technical manual ESCOM 500

version 2.6

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datum : 09-20-1988

Table of contents

AUTOMATICAL ADJUSTMENTS

1. Antenna input level interpretation.

a. Adjust the receiver at 10 MHz, USB.

b. Connect a generator to the antenna input.

c. Adjust the generator at 10001.5 kHz and -10 dBu.

d. Program the signal level step of the generator at 2.5 dB.

e. Press [SHIFT] and [OFF/AUTO] (AGC).

f. The display shows the following warning :

ADJ PROC: PRESS EXEC

g. To start the procedure press [CALIBRATE].

h. The receiver starts internal measurements. Each measuring takes about 2 seconds. A beep will indicate the end of each measurement, whereafter the output of the generator must be incremented with 2.5 dB. The whole procedure consists of 48 measurements.

2. Bandfilter loss compensation.

a. Adjust the receiver at 10 MHz, USB and 500 Hz bandwidth.

b. Connect a generator to the antenna input.

c. Adjust the generator at 10001.5 kHz and 40 dBu. Make sure that the signal passes the narrow bandfilter in a proper way.

d. Press [SHIFT] and [BANDWIDTH UP].

e. The display shows the following warning :

ADJ PROC: PRESS EXEC

f. To start the procedure press [CALIBRATE].

g. The procedure runs automatically and takes about 20 seconds.

3. Gain VHF preamp compensation.

a. Adjust the receiver at 200 MHz, FM.

b. Connect a generator to the antenna input.

c. Adjust the generator at 200 MHz and 40 dBu.

d. Press [SHIFT] an [VHF].

e. The display shows the following warning :

ADJ PROC: PRESS EXEC

f. To start the procedure press [CALIBRATE].

g. The procedure runs automatically and takes about 2 seconds.

These three procedures have to be carried out sequentially. Procedure 3, for example, can only be carried out after the full execution of procedure 1 and 2.

4. Analog S-meter adjustment.

a. Press [SHIFT] and [MANUAL] (AGC)

b. The display shows the following warning :

ADJ PROC: PRESS EXEC

c. Press [CALIBR]

d. The display shows :

ADJUST IND AT MAX

If the S-meter is not at the end of the scale, adjust the indicator at the end of the scale by turning P5 on CN 0574. (see drawing nr: 0574-2228)

