a/d/s/

Analog and Digital Systems, Inc.
One Progress Way
Wilmington, Massachusetts 01887

617.729.1140

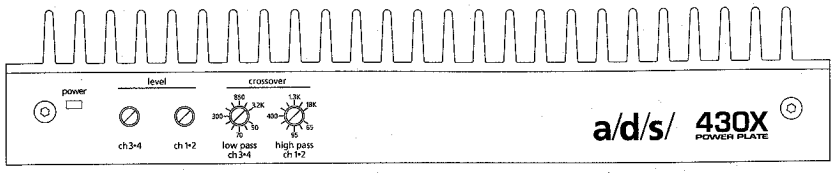
a/d/s/ 430X 630X

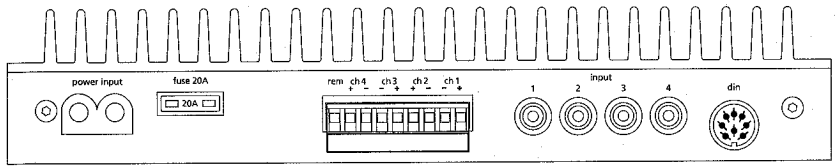
POWER PLATE

multi-channel
amplifier/crossover

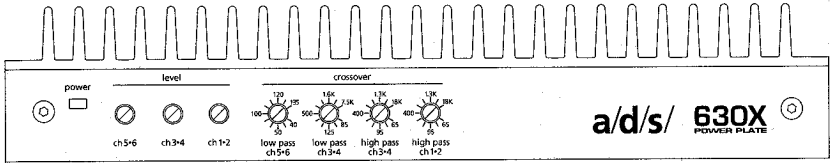
owner's manual

430X





630X



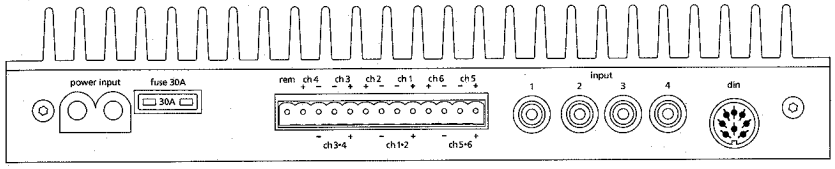


table of contents

introduction

Thank you for purchasing an a/d/s/ car stereo amplifier. This manual provides information on the connection and use of your a/d/s/ amplifier. Please read it thoroughly. Be sure to save this manual and the packing materials for the amplifier for possible future use.

about this manual

Because of the high power output capability of the 430X and 630X, and the wide choice of system configurations they allow, we strongly recommend that you have the amplifier professionally installed.

This manual contains information about the typical connection, use and maintenance of the 430X and 630X. This information is sufficient to guide a skilled technician in installation. Basic information about installation, such as the importance of wiring polarity or techniques for solving grounding problems, is not provided here. Consult your a/d/s/ dealer, or a qualified technician for more information.

associated equipment

The 430X and 630X will perform very well with many different types of signal sources and speakers. Your a/d/s/ dealer can help you select components to complement your amplifier. The broad frequency response, low distortion and wide dynamic range of the a/d/s/ automotive loudspeaker systems make them particularly well suited for use with the 430X and 630X. If other types of speakers are used be sure they are capable of handling the high power levels the amplifier can produce.

installation warnings and tips

Caution: Be careful not to cut or drill into gas tanks, fuel lines, brake or hydraulic lines, vacuum lines or electrical wiring when working on your vehicle.

Do not use the 430X / 630X unmounted. Failing to securely mount the amplifier could result in damage or injury, particularly in the event of an accident. Never mount the 430X / 630X where it might get wet. Mount the amplifier so the wire connections will not be pulled. Route wires where they will not be scraped, pinched or damaged.

The +12V power supply wire must be fused at the battery terminal. Use a 30 amp fuse for the 630X and a 20 amp fuse with the 430X. **Disconnect the +12V wire at the battery before making or breaking connections at the amplifier power terminals.**

If you need to replace the fuse plugged into the side of the amplifier use the specified 20 amp or 30 amp ATO type fuses. Using a higher current fuse may result in damage to the amplifier, which is not covered by the warranty.

Note: Make sure all the other equipment is turned off when making or breaking connections to the 430X / 630X power terminals, input jacks and speaker terminals. Turn on the system and slowly turn up the volume control only after double checking all wire connections.

Power for systems with a single amplifier can be supplied by any automotive electrical system. Systems with more than one amplifier may require a high capacity alternator or battery.

The 430X and 630X generate some heat in normal operation. Be sure the area around the amplifier cooling fins is unobstructed to allow adequate air circulation. To achieve the most efficient cooling mount the amplifier on a horizontal surface with the fins oriented upward, or on a vertical surface with the fins oriented vertically.

Make sure the configuration switches are set correctly for your installation.

Connecting a speaker load of less than 4 Ohms to bridged channel sets may cause the amplifier to overheat. Good ventilation or a cooling fan reduces the chance of the thermal protection system being activated. Unbridged channels should have an impedance load of no less than 2 ohms. Bridged channels should have an impedance load of no less than 4 ohms.

general wiring information

All the power and audio signal input and output connections are on the back side of the amplifier chassis. The power supply and speaker wires are attached to special plug-in terminal blocks.

The +12V and ground power supply wires should be at least 10 AWG stranded copper wire for the 430X and 8 AWG for the 630X. Lighter gauge wire can reduce the power the amplifier produces and lead to dangerous overheating conditions. The wire must have heat and chemical resistant insulation that is suitable for automotive use.

