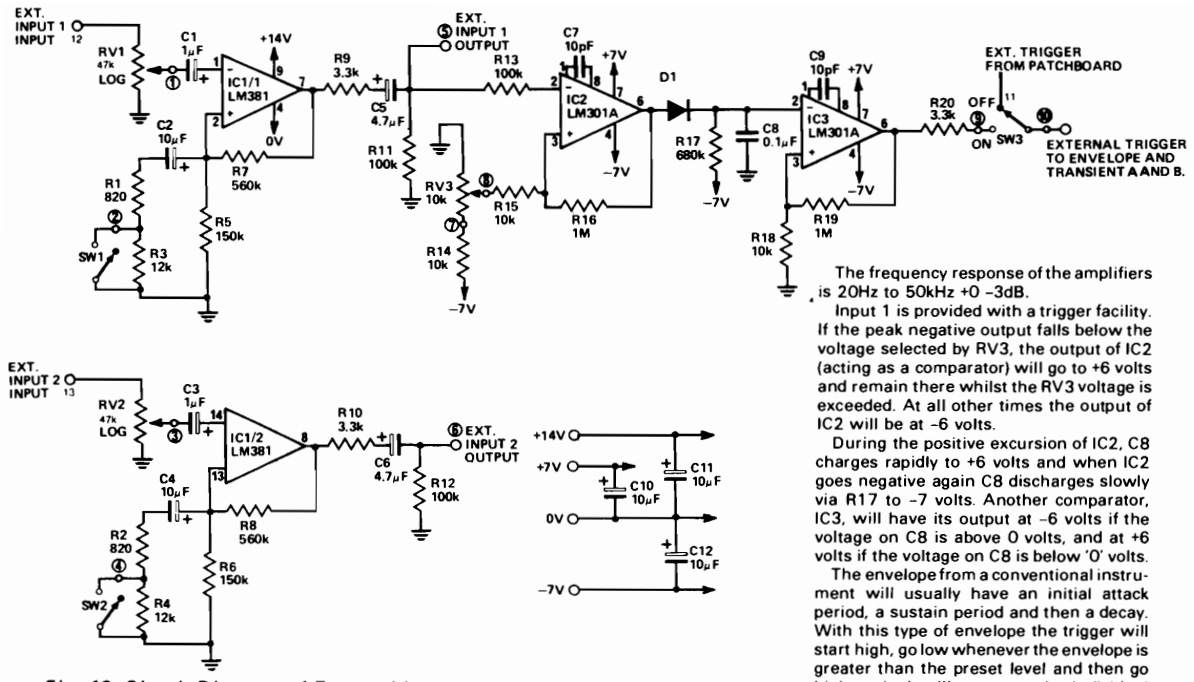


Fig. 49 Circuit Diagram of External Inputs

The frequency response of the amplifiers is 20Hz to 50kHz +0 -3dB.

Input 1 is provided with a trigger facility. If the peak negative output falls below the voltage selected by RV3, the output of IC2 (acting as a comparator) will go to +6 volts and remain there whilst the RV3 voltage is exceeded. At all other times the output of IC2 will be at -6 volts.

During the positive excursion of IC2, C8 charges rapidly to +6 volts and when IC2 goes negative again C8 discharges slowly via R17 to -7 volts. Another comparator, IC3, will have its output at -6 volts if the voltage on C8 is above 0 volts, and at +6 volts if the voltage on C8 is below '0' volts.

The envelope from a conventional instrument will usually have an initial attack period, a sustain period and then a decay. With this type of envelope the trigger will start high, go low whenever the envelope is greater than the preset level and then go high again. It will not respond to individual cycles due to the slow discharge of C8 by R17. The release time is about 20 milliseconds.

Parts List for External Inputs

(1 required for 5600S; 1 required for 3800)

5600S	3800	
R1,2	R1	Min Res 820Ω
R3,4	R3	Min Res 12k
R5,6	R5	Min Res 150k
R7,8	R7	Min Res 560k
R9,10,20	R9,20	Min Res 3k3
R11,12,13	R11,13	Min Res 100k
R14,15,18	R14,15,18	Min Res 10k
R16,19	R16,19	Min Res 1M
R17	R17	Min Res 680k
RV1,2	RV1	Pot Log 47k
RV3	RV3	Pot Lin 10k
C1,3	C1	Tant 1μF 35V
C2,4,10,11,12	C2,10,11,12	Tant 10μF 16V
C5,6	C5,6	Tant 4.7μF 35V
C7,9	C7,9	Ceramic 10pF
C8	C8	Polyester 0.1μF
IC1	IC1	LM381
IC2,3	IC2,3	LM301A
D1	D1	1N4148
SW1,2,3,	SW1	Sub-Min Toggle A

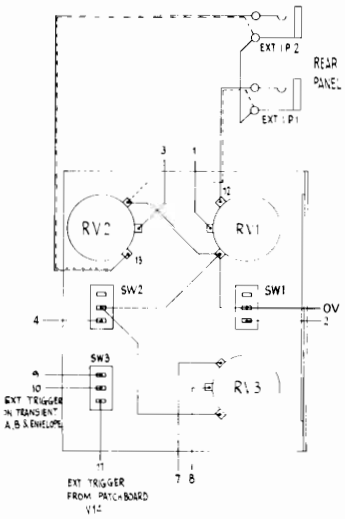


Fig. 50 Front Panel Wiring for External Inputs (5600S only)

Also required

1 Synth Ext I/P PCB
1 DIL Socket 14-pin
2 DIL Socket 8-pin
1 Wafercon Skt 8-way
8 Wafercon Terminals
2 Bolt 6BA ¼in.
2 Nut 6BA
2 Shake 6BA

Also required for 5600S only

1 Ext I/P Mtg Bkt
13 Pin 2141
3 15mm Collet Knob Black
3 15mm Collet Nut Cover
2 15mm Collet Cap Yellow
1 15mm Collet Cap Blue

Also required for 3800 only

1 3800 Ext I/P Mtg Bkt
10 Pin 2141
2 15mm Collet Knob Black
2 15mm Collet Nut Cover
2 15mm Collet Cap Red

Voltage Controlled Filter Construction

Assemble the two pcb's as shown in Fig. 51. They are identical. Fix the front panel components to the bracket then the pcb and interwire as shown in Fig. 53. Fix the assembled modules to the front panel.

Voltage Controlled Filter — How It Works

The voltage controlled filter consists of three main sections:—

1. The buffer amplifier/mixer.
2. A low-pass filter.
3. A voltage controlled oscillator.

The buffer amplifier IC3 is used to give a level shift to the input signal and to provide a constant 100k input impedance. A second input direct to the input of IC3 is used, in the 3800 synthesiser, for additional mixing.

The 4016 analogue switches have all their control inputs connected together and these switches may be regarded as a normal four pole active low-pass filter (two 2-pole in series). The filter has a gain of unity (output of IC3 to output of IC5) below the cut-off frequency and an ultimate slope of 24dB/octave above the cut-off frequency.

As well as an amplitude change with frequency there is also a change in phase relationship. Initially the output of the filter is 180° out of phase with the input (point E), and in phase when 6dB down. It eventually moves 180° out of phase again as the frequency increases. The potentiometer RV3 and resistor R18 take part of the output signal and feed it back into the input of IC3. Below the cut-off frequency this causes the output to be attenuated, at the cut-off frequency the signal is boosted and above the cut-off it again starts to attenuate. This causes the output to peak in the region of the cut-off frequency and then drop suddenly above that frequency. The height of the peak is adjustable. If adjusted too high, the filter will oscillate.

To vary the cut-off frequency we must vary the four capacitors or the four resistors in these areas of the filter.

