

## Technical Manual

**JBL**

# UREI LA-12

## SPECIFICATIONS

- Inputs: Active balanced bridging
- Input Impedance: 40k  $\Omega$  balanced input, 20k  $\Omega$  unbalanced (with detector normalised to input)
- Detector Input Impedance: 100k  $\Omega$  balanced input, 50k  $\Omega$  unbalanced
- Maximum Input Level: +24 dBu (12.3 V rms)
- Gain:  $\pm 20$  dB, adjustable with front panel output level controls
- Frequency Response: 20 Hz - 20 kHz  $\pm 0.2$  dB
- Dynamic Range: <115 dB
- Signal To Noise Ratio: 110 dBA, 22 kHz A weighted noise bandwidth
- THD: <0.006% typical @ 1 kHz, 0.02% maximum @ +14 dBu input

**Attack Times**

- Average Detectors: 1 - 50 ms
- Peak Detectors:  $\leq 100 \mu\text{s}$
- Output Peak Limiters: 50  $\mu\text{s}$

**Release Times**

- Average Detectors: 100 ms - 5 s for 10 dB of release
- Peak Detectors: 10 ms

- Output Peak Limiters: 40 ms
- Compression/Expansion Ratios: Adjustable from 1.5:1 to  $\infty$ :1
- Threshold of Limiting/Expansion: Adjustable from -40 dBu to Off
- Outputs: Transformer isolated, symmetrical floating
- Maximum Output Level: +24 dBm into 600  $\Omega$

**Connectors**

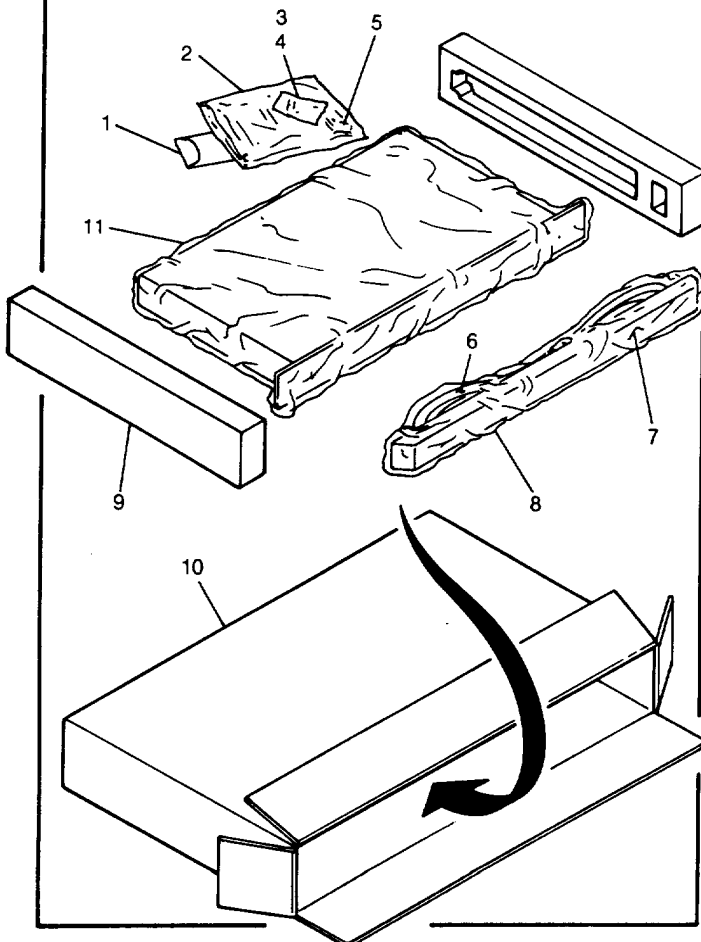
- Inputs and Outputs: XLR type 3 pin (pin 2 high), 6.3 mm (1/4 in) TRS phone jack
- Limiting Detectors: 6.3 mm (1/4 in) TRS phone jack normalised to input
- Link: Barrier strip
- AC Power Requirements: 100-120/220-240 V AC, 50-60 Hz, 25 W maximum
- AC Line Cord: Detachable, IEC type
- Finish: Powdercoated black
- Enclosure Dimensions: See Below
- Net Weight: 14 lbs. (6.4 kg.)

