INFO Televes ®

Universal intelligent protection for DTT signals against LTE interference

A lot has been said and written on how **LTE /4G** signals will potentially interfere with DTT reception. Equipment manufacturers have begun to adapt all their products the new reception conditions. Televes is not any different, except that most of the work was already done five years ago.

The BOSS device embedded in the DAT HD antenna adjusts the TV signal automatically, providing a stable signal to the distribution network, making a rightful claim that the DAT HD BOSS was the first Intelligent antenna in the world.

The automatic adjustment of the BOSS Tech will suffice in most cases, meaning no adaptation will be needed. For those cases where LTE levels are so severe that on-site action is required, Televes has incorporated the same BOSS technology in a new device that will become the first Universal Intelligent Protection Device against LTE interference: the Q-BOSS.

Q-BOSS is the evolution of BOSSTech, incorporating hard-cut filters according to the frequency designated for 4G. It can be placed at the base of the mast, or even at the headend, so there is no need for the installer to take down the existing aerial to perform the adaptation.
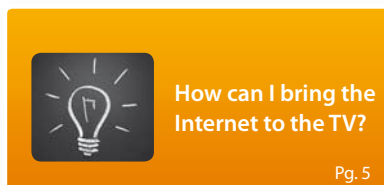
The **Q-BOSS works with any passive antenna**. is the first device that will convert any aerial in the world into an intelligent antenna, without the need to take down, manipulate or readjust the antenna

Q-BOSS
THE INTELLIGENT PROTECTION AGAINST THE LTE/4G

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Q-BOSS.
Intelligent protection against LTE.

You Tube **televescorporation**   televes.com

MEETING POINT

Visit us at:

April	NABSHOW	Las Vegas	8th-11th
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Domestic amplifiers with remote powering facility

Sometimes, a domestic amplifier is used to serve more than one TV outlet.

In these cases, it is likely that the chosen location for the amplifier does not have a power socket (storerooms, lofts, etc.).

In these cases, the possibility of remote powering would be best solution.

The range of domestic amplifiers NanoKom features remote powering through its output coaxial cable, thus overcoming the problem.
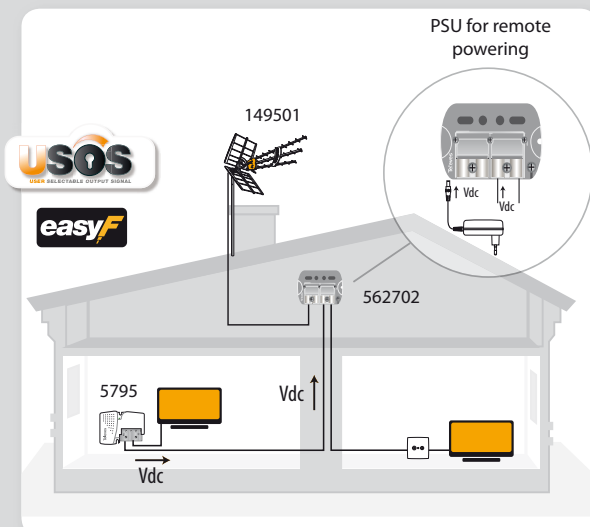
The example below, illustrates how the domestic amplifier is powered by a PSU located beside the television, where surefire there must be at least one power socket.

Nevertheless, these amplifiers also feature a power socket for mains ■

NanoKom
Series

PSU for remote powering

149501

562702

5795

Vdc

Vdc

Vdc

Vdc

USOS
USER SELECTABLE OUTPUT SIGNAL

easyF

TELEVES FACILITIES

Terminal 3 at Dubai Airport

The Dubai International Airport is a major hub for the Middle East with over 6,000 weekly flights. Its strategic location has made it one of the busiest cargo and passengers worldwide.

The new Terminal 3 at Dubai Airport is the largest one in the world with over 1.5 Km^2. This is where has been installed a Televes headend based on a Fiber Optics distribuiton.

Dubai International

The distributed services range from TVSAT channels transmodulated to COFDM, up to two channels of own production.

The whole package is converted to optical signal for distribution in the terminal.

