

EFFICIENT INGENUITY



European technology Made in * EU rope



applied engineering

passion for manufacturing

improved power consumption

50+ years of experience

European Technology Made in EU

T0X = efficient

Ingenuity refers to the process of applying ideas to solve problems or meet challenges, like the process of creating a new generation of head-ends with improved efficiency in usage consumption per service distributed.

Efficient ingenuity is achieved through more than 50 years of experience, leading Televes to technological developments through applied engineering.





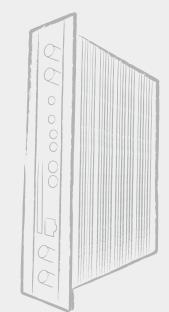
applied engineering

at the service of energy-efficient digital distribution

The release of electrical energy in the form of heat can be one of the biggest enemies in the quest to achieve efficiency.

 $\label{prop:lem:heat} \textbf{Heat dissipation} \text{ is greatly reduced in the TOX through}$

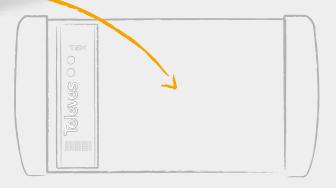
the deployment of a newly designed chassis and the complete reengineering of the internal componentry placement.



Heat dissipation efficiency adds more compactability, giving the TOX **up to 280% more service capacity**.

Additionally, the energy saved has allowed the TOX to use only **one power supply in the lockable cabinet** configuration, adding substantioal savings to each project.

The modules of the T0X head-end have a constant distance separation amongst each other, independently of the modulation used in the application, which makes it far more user-friendly and easier to install.





Passion for Manufacturing

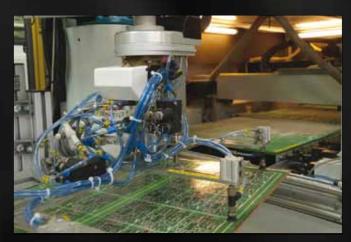
In the era of globalisation, when most of the companies in the sector decide to outsource manufacturing processes in order to reduce costs, **Televes stays faithful to its industrial tradition:**

controlling the whole process at home,

from desing to manufacturing, to certified delivery. This is a strong held belief; a successful belief that can be summoned in our core value:

"European Technology Made in Europe", a value world markets associate with Televes.







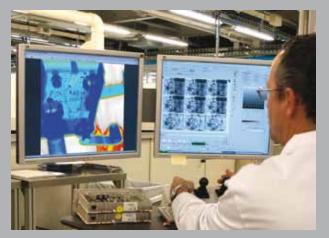






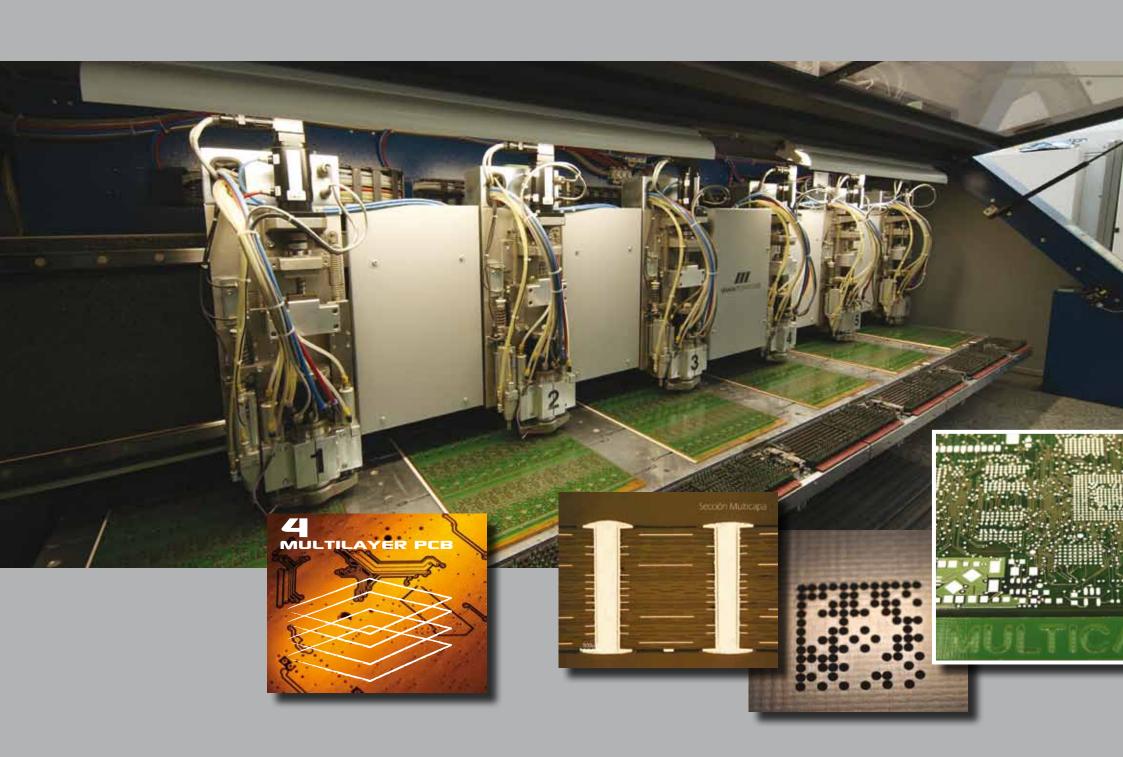
Its experience and its cutting-edge technology

