

MP3 Amp Kit

Introduction

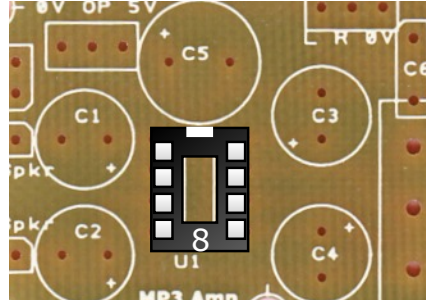
The MP3 Amp Kit v2 provides a 2W stereo amplifier suitable for use in all projects and designs for MP3 Docking Stations.

It can be linked to either the MP3 Light Chaser Kit EK0050 or Sound 2 Light Kit EK0070 to provide light effects for your MP3 Docking Stations.

- Low component count
- Simple audio input connections
- Simple USB power supply
- 2W output
- Suitable for 8R speakers
- Volume control with 16mm spline for caps
- Connections for lighting modules
- PCB size: 48mm x 30mm
- Built size: 54mm x 30mm x 20mm

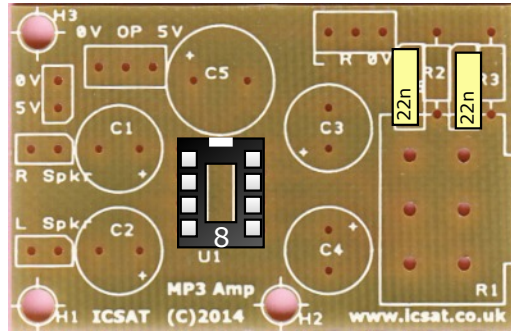
Assembling your MP3 Kit

Solder on to the pcb the 8 pin DIL chip socket, with the notch matching the marking.



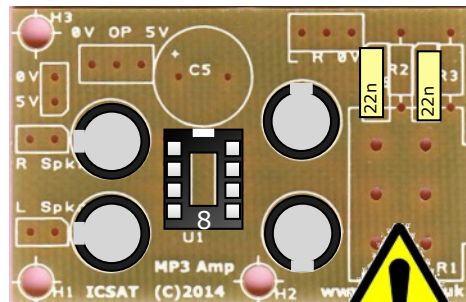
1

Solder the the two 22nF capacitors C6 & C7 in place.



2

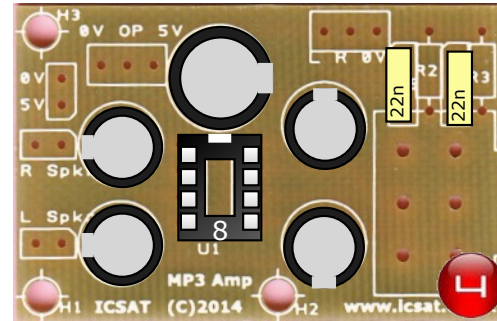
Solder in place the 470uF capacitors; C1, C2, C3 & C4. Make sure they are in the right way around, the long lead goes into the holes marked with a '+'



3

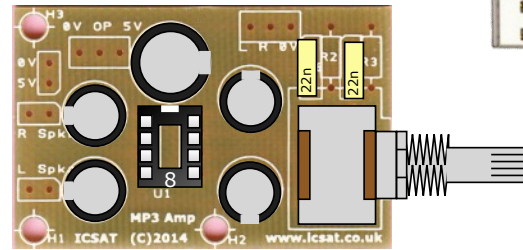


Solder in place the 1000uF capacitor, C5. Ensure it is inserted the correct way around, the long lead goes into the holes marked with a '+'



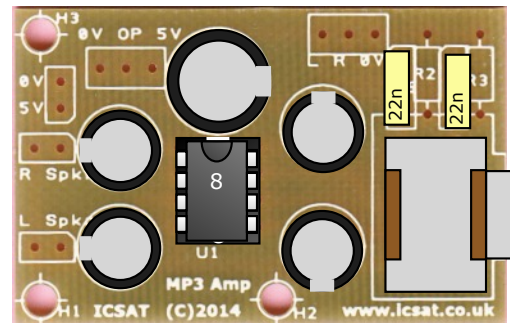
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Solder the potentiometer (volume control) in the the PCB, carefully line up the 6 pins as you insert it into the PCB



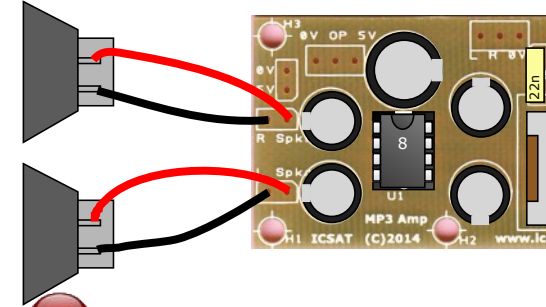
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Carefully insert the PIC chip with the notch matching the notch on the DIL socket.



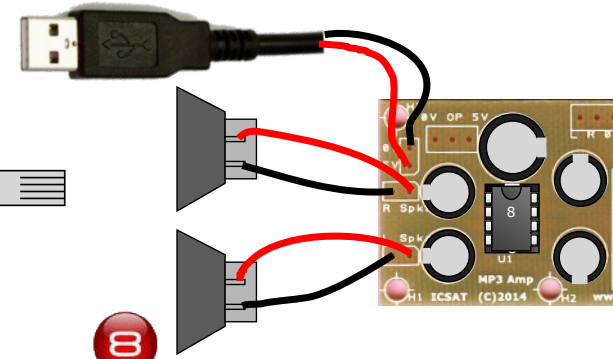
6

The two speakers are connected to the pads marked L / Spkr and R / Spkr.



