Televes

DO IT YOURSELF

CATALOGUE

•••••

..............



Enjoy your camping experience with an intelligent antenna

The BOSS (Balanced Output Signal System) technology makes the antenna intelligent as it optimize automatically the level of TV signal received and also adjust the output level in order to get the best quality in reception.

Certain technical information		Frequency Band	Gain (dBi)	Output Level(dBµV)	Voltage (V)	Consumption (mA)
BOSS Tech	OFF	BIII	0		0	0
		UHF	47	-	U	0
	ON	BIII	10	A	12 24	32 (12Vdc)
		UHF	1922	Auto	1224	42 (24Vdc)





INDEX





ABOUT TELEVES	4
INTELLIGENT ANTENNAS WITH TFORCE TECHNOLOGY	6
TERRESTRIAL ANTENNAS	
TERRESTRIAL ANTENNAS	8
OUTDOOR PASSIVE ANTENNAS	10
OUTDOOR SPECIAL ANTENNAS	12
INDOOR SPECIAL ANTENNAS	14

SATELLITE DISHES

SATELITE DISHES	16
LNB CONVERTERS	18
TV SAT KITS	18

AMPLIFICATION

LTE/4G FILTERS	20
MAST MIXERS	20
MAST AMPLIFIERS WITH POWER SUPPLY UNITS	22
DOMESTIC AMPLIFIERS	24

DISTRIBUTION

SPLITTERS	26
OUTLETS AND ACCESSORIES	28
COAXIAL CABLE AND ACCESSORIES	30
COAXIAL CABLE LEADS	32
COAXIAL CONNECTORS	34
AUDIO/VIDEO AND OPTIC FIBRE	36

5 SET-TOP BOXES & HOME ACCESSORIES

DIGITAL SET-TOP BOXES	38
AUDIO/VIDEO & IR TRANSMISSION	40
MODULATORS & CHARGERS	42

MECHANICAL ACCESSORIES

PACK TOWER	44
ANTENNA WALL SUPPORTS	46
ANTENNA GROUND SUPPORTS	48
MAST AND BRACKETS	50
ACCESSORIES AND DISPLAY BOARD	52
APPENDIX	54



TECHNOLOGICAL DEVELOPMENT IN SEARCH OF EXCELLENCE

Televes is a world renowned brand in the development and manufacture of equipment for the reception, distribution and measurement of radiotelevision signals, with a wide range of solutions that cover all telecommunications services in the era of digital buildings and homes. Founded in 1958, Televes is now the main trademark within a multinational corporation structure that sends products to more than a hundred countries in five continents, thanks to an extensive logistics distribution network, including ten international subsidiaries that have local warehouses for quick to market unplanned deliveries of final goods, as well as the sectors most complete technical assistance and customer support.

The firm is recognized worldwide for the orange satellite dishes that sky about building roofs, but beyond this typical company icon, Televes brand is appreciated by the installers and professional data and television services integrators as a guarantee for quality, advanced technology and technical support. The company has launched more than 1500 different products, an achievement only possible to companies that have a innate "passion for manufacturing".







WE TRANSFORM OUR IDEAS INTO TECHNOLOGICAL SOLUTIONS, BY APPLYING



CUTTING-EDGE MANUFACTURING PASSION FOR QUALITY

..............

Televes builds its own production facilities, we like to say that we manufacture the manufacturing plant. Our products carry the European Technology Made in Europe identity slogan to explain that the complete process from design to market is done by us. Televes has been a pioneer in our sector by introducting superficial assembly of components and robotized automated lines before any one else knew what it was. Our facilities are ever evolving, having adopted the paradigm of Industry 4.0 to increase our product interaction with market demands, creating a stable and sustainable ecosystem between factory and engineers that is able to create technologies like TForce, the base for the design of a new generation of products with advanced performance. We don't leave anything to chance, to guarantee the maximum quality and durability of our products, Televes has built a Certification Lab where products undergo the toughest tests that ensure top quality over time.

PROCESS AUTOMATION AS A GUARANTEE FOR TOTAL QUALITY



Automation has allowed us to obtain high degrees of flexibility in the manufacturing process, along with a reduction of delivery times.We can adapt to the demands of a market in constant evolution.

OURMODERNPRODUCTIONCENTERSARECHARACTERIZED FOR



TERRESTRIAL ANTENNAS INTELLIGENT ANTENNAS WITH TFORCE TECHNOLOGY

Televes goes beyond the silicon era into the new era in electronic component design, which allows building integrated circuits that work in the microwave frequency band.

TForce is based on the manufacturing of gallium arsenide (GaAs) semiconductor components, which provides products with functionalities that are difficult to match.

Televes intelligent antennas are designed with BOSS (Balanced Output Signal System). Don't worry about the signal strength, just align the antenna and the BOSS device will **automatically adjust the output signal to the optimum level.**

Creation of a BOSS with TForce technology, which is based on MMIC components, is an extraordinary milestone in dynamic range optimization.



MORE ABOUT TFORCE TECHNOLOGY EN.TELEVES.COM/TFORCE





HIGH DYNAMIC

RANGE



WIDER DTT

COVERAGE AREA





VERY

HIGH GAIN

NF

VERY LOW

NOISE FIGURE



MANUFACTURED IN EUROPE





AUTOMATIC SIGNAL ADJUSTMENT

DAT BOSS SERIES WITH TFORCE TECHNOLOGY: OUTDOOR UHF INTELLIGENT ANTENNAS

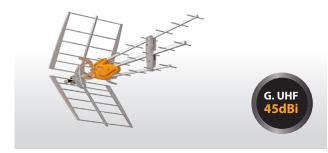
DAT BOSS ANTENNA

The first intelligent antenna

DAT BOSS *LR* ANTENNA

A Long Range UHF antenna for extreme reception conditions

UF

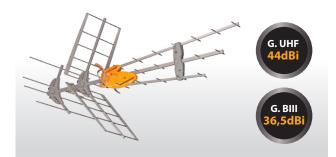


DAT BOSS MIX ANTENNA

A combined antenna for UHF and Band III reception

DAT BOSS MIX LR ANTENNA

A combined **Long Range** antenna for Band III and UHF reception in extreme conditions

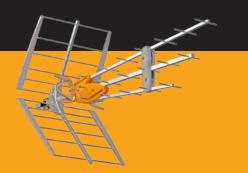


G. U

NOVA BOSS SERIES: SPECIAL ANTENNAS

	ANTENNA	RECEPTION TYPE	RECOMMENDED INSTALLATION	HIGHLIGHT
TV		STATIC	Emblematic Places, Facades, Balconies	Low visual impact
		STATIC (LONG STAYS)	Caravans (Campings)	Optimized mechanic for caravan installations
		STATIC (SHORT STAYS)	Motorhomes and Boats	No need to be oriented
		ON THE MOVE	Motorhomes, Boats and Buses	TVMotion complete system (antenna + receiver) able to receive the signal from all the directions and select the best one

TERRESTRIAL ANTENNAS



The antenna is the essential element for a perfect DTT (UHF antenna) or radio (FM antenna) reception. To guarantee Televes antennas lifetime, these are made of aluminium (stainless material) with its **zamak, rustproof and high durable assembly accessories.**

The UHF antenna choice must be done as its received signal capability (gain) and directivity.

Within the UHF range, **DAT series** achieve "the intelligence" due to the BOSS technological inclusion (Balanced Output Signal System) in the dipole.

INTERESTING BACTS

To activate the antenna intelligence (BOSS) you can use a power supply connected to the coaxial cable. Without power supply, the antenna behaves as a high performance passive antenna.

These antennas include a filter against 4G/LTE interferences. Choose your references for, 1st or 2nd Digital Dividend (LTE790 or LTE700).

Televes



CHARACTERISTICS

		REF.	DESCRIPTION	BAND
		149921 LTE700	"DAT BOSS" Antenna with BOSS intelligence:	UHF: 470698 MHz Channels 21-48
		149941 LTE790	the first intelligent antenna	UHF: 470790 MHz Channels 21-60
		149721 LTE700	"DAT BOSS LR" Antenna	UHF: 470698 MHz Channels 21-48
		149740 LTE790	a very high gain antenna for extreme reception conditions	UHF: 470790 MHz Channels 21-60
DAT BOSS Intelligent Antennas	Ale	149421 LTE700	"DAT BOSS MIX" Antenna a combined intelligent antenna for BIII and UHF reception	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48
		149441 LTE790		BIII: 174230 MHz Channels 5-12 UHF: 470790 MHz Channels 21-60
		149821 LTE700	"DAT BOSS MIX LR" Antenna a very high gain antenna for BIII and UHF reception in extreme conditions	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48

MORE INFO

DAT Series: Intelligent antennas

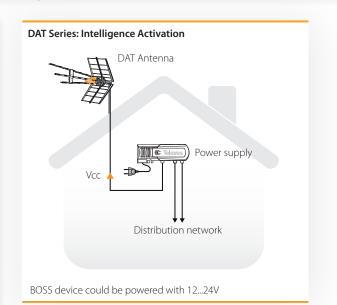
A traditional active antenna incorporates a simple amplifier which can produce saturation problems. Televes BOSS antennas are not active, they are intelligents: **BOSS device regulates the gain to avoid any saturation problem and it adapts to signal fluctuations**, so output level is always optimal. Its new design with **TForce technology,** makes this intelligent device even more versatile:

HIGH DYNAMIC RANGE: it allows you to receive high-quality TV in a variety of critical situations, from areas where signals ae very weak to installations with high reception levels.

DTT COVERAGE ENHANCEMENT: up to 27% higher than older models.



GAIN (dBi)	LENGHT (mm)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
42 (17 w/o BOSS)	1112				8424450185056
45 (17 w/o BOSS)	1112	Box	798x409x69	1	8424450185025
47 (19 w/o BOSS)	1825	Box	1000x425x135	1	8424450185360
(14 M/0 R022)		DUX			8424450185377
BIII: 36.5 (8.5 w/o BOSS) UHF: 41 (16 w/o BOSS)	1000				8424450185421
BIII: 36.5 (8.5 w/o BOSS) UHF: 44 (16 w/o BOSS)	1200	Box	890x411x70	1	8424450185391
Bill: 36.5 (8.5 w/o BOSS) UHF: 46 (16 w/o BOSS)	1900	Box	1020x425x135	1	TBA



PROBLEMS WITH THE QUALITY OF DTT?



EN.TELEVES.COM/DATBOSS

IF THE DAT BOSS CAN'T RECEIVE IT, NOTHING CAN!

A MORE STABLE RECEPTION: it supports signal variations or fading with no effect on the TV installation.

ÓPTIMAL C/N: thanks to a noise figure of only 1.2dB that respects the received signal quality.

VERY HIGH GAIN: TForce increases the gain of the antenna in 13dB, in UHF and III Band.



OUTDOOR PASSIVE ANTENNAS



CHARACTERISTICS

	REF.	DESCRIPTION	BAND			
UHF <i>DTT</i>	111942 LTE790	"Yagi Edge" Antenna 19 elements, compact and light	UHF: 470790 MHz Channels 21-60			
	149221 LTE700	"V Zenit" Antenna an excellent compromise between size and gain in the UHF reception	UHF: 470698 MHz Channels 21-48			
	149201 LTE790	"V Zenit" Antenna with CSG technol- ogy (channel selection geometry): end frequency range can be changed thanks to the different position of the elements)	UHF: 470774/782/790 MHz Channels 21- 58/59/60			

	REF.	DESCRIPTION	BAND
BIII/UHF DTT	149321 LTE700	"V Zenit MIX" Antenna an excellent compromise between size and gain, in a combined reception (BIII and UHF)	BIII: 174230 MHz Channels 5-12 UHF: 470698 MHz Channels 21-48

		REF.	DESCRIPTION	BAND
<mark>ВШ</mark> ртт	-	106601	"V BIII" Antenna a different band III antenna with an in- novative and compact design	BIII: 174230 MHz Channels 5-12
	1			

	REF.	DESCRIPTION	BAND
FM Radio	1201	FM Terrestrial Antenna circular dipole, made to be compact	FM: 88108 MHz

MORE INFO

V Zenit: Three antennas in one.

