

# INFO Televes®

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FREE EDITION



## Televes opens a new subsidiary in Russia

Televes already has its "tenth". With the setting up of the new branch, planned to be on the 1st of September, Televes will add a new reinforcement to its existing multinational structure. This office will be located in Moscu, in an excellent logistic network area. It will consist of a five-person team led by Valery Vardanyan.

Russia is within the set targets for the company's international expansion plans. It has a growing economy with more than 145 million consumers, and remains the natural gateway to the regions which once conformed the Soviet Union and which nowadays compound the "New Customs Union".

It is expected that Armenia and Kyrgyzstan will join this league in 2015,

which nowadays links Russia with Kazakhstan and Belarus.

Televes Russia will focus on the Digital Terrestrial Television and the analogue switch-over, set for mid 2015. Aerials, field strength meters and head-ends are Televes' products that will suit perfectly any need of the market.

Apart from this, Televes Russia will also concentrate in the management with cable operators, with the highest growth segment in the market. Valery Vardanyan, director of Televes Russia hopes that the launch of this branch will strengthen the brand image and recognition that equate Televes with quality and the most professional technology and after-sales support ■

TELEVES RUSSIA WILL ENFORCE THE INTERNATIONAL EXPANSION  
THROUGH THE COUNTRIES THAT COMPOUND THE NEW CUSTOMS UNION

AND ALSO...



In a SAT TV service, does the user have to choose the audio associated with the video content?

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4GNOVA.

   [televes.com](http://televes.com)

## MEETING POINT

Visit us at:



### SEPTEMBER

12-14	IBC	Amsterdam	Netherlands
19-22	FUTURA	Salzburg	Austria
28-30	THE HOTEL SHOW	Dubai	



## FAQs

### InfoComm

(Las Vegas - USA) 14-20 June



Televes has participated in both shows and conferences at Infocomm, Las Vegas. The H30D3 field strength meter with remote control and the SD and HD QAM T.OX encoders were presented in the company stand. These last ones, with their watermarking functionalities, are greatly helpful to cable operators to prevent from piracy.

### Broadcast Asia

(Singapur) 17-20 June



TRedess solutions for the deployment of Digital Terrestrial Television networks were presented at the company stand, focusing on the deployment of such networks in southeast Asia, a region with high potential. Broadcast Asia is the main event in the region and Televes stand had a huge success in terms of professional public assistance.

### FILDA

(Luanda - Angola) 22-27 July



Televes has also participated in an extensive stand at FILDA, where T.OX range solutions (most of all, COFDM DVB-S2 CI) coped most of the attention. The Easyswitch range is positioning itself as the most effective solution for the hospital-ity industry, a sector also quite grateful for the Arantia multimedia IPTV systems. The H60 field meters were also introduced, since they are beginning to constitute part of the equipment for Distribution/Reception of Digital TV signals ■

## In a SAT TV service, does the user have to choose the audio associated with the video content?

*In a DVB-S/S2 to COFDM, can you edit any setting to prioritise an specific audio service?*

### THE EXPERT'S OPINION

A COFDM channel, generated in a head-end, is often interpreted as analogue since it may look similar to an analogue channel, wherein the audio and video carriers defined the audio/video content.

When measuring a COFDM multiplex, you need to take into account the centre frequency of the multiplex, but not the

"old" video/audio carrier frequencies. In this digital format, all information is integrated within the multiplex, so it's transmitted altogether.

For this reason, it's the TV or DTT receiver the one to handle all the multiplexed data (including audio) but not the transmodulator ■



**More information on**  
[televes.com](http://televes.com)

Javier Esteban  
Technical Assistant Manager



## ALWAYS UP-TO-DATE

**UPDATE H60 V1.88**

This new FW version provides the following additional functionalities:

- New ref and plotted graphs for **LTE filtering**.
- **Automatic detection** of DVBT/T2 - DVBC standards.
- Possibility of **compensation when using an external attenuator** on electrical or optical mode.
- **GPS functionality**: GPS Tracking for meters with GPS ■



**DVB-T/T2 DVBC**



**Now available on:**  
[televes.com/en/content/](http://televes.com/en/content/)

## YOUR PICTURES



### Mimicry

This curious photo was sent through our Facebook page and was taken in Extremadura. It is undeniable that, sometimes, aerials break the natural harmony and it may be a good solution to mimicry them with the environment. The thing is, whether or not seek, this aerial goes unnoticed to all but to this keen photographer ■

## Re-multiplexing

*Re-multiplexing means a better usage of trans-modulating devices. Its advantages are countless: we will try to explain its main principles in this article, to make the best use of the equipment.*

As FPGA circuits are integrated into trans-modulating devices, the achieved progresses allow such fetching features as re-multiplexing.

This technique was already present in the DVBS2-COFDM and DVBS2-QAM trans-modulators, both launched on early 2013.

Nowadays, it has acquired a stronger role with the launch of the TWIN modules, Ref. 564301 and 564401.

