Televes®

QUARTERLY NEWSLETTER

INFO

Nº47 JUNE 2018

The era of the "television of emotions"

Televes Corporation has given a boost to the television of emotions, which has taken a significant step forward. On May 3rd, the company launched **an Ultra High Definition (UHD) channel in the Digital Terrestrial Television (DTT) for the area of Santiago de Compostela**. It is the fourth experience of this kind carried out in Spain, following the ones in Madrid, Barcelona and Seville. Transmission is carried out with the Fourth Series equipment from TRedess, one of the firms in the Televes Corporation.

Santiago Rey stated that DTT is the most suitable platform for Ultra High Definition to reach the entire population

The project will span at least over six months, **the main objective being to carry out the DVB-T2 modulation technical tests, among which the reception on the move.** The companies Radiotelevisión Española (RTVE) and Cellnex Telecom collaborate in the project, the first by providing the channel contents - a documentary about Santiago de Compostela in the series on World Heritage Cities - and the second by providing the transmission centre facilities in mount Pedroso.

The project was presented to the public in the Technological Centre of the Televes Corporation by means of a **live connection with the channel "Canal 24 horas" of RTVE.**

Santiago Rey, the company's managing director, highlighted the milestone in the presence of representatives from the national, regional and local administrations: the milestone of an Ultra High Definition transmission channel that confirms Televes as a leader in cutting-edge television technology. Santiago Rey explained how UHD means a qualitative leap in the way to the era of the "television of emotions", and stated that DTT is the most suitable platform to make it available to the population as a whole. He also highlighted the fact that the transmitters used in the project were fully developed and manufactured in the Televes Corporation's own premises

CONTENTS

OUR PEOPLE
José María Soneira, technician in the Technical Support department.

TELEVES CORPORATION
Gsertel, leader of the DTT deployment in Colombia.

PRODUCT NEWS
Both DINOVA BOSS and INNOVA now equipped with TForce.

IDEA
Provisioning of a Coaxdata network.

FREQUENTLY ASKED QUESTIONS
How can I add an IF signal to a DTT-only T.0X processing headend and transmit it through an optical fibre to distant spots?

HIGHLIGHTED INSTALLATION
Hotel Renaissance Sharm El Sheikh (Egypt)

TELEVES IN THE WORLD
NAB Show (Las Vegas, U.S.)
Evolving Connectivity (United Kingdom)
Windham Hotel Group show (Chennai, India)

TRAINING
Mosaiq6, touch interface and gesture commands.

PMEETING POINT

June 26th - 28th **Brodcast Asia** Singapore
Sept. 11th -13th **Energetab** Poland

televes@televes.com
www. televes.com

INFO Televes is also available in: German, French, English, Italian, Polish, and Portuguese.

José María Soneira, technician in the Technical Support department.

What is your job in Televes?
I work in the Technical Support and Training department. We provide support to clients, distributors and engineering firms. We also produce documentation for the sales teams, perform the testing of new products, and write manuals. I am also responsible for the training mobile unit. I am in charge of keeping the van ready, preparing the routes, driving the van, and giving the training in collaboration with the sales representative in each area. We visit around 60 centres per year all over Spain, including vocational training institutes, warehouses and installers associations. Training contents are tailored to users' demands. We've been working a lot recently on optical fibre, GPON, and satellite-terrestrial transmodulation. I also take the second mobile unit to our subsidiary in Stuttgart, Germany, starting point for the tours through different countries in Europe.

How long have you been working for this company? How was your career path in Televes?
I joined Televes in 2014 with an internship, after completing the Telecommunications and Information Systems upper cycle. Then I spent some time in Assamblia, a company in the Televes Corporation in charge of product assembly, and later, in 2015, I started working in my current position.

"What better than helping future technicians to get familiar with the equipment they're going to be using during their future professional life?"

What is the most satisfying aspect of your job?

The contact with people, the feeling that I can help. In Televes there is a long tradition of being close to the technicians and installers. And what better than helping future technicians to get familiar with the equipment they're going to be using during their future professional life? I identify with them. I would have liked to have such an opportunity as a student.

And what is the hardest?
To spend such a long time away from home. Two or three months a year. It is exhausting, but it pays off.

What are, in your opinion, the essential values of our company?
Always looking after the client, giving a hand in everything the client needs, either training, support , or documentation. This is Televes' spirit, what makes it different. Some companies are either manufacturers or resellers. We are much more than that. Our clients can always count on a sales representative nearby, and on a department such as ours, always ready and willing to help.

