

INFO Televes®

BIMONTHLY NEWSLETTER • NO.14 - OCTOBER 2012

¿Quién teme a la TDT?

Por JOSÉ LUIS FERNÁNDEZ CARNERO



EL PAÍS

Televes defends the DTT on all fronts

"You are a honorable citizen. You are doing your job perfectly, you are involved within your community, you look after your family (...). In logical reciprocity, you expect to be able to live your life in a respectful environment and peaceful cohabitation. Finding a wall of hostility instead of respect would be striking. For him to be denied the bread and the salt would be outrageous..."

In an article published in El País on the 5th of August, the managing strategy director of Televes used this metaphor to describe the situation the DTT is living right now.

This letter is part of the work developed in the last months to defend the DTT as we know it today, an essential quota-free service of universal access.

the DTT as we know it today, an essential quota-free service of universal access.

This smear campaign undertaken by some authorities involved did see the threat of a "low cost" release of the digital dividend blowing out the DTT. Televes, to be heard and taken into account, reacted by launching springs. Along with Ametic and the Ministry of Industry, Televes defended the need to invest in the development of DTT, only possible if we preserve its spectral space to be able to offer quality services and technological evolution. Besides, Televes addressed to public opinion with articles published in El País, ABC, Cinco Días and BIT, the magazine of the Telecommunication Engineering College.

Today the future of DTT is not sufficiently defined and Televes feels compelled to give its view on the digital dividend release process, applying responsibility, judgment and knowledge. ■

AND BESIDES...



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NEW PRODUCT

COFDM DigiSlot Modulators

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  televescorporation

MEETING POINT



Visit us at:

October

FRK	Leipzig	8-9
SCTE CABLE -TEC	Atlanta	17-19
EEBC	Kiev	17-19



TELEVES AT FUTURA IN SALZBURG, AUSTRIA 13-16 SEPTEMBER



For another year, Televes took part in this event that brings together major manufacturers and distributors of consumer electronics, home appliances and telecommunications. Televes presented the new product catalog, being the developments in the QSD high quality dishes and the H60 field strength meter of particular interest. The technical and commercial staff attending this great fair of the sector, confirm that the brand Televes is advancing by leaps and bounds in the German and peripheral markets, a great challenge and short term target for the Televes Corporation.

TELEVES USA AT THE FAIR PACE PCO EXPO 2012 - ROCHESTER, MN (EE.UU) 18-19 SEPTEMBER



This fair, specially targeted to private cable operators, was organized by one of the biggest distributors in the industry; only invited manufacturers can expose. The operators that have the best solutions that Televes USA offers to the market take part herein; T.OX headends with transmodulation 8PSK/QAM and RFoG elements, as well as exclusive applications for the field strength meters H30 and H60.

Javier Ruano, the managing director, commented that "the product presentation in this kind of event maximizes operationality, as you have the opportunity to delve into a product demanded by the assistants, which creates a more personalized loyalty" ■

Can I receive DTT in my Caravan, boat, or in fringe areas?

Yes, in these cases you should contact a licensed contractor to install a satellite receiver DTT, ref. 5113.

THE EXPERT'S OPINION

Can I order a receiver for a caravan or motorhome?

Yes, you can. The conditions are as follows:

- Vehicles authorized to install SAT DTT receivers are motorhomes and caravans, registered in Spain, according to the definitions given in Annex II of the General Vehicle Regulations approved by Real Decreto 2822/1998 of 23 December.

- In these vehicles, the first two digits of the classification code given in the ITV card, matching the criteria of construction, will be one of the following: 32, 33, 40 or 41. The next two digits correspond to the criteria of use, and must be 00 or 48.

- Permission is granted for the reception of DTT in national territory and for terrestrial and satellite combo receivers.

Documentation to be submitted:

- Registration number ■ ITV card copy

Can I order a receiver for a boat?

Yes, you can. The conditions are as follows:

- The boat must be registered in the register of ships and shipping companies of the Directorate General of Merchant Marine.

- Permission is granted for the reception of DTT in Spanish territorial sea, or voyages between Spanish ports.

- Before installing, or once performed, it is convenient its notification to the Directorate General of Merchant Marine or the Captaincy Maritime of the port where the installation takes place.

