



AquaScan Win 3.4 manual

The screenshot shows the AquaScan Win 3.4 software interface. At the top, there is a title bar with the text 'AquaScan Win 3.4' and standard window controls. Below the title bar is a menu bar with options: 'NONE' (a dropdown menu), 'Initiate Count', 'Comments', 'Export Data', 'System Info', and 'Tools'. The main area contains a data table with columns for 'Number #', 'Average Weight (g)', 'Total Weight (kg)', 'Current Speed', and 'Average Speed'. There are four rows labeled C1, C2, C3, and C4, each with a checkbox. Below the table, there is an 'ALL' row and an 'Efficiency select' section with radio buttons for 'kg/h' (selected) and '#/h'. At the bottom, there are input fields for 'Counting started', 'Counting stopped', 'Run time', 'Log filename', 'Location', and 'Operator'. The AquaScan Fishcounters logo is visible in the top right corner of the window.

AquaScan Win version 3.4

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Introduction

AquaScan Win is a software tool to extract and display information about the counting operation for AquaScan fish counters.

AquaScan Win 3.4 is intended to be used together with Control Units using software CS20 version 58 (model KC), CS30 version 38 (model KD), CS40 version 22 (model KE), or later.

Install

Insert the AquaScan Win CD into the CD drive. Normally the program setup will automatically start running. If setup does not start automatically you will have to start it from the CD by clicking "setup.exe".

Follow the instructions from setup.

AquaScan Win will normally be installed in the "C:\AquaScan" folder.

Setup will make the folder "Manual" for PDF manuals, and folder "Updates" for files to update a KD and KE Control Units. These folders will be placed below the "AquaScan" folder.

Acrobat Reader is used to read this manual named "AquaScan Win 3.4 Eng.pdf".

Setup creates a shortcut to AquaScan Win at your desktop. When the installation is complete you are able to start the program by a click at the icon at the desktop.

First start of AquaScan Win

The first time you start “AquaScan Win” you will have to select which serial port to use.

This is done by a click with the left mouse button at the pull down menu (the arrow next to NONE).

Select the COM-port (serial port) to which the Control Unit is connected.

If COM5 is selected the screen will look like this:

The selected COM-port will be remembered, so this should only be needed to be done once.

The first time “AquaScan Win” is used during a counting it will create two folders:

“Log” - the folder for log files, stored as “.aql” and “.aqr” files.

“Results” - the folder for copies of the printout, stored as “.txt” files.

These folders will be created in the folder where AquaScan Win is located.

The path to the “Log” - folder may be viewed in the “System Info” dialog.

.aql files are files containing a complete counting and which later may be sent to your supplier for analyze if the counter needs adjustments.

.aqr files are result files which AquaScan Win may open from FILE selection in place of a COM port.

.vid files are pictures saved from the “Lens Check” dialogue and may be opened again from the selection FILE instead of a channel in the “Lens Check” found in the “Tools” dialogue.

AquaScan Win will also create “AquaScanDual.ini” and “Comments.txt”.

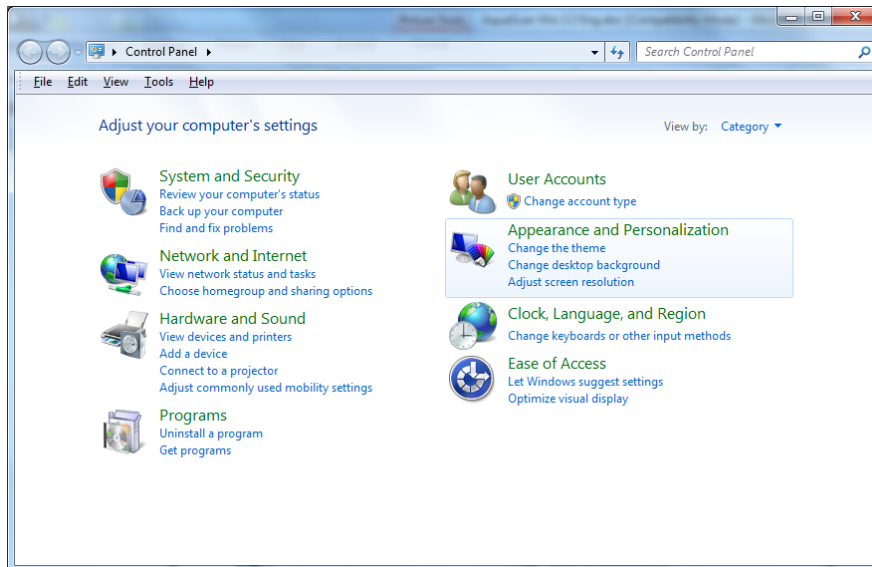
When you want to quit AquaScan Win you should click at the red box with an X at the rightmost upper corner of the window.

Change or check Com-port settings for USB communication

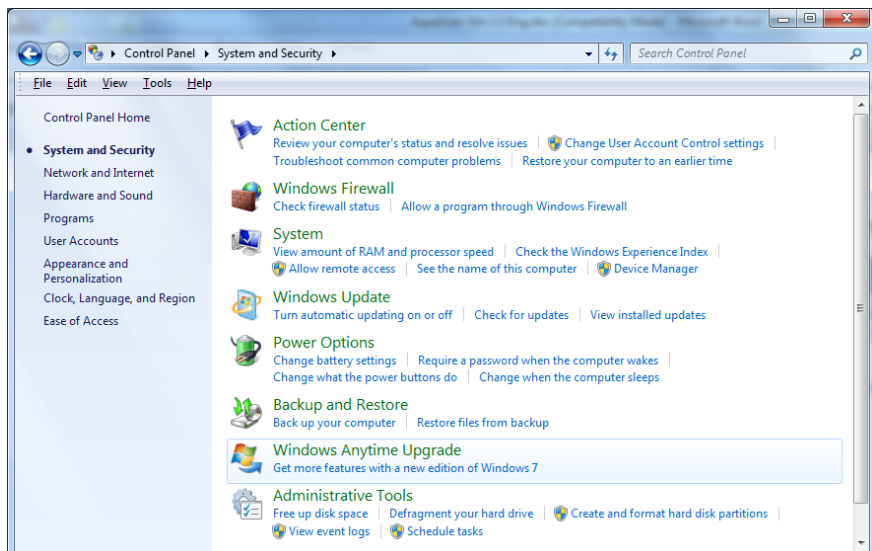
Be aware that if a USB device is inserted in a new USB-port it may need drivers to be reinstalled. Unplugging and reinserting a USB device in the same USB-port may enforce the driver to use a new COM-port.

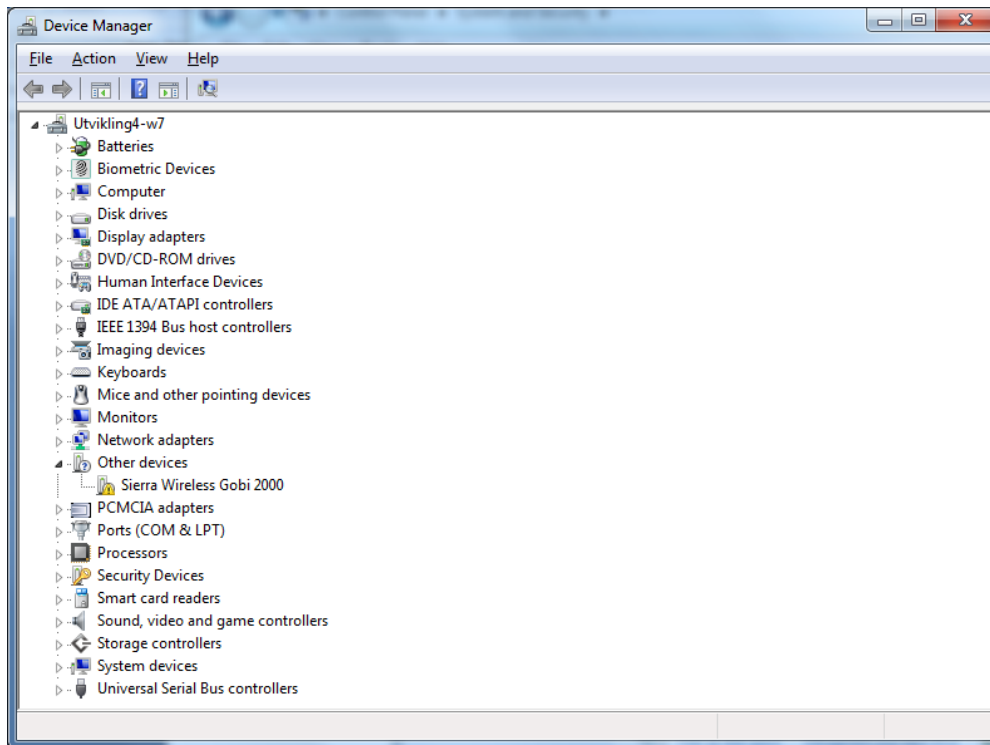
The user must be logged on with Administrator properties.

Click at the Start-menu, and select “Control Panel”.

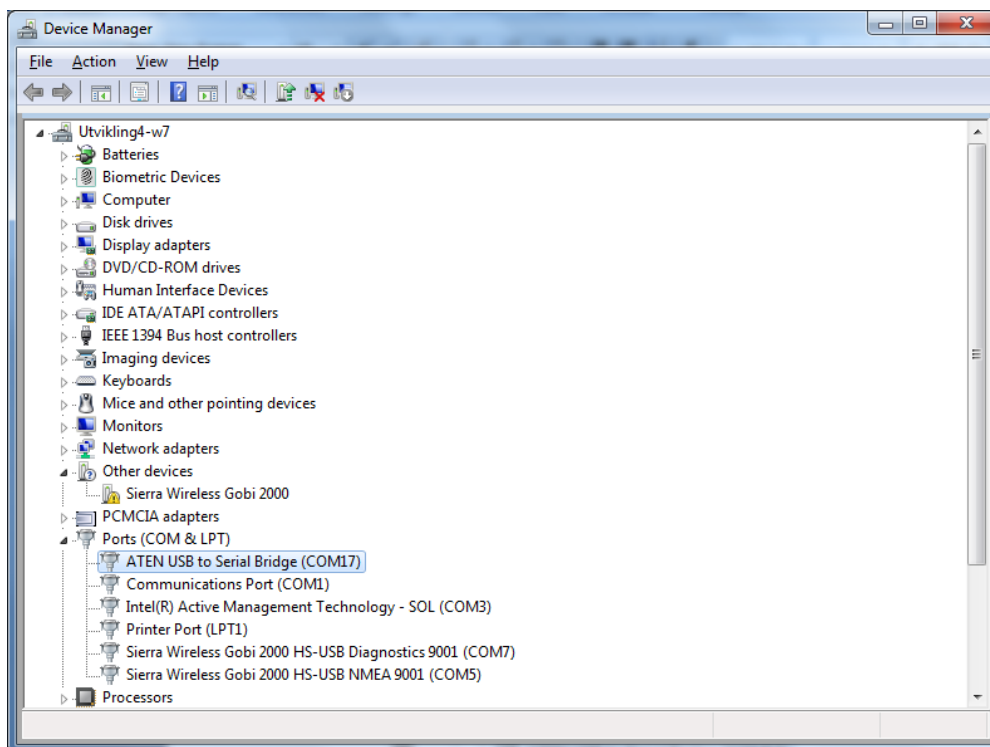


Select the “System and Security” tab in Windows 7 and then “Device Manager” from “System”.



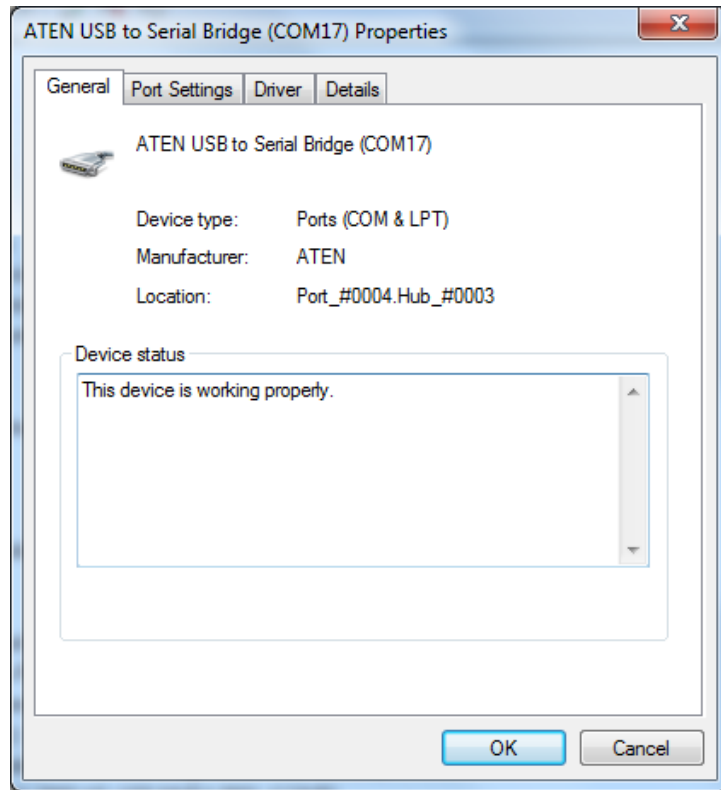


Click at the + symbol next to "Ports (COM & LPT)".

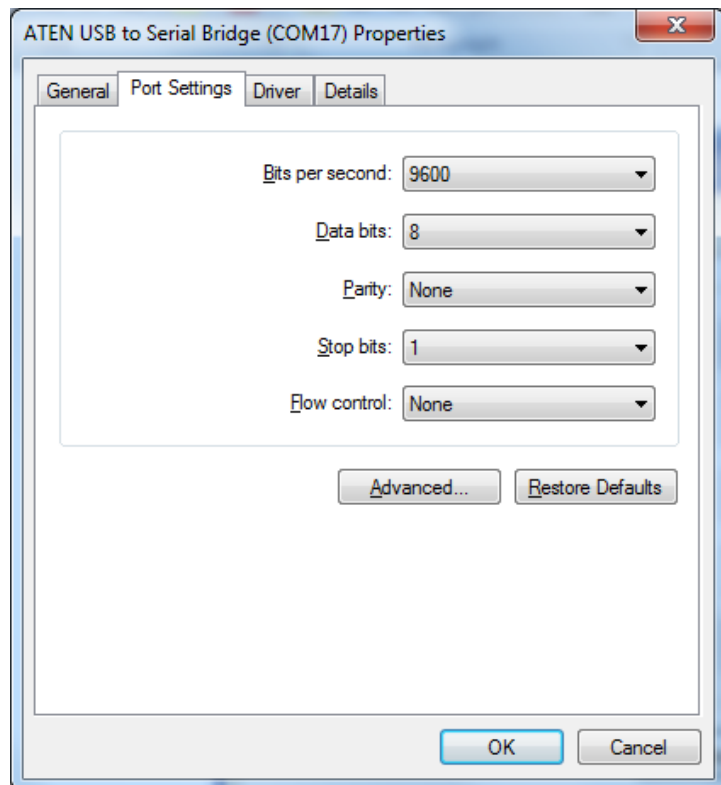


Make a note of what COM-ports are used. In this case COM1, COM3, COM5 and COM7 are used by other devices, while COM17 is used by the "ATEN USB to-Serial Bridge". AquaScan Win 3.4 may use COM1 to COM16. If the COM-port to use is COM16 or lower, a note of the COM-port number should be made and "Device Manager" should be terminated by clicking the red X in the upper rightmost corner. "System and Security" and "Control Panel" may be terminated in the same manner.

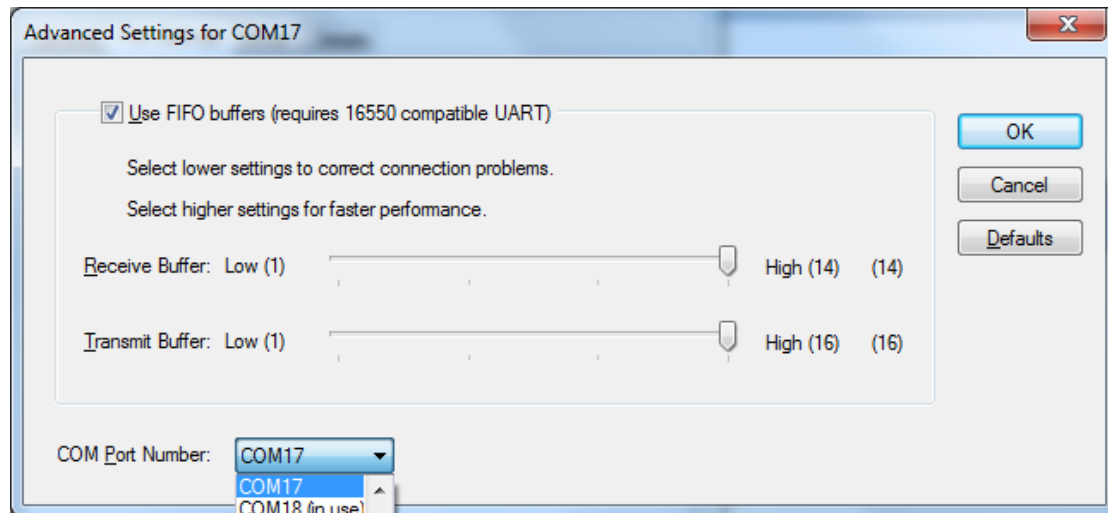
If the COM-port for the device has to be changed the user should double-click the “ATEN USB to Serial Bridge” if this is used, or “USB Serial Port (COM17)” if other brands are used.



