TU9200

AM-FM Stereo Tuner

harman/kardon

O W N E R ' S   M A N U A L

Use 120-volt AC only.

Connecting the unit to an outlet supplying a higher voltage may create a fire hazard.

Handle the Power Cord Gently.

■ To disconnect the plug from the AC outlet, pull on the plug itself, not on the cord.

■ Disconnect the plug from the AC outlet whenever the unit is to be left unused for an extended period of time.

■ Do not place furniture or other heavy objects on the cord, and avoid dropping heavy objects on it. Also do not make a knot in the cord.

Place the unit on a firm and level surface.

Avoid installing it:

■ In moist or humid places;

■ Close to heating equipment or in places exposed to direct sunlight;

■ In a direct draft from an air conditioner or in other very cold locations;

■ In places subject to excessive vibration or dust;

■ In poorly ventilated places.

Moving the Unit.

Before moving the unit, be sure to unplug the power cord from the AC outlet and disconnect all wires to antennas and to other stereo components.

Do Not Open the Cabinet.

Do not attempt to service this unit. Tampering with internal components can cause fire or shock, and may void your guarantee.

If water or small objects enter the unit, unplug the power cord immediately and consult an authorized Harman Kardon service center. Using the unit under such conditions may cause a fire or shock hazard.

Cleaning.

Remove dust by wiping the unit with a soft, dry cloth. If necessary, use a soft cloth lightly dampened with mild soapy water; then wipe with a dry cloth. Never use benzine, thinner, alcohol or other volatile agents, and avoid spraying insecticides near the unit.

TU9200 AM-FM STEREO TUNER

Thank you for choosing a Harman Kardon tuner.

And congratulations. Your new unit is an exceptionally well-engineered product that will give you years of superb performance.

Among its special features are:

■ Digital Synthesized Quartz-Locked Tuning

Quartz-locked tuning guarantees optimum sound quality by eliminating drifting and mistuning. A total of 16 AM and FM preset stations can be stored in memory, for one- or two-touch access.

■ Exceptional Sound Quality

The TU9200 provide low distortion, low noise, wide bandwidth, and excellent stereo separation. The high quality construction, grade of components, and layout provide exceptional audio signal purity.

■ Memory of Stereo or Mono Mode

When preset stations are set in memory, the selection of the stereo or mono mode is also recorded. When stations are tuned using Preset buttons, the unit automatically sets the stereo or mono mode as well.

■ Wired Remote Control Capability

This tuner can be remotely controlled when connected to an external infrared sensor or another hi-fi component with an infrared sensor.

> *To get the most from your new tuner, please read this manual carefully and follow its instructions. Save this manual for future reference.*

FM Antenna

Select the antenna that best meets your needs:

1. An indoor dipole antenna is supplied with your tuner. This will work well if you are located in a strong signal area.

2. Other indoor antennas are available, which may improve reception by offering greater positioning flexibility.

3. If reception is unsatisfactory using indoor antennas, install an outdoor antenna.

4. Or, you may connect to an FM cable antenna.

Connecting the antenna

Connect the two leads of the antenna to the two screw-down terminals marked "FM 300Ω BAL". If you wish to connect a cable antenna, connect it to the coaxial connector marked "FM 75Ω UNBAL".

AM Antenna

Your tuner comes with an AM loop antenna, which provides good reception in most locations. Connect this antenna to the screw-down terminals marked "AM" on the back of the unit.

For best reception, place the antenna away from the unit, and away from contact with any metal object. Alternatively, you may place the antenna in the holder provided on the back of the tuner.

In areas where AM signals are weak, an outdoor AM antenna may improve sound quality. Connect this antenna to the screw-down terminals marked "AM", and connect a ground wire to the "GND" terminal.