To obtain the two ranges we switch capacitors in or out and, to give the

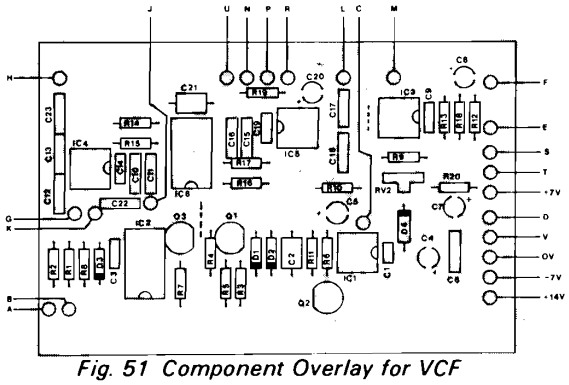
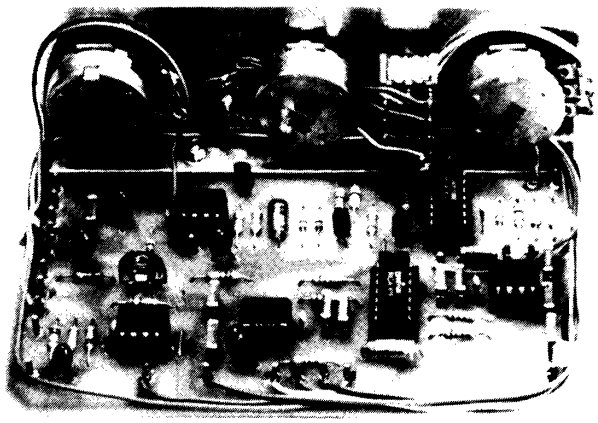


Fig. 51 Component Overlay for VCF



VCF

continuously variable range, we vary the resistors by switching them in and out at a fast rate but with a mark-space ratio which is variable.

By such switching the effective value of a resistor becomes:—

$$\frac{R \times \text{total time}}{\text{time on}}$$

and since on-time is always shorter than total time the resistance can vary from 'R' upwards. We obtain a variable mark-space ratio by using a monostable of about 200n sec triggered by a voltage controlled oscillator which is variable from 5kHz to about 1MHz. We therefore keep the on-time constant and vary the off-time.

The voltage-to-frequency converter used does in fact have a linear relationship from about 10kHz to 1MHz. Frequencies below 20kHz, however, should not be used, as the chopping frequency will become audible.

A variable constant-current source is provided by IC1 and Q2, where the base-emitter voltage of Q2 is compensated by taking feedback from the emitter of Q2 to IC1. A further constant current source is provided by Q1. The current from Q1 can flow either via Q3 to ground (output of IC2/2), or through Q2 as well as into C2. The current provided by Q1 is higher than the maximum available through Q2 and thus C2 will be charged by a constant current (when IC2/2 is high) the value of which is determined by the input voltage.

The voltage on C2 is passed to the input of IC2/1 such that if this voltage is above approximately 7 volts the output of IC2/1 will be low (0V) whereas if the input voltage is less than 7 volts the output will be high (+14V).

In addition RV2 is provided to prevent the oscillator stopping on overvoltage and R11 is provided to prevent the oscillator stopping when there is a negative input voltage.

20 Setting-up Filters for 5600S

Connect +14V in turn to V7 and then to V8, and patch H7/V29 (then H8/V29) and connect a 'scope to this point. Turn RV2 fully towards R9, set range control to low, resonance to maximum and tune control fully anticlockwise. The filter should act as a very low frequency (inaudible) oscillator. Rotate the tune control clockwise and the frequency will increase and then it may drop slightly. Continue until the control is fully clockwise. Adjust RV2 until oscillation just starts to decrease again. (If it did drop slightly when it was being increased, it may jump up in frequency on adjusting RV2 before starting to decrease.)

(12) Setting-up Filter for 3800

Disconnect the wire from point 'A' on the filter pcb and apply +14V to this point. Turn

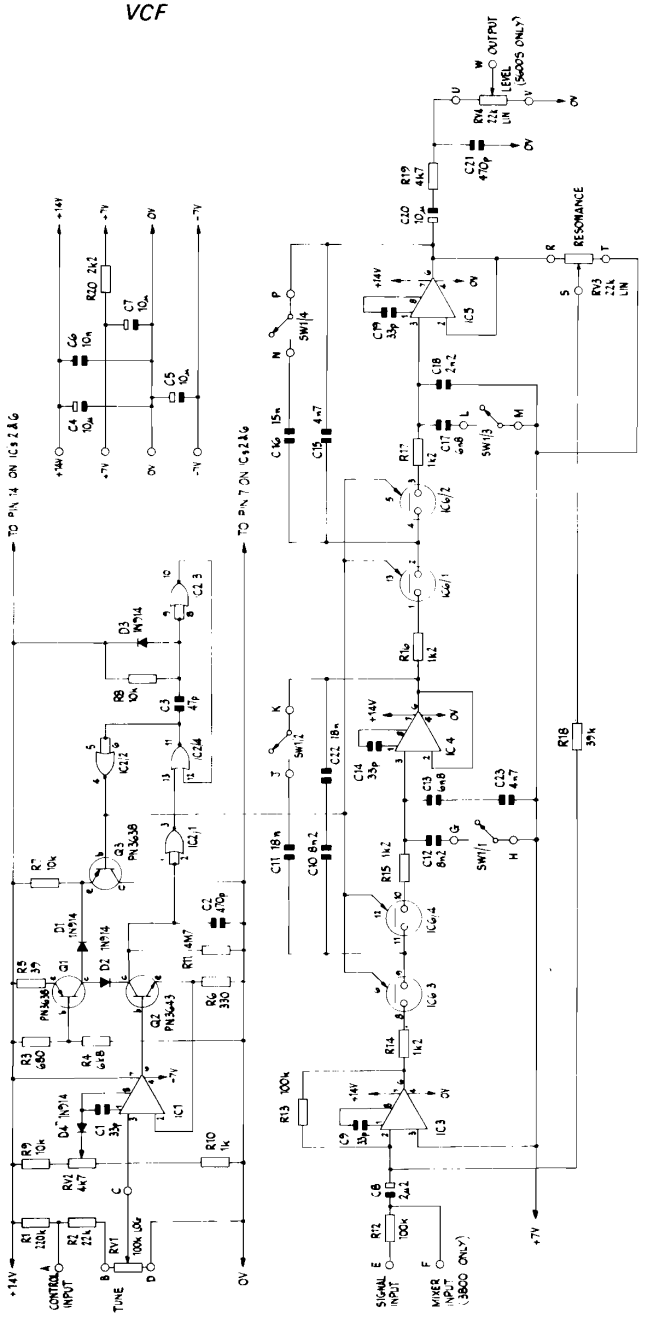


Fig. 52 Circuit Diagram of VCF

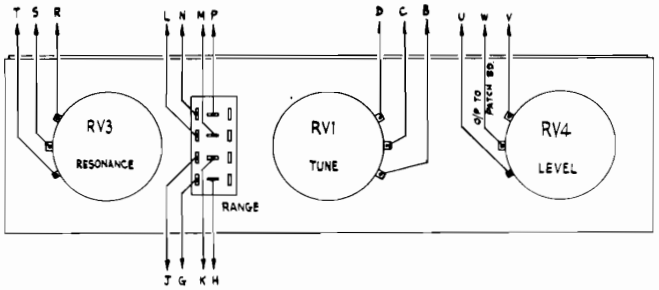


Fig. 53 Front Panel Wiring for VCF (5600S only)

RV2 fully towards R9, set range control to low, resonance to maximum and tune control fully anticlockwise. The filter should act as a very low frequency (inaudible) oscillator. Rotate the tune control clockwise and the frequency will increase and then it may drop slightly. Continue until the control is fully clockwise. Adjust RV2 until oscillation just starts to decrease again. (If it did drop slightly when it was being increased, it may jump up in frequency on adjusting RV2 before starting to decrease.) Disconnect +14V and reconnect the wire from point A on FPC12 to point 'A' on pcb.

