KA2284 Builders Notes

Bill of Materials

QTY	REFERENCE	DESCRIPTION	MARKINGS
1	PCB	KA2284 PCB	
1	U1	IC KA2284	Chamfered edge is pin 1
4	D1,D2,D3,D4	LED Green	
1	D5	LED Red	
1	R3	Trimmer Resistor 10K	103
1	C1	Capacitor Electrolytic 10uF	
1	C2	Capacitor Electrolytic 2.2uF	
1	R1	Resistor 100 Ohms	Brown-Black-Brown-Gold (5%) Brown-Black-Black-Black-Brown (1%)
1	R2	Resistor 10K Ohms	Brown-Black-Orange-Gold (5%) Brown-Black-Black-Red (1%)
2	VCC,AUDIO	Male Pluggable Header 2 pin	
2	VCC,AUDIO	Female Header 2 pin w/ wires	

1. [ ] Install R1, R2, R4, C1, and C2 according to the bill of materials above and the PCB silkscreen values.
2. [ ] Install the KA2284 IC, note on the PCB the square on the first pin, this should match the chamfered edge of the IC (pin 1).
3. [ ] Install the 2 male headers.
4. [ ] Install the LEDS (D1-D4 Green and D5 Red). Note the flat side of the LED should match the flat side of the silkscreen. You may wish to bend the LED's at a right angle depending on your mounting scheme.
5. [ ] Apply 3.5-12VDC to the VCC header using the supplied cable. Observe polarity.
6. [ ] Apply your audio input to the AUDIO header using the supplied cable.
7. [ ] Trimmer resistor R3 can be adjusted to the audio level as needed.

Measured Specifications

Voltage: 2.7-12VDC - Brightness varies with voltage
Frequency Response: 15Hz to 130KHz
Audio Levels (no load, Vp-p)

R3 Position	R1 Lights	R5 Lights
Minimum	23mV	140mV
Middle	50mV	300mV
Maximum	1.6V	10V

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