



**Public Address
Voice Alarm**



**50 Years
of sound engineering**

Few Companies can boast that they have been at the cutting edge of any market for half a century, let alone that involving the fast moving, constantly changing public address technology. However this year Audix Communications of Saffron Walden, now part of the successful TGI group are celebrating their Golden Anniversary.

The Company was formed shortly after the second World War in 1947 by Charles Billett in Camberwell, South London, and was originally named Audix BB Ltd. After a short time Audix expanded and needed a much larger manufacturing site. It was this need to expand that prompted the move to Stansted in Essex.

The Company's main focus in the early stages was on manufactured equipment with the emphasis on education and schools. One of their principal clients at this time was the G.L.C. (Greater London Council).

However in the early 1970's Charles Billett was joined in the Company by his son, John, and Audix started their very successful move into Broadcasting. At this time the boom in Independent Local Radio was in its infancy and Audix soon became a dominant player in the design and supply of complete studio packages.

▼ The factory at Stansted during the early years of expansion.



▶ Charles and John Billett receiving an award for export achievement.



This led Audix into a major role with the BBC in terms of both local and main network radio systems. Audix soon established a principle that was to serve the Company well in the years to come - flexibility of system build. The Broadcasting side of the business became well known for supplying everything - even the "On Air" light over the studio door!

As the Company's name became increasingly synonymous with good technological development and solid customer support in the UK - so this led to prestigious contracts overseas and awards for export achievement. This naturally snow-balled into those market areas where customers were most in need of turn-key packages with a high level of technical support such as the front line African states, Middle and Far East.



▲ The Audix headquarters in the 1980's.

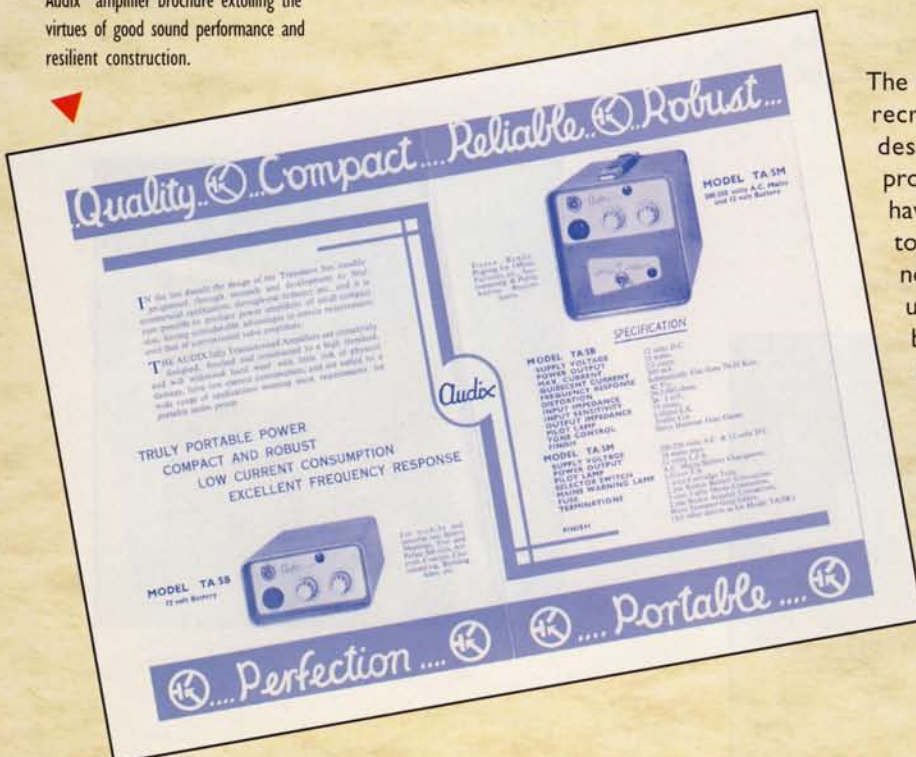
The public address and broadcasting sides of the Company grew as two distinct parts of a thriving business. By the mid 1970's this was to change. Audix had also developed as a major supplier to OEM organisations such as Redifusion, Marconi and Plessey, and many of these suppliers used Audix products on their large prestigious installations, such as the newly created National Exhibition Centre in Birmingham.