Parts List for VCF

(2 required for 5600S; 1 required for 3800)

R1	Min Res 220k
R2	Min Res 22k
R3	Min Res 680Ω
R4	Min Res 6k8
R5	Min Res 39Ω
R6	Min Res 330Ω
R7,8,9	Min Res 10k
R10	Min Res 1k
R11	Min Res 4M7
R12,13	Min Res 100k
R14,15,16,17	Min Res 1k2
R18	Min Res 39k
R19	Min Res 4k7
R20	Min Res 2k2
C1,9,14,19	Ceramic 33pF
C2,21	Polystyrene 470pF
C3	Ceramic 47pF
C4,5,7,20	Tant 10μF 16V
C6	Carbonate 0.01μF
C8	Tant 2.2μF 35V
C10,12	Carbonate 0.0082μF
C11,22	Carbonate 0.018μF
C13,17	Carbonate 0.0068μF
C15,23	Carbonate 0.0047μF
C16	Carbonate 0.015μF
C18	Carbonate 0.0022μF
RV1	Pot Log 100k
RV2	Vert S-Min Preset 4k7
RV3	Pot Lin 22k
RV4 (for 5600S only)	Pot Lin 22k
Q1,3	MPS3638
Q2	PN3643
IC1,3,4,5	LM301A
IC2	4001BE
IC6	4016BE
D1,2,3,4	1N4148
SW1	4p S-M Toggle

Also required

1 3600 VCF PCB
2 DIL Socket 14-pin
4 DIL Socket 8-pin
1 Wafercon Socket 8-way
8 Wafercon Terminals
23 Veropin 2141
2 Bolt 6BA ¼in.
2 Nut 6BA
2 Shake 6BA

Also required for 5600S only

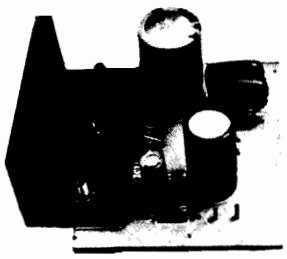
1 Synth VCF Mtg Bkt
3 15mm Collet Knob Black
3 15mm Collet Nut Cover
2 15mm Collet Cap Grey (for VCF 1 only)
1 15mm Collet Cap Blue (for VCF 1 only)
2 15mm Collet Cap Yellow (for VCF 2 only)
1 15mm Collet Cap Blue (for VCF 2 only)

Also required for 3800 only

2 15mm Collet Knob Black
2 15mm Collet Nut Cover
2 15mm Collet Cap Red
1 3600 VCF Mtg Bkt

Headphone Amplifiers Construction

Construct two 8W Amp Kits. Fit and solder the pins to the pcb, then the other components, taking care to ensure that the PC Electrolytics are inserted the right way round. Solder the IC to the pcb then smear the metal tab with Thermpath. Bolt the heatsink to the pcb, then bend the IC over and bolt it to the heatsink. Fix the two amps to the base of the cabinet using two No. 6 self-tapping screws in the positions shown in the internal layout photograph.



Headphone Amp

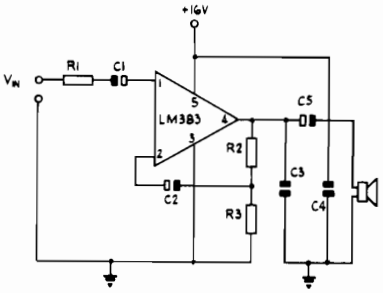
Parts List for 8W Amp Kit

The 8W Amp Kit should contain the following parts.

R1	Min Res 18k
R2	Min Res 220Ω
R3	Min Res 5.6Ω
C1	PC Elect 10μF 40V
C2	PC Elect 470μF 16V
C3,4	Polyester 0.22μF
C5	PC Elect 1000μF 16V
IC1	LM383

Also included

1 8W Hi-Fi Heatsink

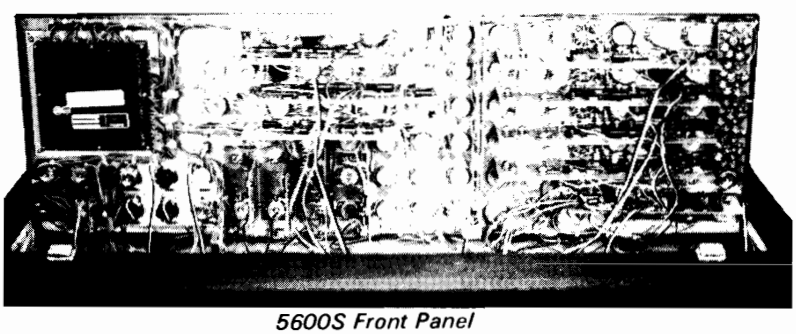


Circuit Diagram of Headphone Amp

1 8W Amp PCB
6 Pins 2145
3 Bolt 4BA ½in.
3 Nut 4BA

Completing the Front and Rear Panels

Fix the foot pedal, foot switch and echo controls to the mixer bracket and front panel. Fix the three 'output' controls and switch, and the three controls and socket immediately above these to the front panel directly. Fix the patchboard using four 6BA ½in. bolts, three fitted with tags to anchor an earth bar made of 20swg strapping wire as shown in the photograph. Cut down all the spindles and fit the knobs as shown in the colour photograph. Fit the components to the rear panel as shown in Fig. 54 and fix the panel to the cabinet. Note that a boot should be fitted to the fuseholder and mains plug.



5600S Front Panel

Interwiring

Carefully follow through the wiring schedule set out in Table 2 picking out first all the wires that interconnect on the front panel. Now put the front panel on the pins of the hinges and screw the hinges to the cabinet so that the pin locates in the blind hole in the cabinet. Complete the wiring shown in Table 2, then connect up all the wiring shown in Fig. 54.

Connect up the keyboard controller to the front panel as shown in Fig. 8. Wire the reverb and phase pcb to the front panel as shown in Fig. 55. Then connect up the other wires shown in Fig. 55. Connect up the wires to the foot pedal, foot switch and echo controls as shown in Fig. 56. Finally wire up the headphone amplifiers as shown in Fig. 57.

Other Parts Required For 5600S Only

1 5600S Cabinet
1 5600S Front Panel
2 C/S Panel Screw 4BA 1in.
2 4BA Cup Washer
} (for front panel)
2 4600 Hinge
4 Self-Tapper No. 4 ⅜in. (for hinge)
1 Large Patchboard
Large Patch Plugs (as required)
300mm Strapping Wire 18swg
4 Bolt 6BA ½in.
7 Nut 6BA
3 Tag 6BA
} (for patchboard)

1 48-note Keyboard
48 Contact Block 1WG
8 Earth Bar
4 KB Mounting Strip
10 Self-Tapper No. 6 ½in. (for keyboard)
2 8W Amp Kit
4 Self-Tapper No. 6 ½in. (for 8W Amp kit)

1 5600S Rear Panel
10 Jack Skt Brk (SK1 to 6,8,9,11,12)
2 Jack Skt Sto (SK7 and Headphone socket)
1 Multisocket 8-way (SK10)
1 Springlatch 8-way
4 Bolt 6BA ½in.
4 Nut 6BA
} (for Multisocket)
8 Self-Tapper No. 4 ⅜in.
1 Tag 4BA
} (for rear panel)
1 roll Strapping Wire 22swg
1 Systoflex 1mm White
1 Systoflex 2mm Yellow
2pk Double Bubble Sachet
4pk Solder D622
1 Small Thermpath
1pk Wire 11C
30m Cable Twin
5m Ribbon Cable 20-Way

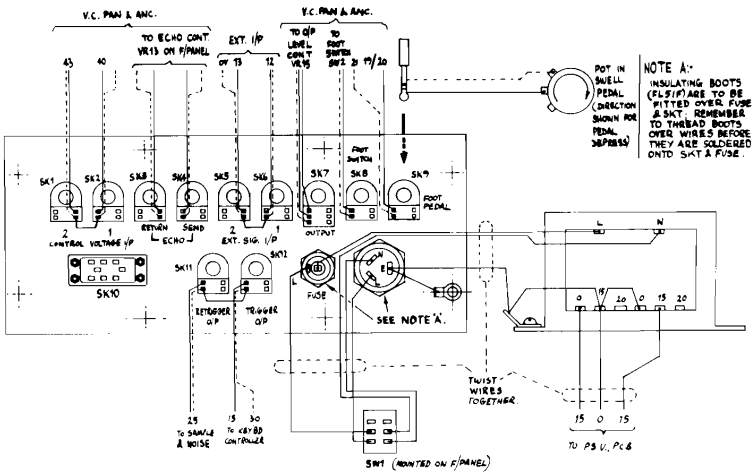


Fig. 54 Rear Panel Wiring (5600S only)