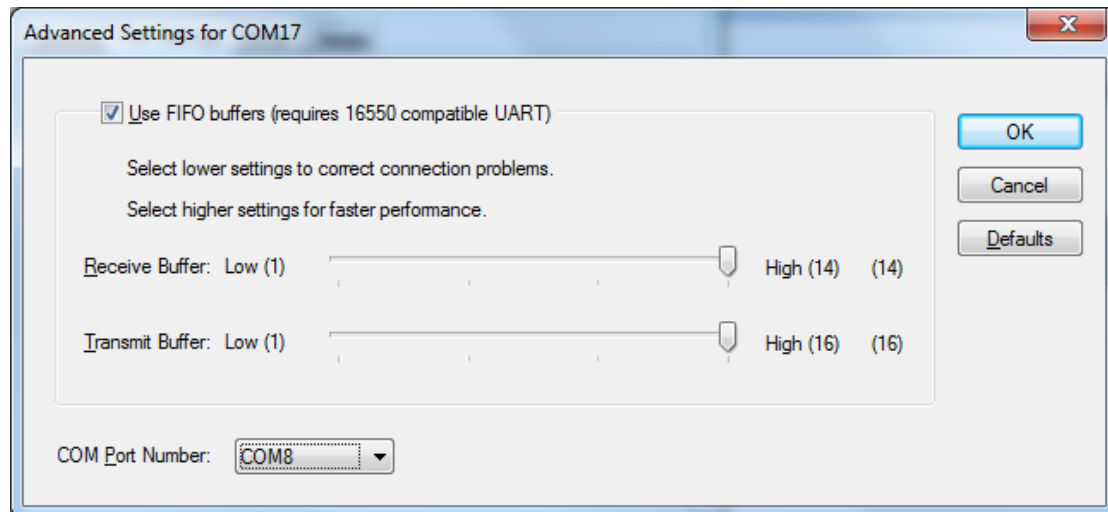
Select the “Port settings” tab.



Click the “Advanced” button.



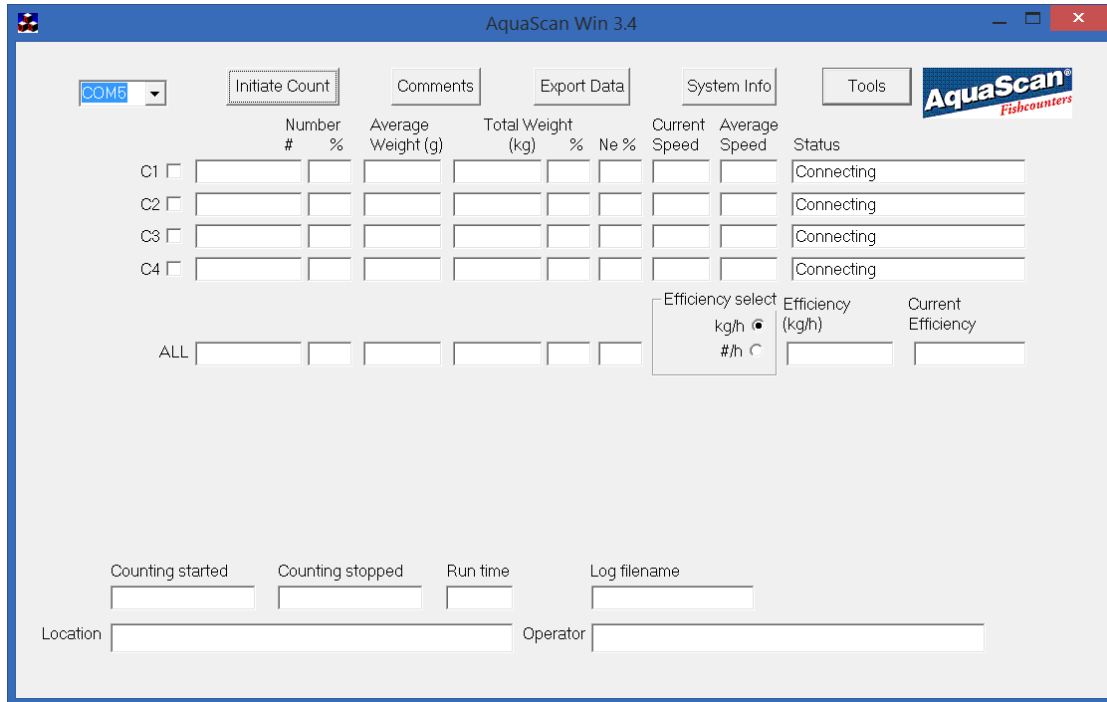
Select a free COM-port number between COM2 and COM16.



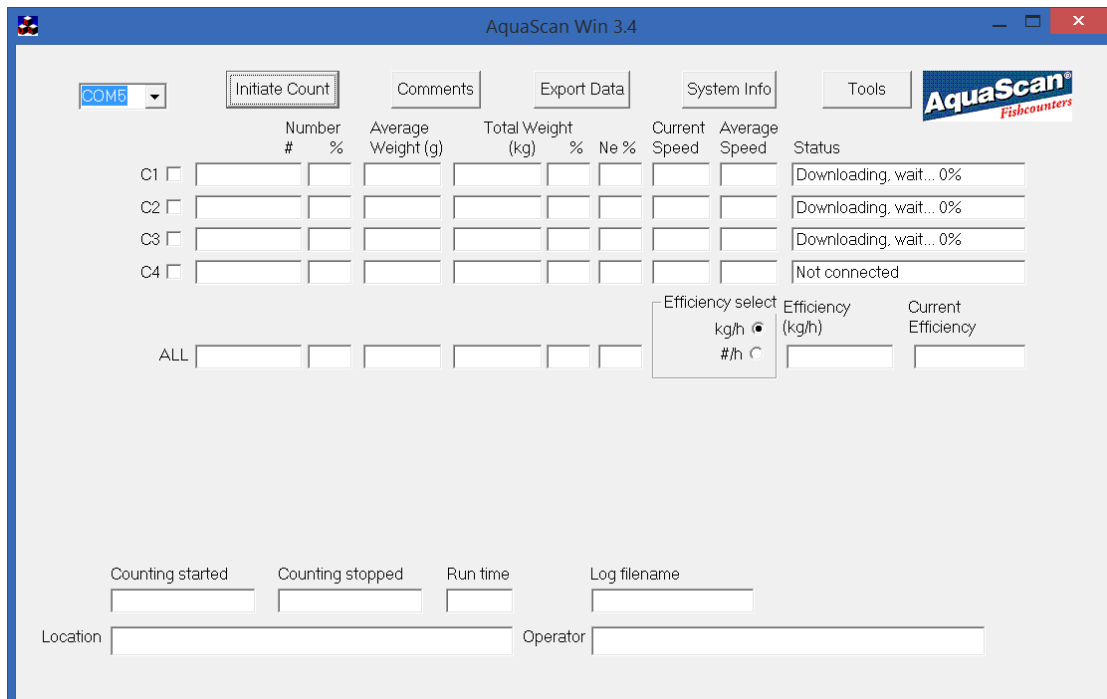
Click the “OK” button until you are back to the “Device Manager”.
Terminate the “Device Manager” as described earlier and reenter “Device Manager”, and verify that the setting is updated.

Normal use of the counter

When the Control Unit is powered after AquaScan Win is started, and correct COM-port and COM-speed is selected, the status field will show “Connecting” for all channels.



When Registration Units are found the status field will show “Downloading wait,...” for used channels.



Eventually the status fields will show “Connected” for used channels.

Normal start of counting

The “Initiate Count” button is used to set Start weight, weight factors, count factors, select weight distribution visibility, set time period for current efficiency, and to set “Operator” and “Location” fields.

Normally these settings are done before counting is started.

The “Initiate Count” dialog is not enabled while counting is running.

If the Control Unit has enabled PC-Control the operator may give the Start weights in this dialogue, and then start and stop the counting from AquaScan Win. If the Control Unit has not enabled PC control the Start weights in this dialog will be grayed out, and can not be changed by the operator.

The weight factors are set for each channel.

The value range is between 500 and 2000 (-50 %, +100 %). The weight factors will adjust all the weight figures.

If the weight factor for C1 is set at 500, the weight figures for C1 will show only half of the measurement for each weight figure than if the weight factor had been set to 1000. In the same manner, if the weight factor for C2 is set to 2000, the weight figures for C2 will show twice as if the weight factor had been set to 1000.

An example:

C1 displays 1778gram, while correct weight is 2,12kg

C2 displays 2033gram, while correct weight is 1,49kg

If weight factor for both channels was set to 1000, the equation for the new weight factor is:

Weight factor = (Correct weight in gram) * 1000 / (displayed weight in gram)

For C1: Weight factor = 2120 * 1000 / 1778 = 1192

For C2: Weight factor = 1490 * 1000 / 2033 = 733

If previous weight factor for C1 was set to 1100 and for C2 to 1050 the equation is:

New Weight factor =

(Correct weight in gram) * 1000 / ((displayed weight in gram) * 1000 / (Old Weight factor))

This equals:

New Weight factor = (Correct weight in gram) * (Old Weight factor) / (displayed weight in gram)

For C1: New Weight factor = 2120 * 1100 / 1778 = 1312

For C2: New Weight factor = 1490 * 1050 / 2033 = 770

The Count factor is used to adjust the displayed count.

The Count factor will be limited to values from 950 to 1050 (+/- 5 %), and may be adjusted for each channel.

A value of 1000 means no count adjustment.

If the Count factor for C1 is set to 950 the displayed count for C1 will be 95 % of the value compared to if the weight factor was 1000. In the same manner, if the Count factor for C2 is set to the displayed count for C2 will be 5 % greater than the value displayed if the Count factor was 1000.

Calculated weight factors should be rounded to closest integer.

An example:

C1 shows 10560 fishes, while correct number is 11000 fishes.

C2 shows 20333 fishes, while correct number is 19755 fishes.

If Count factor for both channels is set to 1000, the equation for the new weight factor is:

Count factor = (Correct number) * 1000 / (displayed number)

For C1: Count factor = $11000 * 1000 / 10560 = 1042$

For C2: Count factor = $19755 * 1000 / 20333 = 972$

If previous Count factor for C1 was set to 970 and for C2 to 1050 the equation is:

New Count factor =

$(\text{Correct number}) * 1000 / ((\text{displayed number}) * 1000 / (\text{Old Count factor}))$

which equals:

New Count factor = $(\text{Correct number}) * (\text{Old Count factor}) / (\text{displayed number})$

For C1: New Count factor = $11000 * 970 / 10560 = 1010$

For C2: New Count factor = $19755 * 1050 / 20333 = 1020$

Note! If AquaScan Win is used with "PC control" the Weight factors and Count factors are controlled from AquaScan Win, not from the Control Unit.

If AquaScan Win is not used with "PC control" the distribution will not be adjusted according to the weight factors and Count factors.

"Distribution Enabled" – Select whether weight distribution is to be visible or not. When the field is ticked distribution is shown, else it is not. You can change it by a click from the left mouse button, or by toggling the space at the keyboard while the field is selected.

"Current Eff. Time (s)" – the time period for current efficiency measurement, range is 1 to 1024 seconds.

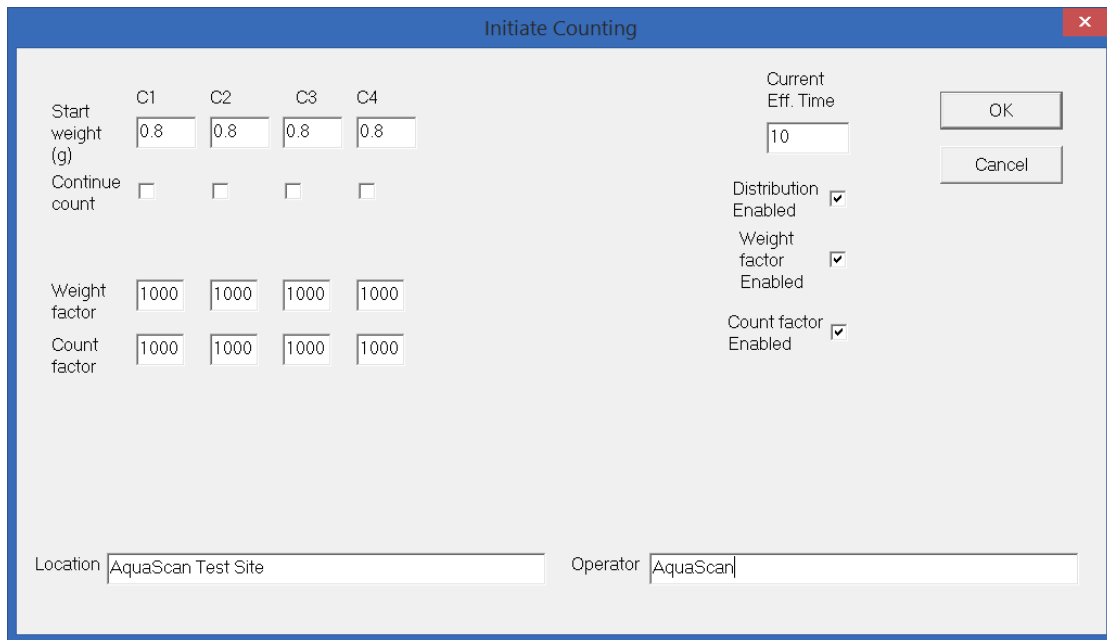
"Operator" is normally set as vessel or company, and operator.

"Location" is normally set as location and cage.

To select a button or field you may use <TAB> at the keyboard, or move the mouse pointer to the desired button or field and click with the left mouse button.

All fields except "Location" are remembered when the program is terminated.

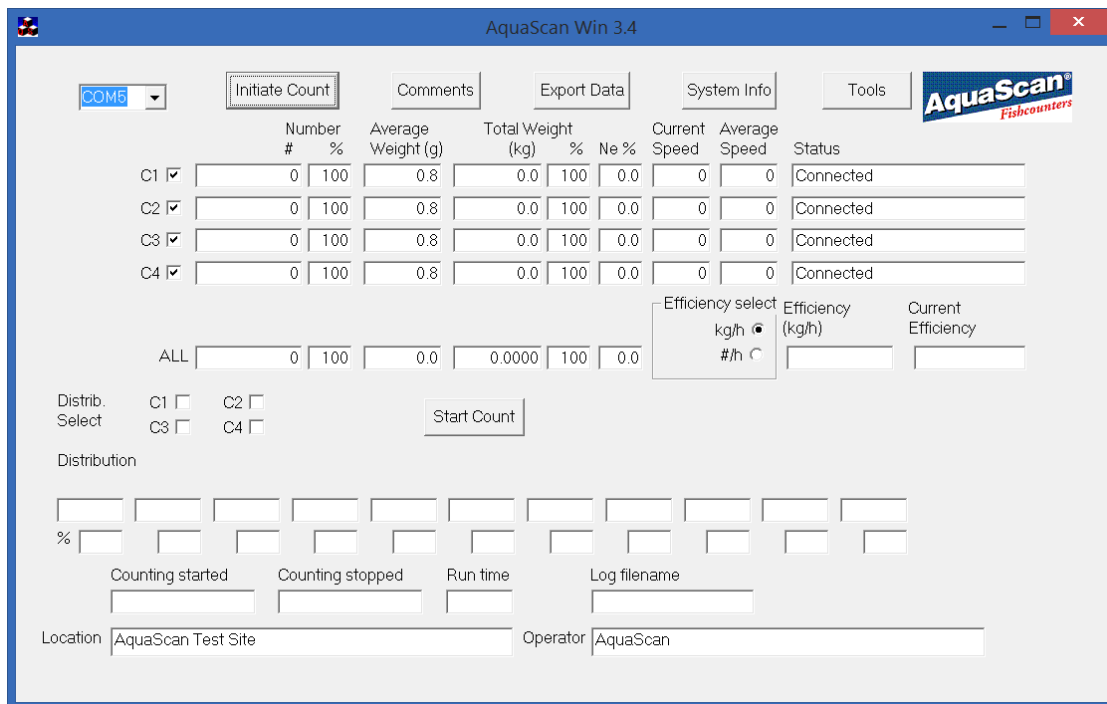
"Operator" and "Location" are included in the printout used during "Export Data" menu.