REMOTE

IN   OUT

UL FILE NO. E28148
AUDIO EQUIPMENT

Ⓤ Ⓛ ®

LISTED 596D

⚡ **CAUTION**
RISK OF ELECTRIC SHOCK
DO NOT OPEN ⚠

AVIS: RISQUE DE CHOC
ELECTRIQUE-NE PAS OUVRIR.

MODEL NO.: TU9200
HARMAN KARDON
NORTHRIDGE
CALIFORNIA
MADE IN JAPAN

SERIAL NO.

AC 120V/60Hz

10W

TO OTHER REMOTE
CONTROLLED COMPONENT

TO
INFRARED
REMOTE
SENSOR

TO PRE AMP OR
INTEGRATED AMPLIFIER
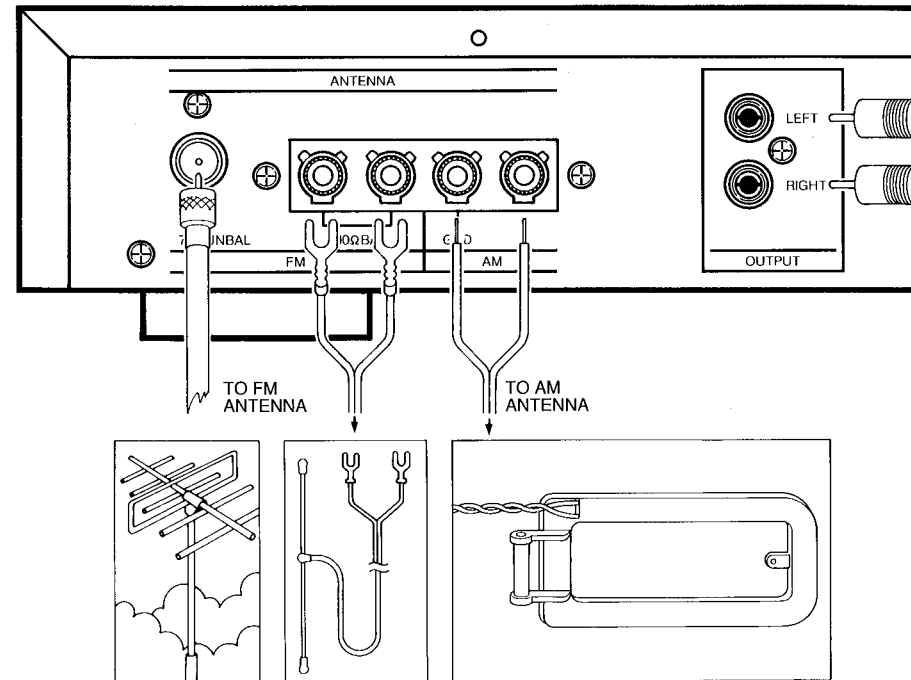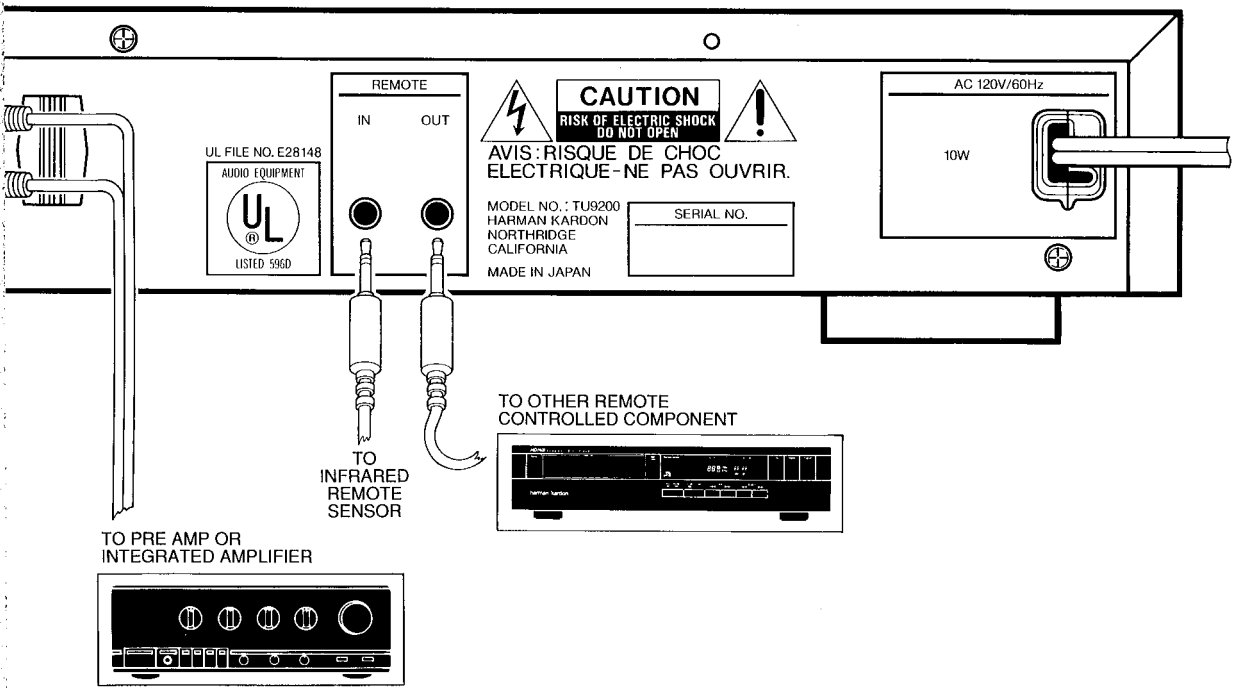
Connection to Preamplifier or Integrated Amplifier

