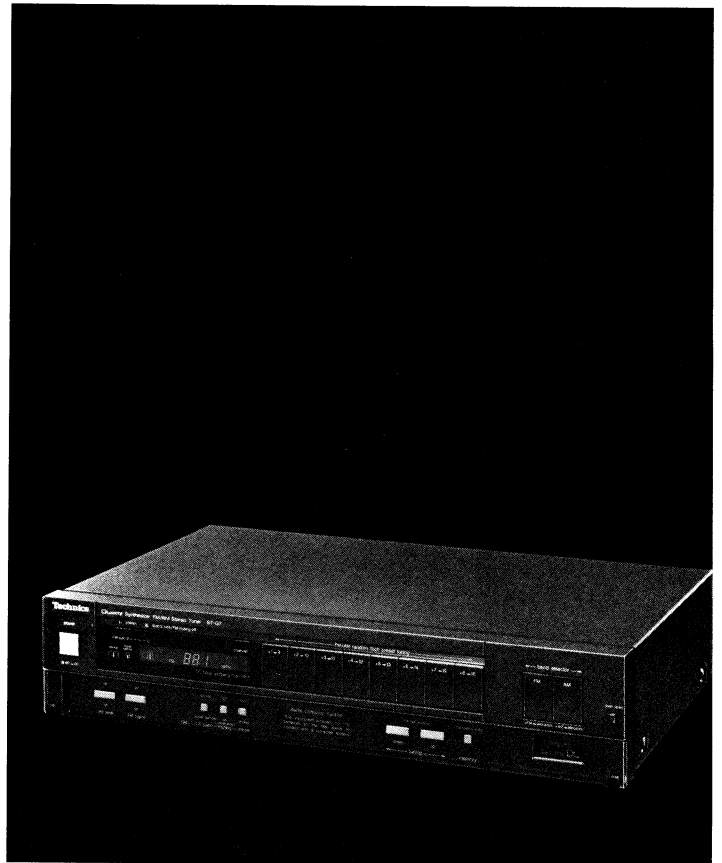


Technics

QUARTZ Synthesizer
FM/AM Stereo Tuner

ST-G7

OPERATING INSTRUCTIONS



Before using this unit, carefully read these operating instructions and the enclosed suggestions for safety.

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. Features like our new computer-drive new class-A amplification and quartz-synthesizer tuning have created tremendous excitement among reviewers and customers alike.

Amplifiers, 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.

CONTENTS

• ACCESSORIES	2
• MAINTENANCE OF EXTERNAL SURFACES	2
• PRODUCT SERVICE	2
• TECHNICAL SPECIFICATIONS	3
• "MOST-RECENT" MEMORY AND "BACK-UP" MEMORY	3
• TO PREVENT ERASING THE MEMORY	3
• STEREO SYSTEM COMPONENTS AND THEIR CONNECTIONS	4
• FRONT PANEL CONTROLS AND THEIR FUNCTIONS	6
• HOW TO PRESET RADIO BROADCAST FREQUENCIES	8
• LISTENING TO RADIO BROADCASTS	10
• TROUBLESHOOTING GUIDE	Back cover

ACCESSORIES

• FM indoor antenna	1
• 300-ohm → 75-ohm impedance matching transformer ...	1
• F-type plug/ring (large and small)	2
• AM loop antenna	1
• AM antenna holders	2
• Screws	2
• Stereo connection cable	1
• AC power supply cord	1

MAINTENANCE OF EXTERNAL SURFACES

To clean, 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, benzene, nor a chemically treated cloth to clean this unit.

Such chemicals may damage the finish of your unit.

PRODUCT SERVICE


■ Warning concerning removal of covers

This unit should be serviced by qualified technicians only. No service information is provided for customers.


Should your "Technics" product ever require servicing, refer to the Directory of Authorized Service Centers or your franchised "Technics" dealer for detailed instructions.

■ Location of serial number

You will find the serial number located on the back of the unit.



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.

The model number of this product may be found on the back of the unit; and the serial number on the label affixed to the back of the unit.

You should 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 in identification in the event of theft.

MODEL NUMBER _____

SERIAL NUMBER _____

WARNING:

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

TECHNICAL SPECIFICATIONS

(IHF '78)

■ FM TUNER SECTION

Frequency range	87.9~107.9 MHz (200 kHz step) 87.50~108.00 MHz (50 kHz step)
Sensitivity	12.8 dBf (1.2 μ V/75 Ω , IHF '58)
Total harmonic distortion	
MONO (normal)	0.01%
STEREO (normal)	0.02%
Dynamic range	116 dB
Frequency response	4 Hz~18 kHz, +0.2 dB, -0.5 dB
Alternate channel selectivity	
normal \pm 400 kHz	55 dB
super narrow \pm 200 kHz	25 dB
Capture ratio	1.0 dB
Image rejection at 98.1 MHz	105 dB
IF rejection at 98.1 MHz	110 dB
Spurious response rejection at 98.1 MHz	110 dB
AM suppression	70 dB
Stereo separation	
1 kHz	65 dB
10 kHz	50 dB
Carrier leak	
19 kHz	-70 dB
38 kHz	-70 dB
Antenna terminal	75 ohms (unbalanced)

■ AM TUNER SECTION

Frequency range	530 kHz~1720 kHz (10 kHz step) 522 kHz~1629 kHz (9 kHz step)
Sensitivity (S/N 20 dB)	20 μ V, 290 μ V/m
Selectivity (\pm 10 kHz)	55 dB
Image rejection at 1000 kHz	40 dB
IF rejection at 1000 kHz	65 dB

■ GENERAL

Output voltage	fixed 0.6V
Power consumption	11 W
Power supply	AC 120V, 60 Hz
Dimensions (W×H×D)	430 × 97 × 276 mm (16-30/32" × 3-13/16" × 10-7/8")
Weight	4.1 kg (9.0 lb.)

