HM720B SOFTWARE MANUAL

CONTENTS

1. Contents 2
2. NOTE 3
3. Main page 5
4. Admin Password 5
5. Settings 6
6. Tank & Print 6
7. Printer paper replacement 7
8. History 7
9. Leak detection 8
10. Administrator 8,9
11. Save 9
12. Total Number 10
13. Oil list view 10
14. Alarm 11
15. Tank Type 11
16. SLOPE 12
17. OFFSET 12,13
18. KB = Keyboard 13
19. Water volume threshold 14
20. Main menu & Sub menu 14,15
21. Sub menu 15
22. Volume-Height table 16
23. Log backup 17
24. Delete log file 17
25. Sensor ID setup 18
26. Program exit & Tx Rx windows 19
27. IP check 19
28. Remote Monitoring (From headquarter) 20
29. Trouble shooting 21,22

NOTE

1. Instruction

- Thank you for purchasing Tank Level Gauge system. To ensure the safe operation and the proper operation of the HM520S & HM720B, we strongly recommend that you read the following information carefully before use. If you require further information, please contact your local supplier or manufacturer. This Installation and operating manual explains how to operate and maintain the HM520S ,HM720B and software.

2. Warranty

- * Humanentec warrants to the original purchaser that this products will be free from defects in material and/or workmanship under normal use and service for a period of a year from the date of the installation or for a period of 12 months from the date of the purchase whichever comes first.
- * This warranty does not include damage to product or components resulting from abuse, accident, alteration, climatic/environmental conditions, damage beyond normal use, freight damage, mishandling, misuse, or unauthorized repair.
- * This warranty applies only when the product is installed in accordance with Humanentec’s specifications and a warranty registration by an authorized distributor.
- * Inquiries with regard to problems with the equipment shall be accepted by our local dealer representative.

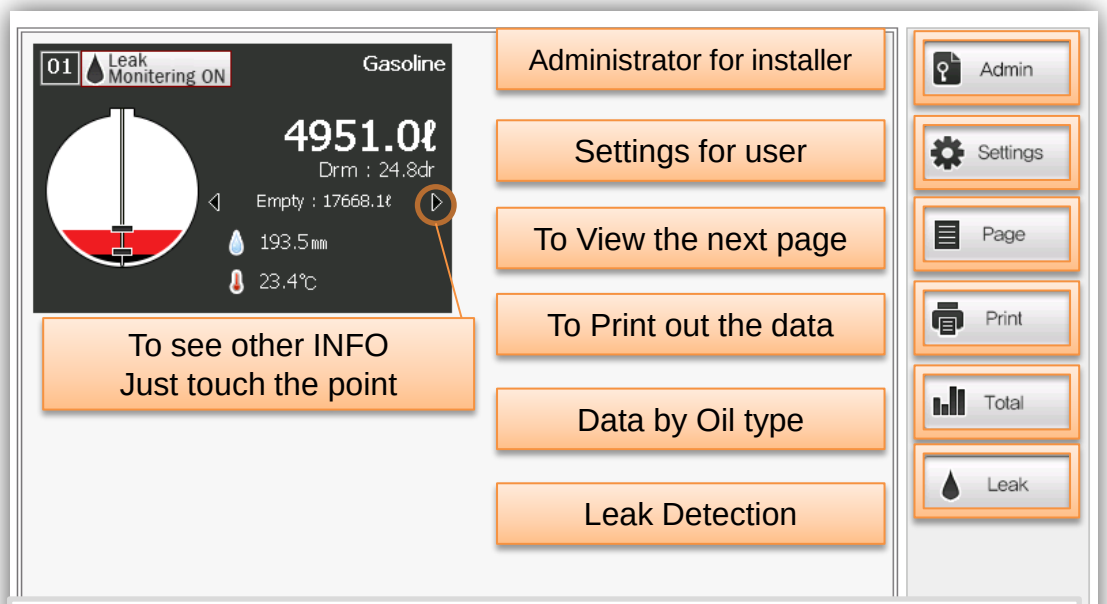
- Whether or not the defective equipment is repaired for free of charge depends on the result of Humanentec's inspection.
- Maximum duty of manufacturer and distributor are limited to the total amount paid by the customer. The limitations or exclusions of warranty have priority over any other warranty expressed explicitly, implicatively, in writing, or orally.

3. Safety notice

Safety notices in this manual detail precautions the user must reduce the risk of personal injury and damage to the equipment by following the instructions written on this manual. The user must read these instructions before installation, operation or maintenance.

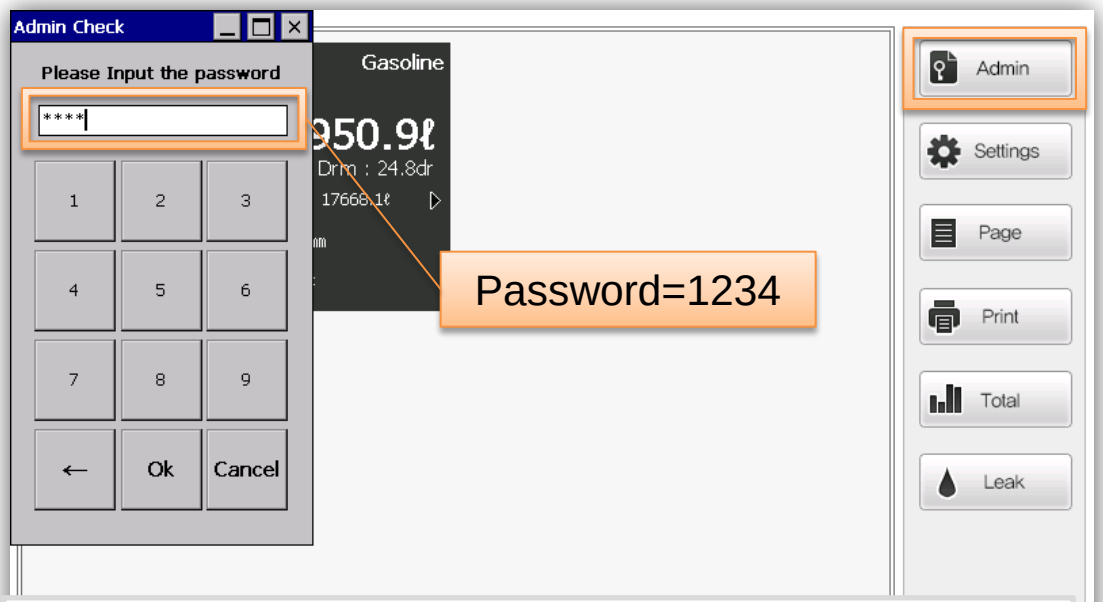
- For where hazardous area contained explosive gas, use flameproof enclosures.
- Do not apply large vibration or impact to HM520S that causes physical and transmissional damage. The probe must be handled with extra caution during any transportation and operation at all time.
- If the probe is used out of allowed temperature written in specification, the sealing materials deteriorate quickly therefore probe may not operate in normal condition.
- Do not open junction box cover and products when energized.
- Be sure that the terminal cover and body cover are put on during the operation.
- Do not open junction box cover when energized.
- Do not connect to 250v or greater voltage power
- Please check battery and electrical leakage before plugging in power.

Main page



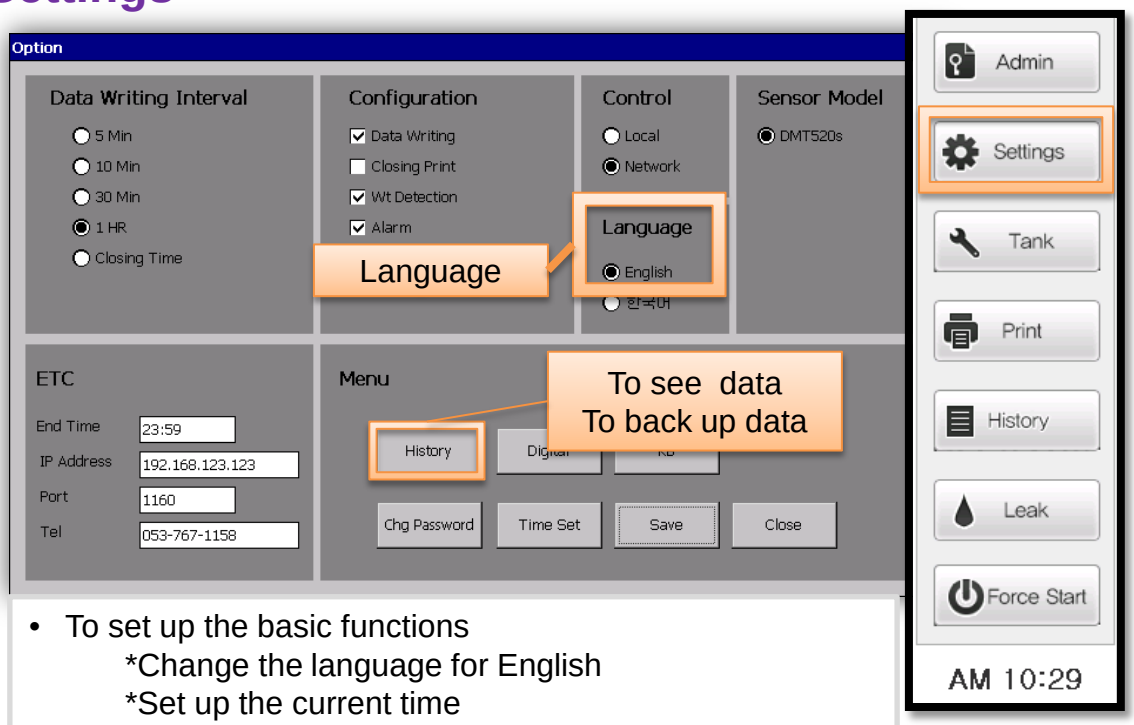
- The main page displays volume, height of oil, height of water, temperature and so on

