

Contents

COMMUNICATING WITH ZELIOCOM	3
ARCHITECTURE DE LA COMMUNICATION CÔTÉ ZELIO-LOGIC	4
Communication architecture on the Zelio-Logic side	5
Communication architecture on the Zelio-Soft side	7
Multi Zelio-Logic communication architecture	8
FUNCTIONS: SEND A MESSAGE TO A ZELIO-SOFT PC	9
Function: send a message to a GSM mobile phone	10
Function: send commands from the Zelio-Soft PC	11
Function: send commands from a GSM mobile phone	12
COMMUNICATION PORT	14
CONFIGURE AN RTC MODEM	15
CONFIGURE A GSM MODEM	16
Zelio-Logic/Zelio-COM stations phone directory	17
Zelio-Soft PC stations phone directory	18
GSM phone directory	19
CLOCK: SETTING AND POSSIBILITY OF COMMON TIME	20
DEFINE MESSAGES	21
Define messages: procedure	22
Define the general and reset messages	23
Display the analog measurements	24
MAKE THE CONNECTION WITH A ZELIO-SOFT PC STATION ON THE INITIATIVE OF ZELIO-COM	26
Make the connection with a GSM mobile phone on the initiative of Zelio-COM	27

Make the connection on the initiative of Zelio-Soft	28
Make the connection on the initiative of a GSM mobile phone	29
Put the Zelio-Soft station on standby	30
Read alarm messages	32
Alarm log	33
UPDATE FIRMWARE ZELIO-COM	38
ZELIO-COM GSM MODEM INITIALIZATION	39
CHANGE PASSWORD	40
UPDATE AUTHORIZED SMS	41
SMS COMMANDS (1)	42
SMS commands (2)	43
SMS commands (3)	44

Communicating with Zelio-COM

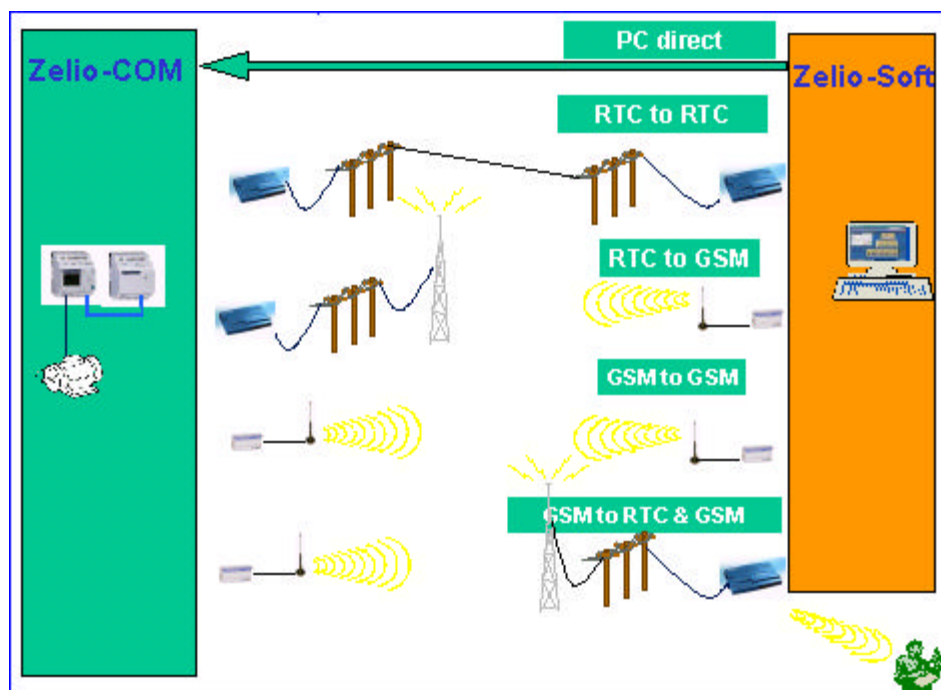
- **Architecture and functions for communicating**
 - Architecture for communicating
 - Functions for communicating
 - Communication implementation methodology
- **Modems configuration, Update firmware**
 - GSM modem RTC Modem PC port
 - Change password
 - Update firmware Zelio-COM
 - Zelio-COM module clock setting
- **Phone directories**
 - Zelio-Logic modules Zelio-SOFT PC
 - GSM mobiles Update authorized SMS
- **Messaging**
 - Define alarm messages
 - Define general and reset alarm messages
 - Display analog measurements in messages
- **Inter-station exchanges**
 - Put the Zelio-Soft PC station on standby
 - Read alarm messages
 - Alarm log
 - Dialog with a Zelio-SOFT PC on the initiative of Zelio-COM
 - Dialog with a GSM mobile phone on the initiative of Zelio-COM
 - Dialog on the initiative of Zelio-Soft
 - Dialog on the initiative of a GSM mobile

Architecture and functions for communicating

{button >>,next()}

A Zelio-Logic module connected to a **Zelio-COM** module makes to dialog remotely with:

- a GSM mobile phone (transfer of SMS messages),
- a PC with Zelio-Soft via an RTC, GSM network.



