

T4P is the standard mark for plug-in-connector type. Products carrying this mark are interchangeable and adaptable among each other.

Technics

Turntable System

SL-Q300

Operating instructions



The model number of this product may be found on the back of the unit, and the serial number on the bottom of the unit.

Please note the model and serial numbers of this unit in the space provided and retain this booklet as a permanent record of your purchase to aid identification in the event of theft.

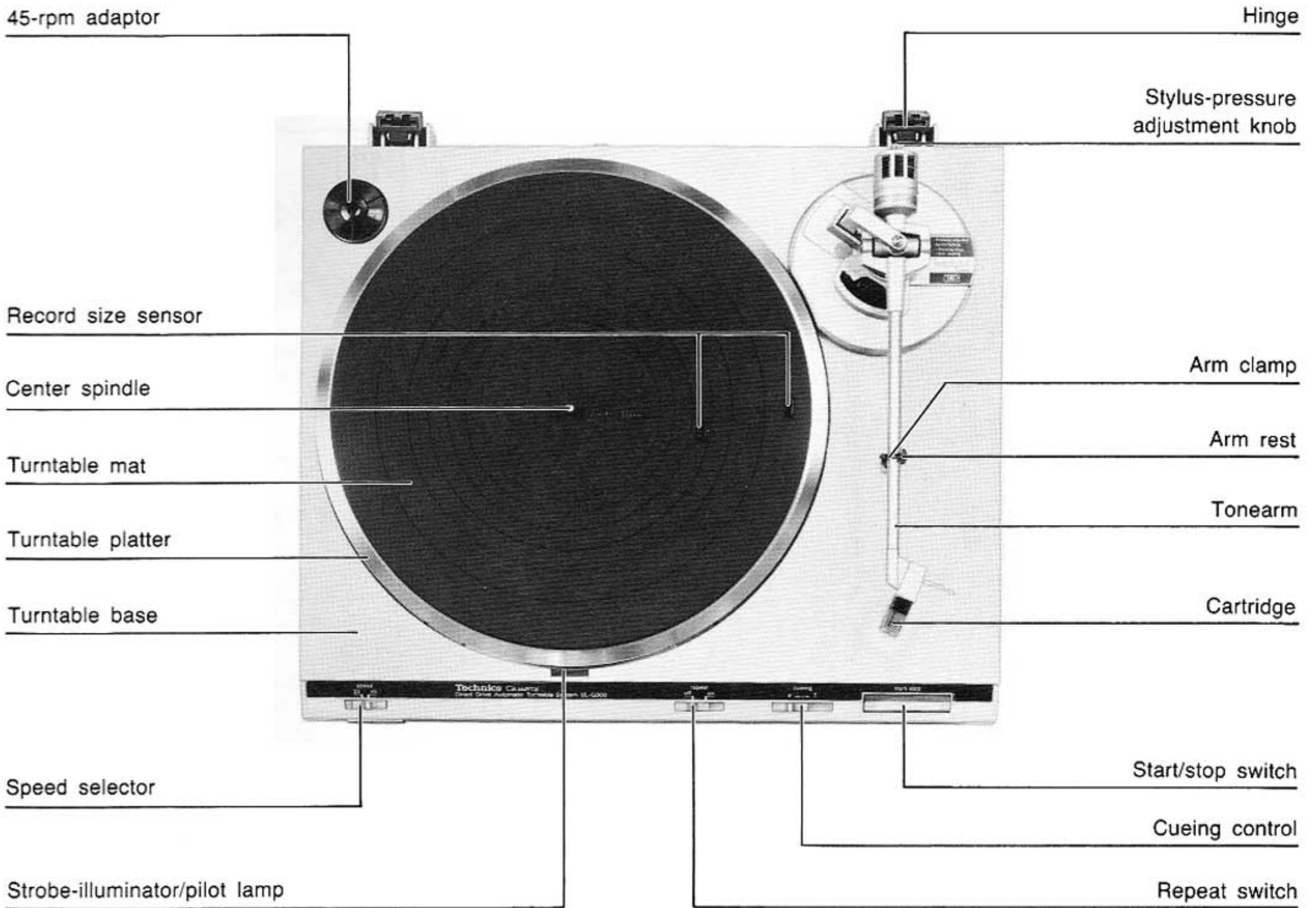
MODEL NUMBER **SL-Q300**

SERIAL NUMBER

Before operating this products, please read these instructions completely.

Thank you for choosing the SL-Q300.
 For optimum performance and safety, please read these instructions carefully.

