

# **RFID TRANSPONDER TECHNOLOGY**

DOC. 371-R2-EN

# **EK20-IDPAYFT USER MANUAL**



IDPAYFT (here named READER) is a fixed RFID device oriented to PREPAYED TIME CHARTER APPLICATION.

Operates with High Security RFID CARDS MIFARE CLASSIC.

Lcd display for operation survey and user info.

Records 2500 payment LOG.

Any LOG saved is sent to the HOST in real time after each operation.

If the HOST is inactive all the pending LOGS are automatically sent at the next reactivation.

Connection to HOST via RADIO UHF (200 mt) or RS485. The USB can be used for firmware upgrade.

Black list for card blocking.

Actuator relay can be used on motorized machines.

Led red-green to indicate status RUN/STOP.

IP65 class protection. Wall mounting.

Operating temperature -20'C to 65'C.

IDONE-PAY software free download at: www.zetanetweb.com/download/zetanet.htm

#### **INDEX**

- 1.0 HOW TO OPERATE WITH READER
- 2.0 IDONE-PAY PROGRAM FIRST INSTALL
- 3.0 HOW TO CONFIGURE THE READER USING IDONE-PAY
- 4.0 LOG MANAGEMENT
- 5.0 HOW TO CREATE FIDELITY AND SUBSCRIPTION CARDS
- 6.0 HOW TO CREATE A CUSTOMER DATABASE
- 7.0 HOW TO CREATE A BLACK LIST
- 8.0 SET CURRENT DATE ON A READER
- 9.0 SET A DEVICE NUMBER ON A READER
- 10.0 READER CONNECTIONS
- 11.0 HOW TO REDUCE IDONE-PAY
- 12.0 AVAILABLE MODELS
- 13.0 TECHNICAL SPEC
- 14.0 HOW TO UPGRADE THE FIRMWARE AND THE LANGUAGE ON IDTRCM

# 1.0 HOW TO OPERATE WITH READER

At power up appears for 3 seconds:

- The model PAYS and the active APPLICATION (Ex.02).
- The installed version (Ex. 1.5R).
- The READER number (Ex.N:00).
- The current date and time.

The LED is **RED** to indicate the unit is stopped.

The READ CARD is active. On the display will appear:

The customer insert the CARD in the support.

The READER verify if it is a VALID CARD for the current APPLICATION (EX.01).

- -Activate the actuator relay.
- -Subtract the set PAY VALUE and save the LOG of the operation.
- -The LED became **GREEN** and the buzzer emit a sound.
- -On the display appears the previous VALUE and the new VALUE.
- -In the second row appear the time elapsed.
- -At any set BASETIME (EX.10minutes) the READER subtract the VALUE.

-When the Customer extract the CARD, the READER wait for the end of the current minute (was prepaid from the customer) and stop the actuator. The LED became **RED** and on the display will appear:

In case of error the buzzer sounds and these warnings are displayed:

CARD VALUE out of limit

CARD OUT LIMIT

RECHARGE!

CARD out of expiry date

CARD expired

RECHARGE!

CARD VALID but with corrupted data.

CARD NOT VALID
CONTACT US!

WRITE ERROR appears:

REPEAT

OPERATION

PAYT01 1.5R N:00 12/10/14 13:56

> INSERT YOUR CARD

0865 → 0863 -H:00 M:00 S:00

0863 → 0861 -H:00 M:10 S:00

> INSERT YOUR CARD

#### 2.0 **IDONE-PAY PROGRAM FIRST INSTALL**

#### **INSTALL USB DRIVERS**

- 1) Copy into the PC the folder [MCP2200WindowsDriver].
- 2) In folder [DriverInstallationTool] select the folder [X64] for 64Bit or [X86] for 32bit platforms. Launch "MCP2200DriverIstallationTool.exe". Press "Install" and wait to the end of drivers installation.

#### INSTALL USB ON YOUR PC

- 1) Turn off the READER. Insert the USB plug and turn on.
- 2) The PC begin the new device install. Wait for the complete install of the assigned COM PORT.

# INSTALL RADIO-PEN-UHF ON YOUR PC

- 1) Insert the RADIO PEN UHF into the USB connector of the PC.
- 3) The PC begin the new device install. Wait for the complete install of the assigned COM PORT.

