PROMAX

Install DIGITAL TO TV and view up to 200 satellite channels in DTT format

- Turns satellite channels into DTT, preserving its original digital quality
- Turns the video output from receivers, DVDs, cameras... into DTT
- Pure image, without interference or noise, ideal for flat screens
- Allows reception of all programmes with the television's built-in DTT decoder
- Roofs without satellite dishes: helps to preserve the landscape
- Normally possible to use existing cabling
- Modify the programming grid from any computer
- It can regenerate weak signals and it allow you to reassign channels
- Expandable: more channels can be added in the future
- Flexible: adapts to client's needs

Made in EU

DVB Digital Video Broadcasting

PROMAX in Internet: www.promaxelectronics.com

DTT quality on your television

The analogue switch off is a unique opportunity to eliminate any interference in the image of your televisions, especially when large format flat screens are used. For this it is necessary to replace the old SMATV distribution networks.

Digital To TV is a head-end that maintains the original digital format and distributes the signal with a superb quality, with all the advantages of the DTT technology.

Satellite channels in DTT format

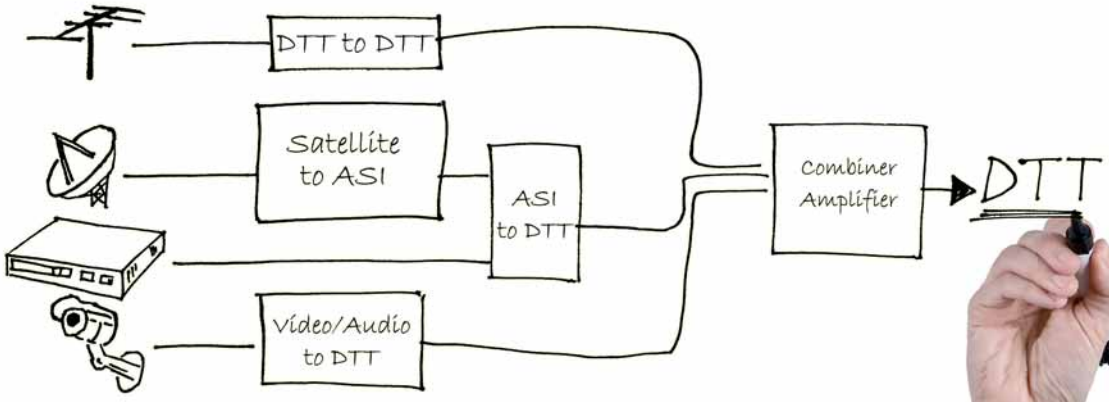
Can you imagine receiving the satellite digital TV using the DTT decoder? With **Digital To TV** it is possible!

Digital To TV turns the satellite digital television programmes to DTT format and injects them in the distribution network with the rest of the DTT channels. As the process is fully digital, the final quality is equal to the original one.

The **Digital To TV** system is compatible with LCN (Logic Channel Number), which allows setting in what order and position channels will be memorized on the DTT decoder when the user does an automatic search (*).

(*) Function available depending on the country and the type of decoder.

Digital To TV



Digital To TV is a universal solution for any installation

Turn any video source into DTT

Would you like to get the Video/Audio output from a pay per view decoder and distribute it in DTT? Does your business have a corporate channel with information on the services offered? Do you have a private video channel? Do you have security cameras, video door entry system or any other application with video/audio you wish to inject in the distribution system?

No problem, **Digital To TV** is flexible enough to digitalise those signals and pack them in groups of four per channel. Just tune in the TV set!

Change the programming whenever you want from any computer

In a hotel, the guests change according to the season. Why not change the television programmes too?

During the installation of the **Digital To TV**, the installer will set up the programmes that you wish to make available to your clients. Later, using the remote control software (webserver), you will be able to re-configure the system to add, clear or move channels.

The audiovisual solution for hotels of distinction

More programmes

Digital To TV is designed to distribute up to 200 different programmes in DTT format. This wide offer of programmes allows the supply of local, national and international channels in different languages, programmes with internal information, publicity, etc.

Offer your clients a unique programme grid!

Internal information channels: *Video Signage*

Easily add exclusive channels with information on the services of the hotel, the activities in the convention rooms or any other type of information.

It is as simple as connecting the computer, DVD or other type of player to the **Digital To TV**.

Render your investment profitable! Incorporate channels with local publicity

Clients will appreciate to learn about the offer of leisure and services in the area. Through a channel with local information the hotel will be able to make the system profitable. It will also allow to promote the internal services: bar, restaurant, etc.