Note:

If the FM allocation setting is set to 0.05 MHz, the AM 10-kHz/step frequency range becomes 530 ~ 1620 kHz.

"MOST-RECENT" MEMORY AND "BACK-UP" MEMORY

"Most-recent" memory

The most-recent memory is a system by which the unit "remembers" the FM or AM broadcast station last heard when any of the functions of this unit are turned off, and automatically tunes to that station the next time the power is turned on.

"Back-up" memory

This is the function which preserves the preset memory and most-recent memory functions. In the event of a power failure, or if the power cord of the tuner is disconnected from the electric outlet, the back-up memory will preserve the preset memory and most-recent memory functions for as long as approximately one week.

TO PREVENT ERASING THE MEMORY

1. Be sure to connect the power cord of the tuner to the "UNSWITCHED" power outlet of the amplifier to be used.
2. If the power supply is interrupted for one week or longer, the memory settings will be erased.
For example:
 - 1) If the power cord is disconnected from the electric outlet,
 - 2) If an audio timer is used and the timer does not operate the tuner for a week or longer,
 - 3) If a power failure occurs, etc.
 If any of the above occurs, the memory will have to be reset.

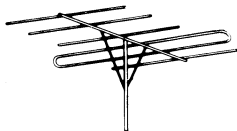
The memory in this unit is maintained by a gold capacitor. If the power supply is interrupted for a week or longer, set the power switch of the tuner to the "on" position for thirty minutes or more in order to recharge the gold capacitor.

STEREO SYSTEM COMPONENTS AND THEIR CONNECTIONS

Note: An outdoor antenna should be installed by a competent technician only.

FM outdoor antenna (option)

(Necessary in mountainous regions, inside reinforced-concrete buildings, etc.)

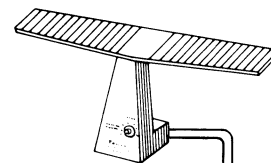


FM indoor antenna (option)

(Technics FM wing antenna: SH-F101)

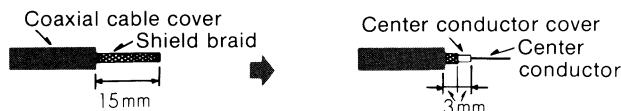
Note:

This indoor antenna reduces the effects of multipath distortion and external noise sources (car engines, etc.). Use in areas where the transmission signal is strong (transmission site is in direct view).

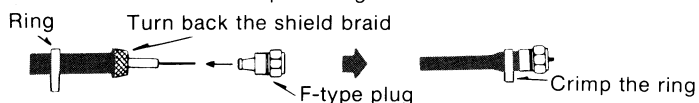


Preparing an F-type plug

1. Strip off the coaxial cable cover and the center conductor cover.



2. Place the ring over the coaxial cable and turn back the shield braid. Then insert the F-type plug between the shield braid and the center conductor cover and crimp the ring.



Use either the small or the large combination of F-type plug and ring, whichever best fits the coaxial cable being used.

75-ohm coaxial cable (option)

F-type plug (included)

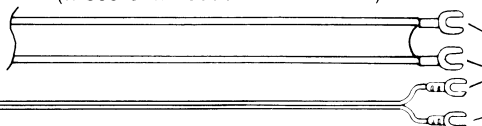
FM indoor antenna (included)

- Unfold to T-shape, and attach to a wall (using tacks or tape) facing in direction of best reception.
- Disconnect this antenna if an FM outdoor antenna is installed.



Tacks or tape

300-ohm feeder wire (option)
(If 300-ohm feeder wire is used.)

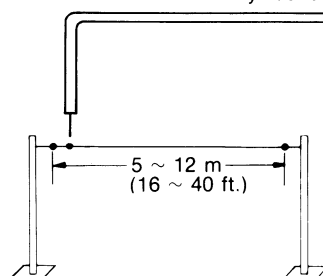


300-ohm → 75-ohm
impedance matching
transformer (included)

Vinyl-covered wire (option)

AM outdoor antenna (option)

(Necessary in mountainous regions, inside reinforced-concrete buildings, etc.) Use 5 ~ 12 m (16 ~ 40 ft.) of vinyl-covered wire horizontally at the window.

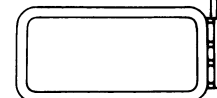


AM loop antenna (included)

After finding the best reception position for the antenna, fix it to a wall, the rack, unit, etc.

Note:

Be sure to connect the AM loop antenna even when an outdoor antenna is used.



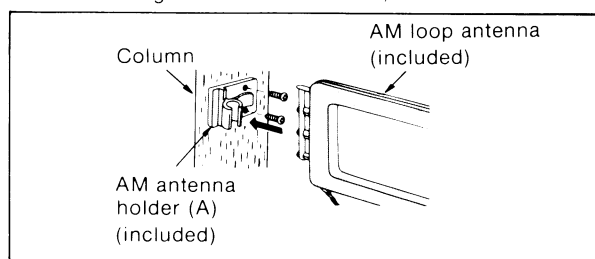
■ How to use the AM loop antenna

Find the best reception position for the FM antenna, and then fix it in place on a wall, the rack, or the unit.

