

Bill Of Materials for NO LIGHT LPG

Design Title NO LIGHT LPG
Author Dustin Stroh (J3RK)
Document Number
Revision 1.2
Design Created Thursday, July 13, 2023
Design Last Modified Thursday, July 13, 2023
Total Parts In Design 133

0 Modules

Quantity	References	Value	PCB Package	Notes
--------------------------	----------------------------	-----------------------	---------------------------------	-----------------------

Sub-totals:

18 Capacitors

Quantity	References	Value	PCB Package	Notes
--------------------------	----------------------------	-----------------------	---------------------------------	-----------------------

3	C1,C4,C11	1000pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film (Choose Polypropylene for C11)
2	C2,C5	1uF	CAP10	C0G/NP0 MLCC/ Ceramic / Film
3	C3,C6-C7	10nF	CAP10	C0G/NP0 MLCC/ Ceramic / Film
3	C8,C17-C18	1200pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film
1	C9	1500pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film
2	C10,C14	100pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film
4	C12-C13,C15-C16	330pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film

Sub-totals:

63 Resistors

Quantity	References	Value	PCB Package	Notes
--------------------------	----------------------------	-----------------------	---------------------------------	-----------------------

6	R1,R12,R38-R39,R41-R42	22k	RES30	1% Resistor (100PPM / 50PPM Recommended)
12	R2,R5,R13,R16,R28-R29,R31-R32,R34-R35,R53,R56	100K	RES30	1% Resistor (100PPM / 50PPM Recommended)
6	R3-R4,R11,R14-R15,R22	1M	RES30	1% Resistor (100PPM / 50PPM Recommended)
2	R6,R17	91K	RES30	1% Resistor (100PPM / 50PPM Recommended)
3	R7,R18,R62	2.2K	RES30	1% Resistor (100PPM / 50PPM Recommended)
5	R8,R19,R48,R50-R51	100R	RES30	1% Resistor (100PPM / 50PPM Recommended)
4	R9-R10,R20-R21	1K	RES30	1% Resistor (100PPM / 50PPM Recommended)
1	R23	820R	RES30	1% Resistor (100PPM / 50PPM Recommended) Anything between 470R and 820R here.
4	R24-R25,R37,R46	10K	RES30	1% Resistor (100PPM / 50PPM Recommended)
4	R26-R27,R52,R55	68K	RES30	1% Resistor (100PPM / 50PPM Recommended)
4	R30,R33,R54,R57	110K	RES30	1% Resistor (100PPM / 50PPM Recommended)
2	R36,R47	5.1K	RES30	1% Resistor (100PPM / 50PPM Recommended)
1	R40	6.8K	RES30	1% Resistor (100PPM / 50PPM Recommended)
3	R43,R58-R59	220R	RES30	1% Resistor (100PPM / 50PPM Recommended)
1	R44	180R	RES30	1% Resistor (100PPM / 50PPM Recommended)
2	R45,R49	15K	RES30	1% Resistor (100PPM / 50PPM Recommended)
2	R60-R61	20K	RES30	1% Resistor (100PPM / 50PPM Recommended)
1	R63	330R	RES30	1% Resistor (100PPM / 50PPM Recommended)

Sub-totals:

11 Integrated Circuits

Quantity	References	Value	PCB Package	Notes
--------------------------	----------------------------	-----------------------	---------------------------------	-----------------------

2	U1-U2	TL074	SO14	TL074 or LF347 fine here. Something simple, but decent.
---	-------	-------	------	---

1	U3	LM4040-5	TO92	A, B, or C type all fine here.
1	U4	J2164	SO16	SSI2164 (SSI Version ONLY!!) Other types will not work here.
3	U5-U7	TL072	SO8	Use high quality audio op amp (OPA2134 for example) for U6 and U7. Use high precision op amp for U5 (OPA2134 or OP2132 etc.)
1	U8	OPA2134UA	SO8	Use high quality audio op amp (OPA2134 for example)
2	U9,U11	TL071	SO8	TL071 fine here.
1	U10	TLE2062	SO8	USE TLE2062 (for swing and output current)

Sub-totals:

0 Transistors

Quantity	References	Value	PCB Package	Notes
--------------------------	----------------------------	-----------------------	-----------------------------	-----------------------

Sub-totals:

9 Diodes

Quantity	References	Value	PCB Package	Notes
8	D1-D8	1N4148	DIODE30	Standard Small Signal Switching Diode (1N4148 or equivalent)
1	D9	LED-BIRG	CONN-SIL2	Bi-Color 2-Lead LED (This is part of the Anti-Vandal Illuminated Pushbutton) - av2211ea12q04

Sub-totals:

32 Miscellaneous

Quantity	References	Value	PCB Package	Notes
20	BP1-BP20	100nF	0805	Decoupling / Bypass SMT0805 Capacitors C0G/NP0
2	FB1-FB2	0R	RES30	Ferrite Beads
1	J1	SIL-156-04	SIL-156-04	MTA-156 Friction Lock Power Header
2	LPFDECAY1, VCADECAY1	1M	CONN-SIL3	Panel Pots (Use Log type here)
4	LPFMIX1,LPFOFFSET1, VCAMX1,VCAOFFSET1	50K	CONN-SIL3	Panel Pots (Use Lin type here)
2	PF1-PF2	10uF	ELEC-RAD10	Power Filtering Electrolytic Capacitors
1	SW1	SW-SPST	CONN-SIL2	This is part of the Anti-Vandal Illuminated Pushbutton - av2211ea12q04

Sub-totals:

Totals:

Thursday, July 13, 2023 12:46:52 PM