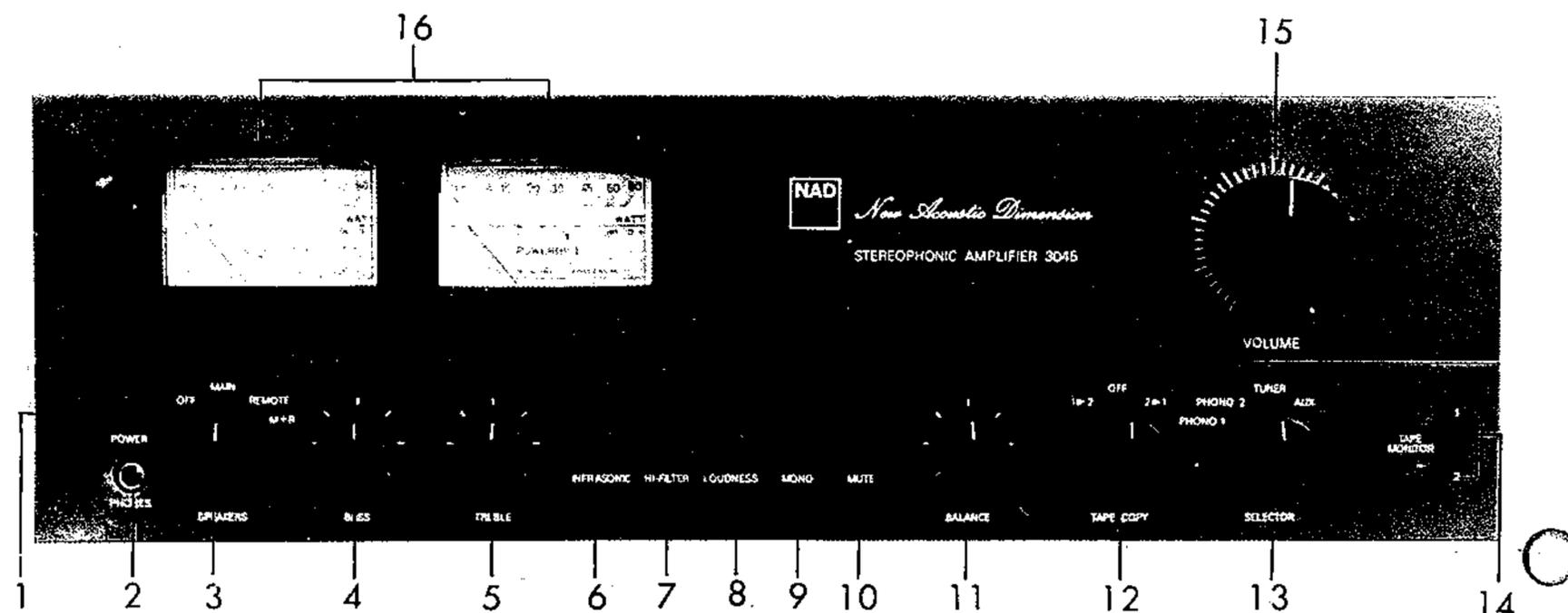


N A D 3045 INSTRUCTIONS FOR USE



FRONT PANEL

1. **Power**
To switch amplifier on or off.
2. **Phones**
A connecting jack for stereo headphones.
3. **Speakers**
Loudspeaker selector switch. "OFF" turns off all speakers, output signal available at headphone jack. "MAIN" turns on speakers connected on Main Speaker Terminal on rear of unit. "REMOTE" turns on speakers connected to Remote Speaker Terminal on rear of unit. "M+R" turns on speakers connected both to Main and Remote.
Note: If either of the two pairs of speaker systems has an impedance below 4Ω , it is best not to use the "M+R" position.
4. **Bass**
Rotating clockwise increases level of very deep, low frequency sounds. Rotating counterclockwise reduces these sounds. In the central, click position, the control has no effect.
5. **Treble**
Rotating clockwise increase level of very high tones. Rotating counterclockwise reduces these tones. In the central, click position, the control has no effect.
6. **Infrasonic**
Eliminates all the unwanted sounds below the audible range which can adversely affect the performance of your amplifier. Normally this switch should be depressed at all times.
7. **Hi-filter**
Suppresses tape hiss, record surface noise, and interference whistle on AM. Most useful for listening to old records. Not recommended for normal, quality programs.
8. **Loudness**
Boosts the very low and very high frequency sounds. When music is played at a very low level, the ear is less able to hear the sounds at extremes of the audio range. The loudness control improves the musical balance under these conditions. Not recommended when listening at normal or loud levels.
9. **Mono**
Converts all input signals to monophonic. Useful for listening to very noisy stereo broadcasts. Also ideal when playing old monophonic records with a stereo pickup (cartridge).
10. **Mute**
Attenuates preamp output by 20dB. Recommended for low level listening as it gives improved signal to noise ratio and better resolution of volume control.

