

INSTALLATION MANUAL



AT-6P (PROFESSIONAL)

SIX SPEAKER SELECTOR WITH AUTOMATIC IMPEDANCE MATCHING PROTECTION

Your AT-6P Speaker Selector is designed to operate with up to 6 pairs of loudspeakers of 4, 8, and 16 Ohm impedance in any combination, and two (2) power amplifiers each of which is dedicated to drive 3 speaker pairs. Speaker pairs 1, 2 & 3 are driven by amplifier A, and pairs 4, 5 & 6 by amplifier B. This unique arrangement permits much more efficient operation because substantially less resistance needs to be inserted in series with the speakers to maintain a safe amplifier load of 4 Ohms or higher. Thus there is less power loss, permitting higher power output with cooler amplifier operation.

While primarily intended for use with 8 and 16 Ohm speakers, a 4 Ohm switch is provided for each set of 3 speaker pairs to insert a small amount of extra resistance in the protection circuit when used with 4 Ohm units. Proper protection with 8 and 16 Ohm speakers is fully automatic.

The amplifier impedance load protection circuit uses a progressive system, inserting no more resistance in series with the speakers than is needed to insure that the load never falls below 4 Ohms, regardless of how many speakers are switched "ON" at one time. There will be no resistance inserted and no power loss when any one or two speaker pairs are turned "ON" in each bank of 3 (1, 2 & 3, or 4, 5 & 6) unless the "4 Ohm" switch is in.

No more loss is inserted than is necessary to maintain the load appearing on the amplifier at 4 Ohms or higher, assuring safe operation no matter how many speakers are in operation at any one time.

Each 4 Ohm switch must be used when more than one pair of speakers are in operation at the same time in it's associated bank of 3 (1, 2 & 3, or 4, 5 & 6), and one of them is 4 Ohms. If using only one 4 Ohm pair with no other speakers switched "ON", the 4 Ohm switch can be left "OUT" to gain maximum power output to that speaker pair.

Other AT-6P features include power handling capability of up to 90 Watts RMS continuous (180 Watts audio) at 8 Ohms in any switching mode, and completely separate circuits for the Left and Right channels, thus assuring safe operation with all types of amplifiers, including those with "bridging" outputs. Maximum power input is somewhat less when the 4 Ohm protection is switched "IN".

INSTALLATION:

Connections to amplifiers and speakers are illustrated in the back of these instructions. Remember that the LEFT and RIGHT circuits are separate, so connections must be made correctly or the system will not operate properly.

Since 2 amplifiers are used, and each is dedicated to a group of 3 speaker pairs, some advantage can be gained by considering how the speakers are to be used. Some locations, such as bedrooms, bathrooms etc., will most likely require lower listening levels than others. If there are 3 such locations, they could be assigned to group 1, 2 & 3 (AMP A) or 4, 5 & 6, (AMP B) and connected to a lower power amplifier. It is also possible to feed different musical material to each group, so background music could be sent to 3 locations, and the prime listening material to the other 3.

Output connections can be made directly between the AT-6P speaker output terminals and the loudspeakers, or through an in-wall speaker volume control (such as the AUDIOPLEX TECHNOLOGY(tm) 35W-2 series) in rooms where local control is required.

Connect each of the two amplifiers to the "A" and "B" terminals as shown. Make sure the + and -, and L and R channel connections are correct to avoid unsatisfactory operation or dead channels.

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The same precautions should be used when connecting the speakers, crossed channels, polarity, or grounds will result in improper operation.

Rubber feet provide a non-marring, stable mount for the AT-6P switcher. They are high enough to help promote air circulation under the unit, keeping it cool. A good precaution is to install in a manner that allows free air circulation around the unit. Avoid placing the AT-6P on any surface that is easily damaged by heat, the switchbox can become quite warm if operating with all speakers "ON" at high power.

OPERATION:

The AT-6P front panel buttons all operate in the same manner, push to turn ON, push again to turn OFF. The switch is "ON" when pushed in closest to the AT-6P front panel.

To select speaker pairs, push the buttons in for the desired choices. If all speakers are 8 and/or 16 Ohms, proper loading for the amplifier is automatic no matter what combination is selected. If some of the speaker pairs in each group of 3 (1, 2 & 3, or 4, 5 & 6) are rated at 4 Ohms, the associated 4 Ohm switch should be pushed in when more than one pair of speakers is operating simultaneously in that bank. The automatic impedance matching circuits will then provide proper protection at all times regardless of the number of speaker systems in operation.