Admin Password



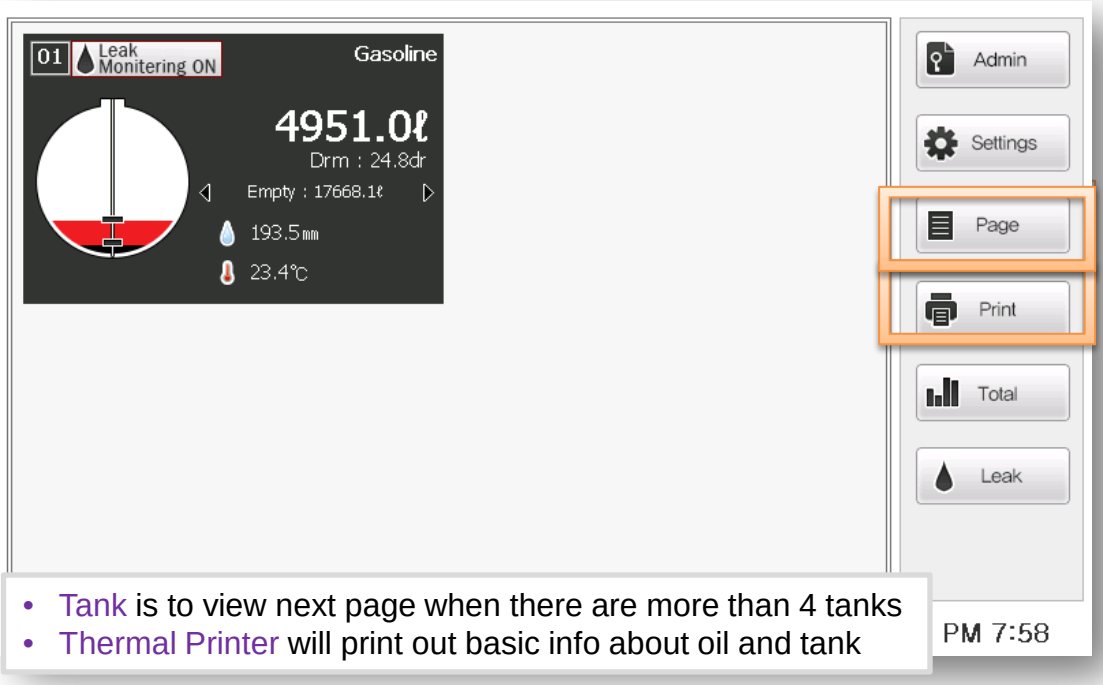
- Password is 1234 at first edition

Settings



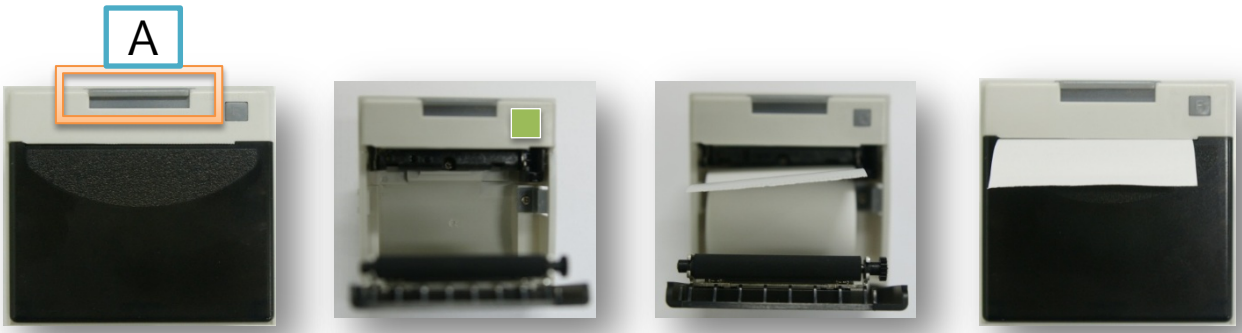
- To set up the basic functions
  - *Change the language for English
  - *Set up the current time
  - *Change the password if necessary

Tank & Print



- Tank is to view next page when there are more than 4 tanks
- Thermal Printer will print out basic info about oil and tank

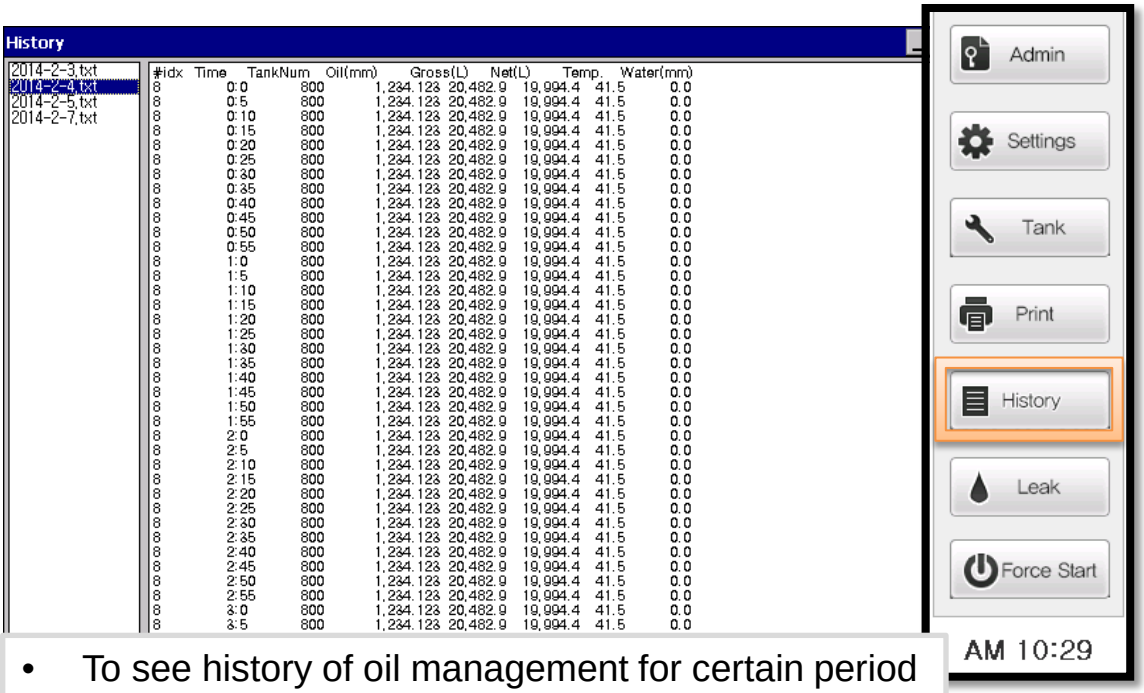
Printer paper replacement



- 60mm Thermal Printer will print out basic info about oil and tank
- Green light will flash when there is no paper

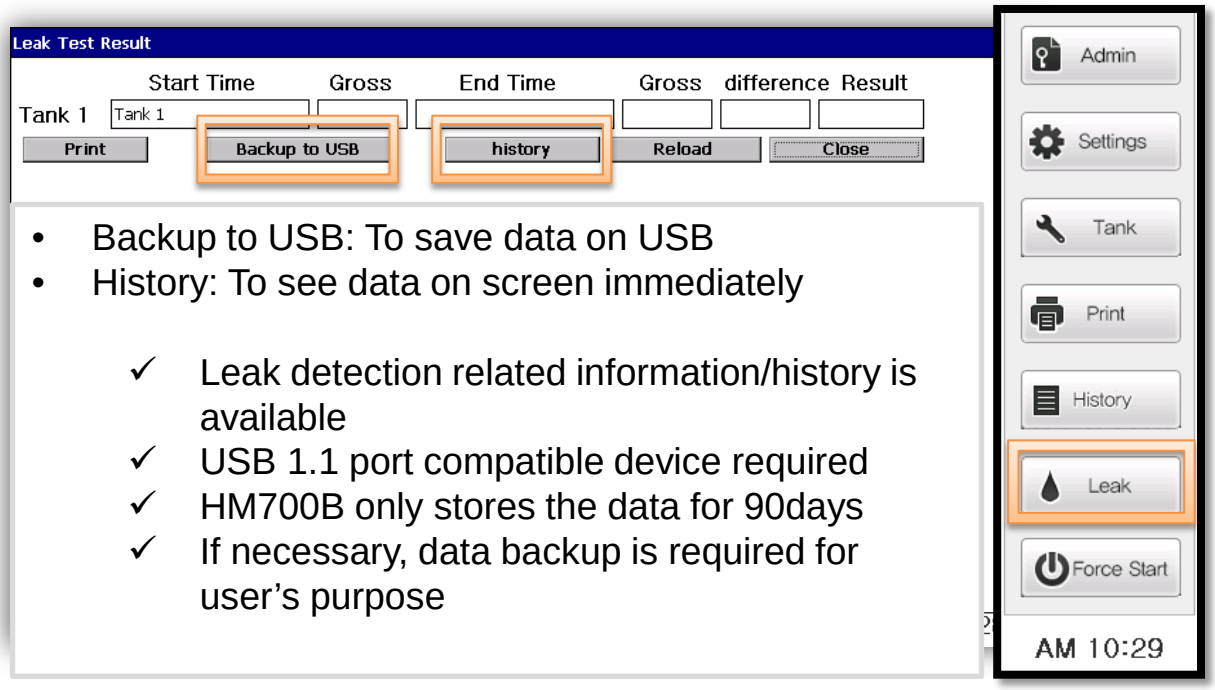
1. Button(A) needs to be pressed for opening the black cover
2. Insert right size(60mm or less) of paper correctly in the printer
3. Close the cover of it
4. Printer is ready for use

