OPTONICA

OWNER'S MANUAL

RP4705

STEREO TURNTABLE

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- 1. Please read this manual before operating the unit.
- 2. Keep the unit dry, as exposure to moisture may cause shocks or fire.
- 3. Do not place or operate this unit in direct sunlight, heat exceeding 104°F, high humidity, extreme cold (below 41°F) or areas with excessive dust.
- Avoid the use of strong solvents, benzine, thinners, pesticides and strong household cleaners on or near the cabinet.
 Serious damage to the finish and/or surface may result.
- 5. Operate the unit only on the specified AC voltage. Usage any voltage other than this specified voltages may result in damage to the unit. Optonica is not responsible for any damage resulting from use at other than specified voltages.

FOR YOUR RECORDS.....

For your assistance in reporting this unit in case of loss or theft, please record below the model number and serial number which are located on the rear of the unit.

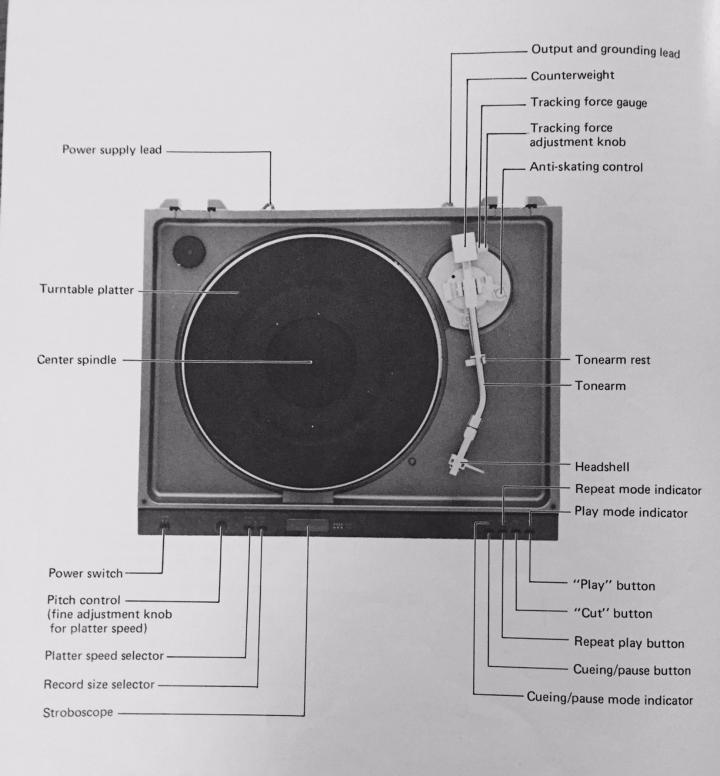
Please retain this information.

Model number_______
Serial number______

Date of purchase_____

Place of purchase______

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



READING

FEATURES

HANDSOME, COMPACT DESIGN WITH FRONT CONTROLS

Efficient streamlining has gone into the design of the RP-4705 to offer sophisticated workmanship within compact dimensions.

HIGH PERFORMANCE DIRECT DRIVE SYSTEM

The mono-torque system platter drive motor, newly developed by Optonica, maintains constant rotational torque. The built-in 72-pole frequency generator substantially lowers the wow and flutter of the platter movement.

INDEPENDENT TONEARM DRIVE MOTOR

The tonearm drive motor prevents lateral pressure from affecting the stylus while tracking. Playing a record becomes a simple operation, controlled by lightly pushing the button for start, cueing, repeat or stop.

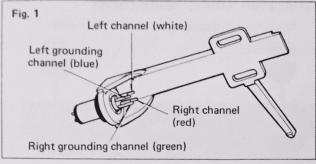
HIGHLY SENSITIVE, STATICALLY BALANCED TONEARM (UNIVERSAL TYPE)

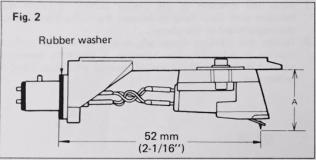
Even with lowered tracking force, the tonearm provides excellent tracking. Performance is further strengthened by the anti-skating device.

