

AudioMaster21

Thank you for your purchase of AudioMaster21 LS5/9 Loudspeaker Systems

The LS5/9 design was created by the Engineering Department of the BBC in 1983 . The design brief was to develop a compact , broadcast quality monitor loudspeaker. The loudspeaker had to be capable of accurately reproducing the human voice, and classical music.

However , to suit the BBC's need of minimum downtime , the speaker had to be manufactured to a very tight specification, so that in the event of field failure , the entire speaker could be replaced by another , without affecting the perceived tonal balance, an obvious prerequisite for monitoring purposes.

4 decades later , these loudspeakers are a superb example of globally enjoyed HiFi, in a historic tradition of innovation and timelessness , which we hope will give much enjoyment.

Please read through this manual. It contains much useful information to enable you to get your speakers installed correctly.

You will also find helpful advice on connecting-up, matching equipment, room placement, service and maintenance.

Provided the recommendations are followed your LS5/9's will give you many years of pleasure.

If advice or service is required please contact the dealer from whom you purchased the product, quoting the serial number and date of purchase.

Audiomaster 21 – Audio Master for the 21st Century.

The original Audiomaster products were introduced by W & N Electronics Ltd., in the mid to late 1950s. Aimed at the higher end of the new burgeoning high fidelity market, the W & N '520' mono amplifier utilised EL34 power pentode valves, and 'Partridge Transformers' for a much superior performance. Several highly flexible (mono) control units, boasting superb build and sound were launched to match the 'W & N Audiomaster 520'. The arrival of stereophonic sound in 1958, saw the launch of the 'Brecon' integrated stereo amplifier (8 + 8 watts, ECL82 output valves) to be followed by the 'Colwyn' pre & power combination (15 + 15 watts, EL84 output valves) and the 'Conway' top of the range stereo pre amplifier designed to run with 2x '520' power amplifiers.

The Sixties saw the introduction of the Audiomaster compact speaker systems : Sonata , Samba and Solent. These 3 models were ideally complementary to the "Abbey Road Sound".

On leaving the BBC in 1973, the now iconic speaker designer Robin Marshall, having worked on the equally iconic BBC LS3/5a monitor loudspeaker, eventually joins forces with John Read of K. J. Leisure-sounds, purposely to manufacture 'high quality, BBC sound, British style' loudspeaker systems.

Audiomaster was re-launched in 1975 with two models; the iconic LS3/5a and a 50% larger model called the 'Image 2'. Robin Marshall's design experience also went in to the exquisite BBC sound-style 'MLS 1', 'MLS 2' and 'MLS 4' range of models, introduced in the late 70s, and with fidelity rivalling that of similar BBC style designs.

The original Audiomaster LS3/5a was assembled on a small production line, with one-by-one hand assembly, with each individual speaker being tweaked and tuned precisely to the BBC specifications. This has ensured a very high demand for these classic models on the second-hand market place. After almost 40 years of a break, the Audiomaster name resurfaces in the twenty first century as "AudioMaster21".

Unpacking

Always unpack speakers with care so as not to damage the finish. It is advisable to open the packa-

ging at one end, invert the carton with the flaps folded back so the speakers are sitting on the floor. Then remove the packaging from the speakers. Retain all the packaging materials in case you need to transport the speakers at a later date.

Amplifier Interface

It is preferable to carefully use a high quality amplifier of 20-200 watts rated output, avoiding clipping.

The output of most recent amplifiers is quoted into a nominal 8 ohm loudspeaker load. A few (e.g. older Valve [Tube] Amplifiers) may have selectable output positions for use with either 4, 8 or 16 ohms loudspeakers. In this case select the 8ohms output.

Because the LS5/9's have medium sensitivity and a nominal 8 ohms impedance, if not using a Valve [Tube] based amplifier rated at 20 watts or more into 8 ohms, we recommend using a solid state amplifier with at least 50 watts output into 8 ohms. This way it is unlikely that the full power setting will be required and this should therefore avoid such clipping damage.

Installation

The LS5/9's were designed for medium rooms , 20 m² to 40 m² .

