

INFO Televes®

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New product reference guide



For installers of telecommunications infrastructures, the digital dividend means a great challenge. As market leader, Televes is already prepared to offer the full support needed by professionals of the sector, with both products and technical support.

Thus, Televes presents the **LTE Product Guide**, a document on solutions that will help to reach the best TV signal: stable and free of 4G interferences.

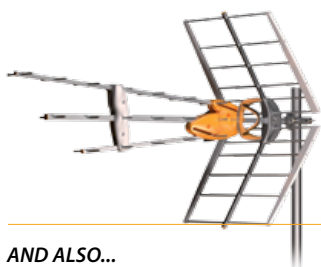
Televes has developed a complete range of products designed specifically to minimize the potential influence of LTE services on DTT. All these products bear the Televes registered mark "**LTE ready**".

In this product family highlights the **Q-BOSS**, the only device able to adapt any antenna of the market to this new scenario, turning your active or passive antenna into a smart device.

The intelligence of the BOSSTech system has also been incorporated into the new antenna **DAT HD BOSS 790**, as can be inferred from its description, along with important improvements both electrical and mechanical, besides its optimization to be capable of rejecting signals from the LTE band.

On the other hand, Televes also offers a suitable set of **rejection filters** which are available as follows:

- Two types of connections: a) F connectors; b) easyF connection.
- Frequency bands with different cut-off channels: 58, 59 and 69.
- Two types of technology: LC and micro-cavities ■



Capture this code to access the Product Guide



AND ALSO...



How can be powered the LNB even though the facility is not wired?

Pg. 2



How to distribute a High Definition TV at home

Pg. 5

SUMMARY

TELEVES IN THE WORLD

Dubai

FAQ

How can be powered the LNB even though the facility is not wired?

YOUR PICTURES

With a T100 PE Cable this would not be required

TALKING ABOUT...

Tredess

DID YOU KNOW

Televes used a dish of 5m in a fair?

TRAINING

Checking the return channel for CoaxData facilities

IDEAS

How to distribute a High Definition TV channel (HDTV) at home

FACILITIES

New hospital in Lamego (Portugal)

NEW PRODUCT

New T.OX modules featuring SID edition (Service_ID)

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MEETING POINT



Visit us at:

February

Andina Link Colombia 26-28

March

Cabsat Dubai 12-14

April

NABSHOW Las Vegas 8-11

DUBAI



Televator, the Televes distributor in Naif market in Deira (Dubai) has opened its doors at the end of last year 2012.

This distributor offers its customers all kind of solutions related to TV signal processing and distribution, at both professional and domestic level.

This new point of sale contributes to the consolidation of the Televes commercial network in Arab market.

From Televes, we wish to Televator a lot of success in this new project ■

ISEP

PORTO 5-6 DECEMBER



On 5 and 6 December, Televes attended the Electrotechnical conferences about Electrical Machinery and Installations organized by the Porto Institute of Engineering.

The aim is to promote the meeting between companies, professionals, researchers, teachers and students related to the sector. In addition, Televes took part in the seminar "Telecommunication Infrastructures and big projects" promoted by ANACOM, telecommunications regulatory organism in Portugal ■



FAQ



When pointing a dish equipped with a Fiber Optics LNB... How can be powered the LNB even though the facility is not wired?

EXPERT OPINION

By using the optical fiber interface, installed on Meters H45 or H60, it is possible to make optical measurements directly through the fiber.

The power voltage can be supplied by connecting a coaxial cable and generating a voltage as if it were a conventional LNB ■



ALWAYS UP-TO-DATE

New software for H60 and H45 Meters

New updates of software for our Meters are available for free at our web site in the Download section:

H45: new S/W version 1.79.01.

H60: new S/W version 1.82.

After you have downloaded and installed the firmware in your PC, to update the meter remember to power it from the mains through its battery charger, turn it on and connect the USB cable to your PC. Then follow the instructions on the screen.

Updating takes some time.



New features are:

- ✓ Faster automatic locking on "TP DVBS2".
- ✓ Update of satellite channel plans.
- ✓ Faster SCR measurements.
- ✓ Optimization of macro-measures processing ■

More information on:

televes.com>services>download>software

YOUR PICTURES



With a T100 PE Cable this would not be required

It is praiseworthy that an installer worry about the quality of its facilities.