The installation company is "Future Metro LLC" of Sharjah city, although it also has offices in Abu Dhabi and Doha ■

PERFORMED BY: FUTURE ● METRO LLC

Interview with: Orestes García
Managing Director of Arantia

"We give every customer a tailor-made solution to suit their needs"

Arantia is the Televes Corporation firm which specialises in the development of equipment and software solutions for television over IP (IPTV). The firm deploys high doses R&D know-how to the mix, focusing on the development of innovative products and services mainly aimed at the Hospitality sector. Orestes García, Managing Director of the firm, highlights trust, robustness and flexibility as the brand's values and mentions an important renewal of the catalogue of products.

How would you describe the values that define Arantia?

Our company is different inasmuch as the people who make up the company make it different. Arantia´s greatest value is undoubtedly its team members. They are the true architects of Arantia's positive evolution in recent years. The team is quite dynamic and agile, which allows the rapid adaptation to technological changes, always improving the products and services in a highly competitive and challenging environment. This level of commitment from Arantia's staff and their total involvement in the company's objectives are the real trademarks.

Which synergies with the Televes Corporation work best?

Belonging to a business group like Televes provides many advantages to all the subsidiary companies that conform it. From the commercial perspective, presence in national and international markets provides us with the "being at street level" factor, giving us first-hand knowledge of the market´s needs and expectations. From the industrial perspective, Televes' experience as a manufacturer and its internationally renowned quality standards are solid guarantees that any product development in Arantia will materialise in success.

What weight do international markets have today, and what growth do you foresee in the coming years?

We are faced with a difficult market situation, as a result of the economic scene, which forces us, in the Spanish market, to not miss an opportunity, and at international level to continue to expand towards new countries. It is safe to say that our growth efforts will be placed on the international markets where we can take advantage of the Televes Corporation presence and support.

Would you bet on new products or technologies?

This is a somewhat special year for us, given that we are renewing practically our whole catalogue. In IPTV I would highlight two products: The new **HD Chronos set-top box**, designed and manufactured in-house, the characteristics of which can be summed up in three words: fast, powerful and small. The second product is the new **Arantia.TV** middleware with a new graphical interface that considerably improves the user's experience.

A new line of products is also in the commercial launch phase for this year. The **Arantia.DS**, a client/server digital signage solution, developed in-house, which is characterised for using STB Chronos as a player, whereby it can display digital signage contents as well as videos or TV channels from an IPTV headend.

Would you highlight any recent projects?

Our own projects in hotels, with recent national and international references such as the ME Meliá in London, the Hotel Sardinero in Santander, the So White Hotel in Cyprus or the Cristal Beach Resort in Mauritius, are joined by projects for public buildings such as Catumbela Airport, in Angola. The list of projects that we develop is long, and the common characteristic in all of them is that no two are alike. Every customer requires a tailor-made solution to suit their needs, which makes our everyday work more complicated, but it is where Arantia stands out from its competitors ▪

Sergio Martín
Communications Manager

DID YOU KNOW..?

...Televes was a pioneer in incorporating surface mount components (SMD)?

The Televes use of surface mount components (SMD) dates back to the early 80s. The Siemens MS72 de Siemens placed up to 2,200 components per hour in 1983.

The technological evolution of robots made the capacity was increased to 6,000 components per hour in 1992. Thereafter, this process is carried out by two complementary machines working together. Thus, in 1998, the models at that time reached the 24,000 components per hour. Currently, the combination of models like the CA4 and the SX2 (Siemens) allows the unbelievable placement of 100,000 components per hour.

With the adoption of this production model, Televes has reached 30 years of technological cutting-edge experience that is currently reflected in the quality of the manufactured devices ▪

Remultiplexing

The creation of a multiplex in the network's headend, with attractive TV services to the user acquires a new dimension with this technique.

In the field of transmodulating headends, the remultiplexing refers to the ability of a device to generate a TV package with contents from different satellite transponders.

Until now, the services that were in a QAM or COFDM multiplex came from a single transponder DVB-S/S2.