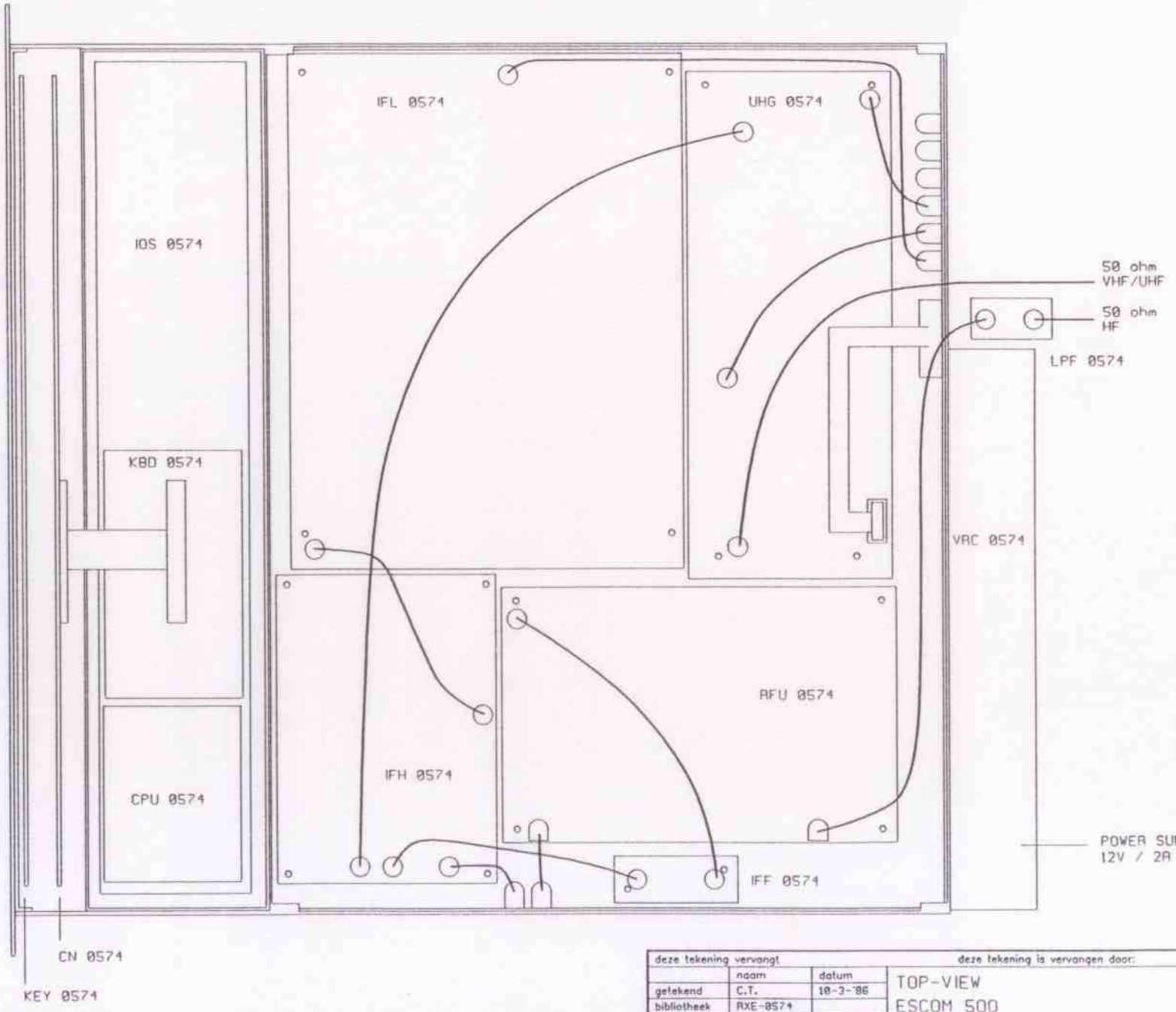
e. Press [PAUSE]

f. The display shows :

SET IND AT -10 dBu

g. The indicator of the S-meter can be moved with the help of the UP and DOWN keys (step mode control) until the S-meter indicates -10 dBu.

h. Press [PAUSE]. The adjusted value will be stored and the display shows the next point to adjust. Adjust again as described in g.



B	C.T.
4-2-88	
UHF-UHG	
uitgave	gewijzigd
datum	gecontroleerd
	goedgekeurd

korte omschrijving der wijziging

deze tekening vervangt

deze tekening is vervangen door:

	naam	datum
getekend	C.T.	10-3-'86
bibliotheek	AXE-0574	
database	574-4401	
print nr.		

