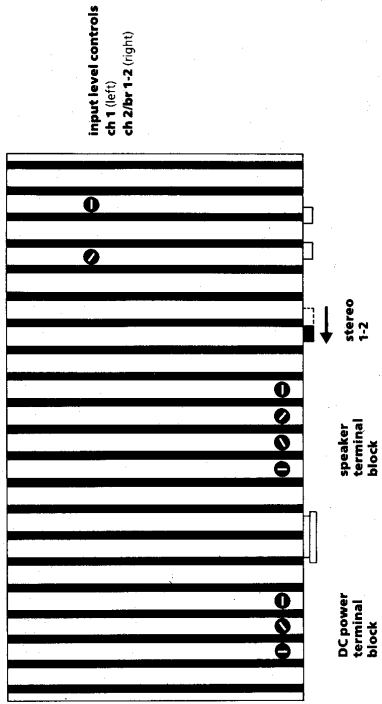
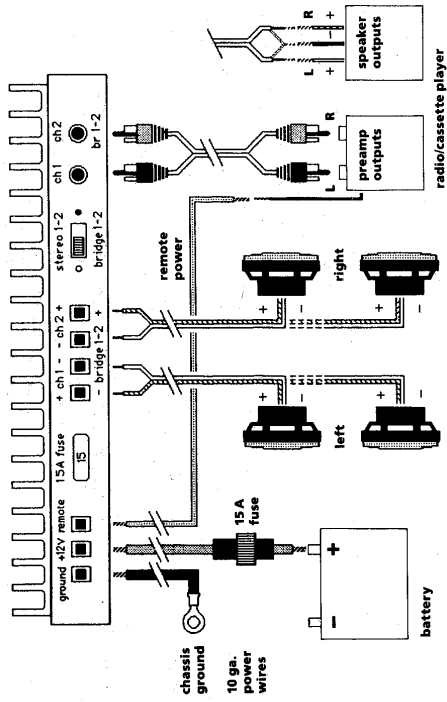




Stereo automotive  
power amplifier

# PS5

**PSS connections**



3	<b>Introduction</b>
4	<b>Controls and features</b>
6	<b>Warnings</b>
7	<b>Associated equipment</b>
8	<b>Installation and connection</b>
19	<b>Operation</b>
21	<b>In case of difficulty</b>
23	<b>Maintenance</b>
23	<b>Other PS5 applications</b>
24	<b>Specifications</b>

**Introduction**

Thank you for purchasing the ADS PS5, an automotive stereo power amplifier of advanced mechanical and electrical design. In its performance, styling and finish, the PS5 ably extends the ADS tradition of excellence in automotive sound products.

the PS5 among the best of home high fidelity amplifiers, and its power supply design lets the PS5 drive multiple speakers. Its high level of performance, rugged physical design and convenience of use make the PS5 an outstanding value.

The PS5 combines a highly efficient switching-mode power converter and two channels of high fidelity power amplification in one small, rugged, aluminum chassis. The small dimensions of the PS5 allow placement where convenient in the automobile, while the aluminum chassis with integral heatsink provides mechanical strength, cool circuit operation and long operating life.

This manual provides information on the connection and use of your PS5. Whether or not you plan to install the PS5 yourself, please read it thoroughly. We suggest you save this manual and the PS5 packing materials for future use.

Thank you,

**ADS, Analog & Digital Systems, Inc.**

Connections to the PS5 are quick and easy, with secure, high-current power supply and speaker terminals. Its amplifier design places

**DC power terminal block** provides connections for the 12V DC power wires. The wires are clamped securely in the terminals by screws accessible through holes in the top of the chassis, between the heatsink fins, directly above the terminals.

**ground** terminal connects the ground wire to the PS5. The ground wire runs between the PS5 and a connection point on the chassis of the automobile.

**+ 12V** terminal connects the power supply wire which runs between the PS5 and the positive terminal of the battery.

**remote** terminal connects the control wire which provides remote power turn-on of the PS5 by the radio/cassette player or a dash-mounted switch.

**15A fuse** protects both the PS5 and the automobile's electrical system from fault conditions. The fuse is a standard automotive plug-in type ATO.

**ch 1, ch 2, bridge 1-2 speaker terminal block** connects the speaker system wires to the PS5. The wires are clamped securely in the terminals by screws accessible through holes in the top of the chassis between the heatsink fins, directly above the terminals.