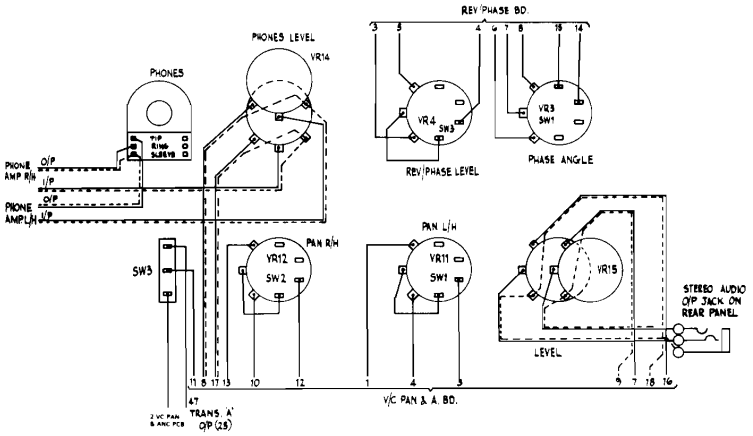
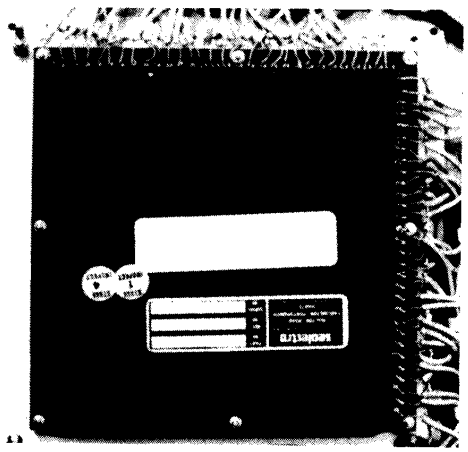


Fig. 55 Reverb, Phase and Output Controls Wiring



Patchboard showing connection of screens to wire straps fixed to tags on fixing screws.

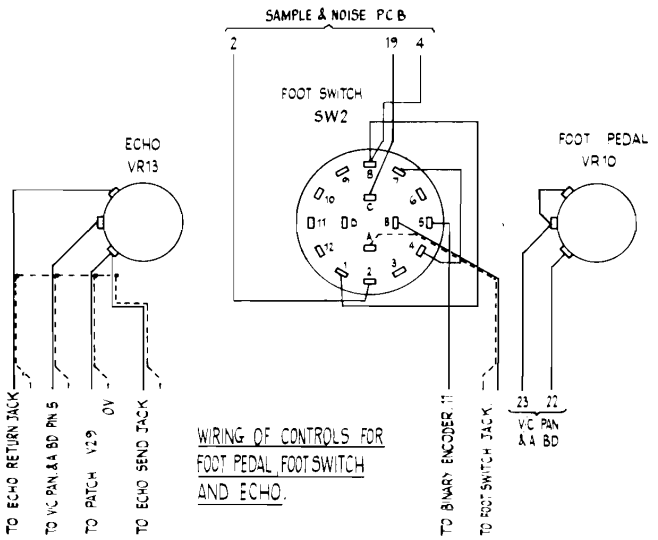


Fig. 56 Wiring of Controls for Foot Pedal, Foot Switch and Echo

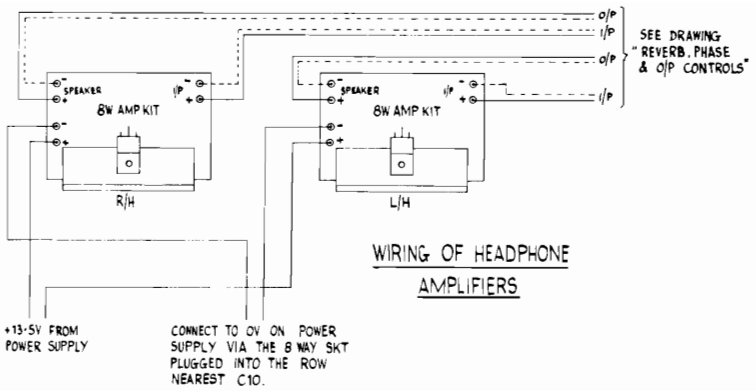
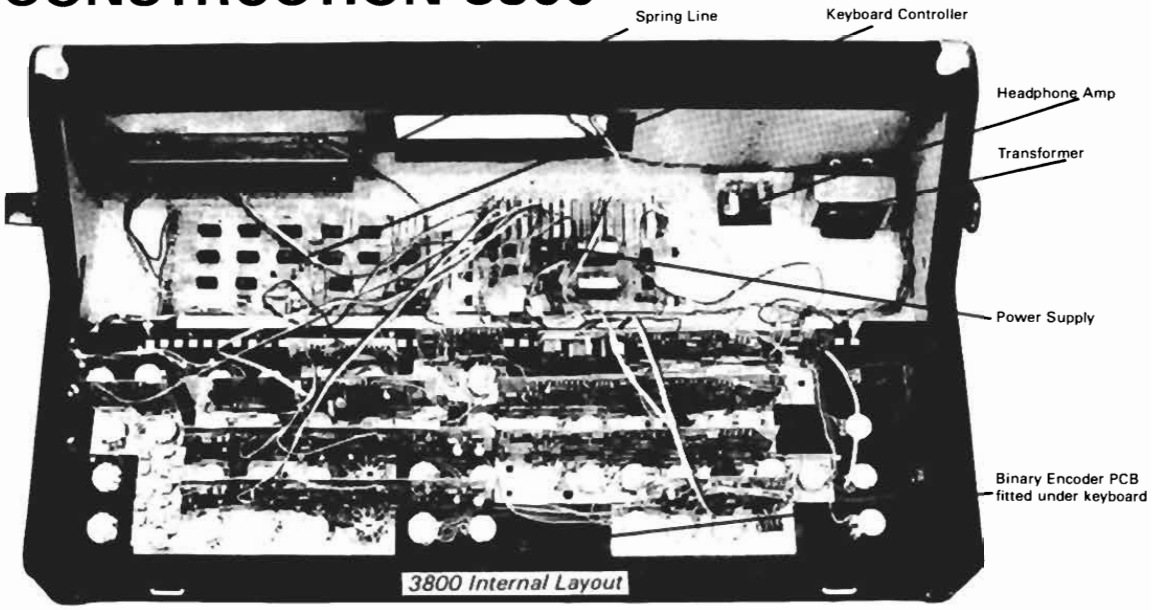


Fig. 57 Wiring of Headphone Amplifiers (5600S only)

CONSTRUCTION 3800



Power Supply

This board is the same as that in the 5600S synthesiser. Follow the construction details for the 5600S. There are sufficient plugs in the 3800 for every board individually except the binary encoder which is powered from the keyboard controller.

Keyboard and Binary Encoder

This board is the same as that in the 5600S synthesiser. Follow the construction details for the 5600S.

Keyboard Controller

This board is the same as that in the 5600S synthesiser. Follow the construction details for the 5600S.

Oscillator

The oscillators in the 3800 are identical to those in the 5600S except that there are only two in the 3800. As in the 5600S, oscillator 2 is wired differently from oscillator 1. When wiring the bracket mounted components as per Figs. 12 and 13 omit the wires between SW4 and pins 20 and 21 on both oscillators. Fix the oscillators to the front panel.

