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Disposal

Within the European Union this label indicates that the product cannot be disposed of with the general household waste. Neither the headend nor the input and output modules can be disposed of with the general household waste.

For proper treatment and recycling of old products, please take them to designated collection points in accordance with your national legislation.

Box content

A new input module is wrapped in antistatic bubble wrap and packed in a cardboard box when you receive it.

Included in the box is a user guide instructing you in how to use the TDX Service Tool to configure the module.

DVB-S module

The DVB-S module is one of the input modules that you can install in the input section of your TDX headend unit.

Below you can see an illustrated description of a DVB-S module.
Labels

A label is placed on the input module where you can write the information regarding the configuration of the module. Besides the information that you write on the label, the module type and part number are also displayed on the label.

Note  

The coloured part at the top of the label informs you of the module type. Each type of module is allocated a unique coloured label.

On the bottom of the module you will find a label with the bar code and a serial number printed on it.

Cover removal

Before you can install a DVB-S module in the input section you have to remove the cover that protects the module slot.

1. Press the fastener downwards
2. Pull the cover outwards to remove it

You do not need tools to remove the covers, just use your fingers.

For EMC and cooling reasons only remove covers from the module slots that you want to insert modules into.
Module installation

It is optional in which slots you place the individual input modules in the input section. For convenience each slot has been given a number, and an overview of the slot numbers has been placed on the inside of the door of each unit.

**Note** Slot no. 1 is placed in the top left-hand corner of the input section when you face the front of the unit.

You install an input module by sliding the module into a module slot in the input section of the headend unit and push it till the module clicks into place.

**Note** You can use hot swapping when you insert an input module into or remove an input module from the TDX system.
Module removal

It is possible to remove an input module from a module slot without using any tools, just use your fingers to press the fastener downwards and then pull the module outwards to remove it from the module slot.

1. Press the fastener downwards
2. Pull the module outwards to remove it from the module slot

Input cable installation

When all the required input modules have been installed you can connect the input signal cables one by one to the input modules. It is also possible to make a loop through from one input module to another.
Status LED's

There is a status LED on the front of each module. The LED indicates whether the module has locked on to a frequency or needs to be configured.

**Green - flashing**  
The module has not been configured yet.

**Green**  
No errors and the module is locked to the frequency.

**Red**  
Error and the module is not locked to the frequency.

**No colour**  
Power has not been switched on.

When you update the software of a module the status LED provides you with information about the updating process.

**Orange**  
Boot loader state.

**Temporary off**  
Initiation of the software update.

**Temporary green**  
Every time the modules receives a valid data package. Repeated until the update is completed without errors.

**Red**  
Software update failed.
Log in

When you have loaded the TDX Service Tool from the TDX headend system to your laptop/computer the Login window of TDX Service Tool is displayed.

1. Enter your password
2. Press the Login button

When you have pressed the Log in button the System window is displayed.
When you have loaded the TDX Service Tool from the TDX headend system to your laptop/computer the Login window of TDX Service Tool is displayed. When you have pressed the Log in button the System window is displayed.

Input window

Click the Input tab in the TDX Service Tool to display the Input window. The first time you display the Input window in a new configuration the module list only displays the number and type of input modules that you have inserted in the main and subunits.

You have to configure the input modules individually.

To display the Configuration window, click the Setup button of the DVB-S input module you want to configure.
The first time the TDX Service Tool displays the Configuration window for an input module in a new configuration, the configuration fields and the list of services will be empty or display default values.

**Frequency**

Enter the desired frequency in MHz in this field.

**Polarity**

To select the required polarity, click the arrow to the right of the Polarity field to open the drop-down list with the polarities you can choose from. Select the polarity you want to use.

**Note**

In connection with a loop through from one DVB-S module to another DVB-S module, you have to set the polarity of the second module to "0V Off".

**Symbol rate**

Enter the desired symbol rate in this field.

If you have connected a Digital Sequence Equipment Control (DiSEqC) switch to the DVB-S module in question you have to select which satellite position you want to use.
The first time the TDX Service Tool displays the Configuration window for an input module in a new configuration, the configuration fields and the list of services will be empty or display default values.

