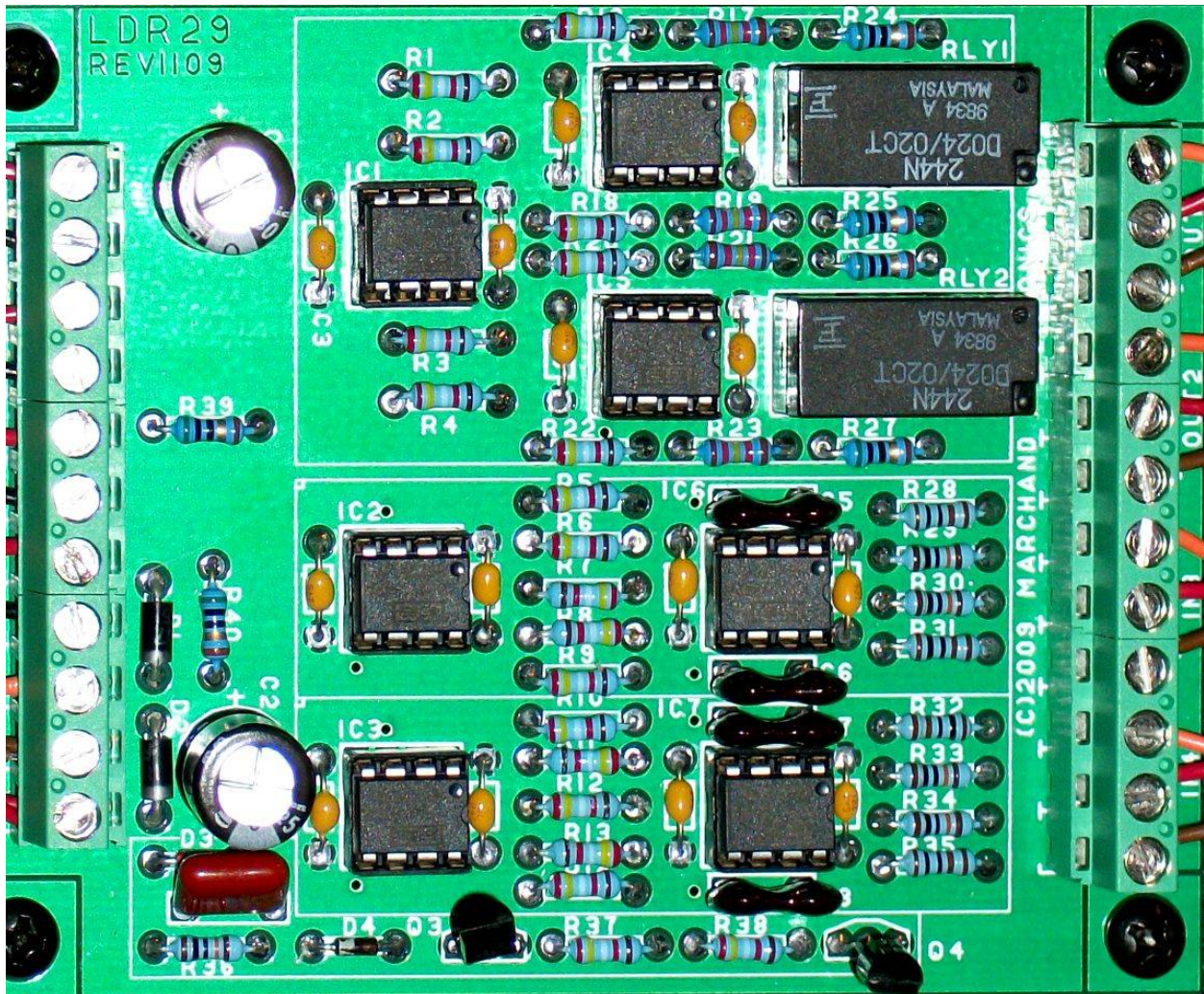


Marchand Electronics Inc.

