KONNECT COMMUNICATION AND CONFIGURATION SOFTWARE MANUAL



Konnect Manual March 2014

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Konnect

Minimum system requirements

The communication and configuration software Konnect has the following minimum system requirements:

- Operative System: Windows XP SP3 or later.
- About 3 MB of free space on the hard disk.

General description

Konnect is a software for the configuration and data acquisition of the Kronotech terminals KE-12 and CLOCK, KP-01 and KP-02, SIKU2, SIKU 3, SIKU 4, KA-03, KR-01, KP-06 and T-LUX.

The connection between the PC and the terminal can be done with a serial line RS232 or RS485, Ethernet or remote with GSM or analogical modem.

The software can work both with *Interactive* mode and *Batch* mode. In the first case, the operations are executed manually by the user, who can choose the path and the name of the transactions file or of the user list file, time policy, alarms activations etc.; in this operational mode, every error is displayed on the monitor in real time.

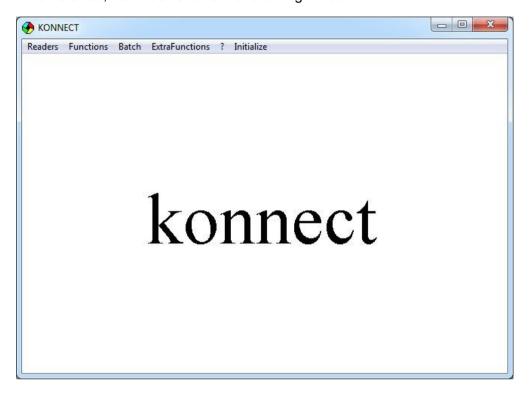
In the second case, Konnect runs a preset list of commands, without the necessity of an operator; in this case the software creates a file of the acquired transactions and a log file that reports the result of the executed operations.

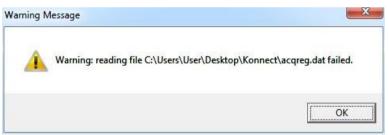
On this manual, the operation of Konnect software is explained in the two operative modes.



1. Start

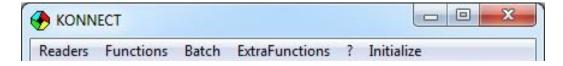
When started, Konnect shows the following window:





press OK, then go to $Batch \rightarrow Configure Archives \rightarrow$ select at least a valid format for the save of the transactions for the batch mode and confirm with $Save \ and \ Exit$.

The menu bar is on the upper side of the window:



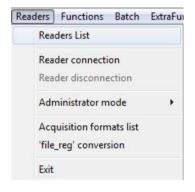
This tool allows a simple and fast access to the menus that include all the configurations and functions that will be presented on next chapters.

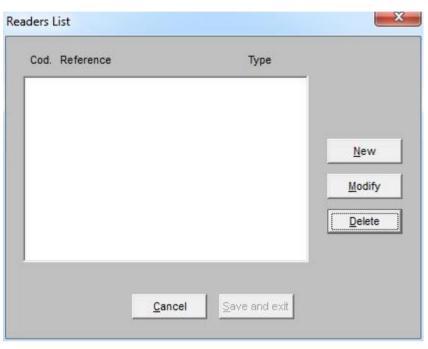


2. Terminals

Readers List

Selecting Readers List form the Readers menu, it is possible to edit the terminals list (max. 1000) that Konnect can control.





New: adds a new reader to the list.

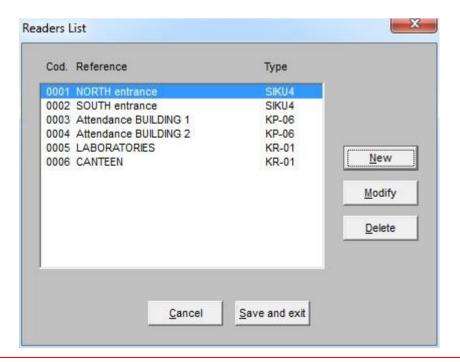
Modify: modifies a reader of the list.

Delete: deletes a reader

from the list.

Cancel: close the window and cancel all the settings and modifies.

Save and exit: closes the window saving all the settings and modifies.





New

The New button allows to access to the configuration window of the communication channel to use for the connection with the terminal.

Code: identification number of the terminal.

Address: node number of the terminal; values from 000 to 255.

Type: model of the terminal that can be selected from the drop down menu.

Reference: description of the connection that is reported on the terminals list.

Port: serial port used for the connection; can be selected from COM1 to COM8 from the drop-down menu.

Speed: communication speed, can be selected from 1200 to 38400 baud with a drop down menu.

RS485: RTS management.

Echo: management of the Echo generated by some converter types.

Modem: enable the connection with modem.

Modem Type: selection of the modem type used for connection; STANDARD=analogic Hayes compatible, TELIT=GSM Telit.

Number: phone number of the modem.

Configuration: initialization string for the calling modem (max 99chr).

Modem continuous acquisition: optimizes the GSM communication with terminals KP-02 and KP-06.

Ethernet: enable LAN connection.

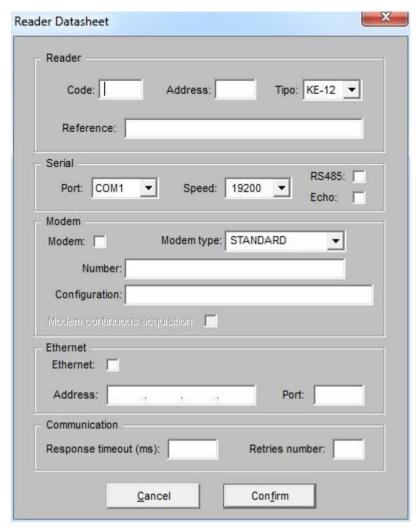
Address: IP address of the Ethernet board.

Port: TCP port of the Ethernet board.

Response timeout: allows to increase the standard wait for the terminal response.

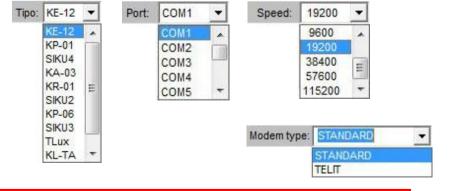
Retries number: allows to increase the standard number of retries for the upload of

the commands to the terminal.



Cancel: discards the modifies.

Confirm: confirm the settings.





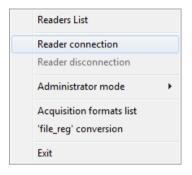
WARNING

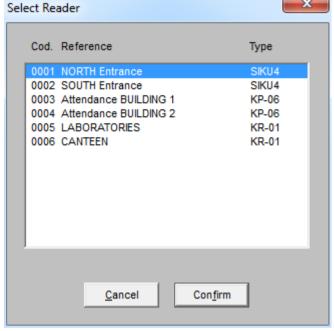
The RS485 flag is not working with Windows NT or later operative systems; if enabled, it closes the Konnect program. For the solution of this issue, please refer to the Appendix.



Reader Connection

Selecting *Reader connection* from the *Terminals* menu, it is possible to connect with one of the terminals of the list.





Cancel: closes the window.

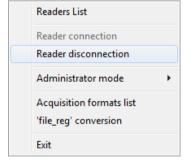
Confirm: connects to the selected terminal.

If the communication channel is opened properly, the code and description of the terminal will be reported on the title bar of Konnect.



Reader Disconnection

Selecting *Reader disconnection* from the *Terminals* menu, it is possible to close the current connection with the terminal.





NOTE

There is no reference to which terminal to disconnect from, because Konnect only connects with one terminal at the time.



Acquisition formats list

Readers List

Reader connection

Reader disconnection

Administrator mode

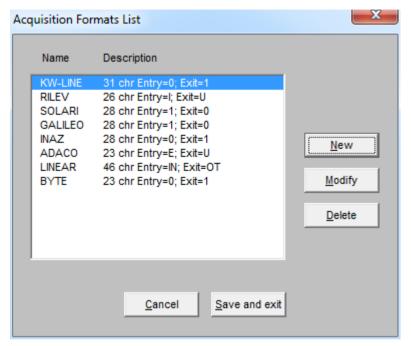
Acquisition formats list

'file_reg' conversion

Exit

The file *Kformat.dat* includes the download formats of Kw-line, Rilev, Solari, Galileo, Inaz, Adaco, Linear, Byte: if you don't have it, ask to the technical assistance.

Selecting Acquisition Formats List form the Terminals menu, it is possible to set the acquisition formats that Konnect uses to save the transactions acquired from the terminals.



New: adds a format to the list.

Modify: modify format of the list.

Delete: deletes a format from the list.

Cancel: closes the window and discards the changes.

Save and exit: closes the window and saves the settings.

New

Name: name of the format.

Description: description note of the format.

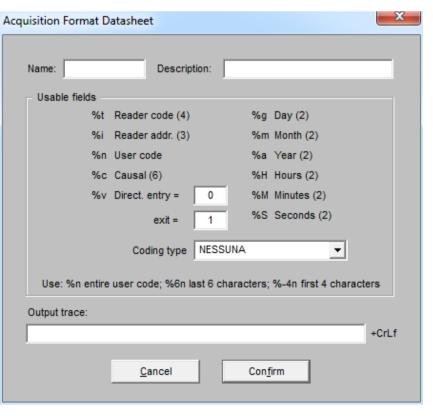
Direction Entry/Exit: set up to three alphanumerical characters to assign as a transactions direction.

Output trace: forms the custom layout for the transactions.

Cancel: discards all the modifies.

Confirm: confirms all the modifies.

The *New* button opens a window for editing the download format, specifying the data content and the data layout:





'file_reg' conversion

Readers List

Reader connection

Reader disconnection

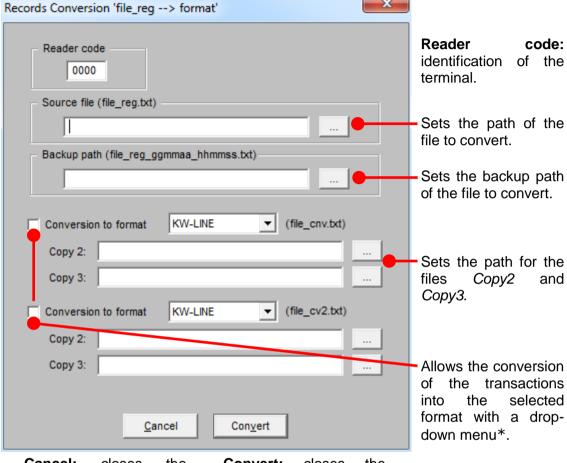
Administrator mode

Acquisition formats list

'file_reg' conversion

Exit

Selecting 'file_reg' conversion from the Terminals menu, it is possible to execute the conversion to the acquisition formats defined (see paragraph Acquisition Formats List) of the transactions file acquired on USBpen.



Cancel: closes the window and discards the changes.

Convert: closes the window and converts the records.

^{*} The available formats in the drop-down menu are the same defined in the function *Acquisition format list* and saved in the file *Kformat.dat*. It is possible to ask to the technical assistance for the download formats: Kw-line, Rilev, Solari, Galileo, Inaz, Adaco, Linear, Byte.



3. Functions

When the terminal is connected, it is possible to use all the commands of the *Functions* menu: the meaning and the use of every command will be explained on next pages.

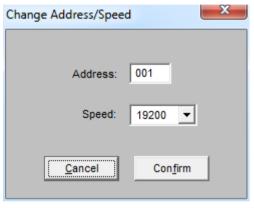
Change address/speed

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read recoverable trans. number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2

Download piggy-back

Send reset + default

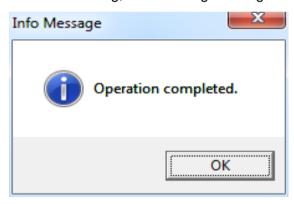
Selecting *Change address / speed* from the *Functions* menu, it is possible to modify the node number and the transmission speed of the on-line terminal.



Cancel: closes the window.

Confirm: sends the configuration command.

When confirming, the following message will display:



Pressing OK, the configuration is applied to the terminal; it is then possible to reconnect the terminal with the new parameters.





WARNING

The modify of the communication speed implies the need of manual reprogramming the Ethernet, Wi-Fi or modem boards connected with the terminal.



Transactions acquisition

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command

Read Reader State

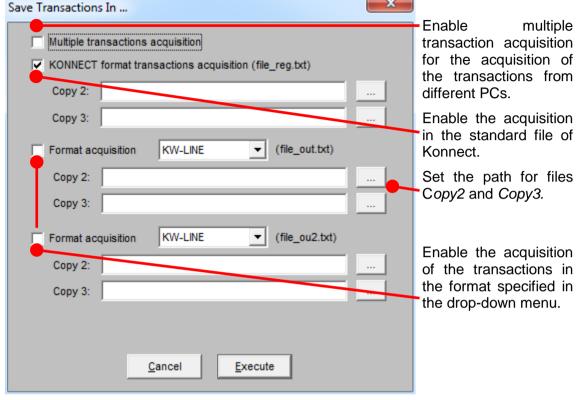
Send bitmap logo

Auto-configure modem

Configure serial readers

Download Firmware Download Reader1 Download Reader2

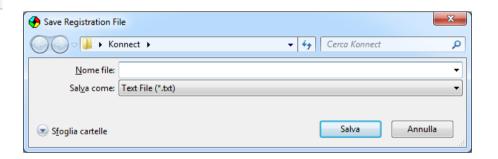
Download piggy-back Send reset + default Selecting *Transactions acquisition* from the functions menu, it is possible to set the format/path of the transactions file(s).



Cancel: stops the acquisition and closes the window.

Execute: confirms the settings and starts the acquisition.