**ch 1 +, -** terminals connect the wires from the speaker system(s) on the left side of the vehicle.

**ch 2 +, -** terminals connect the wires from the speaker system(s) on the right side of the vehicle.

**bridge 1-2 +, -** terminals connect the wires from a single speaker system when the PS5 is used in single-channel bridge mode.

**stereo 1-2/bridge 1-2** switch sets the PS5 for proper operation with either one or two speaker systems connected per channel when in stereo mode, or a single speaker system when in bridge mode.

**ch 1, ch 2/br 1-2** input jacks receive the output signals from the radio/cassette player or a signal processor such as an electronic crossover.

**Input level controls** adjust the gain of each channel of the PS5 for balancing the channels and for matching the output level of the signal source. The controls are screwdriver adjustable and are accessible through holes in the top of the chassis between the heatsink fins.

**Extruded aluminum chassis** with integral heatsink makes the PS5 mechanically strong and physically small, while providing excellent cooling for the power supply and amplifier circuitry.

**Hardware kit** for the PS5 contains:

2 ea. Mounting brackets to securely mount the PS5 to the automobile. The brackets attach to the ends of the PS5 with the supplied screws.

2 ea. Spacers to go between the brackets and the PS5.

4 ea. M5 x 8mm Phillips-head machine screws to attach the brackets and spacers to the PS5.

4 ea. Phillips-head sheet metal screws to attach the brackets to the vehicle.

1 ea. Screwdriver to tighten power and speaker wire terminal clamp screws and to adjust the input level controls.

Study the layout of your automobile thoroughly before you drill or cut any holes. **Take extra care when working near gas tanks, fuel lines, brake or hydraulic lines and electrical wiring.**

**Do not use the PS5 unmounted.** Attach the PS5 securely to the vehicle to prevent damage to either the PS5 or the vehicle and its contents, particularly in the event of an accident.

Keep the PS5 away from locations subject to immersion in water or leakage.

Do not mount the PS5 so that the wire connections are unprotected or are subject to pinching or damage from nearby objects (or people's feet).

Make sure the **stereo 1-2/bridge 1-2** switch is correctly set for your installation. Set it to the left-hand, **stereo 1-2** position for the typical 2-channel system having either two or four speakers. When using the PS5 in single-channel, bridge mode, set the **stereo 1-2/bridge 1-2** switch to the right-hand **bridge 1-2** position.

**The + 12V power supply wire must be fused at the battery positive terminal connection. Disconnect the + 12V wire at the battery end before making or breaking power connections at the PS5 power terminals.**

Make sure your radio/cassette player and/or other equipment is turned off while connecting to the PS5 input jacks and speaker terminals. Turn on the various components and slowly advance the volume control *only* after checking and double checking all connections.

If you need to replace the PS5 power fuse, replace it only with a fuse identical to that supplied with the PS5. Use of a higher rating fuse may result in damage to the PS5 which is not covered by the warranty.

There are many automotive audio products available today. Naturally, your ADS PS5 should be used with only the finest car stereo components. Although the PS5 will work well with many different types of signal sources and speakers, the final result depends on your choice of equipment. Your ADS dealer can help you select components to complement the high performance of the PS5. ADS automotive loudspeaker systems are particularly well suited for use with the PS5, thanks to their broad frequency response, low distortion and wide dynamic range. Consult your ADS dealer for information.

**Who should do the installation?** Installing an automotive audio system is no trivial matter. The quality of the installation will affect the system's performance and reliability, not to mention appearance. When you consider that you will be making possibly irreversible modifications to your automobile, you may well decide to seek professional installation services. The dealer from whom you purchased your PSS may provide such services or will be able to recommend a professional installer in your area. A professional installation can reduce the risk of damage both to your car and your audio components.

If you decide to install the PSS yourself, you will find the following a valuable guide. We suggest you begin by carefully planning your installation.

**Planning the installation.** The small size of the PSS makes it possible to mount the unit in locations which are convenient to the radio/cassette player and to the speakers, such as beneath a seat, or in the trunk or rear cargo space. In choosing a mounting location, keep the following in mind:

Plan to route all power and speaker wiring inside of the automobile using existing wire channels, panels, sills, mats, etc. to conceal and protect the wiring.

