SAFETY INSTRUCTIONS

Every precaution has been taken for your safety during the design and manufacture of this turntable. However, for your complete protection it is essential that all warnings on the turntable and in this manual are adhered to, and that all instructions in it are followed. Read the safety and operating instructions in this manual carefully before using the turntable and keep it safely for future reference.

WATER AND MOISTURE

The turntable should not be used near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

HEAT

The turntable should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including some amplifiers) that produce considerable heat.

POWER SOURCES

The turntable should be connected to a power supply only of the type marked on the turntable, near the power supply cord exit at the rear of the turntable.

POWER CORD PROTECTION

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, and the point where they exit from the turntable.

CLEANING

The turntable should be cleaned only as recommended in Section 9 (Routine maintenance).

NON-USE PERIODS

The power cord of the turntable should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE

The turntable should be serviced by qualified service personnel when:

a. The power supply cord or the plug has been damaged; or
b. Objects have fallen, or liquid has been spilled into the turntable; or
c. The turntable has been exposed to rain; or
d. The turntable does not appear to operate normally or exhibits a marked change in performance; or
e. The turntable has been dropped, or the enclosure damaged.

SERVICING

The user should not attempt to service the turntable beyond that described in this manual. All other servicing should be referred to qualified service personnel.

1. UNPACKING

1. After opening the carton read this instruction book.
2. Grasp the turntable on either side and remove from box.
3. Remove the platter and rubber mat.
4. Remove both support moldings from the sides of the base and take out all accessories packed inside them. See ‘Section 2 Accessories’.
5. Remove all polythene bags and store packing material for possible future use, out of the reach of children.

2. ACCESSORIES

1. A tonearm head molding with finger lift. If a pickup cartridge is not fitted, then the parts needed to fix one will be provided. See Section 4.
2. A 45 rpm center hole record adapter [15]
4. Two dust cover hinges. [3]
5. A dust cover. [2]

3. SETTING UP

1. Locate and remove the four screws [1] which secure the sub-chassis for transport. They are each marked with a paper tag which reads “before using please take off this screw.”
3. The rubber drive belt fits around the platter drive hub and motor pulley. The belt must not be twisted. The belt can be fitted through the openings in the platter. Fit the rubber mat. [14]
4. a. If there is a cartridge in the tonearm head molding already, attach the complete head to the tonearm. To do this, secure the tonearm to its rest, ensure that the locking screw is sufficiently retracted, insert the head fully and tighten the locking screw.
   b. If a cartridge is not fitted, obtain one suitable for your amplifier, then see Section 3 and paragraph 4a above for fitting instructions.
5. Fit the counterbalance weight [11] by pressing and rotating it onto the back of the tonearm [8] with its calibrated barrel facing the front of the arm. For ease of assembly hold the arm in over the platter.
6. Set stylus tracking force and anti-skating control.
   a. Turn the bias compensator control to minimum position and remove the stylus guard, or swing it clear, according to type.
   b. Release the tonearm and position it away from the tonearm rest.
   c. Wind the weight backwards or forwards along the tonearm until it balances with the arm just clear of the rest extension. Secure the tonearm to its rest again.
   d. Hold the body of the counterbalance weight still and turn its front barrel (Counterweight adjustment [12]) until the ‘Zero’ mark is at the line on the top of the tonearm. Balance will be upset if the weight is accidentally turned with the barrel.
   e. Turn the weight and barrel together in a counter-clockwise direction (seen from the front of the arm) until the figure corresponding to the required stylus force in grams is at the line. The barrel is calibrated 0 to 1 gram in 0.1 steps. If, for example, a tracking force of 2 grams is required turn
the weight and barrel two complete revolutions forward.

- Minimum recommended tracking force with a suitable cartridge is 0.75 grams.
- Set the stylus force specified by the cartridge manufacturer.
- When a cartridge is fitted, its stylus force range (in grams) is shown on the identification ticket on the packing carton.

1. Set the anti-skating control [10] as follows:
   The anti-skating control has a calibrated scale.
   Turn the control to correspond with the stylus force already set. For instance, if a cartridge calls for a stylus force of 1 gram, set the calibration mark on the control to the figure "1" on the scale.

7. Attach the connecting leads, see Section 5.

8. Fit the two dustcover hinges [3] to the cover at the square indentations molded into the cover [2] then slide the hinges and cover into the rectangular slots at the back of the turntable base.

   When locating the player please consider the following:
   - It must be placed on a firm, level support with adequate clearance all round to allow slight movement on the sprung feet. Do not pull connecting leads tight or route them beneath the player.
   - To avoid acoustic feedback do not place it on, or too near, speaker enclosure.

4. FITTING THE CARTRIDGE

(Discard these instructions if a cartridge is already fitted.)

1. Assemble the pick-up cartridge to the tonearm head moulding using the screws, round nuts and finger lift moulding provided. Or, if preferred, fix the cartridge to the finger lift and slide this assembly onto the head moulding from the front. Make sure that the finger lift can move along the top of the head.