**WARRANTY INFORMATION:**

- Refer to the Warranty Statement packed with each product.

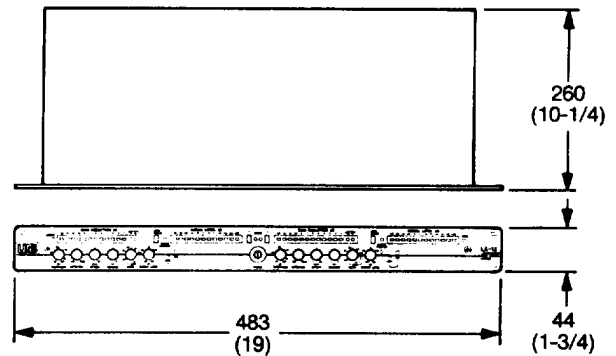
## PACKAGE

Warranty 59660



## COMPONENT VIEW

OVERALL DIMENSIONS  
DIMENSIONS ARE mm AND ( in. )



## COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
1	10-13788	1	KIT, RACK, SCR, BLK
2	260302	1	MNL, USER, LA-12
3	276193-001	2	FUSE, SB, 1/2A, 250V, 5 x 20, UL
4	255236	1	FUSE, SB, 1/4A, 250V, 5 x 20
5	33-0147	1	BAG, POLY, 12" x 16"
6	36-0543	1	CORD, PWR, DETCH, 3COND, 18GA
7	267151-001	1	COVR, SCRTY, LA-XX
8	33-0074	1	BAG, POLY, 5" x 22"

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# UREI LA-12

## COMPONENT PARTS LIST

ITEM	PART NO.	QTY	DESCRIPTION
9	33-16828	2	END, PAD, FOAM
10	33-16827	1	CRTN, LA-XX/79XX
11	33-0071	1	BAG, POLY, 18" x 24"
12	25-16774	2	COVR, PNL, FAB
13	25-14284	1	LBL, WARN, ELEC-SHOCK
14	25-16773	1	PNL, REAR, FAB, LA-12
15	264036	1	TAPE, DBL-SIDED, ADH, 3/16 x 2
16	263437	1	CONN, PWR, W/FUHLR, LA-12
17	261108	1	SCR, 6-32 x 3/4, TRXPNH, BZ
18	274608-001	1	LBL, SER#, LA-XX
19	28-0057	2	WSHR, #6, EXT, TTH
20	H100-15199	3	NUT, 6-32, KEP
21	255104	1	WSHR, 8, 1-7/16 x .032, ALUM
22	30-0216	1	SCR, 8-32 x 1-1/4, PPH, SEMS
23			
24	25-16772	2	PNL, SIDE, FAB
25	267096-001	1	PNL, FRNT, LA-12
26	30-0057	12	SCR, 6-32 x 3/8, PPH
27	25-16781-001	6	SPCR, BSHG
28	25-12993	1	NAMEPL
29	24-16780	1	KNOB, PWR, SW
30	29-17000	6	NUT, SPANNER, 7MM
31	24-16999-001	10	KNOB, INR
32	24-16999-002	4	KNOB, INR
33			
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35			
36			