11. Balance

Permits adjustment of level between right and left channels. Rotating clockwise will increase relative level of right channel, counterclockwise the left channel. In the central, click position, the control has no effect.

12. Tape Copy

If two tape recorders or Cassette decks are connected to the tape inputs and outputs of the 3045, it is possible to copy from one machine to the other. When this switch is rotated to the left, the machine connected to Tape 2 will record the program being played on Tape 1. With the switch rotated to the right, the recording will be made on the Tape 1 machine. The copying can be done at the same time the listener is listening to tuner or phono. If the listener wishes to listen to the tape, he should depress the appropriate "TAPE MONITOR" button.

13. Selector

Selects the appropriate signal source. "AUX" can be used for any high output device such as an extra tape recorder or sound from a TV set. "TUNER" can be used for listening to AM or FM programs if connect your tuner to the amplifier. A turntable or record changer connected to either "PHONO 1" or "PHONO 2" can be selected by using the appropriate input position. Both inputs are identical. You can connect two such devices if you wish.

14. Tape Monitor

If you have connected a tape recorder or a cassette deck to the Tape play inputs on the back of the unit, then depressing Tape Monitor will make it possible to listen to the tapes. If your tape recorder has a monitor capability (usually requires a separate playback head), then you can monitor your tape recording as it is being recorded by depressing the Tape Monitor.

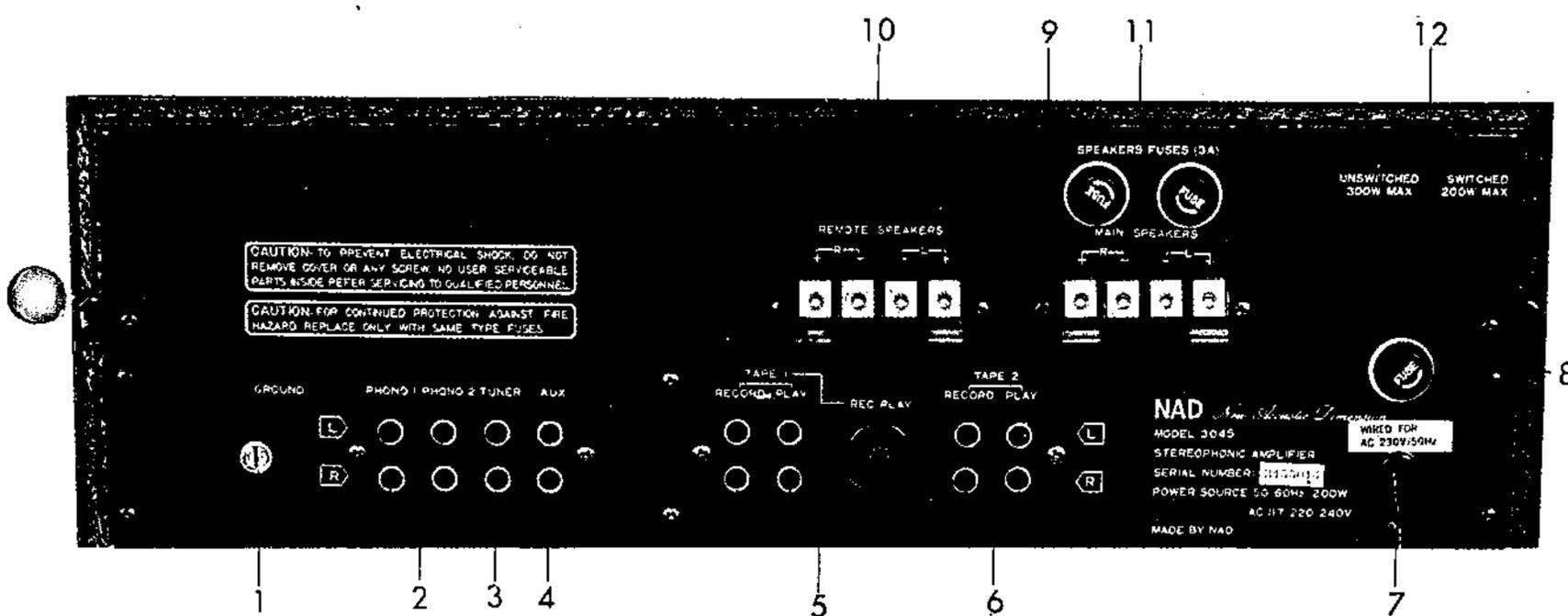
Note: When the Tape Monitor is engaged it bypasses the Selector switch. Regardless what the selector is set for, you only hear the tape. If a Tape Monitor button is accidentally left on, then none of the inputs on the selector will operate. Always disengage the Tape Monitor Switch before trying to operate the amplifier normally.