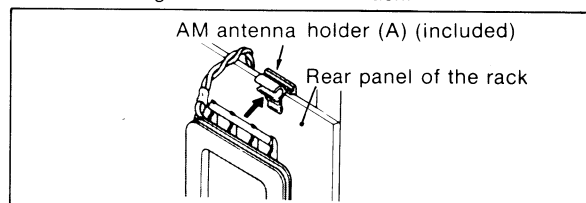
Pay attention to the following points when attaching the antenna.

- 1) Find the height and direction of the antenna where reception is best and then fix it vertically to the wall, rack, etc.
- 2) Do not attach it horizontally (to do so would impair reception).
- 3) Do not attach it close to metal surfaces, power cords, or speaker wires (to do so would result in noise).
- 4) Do not attach it close to a tape deck (when the tape deck is being used, chirping or beeping sounds may be received).

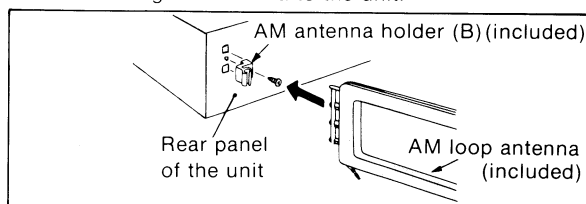
1. When attaching the antenna to a wall, column.



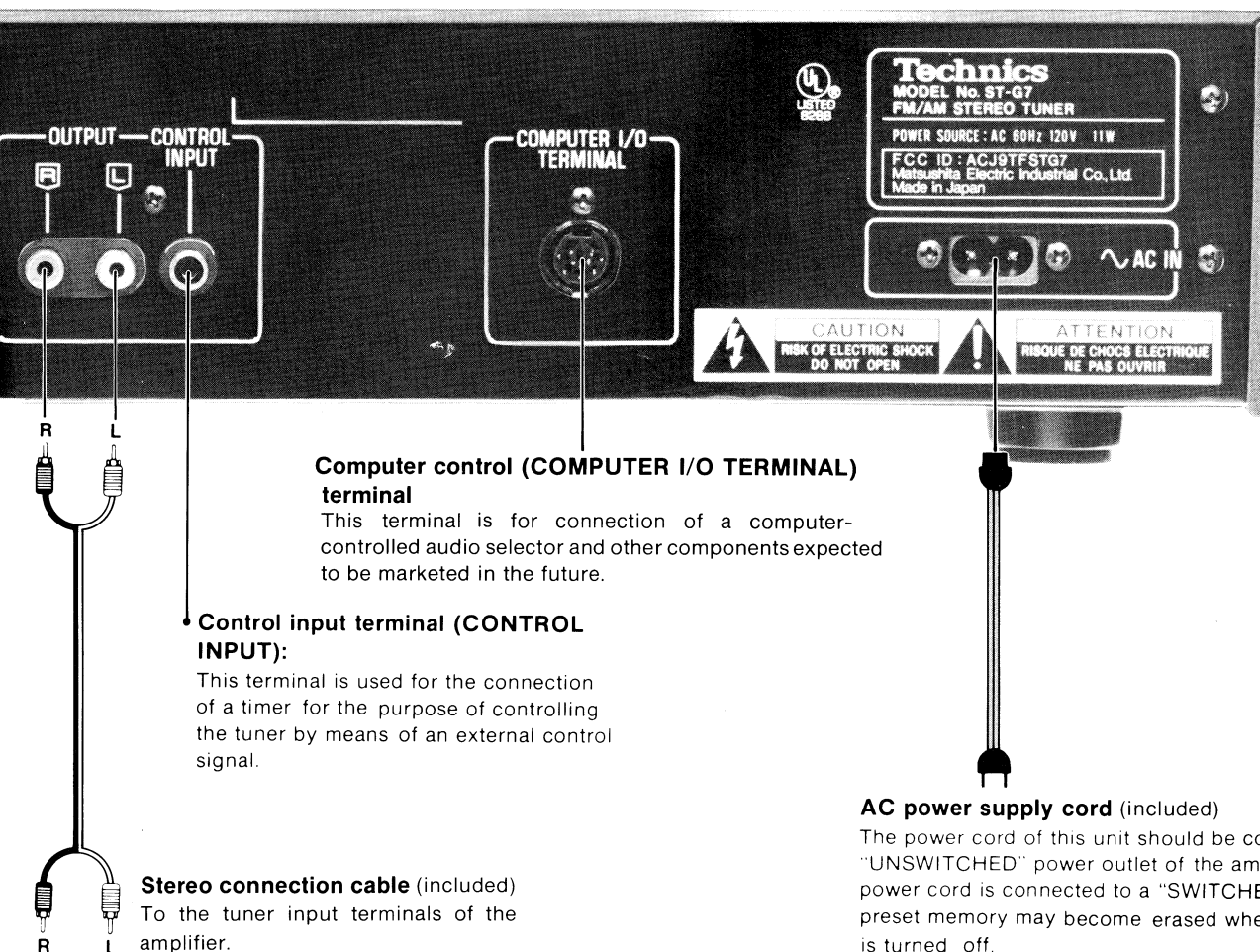
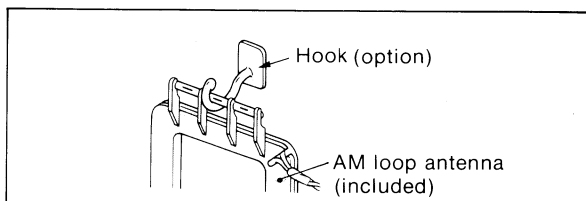
2. When attaching the antenna to the rack.



