

## AZBOX How to activate/start your card

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**Attention:** To know all the functions of this card reader, such as blockers, configuration trickery and so on, read the instruction book till the end. You'll see that you won't regret it. Then, you'll see that this is very simple.  
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### 1) What kind of information do I have to know to introduce my Nagra 2 card in Azbox?

A: The relevant facts are BoxKey (BK) and DT-06 type 0D expanded (64 bytes), also commonly known by RSA or N. If you already know these facts (BK and RSA (N – DT06 expanded) you can go to the following step.

**Imagine these are our facts:**

Boxkey: 0123456789ABCDEF

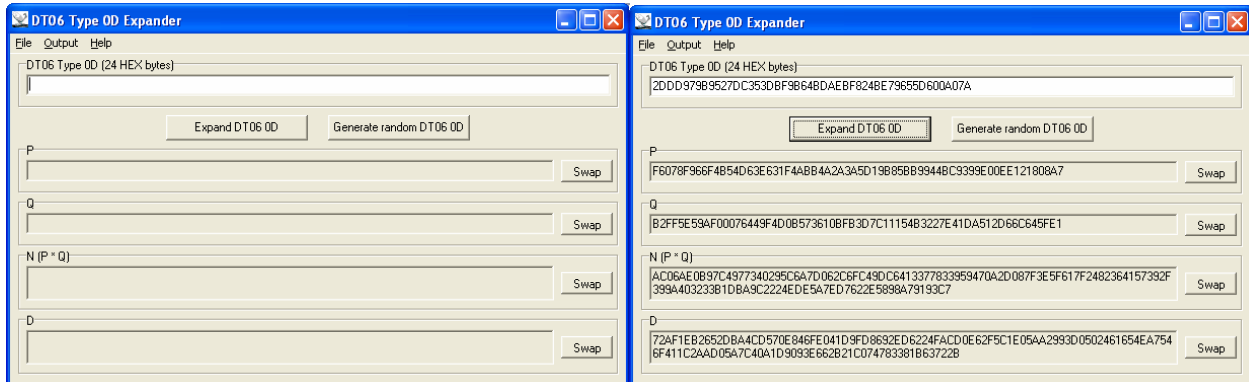
RSA (DT06 (0D): 2DDD979B9527DC353DBF9B64BDAEBF824BE79655D600A07A =  
24 Bytes

With the help of the program “DT06 Type 0D Expander” we'll know which one is the “N”:

Open the programme “DT06 Type 0D Expander” left side, copy facts from DT 06(0D) and paste on the white space. Then, click in expand DT06. The facts we want are going to appear. Our “N”, in this specific case, gave us:

“AC06AE0B97C4977340295C6A7D062C6FC49DC6413377833959470A2D087F3E5F617F2482364157392F399A403233B1DBA9C2224EDE5A7ED7622E5898A79193C7”.

**Warning up: Do not click “SWAP” or you'll invert our “N”**



Our facts:

Boxkey:0123456789ABCDEF

DT06 “N”:

AC06AE0B97C4977340295C6A7D062C6FC49DC6413377833959470A2D087F3E5F617F2482364157392F399A403233B1DBA9C2224EDE5A7ED7622E5898A79193C7

### 2) All right, we already have our necessary facts. Now, how can I introduce these facts in the receiver?

A: Here we have two possibilities. Using the remote control through menus or using the computer linked to the receiver by the COM port.

**Important: The card is introduced in the receiver with the chip turned up.**

**2.1.) With the remote control go to Menu -> Installation -> Card information -> CARD DATA -> Select one of the Data themes (Data 1; Data 2, Data 3 or Data 4).**

In Box key set your Boxkey and in RSA set DT06 expanded and divided into eight parts. In the correct order one part per line. In this case, it would be like this: each line will have 8 bytes:

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AC 06 AE 0B 97 C4 97 73
40 29 5C 6A 7D 06 2C 6F
C4 9D C6 41 33 77 83 39
59 47 0A 2D 08 7F 99 45
0F 68 AF 60 3A 02 44 C7
81 35 BE D7 7A 49 47 14
AA 6E F2 7E 56 9C 55 E5
35 BF 3B A3 A0 41 D5 C7
```

## **2.2.) Using the RSA\_BoxKeyEdit tool:**

**First of all, some explanation about this software structure:**

On the left side we have:

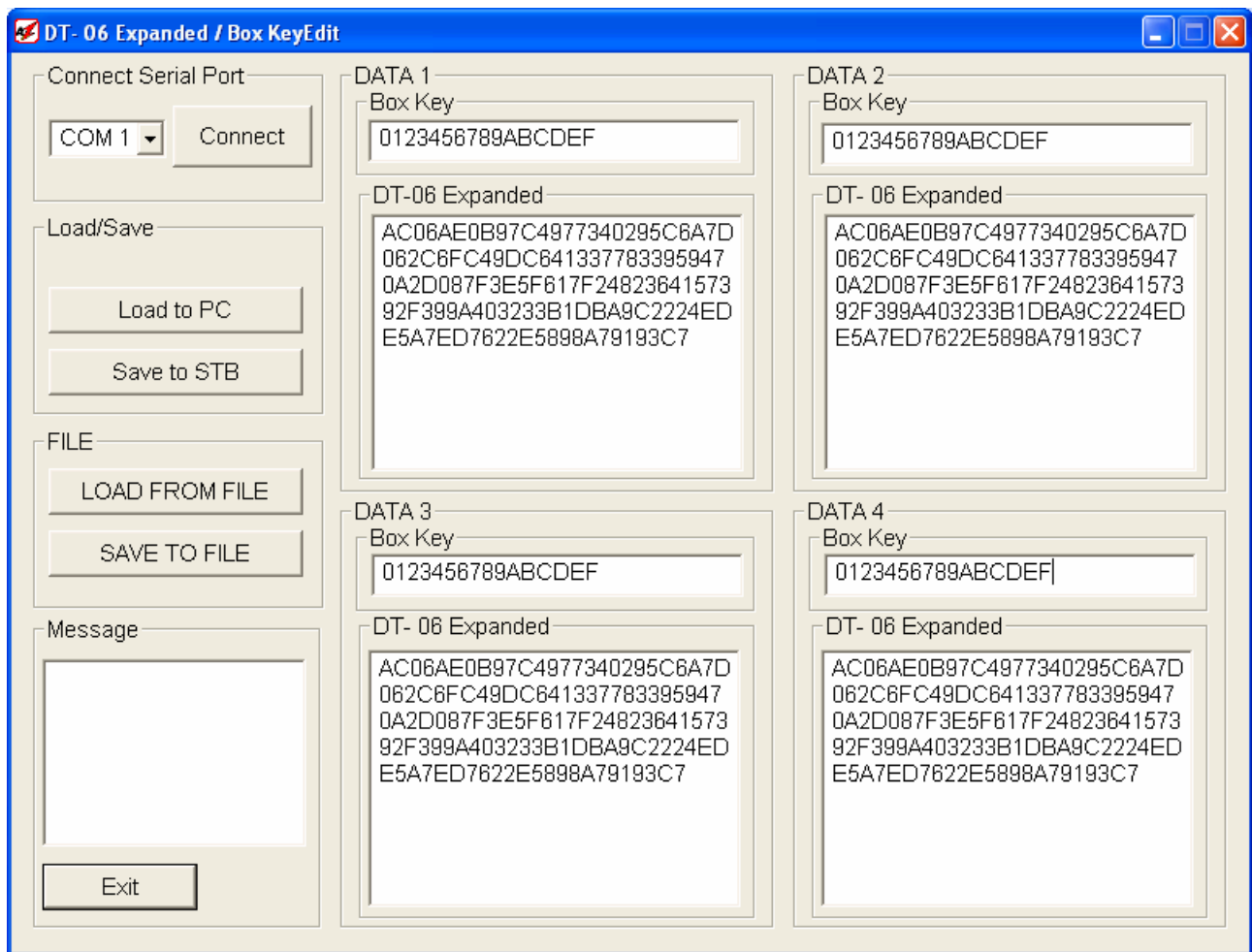
- ***Connect Serial Port:*** It's used to select (activate) the COM port that we want to use. Before sending or receiving anything from the receiver, we have to click in "Connect", and when we finish sending BK/DT06 expanded, we must click in "Disconnect" to release the COM port.
- ***Load/Save Data:*** Used to send/receive BK and RSA facts that are in AZBOX S710:
  - ***Load to PC:*** Transfer BK and RSA from receiver to computer. Those facts will appear in our computer's DATA themes.
  - ***Save to STB:*** Transfer BK and RSA from computer to receiver. The transferred facts are those introduced in DATA themes (DATA 1; DATA 2; DATA 3 and DATA 4).
- ***File:*** Used to record, open a file with facts BK's and DT06 expanded.
  - ***Load from File:*** Used to charge a file with BoxKey and RSA facts previously recorded.
  - ***Save To File:*** Used to record a file with BoxKey and RSA facts in a file to use later on.
- ***Message:*** Information appears about send/receive status and if the COM port is turned on or off.

On the right side we can put up to four Boxkey and DT06 Expanded combinations. This is useful for those people who have more than a card. They can change card without reintroducing the facts. However, if we only have one card, it is enough setting a combination and sending it to the receiver.

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**Advice:** Fill in the four DATA themes (Data 1; Data 2, Data 3 e Data 4) even if you want to use only a combination (Boxkey and DT06 Expanded), or previously do the operation "Load to PC" and then edit facts in order to avoid the error: "Boxkey Value Error".

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### How to use this software:

- 1) Click "Connect";
- 2) Fill in your facts or change them from a previously saved file;
- 3) Click in "Save to STB", and check if the message "Save OK" appeared. If this happened, everything is ok, the facts were transferred.
- 4) Click in "Disconnect" to release COM port.

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**Attention:** By the end of this process don't forget to select DATA combination (DATA 1; DATA 2; DATA 3 or DATA 4) from the card you are going to use; on menu Card Data: *Menu -> installation -> Card information -> CARD DATA -> Select one of DATA themes Data (Data 1; Data 2, Data 3 or Data 4).*

