

**COMPANY**PROFILE



# WE BELIEVE IN A COMMON FUTURE

We believe that clear communication between people, democratic information sharing and top-level scientific research are the key factors in order to live in a better world.

This is what we have in mind every day. This is why, since 1975, we have been working hard to provide our customers with the most advanced Radio, TV and Science products, solutions and services.

## WHO WE ARE

DB Elettronica and Telecomunicazioni SpA was founded in Italy in 1975. With more than 45 years of experience and consistent strategy, DB has become **a recognized worldwide leader in RF transmission and communication solutions**, both for public and private customers, as well as for top level scientific institutions.

DB offers world-class, turnkey broadcasting systems, including **transmitters, antennas, head-end and studio equipment**. The comprehensive range of products in analogue/digital processing and transmission of radio and TV contents allows operators to find their bespoke solution in terms of quality and capital investment.

DB also represents **the best partner for the most important organizations in the health care, scientific and particle-accelerator projects**.

With headquarters located in Padua, Italy and sales and service offices in Brescia, Milan, Rome, Miami, New Delhi, Singapore, DB **guarantees fast delivery lead-times** for equipment and spare parts, as well as prompt **remote and on-site support**.

## WHAT WE DO

DB provides equipment, systems and services in the following sectors:

- **BROADCAST COMMUNICATIONS**
- **RF COMMUNICATIONS**
- **MICROWAVE COMMUNICATIONS**
- **RADIO AND TV STUDIOS**
- **SCIENTIFIC APPLICATIONS**

DB has received important awards for its Solid-State Amplification and its revolutionary **Cold-FET™** technology.

The recently developed **HI-ADC™** technology applied to TV transmitters has significantly improved the signal quality both in analogue and digital transmissions. DB's solutions for scientific projects have been successfully installed in the plants of the most advanced research organizations, such as **CERN** (Switzerland), **GSI** (Germany), **INFN** (Italy), **Institut de Physique Nucléaire d'Orsay** (France), **LPSC** (France), **Sincrotrone Trieste** (Italy), **Inter-University Accelerator Centre** (India) and many others.



## MISSION

To provide Radio, TV operators and Scientific Research organizations with the most **advanced and customized technological solutions to reach their challenging goals**.

## VISION

Advanced radio transmission for **easier and clear global communications**, scientific research to improve **quality of life**, basically working for **a better world**.



# OUR DIFFERENCE

Integration of know-how in different sectors leads to the tailor-made, specialized, solution.

Both in the broadcasting arena and for high-tech scientific applications, the key factor for operators is finding the right solution that **fits both strict technological requirements and a sustainable business model.**

DB can offer its specialization and skills in

multiple applications of the RF modulation and transmission to all customers that are looking **for a cutting-edge solution made specifically for them.**

**DB helps customers on the way to their success.**



# DB DIVISIONS

Continuous cooperation and integration among **DB's specialized divisions lead to a constant technological growth.**



## FM BROADCASTING INDUSTRY

DB is specialized in solid state technologies for analog and digital FM Radio transmitter, analog and digital microwave links, remote control and management systems, antennas and accessories.

DB can offer to its customers Radio Transmitters, Antennas with coverage analysis, Turnkey Solutions, Feasibility Studies, Commissioning and Training services (in our factory and on-site), complete after-sale support.



## TV BROADCASTING INDUSTRY

Under Screen logo we offer a complete range of equipment for the transmission and processing analog and digital television signals. In order to satisfy modern TV broadcast requirements, our TV transmitters comply with existing analogue and digital standards such as DVB-T, DVB-H, DVB-T2, ATSC, ATSC 3.0, ISDB-TB and DTMB, DAB. The product range is from Multi-standard TV transmitters, headend to antennas and accessories. DB can offer to its customers Tv Transmitters, Antennas with coverage analysis, Turnkey Solutions, Feasibility Studies, Commissioning and Training services in our factory and on-site, complete after-sale support.



## SCIENTIFIC APPLICATIONS INDUSTRY

DB SCIENCE offers advanced customized solutions including RF amplifiers, RF generators and other microwave equipment for research institutes, particle physics, nuclear engineering and medical therapy.