The 'Initiate Counting' dialog box contains the following fields and controls:

- Start weight (g):** Four input fields for C1, C2, C3, and C4, each containing '0.8'.
- Continue count:** Four checkboxes for C1, C2, C3, and C4, all unchecked.
- Weight factor:** Four input fields for C1, C2, C3, and C4, each containing '1000'.
- Count factor:** Four input fields for C1, C2, C3, and C4, each containing '1000'.
- Current Eff. Time:** An input field containing '10'.
- Buttons:** 'OK' and 'Cancel' buttons.
- Options:** 'Distribution Enabled', 'Weight factor Enabled', and 'Count factor Enabled', each with a checked checkbox.
- Location:** An input field containing 'AquaScan Test Site'.
- Operator:** An input field containing 'AquaScan'.

Press "OK" when the fields are as desired.
 Press "Cancel" if you want to reject your change in settings.



The main AquaScan Win 3.4 interface displays the following information:

- Menu Bar:** Includes 'Initiate Count', 'Comments', 'Export Data', 'System Info', and 'Tools'.
- Table:** A table with columns: Number #, %, Average Weight (g), Total Weight (kg), %, Ne %, Current Speed, Average Speed, and Status.

	Number #	%	Average Weight (g)	Total Weight (kg)	%	Ne %	Current Speed	Average Speed	Status
C1	0	100	0.8	0.0	100	0.0	0	0	Connected
C2	0	100	0.8	0.0	100	0.0	0	0	Connected
C3	0	100	0.8	0.0	100	0.0	0	0	Connected
C4	0	100	0.8	0.0	100	0.0	0	0	Connected
ALL	0	100	0.0	0.0000	100	0.0			
- Efficiency select:** Radio buttons for 'kg/h' (selected) and '#/h'.
- Efficiency (kg/h) and Current Efficiency:** Input fields.
- Distrib. Select:** Checkboxes for C1, C2, C3, and C4.
- Start Count:** A button to begin counting.
- Distribution:** A row of ten empty input fields.
- %:** A row of ten empty input fields.
- Counting started, Counting stopped, Run time, Log filename:** Input fields for tracking time and logs.
- Location and Operator:** Input fields at the bottom containing 'AquaScan Test Site' and 'AquaScan'.

The system is now ready for counting. Counting may be started either from AquaScan Win by pressing the "Start Count" button, or from the Control Unit.

When the counter is started the screen may look like this:

For each channel there is a line where the following information is present:

- Number of fishes (#), and number of fishes in percent relative to total in all channels.
- Average weight in grams.
- Total weight in kg, and in percent relative to total weight in all channels.
- Number of single fishes in percent relative to number of fishes in channel (“Ne %”).
- Current speed in m/s.
- Average speed in m/s.
- Status showing counter state or error messages.

To the left at each line You are able to select whether the channel (C1,C2,C3,C4) should be included in the ALL line or not. The ALL line displays the following information for the selected channels:

- Number of fishes, and number of fishes in percent relative to total in all channels.
- Average weight in grams.
- The total weight in kg, and in percent relative to total in all channels.
- Number of single fishes in percent relative to number of fishes in channel (“Ne %”).
- Efficiency
- Current efficiency.

Efficiency and Current efficiency may be shown in kilogram/hour (kg/h) or as Number/hour (#/h). This is selected by the buttons in the “Efficiency select” group, and can be changed at any time.

If weight distribution is selected from the “Initiate Count”–menu, the next lines will present the weight distribution. The distribution is displayed as number of fishes and as percent for one channel at the time. The desired channel is selected with the buttons to the left of the distribution lines (“Distribution Select”).

The last lines will show the following information:

- When the counting was started.
- When the counting was stopped.
- Run time.
- The Log filename.
- The Location field.
- The Operator field.

Counting may be paused by a click at the “Pause Count” button.

The screenshot shows the AquaScan Win 3.4 interface with the following data:

	Number #	%	Average Weight (g)	Total Weight (kg)	%	Ne %	Current Speed	Average Speed	Status
C1	130	24.9	0.8	0.1040	24.9	100	1.78	1.78	Paused
C2	130	24.9	0.8	0.1040	24.9	100	2.28	2.25	Paused
C3	131	25.1	0.8	0.1048	25.1	99.2	2.58	2.67	Paused
C4	131	25.1	0.8	0.1048	25.1	99.2	3.08	3.02	Paused
ALL	522	100	0.8	0.4176	100	99.6			

Efficiency select: Efficiency (kg/h) = 4, Current Efficiency (#/h) = 4

Distribution table:

0-0.2g	0.2-0.4	0.4-0.6	0.6-0.8	0.8-1.0	1.0-1.2	1.2-1.4	1.4-1.6	1.6-1.8	1.8-2.0	2.0g->
0	0	0	90	40	0	0	0	0	0	0
%	0	0	69	31	0	0	0	0	0	0

Counting started: 015-12-21 15:05:54
 Counting stopped: 015-12-21 15:10:26
 Run time: 00:04:32
 Log filename: 2112153.aql

Location: AquaScan Test Site
 Operator: AquaScan

Then the count may be continued by a click at the “Continue” button, or stopped by a click at the “Stop Count” button.

The screenshot shows the AquaScan Win 3.4 interface with the following data:

	Number #	%	Average Weight (g)	Total Weight (kg)	%	Ne %	Current Speed	Average Speed	Status
C1	130	24.9	0.8	0.1040	24.9	100	1.78	1.78	Stopped
C2	130	24.9	0.8	0.1040	24.9	100	2.28	2.25	Stopped
C3	131	25.1	0.8	0.1048	25.1	99.2	2.58	2.67	Stopped
C4	131	25.1	0.8	0.1048	25.1	99.2	3.08	3.02	Stopped
ALL	522	100	0.8	0.4176	100	99.6			

Efficiency select: Efficiency (kg/h) = 4, Current Efficiency (#/h) = 4

Distribution table:

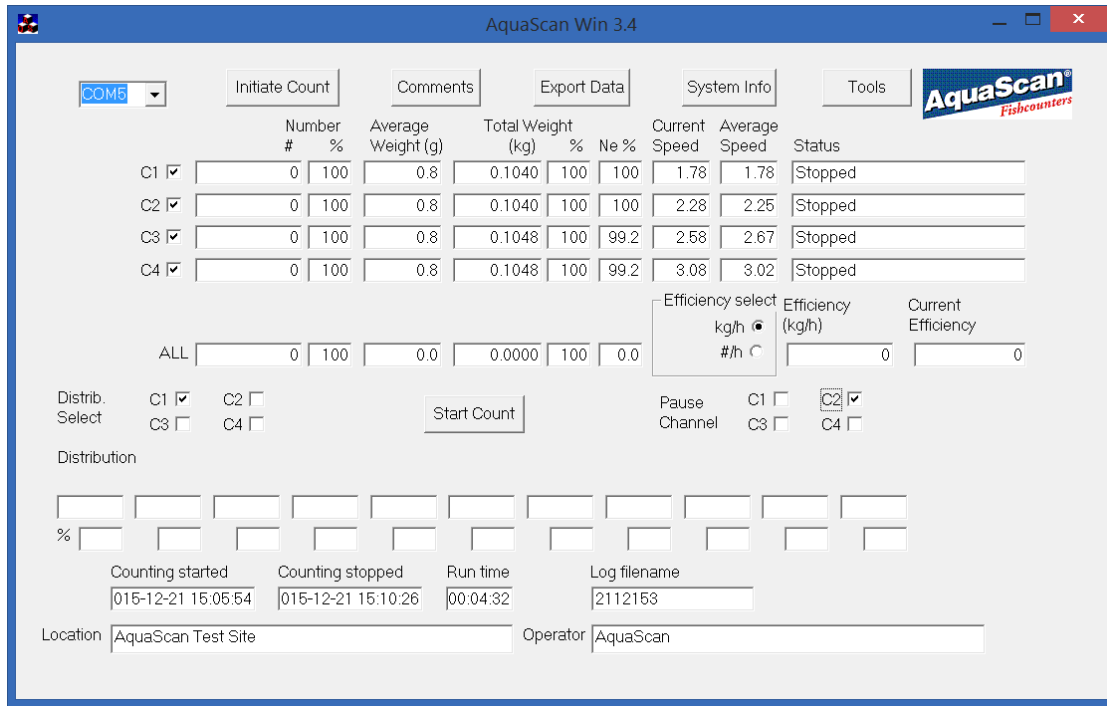
0-0.2g	0.2-0.4	0.4-0.6	0.6-0.8	0.8-1.0	1.0-1.2	1.2-1.4	1.4-1.6	1.6-1.8	1.8-2.0	2.0g->
0	0	0	90	40	0	0	0	0	0	0
%	0	0	69	31	0	0	0	0	0	0

Counting started: 015-12-21 15:05:54
 Counting stopped: 015-12-21 15:10:26
 Run time: 00:04:32
 Log filename: 2112153

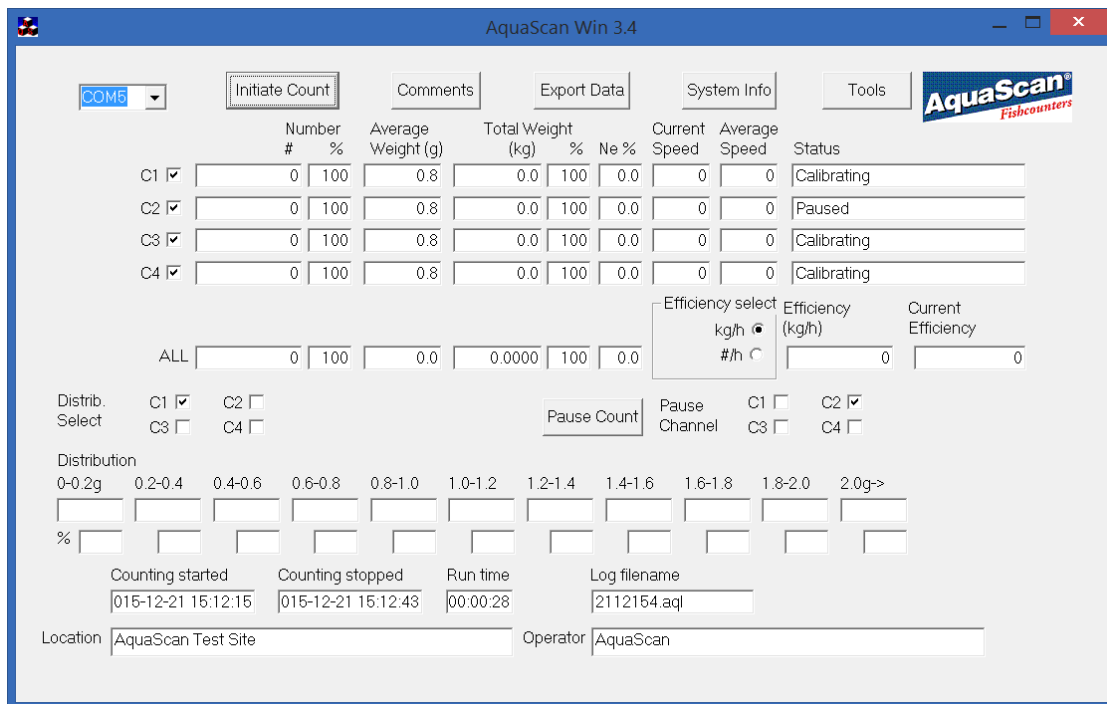
Location: AquaScan Test Site
 Operator: AquaScan

Counting with individual channel pause capability

If the Control Unit does have software version CS30V33 or later, and has enabled “Individual Channel Pause” and “PC Control”, each separate channel may be paused from AquaScan Win. The channels may also be set in pause before counting is started.



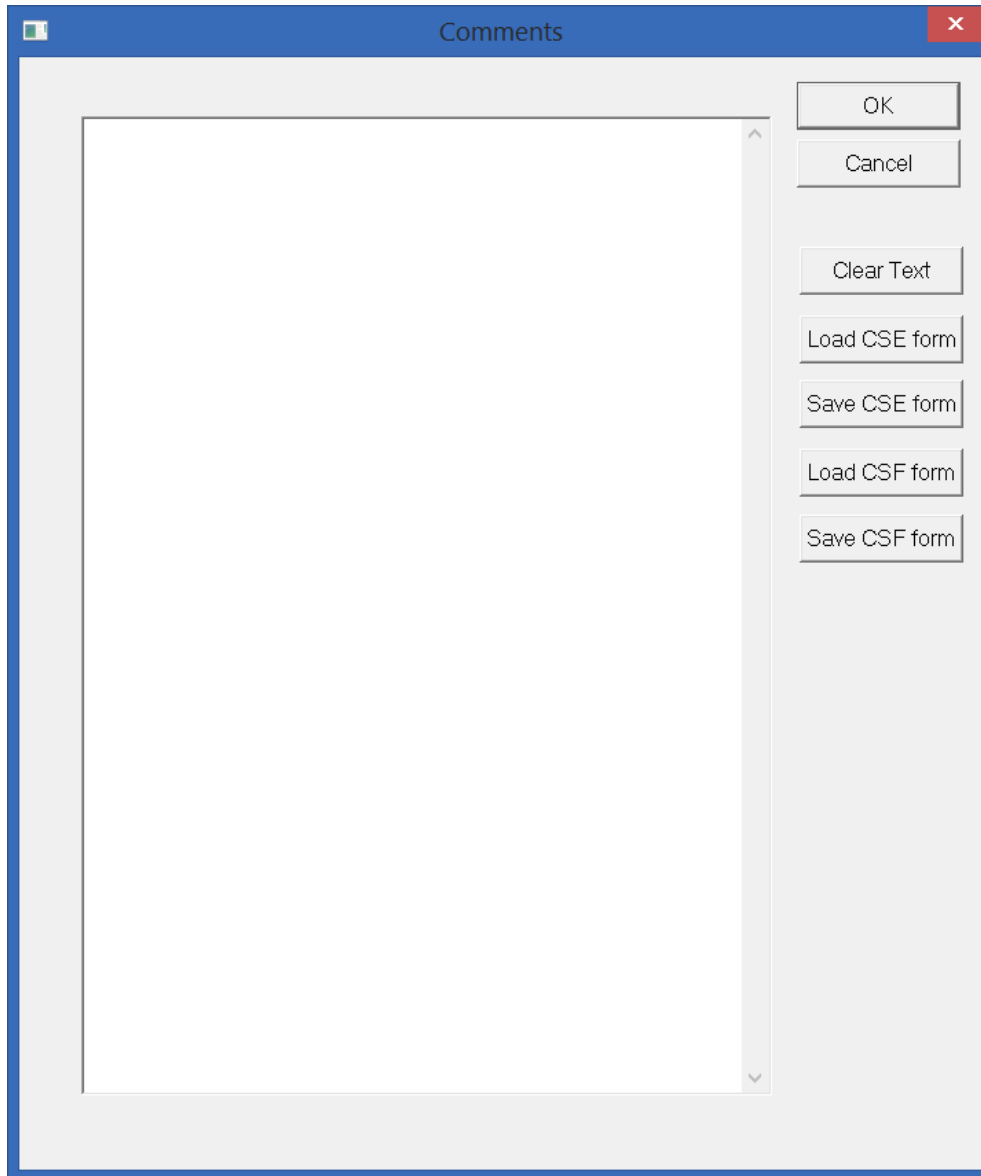
The Status fields will also show which channels are paused or not.



Adding comments

The “Comments” button is used to select the comments view.

The comments view can be selected at any time, and is used to make notes during and after the counting operation.



Normally you will put information like weather conditions, number of start/stop operations etc. in the comment field.

The “Clear Text” button will clear all text in the window

The buttons “Load CSE form” and “Load CSF form” retrieves the forms that were saved with the buttons “Save CSE form” and “Save CSF form”. You should set these “forms” to suit your need, and then save them.

Select “OK” to keep your changes, or “Cancel” in order to reject them.

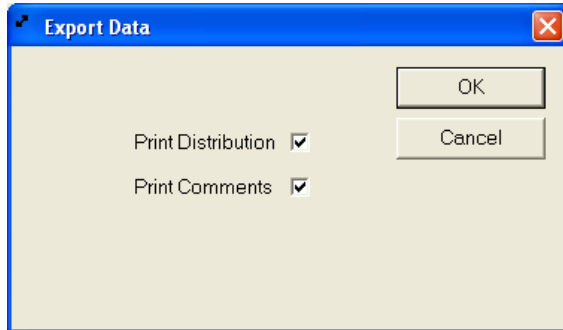
If “OK” was selected, your comments are saved in the file “Comments.txt”.

“Comments.txt” is read during startup, and the comments are set as they were.

The comments may be included in the printout from the “Export Data” menu.