PRECISION ENGINEERED DIE-CAST PLATTER

Weighing 1.4 kgram (3.1 lbs.), this die-cast platter greatly reduces the wow and flutter.

PREPARATION FOR USE





CARTRIDGE MOUNTING

 It is necessary to purchase a cartridge, as it is not furnished with the unit.

Important note:

- Re: fig. 2. Dimension A must be less than 19 mm.
- The weight of the cartridge should be between 4 12 grams.
- Read the instructions pertaining to the cartridge carefully before mounting. Some cartridges may require special mounting hardware, or need to be insulated from the headshell. The cartridge can be mounted on the headshell with the hardware supplied by the cartridge manufacturer or with the hardware included with the turntable.
- The headshell has been pre-wired to facilitate connection to the cartridge. Attach the wires to the cartridge by sliding the connector over the proper terminal on the cartridge.
- The cartridge must be positioned on the headshell so that there is a distance of 52mm between the stylus tip and the rubber washer on the plug end of the headshell.

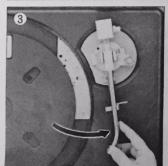




ASSEMBLY

The unit has been amply protected against vibration and impact during transport. Set up the unit in accordance with the following procedures:

- 1. Remove ribbon and tonearm lock from the tonearm.
- 2. Move the tonearm to the center spindle and slide the counterweight over the rear end of the tonearm.



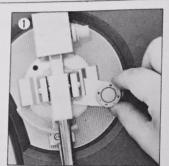


- 3. Manually replace the tonearm onto its rest.
- Gently slide the headshell onto the tonearm and turn the clamp in the direction indicated to lock the headshell.





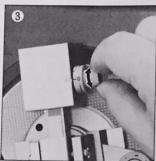
- Hold the platter with both hands and gently place it over the center spindle.
- 6. Place the rubber mat over the spindle and press until flat.



TRACKING FORCE ADJUSTMENT

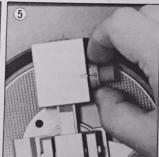
1. Adjust the anti-skating control to the "0" position.



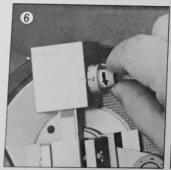


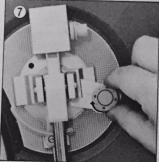
- Move the tonearm to the platter surface. Support the tonearm with your hand to prevent the stylus from hitting the motorboard or the platter.
- Rotate the tracking force adjustment knob until perfect balance is achieved. The tonearm is perfectly balanced when it maintains its horizontal position after your hand is withdrawn.



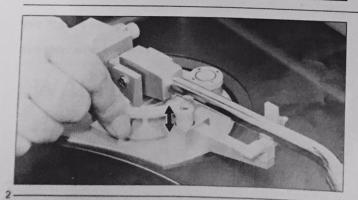


- 4. Manually replace the tonearm onto its rest.
- Manually rotate the tracking force gauge until the "0" mark aligns with the mark on the counterweight.





- Consult the cartridge instructions to determine the recommended tracking force.
 - As shown in Fig. 6, rotate the tracking force adjustment knob in the direction indicated until the recommended force aligns with the mark on the counterweight.
- Adjust the anti-skating control to the same number as the tracking force.



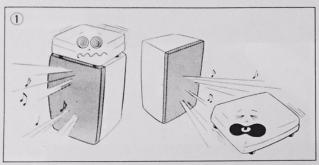
TONEARM LEVER

When using the turntable for the first time after a long period of inactivity, the tonearm may not function initially. If that is the case, gently move the tonearm lever up and down two or three times. The lever should then function normally.



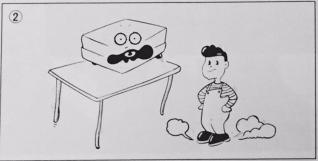
DUST COVER MOUNTING

Join the plate hinges and the hinge brackets on the baseboard by pushing down, as indicated by the arrow in the illustration.

