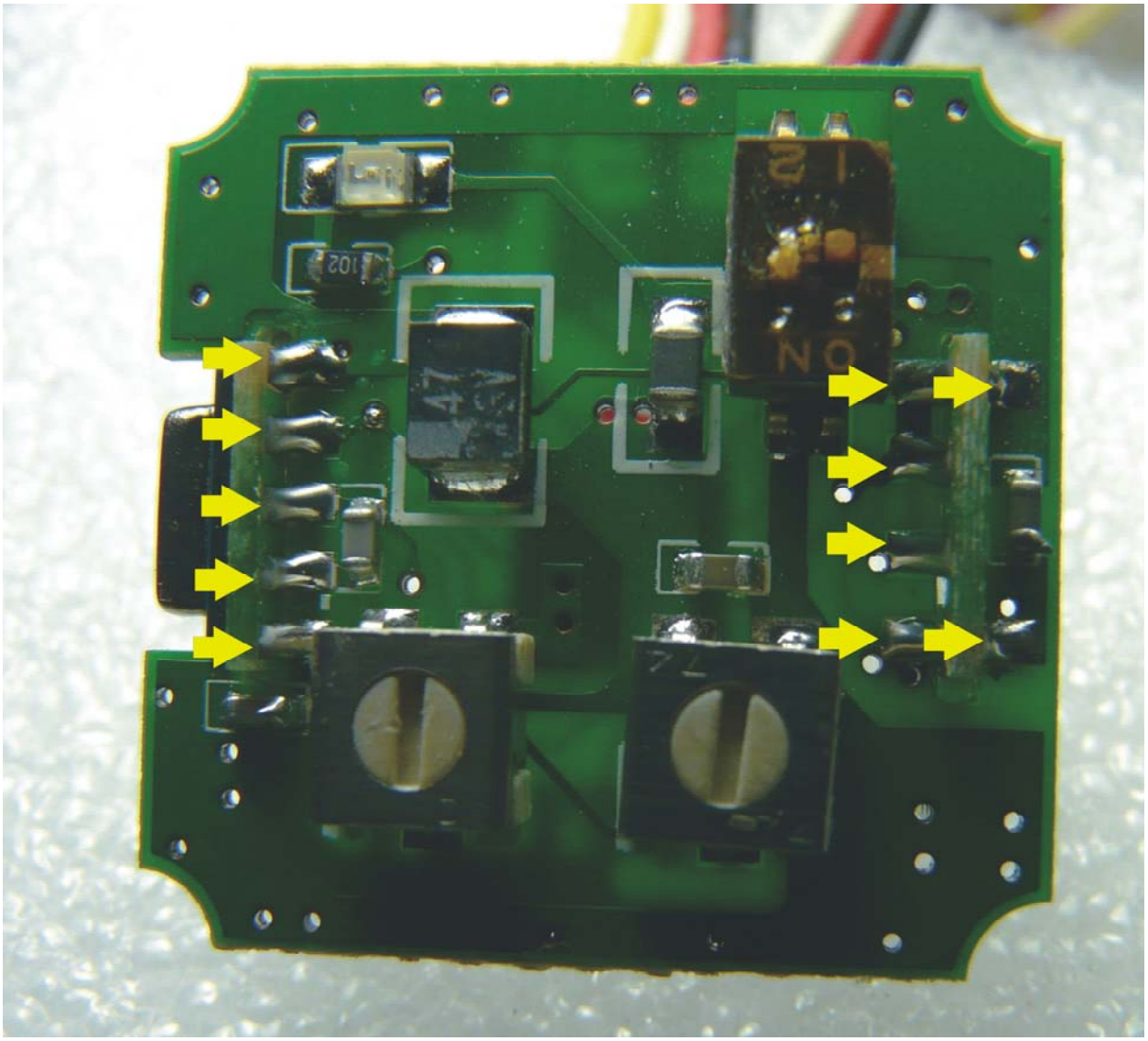


Fig 2

Step 2:
Inspect the integrity of the solder connections of the daughter boards to the motherboard and re-solder if necessary (usually they're fine as is Fig 3):



Step 3:
Apply 5-minute epoxy to reinforce the attachment of the boards and switches along the following areas and allow to cure for 15-minutes (Fig 4 & 5):

