

User Manual

ADAPTIVE
MICRO SYSTEMS

ALPHARh ea Keypad

ALPHARh ea Keypad



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REVISIONS

Date	Rev #	Auteur	Description
30/11/2006	1.0	A.C.	Document cr�ation

1- Step by step

1

Install the "OOh Media!" software

Edit messages that you want to display

Connect the sign to the PC using an Ethernet cable

Download messages into the sign

2

Install the "ALPHARh a Keypad Configurator" Software

Select the folder containing the downloaded messages

Connect the AlphaRh a keypad to PC

Load the message names into the AlphaRh a Keypad

3

Manage the sign with the AlphaRh a Keypad

Connect the AlphaRh a Keypad to the sign

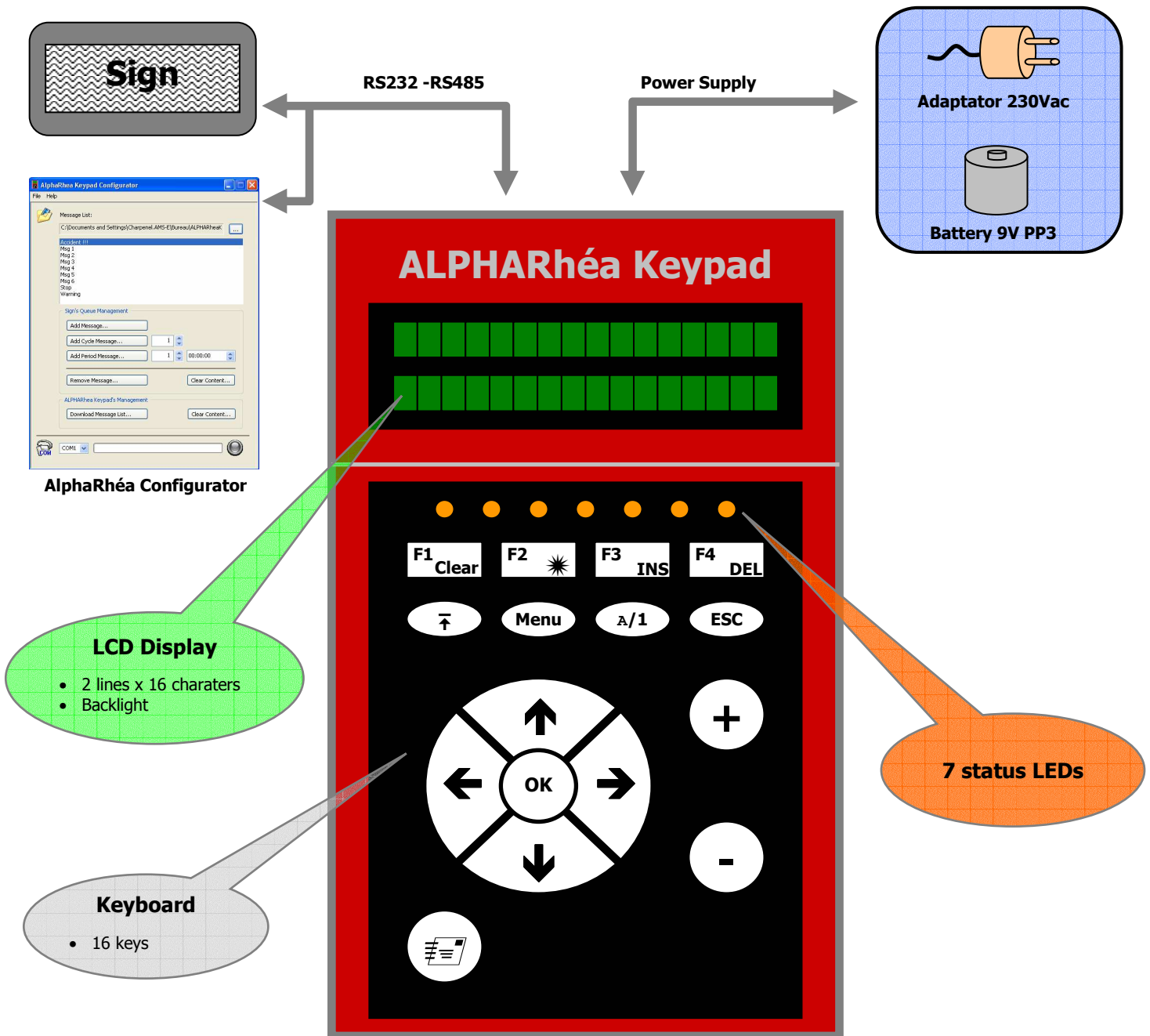
Turn on the AlphaRh a