Tell us about an ongoing project you consider important.
I have already visited all the autonomous communities in the Spanish peninsula, and the Balearic Islands. We plan to cross the straits of Gibraltar in the near future, and visit Ceuta and Melilla, as well as some cities in Morocco, where we possess a significant market power. I really look forward to it ■

Televes Corporation

GSERTEL, leader of the deployment in Colombia

Gsertel is one of the leading players in the implementation of the digital terrestrial television (DTT) in Colombia. In 2017, the Televes Corporation's firm was awarded a contract to provide DVB-T/T2 monitoring equipment, which resulted in the installation of RCS equipment in 22 cities.

By means of a control centre, the infrastructure allows full real-time supervision of the signal received by the users, including critical parameters such as spectral emission, impulse response, quality of the DVB-T2 signal, and DVB frame content supervision. Thus, the National Television Authority of the Republic of Colombia was able to deploy services of higher added value and quality all over the country, while significantly reducing the incident solution time.

The project was funded by the European Union. through an agreement for the upgrading of DTT infrastructure in the Latin American country.

The experience meant a significant boost for Gsertel in Latin America, thanks to the fact that the monitoring technology used is compatible both with the DVB-T/T2 standard used in Colombia and the ISDB-T/Tb standard present in most countries in the region.

The technology used is compatible with both the DVB-T/T2 standard and the ISDB-T/Tb standard, present in most countries in the region ■

DINOVA BOSS and INNOVA now also equipped with TFORCE

TForce: If we can imagine a functionality, we can manufacture the product

Televes has redefined the antenna concept. The exclusive technology used in the design, manufacturing, and assembly of our own MMIC components is known as TForce.

Until now, an antenna was just the reception component of a TV installation, which main features were gain and directivity. Thanks to the introduction of a smart device like BOSS and the TForce technology, both the DINOVA BOSS and the INNOVA BOSS ranges are able to receive extremely weak signals without the risk of being affected by strong signals; furthermore, fluctuations do not impact the output. The dynamic range thus becomes the most remarkable among the quality parameters.

The following characteristics of the TForce technology are worth highlighting, as they make the antennas even more versatile devices:

- ✓ Automatic control of the level of the received signal (either very high or very low) to always provide optimal output level.
- ✓ High dynamic range that allows the reception of television signals even in critical situations in which levels are either very weak or very strong.
- ✓ DTT coverage area enhancement.
- ✓ Lower noise figure.
- ✓ Very high gain.
- ✓ More stable signal reception, able to withstand fading without any impact on the quality of the television installation.
- ✓ Operation in both passive and active modes to activate the intelligence, either using a power supply or a current injector.

References equipped with TForce technology:

DINOVA BOSS 1440xx range
DINOVA BOSS MIX 1442xx range
INNOVA BOSS 1302Xx range
INNOVA BOSS MIX 1303xx range ■

TForce video here: ***en.televes.com/tforce***

IDEA

One of the main requests from the Coaxdata installers is to have a centralized and fast software tool for the management of a Coaxdata network. One of the main requests from the Coaxdata installers is to have a centralized and fast software tool for the management of a Coaxdata network.

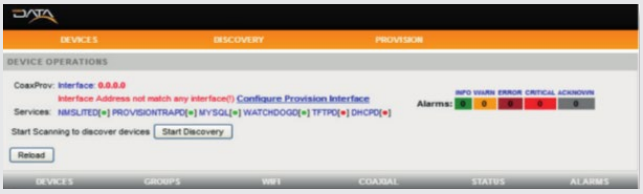
Since we deal with a layer 2 architecture, in principle Coaxdata does not allow for a remote IP connection with the slave devices.

The solution is CoaxBox (ref.769330): a device capable of generating a DHCP service to provision, manage and monitor all the devices in a CoaxData network.

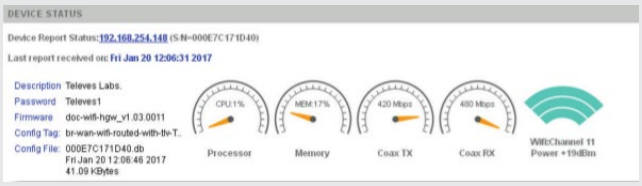
Their main features are:

- ✓ Specification of operation mode and system parameters.
- ✓ Display of the status of each CoaxData device.
- ✓ Remote provisioning of slaves, including a TFTP service for automatic configuration loading ■

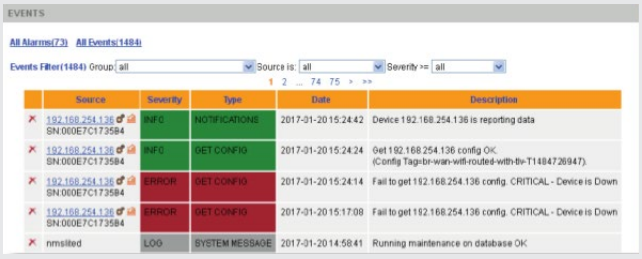
Provisioning of a Coaxdata network



CoaxProv shows the state of the service.



