

Ocean 2014

QA Software for Piranha & Cobia

Ocean 2014 User's Manual - English - Version 3.15A

Welcome to Ocean 2014

Ocean 2014 is a powerful tool for everybody working with Quality Assurance of X-ray systems. Ocean 2014 can be used with the X-ray meters Pirahna and Cobia from RTI.



**INDEPENDENT X-RAY
QUALITY ASSURANCE**

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Intended Use of the Ocean Software

Together with instruments from RTI Group AB the Ocean Software is intended to be used for independent service and quality control, including measurements of kerma, kerma rate, kVp, tube current, exposure time, luminance, illuminance, and dose area product, within limitations stated below.

If installed according to accompanying documents, the product is intended to be used together with all diagnostic X-ray equipment except for:

- therapeutical X-ray sources.
- X-ray equipment with tube potential below 18 kV or above 160 kV.
- X-ray equipment on which the instrument cannot be mounted properly.
- specific types of X-ray equipment listed in the instructions for use or in additional information from the manufacturer.

With the X-ray installation without patient present, the product is intended to be used:

- for assessing the performance of the X-ray equipment.
- for evaluation of examination techniques and procedures.
- for service and maintenance of the X-ray equipment.
- for quality control of the X-ray equipment.
- for educational purposes, authority supervision etc.

The product is intended to be used by hospital physicists, X-ray engineers, manufacturer's service teams, and other professionals with similar tasks and competencies. The operator needs training to be able to use the product as intended. This training can be achieved either by study of the manual, study of the built-in help function in measurement software or, on request, by a course ordered from the manufacturer.

The product is intended to be used inside X-ray rooms ready for clinical use and can safely be left switched on and in any measuring mode in the vicinity of patients.

The product is NOT intended to be used:

- for direct control of diagnostic X-ray equipment performance during irradiation of a patient.
- so that patients or other unqualified persons can change settings of operating parameters during, immediately before, or after measurements.
- for any guidance to diagnosis of patients.

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Chapter 1

Welcome to Ocean 2014

1 Welcome to Ocean 2014



Ocean 2014 is a powerful software for X-ray Quality Assurance work. Use Ocean 2014 with the Piranha and/or Cobia Flex/Sense significantly increase the quality and efficiency of your X-ray QA process.

You can set up templates to automate X-ray equipment testing, analyze the test data and store the data, waveforms and analysis results for future reference or re-use.

There are two different levels for Ocean 2014: Connect and Professional.

Connect

With Connect you can design your own measuring templates that includes displays for easy read-out. You can save your templates and measurements. You can connect your templates with Excel and easily transfer your measured data for further analysis. You can design your own spreadsheet and Ocean 2014, in this mode, automatically fills out your spreadsheet with the measured values from the meter.

Professional

This mode offers everything that Connect does, plus the possibility to set up templates that perform a complete job for you, including measuring data with the meter, checklists and analyze the data according to the pass/fail criteria you have set up. The data is stored and a report is generated.

Quick Check

Quick Check is available for both Connect and Professional. Quick Check is optimized for ease of use and suitable when you just need to do some quick measurements. Quick Check is suitable when using a touch screen (tablet). It simply adapts to the meter you use and the detectors you connect (plug-and-play). Data can be stored and printed from Quick Check. Quick Check offers pre-defined setup and is easier to use instead of Real-time display as soon as you don't need to build specific templates. By default, Quick Check is launched when Ocean 2014 starts if your meter is available (connected via USB or Bluetooth). You can turn off Quick Check if you mostly use Ocean 2014 to run full QA sessions with reports. To turn off Quick Check, go to Options. You can also, if you only use Quick Check, hide Ocean 2014's main window if you only use this mode.

If you have purchased a Piranha before December 2013 and have the Display license level

License level Display will not exist for Ocean 2014, this means a Piranha that has been delivered before December 2013 and has Display; will be automatically updated free of charge to Connect when it is used with Ocean 2014 the first time.

1.1 Ocean and Ocean 2014

Ocean is now available in two different versions, Ocean 2014 and Ocean. Ocean 2014 is the new version that is used with the new Black Piranha, Cobia Flex/Sense and red Piranhas that are upgraded with new firmware.

Ocean 2014
Black Piranha product version 5.5 or higher, firmware 4.0A or higher or Cobia Flex or Sense
Red Piranha that has been converted to Black Piranha, product version 5.5 or higher, firmware 4.0A or higher
Red Piranha with firmware 4.0A or higher

All red Piranha can be upgraded with the latest firmware and used with Ocean 2014. You must have both Ocean versions if you are using a mix of Barracuda and Piranha with firmware 4.0A and higher. You can import data from Ocean into Ocean 2014 but not in the opposite direction. This means that you can have all your data from all meters you have in Ocean 2014.

Ocean
Barracuda all versions
Red Piranha with firmware version 3.3B

If you use Ocean Central, you must have at least v2.0 to use it with Ocean 2014.

1.2 General information

Your Ocean 2014 license key is stored in your meter. When you connect your meter to Ocean 2014 the license key is validated and Ocean 2014 will show the license level on the main caption bar. There are two license levels available to you: Connect or Professional.

Please contact you local distributor if your meter is missing a license.

If you purchase the Professional license after you purchased the meter, you will receive an installer along with the license information. The license will be installed into your meter when you connect Ocean and the meter together the first time. If you purchase Professional at the same time as you purchase your meter, the meter will come with the license information permanently installed and no license key is required or supplied.

All meters sold before December 2013 that have the "Display" license level will be automatically upgraded to Connect when Ocean 2014 starts the first time with the meter connected.

We have added a "keyboard mode" feature to Ocean 2014 that allows you to use the software (except for Quick Check) without the meter connected to it. It's a great way to create templates right at your desk, or if you need to do some quick testing and don't want to set up the meter, you can just make your measurements and enter the data by hand. Since almost every functionality your license level offers is available in this mode (except items you can only do while connected to a meter), you can experience the power and versatility of this software even if you don't own a Piranha or Cobia presently.



We are confident that once you tried Ocean, you will not only want to use the software but harness its true potential by purchasing a Piranha, Cobia Flex or Sense as well.

If you have a tablet or laptop with Ocean 2014 pre-installed and want to get started right away, go to the Getting started topic now.

This User's Manual does not contain everything about Ocean. If you need a more detailed knowledge of Ocean's features, please read the Ocean Reference Manual. You can find the Reference Manual on your Product CD under the file name "Ocean2014ReferenceManual.pdf".

The same information as in the Reference Manual is also available in Ocean 2014's built-in Help text.

NOTE:

Barracuda is not compatible with Ocean 2014. Barracuda can only be used with Ocean, not the Ocean 2014 version. When you update to Ocean 2014, your current installation of Ocean is left unchanged but takes your user data including your database from your current Ocean installation. You must keep your old Ocean installation if you are using Barracuda or if you have Piranha meters that aren't updated with new firmware.

1.3 Important definitions

There are some important definitions that are good to understand before you start to use Ocean 2014 and read this manual.

Quick Check

A separate function in Ocean 2014 that allows you to do quick measurements without any deeper knowledge of Ocean 2014 or the meter you are using. The interface is designed for a tablet (touch screen). Full plug-and-play makes it very simple to use. You can save, export to Excel and print data.

Template

A template is a document without any measurements. It may hold information about how the measurement is going to be performed, calculations and pass/fail criteria.

Real-time display (RTD)

The real-time display is a document that allows you to setup your own measurements more than you can do with Quick Check. Here you can select what to measure and fully design your own templates.

Site

A site is the place where a testing procedure (session) is performed. A site is a facility, department and a room with its equipment.

Test

A test is a document that defines a certain test that is going to be performed. It can for example be "kVp accuracy", "Reproducibility", "HVL" and so on. Tests cannot be used on their own, they can only be used when they are part of a session.

Checklist

A checklist is a document that containing a list of questions or tasks that is part of the x-ray equipment quality assurance process. Acceptable questions and answers are pre-determined and set up by the user. Checklists cannot be used on their own, they can only be used when they are part of a session.

Session

A session is a document that defines a complete task, for example a QA session for an X-ray room. It normally consists of a number of tests and checklists.

Acceptance limits

The pass and fail criteria set up in a test by the user.

Analysis

A calculation done on a selected number of exposures to evaluate the performance of an x-ray generator or other equipment.

Equipment

The equipment in a room that is to be tested.

General settings

Set values that are common for the entire test.

Grid

The grid is where all measured data and set values are stored. It consists of a number of columns and rows.

Meter settings

Settings for the Piranha or Cobia Flex/Sense that control meter functions.

1.4 Installation

You may skip this section if you have got Ocean 2014 pre-installed on a tablet or laptop delivered with your meter. In this case go directly to the topic Quick Check.

You must have Windows XP, Window Vista, Windows 7, Windows 8 or Windows 10 to run Ocean. Ocean can run with both 32- and 64-bit version of Microsoft Office. If Microsoft Office isn't present on the computer, the Ocean installer installs necessary files to use Microsoft Access database. Your computer must also have USB port or Bluetooth. Display resolution should be at least 1280x800 but higher is recommended. You can read more in section Screen resolution about how to get best readability on the screen.

The Ocean installer is located on the Product CD or a USB stick you received with your meter. It can be used to do a new installation or an update of an existing Ocean or Ocean 2014 installation.

Note! You must have administrator level access to the computer you are installing Ocean on.

To install please follow the steps below:

1. Insert the product CD into the CD drive or connect the USB stick. The CD menu starts automatically (if not, locate and run Start.exe). If you are not installing Ocean from a Product CD, run the file **Setup Ocean 2014.exe**.
2. When the Ocean 2014 installer starts you are presented to a number of choices. Read through the text carefully and select what is applicable to you. The installer will then install the required programs on your computer. Two utility applications, Detector Manager and RTI Updater, will also be installed on your computer.
3. Follow the instructions on the screen to complete the installation process.

4. When the installation is completed finish the installer.



You will find Ocean 2014 on the desktop and it is identified with this icon:

When you run Ocean for the first time a **Start up wizard** will guide you through a series of steps to choose the default settings according to your preference. During this process is also a number of examples (both templates and measurements) made available to you. Ocean 2014 can start in two different ways depending on meter status:

Meter is not available

Ocean 2014 starts and the main screen is shown.

Meter connected (via USB or Bluetooth)

Ocean 2014 starts and Quick Check is launched directly. A Bluetooth device you use for the first time must be paired with the table or laptop. You can read more about pairing in section First Measurement with Quick Check.

You can turn off automatic start of Quick Check if you don't want this. Read more in the topic Program options. If you are doing an update and your meter require a firmware update; just connect it and start Ocean 2014. Ocean 2014 will check if the meter's firmware is compatible, if not Ocean 2014 will offer a firmware update.

1.5 Bluetooth

All Bluetooth modules require software (more than just drivers) to operate. This software is called a "Bluetooth stack" or "Bluetooth software stack". This software comes on the CD usually included with the product. Bluetooth stacks are made by various companies, including a Bluetooth stack made by Microsoft included with Windows (since later updates to Windows XP).

There are a few parts of the Bluetooth that may not be supported on these non-Microsoft Bluetooth stacks:

- Discovery & pairing using Windows built-in Bluetooth features.
- A communication protocol called RFCOMM.

We recommend that you use Microsoft's Bluetooth stack if possible because it's the most reliable and it also provides discovery & pairing via Windows' built-in Bluetooth stack.

Ocean says there is a problem with the Bluetooth adapter/configuration

In Windows 10, a type/version of Bluetooth communication we use to communicate with the meter was discontinued. If you're using a Bluetooth stack that doesn't support the RFCOMM protocol, you will find Ocean can't find/communicate with your meter. You can:

- Migrate to the Microsoft Bluetooth stack (see instructions below).
- If your Bluetooth adapter won't work with Microsoft's Bluetooth stack, you could purchase a replacement that will.
- (You could use an earlier version of Windows but that's not necessary.)

Ocean says it can't discover/pair

It can't discover/pair because the Bluetooth stack you're using doesn't fully integrate with Windows' Bluetooth. You can:

1. Discover/pair manually using the software they provided.
2. Try changing to the Microsoft Bluetooth stack (instructions below)

How to choose to use the Microsoft Bluetooth stack

You can use the Microsoft Bluetooth stack by simply not using the CD that came with the Bluetooth module.

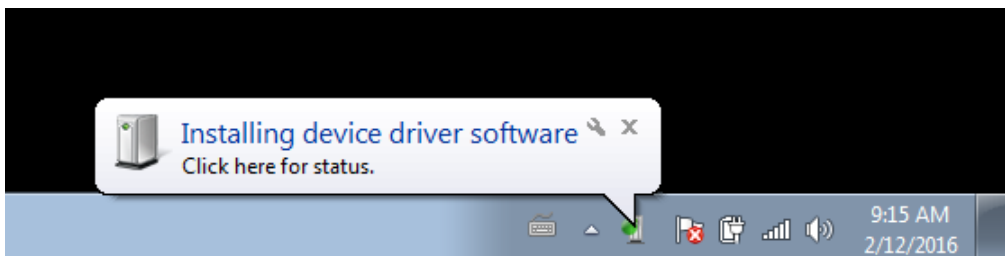
If the non-Microsoft Bluetooth stack is already installed, you can select the Bluetooth stack by choosing a generic device driver from Microsoft. This process varies somewhat based on the version of Windows that you are using. Sometimes a problem can arise during this process that may require you to reinstall Bluetooth software or device drivers.

1. Right-click "Computer" and select "Manage".
2. Click "Device Manager" and select "Bluetooth" to expand it.
3. Right-click the Bluetooth device and select "Update Driver Software." Knowing which device to select can be a problem. You can ignore any Piranha/Cobia devices and also "Enumerator" devices.
4. Click "Browse My Computer for Driver Software and then "Let Me Pick from a List of Device Drivers on My Computer." The list populates with compatible drivers.
5. To choose Microsoft's Bluetooth stack, select the one that says "Generic Bluetooth Adapter" or "Generic Bluetooth Radio" and click "Next." Restart the computer if prompted to finish the installation.

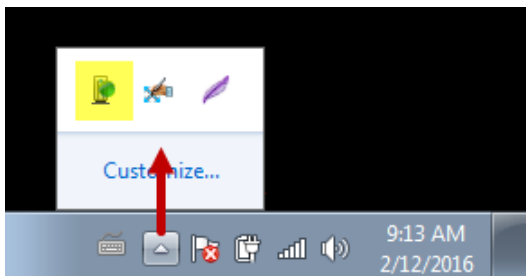
Slow pairing (before Windows 10)

It may take a few minutes for Windows to receive some drivers from Microsoft's servers. Ocean will stop after a minute to ask if you wish to continue to wait. Do continue to wait until the driver install is complete. It takes long enough that it's good to know what to expect.

It will look like this at first:



This will go away and be hidden away here:



You can still see the icon is busy. If you click on it, you can see what it's doing; it may look something like this (devices listed will differ):

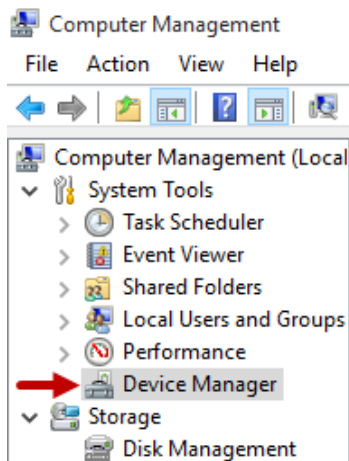


When it's done, Ocean should be able to connect to the meter.

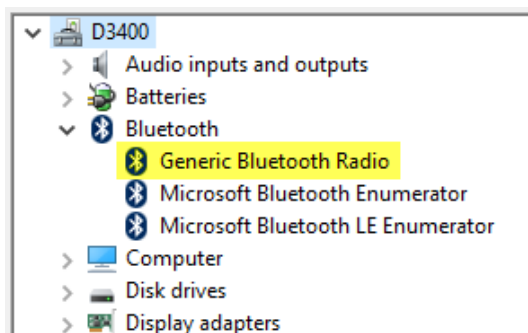
How to see which Bluetooth stack you're using

Ocean performs some:

1. Right-click on your Computer
2. Select "Manage"
3. Select Device Manager (see below)



4. Open the "Bluetooth", "Bluetooth Radios" or "Bluetooth USB" node. (It may appear under another name including the word "Bluetooth".)



If you see "Generic Bluetooth Radio", you're using the Microsoft Bluetooth stack. If "Generic Bluetooth Radio" isn't present, you're using some other Bluetooth stack.

How to return to the original Bluetooth stack

You can return to the original Bluetooth stack using one of these methods:

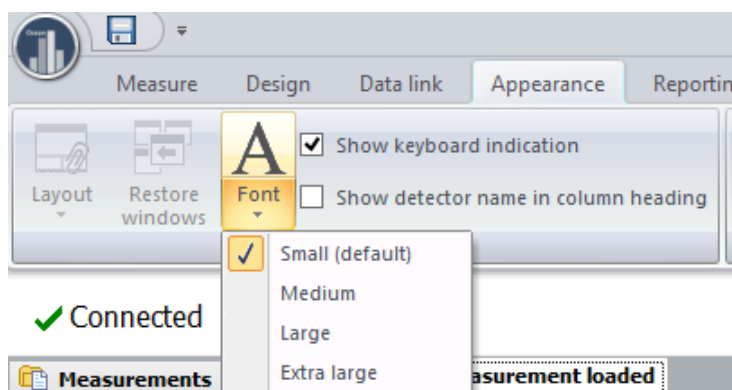
- Install the CD for the Bluetooth module.
- Perform the procedure described above but let Windows select the device driver.
- Perform the procedure described above but select the device driver that seems to be most appropriate for your device.

1.6 Screen resolution and font size

Ocean 2014 is designed for a minimum screen resolution of 1280 x 800. If screen resolution is higher, objects in Ocean can look very small and. There are different ways to increase visibility on the screen:

- Increase font size in Ocean 2014. This will only affect texts in Ocean, not buttons and other objects.
- Change settings in Windows (increase size of text, apps and other items). This feature will increase size of all objects.

Increase font size



You can change the Font size to increase the size of texts and ribbon bar in Ocean 2014. There are four different sizes to choose from; Small(default), Medium, Large and Extra Large. If you use Extra large font size be aware that some texts may be truncated.

Increase object size in Windows

You can increase everything that is shown on the screen by changing the Display settings in Windows (Windows 8 and 10). You can set the "size of texts and apps" between 100 % and 200 %. It is not recommended that you increase more than what gives an "effective" screen resolution lower than 1280 x 800. For example, if you have a screen resolution of 1980 x 1200 and you think that Ocean 2014 "looks small". It is then not recommended to go higher than 150% ($1980/1.5=1320$ and $1200/1.5=800$).

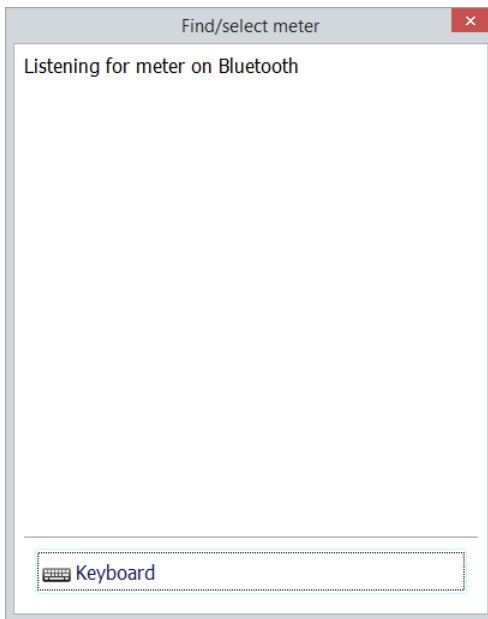
You can combine these two possibilities to maximize size of Ocean 2014 texts and buttons.

1.7 Connecting your meter the first time

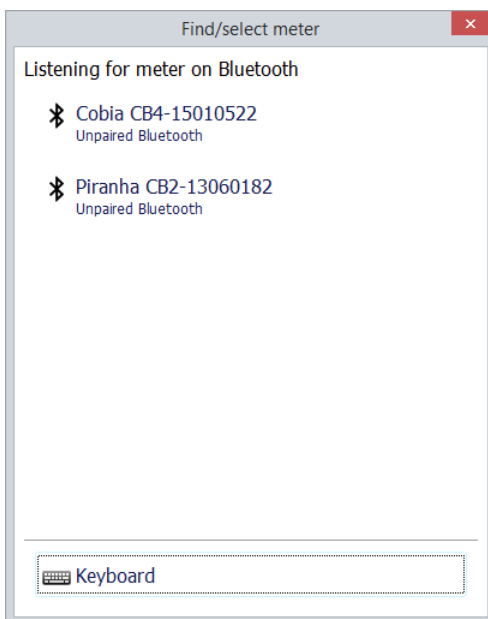
You can start Ocean 2014 with or without a meter connected. You can connect to your meter with USB or Bluetooth. If you start without a meter, Ocean 2014 starts in Keyboard mode. The very first time you start, a "Setup wizard" will be shown. Here you specify the license level you are using, your name and default units of measure. Provide the information required by the wizard. Read more in topic Setup.

If you start Ocean 2014 with a Piranha or Cobia Flex/Sense powered on and connected with USB; Ocean automatically finds the Piranha or Cobia. With USB this is instant.

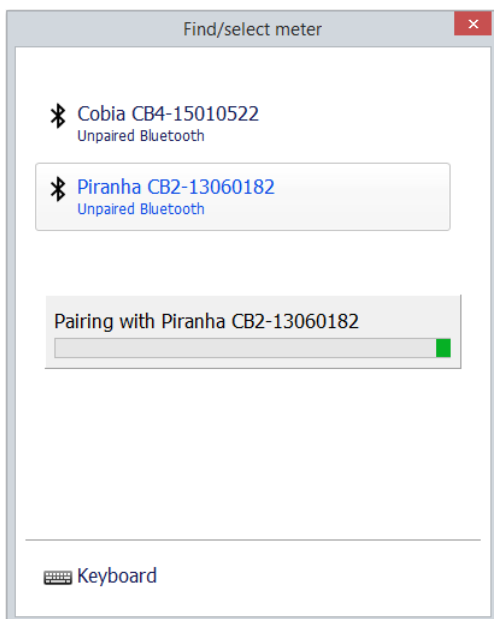
If you instead start with Bluetooth Ocean 2014 will not "see" the Piranha or Cobia the first time, you must manually connect. Click on the "Connect" or "New Quick Check" button. A dialogue will be shown:



Ocean 2014 will now search for Bluetooth or USB devices to find the Piranha or the Cobia. This can take up to a minute or more the first time (if USB is used it connects immediately). As soon a meter is found, it is shown in the dialogue:



Click on the meter you want to connect to. The pairing starts now:



When the pairing is finished, Ocean 2014 shows that the meter is connected. If you clicked on the "New Quick Check" button the Quick Check is launched, depending on your meter type and connected external detector, a menu may be shown. Make your choices and start to measure.

You can try pair the Piranha or Cobia in Windows if you have trouble doing it in Ocean 2014. With Windows 10:

1. Go to Devices -> Bluetooth.
2. Make sure the Bluetooth switch is in the "On" position.
3. Select the device you want to connect and click Pair.

Chapter 2

Quick Check

2 Quick Check



Use Quick Check when you just need to make a quick measurement. Quick Check automatically adapts to the meter you use and the detector you have connected. It is fully plug-and-play and any change you do is automatically detected and Quick Check adapts to the new situation. Quick Check is designed for a tablet (touch screen) but works of course also on a standard laptop. You can do the following with Quick Check.

- Quick measurements
- Save
- Print
- Export to Excel
- Applications with analysis

2.1 Start the Tablet

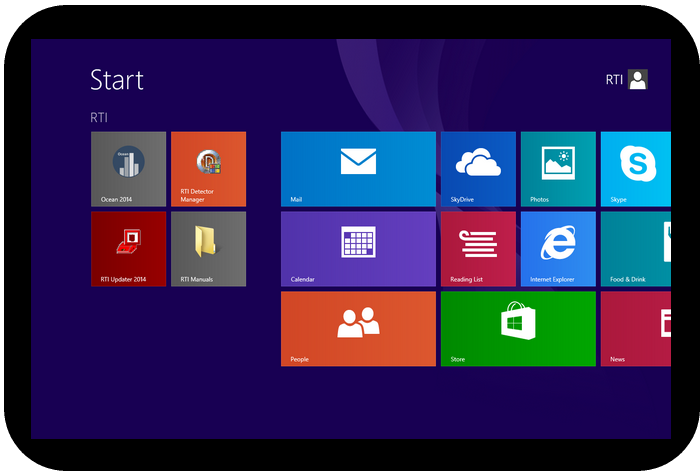
This is a quick introduction to how you get started with the tablet that comes with your meter. The tablet has Windows 8 and is configured and ready to be used with the meter.

To start measuring:

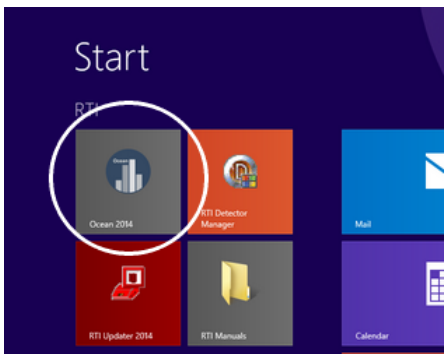
1. Power on the meter.
2. Power on the Tablet.



3. Windows 8 starts and the Start screen is launched.

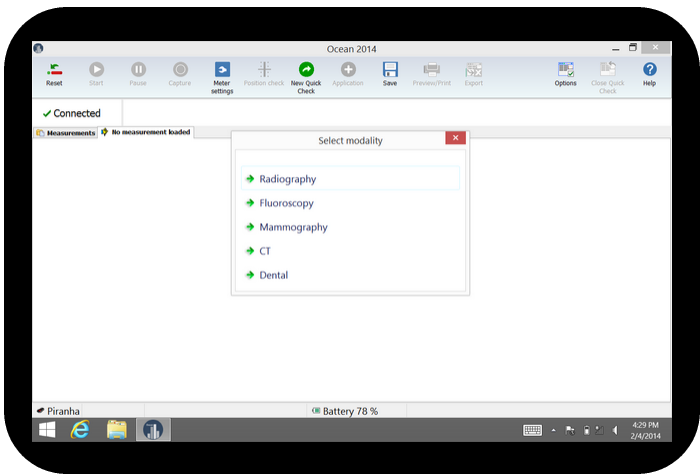


4. You will see the Ocean 2014 tile to the left, click on it to start Ocean 2014.



5. Assuming that your meter is powered on; Ocean 2014 starts in Quick Check mode.

6. Select the modality you want to use:



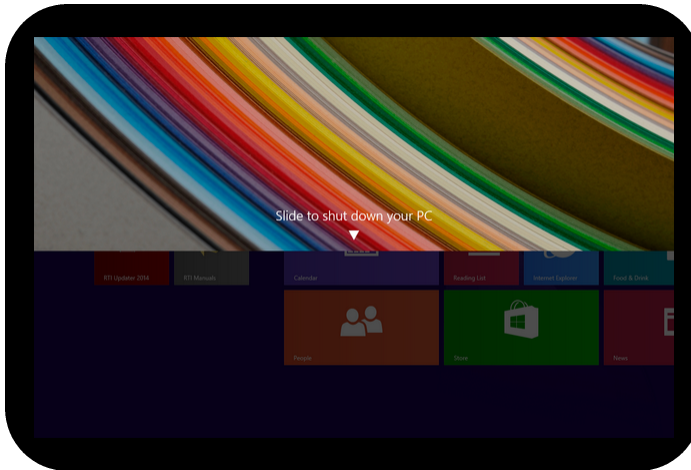
The coming topics will describe how you perform your first measurement and how you navigate in Quick Check.