Do not run wiring outside or beneath the vehicle where it will be subject to wear or snagging by road hazards or the moving parts of the vehicle.

Plan to mount the PSS so that the wire connections are protected and free from strain, and where the PSS will not be tightly covered or have cooling air blocked for any reason. Be sure that the cooling fins of the PSS are in free air and are not against a panel or other surface.

Mount the PSS where it will not be subject to water immersion, seepage or splashing. Do not mount the PSS outside of the vehicle, such as in the engine compartment, where moisture and dirt can damage the unit.

**Required tools and hardware** You will need to assemble a set of tools in order to perform the installation. You will need screwdrivers, pliers, wire cutters, wire strippers, electrical tape and an electric drill with a set of bits.

Hardware for typical mounting of the PSS has been included. You will need to supply hardware for unusual mounting methods. You will also need to supply the wires for power and speaker connections.

**Wiring tips** The +12v and ground wires should be heavy gauge stranded copper wire with heavy insulation; 10 AWG wire is recommended. Smaller gauge wire (12, 14 or 16) will cause increased power losses and can lead to dangerous overheating conditions. The remote wire can be relatively light wire; 18 AWG is recommended. Keep the length of all wires as short as possible.

Make all speaker connections with 18 AWG or larger (16 gauge) wire. Most hardware stores carry 18 gauge or heavier lamp cord (also known as "zip" cord) and it is well suited for speaker connections.

Make sure the wiring does not rub against sharp edges. If wiring is routed through holes drilled in metal, make sure there are not burrs which may cut into the wire. Use rubber grommets or hoses wherever necessary. Use electrical tape to reinforce any section of wire which is subject to wear. Color-code or label the free ends of all wires before routing so that there

will be no doubt as to their origins. This is especially important with speaker wires, which may look the same for both channels.

**Caution** Before you begin drilling or cutting any holes, study your intended mounting location carefully. Will the mounting screws clear all obstructions? Is there clearance for the screwdriver to tighten the mounting screws? Do you know what is beneath the surface into which you will be drilling? Will there be free air circulation for the PS5? Will the terminals and jacks of the PS5 be accessible after installation?

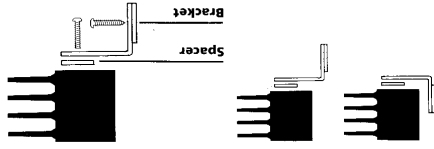
**PS5 mounting** The mounting brackets' smooth-surfaced legs can be attached to the PS5 in one of two ways, as shown by the drawings. Place a spacer between each bracket and

the end of the PS5. Attach the brackets and spacers to the PS5 with the M5 x 8mm Phillips-head screws.

When mounting the PS5 with the brackets' feet underneath the PS5, loosely attach the brackets to the PS5 and measure the mounting hole center spacings. Mark the locations for the mounting screws on the mounting surface with a punch, scribe or felt-tip pen. Drill 3mm/1/8" pilot holes in the mounting surface. Remove

the brackets and spacers from the PS5, attach them to the mounting surface using the sheet-metal screws and then install the PS5 and the spacers in the brackets.

When mounting the PS5 with the brackets' feet outboard from the PS5, first attach the spacers and brackets. Mark the locations for the mounting screw holes by holding the PS5 in place and using a scribe inserted in each bracket mounting hole in turn to mark the mounting surface. When the mounting surface is carpeted, mark with a felt-tip pen. Drill pilot holes for the mounting screws with a 3mm/1/8" bit. Cut carpeting away from the hole locations so that the drill bit does not pull threads and ruin the carpet.



12 Remove insulation approximately 3/8"

Negative



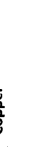
Positive  
Ridges or color  
stripe



Negative  
Silver



Positive  
Copper



of the insulation of one of the conductors, while some speaker wires have clear insulation with wires of different color, one silver and one copper. These markings, shown in the drawings, enable you to clearly distinguish one conductor from the other. Decide on a convention for identifying which of the conductors is the "positive" and which the "negative", and be consistent. For example, by calling the ribbed, colored or copper conductor the positive wire and connecting that conductor to the positive, or red terminals of the amplifier and speakers, you can avoid phasing error.