TOP-VIEW
ESCOM 500

school AM EU

formaat A3

uitgave A B

ALRESO ELEKTRONICA BV
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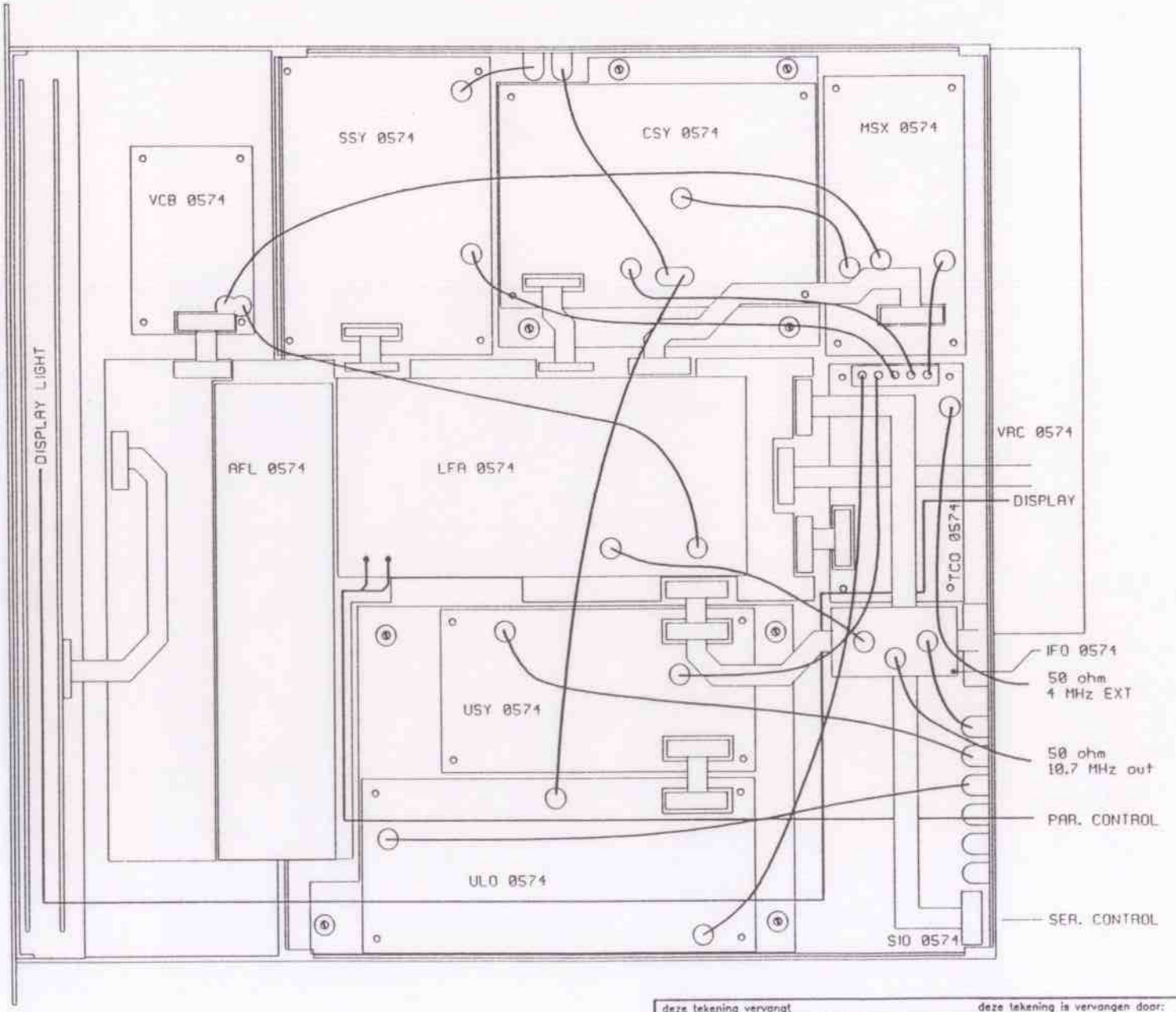
ALRESO
0574-4401



9	C.T.	
4-2-'88		
Modification		
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datum	gecontroleerd	
	goedgekeurd	
korte omschrijving der wijziging		