Communication architecture on the Zelio-Com side

{button <<,prev()}{button >>,next()}



Dialog on the initiative of Zelio-COM >>>

A Zelio-Logic module connected to a **Zelio-COM** module makes it possible to dialog remotely with:

- a GSM mobile phone (transfer of SMS messages),
- a PC with Zelio-Soft via an RTC, GSM network.

A Zelio-COM module can call one or more phone number(s) when a particular condition appears in a program (typically when a value changes state) and send an **alarm message**.

A Zelio-COM module can send mini-messages (120 characters maximum) to a GSM mobile phone.

Example of alarms...

Zelio-Soft - toto1.zel*

Fichier Mode Transfert Affichage ?

Journal des Alarmes

Message

Réception

No	De	Objet	Généré le	Reçu le	Corps
001	station1	Parking 1	Wed. 07/05/03 08:54:52	Wed. 09/04/03 09:56:02	Max places 0012 Free places 0002
002	station1	Parking 1	Wed. 07/05/03 08:54:50	Wed. 09/04/03 09:55:56	Max places 0012 Free places 0002

Alarme Acquitter

5 Ligne(s) / 60

Communication architecture on the Zelio-Soft side

{button <<,prev()}{button >>,next()}



<<< Dialog on the initiative of Zelio-Soft

A user can use a Zelio-Soft PC with a modem (RTC, GSM) to call a Zelio-COM module, and supervise the Zelio-Logic module as if he was connected to the PC's serial port.

Remark

The Zelio-COM module stores:

- the comments relative to the variables (Ix, Qx, Mx, Cx, Tx, Rx, Ax, Xx, Zx, Vx ...),
- the comments relative to the variables associated with the program's lines,
- the content of the **alarm messages**; addressees' numbers; message transmission condition....

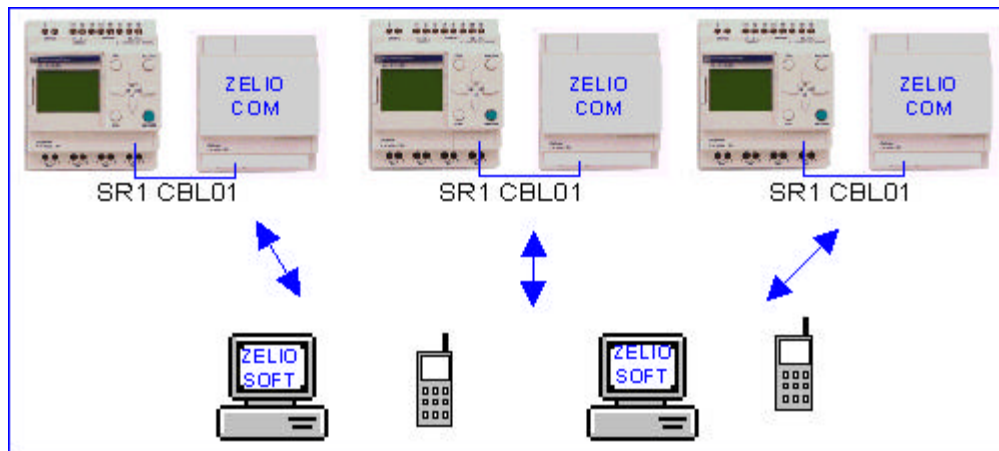
These data are transmitted to the Zelio-COM module at the time of the PC >> Module transfer.

Zelio-Soft will be able to access the comments:

- at the time of the Module >> PC transfer,
- during supervision.

Multi Zelio-Logic communication architecture

{button <<,prev()}}



<<< Dialog on the initiative of Zelio-Soft

It is possible to create an architecture with several Zelio-Logic modules which have Zelio-COM, where.

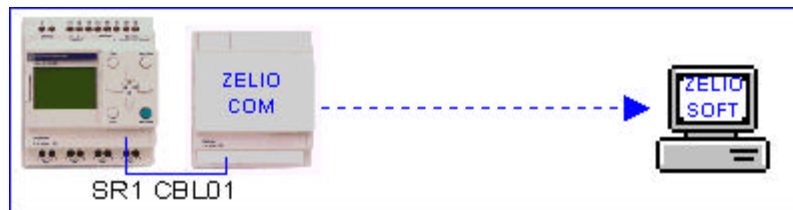
- each module can call various different Zelio-Soft PCs and GSM mobile phones.
- each Zelio-Soft PC can supervise and control several different Zelio-Logic modules.

The term **Station** is used for the equipment in the architecture:

- Zelio-Logic/Zelio-COM module station: identified by a name, phone number, password.
- Zelio-Soft PC station: identified by a name, phone number.
- GSM mobile station: identified by a name, phone number.