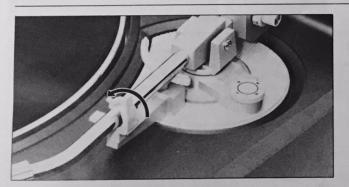


POSITION OF THE UNIT

 To prevent both the stylus from skipping and the presence of feedback whistle, place the unit as far from the speakers as possible.

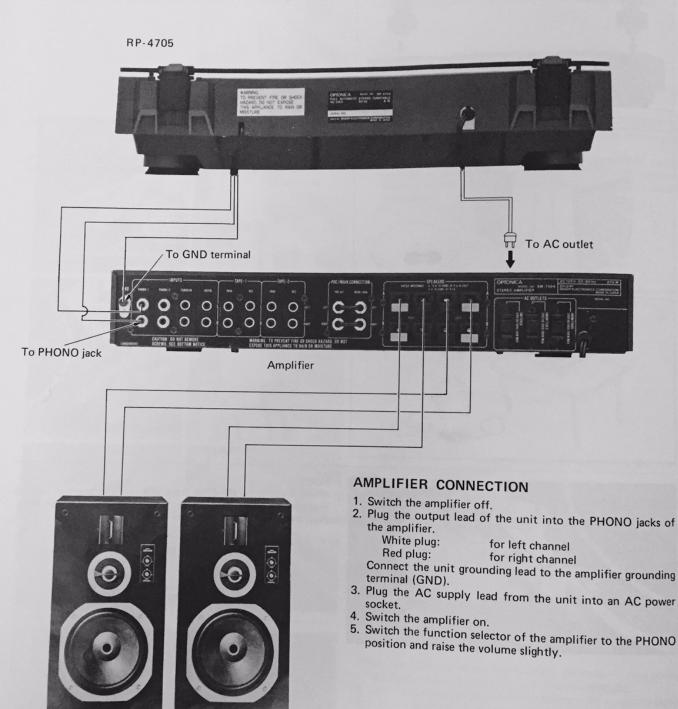


2. Place the unit on a stable, vibration-free base.



Note:

When moving the RP-4705 from one place to another, be sure that the tonearm is fixed in place with the tonearm lock. Push the "cue" button to lower the tonearm lever.



OPERATION



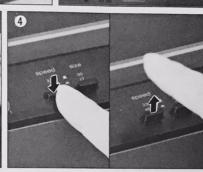


AUTOMATIC PLAY

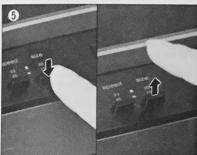
Refer notes on the next page.

- 1. Switch power on.
- 2. Place a record on the platter.

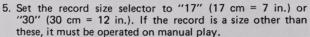




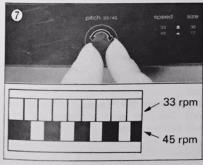
- 3. To play a 45 rpm, use the adaptor furnished with the unit.
- 4. Depending on the speed of the record, set the speed selector to 33 or 45.







Press the "play" button. The play mode indicator will light up and the tonearm will leave the rest, reaching the edge of the record and slowly lowering onto the record to begin playing.





- 7. A stripe pattern will appear on the stroboscope. The correct speed is achieved when the stripes appear to be motionless. If the stripes appear to move, adjust the pitch control knob until the stripes are stationary.
- 8. Adjust the amplifier controls.
- To temporarily interrupt operation, press the "cue" button.
 To restart, press the button again. The stylus will move back to the same place on the record where playing was halted.



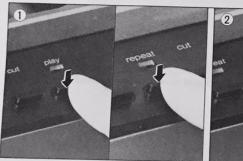


- Press the "cut" button to discontinue operation when the record has not been completely played. The tonearm will return to its rest and the platter will stop rotating.
- 11. When the stylus reaches the last groove on the record, it will automatically return to the tonearm rest and the platter will stop rotating.

