

# INFO Televes®

BIMONTHLY NEWSLETTER • Nº24 - JUNE 2014

FREE EDITION



## ANGACOM 2014 reinforces the value of a brand

Televes has been a key player at the Angacom show, the leading trade fair in Europe for Broadband, Cable and Satellite sectors. The event took place in the German city of Cologne, where the company deployed its full potential in a large 100m2 stand. Televes presented its new products and solutions for television and broadband installers, network operators and content distributors. It has become clear that the company remains at the forefront of technology and manufacturing, in a context in Europe marked by the large deployment of fiber optics and GPON networks.

Within the Televes stand, a lot of attention was placed in the signal measurement area, specially with the launch of the H30D3 meter with DOCSIS, device appreciated for its compact size, ease of use and ability to process real-time digital signals. Visitors were able to get hands-on experience with the complete H Series of field spectrum analysers, the first to

incorporate digital processing to a portable meter.

Regarding headend and distribution equipment, the focus was placed on the T.OX triple remux modules with two QAM/COFDM outputs, or the new encoders with 'watermarking', recently approved by Dish Network in the USA. Installers were also interested in the new range of multiswitches and multimedia outlets manufactured in Televes.

Angacom 2014 has proved that European markets truly appreciate the value of a product wholly developed and manufactured in Europe under the strict production processes and controls that Televes undergoes for all its products in its own facilities. ■

ANGACOM 2014 REINFORCES THE VALUE OF A BRAND THAT THRIVES ON ITS OWN TECHNOLOGICAL DEVELOPMENT AND MANUFACTURING PROCESSES

AND ALSO...



¿Es posible ver todos los partidos del mundial en abierto?

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Más de un satélite en un Multiswitch de 5 entradas

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## SUMMARY

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Evolving Connectivity (CAI) (Birmingham).  
Team Summit (Orlando).

### FAQs

Is it possible to watch all the matches of the World Cup for free?

### ALWAYS UP-TO-DATE

Update H45 V1.84

### YOUR PICTURES

Televes cleans up again

### TRAINING

Launch of the training program "Televes skillsAlliance"

### FACILITIES

The Champions League Final with Televes

### IDEAS

More than one satellite with a 5 input Multiswitch

### DID YOU KNOW...

Dish Network™ approves Televes' 'watermarking'?

### MADE IN TELEVES

Televes manufactures... Decades in the open air.

### NEW PRODUCT

TWIN Transmodulators MUX DVB-S/S2 - COFDM / QAM CI.



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## MEETING POINT

Visit us at:



**17-20 JUNE**  
**BROADCAST ASIA** Singapur Asia  
**18-20 JUNE**  
**INFOCOMM14** Orlando EEUU

## NAB Show

(Las Vegas) 5 - 8 April

Worldwide launching of the H30 meter and presentation of the new QAM and ISDB-Tb encoders. Solutions for MDUs and the hospitality industry oriented to LATAM market were quite well received.



## Evolving Connectivity (CAI)

(Birmingham) 30 April

From a general point of view the show confirmed that the installer is looking for products to expand the portfolio of TV and RF solutions. This year the VZenit antenna drew the attention of the public, highly appreciated by its adaptation to channel system. Also, the SAT>IP system was presented as well as the new CoaxData generation, alternative to traditional data networks.



## Team Summit

(Orlando) 5 - 7 May

This scenario was very useful to show the approval from Dish Network of the new Televes' system (watermarking) used in the Clear QAM encoders suite, as a measure to prevent from piracy.



## PREGUNTAS FRECUENTES

### The Football World Cup on HD free!

*Is it possible to watch all the matches of the World Cup for free?*

#### THE EXPERT'S OPINION

The matches of the World Cup of Brazil 2014 are broadcast for free by two German channels: ZDF and ARD Das Erste.

Both can be received with a dish pointed toward the Astra 19° satellite, so any single or multi dwelling facility can enjoy this event for free, although in German language.

Frequencies are:

- ARD Das Erste on SD: 11.836MHz Horizontal
- ARD Das Erste on HD: 11.494MHz Horizontal
- ZDF on SD: 11.954MHz Horizontal
- ZDF on HD: 11.362MHz Horizontal



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

Javier Esteban  
Technical Assistance Manager



### ALWAYS UP-TO-DATE

This update allows the meter to implement new features in addition to improving that had already implemented.

The most important enhancements are:

- New references and curves for LTE filters.
- Improved Scan&Log.
- Optimization routines for level measurement and calculation of spectrum.

### UPDATE H45 V1.84

■ Improved MER estimation on DVBT and DVBT2 signals, and also BER on DVBS2.

■ DVBC and DVBS2 improved signal locking.