The button shows the file browser:



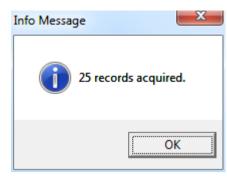
Save: confirm name and path for the transactions file.

Cancel: discard the modifies and close the window.

The acquisition operation is shown with the scalar counter of the following window that shows the code of the connected terminal; when the operation is completed, an info message shows the total number of acquired transactions.





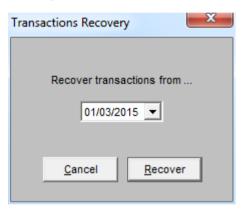


Transactions recovery

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back

Send reset + default

Selecting *Transactions Recovery* from the *Functions* menu, a window shows the starting date for the recovery of the transactions that are already acquired.

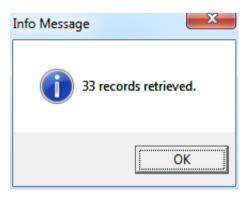


Cancel: discard the modifies and close the window.

Recover: confirm the starting date for the recovery of the transactions.

The *Recover* button allows to select the saving path of the file (see previous paragraph). The progress of the operation and the code of the connected terminal are shown in the following image; when the operation is completed, an info message shows the total number of recovered transactions.







Transactions

Selecting Transactions Cancellation from the Function menu, it is possible to permanently remove all the transactions in the buffer of the terminal. cancellation Erase Records

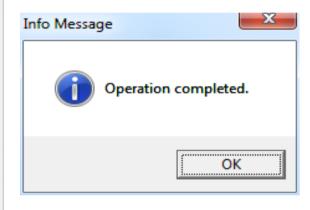


Send reset + default

WARNING! All stored records will be lost. Continue? No

Yes: erase all the No: cancel the operation transactions buffer.

The end of the operation is confirmed with the following message:





WARNING!

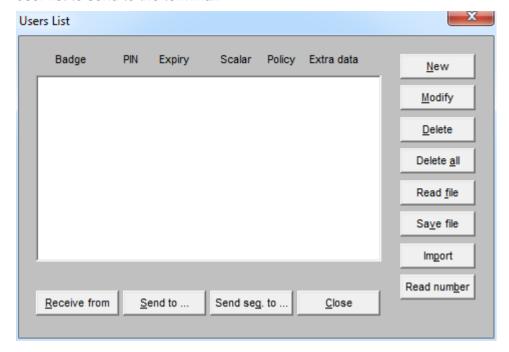
The transactions cancellation is an irreversible operation that implies the impossibility to recover the data from the memory of the terminal.



Users List

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans. number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Users List* from the *Functions* menu, allows to show the window of the user list to send to the terminal.



New: creates a new user.

Modify: modifies a user.

Delete: deletes the selected

user.

Delete all: deletes all the users from the list.

Read File: import the user list

from file.

Save File: save the user list to a file.

Import: imports the user list from a file.

Read number: requests to the terminal the number of enabled users.

Receive from: imports the list from the terminal.

Send to: sends the user list to the terminal.

Send seq. to: sends the user list to the

terminal in sequential mode.

The user data includes:

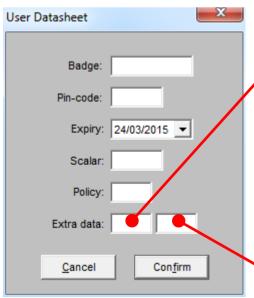
Badge: code 10 characters

Pin-code: 4 digits **Expiry:** dd/mm/yyyy

Scalar: number of transactions 4

digits

Policy: 3 digits



* It is possible to add the options.

** Terminals KP-06 and KA-03.

*** Terminals with motorized reader.

Byte 1 Extra Data*: admitted values

128 = relay 4 activation (KP-02, SIKU4)

64 = relay 3 activation (KP-02, SIKU4)

32 = relay 2 activation

16 = relay 1 activation

8 = enable manual input of the badge code**

2 = withdrawal of the expired cards***

Byte 2 Extra Data*: admitted values:

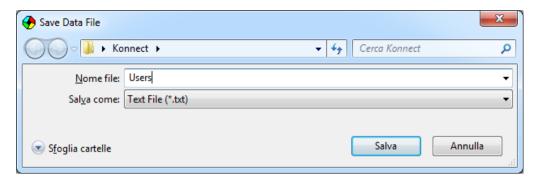
4 = deny remote transactions (KA-03)

2 = deny exit transactions (KA-03)

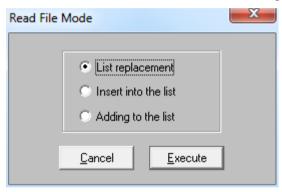
1 = deny entry transactions (KA-03)



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The button *Read file* includes the following options:

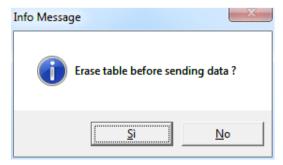


List replacement: allows to replace the list with the records of the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

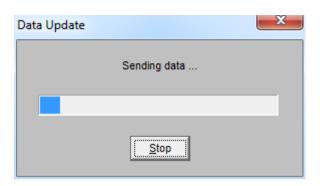
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the user list; choosing No, the list is sent to the terminal adding the new users to the table and modifying the existing users.





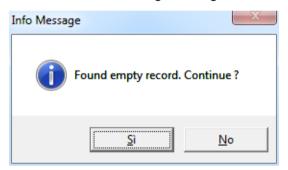
This window shows the progress of the read/write operations of the memory.



NOTE

Erasing the table before the upload of the user list allows the compacting of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, if the following message is shown:



Pressing Yes, Konnec† reads all the rest of the memory used for the table; pressing No, the operation is canceled.



Access policies

Selecting Access Policies from the Functions menu, it is possible to edit the time policies for access.



Policy:

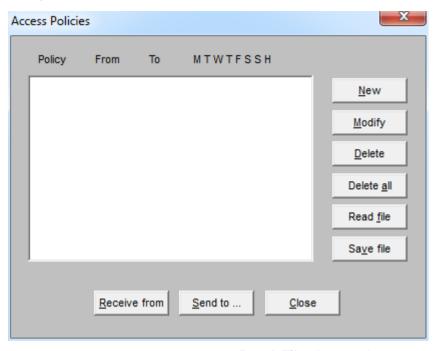
identification code

From/To: time slot.

Active: days of the week when the time

of the policy.

slot is active



New: creates a new access policy.

Modify: modify an existing access policy.

Delete: deletes the selected access policy.

Delete all: deletes all the access policies from the list.

Read File: import the access policies form a file.

Save File: save the access policies to a file.

Receive from: import the access policies from the terminal.

Send to: sends the access policies to the terminal.

An access policy is a set of time slots that specify when the user is enabled to access; every user can be assigned to only one time policy.

The following image shows the window for the settings of the time slots of a policy.

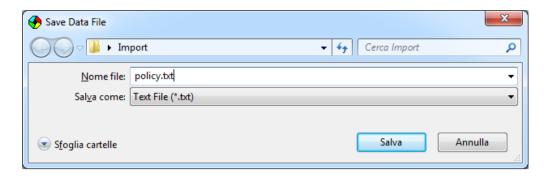


This example shows a time slot of policy 001 that enables the access from 08:00 to 18:00, from Monday to Friday.

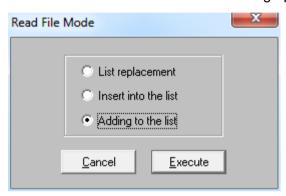
Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.

oose the path and the name of the me.





The button Read file shows the following options:

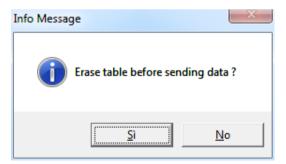


List replacement: replaces the current list with the records on the file.

Insert into the list: inserts the records from a file; the new records are listed in the positions preceding the selected record.

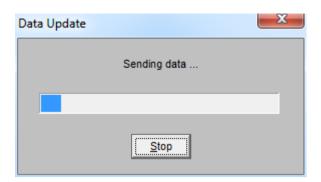
Adding to the list: inserts the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the policy list; choosing No, the list is sent to the terminal adding the new policies to the table and modifying the existing policies.





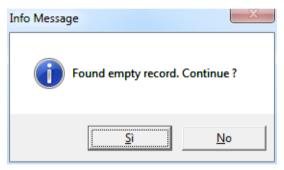
This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the access policies allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, the following message may be displayed.



Pressing Yes, Konnect reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



User messages

Selecting *User Messages* from the *Functions* menu, allows the management of the personal messages to send to the terminal.





New: creates a new personal message.

Modify: modifies personal message.

Delete: deletes the selected message.

Delete all: delete all the personal messages.

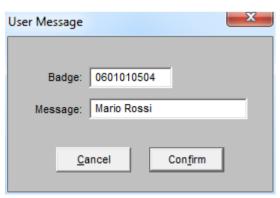
Read file: import the personal messages from a file.

Save File: save the personal messages to a file.

Receive from: import the personal messages from the terminal.

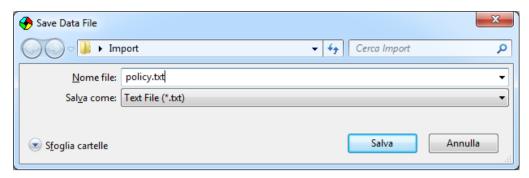
Send to: send the personal messages to the terminal.

The next image shows the window for editing a message: insert the serial number of the badge that will receive the text of the message (max. 16 characters).

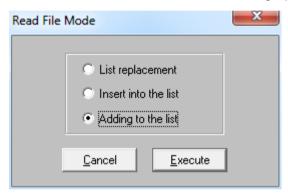




Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The button *Read file* shows the following options:

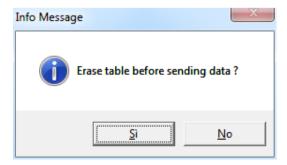


List replacement: allows to replace the current list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

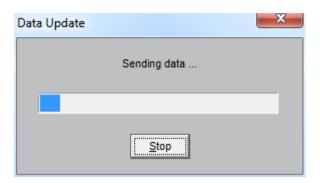
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the personal messages; choosing No, the list is sent to the terminal adding the new messages to the table and modifying the existing ones.





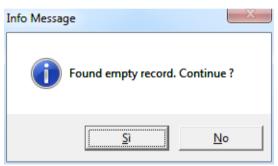
This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the personal messages allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, the following message may be displayed.



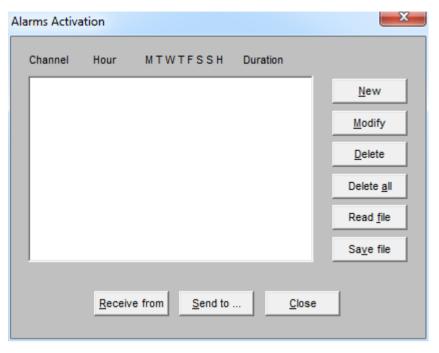
Pressing Yes, Konnect reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



Alarms activation

Selecting *Alarms activation* from the *Functions* menu, allows the management of the alarms activation.





New: creates a new activation time for the alarms.

Modify: modify an existing activation.

Delete: deletes the selected activation.

Delete all: delete all the activations.

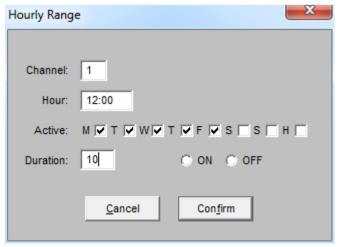
Read File: imports the activations from a file.

Save File: save the activations on a file.

Receive from: imports the activations from the terminal.

Send to: send the activations to the terminal.

The following image shows the window for the configuration of the alarms activation:



Channel: sets the relay for the activation of the alarm.

Hour: hour for the activation of the relay.

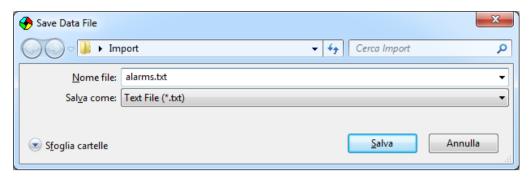
Active: weekly validity of the activation.

Duration: activation in seconds.

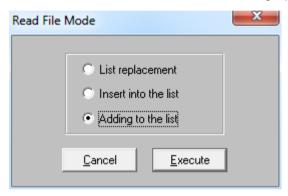
On/Off: used if the activation of the relay is needed for an indefinite time: a time for activation (On) and a time for deactivation (Off) should be created.



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The button *Read file* shows the following options:

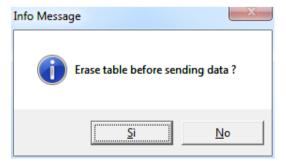


List replacement: allows to replace the shown list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

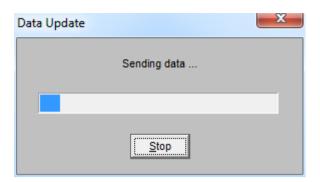
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the alarms activations; choosing *No*, the list is sent to the terminal adding the new alarms to the table and modifying the existing ones.





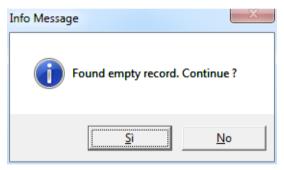
This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the alarm activations allows the compaction of data and the optimization of the memory of the terminal.

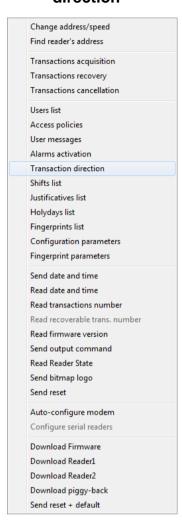
At the end of the reading operations of the table from the memory of the terminal, if the following message is shown:



Pressing Yes, Konnec† reads all the rest of the memory used for the table; pressing No, the operation is cancelled.



