



User Manual: PocketLIM
Optional settings

LIM SAS
86 Rue Jean Bertin
France-69100 Villeurbanne
Tel: +33 (0)4 72 14 68 30
<http://www.lim.eu>



	PocketLIM	Created: 06/03/2024	Page 1 of 12
		Updated: 06/03/2024	

	User manual Optional settings	Author: Pascal Renébon
		<i>Public document</i>

Table of contents

1. Menu "Add Automatic	of cane to " "	4
1.1 Description		4
1.2 Parameters Add	of	
rods		5
1.2.1 Mode 1		6
1.2.2 Mode 2		6
1.2.3 Mode 3		7
1.2.4 External drill button		8
1.3	addition of rod during drilling	
	8	
1.3.1 Mode 1 or Mode 2		8
1.3.2 Mode 3		9
1.3.3	mode "Button for	
	"External drilling button"	9
2. recording of a	5th	
pressing		10
2.1 Activation on the PocketLIM		10
2.2 configuration of the	5th pressure	
pressure sensor		11
2.3 Recording of the 5th pressure sensor		11
2.4 Configuring the display for the 5th pressure sensor		11
3. Rotation speeds		12
3.1 RPM and RSPC configuration		12
3.2	operation of the RPM and	
RSPC		13
3.3	al registration of the rotation	
rotation		13
3.4 Configuring the RPM sensor display		13
4. Flow rate and volume per stroke		14
4.1 Configuration ...		
4.2 Checking operation...		
4.3 Recording of		



Table of contents

5. Air flow rate
 4.1 Configuration ...
 4.2 Checking operation ...
 4.3 Recording of ...
6.
7. Micropile ...
8. Lithological section
9. Mirror
10. Assessment
 .

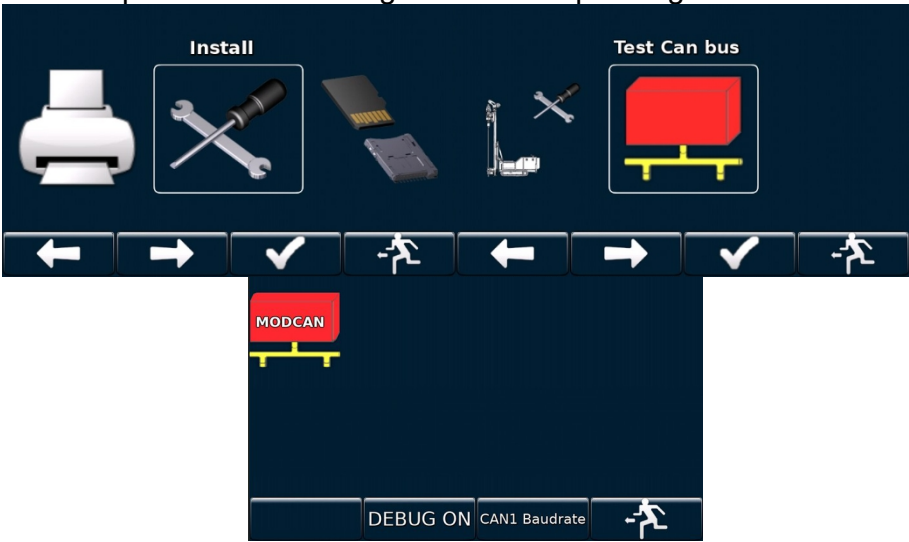
	PocketLIM	Created: 06/03/2024	Page 3
	User manual Optional settings	Updated: 06/03/2024	
		Author: Pascal Renébon	
		Public document	

1. "Automatic Addition of Sticks" Menu.

1.1 Description

On certain machines (particularly quarry machines), it is possible to automate the process of recording the addition of a rod to the rod string. For this option to work, the "ModulCan" option must be present on your measuring equipment and connected to the corresponding inputs on the drill. To check whether your installation includes this option or whether your ModCan card is functional, go to the "Toolbox" menu.

In the standby menu, press "⚙️", then select the "Install" menu using the arrows and confirm your choice with "✅". Then select the "Test Can bus" option in the same way, and the "MODCAN" option "🔌" should appear in the list of available CAN boxes. If this option does not appear, check for the presence and wiring of the corresponding box.

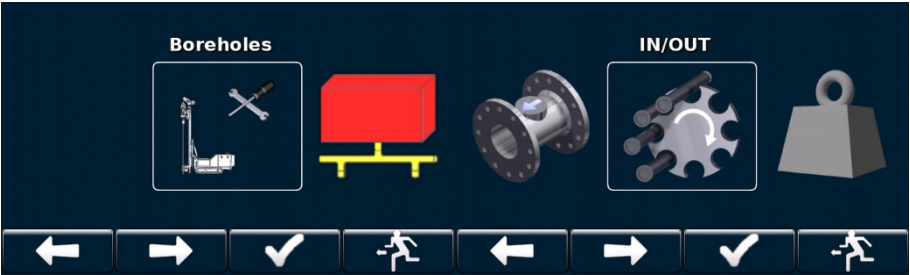


Once this check is complete, press "⏪" to return to the previous menu and adjust the settings for adding the CAN bus.

