

VHF Transceiver - Circuit Diagrams.

These are arranged as 2 pages per circuit with overlap.

Pp 2-3	Receiver
Pp 4-5	Transmitter Driver
Pp 6-7	Transmitter Power Amplifier
P 8	Specification

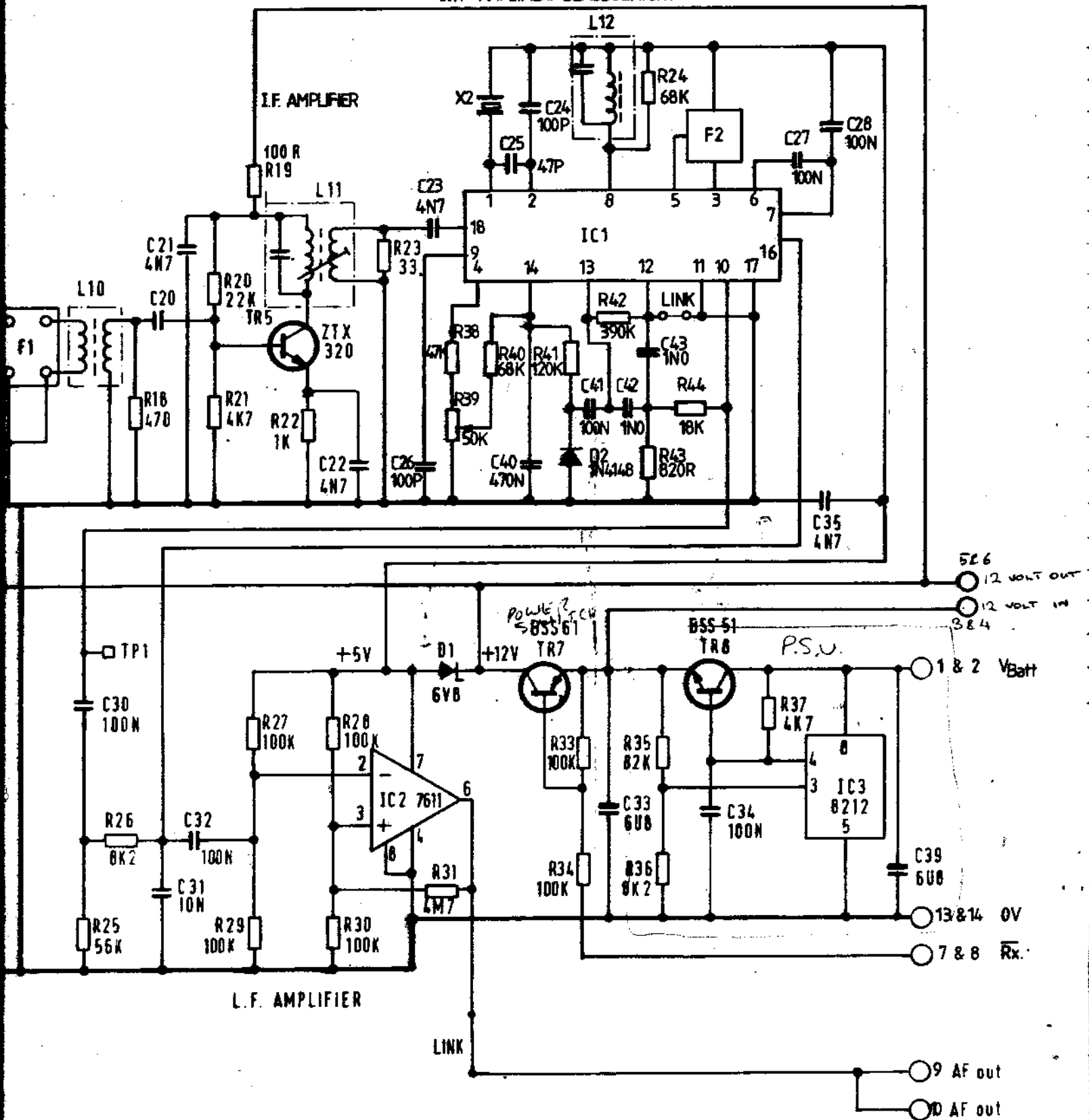
These are taken from manufacturer's data and may not represent accurately the equipment offered on account of variations in manufacture and age of equipment.