The transmodulators ref. 564201 and ref. 564101, are T0X modules capable of re-multiplexing, with outputs COFDM and QAM respectively.

From the point of view of installation, these transmodulators optimize the spectrum because the occupation of the multiplex is performed with the desired services.
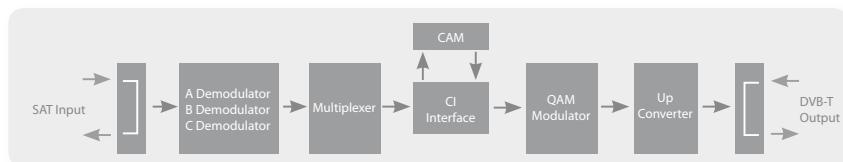
This improvement, along with a better use of the spectrum, provides greater energy efficiency: more services in less power consumption.

Despite being able to process signals from three transponders, using two entries it is assumed that at least two of them must be in the same band and polarity (same LNB download). This detail is important when planning a specific map of channels and services.
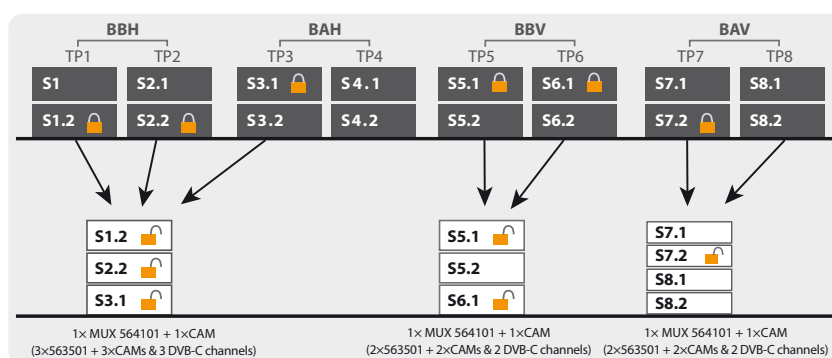
In addition, services that are passed through the CAM must have the same encryption system.

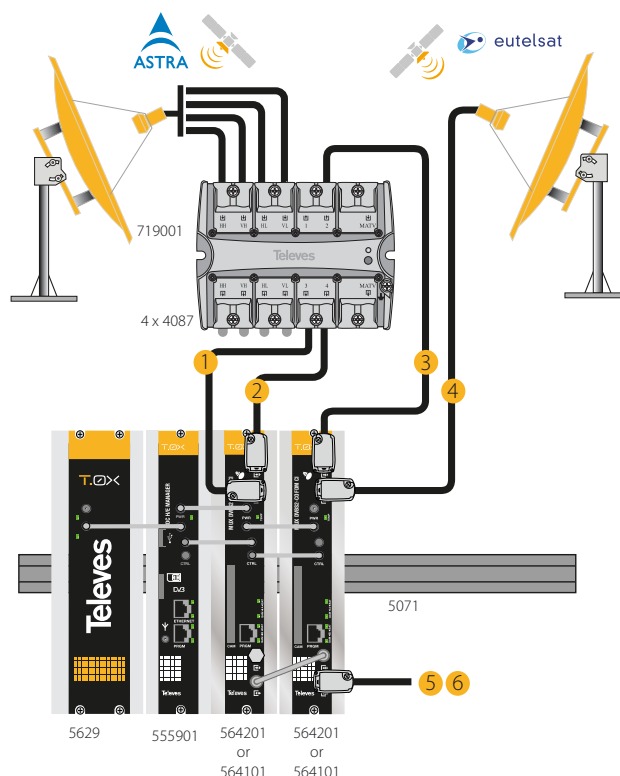The benefits that provide more value to these modules are two:

▶ Editing the SID (Service Identifier) that allows to do changes in the TV channels distributed in a multiplex without having to retune the TV or STB in the facility.

▶ Editing the PID (Package Identifier), for the selective removal of one of them, and therefore the CAM is not "overloaded" when several services have to be decrypted ▪

Block diagram of a Transmodulator with Remultiplexing.

Example of application with encrypted services and QAM output.

