INTRODUCTION

For over 25 years, H.H. Scott Inc. has been manufacturing the ultimate in high-fidelity components, and we are pleased to welcome you to our evergrowing family of satisfied customers. We are confident that you and your family will enjoy many years of troublefree listening pleasure from your new SCOTT stereo turntable.

Your new SCOTT turntable is a sophisticated and flexible unit. It is neither complicated to install nor to operate. However, to obtain optimum performance, a few moments of your time are required to read this manual in order to become familiar with its many features and how to use them.

Should there be any questions which are not fully answered by this operating manual, please contact your local SCOTT dealer, or H.H. SCOTT, INC.

BEFORE INSTALLING

When installing Model PS 16 observe the following.

1. Set Model PS 16 on a place stable and free from vibrations.
2. Avoid a place subject to direct sunlight, or near a space heater or other heat generating object.
3. Select a place which is well ventilated with low humidity and free from dust.
4. Keep the player system away from the speaker systems to avoid the howling problems.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
FEATURES

BELT-DRIVE SYSTEM

The model PS 16 incorporates the belt-drive system with micron-precision polywrethane belt which accurately transmits the motor speed to the turntable without any vibration of the motor.

4-POLE SYNCHRONOUS MOTOR

The 4-pole synchronous motor with lowest vibration and smooth and accurate revolution drives the high precision finished and balanced aluminum alloy diecast turntable platter, that assures the minimum wow and flutter and stable revolution accuracy.

AUTOMATIC RETURN & CUT MECHANISM

The model PS 16 incorporates automatic return and cut mechanism. When a record plays out the pick-up arm returns to its rest position and the power turns off automatically. It is also possible to terminate the play before pick-up arm reaching the last groove of the record.

HIGH-SENSITIVE S-SHAPED PICK-UP ARM

The model PS 16 employs a well laterally balanced S-shaped pick-up arm with lightweight and higher mechanical resonance, enabling precise and stable tracing performance of the record. The stylus pressure adjustment mechanism is direct-readout type with easy and accurate adjustment when cartridge change is necessary.

OIL-DAMPED PICK-UP ARM LIFTER

The oil-damped pick-up arm lifter works extremely smooth and assures easy pick-up arm handling and optimum stylus and record protection.

LOW STRAY-CAPACITANCE OUTPUT CORD

The model PS 16 employs an extremely low stray-capacitance phono output cords, which enable to transmit the full performance of the cartridge to the amplifier without any loss or gain. (When you want to play a discrete 4-channel record, replace the cartridge with especially designed for the discrete 4-channel record)

LARGE SIZE INSULATOR

The model PS 16 adopts large size insulators made from rubber and felt, which absorb and reduce the vibration very effectively, and give you clear sound reproduction.

HIGH-COMPLIANCE MOVING MAGNET TYPE CARTRIDGE

The model PS 16 is equipped with newly developed dual magnet type cartridge, the JM-18, which features an extremely wide frequency response and reproduction of clear and natural sound. The diamond stylus will give you many hours of quality sound reproduction from records.
ASSEMBLY

TO AVOID THE ELECTRIC SHOCKHAZARD, DO NOT INSERT THE POWER CORD PLUG INTO ANY POWER OUTLET BEFORE ASSEMBLY AND ADJUSTMENT ARE OVER.

After unpacking the carton, carefully take out the cabinet mounted with player unit, the pick-up arm and the dust cover, then take out the turntable, rubber sheet and accessories.

I. TO ASSEMBLE THE TURNTABLE DRIVE MECHANISM

1. Remove the three red-topped screws and washers which fasten the motor to motor board for transit, also take off the pick-up balance weight from the player board and insert it into the rear part of the pick-up arm. (See figure 1)

![Fig. 1](image)

2. Check and adjust the position of the gear.
   2-1. Move the toothless part of the gear into center spindle. Never turn the gear clockwise. It will cause mechanical trouble.
   2-2. Slide the clutch toward arrow direction indicated in figure 2.

3. Gently insert the turntable into the center spindle.

4. Set the speed select lever to "33" position, and the drive belt situated on the drive-drum beneath the turntable, with the thumb and forefinger of right hand through an opening of the turntable, then run the drive belt through the belt-guide and onto the driving roller. (See figure 3)

   CAUTION:
   Wash your hands before handling the drive belt to avoid the greasy sweat sticking to the drive belt.

5. Place the rubber sheet on the turntable and 45 r.p.m. adaptor on the storing post of the player board.

   ![Fig. 2](image)

   ![Fig. 3](image)
II. TO ADJUST THE PICK-UP ARM

1. Remove the string which fasten the pick-up arm to the arm rest for transit.
2. Remove the stylus protection cover from the cartridge shell.
3. Set the lift lever to “DOWN” position from “UP” position and the anti skating control knob at “O” position.
4. Unfasten the arm clamp for pick-up arm to be free from the arm rest.
5. Move the pick-up arm to the turntable, paying enough attention to the stylus so as not to touch or hit the turntable etc. and adjust the balance weight, by moving the balance weight back and forth so that the pick-up arm is horizontally balanced (Balance weight is movable back and forth by turning clockwise or counterclockwise). See figure 4 and 5.

