Integra

2 Channel Amplifier

ADM-2.1

Instruction Manual

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Thank you for purchasing the Integra 2 Channel Amplifier.

Please read this manual thoroughly before making connections and plugging in the unit.

Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new 2 Channel Amplifier. Please retain this manual for future reference.

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WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). 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.

Important Safeguards

- 1. **Read Instructions** All the safety and operating instructions should be read before the appliance is operated.
- 2. **Retain Instructions** The safety and operating instructions should be retained for future reference.
- 3. **Heed Warnings** All warnings on the appliance and in the operating instructions should be adhered to.
- 4. **Follow Instructions** All operating and use instructions should be followed.
- 5. **Cleaning** Unplug the appliance from the wall outlet before cleaning. The appliance should be cleaned only as recommended by the manufacturer.
- 6. **Attachments** Do not use attachments not recommended by the appliance manufacturer as they may cause hazards.
- 7. Water and Moisture –Do not use the appliance near water –for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 8. Accessories Do not place the appliance on an unstable cart, stand, tripod, bracket, or table. The appliance may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the appliance.

Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.



PORTABLE CART WARNING

- An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance S3125A and cart combination to overturn.
- 10. Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the appliance and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the appliance on a bed, sofa, rug, or other similar surface. The appliance should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided. There should be free space of at least 20 cm (8 in.) and an opening behind the appliance.
- 11. **Power Sources** The appliance should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
- 12. **Grounding or Polarization** The appliance may be equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

- 13. **Power-Cord Protection** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 14. **Lightning** For added protection for the appliance during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the appliance due to lightning and power-line surges.
- 15. **Overloading** Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 16. Object and Liquid Entry Never push objects of any kind into the appliance through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the appliance.
- Servicing Do not attempt to service the appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- Damage Requiring Service Unplug the appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power-supply cord or plug is damaged,
 - B. If liquid has been spilled, or objects have fallen into the appliance,
 - C. If the appliance has been exposed to rain or water,
 - D. If the appliance does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to its normal operation,
 - E. If the appliance has been dropped or damaged in any way, and
 - F. When the appliance exhibits a distinct change in performance this indicates a need for service.
- 19. Replacement Parts–When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 20. **Safety Check** Upon completion of any service or repairs to the appliance, ask the service technician to perform safety checks to determine that the appliance is in proper operation condition.
- 21. Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 22. **Heat** The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

Features

WIDE RANGE AMPLIFIER TECHNOLOGY (WRAT)

WRAT virtually eliminates the adverse effects of counterelectromotive force by:

1) applying an uncommonly low amount of NFB (negative feedback),

2) using carefully selected, high-tolerance, wide range parts in all critical sections, and

3) incorporating innovative circuit topology based upon decades of high-end amplifier design experience — the final result is flat response beyond 100 kHz.

AUTO POWER ON/OFF FUNCTION

You can turn on and off the ADM-2.1 via a signal input to the AUDIO IN jacks or 12V TRIGGER IN jack.

AUDIO IN/OUT LINK FUNCTION

The signal inputs from the AUDIO IN jacks are output from the AUDIO OUT jacks. When used as a 2 channel amplifier in a multi room configuration, you can connect several ADM-2.1s to enjoy the same source in several rooms.

Precautions

1. Warranty Claim

You can find the serial number on the rear panel of this unit. In case of warranty claim, please report this number.

2. Recording Copyright

Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. AC Fuse

The fuse is located inside the chassis and is not user-serviceable. If the power does not come on, contact your Integra/Onkyo authorized service station.

4. Care

From time to time you should wipe the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it out dry, and wipe off the dirt. Following this, dry immediately with a clean cloth. Do not use rough material, thinner, alcohol or other chemical solvents or cloths since these could damage the finish or remove the panel lettering.

5. Power

WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit will be used meets the required voltage (e.g., AC 120 V, 60 Hz) written on the rear panel.

For Canadian models

For models having a power cord with a polarized plug: **CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

Modele pour les Canadien

Sur les modèles dont la fiche est polarisée:

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.

Supplied accessory

Check that the following accessory is supplied with the ADM-2.1.



Power cord \times 1

Rear panel facilities and connections

Caution:

- · Be sure to always refer to the instructions that came with the component that you are connecting.
- Do not plug in the power cord until all connections have been made.
- Do not make connections to input or output jacks while the ADM-2.1 is turned on.
- · Always turn the volume of the control amplifier or preamplifier down before turning on the ADM-2.1.
- For input and output jacks, red connectors (marked R) are used for the right channel and white connectors (marked L) are used for the left channel.
- Insert all plugs and connectors securely. Improper connections can result in noise, poor performance, or damage to the equipment. Improper connection



· Do not bind audio connection cables with power cords and speaker cables. Doing so may adversely affect the sound quality.





GND

Use this GND terminal for connecting the ground (or earth) wire of other component if humming noise is heard.

2 AUDIO IN/OUT

These are the analog audio inputs and outputs. Use an RCA-type audio connection cable to connect the output jacks of the device to the AUDIO IN jacks on the ADM-2.1. When connecting a control amplifier or preamplifier, connect the PRE OUT jacks to the AUDIO IN jacks.