Example of application with multiswitch and remote acceso control.

Javier Esteban
Technical Assistance Manager

INFO Televes

Televes®

IN THE WORLD

CABSAT
DUBAI 12TH - 14TH MARCH

The Middle East &
Africa's Largest
BROADCAST,
DIGITAL
MEDIA &
SATELLITE
EXPO

"CABSAT is the meeting point of the principal telecommunications operators in the region; therefore, it offers to Televes Corporation the perfect opportunity to present the technological innovations developed by our different subsidiaries. As a market reference and a multinational group with continuous flow of new products, this expo is a perfect platform for us. It's a fair that works very well and we trust it would be very positive from the commercial point of view"; this is how David Goldar, managing director of Televes Middle East, described the presence of Televes at Cabsat2013.

At this meeting, Televes shown that his capacity for technological development also extends to other niche markets, such as IPTV, digital technologies applied to Security and Health services (Digital Hospital).

A new generation of products was presented: the LTE Ready H60 field strength meters with signal and metering remote control, and a Coax Data which offers a high-speed connection using cabling already present in the buildings (1 Gbps and 1,012 access points on coaxial networks).

TRedess presented its video-surveillance over IP solutions, with CWS Watermarking and Real Time Location (RTLS), and also Medicare, the tailor-made solution for the health sector that allows both medical services and patient entertainment and communication services to be integrated in one terminal.

For its part, **Arantia** presented its new Chronos STB, which offers maximum agility in browsing through TV channels distributed over IP ▪

PREVIEW
COMMUNICATE & CONNECT

FAQs

How I can bring the Internet to the TV?

I've heard that you can now access the Internet from your TV and watch programming on demand from home. What do you recommend I do?

EXPERT'S OPINION

Access to Internet content through a TV set is being increasingly demanded.

The options are aiming towards **Smart TV** sets, although this solution has limitations inherent to the television set itself.
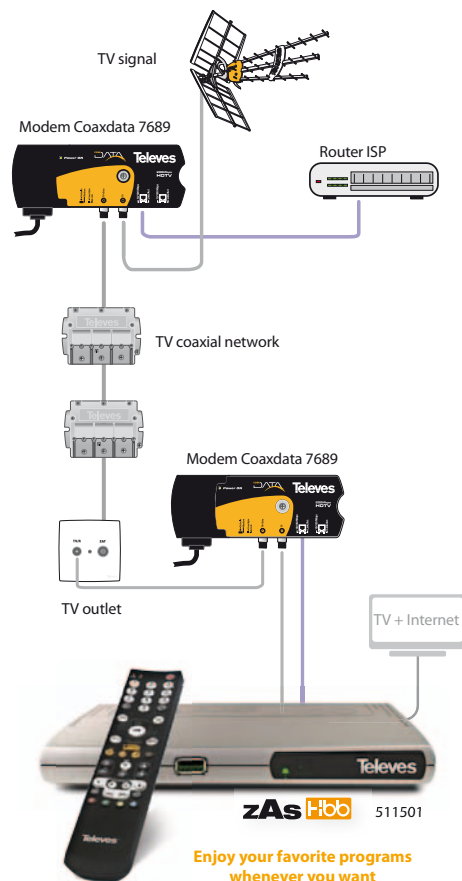
For those cases where the TV set does not have Internet access, or even for those old TVs of "cathode ray tube", Televes offers a HD DTT receiver with Internet access via HbbTV protocol.

The ZAS Hbb TV provides free access to video on demand services.

Thus, any TV wil be able to receive all those attractive audiovisual offers, from providers like TVE.

If no Internet conection is available in the vicinity of the TV, it will be necessary to convert the TV outlet into a multimedia DATA outlet, with the same performances as those achieved by a "Fast Ethernet" connection.