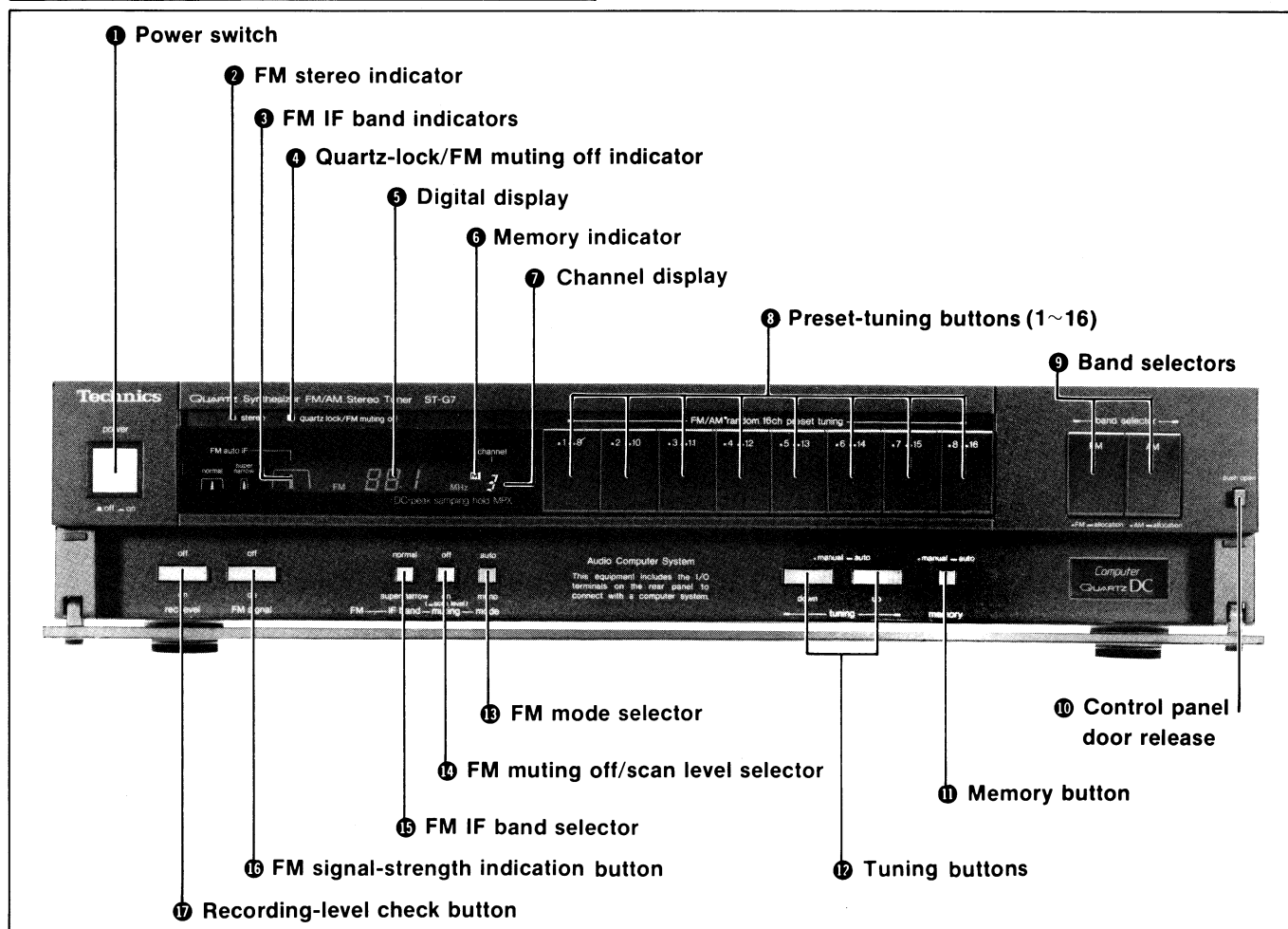
3. When attaching the antenna to the unit.



4. If a hook is used



FRONT PANEL CONTROLS AND THEIR FUNCTIONS



1 Power switch (power)

Before turning the power on, make sure the volume control of the amplifier is set to the minimum ("0") position.


2 FM stereo indicator (stereo)

This indicator automatically illuminates when an FM stereo broadcast is being received.

Note:

It will not illuminate if the FM mode selector is set to the "mono" position.

3 FM IF band indicators (FM auto IF)

normal / :

This indicator will illuminate if the signal is strong and there is little effect from interference.

super narrow / :

This indicator will illuminate if the signal is weak and/or there is interference.

The illumination of the left and/or right parts of the indicator indicates that interference waves are present within 300 kHz (left: -, right: +) of the tuned frequency.

4 Quartz-lock/FM muting off indicator (quartz lock/FM muting off)

This indicator illuminates when this unit is precisely tuned to the transmission frequency of a radio broadcast.

Note that this indicator may illuminate if the FM muting off/scan level selector has been set to the "off" position in order to receive a weak radio broadcast.

5 Digital display

The broadcast frequency, scan level indication of the FM muting off/scan level selector, the frequency of the recording level signal (0.33 kHz), and the FM signal strength are displayed.

