User Guide for LUBE-Master
Monitoring System

1. Introduction

The fluid management system LUBE-Master can handle several different fluids at multiple dispense points. All transactions are controlled from a Key Pad or a PC by installing a SIO to the system. After each dispense the valves close automatically. Add a Printer Module to your system and it is possible to get a receipt when a transaction is completed.

In stand-by mode the display looks like the picture to the right. If it is not, press EXIT repeatedly until the terminal return to stand-by mode.
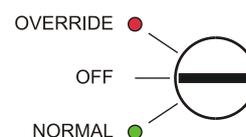
```
REEL:_          ‡
EXIT STOP CE ENT
```

2. Key power switch

On the MPDM there is a key, which can be set to three different modes.

OVERRIDE – Red LED is lit. Computer control completely off, solenoid valves are open. Dispense fluid manually.

OFF – No dispenses can be made. Solenoid valves are closed and nothing can be controlled from terminals. Please note that the power is still on. If a PC is used this mode will show a key above the affected dispense points.

NORMAL – Green LED is lit.

OVERRIDE ●
OFF
NORMAL ●

> **NOTE! If a dispense-handle is open when the key switch is set to OVERRIDE fluid will be dispensed. Always make sure all handles are closed before changing mode.**

> **NOTE! Store the key in a safe location, and NOT in the lock!**

3. Using a terminal (KeyPad)

The terminal has a keyboard with multi-function buttons. Numbers 0-9, left and right button, STOP, EXIT, CE, ENTER and dot (.) are marked in **white letters**, these can be reached **directly**.

The alphabet is reached by first pressing **blue ↑**, **yellow ↓** or **yellow ↓ two times**. *Do not keep and hold the arrow-button.* Type "blue letters" by first pressing **blue ↑** and then **the button with the desired letter.** Type yellow letters in the same way, first press **yellow ↓** and then **the button with the desired letter.** Some buttons have two yellow letters [Ö Ø Æ Å], to type the lower letter, press **yellow ↓ two times** and then **the button with the letter.** The currently active letter is shown in the upper right corner of the display.

> **NOTE! Letters can be used in ID-codes, Job numbers and passwords.**

By pressing **EXIT, you return** without doing additional changes. By pressing an identification string follow by **STOP** you abort the active event. **CE clears** an entered value. Confirm changes or entries with the **ENTER** button.

4. Using a dispense-point

4.1. Make a dispense

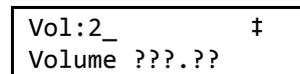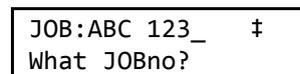> **NOTE! Make sure the reel handle is closed.**

Type the desired dispense-point number. Confirm with ENTER. If this point does not exist or is already in use a message will notify you and the display will return to the selection screen.

```
REEL:1_         ‡
EXIT STOP CE ENT
```

Type your PIN-code (password). Each user receives a personal password when the system is configured. Confirm PIN with ENTER

```
PIN:****_       ‡
EXIT STOP CE ENT
```

Enter the JOB-number, max 16 letters. Again, confirm with ENTER.

```
JOB:ABC 123_    ‡
What JOBno?
```

Type the desired volume within the configured interval. Confirm with ENTER.

```
Vol:2_          ‡
Volume ???.??
```

The solenoid valve is opened and a dispense can be made using the reel handle.

4.2. Close a dispense-point

When reaching the entered volume the solenoid valve closes automatically and finishes the process. To abort early, close the handle and enter the active dispense-point on the terminal. Confirm with **STOP**.

```
REEL:1_          ‡
EXIT STOP CE ENT
```

NOTE! You do not have to press the ENTER button.

4.3. Time-Out

When a dispense-point is opened, the user has a predetermined time limit to start dispensing. This time limit is set during system configuration. If no dispense has started within this time the dispense-point will automatically close. This function is optional and the system will be operational without it.

4.4. Simultaneous dispenses

It is possible to control several processes at the same time if multiple dispense-points are activated. Trying to start a second dispense from the same point results in an error message on the terminal display, which then return to stand-by mode.

5. Optional Printer Module (PM)

A Printer Module includes different databases. Transaction database of the last 940 dispenses a, user database where information about all system users is stored, JOB-number database where valid JOB-numbers are stored and a tank database where the remaining volume in, up to, eight tanks is stored. Additionally a parallel printer and a Clock Module (CM) can be connected to the module.