Digital To TV for rural areas: a solution for zones without DTT coverage

Digital To TV is a very economic solution to re-broadcast channels in areas without DTT coverage. **Digital To TV** receives the programmes via satellite and re-broadcasts them in DTT, offering practically the same quality as in the rest of the network.

Realign the channels without losing quality: Optimize the quality of reception

Often it is necessary to realign the channels. For instance, when re-broadcasting a channel over a new channel to avoid interference on the same channel. Also in cable distribution, when it is necessary to move the channels down to avoid the bandwidth limitations.

With the **Digital To TV** the channels can be moved to another frequency and the quality increased.

Why resign to just amplify? **Regenerate** the quality of the signal!

In many occasions to amplify the signal is not the solution.

Digital To TV is not limited to only realign the channels. The system receives the video/audio signal and modulates it again, fully recovering the original quality of the transmission.

Digital To TV is ideal for distribution in buildings, residential and communities

Offer encrypted programmes in open for communities

Digital To TV has the slots to insert CAM modules and Smart Cards that allows the open distribution for most services. This allows all the neighbours to receive the programmes without the need of additional decoders.

For services that do not offer de-encryption solutions in CAM format, the **Digital To TV** converts the ASI or the video/audio output of the original receivers to DTT.

DTT distribution in Cable TV networks: neither additional set top boxes nor remote controls

Digital To TV helps with the digitalisation of the cable TV networks. Many cable operators have already discovered the advantages of using DTT in their networks, given that most of the homes passed already have DTT receivers. In addition to the saving of the set top box, the users will appreciate not to have to use a new remote control.

Now it is possible **to do without the cable TV set top boxes!**

Preserve the landscape: no satellite dishes!

There are many towns and communities of neighbours that would wish to remove from their buildings the satellite dishes that have slowly contributed to distort the landscape.

The **Digital To TV** allows us to transmit all the contents in DTT and to receive them through the cable distribution networks or through terrestrial antennas, thus contributing to “clean” the landscape of satellite dishes.

Digital To TV suitable for all types of installations, including high definition

DTT Distribution is very convenient in cases where the need to optimise the space has led to the use of flat screens. This might be the case in ships, hospitals, pubs, etc.

The **Digital To TV** is compatible with the new high resolution channels. Make them available to your customers!

Install **Digital to TV** and avoid changing the network

The signal output by the **Digital To TV** system is so robust, that in most cases it will not be necessary to change the cables nor elements of the distribution network even if it was not suitable for analogue distribution. The high quality of the signal generated will allow multiple amplification stages.

Your customers will appreciate a solution to avoid annoying and troublesome reforms.

A portable micro-transmitter

Would you like to have a low power local transmitter? Would you broadcast a match, race, cultural event, etc in the local area of the event? Do you need a low cost solution to transfer the programmes to the point where it is to be broadcast?

Digital To TV can become an effective solution for these and many other cases becoming a true DTT micro-transmitter.

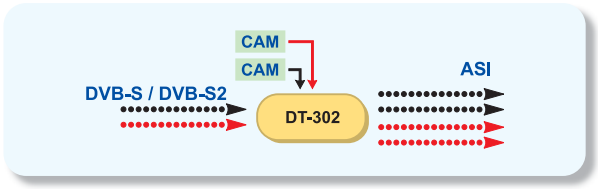
Dual/Single DVB-S/S2 receiver with CAM and ASI output

DT-301 can be tuned to receive a satellite transponder. It allows the selection of a number of programmes and delivers them through a ASI - Transport Stream output. Each satellite receiver has two identical ASI-TS outputs so that all the programmes in a satellite transponder can fit into two DVB-T multiplexes. The built-in CAM module allows the de-encryption of programmes.

DT-302 has the functionality of two **DT-301** units and includes two satellite inputs and four ASI - *Transport Stream* outputs.

DT-301 *(single)*

DT-302 *(dual)*



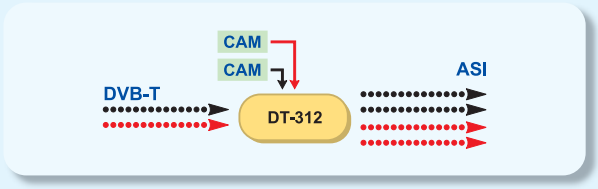
Dual/Single DVB-T receiver with CAM and ASI output

DT-311 can be tuned to receive a DVB-T multiplex. It allows the selection of all or a number of programmes and it delivers them through the ASI - *Transport Stream* output. The built-in CAM module allows the de-encryption of programmes.

