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Technics

Turntable System

SL-Q20

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-Q20**

SERIAL NUMBER

Before operating this set, please read these instructions completely.

Thank you for choosing the SL-Q20.

For optimum performance and safety, please read these instructions carefully.

Dear Stereo Fan

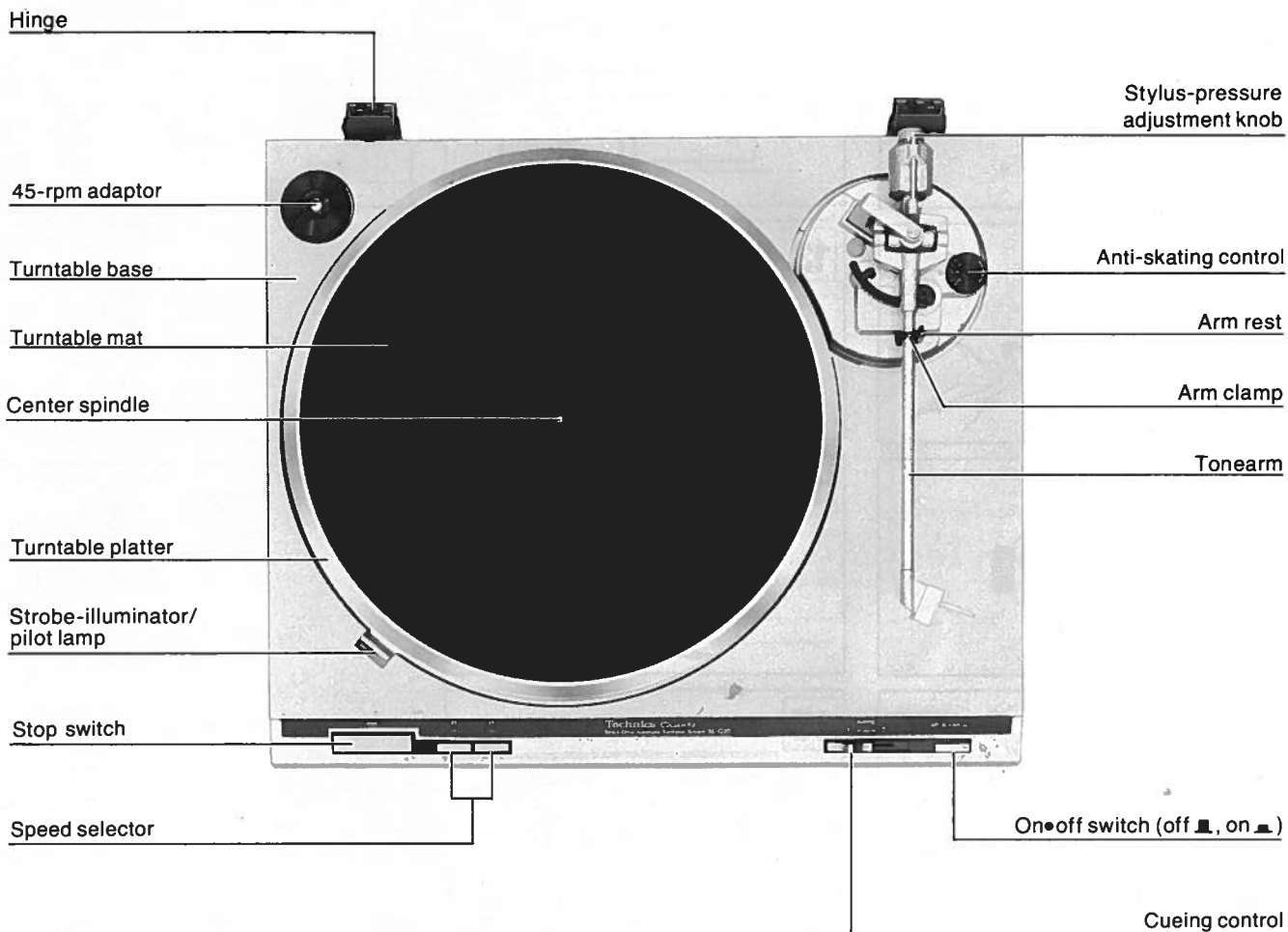
Technics. The science of sound. Our name represents over 100 high quality audio products, in every price range.

From our revolutionary direct drive turntables to our highly acclaimed linear phase speakers, Technics quality and value have become almost legendary among audio enthusiasts.