How to turn off the Tablet

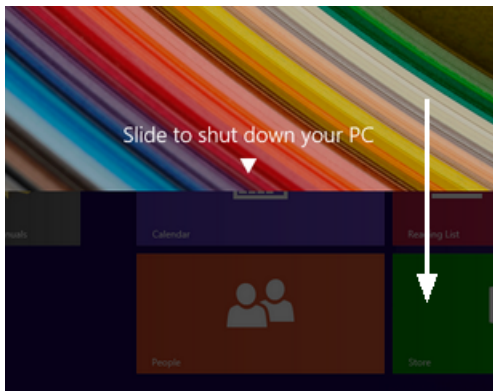
It is recommended that you turn off the Tablet, and not just puts it in sleep mode, when you don't use it. It consumes power even in sleep mode and the battery will be drained quite fast even if you don't use it.

To turn off the tablet:

1. Press the power button and keep it pressed until the screen shows the following:



2. Release the button and slide the panel down to shut down the Tablet.



2.2 First measurement with Quick Check

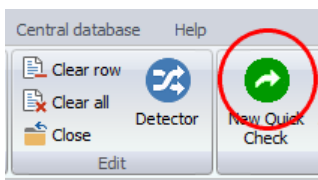
By default, Quick Check is launched automatically when Ocean 2014 starts and the meter is available. Use Quick Check when you just want "a meter" to do a quick measurement. Quick Check is extremely simple to use since it automatically recognizes what type of meter you have and which detectors you use. It is full plug-and-play, directly when you unplug or plug in a detector; Quick Check sets up the measurement for you. You can save data you measure with Quick Check but you must save manually - Quick Check will never ask you if you want to save. It is also possible to print and export measured data to Excel. Quick check also has built-in applications for accuracy, linearity, reproducibility, half-value layer and more. Quick check is designed for use with a tablet and easy to operate directly on a touch screen.

Let us start with a simple measurement to illustrate how to use Quick Check. This example assumes a Piranha 657. If you have another model follow this example and apply it on what you see on your screen when you use your Piranha.

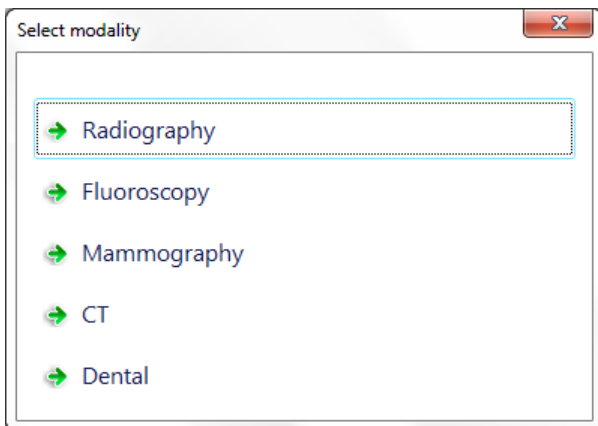
Make sure your meter is powered on and within distance for Bluetooth communication or connected via USB. Disconnect any external probe that might be connected (unless you have a Piranha model that only works with external detector or a Cobia Sense). Assume that we are using a Piranha 657.

1. Start Ocean 2014 or start the Quick Check from the Measure tab on the ribbon bar if you are in Ocean 2014 main view:

(Note: If you use Windows 8; you start Ocean 2014 from the desktop)

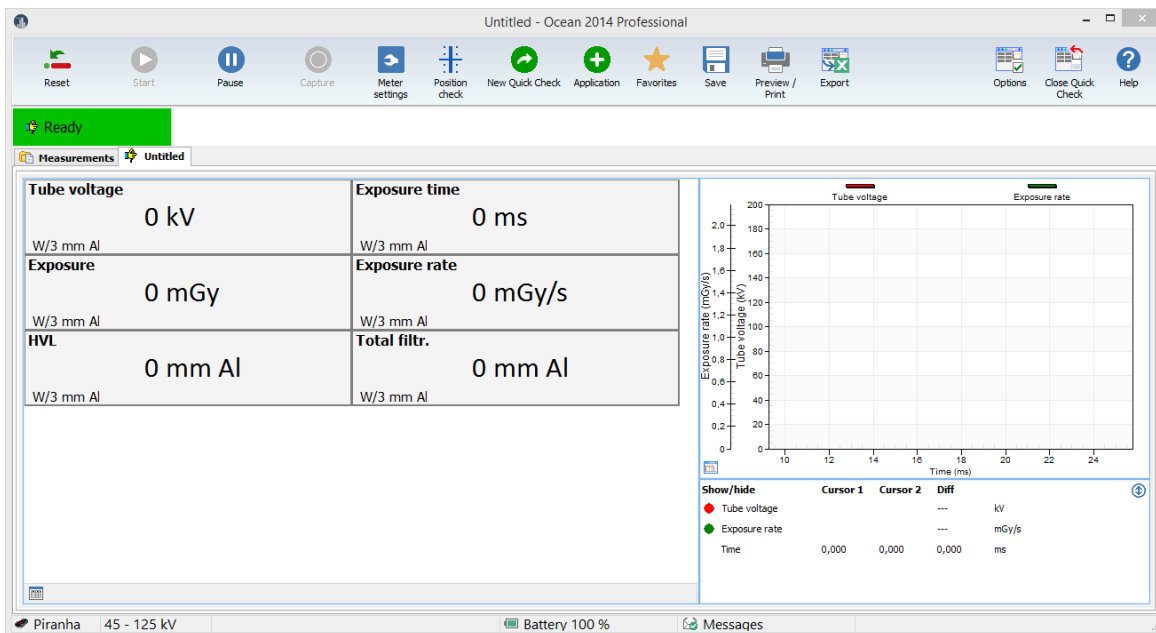


2. Quick Check starts and a menu will be shown. The list is depending on your meter type, it might not appear at all.

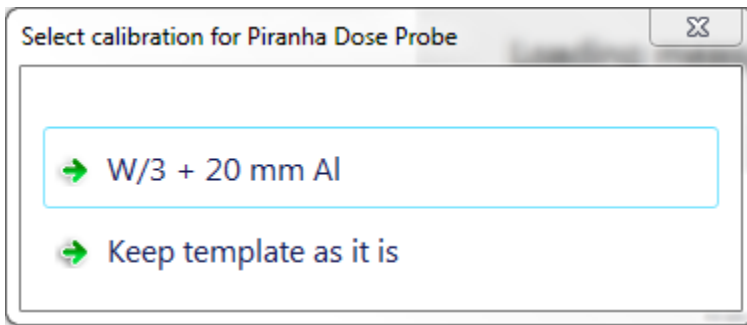


3. Select for example Radiography. For other modalities from here and on; it may be several choices to make before the measurement screen appear. For example, for mammography you must chose calibration and if compression plate is used or not.

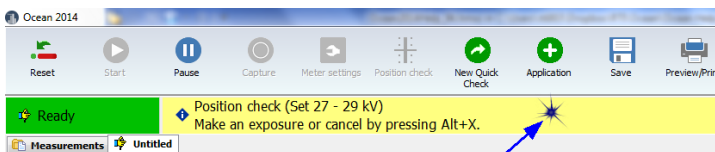
4. The measurement loads and you are ready to start to measure.



If the selected Quick Check is using a calibration that isn't available in your meter/detector, a dialogue is shown. You can here select another calibration instead of the one saved in the document.

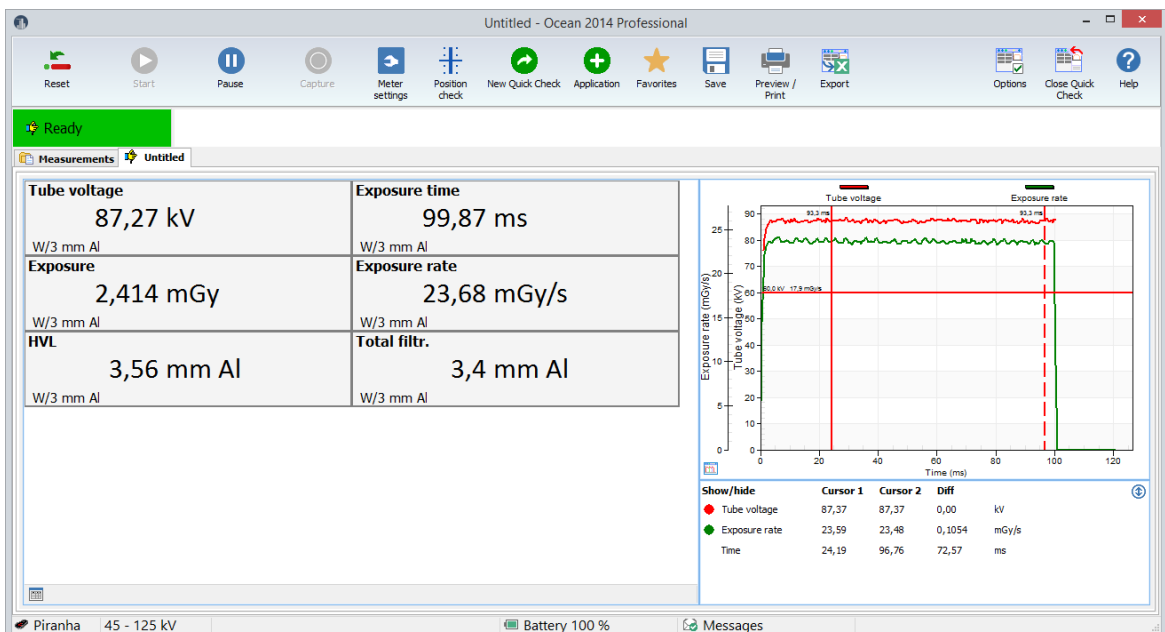


In some situations a message is shown with a yellow background; all such messages can be closed by just clicking or tapping on the yellow background.



When ever the text say that you can cancel something by pressing "Alt+X" you have also an alternative to just click or tap on the yellow field

5. Make some exposures.



6. You can operate Quick Check with mouse and keyboard or with your fingers if you have a tablet with touch screen.

Quick Check is designed to be simple to use on a tablet (touch screen) but you can of course also use a mouse. Below are the most important operations described.

Toggle between displays and logged data: Click on the button in the lower left corner of the display panel or sweep left or right on the displays if you use a tablet.

Enlarge waveform: Click on the button in the lower left corner of the waveform graph or double-click on the waveform. Same to minimize it.

Zoom waveform: Zoom the waveform by holding down the left mouse button and mark the part you want to zoom. When you have zoomed it is remembered for current exposure. If a new row is automatically created for the next exposure, the zoom state is inherited for the new row.

Enlarge a display/single display: Double-click on a display.

Change unit of measure: Right-click on a unit and choose a new unit from the list shown. To right-click one tablet; hold your finger on the unit, remove it when a small square appear.

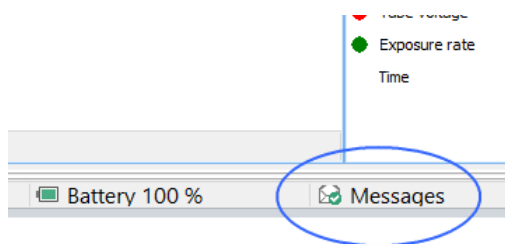
Change kV range: Click on the kV range indication in the lower part of the screen.

You have now seen the basic function of the Quick Check. You can now try to connect an external detector (if you have one) and see that Quick Check will directly recognize the probe and ask you what to do.

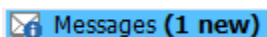
Read also the full description of Quick Check in the topic Run Quick Check on a Tablet to further see how you operate Quick Check. This section is followed by more about how to store, print and how to export your measured data to Excel.

Messages

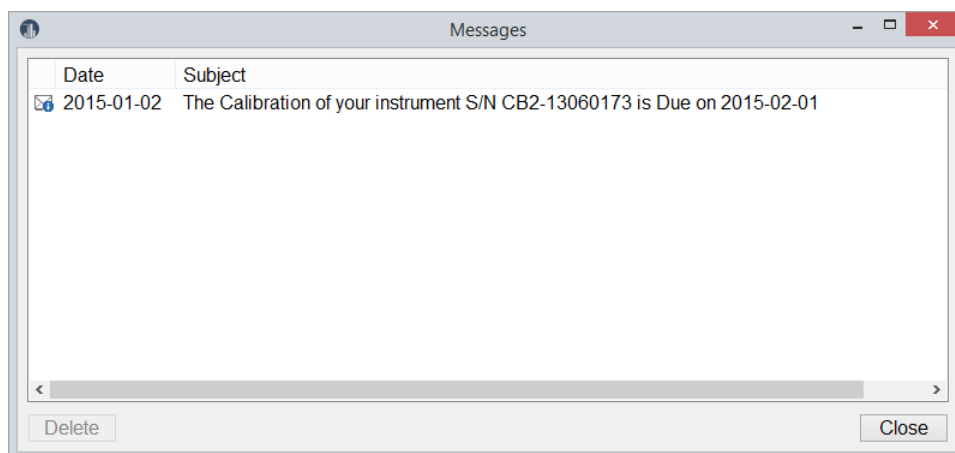
It is indicated on the lower status bar if a message arrives.



When a message arrives the icon changes to:



You can now click on the icon to open the message list:



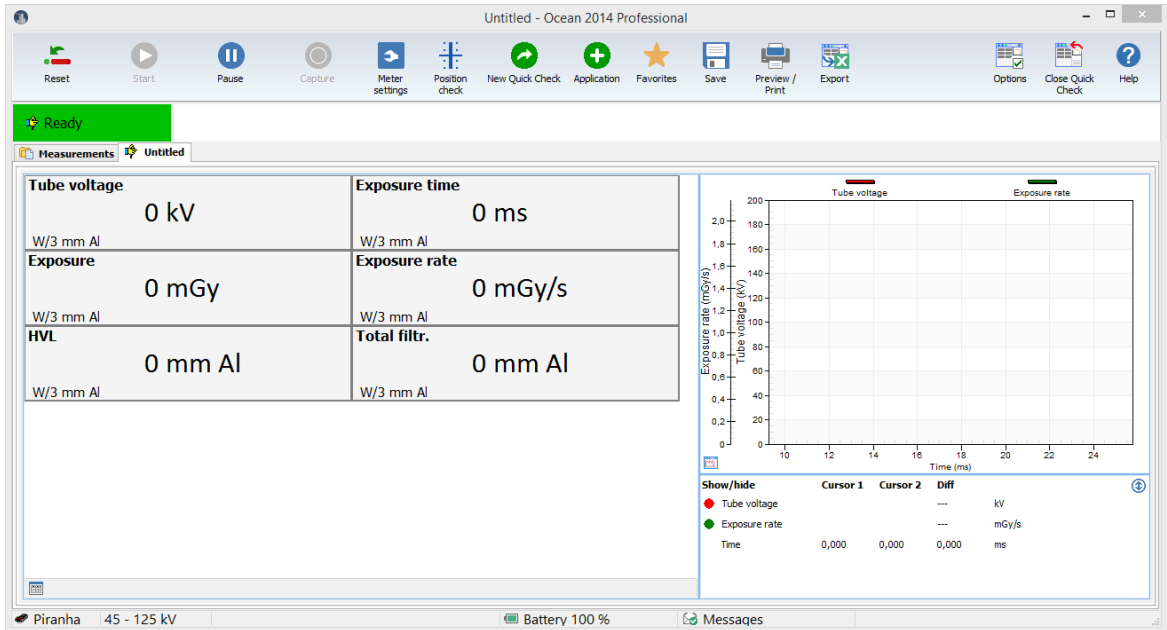
Here are all your messages shown. Double-click in the list to read a message. Unwanted messages can be deleted.

You can turn off calibration reminders in the Program Options, see more in section Program Options

2.3 Run Quick Check on a Tablet

Quick Check is simple to operate and use both on a tablet with touch screen or a normal laptop. This section will describe all the actions you can use to operate Quick Check if you use a tablet, as well as a laptop.

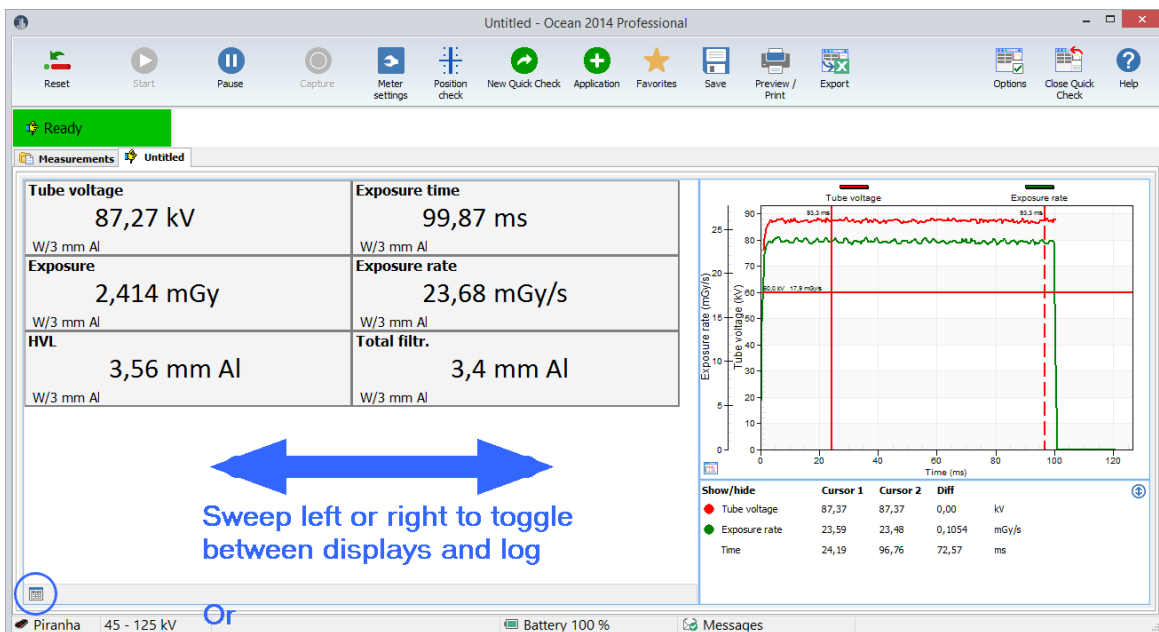
Quick Check main screen for standard measurements looks like this:



You have a ribbon bar at the top with different buttons to activate different function. You can click on these buttons with a mouse click or by tapping on the screen with your finger if you use a tablet.

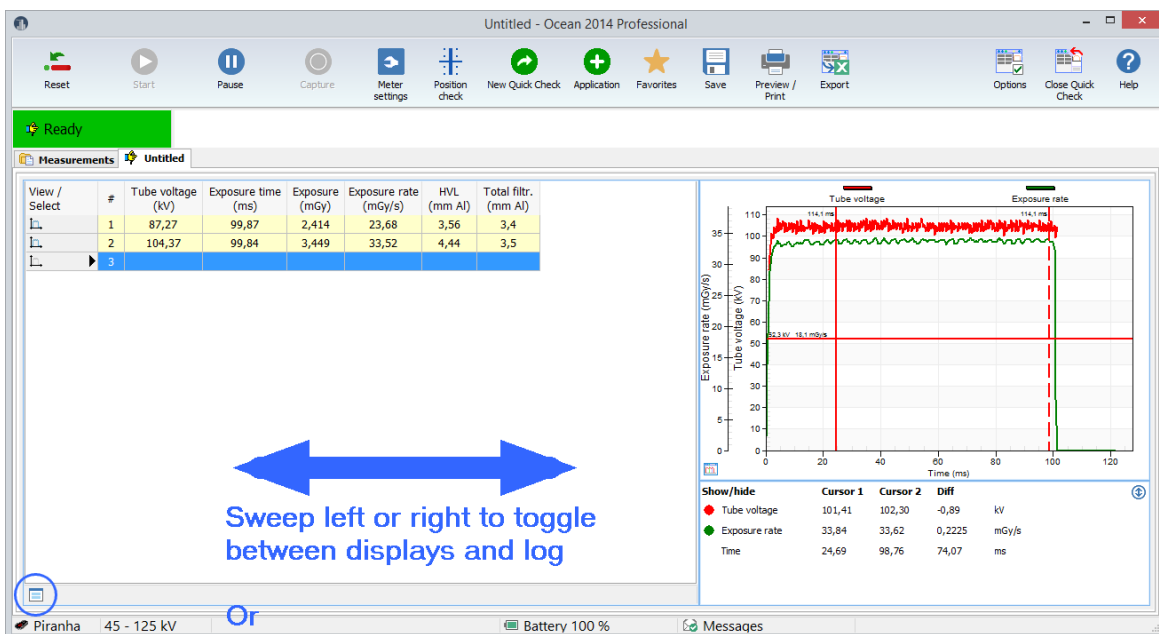
Switch between display and list with exposures

Click on the button in the lower left corner or sweep on the display area of the screen.



Click on the button to toggle between displays and log

The log is shown and you can see all the measurements you have done during this Quick Check session.

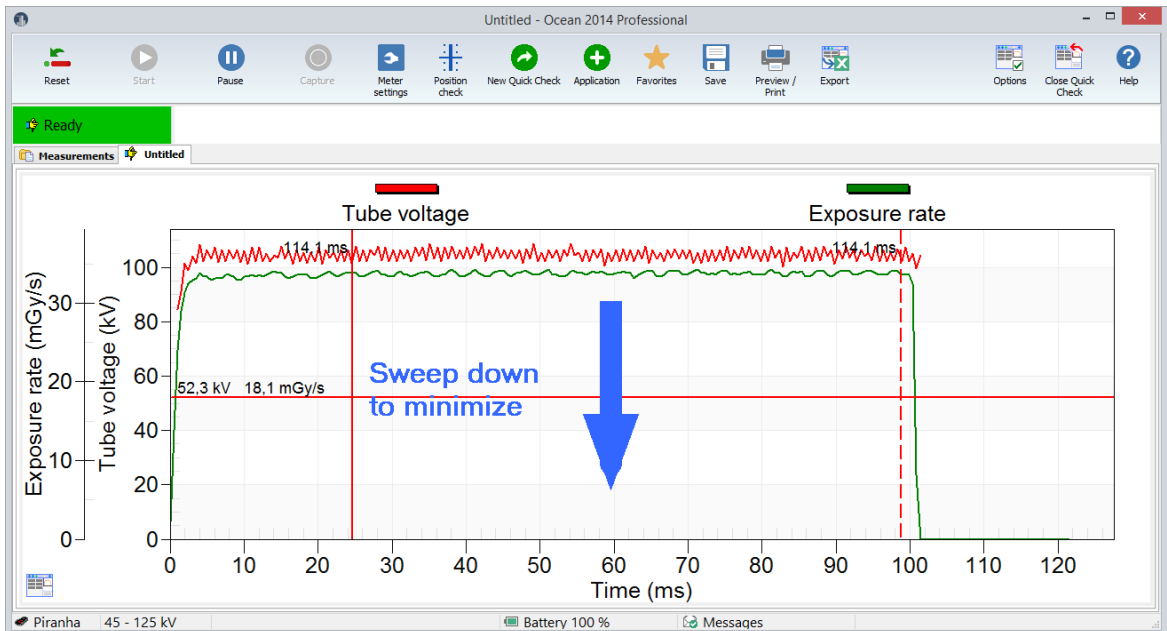
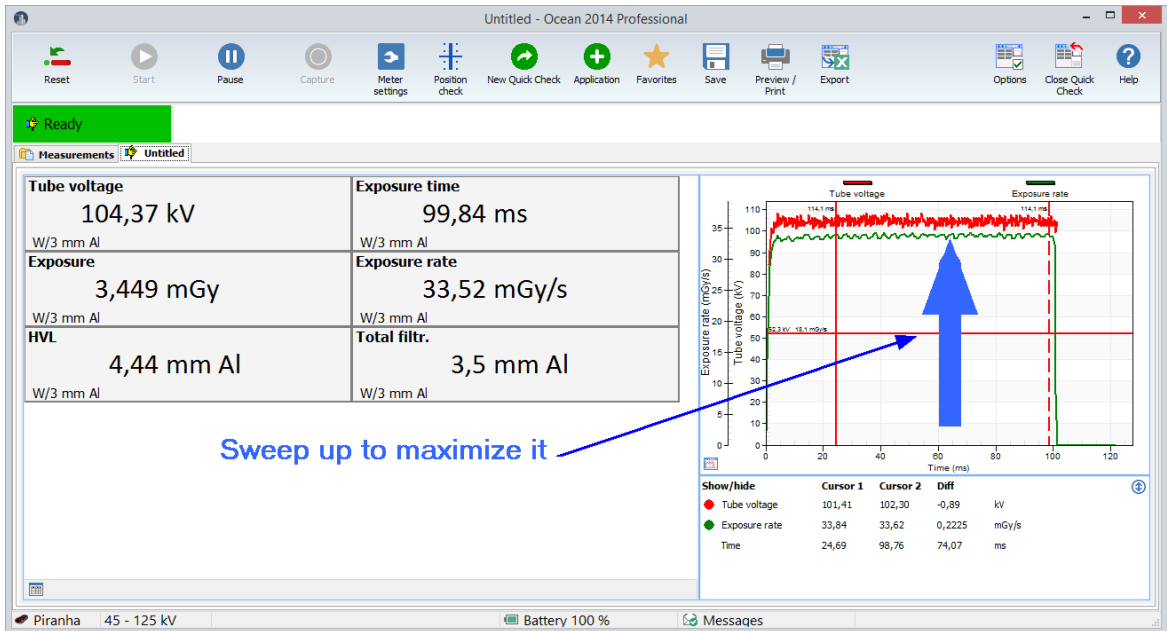


Click on the button to toggle between displays and log

Sweep or click on the button to go back to the displays.