6 Memory indicator (memory)

This indicator illuminates when the memory button is pressed.

To preset the memory manually, press the desired preset tuning button while this indicator is illuminated (within approximately 4 seconds).

If the memory is preset automatically, the indicator will not illuminate.

7 Channel display

The channel number selected by the preset-tuning buttons is displayed.

8 Preset-tuning buttons (1~16) (FM/AM random 16ch preset tuning)

These buttons are used to preset FM and AM broadcast frequencies into the memory of this unit, and are also pressed to select the desired preset frequencies.

If the button is pressed momentarily, stations will be preset to channels 1~8 (front channels). If the button is pressed slightly longer, stations will be preset to channels 9~16 (back channels).

Note:

Refer to page 8 for information concerning preset memory.

9 Band selectors (band selector)

FM:

Press this button to listen to an FM broadcast.

FM allocation:

A frequency step of either FM 0.2 MHz or FM 0.05 MHz can be selected. Set to the appropriate position for your locality. When the FM button is pressed slightly longer and then released when the "AL 5" indication illuminates, the FM frequency "step" will change to 0.05 MHz (50 kHz).

To return to the original FM 0.2 MHz, press the FM button slightly longer, and then release it when the "AL 20" indication illuminates.

AM:

Press this button to listen to an AM broadcast.

AM allocation:

A frequency step of either AM 10 kHz or AM 9 kHz can be selected. Set to the appropriate position for your locality. When the AM button is pressed slightly longer and then released when the "AL 9" indication illuminates, the AM frequency "step" will change to 9 kHz.

To return to the original AM 10 kHz, press the FM button slightly longer, and then release it when the "AL 10" indication illuminates.

10 Control panel door release (push open)

If any of the controls and selectors ① through ⑰ are to be operated, press this button to open the glass door.

When this button is pressed, the glass door will open slowly by means of a damper mechanism.

11 Memory button (memory)

This button is used when preset memory setting of the preset-tuning buttons is made.

There are two types of memory presetting: manual and automatic.

Refer to page 8 for information concerning preset memory.

12 Tuning buttons (tuning)

These buttons are used for tuning to the desired broadcast station.

If the button is pressed momentarily and then released, the frequency will change at intervals of 0.2 MHz (or 0.05 MHz) for FM and 10 kHz (or 9 kHz) for AM. If the button is pressed slightly longer and then released, the station will be selected automatically. If the broadcast signals are weak, it may not be possible to make automatic selection. If this occurs, make the selection manually.

down:

When this button is pressed, the frequency will change to a lower frequency.

up:

When this button is pressed, the frequency will change to a higher frequency.

13 FM mode selector (mode)

This unit automatically switches into the stereo mode when a stereo broadcast is received. Press this button to listen in the monaural mode. The FM stereo indicator will not illuminate in the monaural mode.

14 FM muting off/scan level selector (muting)

This selector is used when releasing the FM broadcast muting function and when setting the scan level for FM broadcasts.

• Releasing the muting function (off)

In mountainous areas, etc., where broadcast signals are weak, breakup in the sound can be lessened by lightly pressing the button. When this is done, the muting is released only for the station being received.

However, when a tuning button is pressed to begin scanning again, the former scan level will be used.

• Setting the scan level (scan level)

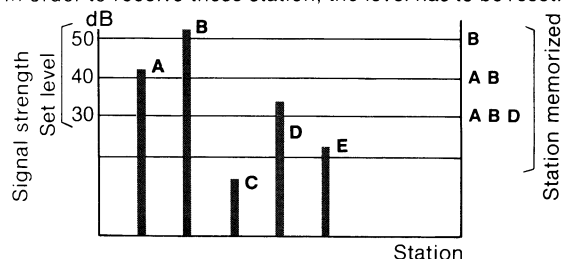
This level setting is effective only for the automatic preset memory and auto tuning.

When the button is held down, "dB" will be displayed and the numbers 30, 40, and 50 will be displayed in order.

When the desired level is reached, release the button.

The higher the level, the more noise is reduced. Stations with good reception can use "a high level", but stations below the set level cannot be received.

In order to receive these station, the level has to be reset.



15 FM IF band selector (IF band)

For selection of the FM IF band.

The built-in computer of this unit detects the signal condition and functions accordingly to select the FM IF band automatically. This button is used to change it manually.

16 FM signal-strength indication button (signal)

If this button is pressed during reception of an FM broadcast, the signal strength (the strength of the signal of the broadcast being received) will be displayed within a 2 dB accuracy.

If the strength of the signal being received is 50 dB or more, a symbol (■) will appear between the number and dB to indicate that a strong signal of 50 dB or more is being received. The signal will become saturated at 50 dB or more. In order to resume the frequency display, press the button once again.

17 Record level check button (rec level)

This button is to be used for adjustment of the recording level when recording an FM broadcast.

When this button is pressed, the microcomputer functions to emit a reference signal of precisely 333 Hz from the output terminals of this unit. The word "CAL" (calibration) and then, soon thereafter, "0.33 kHz" will be shown by the digital display.

Adjustment of the recording level

Use the input-level control(s) of the tape deck to make the adjustment while watching the recording-level meters.

• For VU meters and level meters:

Adjust so that the indication is about +2 VU or +2 dB.

• For peak-level meters:

Adjust so that the indication is about -2 dB.

