Bisskey using the SMiT BISS CAM

The TDX software 4.5.1.39324 (and following softwares) support the Bisskey
de-scrambling.
The TDX feature is only tested using the **Quattro CAM** and the **Smit CAM** – other
Bisskey CAM's might not be supported.

This article describes, how to setup Bisskey on the TDX using the **SMiT BISS CAM.**
If you need a guide fot the Quattro CAM : Bisskey using the Quattro CAM

(To convert the Bisskey from Hex to Dec , you can use the attached Bisskey calculator).

Before you start
Unlike the Quattro 4x4, the SMiT Biss is capable of Bisskey being entered in Hexadecimal or Decimal.
* Bullet point 3a describes how to enter the Bisskey in **Hexadecimal**
* Bullet point 3b describes how to enter the Bisskey in **Decimal**

You might need to familiarize yourself with the conversion from hexadecimal to decimal.
Bullet point 2a gives you an example on how to do this.

1. Check the web for new Biss keys
(ex. https://sattotalinfo.blogspot.dk/2017/03/astra-4a-48-e-sirius-biss-cod-channel.html)

TV channel	Options	Biss Key	Service ID
TET	11766H, sr: 27500, fec: 3/4	19 09 06 28 11 76 60 E7	17DE
2 + 2	11766H, sr: 27500, fec: 3/4	09 02 19 24 63 23 06 8C	17E8
1 + 1 International	11766H, sr: 27500, fec: 3/4	1A 2B 3C 81 4D 5E 6F 1A	17ED
TRK Ukraina	12130 V, sr: 27500, fec: 3/4	A5 B2 EB 22 57 6F 50 16	19D2
UFO TV	12130 V, sr: 27500, fec: 3/4	The A5 B2 EB 22 57 25 6F EB	1A18
Inter +	12284 V, sr: 27500, fec: 3/4	12 34 12 34 AC F2 AC F2	1B4E
Sinema TV Aksiyon	12687 H, sr: 5600, fec: 3/4	AD A8 CC 77 64 17 11 8C	0640
Sinema TV Ask	12687 H, sr: 5600, fec: 3/4	92 AF B6 F7 DD AA 00 87	06A4

In this example, I want to watch "*1 + 1 International*" from Astra 4A, with the Bisskey: 1A 2B 3C 81 4D 5E
6F 1A. This key is in Hexadecimal values.
NOTE: There are 8 segments and this CA module requires 8 segments.

Segment 4 and 8 are control numbers. (1A + 2B + 3C = 81 and 4D + 5E + 6F = 11A which is 1A when using
2 char.)
If the Bisskey only have 6 segments, you must calculate the 4th and 8th segment.

2. Setting up the TDX for SMiT BISS CAM

The first you need to do, is configure the TDX for descrambling with the SMiT BISS CAM.

The CAM must be configured to, what we refer to as "Transparent mode".
1. Go to the CA settings on theh TDX
2. Click the settings icon, on the BISS module
3. In the 'Choose source', select the correct input module. This is the module, where you are receiving the scrambled service (Here I must select "Input 16 DVB-S").
4. Checkmark the services you want do descrambled, from the the servicelist. **The SMiT BISS supports 4 services.**
5. Note the SID for the services - you will need them later on! I have selected "6125"
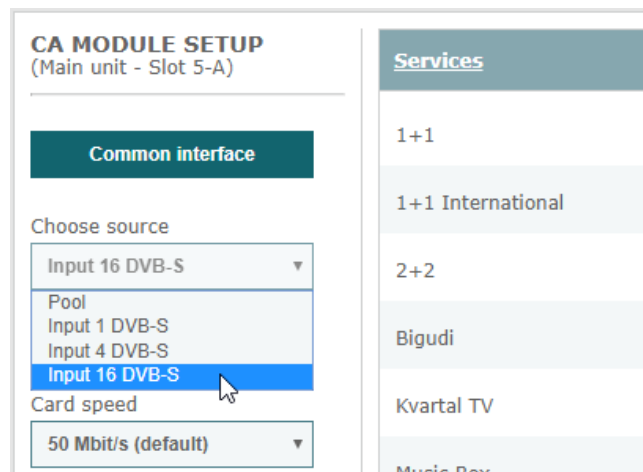
2a. Converting to and from Hexadecimal / Decimal