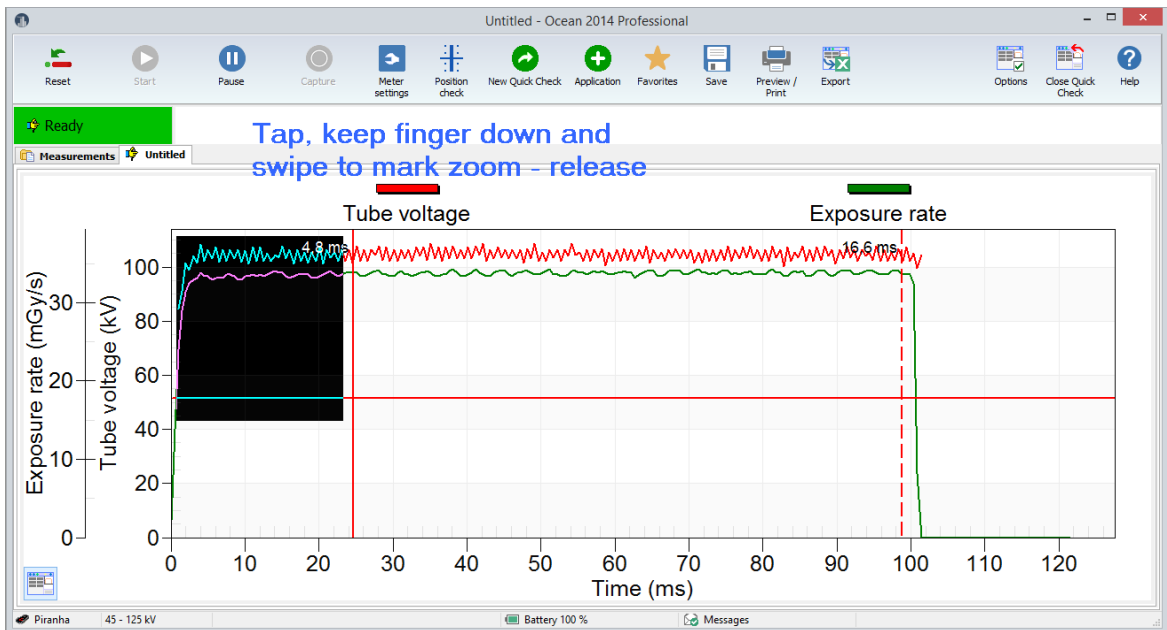
Enlarge the waveform

You can maximize the waveform by double-clicking (tap twice) on it.

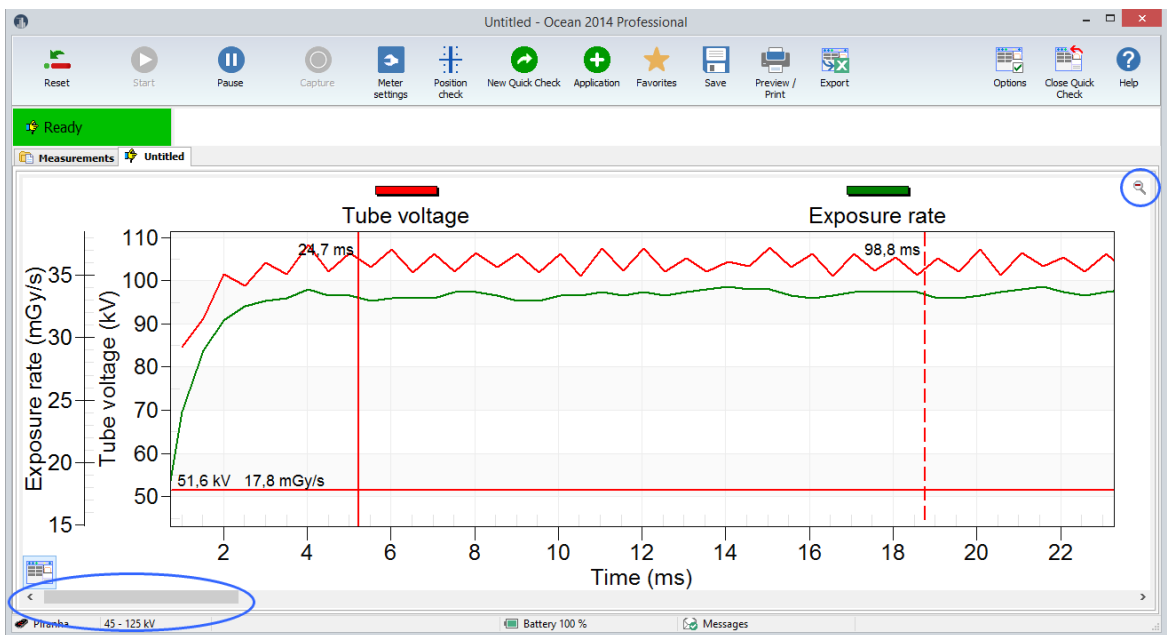


Zoom the waveform

Tap on the waveform and move finger (or right-click, hold down and move mouse pointer) to mark the zoom.



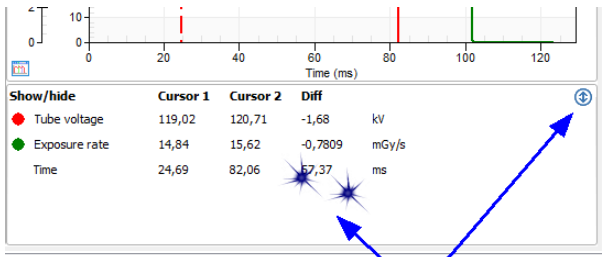
The zoomed waveform is shown when you release and you can now see details.



The current zoom state is now automatically locked and the waveform will be saved in this way. If a new row is automatically created, the new row inherit the zoom state. You can use the scroll bar to "move" backward and forward. Click on the button in the right upper corner to go back to full view.

Waveform data and cursors

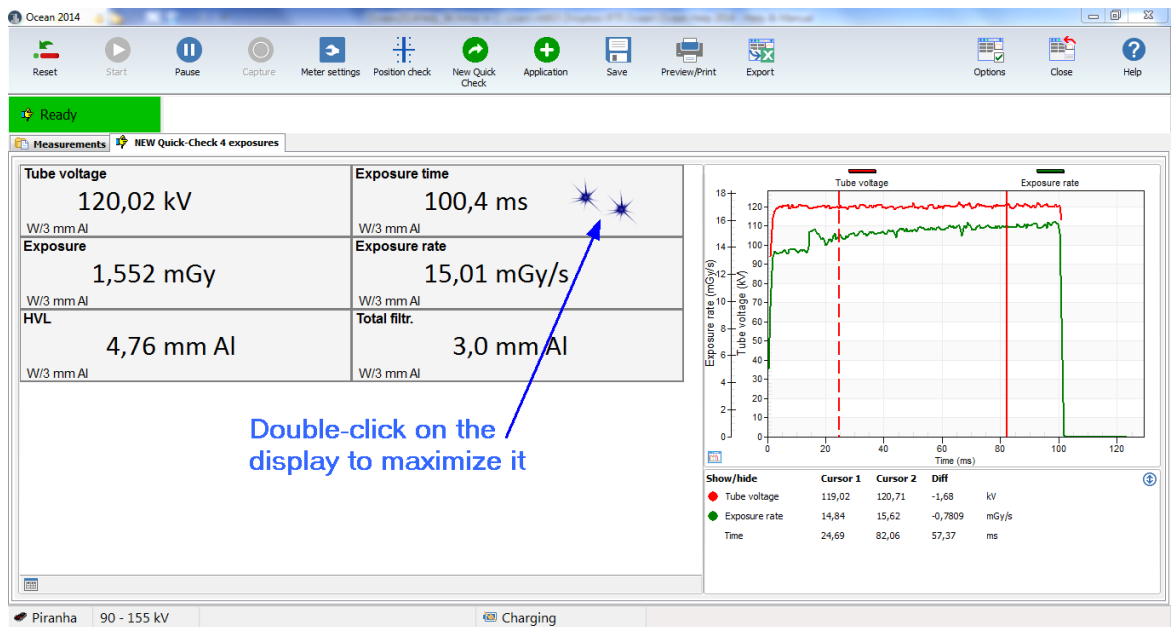
The waveform data is shown under the display (when it is minimized). You can switch between "cursor values" and "value between cursor", use double-click (or tap twice) to change. Values for the two vertical cursors are shown. Cursor data for the horizontal cursor is only shown in the graph.



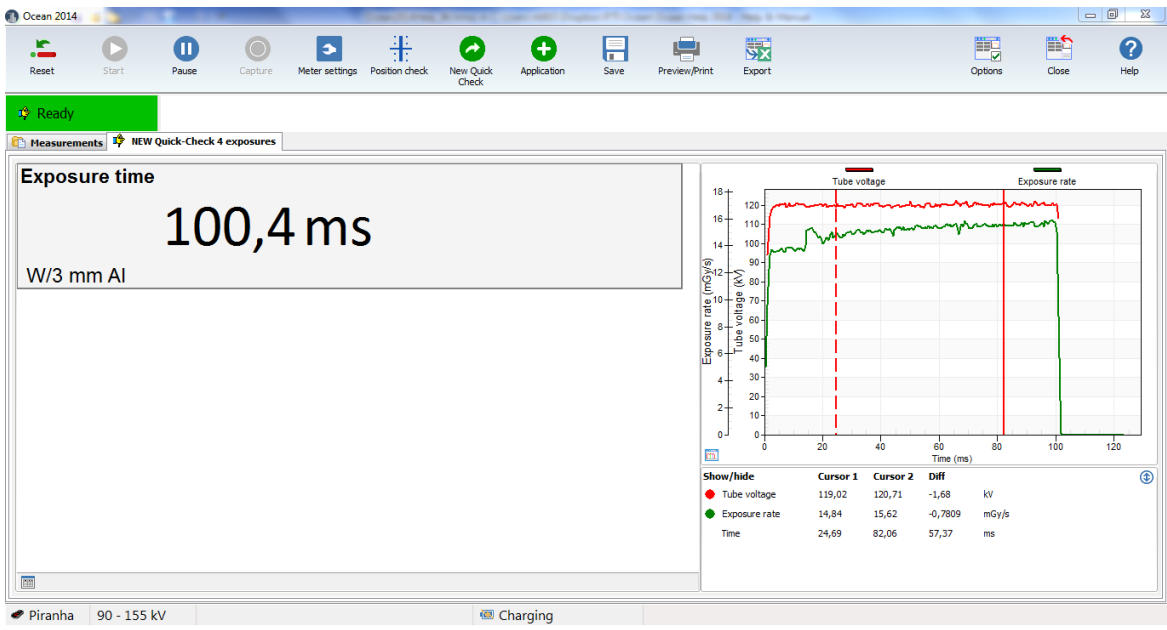
Double-click (or tap twice) or click (or tap) on the small button

Single display

If you just want to see one value, you can maximize just that display. Double-click (tap twice) on the display you want to see.



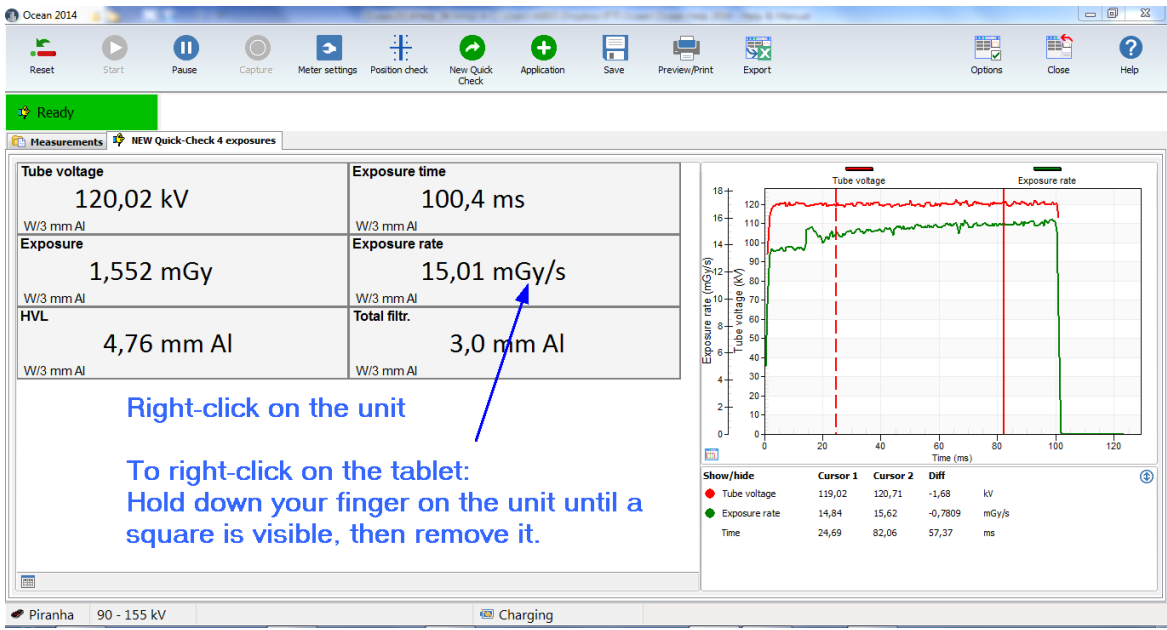
Double-click on the display to maximize it

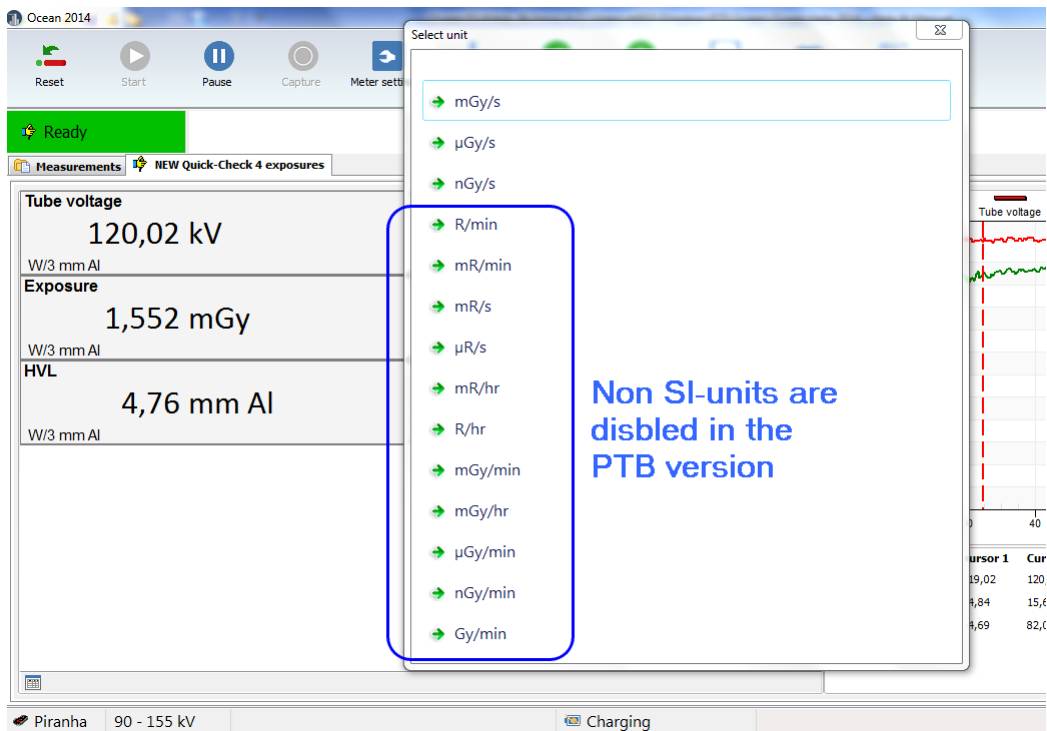


Double-click on the display to go back to smaller displays.

Change unit of measure

You can change unit of measure by right-clicking on the unit:

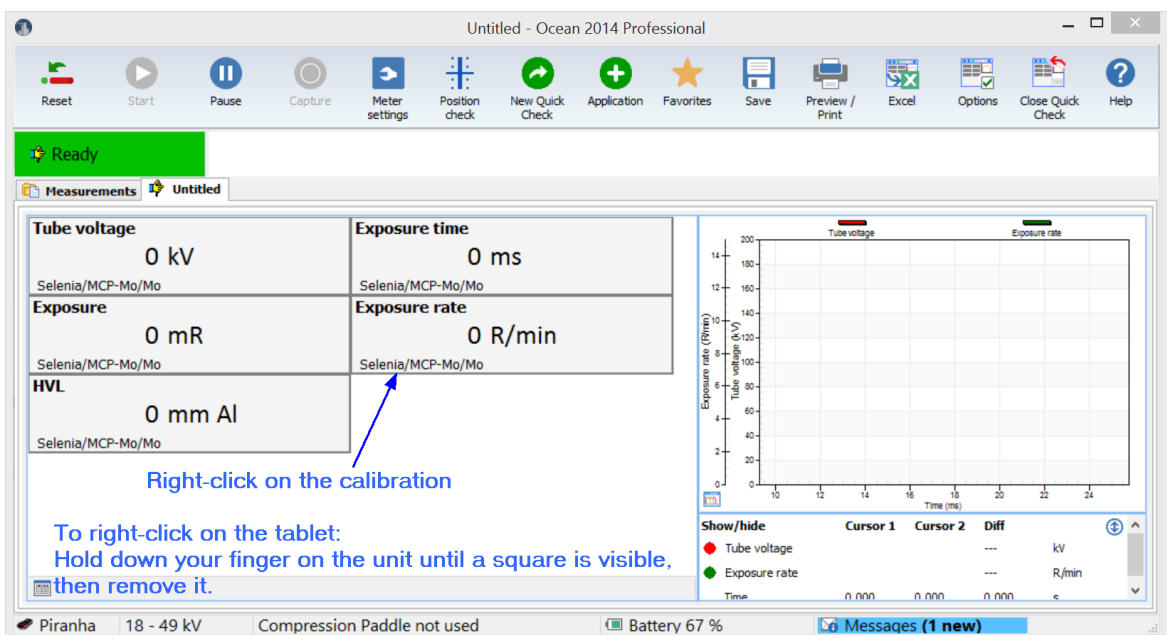




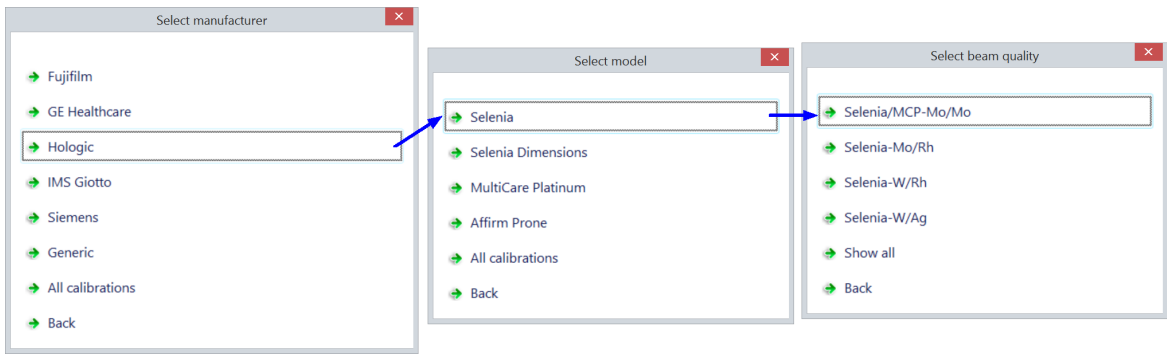
Select a new unit.

Change calibration

It is possible to change calibration by right-clicking in the display. This is not applicable for radiography, fluoroscopy and dental since for these modalities only one calibration (W/Al) is required.



For mammography selection of calibration may look in two different ways; either as a list of manufacturer and models with specific calibrations or as a list of all available calibrations. The list with manufacturer may look like this when you start a new Quick Check:



The list with all calibrations may look like this (the exact look depends on actual calibrations available in the meter):

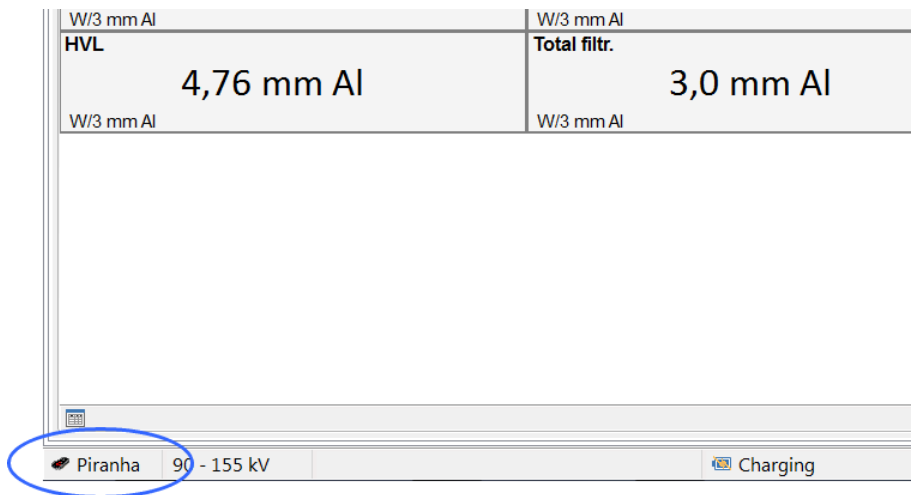


Change number of decimals

You can change number of decimals in the same way by right-clicking on the numeric value in a display.

2.4 Change Meter Settings

Piranha and Cobia have slightly different meter settings but the way you access and change them is the same. Cobia has less settings, since it has auto-range and is a less advanced meter than Piranha. Quick Check will recognize which meter you use and what its capabilities are and adapt to it. You will only see what you can use and you can without any changes switch between Piranha and Cobia.

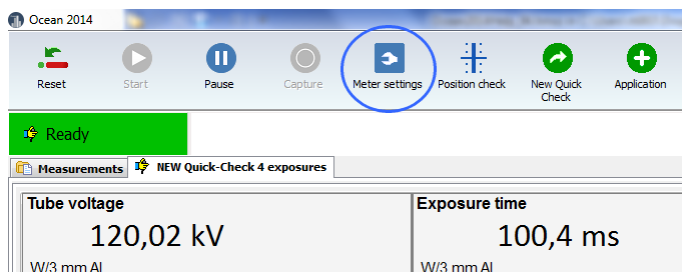


Currently meter is shown in the lower left corner. Quick Check can be directly used with both Piranha and Cobia, just connect to the meter you want to use.

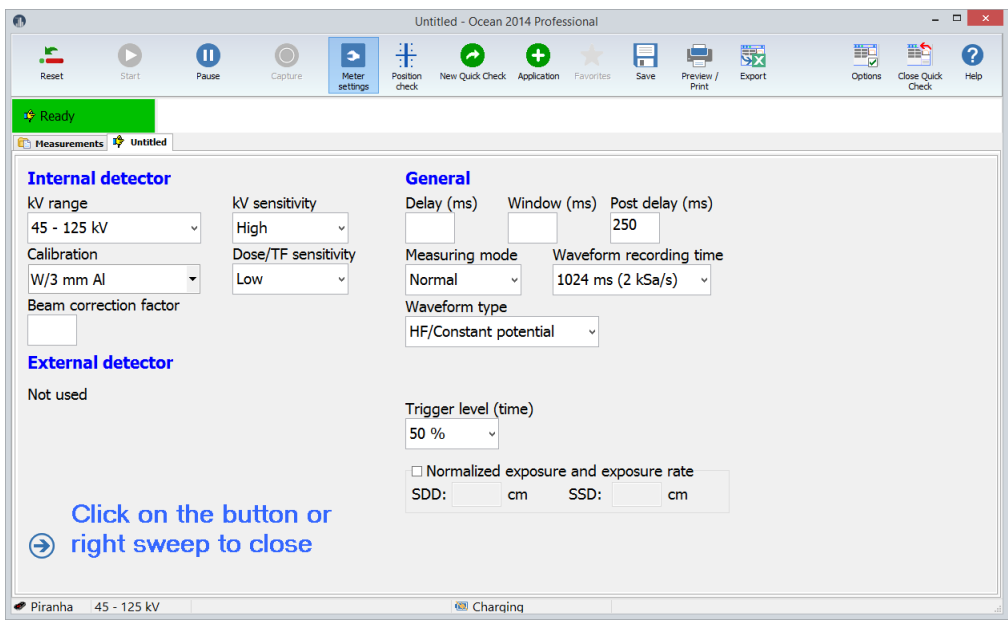
Note: You can use the same Ocean 2014 templates for both Piranha and Cobia, a template built for Piranha can be used with Cobia and vice versa. It is recommended, if you intend to use your templates with both Piranha and Cobia, that you build your templates for Piranha. The reason for this is that Piranha has more settings and you can in this way setup the templates to work in the best way with Piranha. If you do the opposite (you build it for Cobia), Ocean 2014 will when you use it with Piranha select default settings for the Piranha when a set value is missing (due to it doesn't exist for the Cobia). If you build templates without a meter connected and intend to use it with both Piranha and Cobia; go to program options and select default "Meter type" in the Preference section.

2.4.1 Piranha

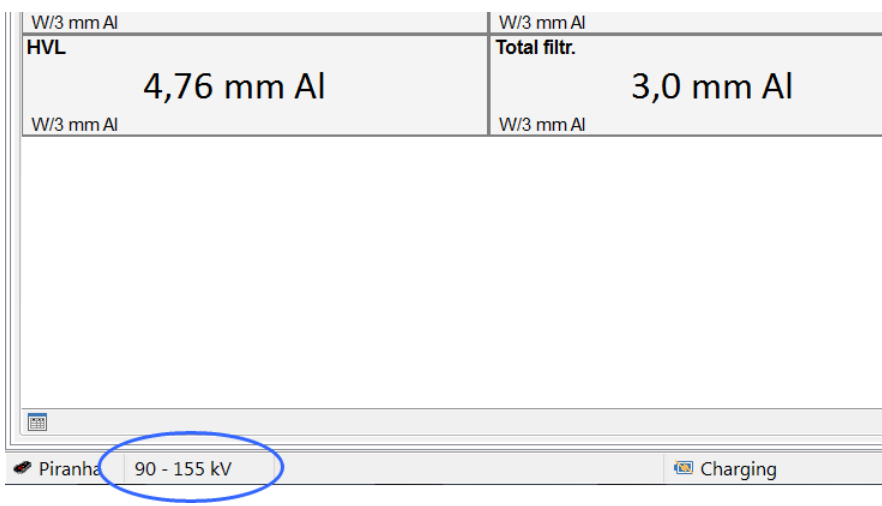
There are several ways to change meter settings. All meter settings are available if you click on the "Meter adjust" button:



When you click on the button the Meter settings are shown (this screen may look different depending on model and selected detectors):

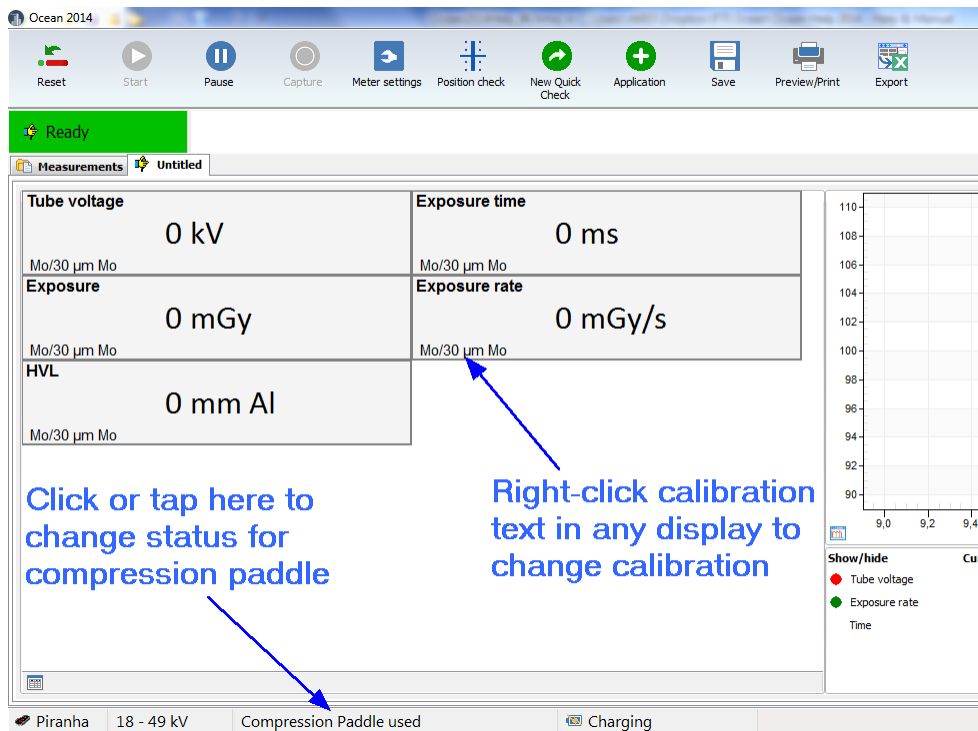


There are also some short cuts to change some of the set values. You can click (or tap) on the kV range indication at the bottom to change kV range:



When you click or tap here, a menu is shown that allows you to quickly select a different kV range.

