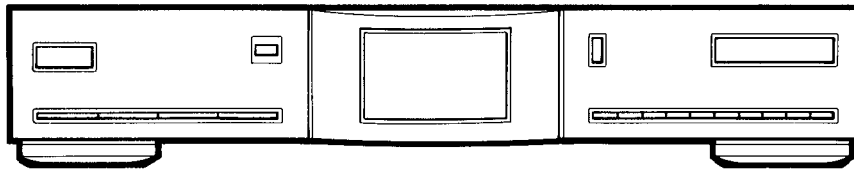




OPERATING INSTRUCTIONS

AM/FM SYNTHESIZER TUNER

DT-920



Please follow the instructions in this manual to obtain the optimum results from this unit.
We also recommend that you keep this manual handy for future reference.

TOA Corporation

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TO USE YOUR UNIT PROPERLY AND SAFELY

- Do not damage the power cord.
- When not in use, disconnect the power cord from the outlet. Grasp the plug, not the cord, when disconnecting the unit.
- If water should enter the unit, electrical shock or a malfunction may result. Use in an area where there is low humidity and little dust.
- Do not disassemble or alter the unit in any way.

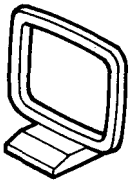
CAUTION

THIS UNIT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

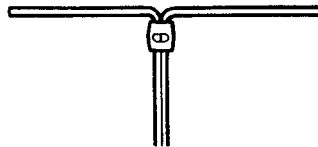
WARNING!

TO AVOID THE HAZARDS OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR OTHER MOISTURE.

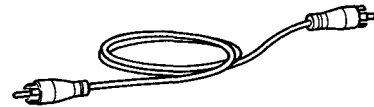
ACCESSORIES



AM loop antenna
Part No. 614 240 0845



FM indoor antenna
Part No. 614 023 7481



RCA plug audio cable
Part No. 645 005 0534

ATTENTION

For your protection in the event of theft or loss of this product, please fill in the information below for your own personal records.

Model No. DT-920

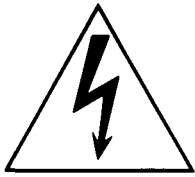
Serial No. _____
(Located on the back of the unit)

Date of Purchase _____

Purchase Price _____

Where Purchased _____

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

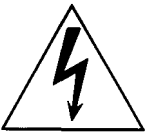


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



These markings are located on the bottom, side or back of the unit.

CAUTION: TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CONNECTIONS

1. Connect the FM and AM antennas as shown below.

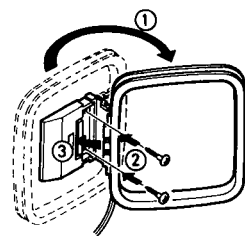
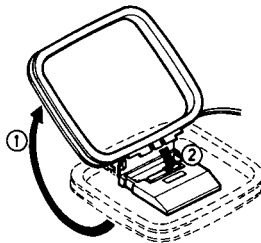
FM antenna

The T-shaped indoor FM antenna (300-ohm) is sufficient to receive most local FM broadcasts and should be connected to the rear FM terminals on the DT-920. In fringe areas, or where reception is distorted or noisy, an FM outdoor antenna (not supplied) should be connected instead of the indoor antenna. The terminals will accept 300-ohm twin lead cable.

AM antenna

The AM loop antenna is sufficient to receive most local AM broadcasts. Assemble the loop antenna

Unwind the antenna wires (about 3 turns), then connect them to the AM LOOP terminals. Place the loop antenna in a position which yields the best AM reception, or attach it to a wall or other surface as shown.



NOTE:

To minimize noise...

- Keep the speaker wires, power cord and all other cables away from the antennas.
- Do not place the antenna close to a TV or speaker.

2. Connect one end of a supplied audio cable to the OUTPUT (1 or 2) jack on the TUNER and the other end to the AUX input jack (-20 to 0dBV, 10kΩ) of the 900 series II amplifier.