Notes on "Automatic play"

- As long as the "cue" button is set, operation will not begin even if the "play" button is pressed. The "cue" button must be pressed first for operation to be resumed.
- Avoid switching the record size selector while the tonearm is in motion. Functional problems may result from such action.
- Should the stylus fail to descend on the starting groove of a record properly, readjustment is necessary. Refer to page 7.
- If the last groove (with signal recorded) on the record is less than 55mm (2-3/16") from the center hole, the tonearm may not automatically return to its rest, even when playing is over. In this case, press the "cut" button.
- * When there is no record on the platter, or when the record size differs from that which has been set on the size selector, if the "play" button is pressed, the tonearm will automatically move up and down, which could cause damage to the stylus. Manually stop the tonearm movement so that the stylus does not hit the platter: when the tonearm moves up and reaches a point just above the record, grip the headshell for a moment until the tonearm drive motor stops. Manually return the tonearm to its rest.
- * During the pause mode, when the "cue" indicator is lit and the tonearm is away from the record surface, press the "cut" button to return the tonearm to its rest. If you have inadvertently returned the tonearm manually, press the "cut" button.
- * Should a power failure occur while the tonearm is in motion over a record, the tonearm will stop in mid-action. Manually return it to its rest and turn off the power switch.

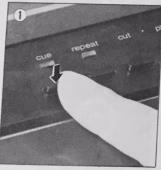
When AC power resumes, turn on the power switch and press the "cut" button while keeping the tonearm in its rest with your hand for about 10 seconds. This allows the built-in mechanism to return to its neutral position.





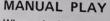
REPEAT PLAY

- To replay a record after it has just been played, press the "repeat" button after pressing the "play" button. The repeat mode indicator will light up.
- 2. To stop repeat play, press the "cut" button.



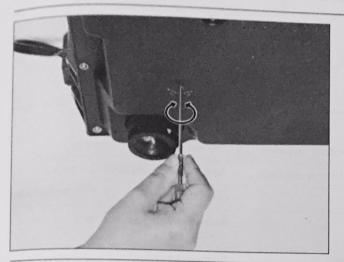






When playing records other than those with diameters of 12 or 7 inches, or when playing a record from a middle section, use the following procedures for manual play.

- Press the "cue" button to raise the tonearm. The cue indicator will light up.
- Using the headshell grip, move the headshell to the desired groove on the record. The play mode indicator will light up and the platter will begin to rotate.
- 3. Press the "cue" button once again to lower the stylus onto the record. The cue indicator will then be turned off.
- 4. The following steps are the same as those described in the "automatic play" section.



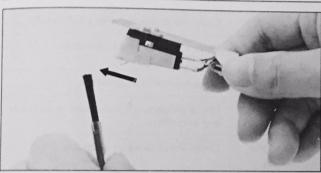
AUTOMATIC LEAD-IN MECHANISM ADJUSTMENT

Before leaving the factory, the descending position of the stylus under automatic play was properly adjusted. However, vibration during transportation may have caused a slight deviation, requiring some adjustment.

If the stylus descends outside of the record edge, turn the screw toward "IN". If the stylus falls inside the starting groove, turn the screw toward "OUT".

One revolution of the screw alters the descending position

about 15mm (5/8 inch).



STYLUS TIP CLEANING

Use a soft brush to clean the stylus. Wipe in the direction shown in the illustration. The stylus tip is very fragile, therefore never touch it directly with your fingers.

CABINET CARE

Dampen a soft cloth in water and a mild detergent. Do not use strong solvents, such as benzine or thinner, as they may cause the luster or finish of the cabinet to become dulled. Wipe the cabinet lightly to clean it.

TROUBLE SHOOTING GUIDE

The situations listed below do not denote malfunctions of the unit. Follow the directions to correct the problems. However, if they should persist, contact your local Optonica service center.