When you measure on mammography you might want to change calibration and/or status for the compression paddle:



The following meter settings are available in Quick Check:

Meter setting	Description and use
Delay	Add a delay after the detection of trig before measurement of kVp starts. This will delay the kVp measurement, it doesn't affect dose, mAs or time measurements.
Window	If a time is specified, kVp is measured during the window time (starts after the delay)
Post delay	This is the time the meter waits after trig off before it assumes that the exposure is finished. The post delay must be set to a time longer than any dead time in the radiation.
kV range	Current kV range. You need to change this for radiography/fluoroscopy and CT, mammography and dental have only one range.
Calibration	Available calibrations for the internal (kVp and exposure) used. See table below that describes usage of the different calibrations.
kV sensitivity	Sensitivity setting for the kVp detector (internal detector). Hi = High sensitivity - for low dose rate Lo = Low sensitivity - for high dose rate
Dose/TF sensitivity	Sensitivity setting for the dose and total filtration measurement (internal detector). Hi = High sensitivity - for low dose rate Lo = Low sensitivity - for high dose rate
Sensitivity (External)	Sensitivity setting for the external probe Hi = High sensitivity - for low signals Lo = Low sensitivity - for high signals
Beam Correction factor	General (user-defined) correction factor used for all exposure related parameters measured with the internal detector.
Beam Correction factor (External)	General (user-defined) correction factor used for all exposure related parameters measured with the external detector.

Meter setting	Description and use
Calibration (External)	Calibration for the external probe
Measuring mode	You can select between Normal, Timed or Free run Normal =use this measuring mode for exposures and fluoroscopy Timed = meter measures during a time you specify Free run = meter measures continuously without use of any trig levels (for more information see table below)
Measurement time (Timed mode only)	Measuring time when Timed mode is used.
Waveform recording time	Select the waveform recording time. Use the shortest time to see details in the waveform. If you use a longer time, you lose details in the waveform. This setting doesn't influence on the accuracy.
Waveform type	This is the waveform type for the X-ray generator. It is normally HF/DC. Sometimes for older X-ray units and for dental you must use 1-phase. Be careful to select the correct waveform type for maximum accuracy. Note that there is a special selection for AMX-4.
Total filtration (External) (R/F, dental only)	The filtration used the external RTI Dose Probe to do energy compensation.
Added filtration (mammography only)	Added filtration used for the internal detector do do energy compensation and kV compensation.
Added filtration (External) (mammography only)	Added filtration used for the external RTI Dose Probe do do energy compensation.
Compression paddle (mammography only)	Select here if compression paddle is used or not used.
Compression paddle thickness(mm) (mammography only)	Specifies the thickness of the compression paddle in equivalent mm Al. Default is 0.12 mm.
Trigger level (time)	This is the level used for the time measurement. You can use this if you want for example to avoid pre-pulses to be included in the exposure time.
Normalized exposure and exposure rate	The square-law is used to normalize the dose and dose rate to a distance (SSD) different from the measuring distance (SDD) when the box is checked.

How to use the different calibrations:

Code	Calibration	Usage
R1 C1	W/3 mm Al	General radiography, fluoroscopy, dental and CT
C3	Straton (Siem1)	Suitable for Siemens CT with Straton tube
C4	GECT (7°)	Suitable for GE CT tubes with a 7° anode angle as well as for other manufactures CT tubes and replacement tubes with a 7° anode angle
C5	Aquillion 64-	Suitable for Toshiba Aquillion 64-320 CT
C6	GECT (10.5°)	Suitable for GE CT tubes with a 10.5° anode angle
C7	GECT (Cardiographie)	Suitable for GE CT Cardiographie
M1	Mo/30 µm Mo	General mammography
M3	Mo/25 µm Rh	General mammography
M4	Rh/25 µm Rh	General mammography
M6	W/50 µm Rh	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M7	W/0.50 mm Al	General mammography - suitable for Philips MicroDose (Sectra)
M8	Mo/1 mm Al	General mammography
M10	W/50 µm Ag	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M11	W/75 µm Ag	General mammography
M12	W/50 µm Rh (Gio)	Suitable for Giotto Mammography
M15	W/0.70 mm Al	General mammography - suitable for Hologic Selenia Dimensions and Fujifilm Amulet
M16	W/50 µm Ag (Sel)	Suitable for Hologic Selenia
M17	W/50 µm Rh (Sel)	Suitable for Hologic Selenia
M18	W/0.30 mm Cu	General mammography - Suitable for Hologic Selenia Dimensions and Fujifilm Innovality/Cristalle
M19	W/0.70 mm Al (Inno/Crist)	Suitable for Fujifilm Innovality/Cristalle
M20	W/50 µm Rh (Inno/Crist)	Suitable for Fujifilm Innovality/Cristalle
M21	Mo/25 µm Rh (Sel)	Suitable for Hologic Selenia
M22	Rh/30 µm Ag (GE HC)	Suitable for GE Senographe Prestina
M23	Rh/30 µm Ag IQST (GE HC)	Suitable for GE Senographe Prestina
M24	Mo/0.25 mm Cu (GE HC)	Suitable for GE Senographe Prestina
M25	Rh/0.25 mm Cu (GE HC)	Suitable for GE Senographe Prestina
M26	Mo/30 µm Mo (GE HC)	Suitable for GE Senographe Prestina
M27	Affirm Prone W/Ag	Suitable for Hologic Affirm Prone
M28	Affirm Prone W/Al	Suitable for Hologic Affirm Prone

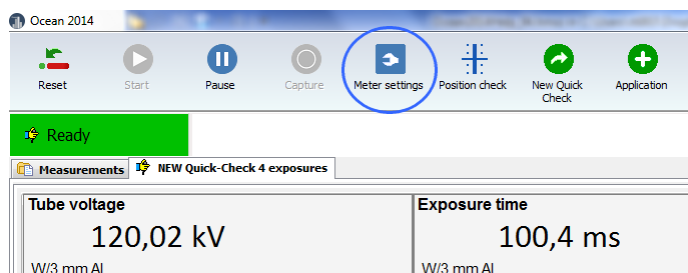
There are three different measuring modes available using the Piranha. They are as follows:

Measuring mode	Description and use
Normal	The Normal mode is used for short and long (fluoro) exposures. In this mode, your meter will automatically sense if there is a signal and when it is above a certain trigger level. If the exposure is long, the displays/grid will be updated with new data every 2 seconds. If the exposure is short, the results are displayed as soon as the trigger is off.
Free run	The free run mode has no trigger level. As soon as the meter is told to begin measuring, it starts to measure even if there is no signal. This measuring mode is useful when the signal you want to measure is very low. Free run is recommended for light measurements, especially when measuring "ambient" light (when no shutter is present).
Timed	The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode and it will further improve the meter's capability to measure very low signals.

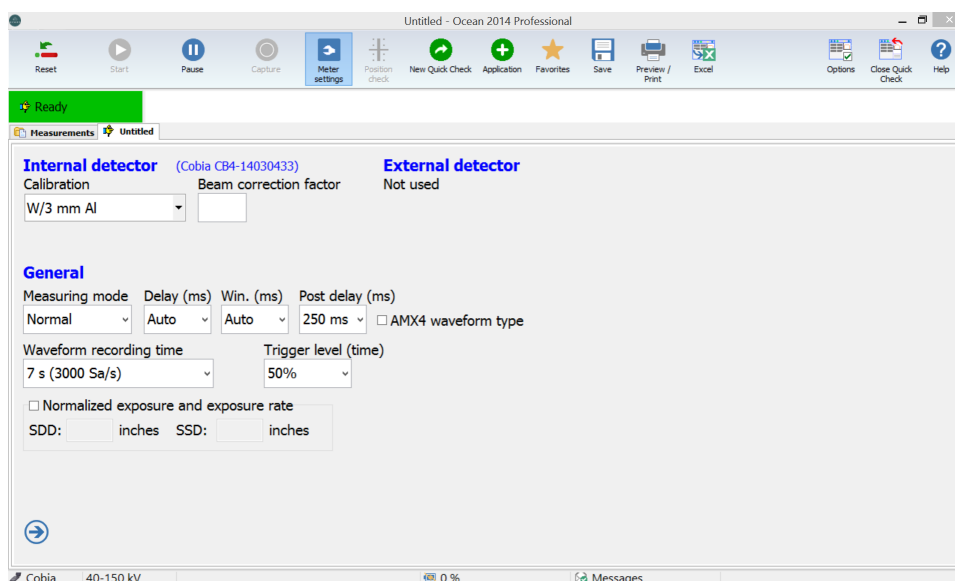
You can read more about meter settings for Piranha in the topics Meter Adjust and Different measuring modes.

2.4.2 Cobia

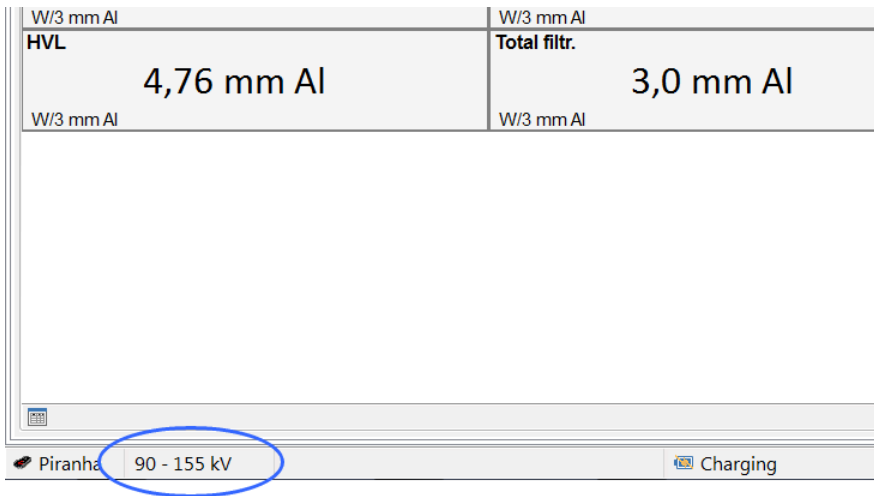
There are several ways to change meter settings. All meter settings are available if you click on the "Meter adjust" button:



When you click on the button the Meter settings are shown:

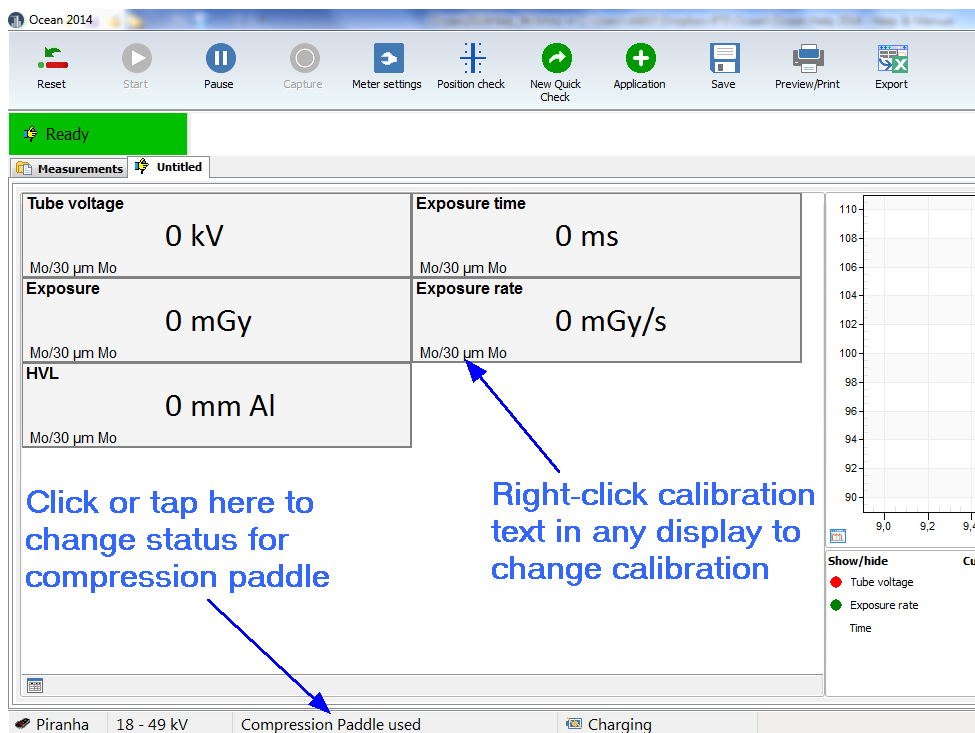


There are also some short cuts to change some of the set values. You can click (or tap) on the kV range indication at the bottom to change kV range:



When you click or tap here, a menu is shown that allows you to quickly select a different kV range.

When you measure on mammography you might want to change calibration and/or status for the compression paddle:



The following meter settings are available in Quick Check:

Meter setting	Description and use
Delay	Add a delay after the detection of trig before measurement of kVp starts. This will delay the kVp measurement, it doesn't affect dose, mAs or time measurements.
Window	If a time is specified, kVp is measured during the window time (starts after the delay)
Post delay	This is the time the meter waits after trig off before it assumes that the exposure is finished. The post delay must be set to a time longer than any dead time in the radiation.
Calibration	Calibration for the internal probe.
Beam Correction factor	General (user-defined) correction factor used for all exposure related parameters measured with the internal detector.
Beam Correction factor (External)	General (user-defined) correction factor used for all exposure related parameters measured with the external detector.
Calibration (External)	Calibration for the external probe.
Measuring mode	You can select between Normal or Timed Normal =use this measuring mode for exposures and fluoroscopy Timed = meter measures during a time you specify (for more information see table below)
Measurement time (Timed mode only)	Measuring time when Timed mode is used.
AMX-4 Waveform type	Check this box when you measure on a GE AMX-4.
Total filtration (External) (R/F, dental only)	The filtration used the external RTI Dose Probe to do energy compensation.
Trigger level (time)	This is the level used for the time measurement. You can use this if you want for example to avoid pre-pulses to be included in the exposure time.
Normalized exposure and exposure rate	The square-law is used to normalize the dose and dose rate to a distance (SSD) different from the measuring distance (SDD) when the box is checked.

How to use the different calibrations (only one calibration is available for Cobia):

Code	Calibration	Usage
R1	W/3 mm Al	General radiography, fluoroscopy and dental

There are two different measuring modes available using the Cobia. They are as follows:

Measuring mode	Description and use
Normal	The Normal mode is used for short and long (fluoro) exposures. In this mode, your meter will automatically sense if there is a signal and when it is above a certain trigger level. If the exposure is long, the displays/grid will be updated with new data every 2 seconds. If the exposure is short, the results are displayed as soon as the trigger is off.
Timed	The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode and it will further improve the meter's capability to measure very low signals.

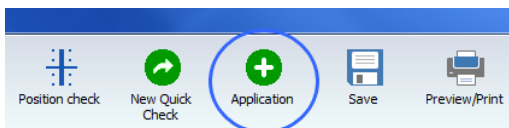
You can read more about meter settings for Cobia in the topics Meter Adjust and Different measuring modes.

2.5 Applications with analysis

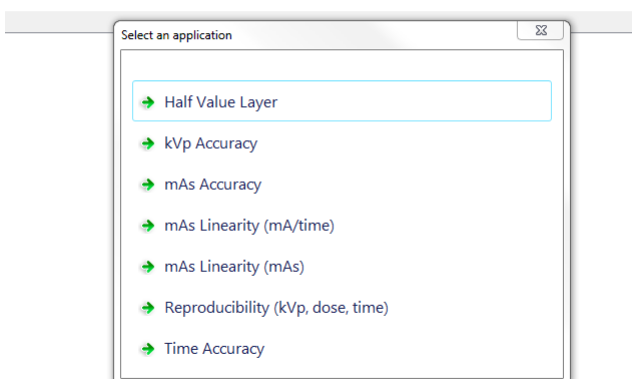
There are also a number of applications available in Quick Check. An application is a predefined measurement where your data are analyzed, it might also include pass/fail criteria. The applications available in Quick Check are not possible to modify in any way. If you have more needs, use Ocean Professional. You can then create tests with user-defined calculations and pass/fail criteria. You will find applications for:

- Accuracy
- Reproducibility
- mA linearity
- HVL
- CTDI

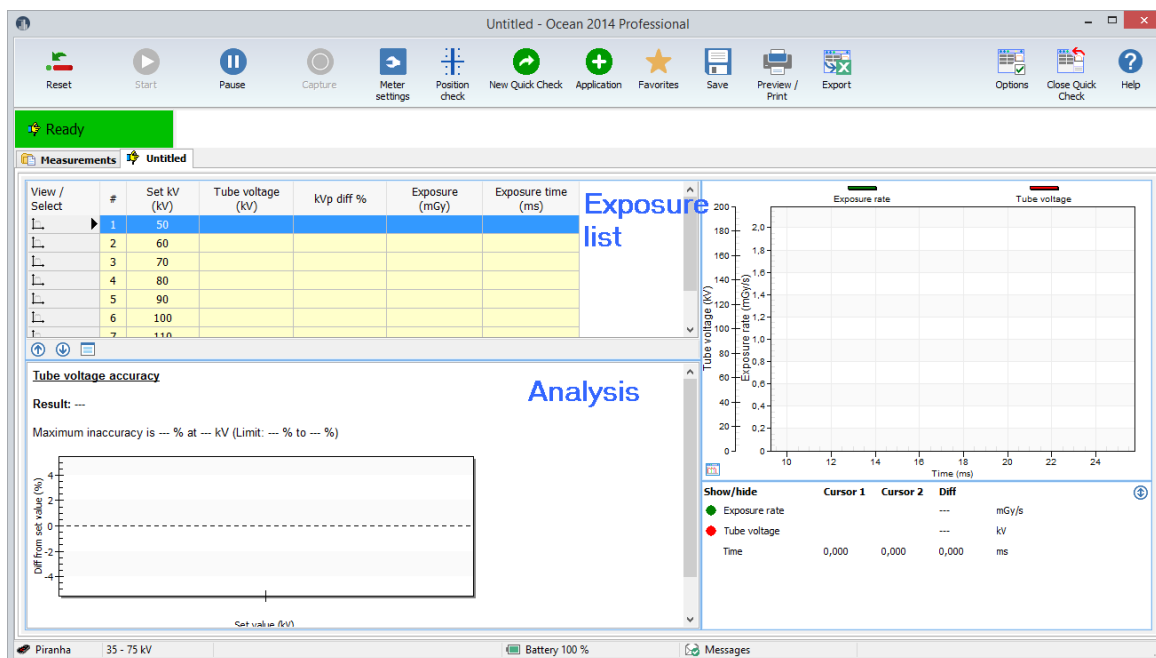
1. You start an application by clicking on the Application button (if the button is not enabled, no applications are available for current mode):



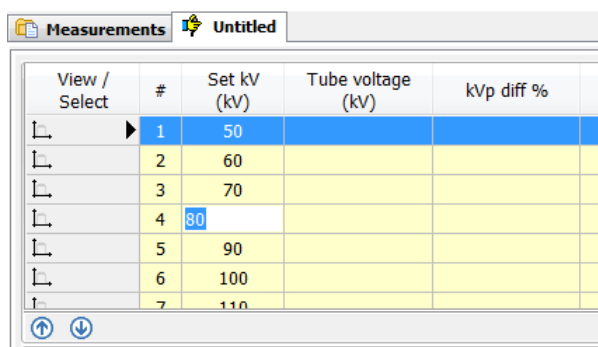
2. A menu showing available applications is shown:



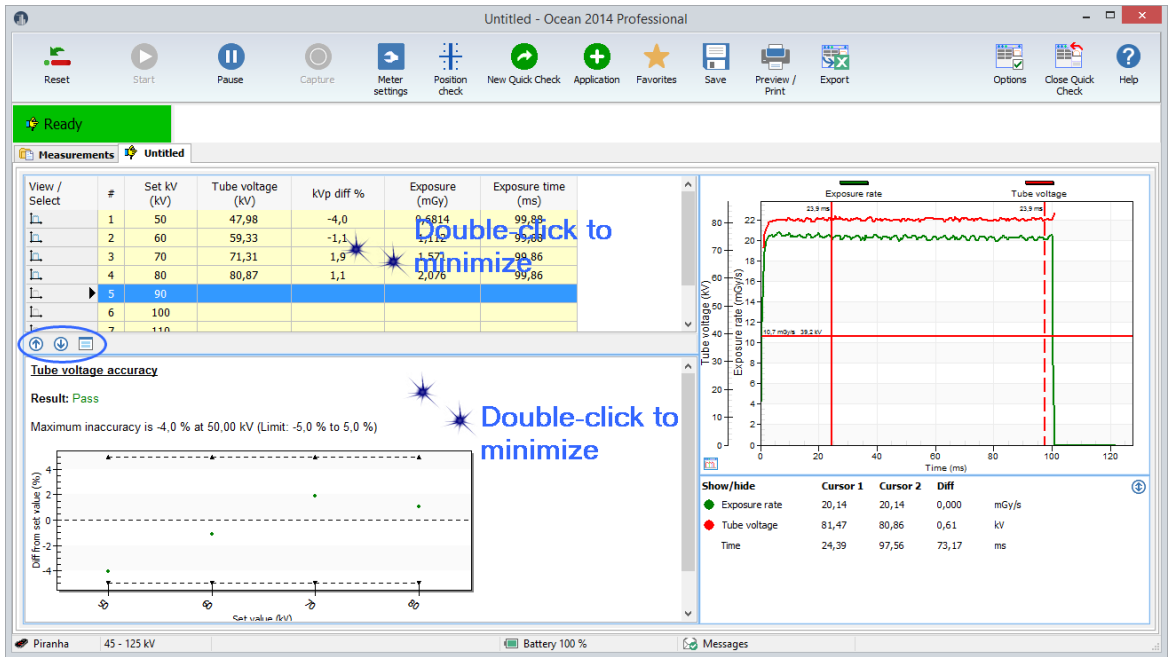
3. Chose an application, for example kVp Accuracy. The screen layout is different for the application compared to a standard Quick Check measurement. In this case there are no displays only grid (exposure list) is shown. There is also an analysis that perform some kind of calculation (in this case kVp accuracy) on your measured data.






4. You can modify set values in the grid (exposure list). Click in a cell to change set values. For example, you may want to change the kVp set value for exposure #4 from 80 to 81 kV.

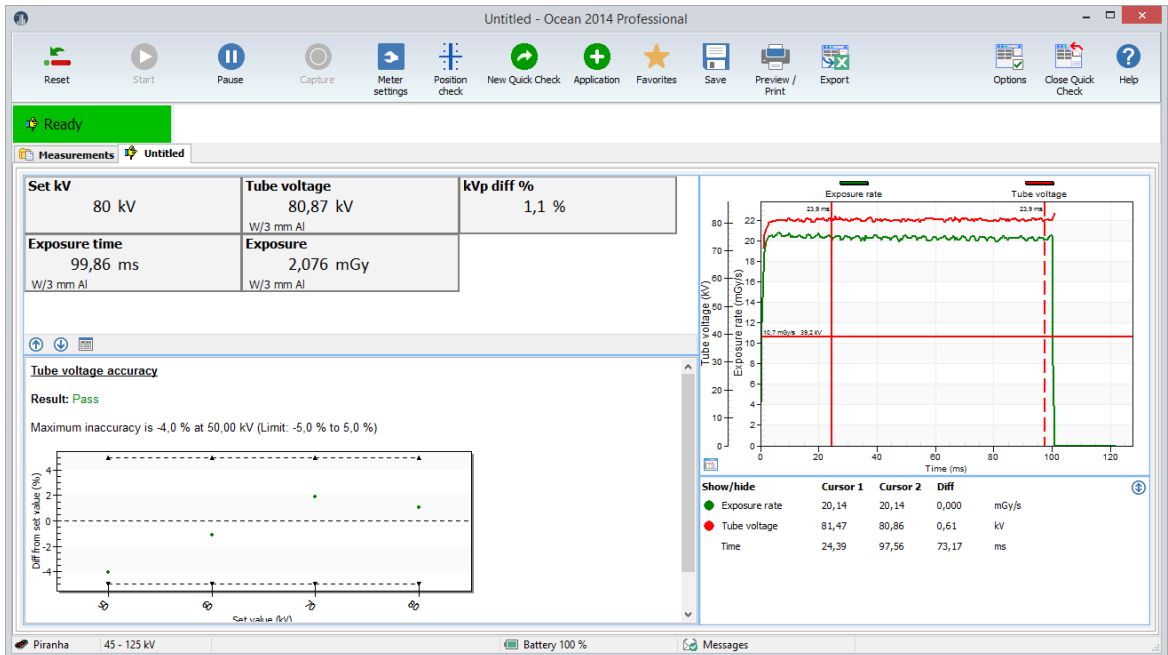


5. Now make the exposures.

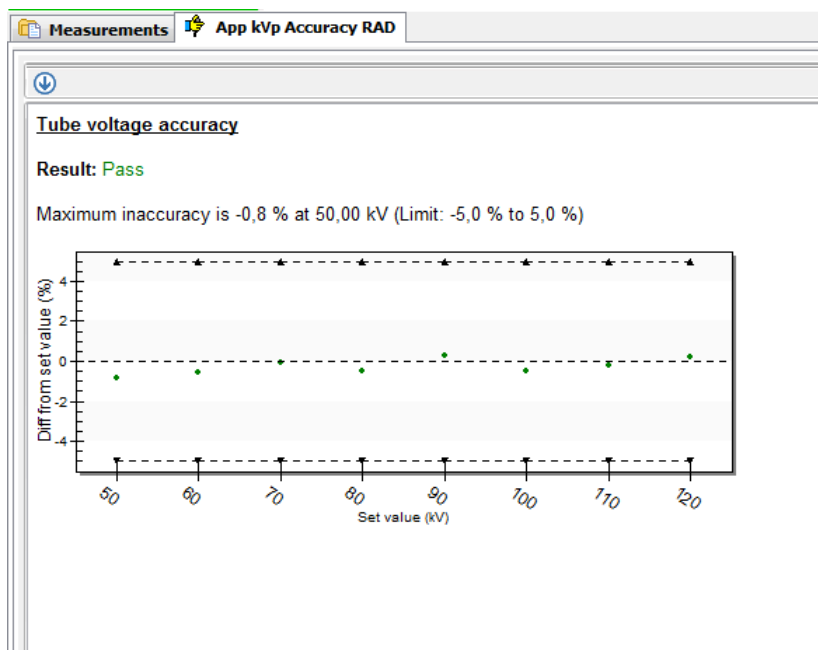


You can maximize/minimize the exposure list section and the analysis section with double-click or by clicking on the buttons  .