Using the calculator that comes with MicroSoft Windows 10 (Linux distros and Apple macOS have a similar calculator).
1. Select the "Programmer" mode
2. Select whether the number to be entered is Hex, Dec, Oct or Bin.
3. Enter the value (ie. Hex "17ed")
4. Read the converted value (Dec "6125")
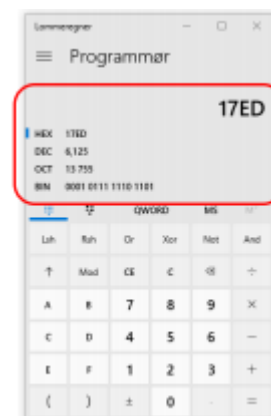
3a. Entering the Bisskey in HEX *(for DEC, see further down, in 3b.)*

Next step is entering the Bisskey, enabling the descrambling of the service. **This is how it's done in Hexadecimal**
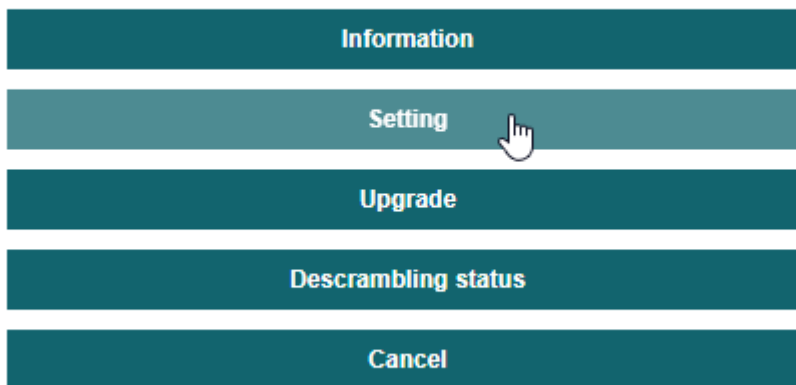
1. Click on "Common interface" in the CA menu, for the SMiT BISS CAM. **NOTE:** You are now entering the menu, hosted by the SMiT CA module!

2. In the "Main menu", click "Setting"

3. Click "Input mode"
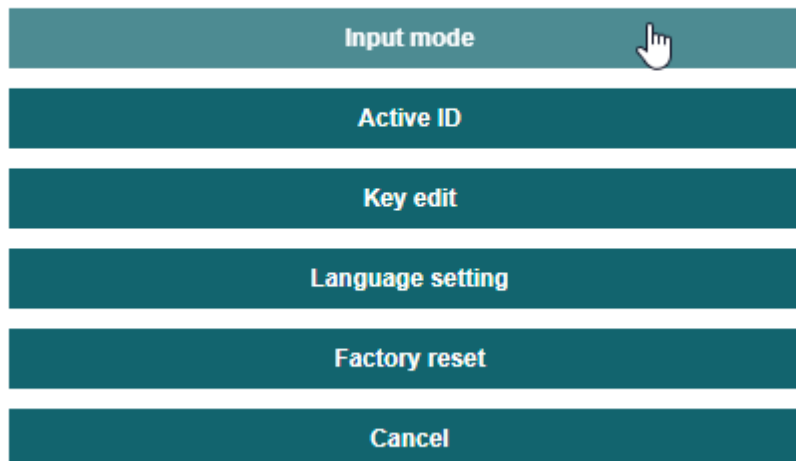
4. Click "Hexadecimal" and the "Cancel" to exit the menu.

BISS

Please choose an input mode to use

Hexadecimal(Enable)
Decimal
Cancel

Press 'OK' to confirm, 'EXIT' to quit

5. Click "Key edit"

BISS

Setting

Input mode
Active ID
Key edit
Language setting
Factory reset
Cancel

Press 'OK' to confirm, 'EXIT' to quit

6. Click "Add service"

BISS

Key edit

Default key
Add service
Empty all services
Cancel

Press 'OK' to confirm, 'EXIT' to quit

7. Select the service you wish to add the Bisskey for. Now you need to convert from Decimal to Hexadecimal, to get the SID in Hexadecimal. Here I have to select "Service ID(0x17ED)"