deze tekening vervangt			deze tekening is vervangen door:		
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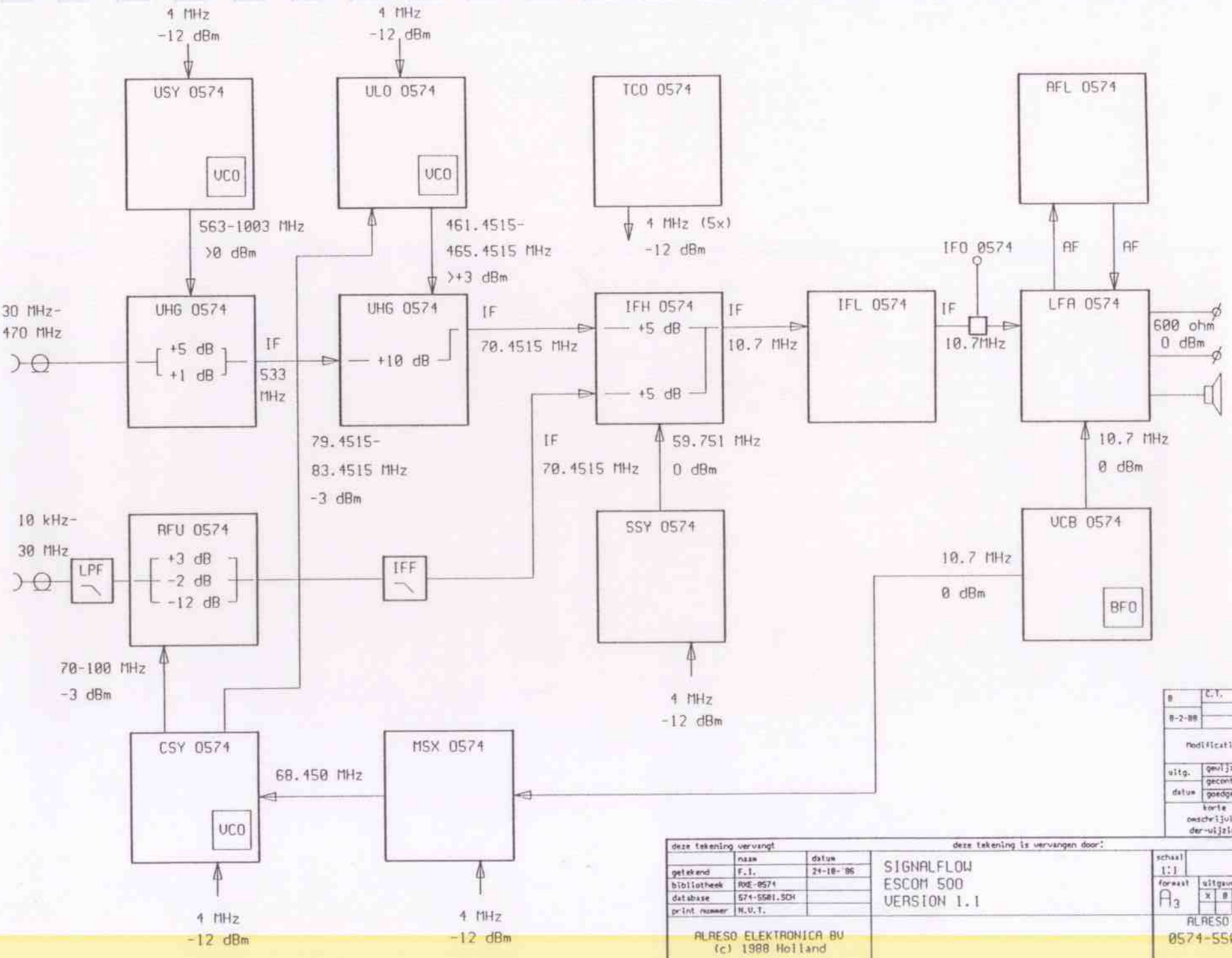
getekend	C.T.	11-3-'86		formaat	uitgave
bibliotheek	AXE-0574			A3	A B
database	574-4402				
print nr.					
ALRESO ELEKTRONICA BV (c) 1988 Holland				ALRESO 0574-4402	

REAR PANEL		ORIGIN/DESTINATION
01	NC	
02	CURR LOOP RxD (+)	IOS 0574 P122
03	NC	
04	CURR LOOP RxD (-)	IOS 0574 P123
05	NC	
06	CURR LOOP TxD (+)	IOS 0574 P124
07	NC	
08	CURR LOOP TxD (-)	IOS 0574 P125
09	NC	
10	SQUELCH OPEN OUTPUT	LFA 0574 P27
11	NC	
12	TIMER	IOS 0574 P99
13	MUTE	RFU 0574 P19
14	NC	
15	NC	
16	EXT SPEAKER OUTPUT (X)	FP2 0574 P08
17	NC	
18	EXT SPEAKER OUTPUT (Y)	FP2 0574 P19
19	+5 VOLT	
20	+9 VOLT	