# RADIO & TV BROADCASTING EQUIPMENT

More than 45 years of experience



**+170**  
Countries



**+ 50,000**  
Worldwide patented designs



**+ 80,000**  
Transmitters installed



**Millions**  
of people connected



ONE SIZE  
DOESN'T FIT ALL

DB is aware **that each project is unique**. No matter how similar they look like, but each Radio, TV or Research organization **has its own soul, goals, quality perception, specific needs and**

**tricky requirements**. Long-term experience and integration of multiple know-hows make **DB the perfect tailor for operators that need their bespoke solution**.

## RADIO PRODUCTS AND SOLUTIONS

DB is leader in FM digital and analog products. For more than 45 years of experience, DB has been designing its products to offer its customers the maximum AC efficiency and the best audio quality.

The **GREEN RF™** technology, the latest evolution of the world-famous DB patented COLD-FET™ technology, is obtained using the latest generation LDMOS 65:1 devices to increase DC to RF efficiency up to 85%, with a drastic reduction of energy consumption. Overall AC to RF efficiency is usually over 75%.

**PFG NEXT and Mozart NEXT Series**, the new line of FM transmitters and exciters, have been awarded some of the industry's most prestigious technology honours, the Best of Show Award at both the NAB Show in Las Vegas and the IBC exhibition in Amsterdam.

DB produces also analog STL with very low noise and high quality audio performances to assure the best signal distributed to the FM transmitters.

Very high efficiency, superior ruggedness, low maintenance costs, compact design with reduced weight and complete web control are only some of the main features of DB FM products.

## TELEVISION PRODUCTS AND SOLUTIONS

DB, under the brand of Screen, offers a complete range of equipment for the transmission and processing analog and digital television signals. The ongoing research and experimentation in new technologies and quality standards enable DB to develop innovative, reliable equipment that is distinguished for an excellent quality-price ratio.

Precision and efficiency combined with meticulous care and dynamism, represent the real strength of the TV production department.

In order to satisfy modern TV broadcast requirements, DB TV transmitters comply with existing analog and digital standards such as DVB-T, DVB-H, DVB-T2, ATSC, ATSC Mobile DTV, ISDB-TB and DTMB, DAB.

**DB offers its customers a wide range of TV solutions:**

- **MULTI-STANDARD TV TRANSMITTERS**
- **HEADEND**
- **DIGITAL TV TRANSMITTERS**
- **DUAL CAST TV TRANSMITTERS**
- **ANALOG TV TRANSMITTERS**
- **ANTENNAS & ACCESSORIES**
- **SD AND HD TV LINKS**

The highly specialized staff avails of the most cutting-edge technology and instruments. The organization of the laboratories and production processes allow DB to respond promptly to any request and to comply fully with all relevant standards and supply schedules.



## FM & TV BROADCAST NETWORK TURNKEY SOLUTIONS

DB designs turnkey tailor-made solutions for its customers. Starting from GPS geographic coordinates of their broadcast sites DB can provide:

- **COVERAGE STUDY**
- **SUITABLE SITE PER SITE FM & TV BROADCAST EQUIPMENT AND ANTENNA SYSTEM**
- **HEADEND**
- **COMPLETE STUDIO DESIGN**
- **LOCAL INSTALLATION**
- **TRAINING AT OUR FACILITIES OR ON-SITE**
- **BEFORE/AFTER SALES SUPPORT**





# SCIENTIFIC APPLICATIONS EQUIPMENT

**20 years** of experience  
**+ 20 MW** installed

## SCIENTIFIC APPLICATIONS

DB Science design and produces RF amplifiers, RF generators and other microwave equipment suitable for research institutes, particle physics, nuclear engineering and medical therapy.

Thanks to the scientific progress, today DB can defeat diseases that were a plague for humanity.

The main characteristics of RF amplifiers and generators made by DB Science are:

- **POWER UP TO 500 KW CW OR PULSED**
- **SOLID STATE OR VACUUM TUBE TECHNOLOGY**
- **AIR, LIQUID COOLING**
- **EPICS COMPATIBLE**

DB is proud to give its commitment to those medical applications, that contribute to the treatment of serious diseases and cancer.