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### **3.) Why can we introduce four Boxkey's Rsa combinations?**

For those who like to change card, you don't need to program the receiver again.

## BLOCKER WORKING

4.) Azbox brings Blockers in order to protect your cards. What are they for? How do we activate/inactivate them?

- How to get blockers menu?

- Menu – Information – Card information – Card Data

- What's the meaning of each parameter? What's EMM's? Why are there different types of EMM's?

EMM-G: If this parameter is OFF, that means the blocker will block all EMM's destined to ALL operator cards.

EMM-S: If this parameter is OFF, that means the blocker will block all EMM's destined to the GROUP of cards of whom this card belongs to.

To activate/inactivate IRD dates, beware of the “famous” should turn EMM-S on, temporary.

EMM-U: If this parameter is OFF, it means that blocker will block all EMM's destined to the used card, and only for that one.

SMART BLOCKER: Just let go beyond some EMM's (keys EMM's), destined to update keys and block “malicious” EMM's.

For being active, you have to verify the following conditions: EMM-G = ON; SMART BLOCKER = ON, if the theme EMM-G = OFF obviously you won't update keys and card won't receive any EMM-G!

- Now, using a more conventional language:

What are the different EMM's for?

EMM-G = Update keys, send “malicious” EMM's, and update cards...

EMM-S = Update the expiration date of tiers, EMM's directed to different groups of cards, it's not usual having problems.

EMM-U = Change rights of watching or stop watching some channels...

- How to set up?

EMM-G = ON, all EMM-G sent to card.

EMM-S = ON, all EMM-S sent to card.

EMM-U = ON, all EMM-U sent to card.

SMART-BLOCKER = ON, if this value is ON a filter is done between EMM-G just to let go EMM-G that contains card keys.

- **Summarizing, practical situations for different kinds of users:**

a) I've got an official card paid every month and I would like to watch everything I have the right to:

EMM-G=ON / EMM-S=ON / EMM-U=ON / SMART BLOCKER = OFF

In this situation, the Azbox card reader behaves as if it was an official card reader.

b) I've got a MOSC card and I would like it to update just the keys and tiers date; I don't want the risk of losing everything.

EMM-G=ON / EMM-S=ON / EMM-U=OFF / SMART BLOCKER = ON

In this case, I let EMM's opened. Till today, never got attacked using this type of EMM's, that does not mean that won't happen. (It's very hard). In my case, I always let it ON to update IRD date.

c) I've got a MOSC card and I'm afraid, I would like to block all EMM's:

EMM-G=OFF / EMM-S=OFF / EMM-U=OFF / SMART BLOCKER = OFF

In this case, the configuration of active Blocker is superfluous, as it is a filter among EMM-G and these, being OFF, don't let anything pass away, so it doesn't have anything to filter.