#### INSTALL IDONE-PAY SOFTWARE ON YOUR PC

Dowload the IDONE PAY setup from the site: www.zetanetweb.com/download/zetanet.htm Launch "IDONE\_PAY\_40x\_Setup" and follow the instructions to end.

Into your PC (WINDOWS7) will be created by default the specific folder:

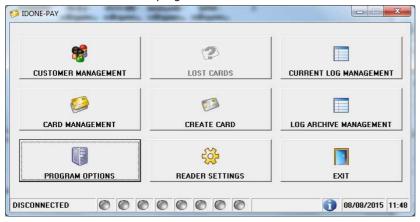
C:/ProgramData/ZETANET/IDONE-PAY/Database Files/idone-pay.mdb. The application Database.

IMPORTANT: Don't erase or rename this file. You can lost all the work made before.

Will be created an icon on your desktop.



Now launch the IDONE-PAY program.



Open the "PROGRAM OPTIONS" window.



Click the "LANGUAGE" to change the CURRENT LANGUAGE. Click "ENABLE COMMUNICATION AT START-UP". The connection go active at any IDONE-PAY restart.

Click "ENABLE CUSTOMER MANAGEMENT" if you want to create a CUSTOMERS DATABASE associated to the CARDS.

Modify or use the default texts in "CARDS DEFAULT TEXT".

These texts will be written into the CARDS in "CREATE CARD" operations.



#### 3.0 HOW TO CONFIGURE THE READER USING IDONE-PAY

#### **CONFIGURATION MODE BY RADIO**

To CONFIGURE the READER the RADIO is the best choice. Avoid to open the box.

Uncheck "SCAN MODE" in the window "COMMUNICTION PARAMETERS".

To avoid problems, make attention that no other READER with the same DEVICE NUMBER is turned on.



#### Click "READER SETTINGS"



Set the "DEVICE NUMBER" = 0 and click the button to send to the READER.

Click the button to send the actual "DATE & TIME" to the READER.

The DEFAULT KEY is preset with the code (FF-FF-FF-FF). Do not change. Press the button to send it to the READER.

The "SECRET KEY" protects your CARDS against fraud and duplication.

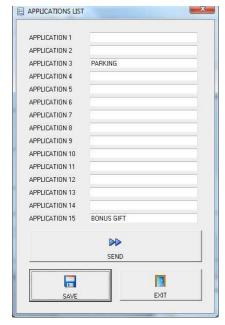
Enter 12 digits with numbers from 0 to 9 and letters from A to F. Example: 3C-26-D9-67-FA-59. For safety reasons, the "SECRET KEY" will not appear again, you will see always FF-FF-FF-FF-FF.

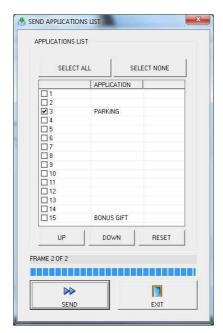
Press the button to send it to the READER.

IMPORTANT: Write this code and keep it in a safe place.

Click "SEND" to transmit the other parameters to the READER. A bar indicates the good transfer.

#### Click "APPLICATION LIST".





Insert the PAYxTIME name in one of the APPLICATION less the 15. (Ex.the APPLICATION 1)

Click SAVE to memorize the created list and click SEND. Will appear the window "SEND APPLICATION LIST".

Check "PAYxTIME" and click "SEND" to transfer to the READER.

A bar indicates the good transfer.

#### **4.0 LOG MANAGEMENT**

They are two LOG buttons:

# **CURRENT LOG MANAGEMENT**

Here you can verify in real time all the LOG transferred from the READER and saved into the current LOG FILE. You can save the current LOG FILE into an EXCEL ARCHIVE.

# LOG ARCHIVE MANAGEMENT

You can open any previous LOG FILE present in the EXCEL ARCHIVE to explore it.

All this operations don't interact anyway with the CURRENT LOG MANAGEMENT activities that flows normally.

-At start up, check if there is a LOG FILE NAME:xxx.mdb where to save your LOGS. If it does not, open another existing file or create a new one by pressing "CREATE NEW LOG FILE".