Using the cable provided, connect the left and right OUTPUT jacks on the back of the tuner to the Tuner input on your preamplifier or integrated amplifier. To avoid sound disturbances and possible damage to your speakers, be sure to push the plug all the way into their jacks.

NOTE: Before making this connection, unplug all the components of your stereo system from AC power outlets. Also be careful not to intertwine the connection wires with any power cord, as this can degrade sound quality.

4

CONTROLS and DISPLAYS
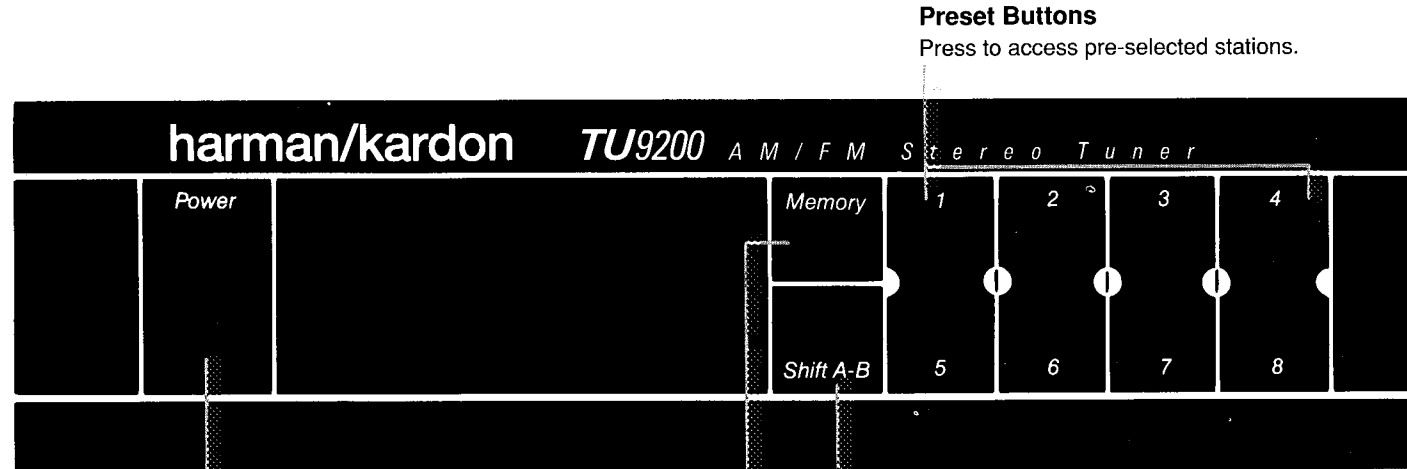
Preset Buttons
Press to access pre-selected stations.