WARRANTY:

Your AUDIOPLEX TECHNOLOGY® AT-6P Speaker Selector Switch is covered by a LIFETIME warranty against any defects in workmanship and materials. Any defects will be remedied without charge for labor or parts.

Damage incurred by shipping or accident is not considered to be a defect, and not covered by this warranty. AUDIOPLEX TECHNOLOGY,® is not responsible for defective operation caused by abuse or by modification or service by any unauthorized person or agency.

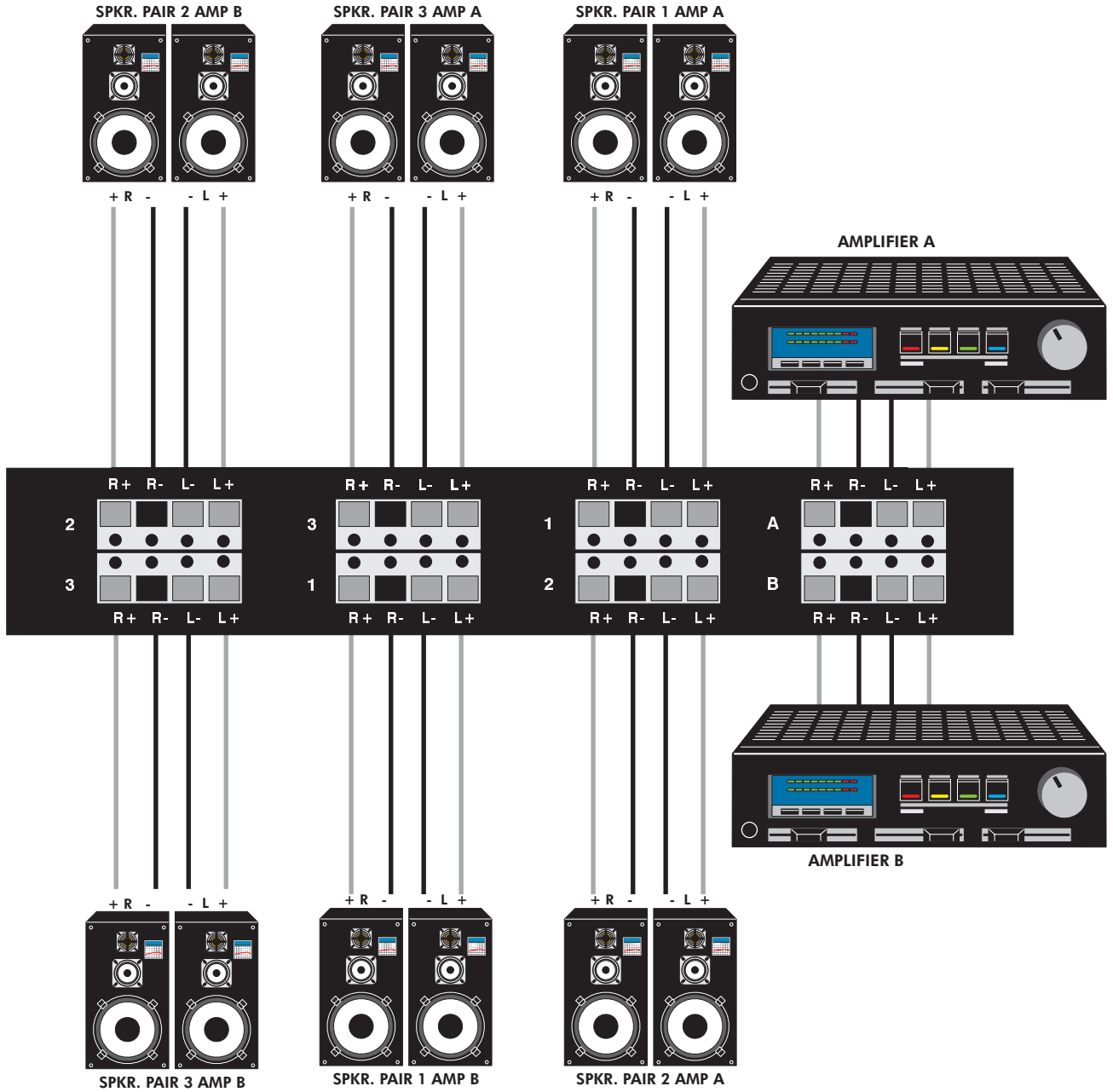
The unit must be properly installed and operated according to instructions for the warranty to apply. Any necessary servicing must be done by AUDIOPLEX TECHNOLOGY.® The product must be returned expenses prepaid, with written authorization from the company. The product must be shipped with the proof of purchase and in the original carton and packing material to avoid damage.

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

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WIRING DIAGRAM



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