3. After making all the connections, connect the AC power cord to 120V AC 60Hz outlet.

This unit is equipped with a polarized plug. If you have difficulty inserting the plug, turn it over and reinsert it. If the unit will not be used for a long time, disconnect the AC plug from the AC outlet.

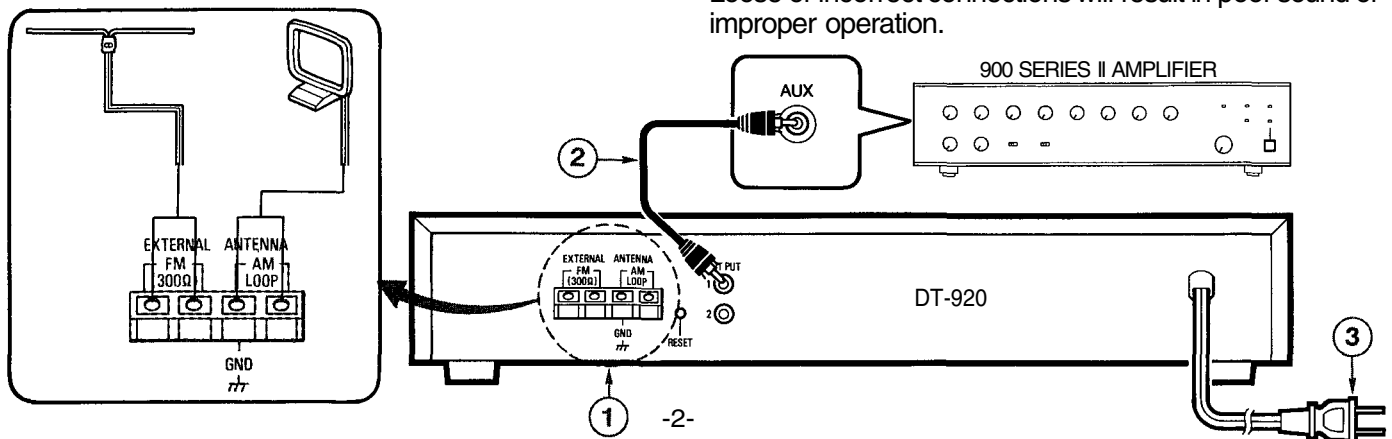
CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION:

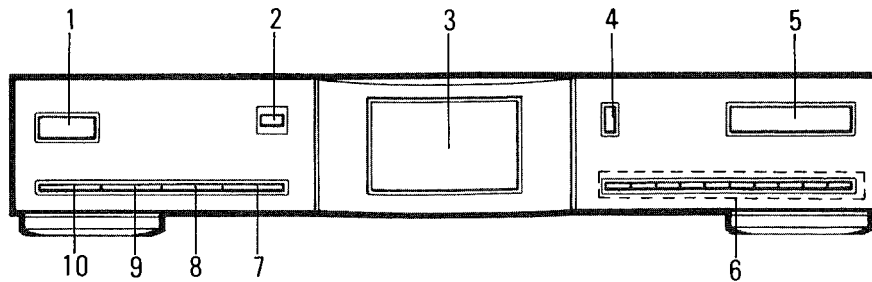
POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

CAUTION:

Loose or incorrect connections will result in poor sound or improper operation.



CONTROLS



- | | |
|--|---|
| 1. Power button (POWER) | 9. Scan level button (SCAN LEVEL) |
| 2. Channel/Frequency select button (CH/FREQ) | 10. Automatic/Manual tuning select button (AUTO/MANUAL) |
| 3. Display (MULTI-FUNCTION DISPLAY) | |
| 4. Band select button (BAND) | |
| 5. Tuning button (DOWN TUNING UP) | |
| 6. Preset tuning buttons (PRESET) | |
| 7. Direct-in button (DIRECT IN) | |
| 8. Memory button (MEMORY) | |

