

# informa



## Televes exhibited its technological power at ANGA Cable 2010.

About 15.000 visitors from over 30 countries had the opportunity to see first hand the latest technological innovations that Televes presented at ANGA Cable 2010 (Cologne, Mai 2010).

The new products presented were:

**The T0X headends:** Headends designed as a highly efficient solution in terms of energy consumption by distributed service. They are prepared for the distribution of any modulation standards currently available and incorporate innovative features that make the work of professional installers easier, allowing them to implement fully customized configurations.

**NEURON:** new software for configuration and remote control of T0X modules through an intuitive interface that is accessible through any LAN or WAN IP.

**Optical Fiber and "Digital Home":** Televes solutions for the extension of telecommunications services via broadband fiber optics to the home. Within these services, the new



**Coax-Data System:** a solution to create local networks for the distribution of television, data services and Internet over coaxial and/or electrical cable (PLC). This technology is presented as a radiation-free alternative to wireless solutions, offering as advantages a high bandwidth and a stable, robust and secure connection, without having to do extra cabling since the coaxial and/or electrical networks are already present in households.

Televes also introduced its wide range of products for the German market and CATV operators. And for sure, we can not forget the revolutionary intelligent DAT HD BOSS antenna, specifically developed for digital terrestrial television (DTT) and ready to ensure the optimal reception of HD signals.



application of portable field meters H45 was also presented. Televes continues to expand the range of applications of this equipment, the first of its kind to incorporate digital processing and that has recently been updated to Service demodulation format MPEG-4 1080p Full HD.

**HDTV Tour:** the presence of Televes at Anga Cable 2010 was completed with the participation of the HDTV Tour mobile unit, an initiative to approach the technological keys of the high definition television to installers, technicians and telecommunications students across Europe.

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## Product News

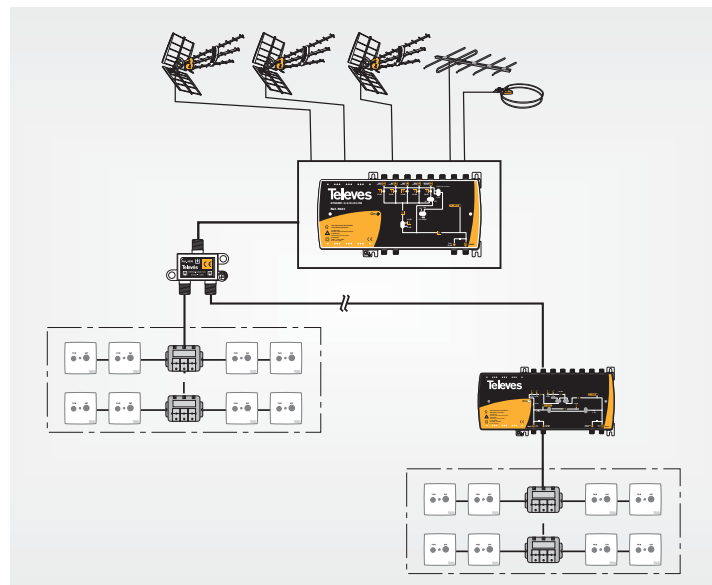
### DTKom Amplifier

The prestige and reliability of the Televes broadband amplifiers is an added value to the excellence of this range of products.

Televes has gone a step further on the design and manufacturing of amplifiers. Designed with the latest technology in broadband devices, the DTKom amplifiers stand out for their technical specifications and their easy installation and adjustment.

Their main features are:

- Input signal detector in each band in order to help the installer to detect possible failures in the signal transmission from the reception system.
- Return channel at 30 and 65 MHz, active or passive. By means of a switch it is possible to choose whether the treatment of these signals must be active or passive, allowing to adapt them to the characteristics of the distribution network.
- External accessibility of the adjustments and configurations. Switches and level potentiometers are accessible from the outside. The diagram printed on the front of the amplifier clearly explains how to configure the different settings of the product.
- The "High / Low" gain is selectable and allows the adjustment of the output level without using signal regulators (internal input attenuators) and therefore without degrading the C/N.