Fig. 4
KEEP PICK-UP ARM HORIZONTALLY
BALANCE WEIGHT

Fig. 5
0.25g/SCALE
MOVING DIRECTION OF BALANCE WEIGHT
MARKER
ROTATING DIRECTION OF BALANCE WEIGHT
COUNTER RING

6. When the horizontal balance is attained, set the “O” position of the counter ring to the marker on the pick-up arm pipe by turning the counter ring.
   Please be careful not to turn the balance weight at this time.
7. Then rotate the balance weight (the counter ring rotates simultaneously with the balance weight) counterclockwise (from front view) so as to set the “2” position of the counter ring line to the marker.
   Now the stylus pressure is adjusted to 2 grams — the correct stylus pressure of the cartridge equipped with this system.
   When using the cartridge of 3 grams recommended stylus pressure, rotate the main weight and set the “3” position of the counter ring with the indicator line.
   The scale marker of the counter ring is provided at 0.25 grams steps, so finer adjustment of stylus pressure is possible to the order of 0.1 ~ 0.5 grams by reading the scale.
8. After the pick-up arm adjustment is over, fix the pick-up arm on the arm rest with the arm clamp.
9. Rotate and set “2” position of the anti-skating control knob on the arrow indicator. When using the cartridge of 3 grams recommended stylus pressure, set the “3” position of the anti-skating control knob on the arrow indicator.
ELECTRICAL CONNECTION

Use the amplifier that permits connection of a record player equipped with a magnetic cartridge.

1. Connect the output cords to the "PHONO" input terminals of the amplifier, left channel output cord (white plug) to the "L-PHONO" input terminal and right channel output cord (red plug) to the "R-PHONO" input terminal.
2. Connect the ground wire of this system to the "GND" or "EARTH" terminal of the amplifier.
3. Connect the AC power cord to the AC wall outlet.
I. APPELLATION AND FUNCTION OF THE CONTROLS

1. SPEED CHANGE LEVER
   This player system permits you to select two speeds, 33-1/3, r.p.m. or 45 r.p.m. Slide the lever according to the type of record you play.

2. TURN TABLE COVER
3. TURN TABLE
4. CENTER SPINDLE
5. 45 R.P.M. ADAPTOR
6. PICK-UP BALANCE WEIGHT
7. COUNTER RING
8. ANTI-SKATING CONTROL KNOB
9. LIFT LEVER
   This is automatic pick-up arm lifter, shifting the lever to up-ward, the pick-up arm will raise from the arm rest or record surface. And shifting to down-ward, the pick-up arm will slowly come down to the record surface automatically.

10. PICK-UP ARM
11. ARM REST
12. AUTO-STOP LEVER
   Push the lever to arrow-indicated direction for terminating the play anytime before the last groove of record is reached. The pick-up arm will automatically return to the arm rest without any damage to the record groove or the stylus tip, and this record player system is automatically turned off when the pick-up arm returns to the arm rest as above.

13. SHELL WITH CARTRIDGE
II. TO PLAY A RECORD

1. Place a record on the turntable. When you play a large center hole disk (45 r.p.m. record) please use the 45 r.p.m. adaptor, an accessory.
2. Remove the stylus protection cover from the cartridge and free the pick-up arm from the arm clamp.
3. Shift the lift lever to "UP" position, then move the pick-up arm toward the record and the turntable will start revolving automatically.
4. Select the proper speed (33-1/3 r.p.m. or 45 r.p.m.) by speed change lever according to the type of record you play.
   Be sure to change the speed while the turntable is revolving in order to protect the turntable driving belt from being deformed.
5. Move the pick-up arm to the first groove of the record position.
6. Shift the lift lever to "DOWN" position, the pick-up arm slowly comes down on the record surface automatically.
7. When a record plays out, the pick-up arm returns to the arm rest, and the turntable stops revolving and the set is turned off, all automatically.
8. When you want to terminate the play before the record plays out, push the auto-stop lever to arrow-indicated direction and the pick-up arm will gently lift and return to the arm rest automatically, without any damage to the record surface or stylus.

CAUTIONS:

1. While the pick-up arm is automatically returning to the arm rest, do not manually interfere with it. Mechanical trouble may result.
2. When moving the pick-up arm by hand, do not force it outward of the arm rest or inward of the last groove of the record.
3. For protection of the turntable drive belt, do not change the speed select lever when the turntable stops.
4. If the stylus is dirty, sound quality will deteriorate, so brush it off with a soft brush from time to time.