CSG Technology (Channel Selection Geometry) is a new concept in the design and manufacture of TV antennas; the antenna can perform as an adjustable filter by means of changing its geometry.





Televes offers a complete range of passive antennas for every reception band: DTT (UHF or BIII antenna) or radio (FM antenna), designed and manufactured in Europe.

They are made of aluminium (stainless material) with his **zamak, rustproof and high durable assembly accessories**, and the strict quality controls guarantee always the antennas lifetime and reliability.

INTERESTING BACTS

Zamak is a zinc, aluminium, magnesium and copper alloy which have high hardness, robustness and resistance.

These antennas include a filter against 4G/LTE interferences. Choose your references for, 1st or 2nd Digital Dividend (LTE790 or LTE700).



GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
10	695	Box	723x179x67	1	8424450178942
13	890	Box	648x299x62	1	8424450184219
15	890	Box	648x299x62	1	8424450169896
CAIN	LENGHT				
GAIN (dBi)	(mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
BIII: 8.5 UHF: 13	1056	Box	898x299x62	1	8424450184226
GAIN	LENGHT		DIMENSIONS		_
(dBi)	(mm)	TYPE	mm (x-y-z)	Qty	EAN13 CODE
9	840	Вох	898x344x62	1	8424450182604
GAIN (dBi)	LENGHT (mm)	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
1	500	Box	601x497x92	1	8424450012017

PACKING

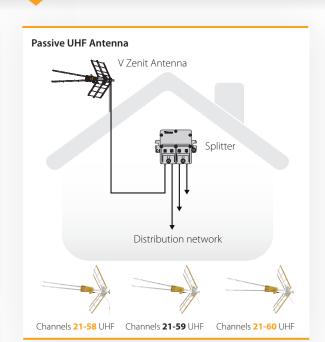
A secure and adaptable fixing system.

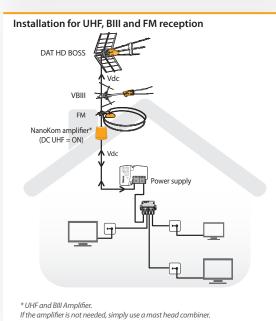
Outdoors antennas are always under the effects of adverse weather conditions.

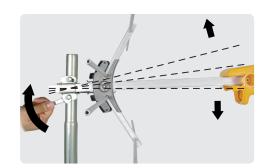
That is why these antennas are clamped in one end through a robust fixing system that allows slightly modifications of the tilt of the antenna on the vertical axis.

The reflectors are secured by a system of clamps manufactured in zamak that simplifies the installation and increases the strength of the whole assembly.

EXAMPLE OF USE







OUTDOOR SPECIAL ANTENNAS



CHARACTERISTICS

		REF.	DESCRIPTION	BAND
		144144	"DINOVA BOSS" Antenna: low visual impact, ideal for balconies, apartments and facades	FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
STATIC RECEPTION	Televes CIMPROMO	144501	"CampNova BOSS" Antenna: enjoy your camping experience with an intelligent antenna. Base was designed to protect and hide the coaxial cable inside the mast or the bracket. Also is compatible with masts up to 30mm of diameter, ideal for caravans.	FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
		144441	"OMNINOVA BOSS" Antenna: omnidirectional antenna that can receives television with stable images, regardless antenna movements. Ideal for motorhomes and boats.	AM: 0,15330 MHz BI: 4768 MHz FM: 88108 MHz BIII: 174230 MHz UHF: 470790 MHz Channels 21-60
		REF.	DESCRIPTION	TRINOVA ANTENNA
DTT ON THE MOVE		144740 + 512501	"TVMotion" System (Antenna+Receiver): receives signals from different directions (different emitters) and select the best one. Ideal for motorhomes, boats and buses.	UHF: 470790 MHz Channels 21-60 Gain: 25dB



BOSS technology has been included in this type of intelligent antennas and allow DTT reception in specials conditions.

Outdoor range, built with high resistance materials, is characterized by its aesthetic design and discretion; ideal to install in sensitive areas.

Within the static reception antennas range, some models are differentiated due to the environment where the TV signal is going to be received.

On the other hand, TVMotion system has been designed to receive the TV signal on the move.

INTERESTING BACTS

Accessories for an easy and simple installation (cables,supports,...) and BOSS activation are included in the product.

All of these antennas include a filter against the 4G/LTE signal interferences.



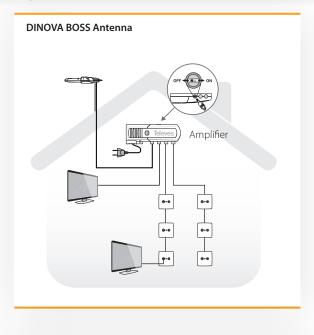
MORE INFO

These antennas have been designed to work in intelligent mode (BOSS activated). Device automatically control the level of the received signal (either very high or very low) in order to always ensure an optimal output level.

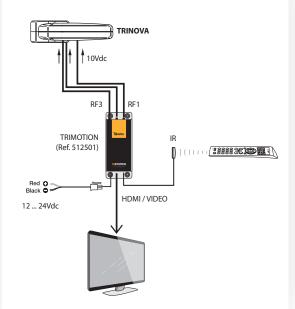




PACKING							
GAIN (dB)	DIMENSIONS (mm)	ТҮРЕ	DIMENSIONS	Qty	EAN13 CODE		
BIII: 10 UHF: 22	450x315x75	Box	mm (x-y-z) 348x369x124	1	8424450178034		
BIII: 10 UHF: 22	320x290x107	Box	332x367x124	1	8424450182864		
AM: - BI: 30 FM: 20 BIII: 28 UHF: 30	320x290x107	Box	348x369x124	1	8424450167199		
TRIMOTION RECEIVER	DIMENSIONS (mm)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE		
High Definition Image HDMI output and composite video	320x290x72 + 256x114x35	2 Boxes	340x367x124 & 326x143x50	1 & 1	8424450177686 & 8424450173565		



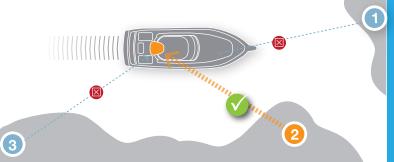
TVMotion System



BEST DTT RECEPTION IN POOR COVERAGE AREAS AND ON THE MOVE

TVMotion receives signals from different locations (boats, buses, caravans, etc.), and from differents locations (transmitters) avoiding those with weak or poor quality and sending the best signal to the receiver every time.

TVMOTION



INDOOR SPECIAL ANTENNAS



CHARACTERISTICS



BOSS technology has been included in this type of antennas and allow DTT reception indoors.

Plug&Play has been particularly intended to indoor range for an easy and fast installation, where a normal antenna can not be installed

		REF.	DESCRIPTION	BAND
nt antennas	Televes	130201	"INNOVA BOSS" Antenna: no need to be oriented.	UHF: 470790 MHz Channels 21-60
IND00R intelligent antennas		130140	High gain "MIRA BOSS" Antenna: It allows to point for complicated recep- tion conditions.	UHF: 470790 MHz Channels 21-60

INTERESTING BACTS

Accessories for an easy and simple installation (cables,supports,...) and BOSS activation are included in the product.

All of this antennas include a filter against the 4G/LTE signal interferences.



MURE INFU

MIRA BOSS antenna, apart from can be used for the reception of the TV signal inside of the house, can be used with other mode.

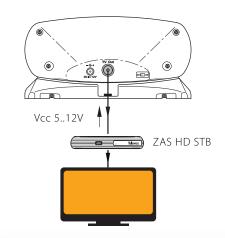
This mode is called "mixed" and is used in installations which has a collective antenna distribution with the lack of some channel which exists in DTT broadcasts, usually local channels.

In this particular case is enough to insert Mira BOSS between the antenna's outlet and the television. The antenna will receive the missing channels and it will mix them with the one's which already exist, so we could see the whole DTT broadcasts in our TV.

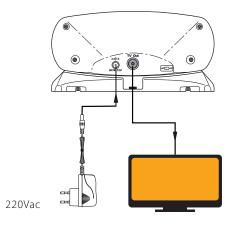


GAIN (dB)	DIMENSIONS (mm)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
30	215x102x105	Box	222x114x105	1	8424450149430
35	213x51x217	Box	222x227x61	1	8424450176023

INNOVA BOSS ANTENNA



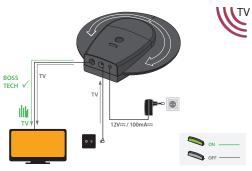
Powering by STB



Local power supply (220Vac)



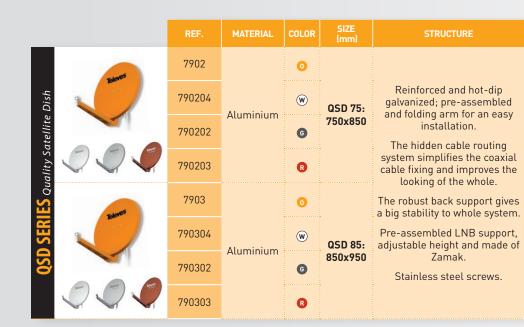
MIRA BOSS in mixed mode



SATELLITE DISHES



CHARACTERISTICS





MORE INFO

Why should you choose an aluminium satellite dish?

Satellite dish is light and immune against rust.

Which range should I choose?	ISD	QSD
Easy mounting	*	***
Robustness	**	***
Durability	**	***
Design	*	***

Satellite dishes usually get installer in roofs. These are perfect places tha allow the signal be received in perfec conditions

Televes

Protection against rust is very important because it affects directly to the quality of the reflected signal. Thus, aluminium dishes and stainless steel screws have been implemented in both ranges.

Satellite dish size depends on the power of the signal that we want to receive.

INTERESTING BACTS

Satellite operators communicate the emission power of each satellite using a curves called footprints. These allow to choose the necessary minimum dish diameter to receive the satellite signal in a specific geographic area.

Zamak is a zinc, aluminium, magnesium and copper alloy which have high hardness, robustness and resistance.





Televes

GAIN (dBi)	WEIGHT (Kg)	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
					8424450144442
39.0	9.3	Deu	842x1170x166	1	8424450149706
07.0		Box	642X117UX166	I	8424450146422
					8424450146439
	40.2 10.4 _{Box}			1	8424450144459
40.2		Derr			8424450149713
40.2		Box	992x1192x166		8424450146392
					8424450146408

DIMENSIONS mm (x-y-z)

TBA

TBA

1

1

8424450184714

8424450184721

8424450184738

8424450184745

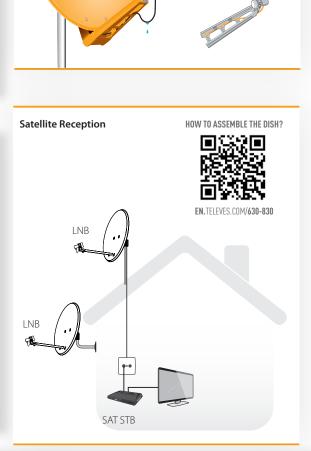
8424450184790

8424450184806

8424450184813

8424450184820

PACKING



Discover the QSD Line: TOP quality.