15. Volume

Performs simultaneous adjustment of volumes in both channels. Rotate the knob clockwise for proper listening level.

16. Power Meters

Show the power output of both left and right channel respectively. Calibrated in watts and dB (decibel) for 8 Ω load.

**REAR PANEL.****1. Ground**

The earth connection for any device that needs to be grounded such as a turntable.

2. PHONO 1/PHONO 2

For the inputs from a turntable. The receiver is designed for a magnetic pickup (cartridge). If the turntable has a ceramic or crystal cartridge, use Aux and turn Bass control clockwise to equalize low frequency response. The two PHONO inputs are identical, and make it possible to connect two turntables if necessary.

3. Tuner

Accepts signals from tuner.

4. Aux

Input for any high output device, such as a tape player or cassette deck, the sound from a TV set, or a turntable with ceramic cartridge.

5. Tape 1

The record output jacks permit recording directly any signal being reproduced by the amplifier. It can be phono, FM, AM or another tape. The signal at this output is not affected by the volume or tone controls on the front. The play or input terminals connect with the playback outputs of the tape recorder or cassette deck. If the recorder has provisions for monitoring, note instructions under item 14, front panel. Connections can be made through a 5 pin DIN connector if desired. Use either the DIN connector or the standard phono jacks, not both.

6. Tape 2

The instructions under Tape above also apply here.

7. Power Cord

Connect this to the AC outlet (mains). Never connect to DC as this will cause serious damage to the receiver and void the warranty. In some countries a proper plug must be attached to the lead. If there are any questions, please consult your dealer.

8. Main Fuse

Protects the unit in the event of overload or failure. If it is blown, replace only with same size and rating.

9. Main Speakers

Speaker output terminals correspond to speaker selector switch, as described in item 3, front panel. To connect speaker wires, carefully twist together the strands of wire, press the rectangular bar under the terminal towards the chassis, insert the end of the wire into the small round hole at least to a depth of 1 cm, and then release the bar. The wire will now be firmly held in place. Make sure no loose strands are able to touch the adjacent speaker wire as this can cause short circuits which may result in disruption of operation.

10. Remote Speakers

If a second pair of speakers is to be operated from this receiver, connect them to this terminal. Follow the above instruction "Main Speaker".

TO CONNECT SPEAKERS IN PHASE

Stereo speakers should operate in phase (woofers moving in and out simultaneously) to obtain best bass response and proper stereo imagery. To assist the user, speaker manufacturers label the connecting terminals with marks such as "+" and "-", "1" and "2", or "A" and "B". It does not matter to which of these terminals the amplifier's black and red output terminals are connected, as long as all speakers are connected in the same way. For example, suppose the left speaker system is coded with a "1" and "2". If the "1" is connected to the red terminal on the amplifier and the "2" to the black, then the procedure must be used on the right speaker system.

POSSIBLE ADDITIONAL FEATURES

As safety standards vary from country to country, the following features may not be on the unit you have.

11. Speaker fuses

Directly over the speaker terminals are two protection fuses for your speakers. These are designed to permit loud signal levels but to open if a defect develops in the receiver that might endanger the speakers. Remember that no fuse can absolutely protect a speaker. If one channel of your music system is not producing sound, check the appropriate fuse. Remove the power cord from the mains first. Using the proper screwdriver take off the fuse cap and remove the fuse. By holding it up to the light, it should be possible to detect a break in the fuse wire. Replace with Type T315 fuse.