Transaction direction



Selecting *Transaction Direction* from the *Function* menu, the window for the management of the exit times will be shown. This function sets the terminal for the registration of exit transaction only in the specified time slots (unless otherwise manually specified by the user).



New: creates a new exit time.

Modify: modify an existing exit time.

Delete: delete the selected exit time.

Delete all: deletes all the exit times.

Read File: imports the exit times form a file.

Save File: save the exit times on a file.

Receive from: import the exit times from a file.

Send to: send the exit hours to the terminal.

The following window sets the exit time slot.

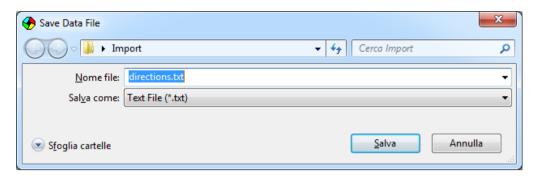


From/to: validity time slot

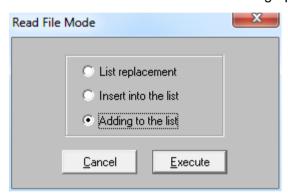
Active: weekly validity.



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The button Read file shows the following options:

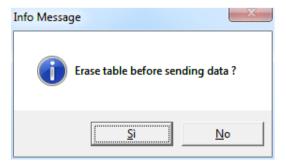


List replacement: allows to replace the current list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

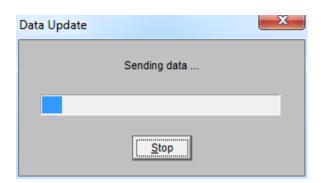
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the Transaction directions; choosing No, the list is sent to the terminal adding the new directions to the table and modifying the existing ones.





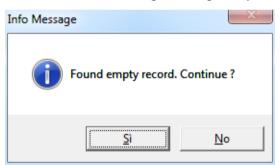
This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the transaction directions allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, if the following message may be displayed:



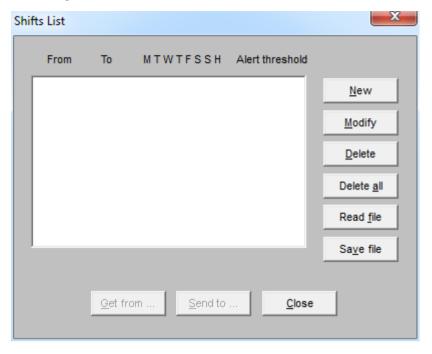
Pressing Yes, Konnec† reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



Shifts list

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1

Selecting Shift list from the Function menu allows to set the shifts.



New: creates a new shift.

Modify: modify an existing

shift.

Delete: delete the selected

shift.

Delete all: delete all the

shifts.

Read file: import the shifts

from a file.

Save File: save the shifts

to a file.

Receive from: import the shifts from the terminal.

Send to: send the shifts to

the terminal.

The definition of the shifts allows the terminal KP-06 (firmware version 1.28 or later) with modem GSM/GPRS to send the start/stop alert messages according to a minimum threshold of presents within the specific time slot.

The following image shows the window for the editing of a single shift.

On this example, the shift is set from 06:00 to 14:00, from Monday to Friday. At least 20 employees should be present.

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From/To: time slot of the

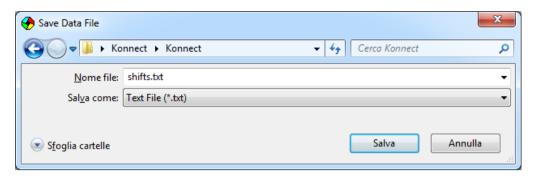
Active: weekly validity of the time slot of the shift.

Alert threshold: minimum number of presents during

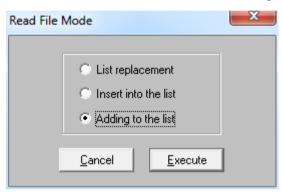
the shift.



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The Read file button shows the following options:

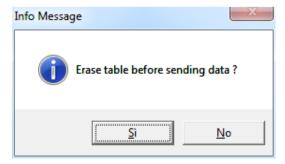


List replacement: allows to replace the current list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

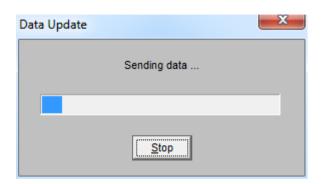
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the shifts; choosing No, the list is sent to the terminal adding the new shifts to the table and modifying the existing ones.





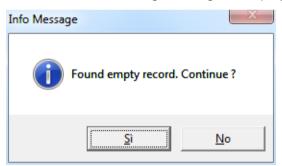
This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the shifts allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, if the following message is displayed:



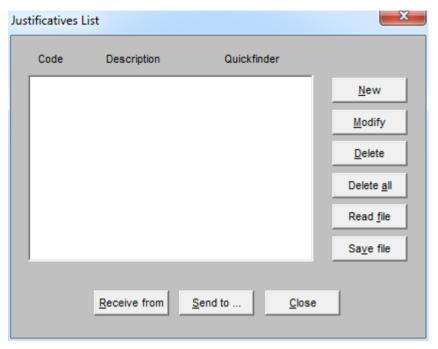
Pressing Yes, Konnect reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



Justificative List

Selecting *Justificative List* from the *Functions* menu, edits the list of the justificative to send to the terminal.





New: add a new justificative to the list

Modify: modify an existing justificative already present in the list.

Delete: deletes the selected justificative from the list.

Delete all: deletes all the justificative from the list.

Read File: import the justificative list from a file.

Save File: save the justificative list on a file.

Receive from: import the justificative list from the connected terminal.

Send to: send the justificative list to the connected terminal.

The following window allows to create a new justificative:



Code: justificative.

Description: description

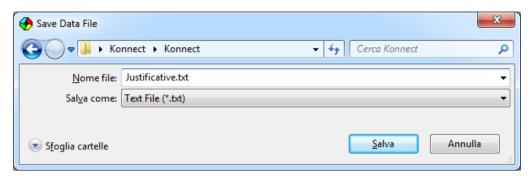
of the justificative.

Quick finder: selection with drop-down menu of the function key to assign to the justificative.

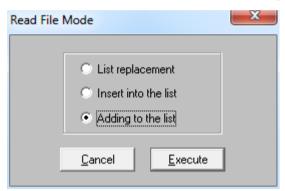




Every read/write operation (read/save) opens the file browser to choose the path and the name of the file.



The button *Read file* includes the following options:

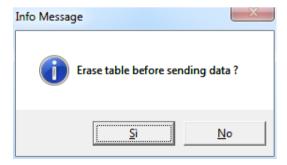


List replacement: allows to replace the current list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

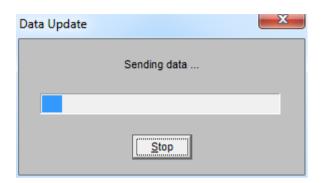
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the justifications; choosing No, the list is sent to the terminal adding the new justifications to the table and modifying the existing ones.





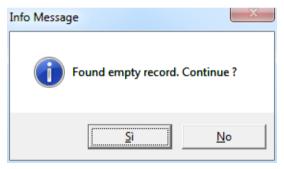
This window shows the progress of the read/write operations of the memory.



NOTE

Erasing the table before the upload of the justifications allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, if the following message is displayed:



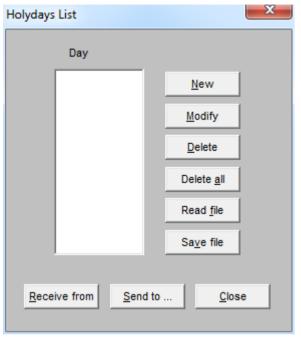
Pressing Yes, Konnec† reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



Holidays List

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting Holiday List from the Functions menu opens the following window for the management of the Holidays.



New: create a new Holiday.

Modify: modify an existing Holiday.

Delete: deletes the

selected Holiday.

deletes Delete All: all the Holidays of the list.

Close: closes the window.

Read File: import the Holidays list from a file.

Save File: save the Holidays list

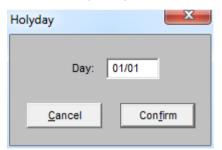
on a file. Receive

from: import the Holidays list from the terminal.

Send to: send the Holidays list to

the terminal.

The following image shows the window for the input of a new Holiday:



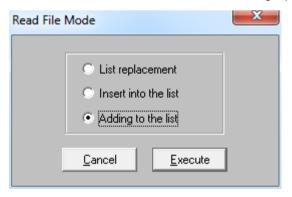
Cancel: discard all the

modifies.

Confirm: save the

settings.

The button Read file shows the following options:



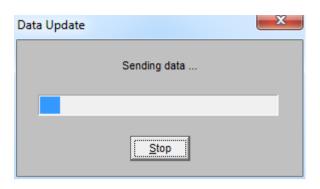
List replacement: allows to replace the current list with the records on the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press Send to... to update the terminal.



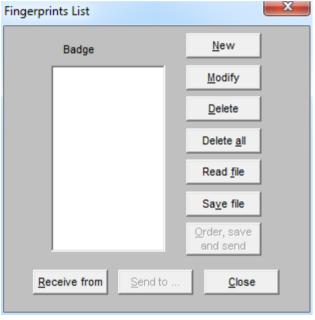


This window shows the progress of the read/write operations of the memory.

Fingerprints List

Selecting *Fingerprint list*, it is possible to associate fingerprints to a card. This function is specific for transferring the fingerprint from the terminal where they are recorded to the other terminals of the plant.





The following image shows the window for the association card/fingerprint:

New: define a new association.

Modify: modify an existing association.

Delete: cancel the selected association.

Delete all: cancel all the associations.

Close: closes the window.

Read File: import the list of the associations from a file.

Save File: save the list of the associations on a file*.

Order, save and send: order the fingerprint list by code, saves the new list on a file and updates the terminal.

Receive from: import the association list from the terminal.

Send to: send the association list to the terminal.



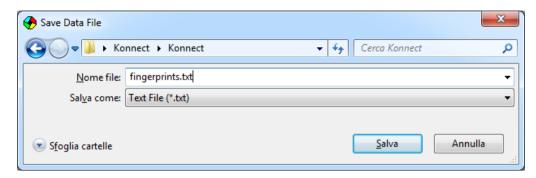
Capture fingerprint: see chapter *Reading and recording fingerprints with KL-TA1356MFFP* of this manual.

Cancel: discard the settings. **Confirm:** save the settings.

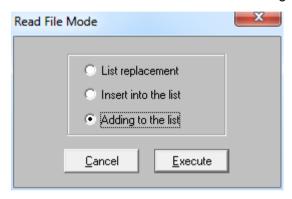
* The file contains the number of the card and the encrypted template (AES256) of the fingerprint.



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.



The button Read file includes the following options:

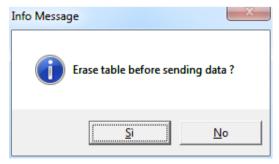


List replacement: allows to replace the current list with the records of the file.

Insert into the list: allows to insert the records from a file; the new records are listed in the positions preceding the selected record.

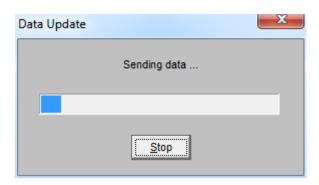
Adding to the list: allows to insert the records from the file starting from the end of the list.

When the operation is complete, press *Send to...* to update the terminal. Before sending the data, Konnect asks if the table of the terminal should be erased:



Choosing Yes, Konnect deletes from the terminals the data contained in the memory area reserved for the associations; choosing No, the list is sent to the terminal adding the new associations to the table and modifying the existing ones.





This window shows the progress of the read/write operations on the memory.



NOTE

Erasing the table before the upload of the associations allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, the following message is shown:



Pressing Yes, Konnec† reads all the rest of the memory used for the table; pressing *No*, the operation is cancelled.



Configuration Parameters

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers

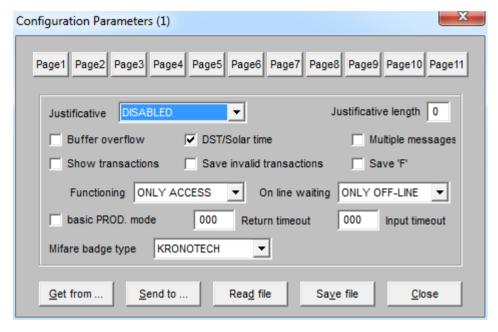
> Download Firmware Download Reader1

Download Reader2

Download piggy-back

Send reset + default

Selecting *Configuration Parameters* from the *Function* menu, it is possible to edit the configuration parameters of the terminal.



Get from: import the configuration parameters from the terminal.

Send to: send the configuration parameters to the terminal.

Read File: import the configuration parameters from a file.

Save File: save the configuration parameters on a file.

The top of the window includes some buttons that show different pages of the configuration parameters of the connected terminal; for the meaning of every parameter, please refer to the manual of the terminal.



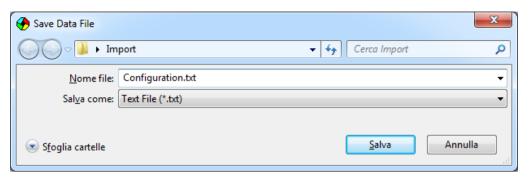


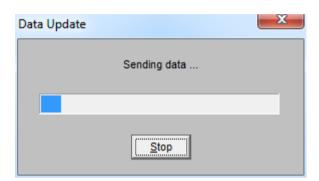
WARNING!

Before editing the parameters, import the current configuration with the button 'Receive from...'