Functions: send a message to a Zelio-Soft PC

{button >>,next()}



Change of a value's state >>

Call the Zelio-SOFT PC >>

Send a message with parameters

1. The Zelio-COM module can call one or more Zelio-Soft PC numbers (5 max.) when a particular condition appears in a program.
2. Once the connection has been made, the Zelio-COM Interface module transfers the data relative to its call and hangs up if the user is absent. These data can consist of plain texts (hopper full) with program data (example: hopper 70 % full) with the possibility of scaling.
3. The number of calls before abandoning can be modified (0 to 10 or infinite)

Functions: send a message to a GSM mobile phone

```
{button <<,prev()}{button >>,next()}
```



Change of a value's state >>

Call the GSM >>

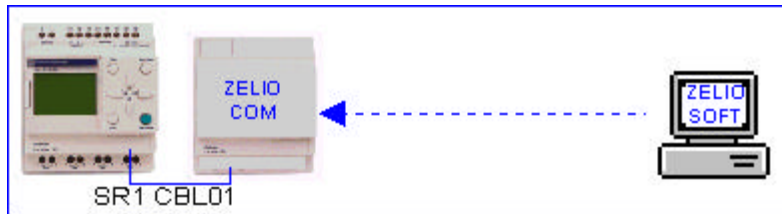
Send a message with parameters

1. The Zelio-COM module can call one or more GSM phone numbers (5 max.) when a particular condition appears in a program. Once the connection has been made, the Zelio-COM module transfers the SMS message relative to its call and hangs up at the end of the call.
2. These data can consist of plain texts (hopper full) with program data (example: hopper 70 % full) with the possibility of scaling.

SMS message transmission takes priority.

Functions: send commands from the Zelio-Soft PC

{button <<,prev()}{button >>,next()}



<< RUN/STOP, parameter settings, transfer....

A Zelio-Soft PC can call a Zelio-COM module to:

- **supervise** the Zelio-Logic module.
- **command** the Zelio-Logic module to RUN or STOP.
- **transfer the following to the Zelio-Logic module:** the program, the parameters. When transferring the information to the Zelio-COM module: messages, addressees, transmission condition, etc. are also sent.
- **transfer the following from the Zelio-Logic module:** the program, the parameters. When transferring the information stored in the Zelio-COM module: messages, addressees, transmission condition are also sent.

All these functions are performed as if the Zelio-Logic module was connected directly to the PC's serial port.

Function: send commands from a GSM module

{button <<,prev()}{button >>,next()}



<< RUN/STOP, parameters,

A GSM module can call a Zelio-COM module to:

- **command** the Zelio-Logic module to RUN or STOP.
- **read/change** the parameters and the inputs/outputs
- **set** the time.

The Zelio-COM module checks the phone numbers of the users approved to use this function.

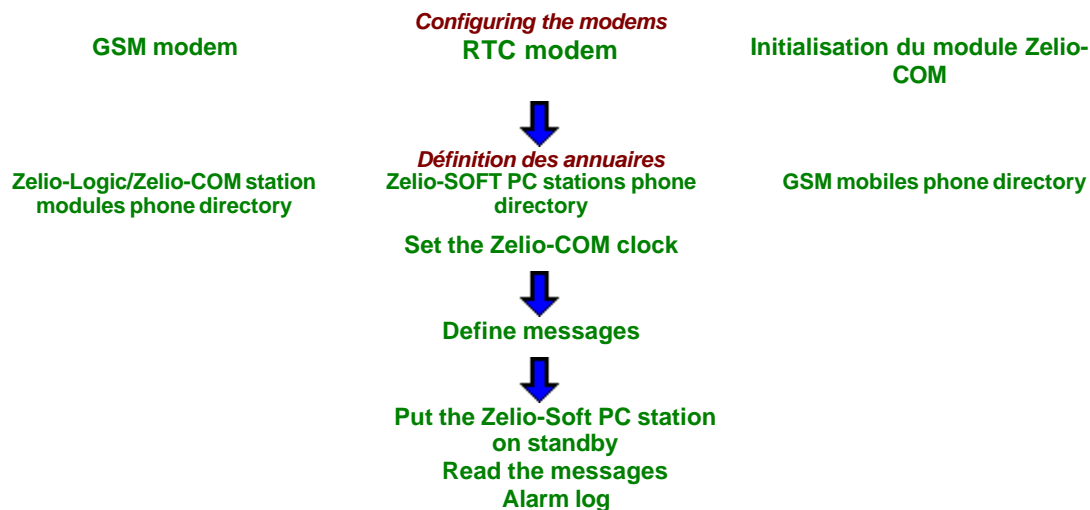
Communication implementation methodology

A "Zelio-COM" application consists of 2 parts:

- one part which makes the connection between 2 pieces of equipment using modems
- and a second part for the dialogue between these 2 pieces of equipment.

We recommend that you:

1. Configure the modems and test the connection between the two pieces of equipment: hardware test.
2. Define the information to be exchanged and the conditions.
3. Test the exchanges between Zelio-Logic/Zelio-COM and the Zelio-Soft PC in local mode.
4. Test the exchanges between Zelio-Logic/Zelio-COM and the Zelio-Soft PC using the modem link.
4. Test the exchanges between Zelio-Logic/Zelio-COM and the GSM mobiles.