Parts identification



	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		

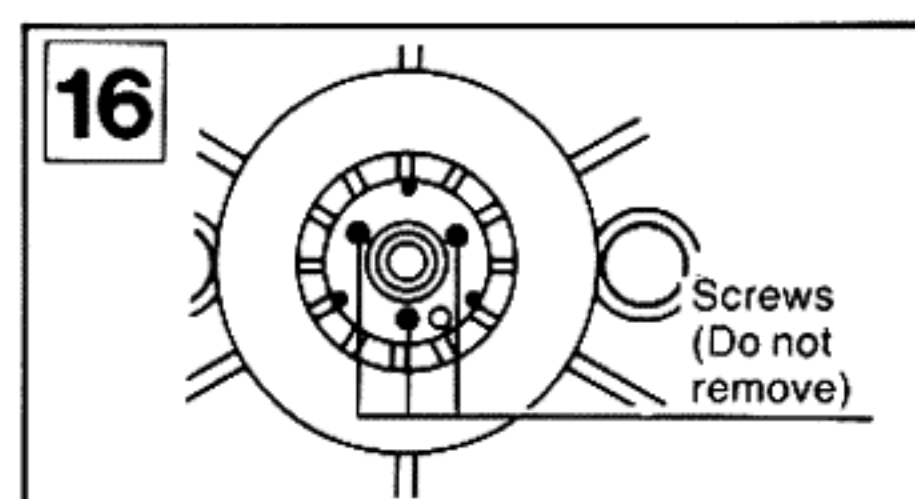
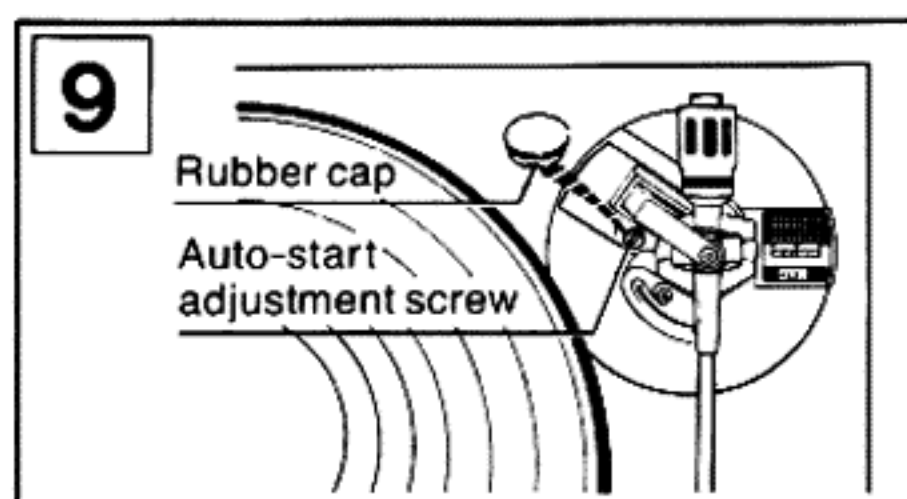