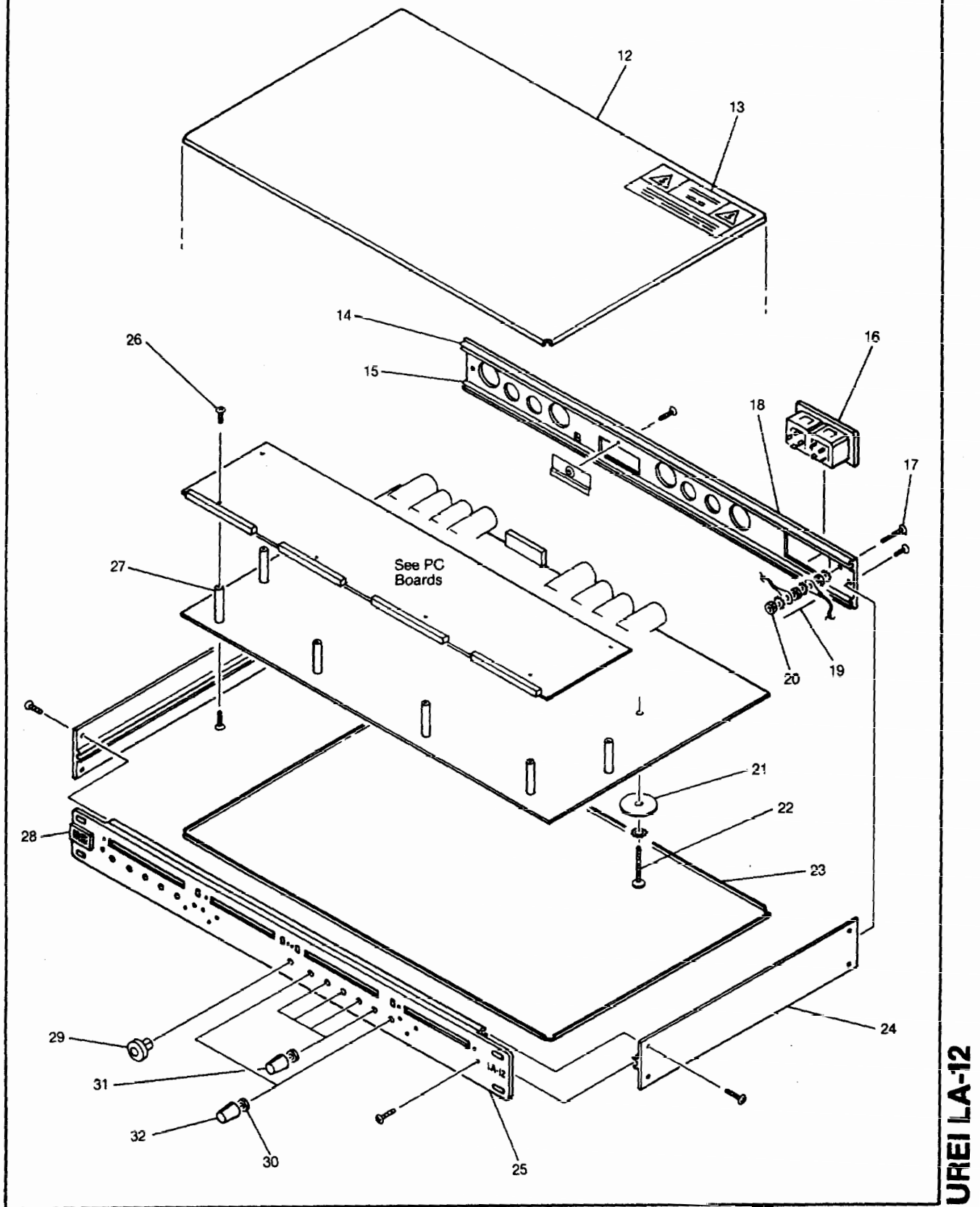
### CIRCUIT BOARDS

1	13-0711	2	LED, BAR-GRAPHIC, RED, 12P
2	13-0746	2	LED, T1, YEL
3	13-0745	2	LED, T1, GRN
4	25-16826	2	MASK, LED
5	13-0712	2	LED, GRN/RED, DICHRO
6	13-0710	2	LED, BAR-GRAPHIC, 12P
7	24-16779	4	KNOB, PBTN
8	13-0744	2	LED, T1, RED
9	15-0494	4	SW, DPDT, ALT-ACT, PCMT
10	14-0505	6	CAP-EL, 10UF, 50V, RD
11	HM14-0582	14	CAP-SF, .1UF, 5%, 50V
12	27-0634	3	HDR, STR, 9POS, .1" CTR
13	HM14-0576	4	CAP-EL, 22, 25V, 85C
14	HM14-0752	2	CAP-SF, .47UF, 5%, 50V
15	13-0304	2	IC, TL072CP, OP-AMP, DUAL
16			
17	15-0517	2	POT, TRIM, CF, 500K, LIN
18	HM13-0413	10	XSTR, TO-92, NPN, 2N3904
19	275009-001	12	IC, LM339AN, E-CMPRTR

