

)AirSense)))

INSTRUCTIONS

Documentary AS-88

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AS-88



AIR SENSE

Air Sampling Pump & Multi Charger

Air Sampling Pump AS-88

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Air Sampling Pump Air Sense AS-88

Docking Station / Multi Charger

Air Sense / Right Connection



Chapter 1 High Lights

The Air Sampling Pumps of "Air Sense" can sample the emission of asbestos in the air as well as fine dust or gasses through chemical binding.

It is the pendant of adhesive samples.

During the whole life time of the pump the airflow rate will be constantly the same, even after the battery made many cycles or when the battery reaches its depletion point. Because of the microprocessor controlled airflow. The airflow calibration is done in the factory.

The result of an executed air sampling procedure will be store at a safe place in the cloud and is there secured. From the cloud you get the distracted reports.

The user is invited to place he pump back after use in the charger. His name can easily be set in a display line.

For the pump is an infrared sensor available as an option en can be connected to the pump in the field. A timestamp is generated when an unauthorized person comes near to the pump.

The pump has a battery management system, which will give a forecast to see if there is enough energy in the pump to full bring the necessary pump duration.

The pump stores any irregularities (filter missing, filter blocked, or a person in nearby) in its memory and reports a prelim when the long-life-battery gets old.

The pumps is provided with a limitation for low battery.

Administrative actions are taken care of by the automatic software procedures.

You can start projects in connection with the multi charger / docking station. The status of the projects will be visible at the screen of the computer.

The parameters the pump stores are: the air flow, the air temperature and the humidity. These values are stored every minute in the logbook of the pump. When connection the pump to the program on the compute the logbook will be send to the cloud.

The pump has a simple big menu control button, to go through the simple menu items.

The pump can be rinsed by tap water (IP67).

The pump is robust, for rough.

The pump satisfies the standards for asbestos rules like NEN 2939, NEN 2990 en NEN 2991.

The pump can be used for several kind of air emissions like for example asbestos, fine dust or gasses.

Chapter 2 Quick Start

QUICK START / EXAMPLE (project 2 pumps)

Installing software.

First install the driver software "MCP2200" to make it possible communicate with the charger or single pump.

Install the AIR SAMPLE PUMP CONTROL software.

Connect the charger with the USB cable to the PC and power-up the charger.

Place all pumps into the charger/docking station.

Start-up the AIR SAMPLING PUMP CONTROL software.

Select in the top Company Profile.

Enter all details and optional Company Logo.

After this is done, select pumps in the top menu and hit the "Collect by Broadcast" button.

The charger/docking station is now detecting all pumps in the system.

After this the system is now ready to use.

Chapter 3 Start a Project

Start a Project:

Press "Project" in the menu line at the top.

A New window pops up to set the project.

Press "New Project" and enter a Project Name.

Select a pump ID from the list and a second pop-up screen to enter mesh size and the Filter number.

After this a second or third pump can be add to the project.

End this procedure by clicking on the Ready button.

On the left column is now a grey blinking LED visible to indicate that pumps are not in the field yet.

Now remove the pumps from the charger/docking station. The LED will show this to turn into gold colour.

The most left column shows that the project is started.

When the job is finished, and the pumps are placed back into the charger, the led from this project is turn into Blue to indicate upload is busy.

As soon this is done the led turns into Green to indicate the project is completed.

Than double click on the project's name on the left column to print a report.

