

Technics

QUARTZ Direct Drive
Automatic Turntable System

SL-QD33

OPERATING INSTRUCTIONS



•These instructions also apply to units of different color.

The model number and serial number of this product can be found on either the back or the bottom of the unit.

Please note them in the space provided below and retain this booklet as a permanent record of your purchase to aid identification in the event of theft.

MODEL NUMBER: SL-QD33
SERIAL NUMBER _____

Before operating this unit, please read these instructions completely.

Dear Stereo Fan

Technics, The Science of Sound, welcomes the challenge of new audio technologies and brings you a multitude of world-renowned, high quality audio components.

Like our stereo high speed editing cassette decks with dbx*, Computer Drive New Class A receivers, quartz drive linear tracking turntables, and revolutionary honeycomb disc speakers. All are backed by our time-honored commitment to imagination, value, and quality.

Technics captures the power of new ideas and turns them into realities -- with digital Compact Disc

players that bring the search for perfect sound to fruition. And A/V receivers that can integrate both audio and video technologies to forever alter the home entertainment system.

The Technics list of advanced audio components continues. From digital PCM processors, quartz tuners, and preamps to the world's first touch-sensitive graphic equalizer, Technics is a shining example of audio technology at its best -- ready to take you to new dimensions in sound.

*dbx is a registered trademark of dbx, Inc.

Suggestions for Safety

Before using this unit, be sure to read the applicable items of operating instructions and these safety suggestions carefully. 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. Don't allow water or any foreign object to get inside this unit.**
Don't 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.**
Don't 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 follow the recommendations for this unit in the operating instructions.
- 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 in the operating instructions.
- 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. 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 service center).
- 12. 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 service center).

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



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

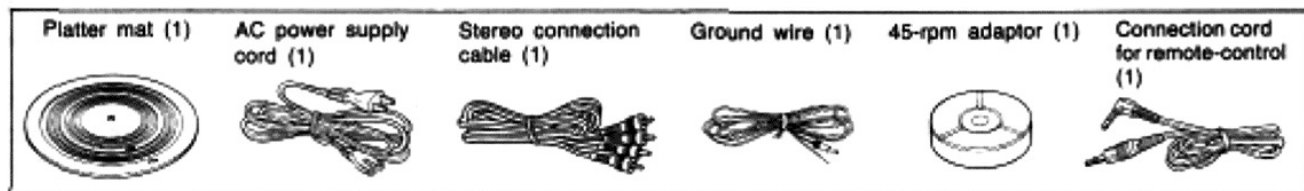


The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



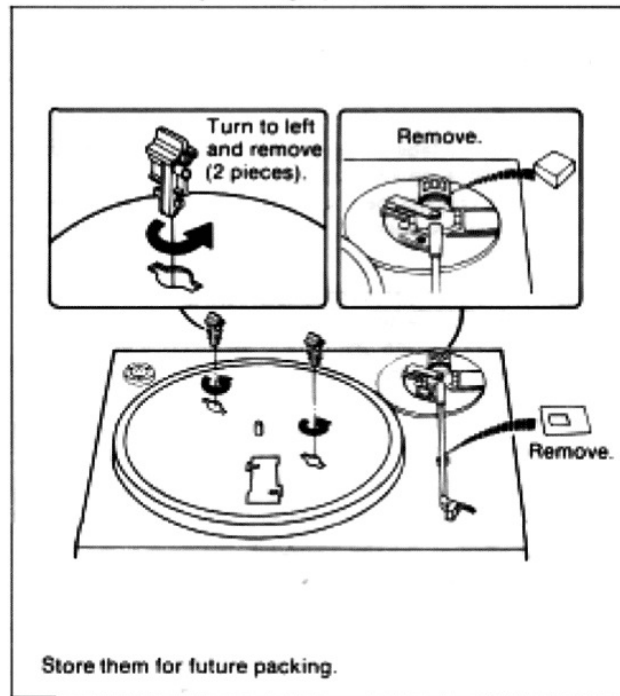
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Accessories