Notes:

1) Because the ideal recording level is apt to vary depending upon the program source and the characteristics of the tape deck, the adjustment should be made by also considering those factors.

2) Don't press the operation buttons of this unit during a recording. If they are pressed, the recorded sound may be disturbed.

HOW TO PRESET RADIO BROADCAST FREQUENCIES

This unit is used to preset as many as 16 radio broadcast frequencies: FM/AM random presetting. After broadcast frequencies have been preset as described below, any desired station can be quickly and easily selected by simply touching one button.

■ Memory presetting

There are two types of memory presetting: automatic and manual. Select whichever is preferred.

Automatic memory presetting

Beginning at the frequency indicated by the digital display, the next 8 consecutive FM broadcasting stations and AM broadcasting stations will be automatically preset to "channels" 1 through 16 for FM and 9 through 16 for AM, respectively. Note that in mountainous or remote areas, broadcasting stations which have weak broadcasting signals cannot be automatically preset into the memory.

Important!



This antenna must be installed to receive AM broadcasts.

■ Before memory presetting

Each button is used to preset two stations.

Presetting front channels (CH 1~8)



Press momentarily.

Presetting back channels (CH 9~16)



Press slightly longer.

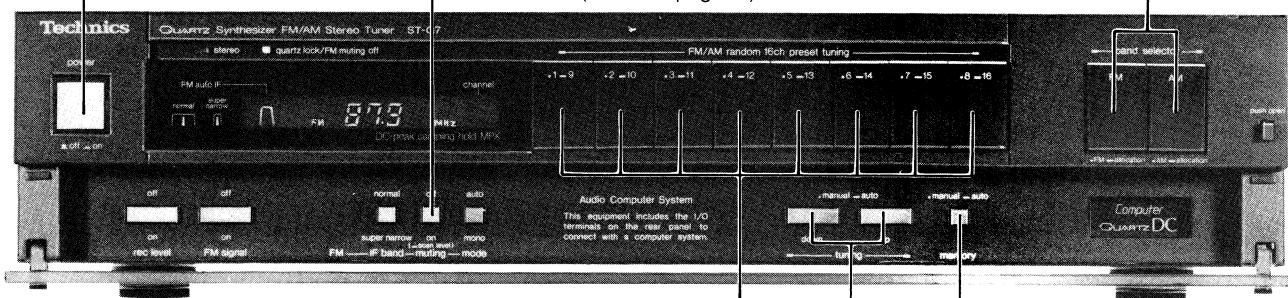
③ Adjustment to FM broadcast signal strength is possible.

Press and hold the button. (Will change to dB indication.) Release the button when the desired scan level indication (30, 40 or 50 dB) is displayed. (When the scan level is set, it will return to frequency display.) A broadcast signal stronger than the set level is memorized.

② Press the "FM" or "AM" button.

Before presetting the broadcasting station, press the band selector to the appropriate position for you locality. (Refer to page 7.)

① Power: "on" ()



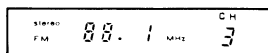
⑥ Confirm the names (call signs, etc.) of the broadcasting stations which are preset to each channel, and enter them on the station memory file sheet (page 11).

To check the front channels (CH 1~8):

Press momentarily.



Frequency stored in the memory and channel number are displayed.

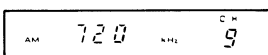


To check the back channels (CH 9~16):

Press slightly longer.



Frequency stored in the memory and channel number are displayed.



⑤ Press. When the frequency indication begins to change, release.



(The frequency will change upward, and the automatic presetting will begin with the broadcasting station of the lowest frequency and will continue in order.

Note that the channel display illuminates each time a broadcast station is preset in the memory, thus indicating which "channel" has been preset.)

④ • To preset FM broadcasting stations: Set to 87.9 MHz (or 87.50 MHz).

• To preset AM broadcasting stations: Set to 530 kHz (or 522 kHz).

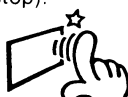
① Press the button and hold slightly (frequency will change continuously).



② Release it at 87.9 MHz (or 87.50 MHz) for FM or 530 kHz (or 522 kHz) for AM, and then press the button again momentarily (frequency change will stop).



③ Press the button momentarily (frequency will change each time the button is pressed), and tune to one of the above frequencies.



Manual memory presetting

Stations can be freely preset to any desired channel.

4 Press the appropriate tuning button to tune to the desired broadcast.

- **Auto tuning** Press the button. When the frequency indication begins to change, release the button (a broadcasting station will be selected automatically). Repeat this operation until the desired station is found.



- **Manual tuning**

Press the button momentarily and tune to the desired station. The frequency will change each time the button is pressed.



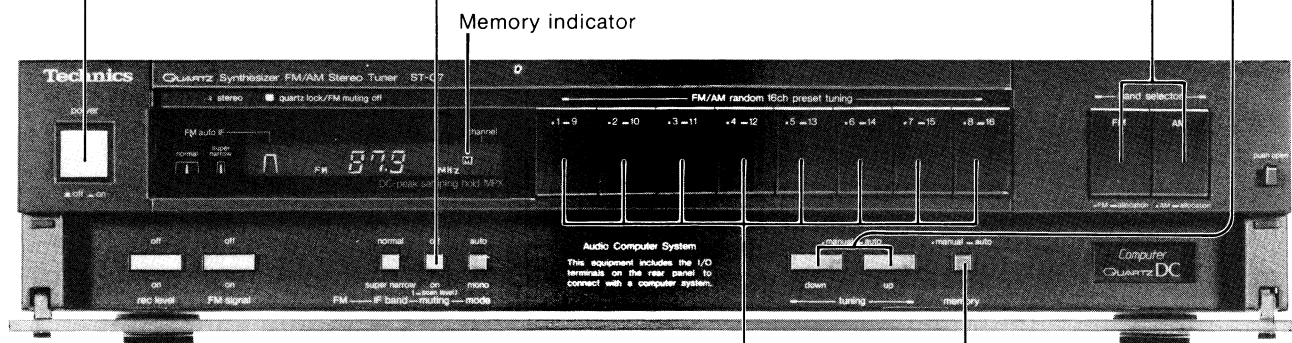
3 Adjustment to FM broadcast signal strength is possible for automatic tuning.