The remote wire can be relatively small; 18 AWG is adequate. If the 430X / 630X is used with an a/d/s/ signal processor, the remote power control is relayed to the amplifier through the a/d/s/ DIN connecting cable.

power supply wiring

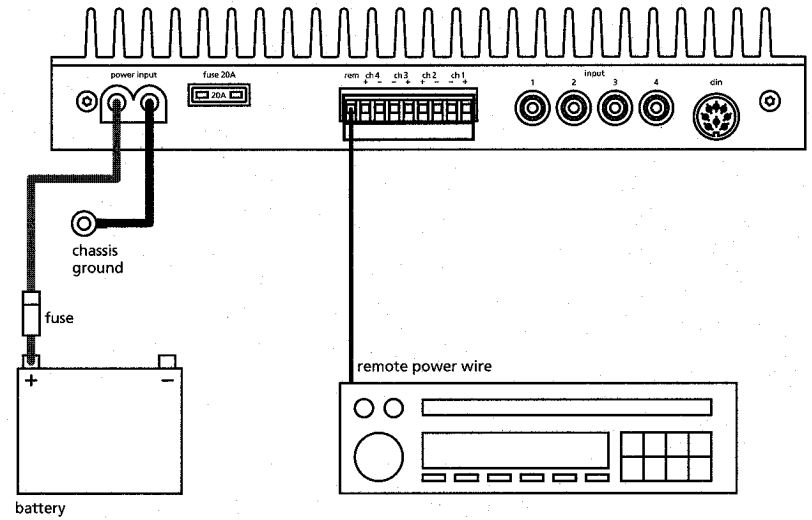
ground The power supply ground terminal is connected between the chassis ground of the vehicle and the terminal on the plug-in connector that is marked with a "–".

+12V The +12V power supply wire is connected between the positive terminal of the battery and the terminal on the plug-in connector that is marked with a "+". This power supply wire should also be fused at the battery terminal. See the "installation warnings and tips" section of this manual.

remote The remote turn on wire is connected between the terminal on the left end of the speaker wire plug-in connector and a switched +12V source. The +12V source can be provided by the "power antenna" wire from the signal source, or by any other power source that is turned on with the vehicle power supply. Note: If the amplifier receives input signals from an a/d/s/ signal processor via an a/d/s/ DIN cable, it is not necessary to use the remote terminal. The remote-on signal is supplied by the signal processor via the input DIN cable.

fuse A 30 amp fuse protects the 630X from problems with the power supply wiring and the electrical system. A 20 amp fuse provides the same protection for the 430X.

power indicator An LED (light emitting diode) power indicator is located on the front panel of the 430X / 630X. The LED is lit when the amplifier is on.



speaker wiring

The labels above the speaker output terminals show the proper connections for unbridged operation. The labels below the terminals identify the bridge mode connections. For example, when channel set 1•2 is bridged the positive terminal of channel 1 and the negative terminal of channel 2 are used. See the wiring diagrams.

Wire Use stranded two-conductor insulated wire to connect the speakers to the amplifier. Use 16 gauge or larger wire.

Preparing the wire Separate the first few inches of the wire conductors. Strip about 3/8" insulation from each conductor. Be careful not to cut into the wire. Twist the wire strands together to avoid fraying. Unscrew the terminal block clamping screw. Insert the wire bundle into the terminal block and tighten the clamping screw to lock the wire in place.

input connection

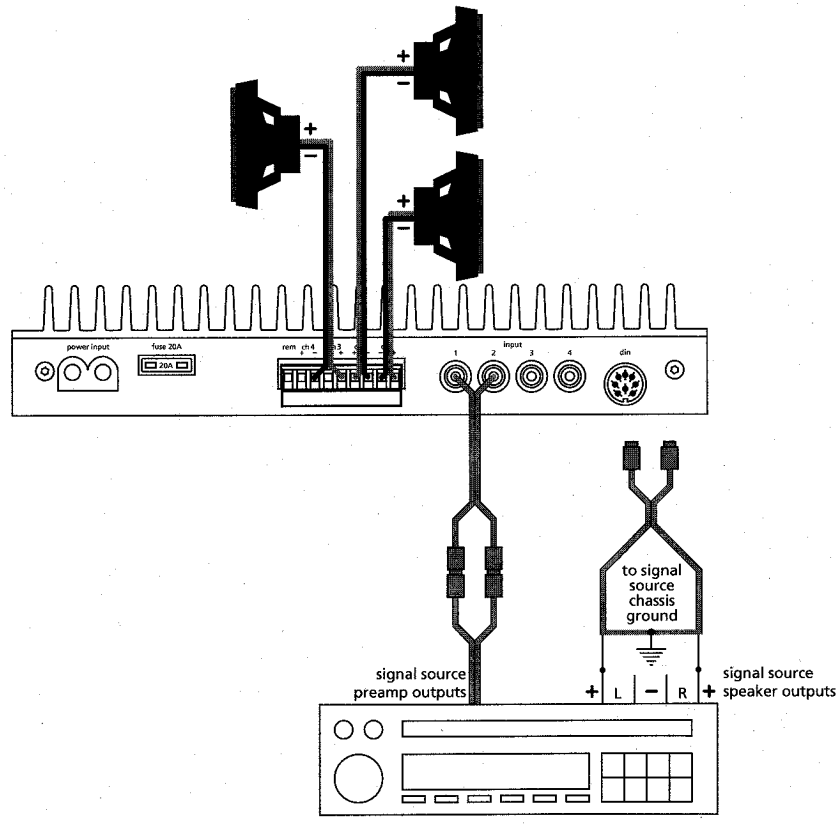
The 430X and 630X can accept either high level (speaker level) or low level (preamp level) input signals. Use a low level input signal if the signal source has preamp outputs. If the signal source lacks preamp outputs a high level signal from the speaker outputs will still provide good results. Be sure to connect the outputs of the signal source to the amplifier inputs correctly so the balance and fader controls work properly.

Low level input The 430X and 630X have both conventional RCA (phono plug) input connectors and an 8-pin DIN input jack. The DIN input allows all audio signal connections to be made with a single plug. When used in conjunction with an a/d/s/ signal processors the DIN input also eliminates the need to connect the remote terminal of the amplifier. See page 15 for a list of special DIN cables available from a/d/s/ retail dealers.