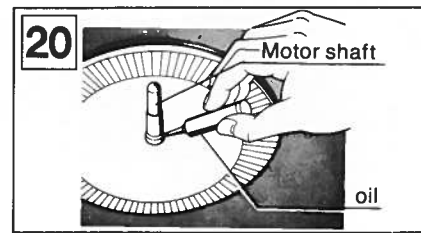
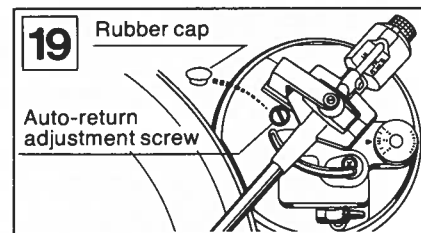
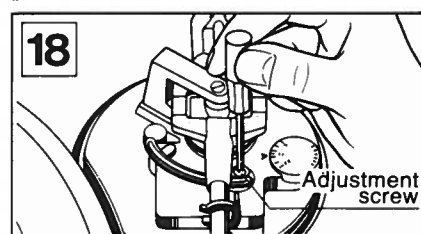
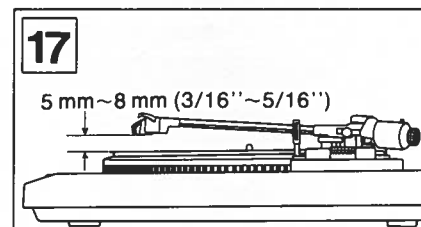
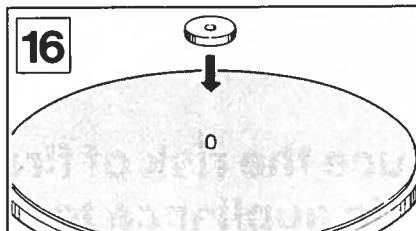
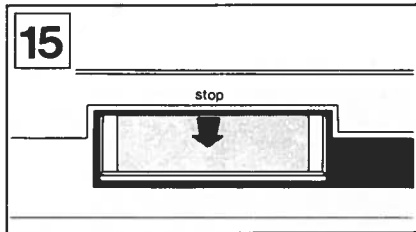
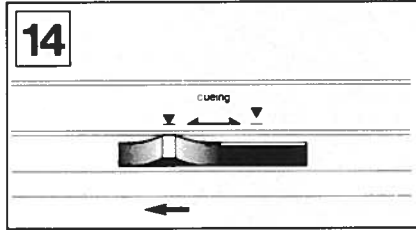
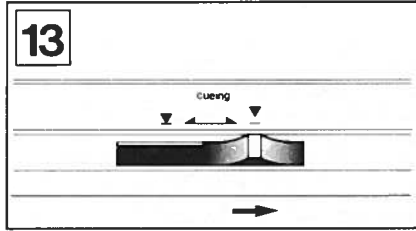
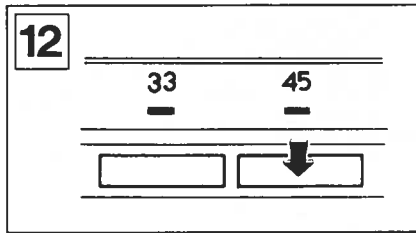
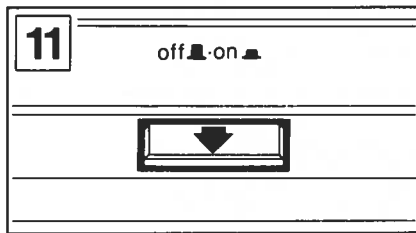
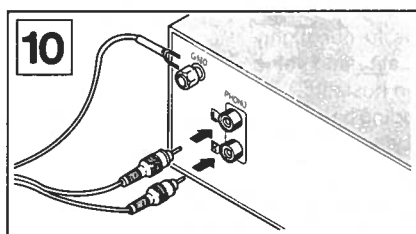
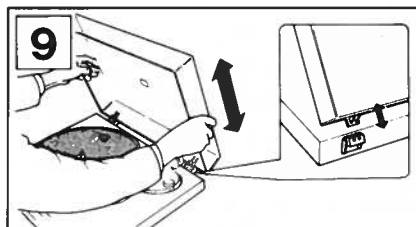
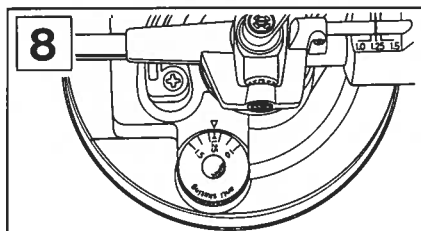
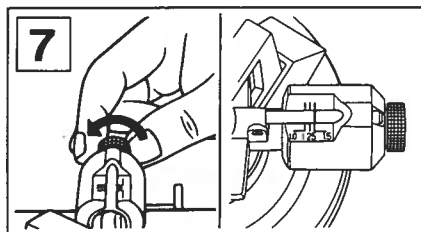
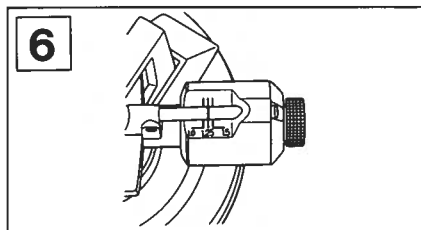
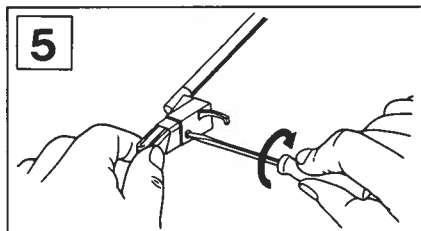
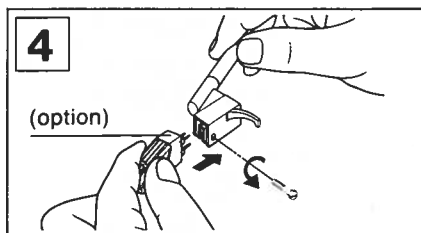
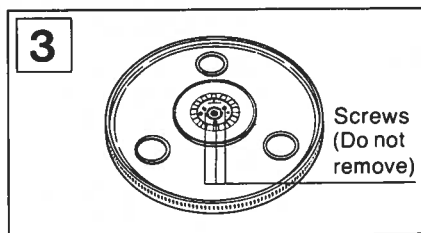
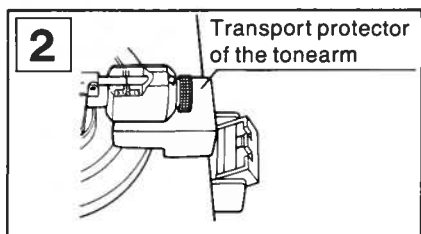
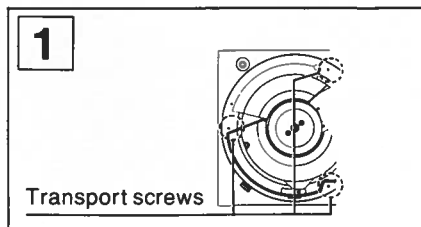
Our truly complete selection of turntables (including belt-drive, direct-drive, and quartz-locked models with varying degrees of automation) now includes an exciting line of linear tracking turntables with zero tracking error. Another innovation, direct drive cassette decks, is available in both slim and micro formats. In fact, with Technics micro series, you can assemble