DT-312 has the functionality of two **DT-311** units and includes two DVB-T inputs and two ASI - *Transport Stream* outputs.

DT-311 *(single)*

DT-312 *(dual)*



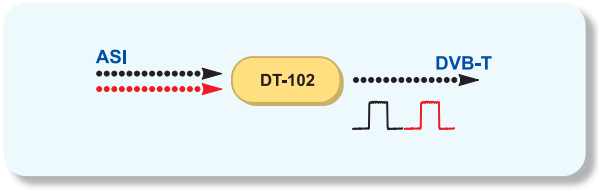
Dual/Single DVB-T Modulator

DT-101 generates a DVB-T output from a ASI - *Transport Stream* input. The output signal has excellent power and quality levels so that it is can withstand significant degradation through wiring, splitters, amplifiers, etc.

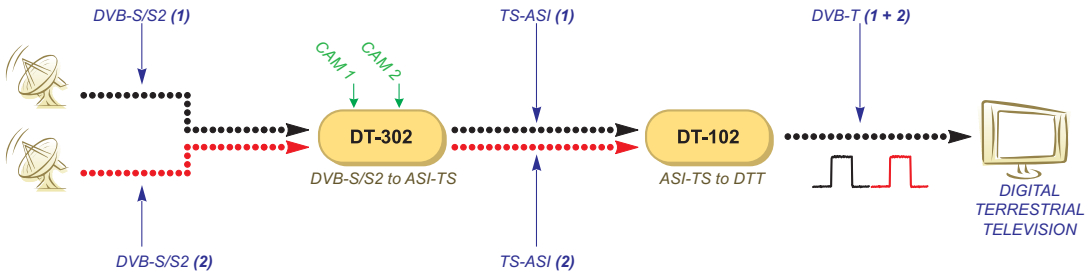
DT-102 has the functionality of two **DT-101** units and includes two ASI - *Transport Stream* inputs and one single output with two DVB-T channels.

DT-101 *(single)*

DT-102 *(dual)*



Example: 2 DVB-S/S2 encrypted transponders into free to air DTT channels

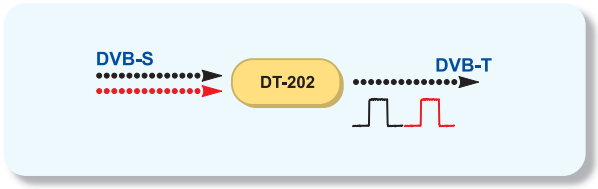


Dual DVB-S to DVB-T transmodulator

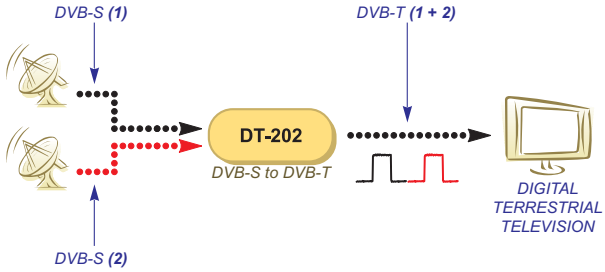
DT-202 can be tuned to receive two DVB-S satellite transponders and to deliver two DVB-T channels at the output. It allows the selection of a number of free to air programmes with realtime edition of the PAT, NIT and SDT tables.

The output signal has an outstanding quality that will allow it to pass through multiple amplifying stages, splitters, long wire, etc.

DT-202



Example: 2 DVB-S into DTT channels

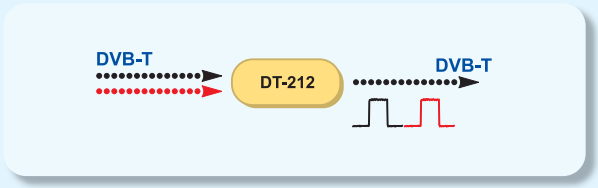


Dual DVB-T to DVB-T transmodulator

It can be tuned to receive a DVB-T multiplex and re-modulate it into another DVB-T channel at the output.

Among other applications, it can be used to restore completely the quality of a weak channel or the possibility of moving DVB-T channels to other frequencies to avoid degradation or overlapping with other channels.