But using a T100 Plus PE Class A 2155 Coaxial, it would not be necessary to protect the cable with a pipe, because its polyethylene sheath is totally weatherproof.



Talking about...

Interview with: Iván Rodríguez
Managing Director of TRedess

"We will focus on high added value video over IP solutions"

TRedess is a real success story within Televes Corporation. The firm, which has been a key player in the digital switchover in Europe, is now ready to make the most of other opportunities which, despite everything, the digital dividend will provide. But it wants more, and it already has a good position in the video over IP business and in localisation systems. The firm's Managing Director, Iván Rodríguez, explains the situation.

What were the key factors that have led to TRedess' leading role in the digital switchover in Europe?

I would say that three main factors have allowed us to successfully manage large network deployment projects.

Firstly, technology, as TRedess has state-of-the-art equipment: Compact, reliable and capable of operating in locations where others were could not.

Secondly, our capacity to personalise the product to suit the customer's specific needs and provide field support. Finally, belonging to Televes Corporation, which gave us ample manufacturing capacity to meet the deadlines.

Is the great opportunity now the digital dividend?

The legislative uncertainty around the digital dividend has led to one of the greatest problems for the development of the Broadcast sector. In any case, the dividend will lead to a revitalisation of the sector and

an important field of work for installers.

But TRedess is not only developing the Broadcast line of business.

What other niche markets is the firm focusing on?

Broadcast is TRedess' backbone and it will continue to be a fundamental mainstay with a view to the spectrum and coverage changes brought by the digital dividend in Europe. This is where our greatest efforts will be placed in internationalisation. But, indeed, it is not the only chapter in our catalogue.

The second mainstay which supports the company is the video over IP business. We focus on this market because it has an important component of technological development which fits in well with TRedess' profile. We have invention patents, such as the video watermarking system, which position us ahead of the game, and we fill focus on developing new high added value applications, such as advanced video analysis systems for a variety of technological applications.

Can you highlight a project?

Recently, TRedess has been selected to carry out a project for the supply and installation of equipment for the homogenisation and remote viewing of the video surveillance system of the Galicia Port Authority.

The aim is to connect all the systems with each area's control centre as well as with the main centre.



Do you have plans to diversify beyond Broadcast and Video over IP?

Yes. We are working on new developments and in particular on a benchmark product that is RTLS (Real Time Location Systems). Nowadays, outdoor localisation is resolved using GPS and GSM-3G technologies, but indoor localisation is not and various solutions exist -WIFI, RFID, Ultra-Wide-Band, Bluetooth- depending on the critical nature of the precision.

TRedess has opted for a multi-technology platform, capable of the real-time localisation of an organisation's critical assets or people in movement. Therefore, with RTLS from TRedess it will be possible to know on what floor and in which room a patient or a member of staff of a health centre is located, for example.

When developing internationalisation plans, what are the advantages of belonging to a multinational group like Televes Corporation?

It is a factor that sets us apart from our competition. Televes is a member of the Leading Brands of Spain Forum and that is a very important first impression. In addition, Televes' large international commercial network gives us knowledge of the markets, proximity to customers and immediate response times ■

Sergio Martín
Communications Manager



DID YOU KNOW..?

...Televes used a dish of 5m in a fair?

The satellite dish of 5m which is exposed in the head office of Televes was active during the Sonimag fair at the end of 80s.

At the fair, most of the signal was from the Ghorizont Russian satellite, but only Televes was able to pick up Intelsat VI signals.

A 5m dish has a very narrow radiation lobe; when the difficulty of moving such a huge metal structure is added, anyone can conclude that its orientation was a challenge.

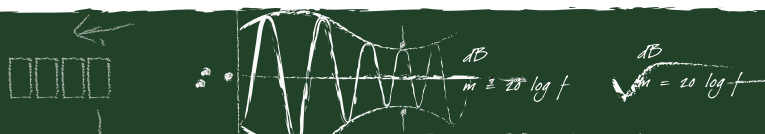


José Luis Fernández Carnero, the current General Director of Strategy in Televes, remembers that long night in which

"...the antenna was located on the back of a truck in the common area of Sonimag, and after calculating azimuth and elevation, we proceeded to its fine tuning with a crowbar and a TV".