Every read/write operation (read/save) opens the file browser that allows to choose the path and the name of the file.





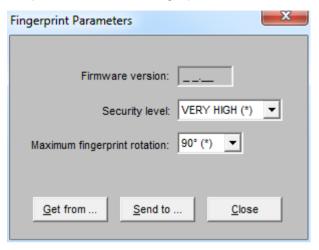
This window shows the progress of the read/write operations on the memory.



Fingerprint Parameters

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Fingerprint Parameters* from the Functions menu, it is possible to edit the parameters of the fingerprint writer.



Receive from: import the configuration parameters from the reader.

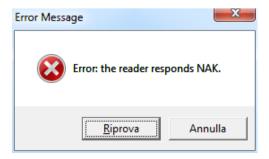
Send to: send the configuration parameters to the fingerprint reader.



WARNING

Before modifying the parameters, import the configuration of the fingerprint reader with the button 'Receive from ...'

When the fingerprint reader of the terminal is not active, when receiving the parameters, the following message will be displayed:





When the parameters are downloaded, the firmware version of the fingerprint reader and the parameters will be displayed:

Selecting Send date and time from the Functions menu, the date/time of the



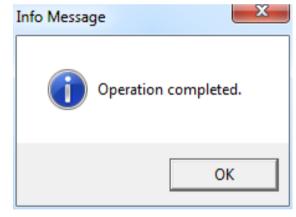
Security level: sets the security level of the fingerprint reader; the bigger is the value, the bigger is the number of dots that the reader compares to recognize the fingerprints.

Maximum fingerprint rotation: sets the maximum rotation angle for the correct recognition of the fingerprint.

Send date and

connected terminal is synchronized with the one of the PC. time If the operation is successfully completed, the following message will be displayed.





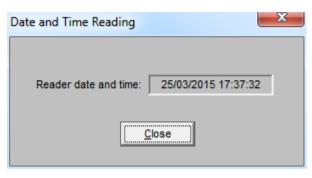


Read date and time

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read recoverable trans. number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back

Send reset + default

Selecting *Read Date and Time* from the *Functions* menu, the date/time of the connected terminal is displayed in real time.





Read transactions number

Selecting *Read transactions number*, an info message displays the number of stored transactions that have not been acquired yet.

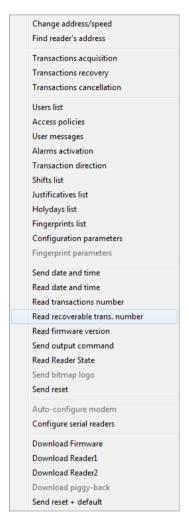






Read recoverable transactions number

Selecting *Read recoverable transactions number* from the *Functions* menu, the number of transactions on the terminal buffer that can be acquired again is displayed. This function can be used only with the terminal SIKU4 (firmware version 2.16 or later).

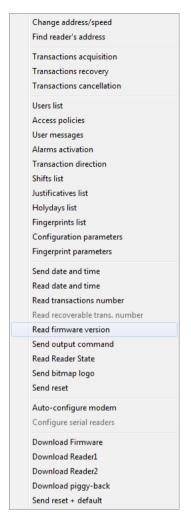


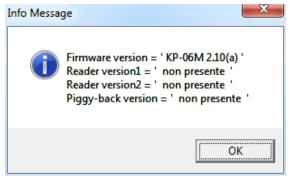




Read firmware version

Selecting *Read firmware version* from the *Functions* menu, a message with the release installed on the connected terminal will display.



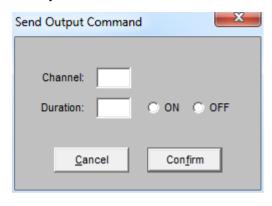




Send output command

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans. number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Send output command* from the *Functions* menu, it is possible to send a relay activation to the terminal.

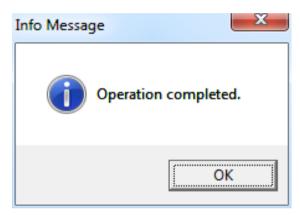


Channel: specifies the relay (1÷4 according to the hardware configuration of the connected terminal).

Duration: activation seconds (1÷99).

On/Off: sets the activation or the deactivation of the relay for an undefined time: ON = activation, OFF = deactivation.

When the command is correctly sent to the terminal, the following message will be displayed.

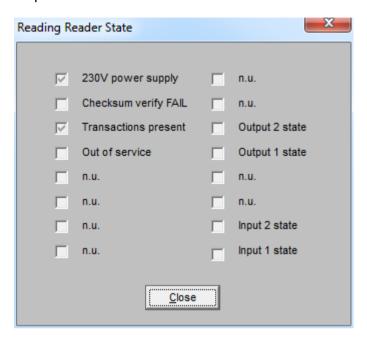




Read Reader state

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Read Reader State* from the *Functions* menu, it is possible to display in real time the state of the power supply, correct operation, digital input and output etc. of the terminal.





Send bitmap logo

Change address/speed

Find reader's address

Transactions acquisition

Transactions recovery
Transactions cancellation

Access policies

User messages

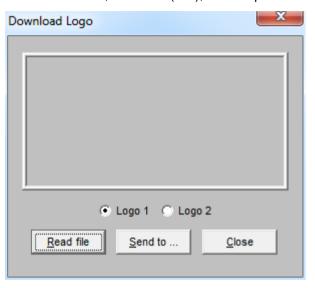
Justificatives list

Shifts list

Transaction direction

Selecting Send bitmap logo from the Functions menu it is possible to send up to two banners to the terminals with graphic display (KP-02.G and KP-06). The files should be in the following format:

- KP-02.G: BMP, 2 colours (b/w), 240x128 pixel
- KP-06.G: BMP, 2 colours (b/w), 128x64 pixel

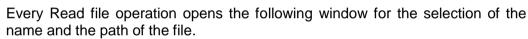


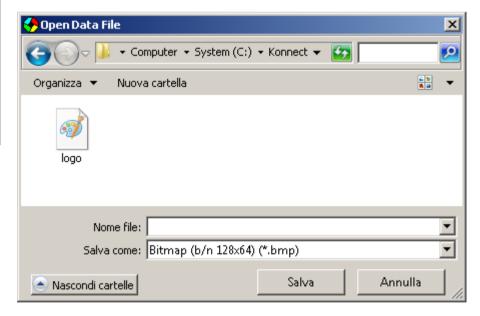
Logo 1: upload the banner for the memory area 1 of the terminal.

Logo 2: upload the banner for the memory area 2 of the terminal.

Read file: allows to select the banner to send to the terminal.

Send to: send the banner to the terminal.





If the selected BMP file has not the correct format, the following message will be displayed:



Send reset + default

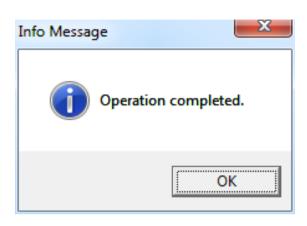


Send reset

Change address/speed Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download piggy-back Send reset + default

Selecting *Send Reset* from the *Functions* menu, a reset is sent to the terminal; this function does not affect the data contained in the terminal.

When the command is correctly sent to the terminal, the following message will be displayed.





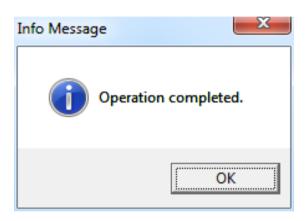
Auto-configure modem

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Auto-configure modem* from the *Functions* menu, the remote configuration command of the modem is sent to the terminal according with the configuration parameters set. This command works only with the following terminals:

- KP-06 firmware version 1.19 or later
- KP-02 firmware version 4.13 or later

When the command is correctly sent to the terminal, the following message will be displayed.

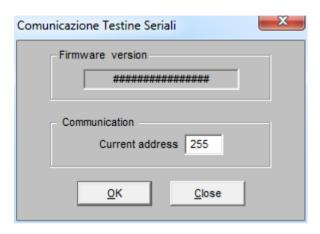




Configure serial readers

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Configure serial readers* from the Functions menu, the windows for the configuration of UHF KL-LR5.s and KL-LR6.s readers will be displayed. This function is available only for the terminal SIKU4 (firmware version 2.40 or later).





WARNING

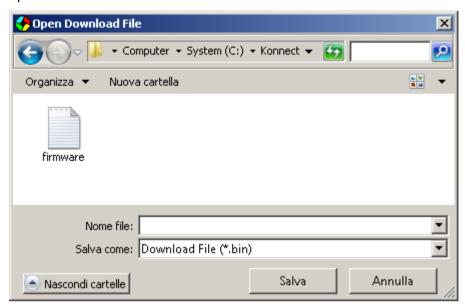
Before proceeding with the modify, import the parameters of the fingerprint reader with the command 'Receive from ...'



Download firmware

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans, number Read firmware version Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Download firmware* from the *Functions* menu, it is possible to update the firmware of the terminal; the following windows allows to select the file to upload to the terminal:



If the selected file is not compatible with the connected terminal, the upload operation is interrupted and Konnect notifies the error with the following message.



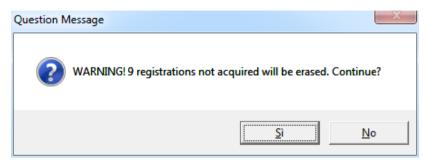


IMPORTANT NOTE

Contact the tech support (a.tecnica@kronotech.it) or visit the reserved area of Kronotech website (http://www.kronotech.it/) to receive the latest firmware version.



Before starting the update, Konnect informs the user of possible transaction that have not been downloaded with the following message.

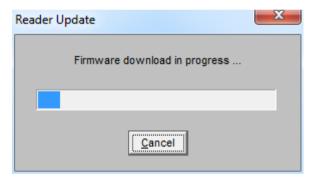




WARNING

The firmware update of the terminals Clock and SIKU4 causes the erase of the transactions in memory; execute a transactions acquisition before updating the firmware.

The following window informs the user of the progress of the firmware download on the terminal.



At the end of the firmware update, the terminal hangs for about 40 seconds. During this period, the terminal verifies the integrity of the received firmware and, if this operation is successful, the firmware is transferred to the dedicated FLASH memory.



WARNING

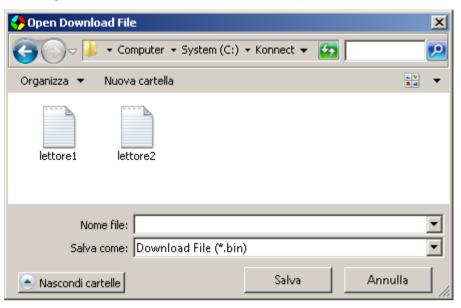
The reset or the turn off of the terminal during this step causes the total loss of the firmware and the necessity of re-programming the microcontroller by the technical support. Therefore, wait for the terminal to restore autonomously its normal operation.



Download Reader 1 and 2

Selecting *Download Reader1 and Reader2* from the *Function* menu, it is possible to update the firmware of the MIFARE readers of the terminal. The following window allows to select the files to upload to the terminal:







IMPORTANT NOTE

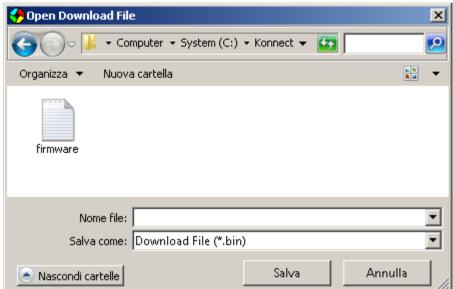
Contact the technical support (<u>a.tecnica@kronotech.it</u>) to request the updated version of the firmware.



Download piggyback

Selecting *Download piggy-back* from the *Function* menu, it is possible to update the firmware of the boards K-NET06N or K-POE06N installed on the terminal.







IMPORTANT NOTE

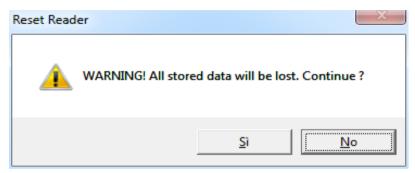
Contact the technical support (<u>a.tecnica@kronotech.it</u>) to request the updated version of the firmware.



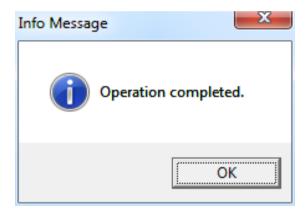
Send reset + default

Change address/speed Find reader's address Transactions acquisition Transactions recovery Transactions cancellation Users list Access policies User messages Alarms activation Transaction direction Shifts list Justificatives list Holydays list Fingerprints list Configuration parameters Fingerprint parameters Send date and time Read date and time Read transactions number Read recoverable trans. number Send output command Read Reader State Send bitmap logo Send reset Auto-configure modem Configure serial readers Download Firmware Download Reader1 Download Reader2 Download piggy-back Send reset + default

Selecting *Send reset* + *default* from the *Functions* menu, the terminal is recovered with default values, including the address (001) and the communication speed (19200 bps); this operation causes the lost of all the data contained in the terminal (transactions, users list, messages etc.): for this reason, before sending the command to the terminal, Konnect shows the following message:



When the command is correctly sent to the terminal, the following message will be displayed.





