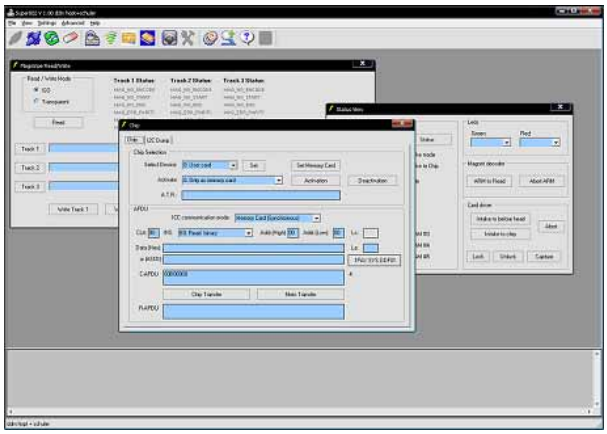
die zeichen lesen
die zeichen setzen

reading the signs
setting the signs



Super882.EXE

Test Software
Reference Manual
Rev. 1.01 (Mai 2011)

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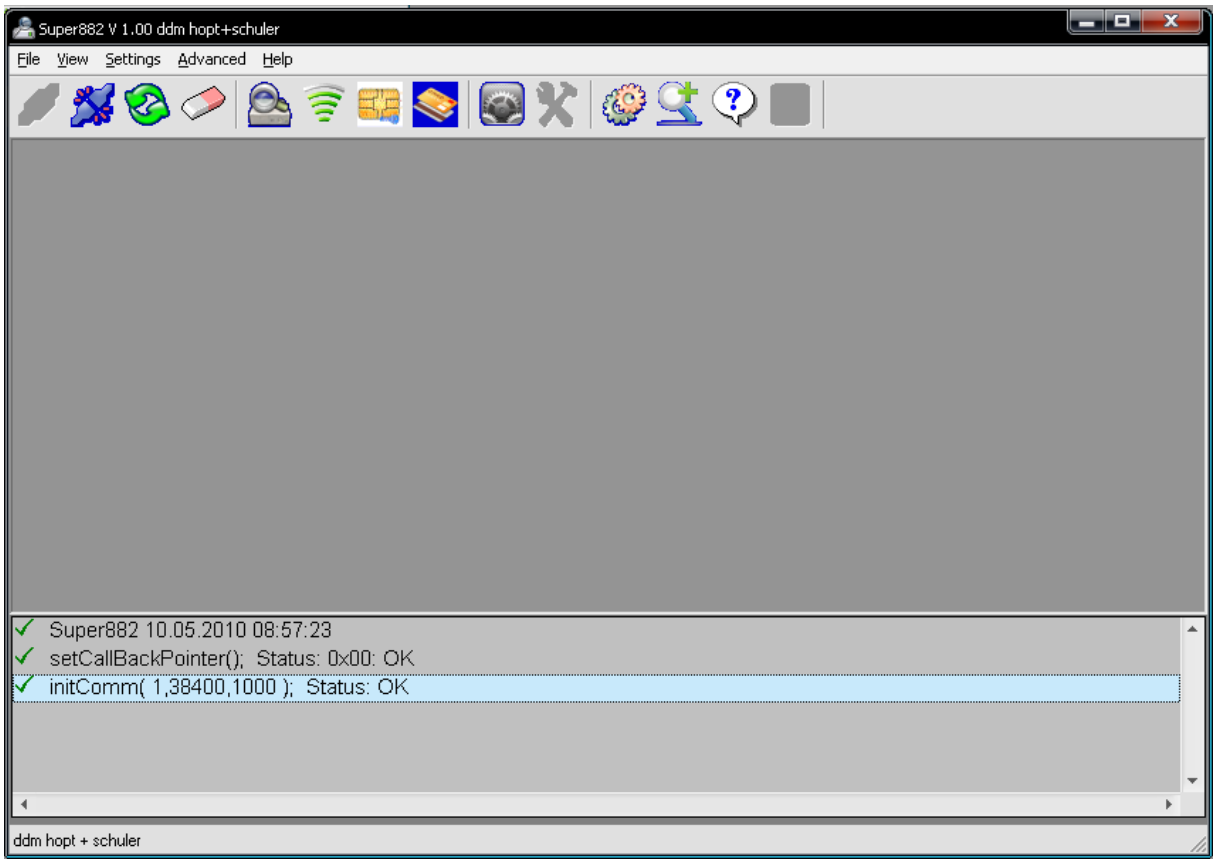
The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing.