# DTKom



The DTKom range is presented in two technological groups:

- The **POWER DOUBLING** range allows to get output levels up to 129dB $\mu$ V in VHF and UHF bands and above 120dB $\mu$ V, with the possibility of equalization, in SAT (IF) band.

It is also possible to choose (switch) having two outputs with a maximum level of 123dB $\mu$ V in the VHF and UHF bands.

- The **PUSH-PULL** range allows to get output levels up to 123dB $\mu$ V in VHF and UHF bands and above 120dB $\mu$ V, with the possibility of equalization, in SAT (IF) band.

Functionally, the DTKom series, with a wide range of products, from head-end multi-input amplifiers to line-amplifiers, covers any need for any TV distribution network.

Ref.	Description	Equivalent
5335	5-30PP47-862+FI	5365
533501	5-65PP47-862+FI	5398
5339	5-30PP47-862	5379
533901	5-65PP87-862	5383
5337	5-30PD47-862+2FI	new
451201	5-65PD87-862	4512
451202	5-30PD47-862	4510

## FAQ

### HD test emissions

The HDTV test emissions are common in different countries. The TVE (Televisión Española) MPEG4 emissions are using an audio mode that can only be processed by a reduced group of receivers.

The Televes receiver ref.7143 is among those few ones that can process encoded audio signals in AC3 (Dolby +) as the recent tests in Seville proved. In fact, the performance of this receiver makes the 7143 a complete multimedia center for HDTV reception.





## Your pictures

*Freak world inspired in Televes*



*Yoda himself would claim something like that on watching the "tuned" Millennium Falcon. That's fame. On May 21st a meeting inspired in the anniversary of "The Empire Strikes Back" was held in Santiago de Compostela, whose commemorative is shown in the picture above. It's obviously a clever way to link the event with Santiago.*



## Real Installations

### Cape Town-Airport (South-Africa)

The Football World Championship in South Africa will lead many people to use the Cape Town-Airport. Considered the best airport in Africa and the 17th in the world ranking - its television network is made with Televes products.



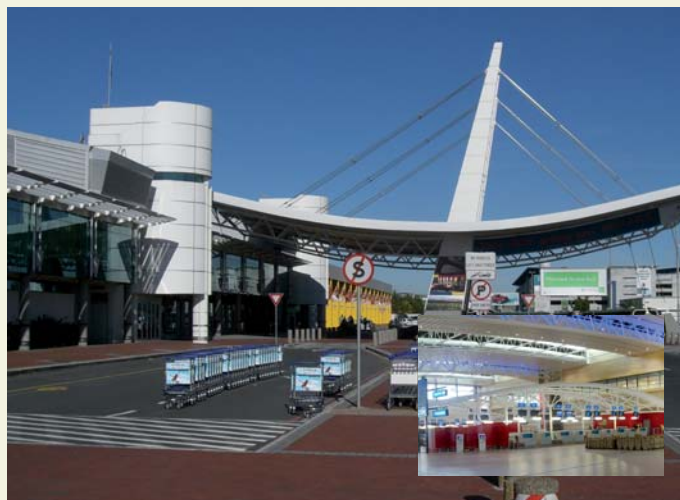
## Ideas

### Creation of MP3 files with the DVD/DVB-T Receiver (Ref.7141)

The latest version of the DTT receiver with DVD ref.7141 DTT incorporates an attractive feature: converting audio files from CD to MP3 format for storage on a USB stick.



Besides, the receiver allows to process the files originated by specific menus, where you can carry out functions as the creation of summaries, playlists, theme selection, etc.



It is really remarkable the headend with 21 UHF channels (VSB modulators and T03 amplifiers) and an IF processing system.

Installed by GB Satellite Installations in cooperation with Jemic International.