Printing

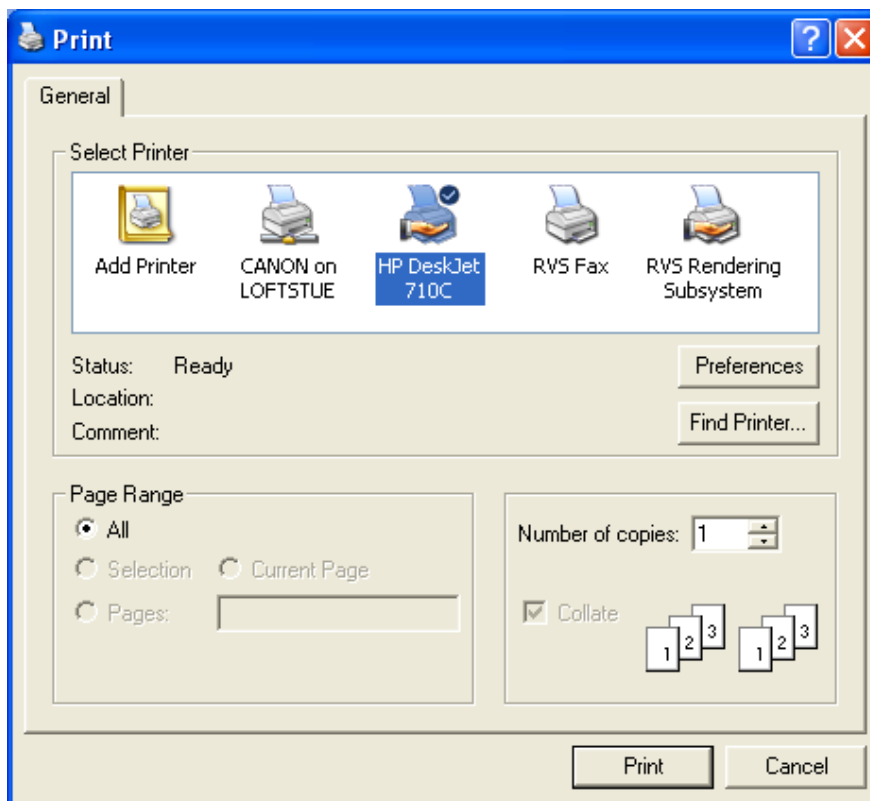
The “Export Data” button is used to reach the Export Data menu.
“Export Data” can only be selected while the counter is stopped.



Tick “Print Distribution” if you want a printout also of the weight distribution.
Tick “Print Comments” if you want a printout also of the comments.

If you want to cancel the print operation, press “Cancel”.
If you want to start printing, press “OK”.

The PC configuration will decide which printers you may select, and the window may look like this:



Press “Print” to continue, or “Cancel” to end the printout.

If “Print” is selected the printout is started, and a file with the name listed at the bottom of the page will also be generated. This file may be opened by a normal text editor like Notepad, or sent by e-mail.

Information about the counter system

The “System Info” button is used to gain information about the counting system. You may choose “System Info” at any time.

	Serial number	Program Version	Model
CU	KE20151024	CS40V22	KE-series
C1	RF20152290	SRV535	CSE1600
C2	RF20152289	SRV535	CSE1600
C3	RF20152271	SRV535	CSE1600
C4	RF20152294	SRV535	CSE1600

Supported models	Supported functions
<input checked="" type="checkbox"/> CS1600, CS2500, CSE1600, CSE2500	<input checked="" type="checkbox"/> Distribution
<input checked="" type="checkbox"/> CS3150, CSE3150, CSE3500	<input checked="" type="checkbox"/> Dual Control Units Mode
<input checked="" type="checkbox"/> CSF1000, CSF1600, CSF2000,	<input checked="" type="checkbox"/> PC control
<input checked="" type="checkbox"/> CSF3150, CSF3500, CSF4000,	
<input checked="" type="checkbox"/> CSW2800, CSS2800	<input checked="" type="checkbox"/> External Data Protocol
<input checked="" type="checkbox"/> CSW5500, CSW6900	

Log file path: M:\AquaScan\Log

In this example the window shows that the AquaScan Win is version 3.4 (white on blue at the top line). Then the serial number, program version, and model for connected equipment.

“Supported models” lists which model of Registration Units the system can use. The Control Unit is configured for the ticked models.

“Supported functions” lists which functions the Control Unit is configured to utilize.

“Distribution” tells if the Control Unit is configured for weight distribution or not.

“Dual CU Mode” tells if the Control Unit is configured for counting with two Control Units.

“PC control” tells if the Control Unit is configured to be controlled by AquaScan Win or not.

“Log file path” shows where to find the .aql and .aqr files from the counting.

The “Config CU” button is used to view or change the configuration of the Control Unit.

Press OK in order to close the window.

Configuration of the Control Unit

Most of the configurations for the Control Unit can be displayed and changed with AquaScan Win. During a count the configurations can only be viewed. The language for the Control Unit (CU Language) may be changed for version CS40V20 or later.

Config values CU Ver: CS40V22 Sn: KE20151024

<>3	AUT	1	BSS	6	SUP	1	EPI	4	<input type="button" value="Cancel"/> <input type="button" value="Save to file"/> <input type="button" value="Open file"/> <input type="button" value="Print"/> CU Language <input type="radio"/> English <input checked="" type="radio"/> Norwegian
	PIX	5	LIN	64	LOG	9	REF	50	
	REFW	100	ALD	5	ALDW	0	VEL	30	
	DLL	40	DLH	40	IRM	0	CON	0	
	WGT	5000	WLL	30	WLH	30			
<>4	NMS	125	NOL	70	MAT	512	DCM	0	
	DCO	2	RDI	48	AST	1	STP	2	
	SUN	40	ALI	70	TDH	5	TDR	0	
	FWC	135	LEN	128	SPC	64	CFN	50	
	SLL	100	SLH	170	EDP	0			

A change can be transferred to the Control Unit with the “Transfer to CU” – button.

Config values CU Ver: CS40V22 Sn: KE20151024

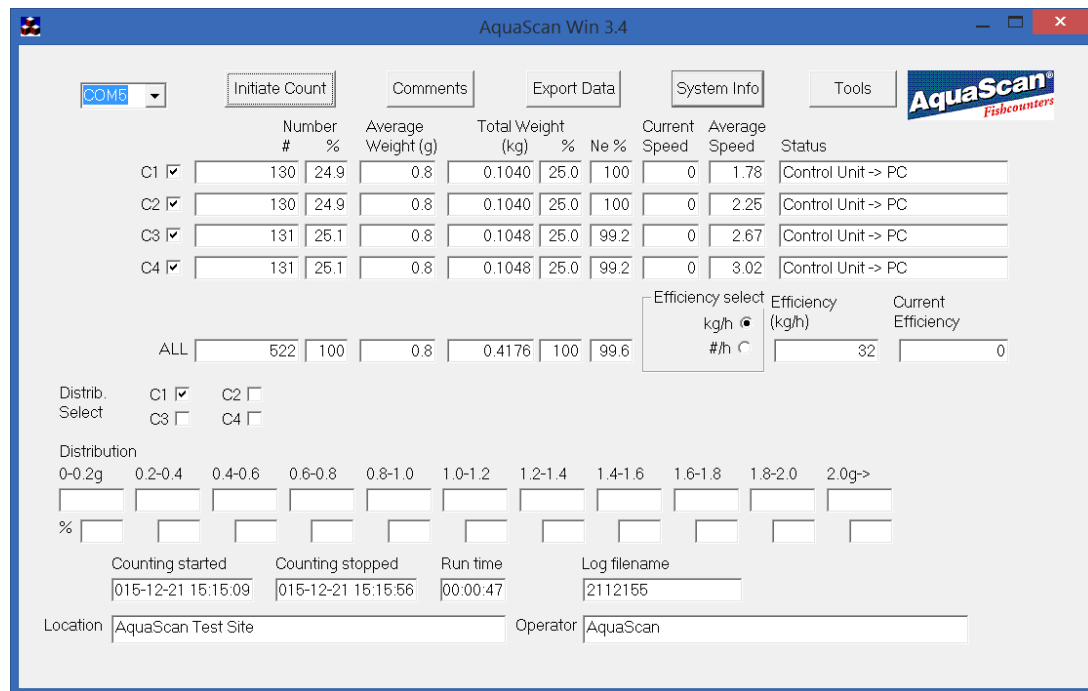
<>3	AUT	1	BSS	6	SUP	1	EPI	4	<input type="button" value="Transfer to CU"/>
	PIX	5	LIN	64	LOG	10	REF	50	<input type="button" value="Cancel"/>
	REFW	100	ALD	5	ALDW	0	VEL	30	<input type="button" value="Save to file"/>
	DLL	40	DLH	40	IRM	0	CON	0	<input type="button" value="Open file"/>
	WGT	5000	WLL	30	WLH	30			<input type="button" value="Print"/>
<>4	NMS	125	NOL	70	MAT	512	DCM	0	CU Language <input type="radio"/> English <input checked="" type="radio"/> Norwegian
	DCO	2	RDI	48	AST	1	STP	2	
	SUN	40	ALI	70	TDH	5	TDR	0	
	FWC	135	LEN	128	SPC	64	CFN	50	
	SLL	100	SLH	170	EDP	0			

Viewed configuration may be stored by the “Save to file” – button, and may be retrieved by the “open file” – button. The “Print” – button may be used to get a printout of the configuration.

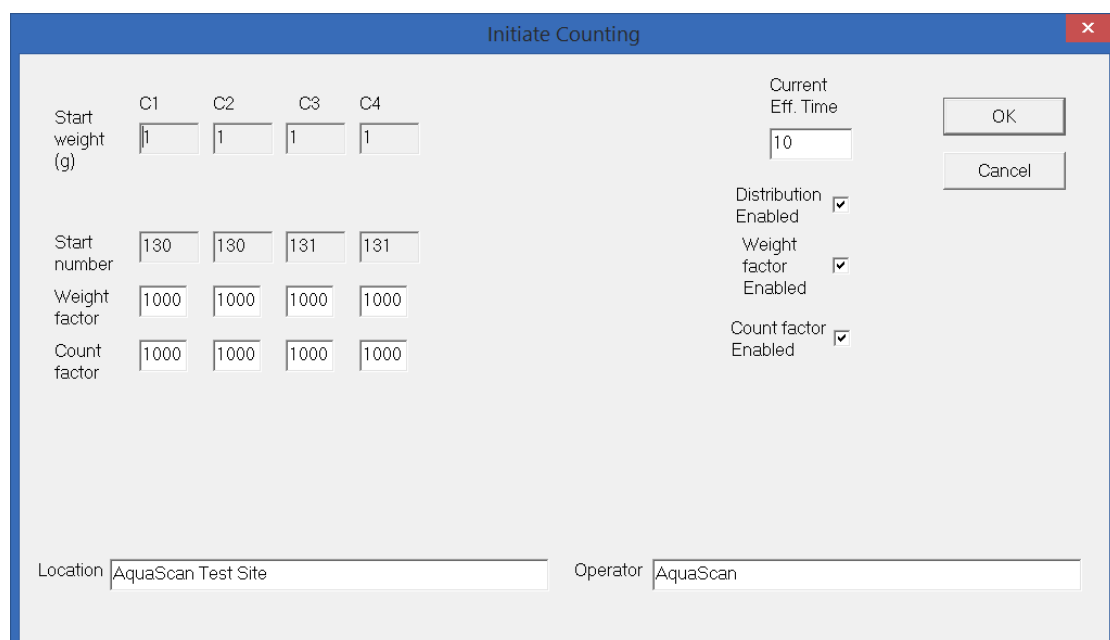
Transfer previous counts from Control Unit to PC

If a PC running AquaScan Win was not available when the counting took place, the count result may be transferred from the Control Unit to the PC. This is only possible if the Control Unit is of KD-series and does have program version 3.18 or later, or is of KE-series.

The Control Unit does not have to be connected to the Registration Units. Ensure that the Control Unit is not powered while connecting the COM-port from the PC to the Control Unit. Start AquaScan Win and the Control Unit. See the User's Guide for the Control Unit how to transfer a previous count to the PC.



“Initiate Count” may be used to view the Start weight and Start number for each channel. “Comments”, “Export Data” and “System Info” may be used as normal.



The Tools dialogue

Comm speed should be set according to the Control Unit and Registration Unit.

Normally the Comm speed is set to “Low speed”, which would be the right choice for all Registration Units except the CSW-series.

For the CSW-series the Comm speed should be set to “High Speed”, or “Auto”.

The “Auto” setting may use some more time to connect to a Control Unit.

The Control Unit also has to be set up for “Low speed” or “High speed” following the same rules.

For “Low Speed” the LOG parameter at the Control Unit should normally be 9.

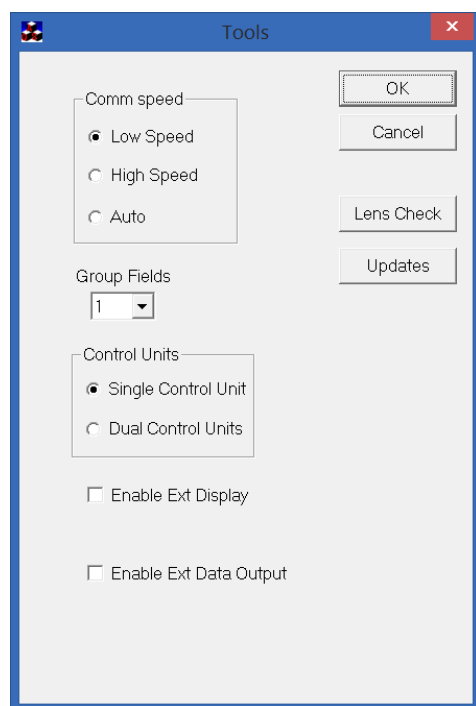
For “High Speed” the LOG parameter at the Control Unit should normally be 109.

“Group Fields” may be set from 1 to 4. If it is set to 1, the ALL line will be shown. If it is higher than 1, “Group 1”, “Group 2, etc. will be shown. This makes it possible to group Registration Units.

“Display” can be selected as “Single CU” or “Dual CU”. “Dual CU” will display data from two Control Units at the same time, given the possibility to control two Control Units and show up to 8 Registration Units at the same time.

“Enable Ext Display” should be ticked if one or more external displays are connected to the PC. When ticked the COM-port selection for the external display appears.

“Enable Ext Data Output” should be ticked if counting information is to be transmitted to an external data system. When ticked the COM-port selection for the external data system appears. Also whether weight should be gutted, and if test data is to be generated can then be selected.

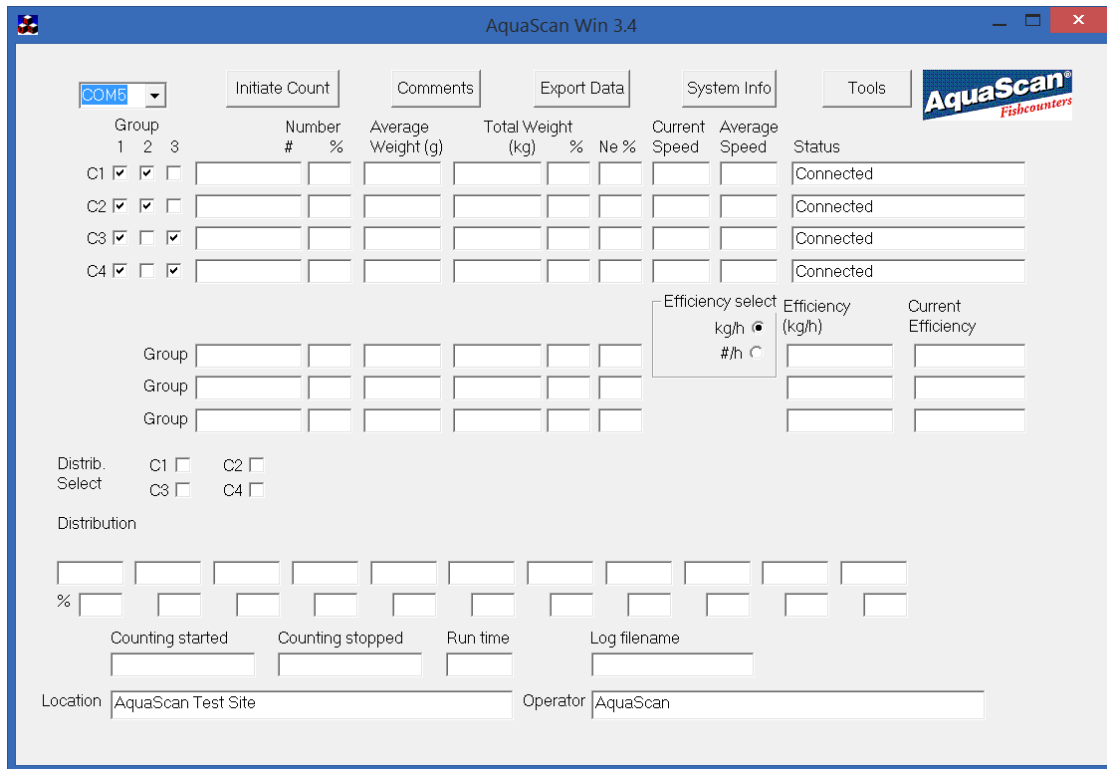


Press the “Lens Check” button in order to start a lens check. Counting will have to be stopped before “Lens Check” is performed.

Press the “Update” button in order to start upgrading a Control Unit. Counting will have to be stopped before “Update” is performed.

