NAD

7125

STEREO RECEIVER

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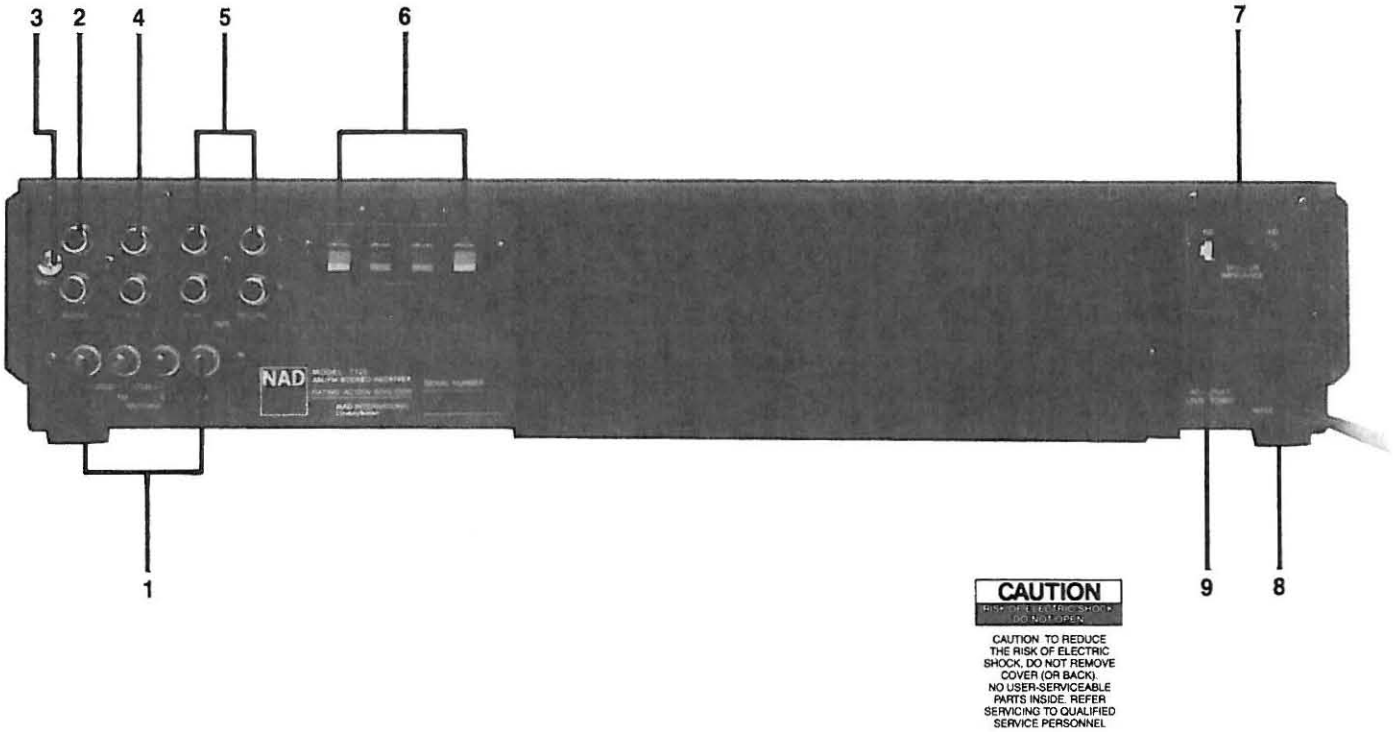