BISS

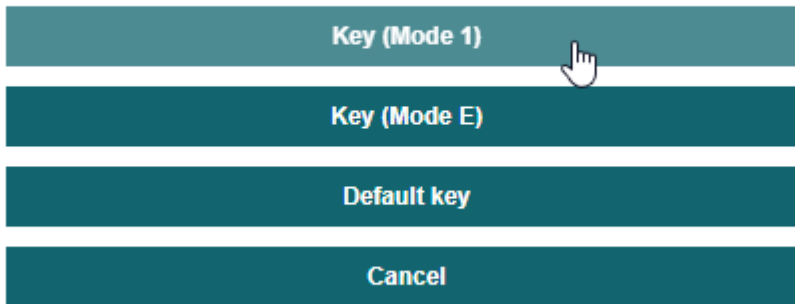Please edit or select a new Service ID

| Edit a new Service ID |
| Service ID(0x17ED) |
| Cancel |

Press 'OK' to confirm, 'EXIT' to quit

8. Select "Key (Mode 1)"

BISS

Edit service(0x17ED) key or use default key

| Key (Mode 1) |
| Key (Mode E) |
| Default key |
| Cancel |

Press 'OK' to confirm, 'EXIT' to quit

9. Enter the Bisskey, by clicking on the fields 0-9 and A-F

BISS

Key(Mode 1): XXXXXXXXXXXX

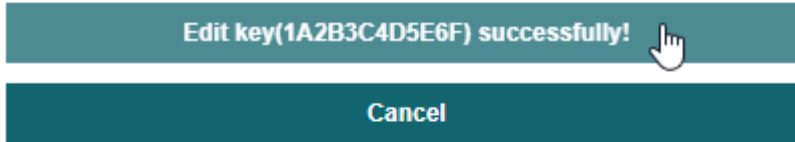| Delete |
| 0 |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
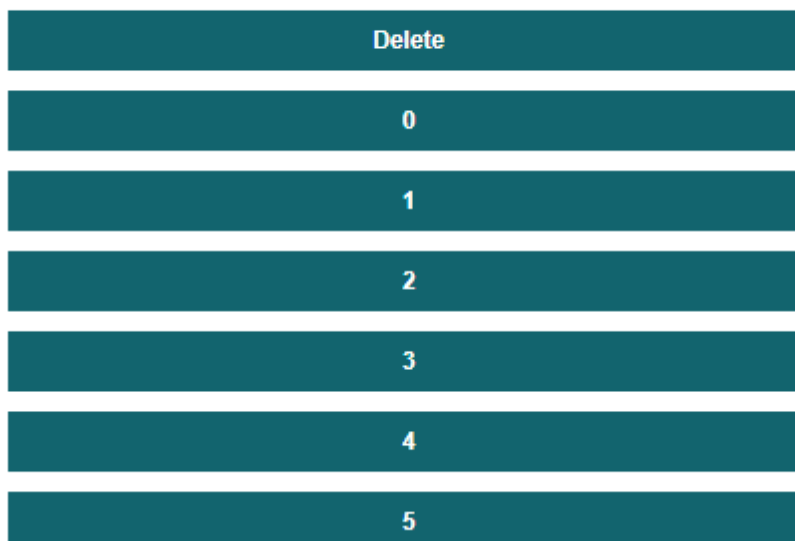
10. I have entered my Bisskey as **1A 2B 3C 4D 5E 6F** - skipping the control numbers. Remember the original bisskey? (**1A 2B 3C 81 4D 5E 6F 1A**). Click the "Edit key successfully" to return.
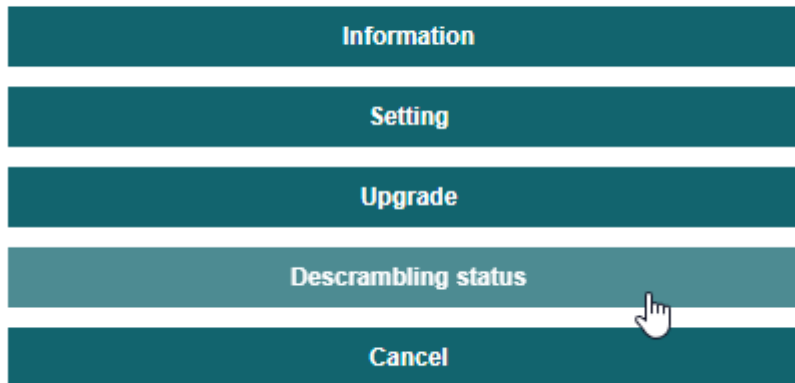
BISS