This new firmware is available on the website:

<http://www.televes.com/en/content/ref-5990-5992>

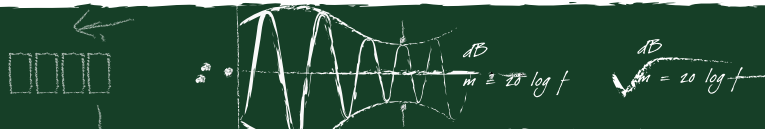


### YOUR PICTURES



#### Televes cleans up again

From South Africa, GBSat send us this picture which he titled "Televes cleans up again". This is a good example of business that also improves the aesthetics of the environment. ■



## Launch of the training program “Televes skillsAlliance”

Televes has set up its own training program, “Televes skillsAlliance”. This initiative consists in a set of educational resources and training labs designed as a support for the attendance courses of the Professional Certificates “Electricity and electronics” family related to Common Telecommunication Structures.



### Main highlights of this program:

Content adapted to the official regulated curriculum, endorsed by Televes, oriented to improve students’ employability.

Guided practices using technical equipment widely deployed in the market.

Training resources and evaluating systems integrated in the Virtual Training Apprenticeship, accessible 24x7 from several mobile devices.

### High performance and better training for both students and teachers.

Televes skillsAlliance facilitates the preparation and compilation of content for teachers, making easier for them to focus on the individualized tutoring and monitoring practices of the students.

Televes launches its own training program “Televes skillsAlliance”; this initiative is a set of educational resources and hands-on labs designed to support the training programs of the Professional Certificates of Electrical & Electronics family related to Common Telecommunication Infrastructures.

This training methodology is based on learning by doing and responds to the most demanded requirements and skills in the market.

Any school public or private can benefit from this initiative. Request a demo access or know how to participate through the website: <http://televes.skillsalliance.info> ■

Televes skillsAlliance is inspired by the highly successful examples as “Cisco Networking Academy” or “Oracle Academy” through an already established partnership with Inlea (experts in training and technology) and Postal Academy (training experts).

Televes has developed all the contents based on their deep industry know-how; transferring this knowledge to the training program. This has been developed in collaboration with teachers in-service with a wide experience in the sector.





## TELEVES FACILITIES

### The Champions League Final with Televes



The 2014 Champions League Final between Real Madrid and Atlético de Madrid at "Estadio da Luz" on Lisbon, had Televes equipment to supply images to televisions and radio present.

With the support of the Televes Technical Department, the producer Medialuso installed a solution that ensured the robustness and reliability needed for such an important event.

The signal from an optical fiber comes to the Televes frame equipped with BVL modulators ref. 5086, that broadcast the transmission of the match, and DigiSlot modulators ref. 554602 with HDMI encoders ref. 554804 to broadcast the additional information.

Due to the number of TV points needed, the quality of the RF channels distributed by coaxial cable to numerous positions was guaranteed by three DTKom launch amplifiers ref. 451201.



Monitors installed on more than 250 positions agreed to transfer the event and any additional information related to the match and teams.

PERFORMED BY:  **MEDIALUSO**

**DID YOU  
KNOW..?**

### Dish Network™ approves Televes' 'watermarking'?

Televes has obtained approval from Dish Network (<http://www.dish.com/>) -one of the leading satellite television operators in the United States, with 14 million subscribers- for its watermarking solution applied to the suite of Clear QAM encoders. Watermarking is a process by which hidden digital information is included in the signal, to verify its authenticity or



integrity indicating the identity of its owners. The Televes' Clear QAM encoders offer this invisible watermark as an option for video forensics in a effort to prevent piracy.



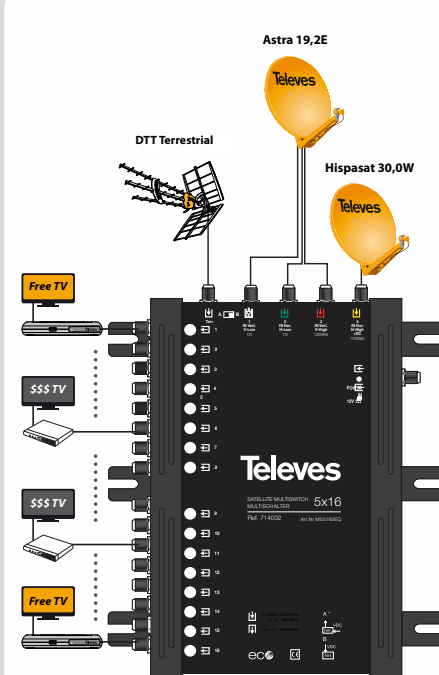
## IDEAS

### More than one satellite with a 5 input Multiswitch

In a distribution of entire TVSAT contents in a multi-dwelling installation, each receiver needs to have the signals from the combination of 2 polarities and 2 bands. Sometimes not all FTA services are of interest to the user, so maybe the use of multiswitches does not mean making the most of the facility.

