

RFID TRANSPONDER TECHNOLOGY

DOC. 370-R2-EN

EK20-IDPAYFS USER MANUAL



IDPAYFS (here named READER) is a fixed RFID device oriented to PREPAYED SHOWERS 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 to operate an electro-valve to control the water flow. Led red-green to indicate status START/STOP.

Two push buttons to START and STOP the water flow.

IP65 class protection. Wall mounting.

Operating temperature $-20^{\circ}C$ to $+65^{\circ}C$.

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

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



APPR	DACH	
YOUR	CARD	Ī

1)-When the customer approach the CARD the READER verify if it is a VALID CARD for the current APPLICATION (EX.02). Subtract the set PAY VALUE and save the LOG of the operation. If OK the Buzzer emit a sound and on the display appears the previous VALUE and the new VALUE after the operation.

After 2 seconds appears the time you have water.

The customer can augment the time repeating the procedure 1). This operation is similar as you use coins.

The customer, when is ready, press the button **START**. The LED became **GREEN** and the water flows. The available time on the display begin to decrement.

2)-The customer can press STOP to suspend the water flows. The LED become RED. The timer stops the time decrement. When the customer is ready press the button START.

3)-The customer can augment the time in any moment as in procedure 1)

At the end of the available time the water flow is blocked. The LED became **RED**. The READ CARD is active for another operation.

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

CARD VALUE out of limit

CARD out of expiry date

CARD VALID but with corrupted data.

WRITE ERROR appears:

THANK YOU	

YOU HAVE TIME FOR MIN->02 SEC->00

YOU HAVE TIME FOR MIN->08 SEC->00

APPRO	DACH
YOUR	CARD

CARD OUT LIMIT
RECHARGE!

CARD EXPIRED RECHARGE!

CARD NOT VALID CONTACT US!

REPEAT	
OPERATION	

2.0 IDONE-PAY PROGRAM 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.

COM4 (OSB Selial Polt)	US	SE RADIO	
	- RE	EADER 0	READER 4
	E RE	EADER 1	READER 5
CONNECT DI	SCONNECT RE	EADER 2	READER 6
<u>a</u>	R	EADER 3	READER 7
NGUAGES			
		ENABLE C	USTOMER MANAGEMENT
🊯 🚔		ENABLE C	USTOMER MANAGEMENT
		ENABLE C	USTOMER MANAGEMENT

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.

ESTO CARTE TIPO FIDELITY PRE-PAYED:	FIDELITY PRE
STO CARTE TIPO FIDELITY POST PAYED:	FIDELITY POST
ESTO CARTE TIPO FIDELITY FREE:	FIDELITY FREE
ESTO CARTE TIPO BONUS:	BONUS
ESTO CARTE TIPO ABBONAMENTO:	SUBSCRIPTION

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 "USE RADIO" in the window "COMMUNICTION PARAMETERS".

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

1MUNICA HUN PARAMI	TERS		
COM12 (USB Serial Port) •	USE RADIO	
6		READER 0	READER 4
		READER 1	READER 5
CONNECT	DISCONNECT	READER 2	READER 6
	2	READER 3	READER 7
RELOAD CO	OM PORT LIST	Enable Communication	on at Startup

Click "READER SETTINGS"

DEVICE NUMBER	0	SERVICES LIST
DATE & TIME	08-08-2015 11:57:21	
DEFAULT KEY:	FF-FF-FF-FF-FF	
NEW KEY:	3C-26-D9-67-FA-59	APPLICATIONS LIST
USE OPERATORS:	🔿 YES 💿 NO	
USE SUPERVISOR CARD:	🔿 YES 🛛 💿 ND	
CARD RECHARGE LIMIT:	9999	
EXPIRY DATE (MONTH):	12	
BLUETOOTH:		SERVICES LIST

-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-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.