12. Auxiliary AC outlets

If present, these will accept the mains power cord from turntable or tape cassette, simplifying the connection of these devices.

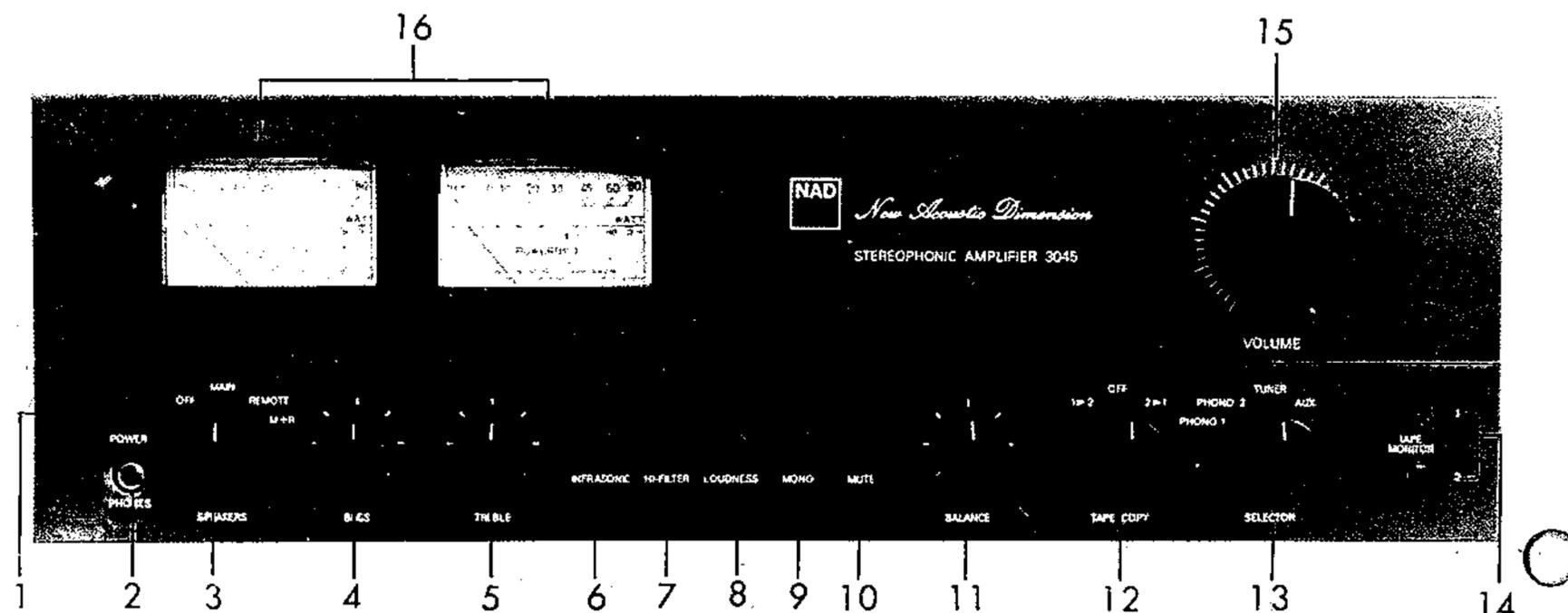
Warning: Do not remove the cover of the receiver. There are no parts inside that can be customer operated. Only a serviceman should make these adjustments.

NAD 3045

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N A D 3045 INSTRUCTIONS FOR USE



FRONT PANEL

1. **Power**
To switch amplifier on or off.
2. **Phones**
A connecting jack for stereo headphones.
3. **Speakers**
Loudspeaker selector switch. "OFF" turns off all speakers, output signal available at headphone jack. "MAIN" turns on speakers connected on Main Speaker Terminal on rear of unit. "REMOTE" turns on speakers connected to Remote Speaker Terminal on rear of unit. "M+R" turns on speakers connected both to Main and Remote.
Note: If either of the two pairs of speaker systems has an impedance below 4Ω , it is best not to use the "M+R" position.
4. **Bass**
Rotating clockwise increases level of very deep, low frequency sounds. Rotating counterclockwise reduces these sounds. In the central, click position, the control has no effect.
5. **Treble**
Rotating clockwise increase level of very high tones. Rotating counterclockwise reduces these tones. In the central, click position, the control has no effect.
6. **Infrasonic**
Eliminates all the unwanted sounds below the audible range which can adversely affect the performance of your amplifier. Normally this switch should be depressed at all times.
7. **Hi-filter**
Suppresses tape hiss, record surface noise, and interference whistle on AM. Most useful for listening to old records. Not recommended for normal, quality programs.
8. **Loudness**
Boosts the very low and very high frequency sounds. When music is played at a very low level, the ear is less able to hear the sounds at extremes of the audio range. The loudness control improves the musical balance under these conditions. Not recommended when listening at normal or loud levels.
9. **Mono**
Converts all input signals to monophonic. Useful for listening to very noisy stereo broadcasts. Also ideal when playing old monophonic records with a stereo pickup (cartridge).
10. **Mute**
Attenuates preamp output by 20dB. Recommended for low level listening as it gives improved signal to noise ratio and better resolution of volume control.