Position your speakers approximately where you want them and select cable runs of an appropriate quality, length and terminations. Designed specifically for studio broadcasting, the LS5/9's can be positioned close to a boundary wall, however do not position tightly into the corners of a room , "boomy" bass may result.

Ideally, placing them on mass loaded (60-80 cm high) stands in free space (away from walls) can offer an increase in perceived space and depth of playback material.

They should be "toed-in" towards the listening position according to personal preference , the 2 axis's can cross at the listener or 50-100 cm in front of him.

Furniture and wall coverings also make a considerable difference. We recommend you experiment until the best results in your room are obtained.

Note: the connections on the back of the speaker are single wire with 5 way protected binding posts. The designed frequency response is achieved with the grilles in place. Removal of the grilles will improve transparency, high frequency and mid frequency performance.

Switch off the amplifier. Identify the left speaker of the pair as the speaker on the left when viewed from the listening position.

Connect the black terminal on the amplifier left channel to the black terminal on the left loudspeaker. Then connect the red terminal on the amplifier left to the red terminal on the left loudspeaker. Repeat these connections for the right-hand channel. Check the integrity of the connections and that there are no shorted wires. Turn down the volume and switch on the amplifier. Select a known source and turn up the volume cautiously.

New speakers require a "break in" period. This enables the drive units to settle into their normal working routine and electrical components in the crossover to "bed in". A minimum of 72 hours playing will see the speakers "broken in" additional playing will continue to improve the overall sound quality. Connecting cables can have an important effect on the final sound quality. Similar lengths of good quality speaker cable should be used. Your dealer can best advise you of suitable cables for your installation.

Longer cable runs will generally require heavier gauge cables.

All system connections should be clean and tight. Periodically cleaning of all signal path connections in your system is recommended. Simply breaking and re-making each connection ensuring a positive contact is all that is needed.

Caring for your loudspeakers

The real wood veneer used on the LS5/9's can be maintained by regular dusting and gentle cleaning with furniture polish and a micro fiber cloth. The grille cloth is best kept clean with a soft brush or light vacuum. Do not use undue pressure as you may damage the drive units beneath the grille. Try not to

position your speakers in direct sunlight as over time this will cause the veneer to fade.

Repairs and service

Should for any reason your LS5/9's require service or replacement parts, please contact your dealer or AudioMaster21.

Technical Specifications

Constructed from the finest 9mm Baltic Birch plywood

- All joints are hardwood battened with beech fillets
- Balanced real wood veneers
- Cabinet walls critically damped with bituminous damping panels
- Cherry finish as standard
- Other finishes to special order, please ask

Latest version of the 34mm Audax HD34 Tweeter

- Tweeter has been adapted with the addition of a dispersion loading protective plate
- Midrange and Bass are handled by a AudioMaster21 designed 220mm woofer
- Critically flared polypropylene Mid/Bass cone is terminated by an inverted half roll of select vinyl

Single layer high purity copper / fibreglass PCB

- High-quality dividing network uses ten reactive elements
- High-quality dividing network uses 17 resistors
- High voltage Metalised capacitors
- All components hand soldered with hyper solder
- High-frequency level is set by resistor jump links:
- Ensures optimum pair matching
- Essential for monitor use

AudioMaster21 LS5/9 Specifications

- System type: Two way bass reflex
- Tweeter: Audax 34mm with phase correction
- Mid/Bass: AudioMaster21 220 mm polypropylene cone vinyl surround
- Crossover: 3KHz 27 precision element 18dB per Octave
- Sensitivity: 87dB for 1W at 1M
- Nominal Impedance: 8 Ohms
- Power handling: 100 Watts unclipped
- Maximum SPL: 106 dBA typical in room
- Cabinet: 9mm Birch plywood hardwood battens
- Grille: Black Tygan
- Finish: Cherry
- Connections: Stereo pair CE 5 Way Binding Posts
- Dimensions: 460mm x 275mm x 285mm (HxWxD)
- Weight: 12Kg (each speaker)

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