Documentation to be submitted:

- Name of the boat.
- NIB ■ MMSI ■ Register Number
- Route or navigation area
- Address of the port and the Autonomous Region where the boat is, or, where appropriate, the port of departure ■



Source:

abertis telecom www.sattdt.es

José Negreira
Training Manager



YOUR PICTURES



Gleaming solar panels...

The video sent from Córdoba by Suministros Técnicos del Sur S.A. (STS), shows that a section of tower is something more than just a rugged antenna support. The possible applications of these structures are numerous and versatile, such as evidenced by this washing system of solar panels ■



To see the video

televes.com>servicios>infoTeleves



Talking about...

GSertel, Certification Laboratory of Televes Corporation

Interview with:

Gabriel Loyácono, managing director of GSertel

With the H45, a portable field strength meter with performances that before only were within the reach of laboratory equipments, GSertel became a key element of the Televes Corporation. Now the plan is to diversify its product range and to be attentif to the major role that the instrumentation will play with the digital dividend. That is the way the managing director, Gabriel Loyácono sees it.

GSertel is a young enterprise inside of the Televes Corporation - what role does it play within?

In the process of installation of ICT systems, GSertel takes the last step by measuring and verifying the reception, distribution and broadcasting facilities. We rely on the technological development to the highest level, offering solutions that before only were reserved to laboratories with much higher costs.

Is it possible to position in such a competitive sector with only one decade of existence, as is the case of GSertel?

Several factors have helped us. First, a young team of very high level. Second, an industrial group with high capacity and flexibility in manufacturing. And finally, a commercial network of global coverage oriented to the customer needs.

How would you describe your product range?

GSertel tries to cover the highest levels of professionalism within the facilities, so that the development of the equipments

is clearly oriented to features that provide greater cost-benefit ratio to the installer. In addition, we have recently launched a new division to diversify the product, including to our catalog telecontrol systems for the energy and infrastructure sector.

What sales percentage makes out export?

The export share amounts over 70%. And this is the best example of international recognition of our product.

Do you follow the Televes Corporation principle of making the whole product cycle "at home"?

From the product design to its manufacturing and marketing, through the integrated design (mechanical, electrical, electronic, etc.), all the processes are carried out fully within the Group. This does not mean that in the development phase we would not count on the valuable collaboration of technology centers, of whom Gradiant is the best example.

With the H45, GSertel marked a milestone when introducing for the first time the digital processing in portable measurement equipment. How important do you think was this achievement?

It has undoubtedly marked a before and after allowing to lengthen the product cycle. To telecom operator can have now, with a portable and affordable equipment, benefits previously only available to laboratory equi-



pment. GSertel made a strong commitment in 2008 and we have seen that this was the right decision.

What are the main advances in the new model H60?

It was the next logical step. It has a screen with higher resolution that enhances the presentation of the measurements and the computer connectivity, so it is possible to obtain measurement results in real time on an IP network. The instrument becomes a more active element in the continuous monitoring of a cable network.

What will the release of the digital dividend mean for your business?

New business opportunities arise with the increase of the problems related to the coexistence of mobile phone and DTT fourth generation networks. It will be necessary to analyze complex environments of signal propagation, which will lead to the instrumentation to gain prominence ■

Sergio Martín
Communications Manager



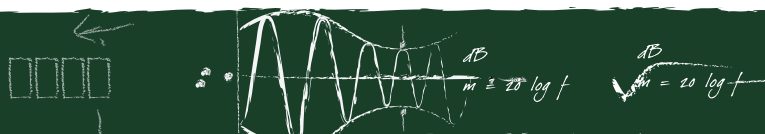
DID YOU KNOW...?

... that the SAT-90 received the 'Mundo Electrónico' award?

In 1985 Televes launched the SAT-90 series, the first indoor satellite unit integrating a demodulator and modulator in one single module.

This unit was recognized in October of that year with the *Tribuna del Inventor Innovador* award by the magazine 'Mundo Electrónico' ■





Data tables in digital transmissions

DTT signal transmissions have the inherent advantage of a better quality of video and audio as well as the great reduction of the frequency spectrum required. Furthermore, there is a significant amount of information which can be inserted, being useful for both the user and the installer.

