8BitFlux com Apple 1 Keyboard Adapter Instructions

Contents

Manual

Conveniently use an Apple][or][+ keyboard with an Apple 1.

Assembly

Make sure you have all the parts, see the Bill of Materials. Always solder by vertical height of the components, from low to high:

- Close the **jumper** (JP1) on the backside. Connect the two pads with a nice blob of solder. This connects the +5V to bit 8, for normal operation of the Apple 1.
- On the backside, solder the two **male-male 8-pin** IC adapters (J1). It is important to use the IC socket as a guide, so insert the two adapters (with the long pin side) into this socket first. This way the two adapters can be soldered vertically correct. Make sure the short pin side of the adapters go through the holes of the PCB (backside) and are soldered. Solder one pin of each adapter first. Then melt the solder of this pin again while moving the adapter on the other side perfect. Finish by soldering the rest of the pins. Finally remove the IC socket.
- Put the **resistor** (R1) in. For best results use a plastic lead bend tool, or bend the leads by hand, before inserting the resistor into the board.
- Then solder the **push button** (SW1). Cut the pins short on the backside, then resolder.
- The **socket** (J2) follows. Make sure it is oriented correctly, check if the notch of the socket matches the outline on the board. Start with soldering two opposite pins, then melt the soldered pins again while pushing the socket all the way down on the top side. When the socket sits nicely, then (re)solder all pins.
- Next, the **LED** (D1), the long leg is the anode (+) and the short leg the cathode (-). The short leg should go through the square pad (left) and the long leg through the round pad (right).
- Put the power out **header** (J4) in. Solder one pin first, then melt it again while aligning the header correctly. After that (re)solder all pins.
- **Important**: affix electrical insulation tape on top of the marked area at the backside of the PCB. This is to make sure the soldered pins do not touch the Apple 1 and will cause a short circuit.

Usage

Make sure all the assembly guidelines (see above) have been followed.

- The adapter can be inserted directly in the keyboard socket of the Apple 1 (at position B4).
- Power on the Apple 1 and check if the green LED lights. Check if the Clear Screen button clears the screen of the Apple 1.
- Power off the Apple 1. Attach the Apple][keyboard to socket J2. Take note of the first pin marking (bottom right).
- Power on the Apple 1 again. The green LED and the light of the Apple][keyboard should turn on now.
- Use the button on the Apple][keyboard to Reset the Apple 1. For Clear Screen, use the button on the adapter.

Use the breakout solder points (round pads on top of PCB) to attach or test custom keyboards with an Apple 1. The Power Out connector (J4) can be used to power a custom keyboard or power the ASCII Keyboard Tester.

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Documents / Resources

	**8BitFlux com Apple 1 Keyboard Adapter** [pdf] Instructions A1KeyboardAdapterManual-v1.0, Apple 1 Keyboard Adapter, Apple 1, Keyboard Adapter, Adapter

References

- **User Manual**