2- Introduction

The **ALPHARh ea Keypad** interface has been developed to meet frequent customer needs in several kinds of markets.

The interface allows to manage the Adaptive’s signs in a simple and convivial way such as: enable/disable messages, clear memory, inc/dec variables, etc.

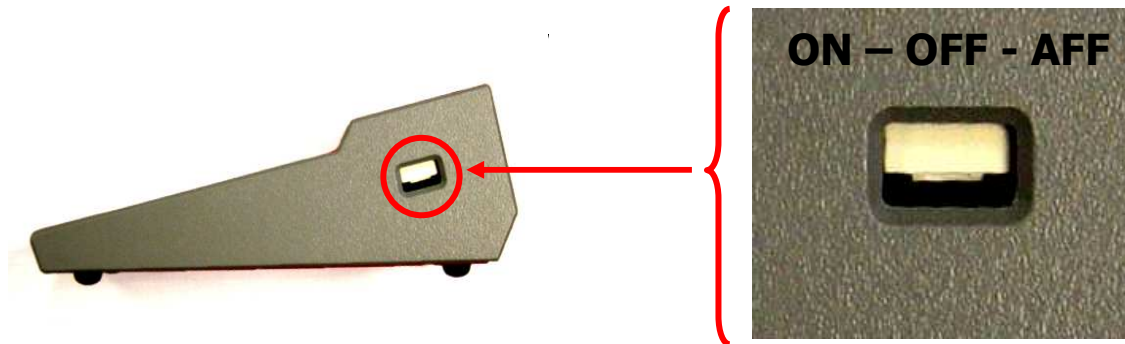
2.1- System overview



3- Start-up

3.1- Power supply

The power mode is setup by the lateral switch as follow:



Position **ON** selects the power from:

- The AC Adapter (230Vac/9Vdc) supplied with the kit
- A 9V battery (type PP3)

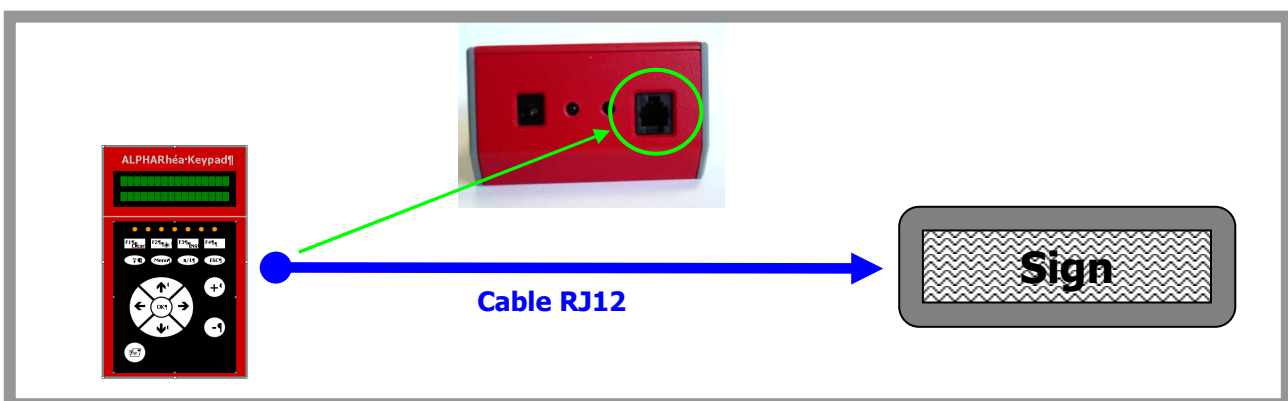
Position **OFF** turns off the AlphaRh ea Keypad

Position **AFF** allows (depending on the sign) to power the interface directly from the sign.