History

Date	Rev	Note
10.05.2010	1.00	Initial draft
10.05.2011	1.01	Updated firmware update section

Table of Content

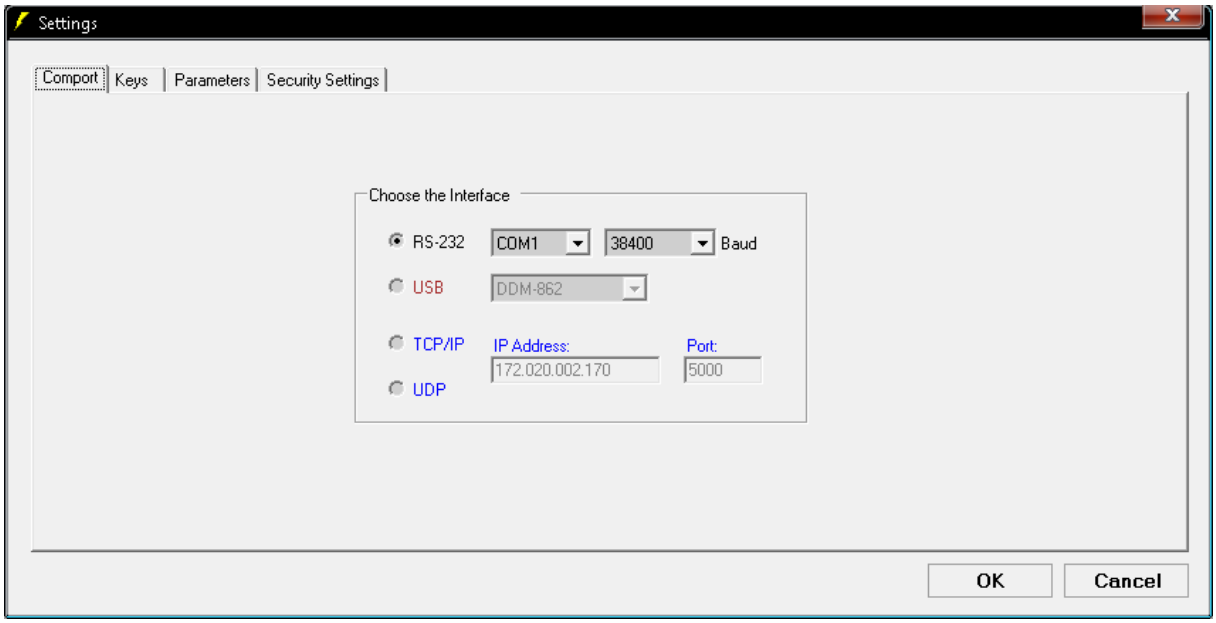
1 Main Window



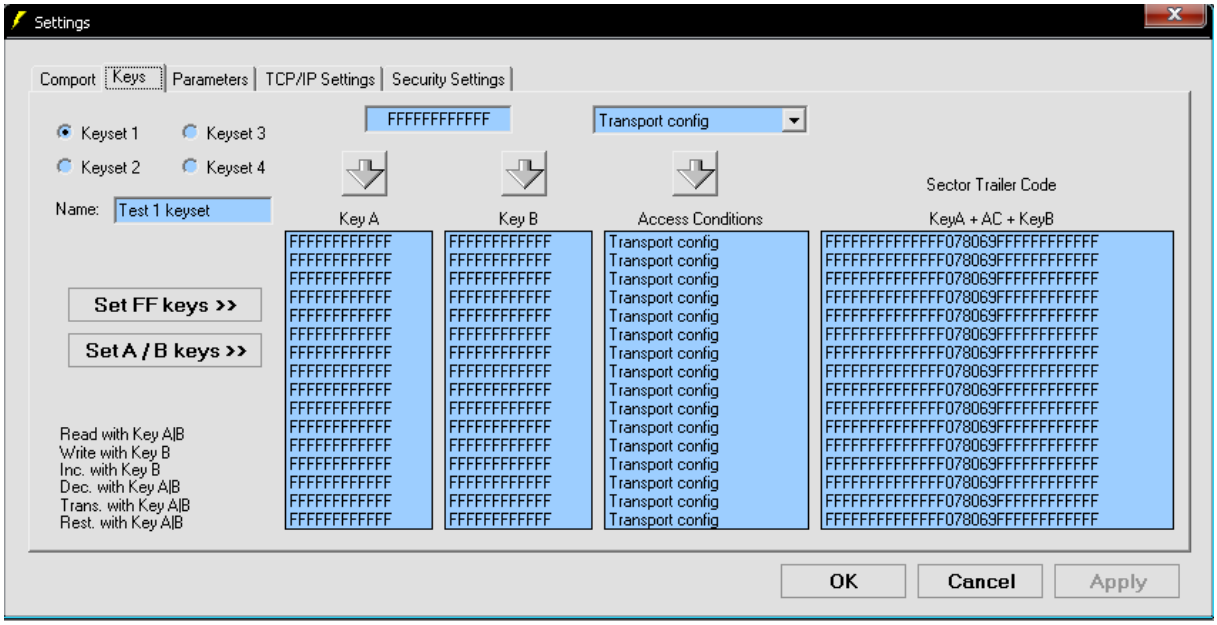
Toolbar buttons:

Connect: Opens the specified interface
Disconnect: Closes the interface
Reset reader: Resets the reader
Clear history: Clears the history list
Status view: Opens the status view form
Contactless: Opens the contactless form
Chip: Opens the chip form
Magstripe: Opens the magstripe read/write form
Configuration: Opens the reader configuration form
Settings: Opens the test software settings form
Sequential tests: Opens the sequential tests form
Maintenance: Opens the reader maintenance form
About: Opens the about form
Exit: Exits the test software

1.1 Test Software Settings

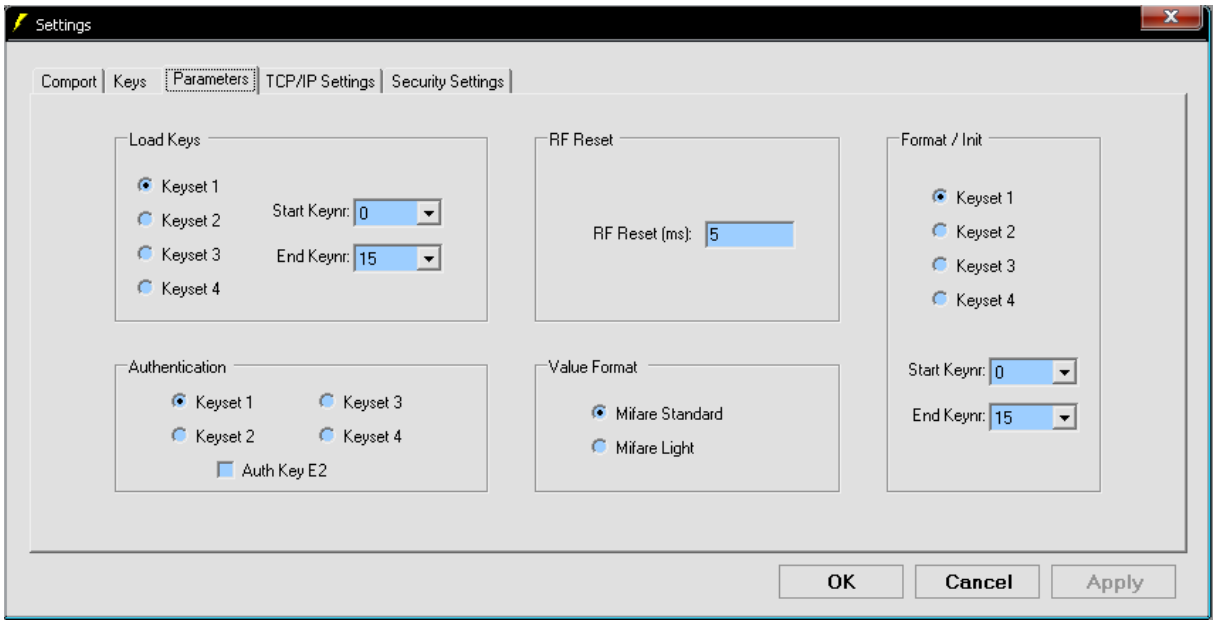


1.2 Mifare Keys Settings



You can define four different keysets. You can also define the sector trailer codes to initialise the blank tags with new sector keys.