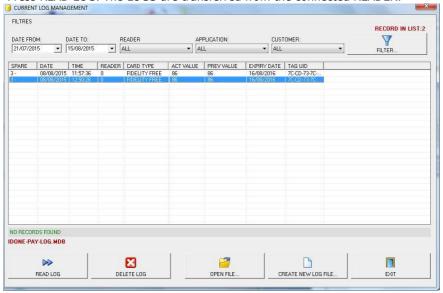
They are two method to get LOG:

- "SCAN MODE" FOR REAL TIME LOG TRANSFER
- -Check "SCAN MODE" and check the "READERS" you want to be connected. (Ex. READER-0-1-2)
- -Select the RADIO COM PORT and click "CONNECT".
- -The RADIO PEN UHF installed on your PC continuously scans the READERS.
- -Any READER present in the RF field will immediately transfer the LOG.
- -On the READER display appear an "R" to indicate the scan is running.
- -On the IDONE-PAY a string of LED indicates the status of the READERS CONNECTED or UNCONNECTED.



#### USE USB OR RADIO FOR DEFERRED LOG TRANSFER

- -Uncheck "SCAN MODE".
- -Click "CURRENT LOG MANAGEMENT".
- -Set the READER to interrogate.
- -Press READ LOG. The LOGS are transferred from the connected READER.



Any record displays the following fields:

APPLICATION The application related to the LOG.

DATE-TIME DAY-MONTH-YEAR HOURS-MINUTES-SECONDS of the recorded LOG.

READER DEVICE NUMBER of the READER.

CARD TYPE PREPAYED, FREE

ACT VALUE
PREV VALUE
EXPIRY DATE
TAG UID
The actual value charged in the CARD.
The previous value present in the CARD.
The date actually written in the CARD.
The CODE UID detected on the CARD.

CUSTOMER Active only if "CUSTOMER MANAGEMENT" is enabled.

Visualize the Name and Surname of the CUSTOMER associated to the CARD.

# **5.0 HOW TO CREATE FIDELITY AND SUBSCRIPTION CARDS**

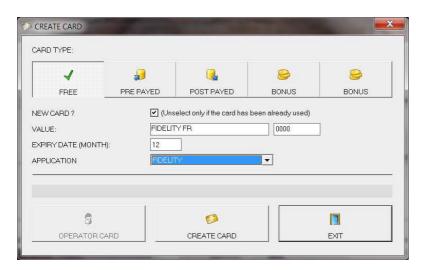
This activity in fixed units as IDPAYFS can be made in two ways:

-Using an IDPAYM mobile READER. See instructions on the "IDPAYM\_UserManual\_ENG" .

Usually an IDPAYM is used also to recharge the Customer CARD.

-Using an IDPAYF fixed READER placed near the PC. May use a spare part.

Use the RADIO UHF and uncheck "SCAN MODE". Select "CREATE CARD".



- Mark "NEW CARD?" if you want to write on a CARD that is never been written.(NOT PROTECTED) Do not mark NEW CARD? if you want to write on a CARD previously written. (PROTECTED). Select FREE or PREPAID or SUBSCRIPTION.

You can write an 11 characters text.

Insert the start VALUE and the EXPIRY DATE (month) from the actual date.

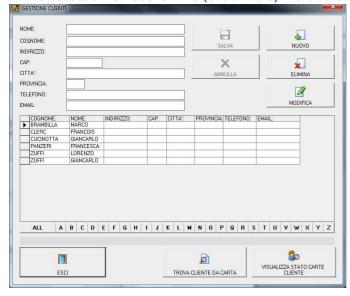
- To write, place the CARD in front of the READER and press CREATE CARD. At the end of the writing appears "WRITE SUCCESFULL". If an error appears "WRITE ERROR".

#### **6.0 HOW TO CREATE A CUSTOMER DATABASE**

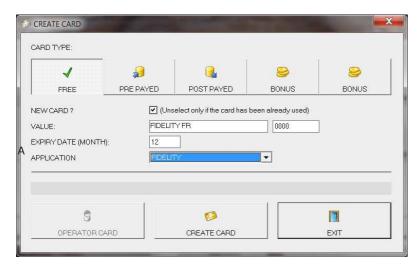
As #5.0 this activity request the use of a IDPAYM or IDPAYF near the PC.