Communication Port

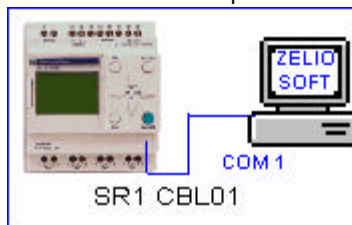
Zelio-Soft must know the number of the Communication Port used by the modem (COM 0 to 4). To find out what this number is:

1. Open the Control Panel,
2. Select Modems, and then the modem that is installed (internal or external),
3. Click on Properties and read the COM number

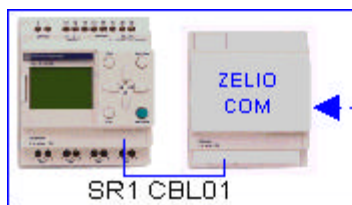
Remark

The PC has several communication ports. You can therefore have, for example:

COM1 direct
connection



COM4
connection
by modem



Configure an RTC modem

Purpose

The Zelio-COM module or the PC connected to Zelio-Soft can use RTC modems.

Configure a modem

No parameters are required for a Zelio-Soft modem.

For a Zelio-Soft modem, during the creation of the **Distant Zelio-Logic modules addressbook** you will have to identify the port used by the PC

Configure a GSM modem

Purpose

GSM modems have to be programmed before they can be used:

- Enter the PIN code
- Lock the PIN code
- Change the PIN code
- Enter the number
- Test the network
- Self-adaptation of the dialog speed

Zelio-COM module initialization

Enter the PIN code, test the network

1. Select the **Tools/ GSM modem configuration** menu
2. Select the port to which the modem is connected, then click on Next. When the modem is detected, its details appear.
3. Select the type of modem to configure:
 - Modem for Zelio-Soft
 - Modem for Zelio-COMThen click on Next.
4. Activate the PIN number request
5. Enter the PIN number and click on Next
6. To test the SMS service (Send a message to a GSM receiver) :
 - Enter the number of the calling server,
 - Enter the telephone number of the GSM receiver,
 - Enter the text to send,
 - Click on Send,

Zelio-COM or Zelio-Soft configuration

1. Select the **Tools/ GSM modem configuration** menu
2. Select the port to which the modem is connected, then click on Next. When the modem is detected, its details appear.
3. Select the type of configuration:
 - Modem for the local unit with Zelio-Soft: 19200 baud and PIN request deactivation
 - Modem for the local unit with Zelio-COM: 9600 baud and PIN request deactivationThen click on Next.
4. Deactivate the PIN number



The PIN number must be deactivated to be compatible with Zelio-Soft and Zelio-COM.
If the PIN number is necessary it will be requested.

Remark

To enable the Zelio-COM module to send SMS messages to GSM mobiles you must check the "Send SMS" option when declaring the addresses of the Zelio-COM modules.

See **Zelio-Logic modules phone directory**

Zelio-Logic/Zelio-COM stations phone directory

Purpose

To define the addresses of the Zelio-Logic/Zelio-COM stations and the communication port to be used on the Zelio-Soft PC to dialog with the stations.

Procedure

1. Select the **Directory/Distant Zelio-Logic module** menu.
 2. Select **Create** to define the station's address.
 3. Enter the **module identification**. This will make it possible to identify the various stations that can be addressed.
 4. Click on the drawing corresponding to the type of connection : **direct** or **by modem** (Zelio-COM). If you select the direct connection, you must indicate the communication port to be used (COM 1 to 4).
 5. In the case of the modem connection :
 - 5.1. Select the communication port for the Zelio-Soft PC's modem,
 - 5.2. Indicate the **phone number** to be called, corresponding to the Zelio-Logic/Zelio-COM station,
 - 5.3. Enter the **security code** for accessing the Zelio-COM module and click on Next,
 - 5.4. Indicate the type of modem used with the Zelio-COM module: RTC or GSM and click on Next,
 - 5.5. For **GSM Mobile**: select the **Send SMS** option to enable the Zelio-Logic/Zelio-COM station to send SMS messages to GSM mobile phones and click on Next.
 6. The software then indicates the addresses of the modules that can be accessed.
 7. Click on Done, the Zelio-Logic/Zelio-COM stations phone directory is displayed.
- The **Modify** and **Delete** buttons allow you to modify this directory.

 **Also see...**
Change password

Zelio-Soft PC stations phone directory

Purpose

To define the addresses of the Zelio-Soft PCs so they can be called by Zelio-COM/ Zelio-Logic stations.
To define the number of connection attempts to be made by the Zelio-COM module before abandoning.

Procedure

1. Select the **Directory/ PC Zelio-Soft Stations** menu.
2. Select **Create** to define the address of the Zelio-Soft PC station.
3. Enter the name of the Zelio-Soft station, the phone number and the number of attempts (1 to 10 or infinite).