▲ An early 30watt transistorised amplifier made at the Stansted works.

Audix moved into direct participation on major public address installations during the mid nineteen seventies with the recruitment of several key systems engineers. In 1975 the Company acquired their first direct project to supply public address equipment at London Heathrow Airport's Terminal 3. As a result of this successful installation Audix secured further contracts to supply upgrades to Terminal 1 and Terminal 2, Gatwick Airport and later the new Terminal 4. Within a very short space of time, Audix enjoyed almost total domination of British Airport Authority Airports such as Glasgow, Edinburgh and Prestwick as well as Heathrow, Gatwick and Stansted.

Audix amplifier brochure extolling the virtues of good sound performance and resilient construction.



In later years, this solid foundation of airport expertise and service was to earn Audix several major overseas airport projects, including Macau, St Lucia, Abu Dhabi, as well as key involvement in the UK's independent airports such as Birmingham and Manchester.



◀ The Audix 'Golf Ball' loudspeakers at Heathrow's Terminal 3, Audix's airport breakthrough in the 1970's. Each 'golf ball' contained a number of angled column loudspeakers and were a major feature of Terminal 3 for over twenty years. The overhanging galleries were finally partitioned off for security reason in the early 1990's. This reduced the acoustic space enabling high definition Audix ceiling loudspeakers to be used.

The early success in airports led to the recruitment of project engineers and designers to supplement the skilled production workforce, many of whom have remained loyal to the Company to the present day. Personnel were no longer designated purely to manufacturing or product development, but to the key area of turn-key system build.

As the Company grew so too did their development of a substantial export business. In 1982 Audix achieved the Export Award.

Major projects at this time included Oman broadcasting, a contract valued at £2.2 million in 1985 and Indonesia State broadcasting in 1988 valued in excess of £6 million.



▲ Audix product equipment range from the 1980's.

Another tenure of the Audix success story is the manufacturing of essential core-products on which system reliability depends.

The 1980's saw Audix Communications go from strength to strength both in manufacturing and product support. The technical expertise and dedication of the staff secured greater and more prestigious projects. The ability of Audix engineers to customise equipment to satisfy customer needs became legendary and ensured continuous business development.



▲ Audix exhibition stand during the early 1960's.

By 1989 Audix had acquired a long string of world-scale contracts such as the prestigious International Convention Centre in Birmingham and the complete radio networks in Indonesia.

In 1989 Audix Communications became part of the TGI Group which emerged from the management buy-out at Goodmans and Tannoy and grew quickly into a powerful specialist audio plc.

Tannoy and Audix - the winning team.

Tannoy, founded in 1926, had a long and celebrated history and the combination of Tannoy's acoustic expertise and the Audix engineering know-how soon proved a formidable combination. Guy Fountain, the founder of Tannoy had opened a factory in Norwood, London, manufacturing loudspeaker systems and tantalum alloy rectifiers from where the "Tannoy" name derives.

During the Second World War the opportunities for expansion increased enormously and the Ministry of Defence installed Tannoy loudspeakers at countless RAF bases both in the UK and around the world and when Tannoy insisted that their products displayed the company logo, the MOD agreed.

Soon after the war, the British Holiday Camp market blossomed as Billy Butlin ordered Tannoy loudspeaker systems in all his new camps. Pathe News carried pictures of the rebuilding of bombed bases contrasting with the sight of "happy campers" - and clearly visible on all the loudspeaker horns was the name Tannoy. This ensured that Tannoy became the generic name for loudspeaker systems worldwide.



▲ An innovative use of loudspeakers developed by Tannoy, now part of the TGI group and a sister company with Audix.