1.3 Parameters for Mifare Keys

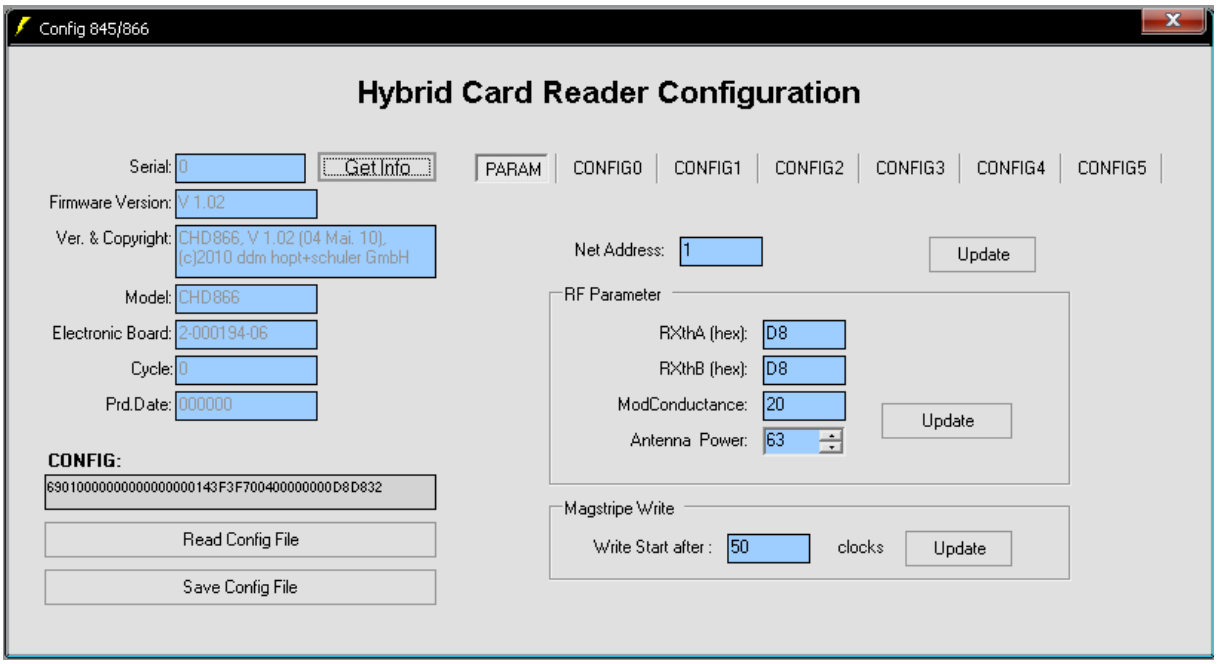


Load Keys defines the keyset and the sector range to load the keys in readers secure eeprom memory. The button ***Load Keys EEPROM*** in Contactless Form uses these settings. After the keys are loaded in the reader memory, the mifare keys will not be passed to the reader through the communication interface. For this purpose ***Auth Key E2*** check box should be checked.

Authentication defines the keyset which should be used and ***Auth Key E2*** defines whether the keys are send or the internal stored keys will be used to authenticate.

Format/Init defines the keyset and the sector range to initialize a tag with new keys. The button ***Format Key Blocks*** in Contactless Form uses these settings.

1.4 Reader Configuration



Get Info: To read information data (Firmware Version or model…)

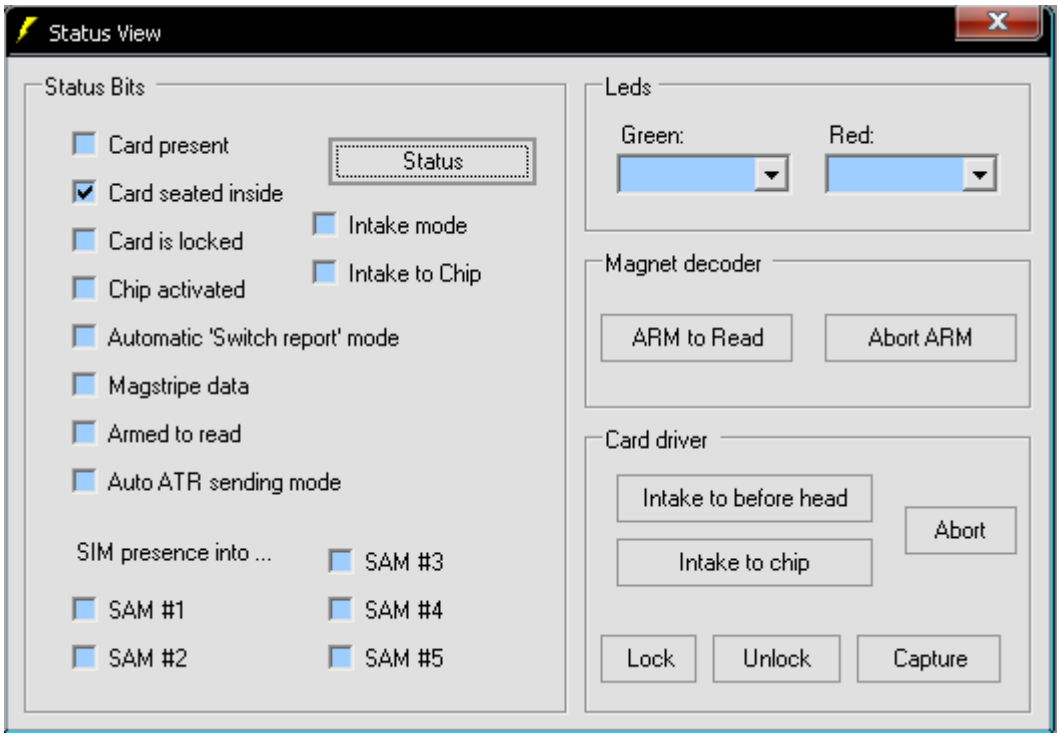
NetAddress: will be used in the communication protocol. The reader will respond to commands which are sent to this or to the network address of 99.