If you connect the AUDIO OUT jacks of the ADM-2.1 to the AUDIO IN jacks of another ADM-2.1, the signal input at the AUDIO IN jacks of the ADM-2.1 is also output from the AUDIO OUT jacks (Audio In/Out Link Function).

If you set the TRIGGER switch to AUDIO, the power of the connected ADM-2.1 turns on automatically when an audio signal is supplied to the AUDIO IN jacks (Auto Power On/Off Function).

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INPUT LEVEL

Turn this INPUT LEVEL control to adjust the input level of the signal from the AUDIO IN jacks. Normally, set to MAX.

Note:

When a CD player is connected to the ADM-2.1, be sure to adjust the INPUT LEVEL control.



TRIGGER

Set this TRIGGER switch before turning on the ADM-2.1.

To turn on the ADM-2.1 with the signal input from the 12V TRIGGER IN jack, set the TRIGGER switch to 12V TRIGGER. To turn on the ADM-2.1 with the signal input from the AUDIO IN jack, set the TRIGGER switch to AUDIO (Auto Power On/Off Function). If you do not use Auto Power Function, set the TRIGGER switch to OFF.

5 **12V TRIGGER IN**

If the connected control amplifiers or preamplifiers have a 12V TRIGGER output jack, use 1/8-inch 2P mini-jack cable to connect the 12V TRIGGER IN jack on the ADM-2.1. This jack works on between 5 to 12 volts DC. When the ADM-2.1 is in the standby state and the TRIGGER switch is set to 12V TRIGGER, you can switch the ADM-2.1 between the on and standby states with operations at the control amplifier or preamplifier.

Note:

When a plug is connected to the 12V TRIGGER jack, be sure to connect the analog output jacks (or PRE OUT jacks) of the device to the AUDIO IN jacks of the ADM-2.1. Otherwise, no sound will be produced.

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Rear panel facilities and connections

SPEAKERS

Connect the jacks on the speakers to the SPEAKERS terminals using the speaker cables. These terminals are compatible with banana plug connections.

- 1 Strip away 15 mm (5/8 in.) of wire insulation.
- 2 Twist wire ends very tight.
- 3 Unscrew.

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- 4 Insert wire.
- 5 Screw.



- Do not connect any devices other than speakers to these terminals.
- Be sure not to mistake the positive and negative outputs or the left and right speakers. Doing so will result in an unnatural sound space.
- Only connect speakers with an impedance of 6 ohms or higher. If a speaker with an impedance of less than 6 ohms is connected, it may damage the ADM-2.1.

Connection diagram

Since the many users will purchase the ADM-2.1 together with the DTR-7.1, here is an explanation of how to connect the ADM-2.1 to the DTR-7.1.

- When you are using only one speaker or when you wish to listen to monaural (mono) sound, a single speaker should never be connected in parallel to both the right and leftchannel terminals simultaneously.
- To prevent damage to circuitry, never short-circuit the positive (+) and negative (-) speaker wire.



NO!

7 AC INLET

Plug the supplied power cord into this AC INLET and then into the power outlet on the wall.

- Do not use a power cord other than the one supplied with the ADM-2.1. The power cord supplied is designed for use with the ADM-2.1 and should not be used with any other device.
- Never disconnect the power cord from the ADM-2.1 while the other end is plugged into the wall outlet. Doing so may cause an electric shock. Always connect by plugging into the wall outlet last and disconnect by unplugging from the wall outlet first.

When connecting the ADM-2.1 to 2 channel control amplifier or preamplifier, connect the AUDIO IN jacks of the ADM-2.1 to the PRE OUT FRONT jacks of the control amplifier or preamplifier, and connect the front speakers to the SPEAKERS terminals of the ADM-2.1.



Front panel facilities and connections





Power

After plugging in the power cord into the rear panel and wall outlet, pressing this switch connects the ADM-2.1 to the AC mains. The function of this switch differs depending on the setting of the TRIGGER switch on the rear panel. Before turning on the power, be sure to set the TRIGGER switch. Besides, before turning on the power, make sure all cables are properly connected. The TRIGGER switch is factory set to OFF.

When the TRIGGER switch is set to OFF

Pressing the Power switch turns on the ADM-2.1. The Standby/On indicator lights orange after flashing red for 5 seconds. Press the Power switch again to turn off the ADM-2.1.

When the TRIGGER switch is set to 12V TRIGGER

If no signal is supplied to the 12V TRIGGER IN jack, pressing the Power switch enters the standby state and the Standby/On indicator lights red.

If 12V DC is supplied to the 12V TRIGGER IN jack, pressing the Power switch turns on the ADM-2.1 and the Standby/On indicator lights orange after flashing red for 5 seconds.

If the ADM-2.1 is in the standby state, the ADM-2.1 turns on automatically when 12V DC is supplied to the 12V TRIGGER IN jack.

When the signal input to the 12V TRIGGER IN jack is interrupted, the indicator lights red and the ADM-2.1 enters standby state (Auto Power On/Off Function).