GSM mobile phone directory

Purpose

A Zelio-Logic/Zelio-COM station can send mini-messages with a maximum length of 120 characters to a GSM mobile phone. The GSM mobile phone numbers must therefore be given so they can be called by Zelio-COM/Zelio-Logic stations.

Procedure

1. Select the **Directory/SMS addressees** menu.
2. Select **Create** to define the address of the GSM mobile phone.
3. Enter the mobile phone's name and number.

Zelio-COM module clock setting

The Zelio-COM module has a Year / Month / Day / Hour / Minute clock which makes it possible to:

- date all the alarm messages transmitted by Zelio-COM
- update the time on the Zelio-Logic module periodically or when a given event occurs (for example after detection of a Zelio-Logic module power up, connection, etc. state).
- automatically change the Zelio-Logic module's SUMMER / WINTER time.

Accessing the Zelio-COM module clock settings...

1. Select the **Module/Clock setting** menu
2. Select the Zelio-COM module for which you want to set the time and validate, by default the PC's clock is displayed.
3. Set the parameters as described below,
4. Click on **Validate**.

The Zelio-COM module's time is updated and it updates the time of the Zelio-Logic module.

Modifying the date...

1. Click on the arrow in the **date zone**,
2. Select the day of the month,
3. Use the right and left arrows to change the month.

Modifying the time...

1. Select the hour or minutes or seconds,
2. Use the up and down arrows to make your modifications,
3. Select winter or summer time so that the module can subsequently change the time.

The SUMMER / WINTER time change will be automatic with 3 modes:

- Europe zone
- US zone
- configurable :
 1. enter the Winter >> Summer date (sunday and month)
 2. enter the Summer >> Winter date (sunday in the month)

Time correction frequency for the Zelio-Logic module ...

Select the time correction periodicity.

Define alarm messages (1/4)

[Next](#)

Purpose *Example of an input, Example of an alarm*

Following the change of a variable's state in the Zelio-Logic application program, the module can send:

- an alarm message to a station that has Zelio-Soft,
- an SMS message to a GSM mobile phone,

Accessing alarm message input:

Select the **Edit/Free mode/Define alarms** menu

Remark

It is possible to access message inputting directly in the program editor:

1. Select the variable for which you want to edit the message,
2. Right click and select **Properties**.
3. Select **Messages**.

Variables conditioning transmission of a message

- I, Q, Z, M, T, C, V, A, clock, text block.
- Send on 0>1 or 1>0 transition or on change of state.

Content of a message *Example of an input*

A message consists of:

- a message subject zone
- a message body zone

It is made up of alphanumerical characters.

The body of an alarm message is made up of static data (clear text) and dynamic data (values of the Zelio-Logic application's variables):

- Programmed/current value of the timeouts.
- Programmed/current value of the counters.
- Reference/hysteresis value of the analog comparator blocks.
- Ib/Ic current value with user scaling,

[Next](#)

Also see...

Put station on standby
Read alarm messages
Alarm log

Define alarm messages (2/4)

[Previous](#), [Next](#)

Input procedure *Example of an input, Example of an alarm*

1. Select the variable,
2. Double click on the **Subject** zone,
3. Select the type of message addressee, PC or GSM, by clicking on the corresponding button.

Zelio-Soft PC station type addressees

In the list of Zelio-Soft PC stations, select each addressee of the message and click on **Send** to add the station to the lists of addressees (5 max.).

GSM module type addressees

In the list of GSM stations, select each addressee of the message and click on **Send** to add the station to the lists of addressees (5 max.).

You can give several addressees.

The **Properties** button allows you to modify the addressee's characteristics.

The **New** button allows you to define a new addressee.

4. Enter the message to be transmitted.
To insert the content of a variable, right click and select the variable.
5. Select the message transmission condition
 - Transition Inactive > Active : transmission of the message when the variable changes from 0 to 1.
 - Transition Active > Inactive > : transmission of the message when the variable changes from 1 to 0.
 - Change of state : transmission of the message when the variable changes from 0 to 1 or from 1 to 0.

[Previous](#), [Next](#)

Also see...

[Put station on standby](#)

[Read alarm messages](#)

[Alarm log](#)

General and reset alarm messages (3/4)

[Previous](#), [Next](#)

Purpose

It is possible to define:

- a "general communication failure" type message. This message is transmitted by Zelio-COM after a communication breakdown between the Zelio-Soft station and the Zelio-Logic module.
- a "reset " type message. This message is transmitted by Zelio-COM when it is started up or after a Zelio-Com/Zelio-Logic station Reset.

Procedures

1. Select the **Module/Configure module** menu.
2. Select the **General Alarm** or **Reset Alarm**.
3. Enter the text of the message in the same way as for a **standard alarm message**.

[Previous](#), [Next](#)

Also see...

[Put station on standby](#)
[Read alarm messages](#)
[Alarm log](#)

Messages: display analog measurements (4/4)

[Previous](#)

Purpose

Zelio-COM is able to process the **Ib**, **Ic**, **Ax** analog values so they can be presented in an alarm message as a physical value directly usable by the user.

Example: utilization of an analog comparator A1 whose Ib input is connected to a linearized PT100 temperature probe.