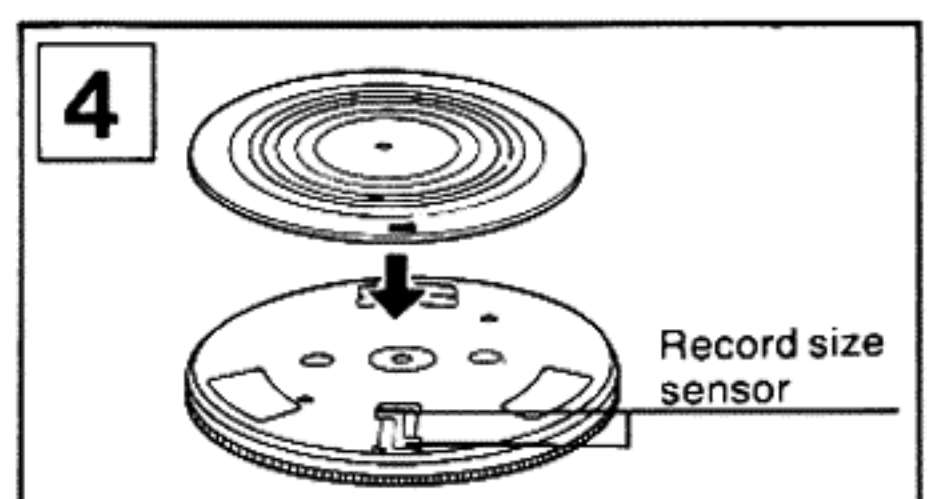
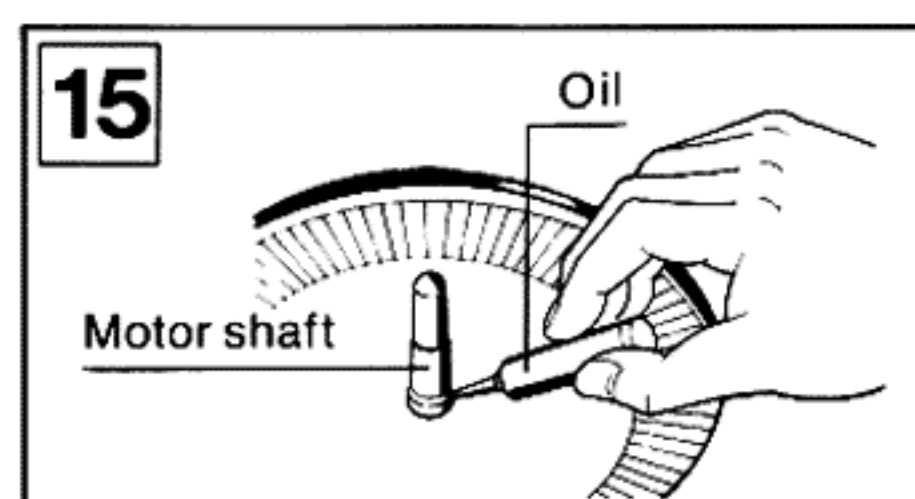
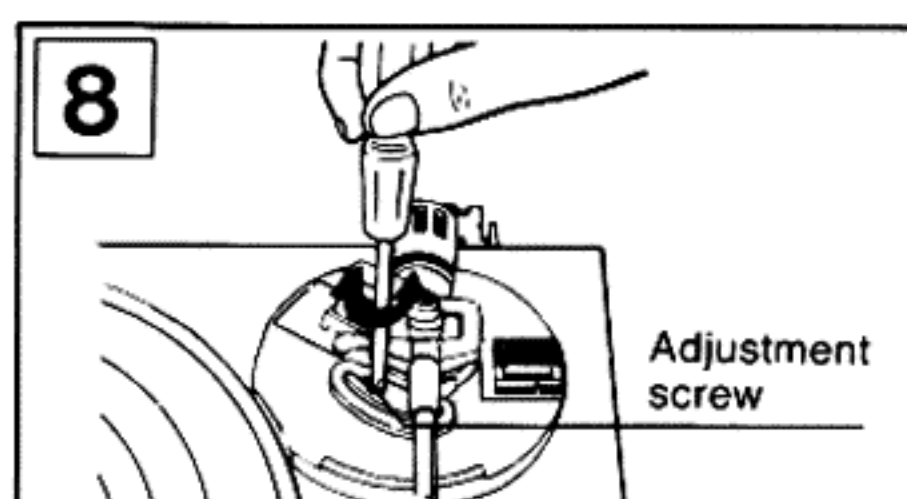
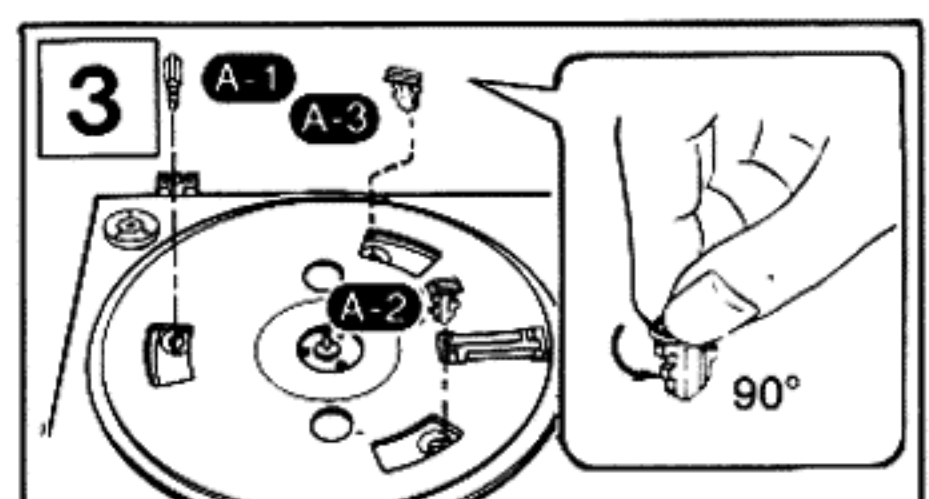
