



H. H. SCOTT, INC.

111 POWDER MILL RD., MAYNARD, MASS., 01754

SERVICE BULLETIN FOR MODEL 315B SOLID STATE FM STEREO TUNER

SPECIFICATIONS

Usable Sensitivity (IHF)
Cross Modulation Rejection
Signal to Noise Ratio
Total Harmonic Distortion
Frequency Deviation
Frequency Response
Capture Ratio
Selectivity
Hum
AM Suppression
Separation
Audio Output (100% modulation)
Tuning Range
Accuracy of Calibration

2 uv
80 db
60 db
0.8 %
less than .02%
* 50-15,000 cps $\pm$ 1 db
2.5 db
45 db
-65 db
55 db
40 db
2.0 v
87-109 mc
0.5 %

Output Impedance
Recommended Load Resistance: greater than
Recommended Cable Capacitance: less than

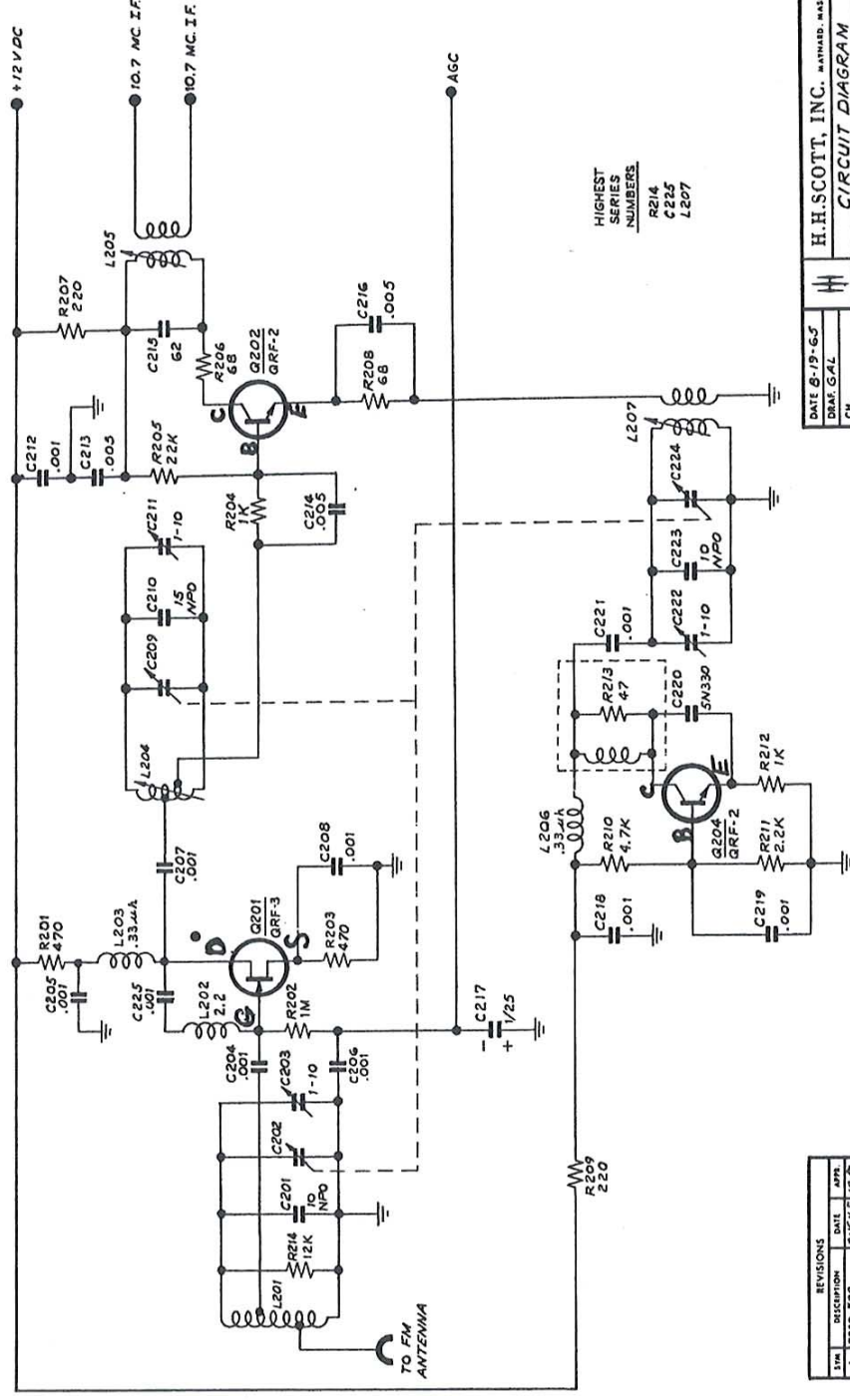
25K ohms
400pf

Range of Line Voltage and Frequency
Power Consumption - AC ONLY - DO NOT OPERATE

105-125v/50-60 cps
6 watts @ 117 v

WITH
DIRECT CURRENT

* This is limit of F.C.C. specifications. ALL SCOTT tuners have far wider frequency response.