The following physical magnitudes, which can be used by the user, are associated with the Ib minimum (0.0V) and with the Ib maximum (9.9V):

- 0.0V with 10 °C.
- 9.9V with 100 °C.

Procedure

1. In the program editor, select the variable concerned (for example: Ib)
2. Right click on the variable and select **Properties**.
3. Define the unit, and the max. and min. values.


To insert the content of the variable in a message, right click and select the variable.

[Previous](#)

Example of a message


Bloc I1 - Alarm message definition

Message recipients

 Zelio-Soft PC: ...

SMS Message: ...

Message to send


 Object:

Content:

No	Functional block	Comment
01	T1 Preset	TempoT1
02	T1 Current	
03	C1 Preset	Compteur C1
04	C1 Current	

OVR

Condition of sending message

 Zelio-COM send the message when I1 goes from state :

☒ Transition INACTIVE to ACTIVE
☐ Transition ACTIVE to INACTIVE
☐ Change of state

Release message definition OK Cancel

Make the connection with a Zelio-SOFT PC station on the initiative of Zelio-COM

When a variable changes state, the module calls one or more Zelio-Soft PC station phone numbers according to the list defined in the alarm message.

The phone numbers called are modems (GSM, RTC).

Once the connection has been made, if the station is on standby, the Zelio-COM module transfers the alarm message linked to its call and hangs up when the programmed number of call attempts has been reached.

Remark

The connection is automatically cut off by Zelio-SOFT once the last alarm message has been received. The user therefore cannot "make the most" of this call (generated by Zelio-COM) to carry out supervision or command operations.



Also see...

Define messages

Put station on standby

Alarm log

Make the connection with a GSM mobile phone on the initiative of Zelio-COM

When a variable changes state, the module calls one or more GSM station phone numbers according to the list defined in the alarm message.

Once the connection has been made, the Zelio-COM Interface module transfers the alarm SMS message linked to its call and hangs up if the user is not present.

 **Also see...**
Define messages

Make the connection on the initiative of Zelio-Soft

A user can connect up to a Zelio-Logic module from a Zelio-Soft PC station via a Zelio-COM interface and perform operating functions as if he was connected directly to the PC's serial port:

In this configuration the modem connected to the Zelio-COM module must be on standby to receive a call.

Security

The accesses are made secure by a security code that was declared when the Zelio-Logic connection was configured.

Possible commands

- RUN/STOP,
- Set the time,
- Transfer program,
- Transfer parameter,
- Supervision functions.

Remarks

1. The Zelio-COM module stores:

- the comments on the variables (Ix, Qx, Mx, Cx, Tx, Rx, Ax, Zx,...),
- the comments on the variables associated with the program's lines,
- the content of the **alarm messages**; addressee number; message transmission condition....

These items are transmitted to the Zelio-COM module at the time of the PC >> Module transfer

2. The items stored in Zelio-COM will be accessible to Zelio-Soft:

- when making the Module >> PC transfer,
- when carrying out supervision.

Make the connection on the initiative of a GSM mobile phone

A user can connect up to a Zelio-Logic module with a GSM mobile phone via a Zelio-COM interface to carry out the operating functions.

In this configuration, the modem connected to the Zelio-COM module must be on standby.

Security

The accesses are made secure by a security code declared when configuring the connection to Zelio-Logic

Possible commands

- RUN/STOP,
- Set the time,
- Read the parameters.
- Read/modify the state of the variables

SMS commands

Put station on standby

Purpose

To be informed at all times of the arrival of an **alarm message** from Zelio-Logic stations while working with Zelio-Soft or other software.

As soon as an alarm message arrives, **an alarm banner** is displayed at the bottom of the screen.

Notes

1. The Zelio-COM module buffer can store up to 20 alarms in a FIFO-type stack.
2. When in supervision mode, alarms are ignored (there is no saving).

Procedure for putting on standby



1. Select the station's **Transfer/Put on standby** menu or click on the icon.

2. Select the Zelio-Soft PC's communication port.

The standby operation icon is activated, and the Zelio-Soft station is ready for an alarm to appear.

Alarm processing

As soon as an alarm message arrives, **the alarm banner** is displayed.

The acknowledge button allows you to acknowledge the alarm (the alarm banner disappears).



Select the **Mode/ Alarm log** menu or click on the  icon to consult the alarms



Also see...



Also see...

Define alarm messages

Read alarm messages

Alarm log



Read alarm messages

Purpose

To read the alarm messages from a Zelio-Logic/Zelio-COM station.

A message consists of:

- a message subject zone
- the text of the message
- the variable that conditions transmission of a message

The message may contain one or more program variables (current value or preselection with scaling). *Example*

Procedure

1. Select the **Transfer/Read alarm messages** menu.
2. Select the Zelio-Logic module.



Also see...

Define messages

Put station on standby

Alarm log


Alarm log

Purpose

When a Zelio-Soft station is **put on standby**, as soon as an alarm message arrives, an **alarm banner** is displayed at the bottom of the screen and the alarm received is stored in the alarm log. The alarm log summarizes all the **alarm messages** received.