Re-multiplexing consists on select, at the trans-modulator input, services included in one or more different satellites and generate with all of them only one output multiplex (when using a TWIN module, 2 multiplexes). We are talking about

a system that allows to create in COFDM or QAM a service package with pieces of information that belong to different satellites.

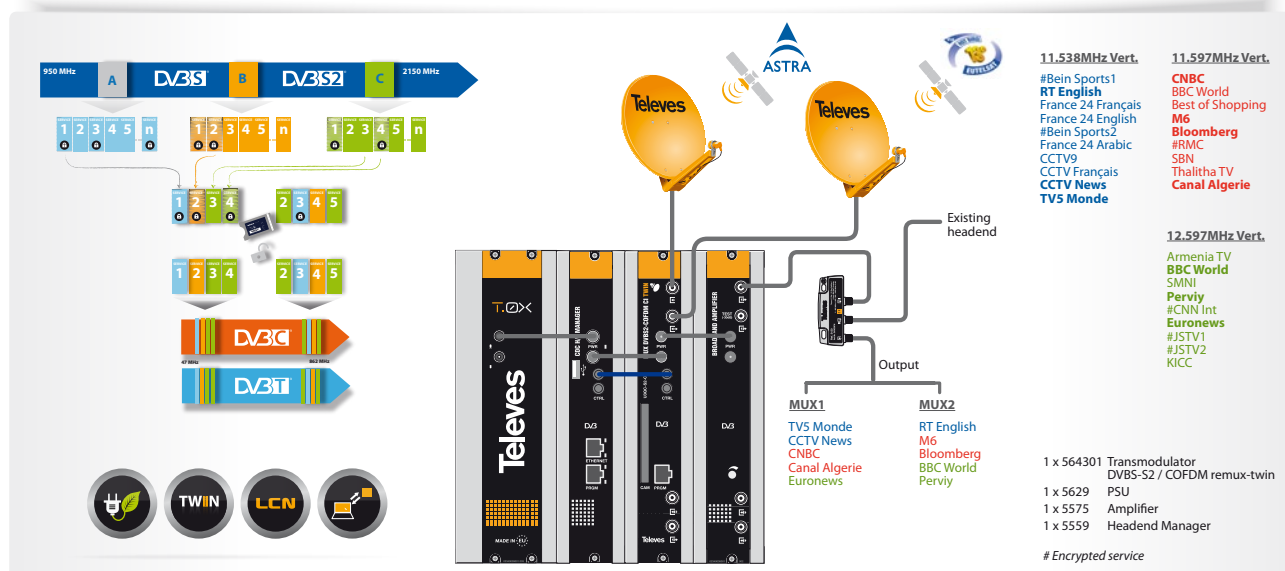
Besides, Televes trans-modulators allow the decryption of one or more services using a CAM module. Thus, the output package can incorporate decrypted services at the head-end.

For a better usage, these modules include the DiSEqC feature: selecting band/polarity and satellite will make easier the installation of the TV system.



### Highlights of this technique:

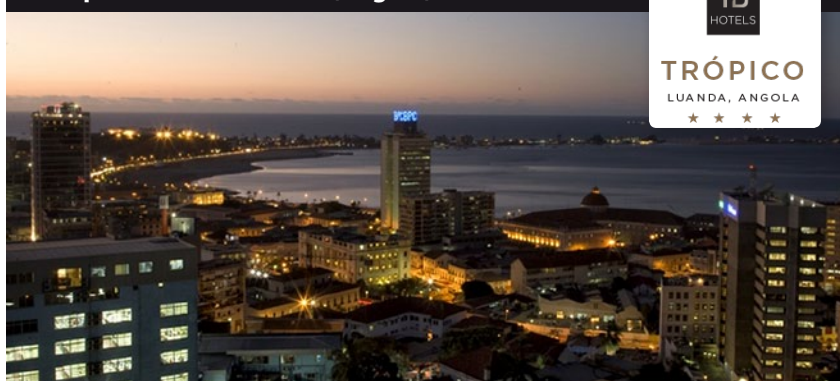
- **Better use of the frequency spectrum:** when re-multiplexing, the services to be distributed can be selected according to every system needs. Thus, the content of the multiplexes will be more appealing, avoiding those channels with low demand or encrypted.
- **More enticing Channel Line-Up:** re-multiplexing allow have more different channels and thus a higher quality content.
- **Better energy efficiency:** As a result of the better frequency usage, the number of required modules can be fitted to a lower number and thus need lower power supply.
- **Flexibility:** with these re-multiplexing trans-modulators, it's easier to manage, substitute or delete services in function of the required needs. Also, the SID edition (Service ID) will avoid the need of re-tuning the TV sets ■





## TELEVES FACILITIES

### Tropico Hotel in Luanda (Angola)



Placed in the very heart of Luanda, Angola, Hotel Tropico is a newly renovated classic, first open in 1972. Now, it has a newly refreshed facilities for the enjoyment of its customers.

The TV system offers 30 subscription channels, trans-modulated from DVBS2 to COFDM.