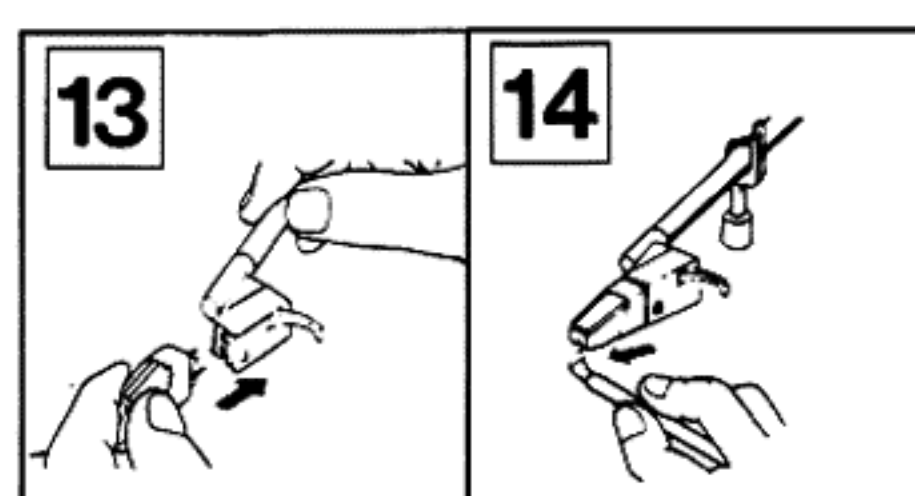
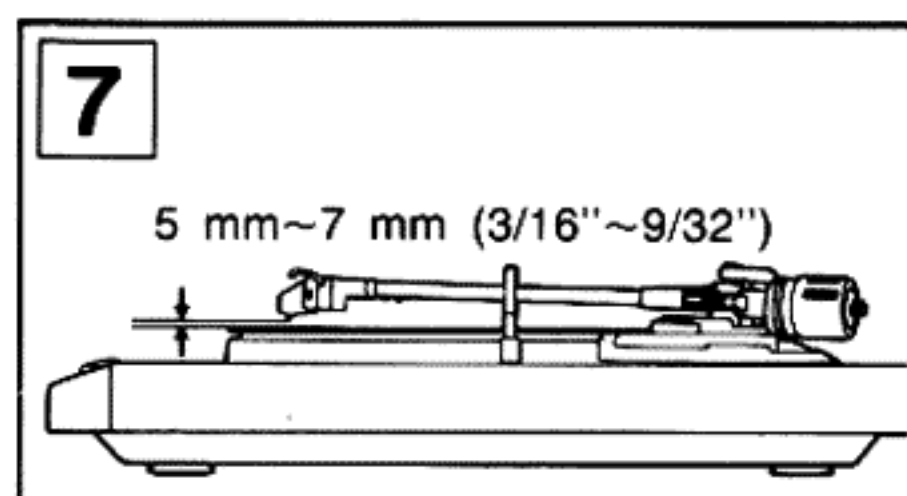
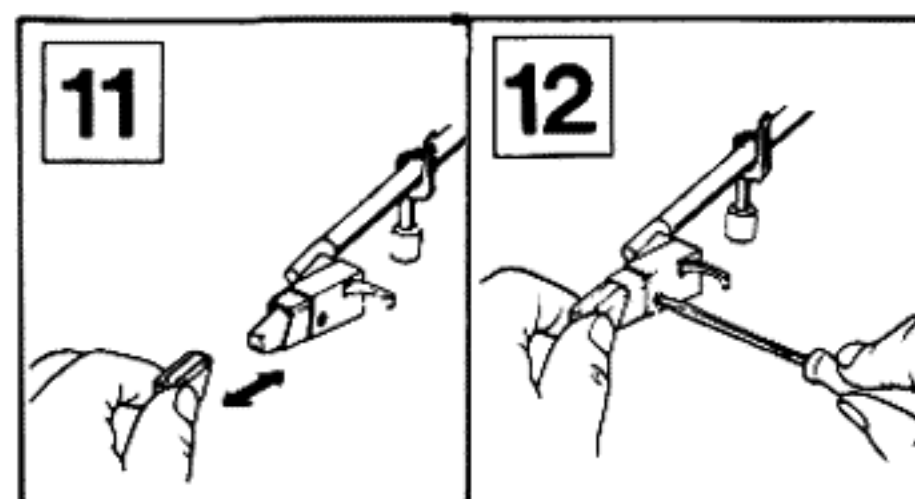
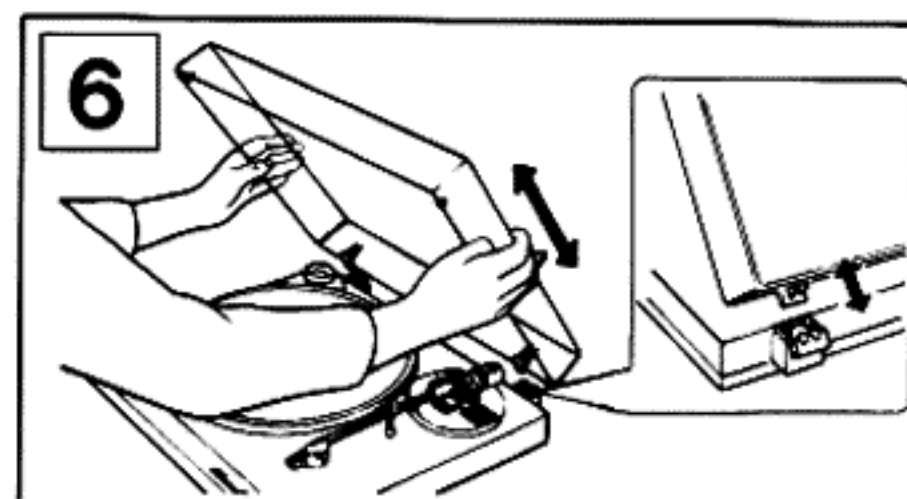