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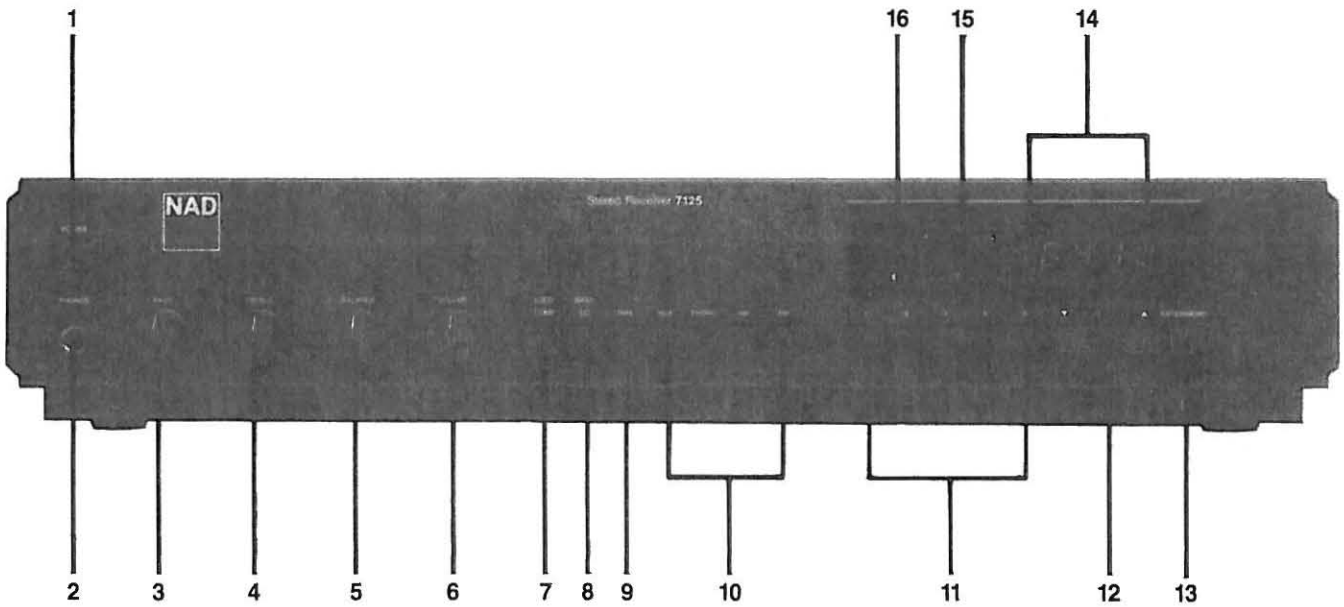

REAR PANEL CONNECTIONS

1. ANTENNA TERMINALS. This receiver is equipped with four antenna terminals; each is a threaded metal shaft with a plastic thumbscrew and a toothed washer which will make secure contact either with bare wire or with the U-shaped metal spade lug that is often provided on antenna wires. If you are using an antenna whose lead-in wires have some other type of connector, cut it off and strip off enough insulation to expose approximately 1 cm (½ inch) of bare wire on each conductor. To connect the antenna wire, unscrew the appropriate thumbscrew, place the spade lug or bare wire under the toothed washer, and turn the thumbscrew clockwise until it is tight. The toothed washer will grip the lug or wire, making a connection that is secure both electrically and mechanically.

AM. Some form of external antenna will be needed for satisfactory reception, since the receiver does not have a built-in AM antenna. For most local broadcasting stations a simple wire up to one meter (three feet) in length will provide ample signal strength, and such a single-wire antenna is included with the receiver. Connect one end of the wire to the AM terminal. The remainder of the antenna may be allowed to hang down behind the receiver or may be tacked in place horizontally along the rear of a wooden—not metal—shelf. (A metal shelf may interfere with reception; in that case the wire should be stretched out along the wall away from the shelving and tacked in place.) You may wish to experiment with the orientation of the AM antenna, in order to find the position that provides the best reception of the stations you listen to most often.

The short-wire antenna usually will provide satisfactory reception of local AM broadcast stations. But if you wish to improve reception of distant AM stations, attach a long-wire outdoor antenna to the AM terminal. As its name implies, a "long-wire" antenna is a simple, straight wire whose length may be anything from a few feet up to about 100 feet (30 meters), mounted parallel to the earth and as high as is convenient. In some cases the effectiveness of a long-wire antenna will be improved by connecting a second wire from the Ground (G) terminal to a true earth-ground, i.e., a copper-plated rod driven several feet into the earth. A substitute electrical ground may also prove effective: a cold-water pipe, a steam radiator, or the third hole of a modern electrical wall socket.

FM. Some form of external antenna must be connected to the receiver for effective reception of stereo FM broadcasts. A ribbon-wire "folded dipole" antenna is supplied with the receiver to get you started. When you stretch out the ribbon-wire antenna you will note that it is in the form of a "T." The "crossbar" portion of the T should be stretched out horizontally and tacked in place—on a wall, on the back of a cabinet, or on the floor. The "vertical" section of the T goes to the receiver's antenna terminals. Connect its two wires to the two 300Ω input terminals.

In view of the excellent sensitivity of this receiver, you may find that the ribbon-wire dipole antenna is all you need for reception of strong local stations. But it is not very efficient at rejecting "multipath" and other forms of FM interference, and it cannot easily be rotated to optimize its pickup pattern for best reception of stations in different directions. Therefore, in most cases you should use a better antenna. The recommended options, in order of increasing cost, are as follows:

(1) A basic "rabbit-ears" indoor TV antenna without auxiliary coils or tuning switches. Electrically, such an antenna is just another dipole (similar to the ribbon-wire antenna) with its tuned elements made of solid metal, but with the advantage that it can be rotated. Stretch out each of its two arms to a length of 30 inches (75 cm), and orient them horizontally or at a shallow angle upward (less than 45 degrees). The ribbon-wire emerging from the antenna's base should be connected to the receiver's two 300Ω terminals in place of the ribbon-wire antenna supplied with the receiver. Now, for each station in turn, after you tune the station you can rotate the antenna for best reception.