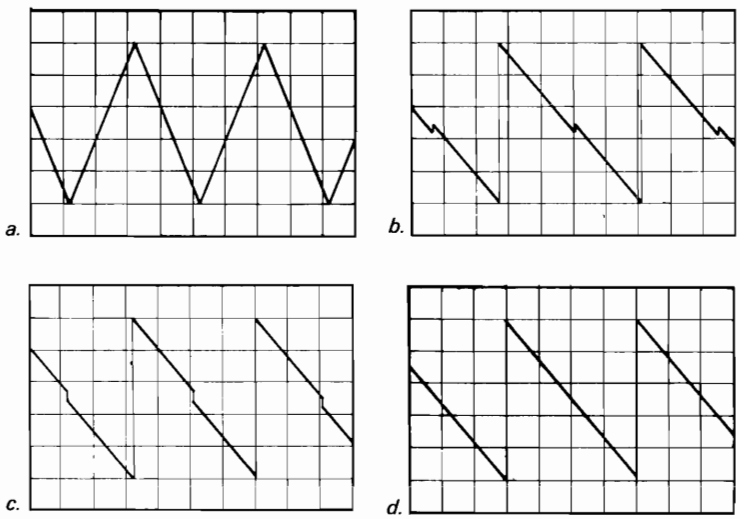


Fig. 58 Setting-up Oscillators

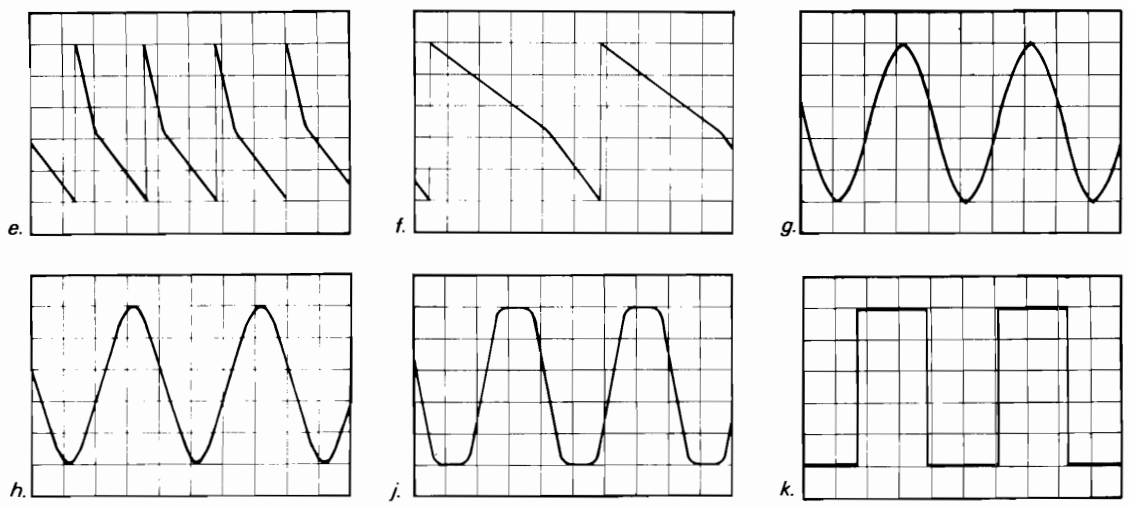


Fig. 58 Setting-up Oscillators

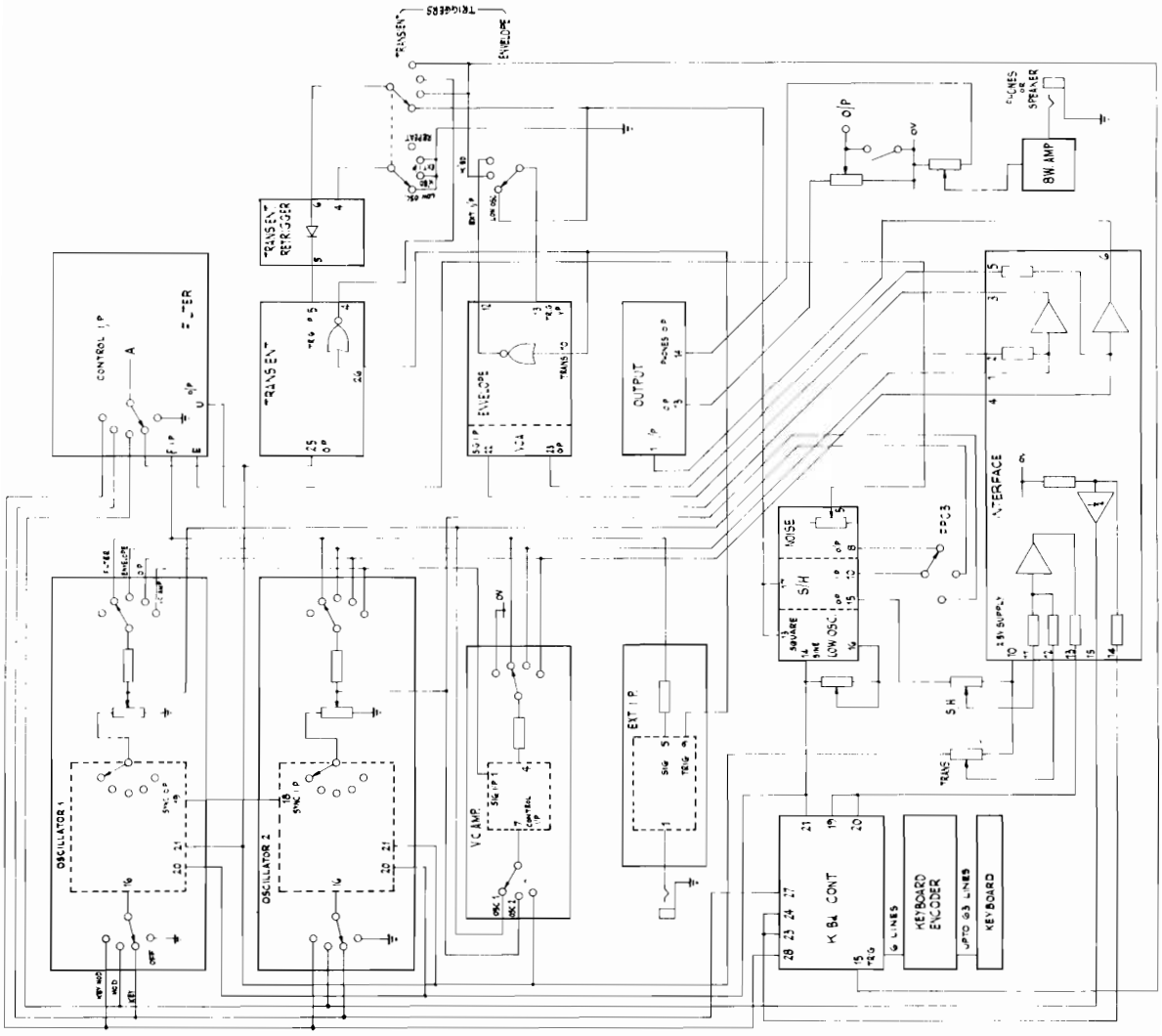


Fig. 59 Block Schematic of 3800

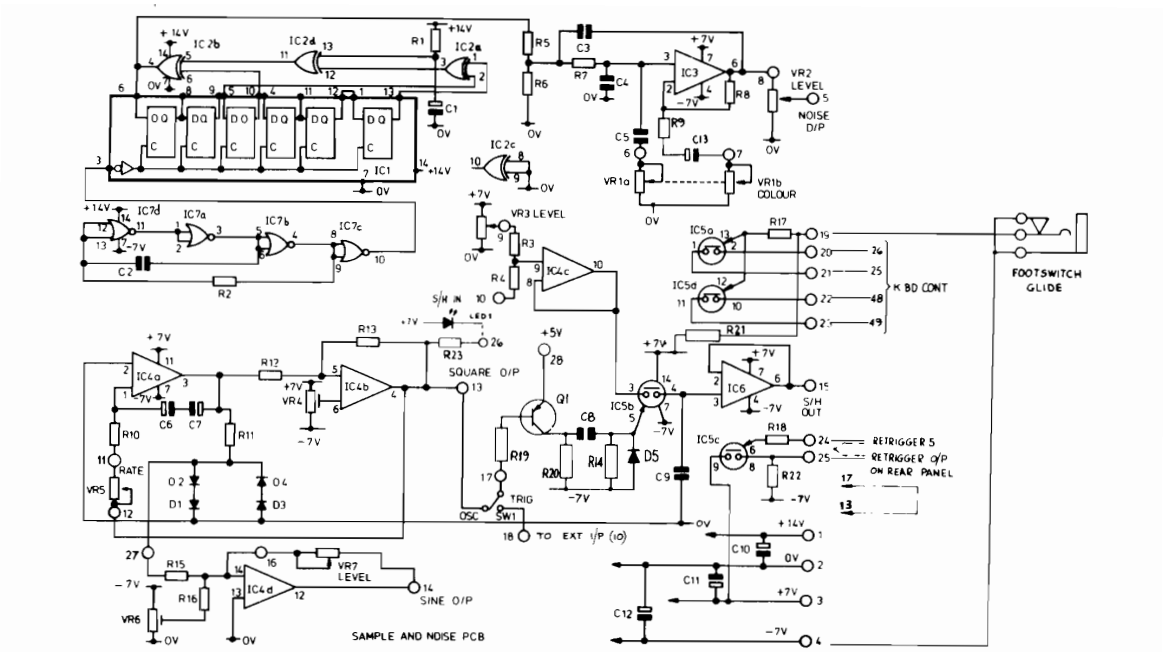


Fig. 60 Circuit Diagram of Sample and Noise (3800 only)

Sample and Noise

This board is the same as that in the 5600S synthesiser. Follow the construction details for the 5600S until the pcb is finished. Then fix the pcb and the front panel controls to the bracket, but do not proceed with any interwiring yet. The circuit in the 3800 is different from the 5600S and is shown in Fig. 60. Fix the bracket to the front panel.

