## BRODMANN ACOUSTICS



#### USER'S GUID

Joseph Brodmann Group

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### USER'S GUIDE

Congratulations on the purchase of your new Brodmann loudspeakers. In doing so you have chosen loudspeakers which will guarantee you, the listener, years of enjoyment. By using the highest quality components with a specially constructed cabinet, and by putting patented developments into production, a range of the highest level loudspeakers have been created. Brodmann amplifiers are the perfect answer to the demands made by you on loudspeakers. They add nothing to the original, nor do they suppress the slightest detail.

#### DEVELOPMENT

Brodmann loudspeakers have been designed and tested both in research and development laboratories and under living room conditions, with the aim of offering the ambitious music lover loudspeakers with the most highly differentiated musical reproduction. The requirements of true-to-life reproduction which, in addition to a wide dynamic range and clear registration of the subtle changes in the depth and breadth of an orchestra, is concerned with the exact reproduction of the recording room. Specialist equipment is used to record the most varied musical instruments and voices individually and in groups. Numerous A-B listening comparisons (original versus recording) follow during the construction phase. In parallel to these listening tests, a completely separate range of tests are analysed by an expensive bank of acoustical instruments, but this is regarded more as a backup. The highest sound quality will be achieved by the careful choice and modification of the amplification system which guarantees the basis for low-distortion reproduction on high dynamics, as well as a series of technical innovations in the acoustical sector which, protected by patent, are used exclusively in Brodmann loudspeakers:

- HornResonator
- Acoustic active frequency separating filters

To guarantee your sheer enjoyment as a listener, we shall explain a few points concerning the operations of Brodmann loudspeakers.

#### LOAD RATING

Contrary to popular opinion, the load rating is not a true benchmark for the quality of a loudspeaker. It serves only as information on the maximum amplifier power which can be supplied to the speaker without damaging it. As a rule of thumb the load rating of a loudspeaker and the amplifier power output should be more or less identical. It is therefore necessary to differentiate between the nominal or continuous rating and musical or short-term pulse rating. The latter can exceed the given load rating as it really only occurs in short pulses. Some points should be noted here however:

When the bass and treble are increased by sound controllers the load rating of the loudspeakers falls! To a great extent the load rating of a large speaker depends on the level of distortion of the connected amplifier, i.e. a low-power amplifier with a large amount of distortion in the

In the former case the tweeter in particular will be damaged, and with continuous overloading, as in the latter case, all the transformers will be endangered. With transient pulses, such as a hard thump on the piano, drumbeats, etc., supplied by high quality, low-distortion amplifiers, the loading on the loudspeaker can be higher than is shown in the data sheet.

#### IMPEDANCE

The information on impedance is necessary for correctly adjusting the loudspeakers to the amplifier. Ideally the impedance value of the loudspeakers should match the amplifier. Normally amplifier terminating impedances are either 4 or 8 ohms. Depending on the model, the impedance of Brodmann loudspeakers is either 4,6 or 8 ohms. There is no problem therefore in connecting our loudspeakers to most standard amplifiers. Take care when connecting more than one pair of loudspeakers to an output. Too low an impedance value will damage your amplifier. In this case, ask your specialist Hi-Fi dealer who can explain to you the correct connection method.

#### **CONNECTION TO THE AMPLIFIER**

#### Important:

to avoid causing a short circuit, switch your amplifier off before connecting the loudspeakers! At the back of each loudspeaker you will find two connection terminals which are colour-coded and also marked + and –. For the correct polarity you must simply connect the red loudspeaker terminal to the respective red amplifier terminal. To simplify connection in the correct phase sequence, most loudspeaker cables are correspondingly colour-coded or marked accordingly. Do not try to save money by sacrificing the quality of the loudspeaker connection cables and try to keep the cables as short as possible! Cable quality and length have a critical effect on the sound quality.

For the best results when listening to Brodmann loudspeakers, we recommend using the Brodmann electronic range of amplifiers and CD players, with Brodmann's own connecting leads and loudspeaker cables. Ask your specialist Hi-Fi dealer for more information.

#### SETTING UP

Depending on the speaker type, either floor standing or shelf cabinet, the following should be noted when setting them up. Floor standing cabinets are designed to be freestanding and are not suitable for installation on shelves. Shelf cabinets are designed for installation on cupboards, walls and shelves, etc. The ideal position is at ear height to the seated listener. Since the setting up of the speakers plays such a large part in the quality of the whole sound experience, special guidelines should be noted here. You will find these detailed in our setting up instructions.