(2) A more elaborate rabbit-ears indoor TV antenna with a tuning switch. This type of antenna does NOT have greater sensitivity than the simpler rabbit-ears unit, so if your problem is that the signals you want to receive are weak and noisy, then an outdoor antenna is the only effective solution. But in cities and in large buildings where signals are strong but are contaminated by reflected "multipath" signals that interfere with good reception, the tuning switch on an elaborate indoor antenna may improve reception by reducing the interference.

(3) An electrically tuned indoor antenna, such as the Technics Wing or B.I.C. Beam Box. Again, such antennas usually do not provide any advantage over the simplest type of "rabbit-ears" unit for receiving weak signals. But where a strong signal is contaminated by interference, the antenna's aiming and tuning controls can reject the interference and yield cleaner reception.

(4) An outdoor antenna. Even the finest indoor antenna, no matter how elaborate, cannot fully exploit the capabilities of a good FM tuner. For the lowest noise, minimum distortion, and largest choice of well-received broadcasts, an outdoor antenna is the best complement to a fine tuner.

A roof-mounted antenna has three fundamental advantages. First, its large size yields better sensitivity (pulling in a stronger signal from the desired station) and a narrower directional pattern for more effective rejection of multipath reflections arriving from other directions. Second, its location on a roof or tall mast places it above many sources of interference—other buildings, passing cars and buses, etc. Third, the strength of received FM signals is directly proportional to the height of the antenna above the ground.

If you already have an outdoor television antenna, using a splitter to extract FM signals from it may produce excellent results. However, many TV antennas are deliberately designed to be relatively weak at FM frequencies in order to minimize potential interference with TV signals at nearby frequencies (Channel 6 in the U.S.). You may be able to use a splitter to extract FM signals from an apartment building's master TV antenna system, but usually this yields poor results because many master antenna systems have "traps" to stop FM signals.

The best choice is a directional FM-only antenna, mounted as high above ground as is practical, and separated by at least two meters (7 feet) from other antennas, vertically and horizontally. A shielded lead-in cable will be mandatory in most locations, both to minimize interference and to preserve strong signals during years of weathering. The cable may be either 75-ohm coaxial or a shielded 300-ohm type. If desired stations are located in different directions (more than 90 degrees apart), a rotor will also be needed in order to aim the antenna.

If you are using a 75-ohm coaxial cable (either from your outdoor antenna or from a master antenna system), connect it as follows. First remove any connector that may have been fitted. Strip off about an inch (2 cm) of the outer insulation to expose the shield wiring, fold back the shield and twist its wire strands together, then strip off a half-inch (1 cm) of insulation from the center conductor. Disconnect any antenna connected to the 300Ω terminals. Connect the coaxial cable's center conductor to the 75Ω terminal and connect the coaxial cable's shield wire to the adjacent ground (G) terminal.

After you have completed all of the antenna connections, examine them to be sure that adjacent wires or connectors are not touching each other, short-circuiting the antenna signal.

2. PHONO INPUT. This input is designed for use with phono cartridges of the moving magnet, induced magnet, moving flux, and moving iron (variable reluctance) types, and with "high-output" moving-coil pickups (i.e., those with a rated output of 1.0 mV or greater). The input impedance at the Phono jacks is 47K ohms in parallel with 100 pF.

Plug the signal cables from your turntable into these jacks. If the cables or plugs are color-coded, refer to your turntable's instruction manual to learn which cable or plug is for the Left channel and which is for the Right. Be careful to insert each plug fully into the socket so that the plug's metal skirt fits tightly over the exterior of the socket. If necessary, crimp the leaves of the plug's metal skirt slightly inward so as to obtain a tight fit with the socket.

Moving-coil pickups with low output voltage should be used with an external transformer or pre-preamp. Plug the turntable's cables into the input jacks of the step-up device, then connect its outputs to the PHONO jacks.

3. PHONO GROUND. If your turntable is equipped with a grounding wire (usually a green wire terminating in a U-shaped spade lug), connect it to this screw terminal. Use a screwdriver to loosen the screw, place the spade lug under the head of the screw, and tighten the screw clockwise to secure the lug. If the grounding wire has no terminal lug, strip off a half-inch (1 to 2 cm) of insulation to expose the bare wire, twist the wire strands tightly together, and fasten the bare wire under the head of the Ground screw.