D

E

F

I.F. AMPLIFIER/ DEMODULATOR



526

12 VOLT OUT

12 VOLT IN

384

1 & 2 V Batt

13 & 14 0V

7 & 8 Rx

9 AF out

10 AF out

C2 P1048 18-3-85

B1 AC13001 16-10-84

B P1011 28 9-83

A 12-5-83

USED ON U.H.F. RADIO

TITLE RX PCB

CIRCUIT DIAGRAM

SONARDYNE LTD

STATION APPROX 4-1111 HAVANT

DIVING INSTRUMENTATION LTD

ESTD 1967 PLYMOUTH DELVON EXETER

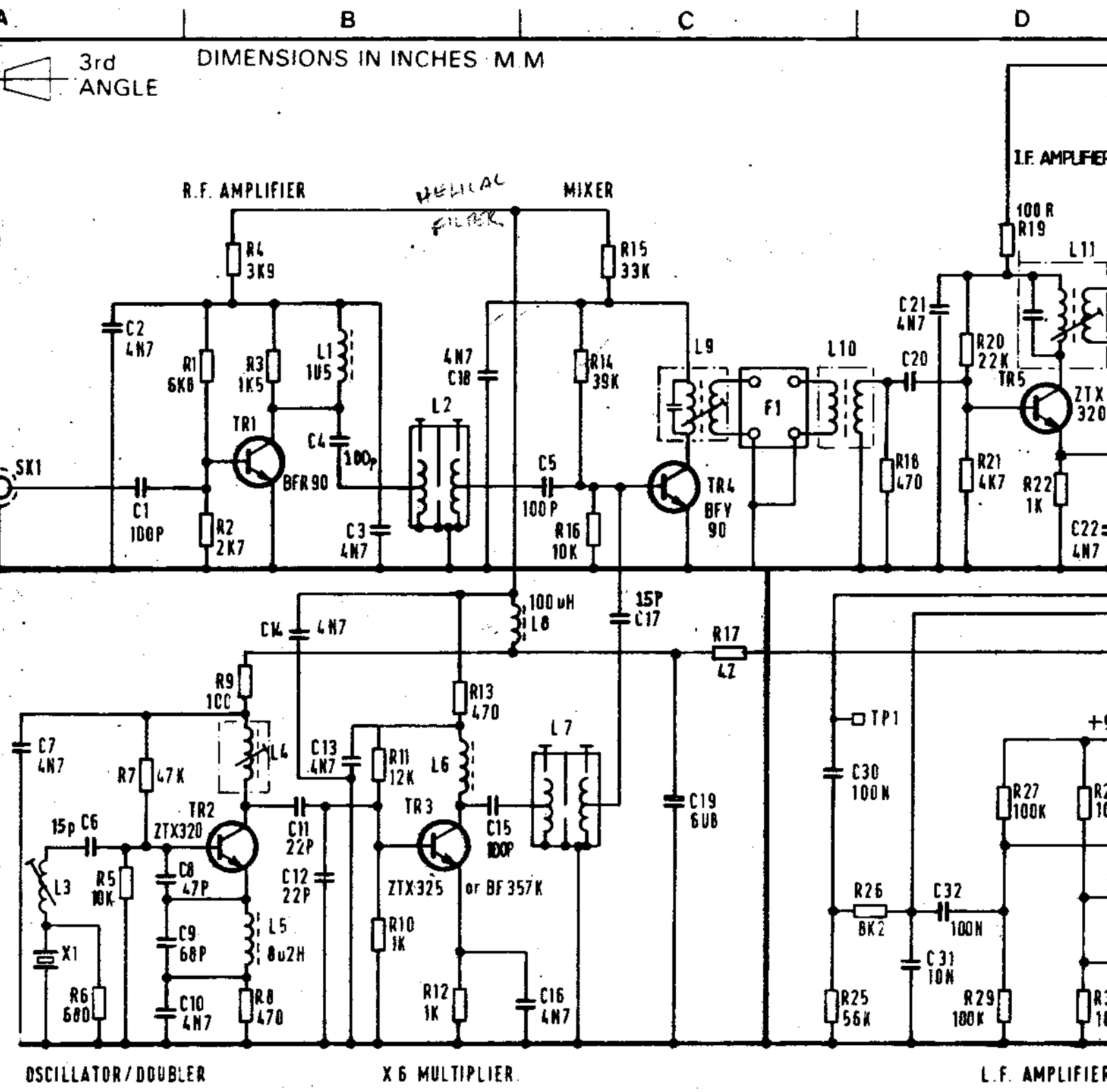
DRG
No

E3-7504-035

1
3

3rd ANGLE

DIMENSIONS IN INCHES M.M

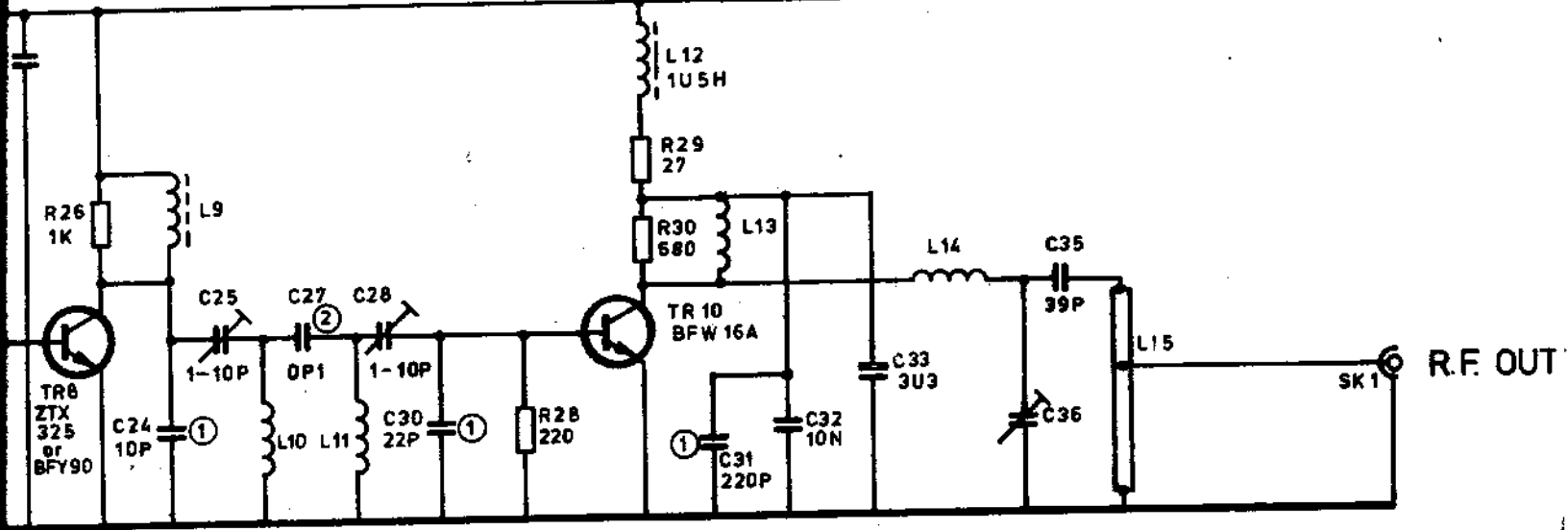
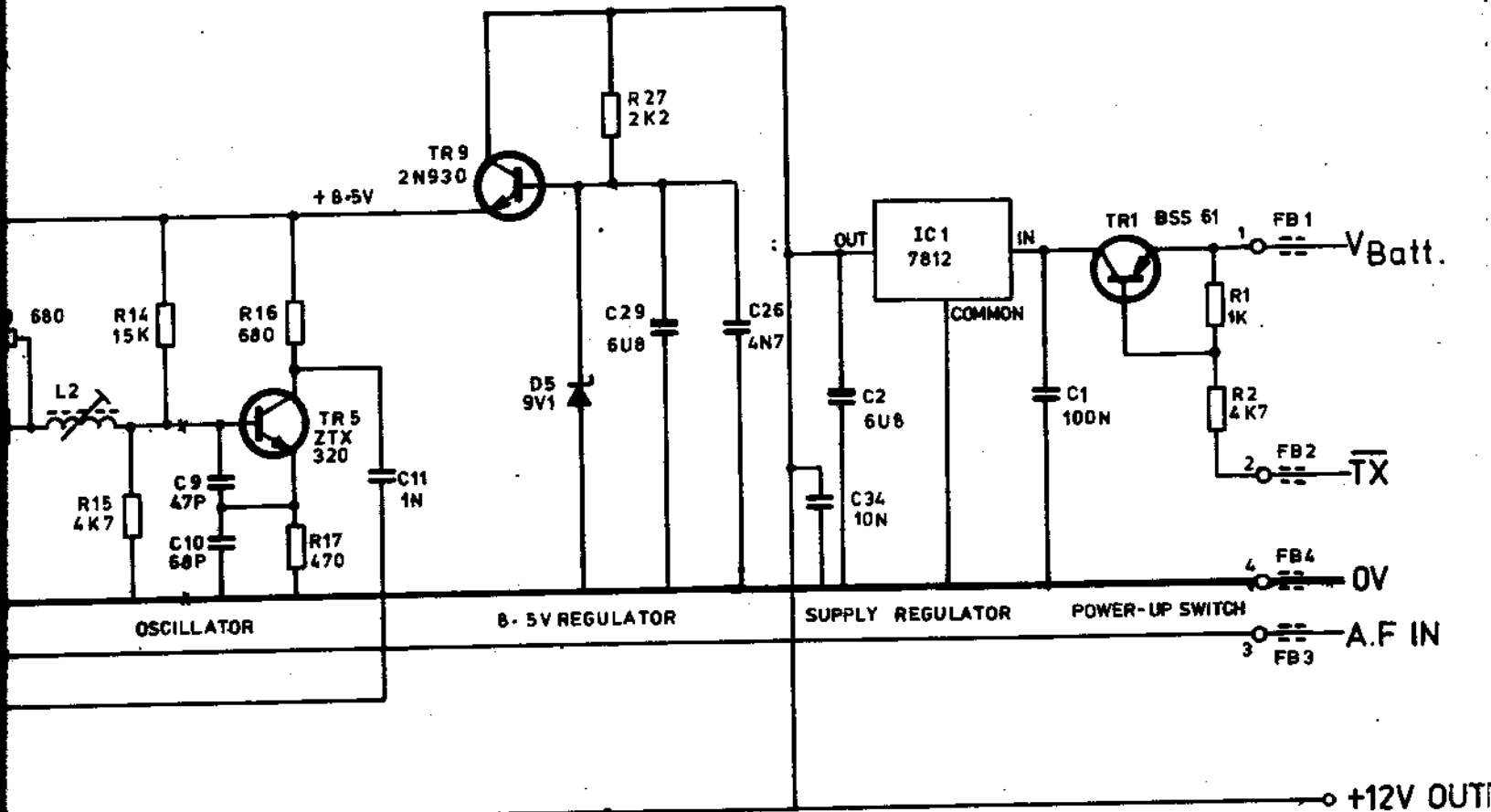