Value edit

Edit key(1A2B3C4D5E6F) successfully!

Cancel

Press 'OK' to confirm, 'EXIT' to quit

11. Click "Cancel" (2x) and click the button called "Descrambling status"status",
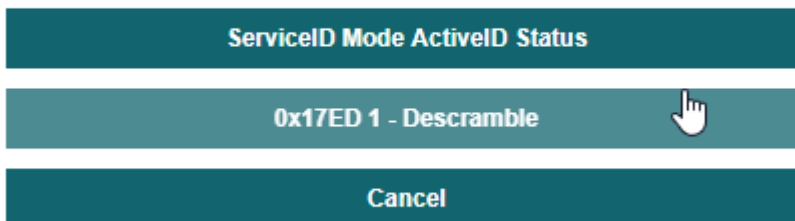
BISS

Main menu

Information

Setting

Upgrade

Descrambling status

Cancel

Press 'OK' to confirm, 'EXIT' to quit

12. "0x17ED 1 - Descramble" indicates, that the service is being descrambled.

BISS
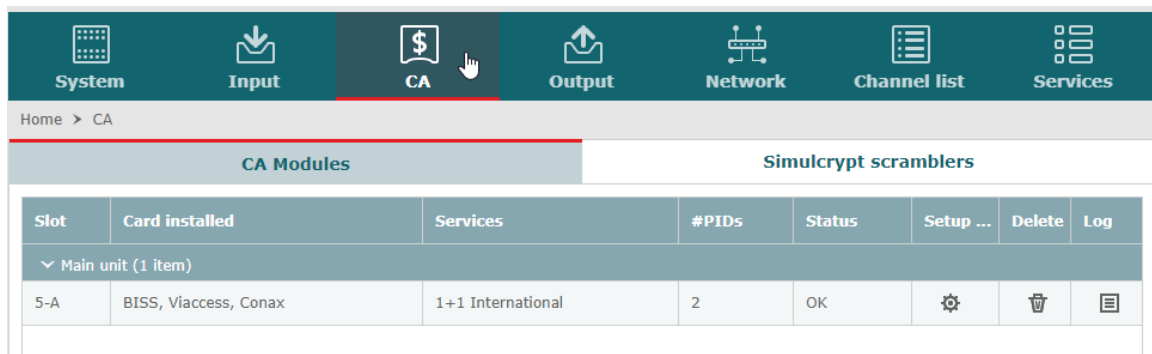
Descrambling status

ServiceID Mode ActiveID Status

0x17ED 1 - Descramble

Cancel

Press 'OK' to confirm, 'EXIT' to quit

13. Click the "CA" menu, in the TDX top menu bar. The status of my SMiT BISS CAM er in "OK"