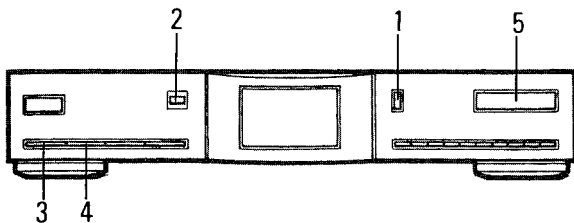
LISTENING TO THE RADIO

Preparation

1. Press the POWER button on the tuner.

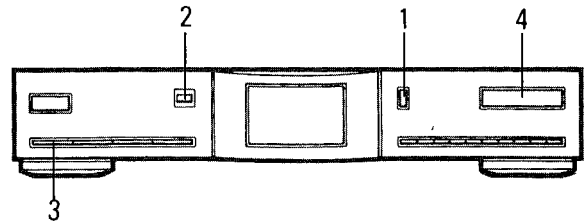
FREQUENCY UP/DOWN TUNING

Automatic tuning



1. Press the BAND button to select AM or FM.
2. Press the CH/FREQ button to select the frequency mode. "FREQ" appears.
3. Press the AUTO/MANUAL button to select the automatic tuning mode. "AUTO" appears.
4. Press the SCAN LEVEL button to select the desired scanning level, "SCAN 1" or "SCAN 2."
SCAN 1: To receive stations with weak signals
SCAN 2: To receive stations with strong signals
5. Press the TUNING "UP" or "DOWN" button.
The unit will scan up or down the band and receive the next station with a signal that is at least as strong as the scanning level selected in step 4.
6. Adjust for the desired sound quality with the appropriate controls of the connected amplifier.

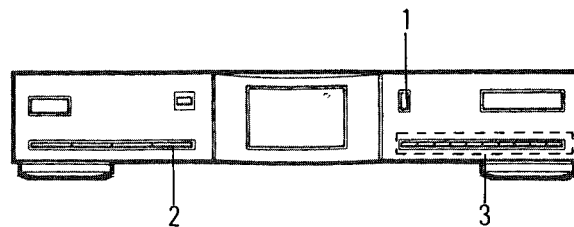
Manual tuning



1. Press the BAND button to select AM or FM.
2. Press the CH/FREQ button to select the frequency mode. "FREQ" appears.
3. Press the AUTO/MANUAL button to select the manual tuning mode. ("AUTO" disappears and "MONO" appears when FM band is selected.)
4. Press and hold the TUNING "UP" or "DOWN" button until the desired station frequency appears on the display.
- Press and release the TUNING "UP" or "DOWN" repeatedly change the selected frequency one step at a time.

DIRECT TUNING

1. Press the BAND button to select AM or FM.
2. Press the DIRECT IN button.
"FM ---. -- MHz" or "AM ---- kHz" appears and blinks.
3. Press the PRESET buttons (1 - 0) to enter the frequency of a broadcast station.
Example:
FM 98.1 MHz... Press 9, 8 and 1.
FM 103.5 MHz... Press 1, 0, 3 and 5.
AM 560 kHz... Press 5 and 6.
AM 1680 kHz... Press 1, 6 and 8.

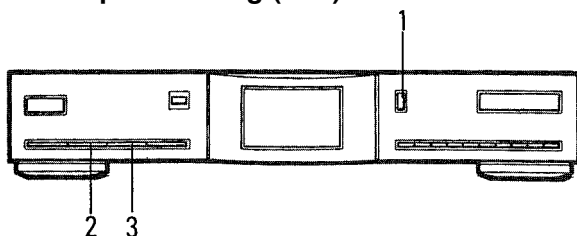


NOTE:

If you try to enter an incorrect station frequency (86.0MHz or 500kHz, for example), the display will continue to blink until the correct number is entered.

AUTOMATIC OR MANUAL PRESET TUNING

Automatic preset tuning (APT)



1. Press the BAND button to select AM or FM.
2. Press the SCAN LEVEL button to select the desired scan level, "SCAN 1" or "SCAN 2."
3. Press and hold down the MEMORY button for at least 3 seconds, until "APT" and "CH" blink, then release the button.