4. Batch

The Batch mode of Konnect allows to schedule and automate some functions of the program, which can then work without an operator; the result of the operations is reported on a log file. In the interactive mode, the operator can manually select the files to send to the terminal, instead in the batch mode, Konnect uses the following files by default:

Utenti.txt → Users list

Politica.txt → Policies

Sirene.txt → Alarms

Messaggi.txt → User messages

Verso.txt → Exit direction time

Giustifi.txt → Justifications list

Parametr.txt → Terminal configuration

Firmware.bin → Terminal application

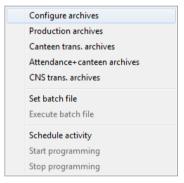
Program.txt → Production program

Tabelle.txt → Production tables list

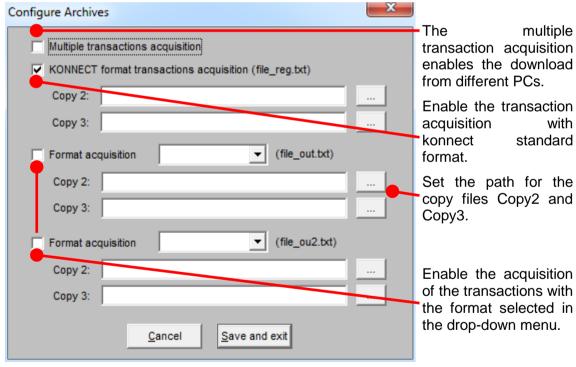
Impronte.txt → Fingerprints list

File_log.txt → Log file

Configure archives



Selecting Configure Archives from the Batch menu, allows to set the format and path of the transactions files.



Cancel: discard the modifies and close the window.

Save and exit: confirm the settings and close the window.

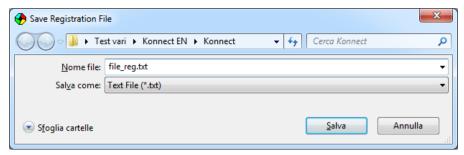
multiple

with

standard



The button shows the following window:

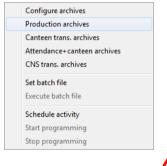


Save: confirm the settings and close the window.

Delete: discards the settings and close the window.

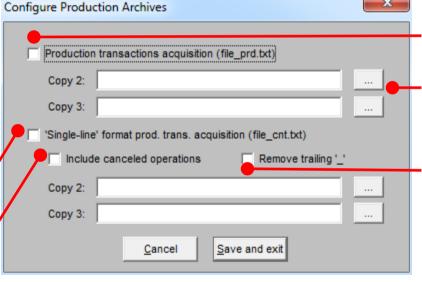
Production archives

Selecting *Production Archives* from the *Batch* menu, allows to set the format and path of the production transactions.



Enable the acquisition with "single line" format.

Enable the writing of the canceled operations in the production file



Cancel: discards the changes and closes the window.

Save and exit: confirm the settings and closes the window.

Removes the underscores "_" from the production file.

Set the path for files

Copy2 and Copy3.

the

the

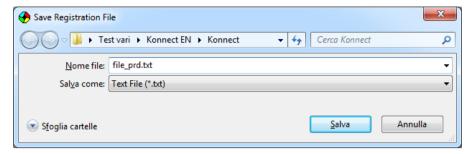
Enable

acquisition

standard file



The button opens the file browser:



Save: confirm the settings and closes the window.

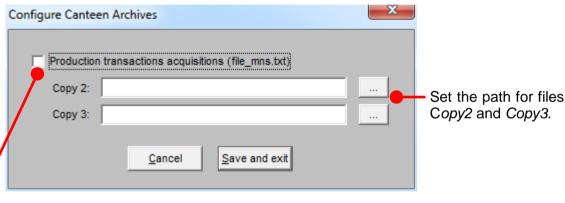
Cancel: discards the settings and closes the window.

Canteen trans. archives

Configure archives
Production archives
Canteen trans. archives
Attendance+ canteen archives
CNS trans. archives
Set batch file
Execute batch file
Schedule activity
Start programming
Stop programming

Enable the acquisition of the transactions on the canteen standard file

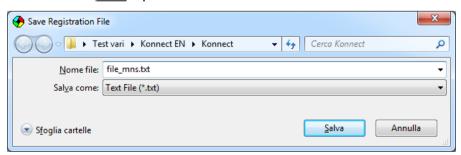
Selecting *Canteen transactions archives* from the *Batch* menu, allows to set the path and format of the transactions for canteen reservation.



Cancel: discards the settings and close the window.

Save and exit: confirm the settings and close the window.

The button opens the file browser:



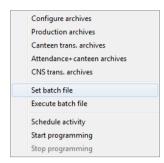
Save: confirm the settings and close the window.

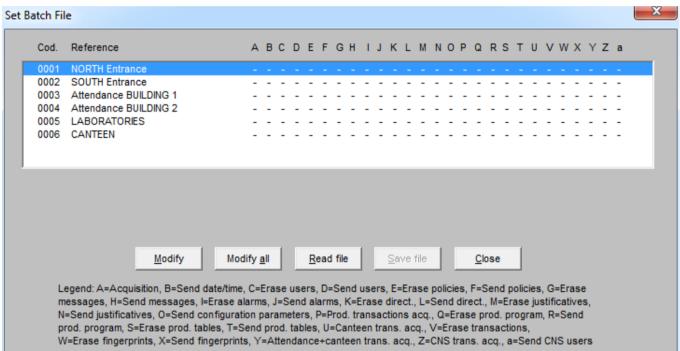
Cancel: discard the settings and close the window.



Set batch file

Selecting Set batch file from the Batch menu, it is possible to set the list of batch operations that Konnect executes on a specific terminal.





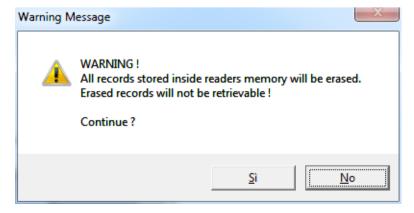
Modify: modify the command list to execute on the selected terminal.

Modify all: modify the list of the commands to execute on all the terminals.

Read File: import the list of the commands to execute from a file with CMD extension.

Save File*: save the list of the commands to execute on a file with CMD extension.

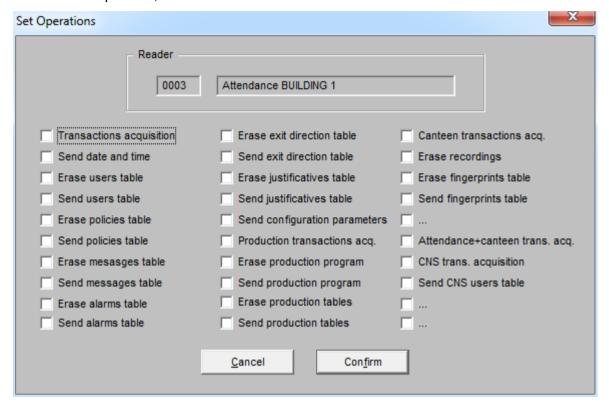
* When the command to erase all the records is saved, the message here on the right is displayed. If the command is listed by mistake, press the NO button to correct the list, otherwise select YES to continue.



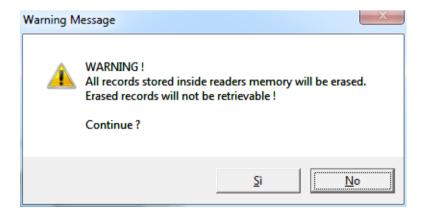


Modify

The button *Modify* shows the following window that allows to create/modify the commands list that the selected terminal will execute autonomously; the commands that can be executed in batch mode are the same listed in the Functions menu, except the modify of the address and speed, the transaction acquisition, date and time read and firmware version read.



If during the creation of the batch file, the command Erase Recordings is selected, the following message will be displayed:

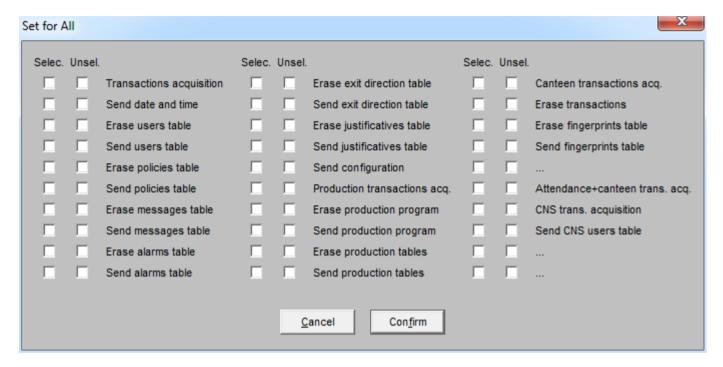


If the command is listed by mistake, press the NO button to correct the list, otherwise select YES to continue.



Modify all

Pressing the button *Modify all* allows to access to the following window that allows to modify the list of the commands on all terminals available.



The **Selec.** Column allows to add the command to the execution list.

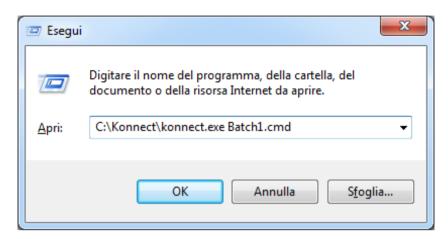
The *Unsel.* column allows to delete the command from the execution list.



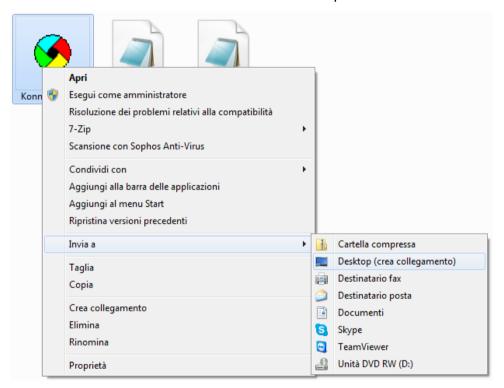
Execution mode of the batch file

The batch file created can be executed in four different modes:

1. From command line, when Konnect is not running, as in the following example:



2. From a shortcut on the Windows desktop.

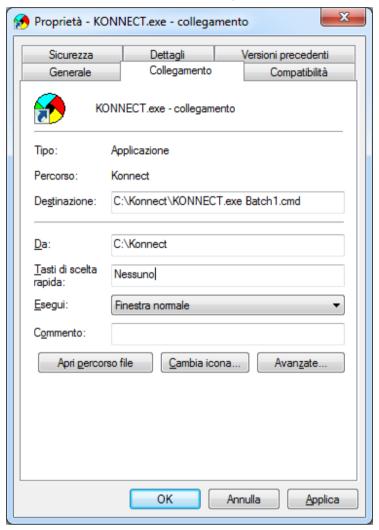


From the folder of Konnect:

- Select the executable file of the program
- Right click
- Select Send to from the menu
- Select Desktop (create shortcut)



Insert the name of the batch file in the *Destination* field (see the following example) and confirm with the OK button. In this way, Konnect can be executed in batch mode with a simple double click of the mouse.



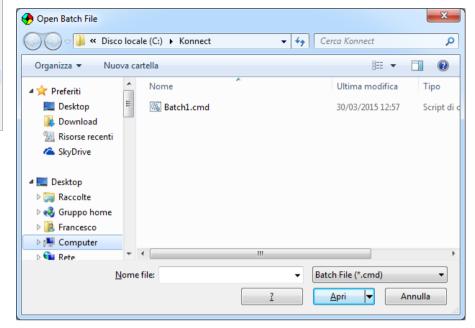
- **3.** From the Konnect menu, as explained in the paragraph "Execute batch file".
- **4.** With a scheduled activity as explained in the paragraph "Schedule activity"



Execute batch file

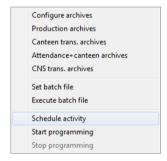
Configure archives
Production archives
Canteen trans. archives
Attendance+ canteen archives
CNS trans. archives
Set batch file
Execute batch file
Schedule activity
Start programming
Stop programming

Selecting *Execute batch file* from the *Batch* menu (see the image on the left), opens a window (see next image) that allows to select the path of the batch file to execute.



Schedule activity

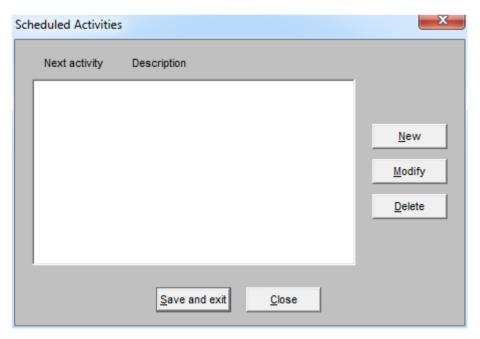
Selecting *Schedule Activity* from the *Batch* menu (see the image on the left), it is possible to set the activities to execute with the Konnect scheduler.



New: create a new activity.

Modify: modify an existing activity.

Delete: delete the selected activity from the list.



Save and exit: confirm the settings and close the window.

Close: discard the settings and close the window.



New

Description:

description on the activity list.

Disable: allows to disable the execution of the activity.

Background: allows to hide the process command window during the execution of the batch.

Minutes: set the minute of activation of the scheduled activity

Hours: set the hour of activation of the scheduled activity.

Days: set the day of activation of the scheduled activity.

Months: set the month of activation of the scheduled activity.

Days of the week: set the days of the week when the scheduled activity will be active. Pressing the *New* button allows to schedule a new activity.

Activity		
		Disable: T
Description:		Disable: ☐ Background: ☐
Hours of activat	ion —	
Minutes:		
Hours:		Allowed syntax: - list (ex: 0,10)
Days:		- interval steps (ex: 0-30/5)
Months:		- wildcard (*)
Days of week:	M T T W T T F S S	
Execution		
Programs to execute:		
	<u>C</u> ancel Con <u>f</u> i	rm

Programs to execute: set the sequential execution of a maximum of three programs at the specified time.

Cancel: discard the settings and close the window.

Confirm: confirm the settings and close the window.