Press and hold the button. (Will change to dB indication.)
Release the button when the desired scan level indication (30, 40 or 50 dB) is displayed.
(When the scan level is set, it will return to frequency display.)

2 Press the "FM" or "AM" button.

Before presetting the broadcasting stations, press the band selector to the appropriate position for you locality. (Refer to page 7.)

1 Power: "on" ()



6 While the memory indicator is illuminated, press the button of the desired channel.

- **To preset channels 1 through 8:**



Press the button momentarily, and then release. (Preset channel number is displayed on the channel display.)

- **To preset channels 9 through 16:**



Press the button slightly longer, and then release. (Preset channel number is displayed on the channel display.)

When the button is pressed, the memory indicator illumination will stop, and the presetting is complete.

Note:

1. If the memory indication illumination stops before you press the button, once again repeat step (5) and then step (6).
2. If a new broadcasting station is preset into a channel, the broadcasting station which was previously entered in that channel will be automatically erased.

5 Press momentarily, and then release.

(The memory indicator will illuminate for approximately 4 seconds.)



Note:

If the button is pressed continuously, the frequency will begin to change, and the memory will be preset automatically.
In order to stop the memory presetting, once again press either the "up" button or the "down" button.

7 Enter the name (call sign, etc.) of the preset broadcasting station on the station memory file sheet (page 11).

This completes the procedures for presetting radio broadcast frequencies. The other preset-tuning buttons can be preset in the same way by following steps (2) through (7).

LISTENING TO RADIO BROADCASTS

Important!



This antenna must be installed to receive AM broadcasts.

- 1 Turn the amplifier on, and prepare it for listening to radio broadcasts.

4-2 Station selection by using the tuning buttons:

- ① Press either "FM" or "AM"
- ② Press the left button to change the frequency downward, and press the right button to change the frequency upward.

• Auto tuning



Press the button. When the frequency indication begins to change, release the button (a broadcasting station will be selected automatically). Repeat this operation until the desired station is found.

• Manual tuning

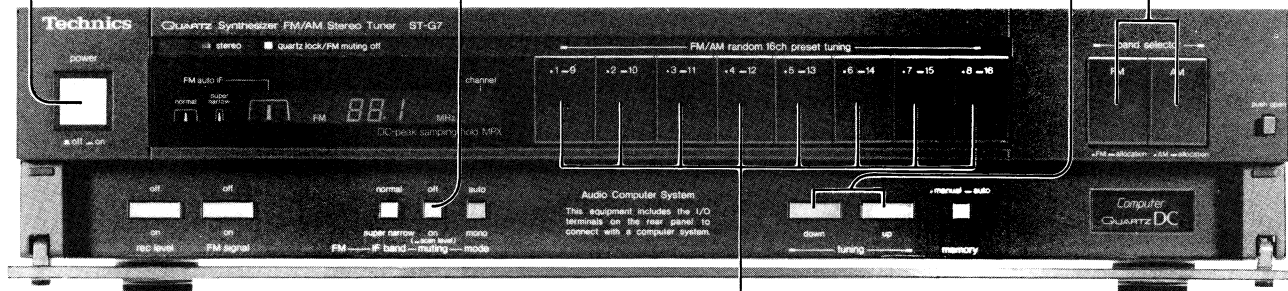


Press the button momentarily (the frequency will change each time the button is pressed) and tune to the desired station.

3 Adjustment to FM broadcast signal strength is possible for automatic tuning.

Press and hold the button.
(Will change to dB indication.)
Release the button when the desired scan level indication (30, 40 or 50 dB) is displayed.
(When the scan level is set, it will return to frequency display.)

2 Power: "on" ()



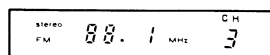
4-1 Station selection by using preset tuning buttons:

- To select the front channels (CH 1~8):

Press momentarily.



Frequency stored in the memory and channel number are displayed.

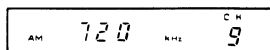


- To select the back channels (CH 9~16):

Press slightly longer.



Frequency stored in the memory and channel number are displayed.