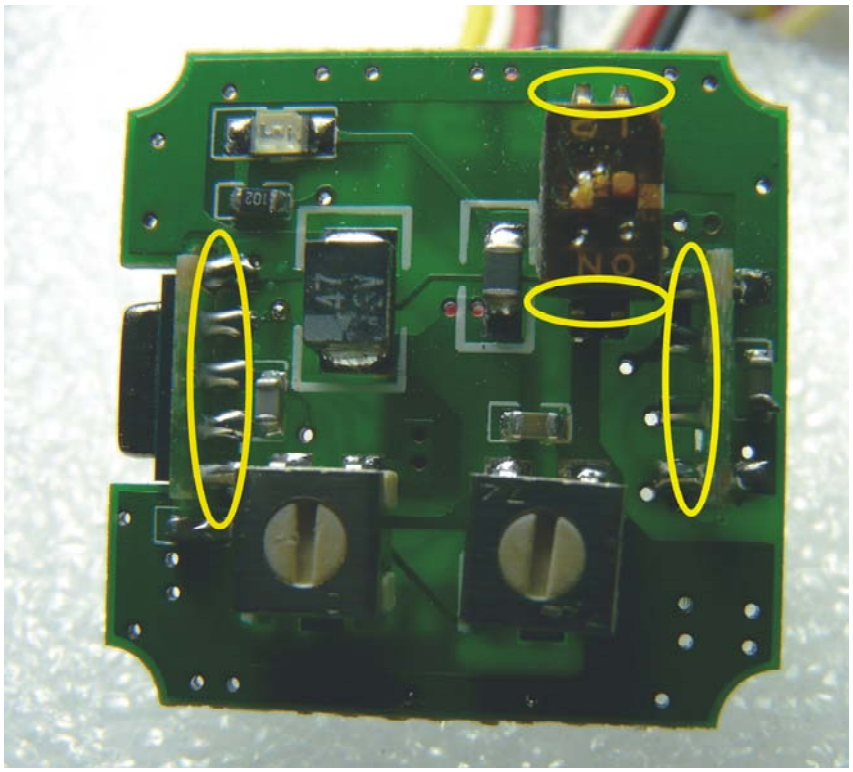


Fig 4

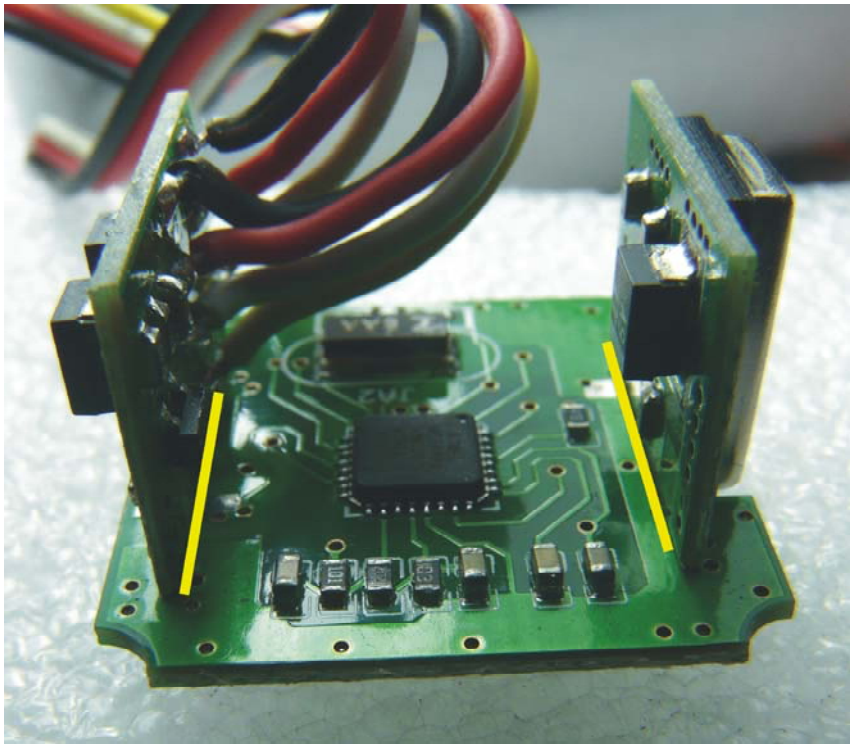


Fig 5

Step 4:
Apply four tiny pieces of double-sided foam tape (3M Tape) to the following areas, these serve as dampers to isolate the sensors from vibration within the housing (Fig 6):

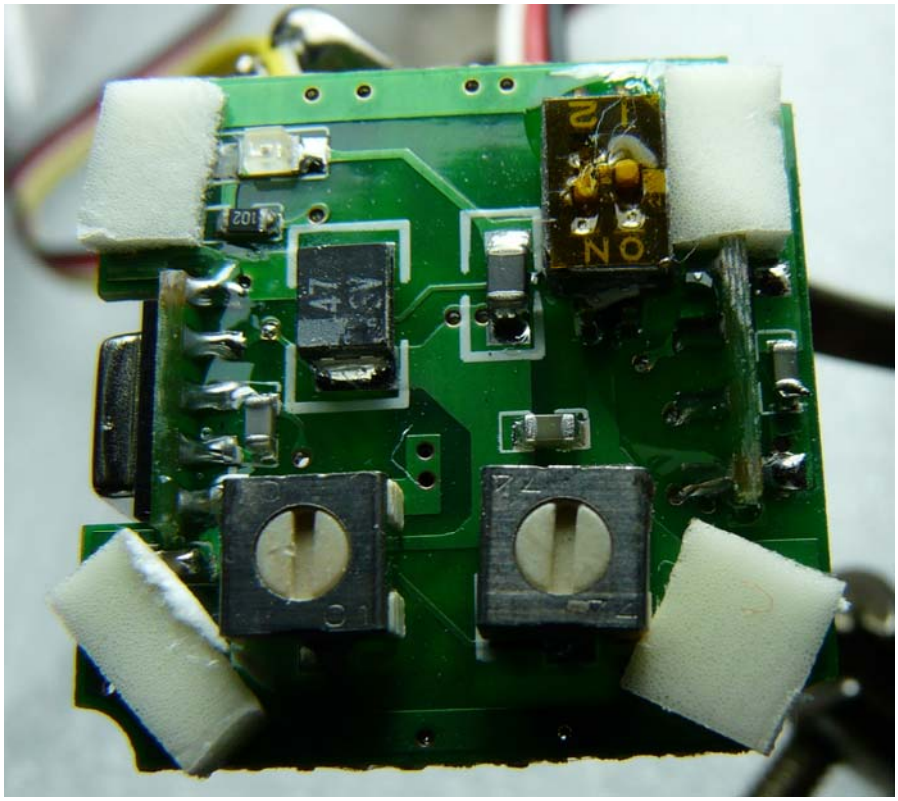


Fig 6

Step 5:
Reassemble the gyro ensuring to leave some slack on the leads within the case.

Step 6:
Using two layers of foam tape, attach the HK401B to the heli (I have found that two layers of tape provides lots of vibration isolation while securely affixing the gyro to the airframe). DO NOT use wire ties to secure the gyro, or you'll negate the purpose of the vibration isolating, two-sided tape.

Step 7:
GO FLY!