Chapter 4 Menu Structures

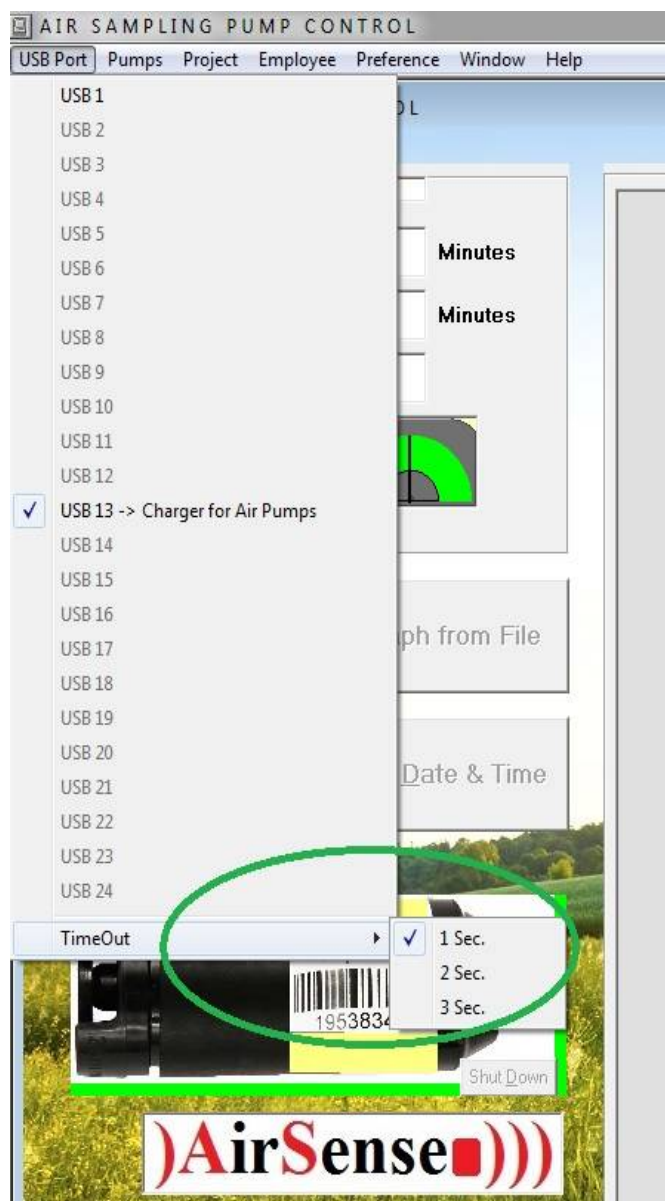
Menu Structures

The basic Window is called "AIR SAMPLING PUMP CONTROL".

USB Port

At the top left menu Item you find the menu option to select an USB Port. The program automatically refers to the USB Port where the charger or a single pump is attached to, at start-up of the program, See Picture 1.

At the bottom of these menu option you find the option to change the Time Out of the charger or pump response in seconds. See Picture 1 inside the green circle.



Picture 1.

