

# System description Netrix Message Server





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## 1. Purpose

With this server it is possible to call up messages of any type. These may originate from any type of device.

## 2. Environment

The software is written for a Windows environment. The program code was written in Visual Basic .NET, and all files are stored in XML format so there is no need for any database software. A certain type of industrial computer is used for the hardware in order to maintain a high level of reliability. We recommend Windows XP as operating system. Multiple Netrix servers can be connected together via a data network.

## 3. Computer types

3.1 Small Box Type I (No longer available!)



- Has 4 COM ports



#### 3.2 Small Box Type II (in use since September 2005)

- Has 4 COM ports
- 220 V power supply (direct)
- Has one PCI slot, in which we usually install a modem



## 3.3 Small Box Type III (in use since April 2009)

- Has 4 COM ports
- 220 V power supply or 24 V power supply
- Has one PCI slot, in which we usually install a modem





#### 3.4 Industrial PC

- This computer has 2 COM ports on the motherboard
- There is an extra Moxa card in the system, which provides 8 additional COM ports
- 220 V power supply or 24 V power supply
  May have a built-in sound card
- Internal or external modem



![](_page_6_Picture_0.jpeg)

#### 4. How to establish connection

- By making use of the attached keyboard, mouse and screen.

- Via a dial-in RAS connection through which you 'take over' the PC using the Dameware software.

Via a LAN connection through which you 'take over' the PC using the Dameware software.
By establishing a direct network connection via a crossover cable and then starting Dameware.

#### 5. Licence

The licence is tied to the computer. If you transfer a database from computer A to computer B, computer B will require its own licence. This cannot be transferred. The request for a new licence can be submitted to Peter Jans.

Licentie	2		×
Fout b	ij lezen licentie		
	Selecteer licentie	2	
	Kopieer uit klembord	ħ	
	Bekijk licentie	:	
	Afsluiten	×	

The software can also be started without a licence by adding /ESSEC to the command line. This allows you to use the software with all the licences for 24 hours; the software then returns to the installed licences.

![](_page_7_Picture_0.jpeg)

## 6. Inputs and outputs

You can find an overview of the inputs and outputs using the menu option Setup -> Input-Output.

You will find all the inputs and outputs for which you have licences in the tree structure on the left side. Click an item in the tree structure to change the settings.

🔡 Input-Output instellingen		
ALCATEL AUDIO 41 CONDIGI	ALCATEL	
← EMAIL     GSM     GSM     HingANGSH00FD     Herhaaloproepen     FSPA-IN     FSPA-IN     FSPA-IN-1     FSPA-IN-2     FSPA-IN-3     FSPA-IN-3     FSPA-IN-4     FSPA-IN-5     FSPA-IN-5	✓ Aan/Uit       IP     192.168.30.23       Intrusion     ✓ Aan/Uit       Netrix-toestel     1       Annulatie-tijd     5       Default-groep     1999	
ESPA-IN-6 FESPA-IN-7 ESPA-IN-8 FESPA-IN-9 FESPA-IN-10 ESPA-OUT ESPA-OUT-1 FESPA-OUT-2 FESPA-OUT-3 FESPA-OUT-4 FESPA-OUT-5 FESPA-OUT-6 FESPA-OUT-6 FESPA-OUT-7 FESPA-OUT-8 FESPA-OUT-9	I SchermDebug □ FoutLogging I FileDebug I Outg opslaan	
P ESPA-OUT-10 P P P P P P P P P P P P P	Cancel	© OK

#### 6.1 Inputs

The currently available inputs are:

- RS232 ports
- Contact inputs, 320 maximum (10x 32); these are provided via the Philips contact heads.
- ESPA inputs
- Incoming SMS message
- IP
- Condigi IP receiver

![](_page_8_Picture_0.jpeg)

#### 6.2 Outputs

The currently available outputs are:

- Message to mobile phone
- Message to Idect, Ditel telephone system
- Message to Audio, with contact for telephone or PA
- Message to a different group
- Message to a text file
- Message to an RS232 port
- To a group on another Netrix via the network
- Contact head output contacts
- A short e-mail message
- Start repeat call
- Stop repeat call
- Execute command
- Message to Alcatel telephone system
- ESPA-Out message

## 7. Groups

This system allows you to program a maximum of 10,000 groups, and each group can have an unlimited number of members. Every member can be of the type described in the outputs. For each member you can assign a different setting, text and other properties.