<p>TOLERANCES</p> <p>Inches mm</p> <p>1 Decimal place .016 .04</p> <p>2 Decimal places .010 .025</p> <p>3 Decimal places .005 .013</p> <p>Unless otherwise stated</p>	<p>MATERIAL</p> <p>TO B S</p>	<p>FINISH</p> <p>Remove all burrs & sharp edges</p> <p>TO SPEC</p>	<p>USED ON U.H.F. RAD</p> <p>TITLE RX PCB</p> <p>CIRCUIT DIAGR</p>
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DO NOT SCALE PRINT.

REF HOLE DIA. INCH +.005 - 0 HOLE DIA. M.M +.13 - 0

ADDITIONAL DATA



NOTES.
 1. CAPACITORS MARKED ① ARE LEADLESS CERAMIC CHIP TYPE MOUNTED ON UNDERSIDE OF P.C.B.
 2. CAPACITORS MARKED ② FORMED BY INTER-TRACK CAPACITANCE.

D1	P1016	26-2-6
C	P1011	26 9 6
B		6 6 6
A		10 5
ISS	CHANGE	DATE

burrs & sharp

USED ON. U.H.F RADIO
 TITLE.
 CIRCUIT DIAGRAM
 TX. DRIVER P.C.B.

SONARDYNE LTD.
 STATION APPROACH FLEET HANTS GU13 8QY TEL (02514) 21731 2800
 DIVING INSTRUMENTATION LTD. ESTOVER CLOSE
 ESTOVER. PLYMOUTH. DEVON PL6 7PL TEL (0752) 707935
 DRG. No. **E3-7504-036**