Although for many years an evenly balanced business with equal contributions from both public address and broadcasting, the advent of TGI placed a natural emphasis on the former, where much of the group's strengths could be brought to bear. The broadcasting side of Audix itself became the subject of a management buy-out and continues on the same site under the Audix Broadcasting banner and is a successful and growing company in its own right.

Did you know ?

The BB in Audix BB stood for British Binoculars - this was because at this time new companies had to use existing company names.



▲ Audix's prestigious Stansted Airport project with its acoustically challenging main concourse served by Tannoy column loudspeakers - the first combined public address and voice alarm installation at any UK airport.



▲ Ministry of Defence headquarters at Bristol. One of the latest in a long line of major Audix projects, linking eleven buildings over complex audio and data cable networks and providing comprehensive voice alarm and public address communication in all areas.

Today Audix has a very clear focus on Customer Service, with its day-to-day support of the most enviable installed base in the UK. Software based products have replaced much of the hard-wired solutions. Thermionic valves have come and gone. Transistors superceded by integrated circuits and cable looms built up on nail-boards confined to history. But the well-laid principle of ingenuity and manufacturing excellence ensures that Audix will remain in the top flight of UK audio companies for many years to come.



▲ The revolutionary Vector V32 System switching matrix with its unique software control, intuitive re-configuration suite and compliance with rigid international voice and fire alarm standards



▲ Mosfet (4 x 60watt) power amplifiers - the current technology

Audix is a market leader in Sound and Communications. The Customer Service team helps to keep the World renowned International Convention Centre tuned to perfection with regular service and maintenance visits.

A look at the organisation behind the design and installation of the complex sound systems at the ICCB is rewarded with a unique insight into a most remarkable British company as it celebrates its fiftieth anniversary.

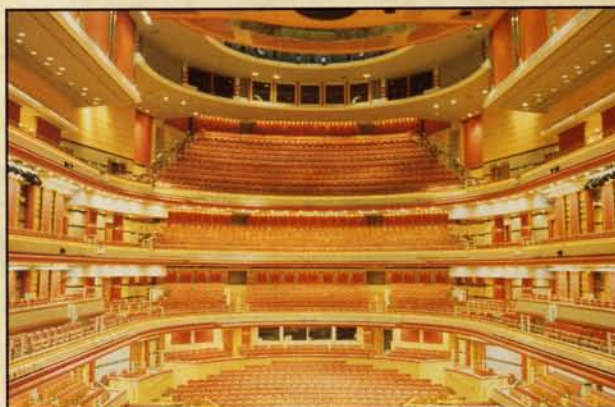


▲ L-R Phil Colpitts, Terry Gould, Doug Noble, Andrea Pointer, Stephanie France and Glen Harris.



▲ The International Convention Centre viewed from Centenary Square.

▼ Audix commissioning Engineers. L-R Steve Nurse, Peter Hansen, Paul Cloughly, Rob Swain, Shane Gilder, Stewart Ano.



▲ Arguably Europe's most acoustically advanced Concert Hall in the heart of the ICCB.



▲ ICCB under construction alongside the NIAS in the heart of Birmingham.

The building programme was professionally managed by Douglas-Turner, a consortium of two companies bringing a combination of skills to the highest profile construction project in the industry.

Deadlines were short and the need for close control on all main contractors' activities a major factor in the successful completion on time.

In size, the ICCB equates to eleven major projects all rolled into one.

- Hall One: Large theatre for 1,500 delegates.
- Hall Two: Symphony Hall, seating 2,000 people.
- Hall Three: Large multipurpose exhibition space.
- Hall Four: Multipurpose hall and stage.
- Hall Five: Auditorium for 250 delegates.
- Hall Six: Divisible hall for meetings and presentations.
- Hall Seven: Divisible hall for presentations purposes.
- Hall Eight: Large hall with three control points.
- Hall Nine: Full function facility for hospitality events.
- Hall Ten: Divisible conference and break-out suite.
- Hall Eleven: Divisible space with two control rooms.
- Central Atrium. Main mall and circulation areas.