11. Balance

Permits adjustment of level between right and left channels. Rotating clockwise will increase relative level of right channel, counterclockwise the left channel. In the central, click position, the control has no effect.

12. Tape Copy

If two tape recorders or Cassette decks are connected to the tape inputs and outputs of the 3045, it is possible to copy from one machine to the other. When this switch is rotated to the left, the machine connected to Tape 2 will record the program being played on Tape 1. With the switch rotated to the right, the recording will be made on the Tape 1 machine. The copying can be done at the same time the listener is listening to tuner or phono. If the listener wishes to listen to the tape, he should depress the appropriate "TAPE MONITOR" button.

13. Selector

Selects the appropriate signal source. "AUX" can be used for any high output device such as an extra tape recorder or sound from a TV set. "TUNER" can be used for listening to AM or FM programs if connect your tuner to the amplifier. A turntable or record changer connected to either "PHONO 1" or "PHONO 2" can be selected by using the appropriate input position. Both inputs are identical. You can connect two such devices if you wish.

14. Tape Monitor

If you have connected a tape recorder or a cassette deck to the Tape play inputs on the back of the unit, then depressing Tape Monitor will make it possible to listen to the tapes. If your tape recorder has a monitor capability (usually requires a separate playback head), then you can monitor your tape recording as it is being recorded by depressing the Tape Monitor.

Note: When the Tape Monitor is engaged it bypasses the Selector switch. Regardless what the selector is set for, you only hear the tape. If a Tape Monitor button is accidentally left on, then none of the inputs on the selector will operate.

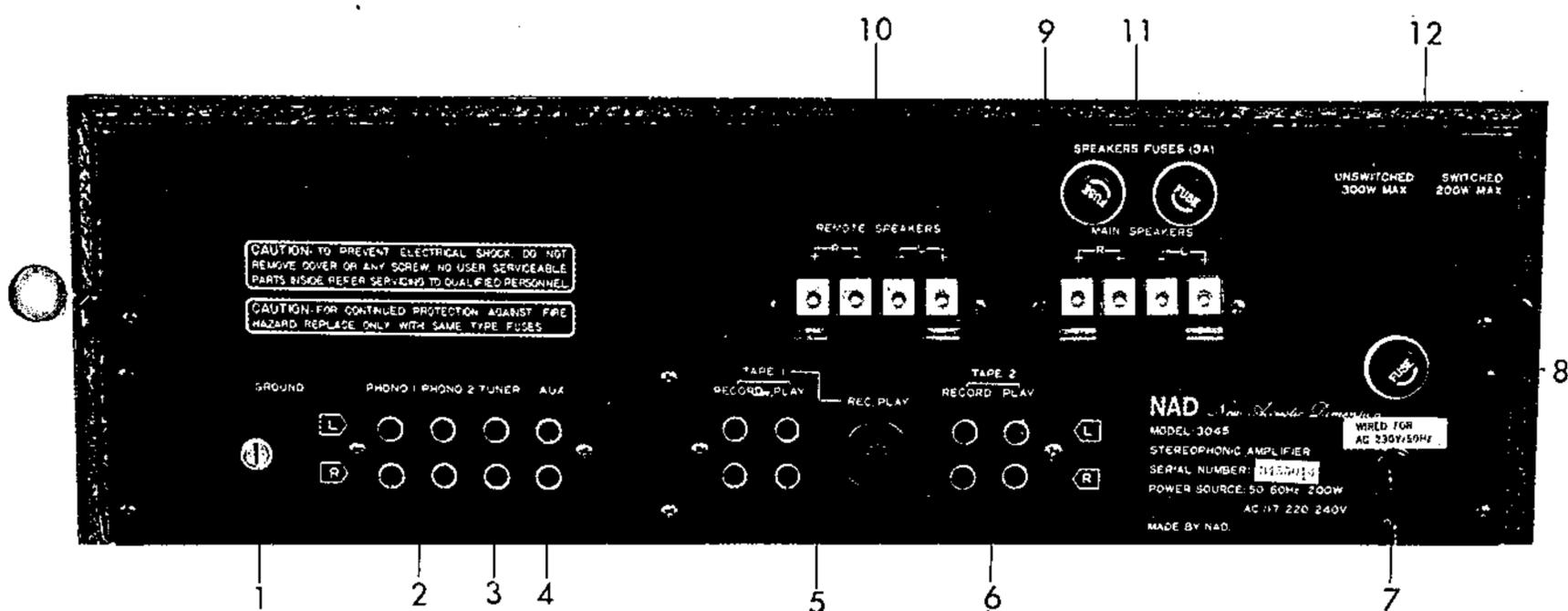
Always disengage the Tape Monitor Switch before trying to operate the amplifier normally.