🔡 Gro	🛃 Groepen								
Groep 📸 🚉									
	GroepID		GroepNaan	n				GroepIDPlusNaam	
	57		mail					57 - mail	
	100		ss					100 - ss	
	101		reset					101 - reset	
	201							201	
Deelne	emer 🎦 🕽	< % I	à 🔒 📄						
	ericht	TypeD	eelnemer	PPQ	Vibrator	DisplayTime	Prioriteit	RingTime	
•		eTypeli	ngangsho			0	0	0	
		eTypeli	ngangsho			0	0	0	
•									

![](_page_9_Picture_0.jpeg)

## 8. <u>Members</u>

#### 8.1 Alcatel output

Deelnemer		
Naam Type Alcatel Bericht	Sector Cancel	<u>с</u> ок
	Turcor	
AlamNama		
Eencht		
Protect		
Ring tone 0 -		
Annahrin (* 10		
(F Aan		
C Supervisie 🔲 Verväjder oproepen		

Number: internal number of an Alcatel phone

Alarm name: Title used for message

Priority:

- 0= Normal call, no acknowledge
- 1= Normal call with acknowledge
- 2=Urgent call, no acknowledge
- 3=Urgent call with acknowledge

Ringtone: each value produces a different rhythm of ringtone

- 0= ringtone
- 1= ringtone
- 2= ringtone
- 3= ringtone
- 4= ringtone + vibration
- 5= ringtone

Callback: Number to use for intrusion.

Cancellation:

Off = phone continues to ring until message is read. On = phone rings for configured number of seconds. Supervision = phone continues to ring until message is read/confirmed. Cancel calls = If multiple phones receive the same message, as soon as one person reads/confirms the message the calls to other phones are cancelled.

![](_page_10_Picture_0.jpeg)

#### 8.2 Audio output

E Cemener	- <u> </u>
Naom 😥 Cancel 🕑	OK
Type Plucio Benchit MSG1	<u> </u>
Audio NR	
Bericht 🗾	
Photek	

Audio number: telephone number Message: Location of the file.

![](_page_11_Picture_0.jpeg)

## 8.3 E-mail message

Decinemer		×
Nam	🛞 Cancel	🕒 ок
Type Email Baicht	MSG1	•
Aan		
00 J		
Dodewap		
Record		
Bedandin voegen		

## 8.4 ESPA-Out

eelnemer		and the second	
zan 🗍		🥸 Cancel	<u>Б</u> 0К
pe ESPA DUT Berich:	*	M5G1	2
ispa out	]		
al address			
htplay massage			
eep coding.			
SPA Prodet			
allype I	_		
nortei)	2		

![](_page_12_Picture_0.jpeg)

#### 8.5 File

🔚 Deelnemer		
Naam	🛞 Cancel	C OK
Type File Baicht 💌	MSG1	•
Bestand		
Bericht		

File: Location of the file.

![](_page_13_Picture_0.jpeg)

## 8.6 Repeat call

Deelnemer			
Nəam 🗌		😢 Cancel	0K
Type Heihaa	rcproepSet Bericht	MSG1	
Reference	<b></b> ii	9	Kleur
Groep Herhaalopro	ep 1 · test schoon		
Herhaaltijd	30 sec 💌		
TTL			
āroep bij TTL	1 test schoon		
Tetrigger			

Reference: unique ID for each call (e.g. pendant number / room number)

Group repeat call: Groups that are called

Repeat time: Length of time to wait between the calls.

TTL: number of times a call is repeated. (Time to live)

Group by TTL: Group that is called after TTL expires.

Re-trigger: This can be used to reset the repeat time.

![](_page_14_Picture_0.jpeg)

## 8.7 Repeat call reset

🔚 Deelnemer	<u>_   ×</u>
Nam Cancel	OK
Type HerhaaloproepReset Bericht r MSG1	•
Referentie	

## 8.8 Mobile phone

🗮 Deelnemer		<u>_                                    </u>
Naam	😢 Cancel	) OK
Type GSM Beildht	MSG1	•
GSM		
Beicht		
Prioritet		

![](_page_15_Picture_0.jpeg)

#### 8.9 Contact head

Decinemer			
Neam		<u>&amp;</u> Annuleren	ОК
Type Ingongshooid	2	MSG1	•
Ingergshoold			
1 - Test	2		
Contact			
	1		
Pube-lijd (1.9)			

#### 8.10 IP

🛃 Deelne	mer					<u>_   X</u>
Naam	[	_		🍪 Cancel	۲	ŪΚ
Туре	IP Baicht			MSG1		•
IP [	×					
Header						
DI 01		D106				
DIG		DIOS				
DI 04		DIOS	1			
DI 05		DI 10	l			

IP: ID of the interface Header + ID = as described in the protocol

![](_page_16_Picture_0.jpeg)

