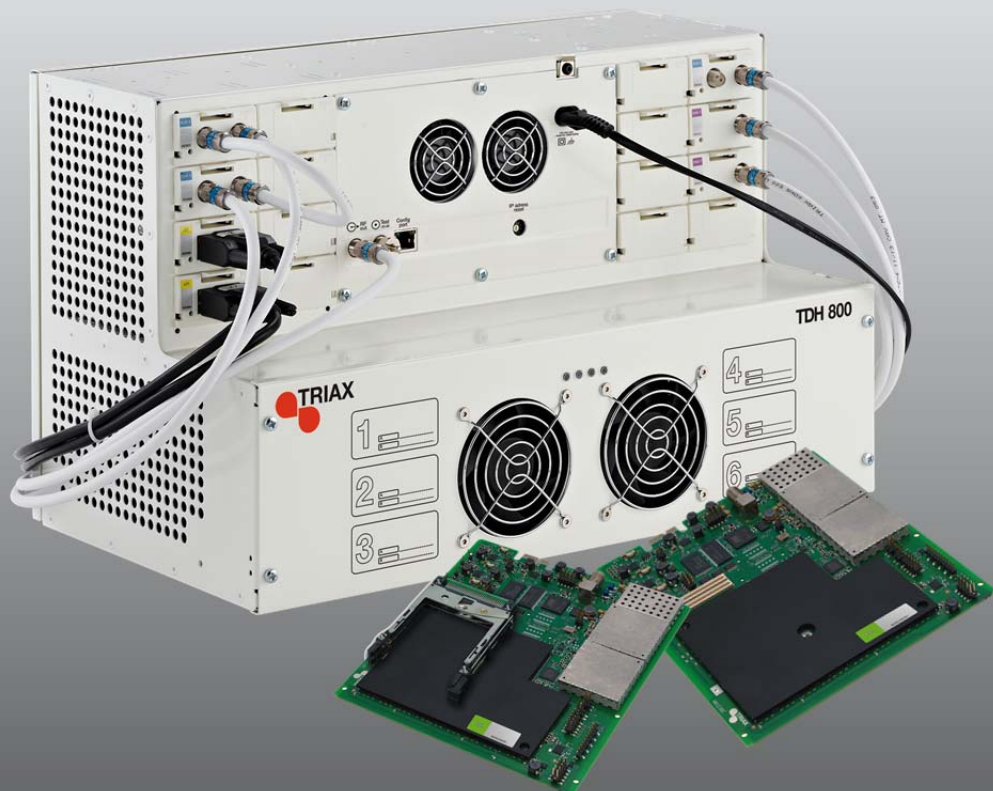




# Configuration guide

**TDH 800 – PAL output module**  
**Art. 692850/692851**



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## Introduction

This document describes the configuration of the PAL Output module for the TDH 800 headend.

Physical installation of the module is described in the TDH 800 main unit installation guide.

## System requirements

### Computer minimum requirements

A computer meeting the following minimum requirements is required for configuring the headend.

Operating system Windows XP or above

Browser Windows Internet Explorer version 6.0 or equivalent

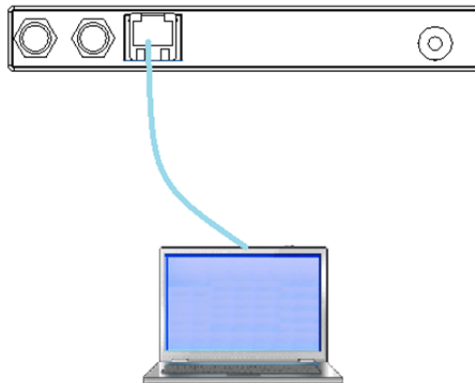
Additional software Microsoft© Silverlight Runtime version 3.0 or above

### Static IP address

A static address must be used on the computer used to configure the headend.

Refer to the computer's operating software documentation for assistance on configuring static IP addresses.