15. Volume

Performs simultaneous adjustment of volumes in both channels. Rotate the knob clockwise for proper listening level.

16. Power Meters

Show the power output of both left and right channel respectively. Calibrated in watts and dB (decibel) for 8 Ω load.

**REAR PANEL.****1. Ground**

The earth connection for any device that needs to be grounded such as a turntable.

2. PHONO 1/PHONO 2

For the inputs from a turntable. The receiver is designed for a magnetic pickup (cartridge). If the turntable has a ceramic or crystal cartridge, use Aux and turn Bass control clockwise to equalize low frequency response. The two PHONO inputs are identical, and make it possible to connect two turntables if necessary.

3. Tuner

Accepts signals from tuner.

4. Aux

Input for any high output device, such as a tape player or cassette deck, the sound from a TV set, or a turntable with ceramic cartridge.

5. Tape 1

The record output jacks permit recording directly any signal being reproduced by the amplifier. It can be phono, FM, AM or another tape. The signal at this output is not affected by the volume or tone controls on the front. The play or input terminals connect with the playback outputs of the tape recorder or cassette deck. If the recorder has provisions for monitoring, note instructions under item 14, front panel. Connections can be made through a 5 pin DIN connector if desired. Use either the DIN connector or the standard phono jacks, not both.

6. Tape 2

The instructions under Tape above also apply here.

7. Power Cord

Connect this to the AC outlet (mains). Never connect to DC as this will cause serious damage to the receiver and void the warranty. In some countries a proper plug must be attached to the lead. If there are any questions, please consult your dealer.

8. Main Fuse

Protects the unit in the event of overload or failure. If it is blown, replace only with same size and rating.

9. Main Speakers

Speaker output terminals correspond to speaker selector switch, as described in item 3, front panel. To connect speaker wires, carefully twist together the strands of wire, press the rectangular bar under the terminal towards the chassis, insert the end of the wire into the small round hole at least to a depth of 1 cm, and then release the bar. The wire will now be firmly held in place. Make sure no loose strands are able to touch the adjacent speaker wire as this can cause short circuits which may result in disruption of operation.

10. Remote Speakers

If a second pair of speakers is to be operated from this receiver, connect them to this terminal. Follow the above instruction "Main Speaker".

TO CONNECT SPEAKERS IN PHASE

Stereo speakers should operate in phase (woofers moving in and out simultaneously) to obtain best bass response and proper stereo imagery. To assist the user, speaker manufacturers label the connecting terminals with marks such as "+" and "-", "1" and "2", or "A" and "B". It does not matter to which of these terminals the amplifier's black and red output terminals are connected, as long as all speakers are connected in the same way. For example, suppose the left speaker system is coded with a "1" and "2". If the "1" is connected to the red terminal on the amplifier and the "2" to the black, then the same procedure must be used on the right speaker system.

POSSIBLE ADDITIONAL FEATURES

As safety standards vary from country to country, the following features may not be on the unit you have.

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12. Auxiliary AC outlets

If present, these will accept the mains power cord from turntable or tape cassette, simplifying the connection of these devices.

Warning: Do not remove the cover of the receiver. There are no parts inside that can be customer operated. Only a serviceman should make these adjustments.