External Input

The external input is provided so that other electronic instruments may be fed into the synthesiser in order to obtain new and different sounds. A trigger pulse is generated from the external instrument's signal, thus allowing the transient generators to be triggered.

Assemble the pcb as shown in Fig. 48, but omit: R2, R4, R6, R8, R10, R12, C3, C4 and C6. Pins 3, 4 and 6 are not required. Fix the front panel controls and the pcb to the bracket and interwire as shown in Fig. 61. Fit the assembly to the front panel.

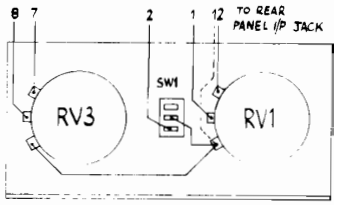


Fig. 61 Front Panel Wiring for External Inputs (3800 only)

Interface Construction

Assemble the pcb with the aid of the component overlay Fig. 62. Fix the front panel controls and the pcb to the bracket. Fix the assembly to the front panel.

Parts List for Interface

(1 required for 3800 only)

R1,2,3,4	Min Res 100k
R5	Min Res 82k
R6	Min Res 18k
R7,8,9,12,13	Min Res 22k
R10,11	Std Res 22k
C1,2	Tant 10 µF 25V
VR1,2	Pot Lin 22k
IC1	4136
IC2	µA741C 8-pin DIL

Also required

1 3800 Interface PCB
1 Interface Mtg Bkt
1 DIL Socket 14-pin
1 DIL Socket 8-pin
1 Wafercon Socket 8-way
8 Wafercon Terminals
17 Veropin 2141
2 15mm Collet Knob Black
2 15mm Collet Nut Cover
2 15mm Collet Cap Grey
2 Bolt 6BA ¼in.
2 Nut 6BA
2 Shake 6BA

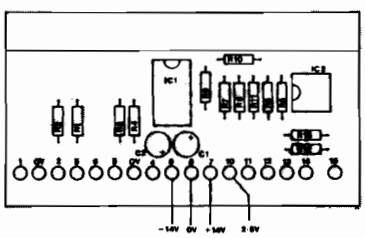


Fig. 62 Component Overlay for Interface

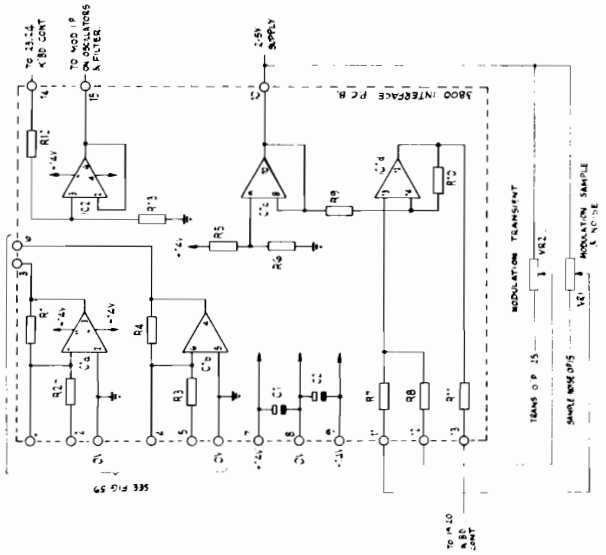


Fig. 63 Circuit Diagram of Interface

VCA

Assemble the VCA pcb using the component overlay Fig. 25 taking care with the orientation of the polarised components. Mount the front panel components and the pcb to the bracket and fix to the front panel with FPC10 and FPC11 (see Fig. 69).

Voltage Controlled Filter

Assemble the pcb as shown in Fig. 51. Fix the front panel components and the pcb to the bracket and interwire as shown in Fig. 64. Fix the assembly to the front panel.

Transient A

Assemble the transient 2 pcb as shown in Fig. 29 and the transient retrigger pcb as shown in Fig. 33. Fix the two pcb's and the front panel controls to the bracket and interwire as shown in Fig. 31 omitting the wiring to SW1 and SW3. Fix the assembly to the front panel.

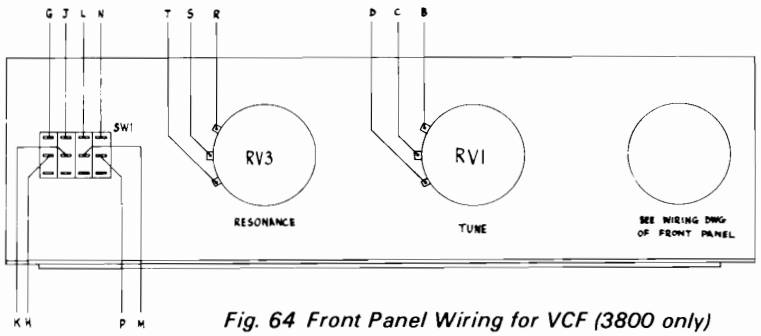


Fig. 64 Front Panel Wiring for VCF (3800 only)

Envelope

Assemble the 'transient' pcb as shown in Fig. 20 and the VCA pcb as shown in Fig. 22. Fix the pcb's and the front panel controls to the bracket and interwire as shown in Fig. 24 omitting the wiring to SW2. Fix the assembly to the front panel.

Output Module Construction

Assemble the pcb as shown in Fig. 65. Fix the pcb and the front panel components to the bracket and fix the bracket to the front panel. Fix the spring line to the cabinet as shown in the internal layout photograph. The spring line should be mounted on two rubber grommets. Wire the spring line to the output module as shown in Fig. 67.

Output Module — How It Works

This pcb can be broken down into four sections as follows:—

Input Buffer
Equaliser
Reverberation
Output Amplifier

The input buffer (IC1) has a 200kΩ input impedance and gives an attenuation of 6dB (½). The attenuation is required to prevent clipping in the equaliser output stage.

The output from the buffer is directly coupled to the input of the equaliser stage. This stage is a little unusual, since the equalising networks are arranged to vary the negative feedback. If we consider one section with the others disconnected, at the resonant frequency of the series LCR combination the impedance of the entire network will be equal to 680ohms. Either

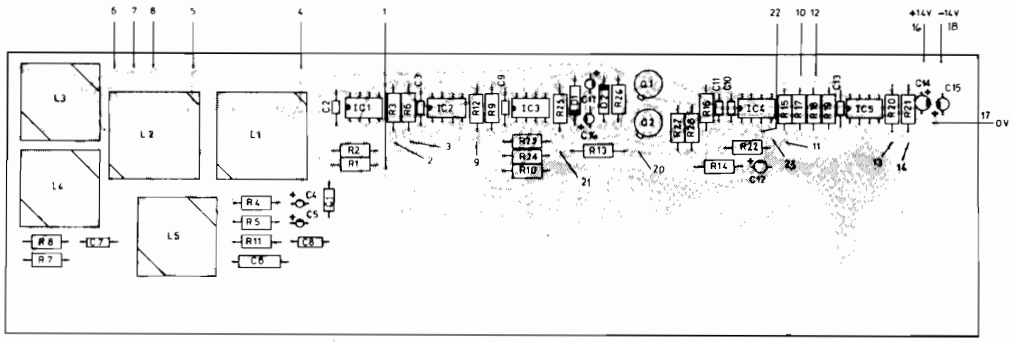


Fig. 65 Component Overlay for Output Module

side of resonance the impedance of the network will increase (with a slope dependent on the Q of the network), due to uncancelled inductive reactance above resonance and uncancelled capacitive reactance below resonance. We can therefore represent the equaliser stage with equivalent circuits as reproduced here. These circuits consider only one network is in circuit, the input signal frequency is the resonant frequency of the network, and the resistance of the inductor is negligible.

With the slider of the potentiometer at the top end (Fig. A) we have 680ohms to the zero volt line from pin 2 of IC2, and a 1kohm between pin 3 and pin 2. The IC will

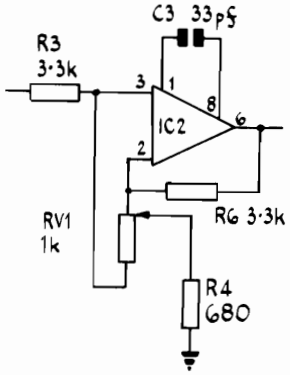


Fig. A Equivalent circuit of the equaliser with the potentiometer set for maximum boost at the resonant frequency of the network.