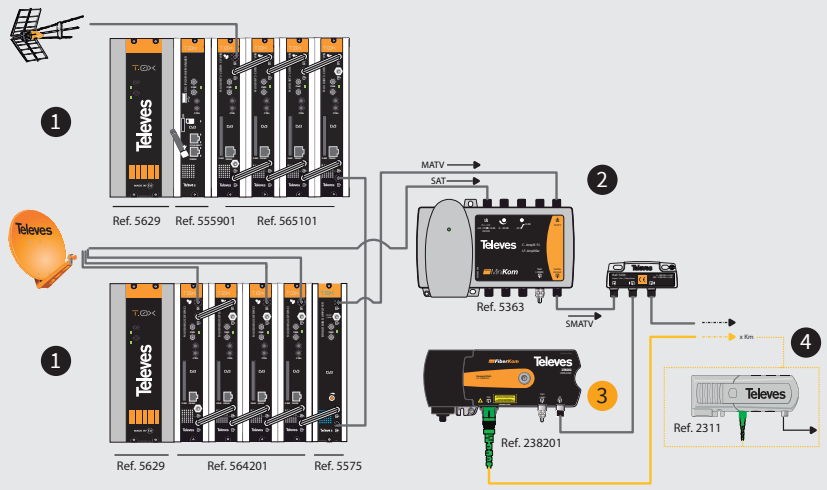
Information about CPU, memory, coaxial rates, Wi-Fi channel and power.



Display of all the events generated in the system.

How can I add an IF signal to a DTT-only T.0X processing headend and transmit it through an optical fibre to distant spots?

In some cases, the transmodulation of specific satellite channels into COFDM will probably not be enough; this is why the option is available to add the IF of a satellite polarity to the COFDM signal flow. Furthermore, that signal flow may be transmitted over optical fibre by means of an appropriate low-loss optical transmitter, thus allowing to reach longer distances.



1. *T.0X processing headends (DVB/S2-COFDM and DVB-T/COFDM transmodulators, encoders/modulators, amplifier, etc.).*
2. *MiniKom amplifier ref. 5363 (Art. No. EV45).*
3. *SMATV optical transmitter ref. 238201 (Art. No. OMS1310).*
4. *SMATV optical receiver ref. 2311 (Art. No. OE1216)*

HIGHLIGHTED INSTALLATION

HOTEL RENAISSANCE SHARM EL SHEIKH (EGIPTO)

Located in the Sinai peninsula, the Renaissance hotel is part of the Marriott hotel chain. The resort spreads horizontally and has one and two-floor housing modules.

It is equipped with an Arantia TV system, which consists of:

3 HE21 HEADENDS, which amounts to 34 DVB-S2 satellite transponders (10 of which have decoding capacity).

1 CORPORATE CHANNEL included in an HE21 headend

2 ENCODERS 8 x HDMI® to IP

1 MIDDLEWARE with a personalized interface exclusive for the Marriott hotel chain.

1 LIVE MULTISCREEN TRANSCODER

The equipment provides services to 536 endpoints.

Besides the TV channels, each endpoint has Youtube and Miracast application access through the user interface.

Egypt installer company:

***AMS** (Advanced Multimedia Systems)*

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

NAB SHOW

CES (LAS VEGAS, U.S.)

JANUARY 9TH -12 TH

Televes, TRedess and Gsertel were present in this event with their own stands to showcase the full potential of the Corporation in the United States. Television infrastructures are quickly becoming the enabling platforms for new generation audiovisual services, and Televes Corporation is consolidating a leading role in that country.

▶ *en.televes.com/ces*

EVOLVING CONNECTIVITY

(UNITED KINGDOM)

26TH APRIL

Televes participated in the event organized by CAI (Confederation of Aerial Industries), where it showcased the compatibility of the new dCSS NevoSwitches with Sky, as well as the Quad Play solutions of the GPON infrastructures with our OLTs and ONTs.