Note: For self powered use, turn the AlphaRh ea Keypad off after having used it, in order to save the battery life.

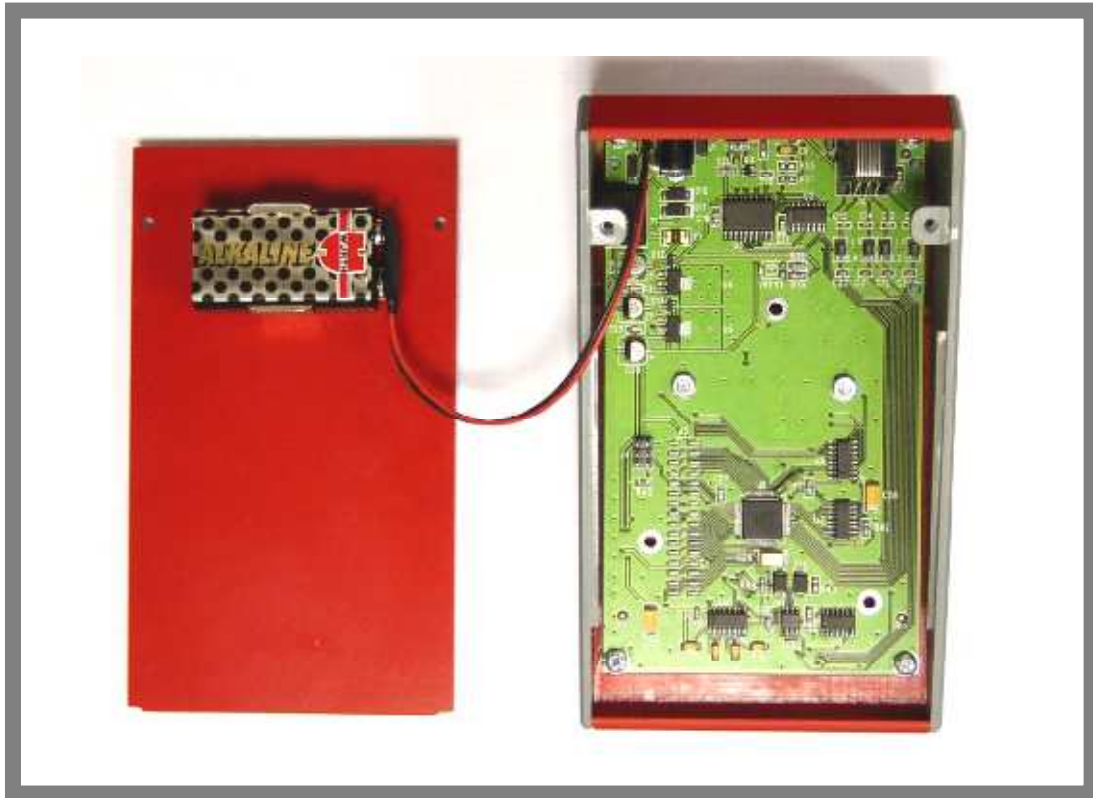
3.2- Connection to the sign

The connection between the PC and the interface is done through a RJ12 cable supplied with the product.



3.3- Battery replacing

The battery replacing is done by opening the back of the box, after having removed the 2 screws.



Note: The battery is a **PP3 9V**.

4- ALPHARh a Keypad Configurator

The **ALPHARhea Keypad Configurator** application allows the user to perform the following actions:

1. Select a folder and populate a message list control with all messages that were created with the OOh!Media application
2. Send commands directly to the sign to add messages in several ways in its queue
3. Download the complete message list to the ALPHARhea Keypad in order to display the message name on the LCD display

4.1- User Interface

The screenshot shows the AlphaRhea Keypad Configurator application window. The interface is divided into several sections:

- Message List:** A folder icon and a text field showing the path `C:\Documents and Settings\Charpenel.AMS-E\Bureau\ALPHARheaK`. Below this is a list of messages: "Accident !!!", "Msg 1", "Msg 2", "Msg 3", "Msg 4", "Msg 5", "Msg 6", "Stop", and "Warning".
- Sign's Queue Management:** Contains buttons for "Add Message...", "Add Cycle Message..." (with a numeric input field set to 1), "Add Period Message..." (with a numeric input field set to 1 and a time input field set to 00:00:00), "Remove Message...", and "Clear Content...".
- ALPHARhea Keypad's Management:** Contains buttons for "Download Message List..." and "Clear Content...".
- Communication Status:** At the bottom, there is a COM port dropdown menu set to "COM1" and a circular status indicator.