NOTE: Some original equipment radios have "floating" preamp level outputs; their audio signal output connectors are not grounded. The 430X and 630X have a unique ground isolation amplifier which prevents noise from ground loops. This equipment combination produces an incomplete audio input circuit. To complete the circuit connect a wire between the outer shield of the amplifier input connector and the chassis of the radio. This connection method is similar to the one described in the following section for high level input connections. Use this connection method only if normal connection procedures do not perform properly.

High level inputs If a high level input is used the speaker outputs of the signal source must be connected to a phono plug adapter cable so it can be connected to the amplifier. Attach the positive speaker output wire to the center conductor of the phono plug cable. The negative speaker output wire is not connected. It must be secured and insulated with electrical tape. The outer shield conductors of the phono plug adapter cables are grounded to the chassis of the signal source.

This illustration shows two speakers connected to the channels 1 and 2. A single speaker is connected to the bridged channel set 3•4. The conventional low level input connection is shown. Also shown is the alternative way of connecting high level outputs to an adapter cable that lets you connect the signal to the amplifier inputs.



system configurations

630X systems

5 or 6 channel mode - The 630X is shipped from the factory configured to drive front and rear satellite speakers, and one or two subwoofers. Channel set 5•6 is bridged and has the low pass crossover turned on and set for 85 Hz. The high pass crossovers for channel sets 1•2 and 3•4 are turned on and set for 150Hz. Connect a single subwoofer to the bridged terminals for channel set 5•6. If two subwoofers are used connect them to the individual speaker terminals for channels 5 and 6. Note: In most systems it is best to leave the 5•6 channel set bridged, even when two subwoofers are used. As long as the low pass crossover is below 100Hz there is no advantage to driving the subwoofers with stereophonic signals.

The 630X can be reconfigured to triamplify a three-way speaker system. Use the high pass crossover for channel set 1•2, the high pass and low pass crossovers for channel set 3•4, and the low pass crossovers for channel set 5•6. Leave channel set 5•6 bridged if the low pass crossover point is less than 100Hz. If the low pass crossover is above 150Hz channel set 5•6 should be operated in stereo. In between those frequencies, whether or not channel set 5•6 should be bridged or not depends on the system configuration. Experiment to determine what produces the best results.

The 630X crossover can be turned off so the amplifier has six full range channels. Channel set 5•6 will take input signals from either the summed inputs of the 1•2 and 3•4 channel sets, or directly from the DIN inputs. See the information about the Linking / Summing configuration switches on the following page.

3 channel mode - All three channel sets are bridged. You can drive a pair of satellite speakers and a subwoofer by using the high pass crossovers for channel sets 1•2 and 3•4, and the low pass crossovers for channel set 5•6, and. A less common application is to use two 630X's to triamplify three way speaker systems by using the high pass crossover for channel set 1•2, the high pass and low pass crossovers for channel set 3•4, and the low pass crossover for channel set 5•6.

430X systems

4 channel mode - The 430X is shipped from the factory configured to drive four full range speakers; the crossovers are bypassed. You can biamplify a pair of satellite speakers, or a pair of satellite speakers and a pair of subwoofers, by turning on the crossovers. Adjust the crossosver frequencies as required for the application. Note: When biamplifying a pair of speakers, or driving a satellite/subwoofer system, either a two or four channel input may be used. If a two channel input is used a Y-adapter cable is needed to provide input signals to both channel sets. Then the high pass channels are 1 and 2 and the low pass channels are 3 and 4. See the information in the Switch Functions section. If a four channel input is used the fader affects bass/treble balance.

3 channel mode - Channel set 3•4 is bridged. Turn the crossovers on and use this configuration to drive a pair of satellite speakers and a mono subwoofer. If you have a four channel source the fader affects the high pass / low pass balance of the system. If you don't want the fader to affect the system balance use a two channel input with a pair of Y-adapter cables on the amplifier inputs.

2 channel mode - Both channel sets 1•2 and 3•4 are bridged and receive signals from either associated input. Typically this configuration is used in multiple amplifier systems. For example, activate the high pass crossover for channel set 1•2 and the low pass crossover for channel set 3•4. and biamplify one channel of a system. (A Y-adapter cable is needed to provide input signals to both channel sets.) Or turn on the 3•4 channel set low pass crossover, connect the inputs to channel 3 and 4, and turn on the channel sharing switches. This produces two mono subwoofer channels.

configuration switches

There is a set of configuration switches on the bottom of the amplifiers under a removable cover. A description of the different types of switches, a list of their functions, and how they should be set is on the following pages. Be sure to pay attention to the column in the switch function tables that shows which switch(es) should be turned "off" when a given switch is turned "on".

Switch functions

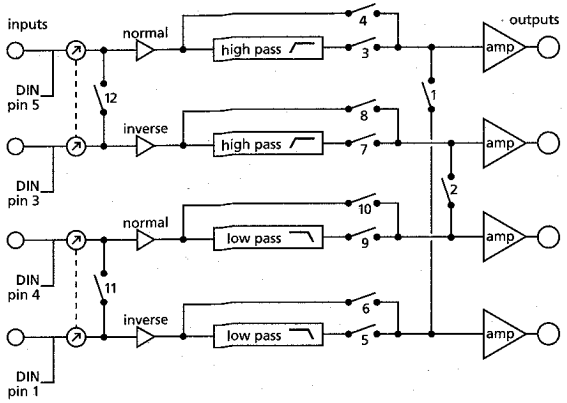
Signal sharing – When a two channel input is used the signals can be shared by the channel sets. The 430X and 630X have different signal sharing systems. In the 430X channels 1 and 4, and channels 2 and 3, are connected after the crossover circuits. This allows the two channel groups to be either high pass or low pass. For example, when amplifier channels 1 and 4 share an input signal, they receive a high pass signal when the channel 1 input and crossover is used, or a low pass signal when the channel 4 input and crossover is used. The 630X shares input signals between channels 1 and 3, and channels 2 and 4. This connection is before the crossovers.