8.11 RS232

🚂 Deelnemer		
New	😥 Capcel	
ineau I	0.000	0 01
Type RS232 Beich:	MSG1	•
R0232		
	_	
Test		

RS232: ID of the interface

#### 8.12 Group

🔛 Deelne	ner		<u> </u>
Naam		😢 Cancel	0K
Туре	Groep Bericht	MSG1	•
Gioep			
1			

![](_page_17_Picture_0.jpeg)

8.13 Execute

🛃 Deelnemer		
Naam	8 Cancel	C OK
Type Ulvoeren 💌	MSG1	•
Type Excounter		
Command		

Command: Location of file to be executed

![](_page_18_Picture_0.jpeg)

## 9. Profiles

A maximum of 10,000 profiles can be defined in the system, and each profile consists of an unlimited number of criteria. The criteria in the profile determine which group is active at a certain time on a certain day. Two groups can be active during a particular period.

🔛 Prol	fielen							
Profie	len 道 🙀							
	ProfielNaam	ProfielID						
►	test	148						
Tijdzo	nes 🎦 🗙 🐰 🗏	a 😩						
	GroepID	Enabled	TijdZonelD	Start	Stop	Maandag	Dinsdag	W
►	9		0	1:00	3:00			
	9	~	0	1:00	3:00			
	29		0	1:00	3:00			
	9		0	1:00	3:00			
	9	<b>V</b>	0	1:00	3:00			
•								Þ

## 10. Conversion tables

The software allows use of an unlimited number of conversion tables for converting certain information to a more useful format. These tables can be used for compiling the members of a group.

#### 11. Arranging windows

The windows can be arranged in three different ways: horizontally, vertically or as a cascade.

#### 12. Calling users

Every output model can be used to perform a test call from the main menu.

#### 13. <u>Backup/restore</u>

The complete programming can be transferred from one server to another or copied to a backup via Backup and Restore. All the important files are compressed into a single ZIP file for transfer to the destination. All the data is kept in XML files, and the settings are in the MRS.ini file. When moving to another server, it is also necessary to obtain a new licence file.

![](_page_19_Picture_0.jpeg)

#### 14. Operation

#### 14.1 Contact head

The contact head is a BOSCH product that has been in use for many years to accept input from contacts and send output to pagers.

Through use of an interface, we can connect these to a COM port of the Netrix server. Every change on a contact is passed on and can be processed within the Netrix. Multiple contact heads can be connected simultaneously.

Communication with the contact head is indicated by a green or red colour.

Starting with version 2.0.0, the two outputs provided on the contact head can also be used.

![](_page_19_Picture_7.jpeg)

(two output contacts at bottom right)

#### 14.2 Adapter

![](_page_19_Picture_10.jpeg)

![](_page_20_Picture_0.jpeg)

#### 14.3 Contact head settings

![](_page_20_Picture_2.jpeg)

On/Off:	Switches on this input module
COM port:	Port number to which the contact head is connected
Speed:	The baud rate used for communication between the computer and the contact head interface (CANNOT BE CHANGED)
Bits:	The number of bits that must be sent to the contact head interface (CANNOT BE CHANGED)
Parity:	The parity that must be set (CANNOT BE CHANGED)
Stop Bits:	The number of stop bits that must be sent (CANNOT BE CHANGED)
Screen Debugger:	If this is active, all messages sent and received by the contact head are shown in a debug screen.
File Debugger:	If this is active, all messages sent and received by the contact head are saved in a file.

![](_page_21_Picture_0.jpeg)

#### 14.4 Contact head work screen

Ingan	gshoofde	en 👘											
	InhStat	us	InhNaa	am	Enabled		InhAanwezig	First	Time	Buffer		GroepIDPlusNaam	GroepProfie
۱.	inhldle		test									1 - test	
	inhScar		test2									2 - test2	
	inhidle		demo									3 - demo	
Cont	acten 🚺												
; Cono	acteri 🧄												
<b>~</b>		1.	1.		1.	1.	1.	1.	-	-	-		•
1		2	3	4	5	6	7	8	9	10	11	12 1	3
		1.	1.					1.	1	1	1.	. J	
14	ļ	15	16	17	18	19	20	21	22	23	24	25 2	6
-	-	1.	1.	1.	1.	1.							
27	,	28	29	30	31	32							

The contact heads, along with their serial numbers and names, are shown at the top of the screen. An overview of the contacts is shown at the bottom.