2. Tighten the screws sufficiently to hold the cartridge in place, while allowing the self-aligning finger lift to slide backwards or forwards for adjustment.

3. Push the tags on the four colored connecting leads in the head moulding onto the corresponding cartridge output pins, using a pair of tweezers or sharp-nosed pliers with care. Never solder leads directly to these pins. Connecting leads use the following code:

   - Red — Right channel signal
   - Green — Right channel ground
   - White — Left channel signal
   - Blue (or Black) — Left channel ground

4. Assemble the head to the tonearm as described in Section 3, paragraph 4a.

5. For best tracking conditions the cartridge stylus tip must be carefully set in relation to the tonearm [8] and the record spindle. Your local dealer is specially equipped to make this precision adjustment.

6. Secure the tonearm to its rest and tighten the cartridge fixing screws firmly, but not excessively. Do not tighten these screws with head moulding fitted to tonearm.

5. AUDIO CONNECTING LEADS

The audio connecting lead is terminated at two phono plugs. If the amplifier pickup (phone) input socket does not correspond to the plugs provided, please consult your dealer who will be able to recommend a suitable adapter. If the amplifier has RCA type phone sockets:

- Attach the phono plugs on the audio connecting leads to these. Connect the red or brown plug to the right channel input and the white or grey plug to the left channel input.
- Secure the bare end of the signal ground lead to the ground terminal on the amplifier.

6. POWER SUPPLY LEAD

Check that power supply voltage and frequency meet the requirements printed on the label at the back of the record player. Connect the plug on the mains lead to an accessory outlet socket (preferably switched) on the amplifier or to any normal household ac mains outlet socket.

7. OPERATION

Check that the stylus guard has been removed or swung clear.

- Manual Play
  a. Set the "speed" change button [4] to 33 or 45 rpm.
  b. Slide the "cue" lever [9] to "lift" and move the tonearm to the required position over the record using the finger lift on the tonearm head. Move the "cue" lever to "lower" to play.

- Auto Return
  a. At the end of the record, the tonearm will be automatically lifted and returned to its rest.
  b. For auto switch off and arm return while playing a record press the "reject" button [7].

8. ROUTINE MAINTENANCE

Careful design has reduced the need for maintenance to a minimum but attention to the following points will prolong trouble-free listening.

- The pickup cartridge stylus.

   If the stylus tip gathers dust, sound quality will suffer. Stroke the dust away gently with an artist's camel-hair brush, working only from the back of the stylus towards the front to avoid bending it. Do not use solvent without the cartridge maker's approval. Have the stylus tip examined under a dealer's microscope periodically for signs of wear. A worn or chipped tip damages records permanently.

   - The platter mat. [14]
     Remove the mat from time to time and clean it with a soft brush or a slightly moist cloth.

   - The dust cover. [2]
     Wipe this cover with a slightly moist cloth to remove dust and finger marks.

9. SERVICE HINTS

Disconnect the unit from the power supply and protect the stylus whenever possible before investigating problems. Numbers in brackets are those of relevant earlier sections.
Fault
Unit fails to start

Cause and remedy
1. Platter drive belt displaced or broken. Remove the turntable platter and refit or fit new belt.
2. Power supply lead insecurely connected. Push plugs fully into power outlet socket.
3. Damaged power supply lead or internal fault. Consult dealer.
4. No output from power source socket (check by connecting other equipment to it). If no output, consult dealer or qualified electrician.

Fault
Speed variation

Cause and remedy
1. Oil belt drive. Wipe the drive belt, motor pulley and platter drum with a clean, dry cloth.
2. Recorded 'wow' or 'flutter'. No cure.
3. Records warped, dished or eccentric. No cure.
4. Drive belt rubs speed change arm. Consult dealer.

Fault
No sound output

Cause and remedy
1. Pickup cartridge leads or phono connecting leads insecure or damaged. Check connections, consult dealer.
2. Faulty cartridge or amplifier. Check by substitution if possible.

Fault
Distorted sound

Cause and remedy
1. Stylus clogged by dust. Clean it with a soft brush.
2. Check stylus force and bias compensator control settings. Reset to cartridge maker's recommended figure.
3. 'Cue' control not moved fully to 'lower' (lifting platform must clear the tonearm).
4. Cartridge insecurely fitted. Check its position and tighten fixing screws.
5. Tonearm head loose. Tighten fixing screw.
6. Worn or damaged stylus. Fit new stylus if needed.

Fault
Low pitched noise through speakers ('hum', 'rumble' or acoustic feedback)

Cause and remedy
1. Connecting leads insecure or damaged. Check connections, consult dealer.
2. Try effect of removing and reversing power supply plug in socket. Not applicable to UK models.
3. Player placed too near to speakers. Move it further away.
4. Recorded 'noise'. No cure.