CAUTION: Do not use excessive force when tightening the Ground screw, or you may strip the threads.

4. AUX INPUT. These auxiliary jacks are for any "line level" signal source, such as a television sound tuner, the audio line output from a videocassette or videodisc player, or the decoded signal from a digital audio disc player. As with the other input/output jacks on this receiver, the upper jack in each pair is for the Left channel and the lower jack is for the Right channel.

5. TAPE RECORD/PLAY. The tape connections may be used with recorders of all types: cassette, microcassette, open-reel, digital, etc. To play recorded tapes, connect a stereo patch cord from the recorder's LINE OUT jacks to the receiver's PLAY input jacks. To make recordings, connect a stereo patch cord from the receiver's RECORD jacks to the recorder's LINE IN jacks (not to its microphone inputs).

If you wish to use a signal-processing accessory with your receiver—such as a graphic equalizer, a dynamic expander, a DBX or CX disc decoder, a noise filter, or an ambience-reproduction system—you must connect it to the receiver's TAPE RECORD/PLAY jacks. Disconnect the tape recorder, connect a cable from the receiver's RECORD output jacks to the processor's "From Amplifier" main inputs, and connect another cable from the processor's "To Amplifier" or "Monitor Output" jacks to the receiver's PLAY inputs. Then connect your tape recorder to the signal processor's own TAPE RECORD/PLAY jacks.

6. SPEAKERS. If the wiring to each loudspeaker will not be longer than about 6 meters (20 feet), then connections should be made using 18-gauge wire such as common lamp cord ("zip" cord), available from hardware and electrical-supply stores in either white, black, or brown insulation. If the wiring to the speakers will be longer than about 6 meters, heavier 16-gauge or 14-gauge wire is preferred. Heavy-duty wiring is especially desirable if you are using speakers of low impedance or two pairs of speakers wired in parallel.

To make connections, separate the two conductors of the cord, strip off about a half-inch (1 cm) of insulation from each, and in each conductor twist together the exposed wire strands. Fully depress the colored tab below each SPEAKERS terminal in order to open up the hole in the terminal, then insert the bared wire into the hole and release the tab; the terminal will grasp the wire and hold it in place. Repeat for each conductor, connecting the wires from the left-channel speaker to the L+ and L− terminals and the wires from the right-channel speaker to the R+ and R− terminals. Check to be sure that no loose strands of wire are touching any adjacent terminal or wire.

PHASING. Stereo speakers should operate in phase with each other in order to yield a good stereo image and to reinforce rather than cancel each other's output at low frequencies. If your speakers are easily moved, phasing can easily be checked. Make the connections to the speakers, place the speakers face-to-face only a few inches apart, play some music, and listen. Then swap the connection of the two wires at the back of ONE of the speakers, and listen again. The connection which produces the fullest, boomiest bass output is the correct one. Connect the wires securely to the speaker terminals, being careful to avoid leaving loose strands of wire which might touch the wrong terminal and create a partial short-circuit, and then move the speakers to their intended locations.

If the speakers cannot easily be set face-to-face, then phasing must rely on the "polarity" of the connecting wires. Note that the SPEAKERS terminals on the receiver are color-coded: in each channel the terminal with the red tab has positive "+" polarity and the black terminal is negative "−". The terminals at the rear of the speakers are also marked for polarity, either via red and black connectors or by labels: "+", 1, or 8 ohms for positive, "−", 0, or G for negative. As a general rule the positive (red) terminal on the receiver is to be connected to the positive terminal of the speaker, in each channel.

To facilitate this, the two conductors comprising the speaker wire in each channel are different, either in the color of the wire itself (copper vs. silver) or in the presence of a small ridge or rib pattern on the insulation of one conductor. Use this pattern to establish consistent wiring to both speakers of a stereo pair. Thus if you connect the copper-colored wire (or ribbed insulation) to the red receiver terminal in the Left channel, do the same in the Right channel. At the other end of the wire, if you connect the copper-colored wire (or the ribbed insulation) to the red or positive terminal on the left-channel speaker, do the same at the right-channel speaker.

7. SPEAKER IMPEDANCE. The impedance of a loudspeaker varies with frequency, and in many loudspeakers the impedance is lowest at the frequencies where the highest power demands occur in music. In the majority of "8 ohm" loudspeakers this minimum impedance is from 4 to 6 ohms, and in "4 ohm" speakers the minimum is typically 3 ohms. And if you were to connect two pairs of speakers to the receiver, wiring them in parallel, their combined impedance would be approximately half the impedance of either.