D

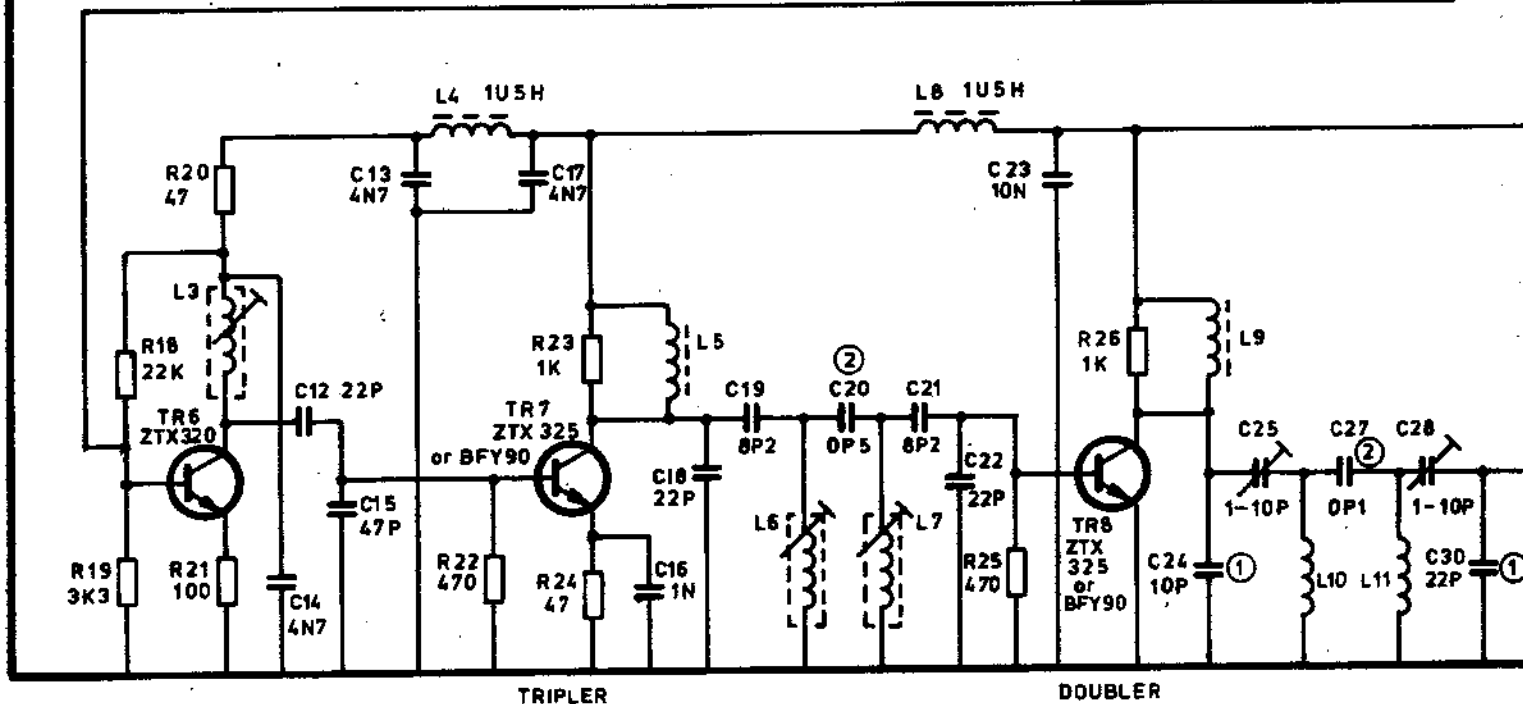