5.1. Printing

If a receipt-printer is connected to the system, a receipt will be printed every time a dispense is completed.

It is also possible to print the entire transaction database, reports by transaction, JOB-number and employee.

By pressing "**?**" you access a quick-menu where you among other things can print completed dispenses. Scroll with ↓ or ↑ to the desired print-option. To leave a menu press **ENTER.**

5.1.1. Print entire database

At **Print All** press **ENTER**. At PrnAll**: N** press **ENTER**. When the cursor appears type **Y** or **1** and then **ENTERS**.

```
Print All        ‡
FastMenu
```

```
PrnAll:N         ‡
Print All Trans
```

```
PrnAll:J_        ‡
Print All Trans
```

```
Print by transn‡
FastMenu
```

5.1.2. Print by transaction

At **Print per trans** press **ENTER**. At **PrnTran: 0** press **ENTER**. When the cursor appears type **from** transaction and then **ENTER**. Type **to** transaction and then **ENTER**. If same number is typed both as **from** and **to** only this is printed. If 0 is typed as **to** the **complete** database is printed.

```
PrnTran:          ‡
Print from Tran
```

```
PrnTran:0         ‡
Print from Tran
```

```
PrnTran:1_        ‡
Print from Tran
```

```
PrnTran:5_        ‡
Print To Tran
```

5.1.3. Print by JOB-number

At **Print by Jobno** press **ENTER**. At **PrnJob:** press **ENTER**. When the cursor appears Type **Job number** and then **Enter**. If an unknown Job number is typed a empty recite is printed.

```
Print by JOBno ‡
FastMenu
```

```
PrnJob:        ‡
Print by JobNo
```

```
ABC 123_       ‡
Print by JobNo
```

5.1.4. Print by employee

At **Print by Emp.** press **ENTER**. At **PrnEmp:0** press **ENTER**. When the cursor appears type the Employee number and then press **ENTER**.

```
Print by EmpNo ‡
FastMenu
```

```
PrnEmp:0       ‡
Print by EmpNo
```

```
PrnEmp:3625_   ‡
Print by EmpNo
```

5.2. Tanks

Press "**?**" to access the tank quick-menu. Here it is possible to print a status-report of the eight tanks as well as other tank related options. Press **ENTER** to leave a menu.

At **Print Tank rep.** press **ENTER**. At **PrnTank: N** press **ENTER**. When the cursor is shown type **Y** or **1** and press **ENTER**

```
Print Tank rep.‡
FastMenu
```

```
PrnTank:N      ‡
Print all tanks
```

```
PrnTank:Y_     ‡
Print report
```

5.3. Other options in the FastMenu

Because it is possible to customize the menu there may be other options available. A few examples are options to update tank-volume, add or remove a user and so on. All options can be protected with a password.

6.   Optional LED Module

With a LED Module connected to the system the amount of fluid dispensing is displayed.

In the upper right corner of the display a small red dot remain lit when the solenoid valve is open. In the lower left corner the number of the active dispense-point is displayed.

When no dispenses are made the module will display current time if the system is equipped with a Clock Module (CM).

```
              .


          2.25
```

```



        12:32
```

7. Setting date and time

If the system is equipped with a real-time Clock Module (CM), this can be set using a Key Pad.

7.1. Set *[CLOCK/Date] and [CLOCK/Time].*

Type the word "**CLOCK**" using the Key Pad and press **ENTER**.

```
Reel:CLOCK_     ‡
EXIT STOP CE ENT
```

Current system date is displayed. Press **ENTER** to set a new date or ↓ and **ENTER** to set the time.

```
Date:01.11.28  ‡
FORMAT YY.MM.DD
```

With the cursor visible type the new date or time and finish with **ENTER**.

```
Date:01.11.28  ‡
FORMAT YY.MM.DD
```

When the cursor disappears the new setting is complete.

> **NOTE! Do not forget punctuation between HH.MM.SS/YY.MM.DD !**

```
Time:09.30.25  ‡
FORMAT HH.MM.SS
```

Press EXIT twice to exit configuration.

```
Time:09.30.25  ‡
FORMAT HH.MM.SS
```

> **NOTE! It may take up to five minutes before all modules are updated since synchronization ocur every 10 minutes.**