If there is both displays, grid and analysis present the button  is shown. Click here to toggle between displays and the grid.



The analysis part will now show the result.



6. Click on Preview/Print to print your report.

This analysis is fixed and you can not change its structure. If you have more needs and want to customize your analysis, change pass/fail criteria, use your own calculations and so on; then use Ocean 2014 Professional. The topic Analysis (Definitions) describes which analysis that are available in Ocean 2014.

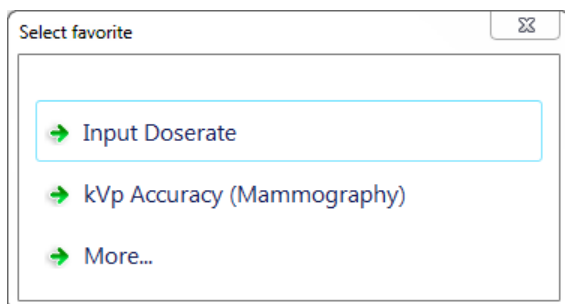
You can open any Quick Check measurement as a Real-time display and in that way modify and extend its capability. See topic Open an old measurement.

2.6 Quick Check Favorites

The Favorites function in Quick Check is an optional way for you to customize the use of Quick Check. It allows you to use and quickly access templates that performs specific measurements. You use Ocean 2014's template design functions to create your own templates and you store them in a specific folder to make them available in Quick Check.

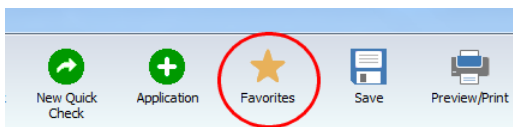
By default, no Favorites are available in Quick Check. You can create your own Favorites to be used in Quick Check by using Ocean 2014's template design capability. The section Create Quick Check Favorites describes how this is done.

If you have stored one or more favorites in the Favorite folder (in the Library) the Favorite list is shown when you start Quick Check. The list shows the Favorites you have stored in the folder.



In this case are two favorites stored in the Favorites folder. If you select one, it loads and you can start to measure directly. If you click on "More...", the normal Quick Check setup procedure starts.

You can go to the Favorite list whenever you are using the Quick Check by clicking on the Favorites button.



The Favorite list will be shown and you can quickly select a another favorite.

2.6.1 Detector selection

When you load a Favorite the required detectors are checked when it loads. If a detector specified, or a compatible one, isn't available in the template, the Detector Selection window is shown. It will shown available detectors. It will be directly shown if you disconnect/connect a detector.



Click to minimize

Select the appropriate detector and click OK.

You have two choices if you for some reason isn't able to select a detector:

Do not use: In this case is the corresponding measured parameter(s) skipped.

Keyboard: In this case is a dialogue shown after each exposure that allows you to enter a value manually.

2.6.2 Create Quick Check Favorites

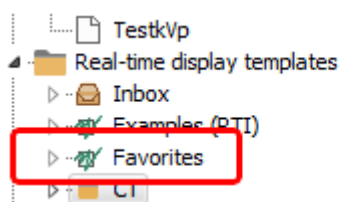
Perform the following steps to use Favorites in Quick Check:

1. Quick Check uses Real-time Display templates. You need to use Ocean 2014's template design function to create templates for you favorite measurements. This is described in the Design section.

2. Your templates can be ordinary "displays" or have analysis/calculations (you must have Professional to create this type) like the Quick Check Applications. The following design rules apply for Quick Check:

- To create a "display" favorite: design the Real-time display template with displays and no analysis.
- To create a favorite that is shown as an "Application": design the Real-time display template without displays and include an analysis.
- The template title you specify is shown in the Favorites list.

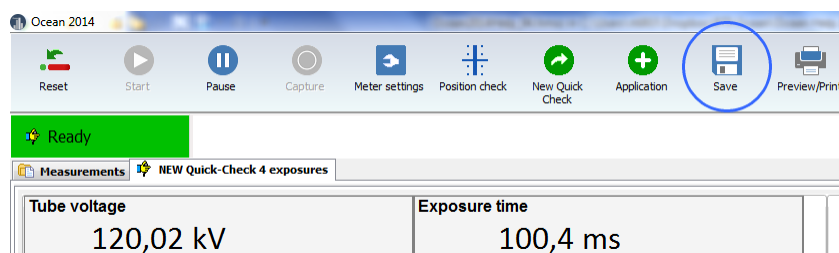
3. Copy or store the favorite templates to the The Favorites folder. It is located in the Library.



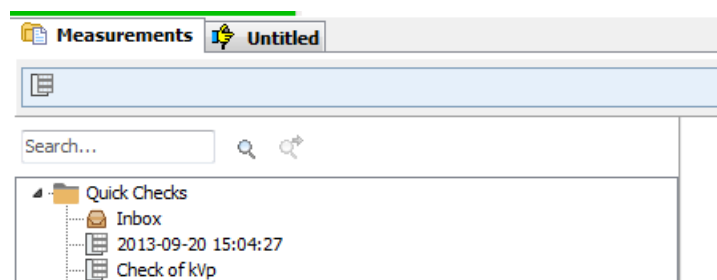
You can, if you have many Favorites of different types, create sub folders. Name the sub folders and store your favorites according to the way you have chosen to categorize them. The sub folders name will be shown in the Favorite list.

2.7 Save a measurement

Quick Check will not ask you if you want to save your data, you must yourself decide if you want to save. Click on the Save button in case you want to save your measured data.



When you click on the Save button you are asked to enter a name for your data. Your data will be saved in the "Quick Check" folder in the Measurement database.



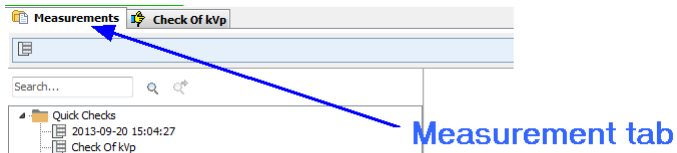
Once you have saved your data the first time, Quick Check will ask you before it discards any data.

2.8 Open an old measurement

You can re-open a Quick Check measurement that you have saved. You can open it if you want to continue to measure or if you want to print it. From Ocean 2014 you can also open a Quick Check measurement in off-line mode (no meter connected) to review or print the measurement.

To open a Quick Check measurement:

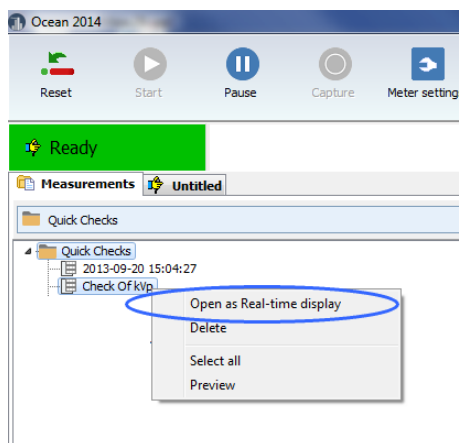
1. Click on Measurement tab.



2. Go to the "Quick Checks" folder, double-click on the measurement you want to re-open.

You can also open a Quick Check measurement as an Real-time display in Ocean 2014 if you want to modify it. To open as a real-time display:

1. Open the measurement folder.
2. Right-click on the Quick Check measurement you want to open as a real-time display.

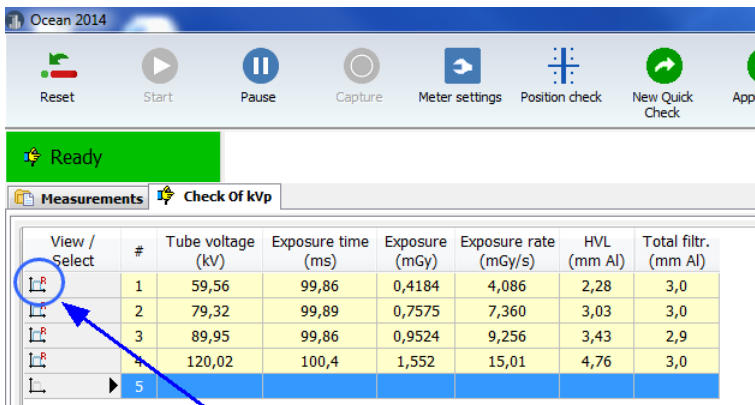


3. The measurement will open in Ocean 2014 as a real-time display. You can now modify the measurement, what you can do depends on the license level you have. If you open a Quick Check measurement that has analysis with only Connect license, the analysis will not be visible.

2.9 Print

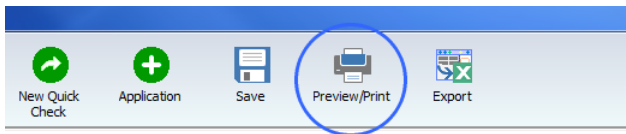
You can print your measured data (or create a PDF file). By default no waveform are included in the report. To include waveforms do the following:

1. Go to the list view.



Click on the waveform.
When the "R" is visible;
waveform is included
in the report.

2. Now click on the Preview/Print button.



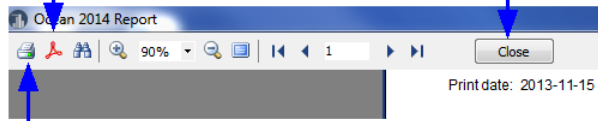
3. A preview is now shown.



4. You can now just preview the report and return, save it as a PDF file or print it.

Make a
PDF file

Close



Print

Report template

You may want to change the report layout, for example, use your own logo. You can make your own report layout and assign it as default for Quick Check. You can do this in Program Options and you can find instructions in section Create a report template.

2.10 Transfer data to Excel

You can transfer data from Quick Check to Excel in three different ways:

- Connect to an Excel workbook. Measured data, are for each exposure, transferred to Excel starting in active cell. Used template determine data format.
- Connect to an Excel workbook. Measured data, are for each exposure, transferred to Excel starting in active cell. Use a fixed data format (compatible with Excel templates used with Xi and X2 View).
- Send current measured data to Excel. The data dump starts in active Excel cell.

Connect (Standard mode)

When this mode is used, data are transferred to Excel in the same order as the columns are appearing in the template. Only numerical values are sent to Excel, no units or waveforms.

	A	B	C	D	E	F
1						
2						
3						
4						
5		2,380663	12,28536	189,7393		
6		2,004946	12,28946	160,0896		
7		2,397109	12,33938	191,7014		

Data are sent according to how columns appear in the template.

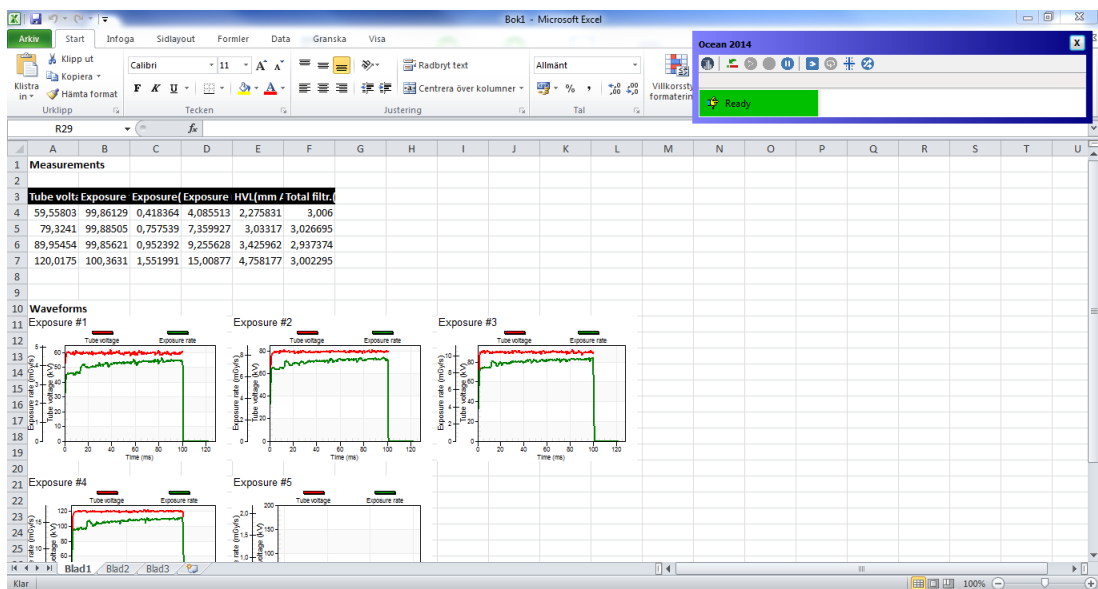
Connect (Fixed format mode)

This is same as "Standard mode" but data is sent in a different format. The format is compatible with the format used with Xi and X2 View from RaySafe. Same Excel templates can be used with none or minimal modifications. This mode is only available in Quick Check. It is activated by checking "Fixed format (Excel connect)" on the Option page (in Quick Check). The format is described in the section Connect (Fixed format).

	A	B	C	D	E	F	G
1							
2							
3							
4							
5		8,532853	mGy	66,92717	mGy/s	0,114927	s
6		11,99338	mGy	75,38516	mGy/s	0,146527	s
7		12,57796	mGy	75,69736	mGy/s	0,154096	s

Send

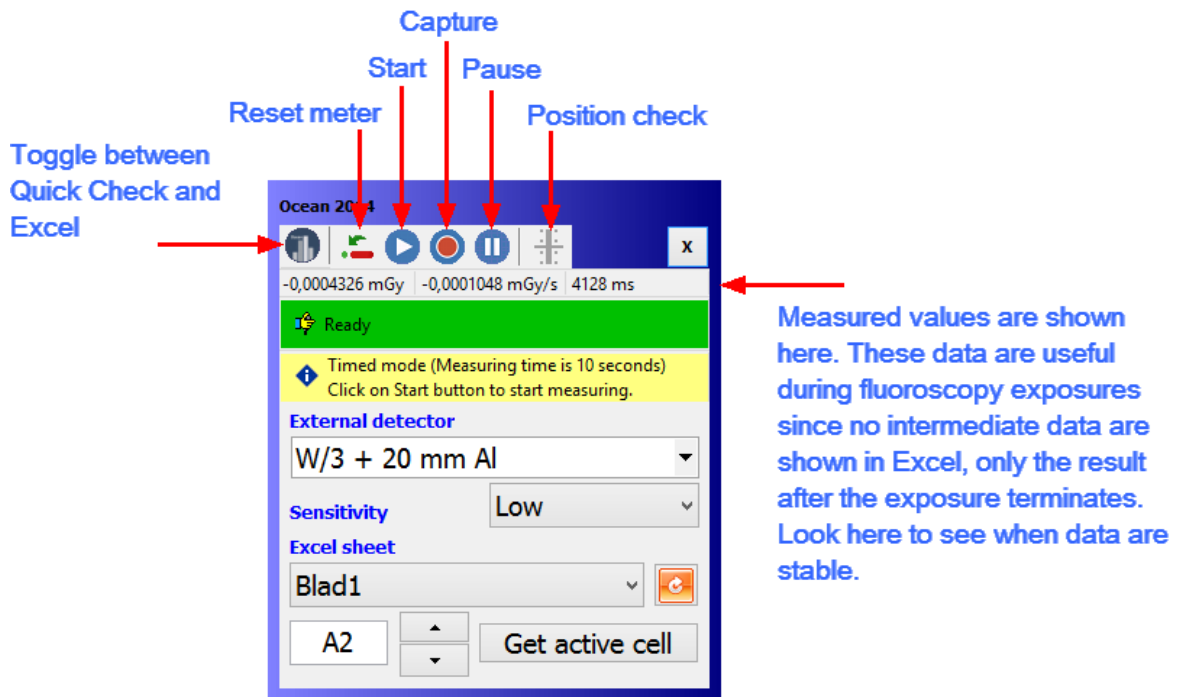
In this mode the entire content in the template is dumped to Excel.



Read the coming sections for detailed information about the different Excel modes.

2.10.1 Excel control window

When data is transferred to Excel a small Excel control window is shown to simplify the interaction between Quick Check and Excel. The exact content in the window is depending on mode (send or connect) and/or used detectors.



The most common meter settings are available (depending on used detector(s)).

To close the Excel connection, click "x" in the upper right corner of the Excel control window. Both the window and the used Excel workbook will be closed. If necessary, you are asked to save.

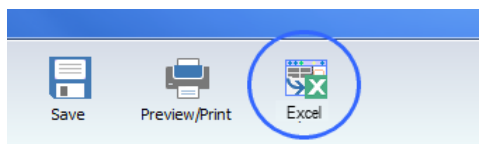
2.10.2 Connect (Fixed format)

Data is sent to Excel using a fixed format that is compatible with the format used in Excel workbooks used with Xi and X2 view. The format is described in detail below.

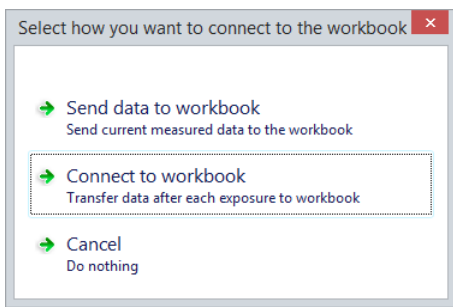
To connect to the workbook:

First go to Options in Quick Check and make sure that the checkbox "Fixed format (Excel connect)" is checked.

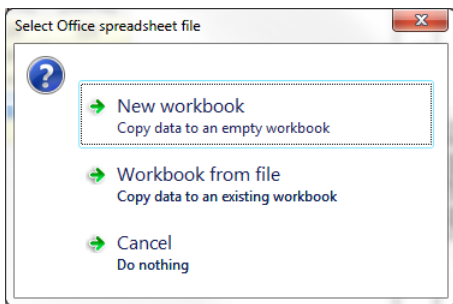
1. Activate a Quick Check display.
2. Click on the Excel button.



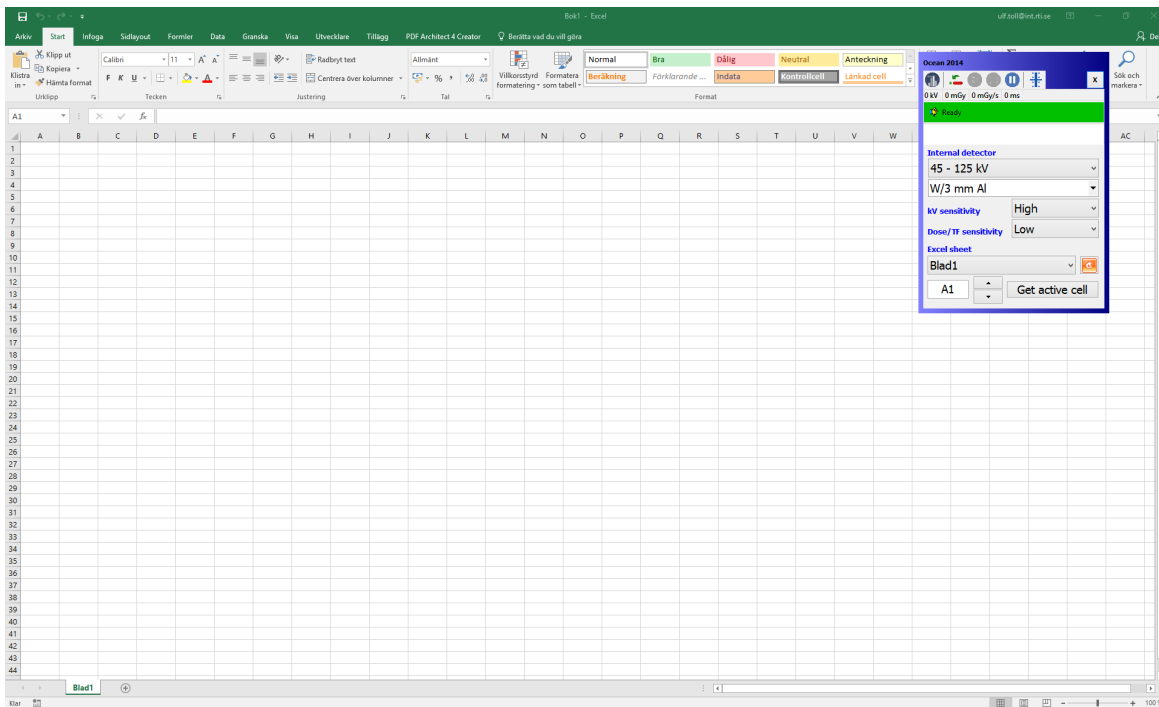
3. A dialogue is shown, select "Connect to workbook".



4. Next you have to choose a workbook. You can choose a new workbook or one you already have on your computer. In this case select "New workbook".



Excel starts and an empty workbook is loaded.



5. Activate the cell, for example B5, where you want measured data to start. You can do that by entering B5 into the cell field in the Excel control box or select cell B5 in the Excel spreadsheet and click on "Get active cell".

6. Make a couple of exposures.

	A	B	C	D	E	F	G
1							
2							
3							
4							
5		8,532853 mGy		66,92717 mGy/s		0,114927 s	
6		11,99338 mGy		75,38516 mGy/s		0,146527 s	
7		12,57796 mGy		75,69736 mGy/s		0,154096 s	

7. Measured data are transferred to Excel for each exposure. You can use the small minimize Excel window to control your measurement procedure while having Excel on the screen. You can change basic meter settings and the left most button is used to switch between Quick Check and Excel. Data are arriving in a fixed format (compatible with the format used by Xi and X2 View). The fixed format is defined below.

Definition of the fixed format

There are four different detector combinations that each has its own fixed format:

- Multi-detector (internal detector) with an optional external detector
- Only an external radiation detector (Dose Probe, CTDP, T20, Ion chamber of any type)
- Only the Light detector
- Only a mAs probe

Multi-detector (internal detector)

Tube voltage
unit
Dose
unit
Dose rate
unit
Exp. time
unit
Pulses
unit
Empty
Empty
Pulse rate
unit
Dose/pulse
unit
HVL
unit
Tube mAs
unit
Tube mA
unit
TF
unit
Dose (ext.)

unit
Dose rate (ext.)
unit

Units are defined by Default units in Program options in Ocean 2014 (not available in Quick Check).

Only external radiation detector

Dose
unit
Dose rate
unit
Exp. time
unit
Pulses
unit
Empty
Empty
Pulse rate
unit
Dose/pulse
unit

Units are defined by Default units in Program options in Ocean 2014 (not available in Quick Check).

Only light detector

Lumunance or Illuminance
unit

Units are defined by Default units in Program options in Ocean 2014 (not available in Quick Check).

Only mAs probe

Tube mAs
unit
Tube mA
unit
Exp. time
unit

Units are defined by Default units in Program options in Ocean 2014 (not available in Quick Check).

2.10.3 Connect (Standard mode)

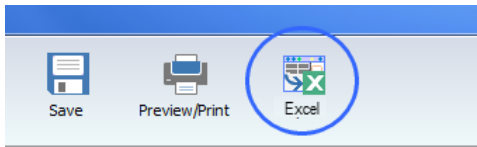
Data is sent to Excel using a fixed format that is compatible with the format used in Excel workbooks used with Xi and X2 view. The format is described in detail below.

To connect to the workbook:

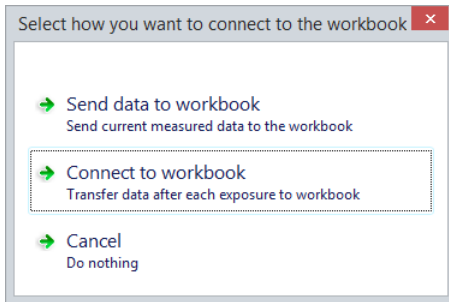
First go to Options in Quick Check and make sure that the checkbox "Fixed format (Excel connect)" is unchecked. This ensures that standard mode is used and data transferred is defined by the actual template used in Quick Check.

1. Load a Quick Check or an Application.

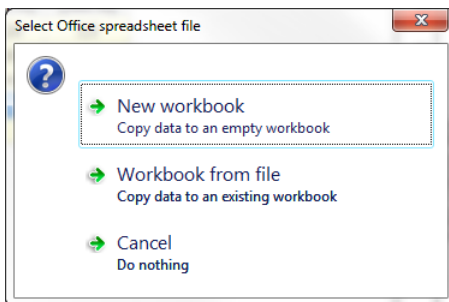
2. Click on the Excel button.



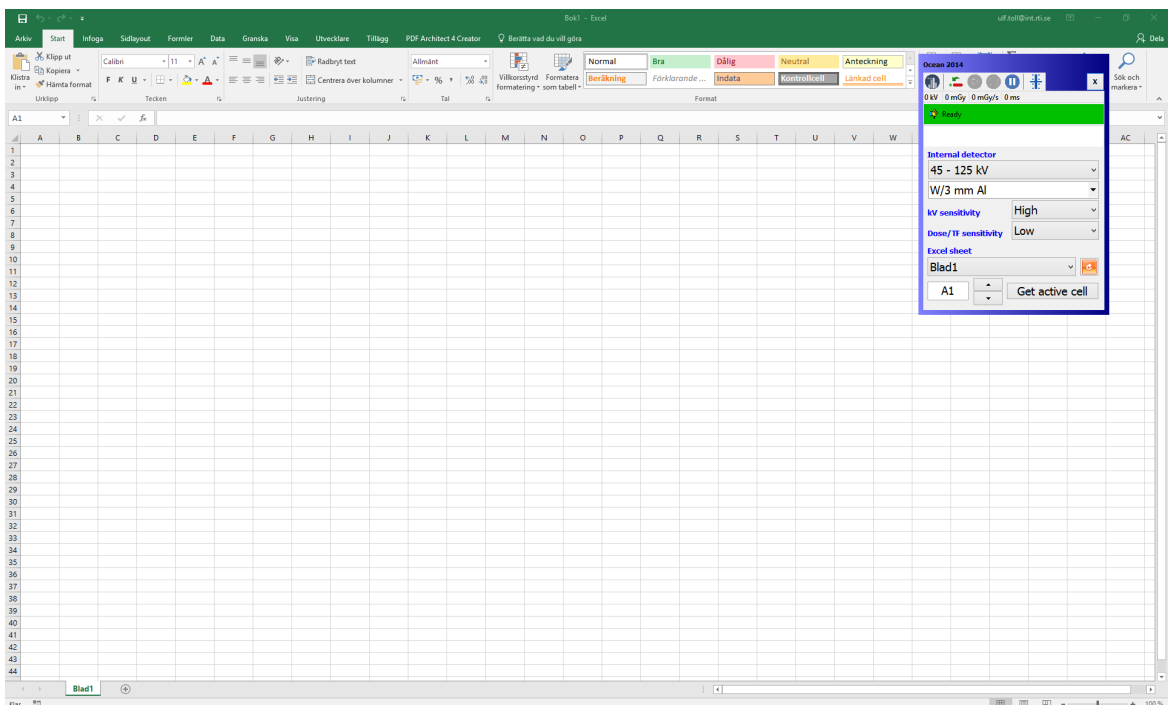
3. A dialogue is shown, select "Connect to workbook".