History



- To see history of oil management for certain period

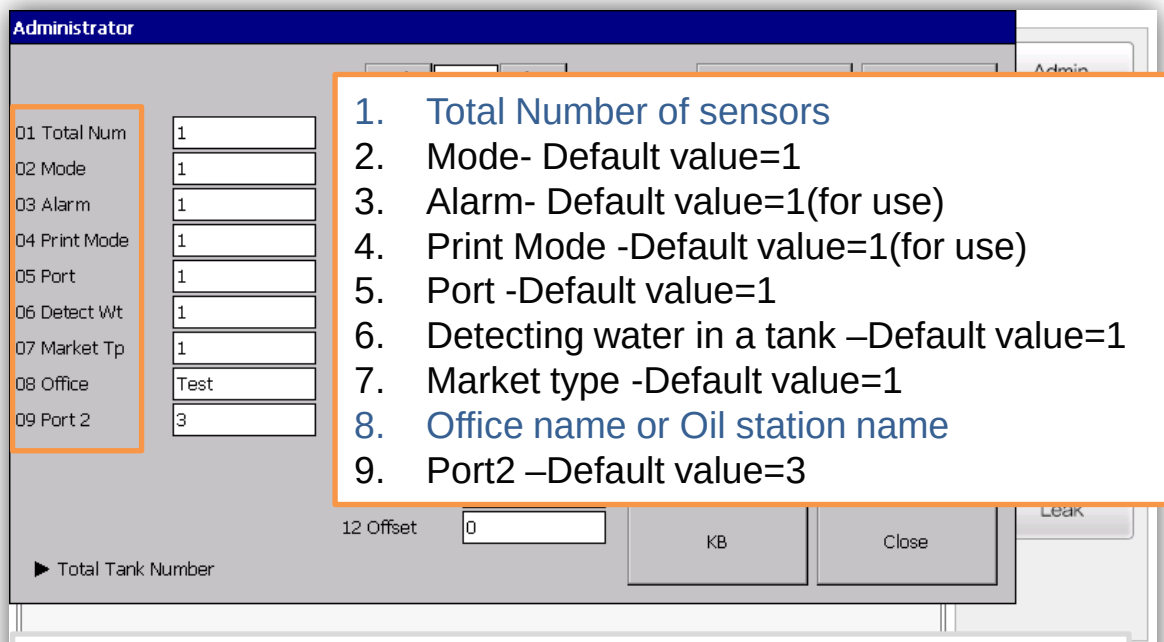
Leak detection



- Backup to USB: To save data on USB
- History: To see data on screen immediately

  - ✓ Leak detection related information/history is available
  - ✓ USB 1.1 port compatible device required
  - ✓ HM700B only stores the data for 90days
  - ✓ If necessary, data backup is required for user's purpose

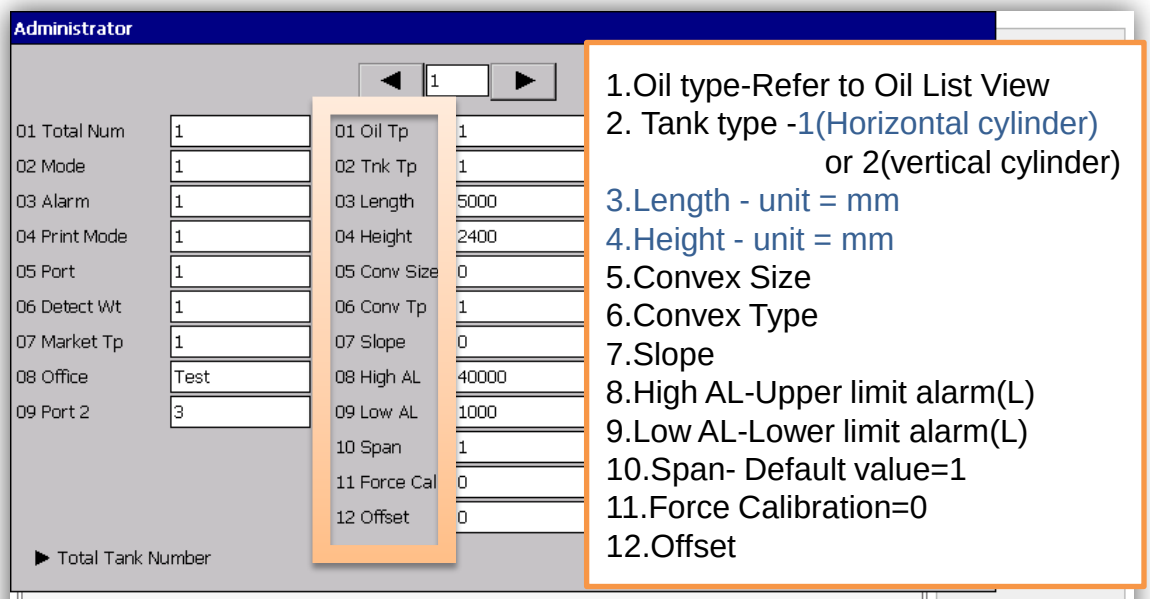
Administrator



1. Total Number of sensors
2. Mode- Default value=1
3. Alarm- Default value=1(for use)
4. Print Mode -Default value=1(for use)
5. Port -Default value=1
6. Detecting water in a tank –Default value=1
7. Market type -Default value=1
8. Office name or Oil station name
9. Port2 –Default value=3

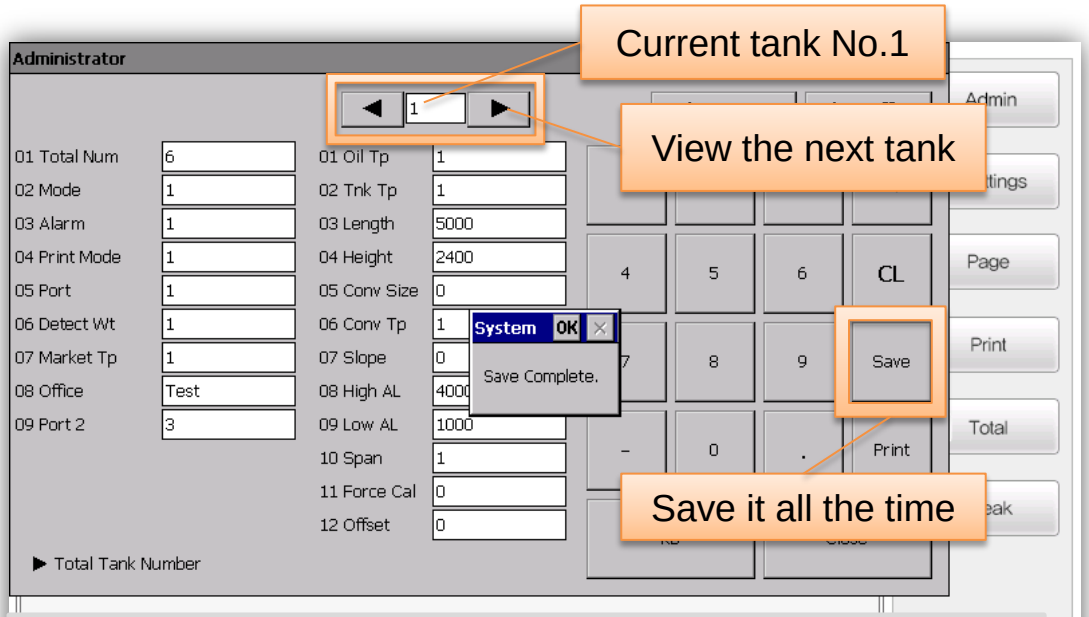
*Notice: This section is for an installer to set up program except 08 area(08).

Administrator



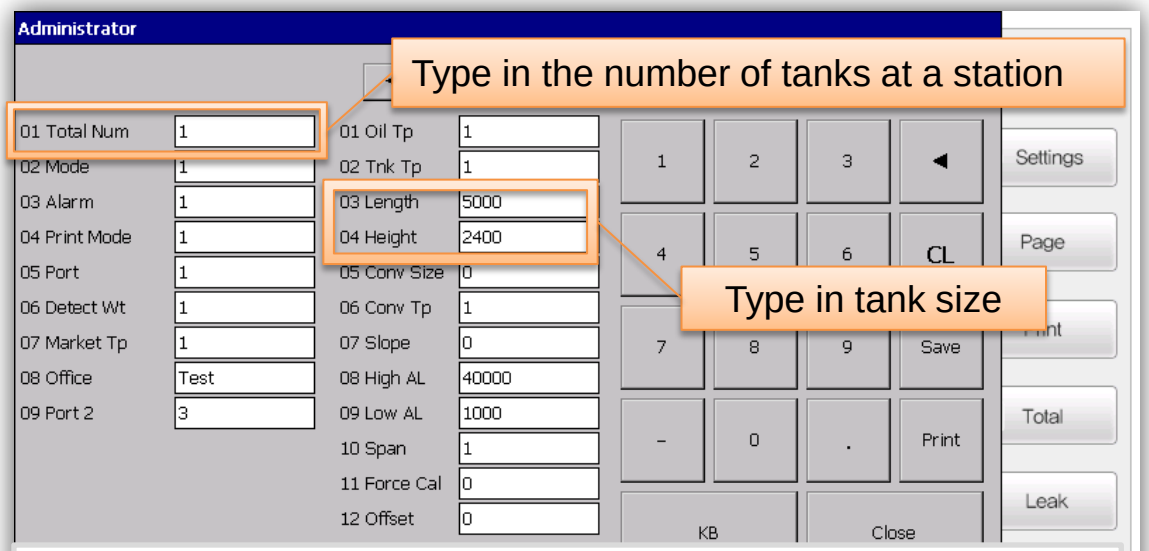
*Notice: This section is for an installer to set up program except alarm function(01,08,09).