![](_page_22_Picture_0.jpeg)

#### 14.5 Contact head configuration

Every contact can be assigned an action, which can then place a call to a group. Valid contact types are: closing, opening, delayed closing and delayed opening. Six variables can be passed on to the groups; these variables can be used how ever you like. Variables: MSG1

MSG2 MSG3 MSG4 MSG5 MSG6

InhScan     Enabled     InhAstweetig     FirstTime     Butter     Bitter     Bitter       InhScan     test     Image: State
InfiScan     test     Image: Contractive contrective contractive contractive contractive contractive c
InfScan         test2         IV         □         □         2-best2         IV           InfScan         damp         IV         □         □         3-demo         IV           s 1         X 3         3         3         0         IV
IntiScan         Jamp         Image: Contractive product of the second o
s ∑ X X 3 2 2 2 Benaming ConladMR Enabled MSG1 MSG2 MSG3 MSG4 MSG5 mmit 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Benanng CurladNR Enabled MSG1 MSG2 MSG3 MSG4 MSG5 mmc 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
mmu Le Constant de
mmcccaa 10
13 D
Accesse in the

Name: Nam Error Group: Gro

Name of the contact head up: Group that must be called if there is a communication failure

			-
AAN/UN	1.5		
Benaming	Juna	MSG1	
Contact	1	M5G2	
Туре	Dpengaan	MSI33	
Delap-tijd	[0	M954	
Бірер	🕫 101 izzał	MSG5	
Profiel	C [118-aces]	MSG6	
Herhoel	E		
Aantal heihalingen			
Herhaal interval	1		

![](_page_23_Picture_0.jpeg)

ON/OFF:	Used to switch on a contact
Group:	The group that this contact must call
Profile:	The profile that this contact must call
MSG1:	Message variables
MSG2:	Message variables
MSG3:	Message variables
MSG4:	Message variables
MSG5:	Message variables
MSG6:	Message variables
Name:	Name of the contact
Type contact:	Opening, Closing, Delayed opening, Delayed closing, Pulse contact
Repeat:	Start repeat call for this group
Number of repetitions:	Number of times the call must be made
Repeat interval:	Time between the repeated calls in seconds

![](_page_24_Picture_0.jpeg)

## 15. <u>Alcatel</u>

The Alcatel interface is used to send messages to any Alcatel telephone via an Alcatel telephone system (OXE).

The phones can be DECT, IP or Digital phones.

🔜 Input-Output instellingen		
	AAN/UIT	
ESPA-IN-9 ESPA-0UT ESPA-0UT-1 ESPA-0UT-2 ESPA-0UT-3 ESPA-0UT-3 ESPA-0UT-4 ESPA-0UT-5 ESPA-0UT-6 ESPA-0UT-6 ESPA-0UT-7 ESPA-0UT-7 ESPA-0UT-8 ESPA-0UT-9 ESPA-0UT-9 IP	I SchermDebug □ FoutLogging □ FileDebugger □ Outg opslaan	
	© Annuleren	<b>©</b> ОК

On/Off:	Used to switch on this output module
Intrusion:	Hands-free intrusion
Netrix number:	The internal phone number of the Netrix; this is required for intrusion.
Cancellation time:	The number of seconds that a phone rings when a message is received.
Default group:	A Netrix group that is called if the message cannot be delivered.
Screen Debugger:	If this is active, all messages sent and received by the interface are shown in
	a debug screen.
File Debugger:	If this is active, all messages sent and received by the interface are saved in
	a file.

![](_page_25_Picture_0.jpeg)

## 16. <u>ESPA-IN</u>

ESPA is a protocol developed for the health care market. Using this interface, calls from a health care system can be transferred to a nurse call system. This link is made using an RS232 connection. The ESPA inputs work according to a very simple standard and adapt themselves, as far as possible, to the connected equipment. With the ESPA protocol, the message fields are predefined.

Fields:

Display information Call type Pager number Beep tone

Within our system, the display information is further subdivided into an alphanumeric and numeric display.

During configuration of the ESPA interface, we can select where the fields must go. The group or profile that is called is the pager number. If this is longer than four characters, the Netrix only looks at the last three digits.

🟭 Input-Output instellingen		
🖃 🔚 Netrix		50 - 50 - 50 - 50
- @ ALCATEL	ECDT IN 1	
AUDIO	ESPA-IN-I	
EMAIL B GSM	🗖 Aan/Uit	
Herhaaloproepen		
🖻 🐖 ESPA-IN	Poort Com1 Display> MSG1	•
ESPA-IN-1	Snelheid 1200 Alph Display> MSG2	
ESPA-IN-2	Park CutAthana CutAthana	
ESPA-IN-3	Even Call Address> MSG3	-
ESPAIN-4	Bits 7 Beeptone> MSG4	
ESPAIN-5		
ESPA-IN-7		
ESPA-IN-8	Default-groep	
ESPA-IN-9	Naam Poll meed	
ESPA-IN-10	TEST ESPA IN	
ESPA-OUT		
ESPA-UUT-1		
ESPA-OUT-3	🔽 SchermDebug 🛛 🗖 FoutLagging	
SPA-OUT-4		
ESPA-OUT-5	FileDebugger	
ESPA-OUT-7		
ESPA-OUT-8		
ESPA-OUT-9		
ESPA-UUT-TU		
IP-1		
🧕 IP-4		
IP-5		
IP.9		
IP-10		
E ₽ RS232	Cancel	🕒 ОК