**Power wiring** You must install the power wires so that the wire connected to the PS5's +12v terminal is also connected to the positive, or red terminal of the battery, and the wire connected to the PS5's ground terminal is connected to the automobile chassis (see **System Grounding**, below). The PS5 is protected against reversed power connections, but obviously the unit will not work if incorrectly wired.

**Speaker wiring** You must observe proper phasing (polarity) when connecting speakers to an amplifier. This means that you must connect the two channels with identical polarity. Speaker wires and "zip" cord usually have raised ribs or a color stripe running the length

**Caution: If your radio/cassette player has bridged speaker output amplifiers, the center conductor of each channel's audio cable must be connected to the matching positive or negative wire (or connecting pin) of the radio/cassette player, with the corresponding negative or positive wire (or connecting pin) of the radio/cassette player left unconnected. Connect the shield of each channel's audio cable to the radio/cassette player's ground wire or chassis.**

**Input signal wiring** The PS5 can receive input signals either from low level sources (the pre-amp outputs on the radio/cassette player or the outputs from an electronic crossover used in a subwoofer-satellite system) or from high level sources such as the speaker outputs of the radio/cassette player.

The PS5's ch 1, ch 2/br 1-2 jacks are used for either type of source. The adjustment range of the PS5's input level controls lets it work with either type of source. See **Operation**, following.

You can use standard audio signal cables with phono type connectors to carry signals from either type of source to the PS5, with the far ends prepared to match the connectors at the source.

When you are connecting to the high level speaker outputs of the radio/cassette player, be certain that the positive, or "speaker," wire (or connecting pin) of each channel of the radio/cassette player is connected to the center conductor of the matching PS5 input cable, and that the negative, or ground wire (or connecting pin) of each channel is connected to the outer conductor or shield of the matching PS5 input cable. Please see the **Caution** note in the sidebar.

The speaker outputs of a few radio/cassette players need to be loaded down with a resistance much lower than the PS5's high input resistance in order to work correctly. When you



have this situation, connect a 33 Ohm, 1 Watt (or higher Wattage) resistor from the center conductor to the shield of each audio cable at the radio-cassette player end.

Consult the Owner's Manual of your radio/cassette player if you are uncertain about the connections.

Insert the phono plugs of the audio cables into the PSS's **ch 1**, **ch 2** input jacks, being careful to connect the source's left channel output to the PSS's **ch 1** input and the right channel output to the PSS's **ch 2** input.

**Bridge mode input wiring** Using the PSS in bridge mode makes it a powerful single-channel amplifier. Follow the instructions in *Input signal wiring*, above, connecting only to the **ch 2/br 1-2** input jack of the PSS.

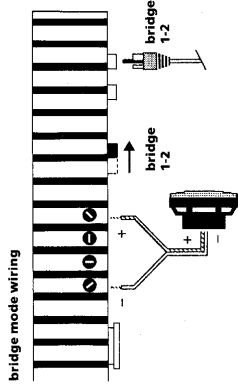
**Speaker output wiring** The positive or  $\oplus$  wire of each speaker system goes to the  $\oplus$  outer speaker terminal of each channel of the PSS, while the negative or  $\ominus$  wire goes to the adjacent  $\ominus$ , inner terminal. The speaker(s) on the left side of the car attach to the **ch 1** terminals and the speaker(s) on the right side attach to the **ch 2** terminals.

The wire ends need to be exposed from the insulation only about 3/8". Avoid stripping the insulation back so far that bare wires in adjacent speaker terminals can touch one another.

Connect the speaker system wires to the PSS's speaker terminals by loosening the clamping screw of each terminal, inserting the stripped end of the wire into the open hole and tightening the screw.

The holes in the PSS's speaker terminals are large enough so that wires from two separate speaker systems can be twisted together and put in each hole for multiple speaker system installations. Use at most two speaker systems per channel (2 Ohm load, minimum).

**Bridge mode speaker wiring** You can connect only one speaker system (4 Ohm load, minimum) to the PSS in bridge mode. The positive or  $\oplus$  speaker wire goes to the PSS's **bridge 1-2**, + terminal, while the negative or  $\ominus$  speaker wire goes to the PSS's **bridge 1-2**, - terminal. Prepare and attach the wires as described in *Speaker output wiring*, above.



