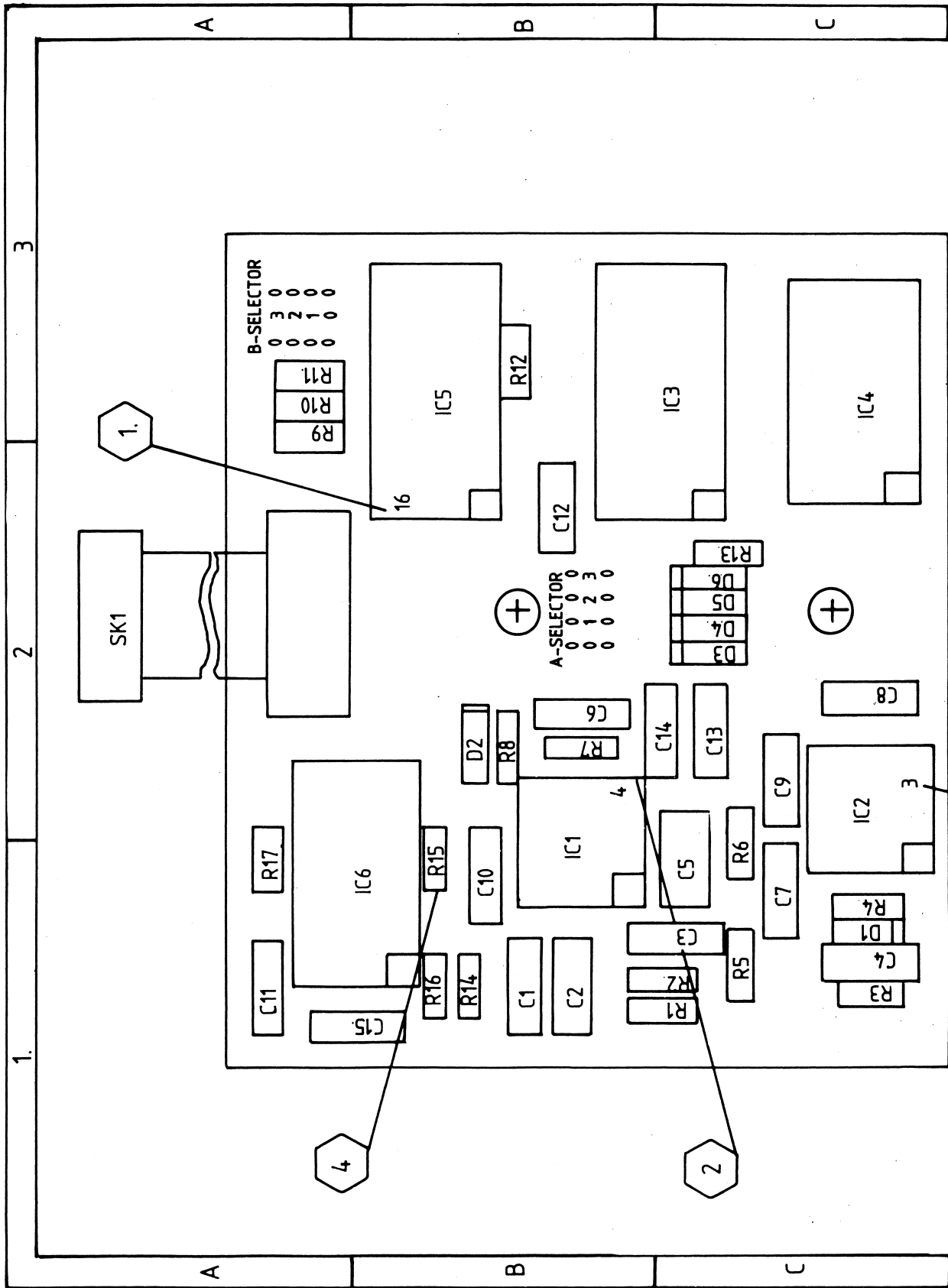


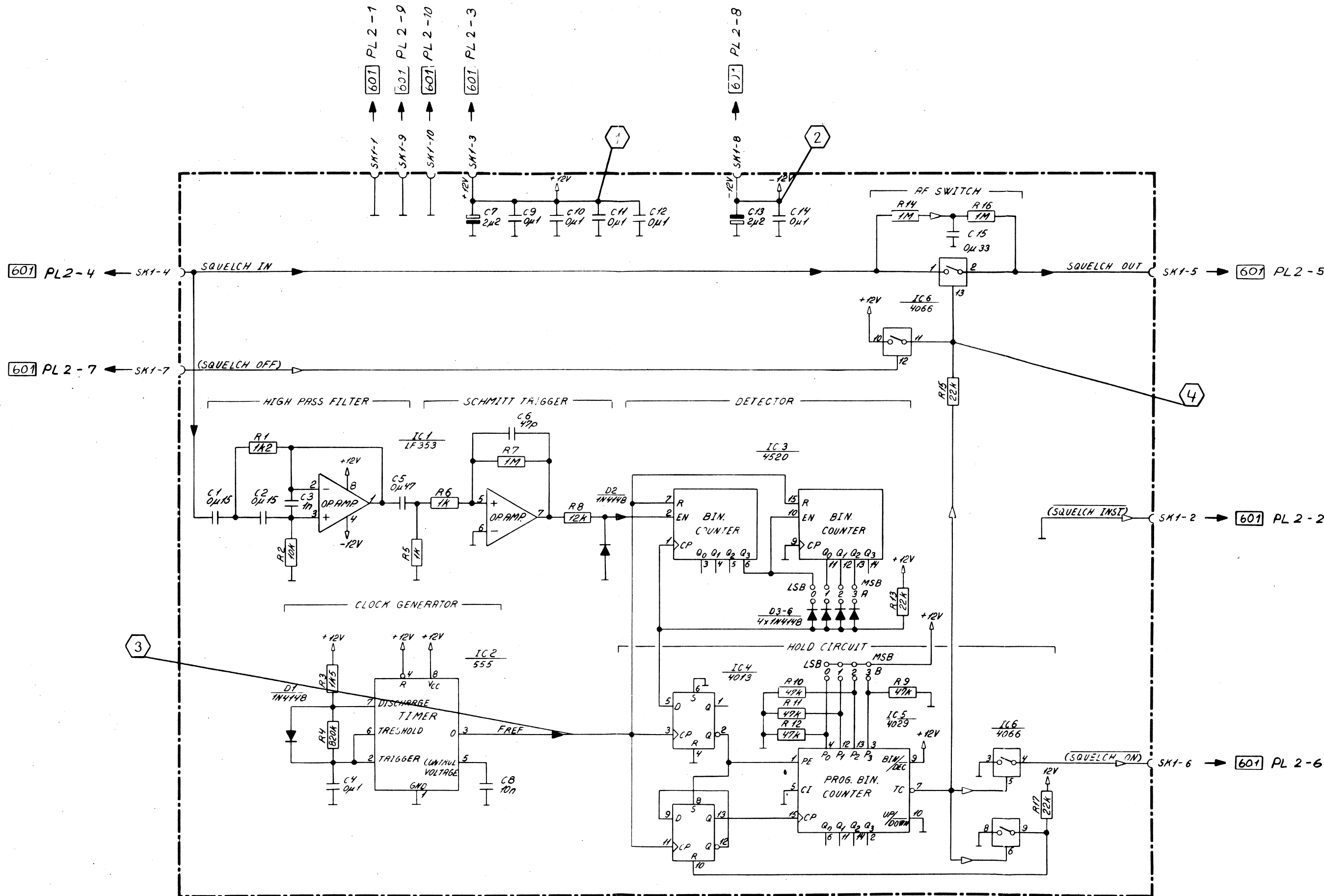
TECHNICAL DESCRIPTION

PCB 602 SQUELCH BOARD

The Squelch Circuit is operating exclusively on the received AF signal knowing its spectral distribution with and without the presence of speech. The AF signal is fed to the AF switch, which carries out the squelch function by turning on and off the AF signal. The AF signal is also fed to the input of the High Pass Filter which prevents hum and low frequency noise from disturbing the Detector. The high pass filter output signal is converted into a squarewave by the Schmitt Trigger, and the resulting signal is led to the input of the Detector. The Clock Generator produces a reference frequency for both Detector and Hold Circuit. In the presence of speech the mean frequency of the AF signal is lowered and becomes smaller than the detector frequency limit set by the reference frequency and the A-selector. This causes the Detector via the Hold Circuit to turn on the AF signal. When speech ceases the AF signal consists of noise only which increases the mean frequency above the detector frequency limit. The detector now triggers the Hold Circuit, which turns off the AF signal after a certain hold time, set by the reference frequency and the B-selector.