Pumps

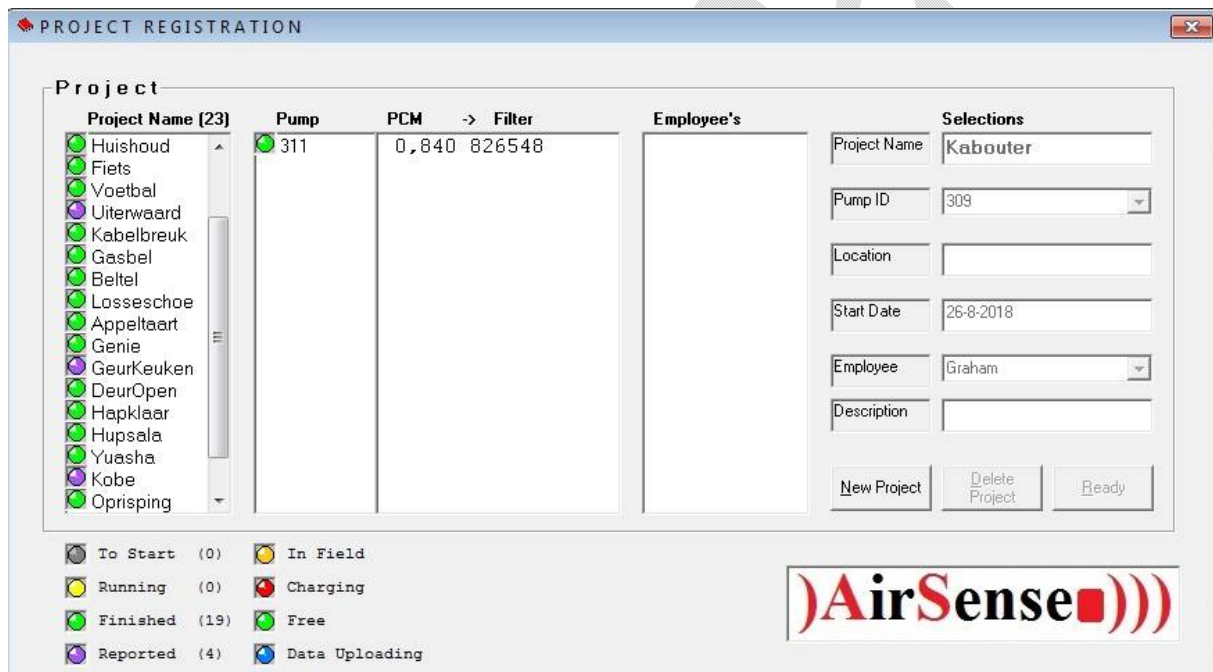
This menu option opens the possibility to scan the charger for the inserted pumps. When all your available pumps are inserted into the charger, an automatic list is generated by using the button "Collect ID's by Broadcast". As an addition to the new available pump list you can add manually extra pumps that are not inserted in the charger in order to make the list complete with all your pumps.

If for some reason you want to remove a pump from the pump list, you can do so by double clicking on the concerned pump.

When using the button "Collect ID's by Broadcast" be aware of the fact that all the pumps are first removed from the list automatically, also the manually added pumps!

Project

This menu option opens the "Project Registration" Window that handles the administration to Project in conjunction with the multi charger. See picture 2.



Picture 2.

To start a new project, press the "New Project" button. The input will then be prepared and a grey LED is added at the top of the project list on the left.

The other object on the Project window are disabled except for the selections to be made until you press the "Ready" button.

In the left list are the projects listed that were added by the most right column "Selections" -> "Project Name". In the same right column you can add several pumps to the project by choosing from the pulldown list "Pump ID". In the list "Pump ID" you find the pumps which were added by the menu option Pumps.

The selected pumps are added to the pump list in the middle of the window. And are guided on the left by a red or green LED depending on the battery voltage of the pump.

When selecting a pump you are invited to fill out the mesh size of the filter to use. The mesh size is prefilled in by the value entered by the "Preference" menu option. (Discussed later on). When "0" was entered then there will be no value as a proposal, assumed is in that case that the mesh size is variable.

The next step is to enter the filter number that belong to the filter in use.

By double clicking on the list with the pump numbers you can remove a pump again so you wish.

By double clicking on the list with the mesh size and filter numbers you can revise the mesh size and the filter number through a popup screen. See picture 3.



Picture 3.

At the field "Location" you can enter the place where the job needs to be done.

The "start Date" is generated automatically by pressing the button "New Project".

You can add employees who are taken part in the project by selecting employees from the pulldown list "Employee". The way the list "Employee" is filled, will be described in a later section menu "Employee".

*All the above selections are fixed after the pump has been used in the field and uploaded their data to the server.

The last selection "Description" stays available even after the project is finished for comment.

By double clicking on the left project list you can print an overview of the selected project.

When the project is finished and you print an overview of the project, the LED on the left of the project will turn purple in order to mark the project as being reported.

Underneath the project frame you find the legend of the meaning of the LED's.

At the right side of the project LED's you find the numbers representing the amount of project statuses. See picture 4.