Undoubtedly, CoaxData is the ideal solution ▪

TV signal

Modem Coaxdata 7689

Router ISP

TV coaxial network

Modem Coaxdata 7689

TV outlet

TV + Internet

zAs Hbb   511501

**Enjoy your favorite programs
whenever you want**

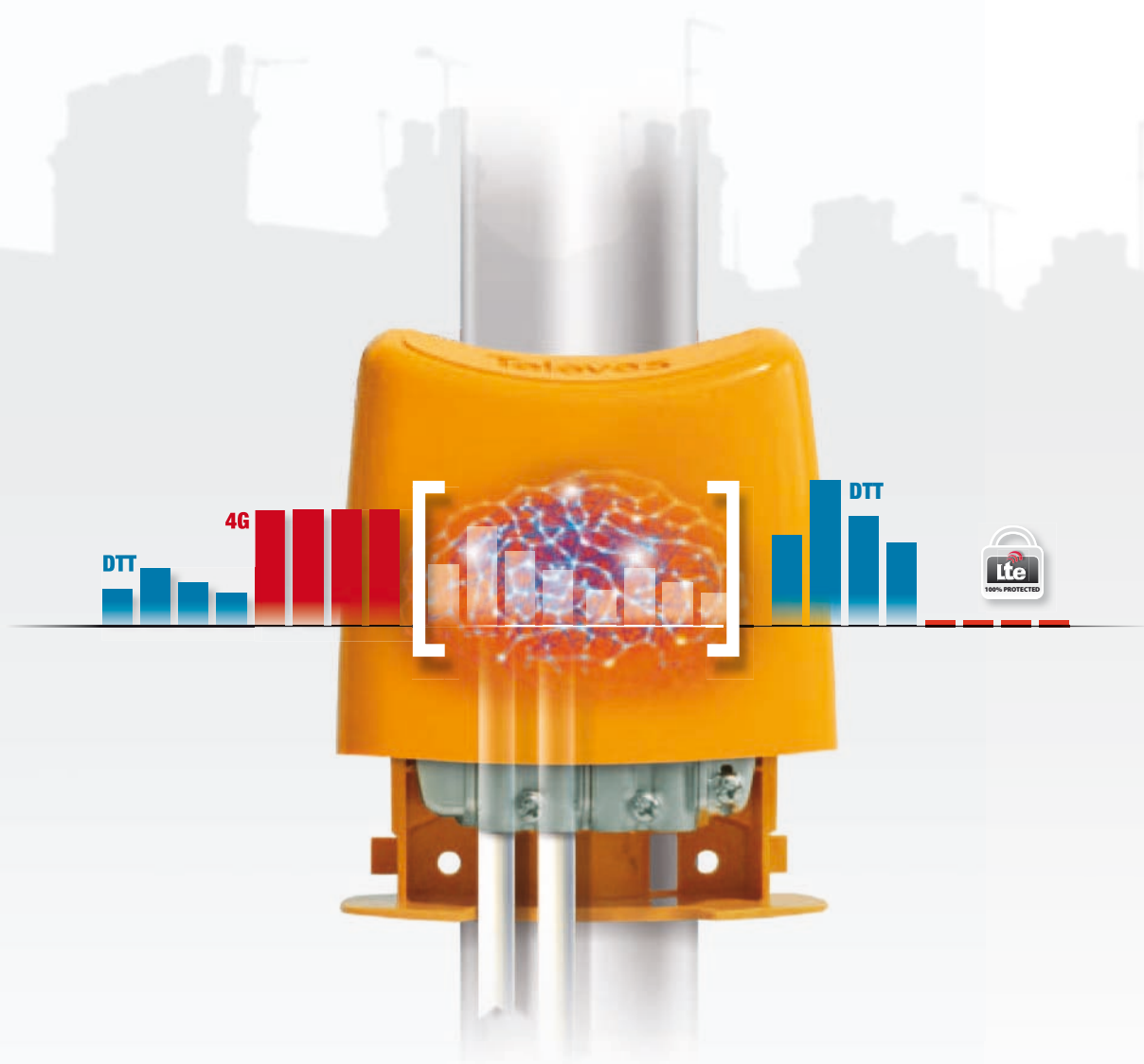## YOUR PICTURES

A taxi with DTT

Until the future "Mobile Digital TV" is launched, an Innova antenna and a ZAS receiver can do the same function. And if not, just ask to this taxi driver in Oporto.