### Physical connection to headend

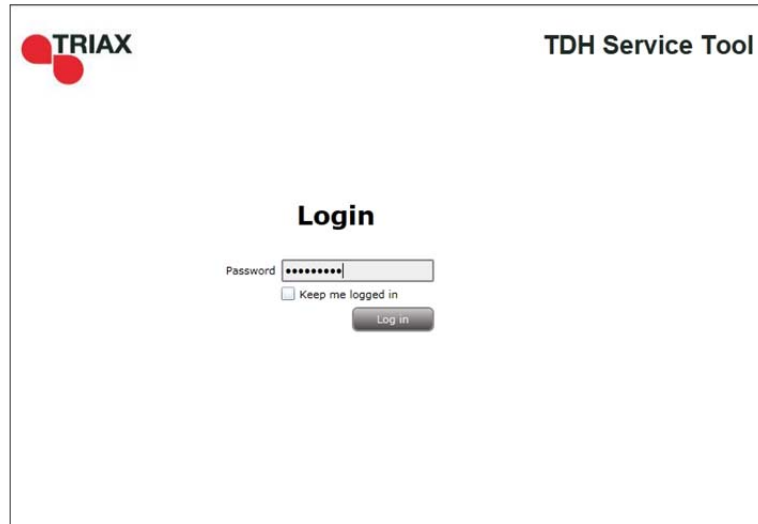


- Connect a Cat5e shielded cable or better between the computer's network port and the configuration port on the headend.

# Introduction

## Service tool

1. Open a web browser window.
2. Enter '**http://192.168.0.100**' in the web address field.
3. Press **Enter**.



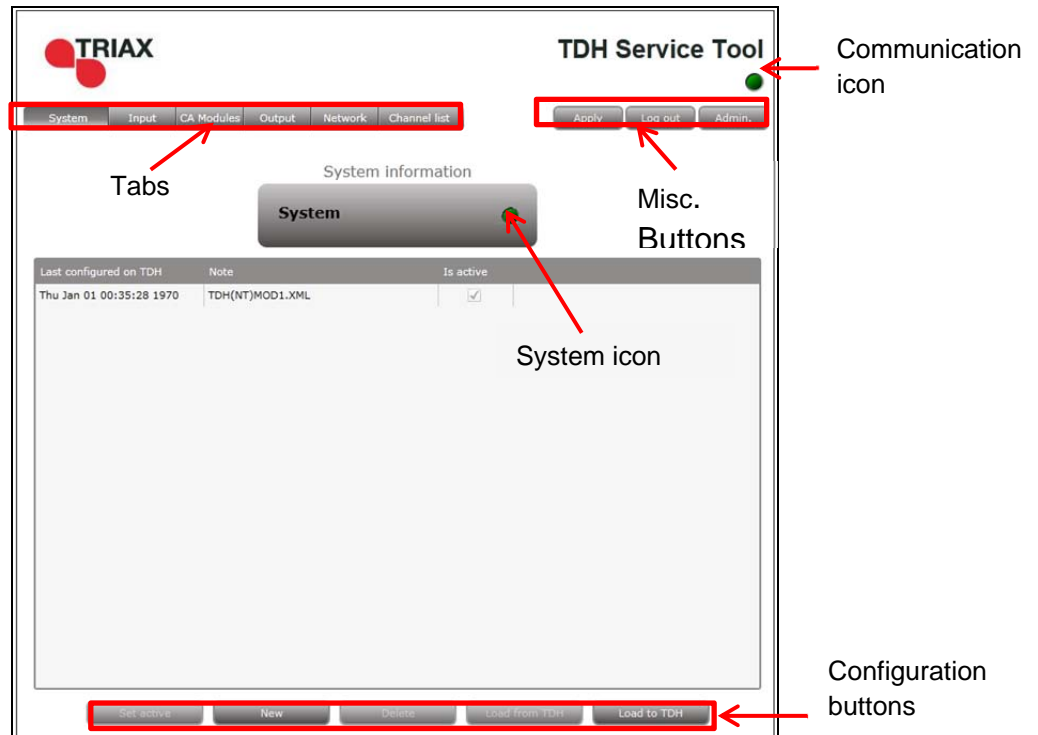
The screenshot shows a web browser window displaying the login page for the TDH Service Tool. The page has a white background. In the top left corner, there is a logo consisting of two red circles of different sizes, with the word 'TRIAx' in black text to their right. In the top right corner, the text 'TDH Service Tool' is displayed. The main heading 'Login' is centered on the page. Below the heading, there is a 'Password' label followed by a text input field containing a masked password represented by ten asterisks. Below the password field is a checkbox with the label 'Keep me logged in'. At the bottom of the form is a grey button with the text 'Log in'.