For these reasons, all NAD receivers are designed to produce maximum power output into impedances of 2 to 6 ohms. But this receiver is equipped with a Speaker Impedance selector which you can re-set to increase the available power output into 8 ohms and higher impedances. If you are not sure of the true impedance of your speakers, or if you are connecting two pairs of speakers, leave the Impedance switch in its 4 OHMS setting.

If you are using a single pair of loudspeakers whose minimum impedance is at least 6 ohms and whose average impedance is above 8 ohms, you should re-set this switch to

re-optimise the amplifier for maximum power delivery at this higher impedance.

NOTE: In the U.S. and Canada the switch may already have been pre-set for 8-ohm operation, as indicated by an orange marker directly below the "8Ω" label. If you are using 4-ohm speakers, or two pairs of speakers wired in parallel, you should re-set the switch to 4 ohms by sliding the screw heads to the right in the following procedure.

Before re-setting the Impedance Selector, turn down the Volume or switch off the Power. Now, in order to prevent the Impedance switch from being re-set unintentionally, it is held tightly in place by screws located to the left and right of the switch handle. Turn the screws slightly counter-clockwise to loosen them. (DO NOT REMOVE the screws!) Note that the screws are installed in slots so that they can be moved to the left or right, and an orange marker visible through one of the slots identifies the setting of the switch.

To set the switch at 8 ohms, slide the screw heads to the left end of their respective slots so that the orange marker becomes visible under the "8Ω" label. (To re-set it for 4 ohms, slide the screw heads to the right end of the slots.) Finally, re-tighten the screws.

If the impedance switch is set to 8 OHMS when you are using low-impedance speakers, or with two pairs of speakers connected, the receiver may overheat when operated at high volume levels. Prolonged abuse of this kind could cause internal fuses to blow in order to protect the receiver, in which case you would have to return the receiver to your dealer for service.

8. AC POWER CORD. After you have completed making connections to the speakers and to other system components, plug the AC power cord into a "live" wall socket.

9. UNSWITCHED AC OUTLET. (Not in U.K. model.) The AC power line cord of another stereo component, such as a turntable or tape deck, may be plugged into this accessory outlet. This outlet remains "live" as long as the receiver's power cord is plugged into a wall socket.

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of 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 of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

FRONT PANEL CONTROLS

1. POWER. Depress this button to switch on the receiver. The green LED above the tuning presets will illuminate when the power is on. To switch the power off, depress the POWER button again and release it.

If you prefer, you may leave the receiver's POWER switch permanently engaged and use an external switch (such as a clock timer) to turn the power on and off.

2. PHONES. Plug stereo headphones in here. The circuit will provide proper drive signals for all conventional stereo headphones regardless of their impedance, with just one exception: electrostatic headphones usually are supplied with an adapter unit which must be connected directly to the speaker terminals on the rear panel.

When a headphone plug is inserted into the PHONES socket the loudspeakers are automatically shut off. If you want to listen to speakers, you must remove any plug from the socket.

Before plugging conventional headphones into the PHONES jack, turn down the VOLUME control for safety. And when you are not listening to the headphones it is wise to unplug them from the socket. Otherwise, when not listening to the phones you might inadvertently turn up the volume to a level which would feed excessively strong signals to the headphones and damage them.

You may freely use headphone extension cables. If you want to use a headphone Y-connector to drive two headsets simultaneously, they should be identical models. Connecting together two headphones which differ widely in impedance usually will produce a substantial loss of volume in the headset having the higher impedance (or in both).

3. BASS. The Bass control adjusts the relative level of the low frequencies in the sound. The electrical response of the receiver is flattest when the control is set in the detent at the 12 o'clock position. Rotation of the knob to the right (clockwise) increases the level of low-frequency sounds, and rotation counter-clockwise decreases their level. Adjust it to achieve the tonal balance that sounds most natural to you.

You will note that at moderate rotations away from center the effect of the Bass control is subtle because its action is confined to the lowest audible frequencies where significant energy is seldom found in recordings. Only at large rotations away from center is there a substantial boost or cut at the mid-bass frequencies which are common in music.

4. TREBLE. The Treble control adjusts the relative level of the high frequencies in the sound. The response of the receiver is flattest when the control is set in the detent at the 12 o'clock position. Rotation of the knob to the right (clockwise) increases the level of high-frequency sounds, and rotation counter-clockwise decreases their level. Adjust it to achieve the tonal balance which sounds most natural to you.