WINDHAM HOTEL GROUP SHOW

(CHANNAI, INDIA)

26TH APRIL

During our first participation in this event, we were glad to realize how interesting the activity was in this EMEA region, where we had the opportunity to showcase our capacities in the Hospitality sector. Televes launched the new version of ATV3, the IPTV Interactive Solution, with an innovative guest mode user interface.

CONVERGANCE – FRANCE

6-8 MAYO

An event specifically devoted to high-capacity multiservice networks, where Televes had the opportunity to demonstrate the flexibility of its FibreData and WaveData solutions for PON networks

The power of user experience: touch interface and gesture commands

Details matter. MOSAIQ6 has an innovative interface specifically designed to get the most out of the 8" multi-touch screen that allows the user to interact with the meter in a simple and intuitive way: it includes all the bells and whistles to provide optimum usability. It is a REAL touch screen that takes all possible advantage of the up to 7 gesture commands described below:

TAP (TAP):
One quick finger touch.
To select a menu option, for example, or to display a drop-down list in an option.

DOUBLE TAP (DOUBLE TAP):
Two quick consecutive taps with one finger.
For example, to access a function in the mosaic mode and display it on the full screen.

DRAG (DRAG):
Long slide with a single finger.
To shift between modes, for example from measurement mode to mosaic mode.

SWIPE (SWIPE):
Short slide with a single finger.
For example, to access the menus marked with arrows or to shift channels in spectrum mode.

PINCH (PINCH/SPREAD):
Pinch/spread two fingers on the screen.
To modify span, making it shorter or larger.

After the overview of the 7 gestures used in MOSAIQ6, lets have a look at a practical example to show how to get the most out of them.

The lower bar has several shortcuts that allow you to make quick modifications with only one click (TAP) . One single touch (TAP) in the lower area allows you to shift from the satellite to the terrestrial band, switch from channel to frequency, store a macro-log file, or go back to the main menu at any time (inter alia). If the arrow in the lower area is selected (TAP), the meter launches a "learning plan", and analyses all the channels detected in the selected band. Once the table with all the channels and measurements (power, C/N, MER, etc.) is produced, you can scroll over it with a short slide (SWIPE) and select a specific channel with a single touch (TAP).

To shift from the scan screen mode to any of the other two (mosaic 6 or mosaic 3) a long slide with a single finger is required (DRAG)

Once in mosaic mode, you can access one of the menus and have it displayed on the full screen with a double tap (DOUBLE TAP). Going back to the previous mode is as easy as double tapping again (DOUBLE TAP). Each of the menus in the mosaic mode can be switched just by pushing the orange arrow (TAP) and selecting the desired menu (TAP).

You can enter the spectrum mode, for example, by double tapping on the appropriate window (DOUBLE TAP).. Once inside, modifying the span is as easy as pinching with two fingers (PINCH) (to reduce span) or to spread them (to increase span) (SPREAD). To switch channels (frequency) is as simple as touching the spectrum with a short forward slide of one finger (next channel), or a back slide (previous channel) (SWIPE).

Thanks to the touchscreen interface and the gesture commands, MOSAIQ6 becomes a high-performance portable meter, highly intuitive and automated:

The power of user experience ■

Don't miss it!

H30 FLEX, a new option for the display of analogue audio/video (Ref. 593236)

Starting from version SW 1.26 the option is available to digitalize audio/video input signals by means of an external USB 2.0 adapter. The option was specifically designed to display and monitor analogue surveillance video cameras.

The following items are supported:

Composite RCA (S-VHS) and S-Video interface.

720x480@30 fps (NTSC) and 720x576@25 fps (PAL) video formats.

Televes © 2018 - Total or partial distribution without mentioning the information source is prohibited.

España | Portugal | France | United Kingdom | United Arab Emirates | Italia | United States | Deutschland | China | Polska | Russia | Scandinavia

Televes Corporation

Technology brings us together

Televes Corporation is the core of a group of technology firms, a leader in the design and development of equipment for all kinds of telecommunications infrastructures for homes, buildings and cities.

Televes Corporation consists of over 20 firms working together towards the common objective of designing, developing and manufacturing in Spain a series of high-quality products and solutions for the telecommunications industry.

Televes Corporation is present in over 100 countries, with its 11 subsidiaries (Spain, Portugal, France, United Kingdom, United Arab Emirates, Italy, United States, Germany, China, Poland, Russia, Scandinavia) and its wide network of professional distributors.

www.televescorporation.com