Config0-5: are explained in module documentation.

RxThreshold, ***ModConductance*** and ***Antenna Power*** are RF settings and shouldn't be changed.

Write Start: Start position of magstripe data. If the "***Mag Write ISO (7mm)"*** setting in ***Config4*** is not selected, the reader uses this setting to define the write start position of an ISO card. The value of 50 corresponds to approx. 4mm on a card.

1.5 Status View



This form shows how to get the card inside and how to eject or capture the card.

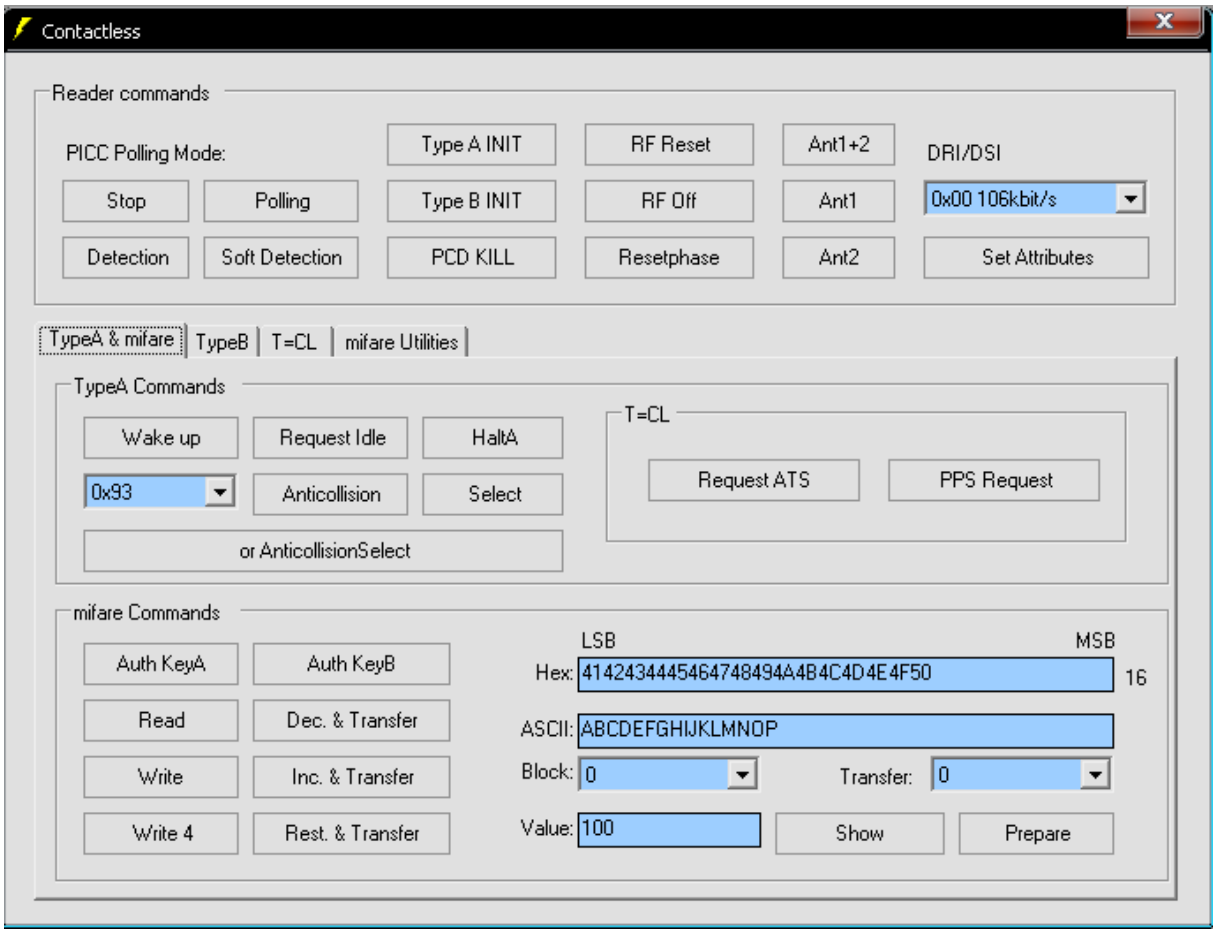
Status button gets the status bytes of the reader.

