

LCD mini message board with backlight and enclosure.

Velleman Kit
Legen Heirweg 33
9890 Gavere
Belgium

The unit starts displaying the default message when it is first activated (unplug the adapter and wait a while before plugging it in again if the display remains blank or displays garbage).

Press the UP (SW1) or DOWN (SW3) button repeatedly to scroll through the menu options :

↶ **SET SPEED – POWER OFF – EDIT MESSAGE – SHOW MESSAGE** ↷

Press ENTER (SW4) to select a menu option.

SET SPEED :

- The user can set the scrolling speed.
- Press UP to increase the scrolling speed or DOWN to decrease it
- Confirm with ENTER.

POWER OFF :

- Turns off the unit. Your message and the speed setting are saved and protected by the EEPROM memory, even when the batteries are removed.
- Press ENTER to turn on the unit.

EDIT MESSAGE :

- Enables the user to modify a message
- Messages can be 124 characters long.
- Press UP or DOWN to scroll through the character table.
- Press ENTER to confirm a character and move to the next one
- There are 2 preassigned characters : ← adds a scrolling pause → indicates the end of a message.
- Press SPACE (SW2) to choose between a space, the letter 'a*', the letter 'A*', the pause character or the 'end-of-message' character.
- (*This is convenient because it saves you from scrolling through the entire character set to locate the desired character)
- Exit the EDIT mode : press ENTER repeatedly until you reach the 'end-of-message' character or hold ENTER for 2 seconds. The unit starts displaying the current message.



HINT : Put an 'end-of-message' character in front of the first character of the current message to restore the default message.

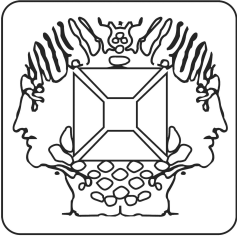
SHOW MESSAGE :

- Starts displaying the current message.

ADVANCED OPTIONS :

- Hold 'UP' at startup for RS232-terminal mode
- Hold 'DOWN' at startup to upload a message from your PC to the MK158

Please check www.velleman.be for more info and free software



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USE OF THE BUILT-IN RS232 INTERFACE

The MK158 features a built-in RS232 interface you can use for uploading and displaying messages. The terminal settings are : 2400 / N / 8 / 1 no handshaking.

Uploading a message :

Hold 'DOWN' while turning on the unit.

The display will read **RS232 → MK158**

The unit is now ready to receive ASCII text via the serial port.

You can type in your message via a terminal program or you can use the Visual Basic program that can be downloaded from our website at no charge.



Hint :

- The end-of-message character is added and the unit starts displaying the message if you enter CHR\$(13) (the 'ENTER' button).
- The 'pause'-character is added if you enter CHR\$(196) (ALT 196).

Displaying a message :

- Hold the 'UP' key while turning on the unit (if desirable, you can bridge the 'UP' button (SW1) permanently with a wire-jumper so the unit will remain in this mode).
- The display blanks.
- The unit is now ready to receive ASCII text via the serial port.
- You can type in your message via a terminal program or you can use the Visual Basic program that can be downloaded from our website.
- The text appears on the screen and scrolls from right to left while you are typing the words.



Hint : The display blanks if you enter CHR\$(13) (the 'ENTER' button).