As explained in the Konnect window, it is possible to set the activation times in three different modes:

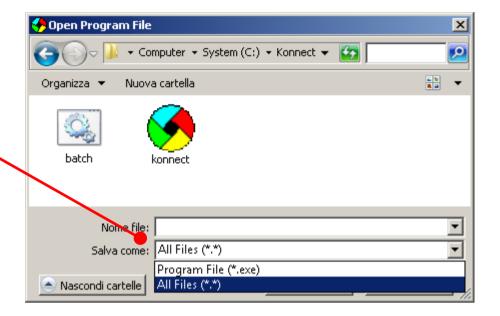
- With a *list*, separating the values with the character "," (comma): setting the minutes with **00,20,40** means that the activity will be executed at minute zero, at minute twenty and at minute fourty.
- With *intervals steps* where the extremes of the interval are separated with the character " " (minus) and the steps with the character " / " (slash): setting the minutes with **00-60/10** means that the activity will be executed for an interval of 60 minutes with 10 minutes steps.
- With a wildcard, character " * " (asterisk), that means "all": setting the minutes to * means that the activity will be executed every minute.



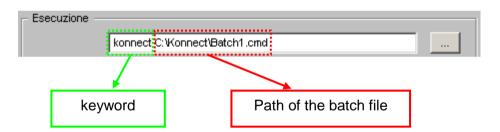


The button *Explore* shows the file browser to set the path of the program to execute.

If a Konnect batch file is selected, it is necessary to set the file types as "All Files" to show the files with CMD extension, as showed in this image.



When the path is specified for the Konnect batch file (*.CMD), for the execution it is necessary to add the word *konnect* to the path (<u>in lowercase</u>), as explained in the following picture.



The possibility to set the path of the batch file at a given time, allows the custom management of every terminal of the plant: to do this, it is suggested to create a folder for each terminal. The files containing the data to send to a single terminal (users, policies, messages etc.) should be in the same folder of the file with CMD extension that is executed.

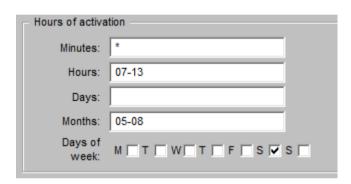


Examples



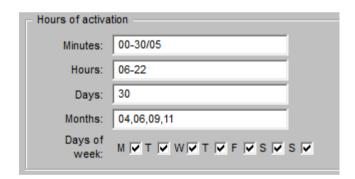
The programmed activity is executed from Monday to Friday, at the following hours:

08:00	10:00	12:00
08:15	10:15	12:15
08:30	10:30	12:30
08:45	10:45	12:45



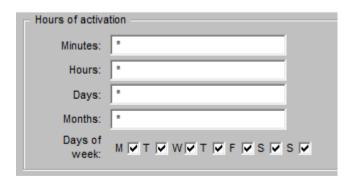
The activity is executed on Saturday, from May to Agoust, at the following hours:

07:00		10:00		13:00
07:01		10:01		13:01
•••	•••	•••	•••	•••
 07:58		 10:58		 13:58



The programmed activity only the 30th of the months April, June, Semptember and November, on the following hours:

06:00		14:00	22:00
06:05		14:05	22:05
	•••		
06:25		14:25	22:25



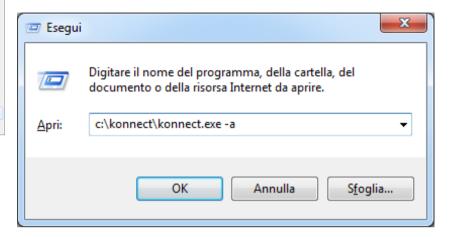
The programmed activity is executed from Monday to Sunday, every minute, every hour, every day, on every month of the year.



Start programming

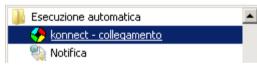
Configure archives
Production archives
Canteen trans. archives
Attendance+canteen archives
CNS trans. archives
Set batch file
Execute batch file
Schedule activity
Start programming
Stop programming

Selecting *Start programming* from the *Batch* menu (see the image on the left), the Konnect scheduler will execute the activities at the chosen times. With the parameter "-a" it is possible to start Konnect in scheduled mode:



Creating a shortcut to Konnect (as showed in the paragraph *Execution modes of the batch file*) and adding the parameter "-a" on the command line (*Destination*) it is possible to start Konnect in scheduled mode at the boot of the computer using the Windows menu *Startup*.







IMPORTANT NOTE

While the scheduler of Konnect is active, it is not possible to connect to the terminals to avoid communication conflicts.

Stop programming

Configure archives
Production archives
Canteen trans. archives
Attendance+ canteen archives
CNS trans. archives
Set batch file
Execute batch file
Schedule activity
Start programming
Stop programming

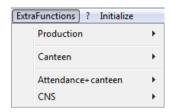
Selecting *Stop programming* from the *Batch* menu (see the image on the left), the scheduler of Konnect is stopped.

When the scheduler is stopped, it will be possible to manually connect to the terminals again.



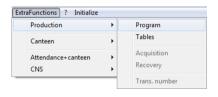
5. Extra Functions

Selecting *ExtraFunctions* from the menu bar, it is possible to access to the menus for the management and the configuration of Production and Canteen; the functions of this menu can be used only with the firmware version "e" of Clock and KP-02.A2 terminals (production) and "d" of the terminals KP-02.G (canteen).

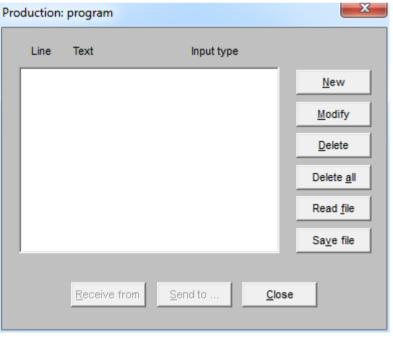


Production

Program



The *Program* item of the *Production* menu allows the management and creation of the production program.



Receive from: imports the production program from the terminal.

Send to: sends the production program to the terminal.

Close: close the window.

New: add a new line to the program.

Modify: modify an existing line.

Delete: delete the selected line from the program.

Delete all: delete all the program lines.

Read File: import an existing program.

Save file: save the program on a file.



Linea di Programma	X
Linea: Testo:	
costante marker 'a capo'	goto diretto linea
operatore lettore	contapezzi 1 contapezzi 2
goto-list codice tabellaabelle	termina input 1 termina input 2 termina input 3 termina input 4 termina ENTER fino a
bar-code cifre min. tastiera cifre max	☐ rele` 1 ☐ rele` 2 ☐ rele` 3 ☐ rele` 4 ☐ buzzer ☐ display ☐ tempo (dec)
Annulla	<u>C</u> onferma

Line: number of the program line.

Text: description of the question that will be displayed by the terminal.

Tables Button: is enabled when a *Goto-List* or *Table* command is used, allows to open the window for the configuration of the tables.

Cancel: window.

closes the

Confirm: inserts the line in the production program.

These are the input types in detail:

Constant: inserts a transaction with a predefined value.

Marker 'word wrap': specify the end of the transaction (single line mode).

Operator: enable to verify (white-list) that the operator can access to the following lines of the production program.

Reader: enable the use of the reader (magnetic/transponder) from the terminal to insert the data.

Goto - list .. table: execute line jumps conditioned by the selected table; this allows to define sub-programs within the production program.

Table: allow the user to select a specific list.

Bar-code: enable the use of a barcode reader (CCD) to insert the data.

Keypad: enables the use of the keypad of the terminal to insert the data.

Digits min-max: minimum and maximum number of digits from the barcode reader or keypad; if the input is from keypad, it is possible to specify only the maximum number of digits.

Direct goto ... line: allows the line jumps within the program.

Counting scales: enable the count of the pulse by the digital input of the terminal (Counting scale $1 \rightarrow$ Digital Input 1 and Counting scale $2 \rightarrow$ Digital Input 2).

End input 1, 2, 3, 4: ends the count of the specific digital input.

End ENTER: the operator can manually end the count.

Up to: ends the count when a defined value is reached.

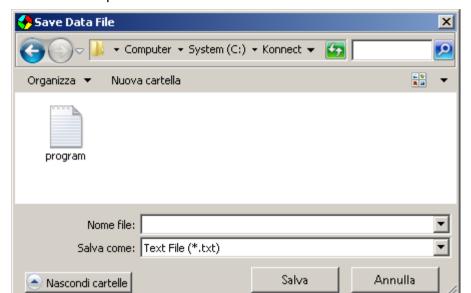
Relay 1, 2, 3, 4 ... time: activate a specific relay for a defined time.

Buzzer ... time: activate the terminal buzzer for a defined time.

Display ... time: displays a message for a specific time.



Every read/write (read/save) operation shows the file browser to choose the name and the path of the interested file.

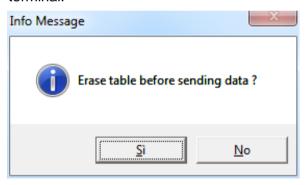


Save: confirm the settings and close the window.

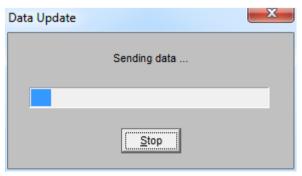
Cancel: discard the settings and close the window.

When all the lines of the production program are ready, they need to be sent to the connected terminal with the button "Send to...".

Before sending the data, Konnect asks if the table should be erased from the terminal:



Pressing the button Yes, Konnect erases all the data in the memory area of the production program from the terminal; pressing *No*, the list is sent to the terminal adding the new lines to the program and modifying the existing lines.



This window shows the progress of the read/write operations on the memory.

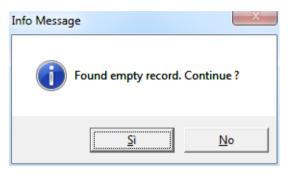




NOTE

Deleting the table before the upload of the data allows the compaction of data and the optimization of the memory of the terminal.

At the end of the reading operations of the table from the memory of the terminal, the following message will be displayed:

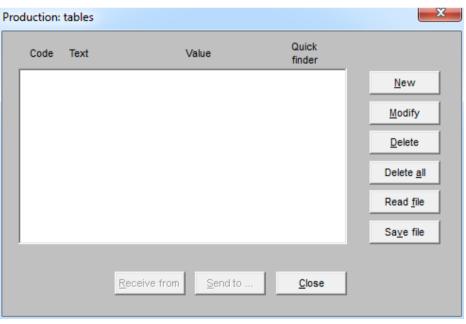


Pressing the button Yes, Konnec† reads all the zones of the memory dedicated to the table; pressing No, the operation is stopped.

Selecting *Tables* from the *Production* menu, the following window will be displayed:

Tables





New: add a new line to the list.

Modify: modify an existing line of the program.

Delete: deletes the selected line from the program.

Delete all: deletes all the program lines.

Read File: import an existing program.

Save File: save the program on a file.

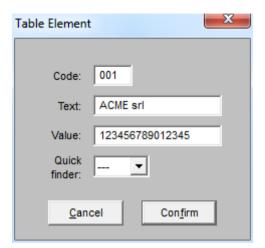
Receive from: import the production program from the terminal.

Send to: send the production program to the terminal.



Cancel: discard the modifies and close the window.

Confirm: confirm the settings and add the entry in the table.



Every entry of the production table that can be added with this window includes:

Code: number of the list that includes the entry.

Text: description of the entry in the list that is displayed by the terminal.

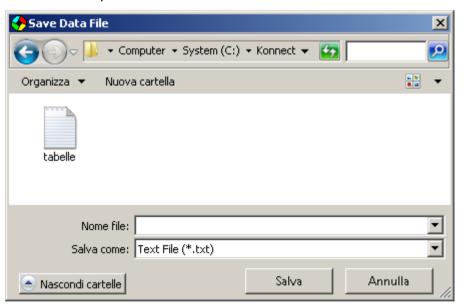
Value: value of the entry in the list; in case of goto-list, it points to the program line where the program shall jump (15 alphanumerical characters).

Quick finder: function button that can be assigned to the entry (F2÷F12, KP-01 and KP-02 only).

Every read/write (read/save) operation shows the file browser to manage the name and the path of the interested file.

Save: confirm the settings and close the window.

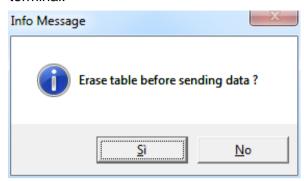
Cancel: discard the settings and close the window.



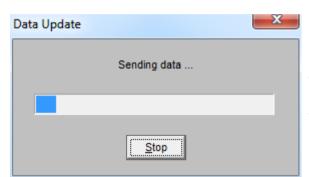
When all the lines of the production program are ready, they need to be sent to the connected terminal with the button "Send to...".



Before sending the data, Konnect asks if the table should be erased from the terminal:



Pressing the button Yes, Konnect erases all the data in the memory area of the production tables from the terminal; pressing *No*, the list is sent to the terminal adding the new lines to the tables and modifying the existing lines.



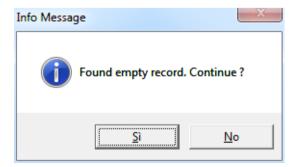
This window shows the progress of the read/write operations on the memory.



NOTE

Deleting the table before the upload of the data allows the compaction of data and the optimization of the memory of the terminal.

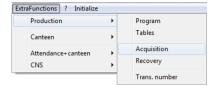
At the end of the reading operations of the table from the memory of the terminal, the following message will be displayed:



Pressing the Yes button, Konnec† reads all the zones of the memory dedicated to the table; pressing No ends the operation.