MAINTENANCE

I. STYLUS REPLACEMENT

The model PS 16 employs a diamond stylus type DSN-39 for ST/LP (33-1/3 and 45 r.p.m. record) playing. You are recommended to replace it after 1,000 hours of use. To replace the stylus assembly, remove the cartridge shell assembly and pull out the stylus knob carefully and slowly to arrow direction (see figure 9 A & B).
II. CARTRIDGE REPLACEMENT

This player system is operative with other phono cartridge or cartridge shell assembly instead of equipped one. The cartridge shell assembly with the cartridge can be easily removed by turning the neck screw clockwise. For replacement of cartridge and cartridge shell, please refer to figure 10 and following procedures:

1. Fasten the pick-up arm to the arm rest by the pick-up arm clamp.
2. Loosen the neck screw and remove the cartridge shell from the pick-up arm.
3. Pull out the stylus assembly from the cartridge so as not to damage the stylus.
4. Carefully remove the cartridge connecting lead wires with tip from the cartridge connecting pins with tweezers or small long nose pliers.
5. Remove two cartridge fixing screws and nuts and take out the cartridge from the shell.
6. Check the net weight of the cartridge with specifications or instruction sheet. This pick-up arm can be used for 4 to 10 grams net weight of the cartridge.
7. Temporarily fix the new or other cartridge to the shell using with the two screws and nuts.

**NOTE:**
Before fixing the cartridge to the shell, remove the stylus assembly from the cartridge to protect the stylus assembly from damages.

8. Connect the connecting lead wires with tip to the cartridge connecting pins, as follows.
   - White lead wire to "L" terminal of the cartridge.
   - Blue lead wire to "LE" or "G" terminal of the cartridge.
   - Red lead wire to "R" terminal of the cartridge.
   - Green lead wire to "RE" or "G" terminal of the cartridge.
9. Install the stylus assembly to the cartridge, then adjust and fix the cartridge position as indicated in figure 11.
10. Install the cartridge shell assembly to the pick-up arm and adjust pick-up arm horizontal balance and stylus pressure to meet the specification of the cartridge referring to "II. TO ADJUST THE PICK-UP ARM" on page 4.
III. ABOUT LUBRICATION

1. Lubricate the machine two or three times a year if it is used for ordinary home entertainment purpose, and once a month if used for business purpose.
   The motor shaft bearings and center spindle bearing should be lubricated (See figure 12)

2. When lubricating, be careful not to contaminate the driving roller, turntable drive drum, belt and/or belt guide with the oil.
   If they are accidentally contaminated with the oil, wipe them clean using with a piece of soft cloth moistened with absolute alcohol.

   Fig. 12

SPECIFICATIONS

TYPE: Two speeds stereo record player system
TURNTABLE DRIVE SYSTEM: Belt drive system
TURNTABLE SPEED: 33-1/3 r.p.m. and 45 r.p.m.
MOTOR: Four poles synchronous motor
SPEED CHANGE MECHANISM: Selector lever system
TURNTABLE PLATTER: 12" (30 cm) diameter, aluminum-diecast alloy.
WOW AND FLUTTER: 0.07% (WRMS) or less.
SIGNAL TO NOISE RATIO: 45 dB or more,
PICK-UP ARM: Static balanced, S-shape type pipe arm with direct read out stylus pressure and anti-skating control system.
EFFECTIVE ARM LENGTH: 8.464" (215 mm)
USABLE CARTRIDGE WEIGHT: 4 to 10 grs.
CARTRIDGE: Dual magnet type (JM-18).
FREQUENCY RESPONSE: 15 Hz. – 20 kHz.
RECOMMENDED STYLUS PRESSURE: 2 grs.
OUTPUT VOLTAGE: 2.5 mV (at 1 kHz, 50 m/m sec.)
CHANNEL BALANCE: Within 2 dB (at 1 kHz.)
RECOMMENDED LOAD RESISTANCE: 47 Kohms.
COMPLIANCE: 6 x 10⁻⁶ cm/dyne.
CHANNEL SEPARATION: 20 db or more (at 1 kHz.)
STYLUS: 0.6 mil, diamond (type DSN-39)
CARTRIDGE WEIGHT: 5.5 grs.

SUBFUNCTIONS: Oil damping pick-up arm lifter.
ACCESSORY: Large size shock insulators.
Auto-cut, auto-return tone arm mechanism.
POWER REQUIREMENT: 46 r.p.m. adaptor.
AC 220 volts 50 Hz. * For North America 117 V 60 Hz.
POWER CONSUMPTION: 15 Watts.
DIMENSIONS: 18-5/16" (465 m/m)W x 14-29/64" (367 m/m)D x 6-5/8" (168 m/m)H.
WEIGHT: 15.4 lbs. (7.0 kgrs)