![](_page_26_Picture_0.jpeg)

On/Off:	Switches on this input module
COM port:	Port number to which the ESPA interface is connected
Speed:	The baud rate used for communication between the computer and the ESPA interface
Bits:	The number of bits that must be sent to the ESPA interface
Parity:	The parity that must be set
Stop Bits:	The number of stop bits that must be sent
Screen Debugger:	If this is active, all messages sent and received by the ESPA interface are shown in a debug screen.
File Debugger:	If this is active, all messages sent and received by the ESPA interface are saved in a file. This file has the name 'espaXXPM.dbg', where XX is the day of the month. If the file is already present, it is overwritten. The system maintains the debug files for a maximum of one month. In order to retain multiple months, the key DebugOverWrite, which is normally set to True, can be changed in the file MRS.ini. If this key is set to False, the data will always be appended to the end of the debug file.
Display:	The variable in which the display field should be placed. (e.g. MSG1)
Alpha display:	The variable in which the alphanumeric display field should be placed. (e.g. MSG2)
Call address:	The variable in which the call address field should be placed. (e.g. MSG3)
<b>D</b> (	This is also the group or the profile number that is called.
Beep tone:	The variable in which the beep tone field should be placed.
Group/Profile:	selects whether a group or a profile must be called
Polling speed:	This is the interval at which the Netrix polls the ESPA input. This is set to 500 ms by default.

#### 16.1 ESPA control screen

ESPA-IN1:test								
	Nummer	Bericht	Prioriteit	EspaPriority	RingTone	Туре	TTL	
۱.	1234		0	0	1	3	0	
4								
Run Status: Idle								

![](_page_27_Picture_0.jpeg)

16.2 ESPA debug screen

🔊 ESPA-II	1:test-Deb	ug			
DatumFR	TijdFR	Re	Info	TekstFR	<b></b>
30/7/20		Com1:	OPEN	BaudRate=9600,Parity=2,StopBits=2,Bits=7	
30/7/20				INC_DATA:1[ENQ]2[ENQ]	
30/7/20				TOTAL_DATA:1[ENQ]2[ENQ]	
30/7/20				Espa -> App:1[ENQ]2[ENQ]	
30/7/20				App > Espa:[ACK]	
30/7/20				INC_DATA:[S0H]1[STX]1[US]1234[RS]2[US]ABCDE1234567890123456789012345[RS]3[US]1[RS]4[US]3[ETX]\	
30/7/20				TOTAL_DATA:[SOH]1[STX]1[US]1234[RS]2[US]ABCDE1234567890123456789012345[RS]3[US]1[RS]4[US]3[ETX]\	
30/7/20				Frame :[SOH]1[STX]1[US]1234[RS]2[US]ABCDE1234567890123456789012345[RS]3[US]1[RS]4[US]3[ETX]\	
30/7/20					
30/7/20				App > Espa:[ACK] BCC ok (Call To Pager)	
30/7/20				Call Address:1234	
30/7/20	09 8:57:29				
30/7/20				Text message:ABCDE1234567890123456789012345	
30/7/20				Bleep Code:1	
30/7/20	09 8:57:29		INFO	Call Type:3	-

## 17 ESPA-OUT

This module is used for sending ESPA messages, e.g. to telephone systems and for paging.

🔜 Input-Output instellingen		
AUDIO	ESPA-OUT-1	
→ INGANGSHOOFD → Herhaaloproepen → ESPA-IN	Aan/Uit	
ESPA-IN-1	Poort Com1	
ESPA-IN-3	Snelheid 1200.	
ESPA-IN-5	Parity Even 🗾	
ESPA-IN-6	Bits 7	
ESPA-IN-8	StopBits 1	
ESPA-IN-10	Naam	
ESPA-OUT	Default-groep 0	
ESPA-OUT-2		
ESPA-OUT-4	SchermDebug FoutLogging	
ESPA-DUT-5	🗖 FileDebugger	
SPA-OUT-7		
SPA-OUT-9		
IP-1		
IP-4		
		(D)
I 19-8	🥸 Cancel	С ОК