The unit will start at the low end of the selected band and scan upward (higher frequency numbers). Up to 20 stations will be memorized automatically.

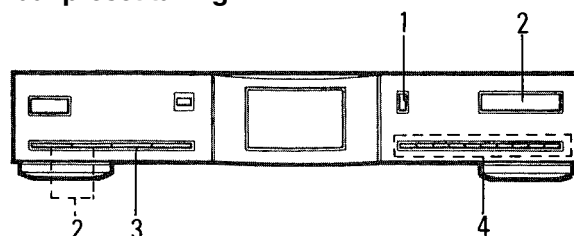
After the last station is programmed, the lowest preset station number will be selected. "APT" disappears.

4. To automatically preset stations on the other band, press the BAND button, then follow steps 1 - 3 above.

IMPORTANT NOTE

- If APT is activated, all previously programmed stations will be cleared and new stations will be programmed.
- FM stations will be automatically programmed into CH01 - CH20.
AM stations will be automatically programmed into CH21 - CH40.

Manual preset tuning



1. Press the BAND button to select AM or FM.
2. Tune in a station as described in "FREQUENCY UP/DOWN TUNING" or "DIRECT TUNING."
3. Press the MEMORY button. "MEMO" appears and "CH - -" blinks.
4. Press two PRESET buttons (1 - 0) while "CH - -" is blinking.

When presetting stations, two buttons must be pressed (except when presetting CH40).

Example:

- CH01 Press "0" and "1".
- CH05 Press "0" and "5".
- CH12 Press "1" and "2".
- CH39 Press "3" and "9".
- CH40 Press "4" only.

The selected station is now programmed. The preset channel number and the frequency of the programmed station appear on the display.

NOTES:

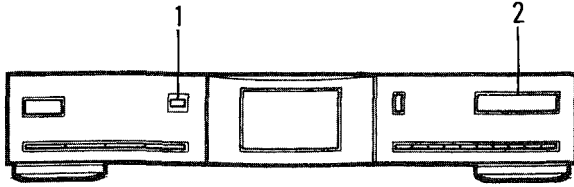
- You cannot enter preset numbers above CH40.
- If a new station is programmed into a band and preset number already containing a programmed station, the previously programmed station will be cleared.

5. To manually preset stations on the other band, press the BAND button, then follow steps 1 - 4 above.

LISTENING TO PRESET STATIONS

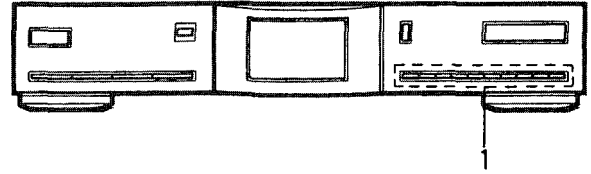
Program stations as described in "AUTOMATIC OR MANUAL TUNING."

Using the TUNING "UP" or "DOWN" button



1. Press the CH/FREQ button to select the channel mode. ("FREQ" disappears.)
2. Press the TUNING "UP" or "DOWN" button until the desired channel number appears on the display.
 - The preset station for the selected channel number can be heard.

Using the PRESET button



1. Press two PRESET buttons (1 - 0) to select the desired channel number.

Example:

- CH01 ... Press "0" and "1".
- CH05 ... Press "0" and "5".
- CH12 ... Press "1" and "2".
- CH39 ... Press "3" and "9".
- CH40 ... Press "4" only.

You cannot enter preset numbers above CH40.

- The preset station for the selected channel number can be heard.
- If a channel number which has not been preset is entered, "----" appears for 2 seconds and the previous station is selected.

Changing the reception frequencies
 It is not necessary to perform this procedure in U.S.A and CANADA.

