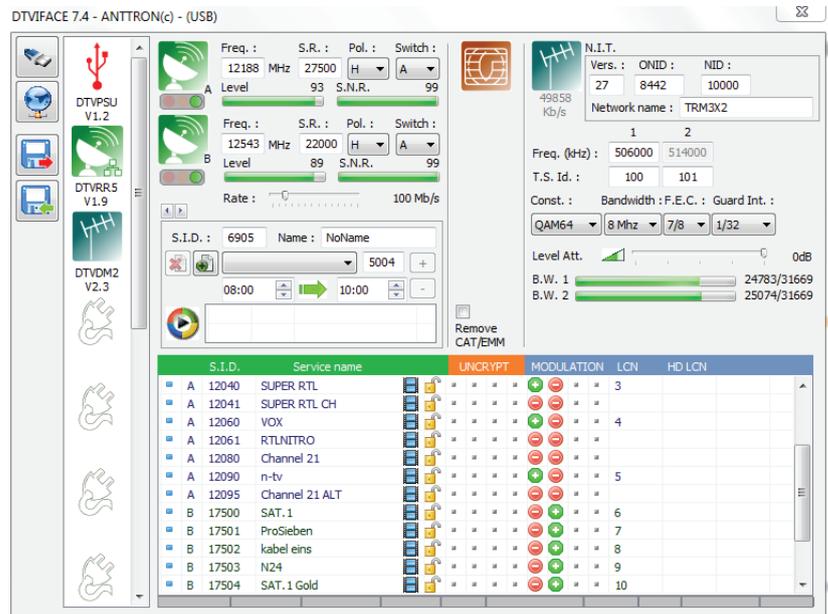




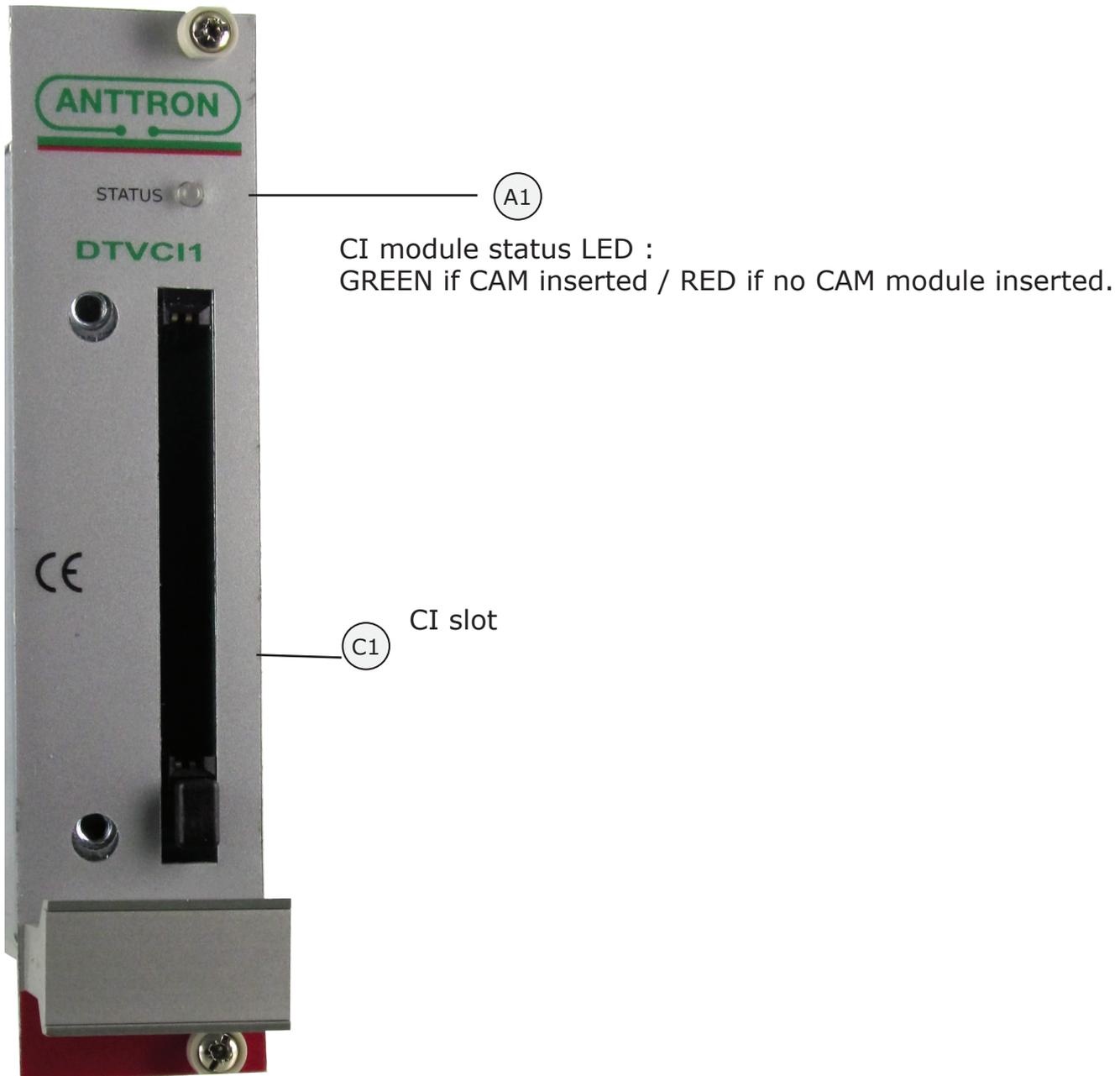
# DTVCI1

## CI module for DTVRack



This manual is also applicable for DTVCI1 module in the compact headend TRM3x2CI .





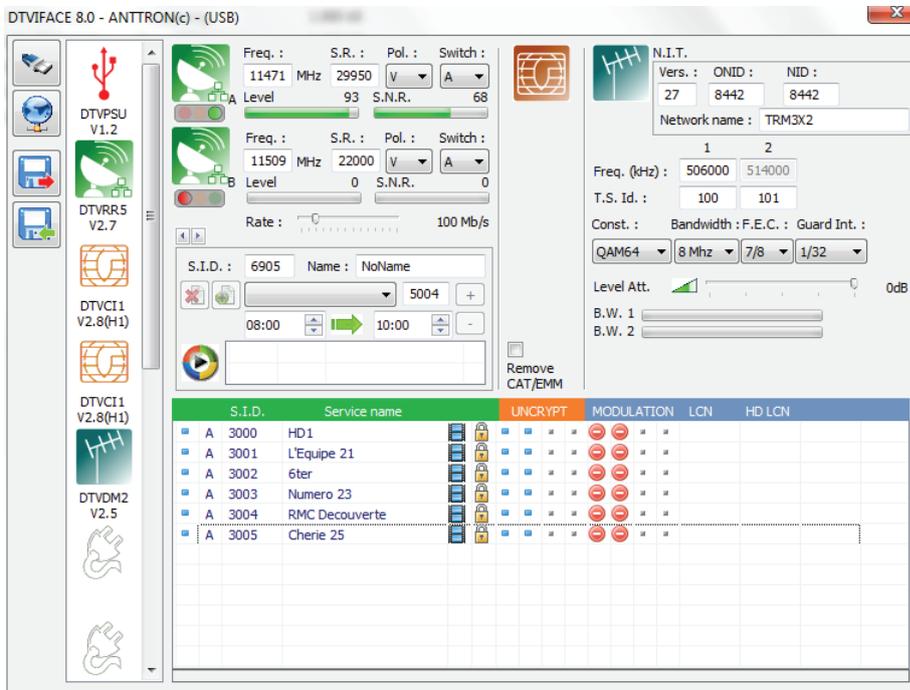
**DTVCI1** : this modules perform the following function in the DTVRack

- a) It receives the transport stream from the 'backplane' in the DTVRack.**
- b) Encrypted programs are decrypted according to the selection in DTVI-face, provided that the CI module is equipped with the appropriate CAM and CARD.**
- c) The DTVCI1 module is preceded with a reception module (DTVRR5 or DT-VCT2) or with another DTVCI1 module. A DTVCI1 module is followed by a modulator module (DTVDMx or DTVCMx) or with another DTVCI1 module.**
- d) Up to 4 DTVCI1 modules can be put in cascade.**

## 1. Identification of DTVCI1 modules in DTViface.

When in DTViface, click on a module (DTVRR5 or DTVCT2) preceding the module(s) DTVCI1.