4. Next you have to choose destination. You can choose a new workbook or one you already have on your computer. In this case select "New workbook".

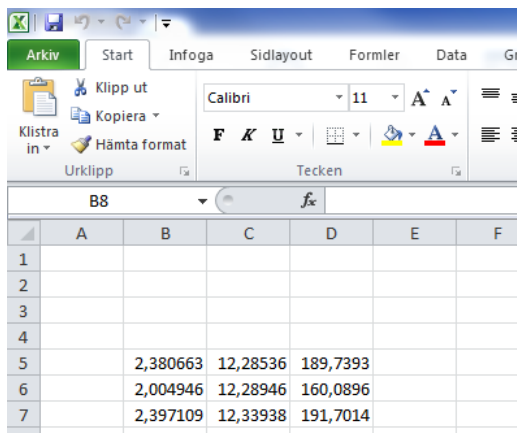


Excel starts and an empty workbook is loaded.



5. Activate the cell, for example B5, where you want measured data to start. The measured values appears in the same order as the columns in the active template. No units are sent, only the numeric values. (If you want a fixed format and units; use the "Fixed format" option described in the next section).

6. Make a couple of exposures.

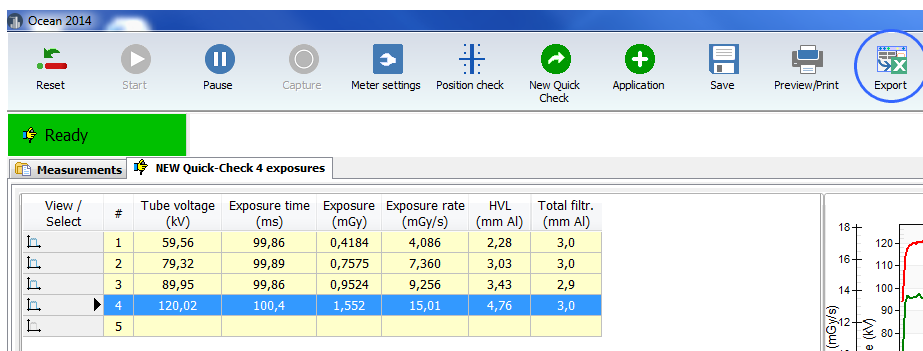


7. Measured data are transferred to Excel for each Exposure. The data transferred and the order of data is determined by the column present in the template used in Quick Check. You can use the minimized Excel window to control your measurement procedure while having Excel on the screen. The left most button is used to switch between Quick Check and Excel.

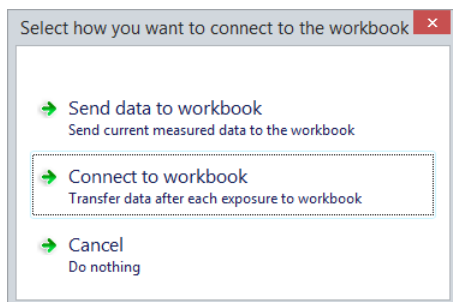
2.10.4 Send data to Excel

This is used when you want dump your current data to Excel. You have a choice to include or exclude waveforms (waveform are exported as pictures).

1. Assume that you have done a number of exposures and you want to dump all the measured values to Excel and that you want waveforms.

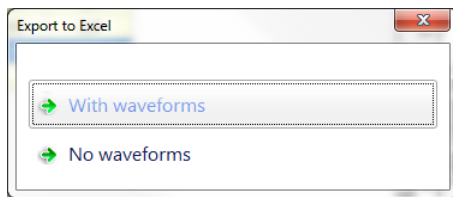


2. Click on the Export button. A dialogue is shown:

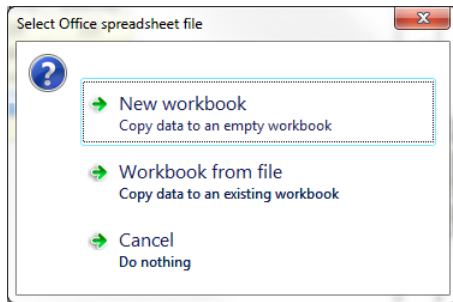


Select "Send data to workbook"

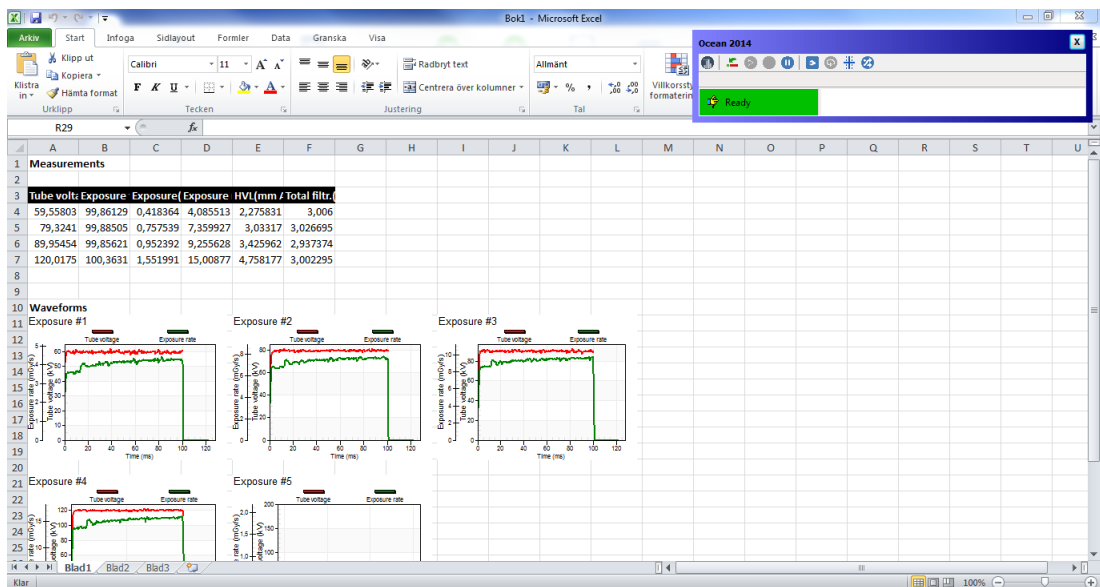
3. A new dialogue is shown where you can chose if you want waveforms or not. In this case select "With waveforms".



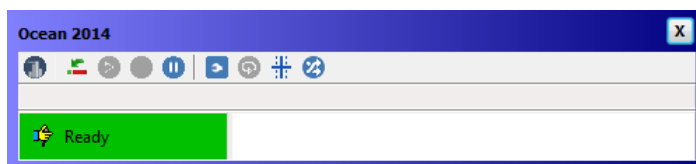
4. Next you have to chose destination. You can chose a new workbook or one you already have on your computer. In this case select "New workbook".



5. Ocean 2014 starts Excel and opens the workbook you selected. All you measured and in this case including waveforms are transferred to Excel.



6. You will also see a minimized Ocean 2014 window that is shown. This window provides help when you work with Excel.



The left most button is used to switch between Quick Check and Excel. See topic Data link to get more information about this window. You can also read Send data to Excel to see how you can use this feature in Ocean 2014.

7. You can save your Excel workbook and further process your measured data.

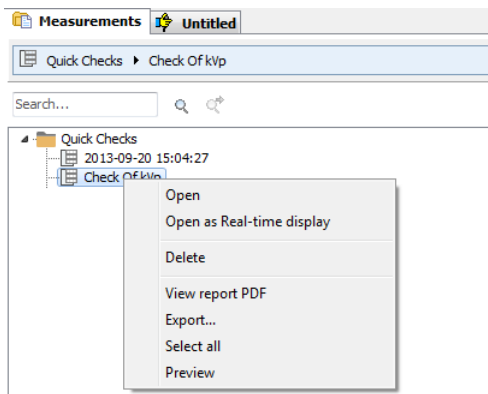
2.11 Import/export

If you want to move measured data from one computer to another, an export and import function is available to you. However, only Export is available from the Quick Check mode. To use the Import function; you must go to Ocean 2014 main screen.

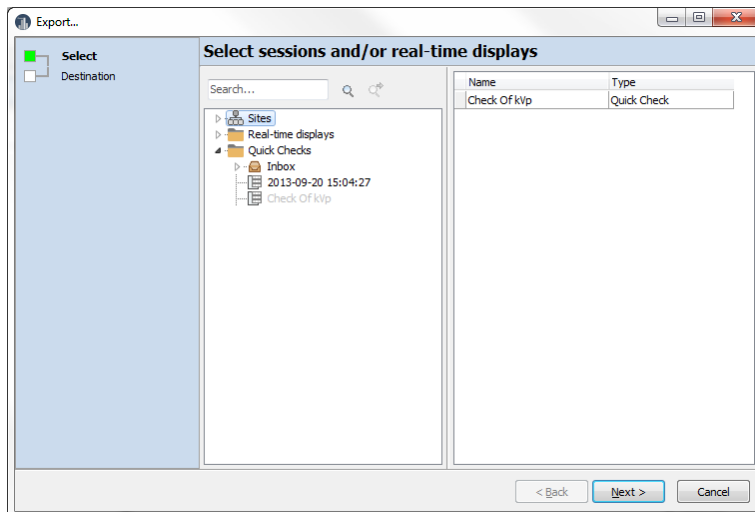
Export

To export one or several measurements:

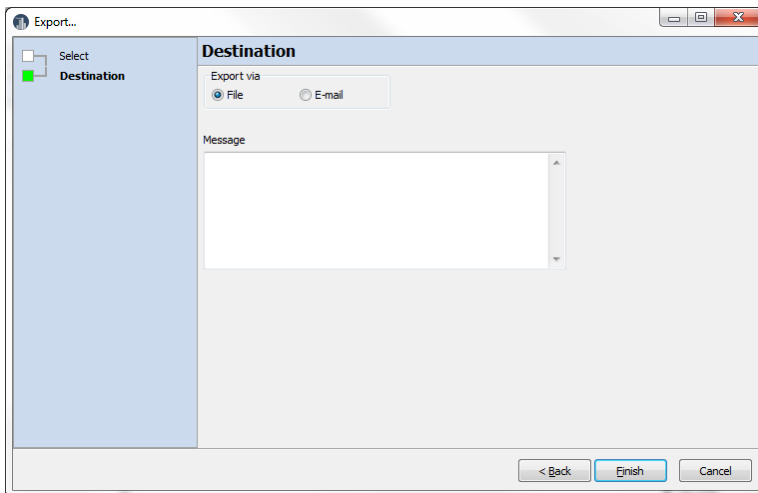
1. Go to the Measurement tab.
2. Right-click on the measurement you want to export.
You can first make a multiple selection by using the Ctrl- and Shift key and then right-click to directly select more than one measurement for export.



3. Select Export. A new window is shown that allows you to here select more measurements to export. The measurements you include are shown on the right side.



4. Click on Next when you have included all measurements.



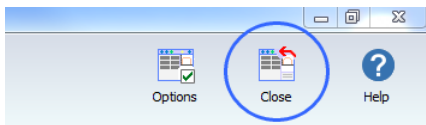
6. You can choose between "File" and "E-mail". If you have an e-mail program, you can send the file directly if that is what you want. Otherwise select "File". Select a file name and destination to finish.

You can now use the file you have created to move your measurements to another computer with Ocean 2014.

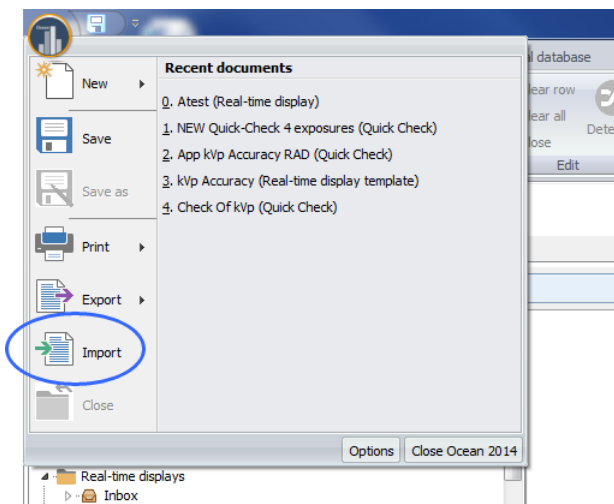
Import

You can import data, but you must then close Quick Check to go to Ocean 2014 main screen and the application button.

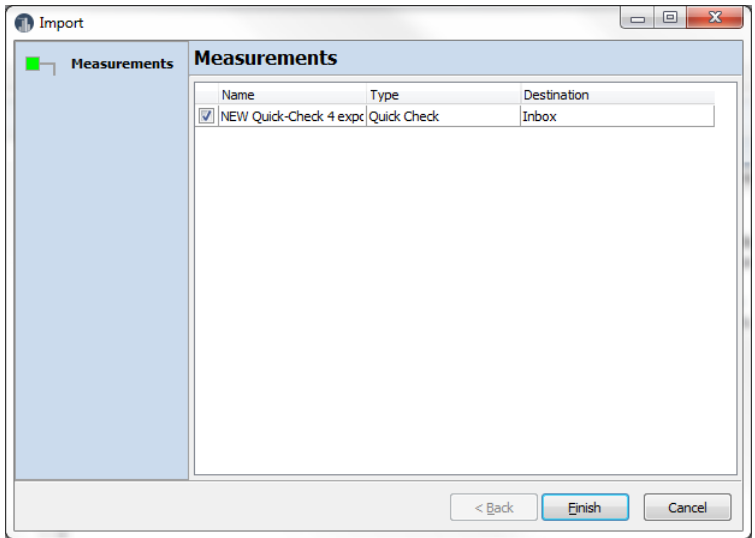
1. Click on the Close button.



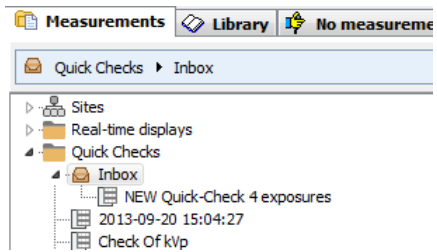
2. Ocean 2014 main screen will now appear. Click on the Application button and select Import.



3. Locate the file you want to import and select it.



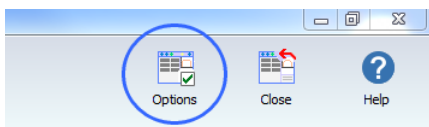
4. The dialogue shows all measurements that will be imported. You will find them in the Inbox after the import is finished.



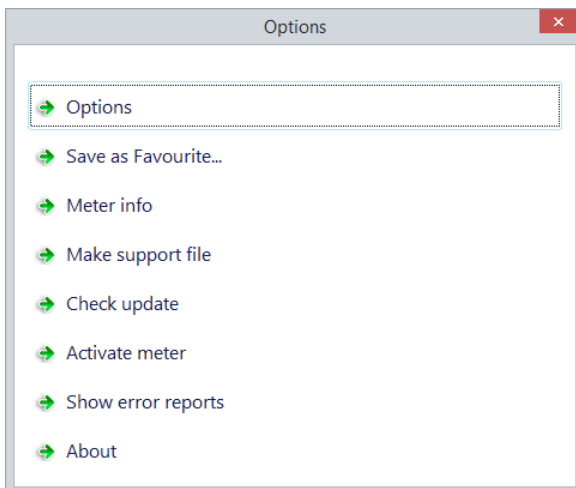
You can read more about Import and Export in the topics Import and Export.

2.12 Options

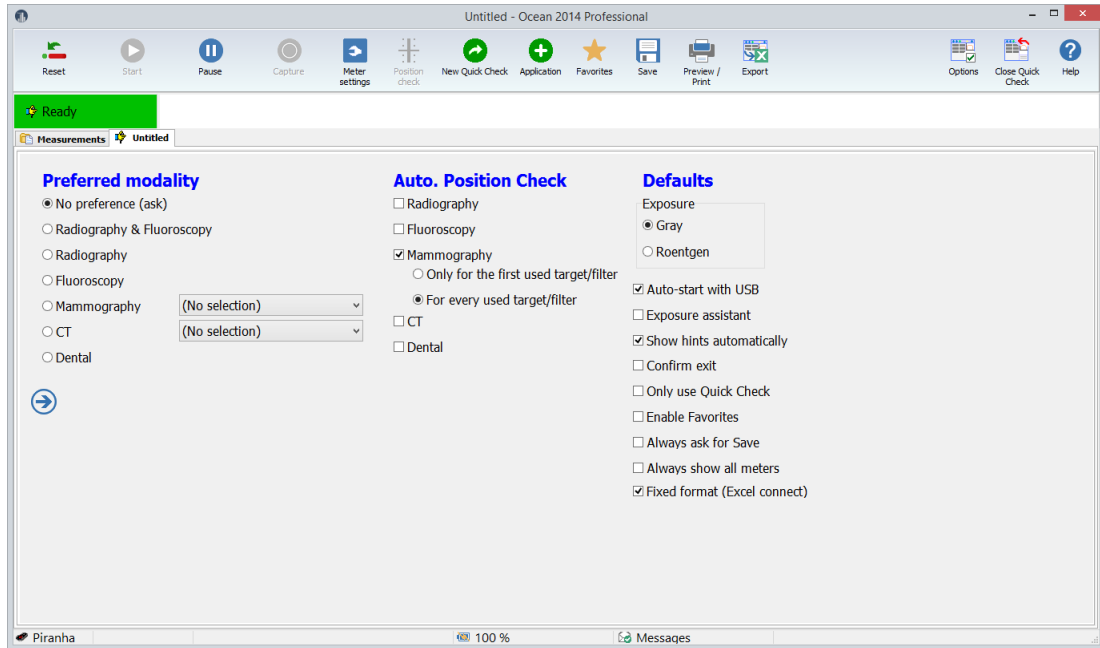
If you click on the options button a menu is shown.



You will have several options here:



Select "Options".



There are three sections here:

Preferred modality

You can use this if you have a meter that covers many modalities but you don't want to see all choices in the Quick Check.

Auto Position Check

Specify in which situations you want Quick Check to automatically suggest a Position Check.

Defaults

Various settings that controls how Quick Check works.

Exposure unit: Select Gray or Roentgen

Language: select the language you want for the Quick Check.

Auto-start with USB: If this is checked, Ocean 2014 and Quick Check starts automatically as soon as the meter is connected with USB. Quick Check also terminates automatically when the meter is disconnected or powered off.

Exposure assistant: Turn on or off the Exposure assistant.

Show hints automatically: If a Quick Check template has a hint attached to it, the hint is shown automatically if this checkbox is checked.

Confirm exit: If you check this a dialogue is shown when you quit Ocean 2014. It give you three alternatives:

- Quit Ocean 2014 and return to Windows
- Quit Ocean 2014 and turn off computer
- Resume Ocean 2014

Only use Quick Check: If you check this box, Ocean 2014 main window is hidden and you will only see the Quick Check. Ocean only starts if meter is available.

Close the Options screen by sweeping right if you use a tablet or click on the close button.

Enable Favorites: When this box is checked and at least one template is stored in the Favorites folder, the Quick Check Favorite list is shown at start up of Quick Check.

Always ask for Save: When this box is checked Quick Check always asks if you want to save your measurements before starting a new measurement or closing.

Always show all meters: When this box is checked a list with available meters to connect to is shown. If unchecked, Ocean 2014 directly tries to connect to the last used meter.

Fixed format (Excel connect): Check this box if you want to use fixed format when connecting to Excel.

Save as Favourite...

Save current measurement as a Favourite. The name given will be shown in the list when the Favourite button is clicked.

Meter Info

Shows meter information.

Make support file

If you want to report a problem, you may use this.

Check update

Look if there is a later version of Ocean 2014.

Activate Meter

Use this if you want to upgrade from Connect to Professional. You will be asked to enter the license code.

Show error report

All error reports that are generated are saved in a folder on your computer. Directly when one is generated, you are always asked if you want to send it to RTI. You may not be able to do that and it will be available in this folder. Click on this button to open the folder.

About

See version information.

You can read more about Ocean 2014's program options in the topic Program options.

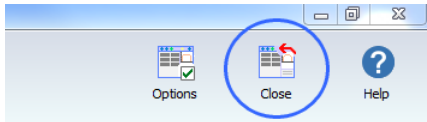
2.13 Close Quick Check

You can close Quick Check in two different ways:

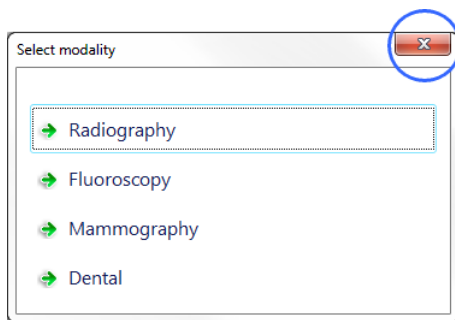
- Close and go back to Ocean 2014's main screen
- Close and quit Ocean 2014 at the same time

Close Quick Check and go back to Ocean 2014's main screen

Click on the close button:

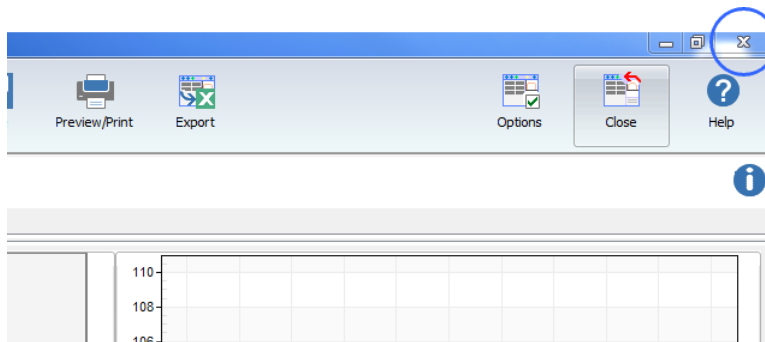


You can also close any of the menus shown in Quick Check. This will also take you back to Ocean 2014's main screen:



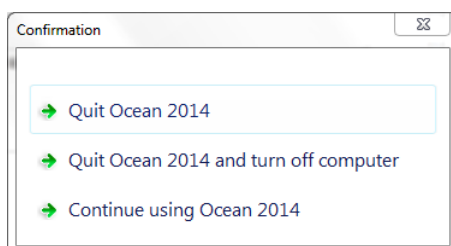
Close and quit Ocean 2014

If you want to close Ocean 2014 directly from Quick Check, click on the close button in the upper right corner of the Quick Check screen:



Remember that Quick Check will not ask you if you want to save data unless you already have saved them once.

If you have enabled "Confirm exit" in Options, a dialogue is shown (otherwise Ocean 2104 quits directly):



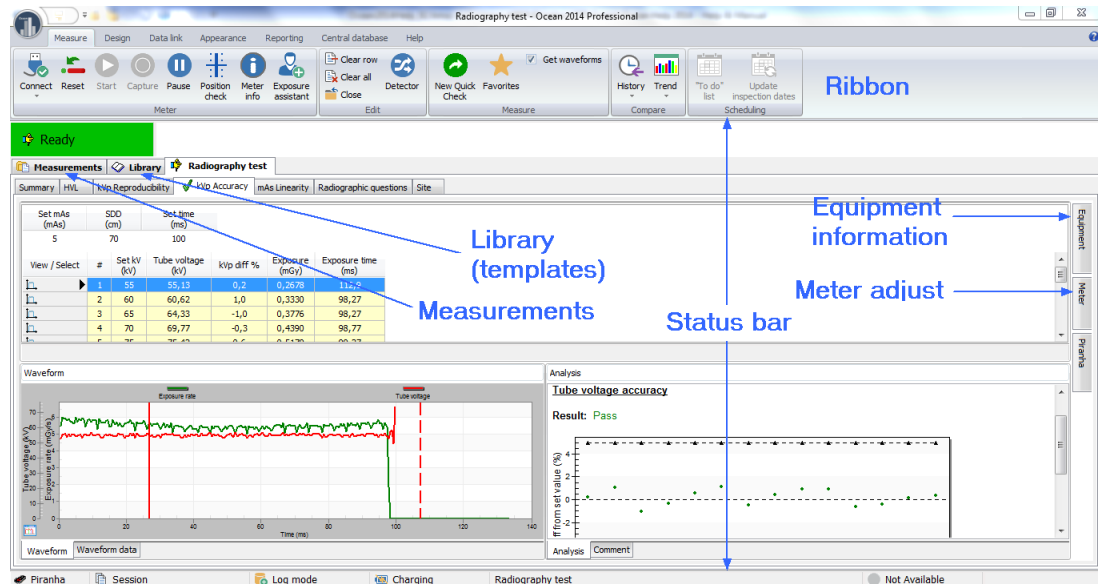
You can choose to go to Windows, turn off the computer or go back to Ocean 2014.

Chapter 3

Ocean 2014 - Main screen

3 Ocean 2014 - Main screen

Main view when Ocean 2014 is in "full mode" (not in "quick check mode"):



Here is a picture of the Main screen. There is a lot of information on this screen so make sure you read carefully your menu choices. All key functions are found on the "ribbon" bar for easy access. The ribbon is divided into six tabs and each tab has a collection of similar functions:

Measure - here you will find everything related to measurements (such as detector selection, connect to meter, set bias, get waveforms, etc.). Quick Check is started from this tab.

Design - under this tab you will find all the functions for creating, saving and editing templates

Data link - this tab has the choices for customizing your data link to Microsoft Excel

Appearance - you can change how things are shown on the main screen with these functions

Reporting - these are all the functions you need to create, edit and print out reports the way you like it

Help - get help

Just below the ribbon and on the bottom of the main screen you find two status bars.

The status bar located just below the ribbon status bar is divided into two parts: the left part indicates what the meter is doing right now and the right part is used to display internal messages and information.

The status bar located at the very bottom of the main screen shows current meter being used, work mode, battery indicator for the meter and more.

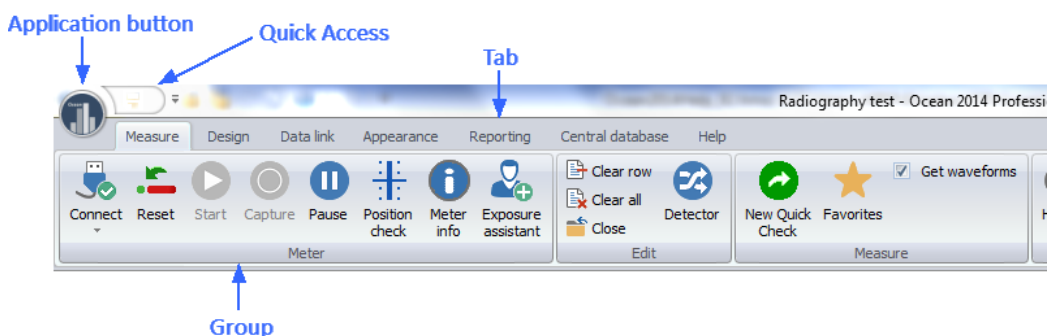
There are two tabs (Measurements and Library) located on the top left of the main screen just below the ribbon.