Digital broadcasting of TV channels require special care at the time of configuration. There are parameters that, if not properly defined, can cause the lack of channels and services on TV sets.

For this reason, you must configure of NIT (*Network Information Table*). By means of NIT will be possible ID settings (*Network Identifier*) and ONID (*Original Network Identifier*). These two identifiers must be consistent with the country in which the facility is located, because there are already specific values of these fields for each country, meaning that all units in the system must have the same values.

Each unit will have a parameter value TSID (*Transport Stream Identifier*), unique and different. Otherwise, if a facility has two multiplex with equal TSID, one of the services will not be tuned, since when making a search the TV set, or the receiver, they will identify the two different services as being the same.

Therefore, each Transport Stream (TS) comprises several services identified by a unique SID (*Service Identifier*) each one of them, and can be repeated in different TS.

You can also assign a name to the network, either to set the hierarchy information, or to define the LCN of each service.

In the T.OX transmodulators with COFDM output, the NIT can be configured from two modes:

■ **Auto:** values for NID,TSID and ONID are the same as those of the input signal.

■ **Manual:** the values of the parameters can be edited. This option is required for installations where more than one module has to be configured to receive all programs of a transponder. In this case, you would need to change at least the TSID of one of them in order to be able to tune the services of the two modules by either the TV set or the receiver of the end user.

You can also define the LCN of each service module. Be aware that there can not be identical values between units.

In the COFDM Encoders and Modulators there is the possibility of editing the program name and the SID. In the NIT can be assigned a name to the network, and configure the NID, TSID and ONID.

In any of these devices can be configured both the hierarchy and the LCN for each service. Thus it is possible, through an automatic search on the TV set or DTT receiver, a classification of programs according to the desired order, regardless of multiplex to which they belong. This feature is especially attractive

for any facility with a large number of services and televisions such as hotels, hospitals and CATV networks.

GLOSSARY:

NID (Network ID): A value that identifies the network that is broadcasting the Transport Stream, this value is unique and specific to each country.

ONID (Original Network ID): ID of the network that originally broadcast the service, this value is also unique and specific to each country. NID and ONID may be different.

TSID (Transport Stream ID): It contains information regarding the services transmitted in a Transport Stream.

SID (Service ID): Unique identifier of a service within a TS. A service can be considered like a TV channel.

NIT (Network Information Table): Indicates how the TS are organized in the network. The NIT contains the name of the network and the NID.

LCN (Logical Channel Number): Allows editing of the order in which, absolutely all services, will be classified in TV sets and DVB-T receivers allowing search by LCN ■



Parameters susceptible of being configured		
T.OX	Encoders	Parameters
●	●	NETWORK ID (NID)
●	●	ORIGINAL NETWORK ID (ONID)
●	●	TRANSPORT STREAM ID (TSID)
	●	SERVICE ID (SID)
●	●	LCN

Helder Martins
International Technical Assistance



IDEAS



How to avoid interferences in UMTS networks produced by IF amplifiers?

RECOMMENDED BY:

DIGITAL+

Since the release of the mobile 4G and LTE, in Televés we have emphasized the importance of shielding as the best solution against interferences.

The most common is talk about TV elements that are affected by interference from other bands.

However, the reverse also happens, as it is the noise generated by faulty installations of satellite IF reception systems in the 1.9 GHz band used in UMTS.

The main source of this interference is the IF amplifier, either by not having enough shielding or be working at the limit of its maximum output voltage.

The IF amplifier, ref532401, does not interfere the UMTS band. It is an amplifier in which the design has been carefully detailed to the point of be specified in its leaflet radiated emissions levels according to ITU-T K60. Thus, for the UMTS band, this value is less than 47dBμV/m eventhough the limit is established in 74dBμV/m.

Because of its high output voltage (124dBμV as per DIN VDE 0855/12), the amplifier does not need approach its saturation to reach an optimum level in the TV outlet.