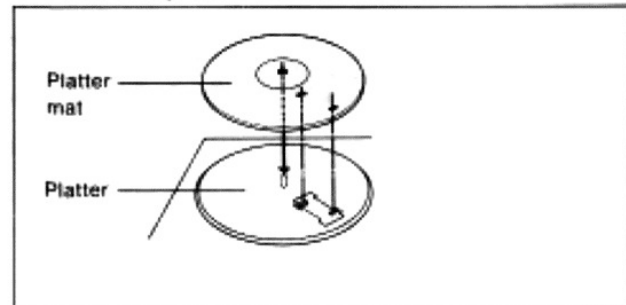


Turntable Assembly

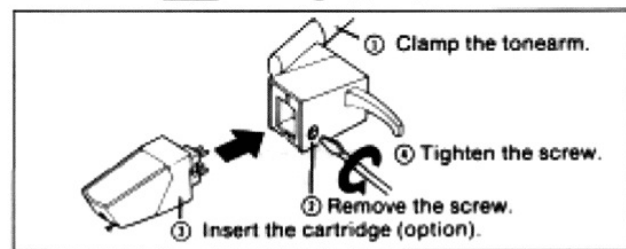
1. Remove the packing spacers.



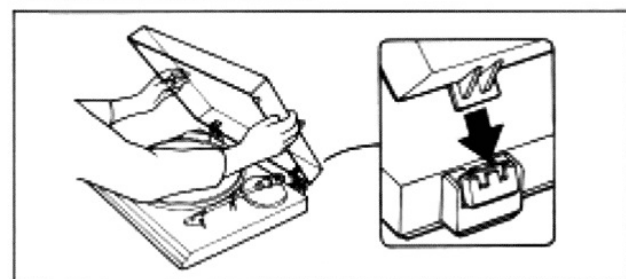
2. Place the platter mat on the platter.