![](_page_28_Picture_0.jpeg)

## 17.1 ESPA-OUT control screen

ESPA-O	ESPA-OUT1:test							
	Nummer	Bericht	Prioriteit	EspaPriority	RingTone	Туре	TTL	
•	1234	test	1	3	1	3	5	
	1234	test	1	3	1	3	5	
	1234	test	1	3	1	3	5	
	1234	test	1	3	1	3	5	
			·					
4							Þ	

## 17.2 ESPA debug screen

ESPA-OUT	1:test-De	ebug			
Datum	Tijd	Re	Info	Tekst	<u> </u>
30/7/2009			INFO	Espa -> Appt:Rawdatat:06	
30/7/2009	9:23:59		INFO	App -> Espail:[SOH]1[STX]1[US]1234[RS]2[US]test[RS]3[US]1[RS]4[US]3[ETX];	
30/7/2009	9:24:00		INFO	Espa -> Appl:Rawdatal:06	
30/7/2009	9:24:00		INFO	App -> Espat:[EOT]	
30/7/2009	9:24:01		INFO	App -> Espail:1[ENQ]2[ENQ]	
30/7/2009	9:24:02		INFO	Espa -> Appl:Rawdatal:06	
30/7/2009	9:24:02		INFO	App -> Espat:[SOH]1[STX]1[US]1234[RS]2[US]test[RS]3[US]1[RS]4[US]3[ETX];	
30/7/2009	9:24:03		INFO	Espa -> Appl:Rawdatal:06	
30/7/2009	9:24:03		INFO	App -> Espail(EOT)	
30/7/2009	9:24:04		INFO	App -> Espail:1[ENQ]2[ENQ]	
30/7/2009	9:24:05		INFO	Espa -> Appl:Rawdatal:06	
30/7/2009	9:24:05		INFO	App -> Espail:[SOH]1[STX]1[US]1234[RS]2[US]test[RS]3[US]1[RS]4[US]3[ETX];	
30/7/2009	9:24:06		INFO	Espa -> Appl:Rawdatal:06	
30/7/2009	9:24:06		INFO	App > Espat:[EOT]	-

![](_page_29_Picture_0.jpeg)

## 18. <u>RS232</u>

From the RS232 screen we can link any RS232 output, analyse the data and take an action accordingly. Fire alarm consoles are often linked in this manner so Netrix can receive fire alarm notifications that specify the zone in which fire has been detected. This information is then analysed and compared to conditions that are used to determine which group or profile should be called.

#### 18.1 RS232 configuration

🔡 Input-Output instellingen			
ESPA-IN-3 ESPA-IN-4 ESPA-IN-5 ESPA-IN-5 ESPA-IN-5 ESPA-IN-7 ESPA-IN-7 ESPA-IN-8 ESPA-IN-9 ESPA-OUT ESPA-OUT-1 ESPA-OUT-1 ESPA-OUT-1 ESPA-OUT-2 ESPA-OUT-3	RS232-1 □ Aan/Uit Poort Snelheid Bach	Com1 9600	
ESPA-OUT-4	Parity	laeen	
ESPA-DUT-5	Bits	18	
ESPA-OUT-7	Default-groen	0	
ESPA-OUT-9	Max. Lengte	180	
E P IP	RegelEinde	13	
	Naam	testRS	
IP-3         IP-4         IP-5         IP-6         IP-7         IP-8         IP-9         IP-10         P         RS2322         IP         RS232-2         IP         RS232-3         IP         RS232-5         IP         RS232-6         IP         RS232-7         IP         RS232-8         IP         RS232-9	☑ SchermD	ebug 🗖 FoutLogging	Voorwaarden
TELRAD-DECT	🛞 Cancel		© ок

![](_page_30_Picture_0.jpeg)

On/Off:	Switches on this input module
COM port:	Port number to which the RS232 interface is connected
Speed:	The baud rate used for communication between the computer and the RS232 interface
Bits:	The number of bits that must be sent to the RS232 interface
Parity:	The parity that must be set
Stop Bits:	The number of stop bits that must be sent
Screen Debugger:	If this is active, all messages sent and received by the RS232 interface are shown in a debug screen.
File Debugger:	If this is active, all messages sent and received by the RS232 interface are saved in a file.
Error Logging:	If this field is set, all messages that are not analysed are saved in a file.
Name:	This field contains a representative name.
End-of-line:	These are the characters used to mark the end of an RS232 message (ASCII separated by ';').