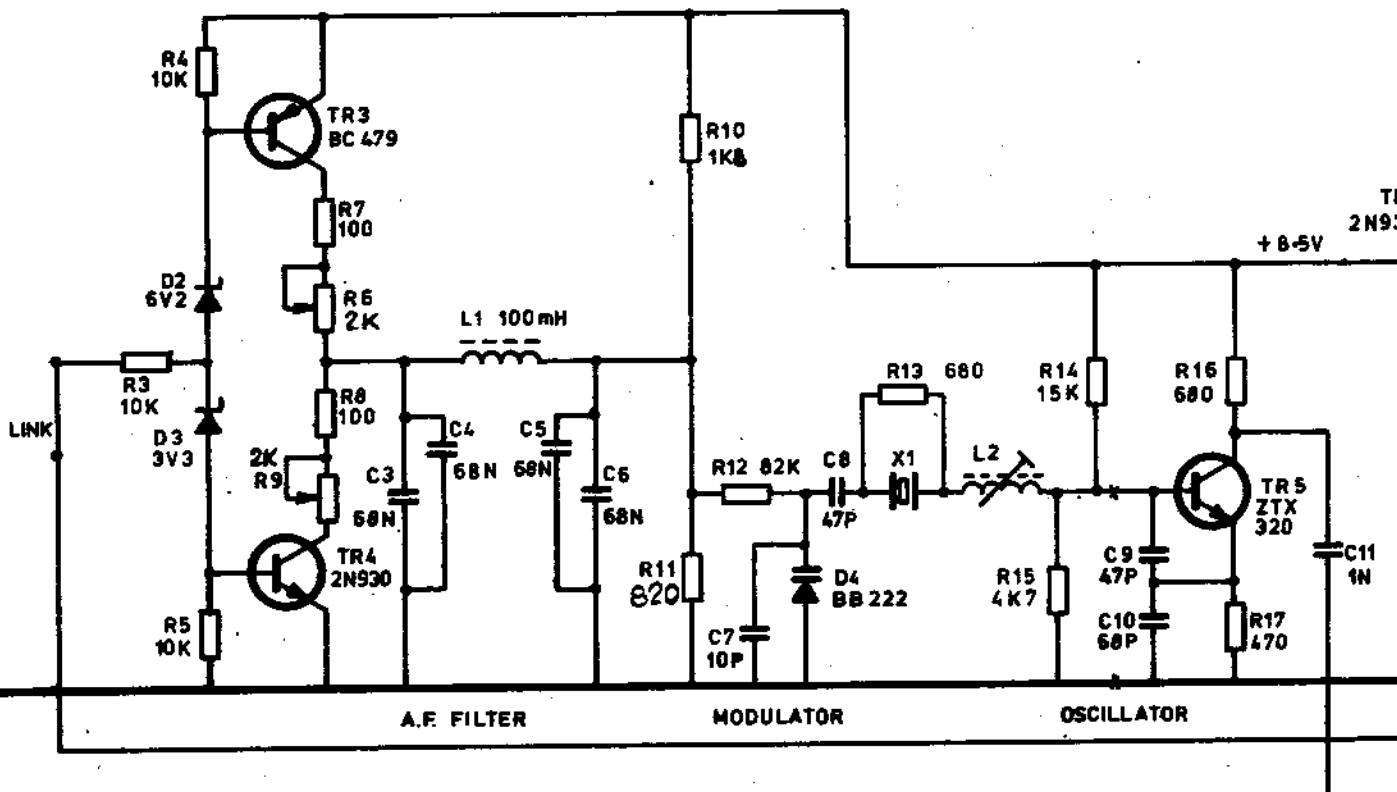
E