1. Select the band to be changed.
2. Turn the power off.
3. While pressing the BAND button, press the POWER button.

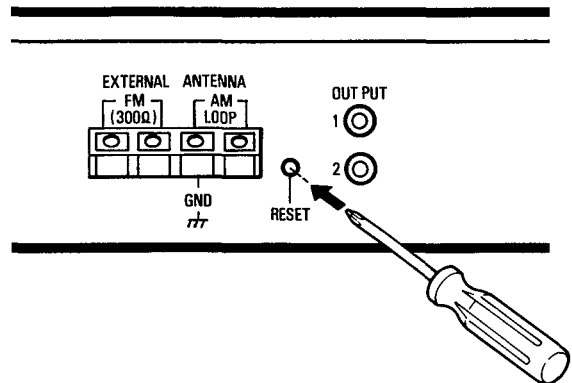
AM: 520 - 1710 kHz (10 kHz steps) ↔ 522 - 1710 kHz (9 kHz steps)

FM: 87.9 - 107.9 MHz (200 kHz steps) ↔ 87.5-108.0 MHz (50 kHz steps)

- The preset stations will be retained in the memory even if the unit is turned off.
 If the memory contents are lost due to a power failure or other condition, preset the stations again.

WHAT TO DO IF ...

If the operation of the unit or display is not normal, or you wish to clear the contents of the memory, disconnect the power cord from the AC outlet, then press the RESET button (rear of the unit) for at least 20 seconds.



MAINTENANCE

Cleaning the cabinet

Use a clean soft cloth moistened with plain lukewarm water and wrung dry. Never use benzol, benzene or other strong chemical cleaners since these could damage the finish of your unit. It is important that no liquid reaches the inside of the unit.

WARNING:

FOR YOUR PERSONAL SAFETY, BE SURE TO DISCONNECT THE AC POWER CORD BEFORE PROCEEDING WITH ANY MAINTENANCE OR CLEANING.

TROUBLESHOOTING GUIDE

If you have followed the instruction and are having difficulty operating the unit, locate the SYMPTOM in the left column below. Check the corresponding POSSIBLE CAUSE and CORRECTIVE ACTION columns to locate and remedy the problem.

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
No power when the POWER button is set to ON.	No power plug connection at the AC outlet.	Insert power plug into the AC outlet
Poor FM reception.	No antenna is connected.	Connect the supplied FM antenna to the FM antenna terminals on the rear panel of the unit. Refer to the "CONNECTIONS" section.
	Shorted or faulty connection(s) between the FM antenna and the tuner.	Check the connections to the FM antenna terminals on the rear panel of the unit.
	The antenna is not positioned for the best reception.	Change the position of the antenna. Refer to the "CONNECTIONS" section.
Continuous or intermittent hissing noise during AM reception, especially at night.	Noise caused by motors, fluorescent lamps, lightning, television. etc.	Keep the unit away from noise sources. Install an outdoor AM antenna (Noise may be reduced, but not completely eliminated.)
A humming noise can be heard during AM broadcast reception.	The power cord may be too close to the AM loop antenna or the antenna wire.	Position the power cord away from the antenna line and the AM loop antenna.
		Adjust the position of the AM loop antenna.
The tuner operation or display is not normal.	The memory must be reset.	Disconnect the power cord, then press the RESET button (rear of the tuner) at least 20 seconds. See page 5.

Servicing:

Should this product require service, refer to the TOA Electronics, Inc., TOA Canada Corporation warranty.

SPECIFICATIONS DT-920

Tuning range AM:	520kHz - 1710kHz (10kHz steps)/522kHz - 1710kHz (9kHz steps)
	FM: 87.9MHz - 107.9MHz (200kHz steps)/87.5MHz - 108.0MHz (50kHz steps)
FM usable sensitivity	14.7dBf
AM usable sensitivity	700µV/m
Power requirements	120V AC ±10%, 60Hz
Power consumption	6 Watts
Dimensions (W x H x D)	Approx. 420 x 82 x 270 mm
Weight	Approx. 2.8 kg

IMPORTANT INFORMATION

All specifications are subject to change without notice.

FCC INFORMATION

This device complies with Part 15 of the FCC Rules.
Operation is subject to the condition that this device does not
cause harmful interference.

CAUTION:

Changes or modifications not expressly approved by TOA may
void the user's authority to operate this equipment.