Numbered callouts (1-10) point to specific UI elements. Colored boxes on the right provide descriptions for groups of these elements:

- Orange box:** Message list loaded from the folder created with the Ooh!Media application (points to callout 1).
- Green box:** List of commands directed to the **Excite sign** (points to callouts 3, 4, 5, 6, 7).
- Blue box:** List of commands directed to the **ALPHARhea Keypad** (points to callouts 8, 9).
- Red box:** Communication status (points to callout 10).

ALPHARh a Keypad– User Instruction

ID	Description
1	Select the folder containing the messages sent to the sign
2	This list contains the message’s names
3	Add a simple message to the sign’s queue
4	Add a cycled message to the sign’s queue. The message will stop after a certain number of predefined cycles
5	Add a periodic message to the sign’s queue. The message will stop after certain predefined number of days, hours minutes an seconds
6	Remove a message from the sign’s queue
7	Clear the sign’s queue. Remove all messages from it
8	Download the message’s names to the AlphaRh�a Keypad
9	Clear the message’s names list from the AlphaRh�a Keypad
10	Select the communication port

The **ALPHARhea Keypad Configurator** application saves some of its parameters to the AlphaRheaKeypadConfigurator.ini

[WINDOW POSITION]
X=415
Y=96
Width=466
Height=590
Show=0

[SIGN]
IPAddress=192.168.001.001

[SERIAL COM]
Port=4
Baudrate=4
DataBits=2
Parity=0
StopBits=1
HardwareControlFlow=0
TXBufferSize=1024
RXBufferSize=1024
ReadIntervalTimeOut=250
ReadTotalTimeOutConstant=250
EnableAcknowledgement=0

