

NEW PRODUCT



Amplification & Recording (Cambridge) Limited

Denny End Industrial Centre, Waterbeach, Cambridge CB5 9PB. Tel: (0223) 861550

ELECTRONICS FOR ACTIVE SYSTEMS

In a conventional stereo system one power amplifier is used to drive one channel. Each loudspeaker contains a passive crossover network which splits up the input signal into its bass and treble components; these are then fed to the woofer and tweeter respectively. Unfortunately the drive units invariably interact with the crossover network and each other and many compromises are necessary to achieve a flat response from the whole loudspeaker. In particular the degree of damping or control that the amplifier can effect on each loudspeaker may vary wildly with frequency, with a consequent deterioration in sound quality.

In an active system the signal is split up at low level by sophisticated electronics contained within the active crossover network. Each loudspeaker drive unit is then fed by its own amplifier channel, so that optimum damping is possible and interactions between drive units are eliminated. The resultant sound has much greater clarity and rendition of detail.

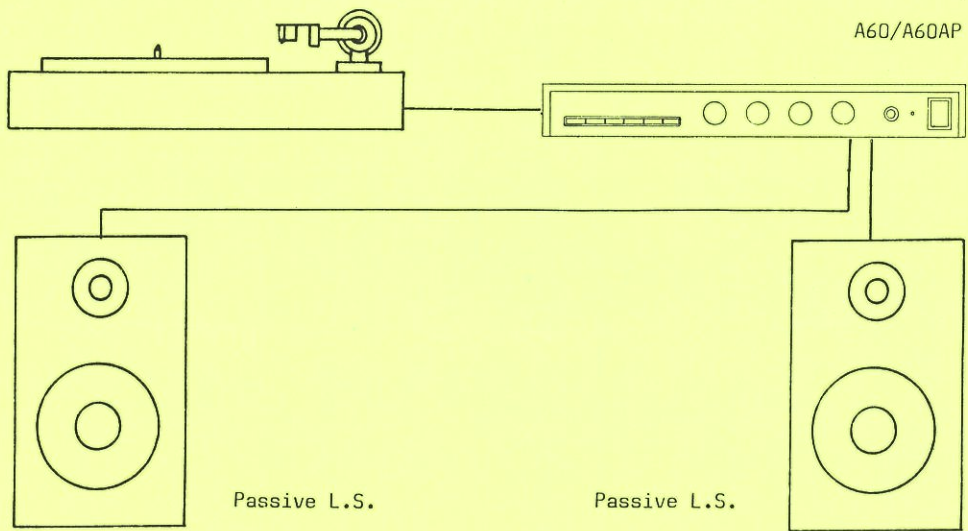
So that one company's electronics may readily be matched with another's loudspeakers a considerable degree of standardisation is necessary. ALSO, the Active Loudspeaker Standards Organisation, was formed to devise and promote suitable standards and A & R equipment conforms entirely with their specifications. This ensures complete compatibility and a high degree of consumer confidence.

ACTIVE SYSTEMS USING A & R EQUIPMENT

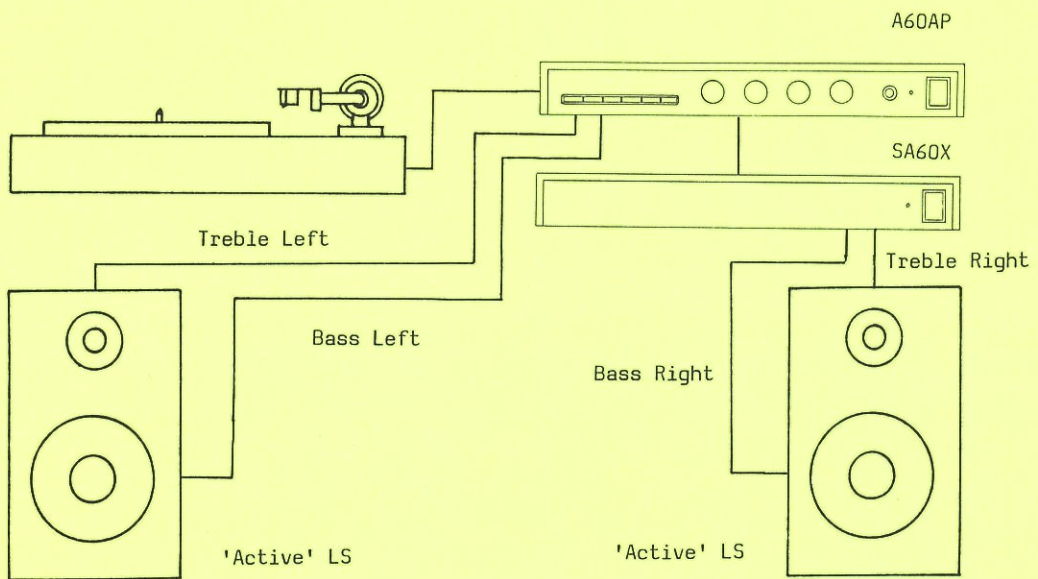
Both the A60 family and the new '200 Series' equipment are suitable for driving active loudspeakers. All A & R equipment is 'upgradable', so that a purchaser may start with A & R's conventional electronics driving passive loudspeakers; he may then add the extra amplifiers and crossovers needed for active loudspeakers at a later date, without rendering any of his existing electronics redundant.

Some typical disc playing systems are shown overleaf; obviously a tuner and tape recorder may be added, if required.

Conventional Stereo



Active System



Active System Using Separate Preamplifier