Bridging – Each channel set can be bridged independently. Bridging connections are made directly after the input stage. When channels are bridged do not use the signal sharing feature. That would make the bridges channels produce a monophonic signal.

Crossovers – The configuration switches also determine which crossovers, if any, are used. Refer to the table below and on the following page.

Linking / Summing – (630X only) The summing switches of the 630X determine what channels 5 and 6 use for an input signal. When the switches are "on" channel 5 gets the summed inputs of channels 1 and 3, while channels 6 gets the summed inputs of channels 2 and 4. If the swicthes are "off" channels 5 and 6 take their input signals from the DIN input.

430X configuration switch settings



Function	Set "on"	Set "off"
Crossovers		
Channel 1 – bypass high pass crossover	4	3
Channel 1 – activate high pass crossover	3	4
Channel 2 – bypass high pass crossover	8	7
Channel 2 – activate high pass crossover	7	8
Channel 3 – bypass low pass crossover	10	9
Channel 3 – activate low pass crossover	9	10
Channel 4 – bypass low pass crossover	6	5
Channel 3 – activate low pass crossover	5	6
Bridging		
Channel 1 and 2 bridging	12	1, 2
Channel 3 and 4 bridging	11	1, 2
Signal sharing		
Channel 1 and 4 crossover output signal connection	1	11, 12
Channel 2 and 3 crossover output signal connection	2	11, 12

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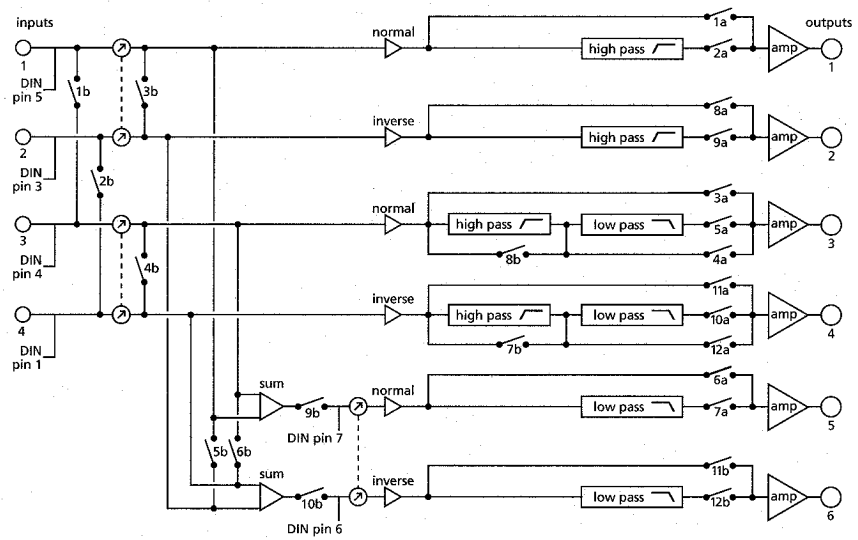
630X configuration switch settings



Function	Set "on"	Set "off"
Crossovers		
Channel 1 – bypass high pass crossover	1a	2a
Channel 1 – activate high pass crossover	2a	1a
Channel 2 – bypass high pass crossover	8a	9a
Channel 2 – activate high pass crossover	9a	8a
Channel 3 – bypass both crossovers	3a	4a, 5a, 8b
Channel 3 – activate high pass crossover only	4a	3a, 5a, 8b
Channel 3 – activate low pass crossover only	5a, 8b	3a, 4a
Channel 3 – activate high pass and low pass crossovers	5a	3a, 4a, 8b
Channel 4 – bypass both crossovers	11a	10a, 12a, 7b
Channel 4 – activate high pass crossover only	12a	10a, 11a, 7b
Channel 4 – activate low pass crossover only	10a, 7b	11a, 12a
Channel 4 – activate high pass and low pass crossovers	10a	11a, 12a, 7b
Channel 5 – bypass low pass crossover	6a	7a
Channel 5 – activate low pass crossover	7a	6a
Channel 6 – bypass low pass crossover	11b	12b
Channel 6 – activate low pass crossover	12b	11b
Bridging		
Channel 1 and 2 bridging	3b	1b, 2b
Channel 3 and 4 bridging	4b	1b, 2b
Channel 5 and 6 bridging	5b, 6b	—
Signal sharing		
Channel 1 and 3 input signal connection	1b	3b, 4b
Channel 2 and 4 input signal connection	2b	3b, 4b
Linking / Summing		
Link channel 1 and 3 inputs to channel 5	9b	—
Link channel 2 and 4 inputs to channel 6	10b	—

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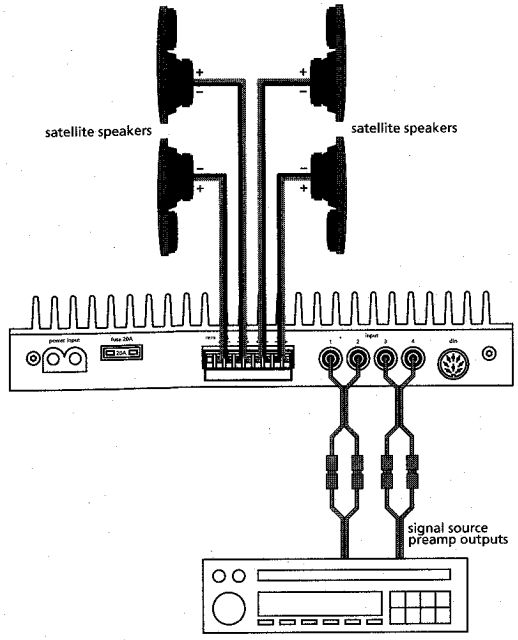
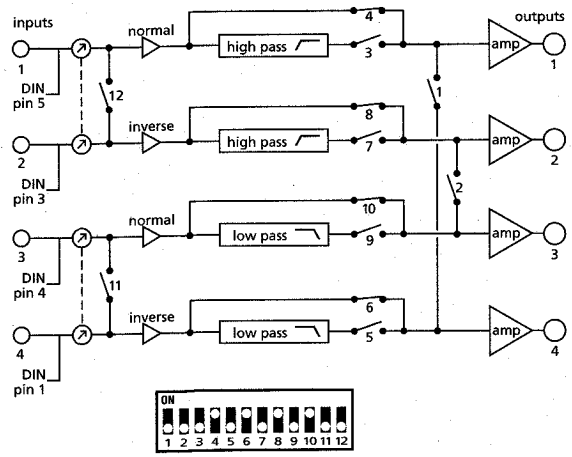
system diagrams