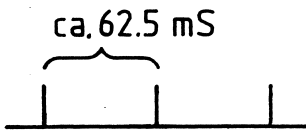
PCB 602 VERSION 1A
 SQUELCH BOARD
 VIEWED FROM COMPONENT SIDE



TEST POINTS FOR 602 SQUELCH BOARD

1 + 12V

2 - 12V

3 \approx 16 Hz 

4 + 12V WHEN SQUELCH OFF

PARTS LIST FOR SQUELCH BOARD 602 VERSION 1A

Printed Circuit Board Complete 602

IC1	LF353				107	560	21
IC2	NE555				850	035	30
IC3	CD4520B				850	055	50
IC4	4013B				850	452	00
IC5	CD4029B				850	401	30
IC6	CD4066BC				850	402	90
					850	406	60
D1-6	1N4148				830	414	80
R1	1.2 kohm	5%		1/8W	MF		
R2	10 kohm	5%		1/8W	MF	500	312 00
R3	1.5 kohm	5%		1/8W	MF	500	410 00
R4	820 kohm	5%		1/8W	MF	500	315 00
R5,6	1 kohm	5%		1/8W	MF	500	582 00
R7,14,16	1 Mohm	5%		1/8W	MF	500	310 00
R8	12 kohm	5%		1/8W	MF	500	610 00
R9-12	47 kohm	5%		1/8W	MF	500	412 00
R13,15,17	22 kohm	5%		1/8W	MF	500	447 00
						500	422 00
C1,2	0.15 uF	10%		63V	Polyes.	622	515 00
C3	1 nF	10%		63V	Cer.	602	310 02
C4,9-12,14	0.1 uF	10%		63V	Polyes.	622	510 00
C5	0.47 uF	10%		63V	Polyes.	622	547 01
C6	47 pF	+2%		63V	Cer.	602	147 00
C7,13	2.2 uF	20%		25V	Tan.	652	622 02
C8	10 nF	-20+50%		63V	Cer.	602	410 01
C15	0.33 uF	20%		63V	Polyes.	622	533 01