#### 18.2 RS232 debug screen

🔊 R52321:-D	ebug				
Datum	Tijd	Remote	Info	Tekst	▲
30/7/2009	9:33:25	Com1:	OPEN	BaudRate=9600,Parity=0,StopBits=2,Bits=7	
30/7/2009	9:33:29	COM Com1:	READ	test ber	
30/7/2009	9:33:29	COM Com1:	BUFFER	test ber	
30/7/2009	9:33:29	COM Com1:	READ	ichti	
30/7/2009	9:33:29	COM Com1:	BUFFER	test bericht	
30/7/2009	9:33:29	COM Com1:	DATA FOUND	test berich@	
30/7/2009	9:33:29	COM Com1:	INFO	Voorwaarde: bericht	
30/7/2009	9:33:29	COM Com1:	INFO	Group="0"	
30/7/2009	9:33:29	COM Com1:	INFO	Msg1=""	
30/7/2009	9:33:29	COM Com1:	INFO	Msg2='"'	
30/7/2009	9:33:29	COM Com1:	INFO	Msg3=''''	
30/7/2009	9:33:29	COM Com1:	INFO	Msg4=""	-

#### 18.3 RS232 analysis screen

With this screen you can view the content of incoming information and use it to establish the conditions. This screen appears if you select a line in the debug screen and press the 'a' key.

A Ana	alyse															
	Text	1	2	3	4	5	6	7	8	9	10	11	12	13		
•	test berichti	t	е	s	t		Ь	е	r	i	с	h	t	0		
	test berichtil (asc)	116	101	115	116	32	98	101	114	105	99	104	116	13		
Lengte	1		_	_	_	_		_		_	_			_		
Longeo	•															

![](_page_31_Picture_0.jpeg)

#### 18.4 RS232 condition rules

These rules are used to determine what is done with the incoming data. If one of the conditions is met, this rule will be processed according to the rules of this condition. The condition consists of a word that must occur at a certain position in the rule; once found, all the variables are collected from the rule at specified positions, for a specified length.

🔛 Yoo	rwaard	en								
1 🗋 📍	א נ	¥ 🗈	🔁 🏦	1						
	Naam	Plaats	Woord	MSG1 positie	MSG1 Lengte	MSG1 vertaling	MSG2 positie	MSG2 lengte	MSG2 vertaling	MSG3 positie
۱.	ack	2	ACK	0	0		0	0		0 C
										F

Voorwaarde			_ 🗆 >
Naam	ack		
Woord	ACK		
Plaats	2		
Groep	2	•	
C Profiel	0	•	
	Plaats	Lengte	Vertaling
	0	0	
	Plaats	Lengte	Vertaling
MSG1	0	0	
MSG2	0	0	
MSG3	0	0	
MSG4	0	0	
MSG5	0	0	
MSG6	0	0	
Annuleren			© ок

![](_page_32_Picture_0.jpeg)

#### 18.5 RS232 conversion rules

The filtered information can then be compared to a list for conversion. If this word does not occur in the conversion list, the variable retains its original value.

🛃 Con	versie-tabel		
Conve	ersie 🎦 🗙 🏢 [	<b>X</b>	
	Oorspronkelijk	Translatie	
•	Call	Оргоер	
	Door	Deur	

## 19. <u>IP</u>

This module makes it possible to read and send TCP/IP information. Both TCP and UDP are supported. This module is mainly used to read in information from the iCall nurse call system.

IP7:iCa	1					
	Tijd	IP	Header	Bericht	TTL	
۱.	14:59	192.168.30.53		01.00020Toilet 0	0	
	14:59	192.168.30.53		0100020Toilet 0	0	
	14:59	192.168.30.53		0100020Toilet 0	0	
	14:59	192.168.30.53		0100020Toilet 0	0	
	14:59	192.168.30.53		0100020Toilet 0	0	
	14:59	192.168.30.53		00100100030560C	0	
	14:59	192.168.30.53		0100020Toilet 0	0	
	14:59	192.168.30.53		00100100030560C	0	

![](_page_33_Picture_0.jpeg)

## 20. Repeat calls

This module makes it possible to start a repeat call. A reference is included in the list, and this reference must also be used to stop the call.

The interval between calls can be set to a length of up to 5 minutes.

The repeat calls can be assigned a different colour to make it easier to identify the repeat calls.

Note: This interface does not have a debug screen.

TTL=0 The last call only goes out to the TTL group

TTL=1 The last call only goes to the called group and the TTL group

Herhaa	loproep						
	Referentie	MSG1	MSG2	MSG3	MSG4	MSG5	MSG6
۱.	ааа	ааа					
	999	999					
4							

![](_page_34_Picture_0.jpeg)

## 21. <u>Mail</u>

This module makes it possible to send e-mail messages. Optionally, one attachment can be sent with each e-mail.