	PocketLIM	Created: 06/03/2024	Page 4
	User Manual Optional Settings	Updated: June 3, 2024	
		Author: Pascal Renébon	
		Public document	

1.2 Parameters for adding rods:

After entering the "Installation" menu, select the "Drilling" menu, then use the "BP1" and "BP2" arrows to select the "In/Out" option and confirm your choice by pressing "BP3" .



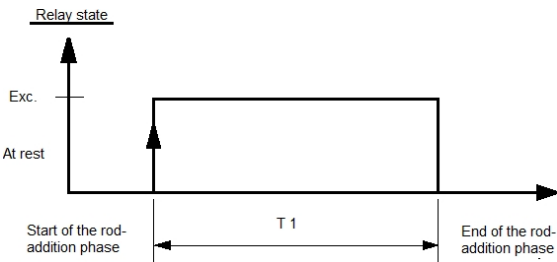
In this menu, you must enter your machine's rod change mode. There are three possible modes, depending on the specific operation of the drill. To load the mode corresponding to your machine, select the line "mode" (Rod change mode), then press "Menu" (Enter mode number) and "Modifier" (Enter mode number), then enter the mode number using the keypad. To confirm your choice and return to the previous menu, press "✓" .



	PocketLIM	Created: 06/03/2024	Page 5
	User manual Optional settings	Updated: 06/03/2024	
		Author: Pascal Renébon	
		Public document	

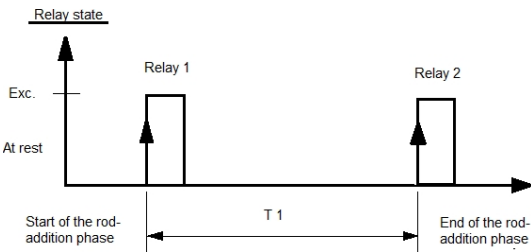
1.2.1 Mode 1:

Mode 1 is used on machines where there is a permanent signal when adding a rod. The "ModCan" card must be wired accordingly (see the card wiring diagram). While the relay is active (period T1), the movements of the drill head are ignored.



1.2.2 Mode 2:

Mode 2 is used on machines where there is no permanent signal during rod addition, but where there is a "start" and "end" signal for rod addition. The ModCan card must be wired accordingly (see the card wiring diagram). This mode uses the inputs of relay 1 and relay 2. The rod addition phase begins when relay 1 is active and ends when relay 2 is active. No movement is recorded during this T1 period.



PocketLIM

User Manual Optional
Settings

Created: 06/03/2024

Updated: 06/03/2024

Author: Pascal Ren  bon

Page 6

		Public document
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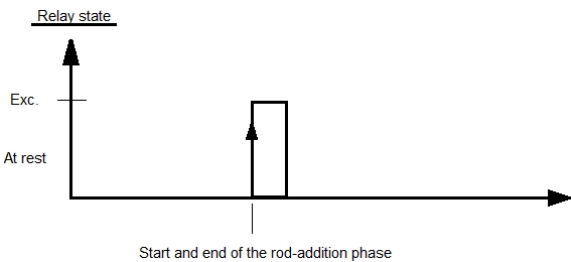
1.2.3 Mode 3

Mode 3 is used when neither of the two previous modes can be used. In this mode, only one piece of information about the machine is used. This information must correspond to an operation that takes place each time the rod is changed and that does not take place during other phases of operation (e.g., exit of the rod feed arm, etc.). This information should only appear if the head has been raised to the rod addition position (raised by at least one rod length after unscrewing). The ModCan card must be wired accordingly (see the card wiring diagram).

For this mode to work, all rods must be the same length, and this length must be entered in the "Rod length" parameter. To do this, select the "Rod length" line  then press  then  and enter the length of the cane using the keyboard. To confirm your entry and return to the previous menu, press the "✓" key .



Each time the relay switches to the active state, the depth displayed is increased by a constant amount corresponding to the length of the fishing rod programmed in the Fishing rod length line.



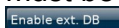
	PocketLIM	Created: 06/03/2024	Page 7
	User Manual Optional Settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

To check that this mode is working, perform the operation selected to trigger the addition of rod. The message "Relay 1 active" should appear during the operation and disappear as soon as the operation is complete.