Both features make this amplifier ideal for distributing satellite IF signal by operators without affecting the users of mobile phones ■



TELEVÉS INSTALLATIONS

Coaxdata's system in the Atlanta Braves Stadium



At Turner Field baseball stadium of the Atlanta Braves has it has been installed a coaxial network that enables the distribution of television signals from own production as well as the distribution of the Internet by the CoaxData system.

The signals from the cameras are linked wirelessly through a Televés headend of processors that makes with them a DTT multiplex. This multiplex is amplified using a remote powered amplifier featuring return channel.

The TV signal is mixed with the signal generated by CoaxData modules, which ensures the distribution of television and data services throughout the stadium.

The Braves are one of the most prominent and oldest franchises in the Major League Baseball, being seconded

to the Eastern Division. In his palmares has 9 league titles and 16 division titles. Since 1966 are settled in Atlanta (Georgia), and its headquarters is Turner Field Stadium, opened in 1996 as Olympic host.

From now on, in the Turn Fiel Stadium, television and the Internet operate with Televés product.



COFDM Modulators

DIGISlot

The new family of COFDM digital modulators DigiSlot is available in two different chassis: to be installed into 19 inch racks, and to be installed onto wall.



Ref. 554601

The output channel of the DigiSlot modulator can be adjusted at any frequency, in both BI and UHF TV bands. The versatility of these modules, equipped with two slots, allows connection of one or two encoders with either A/V or HDMI inputs.

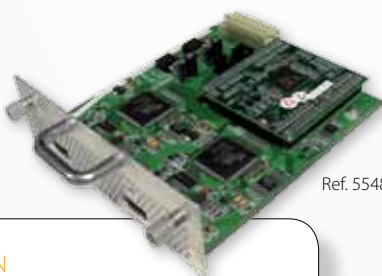
This system allows the distribution of signals both from sources A/V and HDMI, through a coaxial cable network. In order to do this, the system requires an A/V encoder with two inputs, and one HDMI encoder with one input, to generate a COFDM multiplex which can carry up to four services.

The applications of this product range DigiSlot, is quite extensive: hotels, shopping centers, public places and even the residential market, where installations require the same signal source across the network, and with a quality SD, HD or 3D (CCTV cameras, TVSAT receivers, DVD, Blu-ray or any other source A / V or HDMI).

With a simple installation, it can be configured through the front panel or via a PC using a web browser (no specific software needed).



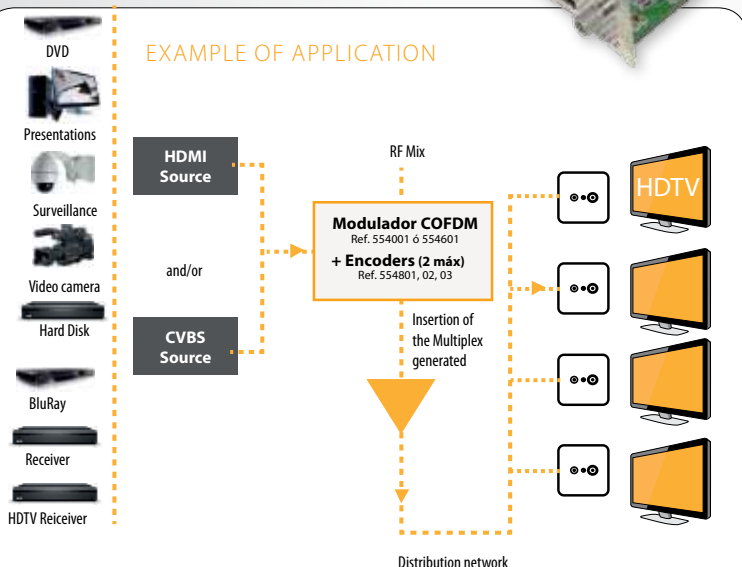
Ref. 554501



Ref. 554803



EXAMPLE OF APPLICATION



Encoder			
Reference	Inputs		Compression
	Signal	Redundancy	
554801	1 A/V	-	MPEG2 SD
554802	2 A/V	-	MPEG2 SD
554803	1 HDMI	1 HDMI	MPEG4 HD

Modulator			
Reference	Installation	Slot for encoder	Output
554501	Wall	2	COFDM
554601	Rack 19"	2	COFDM