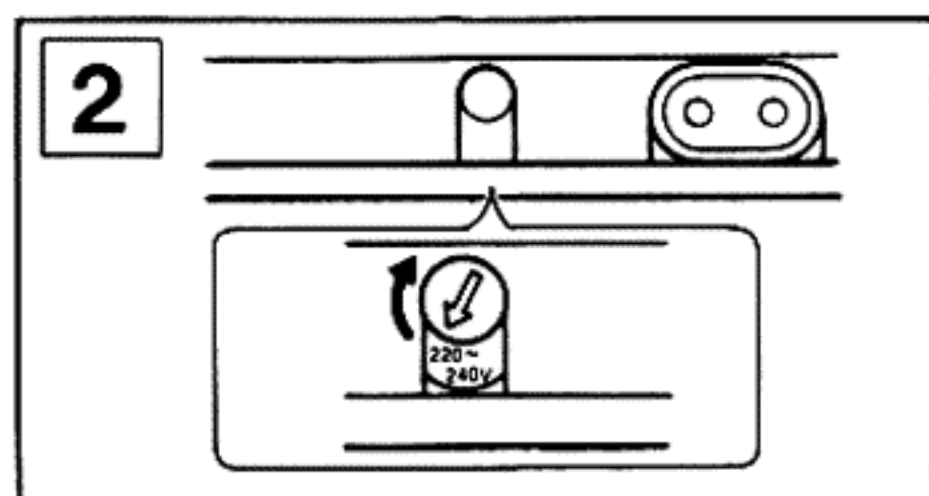
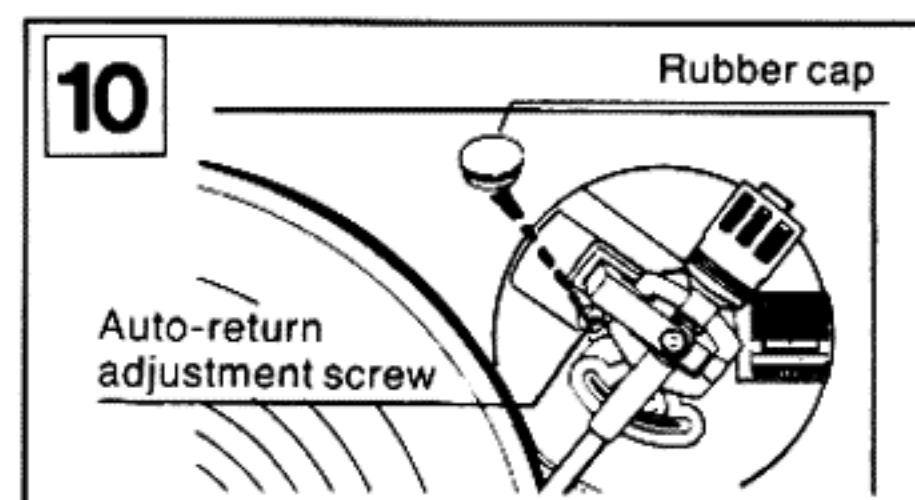
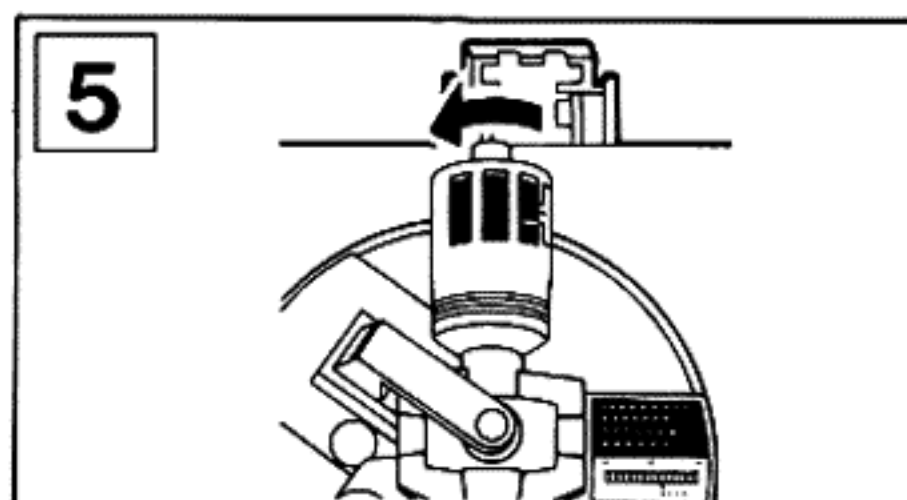
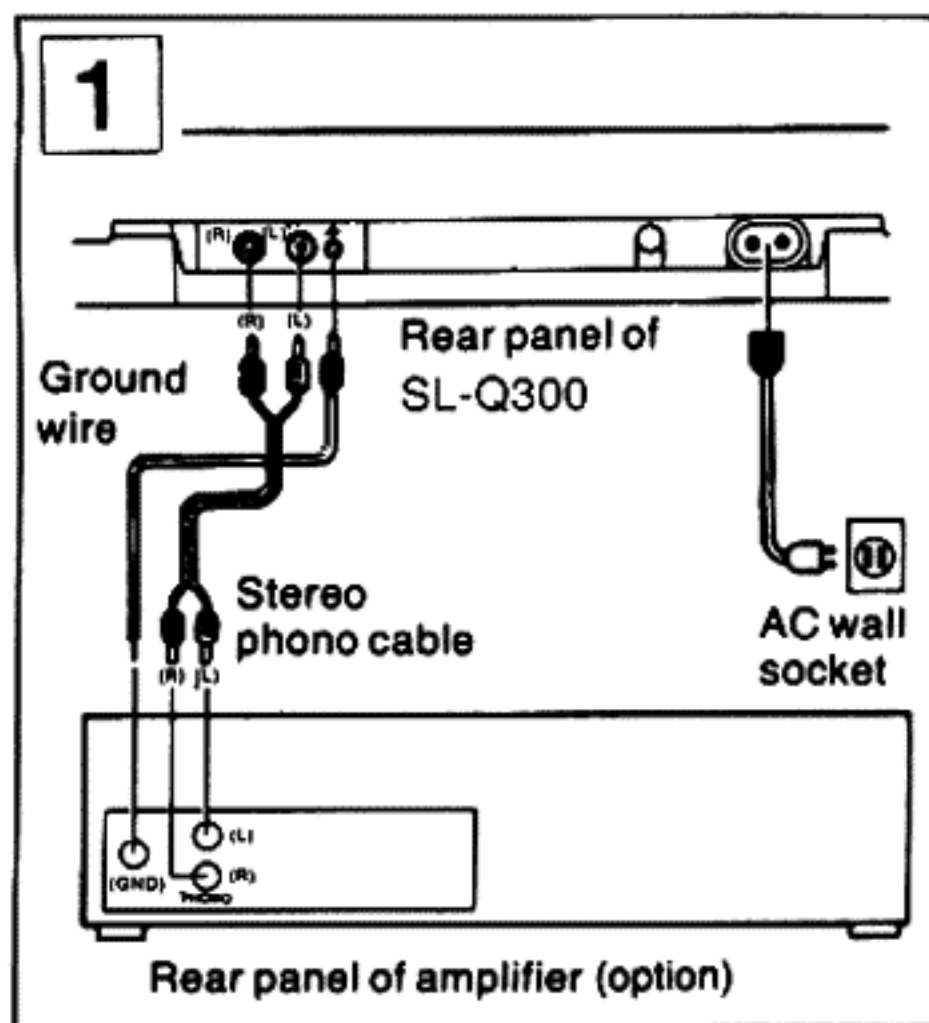