DT-212

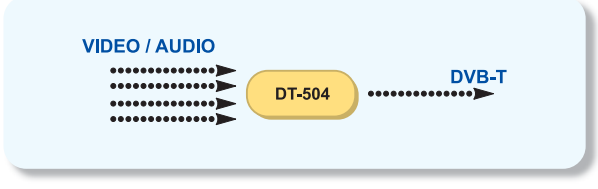


Quadruple Video/Audio encoder, multiplexer and DVB-T modulator

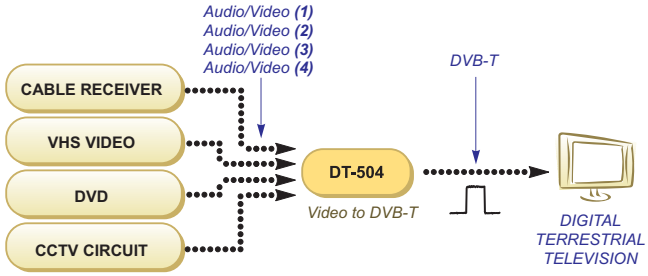
DT-504 allows the insertion of video signals coming from receivers, players, CCTV cameras, video door entry systems, etc into the TV distribution network with all the advantages of the DVB-T technology.

DT-504 packs up to four video/audio input signals into one DVB-T channel. It includes four independent video / audio MPEG-2 encoders, a multiplexer and a DVB-T modulator.

DT-504



Example: 4 video signals encoded and multiplexed in a DVB-T channel

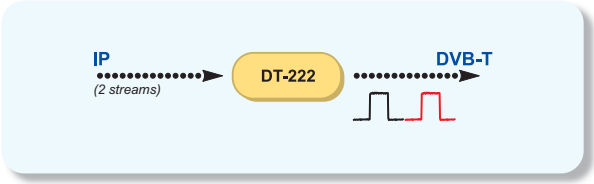


IP to dual DVB-T transmodulator

The **DT-222** transmodulator can receive simultaneously two different IP-encapsulated streams and delivers them in two combined DVB-T outputs for distributing in the UHF/VHF band.

The output signal has an outstanding quality that will allow its pass through multiple amplifying stages, splitters, long wire, etc.

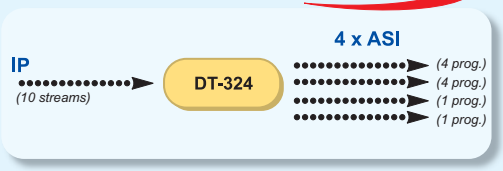
DT-222



IP receiver to ASI-TS output

The **DT-324** module can receive multiple IP-encapsulated streams and deliver them in individual ASI-TS outputs.

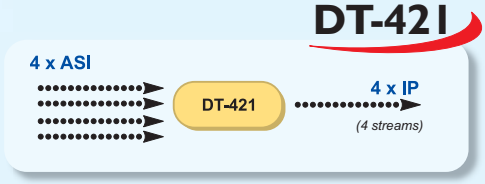
DT-324



IP Streamer. ASI-TS input to IP output

The **DT-421** IP Streamer module can receive multiple ASI Transport Streams and delivers an IP-encapsulated stream for distribution over the Ethernet Network.

DT-421



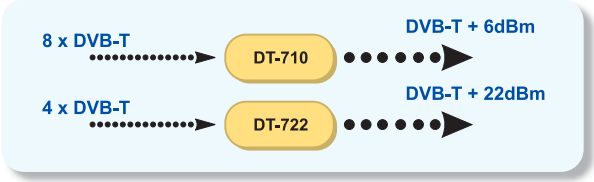
8 inputs DVB-T combiner with amplifier

DT-710 is an eight inputs and one output combiner designed to add the output multiplex generated by the **Digital To TV** to the existing DTT channels in the area. It provides a 114 dBµV (+6 dBm) output signal, which is quite usual for SMATV systems. The **DT-722** provides a 130 dBµV (+22 dBm) output.

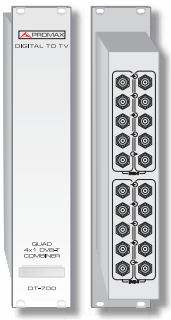
This solution provides a lower noise level and therefore it preserves the original signal quality better than the more usual Z solutions.

DT-710
114 dBµV

DT-722
130 dBµV

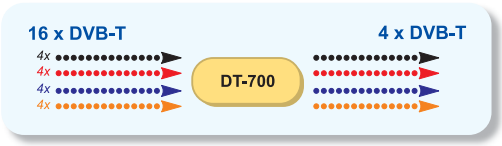


16 inputs Quadruple 4x1 combiner



DT-700 is a passive module with four combiners of four inputs each to add the output from the DVB-T modulators and transmodulators to the existing DTT channels in the area.