After the Sonimag success, the dish of 5m ended in the area of Televes laboratory in Santiago de Compostela.

This dish, that rests on the Televes gardens and one day caught the elusive Intelsat VI, is today a powerful visual attraction ■



Checking the return channel for CoaxData facilities

In many cases, the facilities are not ready to support applications that use the return channel (5-60 MHz). The fact that the signals are on UHF DTT causes forgetfulness of "low frequencies".

Homeplug CoaxData uses the return channel (7.5 to 30 MHz) to establish a data network in a coaxial facility. It is a Plug&Play system as long as the return channel has a minimum quality for transmissions.

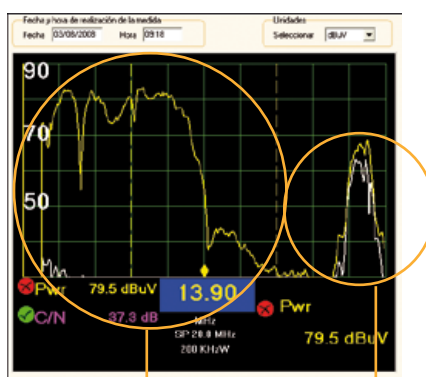
The quality is assessed by a maximum attenuation (80 dB) and a minimum C/N. The better these parameters, higher transmission rate will be achieved.

For checking the network it is necessary to use a noise generator Ref 5930 (or a return channel simulator Ref. 7637).

Thanks to these screens, is detected the presence of a filter which limits the band to 14 MHz, which will result in a real reduction of the bit rate. Without such a filter (that allows connecting CoaxData and Televes Integra) the bit rate that could be obtained would be 200 Mbps.

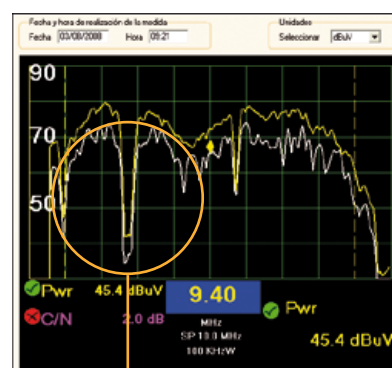
In addition, it is found that the attenuation (if compared with the previous record of the output level of the noise generator) is correct.

CoaxData features a software application (Coaxmanager) which allows knowing the transmission bit rate, in addition to representing a frequency response

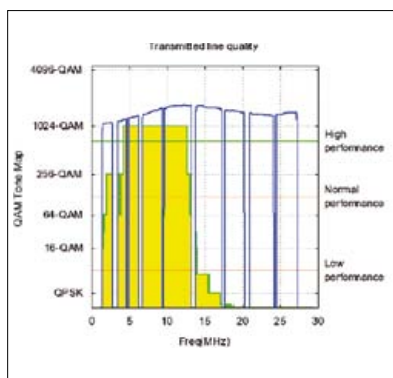


Coaxdata signal filtered out by a low pass filter. This filter is implemented in the diplexer Ref. 7669 to connect Coaxdata and Televes Integra within the same coaxial network.

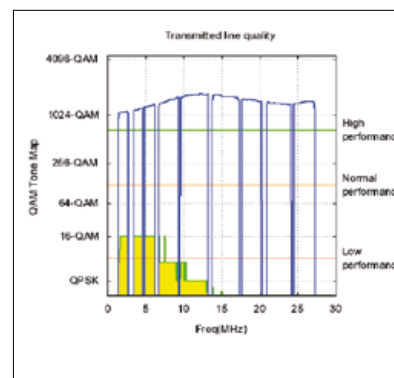
Televes Integra signal.



Coaxdata signal. Notice the "Gap" inserted by Coaxdata in order to not affect the AM signal.