4. Enter the password.
5. Press the **Log in** button.

### Note:

Password = '**triax1234**' when the service tool is opened for the first time.  
The **Keep me logged in** checkbox overrides the system's automatic time out function, which is activated after 20 minute's inactivity.

## Overview



## Icons

Indicates whether the service tool is communicating correctly with the headend unit.

**Green** The service tool and headend are communicating correctly.

**Red** The service tool and headend are NOT communicating correctly.

Indicates whether the headend unit is functioning correctly.

**Green** The headend unit is functioning correctly.

**Red** The headend unit is functioning correctly.

# Introduction

<b>Tabs</b>		Accesses the various tabs used to configure the headend's input and output modules.
	<b>System</b>	The service tool's 'home' window. Provides system overview information and configuration activation/control.
	<b>Input</b>	Tab for configuring input modules and services. Refer to input module manuals for information.
	<b>CA Modules</b>	Tab for configuring CI modules and CA cards. Refer to output module manuals for information.
	<b>Output</b>	Tab for configuring output modules and services. Refer to output module manuals for information.
	<b>Network</b>	Tab for defining customer specific settings that are network related, e.g. Network name, ID, and for defining HD/SD channel numbering.
<b>Misc. Buttons</b>	<b>Channel List</b>	Tab for viewing the channels being transmitted from the headend, as defined in the <b>Input</b> , <b>CA Modules</b> and <b>Output</b> tabs. Refer to input module manuals for information.
	<b>Apply</b>	Stores configuration settings on the SD card located in the headend. <b>Button colour</b> Red There are changes that have not been stored on the headend's SD card. Grey All changes are stored on the headend's SD card.
	<b>Log In/Out Admin.-</b>	Service tool access control. Opens the settings for service tool window, where language, location, time zone, and initial IP addresses are specified.

# Configuring CA modules

## Configuring CA modules

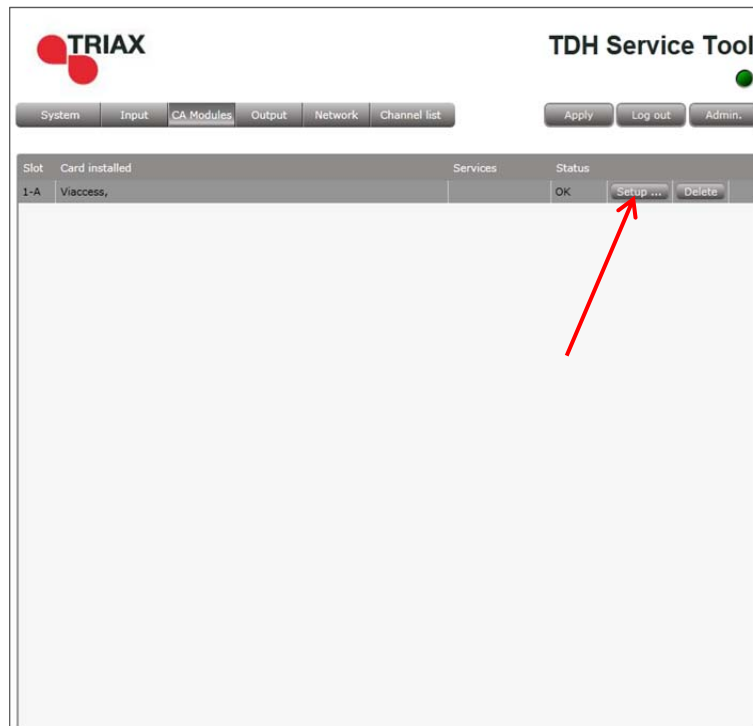
### Pre-requisites

The headend is running, the CA module has been placed in the output module, the output module is inserted in the headend, and the TDH Service Tool is connected to the headend.

See the TDH 800 Headend User Guide for information on inserting the output module into the TDH 800 headend.