20			(See Item 3 or 4 on 1st page)
21			
22	29-0081	1	NUT, 8, KEPS
23	255126	1	WSHR, 8, 1/2 X .03, STL
24	52921-001	1	XFMR, PWR, LA-12/22
25	13-0148	3	XSTR, 2N6716, NPN, 60V use13-0423JBL
26	13-0424	3	XSTR, 2N6728, PNP, 60V
27	14-0505	5	CAP-EL, 10UF, 50V, RD
28	14-0601	1	CAP-EL, 22UF, 20%, 50V, RD
29	13-0005	12	DIOD, IN4003, 200V, 1A, SI
30	27-0218	3	TERM, SPADE, .250, PCMNT
31	13-0206	1	IC, 7818CT, RGLTR, 1A
32	31-0067	2	RVT, POP, .125 x .345 RADS 41
33	264663-001	1	ASY, CABL, PWR, LA-XX, WHT
34	27-0641	5	TER, TAB, MALE, .187"
35	264663-003	2	ASY, CABL, PWR, LA-XX, BRN
36	15-0500	1	SW, PWR, DPST, 6A, 250V
37	14-0633	1	CAP-CD, 33PF, 10%, 500V
38	HM14-0752	2	CAP-SF, .47UF, 5%, 50V
39	15-16767	2	POT, TRIM, 50K, M, REVD, LOG
40	14-0756	2	CAP-CD, 120PF, 10%, 100V
41	13-0744	4	LED, T1, RED
42	15-16769	2	POT, TRIM, 20K, M, LIN
43	13-0190	2	DIOD, ZR, 1N4735A, 6.2V, 5%, 1
44	15-16763	2	POT, 9MM, W/SW, 50K, 10%, LIN
45	HM13-0414	4	XSTR, TO92, PNP, 2N3906
46	15-16761	4	POT, 9MM, 100K, 10%, LIN
47	HM13-0413	4	XSTR, TO-92, PNP, 2N3904
48	15-16760	10	POT, 9MM, 10K, 10%, LIN
49	52920-001	4	POT, 9MM, 50K, 10%, REV'D, "D"
50	HM14-0576	2	CAP-EL, 22, 25V, 85C
51	HM14-0582	28	CAP-SF, .1UF, 5%, 50V
52			
53			
54	13-0514	2	XSTR, LM394CN, DUAL
55	13-0217	12	IC, TL074, QUAD, OP-AMP
56	15-0491	4	POT, TRIM, 100K, M, HZL, MT
57	14-0863	2	CAP-EL, 10UF, 20%, 25V, RD, NP
58	50901-004	6	CAP-PF, 470PF, 5%, 50V, R
59	14-0635	4	CAP-CD, 100PF, 10%, 500V
60	13-0737	2	IC, VCA, SSM-2018
61	HM14-0585	6	CAP-CD, 47PF, 5%, 500V, NPO
62	15-0481	2	POT, TRIM, 2K, M, 5W, HZ
63	14-0636	2	CAP-CD, 470PF, 10%, 500V
64	15-0496	4	POT, TRIM, 500, M, HZMT, CRMT
65	13-0304	2	IC, TL072CP, OP-AMP, DUAL
66	14-0753	6	CAP-MP, 1UF, 10%, 63V
67	27-0419	2	CONN, PCMT, 3P, FEM