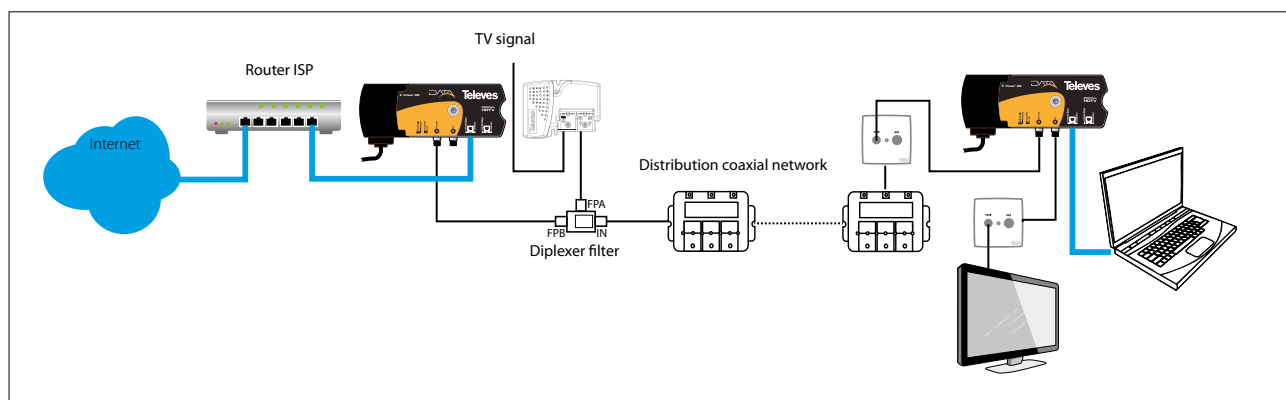


Graphic's network report by using Coaxmanager 70 Mbps bit rate.



Graphic's Coaxmanager report in a network with excessive attenuation in the return channel. 16 Mbps bit rate.

Capture this code for more information





How to distribute a High Definition TV channel (HDTV) at home

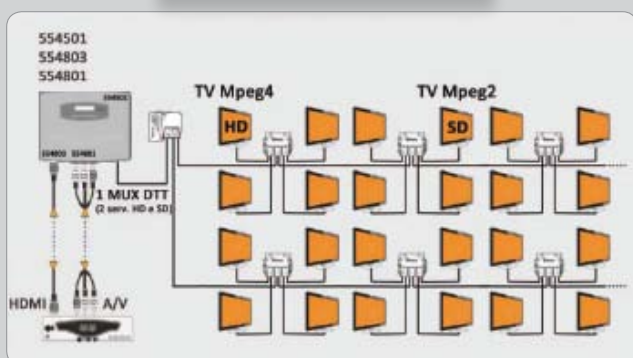
So far, the distribution of a high definition video source in TV show rooms of large Shopping Centers, was possible only through the distribution by means of splitters and HDMI cables, then only visible to TV with HDMI input.

Today, thanks to COFDM modulator DigiSlot (Ref. 554501) and HDMI Encoder (Ref. 554803), you can deploy HD content on a RF coaxial network by connecting the HDMI output of the device that generates or receives this signal (PC, BluRay, TVSAT receiver, etc.) to the HDMI input of this encoder, by keeping the original quality (HD or 3D) on all television with integrated DTT HD (MPEG4).

If we need to receive this content on the TV of the showroom, even without an MPEG4 chip, a solution may be to create a SD version of this signal by extracting of A/V signals from the source device and sending them to the A/V Encoder (Ref. 554801) which will generate a DTT MUX output with the SD version of the HD source.

For these situations, Televes offers its DigiSlot COFDM modulator together with the HDMI Encoder Ref. 554803. By using these two devices, it is possible to deliver the original signal quality (HD or 3D) for all television sets.

In this way, all the TVs will receive a COFDM multiplex providing two TV channels containing the output of our source: one HDTV and one SDTV. The MPEG4 TV set can display HD content, while those with MPEG2 only will display the standard definition ■



TELEVES FACILITIES

New Hospital in Lamego (Portugal)



The new hospital of Lamego (Douro) in Portugal, is equipped with a Televes system that distributes 22 programs of TV and Radio to more than 100 outlets.

An antenna "DATHD BOSS" receives terrestrial channels while a high quality disc QSD850 Ref. 7903, equipped with a support multisatellite Ref 790901, captures signals from Astra and Hotbird.