### Configuration

1. Select the **CA Modules** tab in the TDH Service Tool.



2. Press the **Setup** button for the CA module to be configured.

# Configuring CA modules

Apply button

Tabs

CA module

Common interface button

Submit button

Reset CAM button

Status area

Service list area

The **CA Module setup** window is displayed, initially containing default values.

3. Specify the speed of the CI card in the **Card speed** drop-down list.
4. Specify if a **constant bitrate** is to be used.
5. Select the service(s) that are to be descrambled (indicated by '\$') in the Service list area.
6. Select the **ER** checkbox to enable automatic error recovery for the service.

Signal transmission status through the CA module is constantly monitored when the **ER** checkbox is enabled, with the CA module being automatically reset in the event of data transmission failure. Note that signal transmission will be interrupted for all the services associated with the CA module when the error recovery monitoring prompts the resetting of the CA Module.

The **ER** checkbox should not be enabled for services where signals are not transmitted on a 24-hour basis.

7. Press the **Setup** button for the selected service.

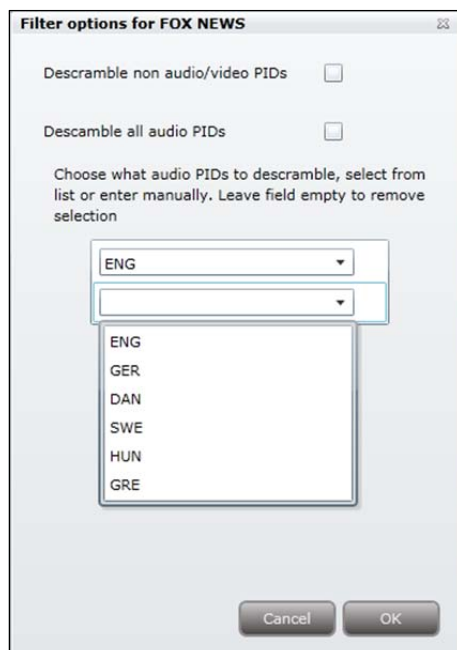


# Configuring CA modules



The **Filter options** window is set by default to descramble all audio PIDs associated with the service.

8. Enable the **Descramble non audio/video PIDs** checkbox to descramble all PIDs associated with the service, that are neither audio, or video related.



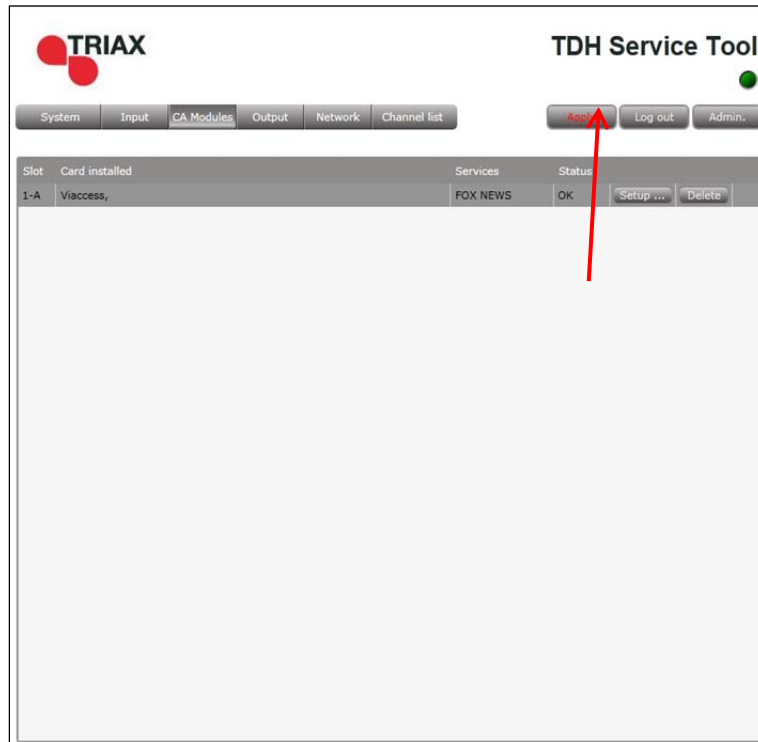
9. Disable the **Descramble all audio PIDs** checkbox to limit the number of audio PIDs to be descrambled to specific languages.
10. Select an audio PID to be descrambled.
11. Select (if required) additional audio PIDs.
12. Press the **OK** button.