36.2

38.8

TBA

TBA

Box

Box

QSD Line aluminium dish (Quality Satellite Dish) is a result of an in-depth analysis about the requirements which a product has to fulfill to resist the adverse weather conditions (sea saltpeper, wind, ...)

The steel back support of the QSD dishes follows an **enhanced process of hot-dip galvanization,** coated in a molten bath of zinc at very high temperatures. The result is a very resistant and stronger material against corrosion and rust.



The QSD dishes have passed the most rigorous safety and quality tests carried out by the TÜV, the German certifying organization

LNB CONVERTERS TV SAT KITS



CHARACTERISTICS

	REF.	OUTPUTS	FREQUENCIES	NOISE FIGURE(dB)
CONVERTERS LINB	4365	SINGLE: 1 Output (1 Satellite)	Input: 10.7-12.75 GHz Output: 9501950 MHz 11002150 MHz	0.3
CONVER	4332	TWIN: 2 Outputs (1 Satellite)	Input: 10.7-12.75 GHz Output: 9501950 MHz 11002150 MHz	0.3

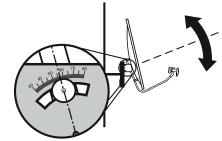
		REF.	DISH	CONVERTER	SAT RECEIVER
ITE KITS	KIT BOO DIGITAL	7506	Ø 800 Steel: 750x836 mm	SINGLE: 1 Output 1 Satellite	Free to air signals (FTA) reception with RF modulator: possibility to distribute the signal through an analog channel generated in UHF band to another outlets in the house.
	KIT BOO DIGITAL	7525	Ø 800 Steel: 750x836 mm	MONOBLOCK: 1 Output 2 Satellites (Astra 19.2°E + HotBird 13°E)	Free to air signals (FTA) reception with RF modulator: possibility to distribute the signal through an analog channel generated in UHF band to another outlets in the house.

MORE INFO

Installing a satellite dish..

Set the elevation

Elevation angle must be the one which correspond with the place of your house.



Steer the satellite dish

Point the satellite dish to the south and turn it slowly to the east or to the west. This depends on the orbital position and the angle posted in the direction plan.

LNB (Low Noise Block Down Converter) is the main element installed in the folding dish arm. The LNB is the component which receives the high frequencies from the satellite (GHz) and convert them to low TV frequencies (MHz). This conversion must be made because the signal need to be adapted to the coaxial bandwidth.

The LNB converter have one (Single), two (Twin) or four (Quad) "F" connector outputs. We will choose the LNB in order to the number of SAT STB inside the home.

SAT kits include all the necessary equipment to set up a FTA (free to air) installation system: dish, LNB, STB with controller, mechanical accessories and connection accessories.

INTERESTING BACTS

Using waterproof caps with the cable connectors help to protect the LNB from the water.

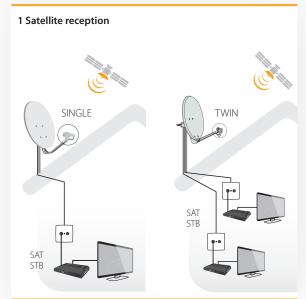
A Single or a Twin LNB converter allows to receive TV and radio services available in the satellite.

On the other hand, a Monoblock LNB allows to receive 2 satellite services at same time, usually 19.2° E Astra and 13° E HotBird.

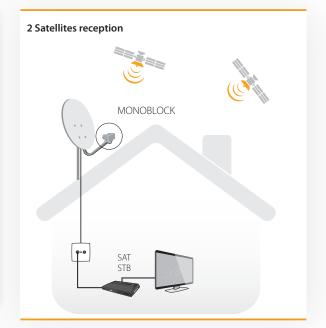
Televes[®]

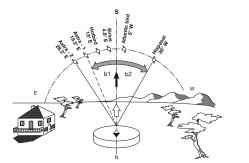


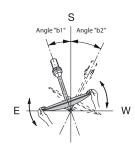
PACKING							
GAIN (dB)	CONSUMPTION (mA)	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE		
60	90	TI	120x260x58	6	8424450043653		
60	170	T2	166x268x67	6	8424450043325		



ADDITIONAL ACCESSORIES	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
LNB and Dish support Screws "F" Connectors	Box	860x770x125	1	8424450075067
LNB and Dish support Screws "F" Connectors	Box	860x770x125	1	8424450075258

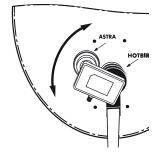






If you are using a Monoblock LNB...

You must aim by the HotBird side 13° and turn the LNB like the image shows.



LTE/4G FILTERS MAST MIXER



CHARACTERISTICS

	REF.	FREQUENCY BANDS	INSTALLATION	CONNECTOR TYPE
	405101	UHF: 470774 MHz Channels 21-58	OUTDOOR	EasyF
	405402	VHF/UHF: 47782 MHz Channels 21-59	OUTDOOR	EasyF
	405401	VHF/UHF: 47790 MHz Channels 21-60	OUTDOOR	EasyF
	403101	UHF: 470774 MHz Channels 21-58	INDOOR	F
	403402	VHF/UHF: 47782 MHz Channels 21-59	INDOOR	F
no továs 🕞	403401	VHF/UHF: 47790 MHz Channels 21-60	INDOOR	F
Televes	404411	UHF: 470774 MHz Channels 21-58	INDOOR	IEC
Televas	404412	VHF/UHF: 47790 MHz Channels 21-60	INDOOR	IEC

	REF.	FREQUENCY BANDS AND MIXED BANDS	INSTALLATION	CONNECTOR TYPE
ERS	433401	3 Inputs: VHF: 47254 MHz UHF1: 470790 MHz UHF2: 470790 MHz	OUTDOOR	EasyF
MIX	434001	2 Inputs: MATV: 5790 MHz SAT: 9502150	INDOOR	F

MORE INFO

REF.		405101	405402	405401	403101 / 404411	403402	
Frequency range	MHz			47 790	470 774	47 782	
Through loss at the edge of the frequency range	dB				1		
Rejected frequency range	MHz	791862 79		793 862	791 862	791 862	
Attenuation in the rejected band	dB	>25	>25	>20	>25	>25	
Protection Index	IP	23			20		
Dimensions	mm	88x79x42				64x34x22.5	
Weight	gr	220				80	
		•••••••••••••••••••••••••••••••••••••••			•	•	



Filters **prevent LTE 790 / 4G** signals through the active elements in the installation which could be affected. Televes filters offer a huge range of solutions according to the frequency band that is used.

Cut off frequency choice must be according to DTT channels, meanwhile the format depends on the installation place of the filter (indoor or outdoor) and in the type of connector

Mixer combines different signals from several antennas. It has a plastic enclosure which protect it from the weather conditions, it is usually installed in the same mast as the antennas.

INTERESTING BACTS

easyF format does not need connectors. The installation is easy, cheap and fast.

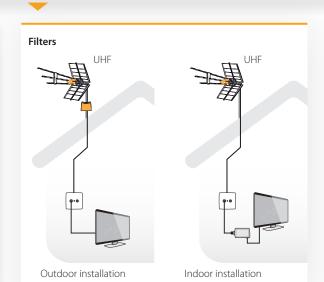
Filter's role in the installation is not only about the interferences, its specifications must be very detailed to not reduce the DTT range of frequencies.



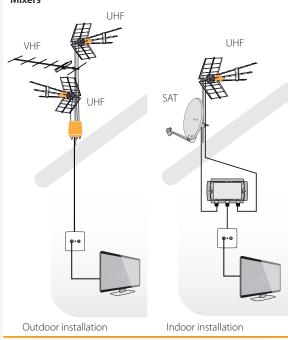


PACKING								
	-							
REJECTION	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE				
MEDIUM	Box	126x95x45	10	8424450154588				
HIGH	Box	90x81x45	10	8424450168448				
HIGH	Box	90x81x45	10	8424450154595				
MEDIUM	Box	80x36x25	10	8424450154564				
HIGH	Box	80x36x25	10	8424450179017				
HIGH	Box	80x36x25	10	8424450154571				
MEDIUM	B3 Bag	122x78x30	10	8424450167823				
HIGH	B3 Bag	122x78x30	10	8424450167830				

DC PASS	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
UHF1: 100 mA max.	T1	120x260x52	10	8424450183168
SAT: 1000 mA max.	ТВА	ТВА	TBA	8424450183175



Mixers



403401 / 404412 47 ... 790 793 ... 862 >20

REF.			433401		434001		
Mixed Bands		VHF	UHF1	UHF2	MATV	SAT	
Frequency range	MHz	47 254	47 790	47 790	5 790	950 2150	
Insertion losses	dB	1	l	5	4	2	
Isolation between inputs	dB	>40 (VHF-UHF) / >18 (UHF1-UHF2)			>20		
DC pass (max.)	W		2				
Protection Index	IP		23		20		
Dimensions	mm	88x79x42			98x75x27		
Weight	gr	220			220		

MAST AMPLIFIERS WITH POWER SUPPLY



CHARACTERISTICS





Mast amplifier main function is **amplify the signal received by the antenna without losing signal quality.** Generally it is installed close to the antenna (in the mast) to avoid degradation and also an effective amplification.

This product range is characterized by a **low noise figure** (around 1 dB) which guarantees a high quality in DTT signal.

Power supply unit (PSU) must be installed indoor, plugged into the electrical network. It sends the electrical current to the outdoor amplifier through the coaxial cable which is used to carry the TV signal from the antenna to the television.

INTERESTING BACTS

The amplifier has a switch to activate DC pass, to share the electrical current with an upper intelligent antenna (BOSS).

Automatic PSU manufacture is subjected to a very restrictive safety standards, it is installed indoors. So, can be accessible by children and short circuits must be avoided.



	REF.	INPUTS / BANDS	SPECIFIC INFORMATION
MAST AMP + POWER SUPPLY Kit	438640	AMP: 3 Inputs: VHF: 47254 MHz UHF: 470790 MHz SAT: 9502150 MHz PSU: 1 Input 5 2500 MHz	AMP: - UHF Gain: 29 dB - USOS Technology (automatic) - Consumption: 40mA PSU: - Output voltage: 12 V - Output current: 220 mA - Consumption: 3.7 W
MAST AMP + PC	438840	AMP: 3 Inputs: BI/FM: 47108 MHz BIII/UHF: 174254 / 470790 MHz SAT: 9502150 MHz PSU: 1 Input 52500 MHz	AMP: - UHF Gain: 27 dB - USOS Technology (automatic) - Consumption: 40mA PSU: - Output voltage: 12 V - Output current: 220 mA - Consumption: 3.7 W

	REF.	FREQUENCY RANGE	SPECIFIC INFORMATION
POWER SUPPLY	550402	1 Input: 5862MHz	- Output voltage: 24 V - Output current: 130 mA - Consumption: 3.6 W - 2 outputs

MORE INFO

REF. (KIT PRODUCT)	4					
Inputs / Bands		VHF	UHF	SAT	BI/FM	
Frequency Range	MHz	47 254	470790	950 2150		
Gain	dB	-	28	-	-	
Output Level (10 DTT Channels)	dBuV	-	94	-	-	
Power Supply	Vdc		1224	-		
Max current through inputs	mA	-	40	300	-	
Protection index	IP	23				
Dimensions	mm	68x50x29				
Weight	gr	150				

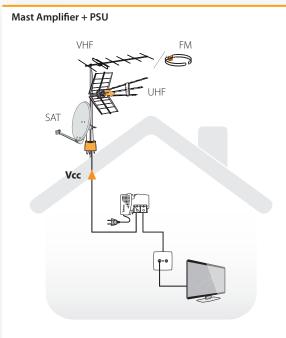


		-			
INSTALLATION	CONNECTOR TYPE	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
AMP: OUTDOOR PSU: INDOOR	EasyF	T1	120x260x54	8	8424450175019
AMP: OUTDOOR PSU: INDOOR	EasyF	T1	120x260x54	8	8424450175026

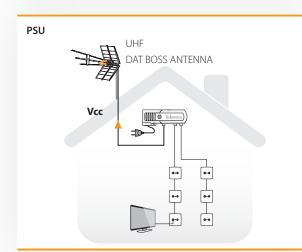
PACKING

INSTALLATION	CONNECTOR TYPE	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
INDOOR	F	T1	120x260x40	8	8424450141885

EXAMPLE OF USE



VHF or FM antenna according to reference



438840 (AMPLIFIER)							
BIII / UHF	SAT						
174254 470790	9502150						
20/27	-						
- / 94	-						
1224							
40	300						

REF. / KIT PRODUCT		438640 / 438840 (PSU)	550402
Outputs		1	2
Frequency Range	MHz	5862	52400
Insertion losses	dB	1.5	1.5 (1 output) / 4 (2 outputs)
Mains voltage (50/60Hz)	Vac	196264	
Output level	Vdc	12	24
Output current	mA	220	130
Protection index	IP	2	0
Dimensions	mm	86x65x26	145x45x35
Weight	gr	130	220

DOMESTIC AMPLIFIERS



Generally, these amplifiers are made to increase the number of outlets in a distribution network, draw from an outlet which already exists. **TV output** offers a lower gain that allow to connect it directly to the television.