3b. Entering the Bisskey in DEC *(for HEX, see above, in 3a.)*
Next step is entering the Bisskey, enabling the descrambling of the service. **This is how it's done in Decimal**
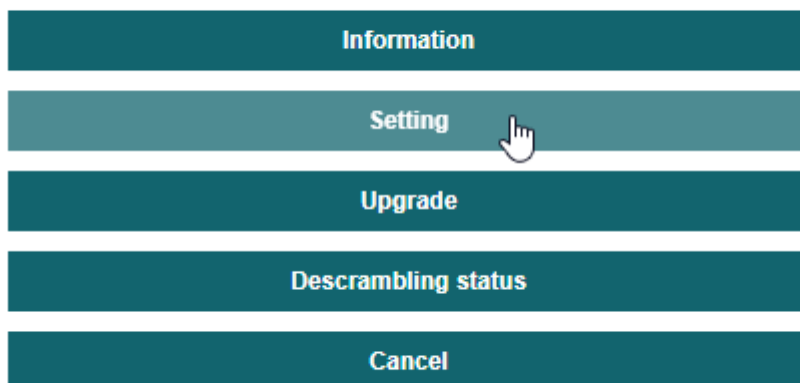
1. Click on "Common interface" in the CA menu, for the SMiT BISS CAM. **NOTE:** You are now entering the menu, hosted by the SMiT CA module!
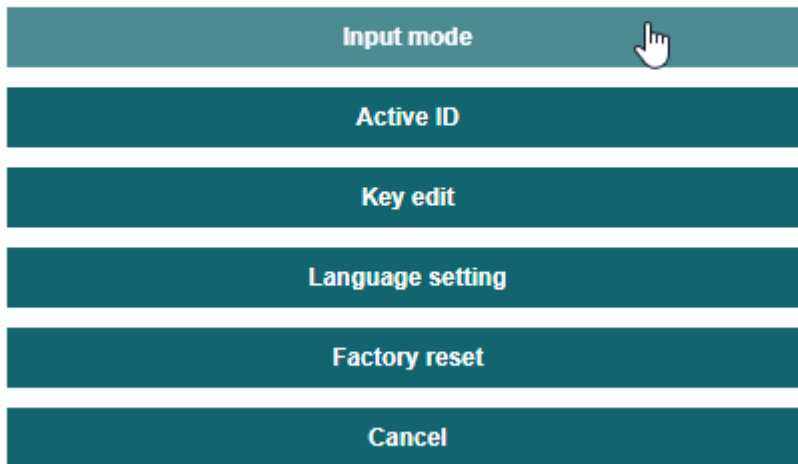

2. In the "Main menu", click "Setting"

Press 'OK' to confirm, 'EXIT' to quit

3. Click "Input mode"

BISS

Setting

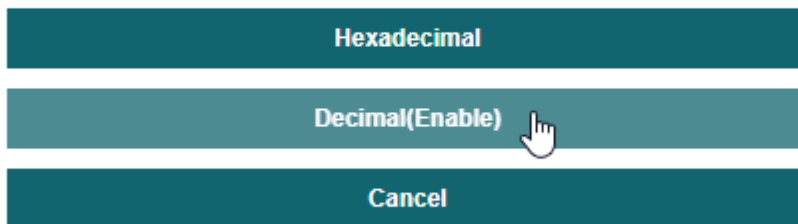| Input mode |
|---|
| Active ID |
| Key edit |
| Language setting |
| Factory reset |
| Cancel |