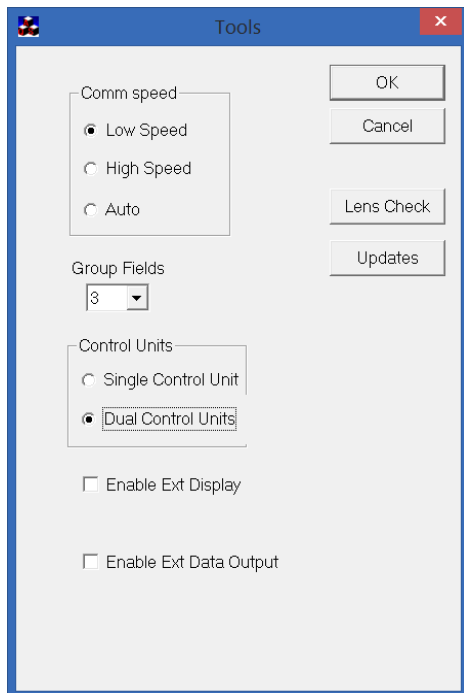
Press the “OK” button in order to save settings and end the “Tools” dialog, or the “Cancel” button in order to dismiss changes.

Each connected channel can join one or more groups.

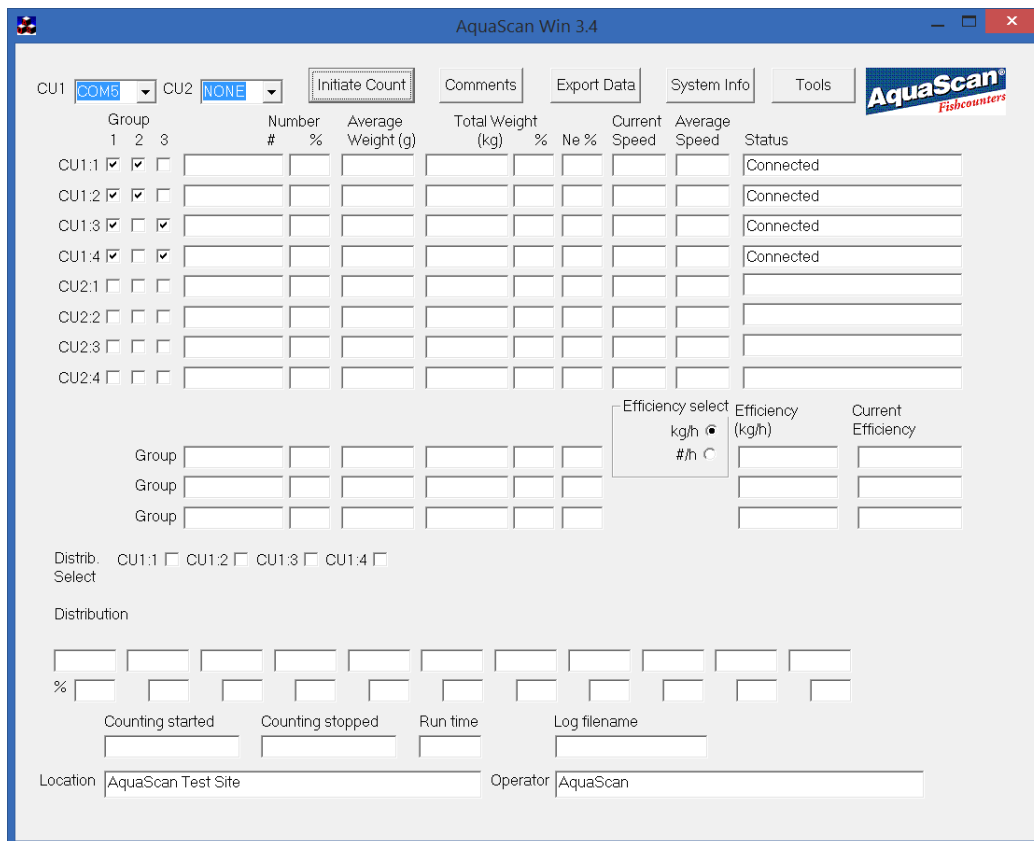


Group selection may be changed at any time.

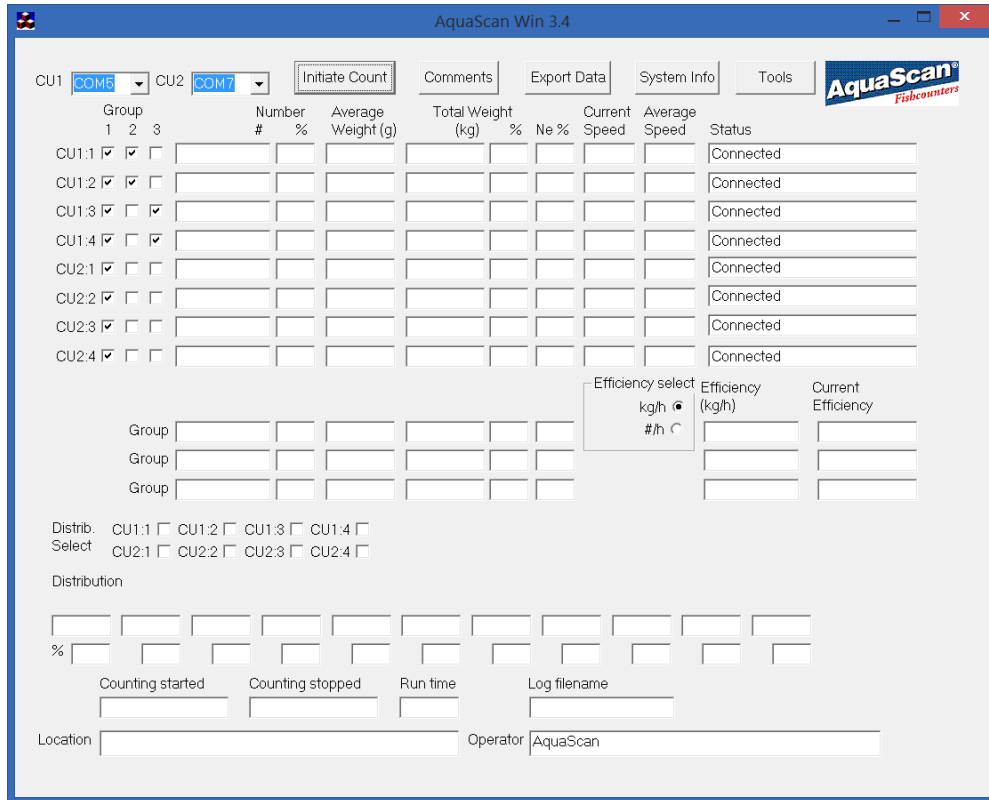
Dual CU Display



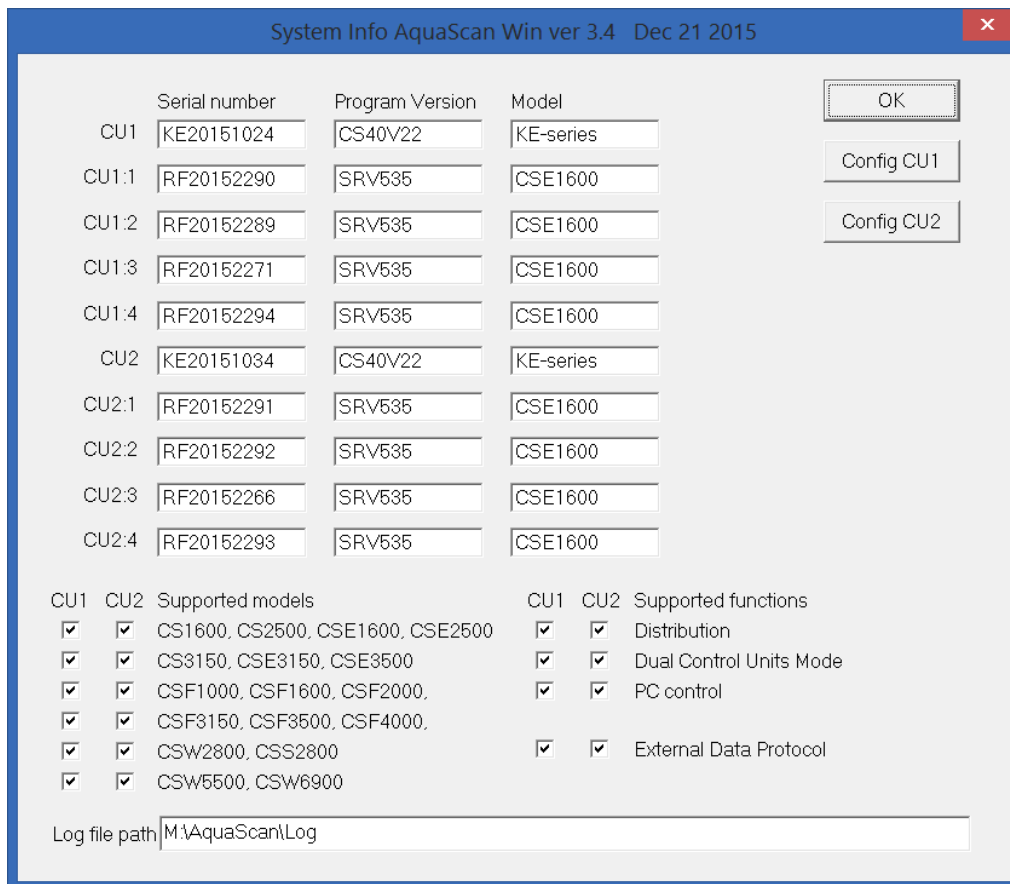
If "Control Units" is set to "Dual Control Units" AquaScan Win can control two Control Units, and display data for up to 8 Registration Units.



There will be two boxes for COM-ports, one for each Control Unit. Select COM-port for CU2.



In order to make AquaScan Win display data for both Control Units they have to be set up for "Dual Control Units Mode". This can be checked in "System Info".



Weight may be given for both Control Units in the "Initiate Count" dialog.

Initiate Counting ✖

	CU1:1	CU1:2	CU1:3	CU1:4	CU2:1	CU2:2	CU2:3	CU2:4	Current Eff. Time	
Start weight (g)	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="2000"/>	<input type="text" value="10"/>	<input type="button" value="OK"/>
Continue count	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						Distribution Enabled <input checked="" type="checkbox"/>
Weight factor	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	Weight factor Enabled <input checked="" type="checkbox"/>	
Count factor	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	<input type="text" value="1000"/>	Count factor Enabled <input checked="" type="checkbox"/>	
Location <input style="width: 40%; border: 1px solid gray;" type="text"/>										Operator <input style="width: 40%; border: 1px solid gray; text-align: center; value: AquaScan" type="text"/>
<input type="button" value="Cancel"/>										

Counting can be started and paused as before.

AquaScan Win 3.4 _ □ ✖

CU1 CU2

Group	1	2	3	Number #	Average %	Weight (g)	Total Weight (kg)	% Ne %	Current Speed	Average Speed	Status
CU1:1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="200"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU1:2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="200"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU1:3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="200"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU1:4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="200"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU2:1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="2000"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU2:2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="2000"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU2:3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="2000"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected
CU2:4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="2000"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>	<input type="text" value="0"/>	<input type="text" value="0"/> Connected

Group	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0"/>	<input type="text" value="0.000"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>			
Group	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0"/>	<input type="text" value="0.000"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>			
Group	<input type="text" value="0"/>	<input type="text" value="100"/>	<input type="text" value="0"/>	<input type="text" value="0.000"/>	<input type="text" value="100"/>	<input type="text" value="0.0"/>			

Efficiency select	kg/h <input checked="" type="radio"/>	#/h <input type="radio"/>	Efficiency (kg/h)	Current Efficiency
			<input type="text"/>	<input type="text"/>

Distrib. Select	CU1:1 <input type="checkbox"/>	CU1:2 <input type="checkbox"/>	CU1:3 <input type="checkbox"/>	CU1:4 <input type="checkbox"/>						
	CU2:1 <input type="checkbox"/>	CU2:2 <input type="checkbox"/>	CU2:3 <input type="checkbox"/>	CU2:4 <input type="checkbox"/>	<input type="button" value="Start Count"/>	Pause	CU1:1 <input type="checkbox"/>	CU1:2 <input type="checkbox"/>	CU1:3 <input type="checkbox"/>	CU1:4 <input type="checkbox"/>
						Channel	CU2:1 <input type="checkbox"/>	CU2:2 <input type="checkbox"/>	CU2:3 <input type="checkbox"/>	CU2:4 <input type="checkbox"/>

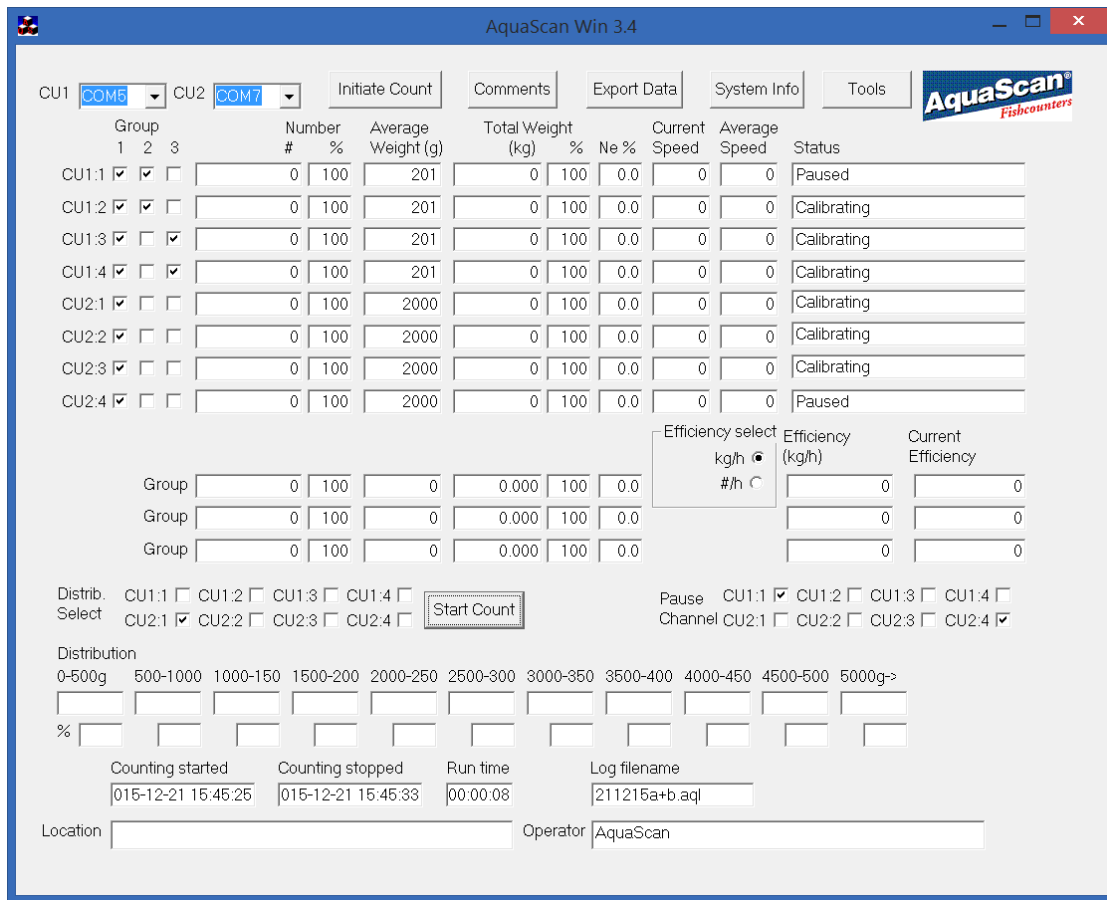
Distribution

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
%	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Counting started	Counting stopped	Run time	Log filename
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Location Operator

Notice that two Log-files will be created, e.g. 211215a.aql for CU1 and 211215b.aql for CU2.

