

PocketLIM : Grouting Application

Power supply for the pocketLIM 5G

Voltage supply

The pocketLIM 5G accepts continuous 12V-24V allowing it to adapt to all types of common batteries. There is only one power outlet and it is located below the datalogger. (See photo) The power of the datalogger was reduced to its maximum and does not exceed 15W.

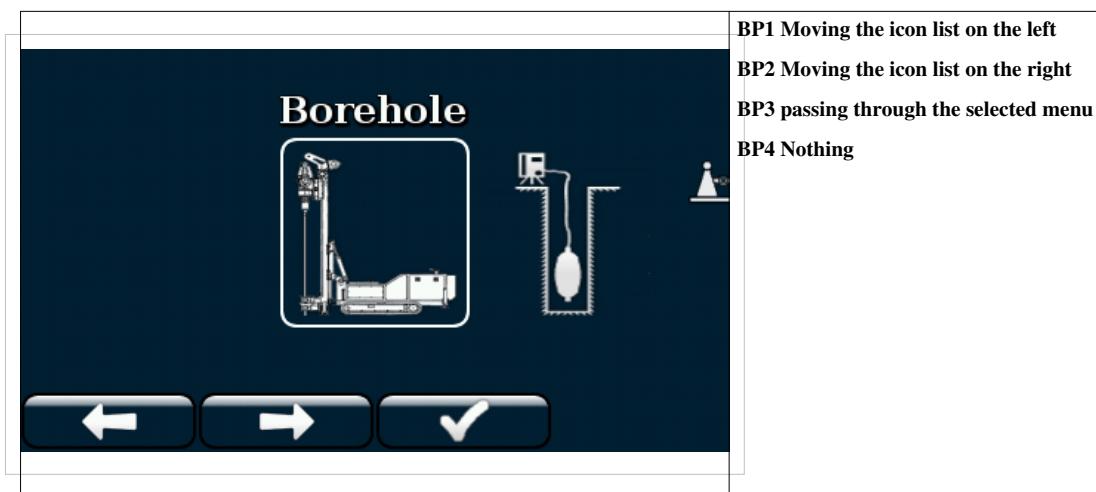
Supply and protection defaults

The PocketLIM is designed to turn off automatically if it detects a power cut (for protection). The On / Off button must again be pressed to restart it. The PocketLIM cannot, under any circumstances, withstand a direct connection to the 230v or 380v network. However, it is possible to connect it via an AC / DC transformer. Another form of protection is that the PocketLIM and all of its sensors are fully isolated galvanically from the supply voltage. Therefore, no current loopback can pass through the devices which could cause malfunctions (electromagnetic disruptions) or deterioration (too high intensities). In the event of a short circuit, the input device is protected by a thermal fuse that resets automatically. Important Note: It is imperative that the power cable is disconnected from pocketLIM 5G when it is connected to the machine's battery.

On/off feature

- Connect the CAN bus cable and the power cable (Figure D and E above)
- Press lightly on the On / Off button (G)

The unit turns on and begins initialisation, and a scroll bar appears after a few seconds to indicate the initialisation phases. Then as the application launches, you will obtain a summary of parameters (serial number, version of the application, hardware version ...). If you purchased a datalogger with multiple applications, the pocketLIM will prompt you to select the desired application.



General Interface: Overview



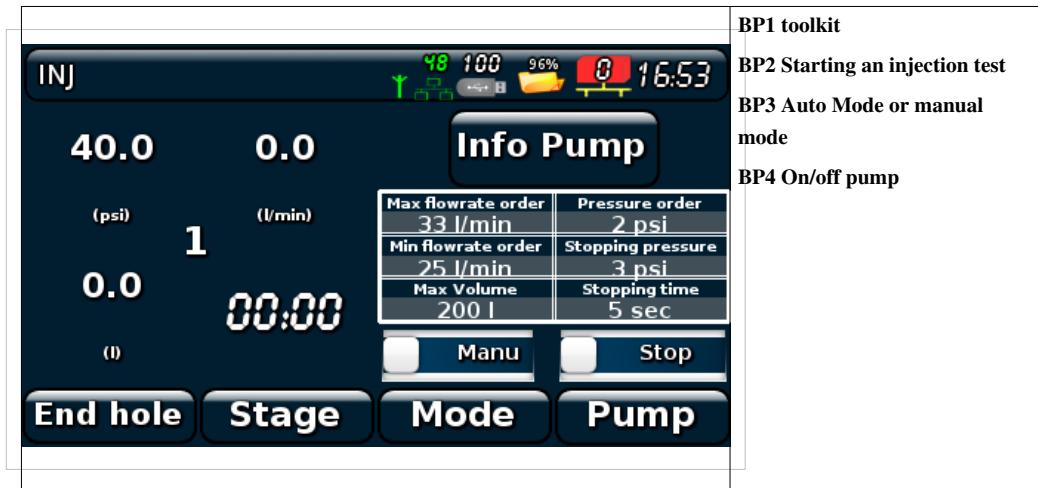
The bar at the top of the screen is always present and informs the operator about the status of the GPS and GSM, the presence of a USB key, the size remaining in the device, the CAN card number on the BUS, and the time. It also gives the name of the drilling currently taking place. This bar also acts as a button that can make the user return to the previous menu when there are multiple applications (choice of the application). The pocketLIM can be described as having two parts:

- The recording part which the driller will use.
- A toolkit part (transfer, output...)

The measurement menu

This menu has two display options:

Real-time measurements display

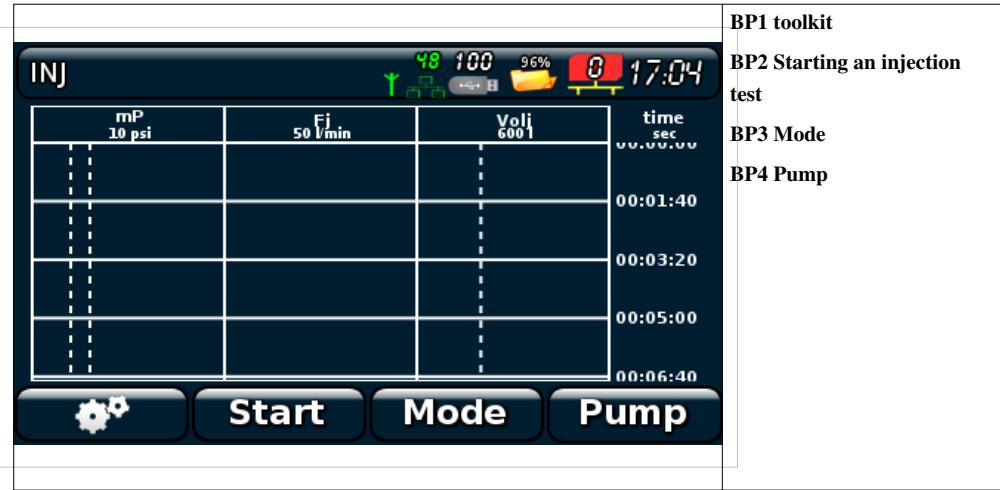


Real-time display of pressure and volume flow rate of the item concerned. Stop criteria table display.

Curbs display

By pressing on the table, it switches to curb mode.

By pressing on the curbs, it switches to real time value mode.



Beginning of a test injection

Site information

This menu allows users to set parameters for the test injection. It includes fields for 'Phasis' (set to 'A'), 'Pressure Lost' (0 psi), 'Strain Volume' (0 l), and two toggle switches: 'Threshold' (set to 'yes') and 'Sleeves' (set to 'no'). At the bottom are navigation buttons: up and down arrows, a 'menu' button, and a 'cancel' button.

To the right of the menu, a legend provides the following associations:

- BP1 moving the list up
- BP2 moving the list down
- BP3 Menu option
- BP4 Exit by validating this menu

In this menu, we configure our test injection. The following menus will differ, depending on the type of injection.

- Pressure Flow Control, - Stop criterion, - Sleeve.

Injection threshold with no sleeve and with no control

Max Volume	200 l	BP1 moving the list up
Stopping pressure	3 psi	BP2 moving the list down
Pressure order	2 psi	BP3 To modify
Stopping time	5 sec	BP4 Exit by validating this menu
Allowed Press.Var.	0.5 bar*sec	
<input type="button" value="↑"/> <input type="button" value="↓"/> <input type="button" value="menu"/> <input type="button" value="exit"/>		