Save



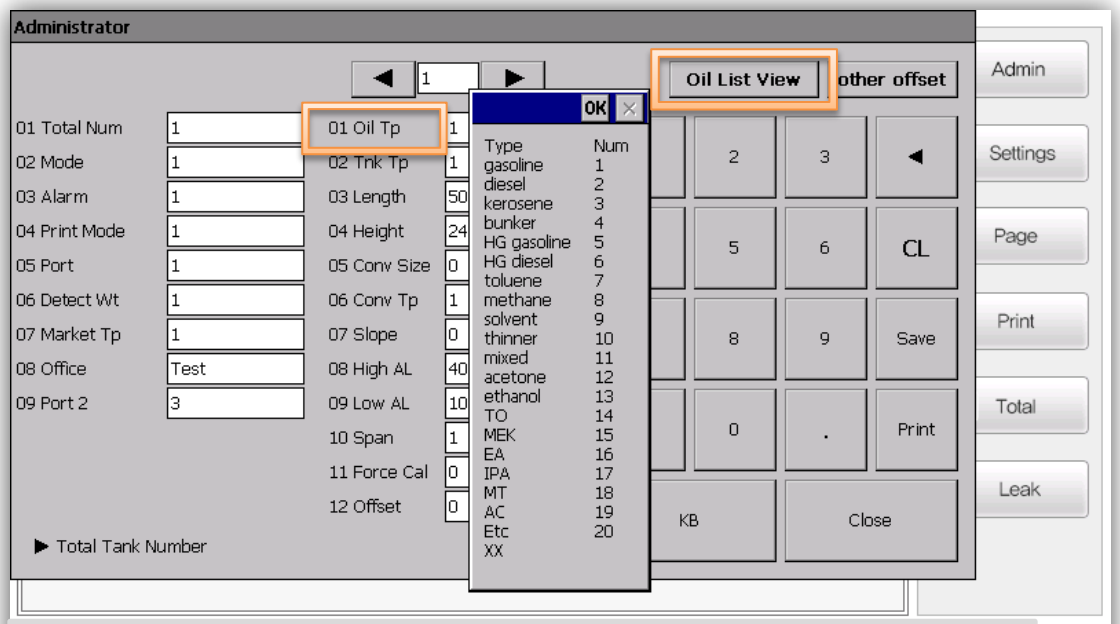
- You need to save the change when editing before viewing the next tank page

Administrator



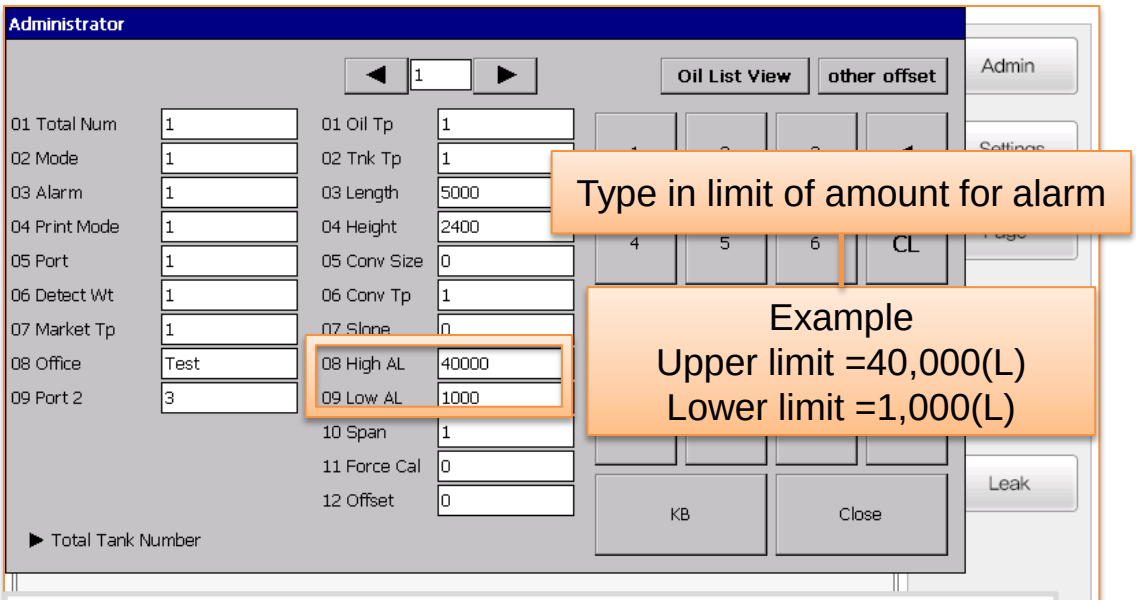
- This section is only for local dealer / technician, not for users
- Please consult with installer or manufacturer
- Type in appropriate numbers at each space

Oil list view



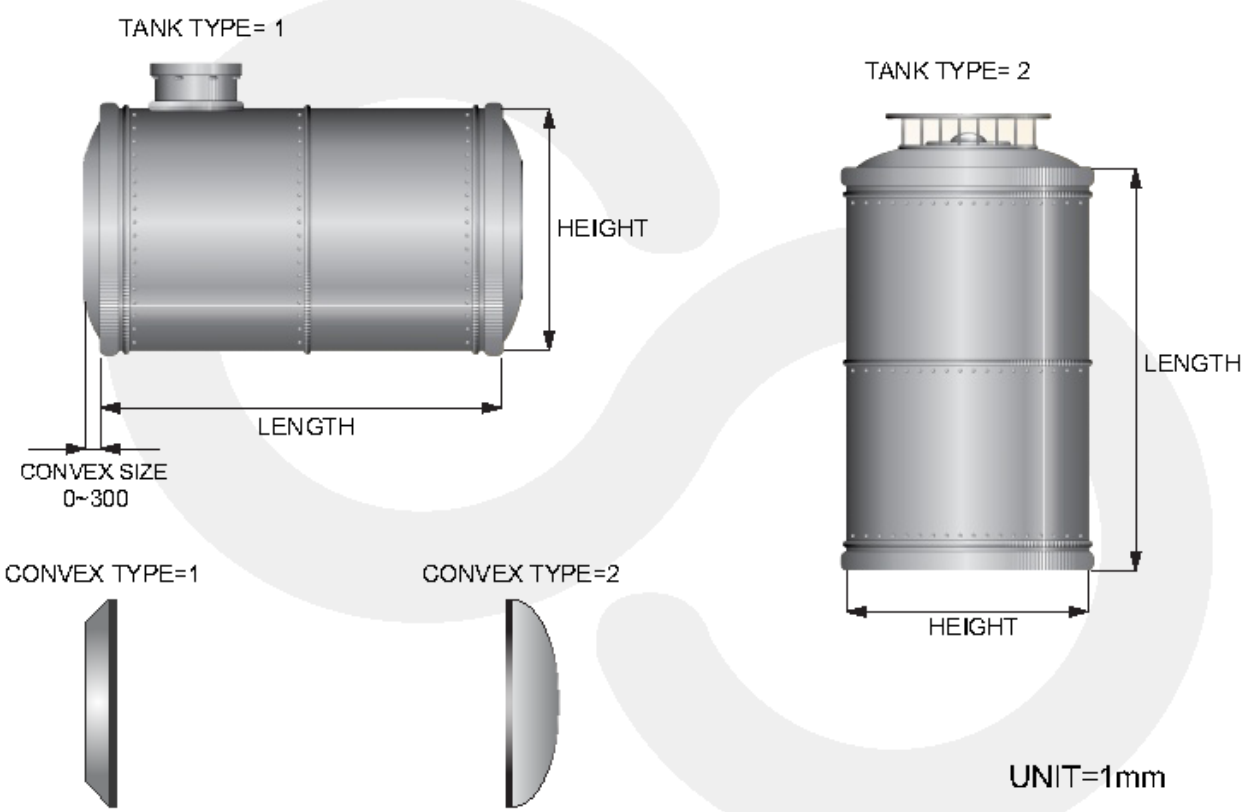
- Insert in number of oil type from the list