**Note:** When you are using bridge mode, set the stereo 1-2/bridge 1-2 switch to the right-hand, bridge 1-2 position.

**Note:** Always be sure that the far ends of the +12v and remote wires are disconnected from the auto-mobile's +12v supply before making or breaking the power connections at the PSS.

**Note:** Be certain that the switch controlling the remote power connection is open (off), so that the PS5 will not turn on until your system wiring is complete.

**Power Wiring** Make the +12V and ground connections to the PS5 with heavy gauge stranded copper wire. We recommend that you use 10 AWG wire. Because the remote power control wire carries relatively little current, much lighter gauge wire can be used. 18 AWG wire is a good choice, since it is mechanically strong and easy to handle.

Leave their far ends unconnected and strip the PS5 ends of the +12V, ground and remote wires back about 3/8". Take each wire in turn and twist the strands at the end of the wire tightly together. Use the screwdriver supplied to loosen the screws of the PS5's terminal block so that the opening of each terminal is unobstructed. Insert the bare ends of the wires into the proper terminals and tighten the screws securely.

Once you've connected the power wires to the PS5, connect their far ends to the appropriate sources. Make the ground wire connection first, then the +12V connection and finally the remote connection.

The PS5's ground wire attaches to a chassis ground connection point. The background noise level of the system will vary with different ground connection points and you may need to experiment to achieve minimum noise. Be prepared to try different grounding points for the PS5 ground wire; initially leave the ground wire long enough to reach the radio/cassette player even though you may not need this much wire. Any connections you try must be securely made. See **System grounding**, following.

You must fuse the +12V wire (or connect it through an automotive type circuit breaker) at the battery end for protection against possible damage to the wire's insulation and resultant damage to the automobile. This wire's battery-end fuse (or circuit breaker) is best connected directly to the positive terminal of the battery itself. When such connection is not possible, the +12V wire/fuse should go to the nearest high-current connection to the battery, such as the starter solenoid's battery terminal. The fuse should be a slow-blow type of the same current rating as the PS5's power fuse.

Attach the remote wire to a switch connected to a convenient +12V source, or to the remote power terminal available on many radio/cassette players. Check the Owner's Manual of your radio/cassette player for information about this feature.

**System grounding** The background noise level of the system will vary widely with different equipment and the choices of individual component grounding points. This noise usually consists of "alternator whine", a buzzing sound which changes in pitch as the engine RPM changes.

Do not confuse this noise with the normal background "hiss", which occurs when playing tapes at high levels, or the various "static" noises which normally occur with AM and FM radio reception. The tape hiss and static noises are either normal or the result of problems with the radio/cassette player and have nothing to do with the PS5. Most noise problems resulting from ground potential differences occur when the volume control of the radio/cassette player is turned fully down.

18 Often, the lowest noise results from connecting the PS5's ground wire to the automobile chassis where the radio/cassette player is grounded. Some radio/cassette player units are electrically grounded through the mounting hardware which holds them in the auto, while others require a ground wire or strap to be connected from the radio to the chassis of the auto. On the other hand, connecting the PS5's ground wire to the automobile chassis near the PS5 will sometimes give best results.

Be sure that the ground connection point for the PS5's ground wire can safely carry the maximum current of the PS5. Connecting the PS5's

ground wire to the chassis of the radio/cassette player, for example, may yield minimum noise, but the ground wire of the radio/cassette player itself may not safely carry the PS5's current, and must be replaced with larger wire. Similarly, do not use ground wires which you may find in the wiring harness of your auto, since they will not safely carry the PS5's maximum current. Make your ground connections to a clean, bare-metal point of the chassis.

Many noise problems appear unsolvable and yet are very simply eliminated once the correct ground points are established. Systems which include equalizers, electronic crossovers or other signal processors often require special care with the ground paths of these units. Consult with your ADS dealer or installer for assistance with difficult problems.

Operation of the PS5 consists of correctly setting the **stereo 1-2/bridge 1-2** switch, adjusting the input level controls, and avoiding use conditions which result in distortion and poor sound quality.

**Setting the stereo 1-2/bridge 1-2 switch** When you are using the PS5 as a normal stereo, 2-channel amplifier, with either two or four speaker systems connected, set the **stereo 1-2/bridge 1-2** switch to the left-hand, **stereo 1-2** position. When you are using the PS5 as a high-power, single-channel bridged amplifier driving a single speaker system, set the switch to the right-hand, **bridge 1-2** position.

