

SMiT Professional CAM User Guide

-- Conax

1. Introduction

SMiT Conax Chipset Pairing CAM, with an authorized Conax smart card, gives access to DVB encrypted programs. It works with the IRD or monitoring equipment, which has a CI Slot.

1.1. Product Description

- ✧ The CAM supports Conax CAS enhanced secure features
- ✧ Based on the Embedded 32-bit CPU (ARM7TDMI)
- ✧ Adopting advanced 0.18-micron technology
- ✧ Flash Size: 2M Bytes
- ✧ RAM Size: 256K Bytes
- ✧ TS process bandwidth: Up to 96Mbps (200Mbps in theory)
- ✧ Limited thermal aging test is over 24 hours
- ✧ Dimensions: Type II PCMCIA card (100mm x 58mm x 4mm)
- ✧ Connector: 68-pin PCMCIA slot
- ✧ Operation voltage: 4.5V ~ 5.5V
- ✧ Operation current: <150mA
- ✧ Low power consumption: < 600mW
- ✧ Support OTA software upgrade
- ✧ Multi services descrambling (Optional), up to 8 services descrambling
- ✧ Up to 24 configurable PID filters for filtering packet or section data

1.2. Standard

- ✧ Plug and Play
- ✧ Compatible with DVB-CI standard (EN50221)
- ✧ Compatible with ETR289
- ✧ Compatible with ISO7816 T=0 protocol, Class A
- ✧ Compatible with MPEG-2/MPEG-4
- ✧ Compatible with the RoHS Directive 2002/95/EC and its subsequent amendments

2. CAM work environment

As an electronic consumer products, CAM should work in a certain environment. Beyond that, CAM may be unstable, or does not work, or even permanent damaged. In order to make CAM work properly, as well as a longer life, we must make it work under a certain environment.

2.1. Power supply requirement

- ✧ Power supply voltage: $5 \pm 5\%V$
- ✧ Power supply current: $\geq 660mA$

2.2. Natural work environment

- ✧ Work temperature: $0^{\circ}C$ to $+55^{\circ}C$
- ✧ Relative humidity: 95%(MAX)- non-condensation

2.3. Storage environment requirement

- ✧ Storage temperature: $-20^{\circ}C$ to $+65^{\circ}C$
- ✧ Relative humidity: 95%(MAX)-non-condensation

2.4. Extremeness work environment

- ✧ Work voltage: $-0.5 \sim 5.5V$
- ✧ Work temperature: $0^{\circ}C$ to $+85^{\circ}C$
- ✧ Storage temperature: $-60^{\circ}C$ to $+155^{\circ}C$

3. Installation

3.1. Instructions

- ✧ Please read this User Guide before using the CAM.
- ✧ DO NOT open the case of CAM, without any guidance from professional technician. It could damage the CAM.
- ✧ DO NOT make any liquids on, or inside the CAM. If the liquid entered the CAM inside, please power off the IRD or monitoring equipment immediately to avoid possible danger. And contact Customer Service Center.
- ✧ Please insert the CAM into the IRD or monitoring equipment's CI slot. Don't pull out the CAM from IRD or monitoring equipment unless necessary, or else it may damage the PCMCIA interface.
- ✧ Please don't pull out and insert the smart card unless necessary, or

else it may damage the smart card.

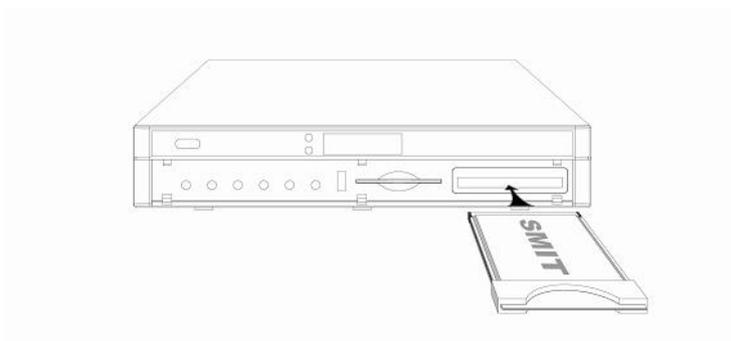
- ✧ Please make sure that all the wires are correctly connected, including antenna, signal wire, video and audio wire.

3.2. Process

1. Insert the smart card into CAM with metal IC towards CAM's front side. Please refer to the following figure.



2. Insert the CAM into the IRD or monitoring equipment correctly. Please refer to the following figure. If the CAM is inserted properly, the TV screen will show CICAM initialization information.



Notice:

After CAM's successful initialization, please refer to your iDTV manual for information on how to setup the digital channels on your device.

For more CAM information, please refer to iDTV manual, your iDTV supplier.

4. Functionalities

4.1. Descramble Service

The CAM, with an authorized Conax smart card, gives access to DVB encrypted programs. Please make sure do not insert any other type of smart card into the CAM, or the smart card may be damaged.

4.2. Message and Error Banner

The operator sends notification or information to user by message or mail.

If user does not correctly use CAM or smart card, or does not have entitlement to access certain services, the CA Error Banner will pop up on TV screen

CA Error Banner	Instructions
No access - geographical blackout	You have no entitlement or your entitlement has expired, please contact the operator to renew your entitlement.
No access - network block	
No Entitlement	
Incorrect card	Please check the smart card and Conax card inserted correctly, If everything is done as requested, but the service still can not be watched, please contact Customer Service Center for help.
Card problem - check card	
No card inserted	
Incorrect Conax card	
No access	
Maturity lock	Please unlock or recharge card.
Enter CA PIN to unlock	
Not enough tokens - please recharge card	
Software update	A new recommended software update is available. The update might take some time and the screen might go black. Do not turn off the receiver of during the update.
Forbid Download	
Allow Download	
Loader status	

4.3. CA Information Description

If you want to get some information about CA, please operate according to the IRD or monitoring equipment user guide. The CA Information includes Subscription Status, Event Status, Tokens Status, Change CA PIN, Maturity Rating, Modem Ordering, About Conax CA, Message Language, Loader Status

✧ **Subscription Status**

Subscription information. Include: Start date, End date etc.

✧ **Event Status**

Event information.

✧ **Tokens Status**

Display smart card subscription order tokens info.

✧ **Change CA PIN**

Change the CA PIN code, which may be needed for some function, such as Maturity Rating.

✧ **Maturity Rating**

Includes four subclasses: G/ PG/ A/ X, G is general audience, PG is parental guidance, A is over 18, X is highest. You must enter CA PIN before modifying the rating.

✧ **Modem Ordering**

The CAM has no modem available.

✧ **About Conax CA**

Include: Software version, Hardware version, CAM Serial number, Interface version, Card number, Number of sessions, Language, CA_SYS_ID, CIM Build Date, ChipID.

Notice: if you contact SMiT Customer Service Center for help, you may need to offer *Software version, Hardware version, CAM Serial number.*

✧ **Message**

Message Management.

✧ **Language**

Include: Self-regulation, English, Norwegian, Danish, Swedish, Somali, German, French, Italian, Spanish, Dutch, Russian.

Notice : This option always displays in English, but menu and prompt OSD will change to the language you set.

✧ **Loader Status**

Include three subclasses: Loader status, Allow Download, Forbid Download.

Loader Status: Information about upgrade: Loader Version, Signature Info etc.

5. SMiT Customer Service Center

Contact Information

Add: SSMEC Building 2/F, Gao Xin Nan First Avenue Hi-Tech Park South, Nanshan, Shenzhen, China 518057

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