have given Televes a key role in the ongoing process of dissipating analogue TV signals, positioning itself at the forefront of companies that the sector consults for new technological tendencies.









Vanguard Manufacturing

The design of the various elements affected by oscillators are perfectly placed in a standard size quadrant which gives added uniformity and the ability to make the modules componentry placed in a fully automated manufacturing process.

We can guarantee our installers that no T0X module has been manipulated individually. Instead, each module is a product of a continous automatic process from the production of the printed circuit board (PCB), the superficial mounting technology (SMT) of every component, to the final integration of electrical and mechanical parts in the chassis... all the way to the final software verification process...

Automatic, repetitive and reliable.



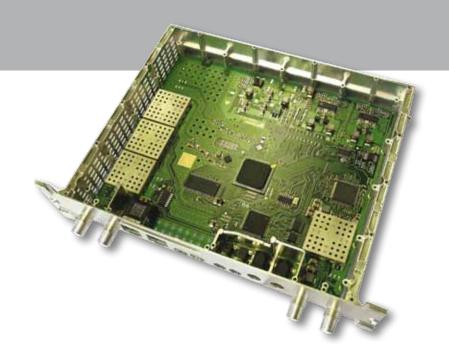


Efficiency:

the ratio of the effective output to the total input of the system

The T0X modules are cleverly designed with one 24 volt power supply. Having just a single voltage source simplifies the unit itself, as well as its related cabling. Additionally, the redesign of the power supply assures distributing more services than ever before, making full rack configurations far more consumption efficient.





45% less consumption in PAL distributions

33% less consumption in QAM distributions

passion
European Technology

consumption

applied engineering

efficient

improve

50+ years experience

Made in EU

ingenuity

manufacturing

Ingenuity:

Functionality achieved to enhance the digital experience

FPGA design to guarantee functionality development in the T0X, no matter what technological advancements may arrive.

- Select what services to be distributed in the QAM and COFDM transmodulators, independently of the overall number of services included in the transponder.
- **Develop signal multiplexors** which will improve the campactability of the modules, only allowing the selected services to be distributed.
- Distribute encrypted and digitally modulated services, maintaining intact the digital quality in all the distribution chain.
- Adapt any installation to any type of exit modulation independently from the distribution of ecrypted or free-to-air services.



Backward compatible:

Use any external 24 volt power supply to feed any T0X module. Expand your current T05 head-end with T0X modules.







Control your T.0X

anytime, anywhere

The TOX controller allows access to a headend by using direct connection to internet, an external modem or local control by connecting a PC directly to the product.

This feature is intended to give full flexibility to the system and to improve servicing procedures. The remote access to the headend could be through a modem or internet.

- Unified software control of all your T.0X deployments.
- Remote IP connection through Televes linking servers.
- Local LAN access with web server interface for Real-Time head-end status report.
- Custom client configuration capability.



NEURUN

Management Software



Throughout more than half a century, Televes has built a solid business reputation based on the values that define the company's identity:

Technological Development

Passion for manufacting

Quality above al

Commitment to the sector it serves

International vocation

Leadership

Excellence in human resources

Sustainable development suport and commitment to the environment

The present challenge for Televes is to continue to have a leading role in the new era of quality-content digital service distribution,

introducing the T.OX as the new generation

of head-ends for years to come





X= efficiency

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the next generation of head-ends for digital services to come