PPLICATIONS LIS		SEND APPLICA		
PPLICATION 1		APPLICATION	NS LIST	
PPLICATION 2	- <u>(</u>			
PPLICATION 3	PARKING	SEL	ECT ALL	SELECT NONE
PPLICATION 4	[]		APPLICA	TION
PPLICATION 5	(
PPLICATION 6	· · · · · · · · · · · · · · · · · · ·		PARKING	
PPLICATION 7	· · · · · · · · · · · · · · · · · · ·	4		
PPLICATION 8				
PPLICATION 9				
PPLICATION 10				
DDUCATION 11				
PRUCATION 12				
		□ 12 □ 12		
PPEICATION 13				
PPLICATION 14		15	BONUS	GIFT
PPLICATION 15	BONUS GIFT	L	L DOW	N BESET
	SEND	FRAME 2 OF 2		
	JEND			
			N	

Insert the SHOWERS name in one of the APPLICATION less the 15. (Ex.the APPLICATION 2) Click SAVE to memorize the created list and click SEND. Will appear the window "SEND APPLICATION LIST".

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

A bar indicates the good transfer.

4.0 LOG MANAGEMENT

They are two visualization:

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:



"USE RADIO" FOR REAL TIME LOG TRANSFER

-Check "USE RADIO" 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 "USE RADIO".

-Click "CURRENT LOG MANAGEMENT".

-Set the READER to interrogate.

-Press READ LOG. The LOGS are transferred from the connected READER.

ATE FR0 21/07/20	ом: с 15 т (DATE TO: 15/08/2015	B •	EADER NLL	AF • AF	PLICATION: _L	CUST	OMER:	FILTER
PARE	DATE 08/08/2015 08/08/2015	TIME 11:57:36 12:50:25	READER 0 0	CARD TYPE FIDELITY FREE FIDELITY FREE	ACT VALUE 86 85	PREV VALUE 86 85	EXPIRY DATE 16/08/2016 16/08/2016	TAG UID 7C-CD-73-7C 7C-CD-73-7C	
RECOP	RDS FOUND Y -LOG.MDB								
								B	Evan I

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	The actual value charged in the CARD.
PREV VALUE	The previous value present in the CARD.
EXPIRY DATE	The date actually written in the CARD.
TAG UID	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 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".

								H					5]	
OGNOME:							9	ALVA					NUO	vo	
NDIRIZZO:						-					-				-
AP:		1						×					5	1	
ITTAS		16) 						***	а.				A		
010A.						_	AN	INULL	9				ELIM	NA	_
ROVINCIA:													-		
ELEFONO:													ø		
MAR.	<u></u>												HODI	ICA	
MMIL.											-				-
COGNOME:	NOME:	INDIRIZZO	I: CA	P: 0	ITTA:	PF	OVINCI	TEL	EFONO	E	MAIL:		T		-
BRAMBILLA	MARCO														
CLERC	FRANCOIS														
CUCINOTTA	GIANCARLO														
PANZERI	FRANCESCA	8													
ZUFFI	LORENZO														
ZUFFI	GIANCARLO														
	BCD	EFG	HI	JK	L	MN	0	PQ	R	S	ΤL	V	w	X	
ALL A															

- 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.

1	,		8	8
FREE	PRE PAYED	POST PAYED	BONUS	BONUS
	1		1	
		1		
9				

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

5.1 HOW TO CREATE A BLACK LIST

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

CLIENTE	STATO	TIPO	VALORE INI	-
BRAMBILLA MARCO	ATTIVA	LIBERA	1111	
PANZERI FRANCESCA	ATTIVA	PRE PAGATA	3333	CARTA PERSA
	#			
ALL A B C D E	F G H I J K L M Tipo Post pagata	VALORE INI 2222	U V W X Y Z VALORE 2222	FIPRISTINA CARTA
			i	ELIMINA DA LISTA

6.0 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 "USE RADIO". Select "CREATE CARD".