harman/kardon *TU9200* A M / F M S t e r e o T u n e r

| Power | | | Memory | 1 | 2 | 3 | 4 |
| Shift A-B | 5 | 6 | 7 | 8 |

Power Switch
Press to turn the unit on and off.

Shift A-B
Allows you to access 16 pre-selected stations using the 8 Preset buttons.

Memory
Press to set in memory a new preset station.

Shows stereo broadcast is being received.

Flashes during period when a station can be entered into the memory.

FM/AM
Press to select FM or AM reception.

FM | | 8 8.8 | MHz | PRESET | | STEREO
AM | | | kHz | A B | 8 | TUNED SEEK

FM | AM | ▲ Tuning
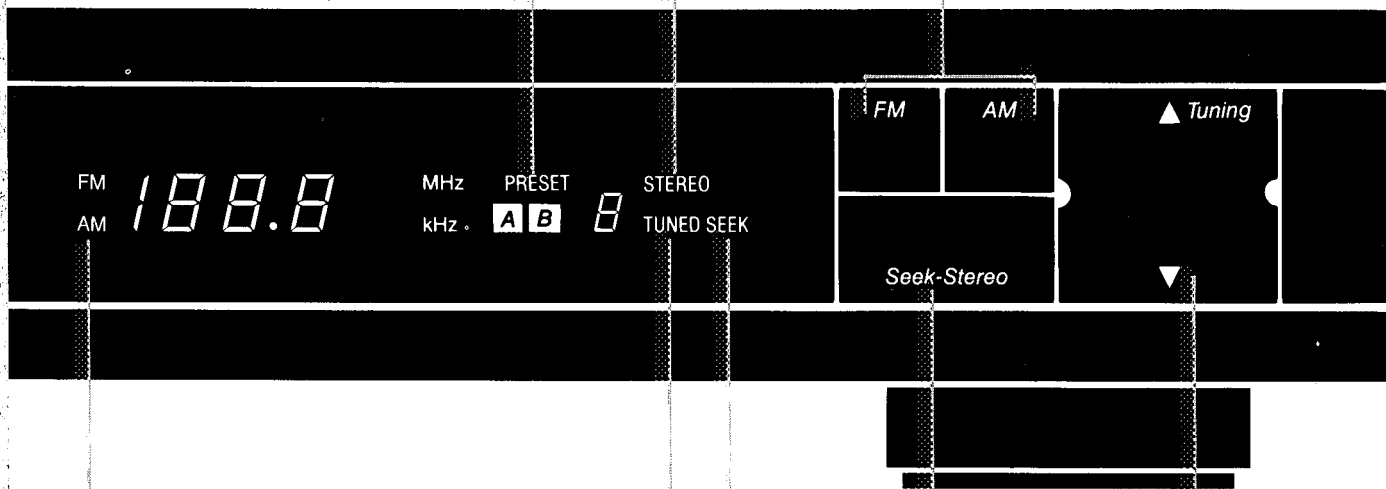
Seek-Stereo | ▼

Indicates AM or FM band and frequency of the tuned station.

Tuning
Press ▲ to tune to stations with higher frequencies; press ▼ for lower frequencies.

Indicates station is properly tuned.

Seek-Stereo
Press on for Seek tuning in stereo, off for manual tuning in mono.

Shows Seek function is on.

Tuning

Your tuner has special features designed to give you the best possible sound quality under a variety of conditions.