To read a magstripe card, you can set the reader in ARM mode. For this, click on "***ARM to Read"***.

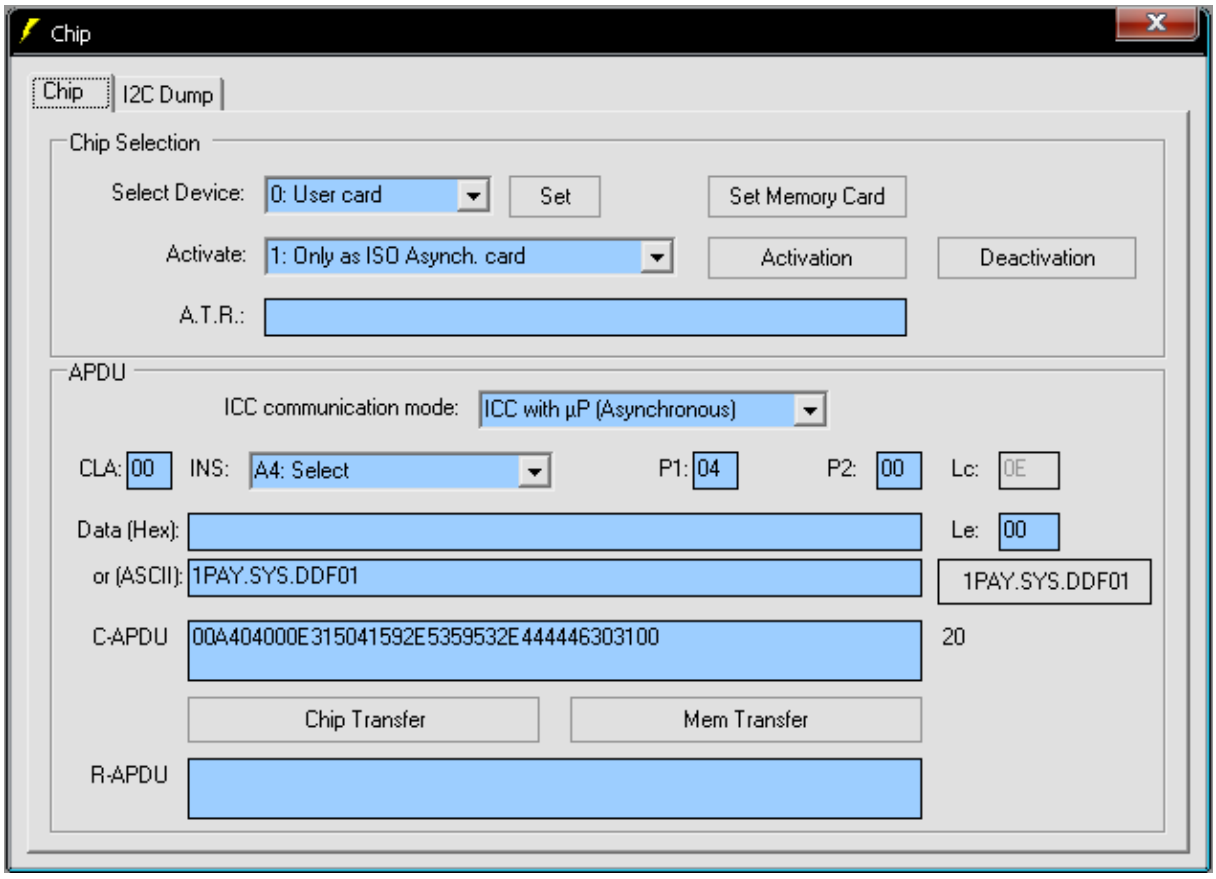
To read a chip card, you need to set the reader in "***Intake to chip"*** mode. After the card is moved to the chip position, the lock and capture commands will not function. In chip position, you can only unlock the card.