<pre> ----- Port Values COM1 : 1 COM2 : 2 COM3 : 3 COM4 : 4 COM5 : 5 COM6 : 6 COM7 : 7 COM8 : 8 COM9 : 9 ----- Baudrate Values 1200 : 1 2400 : 2 4800 : 3 9600 : 4 19200 : 5 38400 : 6 57600 : 7 </pre>	<pre> Parity Values ODD : 1 EVEN : 2 ----- Data bits Values DATABITS_7 : 1 DATABITS_8 : 2 ----- Stop bits Values STOPBITS_1 : 1 STOPBITS_2 : 2 </pre>
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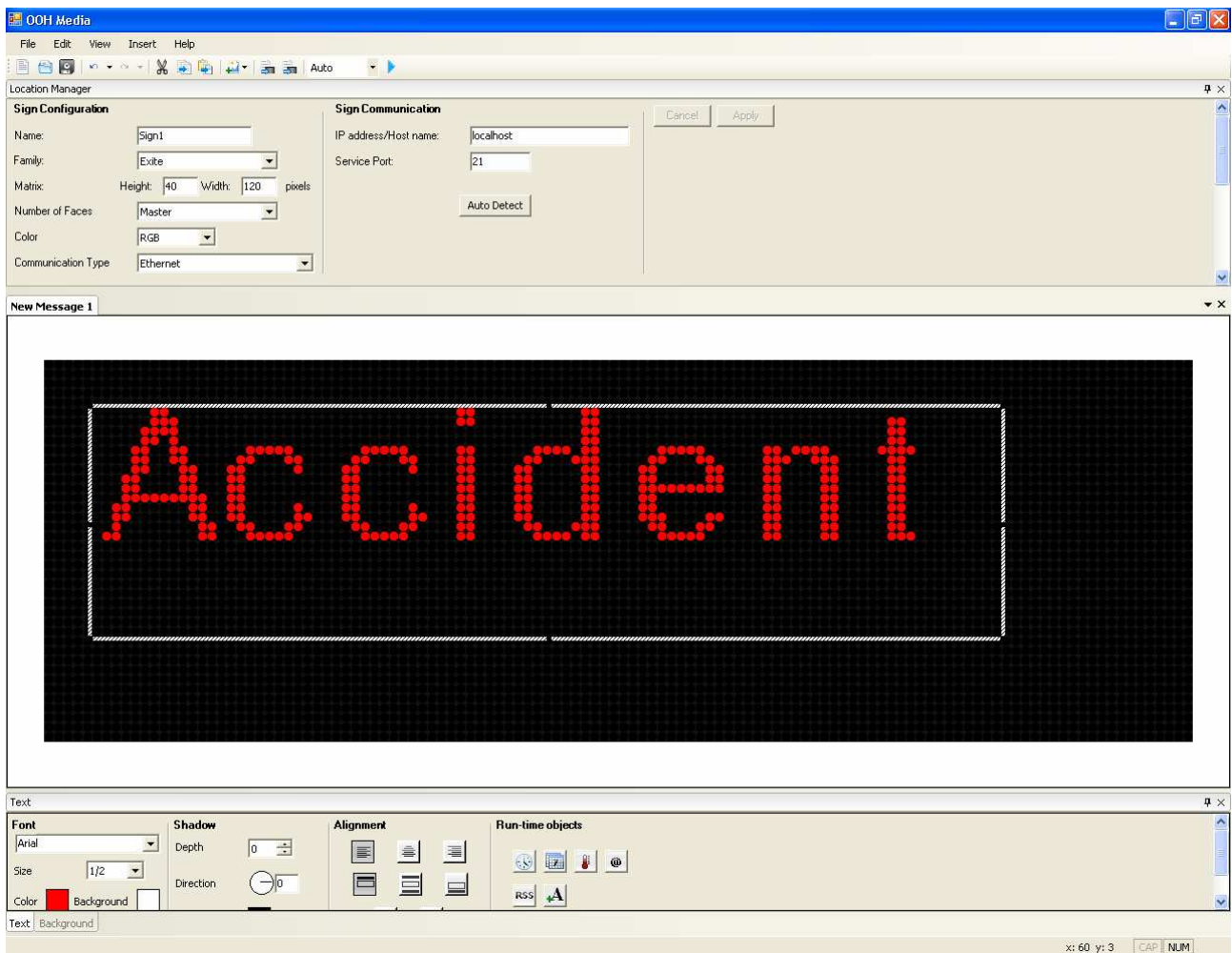
[MESSAGE LIST]
Directory=C:\Dossier Philippe\Projects\((2006-11-14) Traffic Sign - ALPHARh a\02_Software\01_Source

4.2- Operation instructions

4.2.1- Edit messages with OOh Media!

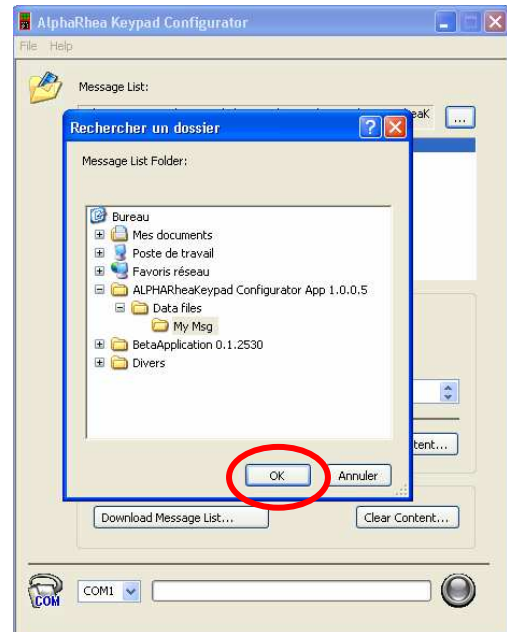
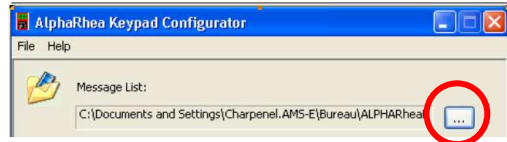
First of all, install and run OOh Media! application on your computer and go to the following instructions:

- 1:** Edit your messages with the application
- 2:** Save them in a folder
- 3:** Download the folder contents into your sign



4.2.2- Select the message’s folder

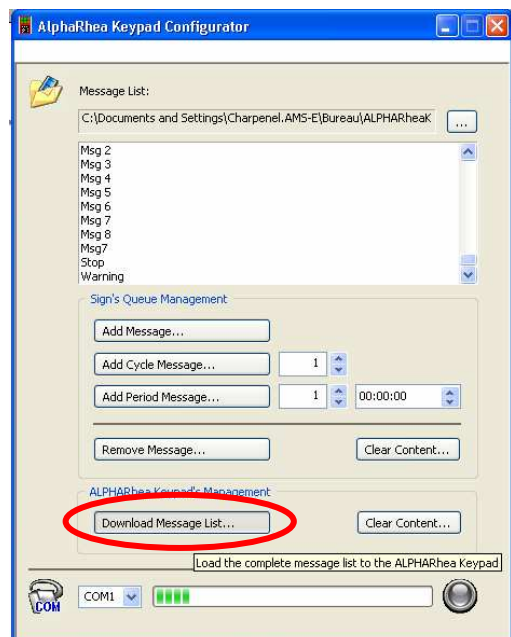
- Install and run the “AlphaRh ea Configurator” application on your computer.
- Click on the browse button
- Select the folder containing the messages that you have just downloaded on sign
- Valid by clicking on “OK”



4.2.3- Download the message’s names

- Connect the AlphaRh ea Keypad to your PC with the supplied cable
- Select your communication port
- Click on “Download Message List...”
- Wait the end of transmission
- **Now AlphaRh ea Keypad is READY!!!**

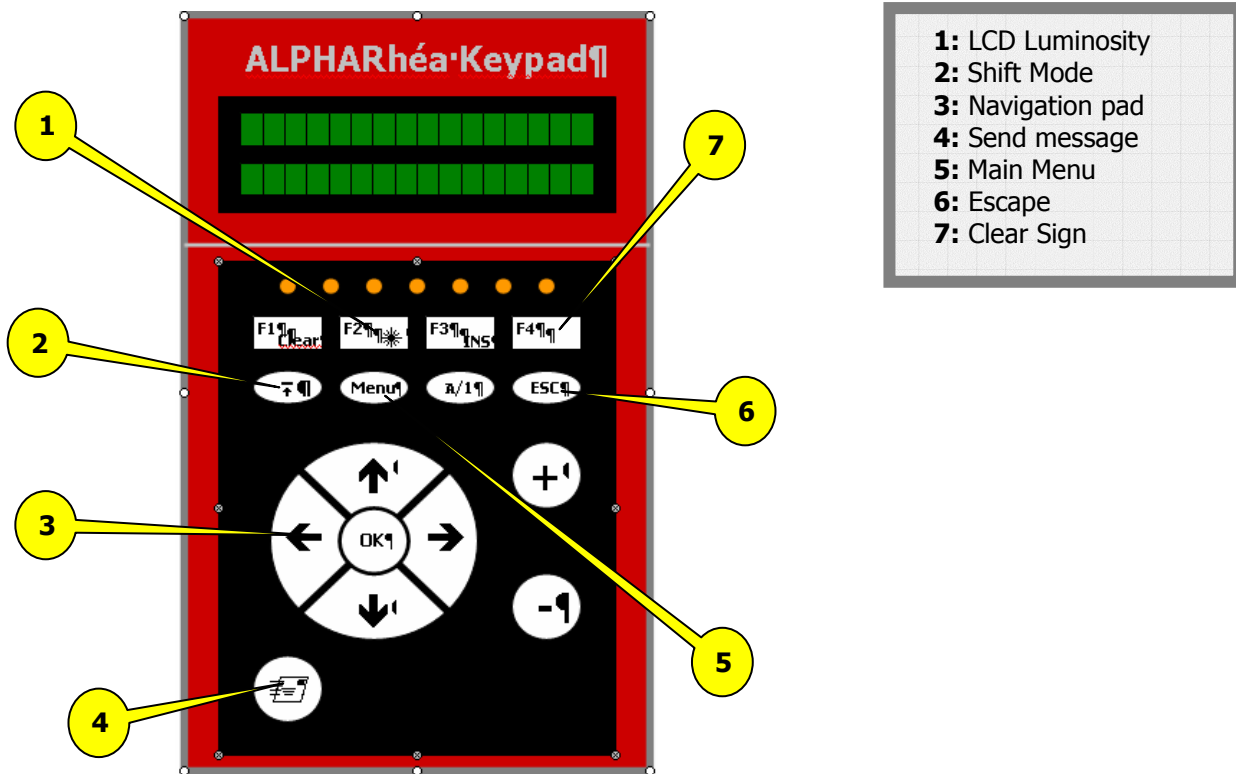
Notice: If you have an error of communication, check that you are using the correct port and that AlphaRh ea Keypad is not in “Sleep Mode”.