NB: In drilling mode, to avoid errors, a new change will only be taken into account after the head has moved at least 1 meter from the previous depth.

1.2.4: External drill button:

On machines where it is not possible to automate the recording of a rod addition, the addition of a rod is validated by the "BP4" button  on the PocketLIM. You can also install an external button on the machine (contact our technical services). For this button to work, the "Enable ext. BS" option must be selected.



To activate it, select the corresponding line, then press "Menu"  and then "Modify" . Follow the same procedure if you wish to deactivate it.

1.3 How adding rods during drilling works:

1.3.1 Mode 1 or Mode 2:

At the end of the current rod, when the rod change operation is activated on the machine, a "barrel" appears in the depth/tool display area.

Add your rod without worrying about the PocketLIM, as the "Tool" and "Drilling" dimensions will not change during this phase. When you switch back to "drilling" mode on the machine, the barrel will disappear and depth measurement will resume.

Note: The "Depth" and "Tool" readings may differ during the rod addition phase. This occurs when the driller lifts the rod string from the bottom of the hole before locking the rod in place and unscrewing the drill head. This difference will be compensated for when drilling resumes.

	PocketLIM	Created: 06/03/2024	Page 8
	User Manual Settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

	Optional	Public document
--	----------	-----------------

Displays during drilling  End of rod in progress Drill head at top of mast Display when adding a rod  1.3.2 Mode 3 At the end of the current rod, the operator slightly lifts the rod and places it in the unscrewing position; the "Drill" depth does not change, while the "Tool" depth decreases. After unscrewing, the operator lifts the drill head to the position for adding the rod to the mast, and the tool depth continues to decrease. The driller adds a new rod, and when the signal validating the addition of the rod is emitted, the tool depth increases by the value corresponding to the length of the rod, thus completing the entire rod addition operation. 1.3.3 External drill button mode This mode works in the same way as using the built-in drill button on the PocketLIM (see PocketLIM manual: 2 to 4 presses).			
	PocketLIM	Created: 06/03/2024	Page 9
	User manual Optional settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

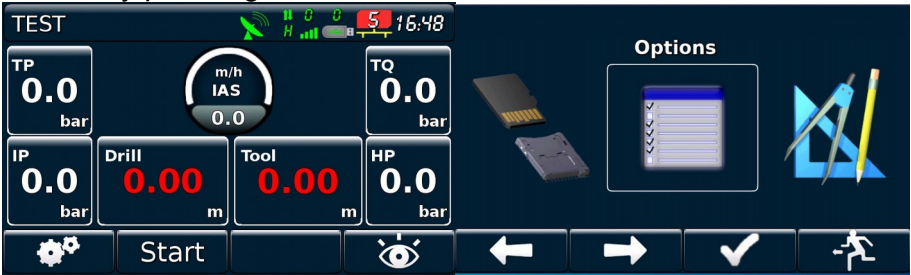
		Public document
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2. Recording a fifth pressure.

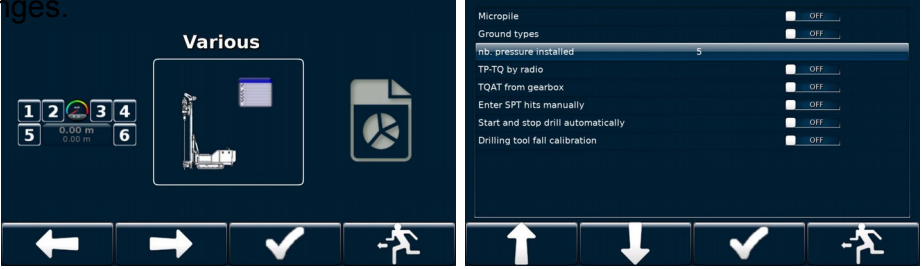
For certain applications, it is possible to record a fifth pressure. For this option to work, the "PressCan" card must be specially configured and an additional sensor must be installed on the machine.

2.1 Activation on the PocketLIM:

To activate the 5th pressure, from the "Standby" menu, press "BP1."  Then select the "Option" menu using the "BP1" and "BP2" arrows and confirm by pressing "BP3." 



Select the "Miscellaneous" menu using the "BP1" and "BP2" arrows and confirm with "BP3" . Select the line "No. of pressure installed" using the "BP1" and "BP2" arrows, press "BP3"  To display the alphanumeric screen, delete the number displayed and enter the number 5, then confirm by pressing "✓"  The PocketLIM will restart to apply the changes.



	PocketLIM	Created: 06/03/2024	Page 10
	User manual	Updated: 06/03/2024	
		Author: Pascal Renébon	

	Settings Optional	Public document
--	----------------------	-----------------

2.2 Configuring the 5th pressure sensor

Go to the "Installation" menu, then "Drilling," then "Pressures," then select "Scale P5" and set the sensor's measurement scale by pressing "Menu" then "Modify." Confirm the new scale by pressing " " on the keyboard, then scroll down to "Name P5" and follow the same procedure ("Menu" and "Modify"). Choose from the list of available names and press " " to confirm.