Procedure



Select the **Mode/Log mode** menu or click on the  icon.

Content of the alarm log

- Message number: the messages are stored starting with the most recent one,
- Transmitter identifier (Zelio-Logic/Zelio-COM station),
- Subject of the message,
- Transmission time (time that the event was detected by the Zelio-COM module)
- Time of reception by the Zelio-Soft PC,
- Message body

.Example

Sorting the messages

It is possible to sort the messages by their time of arrival, time of transmission, transmitter, etc. by clicking on the title of the corresponding box (example: Generated on ...).

Message selection

Click on the message to select

CTRL + A selects all the messages.

It is possible to select several messages (by using the CTRL or SHIFT key).

Deleting messages

Messages in the list can be deleted.

For safety reasons, this function is protected by a password (Menu **File/Change the alarms password**)

Select the message and press the **Del.** key.

Messages printing

Select the messages to Print and click on the Print icon.

Messages saving

Messages can be saved to file. This *.CSV format file can be read by Excel.

The separator is ; and as a consequence the message should not contain ; .

Select the messages to save and click on the CSV icon.



Also see...

Define alarm messages

Put station on standby

Read alarm messages

Zelio-COM on-line help...

Copyright 2002

SCHNEIDER ELECTRIC SA
ACROBAT READER

WEB



Print...

 *Print current section...*

 *Print on-line help ...*

The content of the on-line help is available in the form of a PDF file.

You can read the file using AcrobatReader.

You can consult this file and print the sections you are interested in.



**Execution fault**

Software not available on the PC
(example: Acrobat Reader not installed)

Documentation file not available



Update Firmware Zelio-COM

Purpose

Update the Zelio-COM firmware (software built into the Zelio-COM hardware).

Read the software version number

1. Select the menu **Tools/Update the Zelio-COM firmware**.
2. Click on the **Read button to see the installed version number**.
3. Select the module for which the version number is desired.
4. Click on OK. The PC connects to the module and retrieves the version number and date.

Transfer a new executable to the Zelio-COM module

1. Select the menu **Tools/Update the Zelio-COM firmware**.
2. Click on the **Transfer programme Zelio-COM button**.
3. Select the folder that contains the update file.
Example C:\Zeliosoft\ZelioCOM2\Zeliocom_uploaded. H86.
4. Select the module to update.
5. Click on OK. The PC connects to the module and transfers the new version.

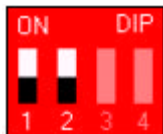
Zelio-COM GSM modem initialization

At initialization, Zelio-COM:

- Detect the type of modem connected (38400 baud RTC or 9600 baud GSM).
- Initialize the modem (Send a Hayes compatible command string).

Furthermore, the media connection can be designated directly by use of switches present on the Zelio-COM card. Therefore, automatic detection is no longer possible.

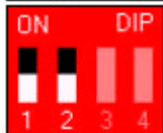
Only the switches 1, 2 are used:



Successful automatic detection



RTC modem connected
(automatic detection is not successful).



GSM modem connected
(automatic detection is not successful)



Direct serial connection with Zelio-Logic, no modem connected.

The Zelio-COM module takes approximately one minute to initialize before communication is possible.

Change password

Purpose

When defining the addresses of the Zelio-Logic/Zelio-COM units you declared a **safety access code** for the Zelio-COM module (8 character alphanumeric password).

When you transfer the Zelio application, this code is registered in Zelio-COM.

This code can be changed by connecting to the module.

Procedure

1. Select the menu **Module/Change Zelio-COM identification key**.
2. Select the address of the module for which you wish to change the identification code and click on OK to connect.
3. Enter the current key code, the new key code (represented by stars) and confirm the latter.
4. Select OK to update.

Update authorized SMS

Purpose

Access to Zelio units can be managed by GSM telephones, by levels.

Two levels can be defined: 0 and 1.

Level 0: all GSM telephones have access to the module.

Level 1: only **authorised** GSM telephones can access the module using SMS commands.



Numbers have to be defined using international format

Example: France +33 06 12 34 56 78

Procedure

1. Select the menu **Module/ Update authorized SMS**.
2. Select the module settings for which you wish to manage accesses and select OK .
Two lists are displayed:
 - The list of mobile GSM numbers
 - The list of authorised GSM telephones
3. Select the level then the **enable** or **disable** button to add or delete GSM telephones from the list.
4. Choose OK to update.

New: Allow definition of a new GSM telephone.

Property: allow reading and modification of GSM telephone properties.

SMS commands

{button <<,prev()}} {button Print,Print()}} {button >>,next()}}

Purpose

Control Zelio-Logic modules via SMS, information:

- RUN/STOP the module.
- Read / Change Variables: Zx, Ix, Mx, Qx, Tx, Cx, Ax, Rx.
- Read / Change the function group parameters (change if the group is not locked)
- Read / Change the time.

In order to secure commands the safety code (an 8 character password) must always be declared and must be composed of 8 alphanumeric characters.