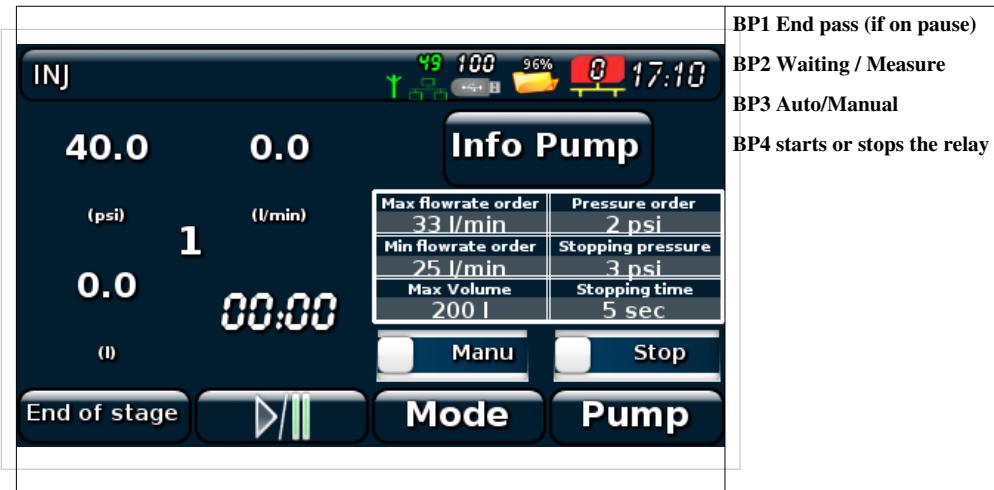
Injection with sleeve

Size of sleeves	33 cm	BP1 moving the list up
Depth	10 m	BP2 moving the list down
Nb of sleeves	30	BP3 Nothing
Nb of layers	1	BP4 Exit by validating this menu
<input type="button" value="↑"/> <input type="button" value="↓"/> <input type="button" value="menu"/> <input type="button" value="exit"/>		

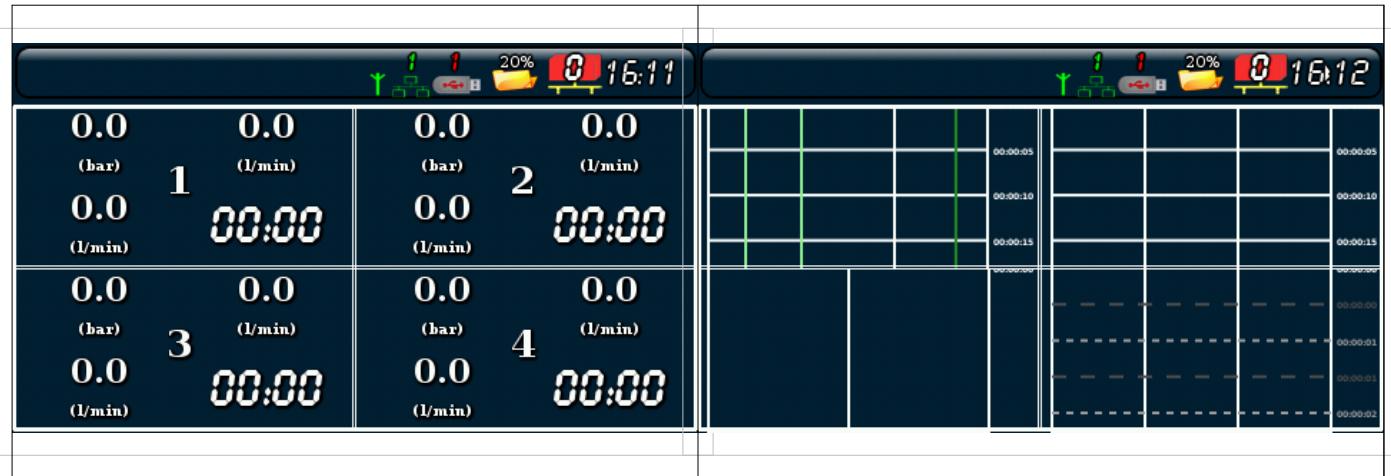
Beginning pass

If the option with sleeves in the beginning pass is chosen, the sleeve to be injected must be chosen.