You will note that boosting the Treble increases the brilliance and clarity of details in the sound, but also makes any noise more prominent. Turning down the Treble makes the sound mellower while suppressing hiss and record surface noise, but too much Treble roll-off will make the sound dull.

5. BALANCE. The BALANCE control adjusts the relative levels of the left and right channels. A detent at the 12 o'clock position marks the point of equal balance. Rotation of the knob to the right (clockwise) decreases the level of the left channel so that only the right channel is heard, thus shifting the sonic image to the right. Rotation of the knob to the left shifts the sonic image toward the left speaker.

Ideally the detented center position of the BALANCE control will be the normal setting. But several common circumstances may cause unequal balance, requiring a compensatory off-center BALANCE setting to restore the most uniform spread of stereo sound between the speakers. These include unequal output from the two channels of the phono cartridge, different acoustical environments around the two loudspeakers, or simply a listening position that is closer to one speaker than to the other.

Adjust the BALANCE control to produce a natural spread of sound across the space between the speakers, with any monophonic sound (such as a radio announcer's voice) appearing as a phantom image centered midway between them.

6. VOLUME. This control adjusts the overall loudness level of the sound. It has no effect on the level of the signals fed to the RECORD jacks for tape recording. The VOLUME control is designed for accurate tracking of its two channels, so that the stereo balance will not shift noticeably as the loudness of the sound is varied.

7. LOUDNESS COMPENSATION. Pressing this button engages a "loudness compensation" circuit which, at low-to-medium settings of the VOLUME control, boosts the low-bass response of the receiver in order to compensate for the human ear's diminished sensitivity to low-frequency sounds at low loudness levels. The circuit also provides a slight treble boost to overcome the "masking" of subtle high-frequency details by background noise. The loudness-compensation circuit in this receiver is more subtle in its action, and thus more realistic in psycho-acoustic terms, than similar circuits in other receivers.

8. BASS EQUALIZATION. This circuit boosts the lowest bass frequencies, those below 60 Hz. In virtually all loudspeakers the useful output rolls off at frequencies below the woofer/cabinet resonance (which typically occurs between 40 and 70 Hz). The BASS EQ circuit compensates for this roll-off, extending the useful response of the speakers significantly lower in frequency.

Of course very low frequencies are not found in all music, nor in all recordings, so the effect of the bass equalization often won't be obvious. Sometimes you may find that switching it in and out does not produce any noticeable change in the sound whatsoever, simply because the recording contains no energy at very low frequencies. But if your loudspeakers are capable of reproducing low bass, and if you play recordings in which low bass does have an important role, the BASS EQ will make an audible (and occasionally dramatic) difference.

If your loudspeakers already have extended and powerful deep-bass response, the BASS EQ will still be useful to correct for the bass roll-offs engineered into some recordings. It also works well in combination with the LOUDNESS COMPENSATION circuit to restore subjectively flat frequency response when you listen to music at low volume levels.

CAUTION: Be prepared to switch off the equalization when playing recordings (especially digitally mastered discs) that contain unusually potent recorded bass. The BASS EQ boosts deep bass levels by 5 dB, i.e. by a factor of three in power. If this boost is combined with high-volume playback levels, a bass-heavy input signal may overdrive the amplifier into clipping and—more important—overdrive a small woofer beyond its safe excursion limits, causing its voice-coil to clatter against the magnet backplate. As long as the speaker sounds good it probably is OK; but distorted or unmusical sounds, such as clattering noises, are a sign of distress in a woofer.

Be alert, also, for signs of acoustic feedback (in which

the low-frequency vibrations from the speakers are picked up by the record-playing stylus and are re-amplified). If you encounter a sustained low-frequency roar, or frequent groove-jumping, immediately turn down the Volume and switch off the BASS EQ until a more nearly vibration-free mounting for the turntable is found.

9. TAPE. When this button is pressed it overrides the other Input Selector buttons and lets you hear the playback signal from your tape recorder (or any other device connected to the PLAY input jacks on the rear panel of the receiver). If you have a signal-processing accessory (such as a graphic equalizer or dynamic expander) connected to the TAPE RECORD/PLAY jacks, pressing TAPE allows you to hear the processed signal.

CAUTION: If you have nothing connected to the RECORD/PLAY jacks, or have a tape deck connected but not running, then when you press TAPE you will hear nothing but silence—regardless of what other selector buttons you may press! To disengage the tape monitor circuit and restore the normal signal path, press the TAPE button again and release it.