The switched power supply is compact and has a **very low consumption** (50% less than standard amplifiers) and it helps to respect the environment.

With an **attractive appearance** adapted to the room installation, these amplifiers are shielded against interferences.

This range offers multiple options to choose the correct product depending on each installation: "F" or "IEC" (9.52) connector, different number of outputs, w/o return channel and capacity to distribute SAT frequencies.



Due to interior installation of amplifiers, automatic manufacture is subjected to a very restrictive safety standards. So, can be accessible by children and short circuits must be avoided.

Televes amplifiers could be used as compact headers, keep in mind the coaxial cable length.





CHARACTERISTICS

		REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
Y	e was og	552740	VHF/UHF: 47790 MHz	1 Output: 1 Standard	IEC
	anna	552840	VHF/UHF: 47790 MHz	3 Outputs: 2 Standard + 1 TV Output	IEC
<mark>ν</mark> _{DTT}	- 10000	552240	VHF/UHF: 47790 MHz	3 Outputs: 2 Standard + 1 TV Output	F
MATV	aaaa	552940	VHF/UHF: 47790 MHz	5 Outputs: 4 Standard + 1 TV Output	IEC
	10000	552340	VHF/UHF: 47790 MHz	5 Outputs: 4 Standard + 1 TV Output	F
	-0000	5531	VHF/UHF: 47862 MHz	6 Outputs: 6 Standard	F

		REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
		553301	Return Channel: 530 MHz VHF/UHF: 47862 MHz	1 Output: 1 Standard	F
tworks	- 2000	553501	Return Channel: 530 MHz VHF/UHF: 47862 MHz	1 Output: 1 Standard	F
CATV Cable Networks	-1-0000	5525	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F
CATV		5520	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F
	10000	5526	Return Channel: 565 MHz VHF/UHF: 88862 MHz	3 Outputs: 2 Standard + 1 TV Output	F

	REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
SMATV	5530	Return Channel: 530 MHz VHF/UHF: 47862 MHz SAT: 9502150 MHz	3 Outputs: 2 Standard + 1 TV Output	F

MORE INFO

REF.		552740	552840	552240	552940
Frequency range	MHz			47790	
Gain	dB	25	20 (12	@TV)	16 (11 @ TV)
Gain Adjustment	dB				12
Ouput Level(DIN45004B)	dBuV	112	10	06	102
AC Consumption	W				2
Protection Index	IP				
Dimensions	mm		145x45x35		
Weight	gr				



۰۰

<u>۰</u>۰0

0 • O

		1116	

PACKING

BLISTER TYPE

T1

Τ1

Т1

Τ1

Т1

Τ1

BLISTER TYPE

T1

T1

T1

T1

Τ1

T1

DIMENSIONS mm (x-y-z)

120x260x40

8

25dB

20 dB

TV Output: 12 dB

20 dB

TV Output: 12 dB 16 dB

TV Output: 11 dB 16 dB

TV Output: 11 dB

16 dB

24 dB

Return Channel: Passive

34 dB

Return Channel: Passive 18 dB

TV Output: 12dB

Return Channel: Passive

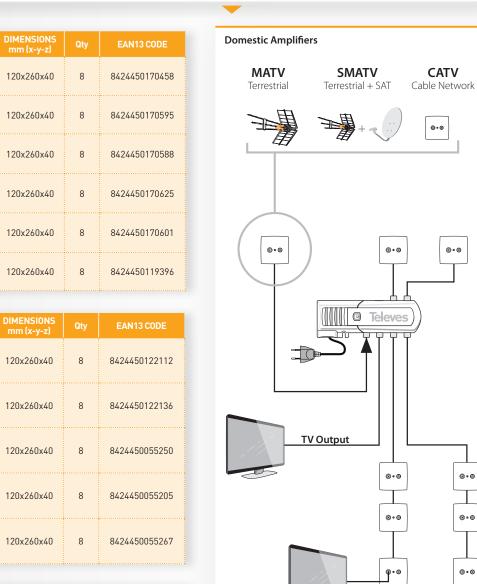
20 dB TV Output: 13 dB

Return Channel: Passive

20 dB TV Output: 13dB Return Channel: 9 dB

MATV: 18 dB, TV Output 10dB SAT: 20 dB, TV Output: 12 dB

Return Channel: Passive



Connector type a	and nu	Imber of	outputs	according t	o reference

552340	5531	553301	553501	5525	5520	5526	5530
	47862	530/47862	530/47862	565 / 88862	565 / 88862	565 / 88862	530 / 47862 / 9502150
16 (11 @TV)	16	- / 24	-/34	-/18 (12@TV)	-/20(13@TV)	9/20(13@TV)	(-/10/12@TV)
			18			12	
102	103	-/112	-/112	- / 106	- / 107	109/107	-/105/110
		3.	.5		2	-	6
		20		-	-	-	
145x60x35					145x45x35		
		220					

8424450055304

25

SPLITTERS



Splitters are elements which can distribute the received signal (DTT, Cable or SAT operators) through several outputs. The signal is the same on each splitter output.

This range of products have different connectors types, for an indoor installation or a plastic enclosure due to outdoor installations.

EasyF series connector, made in Zamak, has a superior Class A shield against electromagnetic interferences and an optimal electrical performance. Professional splitters for all installation types (indoor or outdoor).

> Inductive splitters (T pattern) are a simple solution to split the TV connector from the outlet.

INTERESTING BACTS

EasyF connection does not need "F" connectors. This gives rise to time and cost savings, improving connection reliability.

Televes

CHARACTERISTICS

easy	REF.	FREQUENCY RANGE	NUMBER OF OUTPUTS	ASSEMBLY	CONNECTOR TYPE
	432803	MATV/SAT: 52400 MHz	2	INDOOR	EasyF
onal splitters	434103	MATV/SAT: 52400 MHz	2	OUTDOOR (case included)	EasyF
EASYF professional splitters	432902	MATV/SAT: 52400 MHz	4	INDOOR	EasyF
	434202	MATV/SAT: 52400 MHz	4	OUTDOOR (case included)	EasyF

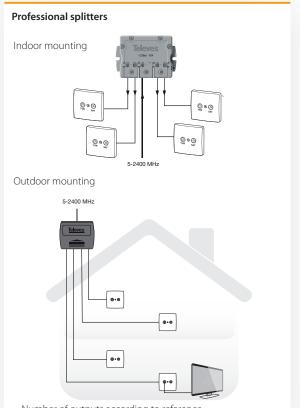
		REF.	REQUENCY RANGE	NUMBER OF OUTPUTS	CONNECTOR TYPE
\E T splitter	The second secon	4320	VHF/UHF	2	IEC: Input : Female Ouput 1 : Female Output 2 : Male
INDUCTIV	T	4322	VHF/UHF	2	IEC: Input : Female Ouput: Male

MORE INFO

REF.		432803	434103	432902	434202
Frequency range	MHz		52	2400	
Insertion loss	dB	0,1	T: 4	MATV: 9 SAT: 7.5	
Rejection between outputs	dB	>	15	MATV: >17 SAT: >15	
Max Current through Out - In	mA		30	00	
Max voltage	Vdc		4	0	
Protection Index	IP	20	23	20	23
Dimensions	mm	57x47x13	68x50x29	69x55x15	
Weight	gr	56	135	166	280



PACKING									
DC BYPASS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE					
From the whole outputs to the input	B3 Bag	78x122x19	8	8424450173329					
From the whole outputs to the input	T1 Blister	260x120x52	10	8424450170113					
From the whole outputs to the input	T1 Blister	120x260x41	8	8424450143551					
From the whole outputs to the input	T1 Blister	120x260x40	8	8424450143575					



Number of outputs according to reference.

0

DC Pass

DC Pass

0

0.0

Ref. 4322

Inductive splitters

Ref. 4320

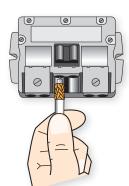
0

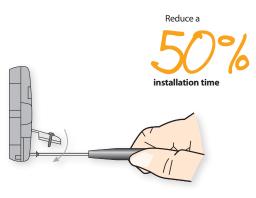
©•©



Discover the connection system







OUTLETS & ACCESSORIES



TV outlet is the **last TV distribution point**, at the entrance it receives the whole signal and detaches TV signal (terrestrial or satellite) from FM signal (radio). Chassis has been designed to make it easy:

• Coaxial cable connection: conical inner conductor guide, tilting embedded claw and the grab system offers a solid connection without screws.

• Outlet installation, thanks to the embedded claw to mounting without screws.





