MONO SWITCHES

For mono output on both channels from a signal connected to the 'L' input socket press in the button marked 'L'. For mono output on both channels from a signal connected to the 'R' input socket press in the button marked 'R'.

For mono output on both channels from a mixture of signals on 'R' and 'L' input sockets, press in both buttons. Normally you will use this condition only when you play a mono record using a stereo cartridge.

For stereo output leave both buttons in the 'OUT' position.

TAPE MONITOR SWITCH

During tape recording it may be possible for you to compare the signal recorded on the tape with the original programme by use of the tape button.

Button OUT = Original programme.

Button IN = Programme recorded on tape.

This applies only for tape recorders fitted with a monitoring head.

N.B. The button should always be in the 'OUT' position except if monitoring when a tape recording is being made.

HIGH FREQUENCY FILTER

The high frequency filter button when pressed in, reduces high frequency noise (surface noise from old or worn records, tape hiss etc.).

LOUDSPEAKER BUTTONS

These permit a choice between using one pair of loudspeakers and a second pair which may be in the same room or in another part of the house. Both pairs may be used simultaneously or both may be switched off to permit private listening via headphones, a jack socket for which is provided on the front panel.

To use either button:—

Button IN = loudspeakers ON
Button OUT = loudspeakers OFF

OPERATING THE DELTA 70

TO OPERATE WITH A TURNTABLE

1. Switch on the loudspeakers by pressing the relevant "speaker" button and switch on the Delta 70.
2. Rotate the volume control slightly from an extreme anti-clockwise position.
3. Select disc 1 or disc 2, whichever you require, checking that the tape button is out.
4. Operate the turntable in accordance with the manufacturer's instructions.
5. Adjust volume, treble, bass, filter and balance controls to suit listening conditions.

TO OPERATE WITH A TUNER

1. Switch on the loudspeakers by pressing the relevant "speaker" button and switch on the Delta 70.
2. Rotate the volume control slightly from an extreme anti-clockwise position.
3. Select tuner 1/MIC or tuner 2, whichever you require, checking that the tape button is out and ensuring power is being fed to the tuner.
4. Tune to station required.
5. Adjust volume, treble, bass, filter and balance controls to suit listening conditions.

TO RECORD ON TAPE

1. Switch on the loudspeakers by pressing the relevant "speaker" button and switch on the power.
2. Rotate the volume control slightly from an extreme anti-clockwise position.
3. Rotate the selector control on the amplifier to select the sound source to be recorded (i.e. tuner or disc).
4. Select for either stereo or mono recording, according to the programme source.
5. Set the tape recorder in accordance with the manufacturer's instructions.
6. Use the volume and balance controls to adjust the programme to your listening needs. This will not affect the recording.
7. If you are using a tape recorder fitted with a monitoring head, depressing the tape button will permit a monitoring comparison to be made between the original programme and your recording.
8. When not in use release the tape button.

TO PLAY BACK TAPE

1. Switch on the loudspeakers by pressing the relevant "speaker" button and switch on the Delta 70.
2. Rotate the volume control slightly from an extreme anti-clockwise position.
3. Select "replay" on the function selector switch.
4. Set the tape recorder to play in accordance with manufacturer's instructions.
5. Adjust the volume, treble, bass, filter and balance controls to suit listening conditions.

DELTA 70 SPECIFICATIONS

1. RATED POWER OUTPUT (Both channels sine-wave driven at 1 kHz.)
   35 + 35 watts into 8 ohm loudspeakers.
   28 + 28 watts into 15 ohm loudspeakers.
2. MUSIC POWER OUTPUT (IHF)
   90 watts into 8 ohm loudspeakers.
   60 watts into 15 ohm loudspeakers.
3. TOTAL HARMONIC DISTORTION
   0.1% at ALL power levels up to 25 watts each channel into 8 ohm or 15 ohm loudspeakers.
4. TOTAL INTERMODULATION DISTORTION
   Input — 70 Hz and 7 kHz in ratio of 4:1.
   Less than 0.5% for ALL power levels up to 35 watts into 8 ohm loudspeakers.
   Less than 0.3% for ALL power levels up to 28 watts into 15 ohm loudspeakers.
5. OVERLOAD DISTORTION
   Less than 0.1% for input signals up to 20 dB above stated sensitivity from 30 Hz to 15 kHz.
6. HUM & NOISE
   66 dB below 30 watts on 'TUNER' and 'REPLAY' and 56 dB below 30 watts on other inputs.
7. CROSS TALK
   Between L and R Channels
   —50 dB up to 1 kHz and —30 dB at 10 kHz.
8. DAMPING FACTOR
   40 measured at 1 kHz for 15 ohm loudspeakers.
   20 measured at 1 kHz for 8 ohm loudspeakers.
9. INPUT SENSITIVITIES
   The sensitivities shown below give 30 watts output at 1 kHz into 8 ohm loudspeakers with tone controls 'zeroed' (12 o'clock) and volume control on maximum.

'DISC 1'	(R1AA Characteristics)	2 mV at 1 kHz
	Input Impedance	47 k ohm.
'DISC 2'	(R1AA Characteristics)	10 mV or 30 mV 1 kHz
	Input Impedance	33 k ohm 100 k ohm

'TUNER 1/MIC' 25 mV or 2 mV @ 1 kHz
47 k ohm 47 k ohm

Selected by cutting white leads on input switch.

'TUNER 2' 60 mV 250 mV
50 k ohm 50 k ohm

Selected by switched input attenuator marked 'HI' and 'LO' located on rear panel.

'REPLAY' ('TAPE-MONITOR' OUT)	400 mV
	47 k ohm
'REPLAY' ('TAPE-MONITOR' IN)	400 mV
	20 k ohm

FREQUENCY RESPONSE (± 1 dB) 30 Hz to 20 kHz
TONE CONTROL RANGE ± 16 dB at 50 Hz and 14 kHz
FILTER 12 dB per octave roll off above 6 kHz.