PROBLEM	CAUSE	SOLUTION
Sound is distorted.	Tracking force is incorrectly adjusted.	Adjust tracking force properly.
	Anti-skating device is incorrectly adjusted.	Adjust anti-skating device properly.
A sharp, snapping sound is heard while record is playing.	Record is dirty.	Clean the record.
	Record is scratched.	Reduce treble on the amp or use a scratch filter.
	Stylus is worn or damaged.	Replace the stylus.
	Dust has collected on the stylus tip.	Clean the stylus tip with a soft brush.
A loud, howling noise occurs when volume is raised.	The turntable is on an unstable surface, loose floorboard, wobbly table, etc.	Move turntable to a stable base.
	Turntable is too close to speakers.	Move turntable or speakers.
A humming noise is present during play.	Turntable is not grounded properly.	Check grounding connections at turntable and amplifier.
No sound issues from either channel.	Turntable is improperly connected to the amplifier.	Check input jacks on amplifier.
	Headshell is not installed properly.	Remove headshell and re-install correctly.
No sound issues from one channel.	Audio cables are not grounded correctly.	Check audio cables at amp input jacks.
	Cartridge is not connected correctly.	Check wires in the headshell to see if they are connected to the cartridge.
Stylus skips while playing.	Turntable is unstable.	Move to more stable location.
	Tracking force is incorrectly adjusted.	Adjust tracking force properly.
	Anti-skating device is incorrectly adjusted.	Adjust anti-skating device properly.
	Record is warped.	Replace the record.
	Record is badly scratched.	Skip the scratched band or replace the record.
ack of definition between annels, lack of separation.	Cartridge is incorrectly connected to headshell.	Check cartridge instructions and reconnect properly.

CALLING FOR SERVICE

SPECIFICATIONS

For your nearest Optonica authorized service station, Please call Toll Free:

800-447-4700

In Illinois:

800-322-4400

In Hawaii or Alaska, please contact your local dealer.

LIMITED WARRANTY

The maker of Optonica warrants this product to the original purchaser to be free from defective materials and workmanship, and agrees to repair any such defect or to furnish a new or equal part in exchange, through an Authorized Optonica Service Dealer or Station.

This warranty does not apply to appearance items nor to any product whose exterior has been damaged or defaced, nor to any product subjected to misuse, abnormal service or handling, nor to any product altered or repaired by other than an Authorized Optonica Service Dealer or Station.

This warranty does not apply to any product purchased outside the United States, its territories or possessions.

The period of this warranty covers two (2) years on parts and labor from date of purchase.

This warranty entitles the original purchaser to have the warranted parts and labor rendered at no cost for the period of the warranty described above when carried into an Authorized Optonica Service Dealer or Station together with proof of purchase.

This shall be the exclusive written warranty of the original purchaser and neither this warranty nor any other warranty express or implied shall extend beyond the period of time listed above. In no event shall the maker of Optonica be liable for consequential economic damage or consequential damage to property.

Some states do not allow a limitation on how long an implied warranty lasts or an exclusion of consequential damage, so the above limitation and exclusion may not apply to you. In addition, this warranty gives specific legal rights, and you may have other rights which vary from state to state.

Sharp Electronics Corp. 10 Keystone Place, Paramus, N.J. 07652 Phone: (201) 265-5600

Power source: AC 120V, 60Hz

Semiconductors: 12-ICs

19-transistors 16-diodes 2-hall elements

Power consumption: 8 W

Dimensions: Width; 480mm (18-29/32")

Height (with dust cover); 108mm (4-1/4") Depth; 384mm (15-1/8")

Weight:

(with dust cover)

TURNTABLE
Motor: Core-less DC servo motor with 72-pole

8.5 kg (18.8 lbs.)