Press 'OK' to confirm, 'EXIT' to quit

4. Click "Hexadecimal" and the "Cancel" to exit the menu.
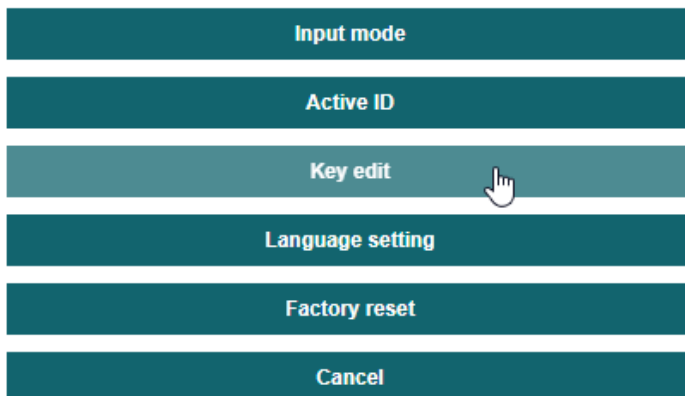
BISS

Please choose an input mode to use

Hexadecimal
Decimal(Enable)
Cancel

Press 'OK' to confirm, 'EXIT' to quit

5. Click "Key edit"

BISS

Setting

Input mode
Active ID
Key edit
Language setting
Factory reset
Cancel

Press 'OK' to confirm, 'EXIT' to quit

6. Click "Add service

BISS

Key edit

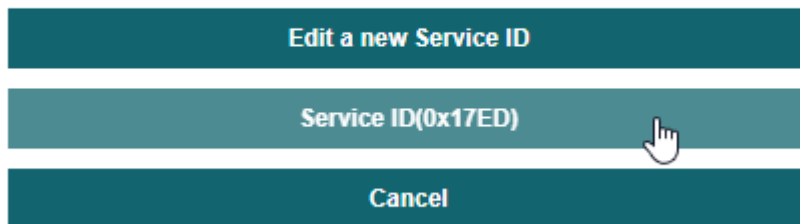| Default key |
| --- |
| Add service |
| Empty all services |
| Cancel |

Press 'OK' to confirm, 'EXIT' to quit

6. Select the service you wish to add the Bisskey for. Now you need to convert from Decimal to Hexadecimal, to get the SID in Hexadecimal. Here I have to select "Service ID(0x17ED)"
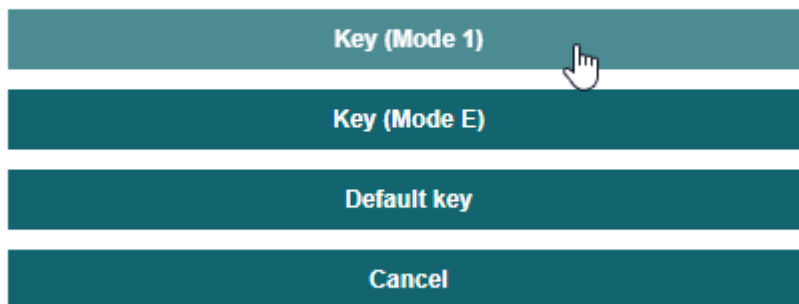
BISS

Please edit or select a new Service ID

Edit a new Service ID
Service ID(0x17ED)
Cancel

Press 'OK' to confirm, 'EXIT' to quit

8. Select "Key (Mode 1)"

BISS

Edit service(0x17ED) key or use default key

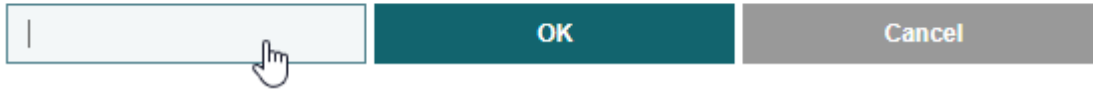| Key (Mode 1) |
| --- |
| Key (Mode E) |
| Default key |
| Cancel |

Press 'OK' to confirm, 'EXIT' to quit

9. Enter the Bisskey in the text field.

BISS

Please enter BISS 1 key(18 digits) in decimal:

	OK	**Cancel**

10. I have entered my Bisskey as ***026043060077094111*** Remember the original bisskey? (***1A 2B 3C 81 4D 5E 6F 1A***). I converted 1A 2B 3C 4D 5E 6F too 026 043 060 077 094 111). You can use the attached converter, to accomplish this. Note, the GUI converts the decimals you entered, to hexadecimal - this gives you the opportunity to check the entered valus. Click the "Edit key successfully" to return.
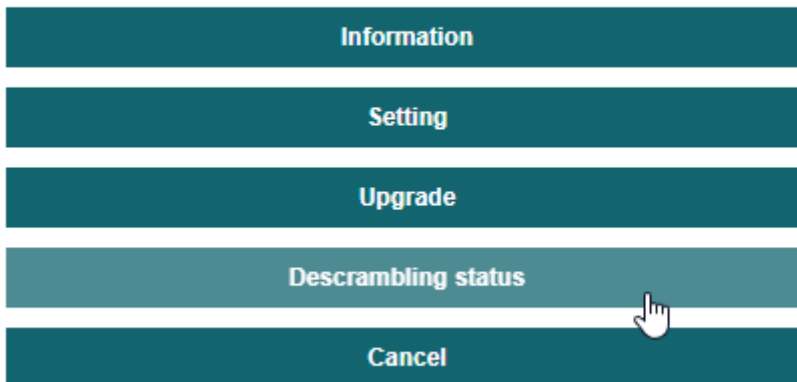
BISS

Value edit

Edit key(1A2B3C4D5E6F) successfully!

Cancel

Press 'OK' to confirm, 'EXIT' to quit

11. Click "Cancel" (2x) until you see a button called "Descrambling status", click
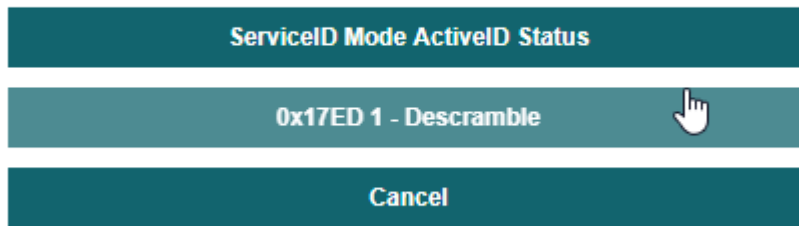
BISS

Main menu

Information

Setting

Upgrade

Descrambling status

Cancel

it" Press 'OK' to confirm, 'EXIT' to quit

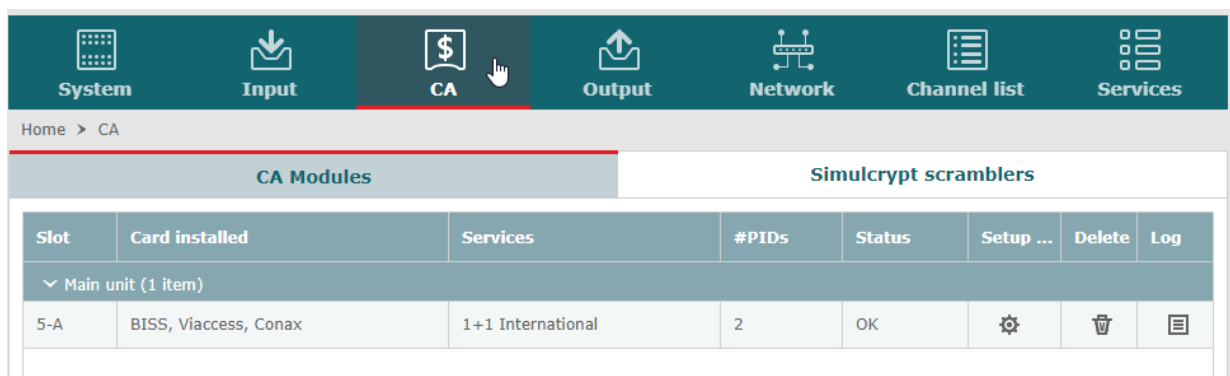12. "0x17ED 1 - Descramble" indicates, that the service is being descrambled.

13. Click the "CA" menu, in the TDX top menu bar. The status of my SMiT BISS CAM er in "OK"

Final notes

The SMiT card gives you the option to enter the Bisskey in decimal or hexadecimal. Entering it, in decimal is the fastest, when you have done the conversion correct. When you have the right decimal number, you can just copy 'n' paste the value into the textfield.