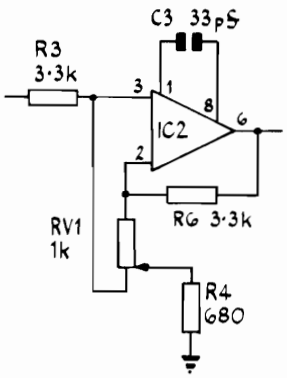


Fig. B Equivalent circuit of the equaliser with the potentiometer set for maximum cut at the resonant frequency of the network.

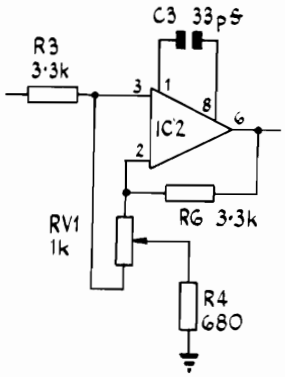


Fig. C Equivalent circuit of the equaliser with the potentiometer set for unity gain regardless of frequency.

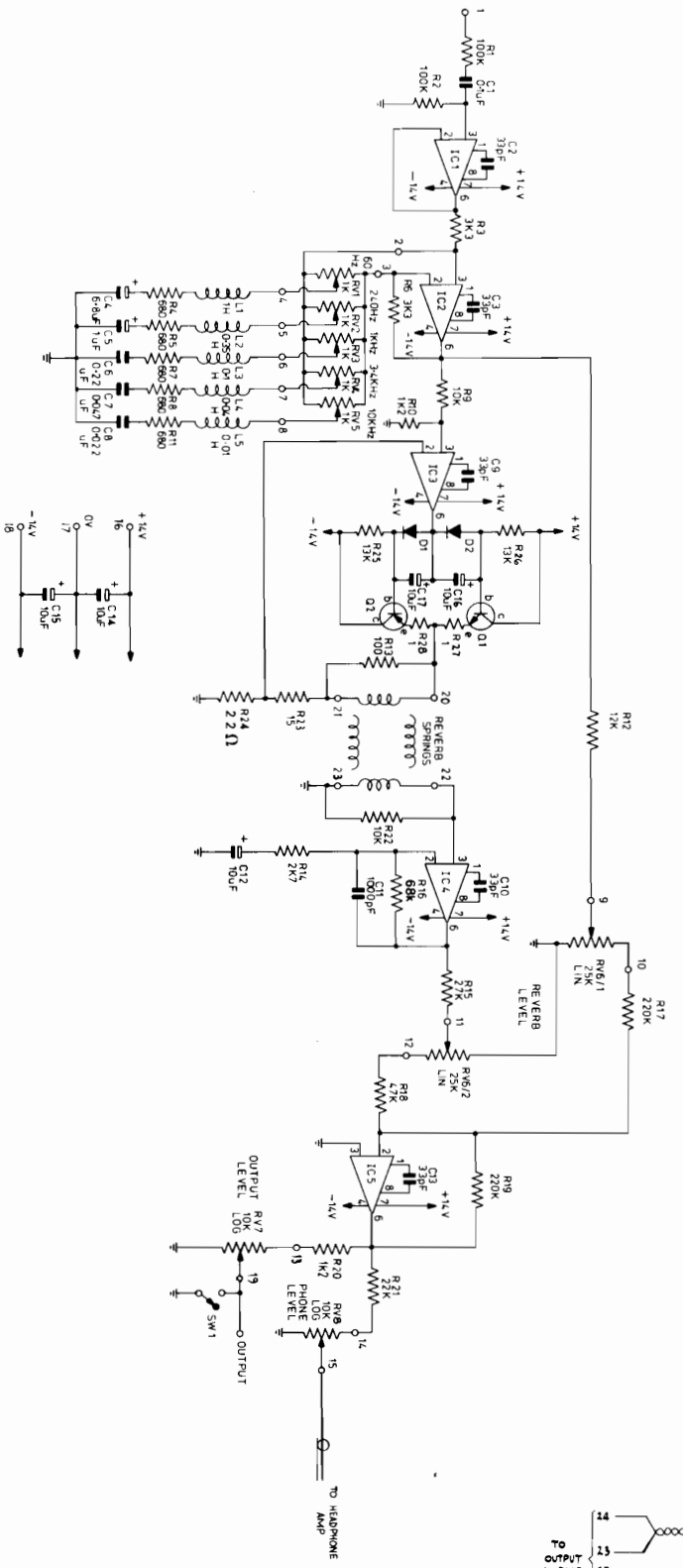


Fig. 66 Circuit Diagram of Output Module

act due to the feedback to keep the potential between pins 2 and 3 virtually zero, thus there is zero current through RV1. The voltage on pin 3 (IC2) is therefore equal to the output of the mixer since there is virtually no current through and no voltage drop across R3.

The output of IC2 in this case is approximately the input signal times (R6 + 680)/680ohms, indicating a gain of about 15dB. If the slider is at the other end of the potentiometer (Fig. B) the signal appearing at pin 3 and thus also at pin 2 is about 0.2 of the output of the previous stage due to the voltage division of R3 and the 680Ω. There is still zero current through RV1 and also zero current through R6 since there is no path. The output voltage is therefore the same as that at pin 2, which happens to be about 0.2 times the output of the previous stage. The gain is therefore 0.2 or -13dB.

With all networks in circuit, the maximum boost and cut will be reduced, but a range of ±10dB is still available. With the wiper of the potentiometers set midway (Fig. C), the gain will be unity regardless of frequency, due to the symmetry of the entire network.

The equaliser output is fed into the reverb drive circuit (IC3, Q3, Q4). The reverb is connected in the feedback of the IC in such a way that the drive is mostly constant current and not constant voltage. This drive method provides a more uniform frequency response. The output of the reverb is a very low amplitude signal which is amplified by IC4. The output of IC4 and the output of the equaliser (IC2) both go to RV6 which selects the percentage of each required.

The final amplifier, IC5, amplifies the output of RV6 and applies it to RV8 which adjusts the output level to the main amplifier. The output of IC5 also goes to the headphone amplifier.

④ Setting-up Output Module

Switch oscillator 1 to output and listen either on main output or on phones. Check that the output module facilities all work correctly (i.e. reverberation and equaliser).

Parts List for Output Module

(1 required for 3800 only)

R1,2	Min Res 100k
R3,6	Min Res 3k3
R4,5,7,8,11	Min Res 680Ω
R9,22	Min Res 10k
R10,20	Min Res 1k2
R12	Min Res 12k
R13	Min Res 100Ω
R14	Min Res 2k7
R15	Min Res 27k
R16	Min Res 68k
R17,19	Min Res 220k
R18	Min Res 47k
R21	Min Res 22k
R23	Min Res 15Ω
R24	Min Res 2.2Ω
R25,26	Std Res 13k
R27,28	Std Res 1Ω
C1	Polyester 0.1μF
C2,3,9,10,13	Ceramic 33pF
C4	Tant 6.8μF 35V

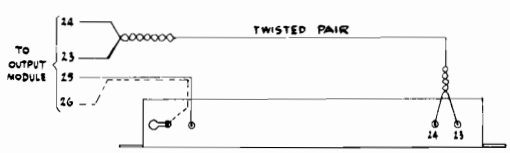


Fig. 67 Wiring of Short Spring Line

C5	Tant 1 μF 35V
C6	Polyester 0.22 μF
C7	Polyester 0.047 μF
C8	Polyester 0.022 μF
C11	Polystyrene 1000pF
C12,14,15,16, 17	Tant 10 μF 25V
RV1,2,3,4,5	Pot Lin 1k
RV6	Dual Pot Lin 25k
RV7,8	Pot Log 10k
Q1	2N2219
Q2	2N2905
IC1,2,3,4,5	LM301A
D1,2	1N4148
SW1	Sub-Min Toggle A
L1	GE Coil L11
L2	GE Coil L12
L3	GE Coil L6
L4	GE Coil L14
L5	GE Coil L15

Also required

1 Output Stage PCB
1 Trans 1/Env Mtg Bkt
1 Short Spring Line
2 Self-Tapper No. 6 ½in.
2 Grommet Small
5 DIL Socket 8-pin
1 Wafercon Socket 8-way
8 Wafercon Terminals
21 Veropin 2141
2 Bolt 6BA ¼in.
2 Nut 6BA
2 Shake 6BA
8 15mm Collet Knob Black
8 15mm Collet Nut Cover
5 15mm Collet Cap Grey
1 15mm Collet Cap Black
1 15mm Collet Cap Blue
1 15mm Collet Cap Red

Headphone Amplifier Construction

This board is the same as that in the 5600S synthesiser (except that there is only one). Follow the construction details for the 5600S and then fix the complete assembly to the cabinet in the position shown in the internal layout photograph. Wire up the amplifier as shown in Fig. 68.

