HALKA

HAL sensor **K**eyboard **A**dapter

also it means "underskirt" in Polish language short installation manual

1. Cut a wood board 15-20mm thick to be mounted over or under the keys, make wide enough to reach side support and as deep as possible to make it sturdy.



2. Mill a slot at one end, 6mm deep, where the connectors are. Don't mind that long narrow slot at one end, it was a mistake in cutting. If you can make 2 slots, one separate for each connector, that's even better (skip step 5 then). Not shown here but worth considering – mill also perpendicular slot on the bottom side, where the cable can be hidden.

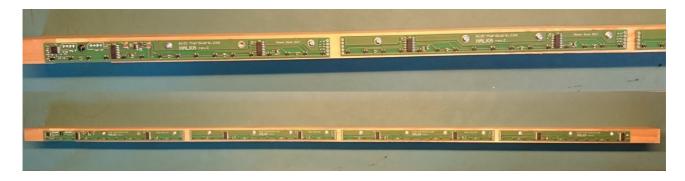


3. Place the board over keys and align all 4 PCBs so the hall sensors (little black thingies) are more or less in the middle of each key. Few milimeters off center is perfectly OK, as long as it's not the edge of a key. Mark PCB locations on the board.

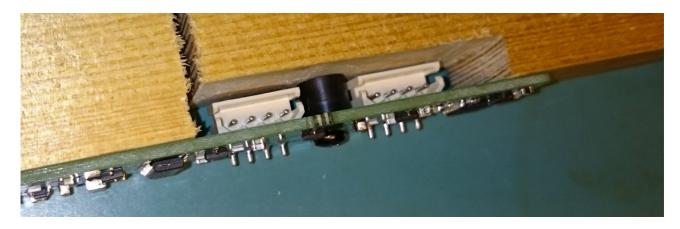


4. Attach all 4 PCBs to the narrow side of wood board, using previously made marks as positioning reference. It may be better to place them in line with bottom edge of the wood, then it's easy to keep all sensor at the same height with respect to keys. Mark hole position and predrill them with small diameter drill bit so it's easier to mount the screws without risking PCB damage.

If there's possibility of bending the wood board over time, it may be better to mount PCBs using only 2 most distant screws, so PCBs will not suffer from tension.



5. Add 6mm-heigh standoff for the screw that goes between connectors. This is obviously not needed if you cut 2 slots for each connector.



6. Solder boards together using any kind of wire, solid hook-up wire seems most convenient for this job. There's 15 wires total to be soldered. Watch out for delicate components nearby while soldering.