PO Box 18099, Rochester, NY 14618
Tel:(585) 423-0462 Fax:(585)423-9375
info@marchandelec.com www.marchandelec.com
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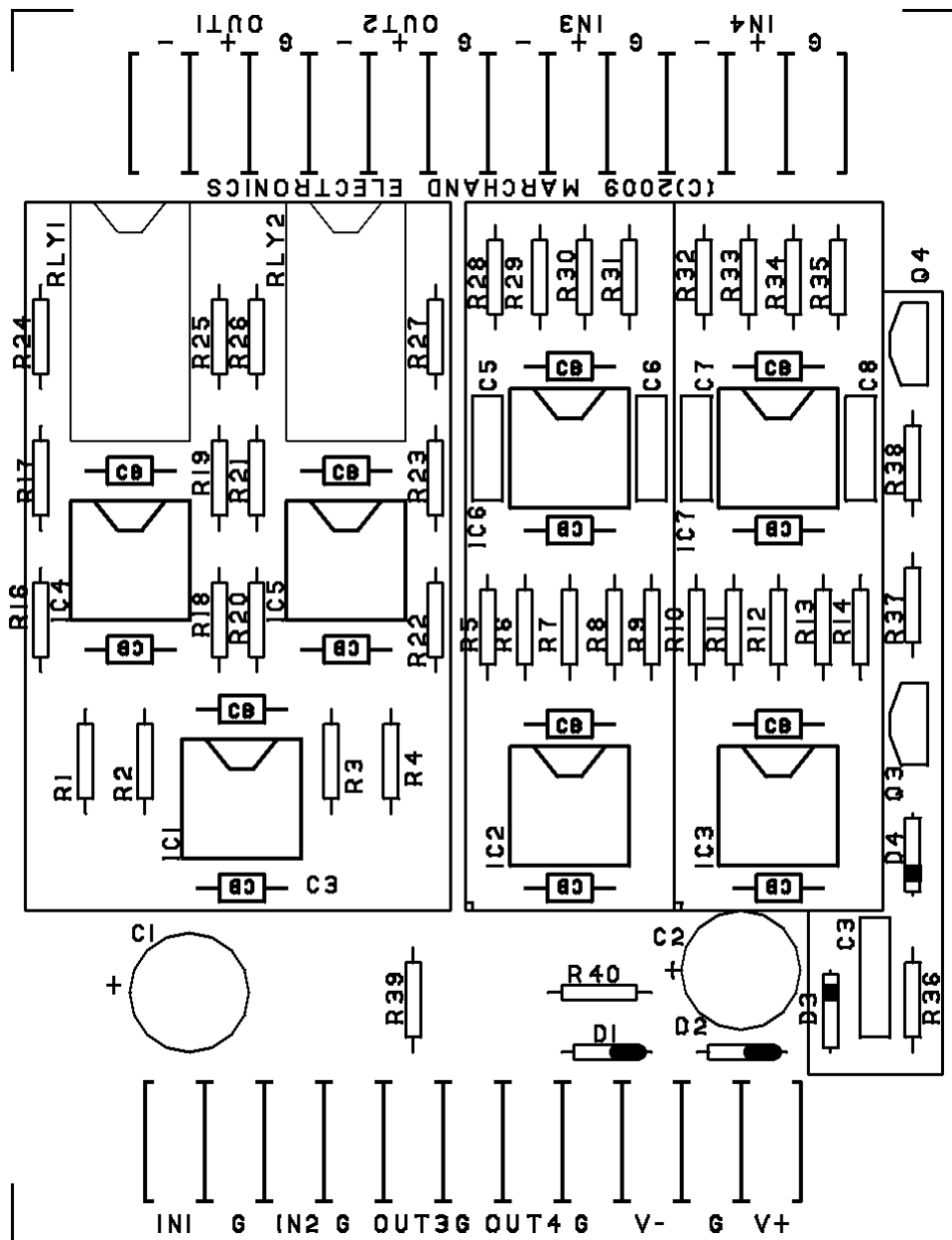
LDR29 Balanced Line Driver Receiver



The LDR29 is a dual line driver-receiver board. Two line drivers with balanced outputs and two line receivers with balanced inputs. A relay on the outputs prevents the driver from driving the outputs terminals until 2 s. after power turn on. The gain of the driver stage and input stage is 1 (0dB)each .

Specifications.