Press the Power switch to turn off the ADM-2.1.

When the TRIGGER switch is set to AUDIO

If no signal is supplied to the AUDIO IN jacks, pressing the Power switch enters the standby state and the Standby/On indicator lights red after flashing red for 5 seconds.

If an audio signal is supplied to the AUDIO IN jacks, pressing the Power switch turns on the ADM-2.1 and the Standby/On indicator lights orange after flashing red for 5 seconds.

If the ADM-2.1 is in the standby state, the ADM-2.1 turns on automatically when an audio signal is supplied to the AUDIO IN jacks.

When the signal input to the AUDIO IN jacks is not supplied for more than 4 minutes, the indicator turns to red and the ADM-2.1 enters standby state (Auto Power On/Off Function).

Press the Power switch to turn off the ADM-2.1.

Note:

You cannot use the Auto Power On Function when the power is turned off. To use the Auto Power On Function, leave the ADM-2.1 in the standby state once the ADM-2.1 enters the standby state.



Standby/On indicator

The Standby/On indicator lights red when the ADM-2.1 is in the standby state and lights orange when the ADM-2.1 is turned on.

Operations

To listen to music or view your favorite movies, follow the operations below.

The procedures given below assume that the other system components are already connected. (For example, that the source components are already connected to the control amplifier or the preamplifier.)

1. Lower the volume at the control amplifier or preamplifier.

Lower the volume of the control amplifier or preamplifier to the minimum so that when the ADM-2.1 is turned on, you do not hear loud unwanted sounds.

2. Select the input on the control amplifier or preamplifier.

Select the proper input on the control amplifier or preamplifier.

3. Slowly increase the volume of the control amplifier or preamplifier.

Now all that remains is to control the control amplifier or preamplifier and the other connected system components to enjoy your music or movies.

Troubleshooting guide

No power.

- The power cord is disconnected.
 - \rightarrow Connect the power cord.
- The setting of the TRIGGER switch is wrong.
 - → Set the TRIGGER switch to the appropriate position.
- With the TRIGGER switch set to a position other than OFF, the Power switch is pressed again immediately after turning the power off.
 - → Be sure to leave more than 3 seconds before turning the power on again.

Power turns on but no sound.

- · Bad connections or wiring.
 - → Check connections, speaker cables, etc.
- · Amplifier protection circuitry has been activated.
 - → Contact your Integra/Onkyo Service Center.
- The INPUT LEVEL control is set to MIN.
 - → Turn the INPUT LEVEL control to adjust the input level.

The Standby/On indicator does not light when the Power switch is pressed.

- Bad connections or wiring.
 - → Check if the power cord is properly connected. If the indicator still does not light, turn off the ADM-2.1, disconnect the power cord, and contact your Integra/ Onkyo Service Center.

The Standby/On indicator flashes red for more than 7 seconds when the Power switch is pressed.

• A malfunction.

→ Press the Power switch to turn off the ADM-2.1. After 3 seconds, press the Power switch again to turn on the ADM-2.1. If the indicator still flashes, turn off the ADM-2.1, disconnect the power cord, and contact your Integra/Onkyo Service Center.

No sound from the speaker, or at very low volume.

- · Bad connections or wiring.
 - \rightarrow Check connections, speaker cables, etc.
- The INPUT LEVEL control is set to MIN.
 - → Turn the INPUT LEVEL control to adjust the input level.
- The settings on the control amplifier or preamplifier are wrong.
 - → Check the settings on the control amplifier or preamplifier.

The left and right sounds are unbalanced or reversed.

- · Bad connections or wiring.
 - \rightarrow Check connections, speaker cables, etc.
- The polarity of the speaker cable is wrong.
 - \rightarrow Check the polarity of the speaker cable.

Specifications

AMPLIFIER SECTION	
Power Output:	100 Watts per channel min. RMS at 8 ohms, both channel driven from 20 to 20,000 Hz with no more than 0.08 % total harmonic distortion.
	125 Watts per channel min. RMS at 6 ohms, both channel driven from 1 kHz with no more than 0.1 % total harmonic distortion.
Dynamic Power Output:	2×140 Watts at 8 ohms
Total Harmonic Distortion:	0.08 % at rated power
IM Distortion:	0.08 % at rated power
Damping Factor:	100 at 8 ohms
Input Sensitivity and Impedance:	1 V, 50 kohms
Output Level and Impedance:	1 V, 10 kohms
Rated Speaker Impedance:	6 ohms MIN
Frequency Response:	10 Hz – 100 kHz, ±1 dB
Signal-to-Noise Ratio:	110 dB (IHF A, 0.5 V input)

GENERAL

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Power Supply:
Power Consumption:
Dimensions $(W \times H \times D)$:
Weight:

AC 120 V, 60 Hz 2.5 A $435\times145\times316~mm$ $17^{-1/8}$ " × 5^{-11/16}" × 12^{-7/16}" 8.5 kg, 18.7 lbs.

Specifications and features are subject to change without notice.

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