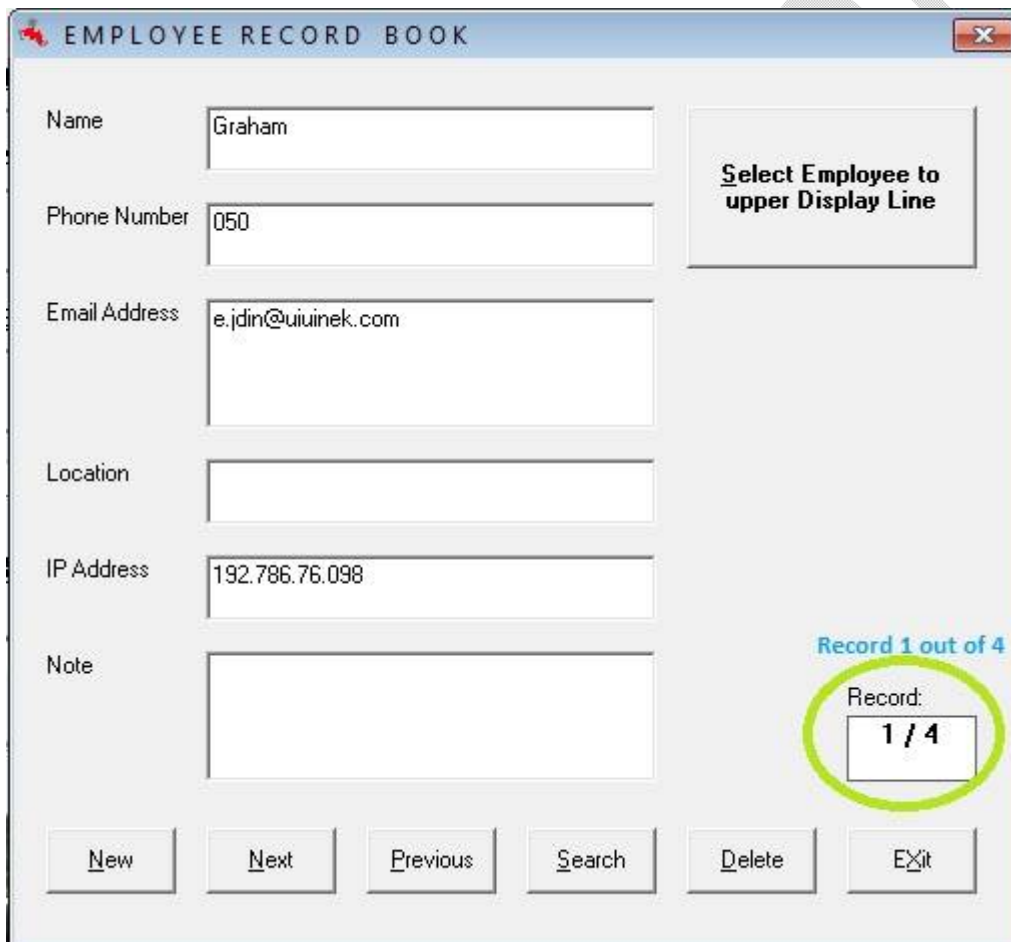


Picture 4.

You can remove a selected project from the project list by pressing the “Delete Project” button. The pumps that belong to the removed project are then rewritten in their displays and set to “FREE”. The pumps have to in the multi charger for that!

Employee

When selecting the menu option “Employee” you open the “Employee Record Book”. See Picture 5.



Picture 5.

This book is used in the pulldown list to add employees to a project as describe in the previous section. The persons you to this book will later be available to the “Project Registration” window.

The upper field is the Name of the employee, up to 16 characters. This limitation is to fit to the length of a name to the upper display line of a pump.