Seek-Stereo

Begin with the Seek-Stereo function on. ("SEEK" will light up on the display panel.) In this mode, pressing the ▲ or ▼ Tuning buttons causes the tuner to step up or down the broadcast band, stopping at the next *strong signal* it receives.

If you wish to locate a weak station, which the tuner skips over in Seek-Stereo mode, only then should you turn the Seek-Stereo function off. Pressing the ▲ and ▼ Tuning buttons in this mode allows you to tune to any desired frequency.

| FM	AM	▲ Tuning
Seek-Stereo		▼
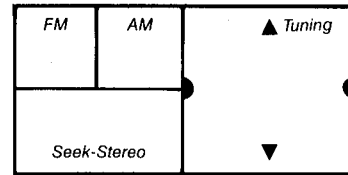
NOTE: When Seek-Stereo is off, all broadcasts are received in mono. This eliminates the excessive noise that results when weak stations are received in stereo. When you tune to a new, stronger station, be sure to turn the Seek-Stereo function back on in order to receive broadcasts in stereo.

Preset Buttons

Your tuner allows you to store 16 station settings and quickly access them, using the 8 Preset buttons along with the Shift A-B button.

The 16 preset stations are designated by the letter A or B, followed by a number from 1 to 8. Any letter/number designation may be used for any AM or FM station, in whatever combination you choose.

Memory	1	2	3	4
Shift A-B	5	6	7	8
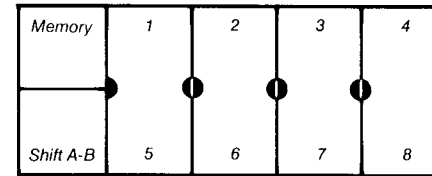
To enter a station in memory.

1. Tune to the desired station.
2. Be sure Seek-Stereo is set in the desired position.
3. Press the Shift A-B button until desired *letter*, A or B, appears on the display. (See diagram below.)
4. Press Memory button. The "PRESET" display flashes for about 8 seconds, during which a station can be entered into the memory.
5. Press the desired numbered Preset button.

PRESET

A **B**

To change a preset station.

Simply enter the new setting. The old setting is automatically erased.

To access a pre-selected station.

First press the Shift A-B button until the appropriate *letter* appears on the display. (See diagram.) Then press the appropriate numbered Preset button.

Remote Control

If you wish to control your TU9200 with an external infrared remote sensor, simply connect the wire from the remote sensor to the REMOTE IN jack on the back panel. A control wire may then be run from the REMOTE OUT jack to the Remote Input of another stereo component. Alternatively, if you have a stereo component with a built-in infrared remote sensor and a Remote Output jack, it may be possible to connect this jack to the REMOTE IN jack of your tuner. Not all components are compatible, but it will not hurt to experiment.

Once your TU9200 is connected to an external infrared sensor, you will need a compatible remote control commander. One such commander is the remote control unit from Harman Kardon's TU9600 tuner, available through Harman Kardon's Parts Department.
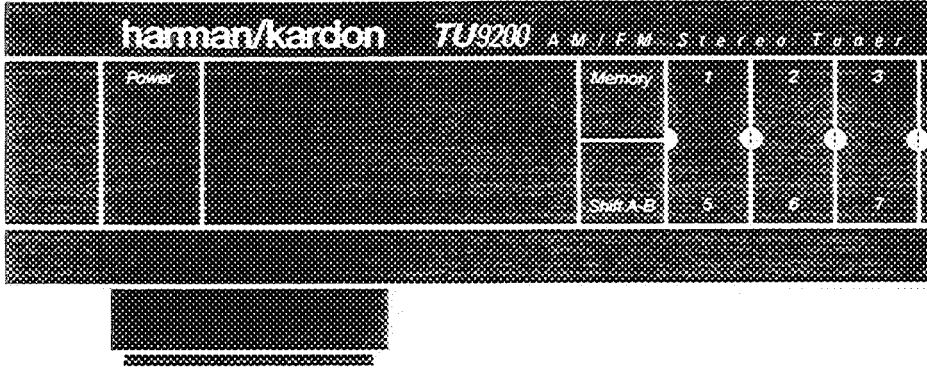
Harman Kardon also offers Masterworks™, a universal remote control that can be used not only with your tuner, but with other components as well, including TVs, VCRs, Cassette Decks and CD Players. Master-works may be available from your Harman Kardon dealer.