The standard purpose of the TAPE monitor is to allow you to listen to recorded tapes, and also to check on tape recordings as they are being made. If you have a three-head tape deck that allows off-the-tape monitoring during recording, engaging the TAPE monitor switches on both the receiver and the tape deck will let you hear the playback signal from the tape immediately after it is recorded, so that you can check on its quality.

To make tape recordings on a recorder attached to the receiver's RECORD/PLAY jacks, simply use the INPUT SELECTOR buttons to select the program source that you want to record from (PHONO, FM, etc.). The recording will not be affected by any of the controls located to the left of the INPUT SELECTOR; thus you may vary the volume, balance, tone controls, tape monitor switch, etc., without altering the recording that is being made.

COPYING TAPES: If you want to copy a recording from one tape deck to another, connect the playback cable from the "source" deck (the machine containing the tape to be copied) to the receiver's AUXiliary inputs, and connect the "copying" or "dubbing" recorder to the receiver's RECORD/PLAY jacks. Press the AUX button in the Input Selector group to hear the source tape and feed its signal to the copying recorder. If you then press the TAPE monitor, you will hear the chosen signal after it has passed through the recorder's electronics.

10. INPUT SELECTOR (AUX, PHONO, AM, FM). These interlocked switches select the input signal for the receiver. This is the signal that you will hear, assuming that the TAPE monitor is disengaged. The selected input signal will also be fed out through the RECORD jacks for tape recording or signal processing, regardless of the setting of the TAPE monitor switch.

11. TUNING PRE-SETS. You can store the frequencies of ten favorite stations (5 FM and 5 AM) in these pre-sets and then tune them instantly just by pressing the appropriate button.

The pre-sets preserve their frequency assignments when the receiver is switched off or unplugged from the AC wall socket, for a period of up to two weeks. Thus you can re-arrange your stereo system, or move the receiver from room to room, without losing the pre-set frequencies. But if you leave the receiver switched off for a month or more, you may have to re-program the tuning pre-sets.

12. UP/DOWN TUNING. The tuning control is a "rocker" switch that allows you to tune up and down the AM or FM radio spectrum. Depress the right-hand section of the switch in order to tune to higher frequencies, and the left-hand section to tune to lower frequencies.

When the TUNING button is pressed momentarily, the tuned frequency is shifted up or down by one step. (In North America the size of this tuning step is 10 kHz on the AM band. In Europe and elsewhere the tuning step is 9 kHz on AM. In both cases the tuning step for the FM band is 0.05 MHz.) Each time the TUNING button is tapped, the tuned frequency will shift up or down by this increment, as shown on the digital frequency display.

If the TUNING button is held down with continuous pressure rather than just tapped, the tuning pauses briefly and then scans rapidly up or down in frequency.

Thus, to manually tune a station, the procedure is to press continuously on either side of the TUNING button until the receiver's frequency is close to the desired broadcast frequency, and then fine-tune by tapping the TUNING button until the digital frequency display exactly matches the station's broadcast frequency as listed in a local newspaper or broadcasting guide.

On FM the decimal point in the digital frequency display serves as a center channel indicator. It blinks on and off as you approach the correct frequency, remaining continuously illuminated when the receiver is tuned to the center of the broadcast channel.

13. MEMORY ENTER/MONO. This button is used to enter the frequencies of your favorite stations in the receiver's ten memory pre-sets (five pre-sets on the FM band and five pre-sets on AM). The procedure is as follows.

(1) Decide which station you want to assign to each pre-set. On each band you may arrange the stations in any order that you find convenient (or easy to remember): alphabetical (1 = WABC, 2 = WCBS, 3 = WNYC . . .), numerical (1 = BBC1, 2 = BBC2, . . .), or in order of increasing frequency (1 = 89.7, 2 = 90.9, 3 = 95.3, etc). If you are not certain of the exact frequencies of the stations, check the station/frequency directory in a local newspaper or broadcasting guide.

(2) Select the AM or FM band, as appropriate. Using the TUNING rocker, manually tune to the first station on your list. Press ENTER, then press Pre-set #1 to store the first station. After you press ENTER you will have almost ten seconds during which you can store the tuned station in one of the pre-sets, before the ENTER mode automatically de-activates.

(3) Manually tune to the second station on your list. Press ENTER button and then press Pre-set #2 to store the second station.

(4) Manually tune to the third station on your list, press ENTER, and press Pre-set #3 to store the station. Continue in this manner with any other stations that you want to store in the remaining pre-sets. Then switch to the other tuning band (FM or AM) and repeat the process for the second set of five pre-sets.