The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

“WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.”



Caution:

- Attach the dust cover last to make assembly and adjustments easier.
- These instructions apply to units of different color.

Checklist of parts

Turntable unit	1
Turntable mat	1
Dust cover	1
45-rpm adaptor	1
Stereo phono cable	1
Ground wire (GND)	1
AC power cord	1

Connections

Use the stereo phono cable to connect the turntable to your amplifier or receiver. Be sure that the white plugs are connected to the left channel jacks and the red plugs are connected to the right channel jacks. Plug the ground wire's plug into the turntable's ground jack and connect the wire to the amplifier or receiver's ground (GND) screw. Regarding the AC cord, plug the female end into the turntable AC jack and plug the other end into an AC wall socket. (Fig. 1)

Note that hum may occur if you neglect to connect the ground wire.

Caution:

Make sure that the turntable's AC line-voltage selector is matched to your local voltage before connecting the AC power plug.

Never connect to a DC socket.

If the pre-selected voltage is different from your local voltage, turn the AC line-voltage selector with a screwdriver so that it corresponds to your local voltage.

If your local voltage is 110 V to 120 V, turn the selector clockwise (Fig. 2)

The AC line-voltage selector is located at the back of the unit.

■ Attaching the dust cover (Fig. 6)

Hold both sides of the cover and lower it into the hinge slots. To remove the cover, open it fully and pull upward.

Note:

Opening or closing the cover during play may cause vibrations and groove skipping.

If you must open the cover during play, do so very gently.

Before use

In order to avoid damage due to vibration or shock incurred during shipment, this unit is packed with protective materials **A**. Be sure to remove these before use. Keep these materials for reuse should it become necessary to transport the turntable again.

- Remove turntable spacers **A-1** ~ **A-3** (Fig. 3)

Assembly

Place the turntable mat on the platter.

Be sure the slot in the mat is over the protrusion (record size sensor) on the platter. (Fig. 4)

Note:

After placing the mat on the platter, turn the platter clockwise about ten full rotations by hand.

This is necessary to assure correct operation of the automatic mechanism.

About stylus pressure (tracking force)

The tracking force is already set to 1.25 g so no adjustment is necessary.

When records with a high modulation level are played or when the turntable is used where the temperature is low or in a location subject to vibrations, sound may be distorted and the stylus may skip. If this occurs, rotate the stylus-pressure adjustment knob at the rear to the "1.5" setting. (Fig. 5)

If the knob is set to "1.0" the tracking force will be lighter.

Placement

- Place the unit in a stable and horizontal position where there is little or no vibration.

This unit features double-isolated suspension system. To take maximum advantage of this feature, place the unit on a stable, level surface. Do not put anything between the turntable base and the surface on which it is placed.

- Place the unit away from the speakers so that it will be subject to as little direct sound radiation as possible.
- Do not place the unit where it will be exposed to direct sunlight, dust, moisture or heat.
- Place it in a well ventilated location.
- If you try to listen to a radio near the turntable while it is turning, you may hear some interference.

Operation

■ Automatic play

1. Put a record on the turntable mat.
2. Remove detachable stylus protector if fitted.
3. Release the arm clamp.
4. Set the speed selector to the correct speed.
5. Push the start/stop switch.

The tonearm automatically selects the record size [for 30 cm (12") and 17 cm (7") records only] and begins record play.

At the end of the record, the tonearm will automatically return to the arm rest and the turntable will stop.

Note:

The record size sensor does not operate for 25 cm (10") records or other records of non-standard sizes.

Operate the turntable manually in such cases.

When there is no record on the turntable mat, the platter will rotate once or twice but tonearm will not move toward the center spindle.

■ Repeat play

Set the repeat switch to the "on" position.

To stop repeat play, set the repeat switch "off".

Note:

Do not touch the repeat switch during auto-start or auto-return operation as the repeat function will not operate properly. The setting of the repeat switch should be changed only when the tonearm is in the arm rest.

■ Stopping the turntable

Push the start/stop switch.

The tonearm will return to the arm rest and the turntable will stop.

■ Temporarily interrupting play

Set the cueing control to the "▼" position.

This will make the tonearm rise from the record.

■ Playing 45-rpm records having large center holes

Place the 45-rpm adaptor over the center spindle.

Set the speed selector to the "45" position.

■ Manual play

1. Perform steps 1-4 of automatic playback.
2. Set the cueing control to the "▼" position.
3. Move the tonearm over the desired groove.
The strobe-illuminator/pilot lamp will light up and the platter will start turning.
4. Set the cueing control to the "▼" position.
The tonearm will descend and play will begin.
At the end of the record, the tonearm will automatically return to the arm rest and the turntable will stop.

■ If the unit is not to be used for some time

Secure the tonearm with the arm clamp.

If the cartridge has a detachable stylus protector, replace after use.