CHARACTERISTICS

		REF.	OUTLET TYPE	FREQUENCY RANGE	CONNECTOR TYPE
ellite	@ • @	4372	END	VHF/UHF: 5862 MHz	TV: IEC Male FM: IEC Female
OUTLETS Radio, Terrestrial TV an Satellite	@ • @	4373	THROUGH	VHF/UHF: 5862 MHz	TV: IEC Male FM: IEC Female
ILETS Radio, Ter	• •	4301	END	VHF/UHF/SAT: 52150 MHz	TV/FM: IEC Male SAT: IEC Female
.00	@ * @	4335	BRIDGED	-	TV: IEC Male FM: IEC Female

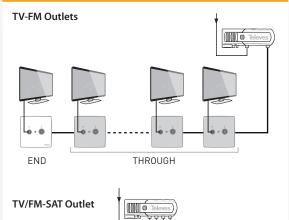
	REF.	DESCRIPTION	USE
ESSORIES	4336	Back Box	Surface Mounting
outlets ACC	4315	Adjustable Attenuator	TV signal level reduction to avoid problems caused by saturation or a excessive signal level

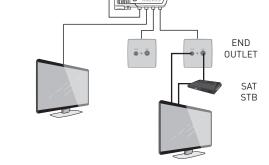
MORE INFO

REF.		4372		4373		4301		4335	
Outputs		TV	FM	TV	FM	TV/FM	SAT	TV	FM
Tap losses	dB	4.5	18	9.5	24	0.6	1.5	<2	
Step losses	dB	-		1.3		-		-	
DC current through	mA	N	0	Ν	0	SAT ->	Input	A	II
Dimensions	mm		80x80x7						
Weight	gr	80		80		140		100	

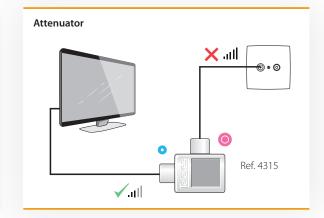


PACKING									
—									
ACCESSORIES	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE					
White TV-R Face Plate	T1	120x260x41	8	8424450043721					
White TV-R Face Plate	T1	120x260x41	8	8424450043738					
White TV/R-SAT Face Plate	T1	120x260x41	8	8424450043011					
White TV-R Face Plate Surface Mounting Base Screws	T1	120x260x41	8	8424450043356					





CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Screws are included	T1 Blister	268x166x40	10	8424450043363
Adjustment 125 dB IEC connectors (Female input - Male output)	B1 Bag	54x125	10	8424450043158





COAXIAL CABLE & ACCESSORIES



CHARACTERISTICS

	REF.	DESCRIPTION	MATERIAL	SHEATH
	4138	SK2000+ 18VAtC	Inner conductor: copper Braid: Tinned copper (98% Cu)	Triple, Class A+ Braid coverage: 82%
Trishield	414001	SK2003+ 18VAtC	Inner conductor: copper Braid: tinned copper (98% Cu)	Triple, Class A+ Braid coverage: 82%
	413705	SK110+ 18VAtC	Inner conductor: copper Braid: tinned copper (98% Cu)	Triple, Class A+ Braid coverage: 55%
	413601	SK100+ 18VAtC	Inner conductor: copper Braid: aluminium	Triple, Class A+ Braid coverage: 60%
	414801	SK6F+ 19VAtC.A	Inner conductor: copper-clad steel Braid: aluminium	Triple, Class A+ Braid coverage: 60%

		REF.	DESCRIPTION	MATER	RIAL	SHEATH
HELD	2x SHIELD	4371	17\/A+C_A	Inner con copper-cl	ad steel	Double, Class A
2x Sł		435501	17VAtC.A	Braid: aluminium		Braid coverage: 77%
		REF.	DESCRI	PTION		USE
ORIES	à	4360	Opene	Opened clip		able setting over the wall or a sharp
ACCESSORIES		2162	Cable S	tripper		sheath and braid from a ble to setting up the con- nectorization

MORE INFO

Trishield Televes cables: 100% certificated.

Televes Cable Certification center checks each centimeter to detect eventual defects. Certification consists in analize different cable parameters and guarantee:

- Copper quality (generally), from dielectric, foil, braid and sheath.
- Attenuation, electrical DC resistance and length parameters.
- Availability, capability and manufacturing flexibility.

which determinates the quality of the signal. There are many parameters that establish the coaxial cable performance, however it is possible to **guarantee an excellent quality** choosing the correct innner conductor and shield.

Copper inner conductor (Cu), offers low electrical resistence and excellent response to low and high frequencies.

The shield capability against interferences is due to the braid and the foil. Class A+ cables are the best ones against interferences, they are made with a triple shield (braid + 2 foils)

These cables have the best protection against LTE/4G and other interferences

INTERESTING BACTS

SK2000+ is a high quality cable recognised by DibKom, the Telecommunication German Institute, where has been subjected to stric certification tests.



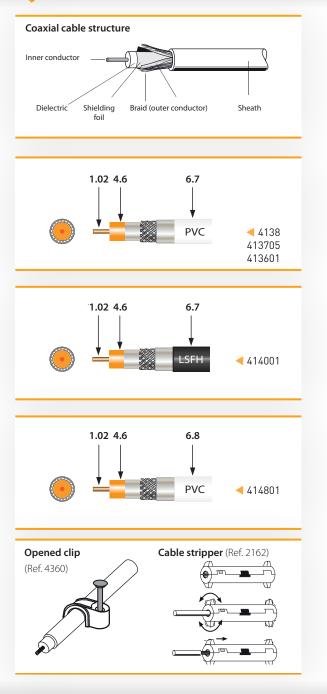


DIMENSIONS mm (x-y-z) PVC 1 / 5 (100 / 500m) Plastic 100 m W 270x270x137 4031136021917 (Indoor) Reel LSFH 1 / 5 (100 / 500m) UV resistant Plastic B 100 m 8424450152324 270x270x137 Reel (Outdoor) PVC 270x270x137 [1 / 5 (100 / 500m) Plastic 100 m W 8424450174258 (Indoor) Reel PVC 1 / 5 (100 / 500m) Plastic 100 m W 270x270x137 8424450174173 (Indoor) Reel PVC 1 / 5 (100 / 500m) 100 m Plastic W 270x270x137 8424450170106 (Indoor) Reel

PACKING

SHEATH (USE)	COLOR	LENGTH	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
PVC	Ŵ	10 m	T2 Blister	166x268x64	10	8424450043714
(Indoor)	W	20 m	Reel	120x260x40	1	8424450167465
CHAR	ACTERISTIC	S	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
White color 25 units kit			B1	54x125	10	8424450043608
Orange color			B2	90x230	10	8424450170595

EXAMPLE OF USE



Final reels are checked one by one so that all of them which are sent to clients **have been certificated and checked**.



COAXIAL CABLE LEADS

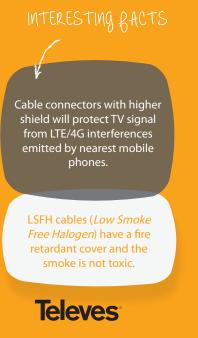


Preconnected cable lead range for different coaxial cables and connectors.

Connection could be type "F", usually used in satellite TV or "IEC" typically used in DTT.

Compression connectors offer a solid an professional cable connection with only one use. Furthermore, **PRO EasyF** connectors could be removed easily from the cable and without alteration. It allows to make shorter cable leads.

PRO EasyF connectors have a higher shield, Class A+ type, according to the SK2000+ cable (also Class A+)





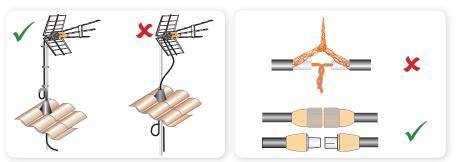
CHARACTERISTICS

		REF.	CABLE TYPE	CONNECTOR TYPE	SHEATH
		3851	SK2000+	F	
	3 8	385101	18VAtC	Male-Male	PVC
	* 6 ⁷	385102	Trishield	Compression	
		3852	SK2000+	IEC	
	1 3	385201	18VAtC	Male - Female	PVC
	~ ~	385202	Trishield	Compression	
S	. // //	3853	SK2000+	F - "Quick F"	
ead	2 5	385301	18VAtC Trishield	Male - Male	PVC
le L	•	385302	msmetu	Compression - PRO EasyF	
3X SHIELD Trishield Cable Leads		3854	SK2000+	F - IEC	
ield	J 3	385401	18VAtC Trishield	Male - Female Compression	PVC
ishi	•	385402	manetu	compression	
1		3856	SK2000+	F - IEC	
	I 3	385601	18VAtC Trishield	Male - Male Compression	PVC
E	•	385602	mometu	compression	
×	- / /	3858	SK2000+	IEC	
	la (6	385801	18VAtC Trishield	Male - Female Compression - PRO EasyF	PVC
	•	385802	mometa		
		385501	SK2000+ 18VAtC	F - IEC Male - Female	PVC
	II 3	303301	Trishield	Compression - PRO EasyF	1.00
		385701	SK2000+ 18VAtC	F - IEC Male - Male	PVC
	w 🌮		Trishield	Compression - PRO EasyF	

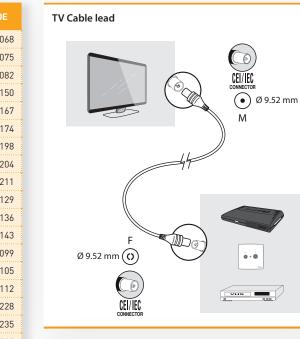
		REF.	CABLE TYPE	CONNECTOR TYPE	SHEATH
Leads	4:	431001	T200+ - 15VRtC	IEC Male - Female	LSFH
Cable Le	6	431002	Dual - Shield	PRO EasyF (Class A+)	LJFH
Cal		4389			
E		4312	Dual - Shield	IEC	PVC
2x SHIE		4311	Duat - Shietu	Male - Female	FVC
2X		4314			

MORE INFO

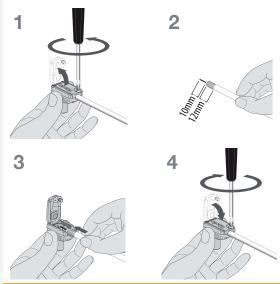
Coaxial cable is not an electrical cable. Junction must be made properly.

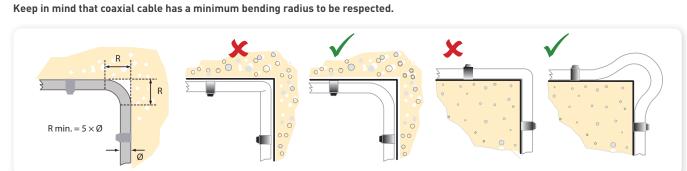






Follow this steps to adapt the cable lead length.





PACKING

CULUR	LENGTH	TYPE	mm (x-y)	Qty	EAN13 CODE
	1.5 m			30	4031136022068
W	3 m	B0	200x305	20	4031136022075
	5 m			15	4031136022082
	1.5 m			30	4031136022150
W	3 m	B0	200x305	20	4031136022167
	5 m			15	4031136022174
	1.5 m			30	4031136022198
W	3 m	BO	200x305	20	4031136022204
	5 m			15	4031136022211
	1.5 m			30	4031136022129
W	3 m	B0	200x305	20	4031136022136
	5 m			15	4031136022143
	1.5 m	BO	200x305	30	4031136022099
W	3 m			20	4031136022105
	5 m			15	4031136022112
	1.5 m		200x305	30	4031136022228
W	3 m	B0		20	4031136022235
	5 m			15	4031136022242
W	3 m	B0	200x305	20	4031136022266
W	3 m	BO	200x305	20	4031136022297

COLOR	LENGTH	BLISTER	DIMENSIONS	Qty	EAN13 CODE
	1.5 m	TYPE T1	mm (x-y-z) 120x260x41	8	8424450160541
6	2.5 m	т1	268x166x40	10	8424450160626
W	1.5 m	T1	120x260x41	8	8424450043899
B	1.5 m	T1	120x260x41	8	8424450043127
W	2.5 m	T1	122x166x45	6	8424450043110
B	2.5 m	T1	120x260x41	8	8424450043141

C DISTRIBUTION

COAXIAL CONNECTORS



There are 2 types of connectors in the world of antennas: "F" and "IEC".

Regardless connector type, **shield and a easy mounting system** are the main parameters to choose the connector type.

Televes range offers zamak connectors with a superior shield, simple connectors and ABS plastic connectors (only a little part to avoid deformation or break during the assembly).



Elbowed connector reduces the connection place behind the TV / receiver.

There is a "Quick F" connector also, similar to "F" connector but it can be plugged without screw it.