3. Attach a **TD** cartridge (option).

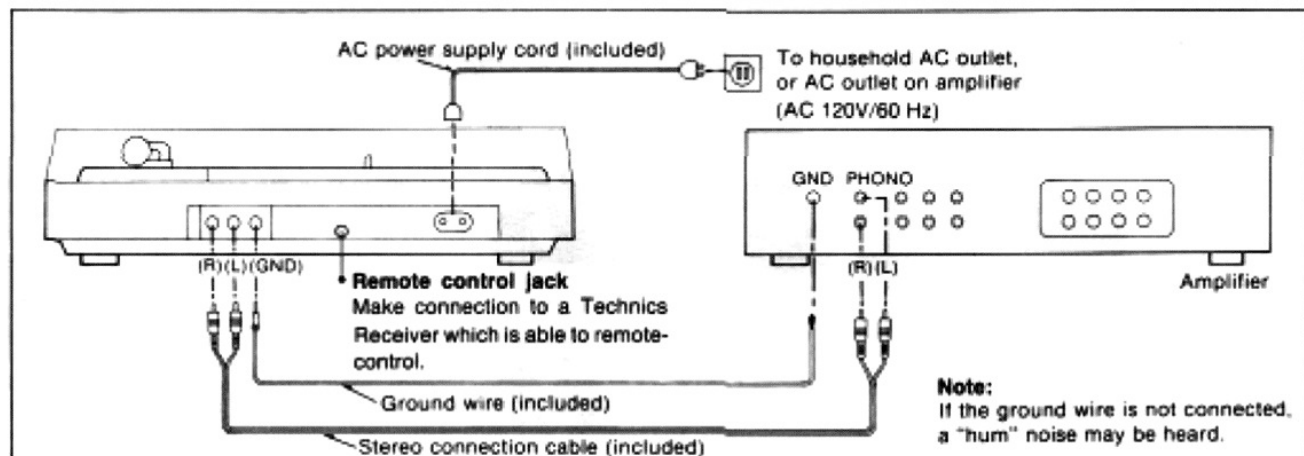


4. Install the dust cover.



Connections

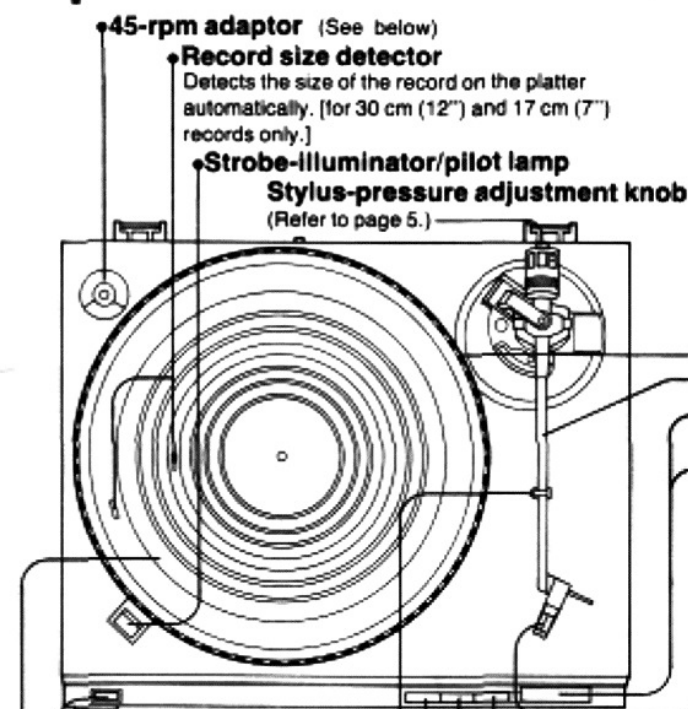
Connection cord for remote-control is included in this unit. By using this connection cord, you can connect to Technics Quartz Synthesizer AM/FM Stereo Receiver only with remote control capability. Refer to the operating instructions of the receiver.



Operation

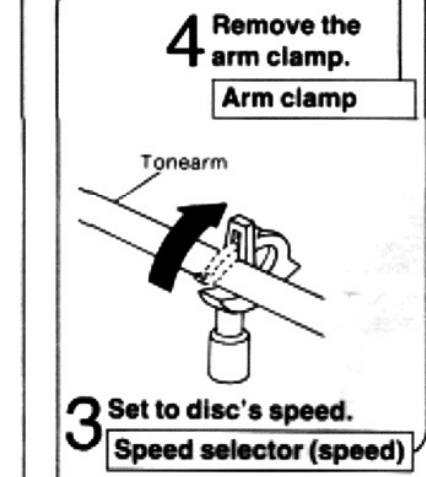
Note:

• If the power switch is pressed during play, the tonearm will not rise and the turntable will stop above the disc at that point. Press the power switch again to return the tonearm to the rest position. (The indicator above the stop/switch will flash.)



Strobe lines
 The strobe-illumination of this unit employs a strobe-illuminator (LED/red illumination lamp) synchronized with the precise frequency of the quartz.
Note:
 The LED illuminator is not synchronized with fluorescent lamps.

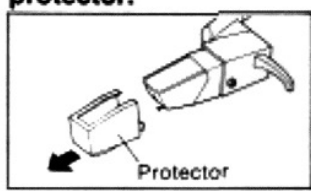
Note:
 Do not try to clean the dust cover while a disc is playing, because static electricity might cause the tonearm to rise.



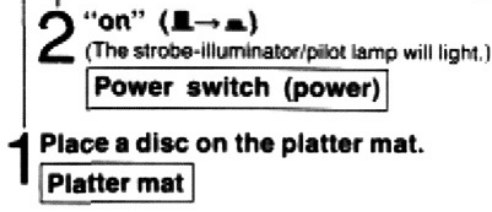
Tonearm
 Press to stop the platter turning. (indicator will not illuminate.)

6 Press. Platter will start turning, and play will begin. (indicator will illuminate.)

5 Remove the stylus protector.
 (Stylus protectors differ among cartridge manufacturers, and some manufacturers do not supply stylus protectors with their cartridges.)



Cartridge
14P is the standard mark for the "P-mount" plug-in-connector system. Products carrying this mark are interchangeable and compatible with each other.