F

3rd. ANGLE

DIMENSIONS IN INCHES/M.M.

DO NOT SCALE PRINT.



NOTES. 1. CAPACITORS MARKED (1) 2. CAPACITORS MARKED (2)

TOLERANCES.		MATERIAL.		FINISH. Remove all burrs & sharp edges.	USED ON. U.H.F
in. m.m.		TO B.S.			TO SPEC.
1	Decimal place	±.016	±0.4		CIRCUIT DIAG TX. DRIVER
2	Decimal places	±.010	±0.25		
3	Decimal places	±.005	±0.13		
Unless otherwise stated					
A		B		C	D

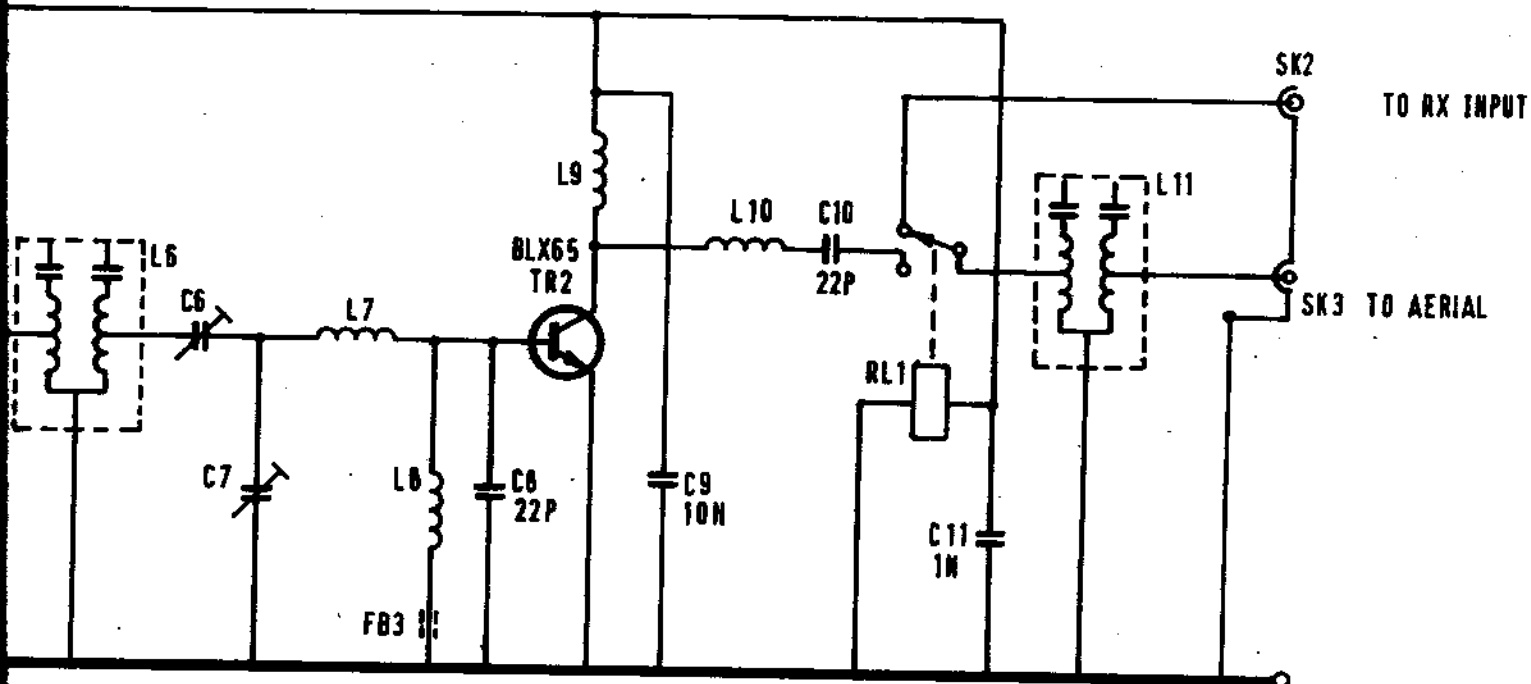
DO NOT SCALE PRINT.