5- Using AlphaRh ea Keypad

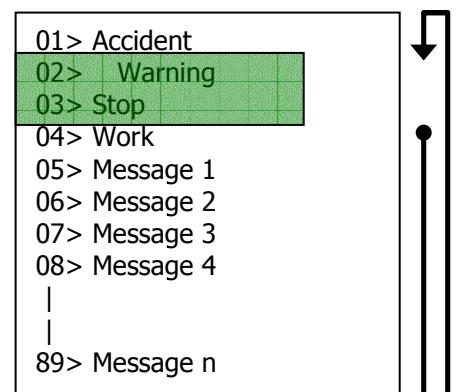
5.1- Keyboard

On this application some keys are not enabled because they are not useful. Here is a description of the keys that you can use:



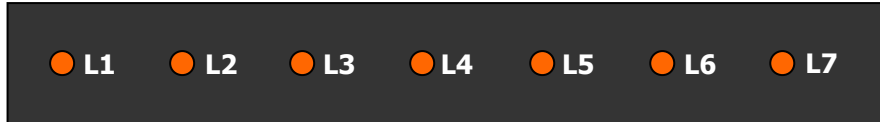
5.2- Navigation

- **Select message:** Press < ↑ > or < ↓ > button of the navigation pad to move in the drop-down message menu. The selected message appears always on the first line of LCD display and rotates continuously.
- **Send message:** Press < send > button and confirm by pushing < OK > or cancel by pushing < ESC >.
- **Return to start:** Press < MENU >.



5.3- Status LEDs

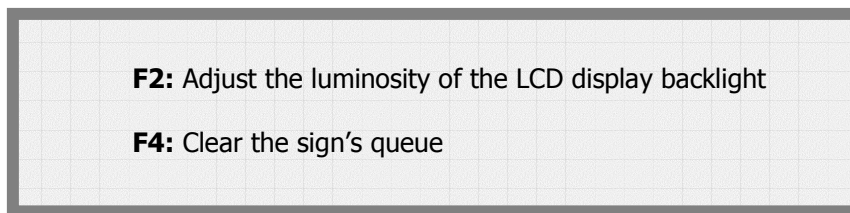
The AlphaRh ea Keypad has 7 status LEDs.



- | | |
|--------------------------------------|-------------------------|
| ● L1: Shift mode | ● L5: Future use |
| ● L2: Communication with sign | ● L6: Future use |
| ● L3: Error of communication | ● L7: Future use |
| ● L4: Future use | |

5.4- Special fonctions

To access to special functions, push on the key SHIFT. LED #1 is lit. Then you can push on the desired function key.



One confirmation request appears, validate with < OK > or cancel with < ESC >.

5.5- Eco mode

In order to save your battery, the AlphaRh ea Keypad stops automatically the backlight of its LCD display a couple of seconds after having pushed a key.

After one minute without any activity, the AlphaRh ea Keypad goes in save energy mode or « **Sleep Mode** ».

The AlphaRh ea Keypad return from this mode after pushing any key.