

How to configure NAGRA2 Smartcad for use with:

Echolink EL-700 series FTE MAX S series Starsat SR-X4000 series and compatibles...

There are some requisites to use a NAGRA2 smartcard in these receivers:

- You must know the receiver **BOXKEY**; this key can be read from the smartcard or from the receiver's flash. Look for instructions in scene's forums. The BOXKEY is a 8 byte key.
- If the card is not an official subscribed card (it's a MOSC with a invalid DT08 or without DT08) or if it's a card without DT08 you will also need the **expanded DT06-0D**, this data is also known as 'RSA module', 'CAM RSA' or 'N'. **If you have an official subscribed card with valid DT08 you don't need this key**. The expanded DT06-0D is a 64 byte key.
- You need firmware **version 1.3.3** or latest and **ALIMINIUPG2.EXE** serial loader.

There are a lot of sites and forums in the net explaining how to get these data due that all unofficial receivers supporting NAGRA2 needs this data to negotiate the communication with the smartcard.

Go to directory where you placed **ALIMINIUPG2.EXE** and create or edit a file called: **CASDATA.INI** and enter your boxkey and RSA, for example:

```
[NAGRA2]
N2BOXKEY=1122334455667788
N2RSA=112233445566778899AABBCCDDEEFF00112233445566778899AABBCCDDEEFF00
112233445566778899AABBCCDDEEFF00112233445566778899AABBCCDDEEFF00
```

Remember, RSA is optional, if you have an official card with valid DT08 there is no need to enter this data. Save and close this file.

Now, every time you upgrade your receiver to a new version with ALIMINIUPG2.EXE the data from this file will be added to the firmware before sending, so it always will work with your card.

NOTE: ALIMINIUPG2.EXE and CASDATA.INI must be in the same directory.

Now, send the firmware to the receiver to update its NAGRA BOX information.

CHECKING SMARTCARD CONFIGURATION

Once you have upgraded your receiver with NAGRA BOX information, insert the NAGRA2 smartcard and go to: MENU – TOOLS – Smartcard and serial port menu and get sure you have activated the smartcard. Then enter in Smartcard menu and you must see a screen like this:



You must see your BOXKEY, verify it is correct.

Also you must see one of these messages:

- **Using CAM module from config** : This means that the receiver is using the RSA you entered in CASDATA.INI to negotiate the communication.
- **Using CAM module from DT08** : This means that your card has a valid DT08 and the receiver was able to negotiate communication using it, the RSA data from CASDATA.INI is not used.

The card MUST be working right now!!!

If you see any other message or error in this screen, please check all your data and steps carefully.