2.3 Recording the 5th pressure

The operator can choose to record this pressure or simply view it on the screen. To activate recording, go to the "Record" menu, then highlight "Record P5" and switch the option to "ON" by pressing the 

2.4 Configuring the display of the 5th pressure sensor:

Return to the "Option" menu, then "Boreholes," highlight the position where you want to place the 5th pressure sensor by pressing " " select the name P5 that has been programmed into the PocketLIM, and press " " to confirm and exit.

Note: You can delete this pressure sensor at any time by reducing the number of pressures installed to 4 in the "Options," "Miscellaneous" menu (Note: The number of pressures recorded is either 4 or 5).

	PocketLIM	Created: 06/03/2024	Page 11
	User manual Optional settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

		Public document
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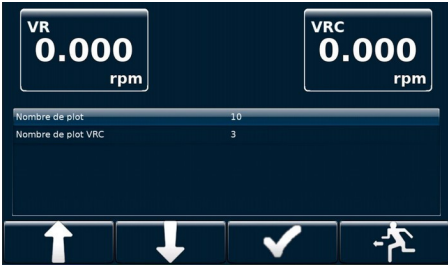
3. Rotation speeds.

The PocketLIM is capable of recording and/or displaying 1 or 2 rotation speeds. For these applications to work, a "Vibracan" card must be present on the measurement line. The rotation speed is measured by a proximity sensor that detects the passage of one or more target plugs installed on a rotating element of the drill head. A head drive pinion can also be used and its number of teeth per revolution counted. For each of the speeds measured, you must enter the number of target plugs (or pinion teeth) per revolution.

The first rotation speed, "RPM," corresponds to the rotation speed of the drill string. The second speed, "RSPC," is used on machines equipped with two drill heads and generally measures the rotation speed of the casing or core drilling head.

3.1 Setting the rotation speed (or RSPC):

To obtain an accurate measurement of the rotation speed, the operator must enter the number of target pins (or gear teeth) installed on the rotating part. To do this, go to the "Installation" menu, then "Drilling." Select the "Rotation speed" option using the arrow buttons, then confirm your selection by pressing "✓". Select the "Number of bit pins RPM" line using the arrow buttons "↑,↓", then press "✓" on "✓". To display "rpm" on the alphanumeric screen, enter the number of pins installed and press "✓". , enter the number of cards installed and confirm your change by pressing "✓". To configure the "RSPC," select its line and proceed in the same way as for the "RPM".

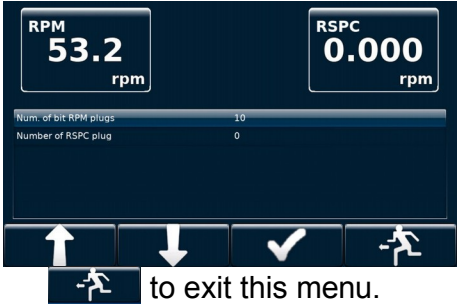


	PocketLIM	Created: 06/03/2024	Page 12
	User Manual Optional settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

		Public document
--	--	-----------------

3.2 Checking the operation of the RPM and RSPC:

Once the "RPM" settings have been entered, the driller can check that they are working. To do this, rotate the corresponding head; the counter associated with this speed should increase.



Press  to exit this menu.

3.3 Recording the RPM or RSPC rotation speed The operator can choose to record each of the rotation speeds or simply view them on the screen. To activate recording, go to the "Record" menu, highlight the rotation sensor, and switch the option to "ON" by pressing the .

3.4 Configuring the rotation sensor display:

Go to the "Option" menu, then "Drilling," highlight the position where you want to place the rotation sensor, then press " " choose the name corresponding to the sensor that should be placed in that location, and press " " to confirm and exit.

	PocketLIM	Created: 06/03/2024	Page 13
	User Manual Optional Settings	Updated: 06/03/2024	
		Author: Pascal Renébon	

		Public document
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4. Flow rates and volumes per number of strokes.

The PocketLIM can record and/or display 1 or 2 flow rates. For these applications to work, a "VibraCan" card must be present on the CAN bus. To measure the pump flow rate, an inductive sensor is used to detect the passage of the piston. A flow meter can also be used for lower pressure applications (max. 50 bar).

3.1 Flow rate settings:

	PocketLIM	Created: 06/03/2024	Page 14
	User manual	Updated: 06/03/2024	
		Author: Pascal Renébon	

	Settings Optional	<i>Public document</i>
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