Measurements - This is where you will find all your measured and saved data. The saved data from the real-time display and Quick Check is also found here. If you are using Professional license, you can also see your facilities, rooms and tubes here with their corresponding data.

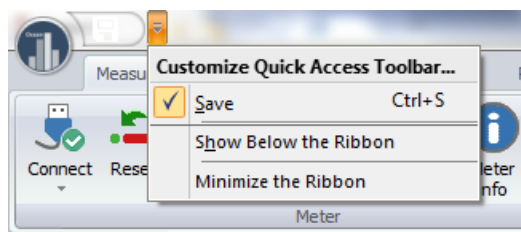
Library - This is where all your templates are stored. A template is a "blank protocol" without any measured data recorded.

3.1 Ribbon

The ribbon is the command bar that organizes Ocean's features for easy access via tabs located at the top of the Main screen window. There are six of these tabs to keep similar functions grouped together. To read what's on the ribbon go to main functions.



There is an **Application button** located on the top left of the Main screen. If you click it, the **Application menu** is shown. There is also a **Quick Access Toolbar** located next to the application button.



You can customize the Quick Access Toolbar to suit your own preference by selecting the **More commands...** option. Use the **Minimize the Ribbon** function if you want to compress the Ribbon. This is especially useful when using a Netbook since the screen height on a Netbook computer is limited.

3.2 Status bars

There are two status bars providing information to assist you while working with Ocean.

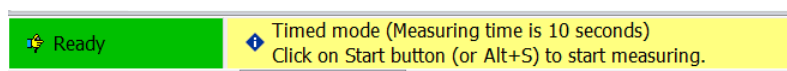
Upper status bar

The upper status bar (Status bar #1) is divided into two sections. The left is used to indicate what the meter is doing right now:



While the background is red, don't click on any buttons or make exposures. The meter will not respond to commands while adjusting itself.

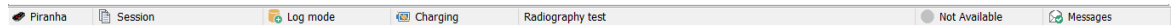
The right part shows short messages that will guide you in certain situations:



When the background is yellow, Ocean 2014 is showing an important message that requires you to take some kind of action. Read the message and follow the instructions.

Lower status bar

The lower status bar (Status bar #2) is divided into five sections:



Section #1 (left) shows which meter currently is used

Section #2 shows what you are working on currently

Section #3 shows which working mode you are in currently ("Log mode" is shown when you are recording data and "Design mode" is shown when you are creating/modifying a template)

Section #4 shows the battery status for the connected meter

Section #5 shows the title of the object you are working with currently

Section #6 shows if you are connected to Ocean Central

Section #7 shows messages (calibration reminders, warnings and more...), read more in the section Messages

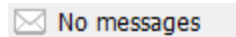
IMPORTANT!

Design mode: If you are working in Design mode, no measured data is saved when you click the save button. Only the (empty) template is saved in this mode.

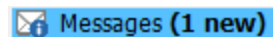
Log mode: If you are in Log mode, everything is saved including the measured data.

3.3 Messages

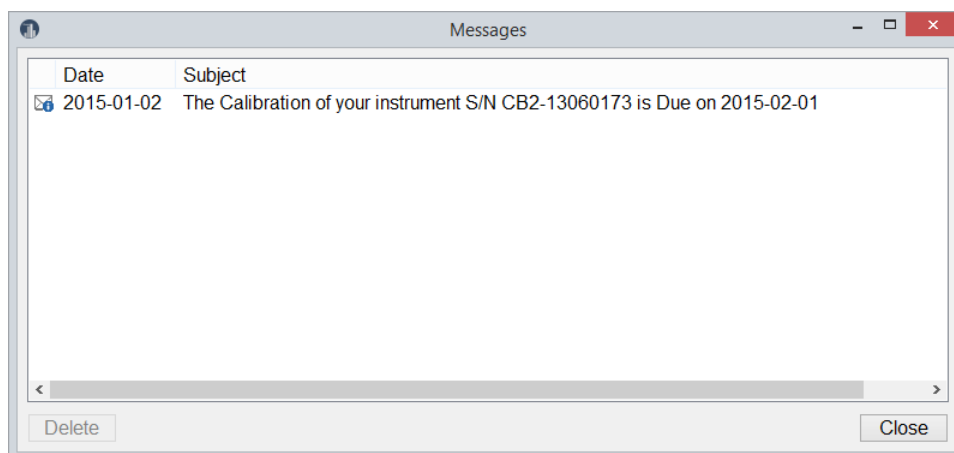
There is a message system included where different information is displayed. The message inbox is shown to the right on the lower status bar:



When a new message arrives the icon changes:



You can now click on the icon to open the message list:



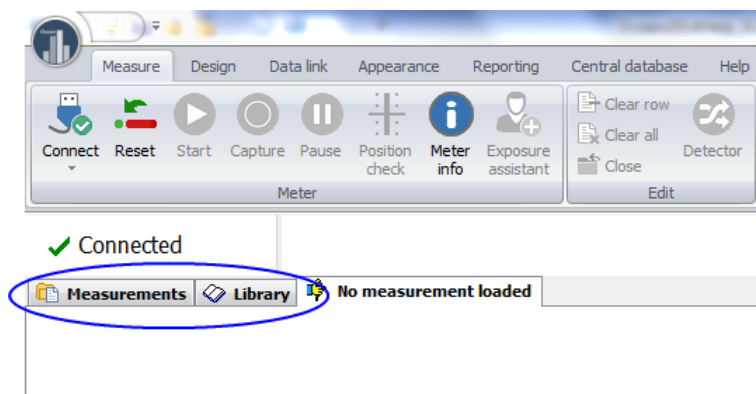
Here are all your messages shown. Double-click in the list to read a message. Unwanted messages can be deleted.

You can turn off calibration reminders in the Program Options, see more in section Program Options.

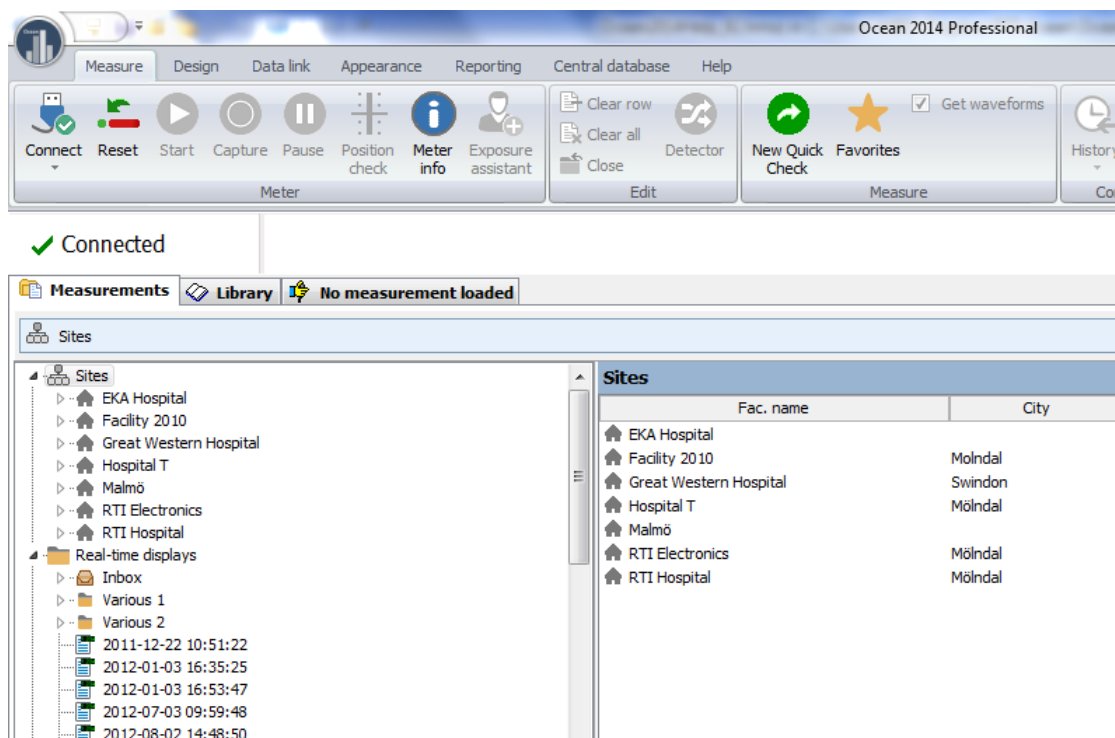
3.4 Database browser

All your data, measured sessions, measured real-time displays and templates, are stored in the database. The database is divided into two main parts, Measurements and Library. In Measurements are measured sessions and real-time displays stored and in the Library are templates stored.

You can browse through your measurements and templates buy clicking on the two tabs Measurements and Library:

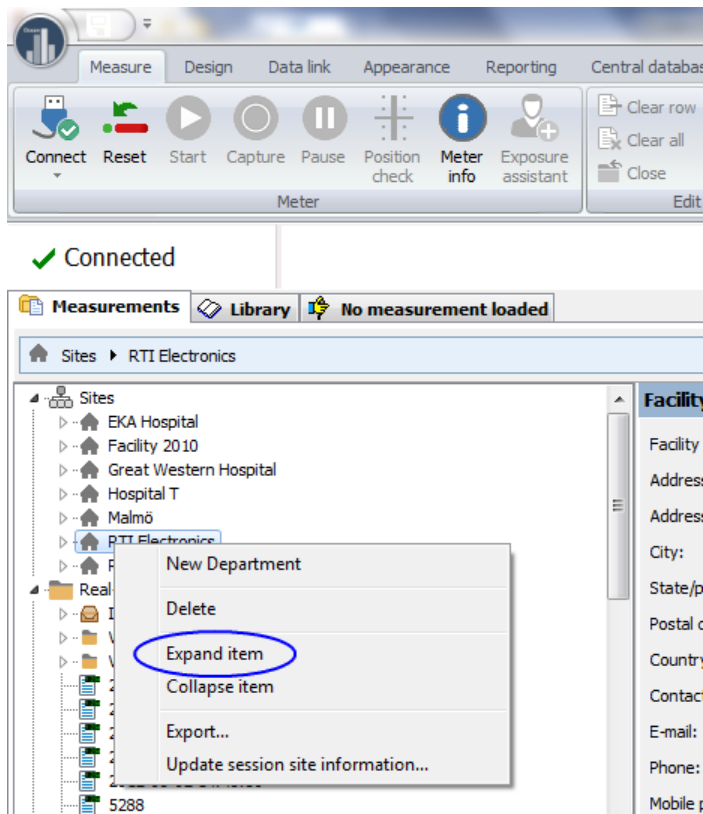


Click on Measurements to browse the measurements:

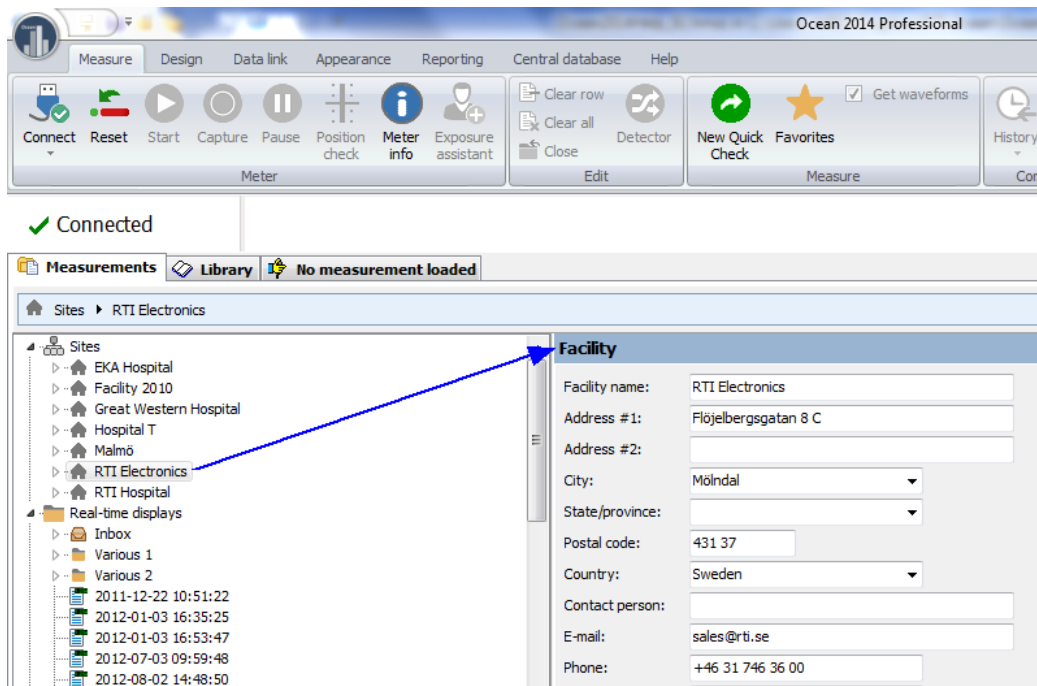


The left part shows the "database tree" and the right part shows the content of the selected "folder". You can browse through templates in the same way. There is a search function available.

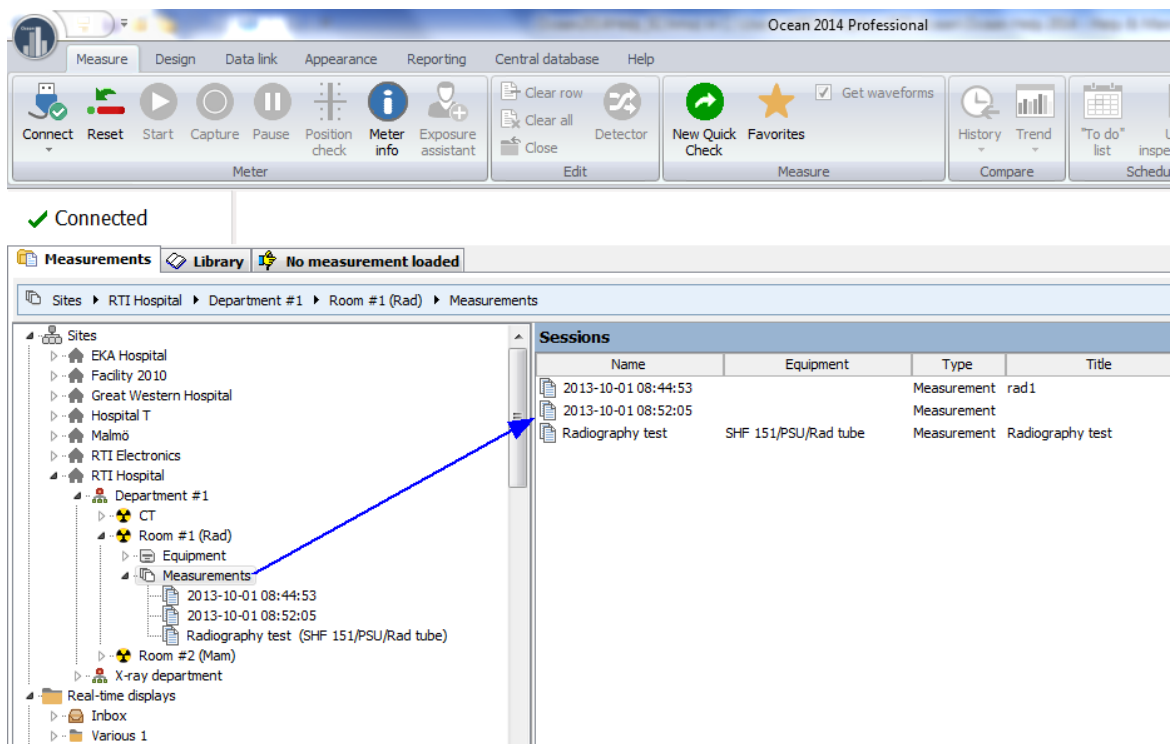
You can right-click on a "folder" and select Expand all to open it and all its sub folders:



If you click in an item belonging to the site (facility, department, room, generator, tube or user-defined equipment) the corresponding details are shown to the right:



If you instead click on a folder its content is shown on the right side:

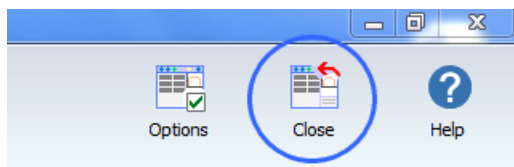


3.5 Connect - license

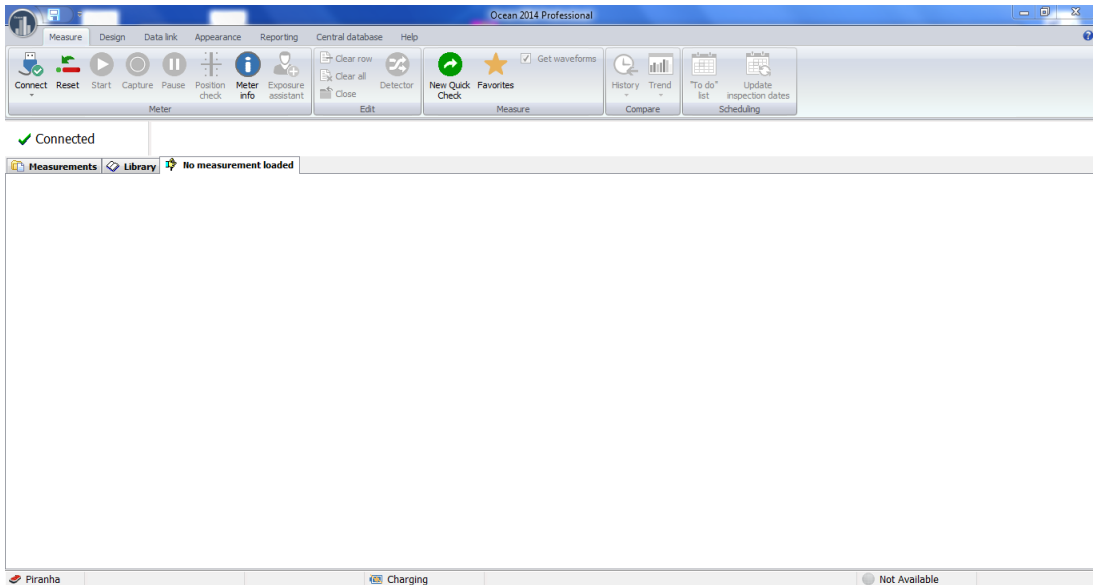
You can load any real-time display template from the Library tab at any time. Read the topic Start a new real-time display (in the Ocean 2014's built-in Help text or in the Reference Manual) for a complete description of how this is done. In this example we will use a template from Ocean 2014's favorite list:

To start a real-time display from the Favorites screen, follow the instructions below:

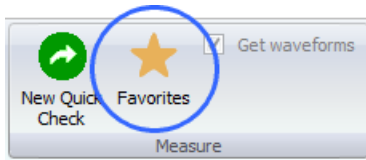
1. If "Quick Check" is launched, close it.



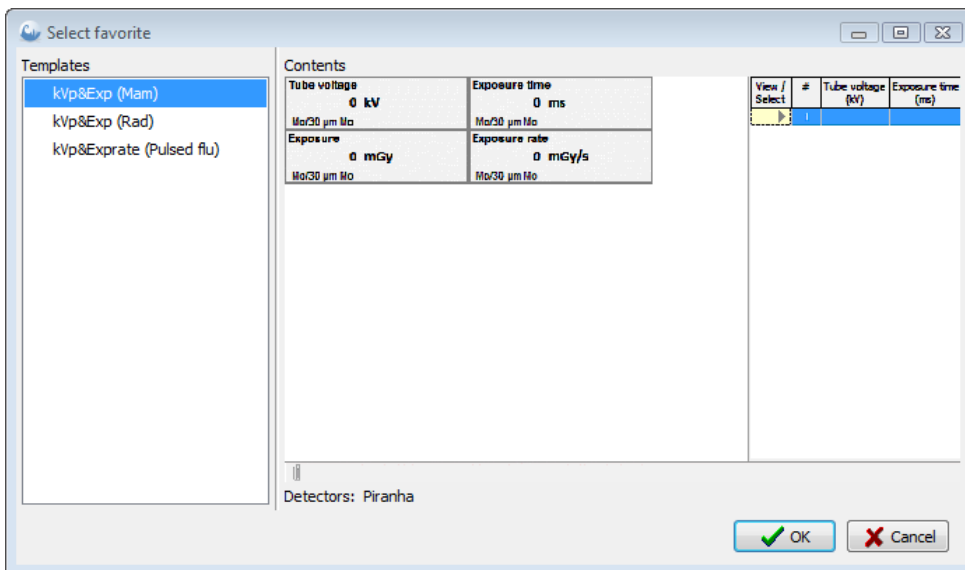
You will be taken back to Ocean 2014's main window:



2. Click on the Favorite button.



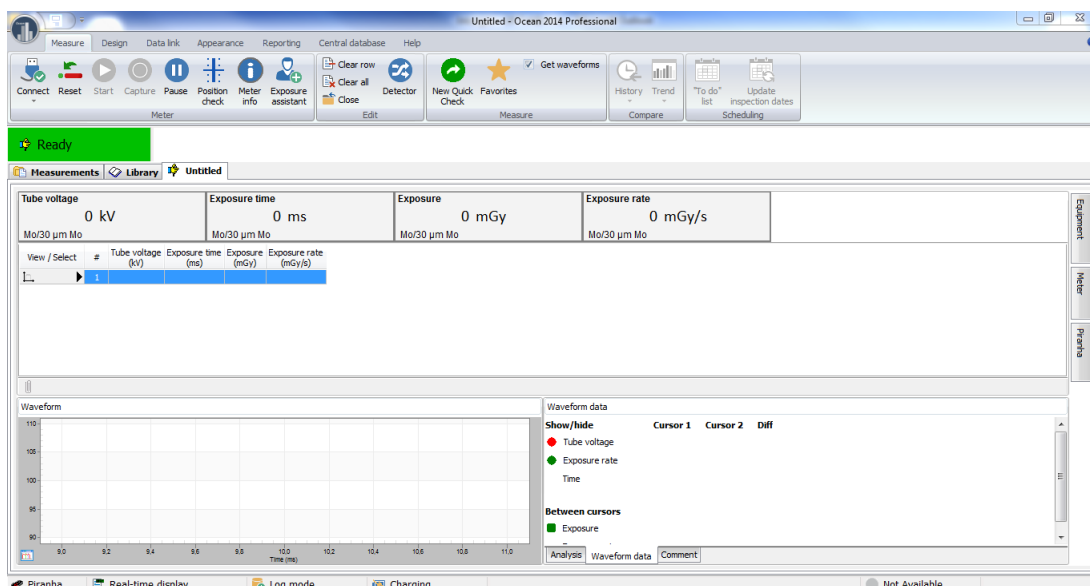
The Favorites window (see below) is shown.



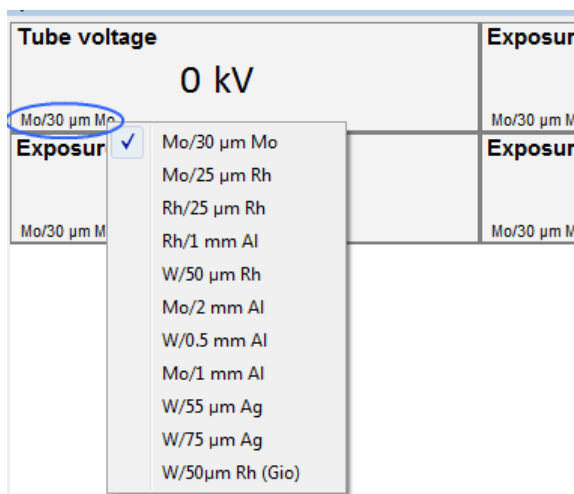
3. Select a real-time display suitable for the work you want to do and that is available to your meter. You will see the available choices on the left side of the screen under the "Templates" heading (see picture above).

4. Click OK.

5. Ocean 2014 will now connect to your meter and load the chosen real-time display.



6. If you are measuring on mammography or CT you may want to select another calibration. The calibration is shown in the lower left corner of the display. Right-click on it if you want to change it:



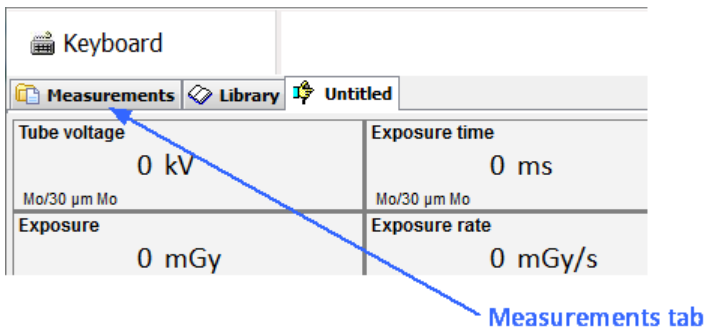
7. You are now ready to make an exposure.

8. When the exposure is finished, the results will be shown in the displays and a waveform will be shown in the waveform window on the bottom left of your screen.

9. You can continue making exposures one after another until your task is complete.

10. Click on the save button when you are done (on the Quick Access Toolbar or on the Application menu) to save your work. You will be asked to specify a name for the measurements you have just completed.

11. Your work is now saved in the database. If you want to see it again later, you can look for it under the Measurements tab to the right of the displays.



You can load any template from the Favorites screen by clicking on the Favorites button, or from the Library tab located to the left of the displays.

Read more about real-time displays by clicking on the links below:

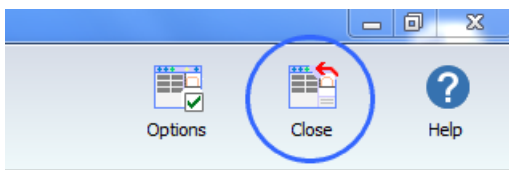
- How to start a new real-time display - click here...
- How to design a real-time display template - click here...

3.6 Professional - license

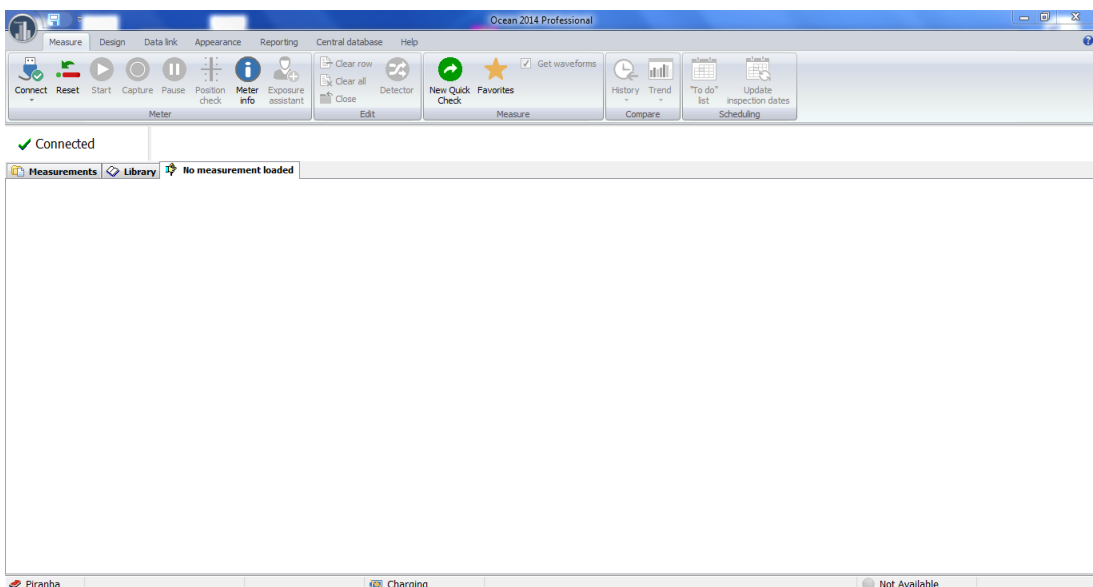
This example shows how to start a session from the Favorites screen. You can load any session template from the Library tab. Read Start a new session for a more detailed description of this topic.

