



Calibration instructions for the UREI type 1176LN peak limiter

1. Inject .775 Volts, 1 KHz into the limiter.
2. Turn Trimpot R 81 full CCW.
3. Set input and output level controls of the 1176 LN to "24" (mid rotation).
4. Set attack control full CCW and release control full CW, meter to "GR" and compression ratio to 20:1.
5. Adjust output control for a reading of +11 db (re.775V) as read on an external meter.
6. CAREFULLY adjust R 81 for an output of +10 db.
7. Set attack control full CW.
8. Set output control for 0 db (re .775V) as read on the external meter.
9. Set attack control full CCW.
10. Set input control for +10 db as read on the external meter.
11. Set attack control full CW.
12. Set output control for 0 db as read on the external meter.
13. Repeat from step #9 until a swing of +10 db/0 db is achieved.
14. Set attack full CCW, and meter to "GR".
15. Adjust the front panel trimpot (accessed through a hole located between the input and output controls) until the internal meter reads zero.
16. Set attack control full CW.
17. Set R 54 until the internal meter reads -10 db.
18. Set attack control full CCW.
19. Adjust the front panel trimpot for zero.
20. Repeat from step #16 until the internal meter reads zero and -10 with the attack control CCW and CW respectively.
21. Set attack control full CW.
22. Set meter switch to "+4" and confirm that the internal meter reads -4 db.
23. Set meter switch to "+8". The meter should read -8 db.

METER CALIBRATION
1176
WITH DISCRETE COMPONENTS
IN METER CIRCUIT

SETUP:

NO SIGNAL
DISCONNECT R44
CENTER (NULL) POT. R75
VOLTMETER ACROSS R74

CALIBRATION:

(A) ZERO 1176 "GR" METER WITH R71 (THRU FRONT PANEL
ZERO ADJ.

(B) ADJUST "NULL" POT. FOR .00 VOLTS ACROSS R74. REPEAT
A AND B UNTIL BOTH CONDITIONS ARE MET.)

(C) ADJUST LIMITER FOR 10DB OF LIMITING, AS INDICATED
IN THE 1176 CALIBRATION INSTRUCTION.

(D) SELECT RESISTOR R44 FOR CORRECT TRACKING, IT MAY
BE NECESSARY TO REPEAT STEPS A, B, C TO FINE TUNE THE
CIRCUIT.

Power Supply C98 + C15 3W
+30 +14 -10 220-115V


2 GAIN -25 IN +20 OUT (+2dB) was 12 1/2 dB


3 CLIPPING ≈ +27-25dB

4 FREQ RESP & DIST +23 OUT 20-20KHZ ≈ 1dB .3%

5 CMRR ≈ -40dB

6 NOISE ≈ -60dB P IN P OUT = -55dB was ≈ -61dB

7  -10 IN 1KHZ

 = +11dB OUTPUT

with R81 TURN CW UNTIL OUTPUT DROPS 1dB (≈ 10dB)

SW. ATTACK POT Q note 10dB LIMITING (if NOT adjusted with wiper POT) AL meter

TURN SW. ATTACK POT OFF Q OFF. WIPER +10 adjusted with INPUT POT

8 WITH (R55 hole on F.P.) adjust meter to 0

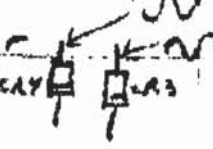
ATTACK POT Q note should read -10dB limiting

IF NOT adjusted with R54 check several times

9 MEASURE VOLTAGE ON WIPER of R81 should read -1.5 TO 2V.
0.9 TO 2V

10 CHECK +4. ± .5dB
+8

11 adjust INPUT TO 10dB LIMITING and OUTPUT POT OUTPUT TO +15dB

12 measure the AL voltage at  MUST be symmetrical
≈ 4VRMS CAP Q1 Q2
± .5V VARY ± .5V

10: ~~10dB~~ 20 GR. -10dB 1KHz +10dB

OUTPUT adjusted with OUTPUT POT

with INPUT POT adjust meter on UNIT to read -1 (1dB limiting)

12:1	Meter	= -2 dB	(2dB)
8:1	Should Read (UNIT)	= -2 1/2 dB	withing 1/2 dB, 3
4:1		= -4 dB	4.

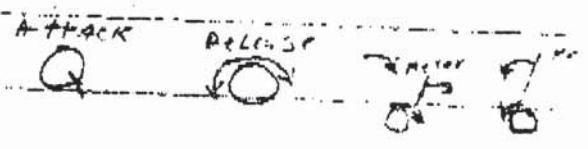
11 WITH OUTPUT POT decrease out 1dB - Now should read +9 dB (20 increase INPUT 20dB 20:1 = 9.9dB +15)

-1dB limiting INPUT POT 12:1 = 9.3dB

+9 out OUTPUT POT 8:1 = 9.2dB 1/2dB 9.4

20dB out INPUT POT 4:1 = 9.5dB

-10dB +10 out S.D.C. limiting



12. 500HZ -10dB IN 10dB limiting 20:1 Q Q Q

+10dB OUTPUT with R16 adjust DIST. TO MINIMUM Q Q Q

LESS THAN 25% = .088 = .15

CONTAMINATION

18: ATTACK OFF Meter +4 (meter on UNIT. F.P.) = 0. Breathe on

Q1

20:1 = 10.1 dB

12:1 = 10 dB

8:1 = 10.2 dB

4:1 = 11 dB

20dB S.D.C. limiting



Release