Sleeve : 1/30		BP1 Choice pass
Min Depth	Max Depth	BP2 Choice pass
9.66 m	10 m	BP3 Rien
Num of stage	Layer number	BP4 Exit
1/30	1/1	
Stopping pressure	Max Volume	
3 psi	200 l	
Pressure order		
2 psi		
<input type="button" value="+"/> <input type="button" value="-"/> <input type="button" value="menu"/> <input type="button" value="exit"/>		

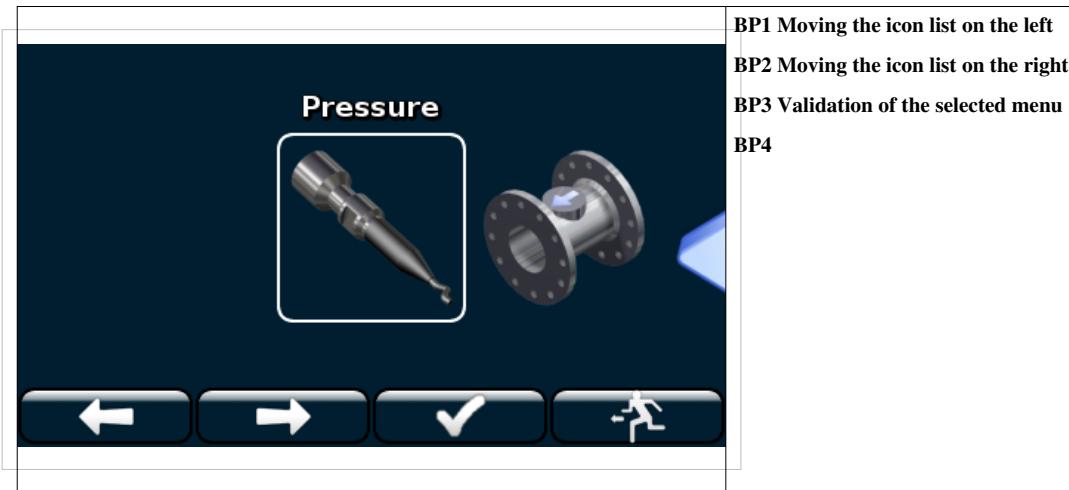


If the control is used, there is, in addition, a touch button to control the high and low setting. The pocketlim can manage up to 4 injection points. If you want to set point 2 for example, simply press on the real time values to obtain the real-time values of points 2 or 4 following the option chosen.



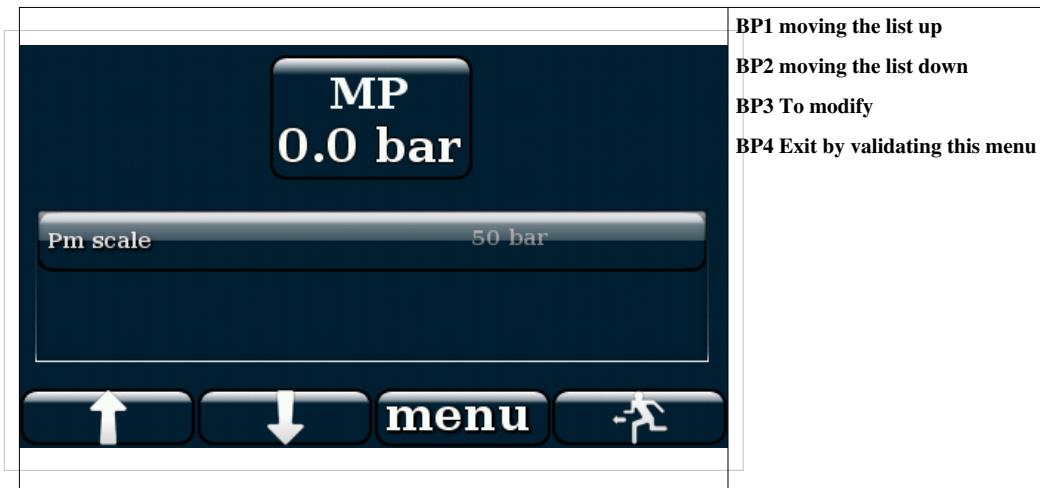
Once point 2 or point 4 is on view, and if you want to see the curbs or real-time values, simply press the buttons. To get from point 1 to another, you must go to the multi-point values menu and press on the touch screen on the item concerned.