# UREI LA-12

## COMPONENT EXPLODED VIEW

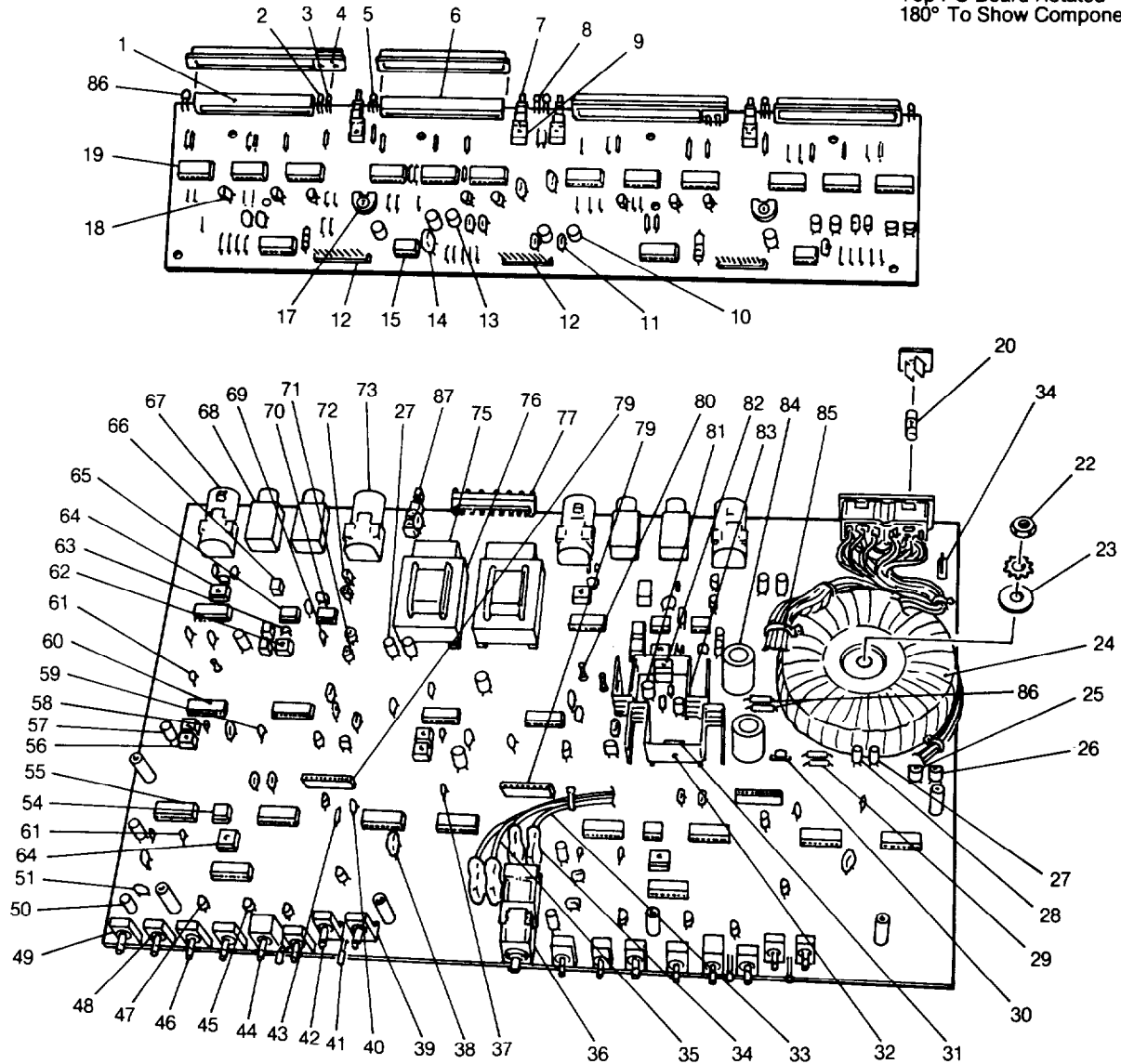


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## CIRCUIT BOARDS

Top PC Board Rotated  
180° To Show Components



ITEM	PART NO.	QTY	DESCRIPTION
68	27-0367	4	JACK, PHONE, .250, DIA, 90DEG
69	14-0767	4	CAP-CD, 22PF, 5%, 1KV
70	S500-1513	2	IC, LM833N
71			
72			
73	27-0420	2	CONN, PCMT, 3P, MALE
74			
75	15-0400	2	RLY, 24V, DPDT
76	16-16825	2	XFMR, OUT
77	27-0625	2	BAR-STP, 5POS, .325" CTR
78			
79	27-0632	4	SKT, STR, 9 POS, .1" CTR
80	52924-001	6	TEST-POINT, PCMT
81	14-0603	4	CAP-EL, 100UF, 20%, 25V, RD
82	13-0207	2	IC, 7918CT, RGLR, 1A

ITEM	PART NO.	QTY	DESCRIPTION
83	36-0552	4	HTSK, T0220, W/MNTG. TAB
84	14-0523	4	CAP-EL, 1000UF, 50V, RD
85	256207	9	TIE-WRAP, 4", BLK
86	278344-001	2	FUSE
87	15-0494	1	SW, DPDT, ALT-ACT, PCMT
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