Close the dust cover.

Adjustments

■ Arm-lift height adjustment

The arm-lift height (distance between the stylus tip and the record surface when the cueing control is at the "▼" position) has been adjusted at the factory to approximately 5 to 7 mm (3/16"~9/32"). (Fig. 7)

If the clearance is too narrow or too wide, turn the adjustment screw clockwise or counterclockwise. (Fig. 8)

Clockwise rotation

—distance between the record and stylus tip is decreased.

Counterclockwise rotation

—distance between the record and stylus tip is increased.

■ Adjustment of automatic start position

(Fig. 9)

Note:

The auto-start and auto-return adjustment screws are located together.

When the tonearm is in or near the arm rest the auto-start adjustment screw is visible (Fig. 9); when the tonearm is near the center of a record, the auto-return adjustment screw is visible. (Fig. 10)

If the stylus does not land in the lead-in groove, adjust as follows.

1. Clamp the tonearm to the arm rest.
2. Remove the rubber cap. (Fig. 9)
3. Turn the screw with a screwdriver, clockwise or counterclockwise as necessary.

If the stylus tip sets down too far in the recorded groove,

—turn counterclockwise.

If the stylus tip sets down outside of the record,

—turn clockwise.

Adjust so the stylus tip lands 1~2 mm in from the edge of the record.

■ Adjustment of automatic return position

(Fig. 10)

(Remove the rubber cap.)

1. Put the stylus protector on the cartridge.
2. Move the tonearm toward the center of the record. The auto-return adjustment screw will appear.

If the tonearm tends to return to the arm rest before the play has finished,

—turn counterclockwise.

If the tonearm fails to return after the final groove,

—turn clockwise.

Stylus replacement

The replacement stylus for this cartridge is EPS-28ES.

Stylus life varies with the conditions of use.

Noise or scratchiness may indicate a worn or damaged stylus. Stylus replacement is recommended after about 500 hours of playing time. Holding the sides of the stylus assembly, pull out to remove the old stylus. Line up the new stylus assembly with the cartridge and push in firmly so that the stylus is securely in place. (Fig. 11)

Notes:

- Be very careful not to touch the stylus tip or cantilever during above procedures.
- There should be no gap between the stylus assembly and the cartridge body.

Cartridge replacement

Plug-in connector cartridges are now available from Ortofon (Denmark), Shure (U.S.A.), Audio Technica (Japan) as well as from Technics. All of these cartridges are designed for perfect matching with this turntable in all areas including weight, tracking force, stylus tip position, and center of gravity. Therefore, you have the option of employing a wide range of cartridges from the world's top manufacturers without the trouble of lead wire connections or tracking force adjustment.

1. Attach the tonearm to the arm rest with the tonearm clamp.
2. Remove the cartridge attachment screw. (Fig. 12)
3. Carefully pull the cartridge out from the tonearm being sure you don't touch the stylus.
4. Align the pins on the new cartridge with the tonearm connector and plug it into the tonearm as far as it will go. (Fig. 13)
5. Tighten the cartridge attachment screw.

Notes and maintenance

- **Do not touch or hold the tonearm during automatic operation.**

- **Carefully remove dust and dirt from records and stylus. (Fig. 14)**

Dust and dirt degrade sound quality and cause excessive wear of the stylus and grooves.

- **Wipe the dust cover and turntable base with a soft, dry cloth.**

Never use volatile cleaners such as alcohol, benzine or thinner.

Do not use chemically treated dust cloths. Do not expose the cover to insecticide spray.

To remove stubborn spots, first pull out the AC plug and detach the cover.

Then wipe the cover with a soft cloth slightly moistened with a mild soap and water solution.

Do not wipe the cover during play, or the tonearm may be attracted toward the cover due to the generation of static electricity.

- **Transporting and shipping the turntable**

Pack the unit in the reverse order from unpacking. Use the original packing material if possible. Otherwise, take these steps:

- Remove the platter and mat and wrap them.
- Tape or tie the tonearm to the arm rest so it cannot shake free.
- Wrap the turntable base with a blanket or soft paper to avoid scratches or damage.

- **Playing special records**

Follow "Manual play" for playing the following types of records. (Special records may interfere with correct automatic operation.)

This is not a malfunction of the turntable.

- Non-standard size records [standard sizes (EIA, IEC, DIN, JIS) and 17 (7"), 25 (10") and 30 cm (12")].

(However, 25 cm (10") records can not be selected automatically by the record size sensor.)

- Sono-sheets, or light and thin records.
- Badly warped records.

- **About the strobe**

This unit's strobe illuminator LED is synchronized with the quartz crystal oscillator frequency.

Use the strobe as a reference for precise speed rotation.

Note:

Unlike conventional units, the strobe illuminator is not synchronized with fluorescent lamps.

- **Lubricating the motor shaft (Fig. 15)**

Apply 2 or 3 drops of oil after every 2000 hours of operation.

Note that the interval between lubrication is much longer than for conventional motors (200–500 hours).

Be sure to use only special oil (part number SFWO 010) available from your audio dealer.

Note:

Handle the platter carefully during assembly and be sure the rotor-magnet does not get dusty or attract iron filings. Do not remove or loosen the rotor-magnet screws. (Fig. 16) Tampering with the rotor-magnet may interfere with motor performance.