Be sure to have set "ENABLE CUSTOMER MANAGEMENT" in the "PROGRAM OPTIONS" window. To assign a CARD to a specific CUSTOMER follow this procedure:

- Select "CUSTOMER MANAGEMENT" and press "NEW".
- Insert data of new CUSTOMERS (one or more) in the boxes and press "SAVE".



- EXIT and press "CREATE CARD" in IDONE-PAY window.
- Press "SELECT CUSTOMER" and choose the desired CUSTOMER that will be swon in the CUSTOMER box.
- Create a Card as detailed in #3.2.

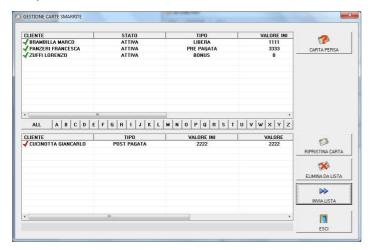


Other functions permit:

- -FIND USER FROM CARD
- -ADD NEW CUSTOMER
- -VIEW CUSTOMER CARD STATUS
- -MODIFY, DELETE a CUSTOMER record.

# 7.0 HOW TO CREATE A BLACK LIST

Is possible to send to the READER a BLACK LIST of CARDS to avoid a misuse of them.



# **8.0 SET CURRENT DATE ON A READER**

Press the arrow in "DATE &TIME" to update the READER date.



# 9.0 SET A DEVICE NUMBER INTO A READER

Set the DEVICE NUMBER to send to the READER. Press the arrow.



# **10.0 READER CONNECTIONS IDPAYFT**

A 4 wire cable 0,25mmsq so composed:

J1

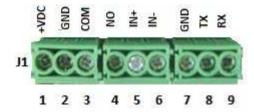
- Pin1 +VDC 9 to 14VDC stabilized

- Pin2 GND 0VDC

- Pin3 COM RELAY CONTACT COM max Current 1,5A at 24VDC

- Pin4 NO RELAY CONTACT NO





# 11.0 HOW TO REDUCE IDONE-PAY

# **13.0 AVAILABLE MODELS**

**EK20-IDPAYFT-R EK20-IDPAYFT-485 Basic model** with USB and RADIO UHF. **Basic model** with USB and RS485.

For other options:RS232- BLUETOOTH-WIFI contact us.



The RADIO PEN UHF is quoted a part.

# 14.0 TECHNICAL SPECIFICATION

RFID FREQUENCY	13.56Mhz MIFARE 1K-ISO14443A
LOG MEMORY	Circular buffer of 2500 records
DISPLAY LCD	2 row x 16 chars White-Blue
ACOUSTIC WARNING	Buzzer
DATA TRANSMISSION 19200-8-N-1	USB2.0 , RADIO UHF
DIMENSIONS WEIGHT	
OPERATING TEMPERATURE	-20'C to +65'C

#### HOW TO UPGRADE THE FIRMWARE AND LANGUAGE ON THE READER

The upgrade on the FIXED units can be made using the RADIO UHF without open the box.

- Uncheck "SCAN MODE" in the window "COMMUNICATION PARAMETERS". To avoid problems, make attention that no other READER with the same DEVICE NUMBER is turned on.
- Turn on the READER.
- Wait for:

**APPROACH** THE CARD

- Click the icon of the program **EK20-UPLOADER** found in the folder "IDPAYF\_CD".
- Select the RADIO COM PORT and the bitrate at 19200.
- Click UPLOAD PROGRAM.
- Take the file IDPAYFP\*.BIN
- Click START and wait the end of programming "Upload OK".
- Turn off the READER.

To upgrade the LANGUAGE repeat the same procedure but click "UPLOAD LANGUAGE" and taken the file IDPAYFP\*.txt



# IDONE\_CLOUD

Un'altra soluzione è quella di raccogliere i LOG via RADIO in tempo reale e di trasmetterli via INTERNET CLOUD.

- LOG vengono trasmessi ad un CENTRO SERVIZI il una vostra AREA PERSONALE.

- Permette un accesso protetto da PERSONAL PASS WORD.

Questa soluzione necessita di un Internet Access Point nella vostra locazione e un Microserver per raccogliere i LOG dai LETTORI.



INOUT RFID s.r.l Via Milano,14/H 20064-Gorgonzola (ITALY)

Phone: +39 02.95138.139 Fax:+39 02.95.158.694 Email: info@inoutsrl.it Web: www.inoutsrl.it