Acquisition



The transactions generated by an entire program cycle (program start – end) can be acquired in different modes:

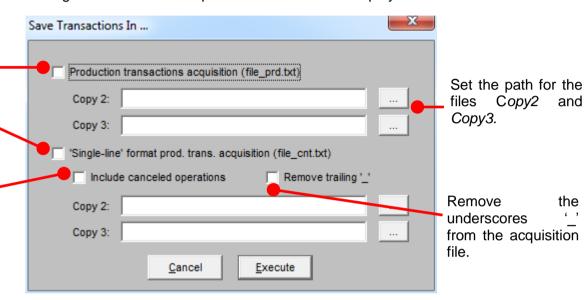
- A detailed mode, that reports a transaction for every program line executed (file_prd.txt).
- A continuous mode, where the entire production cycle/phase (or program) is reported on a single transaction (file cnt.txt) using the 'return' marker.

Selecting *Acquisition* from the *Production* menu, the window for the management of the format/path of the files will be displayed.

Enable the acquisition of the transactions with detailed mode.

Enable the acquisition of the transactions with 'one line' mode.

Include the canceled operations in the acquisition file.



Cancel: close the window and stop the transactions acquisition procedure.

Execute: confirm the settings and proceed with the acquisition.

Every read/write (read/save) operation opens the file browser to set the name and the path of the interested file.

Save: confirm the settings and close the window.

Delete: cancel the settings and closes the window.



The progress of the transactions acquisition operation is shown with the scalar counter (see the following image) that shows the code of the connected



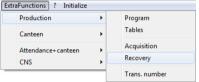
terminal; when the operation is complete, an info message reports the number of acquired transactions.





Recovery

Selecting *Recovery* from the *Functions* menu, a window for the selection of the starting date for the recovery of the registrations will be displayed.

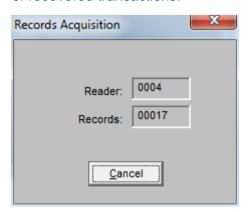


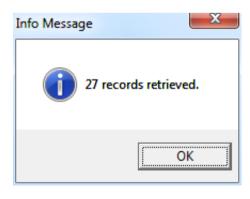


Cancel: discard the modifies and close the window.

Recover: confirm the starting date for the recovery of the transactions.

The *Recover* button opens the window for the configuration of the format/path of the file for the record of the transactions (see previous paragraph). The progress of the transactions recovery is shown with the counter (see the following window) that shows the identification number of the connected terminal; when the operation is complete, an info message displays the number of recovered transactions.





Set the path for the

Copy2

files

Copy3.



Transactions number

Selecting *Transactions number* from the *Production* menu (see the image on the left), an info message shows the number of production transactions not yet acquired of the connected terminal (see the following image).





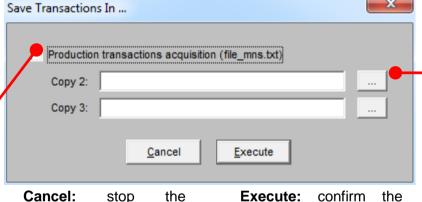
Canteen

Acquisition

Selecting *Acquisition* from the *Canteen* menu, it is possible to set the format/path of the transactions file of the canteen reservations.

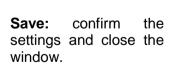


Enable the acquisition with the standard file format

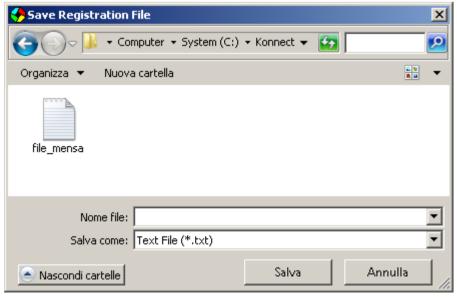


Cancel: stop the acquisition and close the window. **Execute:** confirm the settings and start the acquisition.

Every read/write operation (read/save) opens the file browser to choose the name and the path of the interested file.



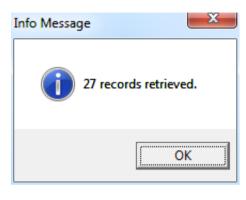
Cancel: discard the settings and close the window.





The progress of the transactions acquisition operation is displayed with the scalar counter (see the following image) that shows the identification number of the connected terminal; when the operation is complete, an info message reports the number of acquired transactions.

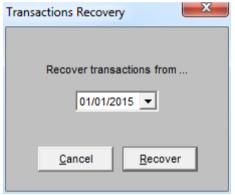




Recovery



Selecting *Recovery* from the *Canteen* menu (see the image on the left), a window for the selection of the starting date for the recovery of the registrations will be displayed.



Cancel: close the window and stop the transaction recovery procedure.

Recover: confirm the starting date for the recovery of the transactions.

Pressing *Recover*, a window similar to that of the previous paragraph will ask to specify the format and the path for the recovered transactions file. The progress of the transactions acquisition operation is shown with the scalar counter (see the following image) that shows the identification number of the connected terminal; when the operation is complete, an info message reports the number of acquired transactions.







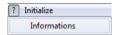
Transaction Number



Selecting *Transactions number* from the *Canteen* menu (see the image on the left), a window will report the number of transactions of canteen reservation that are not yet acquired by the connected terminal.

6."?"

Informations



Selecting *Informations* from the menu '?' (see the image on the left) will display the following window with the Konnect version.



7.Initialize



The menu *Initialize* gives access to the management functions for the Kronotech 13,56MHz ISO14443A cards (Mifare 4k, Mifare 1k, Ultralight) using a desktop reader KL-TA1356MFFP.



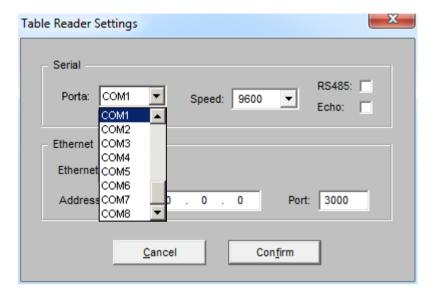
IMPORTANT NOTE The writing/customization features will work only with the 13,56MHz cards provided by Kronotech.



MF Badges "@"



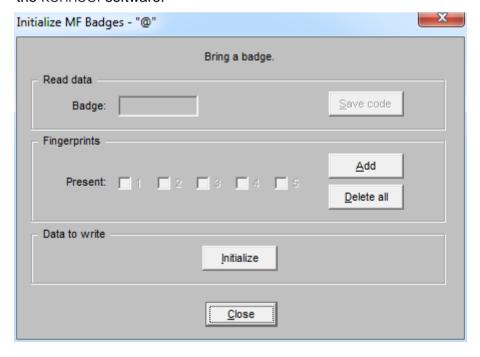
Selecting *MF Badges* – "@" from the *Initialize* menu, it is possible to manage the ISO14443A cards type @ by Kronotech (UID only). Before opening the management window, it is requested to set the communication port (serial or VCP) used by the reader KL-TA1356MFFP; the supported communication speed is 9600 baud.





NOTE The Ethernet connection is not currently supported.

The *Confirm* button will give access to the management window of the desktop reader; the yellow led blinking means that the reader is correctly connected to the Konnect software.







The window requests to use the card on the reader to store the fingerprints: the image on the left shows the reading area of the reader. Do not remove the card during the read/write operations.

When the card is used on the reader, the following message will be displayed.

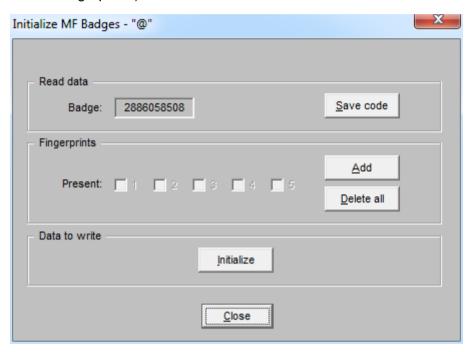


When the reading is complete, the window shows the UID of the card and possible fingerprints already present (the following image shows a card without fingerprints).

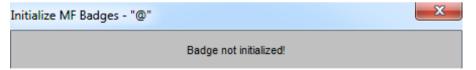
Add: acquisition of a fingerprint.

Delete all: delete all the fingerprints from the memory of the card.

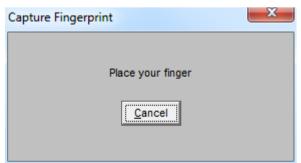
Close: close the window.



If the card is not type @, the following message will be displayed. Press the *Initialize* button to prepare the card.



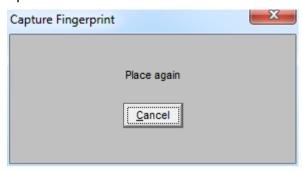
When the *Add* button is pressed, the fingerprint sensor is activated and the following message will be displayed:



During the acquisition of the fingerprint, it is possible to remove the card from the reader, so this latter will be easier to use.



After the first reading of the fingerprint, it will be requested to repeat the operation to confirm:



If the data of the second fingerprint is not the same as the first fingerprint (for example because the finger is not correctly placed on the sensor), both readings will be repeated.

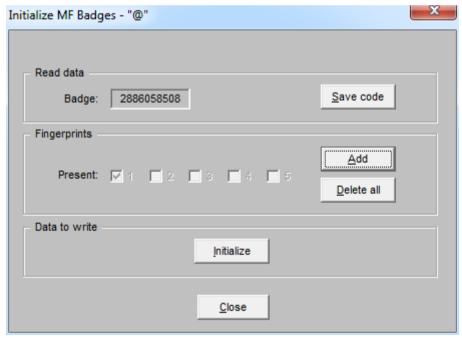
If the acquisition of the fingerprint is correct, the following message will be displayed:



To complete the operation, place the card on the reader again to save the fingerprint. The following message will be displayed:



When the writing of the fingerprint on the badge is completed, the window will show the presence of the fingerprint.



If the card used for the writing is different from the first one, the following message will be displayed; to end the procedure, use the correct card.

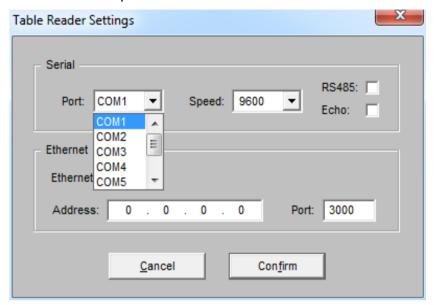




MF Badges "B"



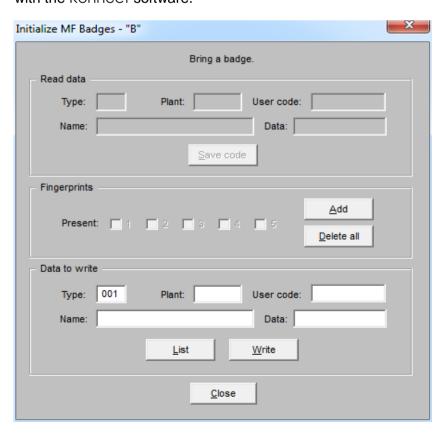
Selecting *MF Badges – "B"* from the *Initialize* menu, it is possible to manage the ISO14443A cards type B by Kronotech (custom data structure). Before opening the management window, it is requested to set the communication port (serial or VCP) used by the reader KL-TA1356MFFP; the supported communication speed is 9600 baud.





NOTE The Ethernet connection is not currently supported.

The *Confirm* button will give access to the management window of the desktop reader; the yellow led blinking means that the reader is correctly connected with the Konnect software.

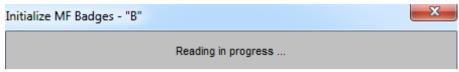






The window requests to use the card on the reader to store the fingerprints: the image on the left shows the reading area of the reader. Do not remove the card during the read/write operations.

When the card is used on the reader, the following message will be displayed.



When the reading is complete, the window shows the data of the card and possible fingerprints already present (the following image shows a card without fingerprints).

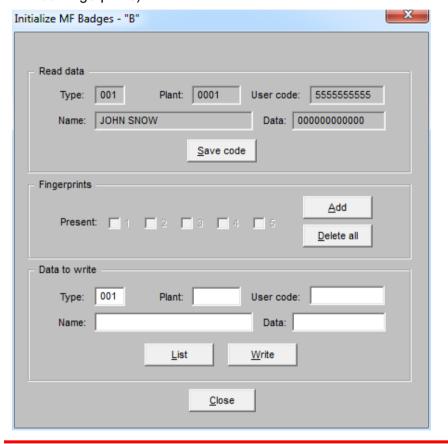
Add: acquisition of a fingerprint.

Delete all: delete all the fingerprints from the memory of the card.

List: recalls the *User list* window to import the user code of an enabled card.

Write: writes the current data on the memory of the card.

Close: closes the window.





WARNING

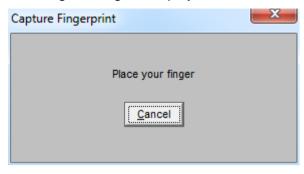
The value of the *Type* field (default 001) shall never be changed.

If the used card is not type B, the following message will be displayed. Press the *Write* button to prepare the card.



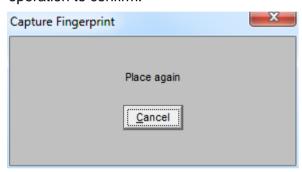


When the *Add* button is pressed, the fingerprint sensor is activated and the following message is displayed:



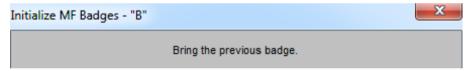
During the acquisition of the fingerprint, it is possible to remove the card from the reader, so this latter is easier to use.

After the first reading of the fingerprint, it will be requested to repeat the operation to confirm:



If the data of the second fingerprint is not the same as the first fingerprint (for example because the finger is not correctly placed on the sensor), both readings will be repeated.