In the examples this code is represented by 12345678

Example 1

Write I1 and I3,
Read I2 STATE and Q1

Command

12345678 I1=1 I2? I3=0 Q1?

Response

Zeliocom-12/12/01 11:01- I1=1 I2=1 I3=0 Q1=1

Error messages and execution errors

Zeliocom-12/12/01 10:01-Invalid password: wrong password

Zeliocom-12/12/01 10:01-Device not connected: module not connected

Zeliocom-12/12/01 10:01- *** : Syntax contains stars * >> invalid syntax

Other cases

A Zelio-Soft unit is being supervised: the SMS cannot be immediately processed because the modem is busy.

Read error of a value: the value is replaced by **Err**.

Syntax commands

Password Command heading *Send key*

- The password is an eight character string
- Each element of the command is separated by a space.
- One message can contain multiple commands, with each command separated by a space.
- The message returned by Zelio-COM is limited to 160 characters.

Read command: Password Variable?

Write command: Password Variable = value

Answer Zelio-COM-DD/MM/YY HH:MM-command response

Example 2

Write I1, I2, the threshold value of counter C1 and the value of the analog comparator A1

Read the value of I3 and of the R1 clock function blocks channel A

RUN the Zelio-Logic module

Command

12345678 I1=1 I2=0 I3? C1P=1000 A1P=9.9 R1PA? RUN

Response

Zeliocom-DD/MM/YY HH:MM-I1=1 I2=0 I3=1 C1P=1000 A1P=9.9
R1PA=0 1 1200 2000 STATE=RUN

SMS commands

{button <<,prev()}} {button Print,Print()}} {button >>,next()}}

● RUN/STOP command and module state

Commands	Examples	Responses
RUN	12345678 RUN	Zeliocom-12/12/01 10:01-STATE=RUN
STOP	12345678 STOP	Zeliocom-12/12/01 10:01-STATE=STOP
Read the module state	12345678 STATE?	Zeliocom-12/12/01 10:01-STATE=POWER CUT (power off)

● Read / Change Ix, Mx Zx, Qx, Rx Variables

Variables	Examples	Responses
Ix	12345678 I1=1 I2? I3=0 I4?	Zeliocom-12/12/01 10:01-I1=1 M1=0 Q1=1
Mx	12345678 M1=1 M2=0 ME? MF?	
Zx	12345678 Z1=1 Z2? Z4=0	
Qx	12345678 Q1=1 Q1? Q2=0 Q3?	

● Analog function blocks

Commands	Examples	Responses
Change Reference / Hysteresis value: AxP=	12345678 A1P=1.2V A2P=9 V 12345678 A3P=38 (case of scaling)	Zeliocom-12/02/03 10:01- A1P=1.2V A2P=9V Zeliocom-12/02/03 10:01- A3P=38
State of the Ax output?	12345678 A1? A5?	Zeliocom-12/02/03 10:01- A1=1 A5=0
Read IBV ICV values?	12345678 IBV?	Zeliocom-12/02/03 10:01- IBV=1.2V

SMS commands

{button <<,prev()}} {button Print,Print()}} {button >>,next()}}

● Timer function blocks

Commands	Example	Responses
Change the preset value : TxP=	12345678 T1P=1000 T2P=0010	Zeliocom-12/02/03 10:01-T1P=1000 T2P=0010
State Output Tx?	12345678 T1? TA?	Zeliocom-12/02/03 10:01-T1=0 TA=1
Read the current value: TxV?	12345678 T3V ?	Zeliocom-12/02/03 10:01-T3V=0500

● Counter function blocks

Commands	Examples	Responses
Change the preset value: CxP=	12345678 C1P=12 C2P=110	Zeliocom-12/02/03 10:01- C1P=12 C2P=110
State output: Cx?	12345678 C1? CA?	Zeliocom-12/02/03 10:01- C10 CA=1
Read the current value: TxV?	12345678 C1V ? C4V ?	Zeliocom-12/02/03 10:01- C1V=800 C4V=12

● Clock function blocks

Commands	Examples	Responses
Change: Channels A,B,C,D RxPn° of channel = begin Day end Day time On space time Off Day: 0 to 6, Sunday = 0 RX output state?	12345678 R1PA=0 1 1200 1300 R2P=B 7 2 ---- 1300 12345678 RA?	Zeliocom-12/02/03 10:01- 12345678 R1PA=0 1 1200 1300 R2P=B 7 2 ---- 1300 Zeliocom-12/02/03 10:01- RA=1

● Clock setting

Command	Syntax	Examples	Response
Day setting	Day=DDMMYY	12345678 Day=121001	Zeliocom-12/12/01 10:01-Day=101201 Hour=1825 WS=011 SW=125
Time setting	Hour=HM	12345678 Hour=1012	
Winter time setting	WS=Month number of Sunday (1 to 5)	12345678 WS=011	
Daylight savings setting	SW=Month number of Sunday >	12345678 SW=125	
Read date	Day? Hour? WS? SW?		