DT-700



DVB-T 30 dBm power amplifier (1 W)

The **DT-730** is a high quality 1 W RF power amplifier for COFDM signals, both for single carrier or multicarrier systems (*). The system provides an amplified output of 30 dBm (137 dBµV).

DT-730

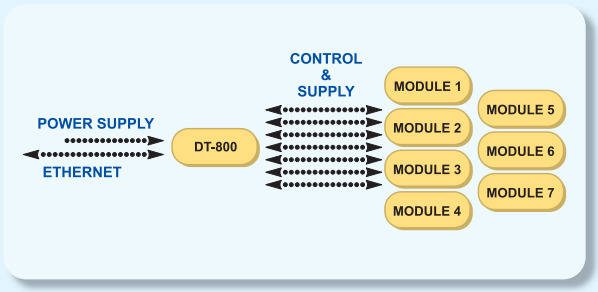
(*) 80 MHz maximum space between 2 channels.

Control unit and power supply

DT-800

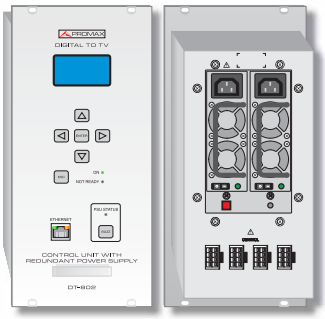
DT-800 can control and supply up to 7 modules. The build-in keypad and screen allows changing at any time the configuration of the receivers, modulators, transmodulators, etc. The system is **protected with a password** so that the administrator can prevent accidental or non-authorized access.

The Ethernet port is useful to program the unit from a PC and also for remote control. It can be specially interesting when wanting to copy the configuration from one system to another to reduce the installation time.



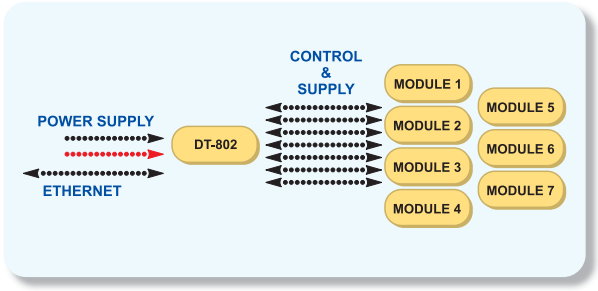
Control module with a redundant power supply

DT-802



Control module with a dual redundant power supply of 300 W and two inputs for 1 or 2 different electricity suppliers. Each power module is individually removable and hot-swappable. It works when either one of the electricity suppliers or one power module fails. In this case the second power module acts immediately without affecting the TV distribution system.

Both power modules can be replaced by hot-swapping a new one, that is, without rebooting the system. All other functions are equivalent to the power supply module **DT-800**.



Accesories

Assembly DT-900

Frame to assemble up to 7 modules plus the control unit **DT-800** (6 modules in the case of the **DT-802**). It can be wall mounted or in a 19" rack frame.

Blind panel DT-901

To cover empty spaces in the frame rack.

CAM module DT-902

CAM module multiservice for conditional access (Viaccess, Mediaguard, Irdeo, Conax, Betacrypt, Cryptoworks). For **DT-301/302** and **DT-311/312** receivers.

VHF Output OP-xxx-V

Output frequency option for modules with a DVB-T ouput in a band between 170 MHz and 650 MHz.

Digital To TV applications go far beyond signal distribution in coaxial installations

Many rural areas are not formally covered by DTT or they have problems at reception. After the analogue blackout, these areas, which received analogue television to date even with poor quality, will not watch television any more.

Digital To TV is the solution for these small communities and villages.

Thanks to the power modules **DT-722** and **DT-730**, **Digital To TV** is able to built low-power solutions in a very simple and inexpensive way, in order to cover small geographic areas by broadcasting.

Digital To TV can receive the source signal from satellite and from other DTT transmitters and can also re-generate the signal quality completely before transmitting it again. The ASI interface, which is available with the **DT-101/102** modulators, is full compatible with any professional satellite receiver in the market.

Similarly, by using directive antennas, **Digital To TV** allows establishing point-to-point links between repeaters that are located several kilometres away, covering shadow areas.

Made in EU

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