REF

HOLE DIA. INCH
+ 0.005 - 0

HOLE DIA. M.M.
+ 0.13 - 0

ADDITIONAL DATA



ARE FITTED WITH HEATSINK.

COAX. CABLE 50Ω (LENGTH 72mm.) ENSURE FREE END IS OPEN CIRCUIT.

10 ARE LEADLESS CERAMIC CHIP TYPE.

B1	28-1-86
A1	16-3-85
A	19 5 83
ISS	CHANGE DATE

USED ON. UHF. RADIO
TITLE. CIRCUIT DIAGRAM.
POWER AMPLIFIER BOARD

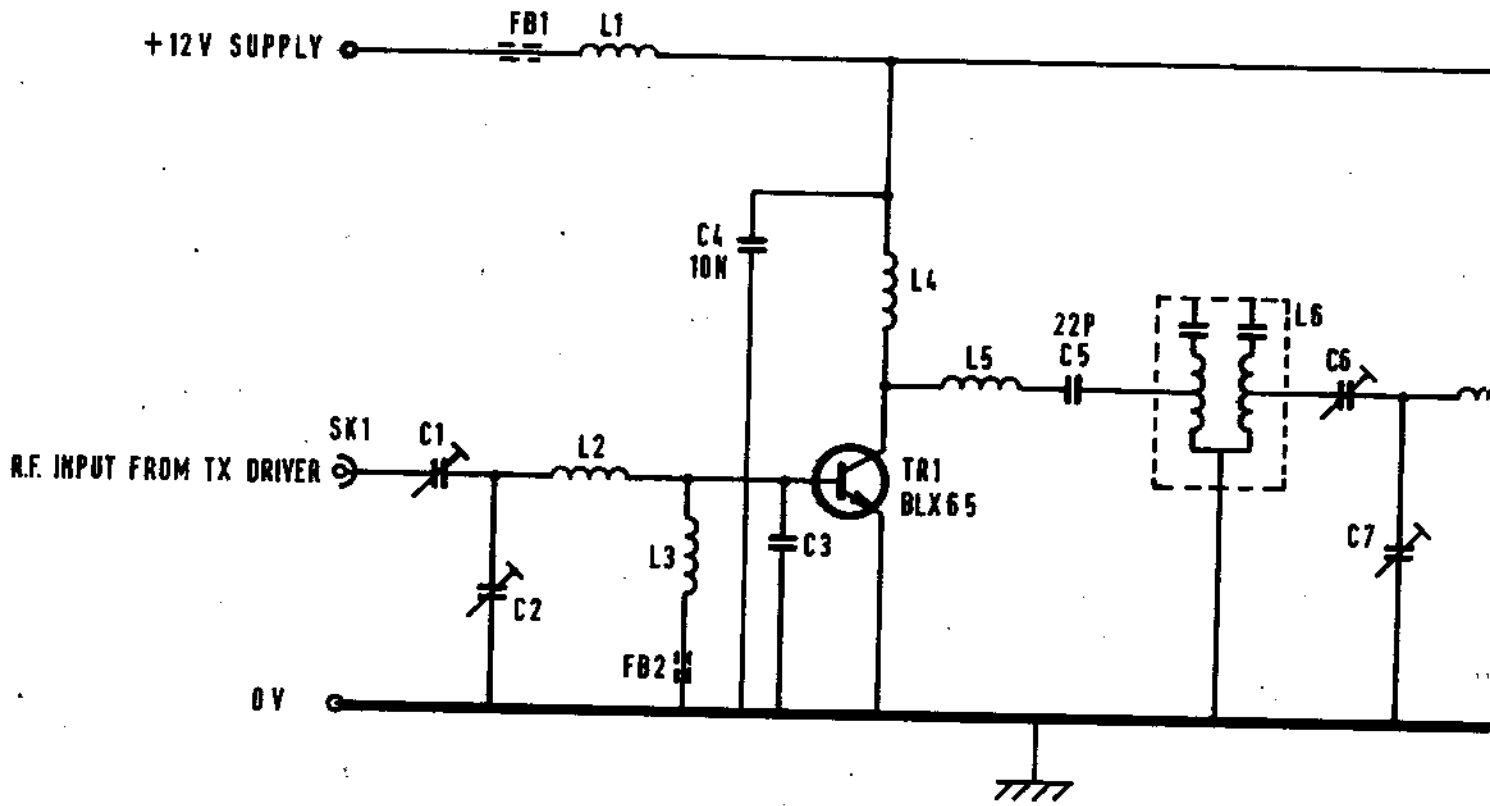
SONARDYNE LTD.
STATION APPROACH FLEET HANTS GU13 8QY TEL (02514) 21731 28008
DIVING INSTRUMENTATION LTD. ESTOVER CLOSE.
ESTOVER, PLYMOUTH, DEVON. PL6 7PL TEL. (0752) 707935
DRG. No. **E3-7504-037**



3rd.
ANGLE

DIMENSIONS IN INCHES/M.M.

DO NOT SCALE



- NOTES
- 1 TR1 & TR2 ARE FITTED WITH HEATSINKS
 - 2 Z1 IS COAX. CABLE 50Ω (LENGTH)
 - 3 C3, C5, C8, C10 ARE LEADLESS CERAMIC
 - 4.

SCALE	/	TOLERANCES.	MATERIAL.	FINISH. Remove all burrs & sharp edges.	USED ON. I
DRAWN	829				
CHKD.	829	1 Decimal place ±.016 ± 0.4	TO B.S.	TO SPEC.	TITLE. CIR POWER
APP'D.		2 Decimal places ±.010 ± 0.25			
		3 Decimal places ±.005 ± 0.13			
		Unless otherwise stated			
A		B		C	

Technical Data

General Specification

Modulation System	Narrow band frequency modulation
Frequency Range	450-470 MHz
Channel Spacing	25 kHz
Number of Channels	One
Supply Voltage	15-24V
Supply Current	
Receiver	12mA typical
Transmitter	500mA typical depending on RF power output
Operating Temperature Range	-20°C to +60°C
Dimensions	800mm x 100mm dia approx, including antenna
Type Approval	Home Office Spec. MPT 1309

Receiver

Type	Dual Conversion Superhet
Intermediate Frequencies	10.7MHz and 455kHz
Input Impedance	50 ohms
Frequency Deviation	+/- 2.5kHz peak optimum
Sensitivity	better than .8uV pd for 12dB snad.
Adjacent Channel Rejection	better than -110dB
Spurious Response Rejection	better than -70dB
Audio Response	100 - 3kHz +/- 2dB
Squelch	Optional
Power Up Risetime	less than 20ms

Transmitter

RF Power Output	1W max continuous (factory preset to 500mW)
Output Impedance	50 ohms
Spurious Emissions	better than -64dB rel. to carrier
Adjacent Channel Power	better than -64dB rel. to carrier
Frequency Stability	+/- 5ppm over full temperature range
Frequency Deviation	+/- 5kHz peak max.
Modulation Response	0-3kHz +/- 2dB
FM Carrier Noise Level	less than -55dB rel. to 3kHz dev. at 1kHz mod.
Power Up Risetime	less than 25ms