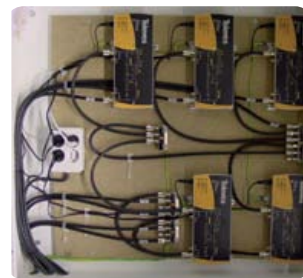
The headend consists of 3 DVBS/S2-COFDM T.OX Transmodulators to process around 15 FTA services broadcast from satellites.

It has been added a A/V PAL TWIN T.OX modulator for generating two private programs.

The system is monitored and configured remotely via IP using a Headend Controller "IP CDC T.OX".

The high quality coaxial cable installed in the network (TR165, Ref 214901 and T100PLUS LFSH, Ref 215101) allowed using only six Power Doubling DTKom line amplifiers for the entire cable run of 3500 m.

Implementation of the project was carried out by the JF Miguens installation company ■



PERFORMED BY:



JF MIGUENS

New T.OX modules featuring SID edition (Service_ID)

The installer can change channels in a facility **without the need for retuning TVs**



Ref. 564201 T.OX DVBS2-COFDM CI 3MUX
Ref. 563199 T.OX DVBS/S2-COFDM + SID CONTROL



Televes adds two new modules to its range of transmodulators T.OX DVBS/S2-COFDM.

Ref. 563199 is a module that allows editing the Service Identifier (Service_ID). By editing this parameter, the installer will be able to change the available channels in a facility without the need for retuning the TV sets. This characteristic facilitates maintenance work in special facilities such as hotels, hospitals, nursing homes, etc.

Substitution of a channel by another one is a transparent operation for the TV set; on the other hand, the transmodulator itself issues an alert if the same Service_ID has been configured in more than one service so that it can then be changed.

By means of Ref. 563199, can also be edited the LCN (Logical Channel Number), which is the system used in other countries to order the list of channels in the TV sets.

The transmodulator Ref 564201 multiplexes again the signals broadcast from up to 3 different transponders.

This way, you can configure a multiplex to distribute content coming from three different packages of TVSAT.

By having two inputs, the signals can be from up to two different satellites, due to the fact that two of the transponders must belong to the same band and polarity.

Just like the Ref. 563199, the transmodulator Ref. 564201 also allows editing both Service_id and LCN.

Both transmodulators can be managed by means of the CDC unit (Headend Controller) and the Tsuite software, so that editing channel lists, as well as any other parameter, can be done remotely ■

AUTOMATIC CHANNEL IDENTIFICATION



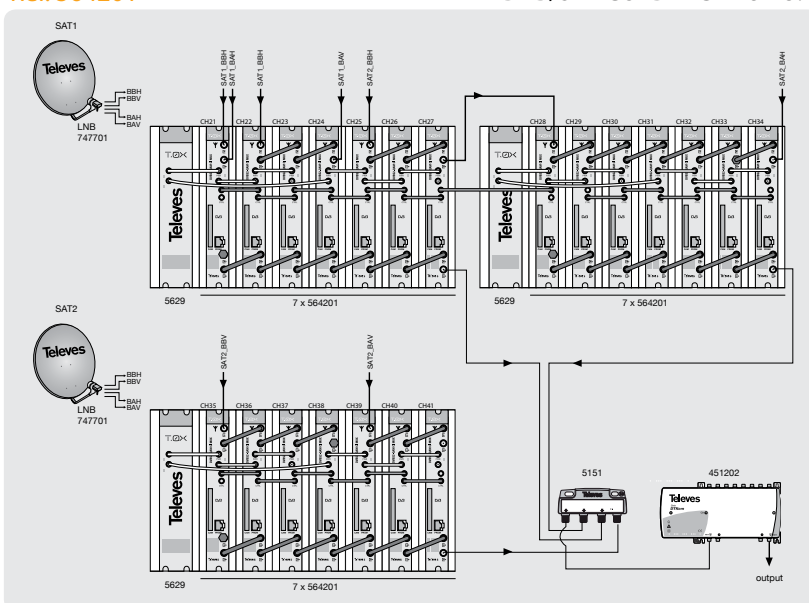
Original list of channels.



Channels list modified, where the new channel occupies the same position as the old one substituted. The TV set does not need to be tuned again.

Ref. 564201

DVB/S2 - COFDM CI MUX 3:1



Multiplexing of 21 services coming from two satellites for distribution in COFDM modulation.