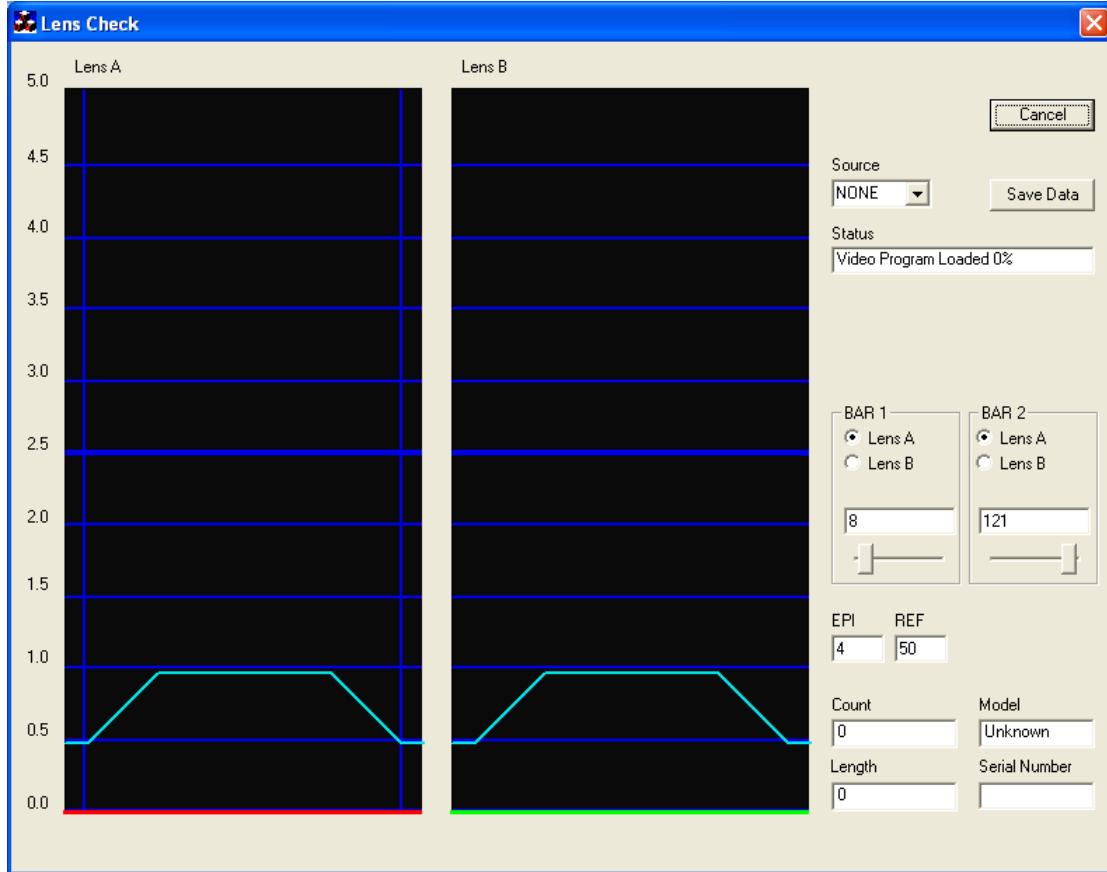


In this example we have selected to show the sum of all channels in group 1, the sum of CU1:1 and CU1:2 in group 2, and the sum of CU1:3 and CU1:4 in group 3.

Lens Check

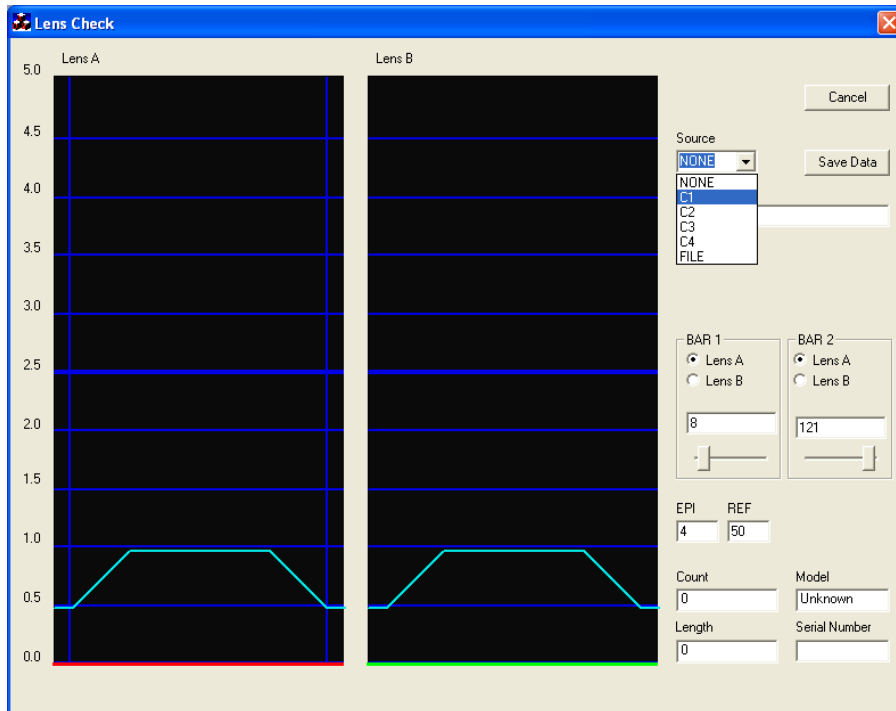
AquaScan Win supports checking the lenses at the Registration Unit.

Press the “Lens Check“ button at the “Tools” dialog when the counter is stopped and shows Weight(g):
for the first channel connected..

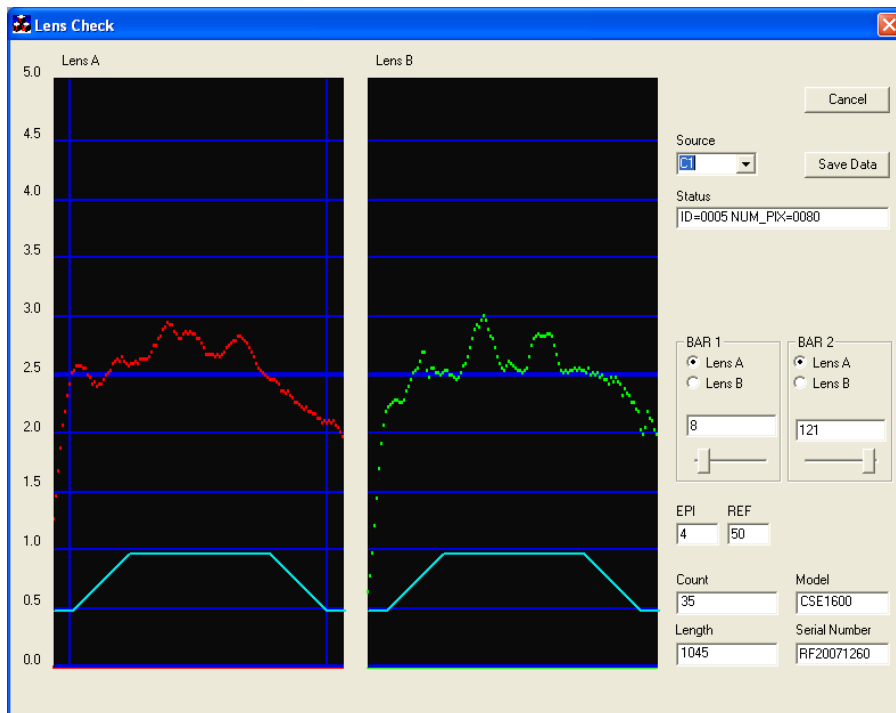


Observe the status field which tells “Video Program Loaded 39%”.

When the status field tells “Select Source” You do that from the Source field.



After selecting the channel to inspect, the view should be something like this:



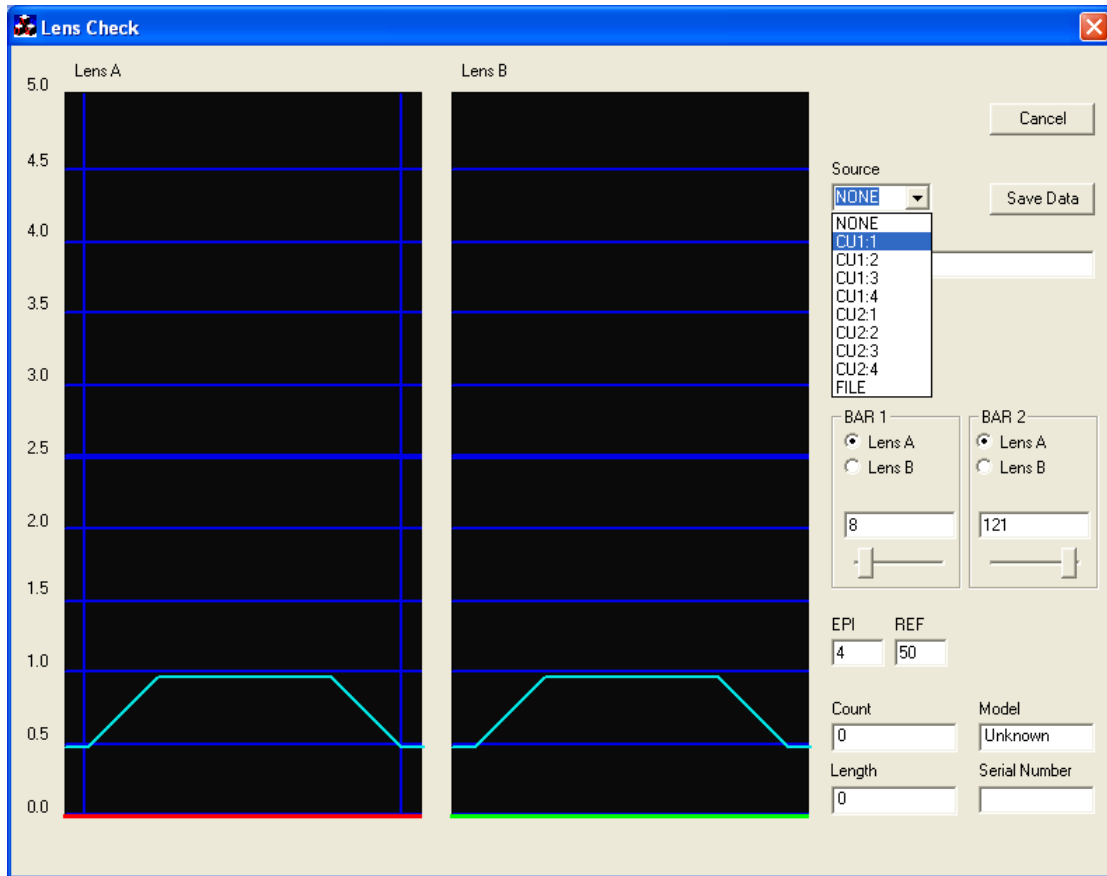
The red and green waveforms should be above the light blue curve starting at 0.5. If the red or green waveform is below the light blue curve, the system will be disturbed by it.

The waveforms can be saved to a file so it can be inspected later. In order to save the picture, set Source to NONE, and then press the Save Data button. Then give a filename for the picture. The saved file may later be opened by setting the Source to FILE, and then select the given filename.

When the operator has finished looking at the waveforms and pressed “Cancel”, the Control Unit will download program to the Registration Unit(s) again while AquaScan Win returns to the “Tools” dialog.

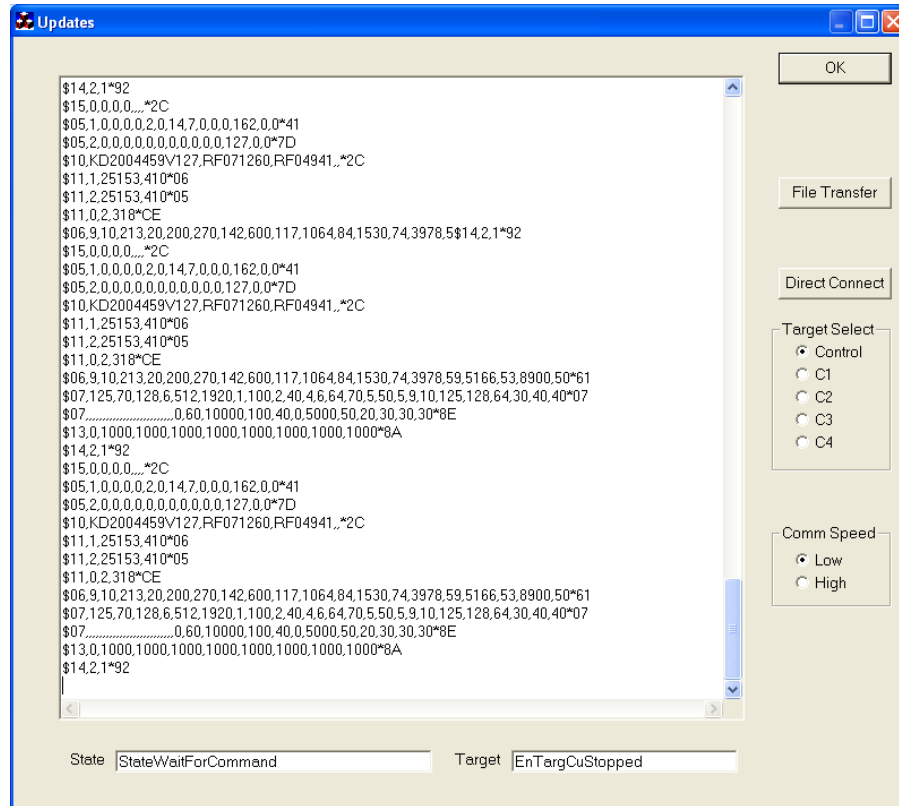
Note:

For “Dual Control Units Mode” both Control Units will download program to the Registration Units, and the selection of “Source” will look like this:



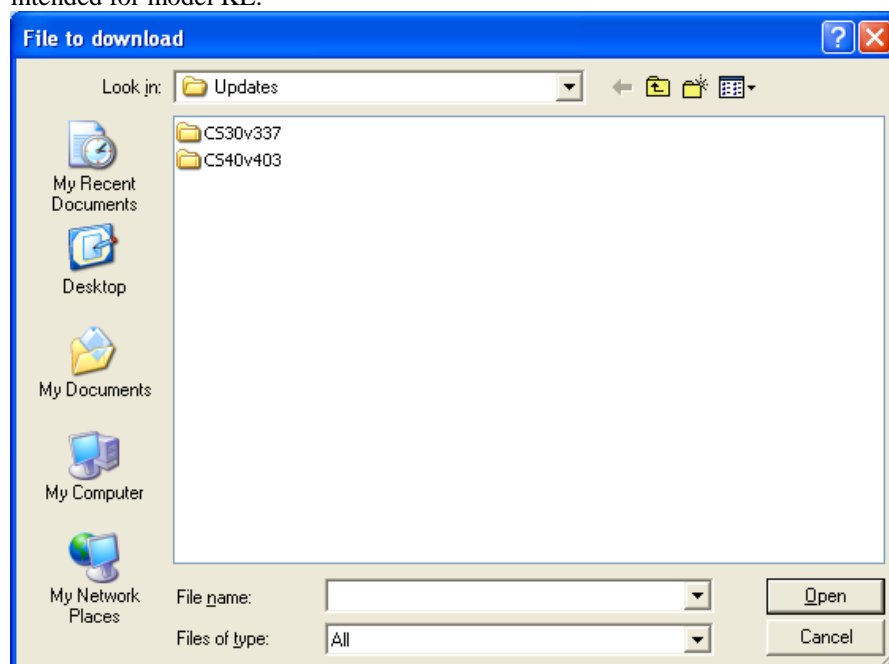
Updates

Only Control Unit model KD and KE can be upgraded by AquaScan Win 3.4.

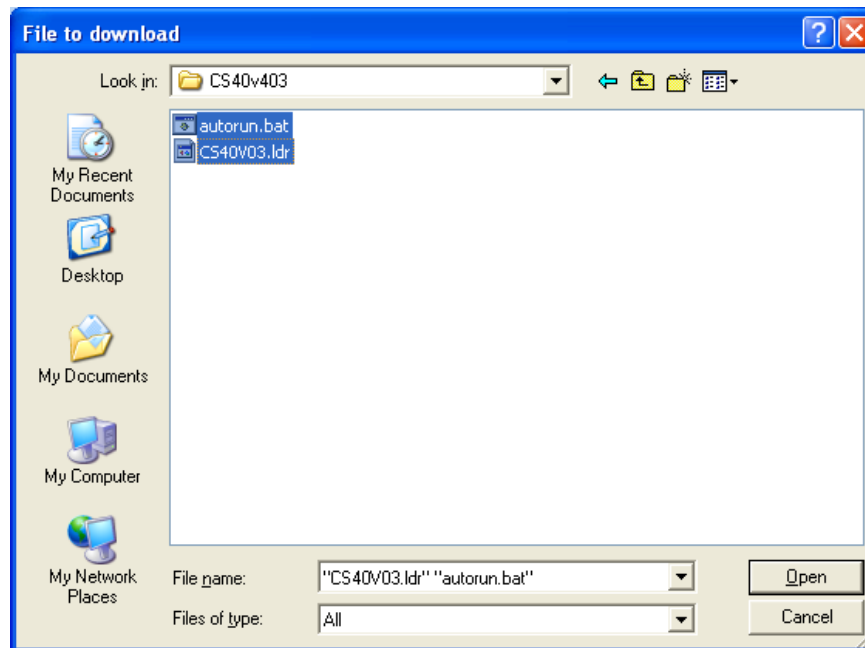


If the Control Unit is to be upgraded this should be done by first set “Target Select” to “Control” and then press the “File Transfer” button.