Before sending Lock, Unlock or Capture commands, the chip card should be deactivated.

1.6 Contactless



1.7 Chip

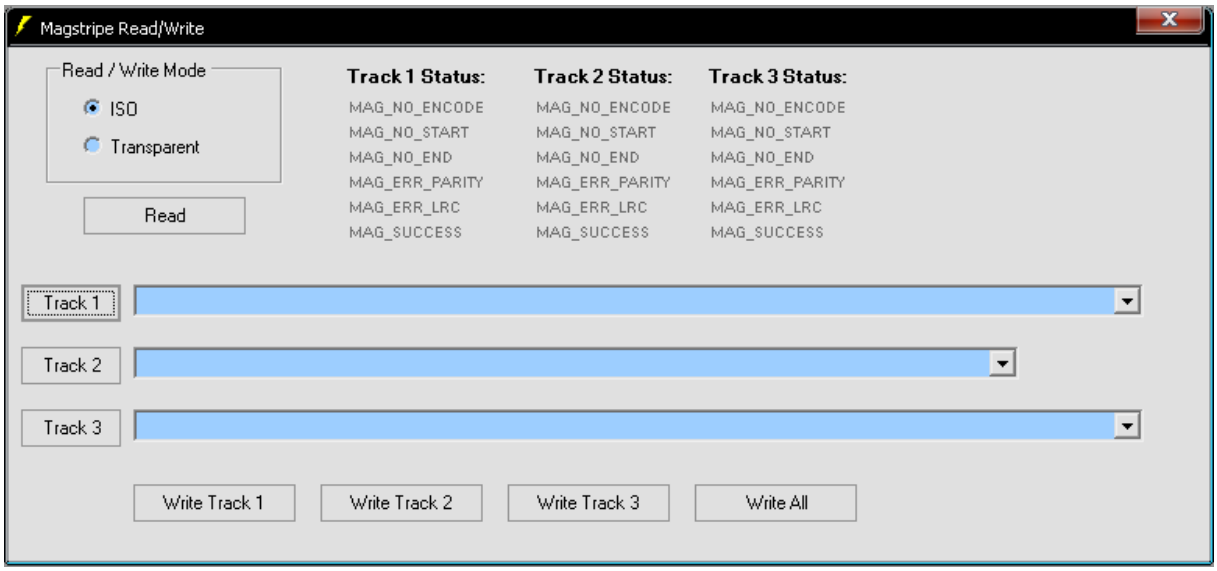


First select the user card or the SAM. Before activation, you need to define the type of the card. After clicking on ***Activation***, you will receive the ***ATR*** (Answer To Reset).

To communicate with the card, select the communication mode and define the data. If asynchronous mode is the case, use the ***Chip Transfer***.

At the end of the communication, deactivate the chip by clicking on ***Deactivation***.

1.8 Magstripe Read/Write



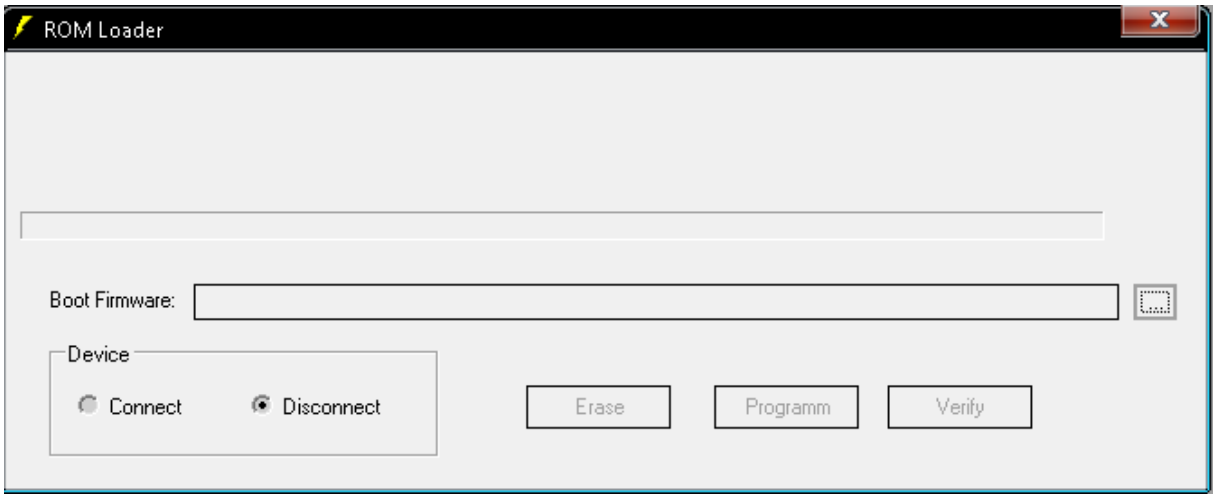
If the reader was in ARM to Read Mode, you can directly read the track data by clicking on **Track 1/2/3**. Otherwise click first on ***Read*** button.