4 MHz
-12 dBm
4 MHz
-12 dBm
USY 0574
VCO
ULO 0574
VCO
TCO 0574
AFL 0574
563-1003 MHz
>0 dBm
461.4515-
465.4515 MHz
>+3 dBm
4 MHz (5x)
-12 dBm
IFO 0574
AF
AF
30 MHz-
470 MHz
UHG 0574
+5 dB
+1 dB
IF
533
MHz
UHG 0574
+10 dB
IF
70.4515 MHz
IFH 0574
+5 dB
+5 dB
IF
10.7 MHz
IFL 0574
IF
10.7MHz
LFA 0574
600 ohm
0 dBm
79.4515-
83.4515 MHz
-3 dBm
IF
70.4515 MHz
59.751 MHz
0 dBm
10.7 MHz
0 dBm
10 kHz-
30 MHz
LPF
RFU 0574
+3 dB
-2 dB
-12 dB
IFF
SSY 0574
VCB 0574
10.7 MHz
0 dBm
BFO
70-100 MHz
-3 dBm
4 MHz
-12 dBm
CSY 0574
VCO
68.450 MHz
MSX 0574
4 MHz
-12 dBm
4 MHz
-12 dBm
B
C.T.
8-2-88
Modification
uitg.
gewijzigd
gecontr.
datum
goedgek.
korte omschrijving der-wijziging
deze tekening vervangt
deze tekening is vervangen door:
naam
datum
getekend
F.I.
24-10-'86
bibliotheek
RXE-0574
database
574-5501.SCH
print nummer
N.V.T.
SIGNALFLOW
ESCOM 500
VERSION 1.1
schaal
[:]
formaat
A3
uitgave
X
B
ALRESO ELEKTRONICA BV
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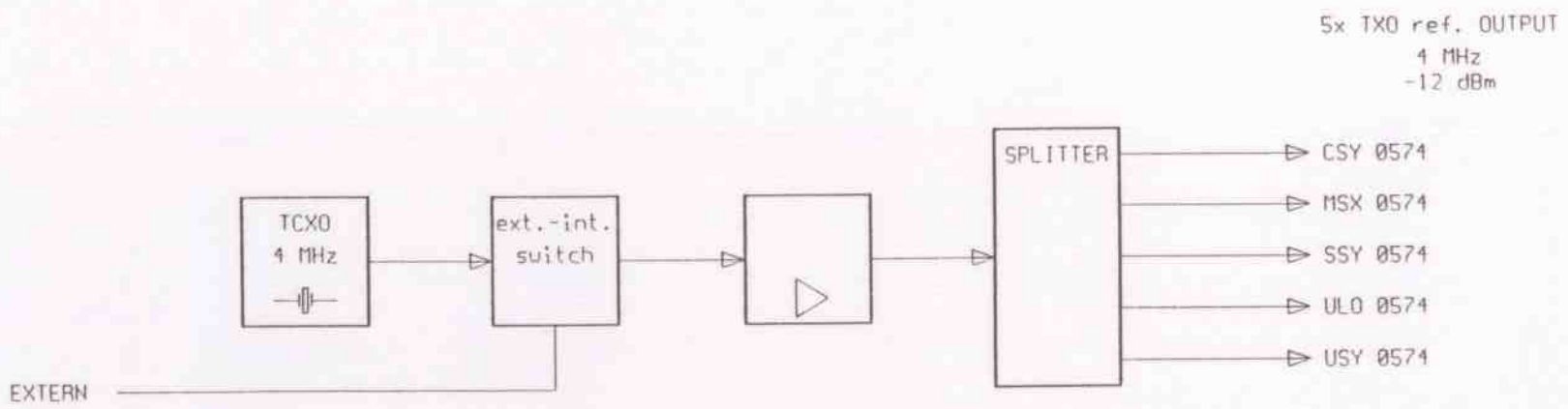
ALRESO
0574-5501



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korte omschrijving der-wijzing	

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database	574-5502.SCH	
print nummer	N.V.T.	