**Trying the system** Once you have securely made all connections to the PS5 (including trial ground wire connections), you may try the system. Initially set the PS5's input level controls to full clockwise rotation (fully on). Turn on the power to your radio/cassette player, and then, if the PS5 is separately switched, turn on the remote switch for the PS5. Leave the volume control turned down on the radio/cassette player for a moment to allow the PS5 to power up. You may hear a mild 'pip' through the speakers when the PS5 turns on. Select a program source on the radio/cassette player and slowly turn up the volume control. If no sound or distorted sound is heard, immediately turn off the system, check fuses and check all power and signal wiring for correct and secure connections. If the problem persists, consult with your dealer or service technician.

**Note:** Be sure that the stereo 1-2/bridge 1-2 switch is in the correct position before adjusting the PS5's input level controls. When you are using the PS5 in bridge mode, only the ch 2 input level control is functional.

**Input level adjustment** Before following the procedure for adjusting input levels, be sure your speakers are rated for the maximum power output capability of the PS5.

Turn the PS5's input level controls fully counterclockwise (fully down) and set the tone and balance controls of the radio/cassette player to mid-rotation. Set the radio/cassette player's volume control to full clockwise rotation (fully on).

Adjust the PS5's level controls clockwise until the sound is at a comfortable level for you and the channels are balanced. Now listen for clarity and freedom from distortion in the sound. If you hear distortion, slowly turn the radio/cassette player's volume control down until the

sound is clear. If you don't initially hear distortion, leave the volume control at full rotation. The resulting volume control setting is the maximum for undistorted output from the unit.

Now turn the PS5's input level controls up until the sound is distorted (limited by either the amplifier or the speakers). The sound level will likely be very loud, so when the levels are reached where distortion occurs, quickly turn down the radio/cassette player's volume control. The above procedure maximizes the system signal-to-noise ratio and its overall reliability. These settings of the input level controls should result in a satisfactory range of sound levels from very soft to full output.

**Note:** In some radio/cassette players, the output levels from the radio and from cassette tapes may be substantially different. Check both sources when setting the PS5's input level controls to be sure that maximum undistorted output is achieved from both sources.

The most common difficulties are noise and/or distortion, and thermal cycling. A blown PS5 fuse is an unusual occurrence.

Noise in the system may be normal, depending on its source. Tape "hiss" and radio "static" are common and sometimes unavoidable noises in the system; review **Input level adjustment**, above, to minimize these noises. Engine speed related noises, especially those heard at low volumes, may be solvable. See **System grounding**, above, for comments about ground problems.

Distortion, especially when it occurs at high volume, may simply be the result of overdriving the amplifier or the speakers or both. Overcoming the noise resulting from driving at highway speeds with the windows down, for example,

will tax the abilities of any automotive sound system. The obvious cure is to reduce the volume level of the system.

The PS5 is protected from excessive temperatures by a thermal cutoff which turns off the power converter when the heatsink temperature exceeds approximately 80° C. Normal operation of the PS5 resumes automatically when the heatsink cools down.

The PS5 may run excessively hot when:

- cooling air to the heatsink is blocked
- the ambient temperature of the air around the PS5 is very high
- more than one speaker system is used with the PS5 in **bridge** mode (the load is less than 4 Ohms)

tion of the **stereo 1-2/bridge 1-2** switch. A defective loudspeaker also may trigger this condition. Listen for distortion from the speakers at medium volume levels; if distortion is heard, try to determine which speaker is defective and replace it.

22 Check the setting of the **stereo 1-2/bridge 1-2** switch, and remove anything which blocks the flow of air over the PS5.

A blown PS5 fuse is unusual and may result from problems within the PS5. Use only a replacement fuse of the exact type and rating specified for the PS5. The power fuse plugs into a fuse block in the PS5's connector panel. If a replacement fuse blows immediately, take the PS5 to your ADS dealer or authorized service agency for assistance.

Occasionally, the protection circuits of the PS5 which detect power output beyond the safe capabilities of the amplifier may turn the PS5 off momentarily. When this occurs, reduce the volume level of the system and check the posi-

The PS5 requires little routine maintenance. Keep the chassis free from dust and dirt, and check the quality of the various connections every few months, with the power off.