Suggestions for safety

Before using this unit, be sure to read applicable items of the operating instructions and these safety suggestions carefully; and afterwards keep them handy for future reference. Take special care to follow the warnings indicated on the unit itself as well as in the operating instructions.

1. **Avoid places where there is water or humidity.**

Do not use this unit near a bathtub, washbasin, swimming pool, or the like. Damp basements should also be avoided.

2. **Do not allow water or any foreign object to get inside this unit.**

Do not place small metal objects or anything containing liquid on or near the unit.

3. **Avoid placement of the unit where it will be exposed to the direct rays of the sun, or where ventilation is inadequate.**

Do not place this unit in a bookcase or between cabinets, or where curtains or furniture may obstruct the ventilation holes.

4. **Place this unit away from heat-emitting appliances.**

Never place this unit near a radiator, heat register, stove, or any other heat-emitting equipment (including amplifiers).

5. **Placement**

Place the unit on a stable, vibration-free, level shelf or stand.

6. **Use of a cart or stand.**

When deciding on a cart or stand, be sure to use only with the cart or stand recommended by the manufacturer.

7. **Wall or ceiling installation.**

If the unit is to be mounted on a wall or ceiling, be sure to do so only as recommended by the manufacturer.

8. **Check the voltage rating of this unit before connecting the unit to a power supply.**

Be sure to connect the unit only to the type of power supply indicated in the operating instructions, or as indicated on the unit itself.

9. **Care of the power cord and plug.**

Take care that the cord is not bent sharply (especially near its connection to the unit or near the plug), that nothing is placed on it, and that it is not pinched or crushed. Never take hold of the plug or cord if your hand is wet, and always be sure to grasp the plug body when connecting or disconnecting it.

10. **If the unit will not be used for a long period of time:**

Be sure to disconnect the power cord.

11. **Maintenance**

Refer to the operating instructions for details.

12. **Never attempt repairs yourself:**

- (a) If the power cord or plug is damaged.
- (b) If a foreign object or liquid falls into the unit.
- (c) If the unit is exposed to rain.
- (d) If the unit does not function normally, or if operation shows an unusual change.
- (e) If the unit has been dropped and the cabinet or chassis are damaged . . . etc.

Unplug the power cord and consult with a qualified technician (or the dealer from whom the unit was purchased or the nearest servicenter).

13. **Repairs**

Except for adjustments explained in the operating instructions, do not attempt any repairs yourself. Be sure to request service from a qualified technician (or your dealer or nearest servicenter).

Specifications

■ General

Power supply:	~110~120/220~240 V, 50 or 60 Hz
Power consumption:	5 W
Dimensions: (W×H×D)	43×10×37.5 cm (16-15/16"×3-15/16"×14-3/4") Maximum height when top (dust cover) is open. 43×37×41 cm (16-15/16"×14-9/16"×16-1/8")
Weight:	4.5 kg (9.9 lb.)

■ Turntable section

Type:	Quartz direct drive Automatic turntable Auto start Auto return Auto stop Repeat play Manual play
Drive method:	Direct drive
Motor:	Brushless DC motor
Drive control method:	Quartz-phase-locked control
Turntable platter:	Aluminum die-cast Diameter 31.2 cm
Turntable speeds:	33-1/3 rpm and 45 rpm
Wow and flutter:	0.012% WRMS* 0.025% WRMS (JIS C5521) ±0.035% peak (IEC 98A Weighted)

*This rating refers to turntable assembly alone, excluding effects of record, cartridge or tonearm, but including platter. Measured by obtaining signal from built-in frequency generator of motor assembly.

Rumble:	-56 dB (IEC 98A Unweighted) -78 dB (IEC 98A Weighted)
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■ Tonearm section

Type:	Statically-balanced straight tonearm Plug-in connector cartridge system
Effective length:	230 mm (9-1/16")
Overhang:	15 mm (19/32")
Tracking error angle:	Within 2°32' at the outer groove of 30 cm (12") record Within 0°32' at the inner groove of 30 cm (12") record
Effective mass:	7.5 g (without cartridge) 13.5 g (including cartridge)
Stylus pressure adjustment range:	1.25±0.25 g
Applicable cartridge weight:	6 g

■ Cartridge section

Type:	Moving magnet stereo cartridge plug-in-connector type
Magnetic circuit:	All laminated core
Frequency response:	10 Hz~40 kHz 20 Hz~10 kHz ±1.5 dB
Output voltage:	2.5 mV at 1 kHz 5 cm/s. zero to peak lateral velocity (7 mV at 1 kHz, 10 cm/s. zero to peak 45° velocity [DIN 45 500])
Channel separation:	28 dB at 1 kHz
Channel balance:	Within 1.8 dB at 1 kHz
Recommended load impedance:	47 kΩ~100 kΩ
Compliance (dynamic):	12×10 ⁻⁶ cm/dyne at 100 Hz
Stylus pressure range:	1.25±0.25 g (12.5±2.5 mN)
Weight:	6 g (cartridge only)
Replacement stylus:	EPS-28ES

Specifications subject to change without notice.
Weight and dimensions shown are approximate.

Panasonic Tokyo
Matsushita Electric Industrial Co., Ltd.
1-2 1-Chome Shiba-koen Minato-ku Tokyo 105, Japan

National Panasonic GmbH
Hagenauer Straße 43
6200 Wiesbaden/Biebrich
F. R. Germany