Note that an additional language drop-down list is displayed each time a

# Configuring CA modules

language is selected.

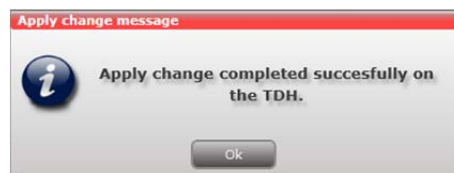
13. Press the **Submit** button in the **CA Module setup** window.



The service(s) selected is now listed.

14. Press the **Apply** button.

The following confirmation is displayed.

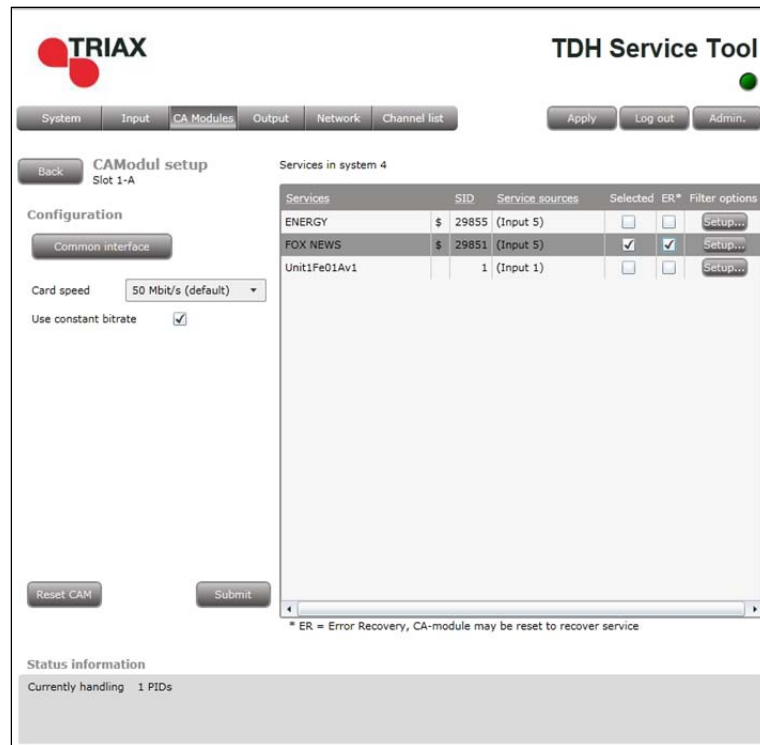


## Resetting

It may be necessary to reset the CA module if it malfunctions.

1. Press the **Setup** button for the CA module to be reset.

# Configuring CA modules



2. Press the **Reset CAM** button.



3. Press the **Yes** button.

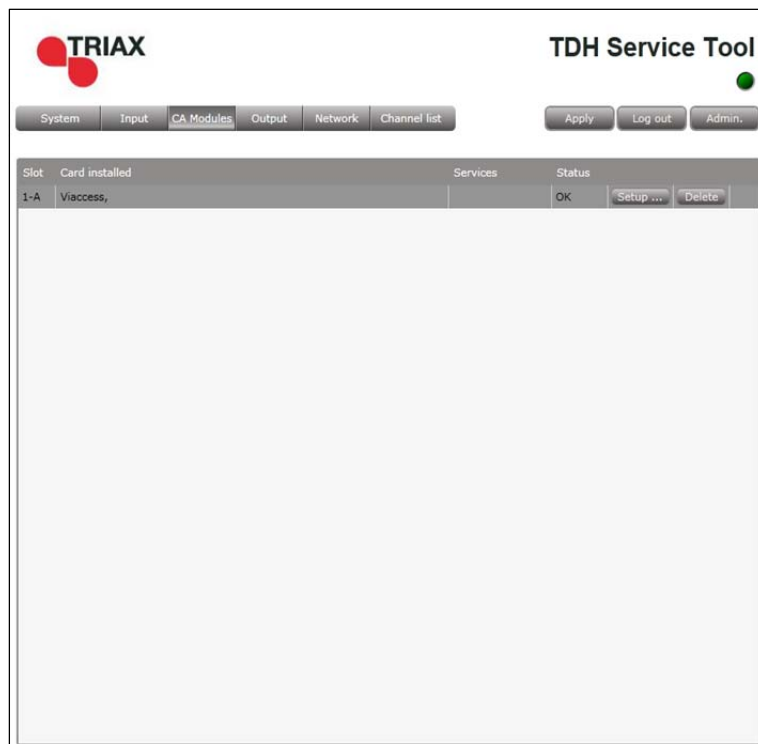
The CA module will be reset and service transmission through it will be temporarily interrupted. The **ER** checkbox can alternatively be enabled to automatically reset CA modules, see above.

