LOU-GED-115D2277-A

ReFeRence P3K-AL-0401-A01

A. **Power Inputs**

1. +22 VDC to pin 37
2. -22 VDC to pin 41
3. Common to pin 39

B. **Power Supplies**

1. VTP1 = 15.7 +/- 1 VDC
2. VTP2 = -15.7 +/- 1 VDC          VR1 Full cw
3. I Pin 37 = 63 +/- 15 ma DC
4. I Pin 41 = 62 +/- 15 ma DC

C. **IC1** (VIOLET)

1. VTP50 = 1.45 to 1.9 VDC    1.63    VR8 cw
   VTP50 = -7.5 to -6.2 VDC   -6.87   VR8 ccw

2. Gains
   (VIOLET)
   a. Adjust VR8 for VTP50 = 0 VDC
      Ground pin 33
      +1 VDC to pin 35 (VR9 ccw)          TP7 = -5 VDC +/- .1

   b. Move input to pin 36 = + 5.00 VDC   TP7 = -2.55 to -2.48 VDC

   c. Move input to pin 33 = + 1.00 VDC   Move ground from pin 33
                                              to pin 35.
      TP7 = -4.9 to -5.1 VDC

   d. Move input to pin 32 = +5 VDC       TP7 = -2.48 to -2.55 VDC

   e. Remove voltage from pin 32.     Ground pin 33.
         VR8 cw   TP7 = -1.56 to -2.04 VDC
         VR8 ccw  TP7 = 6.00 to 7.00 VDC
         Set VR8 = 0.00 VDC

D. **Meter Amplifier (IC3)**

1. VTP53 (Black) = -22 VDC (VR10 cw)
   VTP53          = -5.8 to -6.85 VDC (VR10 ccw)

2. Attach a milliammeter from pin 24 to ground.
   Ground TP5 and null IC3  TP4 = 0.00 VDC
   Insure that VR50 runs TP4 through zero.
   Remove ground at TP5.

3. Apply 10.00 VDC to pin 6.
   Amp meter = 1.5 to 1.6 ma DC (VR5 cw)
   Amp meter = 0.82 to 0.92 ma DC (VR5 ccw)
   Remove amp meter from pin 24.

E.  Summing Amplifier (IC2)

1.  Voltage Ranges

    a.  VTP60 (Violet) = 0 VDC   (VR4 ccw)
        VTP60         = -5.00 to -6.00 VDC (VR4 cw)

    b.  VTP55 (Green) = 0 VDC (VR7 ccw)   (VR53 ccw)
        VTP55 = -12 to -14.1 VDC (VR7 cw)

    c.  VTP51 (White) = 5.42 to 5.58 VDC (VR1 ccw)  (VR2 cw)
        VTP51         = 19.02 to 19.49 VDC   (VR1 cw)
                              (8.26)

        VTP61 should read one diode drop less than VTP51 = approx. .6 VDC.

    d.  VTP64 (Brown) = 0 VDC  (VR3 ccw)   (VR54 ccw)
        VTP64 = -14.17 to -15.17 VDC (VR3 cw)

2.  Amplifier Gains

    a.  Release input to pin 6.

    b.  VR7 = ccw
        Ground- TP63 (Blk.) TP66 (Orange) TP62 (Red) TP67 (Blue)
        TP57 (Blue) to TP52 (Red) - Shorted
        TP58 (Yellow) to TP59 (Gray) - Shorted
        Set VTP61 to 5.00 VDC with VR1
        Then  WHITE
        VTP3 = -4.05 to -4.21 VDC   (VR2 cw)
        VTP3 = -4.06 to -3.87 VDC   (VR2 ccw)

        Remove all grounds TP63, TP66, TP62, TP67, and the short TP57 to
        TP52.

        Ground TP7, TP54 (Brown), TP61 (White), TP5, TP66 (Orange),
        TP65 (Green).

        Input 1 VDC to TP56 (Orange).
        VTP3= -1.23 to -1.27 VDC (VR55, VR6 ccw)
        Reduce input TP56 = .2 VDC.
        VTP3 = -9.54 to -11.86 VDC (VR55, VR6 cw)

        Put a negative voltage into TP56 until TP3 stops changing.  Final
        value (limit) is 5.79 to 5.96 VDC. 5.93 Input will be about -4.5 VAC. VDC
        Pull jumper between TP58 and TP59.  Voltage at TP3 will be about -4.59
        0.33 VDC.   .33v

        Replace jumper TP58 to TP59.

c.  Remove Grounds.
    Then
        TP57 to TP52 shunted
        TP66, TP63, TP61 grounded.

*ORANGE   BLACK   WHITE*

*BROWN* (a)  Input +5.00 VDC to TP56. *ORANGE*          *GREEN*
       (b)  Set TP54 for -5.00 VDC with VR7.  (Note TP55 is one diode drop
            more than TP54 = approx. -5.7 VDC.)
       (c)  Read TP3 = -0.97 VDC +/- .14.  *-.95*
       (d)  Set VR53 full cw.  TP3 = -4.025 to -4.38 VDC.  *-4.06*
       (e)  Read TP7 = approx. 0 VDC (no inputs).
       (f)  Set VR7 full ccw.
       (g)  Set TP7 for +5.00 VDC with VR8.  Remove +5 VDC from TP56.
       (h)  Set VR51 full ccw.
       (i)  Read TP3 = -9.85 to -10.25 VDC.  *-10.1*
       (j)  Set VR51 full ~~ccw~~ *cw*.
       (k)  Read TP3 = -.342 to -.432 VDC.  *-.372*
       (l)  Read TP54 = approx. 0 VDC.
       (m)  Remove grounds. *RED   BLUE*
       (n)  Ground TP61, TP62, TP67.  *REAPPLY   5VDC   to TP56*
       (o)  Set TP65 for -5.00 VDC with VR3.
       (p) *REAP* Set TP63 *BLACK* = approx. 0 VDC.
       (q)  VR54 full cw.
       (r)  Read TP3 = -0.75 to -1.05 VDC.  *-1.42   -1.39*
       (s)  VR54 full ccw.
       (t)  TP3 = -4.5 to -4.82 VDC.   *-4.63   -4.59*
       (u)  Set VR3 full ccw.  Set VR52 cw.
       (v)  Move the +5.00 VDC input from TP56 to pin 6.
*GREEN* (w)  TP65 = approx. 0 VDC.
       (x)  TP3 = -9.85 to -10.25 VDC.  *-10.1*
       (y)  VR52 full ccw.
       (z)  TP3 = -0.338 to -0.435 VDC.  *-.37*


Remove all power input from card.



End of Test