

E. CALIBRATION

507/521

1. Test and Calibration -- Instruments

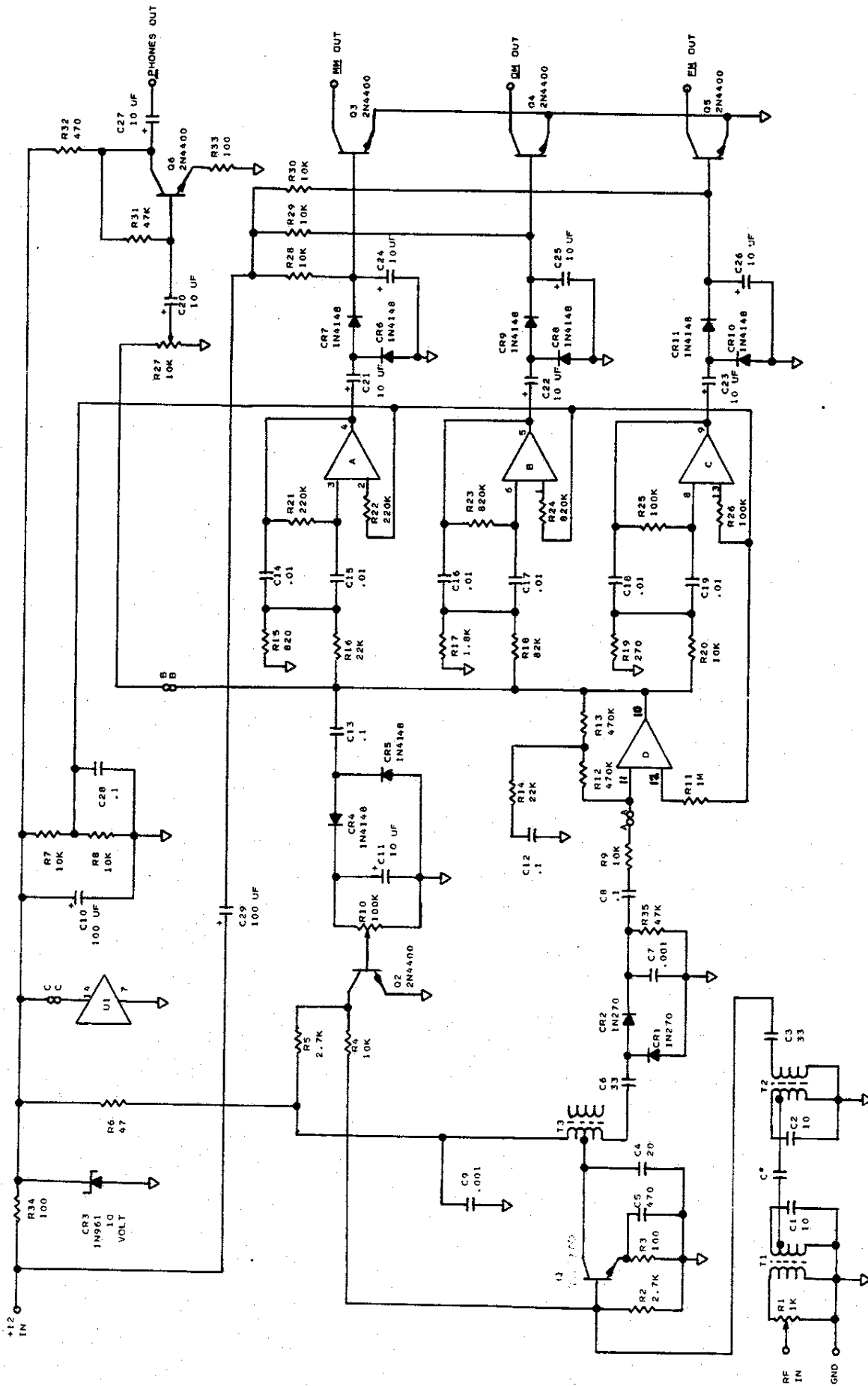
a. This section may be used for calibration with instruments. For calibration without instruments, refer to either section E.2. or E.3. The instruments required are:

1. Marker Beacon Test Set (RST-701) (or 2, 3 and 4 below)
2. 75 MHz Signal Generator with external modulation capability (H.P. 608, Meas. Corp. 80 or equivalent)
3. Audio generator capable of modulating "2" at 400, 1300, 3000 Hz (H.P. 200 AB or equivalent)
4. Frequency counter (+/- .01%) for setting "2" on frequency
5. +12 volt power supply @ 100 mA maximum
6. A.C. voltmeter (Simpson 260 or equivalent)

b. Connect the instruments as shown in Drawing #521-8010.

c. Set the instruments as follows:

1. Set the signal generator to exactly 75.00 MHz, 90% 400 Hz modulation, approximately 100K microvolts output (-10dbm). Adjust R10 to midrange.
2. Align T1, T2 and T3 for maximum output on the meter (maximum audio output).
3. Reduce the input as far as possible while still showing a readable output level.
4. Repeat steps 2 and 3 until no further improvement is noted. Reset the signal generator to 100K microvolts and adjust R10 so that only the blue lamp is lit. Adjusting the signal generator for a level on the output meter of .5 volts RMS with R1 and R27 fully clockwise, the input level should be approximately 300 to 800 microvolts.
5. At a generator output of 2000 microvolts check the blue light for full brightness. Change the modulation to 1300 Hz and then 3000 Hz and note full brilliance of the orange and white lamps respectively.
6. With R1 and R27 fully clockwise and a generator level of 2000 microvolts, check for a minimum 2.5 volts RMS at the audio voltmeter.
7. With the generator level at 1000 microvolts, set R1 for an audio output of 2.0 volts RMS and note that the lamp is half extinguished.



1. C* IS A PRINTED MICROSTRIP CAPACITOR ETCHED DIRECTLY ONTO THE PRINTED CIRCUIT BOARD. THE VALUE AT 75 MHZ. IS APPROXIMATELY 0.5 PF.

2. ALL RESISTORS 1/4W 5% CARBON FILM, CAPACITORS > 1 IN PF; CAPACITORS < 1 IN UF UNLESS NOTED

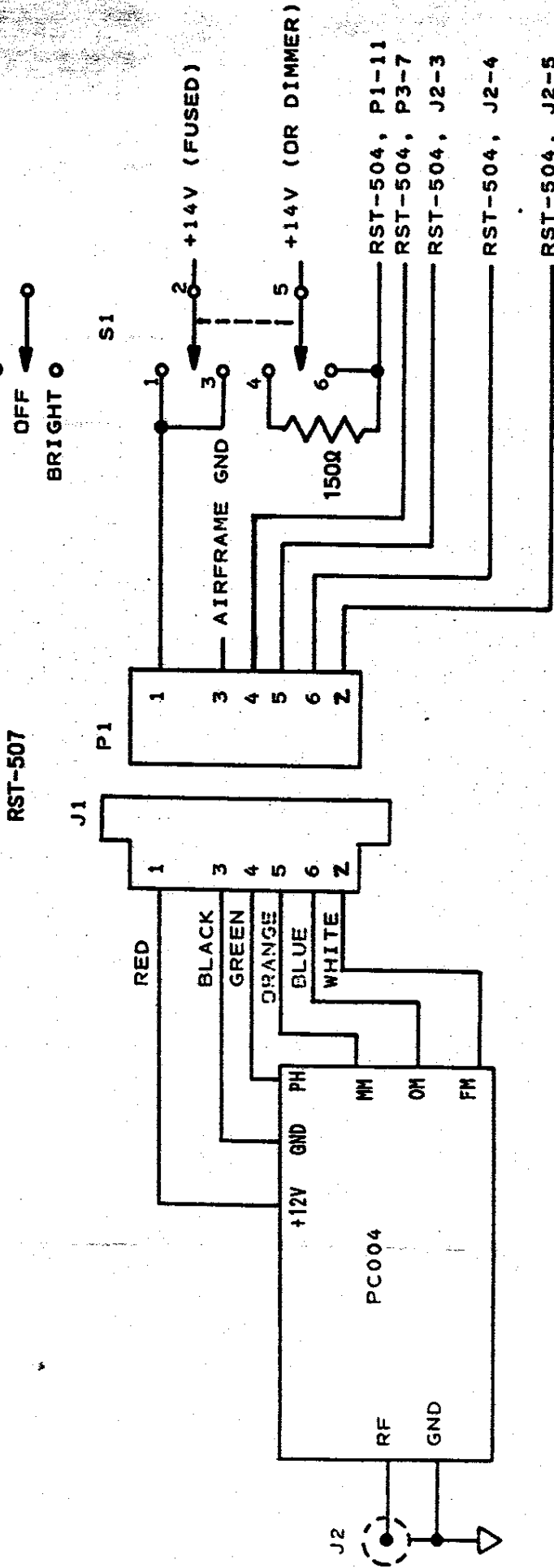
3. U1 (SECTIONS A, B, C, D) IS AN MC3401/LM3900 QUAD DP-AMP.

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REV. A: CHANGED FROM 12-PIN TO 6-PIN CONNECTOR
EFFECTIVE BEGINNING WITH S/N 1671 - 5/1/91

S1 TYPICAL:

DIM ○
OFF ←
BRIGHT ○



Drawing Name: RST-507 REMOTE MOUNT ELECTRICAL
INSTALLATION AND INTERFACE WITH RST-504

Drawn By: TLP

Approved By: *JAM*

Revised By: *JAM*

Scale: 28FEB86

Date: 6 MAR 86

Date: 2-15-93

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Drawing Number:
521-3062-A