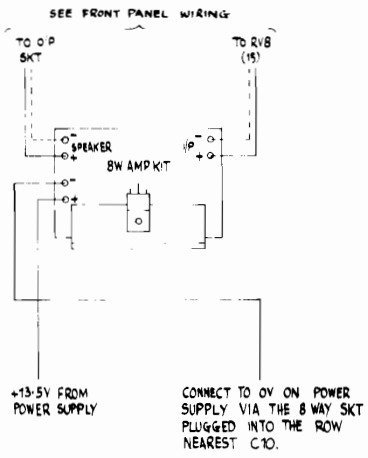


Fig. 68 Wiring of Headphone Amplifier (3800 only)

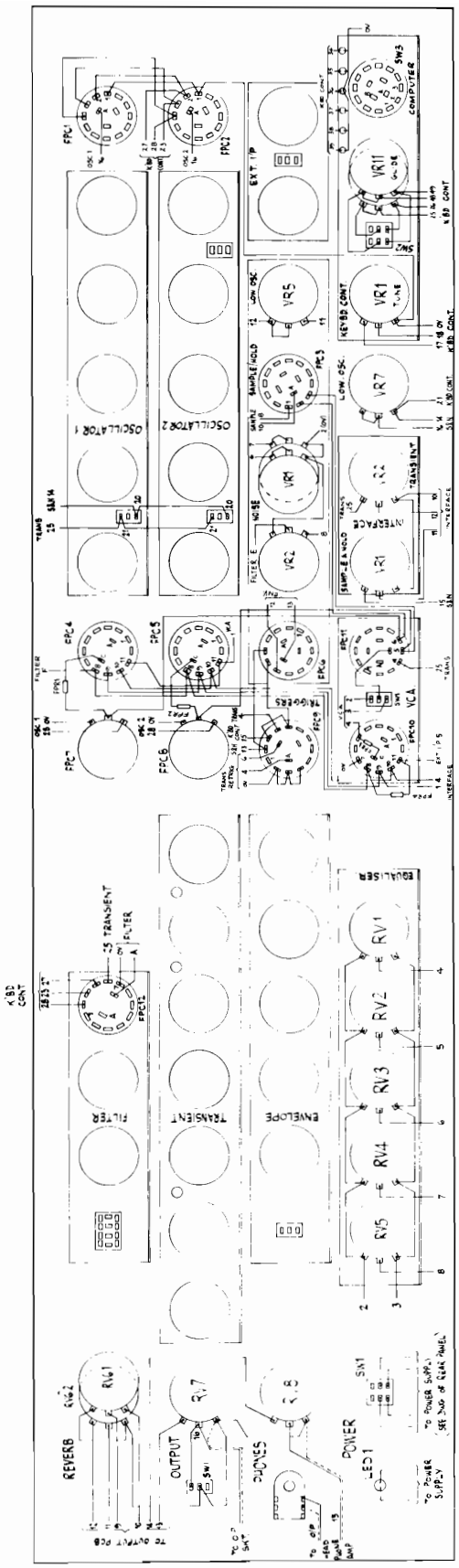


Fig. 69 Wiring of Front Panel

Completing the Front and Rear Panels

Fix the rest of the components to the front and rear panels. Carefully wire the front panel as shown in Fig. 69 and the rear panel as shown in Fig. 70. Cut down all the spindles and fit the knobs as shown in the colour photographs. Fix the rear and front panels to the cabinet. Note that a boot should be fitted to the fuseholder and mains plug.

Other Parts Required For 3800 Only

1 3800 Cabinet
1 3800 Front Panel
6 Rd Woodscrew No. 4 Black ½in. (for front panel)
4 Rotary Sw 4 (FPC 1,2,6,9)
2 Rotary Sw 3 (FFC 3,11)
4 Rotary Sw 6 (FPC 4,5,10,12)
2 Pot Lin 22k (FPC 7,8)
4 Min Res 100k (FPR 1,2,3,4)
12 15mm Collet Knob Black
5 15mm Collet Indicator
7 15mm Collet Nut Cover
2 15mm Collet Cap Black
3 15mm Collet Cap Blue
4 15mm Collet Cap Green
2 15mm Collet Cap Red
1 15mm Collet Cap Yellow

1 48-note Keyboard
48 Contact Block 1WG
8 Earth Bar
4 KB Mounting Strip
10 Self-Tapper No. 6 ½in. (for keyboard)
1 8W Amp Kit
2 Self-Tapper No. 6 ½in. (for 8W Amp kit)
1 3800 Rear Panel
6 Jack Skt Brk (SK1,2,3,4,6,7)
1 Multisocket 8-way (SK5)
1 Springlatch 8-way
4 Bolt 6BA ½in. } (for Multisocket)
4 Nut 6BA }
8 Self-Tapper No. 6 ⅜in. } (for rear panel)
1 Tag 4BA }

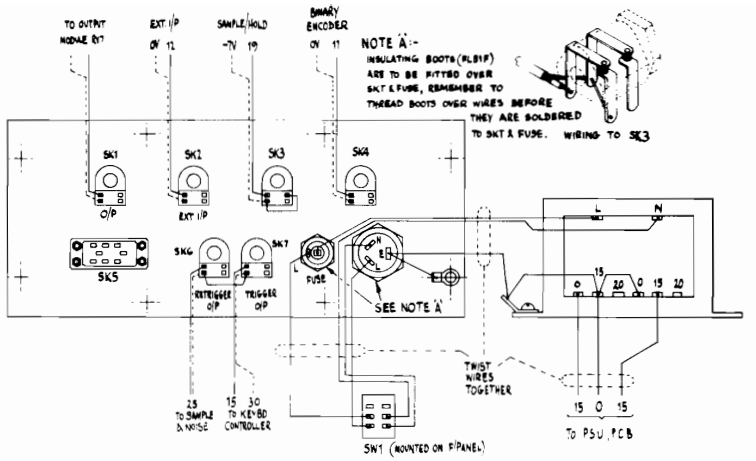
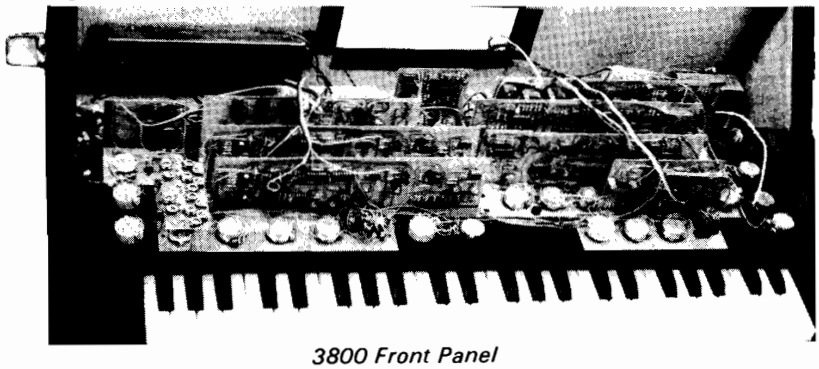


Fig. 70 Wiring of Rear Panel (3800 only)



3800 Front Panel

1 Jack Skt Sto (for headphones)
1 roll Strapping Wire 22swg
1 Systoflex 1mm White
1 Systoflex 2mm Yellow
2pk Double Bubble Sachet
3pk Solder D622
1 Small Thermpath
1 Foot Sw
1 Adaptor A (for Foot Sw)
1pk Wire 11C
15m Cable Twin
4m Ribbon Cable 20-Way

Index

Construction of the 5600S should be carried out in the following order.

Construction of the 3800 should be carried out in the following order.

Setting-up the 5600S should be carried out in the following order.

Setting-up the 3800 should be carried out in the following order.

The following is a list of where other non-specific information may be found in this book.