**Frequency**
Enter the desired frequency in MHz in this field.

**Polarity**
To select the required polarity, click the arrow to the right of the Polarity field to open the drop-down list with the polarities you can choose from. Select the polarity you want to use.

**Symbol rate**
Enter the desired symbol rate in this field.

If you have connected a Digital Sequence Equipment Control (DiSEqC) switch to the DVB-S module in question you have to select which satellite position you want to use. Note: In connection with a loop through from one DVB-S module to another DVB-S module, you have to set the polarity of the second module to “0V Off”.

**DiSEqC button**
Click the DiSEqC settings button to open the DiSEqC settings window. As default the DiSEqC switch is disabled. In the DiSEqC settings window click the Enable DiSEqC version 1.0 radio button to access the DiSEqC switch.
To select the required satellite position, click the arrow to the right of the Satellite position field to open the drop-down list with the satellite positions you can choose from.

Select the satellite position you want to use.

1. Click to access the DiSEqC switch
2. Click the arrow to open the drop-down list and select a satellite position

In case your DiSEqC switch does not support vertical (13 volts) / horizontal (18 volts) polarisation and High Band / Low Band frequencies, click the Use extended position/polarity check box to enable up to 16 positions.

Click to enable

Click OK to return to the Configuration window.
Click the Update button to enter the information into the headend system.

As a result a list of available services is displayed in the services list area.
To select services you can either select all services in the service list area by clicking the All button at the top of the list or select the services one by one clicking the square to the right of the services you want to make available in your TDX service pool.

**Note**  
By clicking one of those column headlines that are underlined in the service list area you can sort the list into alphabetical or numerical order depending on which column headline you click.

When you have selected the services you want, click the Submit button to enter this information into the TDX system and return to the Input window. Now the selected services are available in the TDX service pool.
To select services you can either select all services in the service list area by clicking the All button at the top of the list or select the services one by one clicking the square to the right of the services you want to make available in your TDX service pool.

Note When you display the Configuration window for an input module that has been configured, all fields are filled in and services have been selected.

If you want to change the existing frequency, polarity, services just follow the same procedure as when you configure an input module for the very first time.

Status information Status information is placed at the bottom of the Configuration window. The information displayed in the configuration window of a DVB-S module includes the status of the module, bit error rate, locked frequency, TS symbol rate and revision of software.

Status Informs you whether the input module is locked or not.

Bit error rate Informs you of the rate at which errors occur in the transmission.

Locked frequency Displays the actual frequency that the input module has locked into.

TS symbol rate Displays the actual symbol rate.

SW revision Displays the software version of the input module.

Remember to click the Apply button in the upper right-hand corner to save new settings in the configuration.

Note

When you display the Configuration window for an input module that has been configured, all fields are filled in and services have been selected.

If you want to change the existing frequency, polarity, services just follow the same procedure as when you configure an input module for the very first time.

Status information Status information is placed at the bottom of the Configuration window. The information displayed in the configuration window of a DVB-S module includes the status of the module, bit error rate, locked frequency, TS symbol rate and revision of software.

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Displays the software version of the input module.

Remember to click the Apply button in the upper right-hand corner to save new settings in the configuration.
When you return to the Input window the configuration of the input module is displayed in the module list.

Now you can continue to configure the other input modules one by one, following the procedure described on the previous pages.

**Delete setup**

If you want to remove an input module and the associated configuration you can use the Delete button of the module in question in the Input window.

Click the Delete button of the DVB-S input module you want to remove. A message window is displayed asking you to confirm that you want to remove the input module.

Until you have removed the input module physically from the headend unit the module list will display a line with the writing in red.
Now you can continue to configure the other input modules one by one, following the procedure described on the previous pages. When you return to the Input window the configuration of the input module is displayed in the module list.

### Save configuration

An important button when you change your configuration of the headend system is the **Apply** button placed in the upper right-hand corner of the TDX Service Tool window.

![Save configuration](image)

### Apply

Whenever you have made changes in your configuration, “Apply” on the Apply button turns red to tell you that you have unsaved changes that need to be saved. Click the Apply button to **save** the changes. When changes have been saved the “Apply” text looses the red colour.

### WARNING - All unsaved changes will be lost in case of a power cut
Dear Customer,

Should you require technical assistance in the event that your expert dealer is unable to help you, please contact us at:

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Your notes