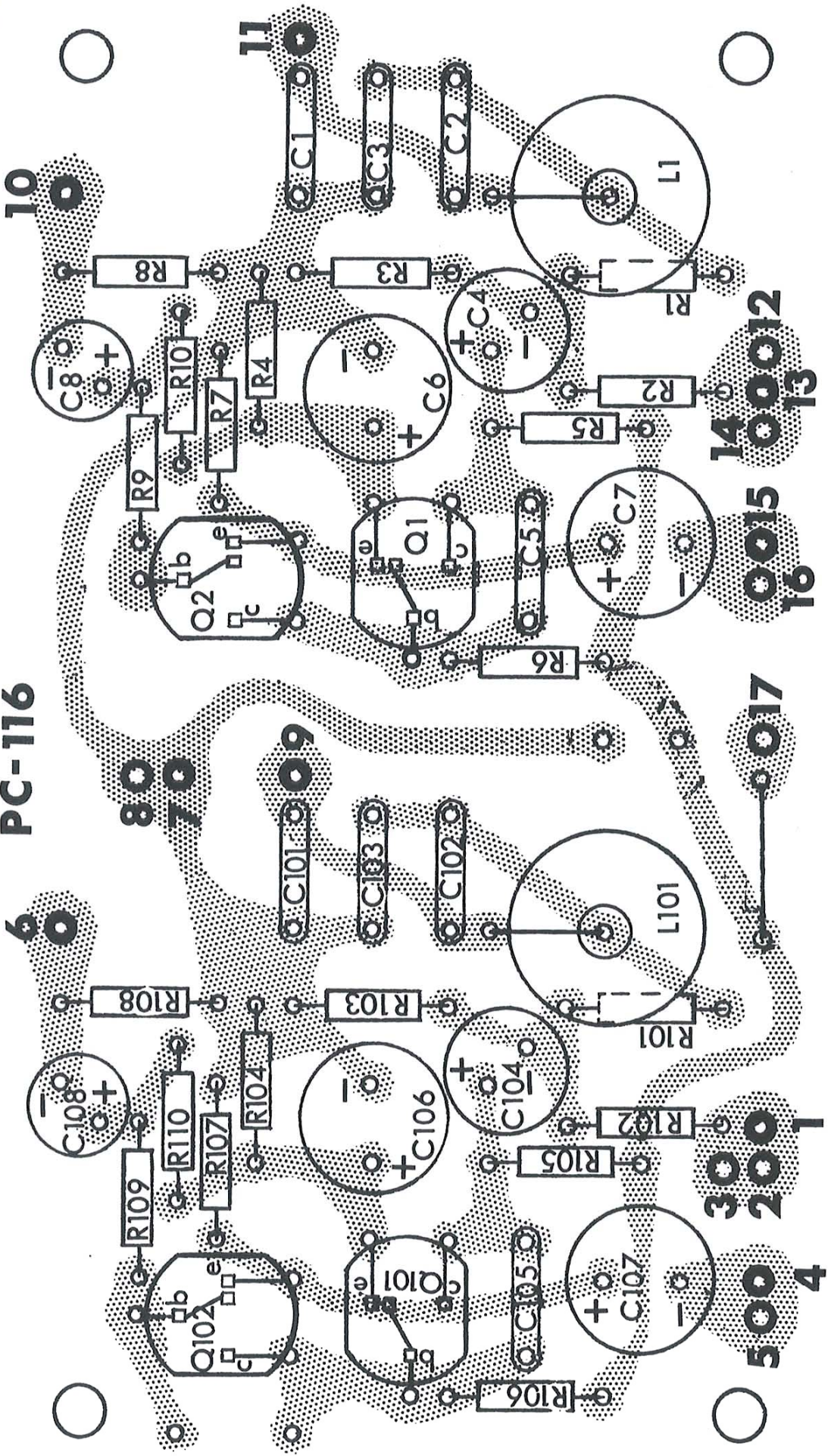


REV.	DESCRIPTION	DATE	BY
1	PLCD 22	7-15-66	MS
2	PLCD 25	8-1-66	MS
3	ECO 1302	7-15-66	MS

DATE 8-19-65	H.H. SCOTT, INC. MAYNARD, MASS.
DRAWN G.A.L.	CIRCUIT DIAGRAM
CHK. G.A.L.	SCALE: 1" = 1"
ENG. G.A.L.	PT. 1 OF 1
MOD.	2-FM-15-C1