Installation menu for sensors



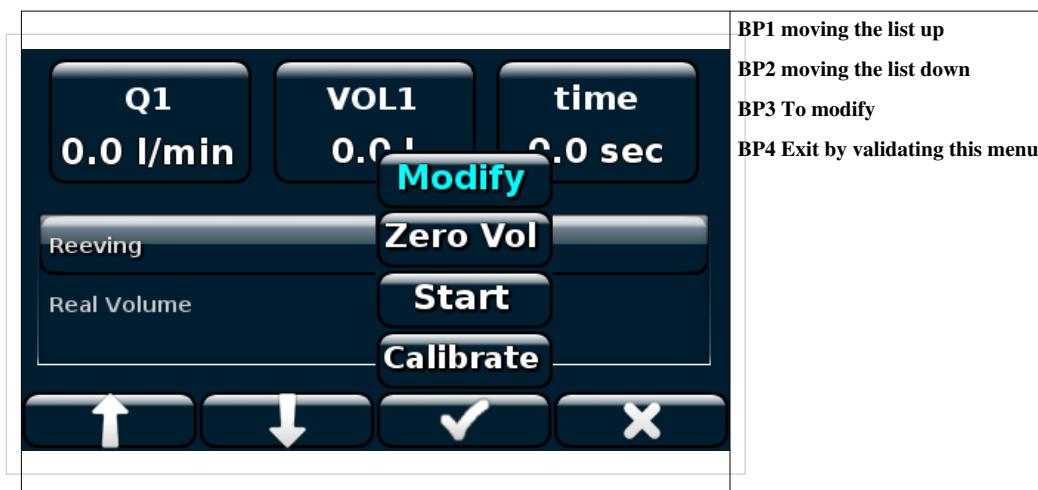
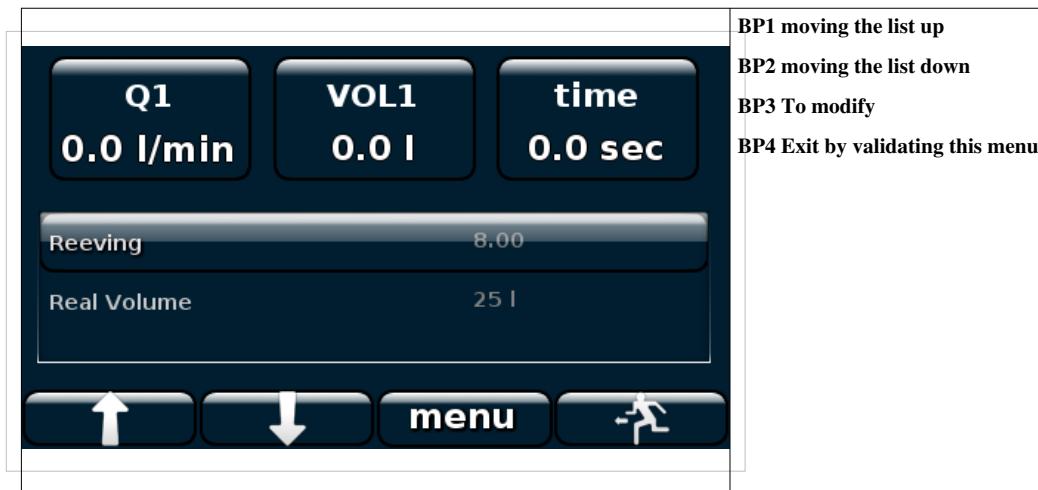
There are three menus to configure for injections: - The pressure sensor. - The flow meter - the control

The Pressure sensor

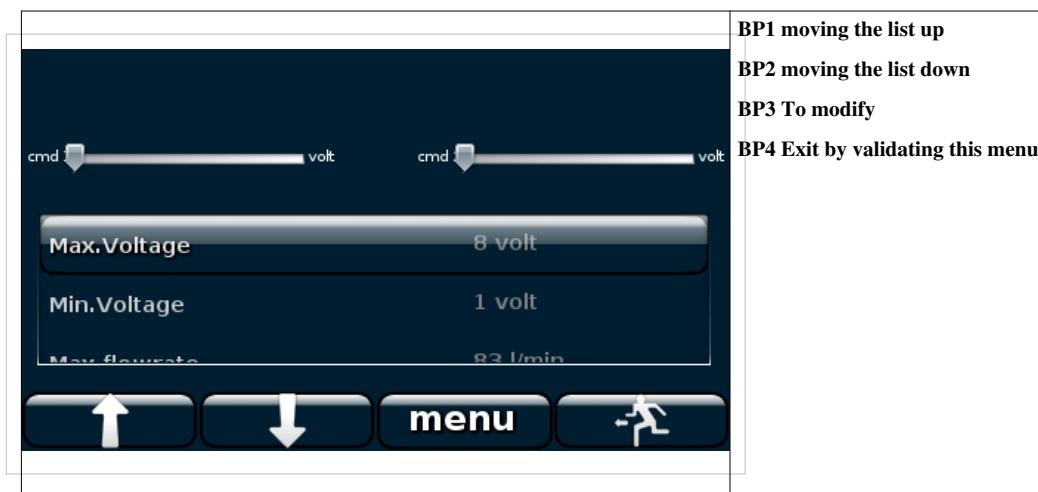


The flow meter

The operator may need to calibrate the flow meter. To do this, the operator presses on Menu and then on Start when he puts the hose in the standard bin. When the bin is filled, the operator presses on Menu, then on Stop. The tempo and volume will then stop. The operator adjusts the actual volume of the bin if necessary. Once this is done, the operator presses on the calibration menu to automatically calibrate the flow meter. By default, the value of the haul system is 8.00 (8000 l/h/ 1000 imp).