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deze tekening is vervangen door:

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TCO 0574
ESCOM 500

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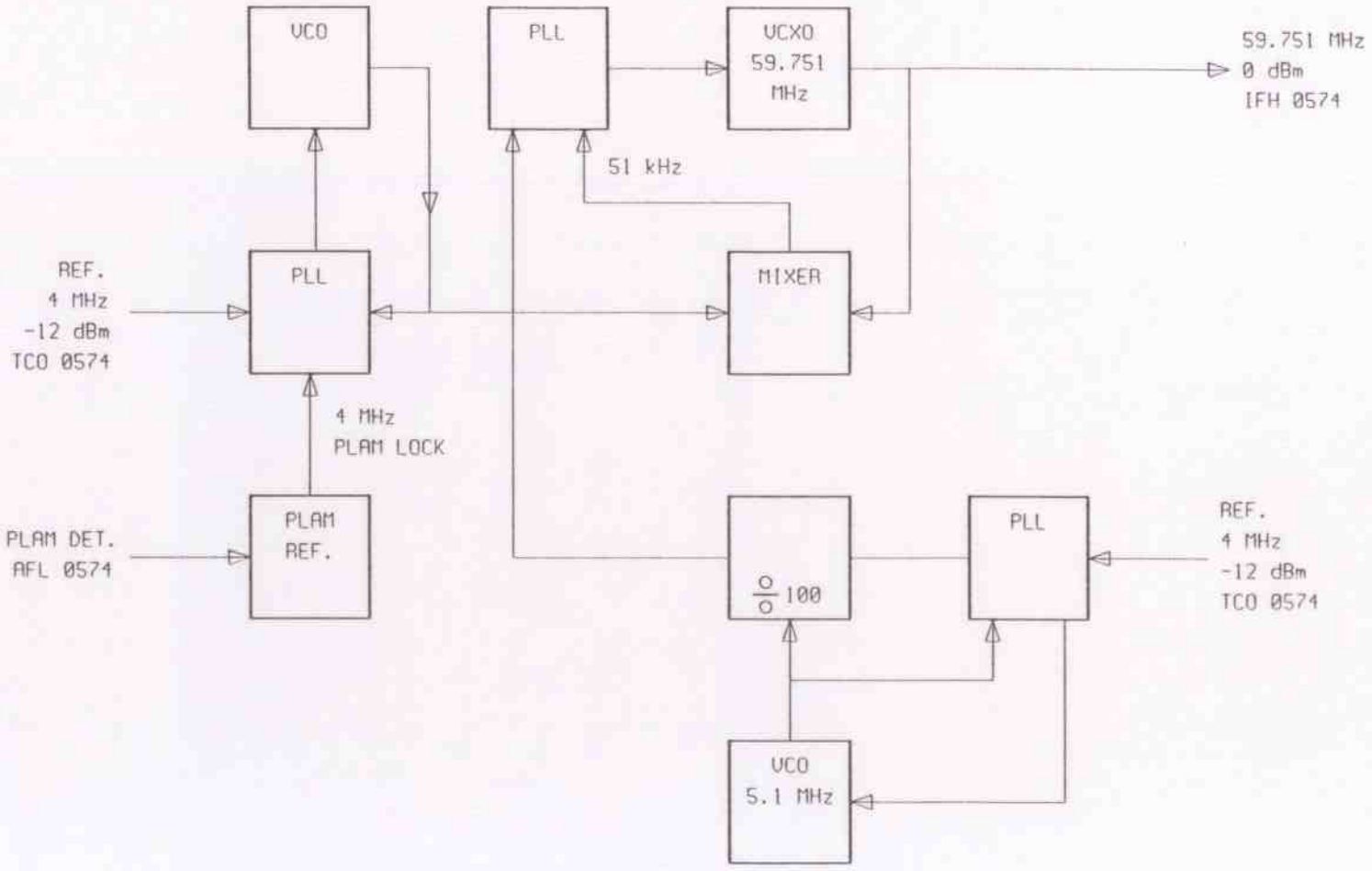
formaat	A3
uitgave	X | B

ALRESO
0574-5502



deze tekening vervangt			deze tekening is vervangen door:		
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bibliotheek	RXE-0574				
database	S74-5503				
print nummer	M.U.T.				
ALRESO ELEKTRONICA BV (c) 1988 Holland				ALRESO 0574-5503	