DB has realized equipment for the most important scientific projects:

- **CERN** (Switzerland - France)
- **ESS European Spallation Source** (Sweden)
- **Ganil** (France)
- **Goethe Universität** (Germany)
- **GSI** (Germany)
- **Imperial College London**, (UK)
- **INFN** (Italy)
- **Institut de Physique Nucléaire d'Orsay** (France)
- **Inter-University Accelerator Centre** (India)
- **LPSC** (France)
- **MedAustron** (Austria)
- **Sincrotrone Trieste** (Italy)
- **Universidad de Huelva** (Spain)
- **Uppsala University** (Sweden)



## QUALITY IS MORE THAN A CONCEPT

For DB quality is more than a concept: the company got the following certifications demonstrating its dedication to continuous improvement and superior performance in all aspects of its business:

- **ISO 9001:2015** for the quality **management** system;
- **ISO 14001:2015** for the **environmental** management system;
- **ISO 45001:2015** for the occupational **health and safety** management systems.

Each department pursues the highest quality to guarantee top level performances and reliability, always respecting the international standards for electromagnetic compatibility and safety:

- Every piece complies with all the requirements of the **Radio Equipment Directive (RED) 2014/53/EU** and the mutual recognition of their conformity;
- Most of DB products are **FCC certified**.



## RESEARCH & DEVELOPMENT

Designing equipment with excellent performance, both for broadcasting and scientific application, is a challenge DB faces every day since 1975.

DB firmly believes innovation to be a powerful instrument to overcome the challenges of the broadcasting industry and scientific research. **DB grants the best solutions and configurations of the customized equipment with a positive can-do attitude.** And the best result is that DB products are successfully installed in more than 170 countries in the world.

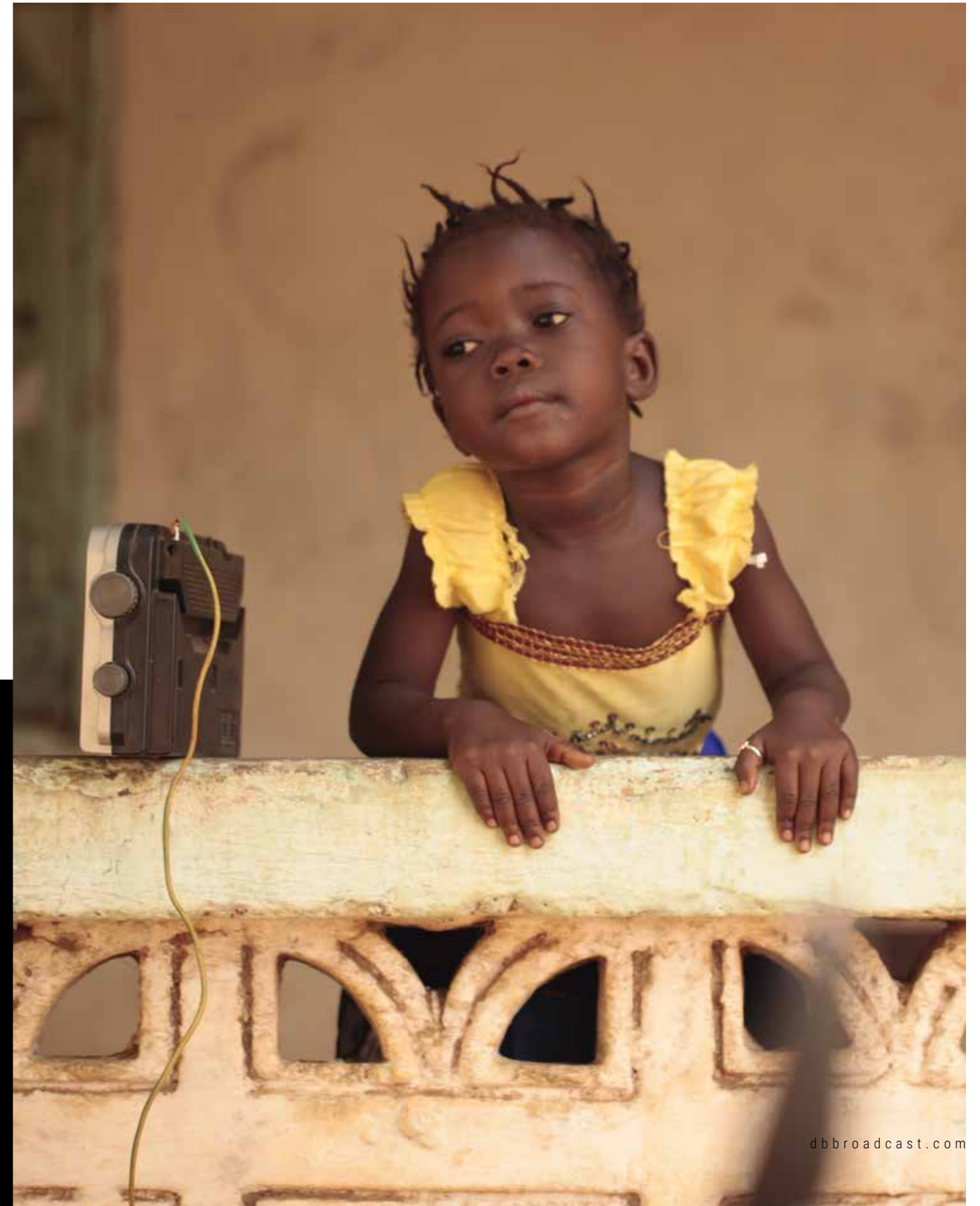
DB's internal Research & Development department is able to design complete systems and provide customers with all the necessary assistance from the definition of the project, choice of equipment with accurate technical specifications up to installation and after-sale service.