The diagrams below and on the following pages show typical systems that illustrate some of the system configurations possible with the 430X and 630X. Many more configurations are possible. Consult you a/d/s/ retail dealer for more information.

430X four channel system

— for four full range speakers (factory standard configuration)





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430X three channel system

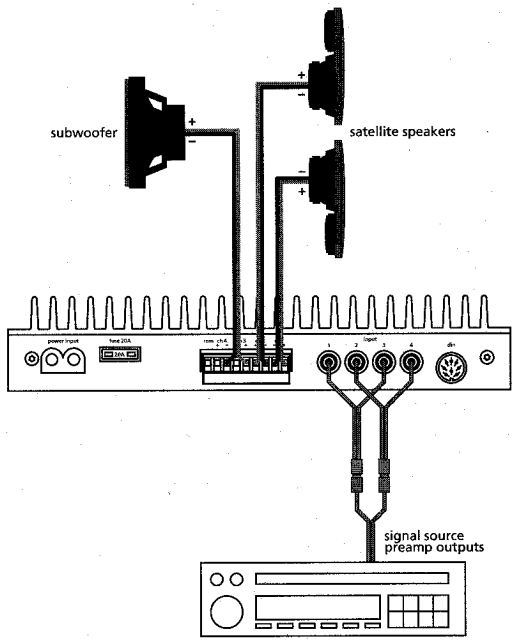
— for two satellites and a mono subwoofer

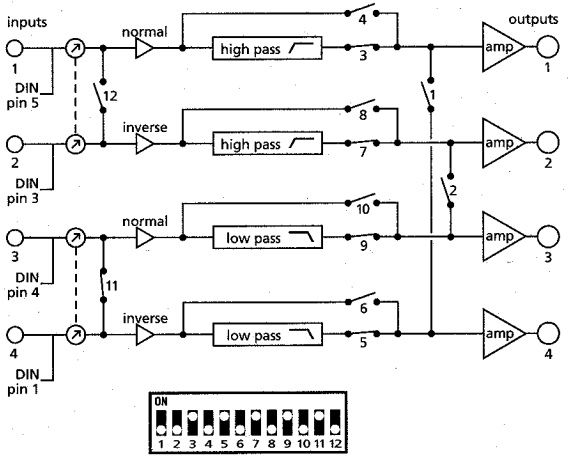
In this system a pair of Y-adapter cables are required to deliver the input signal to the two channel sets. Note the connections for the bridged amplifier channel set for the subwoofer.

Alternative Configurations

This type of system could also drive a pair of subwoofers. To do this move switch 11 to the off position to unbridge channel set 3•4. Connect the two subwoofers in the normal way.

If you have a signal source with four outputs the Y-adapter cable could be eliminated. The fader could then be used to control the subwoofer/satellite balance.





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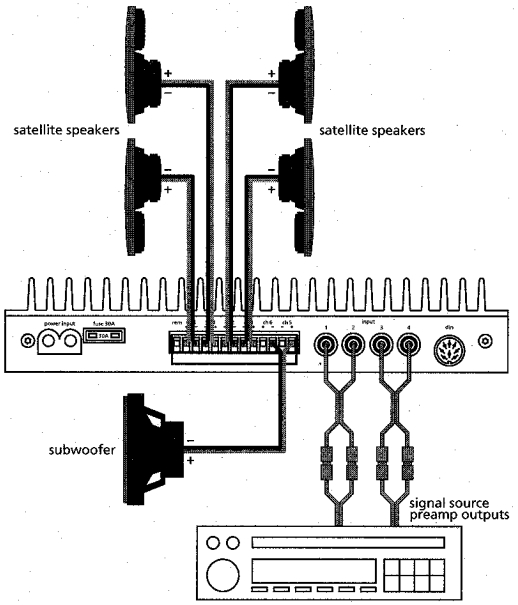
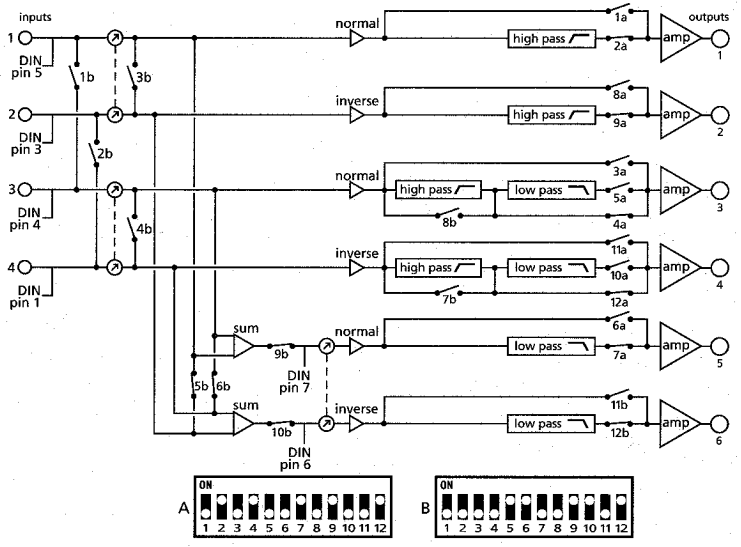
630X five/six channel system

— for four satellite speakers and one or two subwoofer(s)

If one subwoofer is used configure the system as shown below. If two subwoofers are used see the information on page 5 in the "5 or 6 channel mode" section.