Alarm



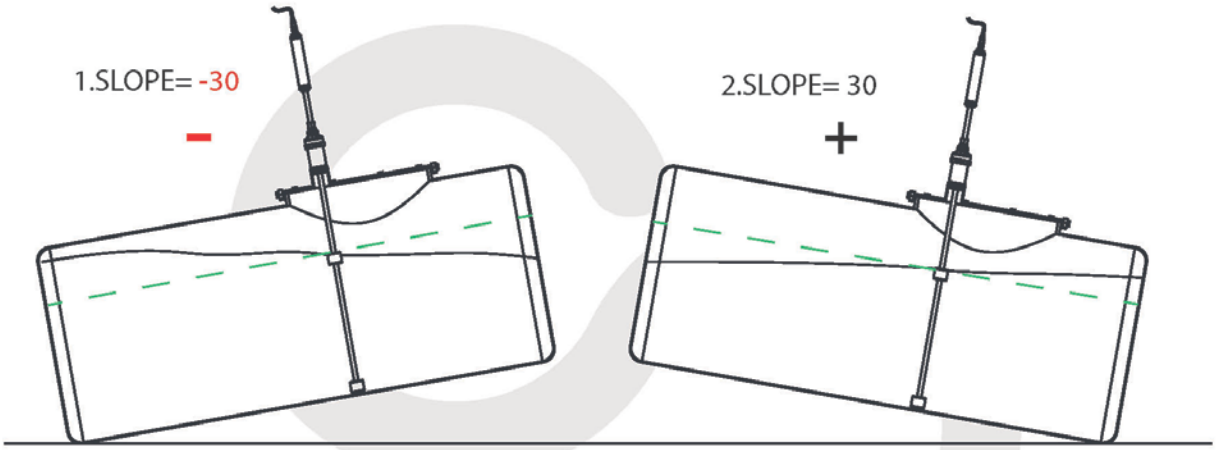
- Type in the amount for alarms

Tank Type



SLOPE

Example

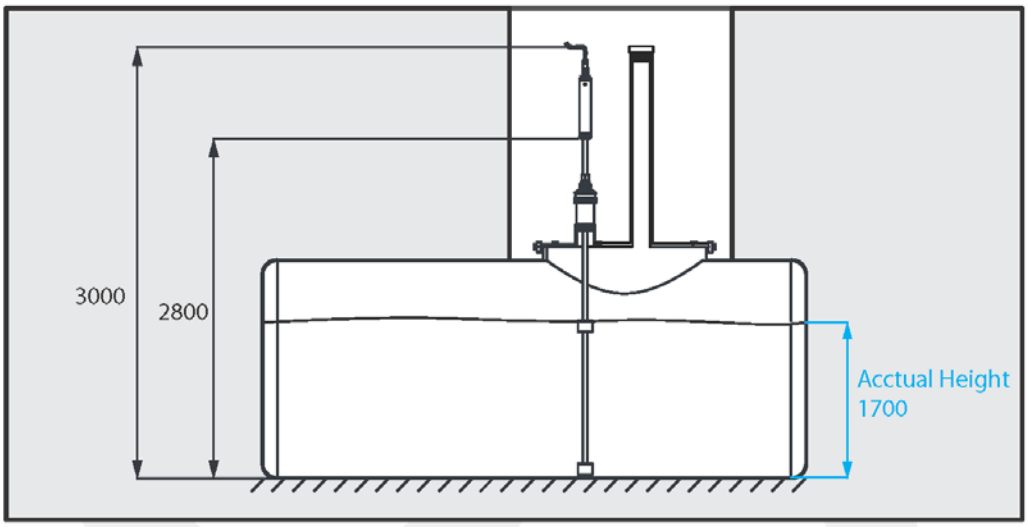


The drawings is exaggerated for better understanding.

UNIT=1mm

OFFSET

How to decide OFFSET value



<Unit =mm>

Example)

Acctual Height = 1700mm
Detected Oil Height = 1600mm
Acctual Height - Oil Height = OFFSET value (mm)

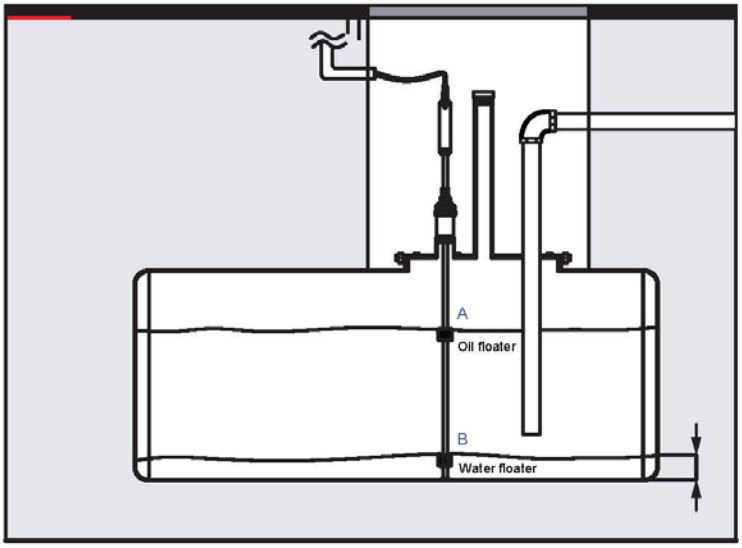
1700- 1600 = 100

Acctual Height = 1700mm
Detected Oil Height = 1800mm
Acctual Height - Oil Height = OFFSET value (mm)

1700- 1800 = -100

OFFSET

How to decide OFFSET value for water floater



Acctual Height=100mm

<Unit =mm>

Example)

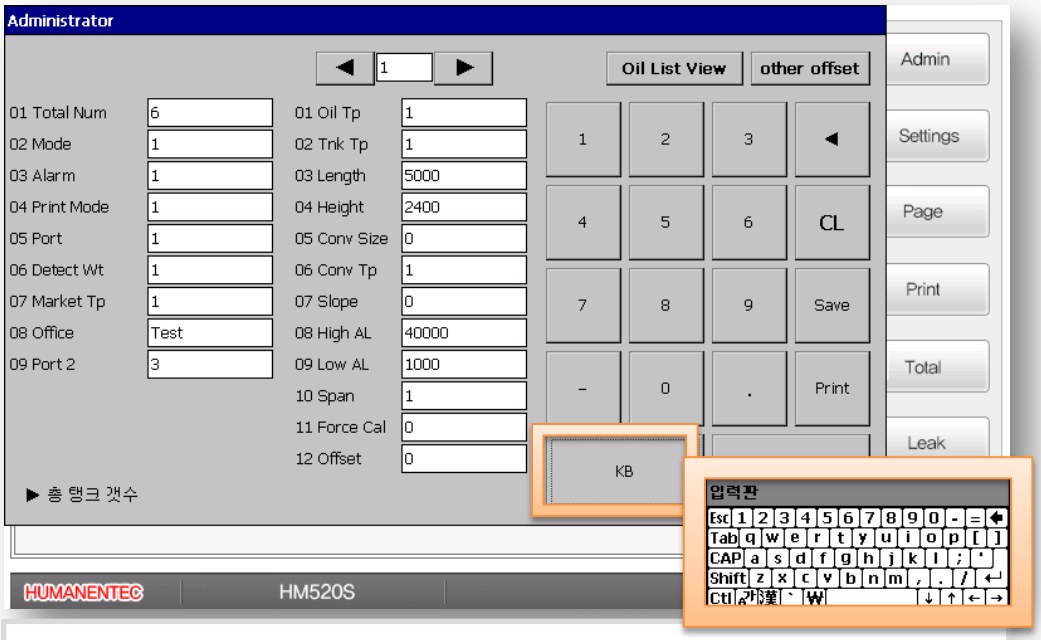
Acctual Height = 100mm
Detected water Height = 50mm
Acctual Height - water Height = OFFSET value (mm)

100-50 = 50

Acctual Height = 100mm
Detected water Height = 150mm
Acctual Height - water Height = OFFSET value (mm)