an entire system of the highest quality with truly compact dimensions. And our receivers, which combine new class A amplification with quartz synthesizer tuning, have created tremendous excitement among reviewers and customers alike. Amps, tuners, headphones, microphones, cartridges, open-reel decks, sound processors—we are proud of all our high quality equipment and we are constantly seeking to improve our products, in terms of performance and handling ease. In addition, our confidence in the reliability of our merchandise (demonstrated by our warranties) and the reasons for our enormous and rapid growth become obvious.

Parts identification



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



Before use

Caution:

- Do not plug in the AC power plug before completing assembly.
- Attach the dust cover last to make assembly and adjustments easier.

off: This symbol indicates the "stand-by" mode, which means that when the switch is in this position, the unit is switched off but not entirely.

on: This symbol indicates "on". Push to switch the unit on. Push again to switch the unit to the stand-by mode.

■ Removing the transport screws and protector

Remove transport screws. (Fig. 1)

Remove transport protector of the tonearm. (Fig. 2)

Save for future use.

■ Checklist of parts

Turntable unit	1
Turntable platter	1
Turntable mat	1
Dust cover	1
45-rpm adaptor	1

Assembly

■ Installing the turntable platter

1. Place the platter on the center spindle.

Note:

In our direct drive system, the motor's rotor-magnet is attached to the underside of the platter. 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. 3) Tampering with the rotor-magnet may interfere with motor performance.

2. Place the turntable mat on the platter.

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.

■ Cartridge Installation

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.