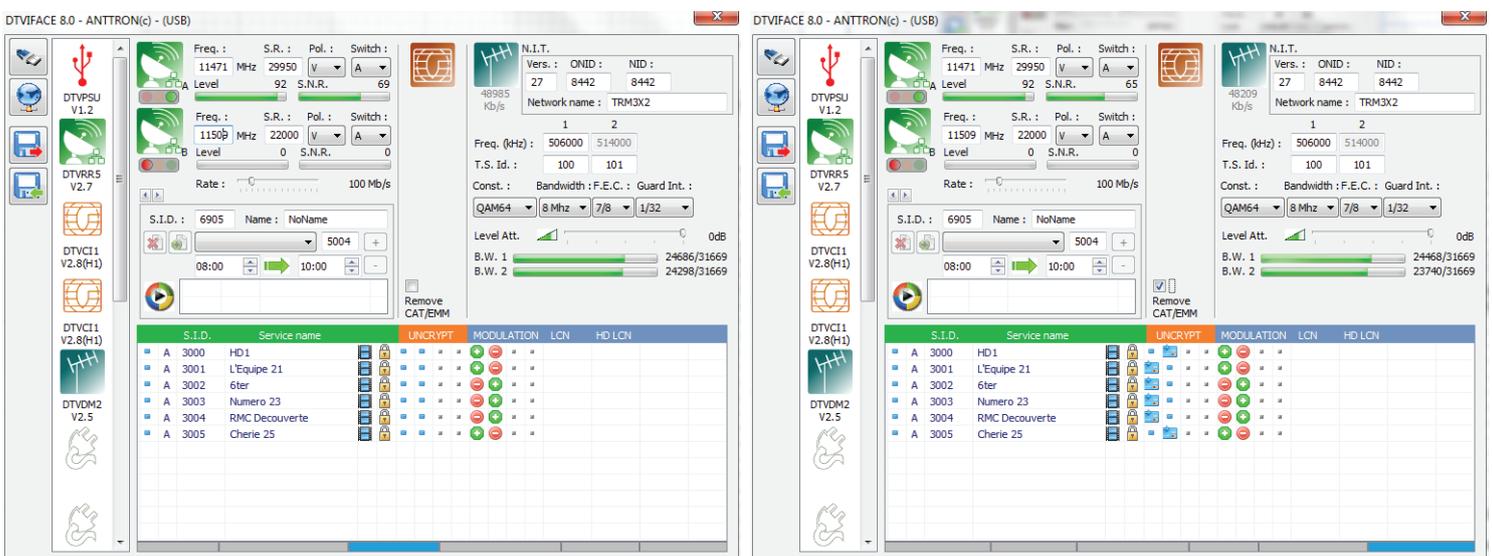
According to the number of modules installed in cascade(1,2,3 or 4) a similar image as below will appear in DTViface.



In above image two DTVCI1 modules are present. In the column between Service Name and Modulation, 2 of the 4 columns are now available. These 2 columns represent the two different DTVCI1 modules, where channels can be decrypted.

## 2. Decrypting of programs.

Before starting decrypting programs, please note that they have to be modulated first. Otherwise DTViface will not accept your commands.



Once the programs you have selected are modulated, you can now activate the decryption of the selected programs. The activation is performed by double clicking the dot besides the program name in the colon of the CAM you chose. A bankcard symbol appears indicating that the program should be decrypted.

The number of programs that can be decrypted is only dependant of the CAM and CARD used. So please check on this to define how many programs you can decrypt on one CAM/CARD.

### 3. Additional information.

**a) Rate settings :** in the menu of DTVRR5 or DTVCT2 module there is a possibility to set a rate. This is particular important when using CAM and CARD for decryption of programs. Normally a CAM is limited in the maximum bit rate it can accept to function error free and without creating defects in the picture.

So check the technical specifications of the CAM you are using and set the rate accordingly.

For information, here are some rates for specific CAMs :

Neotion CAM : 100 mbit/s //Tivusat CAM : 50 mbit/s // Aston FRANSAT CAM : 100 mbit/s  
Polsat CAM : 50 mbit/s // Powercam : 50 mbit/s

If you cannot find the rate of your CAM, please try 50 mbit/s as rate and if OK , increase slightly till you see defects in the image. Then reduce again to the value which gives you satisfaction. When the rate is set to 50 mbit/s f.i. then only modulate this number of programs giving a global rate which is about 15% less then the 50 mbit/s you used for the CAM settings.

**b) Remove CAT/EMM :** this option allows you to remove the CAT and EMM tables from the transport stream in the modulation. It is advised to do so when programs are decrypted in the headend. Otherwise TV sets may still think it 'sees' encrypted programs although decrypted.

**c) Watchdog :** when programs are indicated as to be decrypted, automatically the modulator checks if these programs are decrypted. If the modulator sees that decryption has not taken place (faulty CAM / faulty CARD / CARD inserted wrongly etc.), automatically it will reboot the headend (first after 90 sec, then every 10 minutes) trying to remove the error.

**d) Accessing the CAM menu :** in order to access the CAM and CARD information simply click the DTVCI1 symbol in the DTVRack line up. A new window will appear where you can read the information on the CAM and CARD. Please note that to access this menu, at least one program should be decrypted on that specific DTVCI1 module.