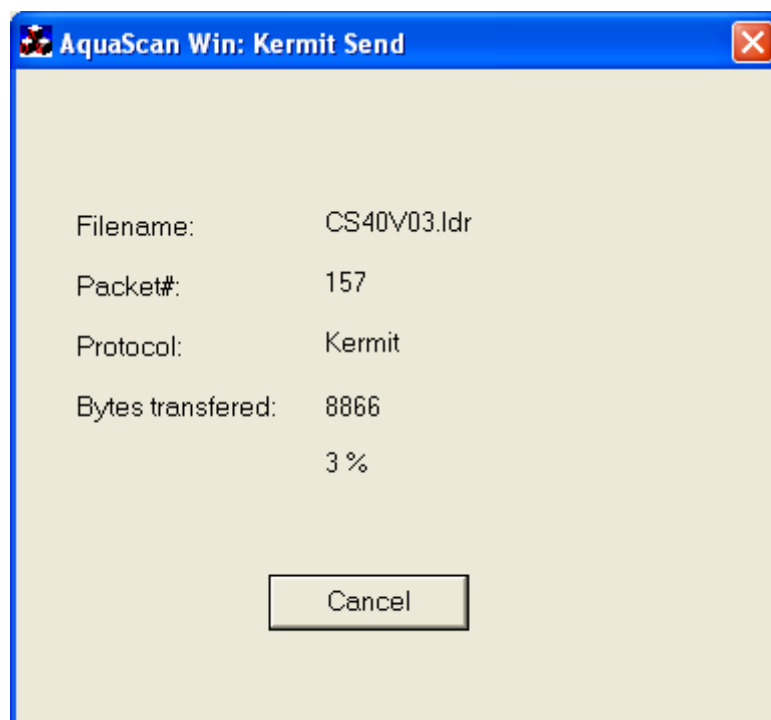
In the “File to download” dialog select the directory where the files are located, e.g. “CS40v403” by double-click at it. Notice that CS30 software is intended for model KD, while CS40 software is intended for model KE.



Then select files to transfer by press and hold the “Ctrl” key at the keyboard and click at each file to transfer. If all files are to be transferred, only click at the first file, then press and hold the “Shift” key at the keyboard and click at the last file.

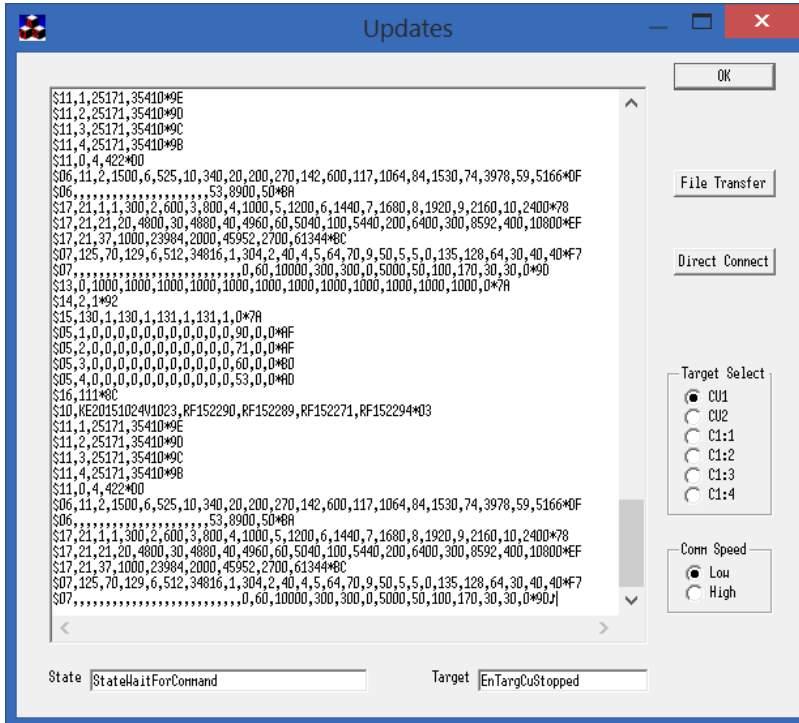


When all files to be transferred are marked press the “Open” button.

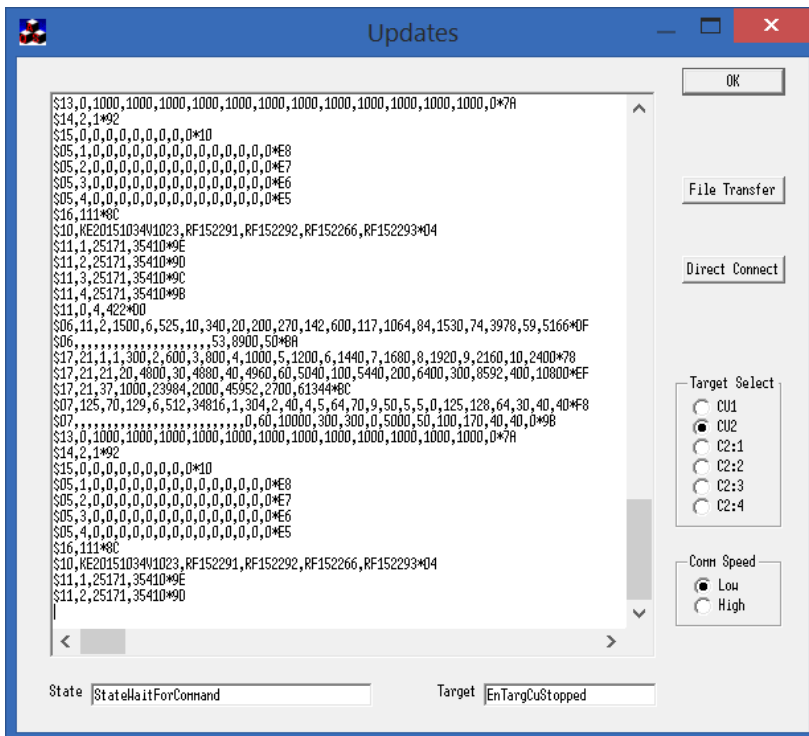


The Updates dialogue with "Dual Control Units"

In "Dual Control Units" it is only "Target Select" that is changed. When the Updates dialogue starts the operator can choose between CU1, CU2 and Registration Units connected to CU1.



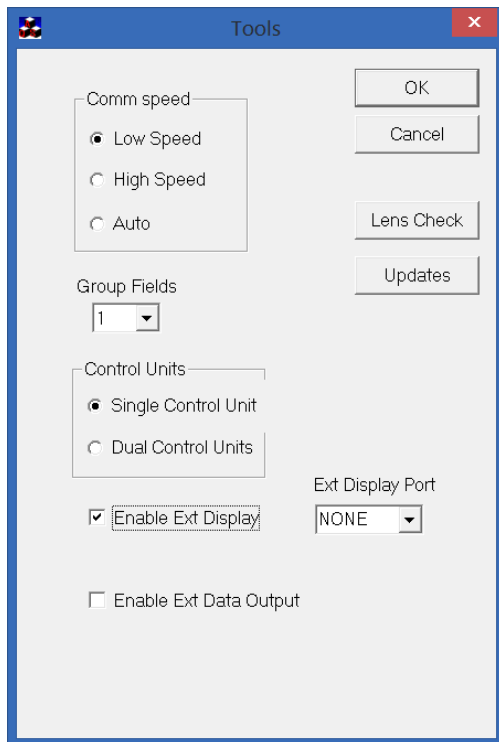
If it is desired to update Registration Units connected to CU2, the operator will have to select CU2 before the proper Registration Unit can be selected.



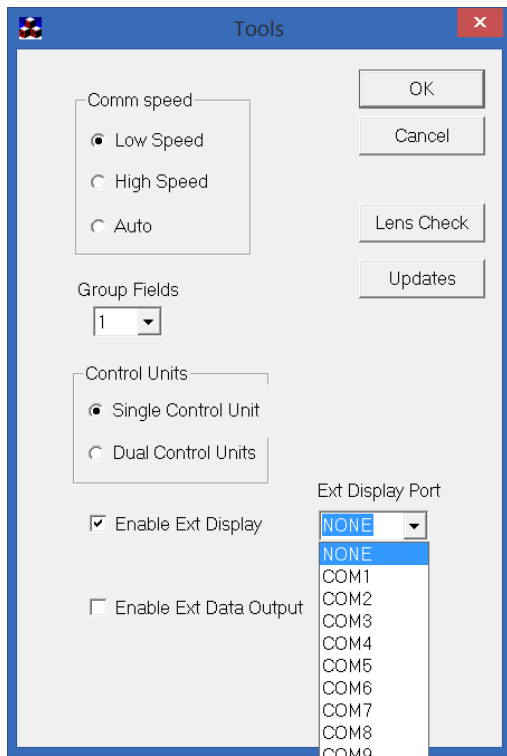
In all other ways the use will be as usual.

External display

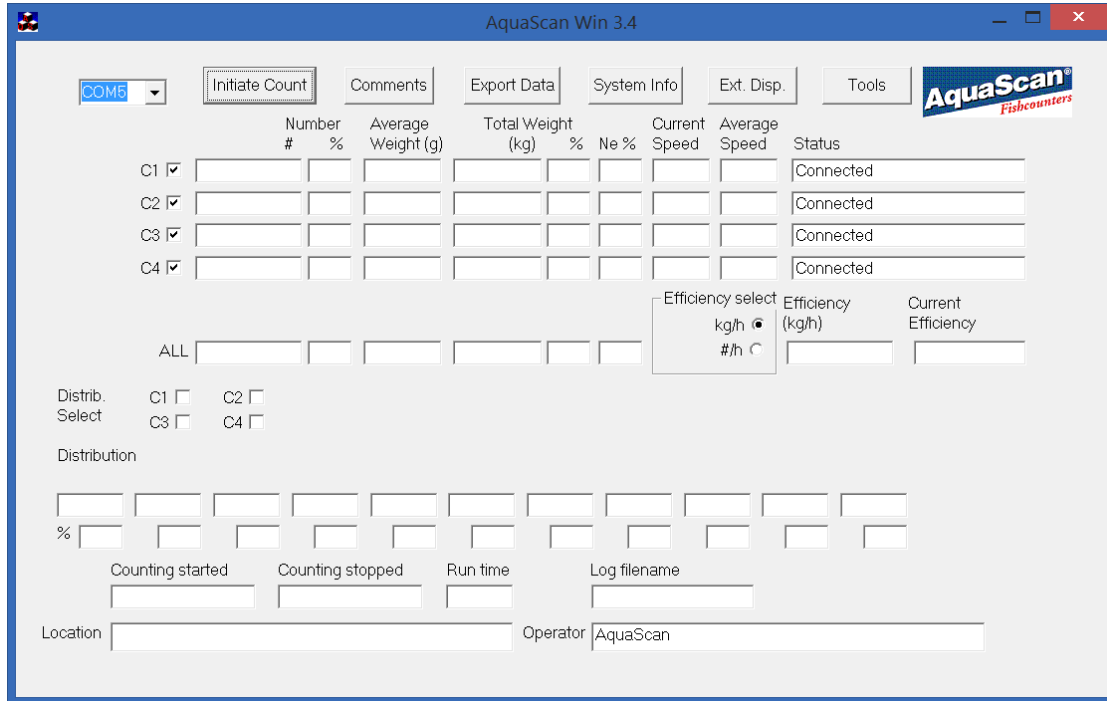
In the “Tools” dialog we can enable external display.



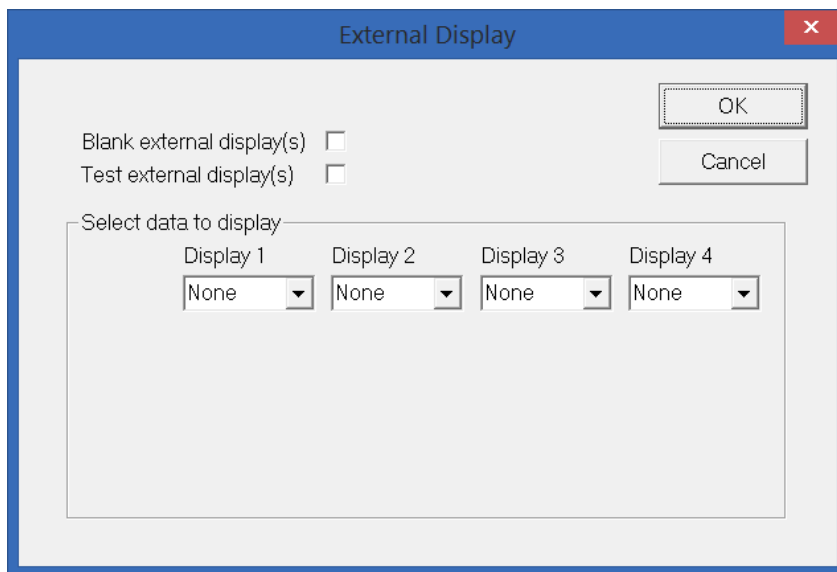
Then we have to select what port to use for it:



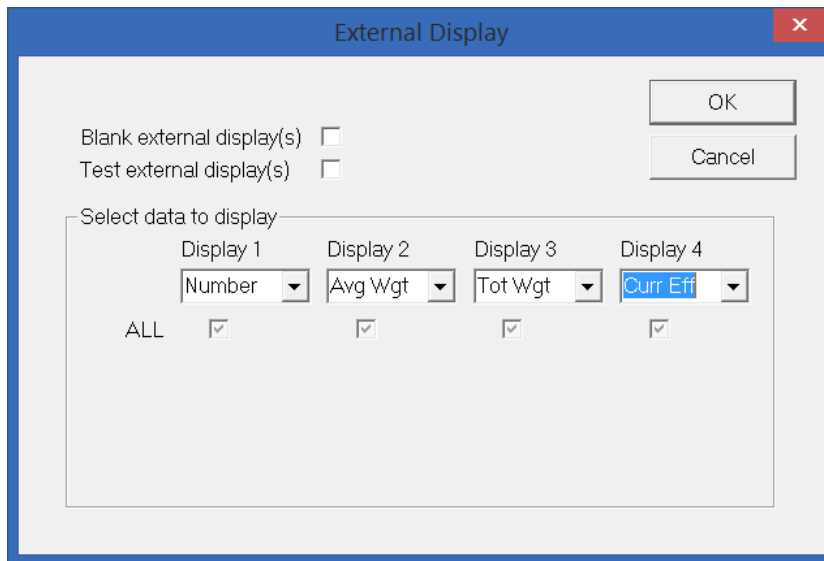
When enabling external display the main window will also show the “Ext Disp.” button, which can be pressed both during counting or not.



The “External Display” dialogue can blank the display, test it, or select what data to be shown at the display.



Up to four external displays may be connected and show different data.



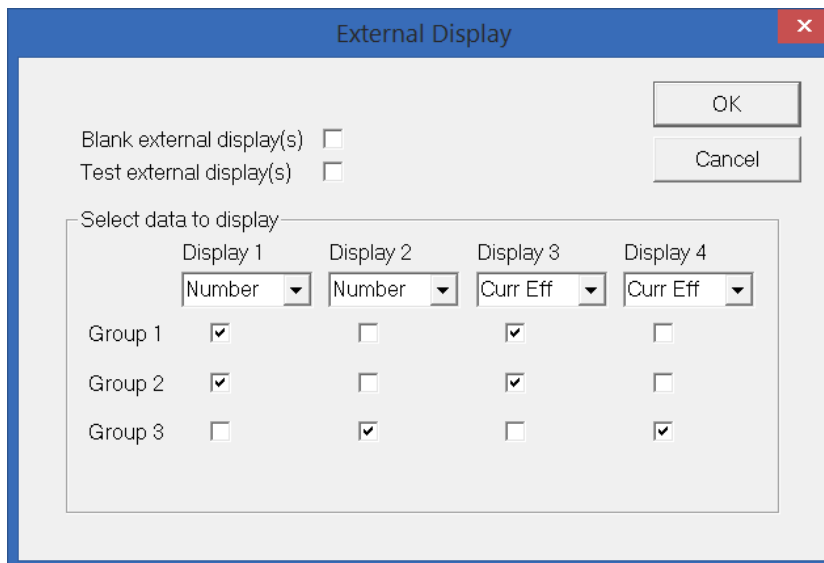
If “Blank external display(s)” is ticked, all connected external displays will be blanked.

If “Test external display(s)” is ticked, each display will switch between two values.

If the “Cancel” button is pressed, all changes will be dismissed, and the dialogue will terminate.

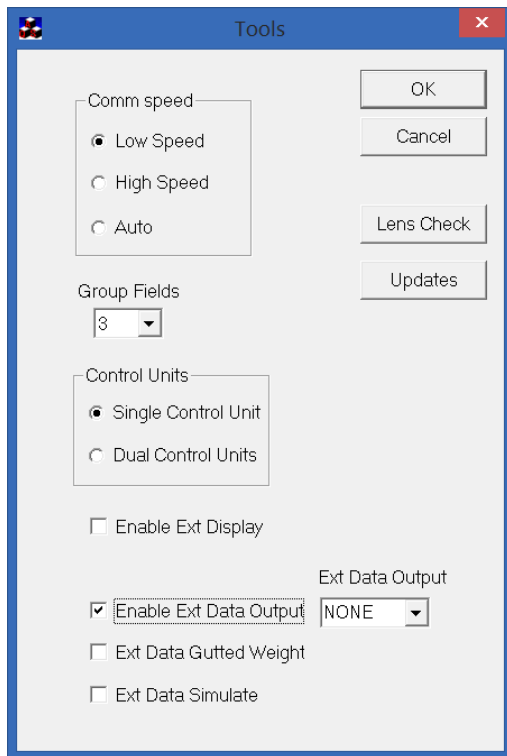
If the “OK” button is pressed, all change will be kept, and the dialogue will terminate.