NAD 3045

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N A D 3045 INSTRUCTIONS FOR USE



FRONT PANEL

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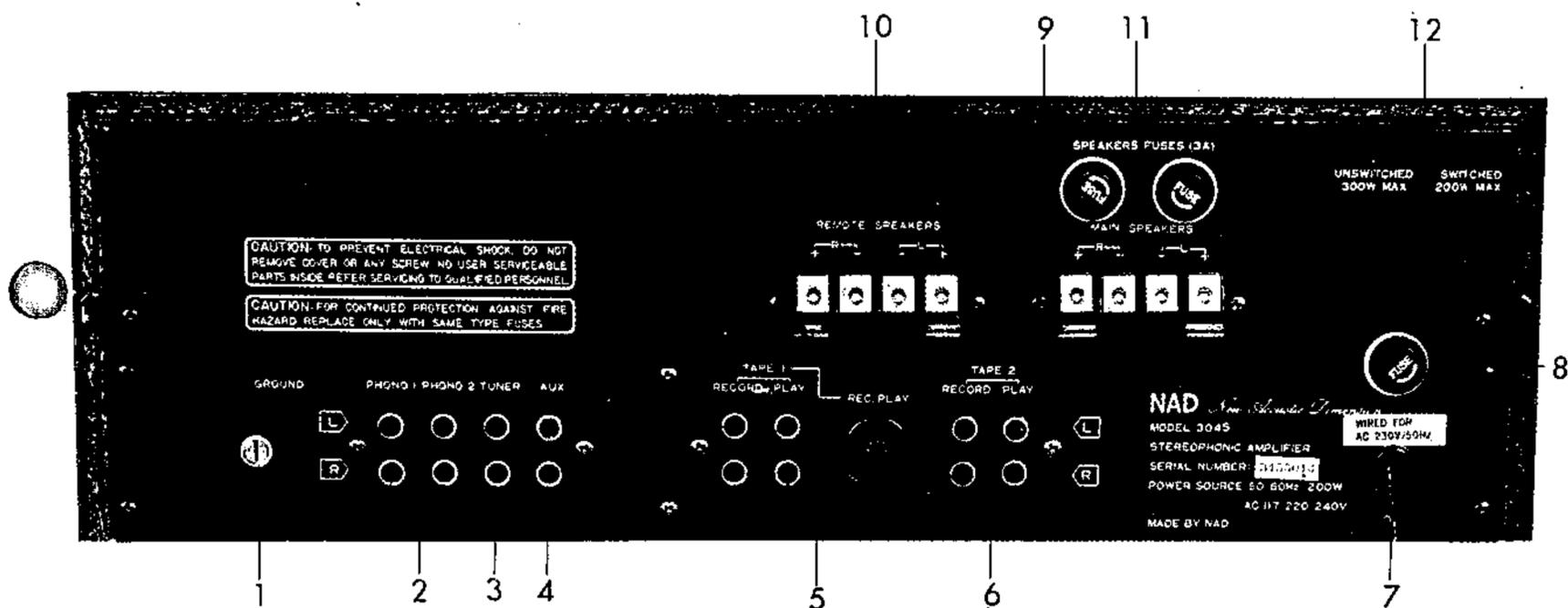
Always disengage the Tape Monitor Switch before trying to operate the amplifier normally.

15. Volume

Performs simultaneous adjustment of volumes in both channels. Rotate the knob clockwise for proper listening level.

16. Power Meters

Show the power output of both left and right channel respectively. Calibrated in watts and dB (decibel) for 8 Ω load.

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The earth connection for any device that needs to be grounded such as a turntable.

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6. Tape 2

The instructions under Tape above also apply here.

7. Power Cord

Connect this to the AC outlet (mains). Never connect to DC as this will cause serious damage to the receiver and void the warranty. In some countries a proper plug must be attached to the lead. If there are any questions, please consult your dealer.

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Stereo speakers should operate in phase (woofers moving in and out simultaneously) to obtain best bass response and proper stereo imagery. To assist the user, speaker manufacturers label the connecting terminals with marks such as "+" and "-", "1" and "2", or "A" and "B". It does not matter to which of these terminals the amplifier's black and red output terminals are connected, as long as all speakers are connected in the same way. For example, suppose the left speaker system is coded with a "1" and "2". If the "1" is connected to the red terminal on the amplifier and the "2" to the black, then the same procedure must be used on the right speaker system.

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