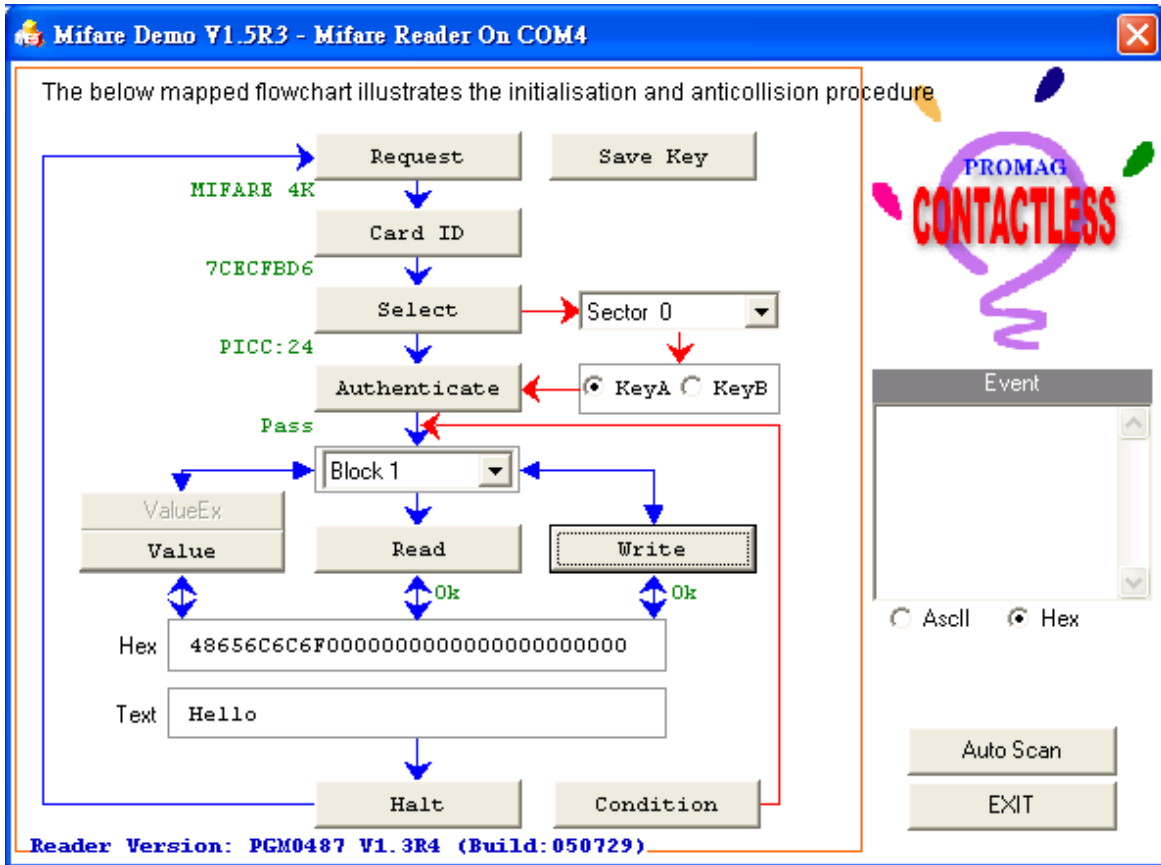


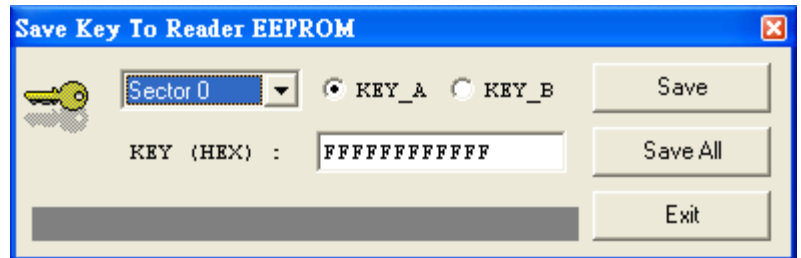
Mifare Demo Quick Start



Get Start:

1. Select the "Comm Port" where you are to connect the MF5 device.
2. Beforehand "Save Key" to MF5 device for authenticate card.

Default KEY_A: FFFFFFFFFFFFFFFF
 Default KEY_B: FFFFFFFFFFFFFFFF



Request (Answer to Request):

With the "Answer to Request" sequence the MF5 requests all MIFARE cards in the MF5 antenna field. When a card is in the operating range of a MF5, the MF5 continues communication with the appropriate protocol.

Card ID (Anticollision loop to get card Serial Number):

In the "Anticollision loop" the serial number of the card is read. If there are several cards in the operating range of a MF5 they can be distinguished by their different serial number and one can be selected (Select Card) for further transactions. The unselected cards return to the standby mode and wait for a new "Answer to Request" and "Anticollision loop". (PS: Anticollision = Anti-Collision)

Select (Select Card):

With the "Select Card" command the MF5 selects one individual card for further authentication and memory related operations. The card return the Answer to Select (ATS) code, which determines the individual type of the selected card.

[Refer to the document MIFARE Standard Card Type Identification Procedure for the further details.](#)

Select Sector (Access Specification):

After identification and selection of one card the MF5 specifies the memory location of the following access.

Authenticate (3 Pass Authentication):

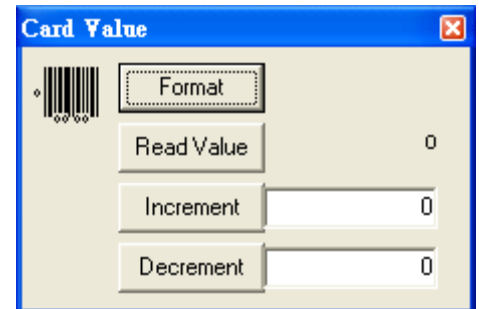
The appropriate access key for the previously specified access is used for 3 Pass Authentication. Any communication after authentication is automatically encrypted at the sender and decrypted by the receiver.

Select Block :

After pass the Authentication and selection of one card the specifies the block number of the access block memory.

Read/Write/Value (Access):

| | |
|-----------|---------------------------------------|
| Read | read the block |
| Write | write the block |
| Value | |
| Format | format the block to value block |
| Read | Value read value from the value block |
| Increment | Increment value into the value block |
| Decrement | Decrement value into the value block |



Condition (Change KEY_A (or KEY_B) and Access Condition of the selected card):

The "Condition" change access condition for the selected card.