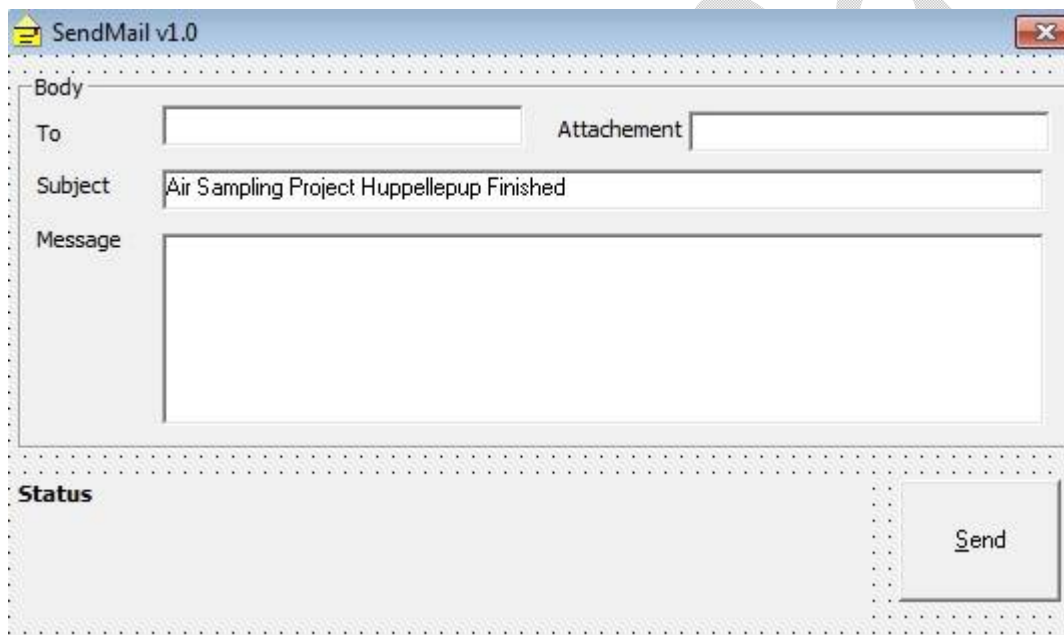
The button "Select Employee to upper Display Line" is used if you want to write the name of this person to the first display line of a selected pump. After this preparation you press enter in the textbox on the right side of the button "Menu Line". See picture 6.



Picture 6.

In the field "Phone Number" you can enter up to 25 characters the phone number of the selected person.

In the field "Email Address" you can enter the Email Address of a person. This Email address will be used when the project is finished (all pumps are back after being in the field) to send an Email to with the message that the project is finished. Including the date and time the project was finished. See Picture 7. If you don't want Email to be send, leave this field empty.



Picture 7.

The field "Location" is used to describe where the employee is basically situated.

The field "IP Address" is the IP Address of a remote docking station / multi charger. For example at the home or office of an employee. The project registration will then remotely controlled. For example in the head office you will see the status and update of the job of your employee without having the employee to take actions other than to pick the described pumps from the docking station and to put them to be recharged after the job.

In the field "Note" you can add additional information about the employee.

The six buttons at the bottom of the book can be used for navigation through the book.

Preference

In the menu option "Preference" you find the option "Battery Charged Threshold". This is the level where on the LED on the right side of a pump decides to turn red or green. Red for pump is being charged or green for being charged (ready to use / FREE).

The value to be entered has to be between 11.9 Volt and 15.6 Volt.

In the menu option "Mesh Size of Filter" you enter the mesh size of the filter being mounted on the pump inlet. The entered value will come in the program when needed as standard.

Enter "0" if the mesh of filters are variable in your case.

In the menu option "Pump Run Time Duration" you enter a standard time for the time that a pump needs to run in the field.

In the menu option "Scan Interval" you enter the time between two readings of the docking station to collect its updated data of the pumps. To represent the new status of the projects.

The interval has to be greater than or equal to two minutes and smaller than or equal ten minutes.

At the menu option "Graph's only" you can mark to poll for single pumps at start-up of the program when the option is not checked. When the option is checked the program is to use for only opening graph's from stored files at your hard disk.

Window

In this menu option you get an overview of the opened windows in the program and the option to order them in the way you wish.