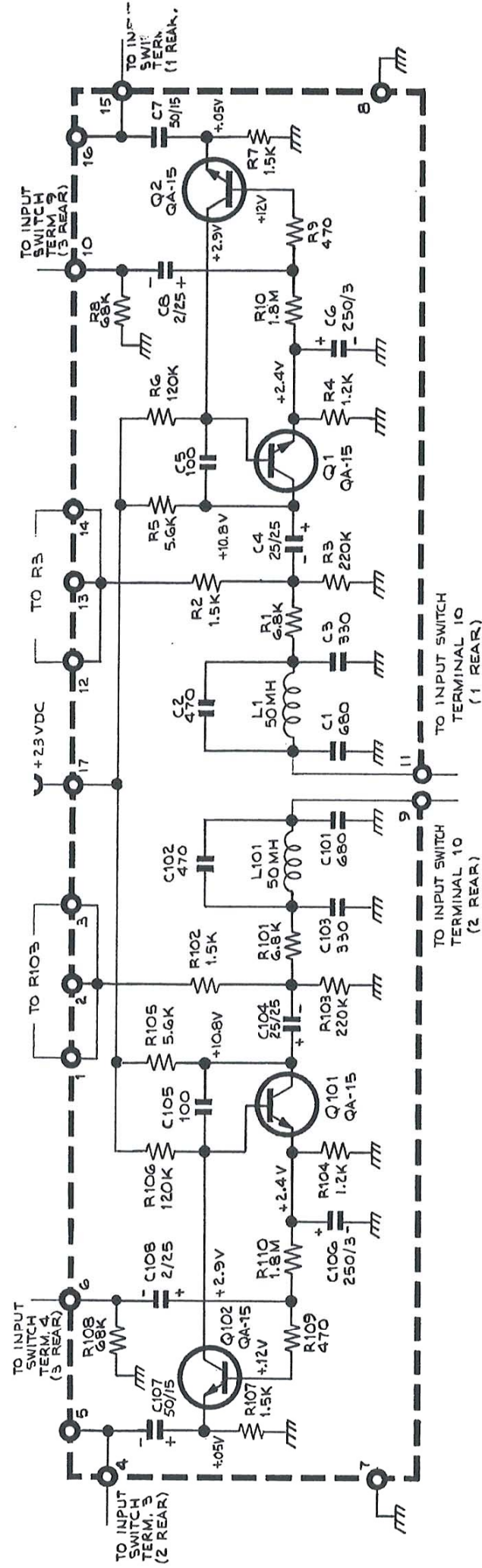
Q1, Q101 — 2N2925, or 2N3711
Q2, Q102

PC-116



PREAMP

Z-PC-P-8 00



PREAMP Z-PC-P-8

00

NOTES:

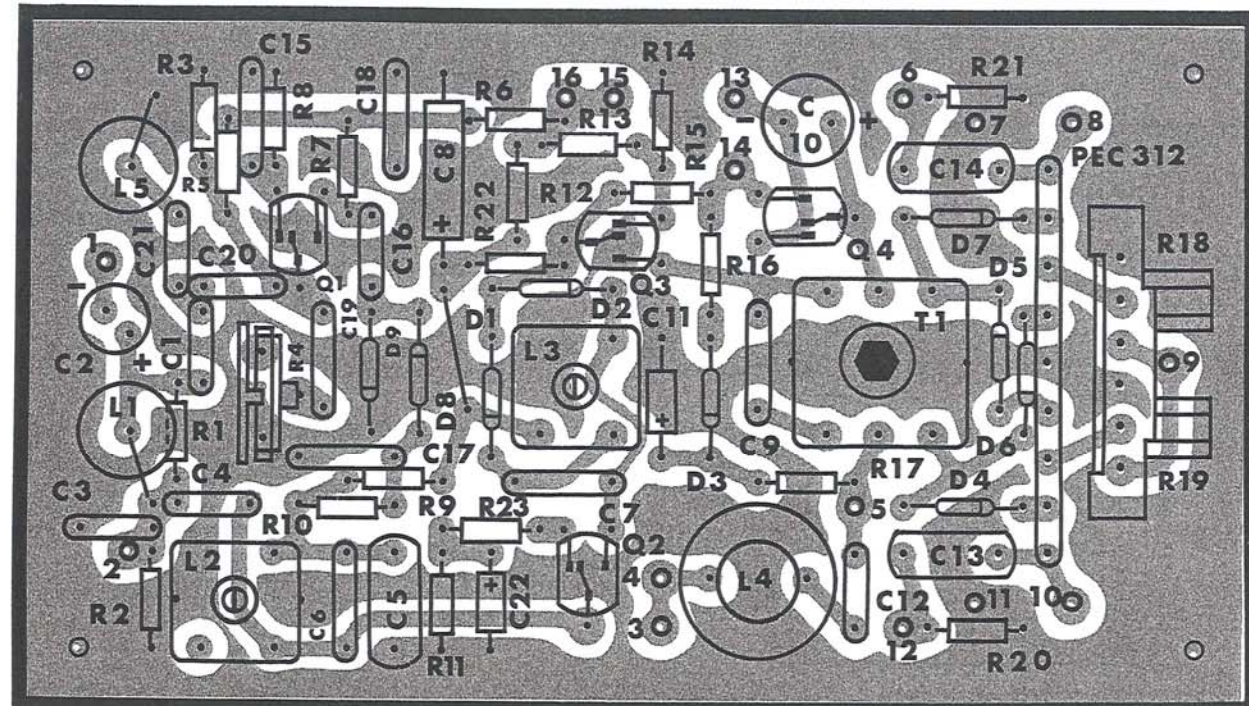
1. UNLESS OTHERWISE SPECIFIED: RESISTORS IN OHMS AND 1/4 WATT CAPACITORS IN MFD.
2. VOLTS DC $\pm 15\%$ MEASURED WITH 20K Ω /V.V.O.M NO SIGNAL AND 117V LINE
3. ARROW HEADS INDICATE MAIN SIGNAL PATH.

HIGHEST SERIES NUMBERS

C8	C108
R10	R110
Q2	Q102
L1	L101

DATE 8 NOV 66	H	H.H. SCOTT, INC. MAYNARD, MASS.
DRAW. L. McGRATH		
CH.		
ENG. <i>Sub</i>	SCALE: —	CIRCUIT DIAGRAM
PROD.	SHEET OF	
		Z-PC-P-8
		REV 0

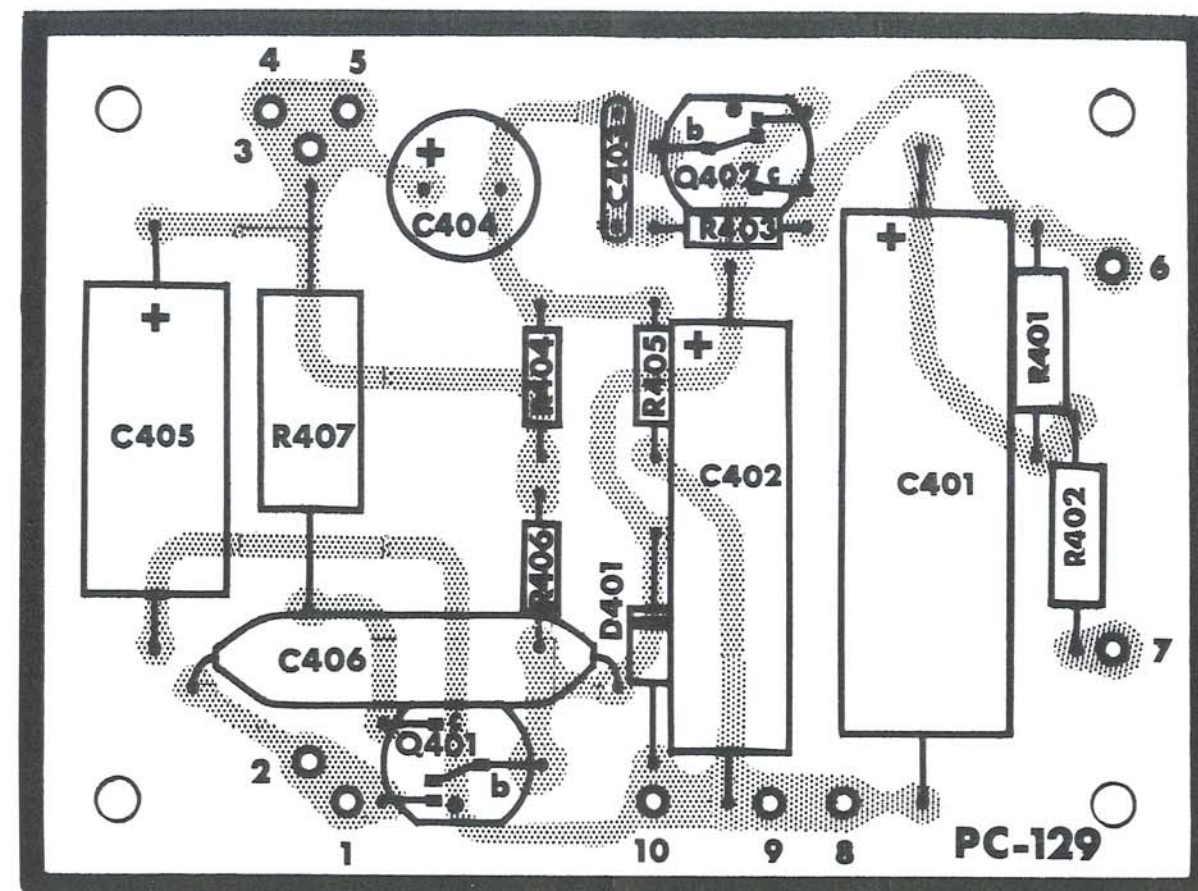
Q1-2N2924
Q2-2N2925 or SE4010 or QA-15
Q3-2N3964 or 2N4249 or 2N4250
Q4-2N3567