When installing a cartridge, follow the instructions that came with the cartridge.

1. Remove the cartridge attachment screw with a screwdriver. (Fig. 4)
2. Align the pins on the new cartridge with the tonearm connector and plug it into the tonearm as far as it will go. (Fig. 4)
3. Tighten the cartridge attachment screw. (Fig. 5)

About stylus pressure (tracking force)

The tracking force is already set to 1.25 g so no adjustment is necessary. (Fig. 6)

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 adjustment knob at the rear to the "1.5" setting. (Fig. 7)

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

■ Adjusting the anti-skating control (Fig. 8)

This is set to the same level as the tracking force (1.25); there is no need to adjust it yourself. However, if the index mark (▼) is off center, reset it to the proper position.

If the tracking force is set to 1.5 g, the anti-skating control also must be set to "1.5".

■ Attaching the dust cover (Fig. 9)

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

Placement

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

This unit features a 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.

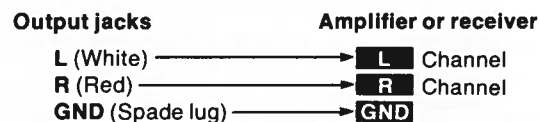
■ Do not place the unit where it will be exposed to direct sunlight, dust, moisture or heat.

■ 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.

Connections

■ Connect the output jacks (Fig. 10)



Note:

To avoid hum, be sure to make a secure ground connection between turntable and amplifier or receiver.

■ Plug in the AC power plug

Plug the AC power plug into an AC wall socket.

Operation

1. Put a record on the turntable mat.
2. If the cartridge has a detachable stylus protector, remove it.
3. Release the arm clamp.
4. Push the on / off switch to the "on" position (■). (Fig. 11)
The 33 (33-1/3 rpm) speed indicator will light, so will the strobe illuminator/pilot lamp.

Note:

33-1/3 rpm is selected automatically whenever the on • off switch is turned on. Remember to push the 45 rpm selector to play 45s. (Fig. 12)

5. Set the cueing control to the "▼" position. (Fig. 13)
6. Move the tonearm over the desired groove.
The platter will start turning.
7. Set the cueing control to the "▴" position (Fig. 14)
The tonearm will descend slowly and play will begin.
At the end of the record, the tonearm will automatically return to the arm rest and the turntable will stop.

Note:

● Push the on / off switch to the off (■) position to turn off the unit.

■ Stopping the turntable

Push the stop switch. (Fig. 15)

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

■ Temporarily interrupting play

Set the cueing control to the "▼" position. (Fig. 13)

This will make the tonearm rise off the record.

■ Playing 45-rpm records having large center holes

Put the 45-rpm adaptor over the center spindle. (Fig. 16)

Push the "45" speed selector. (Fig. 12)

■ 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, put it back on 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 8 mm (3/16"~5/16"). (Fig. 17)

If the clearance is too narrow or too wide, turn the adjustment screw clockwise or counterclockwise. (Fig. 18)

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 return position

(Fig. 19)

1. Put the stylus protector on the cartridge.
2. Remove the rubber cap.
3. 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.

Notes and maintenance

- **Do not touch or hold the tonearm during automatic operation.**
- **Carefully remove dust and dirt from records and stylus.**
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, benzene 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.
- **Using a stabilizer is not recommended because it may interfere with the performance of the double-isolated suspension cabinet.**
- **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 together with sufficient protection for the motor-rotor on the underside of the platter.
 - 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.
- **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. 20)**
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.

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:	120 V AC, 60 Hz
Power consumption:	7 W
Dimensions: (W×H×D)	43×10.6×37.5 cm (16-15/16"×4-7/32"×14-3/4") Maximum height when top (dust cover) is open. 43×37×42 cm (16-15/16"×14-9/16"×16-17/32")
Weight:	6.1 kg (13.4 lb.)

■ Turntable section

Type:	Quartz Direct drive Fully automatic turntable Auto return Auto stop
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
Friction:	Less than 7 mg (lateral/vertical)
Effective mass:	7.5 g (without cartridge)
Stylus pressure adjustment range:	1.25±0.25 g
Applicable cartridge weight:	6 g
Phono cable capacitance:	135 pF

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

Note:

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate the computer with respect to the receiver
- move the computer away from the receiver
- plug the computer into a different outlet so that the computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems."

This booklet is available from the

US Government Printing Office,
Washington, D.C., 20402,
Stock No. 004-000-00345-4.

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