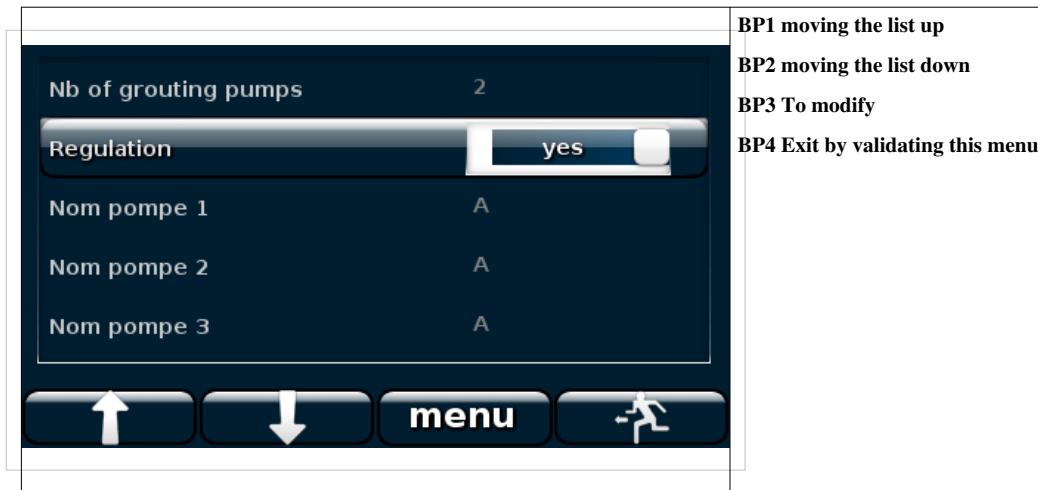
The control



This menu is very important, and the values of the pump must be respected so as not to risk damaging it. This menu allows testing of our 0-10V output.

Injectlim Menu Option

This menu lets you choose the point number you want to manage, the name of the possible pumps, and if you wish to use the pressure flow control.



Sources et contributeurs de l'article

PocketLIM : Grouting Application *Source*: <http://wiki.lim:82/index.php?oldid=9175> *Contributeurs*: Yoann, 3 modifications anonymes

Source des images, licences et contributeurs

image:Menu_init.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_init.png *Licence*: inconnu *Contributeurs*: Yoann
image:borehole.png *Source*: <http://wiki.lim:82/index.php?title=Fichier:Borehole.png> *Licence*: inconnu *Contributeurs*: Yoann
image:Barre_tache.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Barre_tache.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_inj_mes.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_inj_mes.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_mes_crb.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_mes_crb.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_go.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_go.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_inj_val.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_inj_val.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_sleeve.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_sleeve.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_sleeve_choice.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_sleeve_choice.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_inj_rt.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_inj_rt.png *Licence*: inconnu *Contributeurs*: Yoann
image:Menu_mes_rt2points.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_mes_rt2points.png *Licence*: inconnu *Contributeurs*: Yoann
image:Menu_mes_rt2points_crb.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_mes_rt2points_crb.png *Licence*: inconnu *Contributeurs*: Yoann
image:Menu_mes_rt4points.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_mes_rt4points.png *Licence*: inconnu *Contributeurs*: Yoann
image:Menu_mes_rt4points_crb.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_mes_rt4points_crb.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_inst_inj.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_inst_inj.png *Licence*: inconnu *Contributeurs*: Yoann
image:Lug_press.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Lug_press.png *Licence*: inconnu *Contributeurs*: Yoann
image:Menu_flow_inj.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Menu_flow_inj.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_flow_inj2.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_flow_inj2.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_control.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_control.png *Licence*: inconnu *Contributeurs*: Yoann
image:Mn_option.png *Source*: http://wiki.lim:82/index.php?title=Fichier:Mn_option.png *Licence*: inconnu *Contributeurs*: Yoann