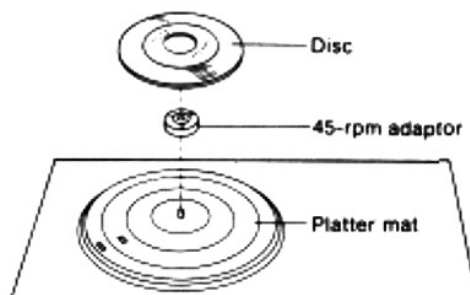


Cueing control (cueing)
 Press to stop the play temporarily. (indicator will illuminate.)
 To cancel, press again. (indicator will not illuminate.)
Note: During play, pressing the cueing control once will temporarily stop play by lifting the tonearm. (Tonearm position may be adjusted at this time.)
 To resume play, press again.

Repeat button
Press the repeat button before or during play.
 (The indicator will illuminate.)
 To cancel, press the button again.
 (The indicator will not illuminate.)
Note:
 Repeat play can only be used with 30 cm (12") or 17 cm (7") records (standard records).

Notes:
 • The tonearm will automatically return to the arm rest by moving the tonearm to the center position by hand when the cueing indicator is not illuminate.

■ For a 17-cm (7") (large center hole) disc

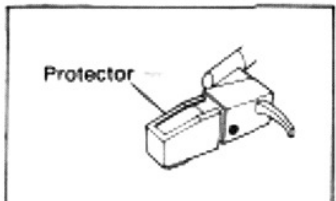


■ When play ends

1. The tonearm will automatically return to the arm rest (the automatic return feature).
2. Rotation will stop.

After use

1. After listening is finished, the power switch of this unit should be turned "off".
2. Attach the arm clamp.
3. Attach the stylus protector.

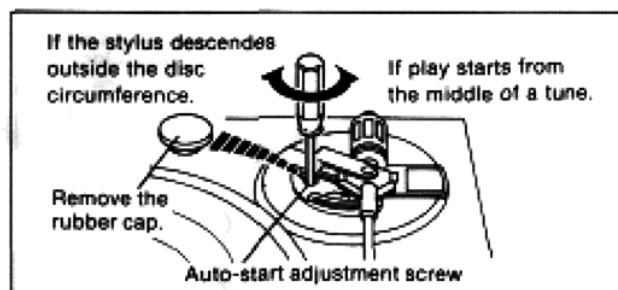


Adjustment

Adjustment of the automatic-start position

Make this adjustment if the tonearm doesn't automatically to the disc, or if it before the tune ends.

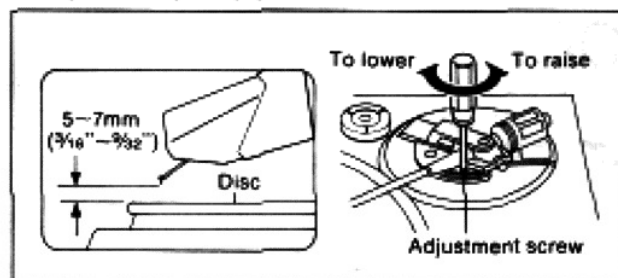
1. Adjust to the desired automatic position.
2. Check to be sure the automatic position is correct.



Adjustment of the stylus-to-disc clearance

This adjustment is preset at the factory. This adjustment should not be necessary unless the cartridge or stylus is changed.

1. Press the cueing control. (Indicator will illuminate.)
2. Move the tonearm to a position above the disc.
3. Adjust the stylus tip position.



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.

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

CAUTION

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications set forth in Subpart J of Part 15 of the FCC Rules. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver.

Replacement

Replacement of the stylus

If noise is heard from new discs, the stylus is probably worn. Replace it with a new one.

(Refer to the operating instructions of the cartridge.)

Replacement of the cartridge

The plug-in type of cartridge is already designed to match this unit in every respect: weight, correct stylus pressure, stylus tip position, center of gravity, etc. This means that there's no longer any need for troublesome connection of lead wires or adjustment of the stylus pressure.

(Refer to page 3.)