Televes[®]

CHARACTERISTICS

		REF.	ТҮРЕ	MOUNTING	SHIELD
	A A	437401	IEC Male	PRO EasyF	Class A+
		437501	IEC Female	PRO EasyF	Class A+
IEC _{DTT}	OR, OR,	437601	IEC Male + IEC Female	PRO EasyF	Class A+
EC		4305	IEC Male	Screw	Standard
		4303	IEC Female	Screw	Standard
	Cora	4316	IEC Male + IEC Female	Screw	Standard

	REF.	ТҮРЕ	MOUNTING	SHAPE
ATELLITE	4306	F Male	Screw	Straight
TVS	4317	F Male	Screw	Straight

	REF.	ADAPTER TYPE	MOUNTING
	4307	F Female - F Female	Screw
ADAP	4309	Joint without connectors	Screw

MORE INFO

Know more about *EasyF* connectors:



Professional "PRO EasyF" connectors offer several benefits thanks to "Easy F" assembly:

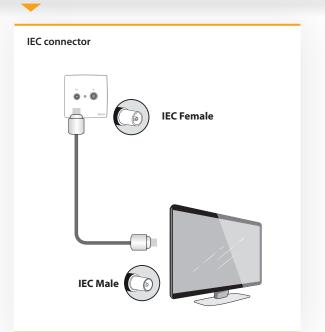
• **Easy mounting system**. Coaxial cable connection becomes a fast operation in 3 simple moves. With a single screw to grab and close the connector, the cable is strongly assembled ensuring a safe and a reliable connection.



PACKING						
SHAPE	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE	
Elbowed	1 u.	B1	54x125	10	8424450133644	
Elbowed	1 u.	B1	54x125	10	8424450133675	
Elbowed	2 u. (pair)	B1	54x125	10	8424450133712	
Straight	1 u.	B1	54x125	10	8424450043059	
Straight	1 u.	B1	54x125	10	8424450043035	
Straight	2 u. (pair)	B1	54x125	10	8424450043165	

ACCESSORIES	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
Waterproof cap	1 u.	B1	54x125	10	8424450043066
F	2 u.	В1	54x125	10	8424450043172

SHAPE	UNITS PER BAG	BAG TYPE	DIMENSIONS mm (x-y)	Qty	EAN13 CODE
Straight	1 u.	В1	54x125	10	8424450043073
Straight	1 u.	B1	54x125	10	8424450043097





- **Shield**. Class A+ protection against interfering LTE / 4G signals.
- **Quality**. Zamak manufacturing with RCP (Reactive Coating Process) which guarantees long durability. Robotic production ensures reliability.



AUDIO/VIDEO & OPTICAL FIBRE



SCART is the most used connection between electronic and multimedia equipment at home.

Nevertheless, HDMI head the list of digital A/V connection. We have a cable (in this range) "High Speed HDMI Cable with Ethernet" which is compatible with 4K technology (UltraHD or UHD).

Optical fibre is currently used in a large number of homes. Fibre optic single patch cord allows you to connect an optical router to an optical outlet. "SC/APC" are the most used connectors between fibre optic devices.

INTERESTING BACTS

Televes works with HDMI licenses, which is a standard that includes royalties. Its cables respect all the specifications and quality standards of the HDMI certification.

In case that fibre optic must be rolled, it is important to keep a minimum bending radius (8cm).It improves transmission and prevents signal loss.



ULTRA	CHARACTERISTICS					
	REF.	ТҮРЕ	CONNECTOR	COMPATIBILITY		
Ø	494501	A/V Extender	HDMI Male - HDMI Male High Speed with Ethernet	4К		
	494502	A/V Extender	HDMI Male - HDMI Male High Speed with Ethernet	4K		
Ø	494503	A/V Extender	HDMI Male - HDMI Male High Speed with Ethernet	4К		

	REF.	ТҮРЕ	CONNECTOR
	4319	A/V Extender	SCART Male - SCART Male 21 PIN
SS	4377	A/V Extender	SCART Male - 2RCA Male



MORE INFO

Fibre optic work tips:

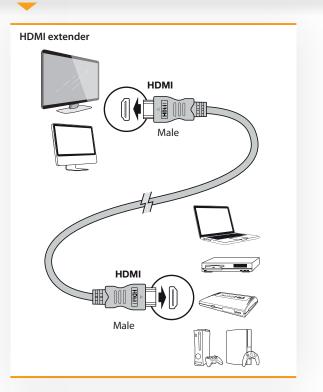
- If the patch cord is connected to a laser source do not look directly to both ends.
- Optical signal could be reduced if any scratch, impurity, grease residue or sweat go into the connector so, handle it with caution.
- As a result of the last tips, is advisable to save the protection caps and place it again when the connectors are open.
- If it was necessary to roll the patch cord, it is important to keep a minimum bending radius (8cm for a patch cord). It improves transmission and prevents signal loss.

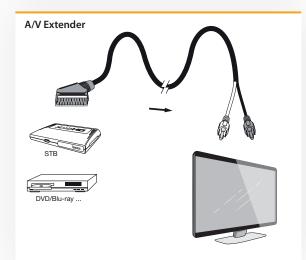


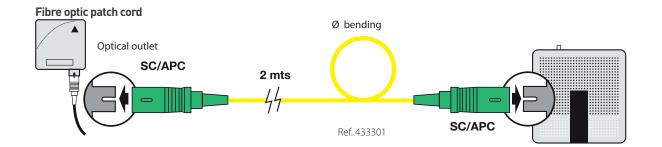
PACKING							
COLOR LENGTH BLISTER DIMENSIONS Oty EAN13 CODE							
0	1.5 m	T1	120x260x41	8	8424450144152		
B	3 m	T2	166x268x64	10	8424450146019		
0	5 m	T2	166x268x64	10	8424450146026		

COLOR	LENGTH	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
0	1.2 m	T1	268x166x40	10	8424450043196
0	1.5 m	T1	120x260x29	10	8424450043776

COLOR	LENGTH	BLISTER TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Yellow	2 m	T1	120x260x29	10	8424450174050







DIGITAL SET-TOP BOXES



High definition digital set-top boxes range to receive DTT, HbbTV or free to air satellite services. The ideal solution for TVs without the suitable tuner.

The zAs series set-top boxes are made in Europe through an automated and robotic process. This manufacturing guarantees quality, reliability and low consumption.

INTERESTING BACTS

Get the interactive services provided by the new television. The zAs Hbb gives your TV an Internet connection to access any VoD content (series, movies, documentaries and programs already issued) in addition to conventional programs of DTT (HDTV included).

Just connect zAs Hbb to Internet and you will receive the contents that your operator offers with the possibility to handle the playback control (rewinding, pause, play...).





CHARACTERISTICS

	REF.	DESCRIPTION	CHARACTERISTICS
TERRESTRIAL DTT	511501	zAs Hbb A hybrid set-top-box for digital terrestrial TV	DVB-T Standard HbbTV compatible MPEG2 (SD) & MPEG4 (HD) Video LCN compatible Teletext compatible Parental Code PVR function & TimeShift with USB Multimedia player: video, audio and pictures (via USB) Software update (USB or IP) Low consumption

	REF.	ТҮРЕ	CHARACTERISTICS
SATELLITE Free-to-air services	717501	zAs HD SAT A set-top box for the digital TV by satellite	DVB-S / DVB-S2 Standards MPEG2 (SD) & MPEG4 (HD) Video DiSEqC 1.2 compatible, USALS motorization, LNB unicable Teletext compatible Parental code PVR function & TimeShift with USB Multimedia player: video, audio and pictures (via USB) Software update (USB) Low consumption
SATELLITE	7118	RSD A set-top box for the digital TV by satellite	DVB-S Standard MPEG2 (SD) Video DiSEqC 1.2 compatible, USALS motorization, LNB unicable Teletext compatible Parental code Software update (RS-232) RF Modulator Games Low consumption
MORE INFO			



HYBRID STB FOR RECEPTION OF



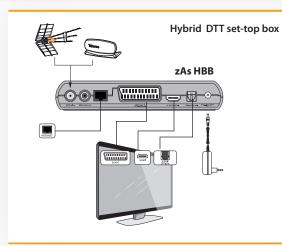
You decide what to watch

HbbTV, VOD television for free and with contents to the whole family.

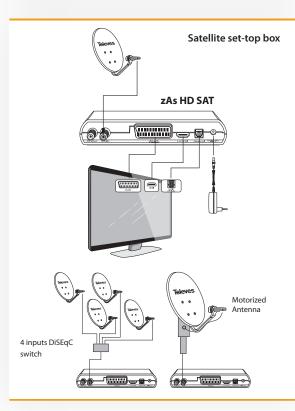




		PACKIN	G		
CONNECTOR	INCLUDED ACCESSORIES	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
IEC 9,52 antenna SCART HDMI Optical Audio USB 2.0 RJ45 internet	HDMI Cable Coaxial cable lead Remote control (batteries incl.) AC Supply User Manual	Box	200x218x60	1	8424450163757



CONNECTOR	INCLUDED ACCESSORIES	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
F antenna SCART HDMI Optical Audio USB 2.0	HDMI Cable Remote control (batteries incl.) AC Supply User manual	Box	200x218x60	1	8424450148846
F antenna SCART 3RCA RS-232	Remote control (batteries incl.) AC Supply (integrated) User manual	Box	372x200x55	1	8424450133996





The table from bellow shows what types of multimedia files can be reproduced with zAs set-top boxes:

File type	Extension	Video codec	Audio codec
MP4	MP4	MPEG4 H.264	AAC
WAV	WAV		PCM MP3
MATROSKA	MKV MKA	MPEG4 H.264	AC-3 MP2 MP3 AAC
AVI	AVI	XVID (MPEG4-ASP)	AC-3 MP2 MP3

AUDIO/VIDEO & IR TRANSMISSION



CHARACTERISTICS

This range is composed by **devices** which transport signals where it is necessary in the house, using different means of transmission:

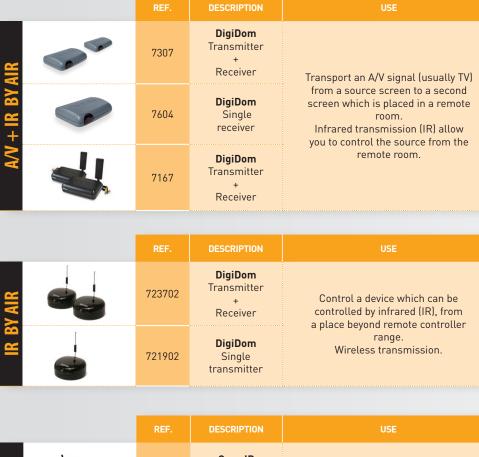
DigiDom A/V Kit: audio, video and IR transmission without cables.

DigiDom IR Kit: infrared transmission (IR) without cables. Universal system to extend the remote control range.

Coax IR Kit: infrared transmission through coaxial cable.

INTERESTING BACTS

Coaxial cable transmission always be stronger than one without cables, less sensitive to interferences (WiFi signals, fluorescent or neon lights, microwaves, etc) and is not affected by walls or another obstacles.



COAXIAL	<u>ح</u> ر	7605	Coax IR Transmitter + Receiver	Control a device which can be controlled by infrared (IR), from a place beyond remote controller
IR VIA	کو	7606	Coax IR Single transmitter	range. IR are transmitted through coaxial cable from one side to other side.

MORE INFO

Coax IR System

Coax IR allows to control electronic devices using the coaxial network to transport TV signals. Enjoy satellite TV (or any type of TV content) in all your rooms with a single satellite STB.

You could use a Coax IR emitter on each TV and a Coax IR receiver in the satellite STB, and use a domestic modulator to share A/V signal from the receiver.

Coax IR elements have "IEC" connectors which allow it to connect to TV outlets or to another distribution network elements.