AUTOMATIC MULTIPLEX DEMODULATOR Z-PC-MX-14

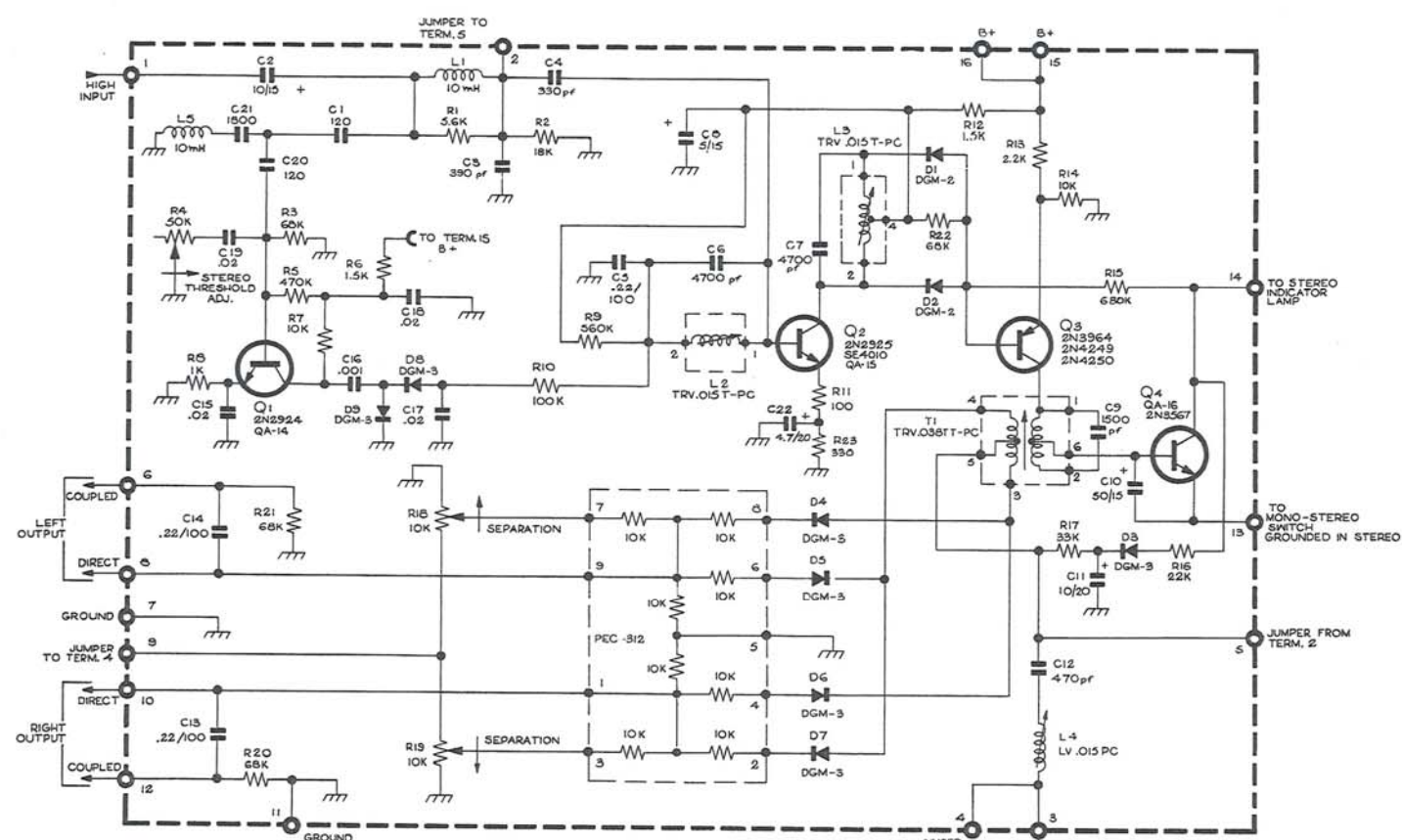
01

Q401, Q402 - QA-10



POWER SUPPLY Z-PC-PS-6

00

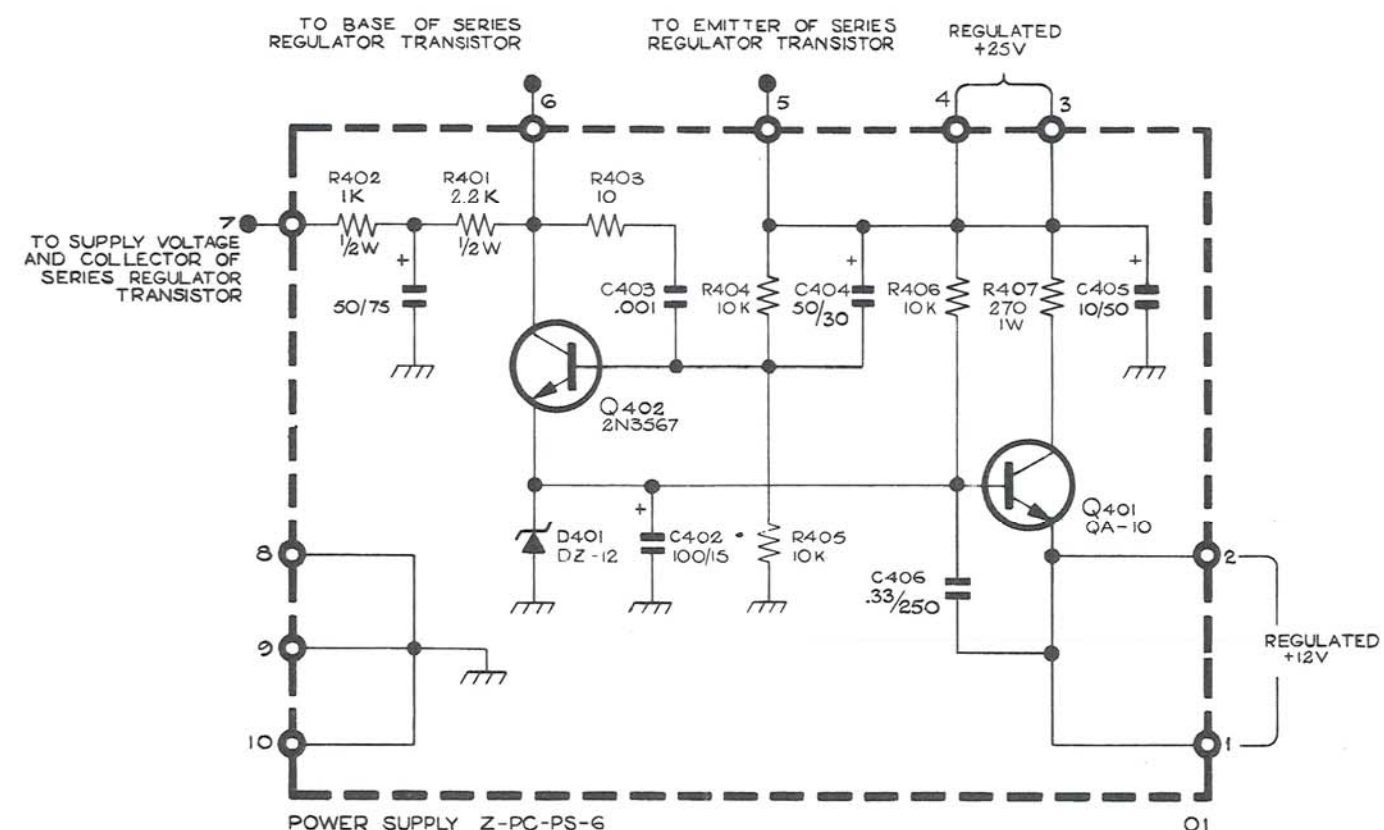


AUTOMATIC MULTIPLEX DEMODULATOR Z-PC-MX-14

02

NOTES:
1. UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS $\pm 10\%$
CAPACITANCE IN MFD'S RESISTORS $\frac{1}{4}$ WATT.
2. ARROWS ON POTENTIOMETERS INDICATE CW ROTATION.

DATE 11-2-66	H.H. SCOTT, INC. MAYNARD, MASS.
DRAW. 8	CIRCUIT DIAGRAM
CH.	
ENG. <i>[Signature]</i>	SCALE: NONE
PROD.	SHEET 1 OF 1
	Z-PC-MX-14
	REV 3