🔜 Input-Output instellingen		_ 🗆 🗵
Netrix		
	EMAIL	
	I⊄ Aan/Uit	
	SMTP-server 192.169.1.251 From netrix.server@essec.be	
ESPA-IN-2 ESPA-IN-3 SPA-IN-4	Credentials Account	
	Password	
SPA-IN-8 	Domain	
ESPA-OUT	Default-groep	
ESPA-OUT-3 	Scherm Debug	
ESPA-OUT-6	<ul> <li>File Debug</li> <li>FoutLogging</li> </ul>	
ESPA-OUT-8 		
□-Q IP-1		
IP-2 IP-3		
IP-4 IP-5 IP-6	Cancel	© ок

## 22. Condigi

This interface makes it possible to register calls from wireless Condigi pendants. The calls are sent to the Netrix via a Condigi Wireless Receiver IP. The receivers filter out double calls themselves (interval between calls can be set in the website of the receiver), and the Netrix does this too (in the case of calls coming from two different receivers).

Various call groups can be assigned to each pendant. This is necessary so the calls can later be sent to the right group.

If 'automatic learning' is activated, all Condigi pendants that place calls are configured with a standard set of groups. Various groups can be set for the following types of calls:

- Call
- Call type2
- 3Push
- Battery-low
- New Position

Every pendant can also be temporarily deactivated.

To obtain an overview of the various receivers, use the menu option Info -> Condigi.

![](_page_35_Picture_0.jpeg)

## 23. Mobile phone

The mobile phone interface is linked to a mobile phone modem (Wavecom, Siemens). This module takes care of configuring this modem properly. Some information is also retrieved from the modem, such as the signal strength and quality. The software can make use of SIM cards with or without a PIN code. The signal strength and quality are shown at the bottom left of the interface.

The connection between the modem and the PC is made via a standard RS232 cable.

歸 Input-Output instellingen		
Netrix         ALCATEL           AUDIO         GSM           INGANGSHOOFD         ESPA-IN-1           ESPA-IN-2         ESPA-IN-2           ESPA-IN-3         ESPA-OUT           ESPA-OUT         ESPA-OUT-2           ESPA-OUT-3         ESPA-OUT-3           IP-1         IP-2           IP-3         RS232-1           RS232-2         RS232-3           RS232-4         RS232-5	Image: Cost of the second	
	<ul> <li>✓ SchermDebug</li> <li>✓ FoutLogging</li> <li>✓ FileDebugger</li> <li>✓ FileDebugger</li> </ul>	Voorwaarden Vertalingen

![](_page_36_Picture_0.jpeg)

## 24. Conversion tables

Just as with RS232 or IP, we can add additional conversion tables. To do so, use the menu option Setup -> Conversion tables.

First create a new conversion table, and then add your conversions. You can also easily import a CSV file, which is handy if you need to add many conversions.

Note: You will need the name of the list later on if you want to use a conversion table to convert a variable in the groups.

🕙 Co	nversie-tabellen		
Conv	versieTabel 📷 🙀		
	LijstID		
۱.	qs		
	аа		
	db		
Conv	versie 🎦 🗙 🏢		
	Oorspronkelijk	Translatie	
•	ff	ff	

## 25. Debugging

Screen debugging can be switched on for nearly all the interfaces. This is an additional window that opens, which provides you with more detailed information.

Note:

Screen debuggers can slow down the system.

#### 26. FileDebug

If FileDebug is on, all the information that is normally displayed in screen debug will be logged to a file.

<u>Note:</u> File debuggers can slow down the system.

![](_page_37_Picture_0.jpeg)

## 27. Analysis

If you press the letter 'a' in a debug window, you can analyse the information in the selected line.

A Analyse														
	Text	1	2	3	4	5	6	7	8	9	10	11	12	13
•	test bericht	t	е	s	t		ь	е	r	i	с	h	t	0
	test bericht@(asc)	116	101	115	116	32	98	101	114	105	99	104	116	13
Lengte	1													

## 28. Languages

Languages can be added easily.

Translate one of the .lng files to the desired language. Words between [square brackets] must not be translated.

Place this file in the root directory of the Netrix software and you will then be able to select this language using the menu option Options -> Language.

## 29. Conversions

Replace old Netrix software with new Netrix software.

Make a backup of the old Netrix files and Restore them in the new software. Make sure a new licence file is available and copy it to the Netrix installation folder.

Restart the Netrix software.

Because DAT files were used in the old software, these files will be automatically converted to XML. The necessary modifications will also be made to the MRS.ini file.