The Televes' range of QUAD Compatible Multiswitches allows to generate independent control signals in each input. Thus, the SAT receiver can receive signals from different satellites, offering the possibility of making more attractive the channel list.

The advantage of this type of application is that it works with any receiver, even with premium pay-TV platforms that sometimes provide receivers with the DiSeqC protocol disabled.



Application example



# Televes manufactures...



## Decades in the open air

Many of the products used in TV distribution systems are exposed to harsh weather conditions. These products need to have an extended useful life, decades mostly, so the installation is made just once and the installer shall not worry about its maintenance over the years. Weather conditions will depend on the geographic area where the facility has been installed. In some places we may encounter with extreme humidity or temperature, so it becomes inevitable for any metallic piece to have the suitable reinforcement and covering, but also to be long lasting whether it's in South Africa or Sweden.

Another example of how Televes regulates all variables involved in the manufacturing stages is the control over the coating processes to those metal pieces exposed to harsh conditions, to assure the highest quality in the final product.

Televes' chemical engineers validate the right applying of the maximum thickness plated covering to masts, towers, antennas and outdoor amplifiers to ensure their longest useful life. Furthermore, these products undergo stringent accelerated aging tests through salt spray in Televes' labs to check the product performance in such conditions.

All this effort is made to guarantee the best anti-corrosion performance in its product category.

**Televes is passion for avant-garde manufacturing** and comprehensive control of all manufacturing processes. ■



## TWIN Transmodulators DVB-S/S2 - COFDM / QAM CI, with REMUX

Transmodulators that **generates two muxes** (COFDM ref.564301 or QAM ref.564401) with content from **one, two or three** DVBS or DVBS2 TVSAT transponders.

The COFDM/QAM services are packaged in any channel within the RF band.

Settings of operation parameters can be performed by means of the universal programmer (ref.7234) or the TSuite software.

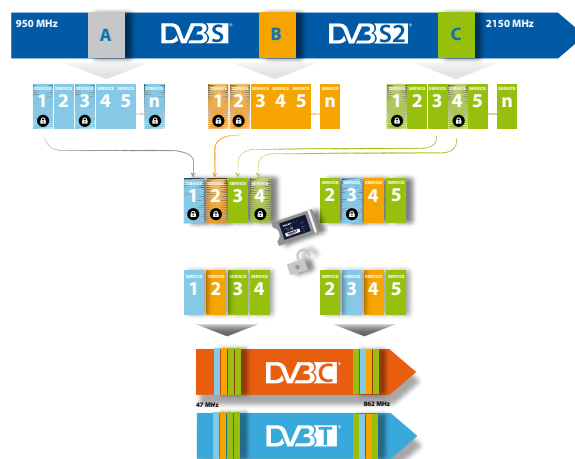
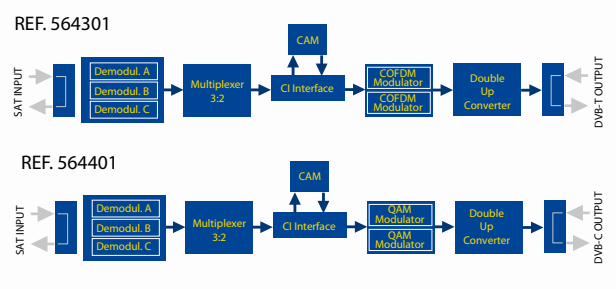
The highlights of these transmodulators are:

- ▶ **Total or selective deleting of services.** This feature allows to limit the channels to tune by receivers.
- ▶ **Edition of TS\_ID** to facilitate detection of programs or services in the receiver (STB).
- ▶ **Edition of Network\_ID, Original Network\_ID and Cell\_ID.**
- ▶ **Edition of S\_ID** to avoid retuning of receivers (STB) when the services of a multiplex are changed at its output.
- ▶ **LCN (Logical Channel Number)** to sort the services present in the output, which facilitates the management of channels in the receiver (STB).
- ▶ Through its **CI Interface**, and the corresponding CAM module, encrypted satellite channels become free DTT services. According to the CAM used (standard/ professional) it is possible open one or more services for free TV.
- ▶ **DiSEqC.**



REF.	DESCRIPTION
564301	Transmodulator MUX DVBS/S2 - COFDM CI TWIN
564401	Transmodulator MUX DVBS/S2 - QAM CI TWIN

### BLOCK DIAGRAM



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