Maintenance

To clean dust from the stylus

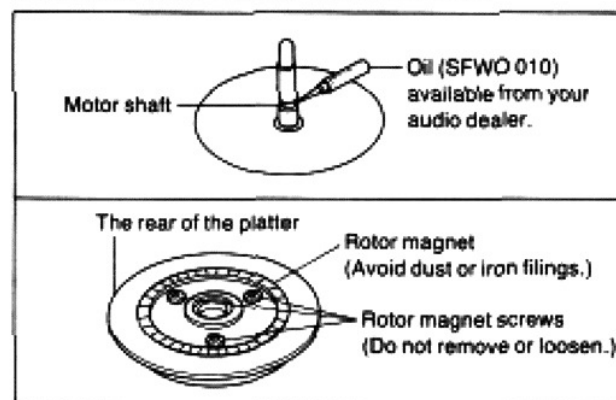
Use a soft brush or similar material to gently remove the dust. Thoroughly clean your discs occasionally with a high-quality disc cleaner.

Maintenance of external surfaces

To clean this unit, use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth, dipped into a soap-and-water solution or a weak detergent solution. Wring the cloth well before wiping the unit. Wipe once again with a soft, dry cloth. Never use alcohol, paint thinner, benzine, nor a chemically treated cloth to clean this unit. Such chemicals may damage the finish of your unit.

Lubricating the motor shaft

Apply 2 or 3 drops of oil after every 2,000 hours of operation. (Handle the platter carefully during assembly.)



Troubleshooting Guide

Before requesting service for this unit, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the directory of Authorized service centers (enclosed with this unit) to locate a convenient service center, or consult your Technics dealer for instructions.

Problem	Probable cause(s)	Suggested remedy
During disc play		
A loud and unusual sound ("howling") is heard when the volume level is increased.	The location of the turntable and speaker systems is unstable.	<ul style="list-style-type: none"> If the equipment is unstable because it is located upon a soft surface, such as a carpet, place a solid material (such as concrete blocks, bricks, a hard board, etc.) beneath the speaker systems. Try moving the turntable farther away from the speaker systems. Try placing a cushioning material (such as felt or commercially available audio insulators) beneath the turntable.
Unusual scratching noises are heard.	Disc is old or scratched.	Turn the treble tone control of the amplifier to reduce the treble sound.
	Dust in disc grooves.	Use a disc cleaner to remove the dust from the disc grooves.
	Stylus needle is worn.	If the noise is heard even when a new disc is played, probably the stylus is worn. Replace it with a new stylus.
	Dust is attached to stylus tip.	Remove the dust by using a soft brush.

Technical Specifications

■ TURNTABLE SECTION

Type	Quartz direct drive Automatic turntable Auto-start Auto-return Auto-stop Repeat play Manual play Direct drive
Drive method	Brushless-DC motor
Motor	Quartz phase locked control
Drive control method	Aluminum die-cast
Turntable platter	Diameter 31.2 cm (12-9/32")
Turntable speeds	33-1/3 rpm and 45 rpm
Wow and flutter	0.012% WRMS* 0.025% WRMS (JIS C5521) ±0.035% Weight zero to 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 DIN-A (IEC 98A Unweighted)
-78 dB DIN-B (IEC 98A weighted)

■ TONEARM SECTION

Type	Static-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 outer groove of 30 cm (12") record Within 0°32' at 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
Phono cable capacitance	90 pF

■ GENERAL

Power supply	120V AC, 60 Hz
Power consumption	8 W
Dimensions (W×H×D)	430×100×375 mm (16-15/16"×3-15/16"×14-3/4")
	Maximum height when dust cover is open: 430×370×410 mm (16-15/16"×14-9/16"×16-1/8")
Weight	4.5 kg (9.9 lb.)

Product Service

The unit should be serviced by qualified technicians only. No service information is provided for customers. Your product is designed and manufactured to ensure a minimum of maintenance. However, should your unit ever require service, a

nationwide system of factory servicenters and AUTHORIZED INDEPENDENT SERVICENTERS is maintained to support your product's warranty.

Panasonic Company Division of
Matsushita Electric Corporation of America
One Panasonic Way Secaucus,
New Jersey 07094

Matsushita Electric of Canada Limited
5770 Ambler Drive, Mississauga,
Ontario L4W 2T3

Panasonic Hawaii, Inc.
91-238 Kauhū St., Ewa Beach
P.O. Box 774
Honolulu Hawaii 96808-0774

Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infantería, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