Incidentally, if you make a mistake or change your mind, it is not necessary to re-program all five pre-sets in sequence. You can re-program any pre-set at any time: simply tune to the desired frequency, press ENTER, and press the pre-set button that you want to re-program.

After you finish programming the pre-sets, you may wish to post your list of stations and associated pre-set numbers near the receiver for reference.

CAUTION: When using the receiver, be careful not to press the ENTER button by accident. Doing so will activate the ENTER mode, and if you then press any of the pre-set buttons you will unintentionally re-program that pre-set. You would then have to manually re-tune to the station you

wanted, and re-ENTER it into the pre-set. If you accidentally press ENTER, you can force the tuner to back out of the ENTER mode by tapping the manual TUNING rocker or by switching tuning bands (i.e. from FM to AM and back).

MONO. The ENTER button has two additional special functions. One of these is a mono/stereo switch for the FM tuner. If a stereo broadcast signal is too weak for reasonably noise-free reception, the receiver is designed to switch automatically into mono. But if you disagree with the factory setting of this stereo switching threshold, or if varying reception conditions cause the tuner to switch in and out of stereo, or if the signal is strong but severely distorted because of multipath interference, you can lock the tuner in mono by pressing the ENTER button, holding it in for at least two seconds. Under adverse conditions mono reception will normally be quieter and more distortion-free than stereo.

(Of course using the ENTER/MONO button to switch into mono also engages the ENTER mode. The ENTER mode will automatically disengage within ten seconds. Do not press any of the station pre-sets during that interval; if you do, the currently-tuned frequency will be programmed into that pre-set.)

The ENTER/MONO button switches only the FM tuner into mono. The Phono, Aux, and Tape inputs are unaffected.

If you re-tune to a different frequency, or switch to a different input and then back to FM, or turn the receiver off and later turn it on again, the tuner automatically returns to its normal operating mode in which stereo or mono reception is selected automatically. You can also return it to automatic mode by again depressing the ENTER/MONO button for at least two seconds.

FAST SCAN. The ENTER/MONO button also serves as an "accelerator" for the Up/Down Tuning rocker. If you press both the ENTER/MONO button and the TUNING rocker, the tuner will scan up or down in frequency approximately five times faster than normal, moving through the entire FM tuning band in a few seconds. The usual caution applies, however: if you press any of the station pre-sets within ten seconds after pressing ENTER, you will re-program that pre-set—unless you first disengage the ENTER mode by using the TUNING rocker in its normal slow-scan mode.

14. TUNING DISPLAY. The display shows the broadcast frequency to which the receiver is tuned. (When you select the AUX or PHONO input the display is turned off.) On the FM band the fifth digit will be either 0 or 5 since tuning occurs in increments of 0.05 MHz. The decimal point in the display blinks to indicate off-center tuning. (See paragraph 12. UP/DOWN TUNING)

15. FM STEREO BEACON. This red LED illuminates when a stereo FM broadcast is being received and decoded by the receiver's multiplex decoder circuit. If a station is broadcasting in mono, or if a stereo broadcast signal is too weak for reasonably noise-free reception in stereo, then the receiver will automatically switch into mono and this light will not illuminate. Also, if you have mistuned the receiver away from the center of a station's broadcast channel, the stereo decoding circuits may not lock onto the signal and it may be received in mono.

16. POWER INDICATOR. This green LED illuminates whenever the receiver is turned on.

A Note on Overload Protection. Because the NAD 7125 sounds so clean and musical when driven beyond its nominal power rating and when used to drive low-impedance loudspeakers, you may be tempted to stress it beyond its design capacity. For example this receiver can safely and cleanly drive a 2-ohm load impedance, reproducing wide-range musical signals with peak levels of 50 watts or more. Thus it is permissible to play music at volume levels which cause the transient peaks and climaxes to exceed the receiver's rated power by a considerable margin.

But if you overdrive the receiver continuously rather than only on brief musical peaks, the output transistors may overheat. This is particularly likely if you set the SPEAKER IMPEDANCE switch to 8 OHMS and then try to drive very low impedances at high volume levels. Severe abuse of this type could cause internal fuses to blow in order to protect the receiver. These fuses are not intended to be replaced by the user; if the receiver shuts down you should return it for service.

If this occurs, you should examine whether a pattern of unintended abuse may have contributed to the failure. For example you may have a loose strand of speaker wire causing a partial short-circuit either at the speakers or at the receiver's speaker terminals. The impedance of your speakers may be lower than you think; if you are not sure, set the SPEAKER IMPEDANCE switch to 4 OHMS. You may be combining maximum bass boost with high volume settings. Or you may simply be playing the music at continuously high power levels that demand a larger amplifier.

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