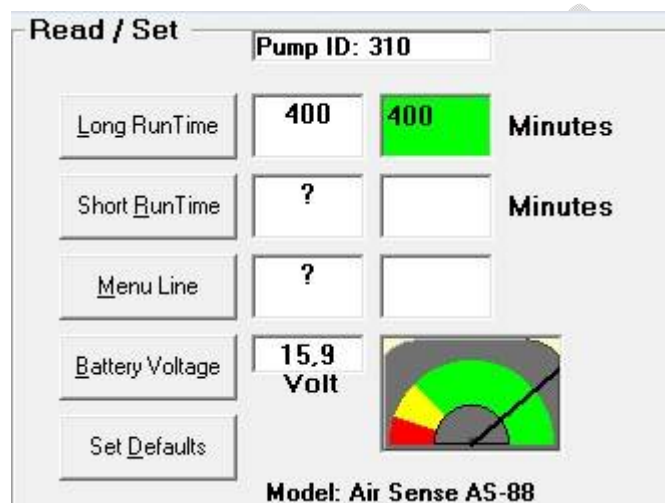
Chapter 5 Single Pump Operation

Single Pump Operation

AIR SAMPLING PUMP CONTROL

In the basic Window called "AIR SAMPLING PUMP CONTROL" you control a single pump with or without a docking station. When using a single pump, connect the pump with the six pin round connector at the side of the pump to a USB Port of your computer. Here for you need the AirSense cable "Communication Single Pump". The same round connector is used for a single AirSense charger or the AirSense Proximity Sensor.

In the left upper frame "Read / Set" you have the button "Long Run Time". Pressing this button brings you the representation of the actual long runtime of the Air Sampling pump. The amount of minutes the pump will run in the field, is read out and presented in the white label next to the button. To set a new "Long Run Time" you enter the desired value in the textbox to the right of this label. After the new value is entered, press the enter-button to send the new value to the Air Sampling pump. When the new value is accepted the textbox will turn green. See picture 8.



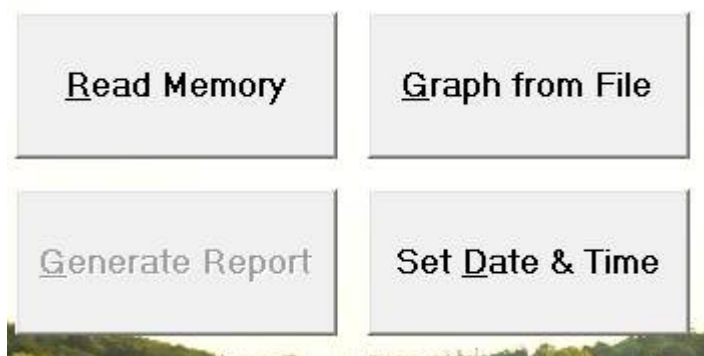
Picture 8.

The button "Short Run Time" in the frame "Read / Set" brings the representation of the actual short run time of the actual Air Sampling pump. The amount of minutes the pump will run in the field, when the menu button on the pump is selected. The presentation of the short runtime comes to the white label on the right side of the button. To set a new value "Short Run Time" to the pump's menu yellow menu button, enter the desired value in minutes in the textbox on the right of the label. After the new value is entered, press the enter-button to send the new value to the Air Sampling pump. When the new value is accepted the textbox will turn green. See picture 8.

When in general you use always the same runtime for your pumps in the field, you can set the Long Run Time and Short Run Time to the same value.

The button "Menu Line" brings you the upper menu line of the pump's display. You can also set a new men line by entering the text in the box on the right side of the button. When pressing enter the new line will be send to the pump.

Picture 9



With the button "Read Memory" you can empty the pump's memory to the computer and then to the cloud. The memory will be cleared and the date and time in the pump will be synchronized to the computer time.

With the button "Graph from File" you can represent the result of a pump procedure from the cloud.

With the button "Set Date & Time" you can synchronize time in to pump to the computer time.

With the button "Shut Down" you can reset / make the pump going to "sleep".

Optie PIR / bewegingsmelder op 6 polige zij connector aansluiten.