To write on magstripe card, the track data has to be defined first. It is recommended not to write all tracks at the same time in ***HICO Mode*** (requires current greater than 2A).

1.9 Firmware Update

1.9.1 ROMLoader (to Load the Boot Firmware)

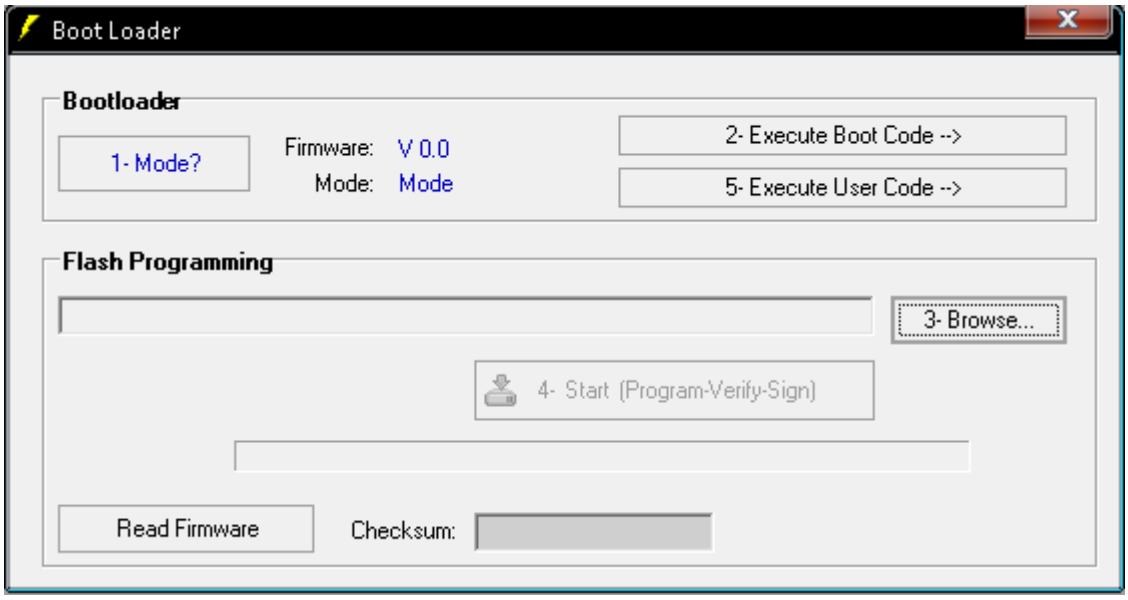
Normally, the Boot Firmware is preinstalled. If it is required it can be updated or installed using the ROM Loader. The ROM Loader uses the on-chip boot loader to program the complete Flash, which resides on the ROM area. Before the programming starts, the controller must run the on-chip boot loader. For this, a hardware reset is required.



To open this form click on Advanced->Firmware Update->ROMLoader.

Connect the RS232 cable and select the RS232 interface. Click on Connect and make a hardware reset. After successful connection; erase, program and verify the new boot firmware. Click on disconnect and reset the reader once again. The boot firmware starts running with the fast flashing LED. After the boot firmware is installed, it is possible to load the application firmware through the USB and Ethernet interface.

1.9.2 BootLoader (to Load the Application Firmware)



To open this form click on Advanced->Firmware Update->BootLoader.

The Boot Loader installs the application firmware and can be used for all serial interfaces. To start the firmware update, the reader must be in boot mode. For this, click on execute boot code. After, browse for the hex file and click on start. At the end, click on execute user code to run the new firmware. The LED will flash slowly when the application is running.