Drive system:

Speed:

Speed control range:

Wow and flutter:

frequency generator
Direct drive system
33-1/3 and 45 rpm
More than $\pm 4\%$ 0.035 % WRMS

Wow and flutter: 0.035 % WRMS Rumble: 68 dB (DIN-B)

Turntable platter: 12.0 inches, aluminum die-cast with

stroboscope

TONEARM

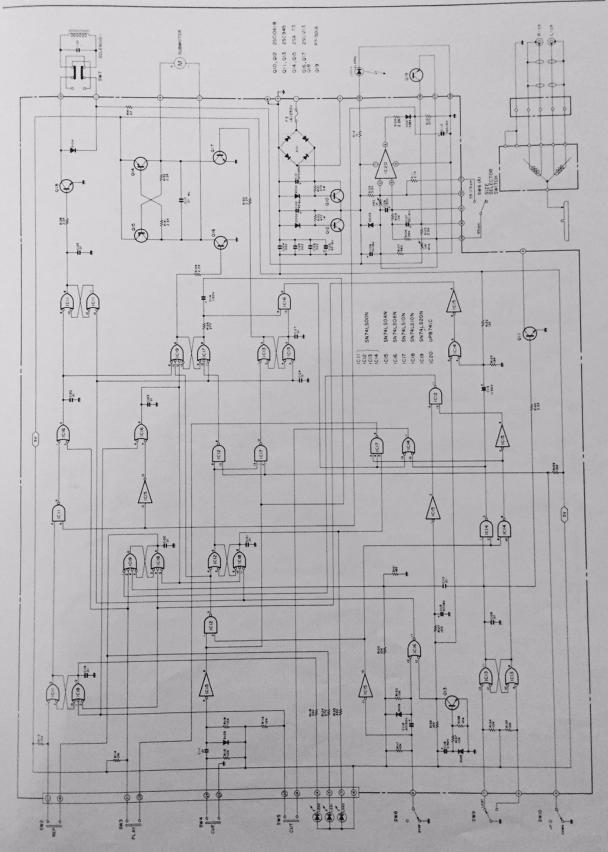
Type: Statically-balanced pipe arm

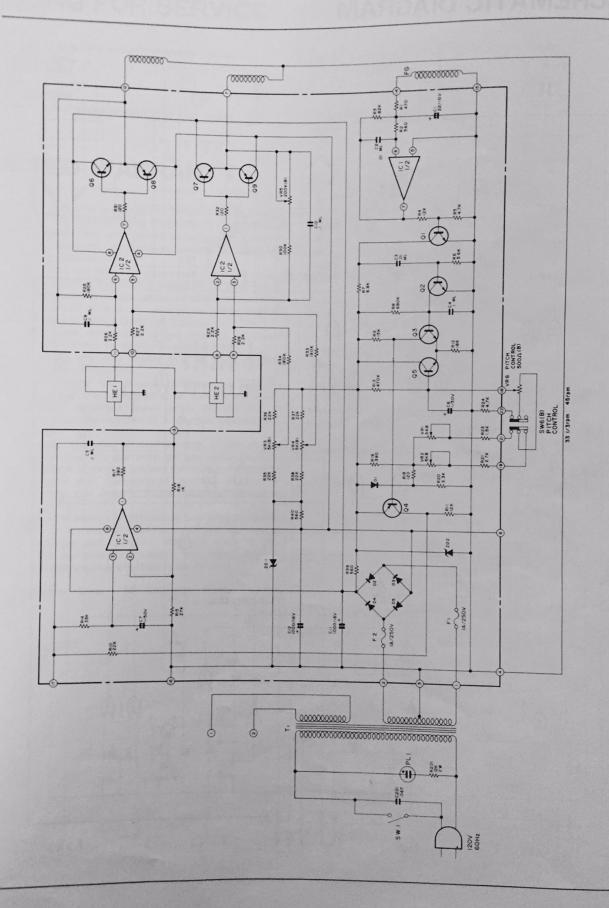
Effective length: 210mm (8-1/4")
Overhang: 11mm (7/16")

Off-set angle: 19°
Headshell weight: 8 grams
Cartridge weight range: 4 to 12 grams

Specifications are subject to change without prior notice.

SCHEMATIC DIAGRAM





OPTONICA

10 Keystone Place, Paramus, New Jersey 07652 Phone: (201) 265-5600