## Modifying

1. Press the **Setup** button for the CA module to be modified.
2. Make the desired changes.
3. Press the **Submit** button.
4. Press the **Apply** button in the **Configuration** window.

# Configuring CA modules

## Deleting



1. Press the **Delete** button of the CA module to be removed.  
A confirmation popup is displayed.
2. Press **Yes** on the confirmation popup.

# Configuring PAL output modules

## Configuring PAL output modules

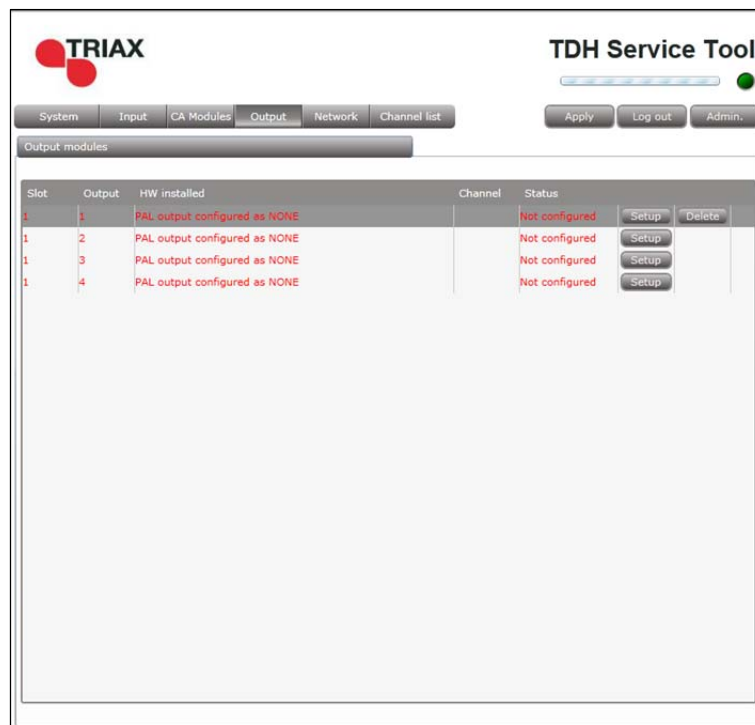
### Pre-requisites

The headend is running, the output module is in position, and the TDH Service Tool is connected to the headend.

See the TDH 800 Headend User Guide for information on inserting the output module into the TDH 800 headend.

### Configuration

1. Select the **Output** tab in the TDH Service Tool.



2. Press the **Setup** button for the first output row.

# Configuring PAL output modules

Uncheck →

TRIAX TDH Service Tool

System Input CA Modules Output Network Channel list

Apply Log out Admin.

Back PAL output setup Slot 1 - Output 1

Configuration

Disabled output

Colour system PAL

Broadcast system B/G

Channel

Frequency (KHz)

Channel spacing 7 MHz

Select input Services...

RF level correction +0 dB

Audio Sub Carrier Attenuation 0 dB

Use alternative decoder settings

Aspect ratio Letterbox

First audio language EN

Second audio language EN

Audio system Mono

Audio level correction 0 dB

First subtitle language EN

Second subtitle language EN

Preferred subtitling type DVB Subtitles

Subtitles offset (pixels) 0

Disable teletext

Reset output Submit

Status information

Status Not configured SW-Revision 2.0.1.27611

The first time the output configuration is opened, it will contain default and/or empty values, and the output module is disabled.

1. Remove the check from the **Disabled output** checkbox.

Channel, channel spacing and frequency

PAL modules can be configured either by using the pre-defined channel plans, or through manual specification.