If you have a signal source with only two outputs move switches 1b and 2b to the on position to tie the 1•2 channel set inputs to the 3•4 channel set inputs. The balance between the two channel sets is controlled by the amplifier level controls.





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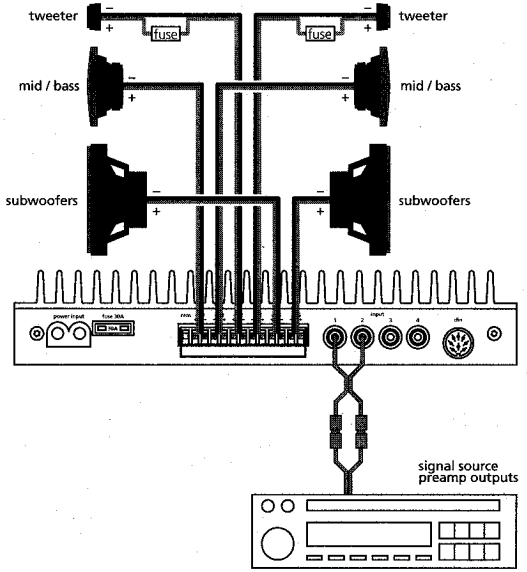
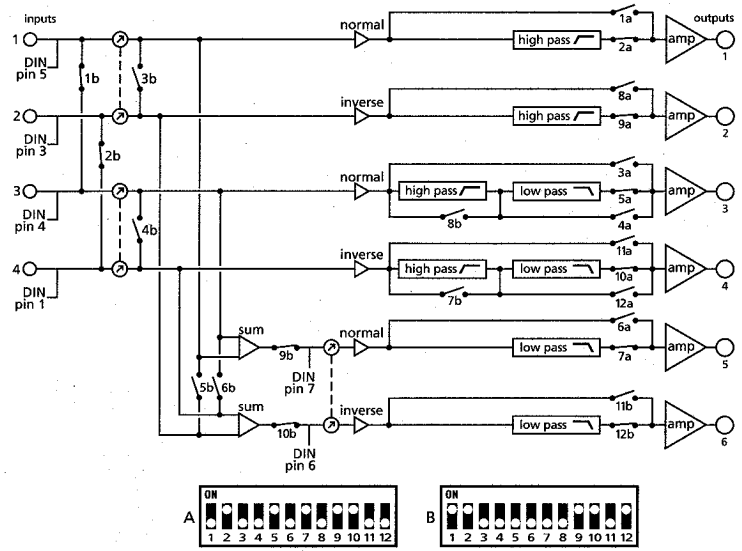
630X six channel system

— for triamplifying a speaker system

One or two subwoofers may be used. If two subwoofers are used configure the system as shown below. If one subwoofer is used move switches 5b and 6b to the "on" position to bridge channel set 5•6. Connect the subwoofer for bridged operation. In this type of system use a fairly low (120Hz or lower) midbass / subwoofer crossover frequency.

Note: In this type of a system the tweeter can be damaged if the crossover frequency or the levels are improperly set. A fuse installed in the tweeter wires as shown below can help protect the tweeter. For a/d/s/ tweeters use a 1.5 amp fast blow fuse. For other speakers contact the manufacturer for recommended fuse values.





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testing the system

Check all the wiring connections to be sure they are correct and secure. Turn the signal source volume control all the way down. Turn the system on. The remote turn on system of the amplifier must be activated. (See the information on page 3.) The LED power indicator of the front of the amplifier should be lit.

Slowly turn up the volume control of the signal source. If the system produces reasonable sound levels, and the sound is clean, proceed with the input level adjustment described in the following section. If no sound is heard, or if the sound is distorted, immediately turn off the system. Check the power and signal wiring for correct and secure connections. If the problem persists, consult your a/d/s/ dealer or service technician.

level control adjustment

The level controls on the front panel adjust the outputs of the various channel sets. When a set of channels is used in the stereo mode, the associated control effects two channels. When a set of channels is bridged, the associated control effects the bridged output channel.

Adjusting the level controls of the system is a two step process. First the maximum setting of the signal source is determined. Then, if necessary, the level controls of the 430X / 630X are adjusted to allow the maximum possible undistorted sound level. This procedure maximizes the system signal-to-noise ratio and reliability. Note: In some systems the output signals from the radio and from cassette tapes or compact discs may vary substantially. Check all sources and use the source which is loudest for a given volume setting.

Turn the 430X / 630X input level controls down all the way, to the full counter-clockwise position. Set the tone, balance and fader controls to their "flat", or mid-rotation, positions.

Head unit volume control maximum setting With highly dynamic music playing, slowly advance the volume control of the signal source. If you achieve the highest volume level you want, or if you hear any distortion, before the signal source volume control is turned up all the way, stop turning up the volume control. Do not turn up the 430X / 630X volume controls. Be very careful when operating the system. Never play the system at a volume level that produces audible distortion. Doing so can damage the system components.

Level control maximum settings If you can turn the volume control of the signal source up all the way without hearing distortion, and that produces adequate volume levels, you do not need to turn up the level controls of the 430X / 630X. If you can turn the volume control of the signal source up all the way without hearing distortion, but you want to achieve higher volume levels, turn up the level controls on the amplifier. Start turning up the level controls, one at a time, until you just begin to hear distortion. Note the position of the control and turn it down. Repeat this process until you have determined the maximum setting for all the controls. Then return all the controls to the setting you have determined to be the maximum.