Station memory file sheet

Station	Button	CH. 1	CH. 2	CH. 3	CH. 4	CH. 5	CH. 6	CH. 7	CH. 8
FM									
AM									
Station	Button	CH. 9	CH. 10	CH. 11	CH. 12	CH. 13	CH. 14	CH. 15	CH. 16
FM									
AM									

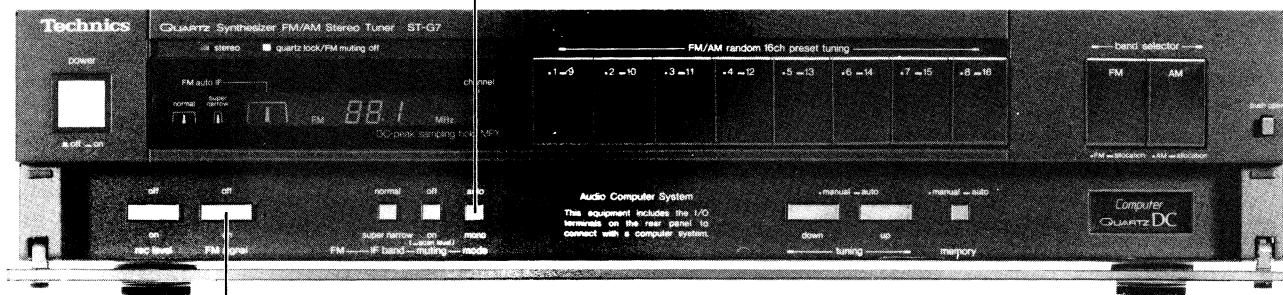
Operation after station selection:

If interference and noise are excessive in an FM stereo broadcast:

Press the FM mode selector.

Note that this will result in monaural reception, but the noise will be reduced.

To switch back to stereo reception, press the button once again.



Press to checking FM signal strength.

When recording an FM broadcast, the signal strength should be at least 50 dB in order to make a recording which is clear and noise-free.

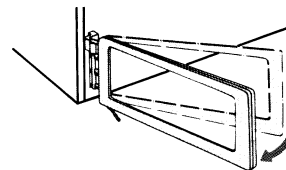
If this button is pressed again, the broadcast frequency is displayed again.

Notes:

- 1) When checking the signal strength, set so that the "normal" FM IF-band indicator is illuminated. If the "super narrow" indicator is illuminated, slight errors might occur in the indication of weak signals.
- 2) The display may flicker if the signal of the broadcast being received is extremely weak.

For AM broadcasts

Move the antenna toward the right or left to find the point of best reception.



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 Servicenters (enclosed with this unit) to locate a convenient servicenter, or consult your Technics dealer for instructions.

	Problem	Probable cause(s)	Suggested remedy
While listening to FM broadcasts	An unusual hissing noise is heard when listening to the broadcast in stereo, but not heard when listening monaurally.	A slight noise may be heard because the method used for modulation of FM stereo broadcasts is different than that used for monaural broadcasts.	<ul style="list-style-type: none"> • Try reducing the treble sound by using the treble control of the amplifier. • Set the FM mode selector to the "mono" position. (Note that the broadcast will then be heard as monaural sound.) • Try changing the location, height and/or direction of the antenna. • If an interior antenna is being used, change to an exterior antenna. • Try using an antenna with more elements.
	Noise is excessive in both stereo and monaural broadcasts.	Poor location and/or direction of the antenna. Transmitting station is too far away.	<ul style="list-style-type: none"> • Try changing the location, height and/or direction of the antenna. • If an interior antenna is being used, change to an exterior antenna. • Try using an antenna with more elements.
	The FM stereo indicator or quartz lock indicator flickers, without completely illuminating.	Poor location and/or direction of the antenna. Transmitting station is too far away.	<ul style="list-style-type: none"> • Try changing the location, height and/or direction of the antenna. • If an interior antenna is being used, change to an exterior antenna. • Try using an antenna with more elements.
	Excessive distortion in the sound of stereo broadcasts.	Nearby building or mountain. [Multi-path distortion is being caused by the mutual interference of broadcast signals received directly from the transmitting station (direct waves) and signals being reflected from nearby buildings or mountains (reflected waves).]	
	Station selection cannot be made by using the preset-tuning buttons.	The preset-tuning buttons have not been preset. The charge of the gold capacitor which maintains the "back-up" memory is exhausted.	<ul style="list-style-type: none"> • Make the presets. • Set the power switch to the "on" position for 30 minutes or more to perform the charging, and then make the memory presetting again.
	The "most-recent" memory will not be reset.	The charge of the gold capacitor which maintains the "back-up" memory is exhausted.	<ul style="list-style-type: none"> • Set the power switch to the "on" position for 30 minutes or more to perform the charging, and then make the memory presetting again.
While listening to AM broadcasts	An unusual "beat" sound is heard.	Unit is being used at the same time as the television set.	<ul style="list-style-type: none"> • Turn off the television set, or use this unit farther away from it.
	A low-pitched "hum" sound is heard when the broadcast is tuned.	The antenna connection wires are too close to the power cord. The power supply frequency from the power cord is modulated and heard from the speakers.	<ul style="list-style-type: none"> • Place the antenna connection wires and the power cord farther apart. • Try reversing the connection of the power cord plug. • Install a special exterior antenna.
	A strange hissing noise is produced continuously or intermittently.	Caused by the "discharge phenomenon" and the "oscillation phenomenon" of electric appliances (such as fluorescent lights, TV, small series-type motors, rectification equipment, etc.).	<ul style="list-style-type: none"> • Try placing this unit farther away from such equipment. • Install noise-prevention equipment on this unit or on the electric appliance.
	Station selection cannot be made by using the preset-tuning buttons.	The preset-tuning buttons have not been preset. The charge of the gold capacitor which maintains the "back-up" memory is exhausted.	<ul style="list-style-type: none"> • Make the presets. • Set the power switch to the "on" position for 30 minutes or more to perform the charging, and then make the memory presetting again.

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 Kauhi 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 Infanteria, KM 9.7 Victoria Industrial Park Carolina, Puerto Rico 00630