Do not use solvents or liquid cleaners of any kind on the PS5's chassis. Dust and dirt can be removed with a dry cloth or soft brush.

The PS5 can be used effectively in applications which require equipment operating from 12V DC, such as marine, aircraft, mobile home and alternative energy source installations. The wide DC voltage operating range of the PS5 permits use where other amplifiers may not work.

Be sure that the DC power source can safely supply the large currents required by the PS5, and that the power wiring meets the requirements of the PS5.

**Specifications**

24 **Continuous average power output per channel, at 14.4 VDC power input, with no more than the specified total harmonic distortion:**

**Guaranteed performance**  
 Stereo mode, both channels driven, 20Hz to 20kHz:  
 30 Watts into 4 Ohms, THD = 0.05%  
 40 Watts into 2 Ohms, THD = 0.1%

Bridge mode, single channel, 20Hz to 20kHz:  
 80 Watts into 4 Ohms, THD = 0.1%

**Typical performance**

Stereo mode, both channels driven, 20Hz to 20kHz:  
 35 Watts into 4 Ohms, THD = 0.4%  
 45 Watts into 2 Ohms, THD = 0.4%

Bridge mode, single channel, 20Hz to 20kHz:  
 90 Watts into 4 Ohms, THD = 0.4%

Stereo mode, both channels driven, 1kHz, 1% THD:  
 40 Watts into 4 Ohms  
 50 Watts into 2 Ohms

Bridge mode, single channel, 1kHz, 0.5% THD:  
 100 Watts into 4 Ohms

**IHF dynamic headroom** 2.5 dB into 4 Ohms

**Damping factor**  
 > 100 into 4 Ohms  
 > 50 into 2 Ohms

**Frequency response**  
 +0, -0.5dB, 20Hz to 20kHz

**IHF signal to noise ratio, 1W into 4 Ohms**  
 93 dBA

**Input sensitivity/impedance, for rated output into 4 Ohms** 45mV/50k Ohms

**Input level control attenuation range** 28dB

**DC power supply voltage** 10 to 16V

**Remote power on/off current** 10mA

**DC power supply current:**  
 No signal 0.44 A  
 Maximum output 15 A

**Power fuse** Type ATO, 15 A

**26 Accessories supplied**

- 2 Mounting brackets and brackets
- 2 Spacers, to put between PS5 and brackets
- 4 M5 x 8mm Phillips-head machine screws, for mounting brackets to PS5
- 4 Phillips-head sheet metal screws, for mounting brackets to vehicle
- 1 Insulated shaft screwdriver for power connections and input level adjustments

**Dimensions** 200mm/7 7/8" w by 45mm/1 3/4" h by 130mm/5 1/8" d

**Weight** 2 kg/ 4.4 lbs

**Owner's record** Please complete this section and retain for your records.

PS5 serial number

Date of purchase

Dealers name

Date warranty registration mailed

We urge you to save your sales receipt for future reference; you may want to attach it to this manual. Completing and mailing your *Owner's Registration Card* enters your purchase into our files.

**ADS Power Plate System PSS and  
Power Plate System PQ10  
limited warranty**

Analog & Digital Systems, Inc. ("ADS") warrants to the first consumer purchaser of a new ADS Power Plate System PSS/PQ10, that the Power Plate System is free from defects in material and workmanship. ADS' sole obligation under this warranty shall be to provide, without charge, parts and labor necessary to remedy defects, if any, which appear within one year from the date of purchase.

This warranty is the sole and exclusive express warranty given with respect to the Power Plate System and all other express warranties are hereby excluded. Neither ADS nor the licensed ADS dealer who sells the Power Plate System is responsible for neglect, incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

The ADS warranty does not extend to any defect, malfunction or failure caused by misuse, abuse, accident, faulty hookup, defective associated equipment, or the use of the Power Plate System with equipment for which it was not intended. Please read your owners' manual carefully.

This warranty is valid only for a Power Plate System purchased in the U.S. and when the Power Plate System is returned to the licensed ADS dealer from whom it was purchased or directly to ADS at the address shown below, freight prepaid, together with proof of date of purchase. For the names and addresses of other licensed ADS dealers in your area who will provide warranty service, simply contact ADS.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**ADS, Analog & Digital Systems, Inc.**

One Progress Way  
Wilmington  
Massachusetts 01887  
617 729-1140