



## **Thank you for your purchase of AudioMaster21 LS3/5a Loudspeaker Systems**

The LS3/5A design was created by the Engineering Department of the BBC. The design brief was to develop a small , broadcast quality monitor loudspeaker. The loudspeaker had to be capable of accurately reproducing the human voice, in outside broadcast applications, yet take up the minimum amount of space.

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.

Almost 5 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 LS3/5a'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. Leisuresounds, 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", with the LS3/5a.

## Unpacking

Always unpack speakers with care so as not to damage the finish. It is advisable to open the packaging 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 20-80 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 16ohms output.

Because the "Classic" and the 40th Revival LS3/5a's have low sensitivity and a nominal 15 ohms impedance, if not using a Valve [Tube] based amplifier rated at 20 watts or more into 16 ohms, we recommend using a solid state amplifier with at least 40 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 LS3/5a's were designed for small rooms, 12 m<sup>2</sup> to 30 m<sup>2</sup>, bigger rooms might need a stacked solution , with 2 pairs.

Position your speakers approximately where you want them and select cable runs of an appropriate quality, length and terminations. Designed specifically for outside broadcasting, the Classic LS3/5a 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 4mm BFA banana sockets or 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 Classic LS3/5a and 40th Revival LE 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 LS3/5a's require service or replacement parts, please contact your dealer or AudioMaster21.

## Technical Specifications

**Classic LS3/5a 15 Ohm Monitor Speaker**

**LS3/5a 40th Revival Limited Edition Monitor Speaker**

**System Type:** Two way infinite baffle ( closed box)

**Frequency Response:** 70Hz – 20KHz +/- 3dB

**Bass/Midrange Driver:** 133mm polymer cone

**Tweeter:** 19mm mylar dome

**Crossover Frequency:** 3KHz , AudioMaster21 FL6/23 type

**Sensitivity:** 83dB for 2.83V at 1M

**Nominal Impedance:** 15 Ohms

**Recommended Amplifier Range:** 30-80 Watts

( Warning do not connect to any amplifier exceeding range as damage may result )

**Cabinet:** Cabinet 9-12mm Birch ply critically damped

**Grille:** Black Acoustic Textile

**Dimensions :** 304 mm H X 190 mm W X 165 mm D.

**Weight** 5.5 Kgs each



**Audio Master 21.Co.UK**  
**UK Branch**  
**Ince, Wigan**  
**Greater Manchester**  
**United Kingdom**  
**email: [UK.office@audiomaster21.com](mailto:UK.office@audiomaster21.com)**



**Audio Master 21.com**  
**EU Branch**  
**Revello, Cuneo**  
**Italy**  
**email: [EU.office@audiomaster21.com](mailto:EU.office@audiomaster21.com)**