If groups are selected in the “Tools” dialogue, what groups to be displayed can be selected.

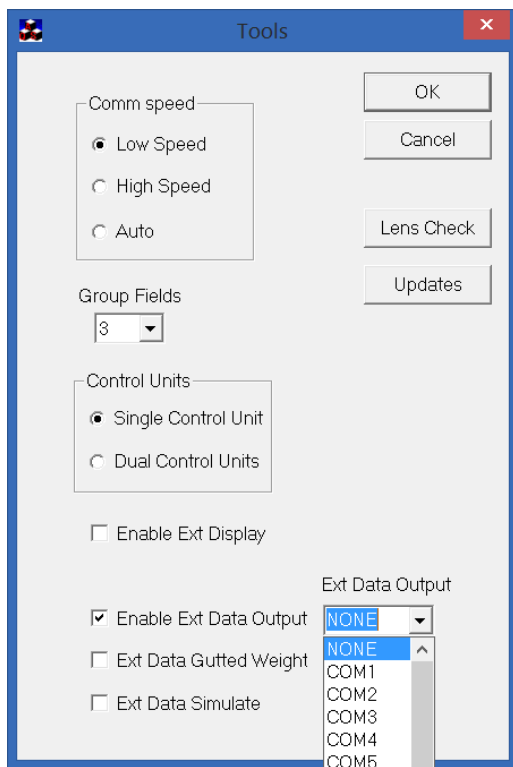


External data output

In the “Tools” dialog we can enable external data output to an external system.



Then we have to select what port to use for it:



”Ext. Data Guttred Weight” selects whether sent weight should be gutted or round.

”Ext. Data Simulate” selects whether data output should be simulated or from the counters.

Loading / Unloading controlled by AquaScan Win

AquaScan Win 3.4 can control the load direction from the “Initiate Counting” dialogue if the Control Unit have software version CS40V04 or later. The parameter SUP at the Control Unit must be set to 3 or 7 in order to enable the direction control at the Control Unit.

	C1	C2	C3	C4
Start weight (g)	200	200	200	200
Continue count	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight factor	1000	1000	1000	1000
Count factor	1000	1000	1000	1000

Current Eff. Time: 10

Distribution Enabled:

Weight factor Enabled:

Count factor Enabled:

Direction:
 Loading
 Unloading

Location:

Operator: AquaScan

”Direction can be switched between Loading and Unloading.

Gutted weight display

AquaScan Win 3.4 can show gutted weight. If gutted weight for distribution also should be displayed the Control Unit must have software version CS40V07 or later. The parameter SUP at the Control Unit must be set to 259 or 263 when direction control is enabled or 257 without direction control in order to enable the gutted weight factors at the Control Unit.

The screenshot shows the 'Initiate Counting' dialog box. It contains the following fields and controls:

- Start weight (g):** C1: 200, C2: 200, C3: 200, C4: 200
- Continue count:** Four unchecked checkboxes for C1, C2, C3, and C4.
- Weight factor:** C1: 1000, C2: 1000, C3: 1000, C4: 1000
- Count factor:** C1: 1000, C2: 1000, C3: 1000, C4: 1000
- Current Eff. Time:** 10
- Buttons:** OK, Cancel
- Options:**
 - Distribution Enabled:
 - Weight factor Enabled:
 - Count factor Enabled:
 - Gutted factor Enabled:
- Direction:**
 - Loading:
 - Unloading:
- Location:** [Empty text box]
- Operator:** AquaScan

In the displayed example the SUP is set to 257.

The "Gutted Factor" may be set to values between 500 and 1000, where 1000 means turning of gutted weight for the given channel, in the same manner as "Weight Factor".

This screenshot is similar to the previous one but includes an additional checkbox:

- Gutted factor:** C1: 1000, C2: 1000, C3: 1000, C4: 1000
- Gutted factor Enabled:**
- Gutted factor also for Distribution:**
- Direction:**
 - Loading:
 - Unloading:

The checkbox "Gutted factor also for distribution" is only displayed if the Control Unit has enabled gutted factor, and has software version CS40V07 or later.

If given gutted factor for a channel differs from 1000, this channel will use this gutted weight for distribution weights.

The text above the distribution shows whether distribution is showed with gutted weight or not.

	Number #	%	Average Weight (g)	Total Weight (kg)	%	Ne %	Current Speed	Average Speed	Status	Loading
C1	0	100	2000	0	100	0.0	0	0	Stopped	
C2	0	100	1600	0	100	0.0	0	0	Stopped	
C3	0	100	1400	0	100	0.0	0	0	Stopped	
C4	0	100	2000	0	100	0.0	0	0	Stopped	

Use "Weight select" to decide whether gutted or ungutted weight will be displayed for "Average Weight" and "Total Weight". This selection will have no influence on distributed weight. "Weight select" can be changed both during and after counting, and will also decide if the printout from export data will be given with or without gutted weight. The user may make more than one printout of the result, and may change the "Weight select" so both gutted and ungutted weight may be printed.

In this example channel C1 does not show distribution with gutted weight.

The screenshot shows the AquaScan Win 3.4 interface. At the top, there are buttons for 'Initiate Count', 'Comments', 'Export Data', 'System Info', and 'Tools'. Below these is a table with columns for 'Number #', 'Average Weight (g)', 'Total Weight (kg)', 'Current Speed', and 'Average Speed'. Channel C1 is selected with a checkmark. Below the table, there are 'Efficiency select' and 'Weight select' dropdowns. The 'Weight select' dropdown is currently set to 'Ungutted'. At the bottom, there are fields for 'Counting started', 'Counting stopped', 'Run time', and 'Log filename'.

	Number #	Average Weight (g)	Total Weight (kg)	Current Speed	Average Speed	Status	Loading
C1	0	2000	0	0	0	Stopped	
C2	0	2000	0	0	0	Stopped	
C3	0	2000	0	0	0	Stopped	
C4	0	2000	0	0	0	Stopped	

Ungutted Weight Distribution

0-500g	500-1000	1000-150	1500-200	2000-250	2500-300	3000-350	3500-400	4000-450	4500-500	5000g->
%										

Counting started: 015-12-21 16:00:08
 Counting stopped: 015-12-21 16:00:13
 Run time: 00:00:05
 Log filename: 2112156

Location: Operator: AquaScan

Channel C2 does show distribution with gutted weight, while “Average Weight” and “Total Weight” still is displayed as ungutted.

The screenshot shows the AquaScan Win 3.4 interface. At the top, there are buttons for 'Initiate Count', 'Comments', 'Export Data', 'System Info', and 'Tools'. Below these is a table with columns for 'Number #', 'Average Weight (g)', 'Total Weight (kg)', 'Current Speed', and 'Average Speed'. Channel C2 is selected with a checkmark. Below the table, there are 'Efficiency select' and 'Weight select' dropdowns. The 'Weight select' dropdown is currently set to 'Ungutted'. At the bottom, there are fields for 'Counting started', 'Counting stopped', 'Run time', and 'Log filename'.

	Number #	Average Weight (g)	Total Weight (kg)	Current Speed	Average Speed	Status	Loading
C1	0	2000	0	0	0	Stopped	
C2	0	2000	0	0	0	Stopped	
C3	0	2000	0	0	0	Stopped	
C4	0	2000	0	0	0	Stopped	

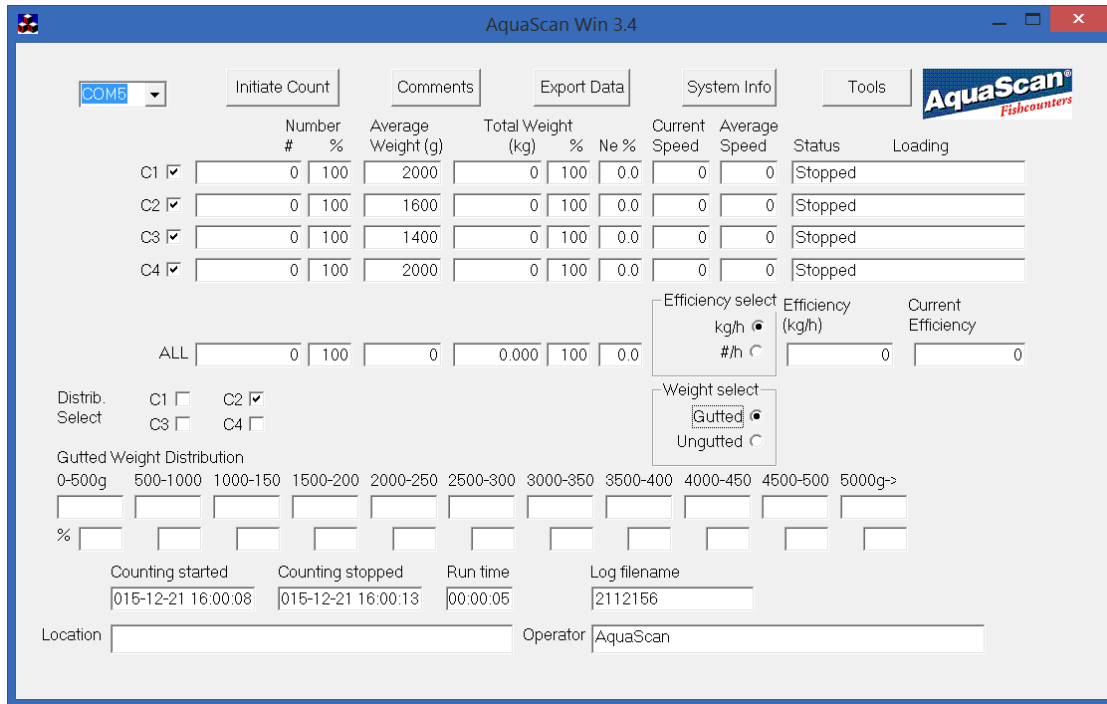
Gutted Weight Distribution

0-500g	500-1000	1000-150	1500-200	2000-250	2500-300	3000-350	3500-400	4000-450	4500-500	5000g->
%										

Counting started: 015-12-21 16:00:08
 Counting stopped: 015-12-21 16:00:13
 Run time: 00:00:05
 Log filename: 2112156

Location: Operator: AquaScan

In this example also “Average Weight” and “Total Weight” is displayed gutted.

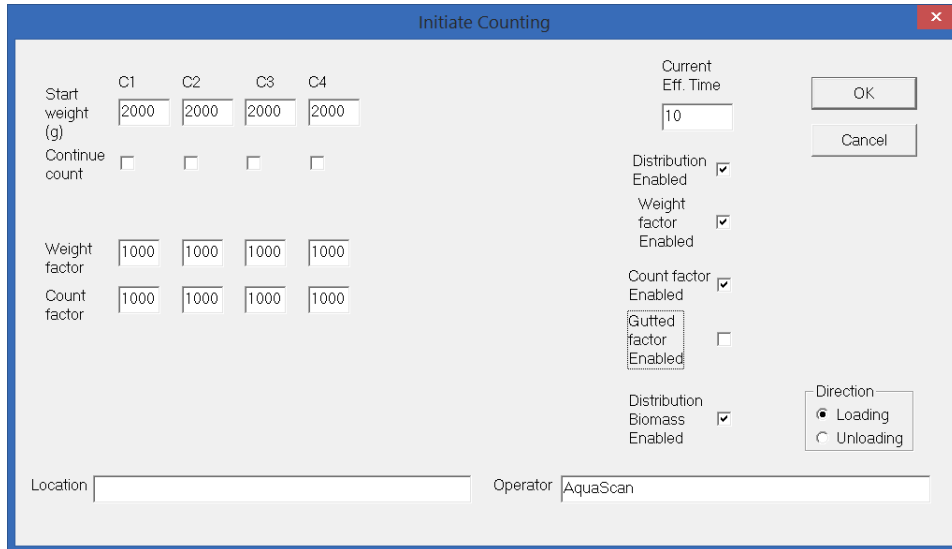


The gutted factors used will also be printed at the output from export data.

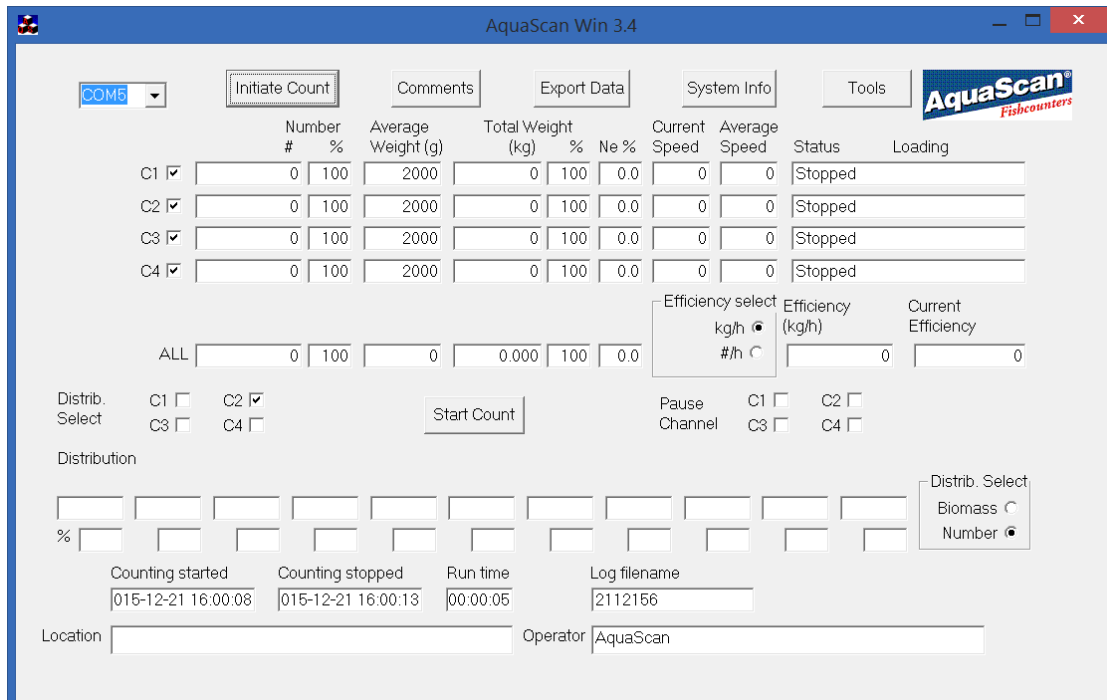
Biomass distribution

AquaScan Win 3.4 supports biomass distribution where the distribution is displayed as biomass as opposed to be displayed as numbers. To be able to display this, the Control Unit needs to have program version CS40V22 or later. The parameter CON at the Control Unit must also be set to 1024 in order to activate the biomass distribution.

Then this may be selected in the “Initiate Counting” dialogue:



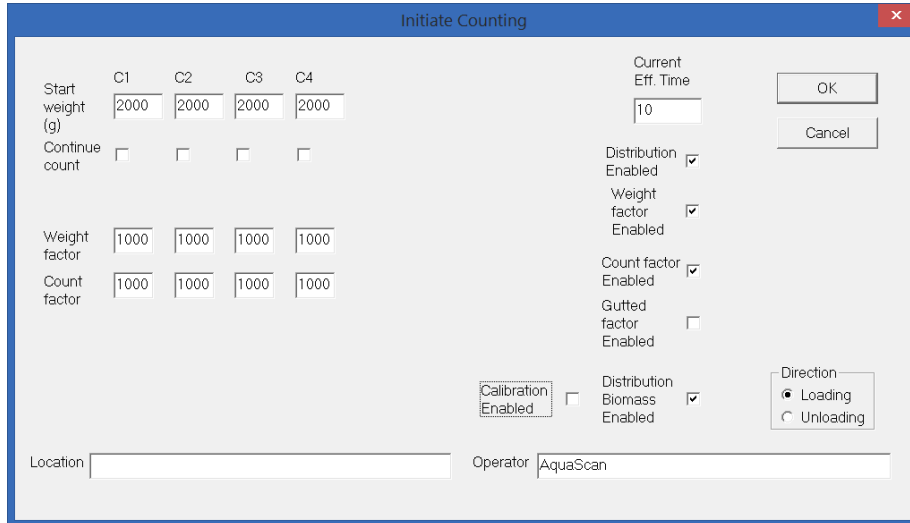
The operator may now switch between displaying biomass distribution and number distribution during counting, and after counting using “Distrib. Select”.



Calibration selection

AquaScan Win 3.4 supports selection of whether to use calibration or not during start of counting. The Control Unit needs to have program version CS40V22 or later. The parameter DCM and DCO at the Control Unit must also be set to other values than 0 in order to activate the start calibration control.

The start calibration state may be selected in the “Initiate Counting” dialogue:



The counting will now start in calibration or not depending on whether it was enabled in the “Initiate Counting” dialogue.