7

The +5V connection is soldered to the 0V and 5V connections **top left**, this is from a USB lead - Red to +5V and black to 0V.



8



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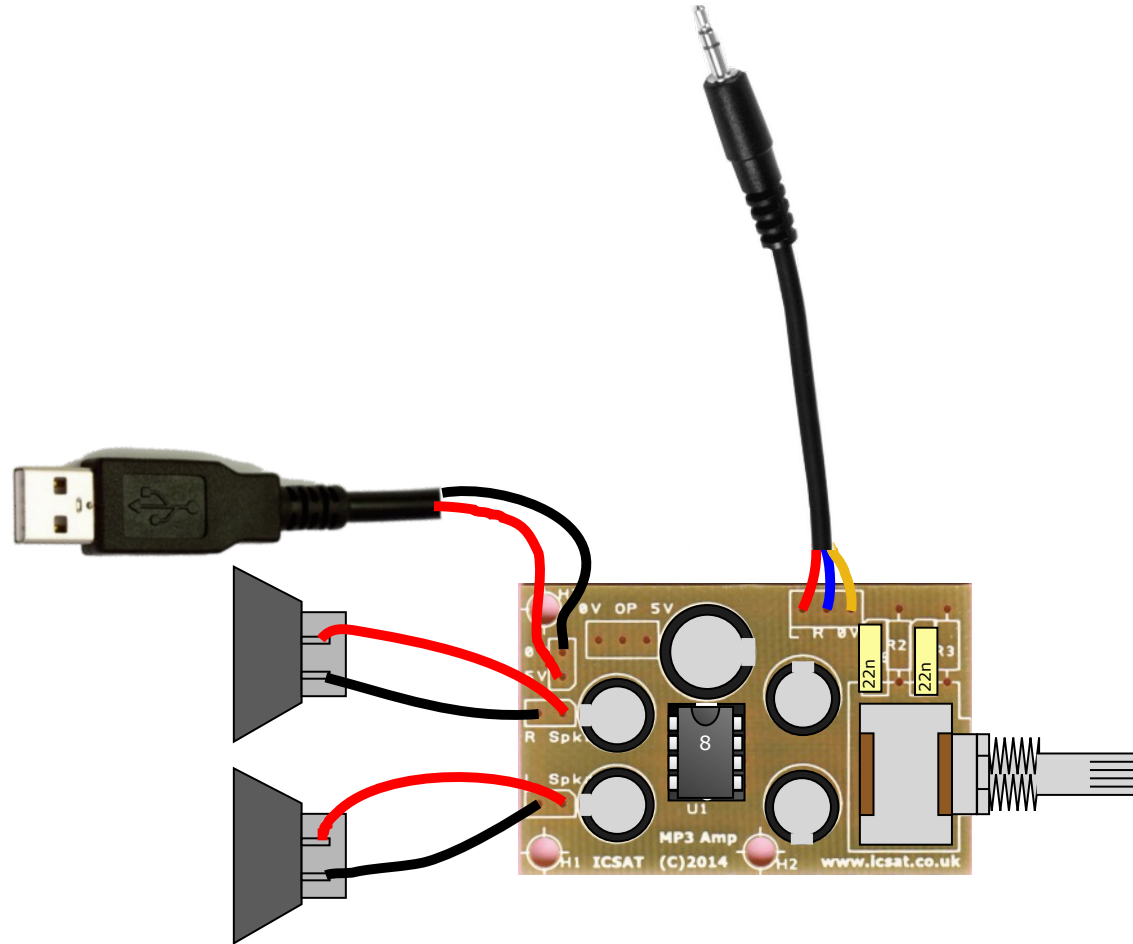
SKU EK0090

MP3 Kit Manual

Ver. 1.50

The 3.5mm audio input lead is soldered to the L R 0V pads top right, 0V is usually the braided copper part of the cable, the other two are connected to L & R, you can position the speakers appropriately once you have tested your MP3 Amp.

Completed MP3 Amp Reference diagram



Power Supply

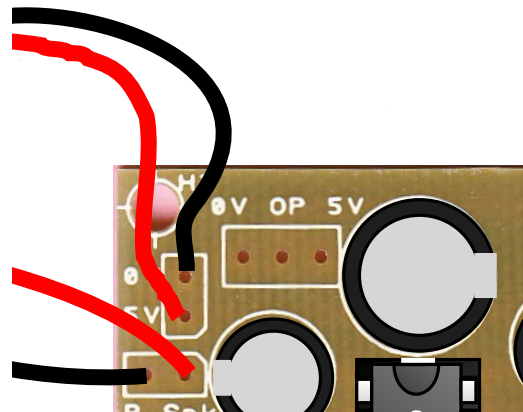
The MP3 Amp Kit is best powered from a USB power pack or connection, most phone chargers are appropriate USB supplies, this is vital if you are going to use our Light Chaser EK0050 or Sound to Light EK0070 modules. If you are not using either of these modules you can use up to a 9V supply instead.



Adding a Light Chaser or Sound to Light modules

You can purchase one of two modules to add sound controlled lighting. The Light Chaser module EK0050 gives you a moving LED effect the speed of which is controlled by the frequency of the audio input. The Sound to Light module gives you 3 LEDs, one for high frequency, mid range and low frequencies, they light up depending upon the audio input frequencies detected.

The remain 3 connections labelled 0V, OP and 5V are for these modules.



Support

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