If the acquisition of the fingerprint is correct, the following message will be displayed:

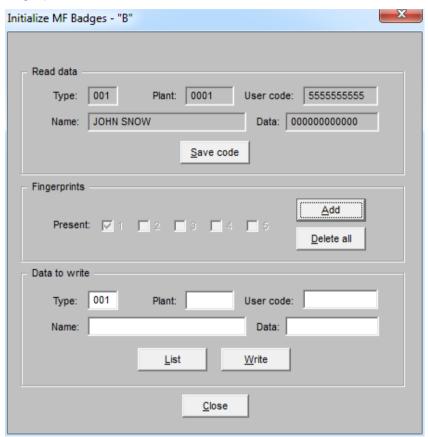


To complete the operation, use the same card again on the reader to save the fingerprint. The following message will be displayed:





When the writing is complete, the window shows the presence of the fingerprint.



If the card used for the writing is different from the one used before, the following message will be displayed; to end the procedure, use the correct card.





MF Badges UID



Selecting *MF* badges *UID* from the *Initialize* menu, it is possible to set the reading of the UID of the Kronotech ISO14443A cards or generic. Before opening the management window, it is requested to set the communication port (serial or VCP) used by the reader KL-TA1356MFFP; the supported communication speed is 9600 baud.





NOTE The Ethernet connection is not currently supported.

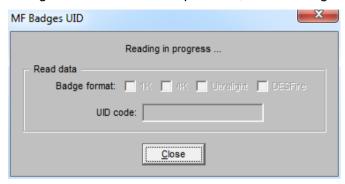
The *Confirm* button will give access to the management window of the desktop reader; the yellow led blinking means that the reader is correctly connected with the Konnect software.

The next window requests to use the badge on the desktop reader to read the UID (User IDentifier).

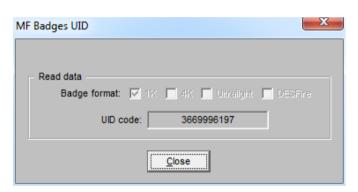




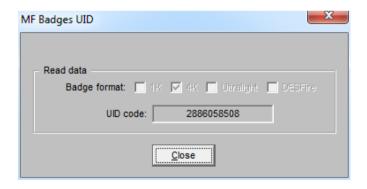
Using a card on the desktop reader, the following message will be displayed.



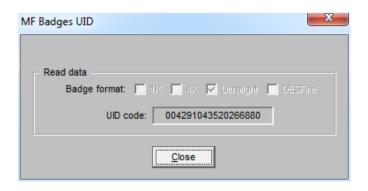
When the reading is complete, the window shows the UID code of the card and the format of the card.



UID of a Mifare 1K card



UID of a Mifare 4K card



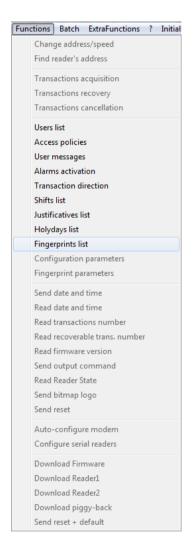
UID of a Mifare Ultralight card



8. Reading and recording fingerprints with KL-TA1356MFFP

The desktop reader KL-TA1356MFFP can be used both to save the fingerprints on a MIFARE® card (ISO 14443A), and to acquire the fingerprints and send them to the terminals.

Fingerprints List

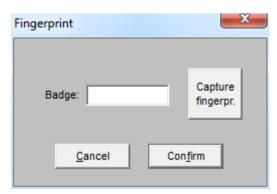


Without connecting to a terminal, select *Fingerprint list* from the *Function* menu of Konnect.

Press the *New* button to open the window for the acquisition of a new fingerprint.

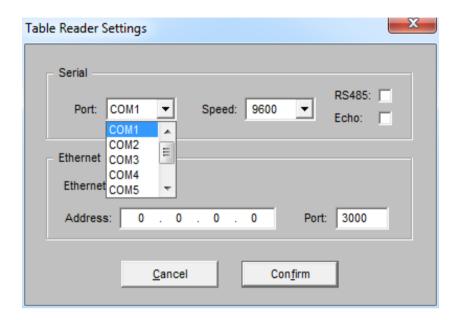


Press the button *Capture fingerprint* to acquire the fingerprint with the use of the desktop reader KL-TA1356MFFP.





Before opening the *fingerprint list* window, it is requested to set the communication port (serial or VCP) used by the reader KL-TA1356MFFP; the supported communication speed is 9600 baud.

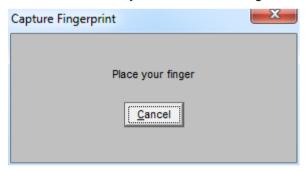




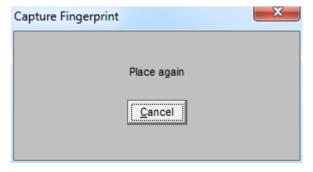
NOTE The Ethernet connection is not currently supported.

The *Confirm* button opens the management window of the desktop reader; the yellow led blinking means that the reader is correctly connected with the Konnect software.

The reader is ready for the first reading of the fingerprint.:



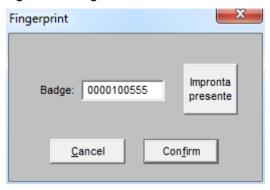
After the first reading of the fingerprint, it will be requested to repeat the operation to confirm:



If the data of the second fingerprint is not the same as the first fingerprint (for example because the finger is not correctly placed on the sensor), both readings will be repeated.

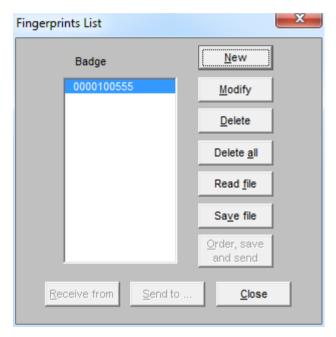


If the acquisition is made correctly, the template of the fingerprint will be automatically saved in the Konnect folder and the previous window will show again to assign the number of the card:



Press the *Confirm* button to assign the fingerprint to the card.

Press the Save file button to save the list of cards with fingerprints.





NOTE

The list of cards with fingerprint will be lost when Konnect will be closed if the file is not saved.



9. File_log.txt

Every time it is started in batch or programmed activity mode, Konnect creates (or updates) a LOG file in text format called **File_log.txt** that contains information regarding the connection, the executed commands, the result of the operations with the following layout:

```
---: batch execution start 09/04/2015 12:40:39
0004: commands to be executed 0000023F
0004: records acquiring (0 record) OK
0004: send date/time OK
0004: erase users table OK
0004: send users table (44 record) OK
0004: erase policies table OK
0004: send policies table (24 record) OK
0004: send alarms table (6 record) OK
----: batch execution end 09/04/2015 12:40:44
---: batch execution start 09/04/2015 12:40:57
0004: commands to be executed 0000000F
0004: records acquiring (0 record) OK
0004: send date/time OK
0004: erase users table OK
0004: send users table (44 record) OK
----: batch execution end 09/04/2015 12:41:00
----: batch execution start 09/04/2015 12:41:09
0004: commands to be executed 00200001
0004: records acquiring (4 record) OK
0004: erase records OK
----: batch execution end 09/04/2015 12:41:10
---: batch execution start 09/04/2015 12:41:19
0004: commands to be executed 00000001
0004: records acquiring (3 record) OK
----: batch execution end 09/04/2015 12:41:20
```

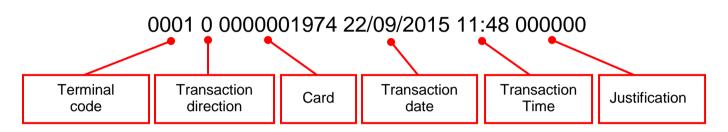
**** : Start of a programmed activity.

: Start and end of the execution of a batch.

 $0001 \div 9999$: Specify the code of the terminal interested by the operations of the batch.



10. Konnect Layout: file_reg.txt



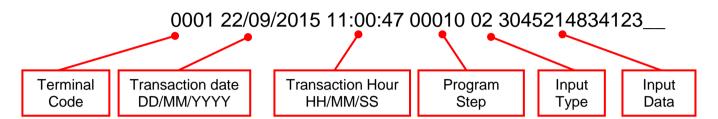
DIRECT.	REASON	DIRECT.	REASON
0	Entry	9	Card Not Enabled
1	Exit	А	Expired card
2	Remote	В	Finished Card
3	APB writing error	С	Access Not Enabled
4	Wrong Plant Code	D	Transaction cancelled by timeout
5	Entry APB	Е	Breach of One-Per-Day
6	Exit APB	F	Correct transaction
7	Access outside time slot	G	Timeout alarm open/closed passage
8	Wrong Pin Code	Н	Breakthrough alarm



11. Production layout: file_prd.txt

During every transaction acquisition, Konnect creates or updates one or more files containing the production transactions of the terminals.

The layout of the transactions contained in the file is the following:



INPUT TYPE				
INPUT	CODE (HEX)	INPUT	CODE (HEX)	
Keyboard	01	Table	10	
BARCODE	02	Goto-List	20	
READER	04	USER	40	
COUNTING SCALE 1	08+*	SERVICE	80+**	
COUNTING SCALE 2	08+*			

		INPUT 4	INPUT 3	INPUT 2	INPUT 1	VALUE	MANUAL	COUNTING SCALE 2	COUNTING SCALE 1
*	=	80н	40н	20н	10н	08н	04н	02н	01н
		-	-	MARKER	BUZZER	RELAY 4	RELAY 3	RELAY 2	RELAY 1
**	=	-	-	20н	10н	08н	04н	02н	01н

The terminal records up to 15 characters of the input data: the characters that are not used are filled with the underscore character "_".

The "Input Data" field includes some standard entry for particular events as:

- Input cancelled by the user → "CANCELLED_____"
- Suspension of the production program → "SUSPENSION_____"
- Restart of the production program → "RESTART______"



The following examples report the same production cycle with the different acquisition modes supported. Note that the *single line* mode doesn't specify the program line that generates the transaction, the input type and the time of every single transaction (the reported time refers to the 'enter' marker).

DETAILED MODE

0001	22/09/2010	10:55:37	00010	04	0601010504
0001	22/09/2010	10:55:45	00020	10	112233445566778
0001	22/09/2010	10:55:55	00030	20	200
0001	22/09/2010	10:56:04	00200	F3	ANNULLAMENTO
0001	22/09/2010	10:56:15	00030	20	100
0001	22/09/2010	10:56:16	00100	82	INIZIO FORATURA
0001	22/09/2010	11:32:14	00110	04	0601010504
0001	22/09/2010	11:32:14	00120	81	GOTO_00500
0001	22/09/2010	11:32:14	00500	84	A_CAPO

SINGLE LINE MODE (WITH "CANCEL", WITH "UNDERSCORE")

▼ 'Single-line' format prod. trans. acquisition (f	ile_cnt.txt)		
✓ Include canceled operations	Remove trailing '_'		
0001 22/09/2010 11:32:14 0601010504	112233445568	778 ANNULLAMENTO_	INIZIO FORATURA 0601010504

SINGLE LINE MODE (WITH "CANCEL", WITHOUT "UNDERSCORE")

ľ	▼ 'Single-line' format prod. trans. acqu	isition (file_cnt.txt)	
	Include canceled operations	Remove trailing '_'	

0001 22/09/2010 11:32:14 0601010504 112233445566778 ANNULLAMENTO INIZIO FORATURA 0601010504

SINGLE LINE MODE (WITHOUT "CANCEL", WITH "UNDERSCORE")

✓ 'Single-line' format prod. trans. acquisition (file_cnt.txt)
Include canceled operations	Remove trailing '_'
0001 22/09/2010 11:32:14 0601010504	INIZIO FORATURA 0601010504

SINGLE LINE MODE (WITHOUT "CANCEL", WITHOUT "UNDERSCORE")

Single-line' format prod. trans. acquis	sition (file_cnt.txt)
Include canceled operations	Remove trailing '_'

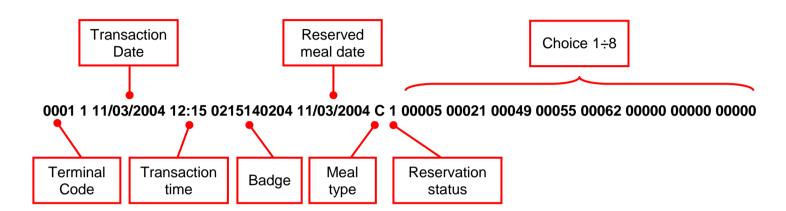
0001 22/09/2010 11:32:14 0601010504 INIZIO FORATURA 0601010504



12. Canteen layout: file_mns.txt

For every transaction acquisition, Konnec† creates or updates one or more files containing the canteen reservations transactions of the terminals.

The layout of the transactions contained in the file is the following:



The *Meal Type* field report the type of reserved meal:

- P → Lunch
- C → Dinner

The Reservation Status field can assume the following values:

- 1 → First reservation.
- 2 → Modify of an existing reservation.

The eight *Choice* fields report the code of the chosen dish.



13. Appendix

Use of the converter RS485 KC-23 (old type)

If Konnect is used under Windows NT, 2000, XP, Vista or 7 it is necessary to:

- **1.** Configure the communication line (see *Terminals* chapter, *New* paragraph) with the following parameters:
 - RS485 = NO
 - ECO = NO
- 2. Use the following cable to connect PC and KC-23:

Kc-23	PC	Kc-23	PC
DB9 M	DB9 F	DB9 M	DB25 F
2	2	2	2
<u> </u>	3	<u></u> 3	3
5	5	5	7
<u></u> 7		<u> </u>	

On the KC-23 side there is a shortcut between pins 7 and 3 of the DB9 connector.