## EFFICIENCY & TECHNOLOGY

We live in a very complex world and DB is aware that there are great differences in the access to services. In some parts of the world, listening to the radio or watching television means also attending classes from home because of epidemics and diseases or wars: in others listening to the radio or watching television **means keeping informed on what is going on around, being conscious, saving lives, getting involved, taking part... contributing to make the world a better place.**

In the scientific and medical field, where the stakes are higher and the ambitions are more challenging, **DB is proud to give its commitment to those medical applications that contribute to the treatment of serious diseases and cancer.**

That's why DB works hard to create reliable, rugged, technologically advanced and highly efficient solutions. DB designs green products, increasing the AC efficiency up to more than 70% for FM and more than 40% for TV, to give each customer, wherever he may be in the world, the opportunity to be connected and to communicate with a continuously operating service with lower consumption and costs.





# SERVICE

## ON-LINE SERVICE

DB Technical Departments in Brescia, Padua, Rome, Miami, New Delhi and Singapore are on-line every day to reply to customers' enquiries, solving their troubles in order to get perfect broadcasting. DB is proud of its achievement: **solving 85% of the customers' problems** through its on-line service without moving to the next level. This is possible exclusively **thanks to the innovative technology** that characterizes the entire DB production.

The most important benefits of DB on-line service translated into real broadcasting life:

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**IMPROVING FM AND TV NETWORK SUCCESS,  
MINIMIZING OFF-AIR**

**REDUCING FM AND TV NETWORK  
MAINTENANCE COST, WITH EASY  
AND FAST ONLINE SERVICE SOLUTIONS**

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## FACTORY SERVICE

**The DB most valuable asset is represented by its customers**, who are, in the DB mindset, its partners. For this reason, the continuous exchange of ideas and points of view is essential to build a lasting business relationship. **DB factory and on-site training** is a cornerstone of the development of DB customers' satisfaction.

## LOCAL SERVICE

DB dedicates a team of engineers and technical specialists handling local service that includes:

- **LOCAL TRAINING WITH FINAL CERTIFICATION**
- **SUPERVISION AND INSTALLATION WITH FINAL CERTIFICATION**
- **TECHNICAL SERVICES**
- **COMPLETE ASSISTANCE AND MAINTENANCE, EVEN TO DISCONTINUED PRODUCTS**

## INSTALLATION PROCESS

DB has a highly specialized staff to help the customer with the installations of:

- **RADIO AND TV COMPLETE TRANSMISSION SYSTEMS**
- **ANTENNA SYSTEMS**
- **MICROWAVE LINKS**
- **AMPLIFIERS, EXCITERS, ETC.**
- **SCIENTIFIC EQUIPMENT**



# TRAINING SUPPORT

## FACTORY TRAINING

DB also **delivers several levels of factory training courses** in its dedicated training rooms in order to issue all attendees a final training certification.



## ON-SITE TRAINING

**Customized programs conducted by DB engineers and technical specialists at your site are available on request.** Let's build a win-win partnership together and contribute, in so doing, to bettering communication between people, no matter where they are.



WORKING  
WITH DB MEANS  
THE BEST  
BROADCASTING  
AND SCIENTIFIC  
SOLUTIONS  
FOR A BETTER  
WORLD





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