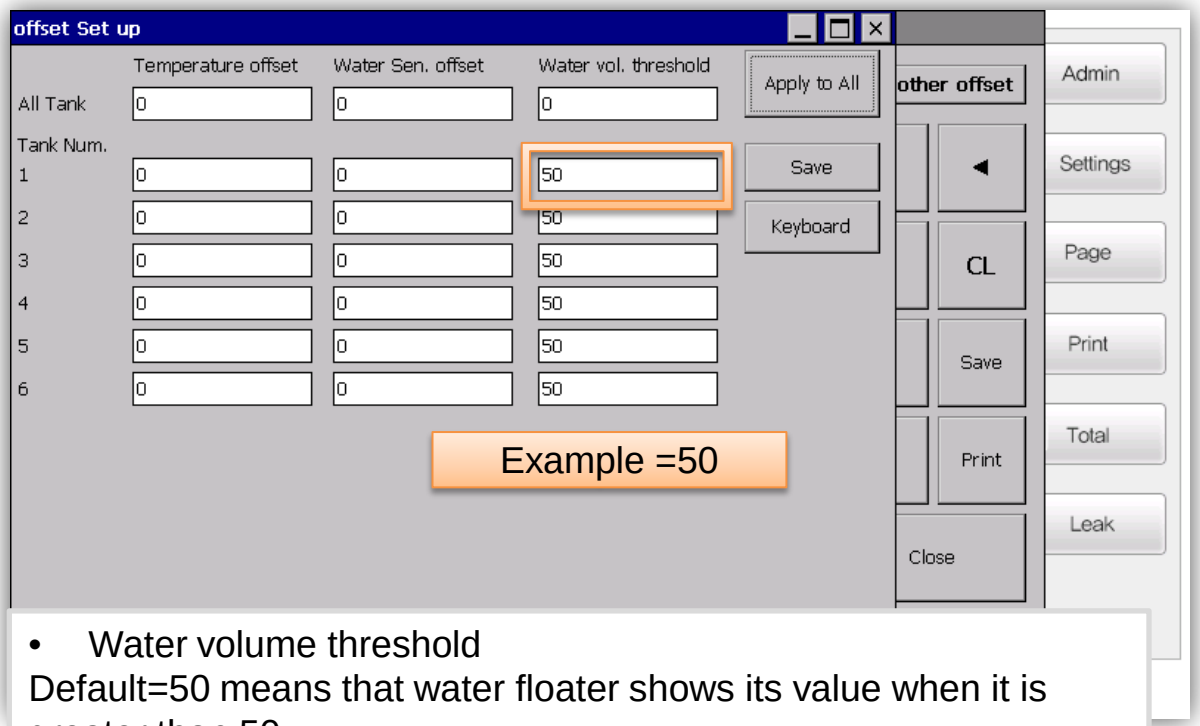
100- 150 = -50

KB = Keyboard



Mobile phone pen will be handy to type on keyboard

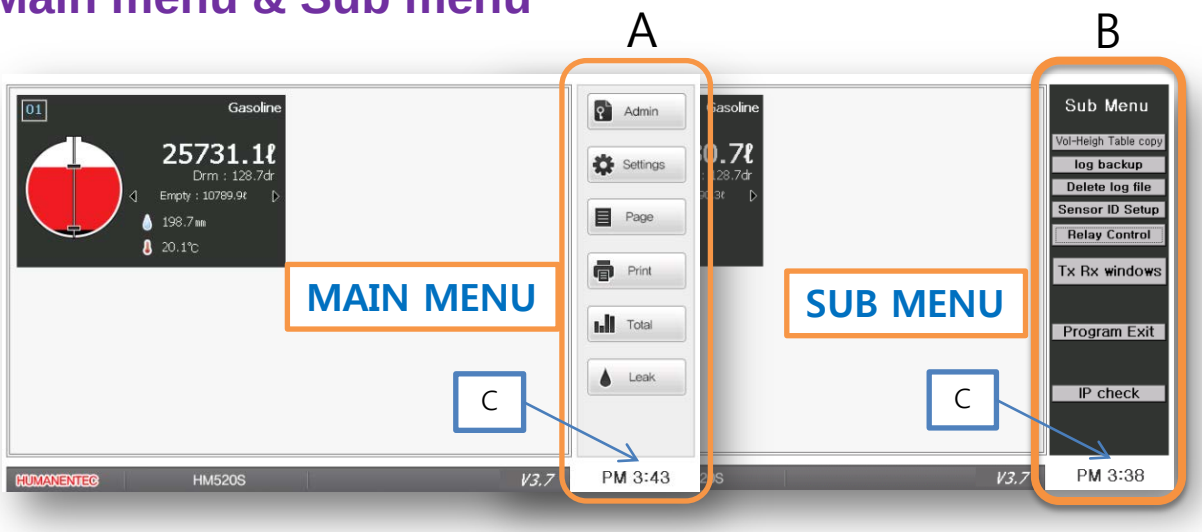
Water volume threshold



- Water volume threshold

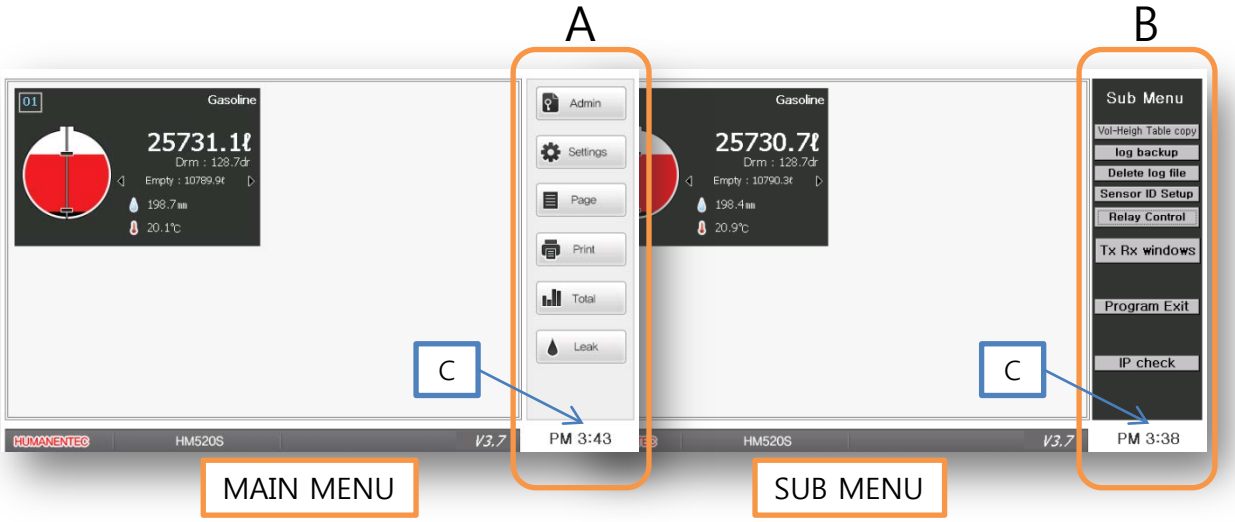
Default=50 means that water floater shows its value when it is greater than 50

Main menu & Sub menu



- MAIN MENU(A) or SUB MENU(B) Will show up when ‘C’ button were pressed
- ‘C’ area is hidden button between ‘TIME’ and the block of menu for SUB MENU

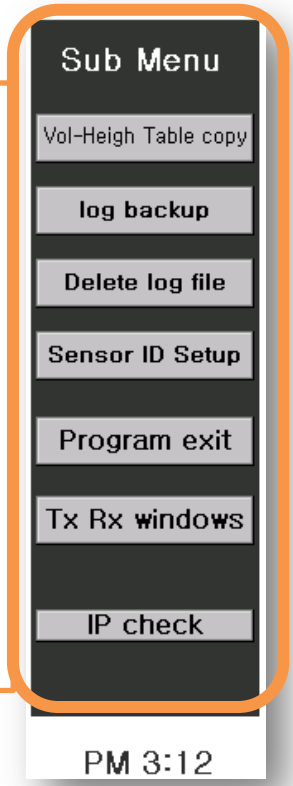
Main menu & Sub menu



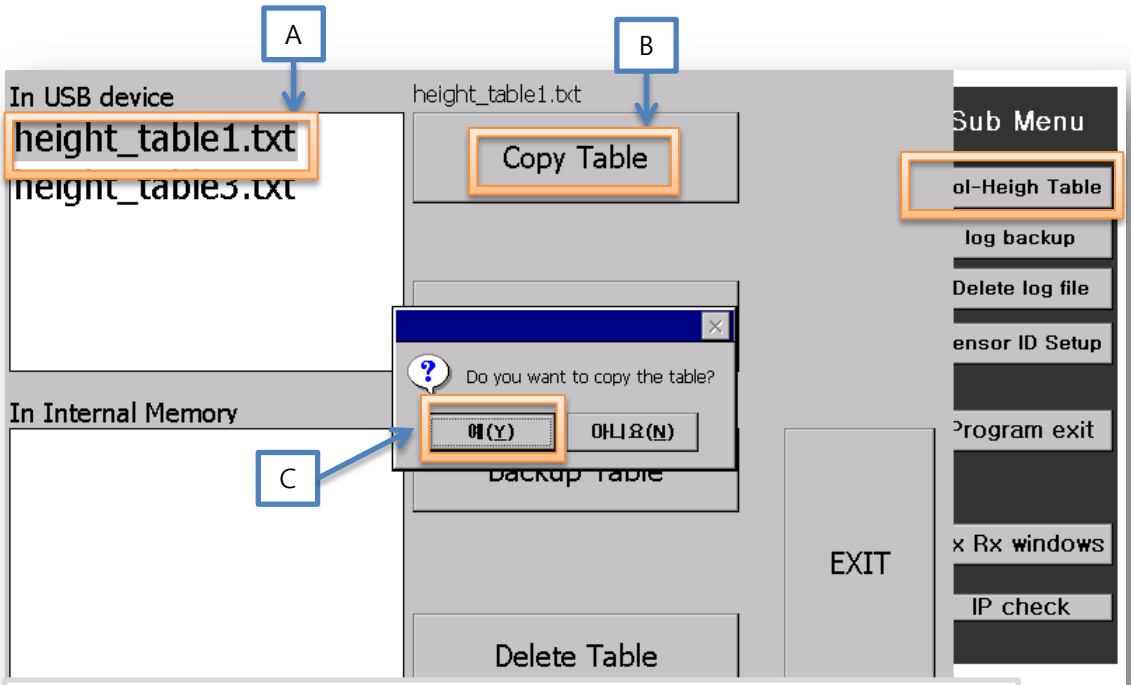
- MAIN MENU(A) or SUB MENU(B) Will show up when 'C' button were pressed
- 'C' area is hidden button between 'TIME' and the block of menu for SUB MENU.

Sub menu

- **Volume-Height table copy-** When you use manually measured DATA for oil volume.
- **Log back up** – It is for back up the log file on USB memory stick
- **Delete log file-** It deletes all of log files
- **Sensor ID setup-** Sensor ID can be changed through the software
- **Program exit-** It close down HM720B software to browse Windows CE
- **Tx Rx windows** – It checks the communication signal between sensors and console.
- **IP check** –It displays IP address for Remote view mode.