CARD TYPE:					
1	P		8	8	
FREE	PRE PAYED	POST PAYED	BONUS	BONUS	
NEW CARD ? (Unselect only if the card has been already used)					
/ALUE:	FIDELIT	TY FR	0000]	
EXPIRY DATE (MONTH)	12				
APPLICATION	FIDELI	DY.	•		
9	1	ø			
	1.825				

 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".

7.0 SET CURRENT DATE ON A READER

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

-11013		-
DEVICE NUMBER	0	
	09.09.2015 11.57.21	

8.0 SET A DEVICE NUMBER INTO A READER

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

OPTIONS		giller a
DEVICE NUMBER	0	
DATE & TIME	08-08-2015 11:57:21	



7



5 6

4 **10.0 HOW TO REDUCE IDONE-PAY**

1 2 3

Normally the end user application don't use all the functions available on IDONE-PAY.

For this reason the user can use a reduced version named IDONE-PAY-CLIENT that use the Database created using IDONE-PAY.

JDONE-PAY-CLIENT	Sec.	-		-		X
CURRENT LOG		-	LOG ARCHI	VE MANAGE	MENT	
PROGRAM	OPTIONS		BLACKLIS		1ENT	
	I T					
CONNECTED	00		0 0	0	01/11/2014	15:39

To install this reduced version on the PC of your CUSTOMER follow this procedure:

Copy our folder IDPAYM_CD into your PC.

INSTALL USB DRIVER

- 1) Copy into the PC the folder [MCP2200WindowsDriver].
- 2) In folder [DriverInstallationTool] select the folder [X64] for 64Bit or [X86] for 32bit.
- Launch "MCP2200DriverIstallationTool.exe". Press "Install" and wait to the end of drivers installation. INSTALL USB ON 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 PC
- 1) Insert the RADIO PEN UHF into the USB connector of the PC.
- 2) The PC begin the new device install. Wait for the complete install of the assigned COM PORT.
- **INSTALL IDONE-PAY ON PC**

Dowload the IDONE_PAY_CLIENT setup from the site:www.zetanetweb.....

Launch "IDONE_PAY_CLIENT_40x_Setup" and follow the instructions to end.

- Into your PC (WINDOWS7) will be created by default this specific folder:
- C:/ProgramData/ZETANET/IDONE-PAY-CLIENT/Database Files/idone-pay-client.mdb. The application Database. IMPORTANT: Don't erase or rename this file.

Will be created an icon on your desktop.



To operate with this version need to replace the application Database created by the IDONE-PAY-CLIENT installation (idone-pay-client.mdb) with that create developing the application by IDONE-PAY (ex.)

11.0 AVAILABLE MODELS

EK20-IDPAYFS Model with USB and RADIO UHF.

For other option: BLUETOOTH-WIFI contact us.





The RADIO PEN UHF is quoted a part.

12.0 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
LED	LED RED (CLOSED) LED GREEN (OPEN)
ACTUATOR	RELAY ELECTROVALVE COMMAND 30VDC 1,5A max 2A
PUSH BUTTONS	START and STOP.
POWER SUPPLY	9 a 14VDC stabilized Current max 200mA
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 IDPAYM 13.0

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

- Uncheck "USE RADIO" 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

- of the program **EK20-UPLOADER** found in the folder "IDPAYF_CD". - Click the icon
- Select the RADIO COM PORT and the bitrate at 19200.
- Click UPLOAD PROGRAM.
- Take the file IDPAYFP*.BIN
- Select the READER address.
- 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

🔟 Ek-20 🛛 🔟	pLoader					
Cor	mm Port 1 💌	Baud: 19200,n,8,1	I	-		
					Deload Program	START About
•					Device Address 0 💌	
1					UpLoading	
[EXIT				
12/11/2013	11.39	UpLoad Language	UpLoad Program			

IDONE_CLOUD

Another solution is to be supported by an INTERNET CLOUD having the function to: Collect the LOGS via RADIO in real time.

Transmit to the SERVICE CENTER in your Personal Area.
Offer a full protected access by a personal Password.
This operation need an Internet Access Point in your location and a MicroServer to collect the Logs from IDTRC.



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