TROUBLESHOOTING

This unit is designed for trouble-free operation; most problems users encounter are due to operating errors. So if you have a problem, first check this list for a possible solution. If the problem persists, consult your authorized Harman Kardon service center.

Problem	Probable Cause	Remedy
Station Display does not illuminate when the Power switch is pressed.	■ The power cord is not plugged into a live outlet.	■ Make sure cord is plugged in securely. ■ Make sure the outlet is "live".
No sound is heard.	■ The tuned frequency does not carry a broadcast. ■ The function or speaker switch of the amplifier is not set in the correct position. ■ The connection wires are disconnected or broken.	■ Tune to a broadcasted station. ■ Check for correct amplifier settings. ■ Check the connections and wires.

FM sound has a large amount of interference.
    OR
The "STEREO" display is not fully illuminated.
    OR
Sound distorts and/or volume level becomes low.
	■ The antenna is improperly connected.
	■ The antenna is poorly located or directed.
	■ The transmitting station is too far away.
	
	■ Broadcast signals reflected by nearby buildings or mountains are interfering with signals received directly from the transmitting station.
		■ Check antenna wires and connections.
		■ Change the location, height, and/or direction of the antenna.
		■ If an indoor antenna is being used, replace it with an outdoor antenna.
		■ Use a more directional antenna.

Intermittent or continuous buzzing or hissing.	■ Unit is being affected by nearby electric appliances (fluorescent lights, TV, motors, etc.).	■ Place the unit farther away from these appliances. ■ Install noise filters on the appliances.
Stations cannot be preset.	■ The "PRESET" display is not flashing when the desired Preset button is pressed.	■ Repeat steps 1-5 on page 7 and re-enter desired station into the preset memory. Be sure that the "PRESET" display is flashing when a Preset button is pressed.
Station selection cannot be made by using the Preset buttons.	■ Stations have not been entered into the memory. ■ Memory is not in the proper A or B range.	■ Enter stations into the memory as per steps 1-5 on page 7. ■ Use Shift A-B button to access previous memory entries.

SPECIFICATIONS

FM Section

Usable FM Sensitivity, Mono:	11.2dBf
50dB Quieting Sensitivity, Stereo:	37.2dBf
FM S/N Ratio (65dBf) — Mono:	78dB
Stereo:	72dB
Capture Ratio:	1.5dB
Alternate Channel Selectivity:	70dB
Adjacent Channel Selectivity:	5dB
IF Rejection:	80dB
AM Rejection, 45dBf:	45dB
Image Rejection:	45dB
Spurious Response Rejection:	75dB
THD (65dBf, 1kHz) — Mono:	0.15%
Stereo:	0.2%
Stereo Separation (65dBf) 1kHz:	45dB
FM Audio Output Level/Load (75kHz DEV.):	700mV/10k ohm

AM Section

AM Sensitivity (External Antenna):	20µV
AM Alternate Channel Selectivity:	50dB
AM Image Rejection:	35dB
AM IF Rejection:	60dB
AM Signal-to-Noise:	50dB
AM Audio Output Level/Load: (30% Modulation)	180mV/10k ohm

Dimensions: (Width x Height x Depth)	17-3/8" x 2-7/8" x 13-1/2" (442 x 73 x 342 mm)
Weight:	7.5 lbs. (3.4kg)

All features and specifications subject to change without notice.

harman/kardon