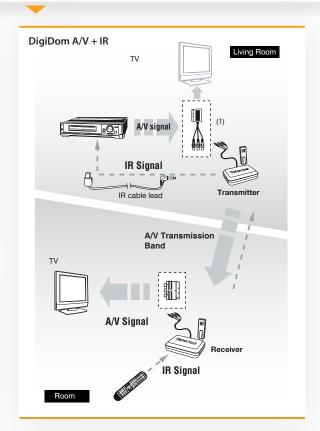


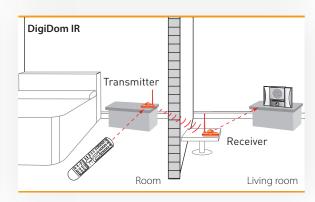


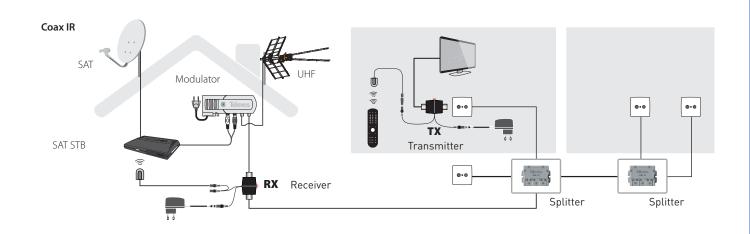
PACKING					
CHARACTERISTICS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE	
Transmission Band 2.4 GHz 3 configurable channels Antennas are hidden inside the device PAL & NTSC Standards	Box	250x192x97	1	8424450073070	
	Box	250x192x53	1	8424450076040	
Transmission Band 5.8 GHz 8 configurable channels Steerable antennas PAL & NTSC Standards	Box	226x159x104	1	8424450145975	

CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
30 60 KHz carrier 8 configurable channels ASK Standard	Box	144x86x150	1	8424450177952
	Box	144x85x104	1	8424450179000

CHARACTERISTICS	TYPE	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Transmission distance up to 2 km	Box	125x125x65	1	8424450113370
	Box	125x125x39	1	8424450118269







MODULATORS & CHARGERS

Domestic A/V modulator which generates, from an A/V source (camera, SAT STB,...) an analogue channel modulated in frequency (selectable) within the MATV terrestrial band (UHF). It is compatible with satellite installations and it includes a switch-mode power supply that optimise energy efficiency.

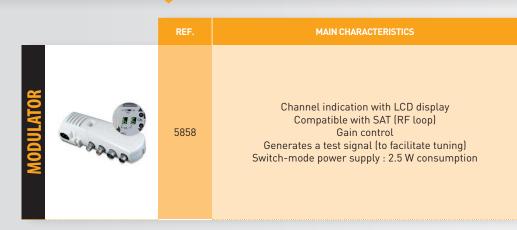
This **USB charger has an efficiency** greater than 75% which facilitates the devices to charge twice as fast as other adapters that only generate 0.75A. USB connection provides an universal compatibility.



Due to interior installation of amplifiers, automatic manufacture is subjected to a very restrictive safety standards. So, can be accessible by children and short circuits must be avoided.

Televes

CHARACTERISTICS

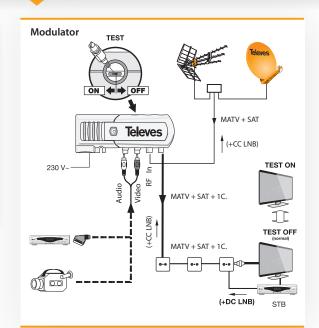


SECURE 50%	U		
	REF.	MAIN CHARACTERISTICS	TECHNICAL CHARACTERISTICS
CHARGER	434401	Efficiency 75% Minimum heat dissipation Very low ripple level (50 mV) Resettable fuse (against power surge) ABS plastic chassis Small dimensions: 60x47x70 mm and 70 g	Input: 196264 Vac 50/60 Hz 10 W 100 mA Output: 5.1 Vdc 1.5 A (max.)

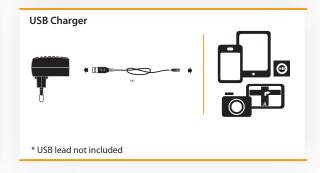




		NG		
TECHNICAL CHARACTERISTICS	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Modulation: PAL B/G Standard VHF/UHF Band 90 dBµV Output Level RF Loop: 5 2400 MHz Band 300 mA DC bypass < 2 dB Through Losses	Box	150x90x40	1	8424450139806



COMPATIBILITY	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE
Universal: USB connector System: Apple & Android Products: Smartphones, MP3/4, eBook, GPS, tablets, cameras	T1 Blister	60x47x70	10	8424450166819



Why choose a 100% made in Europe charger?

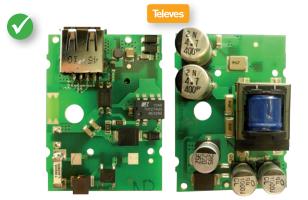
Do not leave security in the background, protect yourself and preserve you electronic devices.

Self-production and manufacturing allow to control every aspect related with the quality of the product and its components. In this way we obtain a high performance product with a greater efficiency.

Also, like Televes power supplies, charger is submitted to a strict thermal test to guarantee an optimal performance.

It offers the **best security:**

- **Product that is charging and its battery:** thanks to its progressive and unalterable charge process against electrical fluctuations and its fuse that protects it against surges.
- **User:** thanks to its higher thermal insulation, low heat dissipation and chassis against fire made of ABS plastic.





Frequently, to install a tower we need to build a structure over a roof of a building or a house.

A standard tower is not an option on private houses because its base needs a concrete structure.

Pack tower is a structural support for several antennas designed to be installed in an easily, and without maintenance.



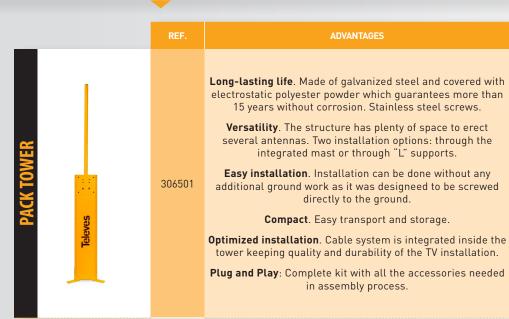
Pack tower is an excellent choice as an auxiliar structure for an exhibition, fair or lounge.

Use a "L" support (ref. 7349) to set a stably satellite dish.

You must install the support before the tower.

Televes

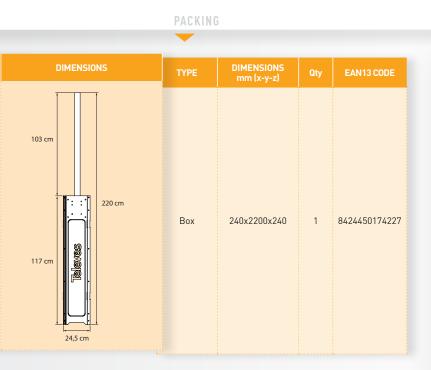
CHARACTERISTICS



IORE INFO

Mast thickness	-	2
Lateral panels thickness		1.5
Mast diameter	mm	45
Mast total height		1,170
Mast operative height		1,040
Weight	kg	17
Base bending moment	Nm	1,040
Mast bending moment	INITI	520







Tower is completely disassembled and in a compact packaging.

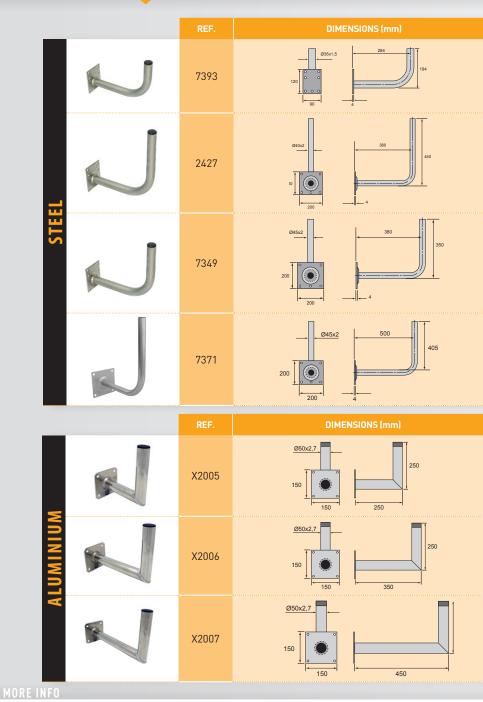
It allows to transport it easily to the installation place, preventing handling problems and bulky problems (put in a car boot, go through doors, etc) and also optimize its storage.



ANTENNA WALL SUPPORTS



CHARACTERISTICS





Compatibility between wall brackets and dishes:

When a satellite dish is installed, fixing system choice is very important due to bracket type depends on dish dimensions.

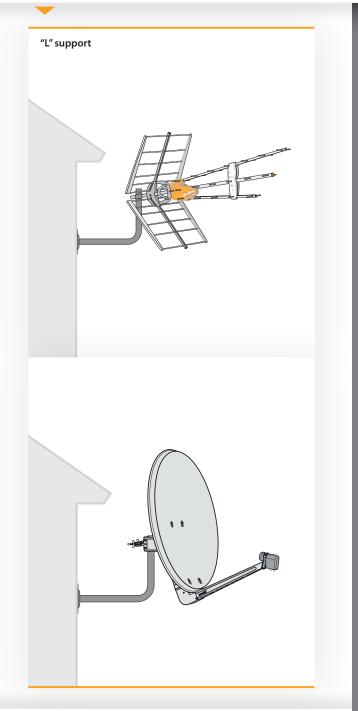


These "L" antenna (terrestrial o satellite) supports are installed with screws on the wall

According to the material, supports range is classified in: **aluminium or steel.** Steel brackets are covered with a **double galvanization and reactive waterproofing RCP process** (Reactive Coating Process). This technique increases resistance against rust and **guarantees long durability** even in adverse conditions.

Televes

PACKING						
MATERIAL	ТҮРЕ	TYPE	Qty	EAN13 CODE		
Processed steel	"L" - Wall	Box 400x300x210mm	10	8424450073933		
Processed steel	"L" - Wall	Bulk	5	8424450024270		
Processed steel	"L" - Wall	Box 590x390x325mm	5	8424450073490		
Processed steel	"L" - Wall	Bulk	5	8424450073711		
MATERIAL	ТҮРЕ	ТҮРЕ	Qty	EAN13 CODE		
Aluminium	"L" - Wall	Box	10	4031136001162		
Aluminium	"L" - Wall	Box	10	4031136001179		
Aluminium	"L" - Wall	Box	10	4031136001247		

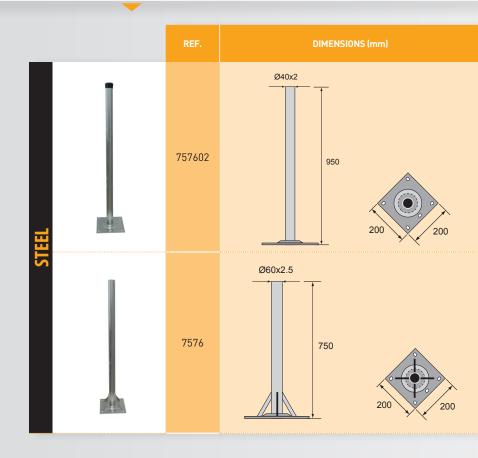


ØBr	acket	35	40	4	45		50	
DISH	I TYPE	7393	2427	7349	7371	X2005	X2006	X2007
16.0	630	✓	✓	✓	✓	✓	✓	✓
ISD	830	✓	✓	✓	✓	x	x	x
QSD	750	x			✓	✓	✓	✓
QSD	850	~	*	¥		×	3C	×

ANTENNA GROUND SUPPORT



CHARACTERISTICS





These satellite dish "T" supports are screwed on the ground.