# Cross polarity adjustment in DTT-SAT applications

In the case of having signals transmitted using the DVB-S2 standard in the same frequency but different polarity (e.g. DTT-SAT services via Hispasat), the adjustment of the LNB skew angle is critical. Only with a meticulous procedure and the help of a field strength meter as the H45, with Link Margin measurement, the installation can be fitted with guarantee.

The dish alignment and the adjustment of the reception system is divided into two phases:

1. Dish alignment: azimuth and elevation setting.

1.1. Power the LNB at 18V and 22KHz using the field strength meter H45 (fig.1).

1



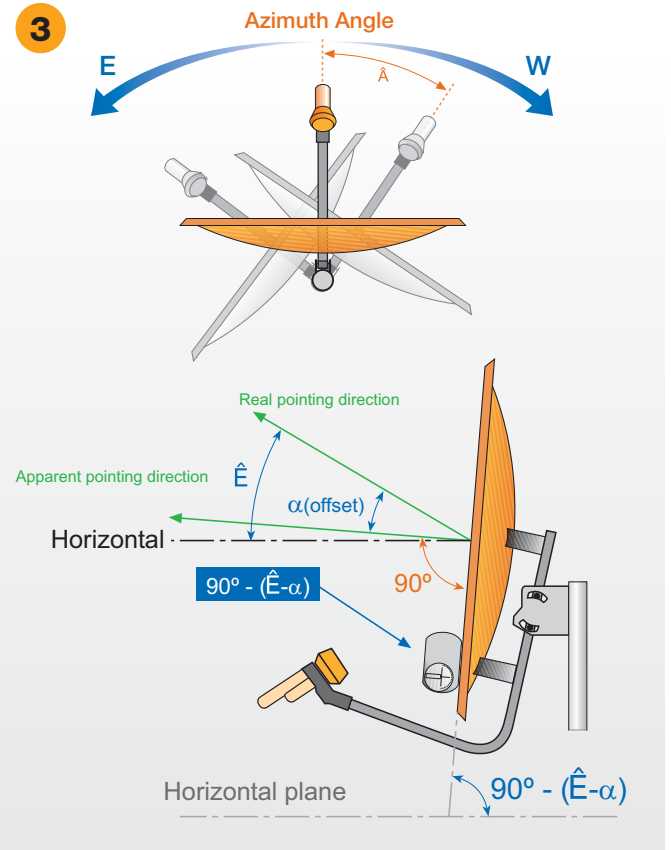
1.2. Rotate the LNB to "5 pm" as shown in fig.2.

2



1.3. Set the ELEVATION and AZIMUTH of the dish until getting the maximum level in any frequency (fig.3).

3



2. LNB skew angle adjustment. This process is divided into three parts:

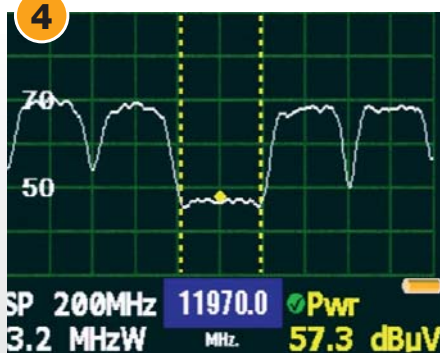
2.1. Adjustment using a spectrum analyzer: center the frequency (11.970MHz / SPAN 200MHz) and the spectrum should be as shown in fig.4. Adjust the LNB skew angle until getting a minimum level in this frequency.

2.2. Fine adjustment reading the LINK MARGIN at 11.615MHz Horizontal.

Adjust the LNB skew angle reading the LINK MARGIN at 11.615 MHz Horizontal (18V). This adjustment will be made rotating the LNB (softly) until getting the MAXIMUM value of the LKM (>3dB) (fig.5).

2.3. Final check of the LINK MARGIN. Once optimized the LNB skew angle, verify the LINK MARGIN at 12.631 MHz Horizontal High / Vertical High and 12.671 MHz Vertical High. It should be LKM>3dB (fig.6).

4



5



6