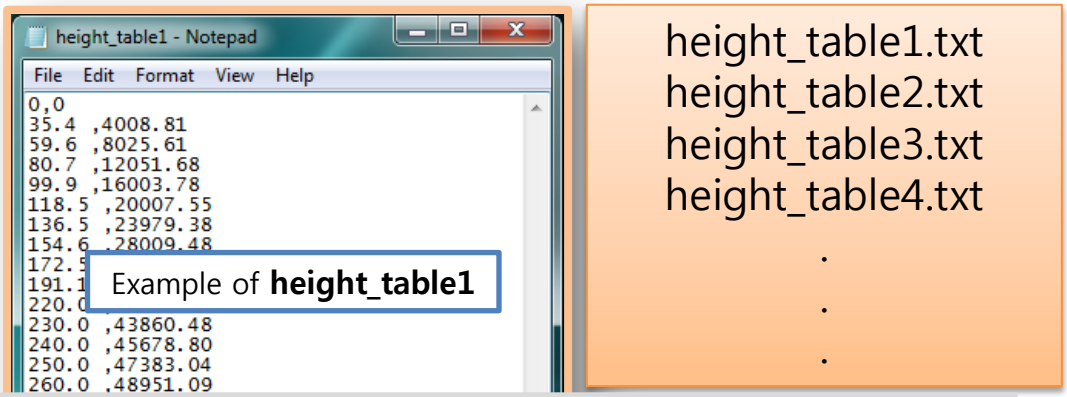


Volume-Height table



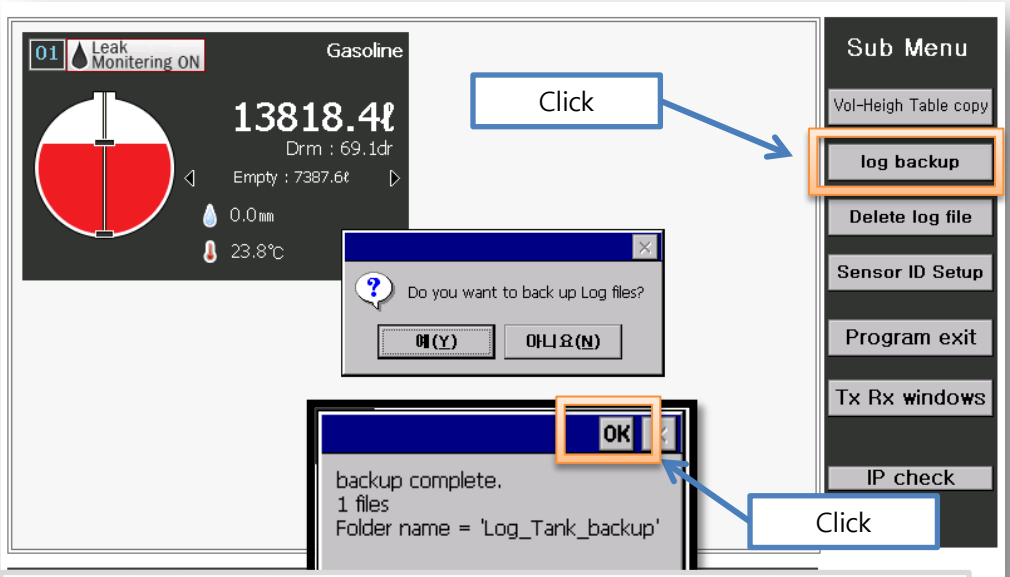
1. USB memory needs to be connected to HM720B USB slot
2. Click “A” that you want to copy
3. Click “B” for the execution
4. Click “C” for YES

height_table1



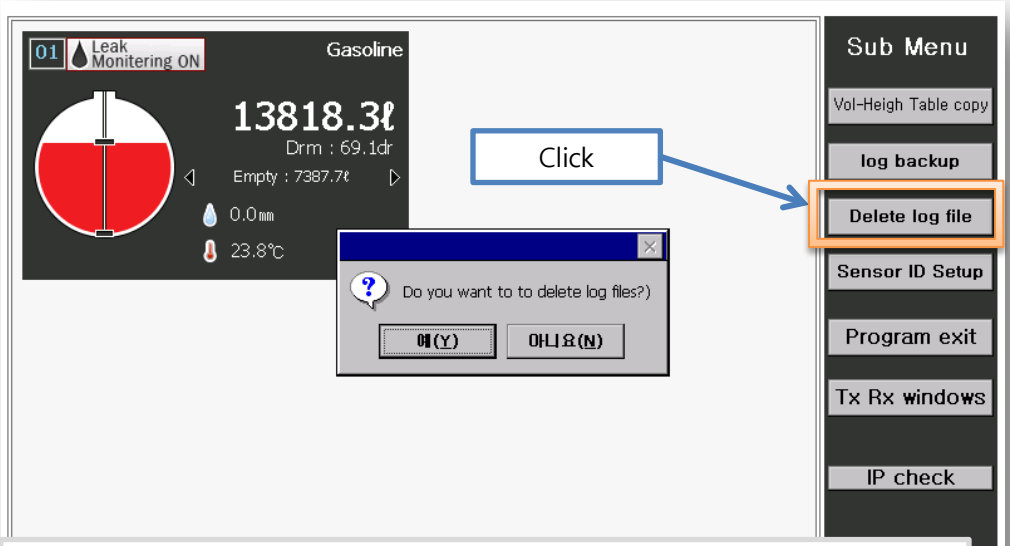
5. **Vol-Height table** is all set for TANK 1
6. Turn off and on the console(HM720B) to apply new settings
7. **height_table2.txt** is for TANK 2
8. File name has to be same form like ‘height_table3.txt’

Log backup



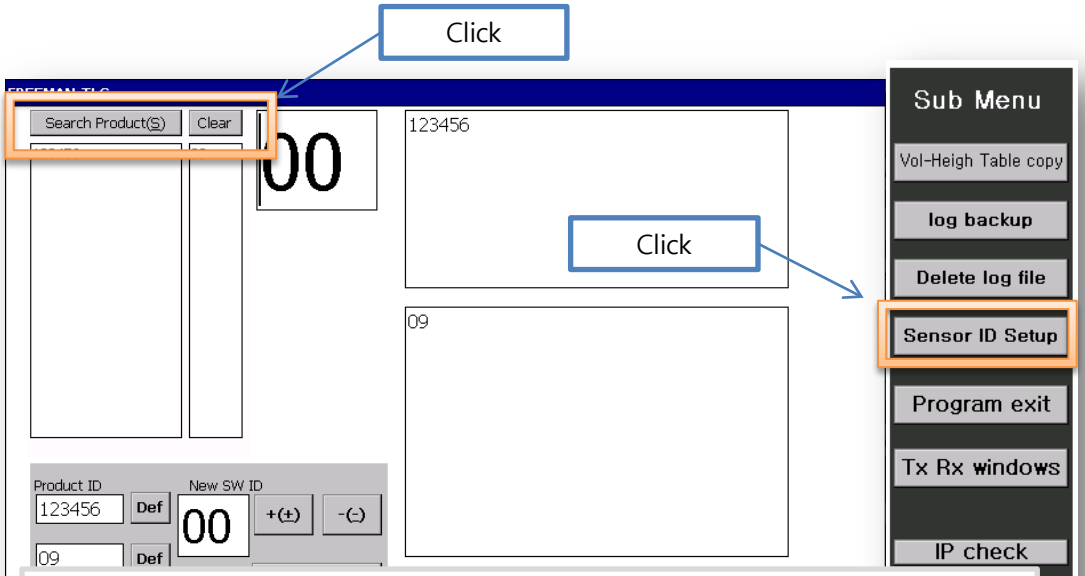
1. Plug **USB** memory in a slot of HM720B
2. Click the **Log backup** on Sub Menu
3. Click Yes(Y)
4. Back up completed on USB, Click **OK**

Delete log file



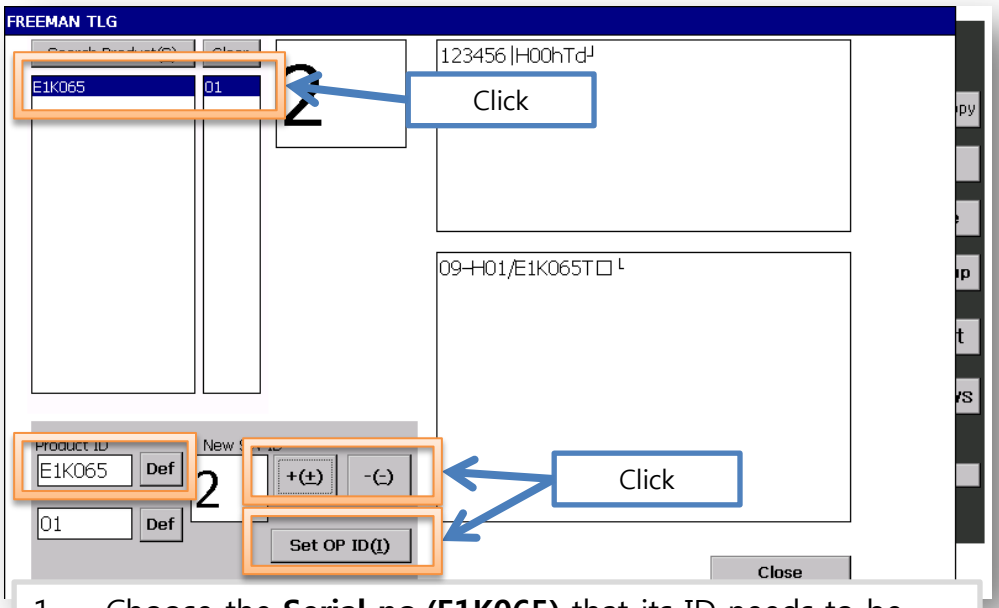
1. Click the **Delete log file** on Sub Menu
2. Click Yes(Y), Process is done