▼ Administration, procurement and financial staff. L-R Laura Stone, Patrica Ranson, John Clark, Peter Musk, Angela Dower.



▼ Assembly staff at work. L-R Trevor Dower, Bridget Payton, Paula Hall, Joan Virtue, Gavin Williamson, Mary Fountain, Barbara Barnes.



The ICCB Sound and Conference Communications package involved Audix in the building and wiring of over forty equipment racks and the manufacture of large quantities of attendant amplifiers and control equipment.

Also the procurement and installation of sound mixing desks, conference and simultaneous interpretation systems, CCTV equipment, Theatre comms and Prosound.

All systems were designed to work in sympathy with an overall requirement for safe and rapid evacuation from any area in a critical emergency.



▲ This cut-away illustration clearly shows the many facilities and options available- all under one roof.

ICCB features 250 paging zones, fully integrated with the fire detection systems over eleven evacuation zones.

A data highway with local area networks is used to ensure overall flexibility in use.

Eleven 32 way matrices serve the wide variety of loudspeakers at every potential listening point, both staff and public.

With the absence of fire sounders, the loudspeakers have a vital dual role and are monitored continuously in strict compliance to international standards.



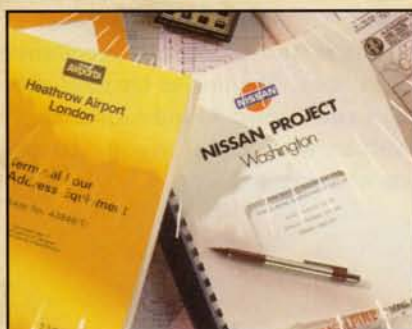
▲ The Audix installation at the NIAS

The adjacent National Indoor Arena for Sport (NIAS) and seven new halls at the National Exhibition Centre, operating under the same management, were also equipped by Audix Communications.

The NIAS featured a single central cluster of loudspeakers covering all seated areas with top quality sound. Audix were subsequently commissioned to supply the Indoor Arena in Manchester (Nynex).



▲ The engineering team. L-R Jeremy Buss, Ian Twemlow, Antony Williams, Ian Penson, John Marchant, Mike Stapleton.



▲ Comprehensive Workshop manuals were produced by Audix engineering staff in accordance with strict specification requirements and with a particular emphasis on after sales support and operator training.

▲ In the workshop, L-R Mike Larthwell, John Brett, Alan Willis, David Lee, Richard Rolfe.



The ICCB, NIAS and NEC contracts demanded professional project management. The Client rightly expected to be fully versed in progress both on site and at the factory at all points during the extensive, yet fast track contract period.

Established reporting procedures were adhered to through-out, and instant communications with all parties, both in formal and informal settings, made a vital contribution to the overall success.



▲ L-R. Gordon Steel, Charles Turner., Eilan Butcher, Gordon Fiddy, Christine Robinson, Dennis Salter, Marion Overson.

A small selection of press cuttings at the award of contract. ▼



The ICCB contract was awarded to Audix amidst a blaze of publicity. Long before then, the sales team had been working with the American Consultants, Artec. Advising on matters related to the technical specifications including European wiring practice, British Standards relating specifically to fire and emergency voice alarm, discussing various operational options using the latest technology available, providing budgetary guidelines and liaising over technical submissions.



▲ The National Exhibition Centre, operated by joint management with the ICCB and NIAS, and containing Audix systems in seven new halls.



◀ Part of the Audix sales team. L-R. Alan Bond, Darren Kitchener, John Strong, Debbi Crawte, Karl Green, James Bowes.

Names and faces change in time, but throughout their long history Audix has continued to demonstrate a level of commitment and technical excellence second to none. The unique blend of skills that laid such good foundations, apply themselves with equal vigour to the projects of the future.