If further adjustments are needed to achieve proper balance in the system, turn down the controls that are too loud. Do not turn up the controls to balance the system.

crossover adjustments

The crossover controls on the front panel set the crossover frequency of the various channel sets. The crossover controls described below must be set, along with the configuration switches and the level controls described in the preceding sections, to get proper performance from the system. The crossover functions of the 430X and 630X allow a variety of system configurations. Where the crossover frequency controls should be set depends on the configurations of the system, the speakers used, the installation location of the speakers, and the acoustical properties of the vehicle acoustics.

Ideally the crossover point should be set using an acoustical analyzer. If one is not available the crossovers in a two-way system can be set using careful listening tests. Crossovers for three-way systems should always be set with the aid of an acoustic analyzer. Note: After the crossover controls have been set, the sound balance of the system may have changed enough that it will be necessary to readjust the level controls of the amplifier. If necessary, repeat the level control setting procedure described in the preceding section.

Channel set 1•2 of the 430X has a high pass crossover that can be set from 65 Hz to 18K Hz. Channel set 3•4 has a low pass crossover that can be set from 50 Hz to 3200 Hz. This combination of crossover can be used to biamplify a subwoofer / satellite system or a woofer / tweeter system.

Channel set 1•2 of the 630X has a high pass crossover that can be set from 65 Hz to 18K Hz. Channel set 3•4 has both high pass and low pass crossover sections. The high pass section can be set that can be set from 65 Hz to 18K Hz. The low pass section can be set from 85 Hz to 7500 Hz. Channel set 5•6 has a low pass crossover that can be set from 40 Hz to 135 Hz. This combination of crossovers can be used to biamplify a system with four satellites and a subwoofer, or to triamplify a three-way speaker system.

Two way system crossover adjustment Set the crossover controls to their approximate positions. In a satellite / subwoofer system set the high pass crossover control slightly above the low frequency limit of the satellite speakers. (See the specifications for the satellite speakers.) Set the subwoofer low pass control slightly below the frequency setting of the high pass crossover control. In a woofer / tweeter two-way speaker system set the high pass control at or slightly above the recommended tweeter crossover point. Set the low pass control at or slightly below the frequency setting of the high pass crossover.

Play music that has solid, but not overpowering, bass information combined with a vocal component. Music with a male voice works well for subwoofer / satellite systems; female voice is better for woofer / tweeter systems. While playing the system at moderately high volume levels listen for good bass definition and vocal reproduction that sounds natural and well balanced. If the transition from one speaker to the other is not smooth try adjusting the low pass crossover. It may also be necessary to adjust the level controls of the system. (Do not set the high pass crossover to a lower frequency or turn up the level control for the high pass channels. Doing that increases the work the tweeter or satellite speaker has to do and reduces the power capacity of the system.) Repeat this process until the system sounds natural and well balanced.

maintenance

The 430X and 630X require little routine maintenance. Every few months, with the system turned off, check the power supply and audio connections to make sure they are secure.

Keep the chassis free of dust and dirt. Dust and dirt can be removed with a soft brush or vacuum cleaner. Do not use solvents or liquid cleaners of any kind on the amplifier's chassis.

in case of difficulty

The most common difficulties are noise, distorted sound, or thermal cycling. Fuses will blow only under unusual circumstance, or when there is a problem in the power supply wiring.

If you have problems that are not corrected by following the steps described below, call your local authorized a/d/s/ dealer.

System noise and distortion

The background noise level of the system will vary widely. Differences in equipment and installation practices, particularly power supply wiring, will result in higher or lower noise levels.

Certain types of noise, in modest amounts, is normal. Tape "hiss" is typical when playing tapes at high levels. Varying amounts of "static" is also normal with AM and FM radio reception. Such noise is produced by the signal source, not the 430X / 630X. Setting the system level controls as described in the preceding section will minimize these noises.

Improper power supply wiring, particularly inadequate grounding, is the source of most noise problems. One common noise is "alternator whine", a buzzing or whirring sound which changes with the engine speed. This type of noise often has a constant volume level. Such power supply related noise can typically be eliminated with better installation practices. Consult a professional mobile installation specialist for advice.

Distortion, especially when it occurs at high volume, is typically the result of over driving the amplifier, or the speakers, or both. For example, overcoming the noise resulting from driving at highway speeds with the windows down will tax the abilities of any automotive sound system. In such instances the only remedy is to reduce the volume level of the system before damage occurs.

A defective, or improperly installed, loudspeaker also can cause distortion. Fuzzy or raspy sound, especially at loud levels, is a sign of loudspeaker failure. Listen carefully to each driver in the speaker system to determine which one is producing distortion and replace it, or correct the installation problem.

Thermal cycling

The 430X and 630X are protected from overheating by a thermal protection circuit which turns the amplifier off when it gets too hot. Normal operation of the amplifier resumes automatically when the unit cools down.

The 430X / 630X may run excessively hot when:

- Air cannot circulate around the heatsink.
- The ambient temperature of the air around the amplifier is very high.
- The impedance load of the speaker(s) connected to any given channel is too low.

Unbridged channels should have an impedance load of at least 2 ohms. Bridged channel should have an impedance load of at least 4 ohms.

Short circuit protection

When one of the speaker outputs of the 430X / 630X is short circuited the amplifier shuts itself off. When the problem is remedied the amplifier resumes normal operation.

Power fuse

Fuses will blow only under unusual circumstance or when there is a problem with the power supply wiring. Before replacing a blown fuse, inspect all the power supply wires to be sure they are properly connected, and that they are not loose or damaged. Replace blown fuses only with the specified 20 or 30 amp ATO type. If a replacement fuse blows, have the system inspected by your a/d/s/ dealer or a qualified service agency.