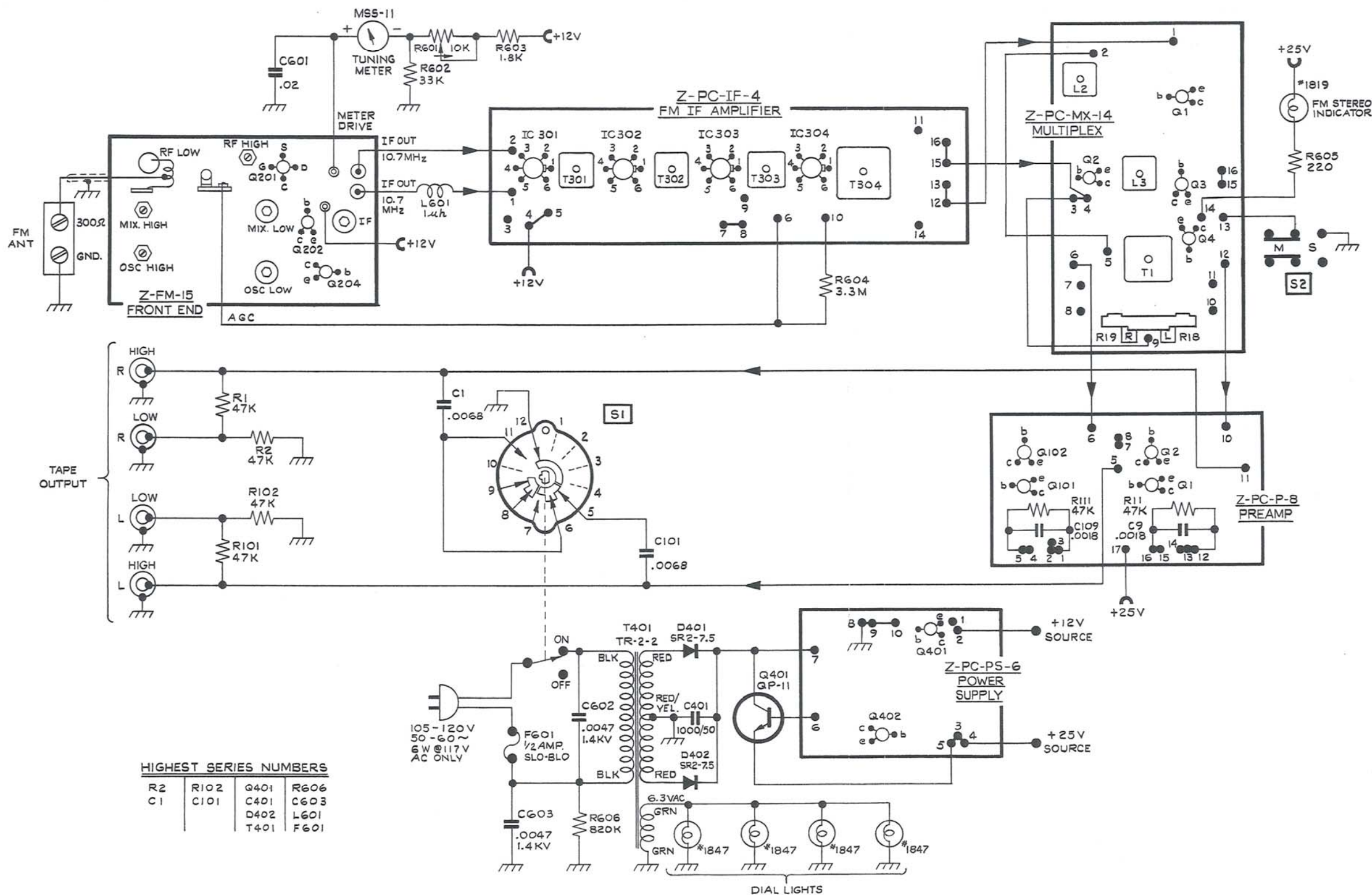


POWER SUPPLY Z-PC-PS-6

01

NOTES:
1. UNLESS OTHERWISE SPECIFIED
RESISTANCE IN OHMS $\pm 10\%$
CAPACITANCE IN MFD'S
RESISTORS $\frac{1}{4}$ WATT

DATE 12-8-66	H.H. SCOTT, INC. MAYNARD, MASS.
DRAW. 8	CIRCUIT DIAGRAM
CH.	
ENG. <i>[Signature]</i>	SCALE: NONE
PROD.	SHEET 1 OF 1
	Z-PC-PS-6
	REV 1



VOLTAGES

UNLESS OTHERWISE SPECIFIED:

ALL VOLTAGES POSITIVE DC $\pm 15\%$ MEASURED WITH 20 K Ω /V VOM + 117 VAC LINE 300 OHM LOAD ON EXTERNAL ANTENNA TERMINALS TUNER OFF STATION + FUNCTION SWITCH IN "NORMAL" POSITION, SELECTOR SWITCH IN "MONO" POSITION. *VOLTAGES MEASURED UNDER SAME CONDITIONS AS ABOVE ONLY SELECTOR SWITCH IN "STEREO" POSITION WITH STEREO SIGNAL FED INTO TUNER.

Z-FM-15	GATE	DRAIN	SOURCE
Q201	.025V	1.05V	9.2V
Q202	.05V	.45V	10.8V
Q204	2.6V	3V	10.2V

Z-PC-IF-4	LEAD	VOLTS	LEAD	VOLTS
IC301	LEAD 1	12V	LEAD 4	0V
IC302	LEAD 2	11.7V	LEAD 5	1.4V
IC303	LEAD 3	1.4V	LEAD 6	11.7V

Z-PC-MX-14	e	b	c
Q1	.6V	1V	5.6V
Q2	.8V	1.2V	8.6V
Q3	8V	6.5V	.8V
Q4	0V	.8V	.2V