They are made with processed steel and covered with a **double** galvanization and reactive waterproofing RCP process (Reactive Coating Process). This technique increases resistance against rust and guarantees long durability even in adverse conditions.



Compatibility between wall brackets and dishes:

When a satellite dish is installed, the choice of the fixing system is very important due to the bracket type depends on dish dimensions.



PACKING						
MATERIAL	ТҮРЕ	ТҮРЕ	Qty	EAN13 CODE		
Processed steel	"T" - Ground	Bulk	1	8424450143087		
Processed steel	"T" - Ground	Bulk	1	8424450075760		

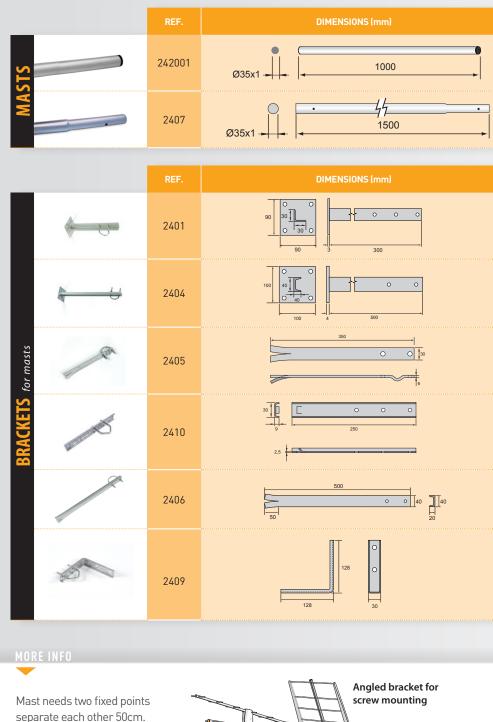


ØB	racket	48	60		
D	ISH	757602	7576		
ISD	630	✓	×		
120	830	✓	×		
QSD	750	4	4		
QSD	850	•	•		

MASTS & BRACKETS



CHARACTERISTICS



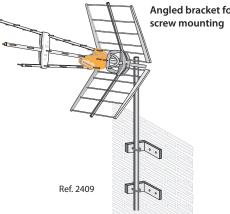
Masts could be necessary to terrestrial antenna installations. If the received signal is weak, a mast must be installed to place the antenna higher and TV signals will be received properly.

Thanks to brackets the mast could be installed on facades detaching it to avoid different obstacles.

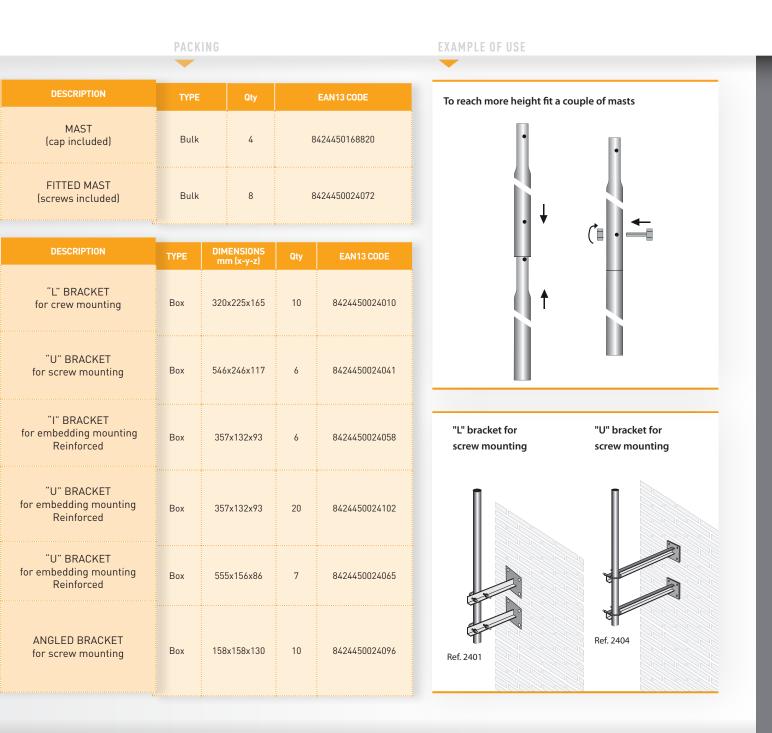
Televes fixations range allow two types of installation: **screw mounting or embedding mounting.**

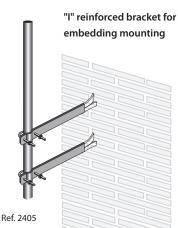
Galvanized surface is processed with RCP (Reactive Coating Process) to increase resistance against rust.

> Mast needs two fixed points separate each other 50cm. Hence, accessories are usually bought in pairs.



Televes





"U" reinforced bracket for embedding mounting Ref. 2406 "U" reinforced bracket for embedding mounting Ref. 2410

ACCESSORIES & DISPLAY BOARD

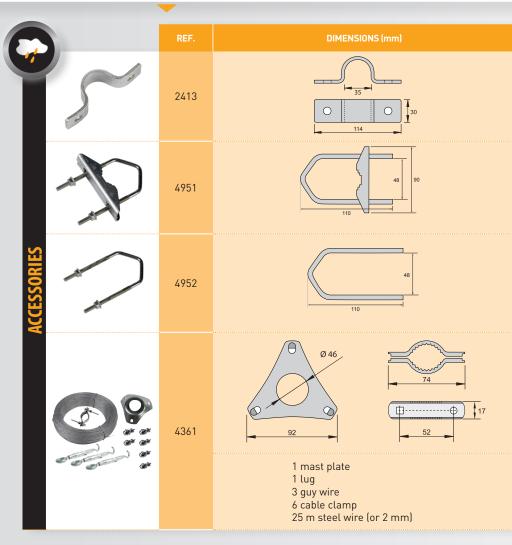


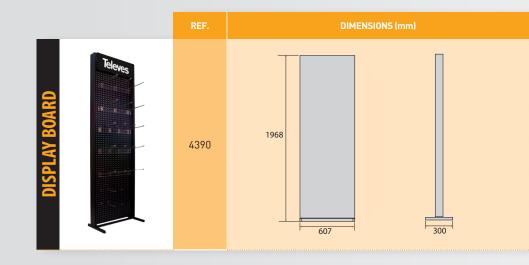
Complete or improve the mechanica part of the installation with different useful accessories like fixing complements

In line with the rest of the mechanical accessories, all complements are made with a **RCP process (Reactive Coating Process)** to increase resistance against rust and guarantee a long durability even in adverse conditions.

Self-service professional display board allows the exhibition of the product packed in a blister or in a bag.







Televes

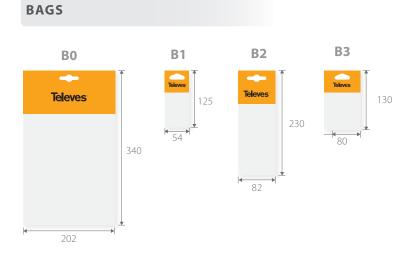


	PACKIN	G			EXAMPLE OF USE
DESCRIPTION	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE	Accessories
MAST CLAMP Ø 35 mm	Box	128x68x62	6	8424450024133	
MAST CLAMP Ø 2545 mm	Blister T1	120x260x41	8	8424450140154	
MAST U-BOLT Ø 2545 mm	Blister T1	120x260x41	8	8424450140178	30
GUY WIRE MOUNTING KIT Ø 45 mm	Blister T2	268x166x55	10	8424450043615	Guy wire mounting kit
DESCRIPTION	ТҮРЕ	DIMENSIONS mm (x-y-z)	Qty	EAN13 CODE	
PROFESSIONAL DISPLAY BOARD Clamps included	Box	217x65x15	1	8424450043905	

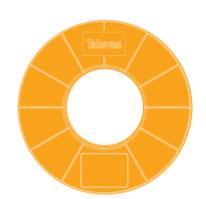
22 MECHANICAL ACCESSORIES

APPENDIX

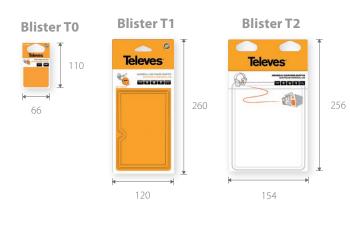
PACKING TYPE

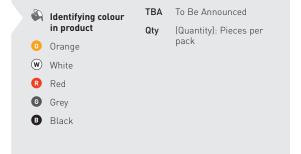


PLASTIC REEL



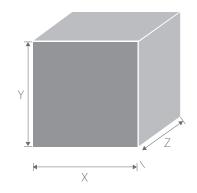
BLISTERS





BOXES

Dimensions are always specified in the order: X, Y, Z

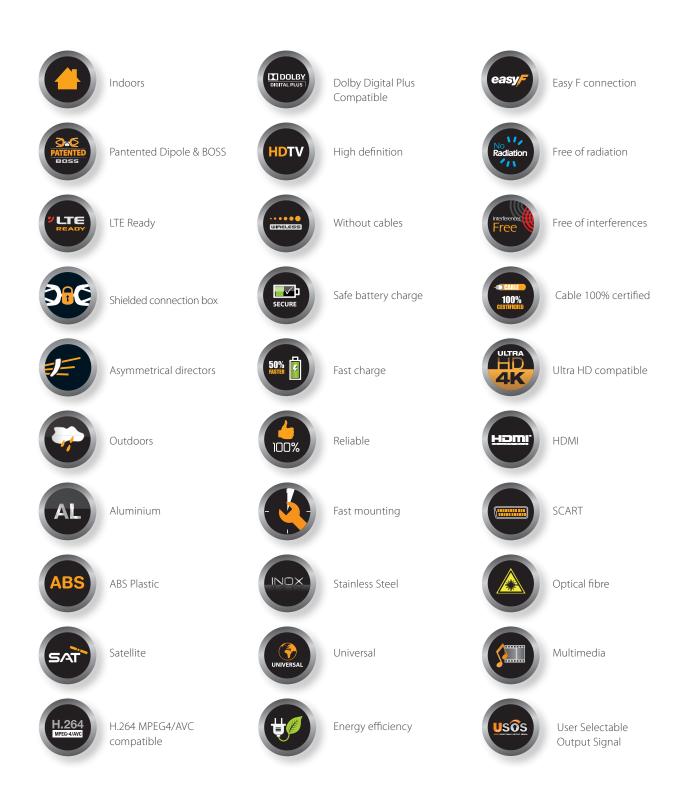


Televes expresses that this document is just for information purposes and does not accept any responsibility that could be originated from possible errors or omissions regarding its content.

The product pictures included are not contractual and Televes could supply products as shown or these could suffer variations, modifi cations and/or alterations at any time and without notice.

APPENDIX

GLOSSARY OF ICONS



......



TFORCE TECHNOLOGY ANTENNA

Televés goes beyond the silicon era into the new era in electronic component design, which allows building integrated circuits that work in the microwave frequency band. TForce is based on the manufacturing of gallium arsenide (GaAs) semiconductor compounds, which provides products with functionalities that are difficult to match.



IF THE DAT BOSS CAN'T RECEIVE IT, **NOTHING CAN!**







HIGH DYNAMIC RANGE



WIDER DTT COVERAGE AREA dBi

VERY

HIGH GAIN



VERY LOW

NOISE FIGURE



MANUFACTURED IN EUROPE