DIN input jack connections

630X

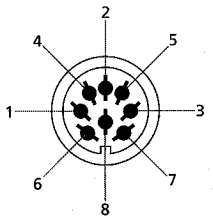
pin 1	ch 4 input
pin 2	Audio signal ground
pin 3	ch 2 input
pin 4	ch 3 input
pin 5	ch 1 input
pin 6	ch 6 input
pin 7	ch 5 input
pin 8	remote power control

430X

pin 1	ch 4 input
pin 2	Audio signal ground
pin 3	ch 2 input
pin 4	ch 3 input
pin 5	ch 1 input
pin 6	not connected
pin 7	not connected
pin 8	remote power control

DIN pin numbers

Viewed from the front of the jack.



optional accessories

AC201	Cable adapter, 8 pin DIN jack (female) to 6 phono plugs (male)
AC202	Chassis adapter, 8 pin DIN plug (male) to 6 phono jacks (female)
AC203	1 foot cable, 8 pin DIN plug (male) each end
AC204	6 foot cable, 8 pin DIN plug (male) each end
AC205	15 foot cable, 8 pin DIN plug (male) each end
AC206	Break-out-box, 1 DIN jack in - 2 DIN jack out, for pin reassignments
AC207	Chassis adapter, 8 pin DIN plug (male) to 6 phono plugs (male)

specifications

630X

Power output (watts)*:	6 channel 6 x 25
	5 channel 1 x 50 + 4 x 25
	3 channel 3 x 50
Midband power, 0.1% THD, 2 ohm load	6 x 44
Power bandwidth	20Hz to 32 kHz, -0.5dB
Signal to noise ratio	100 dB
Input sensitivity	100 mV
Input impedance	10k Ohms
Crossover high pass	65 Hz - 18kHz, 12 db / octave
Crossover low pass	85 - 7500 Hz, 12 db / octave (Ch. 3•4)
	40 - 135 Hz, 12 db / octave (Ch. 5•6)
Input DC power supply current	No signal - 1.5A
	Maximum - 30A
Power fuse	Type ATO, 30 amp
Dimensions	267mm W x 268mm L x 52mm H
	10½" W x 11" L x 2 1/16" H

430X

Power output (watts)*:	4 Ohm, 4 channel 4 x 25
	4 Ohm, 3 channel 1 x 50 + 2 x 25
	4 Ohm, 2 channel 2 x 50
Midband power, 0.1% THD, 2 ohm load	4 x 44
Power bandwidth	20Hz to 32 kHz, - .5dB
Signal to noise ratio	100 dB
Input sensitivity	100 mV
Input impedance	10k Ohms
Crossover high pass	65 Hz - 18KHz, 12 db / octave
Crossover low pass	50 - 3200 Hz, 12 db / octave
Input DC power supply current	No signal - 1A
	Maximum - 20A
Power fuse	Type ATO, 20 amp
Dimensions	267mm W x 193mm L x 52mm H
	10½" W x 7¼" L x 2 1/16" H

*all channels, continuous FTC rated, 4 Ohm, 20Hz to 20kHz, < 0.05% THD, power input voltage at 12.6 VDC or higher.

a/d/s/

Warranty Information

There are two things you **must** do to ensure trouble free service in the event you need warranty repairs.

1 - Keep your original sales receipt in a safe place. A copy of the receipt will be **required** to obtain warranty service.

2 - Be sure your retail dealer has written the **date**, the **model number**, and the **serial number** of the Product on the receipt.

To give yourself an extra measure of protection, make a separate record of the information about your purchase and keep it in a safe place. In the event you misplace the sales receipt, your dealer may be able to give you a copy.

Take a moment now to read the terms of your warranty. Check to be sure your sales receipt is dated and has the Product model number and serial number on it. Then put it away in a safe place.

When shipping a Product in for service:

- Enclose a copy of your original sales receipt that has the date, the Product model number and serial number (if applicable) written on it.
- Always ship Products in the complete original packing material.
- Avoid shipping Products via the postal service. If you must use the Postal service, be sure to register and insure the package.

a/d/s/ One Year Limited Warranty

Analog and Digital Systems, Inc. (a/d/s/) warrants to the original consumer purchaser of the a/d/s/ Products described in this manual, that the Product will be free from defects in materials and workmanship for a period of one (1) year after the date of purchase. a/d/s/' sole obligation under this warranty shall be to provide, without charge, parts and labor necessary to remedy the defects, if any, that appear during that one year period.

This warranty is the sole and exclusive express warranty given with respect to the Product. All other express warranties are hereby excluded. Neither a/d/s/ nor the authorized dealer who sells the Product is responsible for indirect, incidental, or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

IMPORTANT – Keep your original sales receipt. Be sure the retail dealer has written on it the date, model number, and serial number (if applicable) of the Product. This information is required for warranty service.

This warranty is limited to:

- Products purchased from authorized a/d/s/ retail dealers in the United States. a/d/s/ will supply a list of authorized dealers on request.

In order to obtain warranty service you must:

- Return the Product, freight prepaid, to the a/d/s/ dealer from which it was purchased, an authorized a/d/s/ independent service agency, or to a/d/s/. If necessary you may call a/d/s/ Customer Service Department for the names and addresses of authorized independent service agencies in your area.
- Provide proof of purchase in the form of a copy of your original sales receipt. The date, model number, and serial number (if applicable) of the Product **must** be written on the sales receipt.

This warranty does not cover:

- Damage that is the result of misuse, abuse, accident (including but not limited to damage by water), faulty hookup, defective or maladjusted associated equipment, or the use of the Product with equipment for which it was not intended.
- Cosmetic defects that appear more than thirty (30) days after the date of purchase. Cosmetic damage caused by improper handling is also excluded.
- Products that are used for commercial purposes.
- The cost of removing or reinstalling the Product.
- Damage that occurs while the Product is being shipped to whoever will service it. See the information above regarding shipping procedures.

This warranty is void if:

- The Product identification or serial number label is removed or defaced in any way.
- The Product is serviced or repaired by any one other than a/d/s/ or an authorized a/d/s/ dealer or service agency.