The satellite TV signal is received via a parabolic QSD antenna (Ref. 7903) and, due to the long distance to the head-end, an optical LNB (Ref. 2353) was chosen so the signal is transmitted on a fibre optic cable.

In the head-end, the signal is converted to RF using a MDU (Ref. 327002), which delivers the signal to a 5x26 Multiswitch (Ref. 714002) connected to the 15 trans-modulators.

To provide a more flexible system to the facility, units with re-multiplexing were chosen (Ref. 564201), which allow to program in the same multiplex services from up to 3 different transponders.

Every TOX unit includes a CI slot to insert a CAM module and decrypt subscription channels. Also, the head-end is remotely managed via a CDC-IP module.

Finally, the signal is broadcast to every TV set in the building is distributed using an "Easy-F" star configuration network, T200 LSFH coaxial cable (Ref. 213002) and DTKom amplification (Ref. 451201) ■



PERFORMANCE BY: **MONOFÁSICA**  
Instalaciones Eléctricas

**DID YOU KNOW..?**

### Televes started SMD manufacturing in 1983?

In 1983 Siemens exported the first superficial mounting device (SMD) machine outside Germany. It was a prototype of model MS-72 and Televes was the company that purchased it. Before Spain even knew what that technology was and despite the higher costs of the components, Televes envisioned vanguard manufacturing as a strategic mainstay going forward. The modifications and suggestions that Televes made on that prototype helped Siemens in their product evolutions toward newer generations and it



started a relationship of collaborations between both companies that lasts to this day.

History would repeat in 2010 when Televes was able to purchase the first Siplace CA4 that Siemens allocated outside of Germany, the first generation of SMD machines able to mix DIE component inserted from wafers with traditional components from reels and tapes ■

## IDEAS

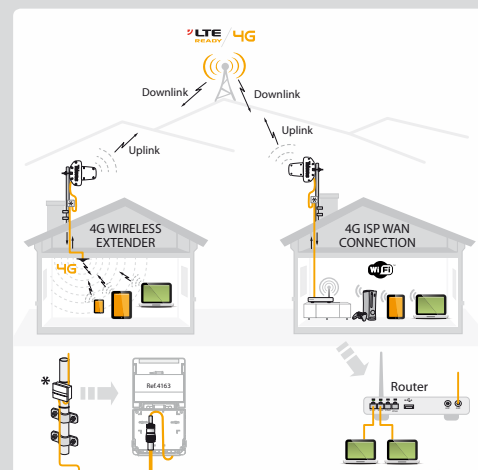
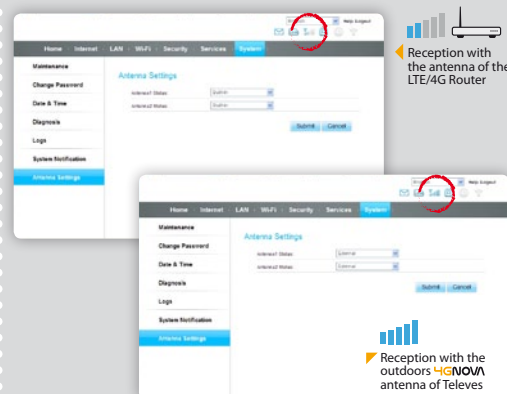


### A solution for a poor 4G coverage

4G technology allow internet access to an ISP provider with no need of cabling. Smartphones, tablets and other wireless devices can use this signal to access the Internet.

However, there are routers that provide its ISP service through a 4G signal. These routers can be a good choice to get a high speed Internet connection for second-use housings, caravans, or even in areas with no structured cabling from any Internet provider. In In this kind of areas it's quite likely to have a poor 4G coverage.

The solution can be installing a high quality outdoors antenna to get the 4G signal to the router: **4GNova** (ref.650101), an **outdoors antenna, bi-directional, tuned to the emission frequency bands and with LTE/4G reception** ■



Example of application.





Televes manufactures...

$$\theta \times 45^\circ (= 360^\circ)$$



## The value of having a good connection

Companies with a technological profile usually focus their values/highlights/strong points in electronics. This approach can be found in Televes in our patented **BOSS Tech** system for intelligent antennas, in the ability of our TOX range to trans-modulate signals or processing them with our HSeries field strength meters.

It may be easy to forget that the quality of a service is given by the weakest link of the chain. Is in this specific point where our industry usually forgets about the importance of the connectors. It does not happen in Televes, since our CEI Class+ connectors are manufactured automatically, controlling every step in the assembly process and being inspected with artificial vision systems.

The result is a **perfect connection, avoiding any interference** thanks to the connector's shielding and **thus guaranteeing the best quality signal** ■



NEW  
PRODUCT

# Improve your mobile devices coverage



## 4GNOVA

Tablets and smartphones linked to a 4G network through a 4GNova antenna will get better coverage without the need of emitting high power level signals, but saving battery power and protecting the user from radiation excess.



100% Designed, Developed & Manufactured in Televes Corporation  
televescorporation ■ televes.com ■ televes@televes.com

# Televes®