Q1	.6V	1V	5.6V
Q2	.8V	1.2V	8.6V
Q3	9.2V	10V	0V
Q4	0V	0V	25V

Z-PC-P-8	Q1	Q2	Q101	Q102
Q1	2.4V	2.9V	10.2V	2.9V
Q2	.2V	.12V	2.9V	2.9V
Q101	2.4V	2.9V	10.2V	2.9V
Q102	.2V	.12V	2.9V	2.9V

Z-PC-PS-6	Q401	Q402
Q401	.025V	55V
Q402	24.8V	25V

AGC VOLTAGE (Z-PC-IF-4) TERM 7 + 8.
-1.5 TO -1.8V WITH 1000 μ V SIGNAL FED TO EXTERNAL ANTENNA TERMINALS + FUNCTION SW. IN "NORMAL" POSITION.

NOTES:

- UNLESS OTHERWISE SPECIFIED: RESISTANCE IN OHMS $\pm 1\%$ RESISTORS $\frac{1}{4}$ WATT, + CAPACITANCE IN MFD'S.
- ROTARY SWITCH (S1) SHOWN IN FULL CCW POSITION AS VIEWED FROM THE FRONT (POSITION 1)
- ARROW-HEADS INDICATE MAIN SIGNAL PATH.
- ARROW ON POTENTIOMETER INDICATES CW ROTATION.
- SR11, R111, C9, + C109 ADDED TO Z-PC-P-8 ASSEMBLY

6. S1-FUNCTION SWITCH (SRW-44-11)

POSITION	FUNCTION
1	OFF
2	NORMAL
3	SUB CH FILTER
4	NOISE FILTER

7. SWITCH FUNCTION

S1	FUNCTION
S2	SELECTOR

DATE 3-20-67	H.H. SCOTT, INC. MAYNARD, MASS.
DRAW. A	CIRCUIT DIAGRAM
CH. LK	SCALE: —
ENG. <i>[Signature]</i>	SHEET 1 OF 1
PROD.	DWG. SIZE D 315B-C1 REV 0