Dimensions:	3.20" * 4.15"
Frequency response:	DC-100KHz
Input impedance:	100K + 100K
Input/Output voltage range	25V p-p (8 VRMS)
Output impedance	50 Ohm + 50 Ohm
Power supply requirements	+/-15VDC max, 150 mA



LDR29 Parts List

ID	Value	Description
R1	24K9	1% ,1/4W, Metal Film
R2	24K9	1% ,1/4W, Metal Film
R3	24K9	1% ,1/4W, Metal Film
R4	24K9	1% ,1/4W, Metal Film
R5	12K4	1% ,1/4W, Metal Film
R6	12K4	1% ,1/4W, Metal Film
R7	12K4	1% ,1/4W, Metal Film
R8	12K4	1% ,1/4W, Metal Film
R9	12K4	1% ,1/4W, Metal Film
R10	12K4	1% ,1/4W, Metal Film
R11	12K4	1% ,1/4W, Metal Film
R12	12K4	1% ,1/4W, Metal Film
R13	12K4	1% ,1/4W, Metal Film
R14	12K4	1% ,1/4W, Metal Film
R15		
R16	24K9	1% ,1/4W, Metal Film
R17	12K4	1% ,1/4W, Metal Film
R18	24K9	1% ,1/4W, Metal Film
R19	12K4	1% ,1/4W, Metal Film
R20	24K9	1% ,1/4W, Metal Film
R21	12K4	1% ,1/4W, Metal Film
R22	24K9	1% ,1/4W, Metal Film
R23	12K4	1% ,1/4W, Metal Film
R24	49.9 Ohm	1% ,1/4W, Metal Film
R25	49.9 Ohm	1% ,1/4W, Metal Film
R26	49.9 Ohm	1% ,1/4W, Metal Film
R27	49.9 Ohm	1% ,1/4W, Metal Film
R28	1K00	1% ,1/4W, Metal Film
R29	100K	1% ,1/4W, Metal Film
R30	100K	1% ,1/4W, Metal Film
R31	1K00	1% ,1/4W, Metal Film
R32	1K00	1% ,1/4W, Metal Film
R33	100K	1% ,1/4W, Metal Film
R34	100K	1% ,1/4W, Metal Film
R35	1K00	1% ,1/4W, Metal Film
R36	249K	1% ,1/4W, Metal Film
R37	24K9	1% ,1/4W, Metal Film
R38	24K9	1% ,1/4W, Metal Film
R39	49.9 Ohm	1% ,1/4W, Metal Film
R40	49.9 Ohm	1% ,1/4W, Metal Film
C1	330uF, 25V	Aluminum Electrolytic
C2	330uF, 25V	Aluminum Electrolytic
C3	0.22uF	Stacked Film
C5	22pF	Silver Mica
C6	22pF	Silver Mica
C7	22pF	Silver Mica
C8	22pF	Silver Mica
Cb	0.10uF	Axial Ceramic
D1	1N4937	1A Diode
D2	1N4937	1A Diode
D3	1N4148	Signal Diode
D4	1N5232	5.6V Zener Diode
Q1		not used
Q2		not used
Q3	MPSA92	PNP Transistor
Q4	MPSA42	NPN Transistor
IC1	OPA2134	Dual Op-Amp
IC2	OPA2134	Dual Op-Amp
IC3	OPA2134	Dual Op-Amp
IC4	OPA2134	Dual Op-Amp
IC5	OPA2134	Dual Op-Amp
IC6	OPA2134	Dual Op-Amp
IC7	OPA2134	Dual Op-Amp
RLY1	24V,DPDT	Relay
RLY2	24V,DPDT	Relay

Quantity	Value	Description
6	50 Ohm	1% ,1/4W, Metal Film
4	1K00	1% ,1/4W, Metal Film
14	12K4	1% ,1/4W, Metal Film
10	24K9	1% ,1/4W, Metal Film
4	100K	1% ,1/4W, Metal Film
1	249K	1% ,1/4W, Metal Film
2	330uF, 25V	Aluminum Electrolytic
1	0.22uF	Stacked Film
4	22pF	Silver Mica
14	0.10uF	Axial Ceramic
2	1N4937	1A Diode
1	1N4148	Signal Diode
1	1N5232	5.6V Zener Diode1
1	PN5087	PNP Transistor
1	PN2222	NPN Transistor
7	OPA2134	Dual Op-Amp
2	24V,DPDT	Relay
7		IC socket, 8-pin
1		Terminal block, 11-pos
1		Terminal block, 12-pos
1	LDR29	Circuit board, double sided