Sensor ID setup



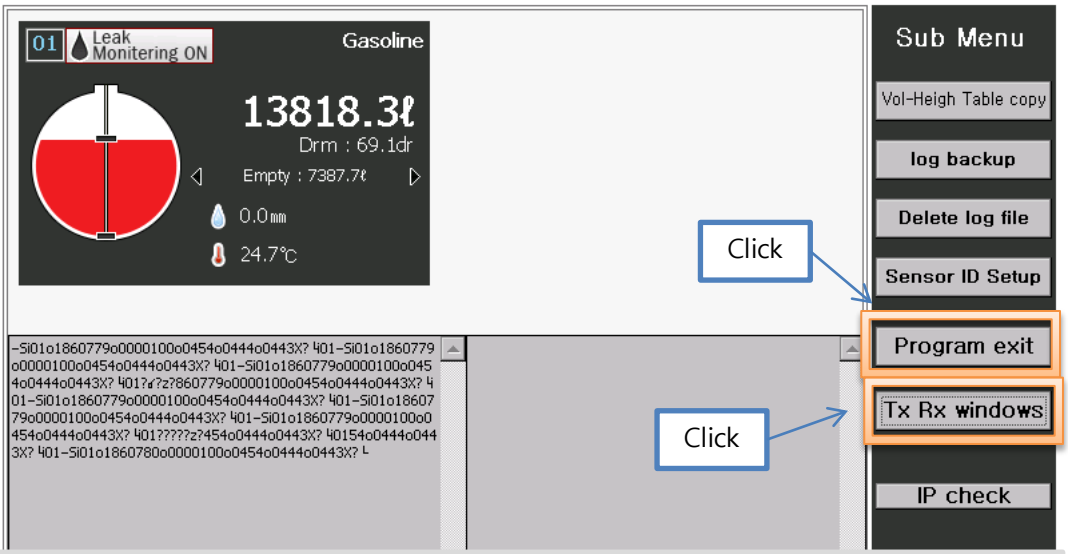
- When a sensor needs to change the ID

1. Click the **Sensor ID Setup**
2. Click the **Clear**
3. Click the **Search Product(s)**



1. Choose the **Serial no.(E1K065)** that its ID needs to be changed
2. Click the **+ or –** to change no. of ID
3. Click the **Set OP ID(I),** Process is done
4. Click the close

Program exit & Tx Rx windows



- **Program exit-** It closes down HM720B software to browse Windows CE
- **Tx Rx windows** – It checks the communication signal between sensors and console.

IP check

- **IP check** –It displays IP address for Remote monitoring mode
- Remote Monitoring requires Ethernet connection(Internet wired)
- Please refer to **Remote Monitoring** section in the manual

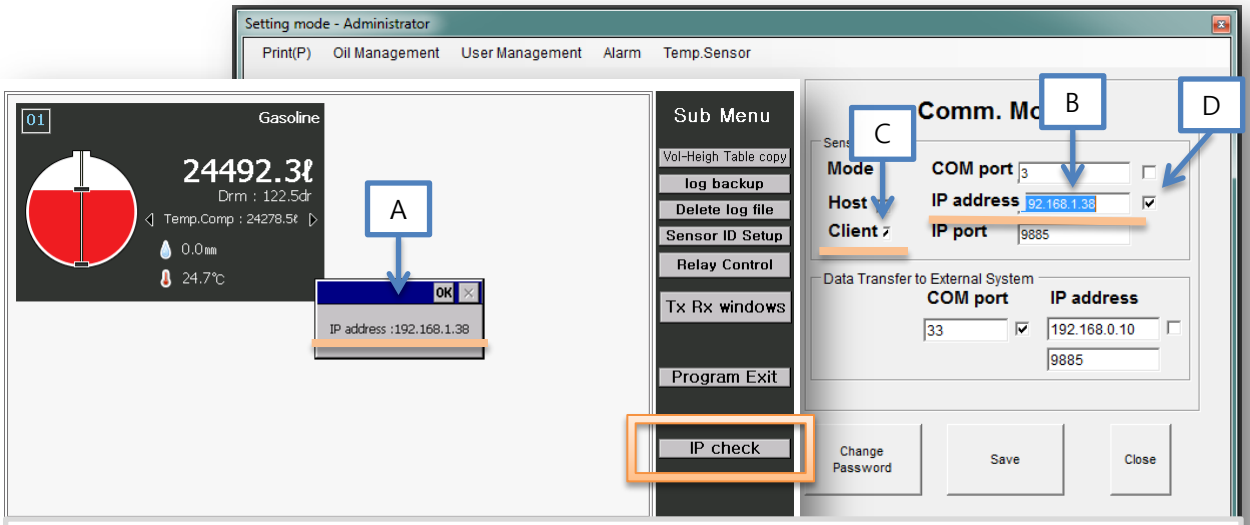
Ethernet connection

- Ethernet line must be linked to each **console**(HM700B) and **PC**(HM600C) for Remote Monitoring.

- Caution! PC software(HM620C software) needs to be preinstalled for **remote monitoring**

Remote Monitoring (from headquarter)

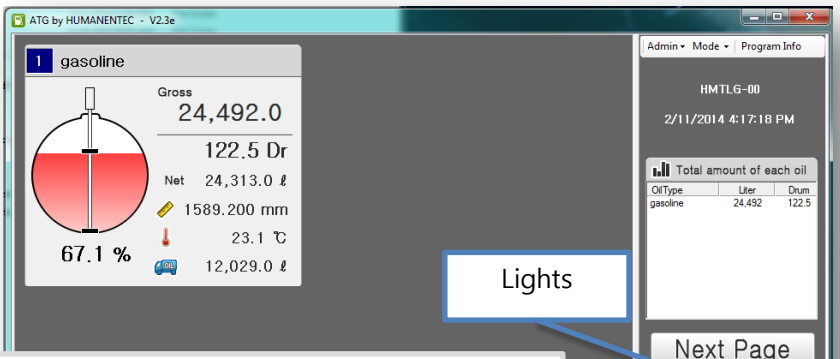
PC(HM600C) & **Console**(HM700B)



- Remote monitoring is for When you want to remotely manage your gas station from other office.
- IP address is for Data Linkage between PC(HM620C) and Console(HM720B)

1. Check the IP address by clicking IP check button
2. Type in (A) **IP address** in space (B). IP address (A) and (B) must be same
3. (C) and(D) needs to be ticked
4. IP port must be **9885** on both of software HM700B and HM600C.

- Notice! PC software(HM620C software) needs to be preinstalled for **remote monitoring**



5. Edit the size of tank as same as console (HM720B) on administrator
6. And other settings has to be same.
7. Lights will be flashing
8. Remote Monitoring is in motion

Communication Error

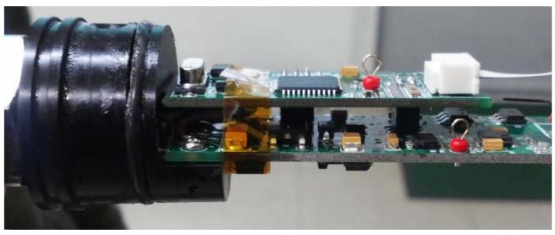
Red light blinking
That means that there is COMMUNICATION ERROR.

- When one sensor displays same value even though oil is consumed.

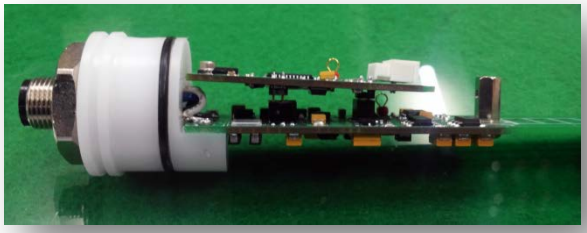
1. Oil/ Water floater might be stuck to ladder or something
   ① Pull out the sensor
   ② Check if the value of Oil/water floater changes as it moves
   ③ If it still has the same problem please check the connection of sensor digital boards

2. Digital boards connection causes a problem
   ① Check the connection of two boards

Good



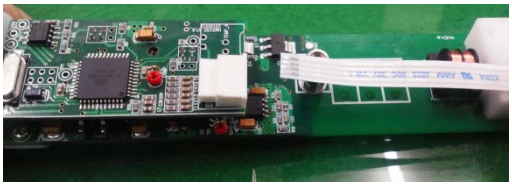
Bad



Temp. Error

- Temperature connection problem-
  ① Check the connection of temp. cable
  ② Follow the process of A,B,C

A



B

C

Please make sure that
the cable holder is shortened

Signal Error

When significant changes in the **value of water/oil floater** displays on monitor

1. Oil/Water floater offset value needs to be checked on administration

2. Oil/Water floater might be stuck to ladder or something
   ① Pull out the sensor
   ② Check if the value of water floater changes as it moves
   ③ If it still has the problem please see no.3 as below.

3. Digital signal problem
   -This is for to get rid of any magnetism on unnecessary part of sensor

① Please follow the process 1,2,3 a couple of times
② Check the water floater value if it is OK after the process.
Caution! Floaters must not be close to Head of sensor **within 10cm**

HM720B to PC

Data Linkage from console to PC

- PC software(HM620C software) needs to be preinstalled for **data linkage**
- Console(720B) and PC should be licked by cable
- Console(RS285) to PC(USB)
- Example of cable : RS232 to USB cable

SINCE 1993
Hidden Champion
HUMANENTEC
ATG

www.humanentec.com
Tel. 82-53-767-1158 Fax. 82-53-767-5141
#101, 1287-1 Bummul-dong, Suseong-gu, DAEGU, KOREA

Materials and product specifications shown in this catalogue are subject to change without prior notice for quality improvement reasons.