Pre-defined

1. Select the required **Channel plan**.
2. Select the required **Channel**.

Pre-defined values are loaded in the **Frequency** and **Channel spacing** fields.

Manual

1. Select 'Frequency' in the **Channel** drop-down list.
2. Enter the desired frequency (MHz) in the **Frequency** field.
4. Select the required channel spacing in the **channel spacing** drop-down list.

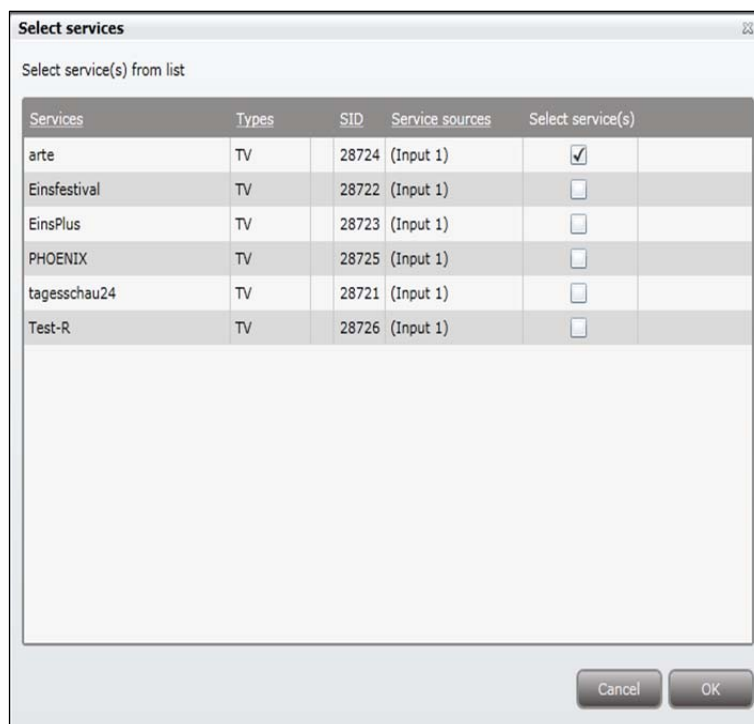
Select input

Input can only be selected for a PAL output module from the TDH Pool.

1. Press the **Services** button.

The **Select services** window is displayed.

# Configuring PAL output modules



2. Check the **Select service/s** checkbox for the required service.
3. Press the **OK** button.

**Note** that only one service can be selected per slot on a PAL output module, i.e. a total of four services can be selected for one PAL output module.

**Note** that the service selected will no longer be available in the TDX-pool for other output modules.

## Additional settings

1. Make (if required) additional configuration changes in the following fields/drop-down lists in the configuration window:
  - RF level correction.
  - Audio Sub Carrier Attenuation
  - Use Alternative decoder settings
  - Aspect ration
  - First audio language
  - Second audio language
  - Audio system
  - Audio level correction
  - First subtitle language
  - Second subtitle language
  - Preferred subtitling type
  - Subtitles offset (pixels)
  - Disable teletext

## Completion

5. Press the **Submit** button.

## Validation

1. View the **Payload** bar in the configuration page, which graphically indicates the amount of data being transmitted in relation to the

# Configuring PAL output modules

maximum permitted payload.:

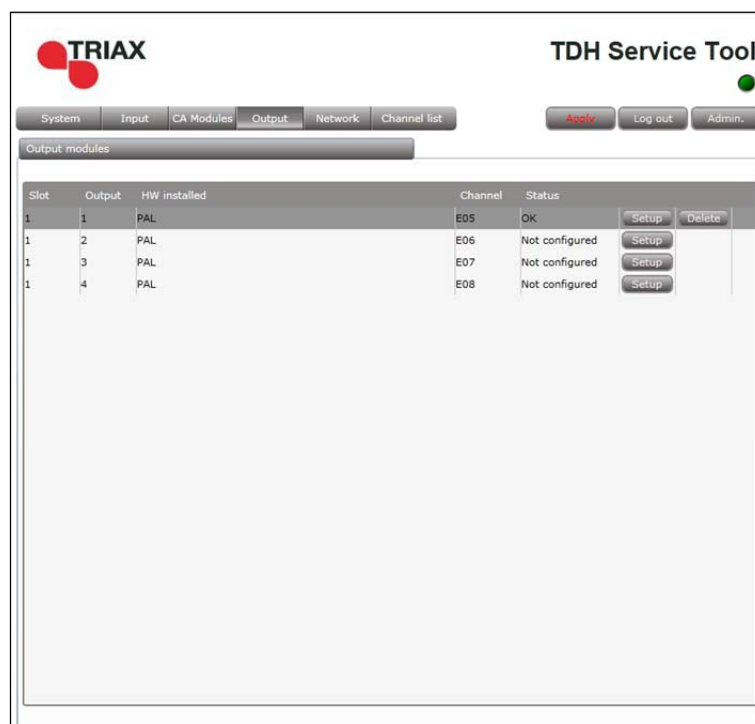


2. View the status information at the bottom of the page to check that the input module is functioning correctly:

Field	Contents
Status	Whether the output module is enabled or disabled.
SW revision	Displays the software version of the input module.

**The software version displayed must be identical with that installed on the TDH 800 main unit and on all other input/output modules.**

**Update the software for the entire TDH 800 headend (including input/output modules) if this is not the case.**



6. Press the **Apply** button.

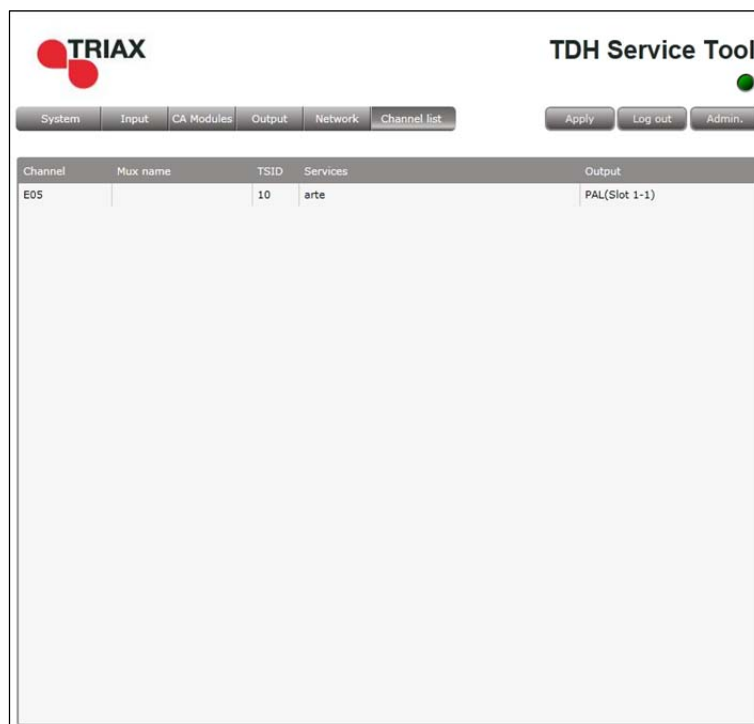
The following confirmation is displayed.



# Configuring PAL output modules



The service that was selected is now visible in the **Channel list** tab.



The remaining slots on the output module can now be configured in the same manner.

## Modifying

1. Press the **Setup** button for the output module to be modified.
2. Make the desired changes.
3. Press the **Update** button.
4. Press the **Submit** button.
5. Press the **Apply** button in the **Configuration** window

## Deleting

1. Press the **Delete** button of the output module to be removed.

A confirmation popup is displayed



2. Press **Yes** to remove the output module.

The output module is displayed in red in the **Output** tab.

3. Turn off the headend.
4. Physically remove the output module from the headend.

# Configuring PAL output modules

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5. Restart the headend.
6. Restart the service tool.

The output module will no longer be listed in the input module list.



## Manufacturer

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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### DECLARATION OF CONFORMITY

TRIAX confirms that the product conforms to relevant EEC harmonised standards and consequently can carry the CE-mark.

Relevant harmonised standards:

DE/EN 60728-2 2010, DS/EN 60728-11 2010 and DS/EN 50083-2 2006

This document is only valid with the signature of the person responsible for CE-marking by Triax

Date: October 2012

Signature:

A handwritten signature in blue ink, consisting of stylized, overlapping loops and lines.