To start a session from the Favorites screen follow the steps as described below:

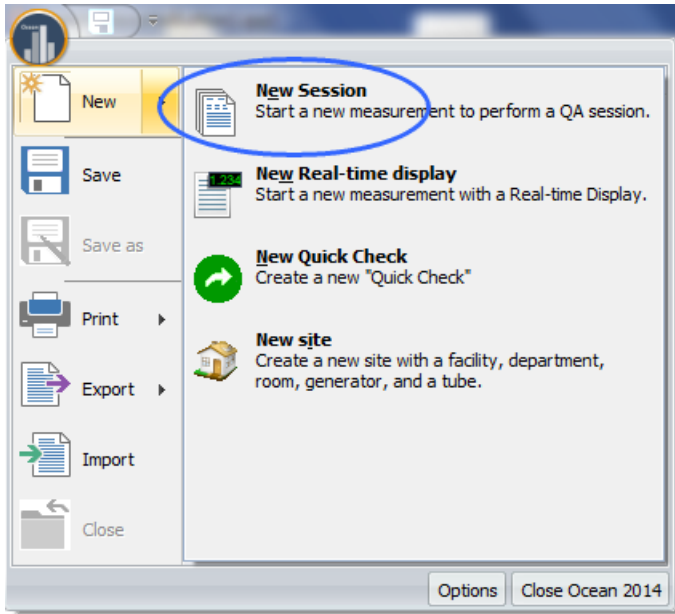
1. If "Quick Check" is launched, close it.



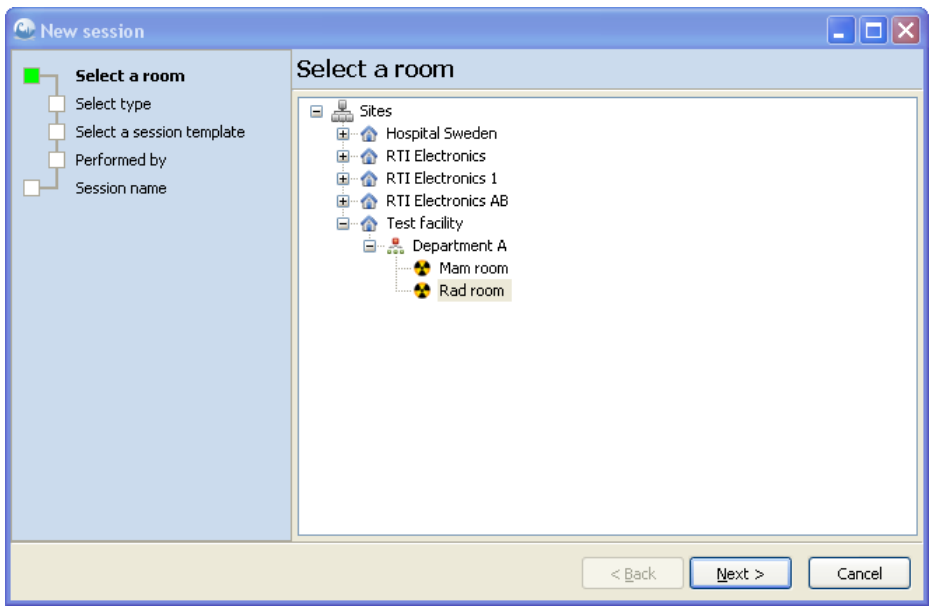
You will be taken back to Ocean 2014's main window:



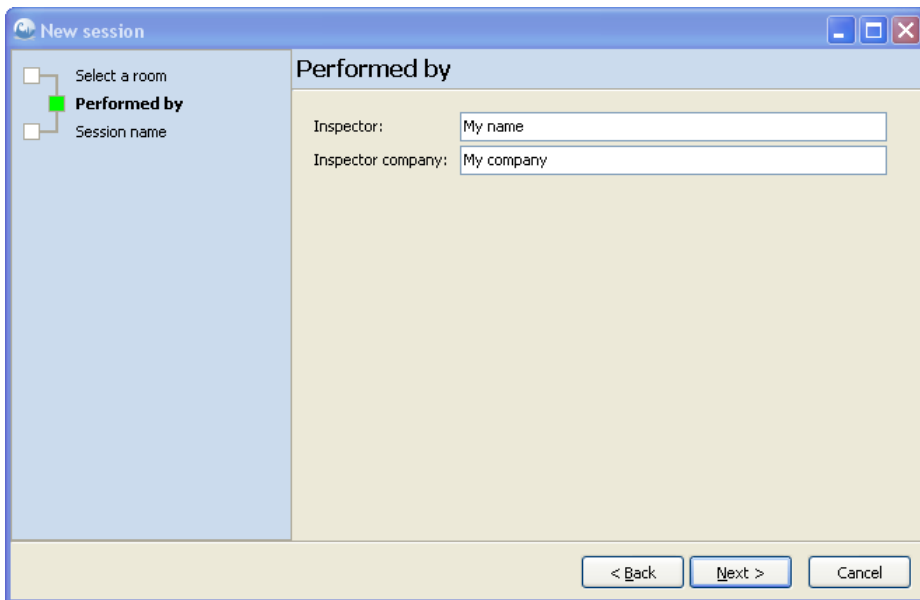
2. Click on the Application button and chose New Session.



5. The first thing you will be asked to do is to specify a site (a hospital or medical clinic) where this session will be used. If this is the first time you use Ocean 2014, there will be no available sites so you will need to create a site, department, room and equipment. To learn how to create a new site read the topic New site. We have added a "test site" for you to try out the different features Ocean 2014 has to offer, and for this example, click on the "Test facility". There is only one department, so select "Department A". Finally, select a suitable room (for this example, choose the "Rad room").



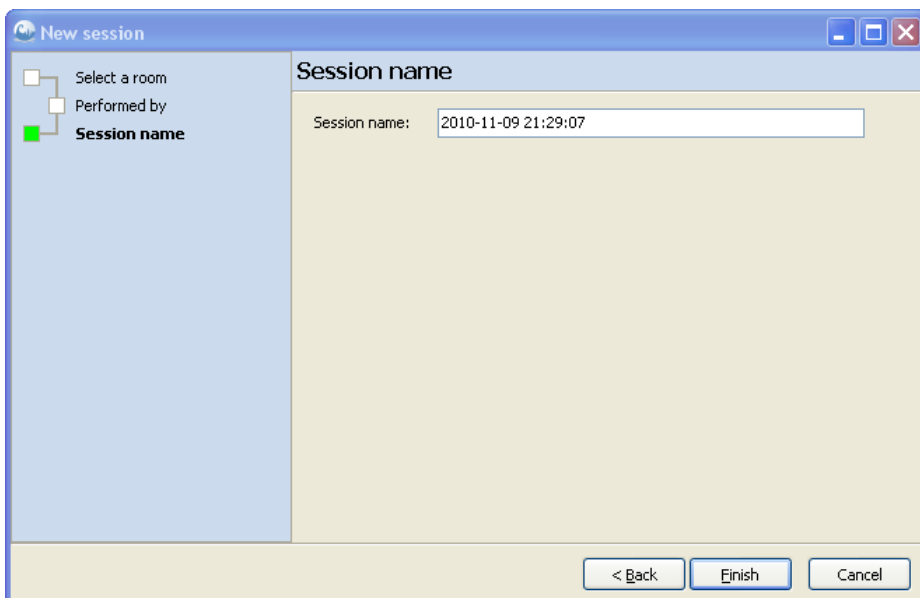
6. Click on Next.
7. Chose "Select an existing Session template". Click on Next.
8. Now chose a session. Go to Examples(RTI) under Session templates and select Radiology. Select the session "QA (Rad room)" and click on Next. You can also double-click to select and move on to the next step.
9. You are now asked to provide your name and the organization name you work for (company). If you ran the start-up wizard previously, this information would already be filled out.



The screenshot shows the 'New session' dialog box with the 'Performed by' step selected. The left sidebar contains three options: 'Select a room', 'Performed by' (highlighted with a green square), and 'Session name'. The main area is titled 'Performed by' and contains two text input fields: 'Inspector:' with the value 'My name' and 'Inspector company:' with the value 'My company'. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'.

11. Click Next to continue.

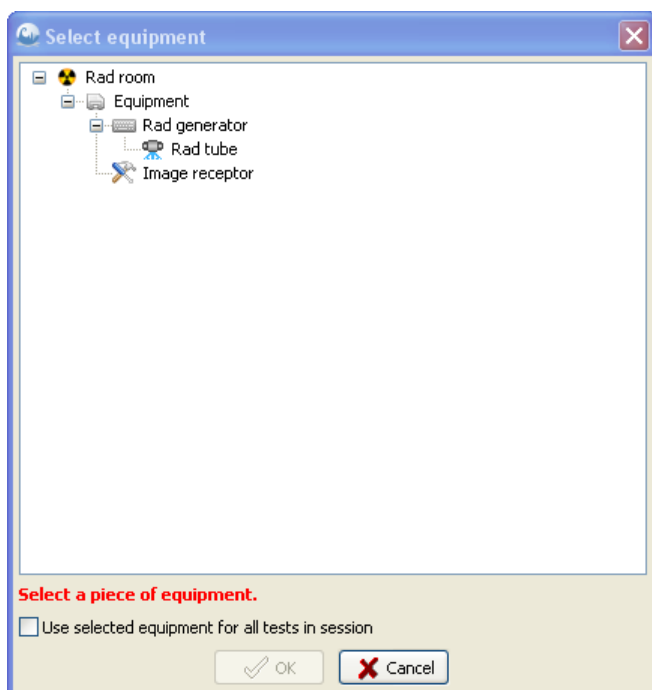
12. You need to specify a name for your session (the default name is a date and time stamp) For this example, just leave the name at the default setting.



The screenshot shows the 'New session' dialog box with the 'Session name' step selected. The left sidebar contains three options: 'Select a room', 'Performed by', and 'Session name' (highlighted with a green square). The main area is titled 'Session name' and contains a text input field labeled 'Session name:' with the value '2010-11-09 21:29:07'. At the bottom right, there are three buttons: '< Back', 'Finish', and 'Cancel'.

13. Click Finish.

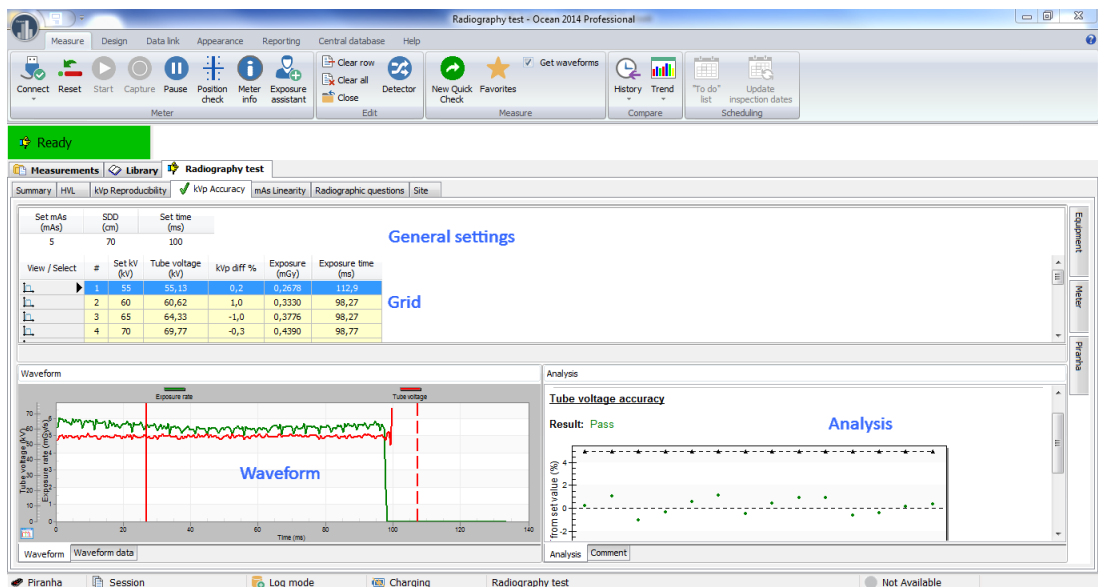
14. You have now opened the session. When you open a session Ocean 2014 will automatically start with the first test in the session. Before you can start making measurements, you will need to select the equipment you will be testing. To learn more about how to add new equipment to a site, read the Add more departments and rooms topic of this manual.



15. For this example, choose the "Rad tube" and click OK.

16. The first test in the session (in this case the HVL test) is activated and your cursor is positioned on the first row in the grid. You are now ready to make exposures according to the conditions specified in the test.

17. As you make your exposures, you will see measured data appearing in the grid along with the corresponding waveforms in the waveform window to the bottom left of the grid and the analysis will appear in the analysis window next to the waveform window.



18. Click on the save button to save your measurements. You don't need to choose a name here, since we left the session name at the default date and time stamp earlier.

You can load any template from the Favorites screen by clicking on the Favorites button, or from the Library tab located to the left of the displays. Read the topics below for more information:

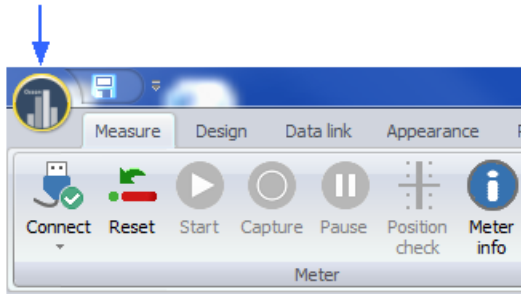
- How to start a new session - read the topic Start a new session
- How to design a test template - read the topic Design a test template

- How to design a checklist template - read the topic Design a checklist template
- How to design a session template - read the topic Design a session template

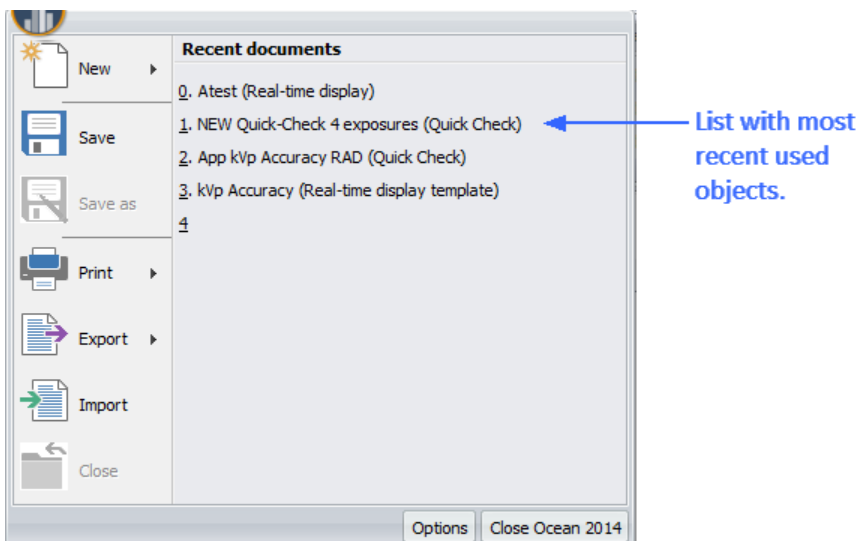
3.7 Application menu

You can access the Application menu by clicking on the Application button (see picture below) located at the upper left corner of the Ribbon bar.

Application button



The Application menu offers quick, convenient access to the most frequently used commands such as New, Save, Import, Export, etc. and the most recently used files (see the picture below).

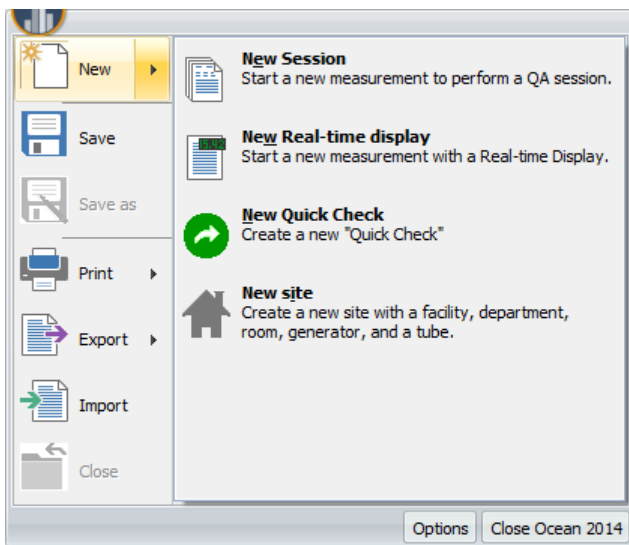


You will find the following functions on the Application menu:

New	Start a new session, real-time display or site
Save	Save what you currently is working with
Save as	Make a template of the current job or rename existing objects
Print	Print current job
Export	Export sessions, tests, checklists or real-time displays to a file (use this to share data with others)
Import	Import sessions, tests, checklists or real-time displays from a file (use this to receive data from others)
Close	Close current job

3.7.1 New

The **New** function is located on the Application button drop-down menu. You can use **New** three ways:



↓ **New Session** - Start a new QA session

Use this function when you want to start a new QA session for a certain room. The new session wizard will appear and will help you create the session. The wizard will ask you to:

- Select the facility, the department and the room where you perform your job
- Select the session template you want to use
- Specify your name and your organization (data from setup is used as defaults)
- Specify a name for your job (the name used when the job is saved in the database)

When the wizard finishes the session is created saved under the **Measurements** tab for the new room you just created.

Read more here...

↓ **New Real-time display** - Start a new real time display

Use this function when you want to start making measurements with a new real-time display. The real-time display wizard will appear and will help you create the real-time display. The wizard will ask you if you want to use an existing real-time display template or create a new real-time display from scratch. If you chose to create a new real-time display, the wizard will ask you to:

- Select modality
- Select displays, detectors and calibrations

Once the wizard finished, you can start making measurements right away if your meter is connected to the computer. The data from each exposure is shown in the displays and stored in the grid. A new row is automatically created in the log for every new exposure (if the cursor is located on the last row). If you need to change meter settings use the **Meter Adjust** function to the right in the main window.

↓ **New Quick Check** - Start Quick Check

Use this function when you want to do quick standard measurements. You will be guided to quickly setup the measurement according to your preferences. Full plug-and-play makes it very simple and fast.

↓ **New Site** - Create a new site (facility/department/room/generator/tube)

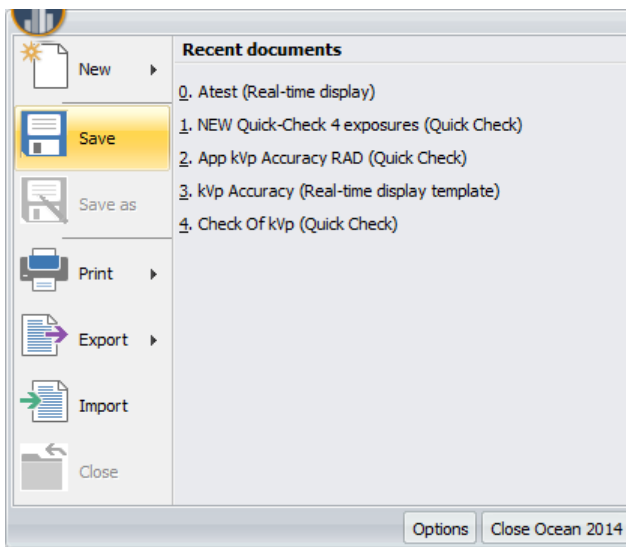
Use this function when you want to add a new site. The new site wizard will appear and will help you add the new site. The wizard will ask you to:

- Specify a facility (name, address, phone number, contact person, etc.).
- Specify a department (name, etc.).
- Specify a room (name, room ID etc.).
- Specify a generator (name, manufacturer, model, serial number, etc.).
- Specify a tube (name, manufacturer, serial number, etc.).

When the wizard finishes, you will be able to view your new site under the **Measurements** tab. The generator and tube is located under the **Equipment** tab.

3.7.2 Save

The **Save** function is located on the Application button drop-down menu. You can use this to save your current work. What is saved depends on what you are working on at the time you press **Save**.



↓ **Working with an opened session**

When you press **Save** you the session is saved with the measured data to the same location and name. It is not possible to change the location of the session using this function. If you want to change the location, you must first close the session and then move it by using the drag-and-drop feature of the database tree. If you want to save the session as a template (no measured data) use **Save as** function.

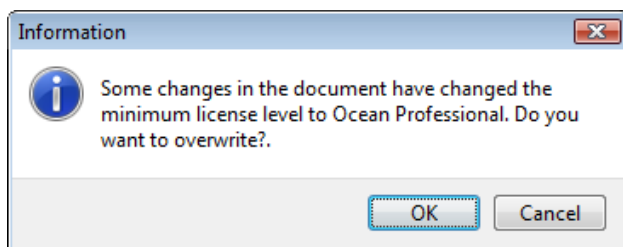
↓ **Working with a real-time display**

When you press **Save** the real-time display is saved to the same location and name under the **Measurements** tab. You will be asked to choose a name and location if this is the first time the real-time display is saved. It is not possible to change the location of the real-time display using this function. If you want to change the name and/or location, you must first close the real-time display and then move it by using the drag-and-drop feature of the database tree. If you want to save the real-time display as a template (no measured data) use **Save as** function.

↓ **Working with a template**

When you press **Save** the template is saved (no measured data). You will be asked to specify a name and location if it is a new template. If you want to change the name and/or location, use the **Save as** function.

The following message may be displayed when you go to save your work:



It means that minimum license required to re-open the object changed (became more restrictive). You may see this message if:

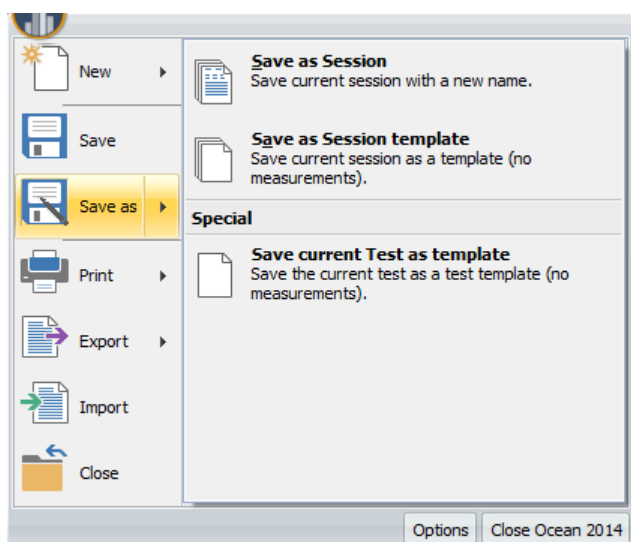
- you use different meters with different Ocean licenses (Display, Connect or Professional) with the same Ocean.
- you start a trial period to test a higher license than you currently have.

3.7.3 Save as...

The **Save as** function is located on the Application button drop-down menu. You can use this function to do the following:

- Rename an object (real-time display, session or a template).
- Change the location of an object (not for sessions).
- Change the object type (toggle between template and measurement types). For example, you can use this function if you have a session that you wish to make into a template, or vice versa.
- You have the option of saving a test or checklist as a separate object to be included in your future sessions.

Save as functions available while working with sessions



Save as a Session

If you use Save as to rename a session, it will create a copy of the existing session and all future work will be saved in the new copy. The new copy will be saved in the same site and room where the original session was located. It is not possible to change the location of the new copy using this function. If you

want to change the new copy location, you must first close the session and then move it by using the drag-and-drop feature of the database tree.

Important: Please make every effort to save the session to the correct site and room, before you use it. Once a session is used in a certain room and on a certain tube, the equipment information is stored in Ocean 2014 and when you move it to a new room, the equipment information from the old room will be moved to the new room as well. The room and equipment data is used by Ocean 2014 to determine what measurements are available to you and, as a result, you may not be able to use certain tests in the session and the test results that you get on other tests may not be accurate.

Save as Session template

You can use Save as Session template if you want to rename an existing template or if you have a session open that you are working on, you can use this function to save it as a template in the **Library**.

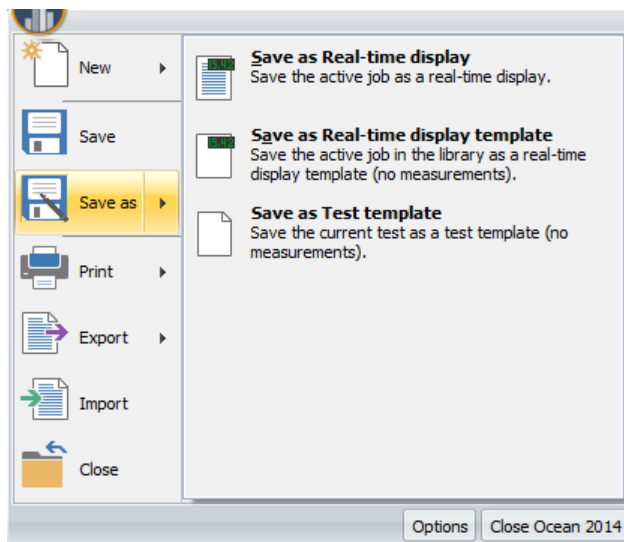
Save current Test as template

You can use Save current Test as template if you want to pick out one individual test of a session or session template and save it for future use as a test template in the **Library**. You can then use this test template in other session templates as well.

Save current Checklist as template

You can use Save current Checklist as template if you want to pick out one individual checklist of a session or session template and save it for future use as a checklist template in the **Library**. You can then use this test template in other session templates as well.

↓ Save as functions available while working with real-time displays



Save as a Real-time display

If you use Save as a Real-time display to rename and/or change the location of a real-time display, it will create a copy of the existing real-time display with all of its measured data and all future work will be saved in the new copy.

Save as a Real-time display template

You can use this in two different situations:

- If you use Save as a Real-time display template to rename and/or change the location of a real-time display template, it will create a copy of the existing real-time display template (without measured data) and all future work will be saved in the new copy at the location you chose.
- You can also use this function if you are making measurements in a real-time display and want to save the real-time display you are working on as a template (no measured data) in the **Library**. All further work will be saved as a real-time display template (no measured data) in the new copy.

Save as a Test template

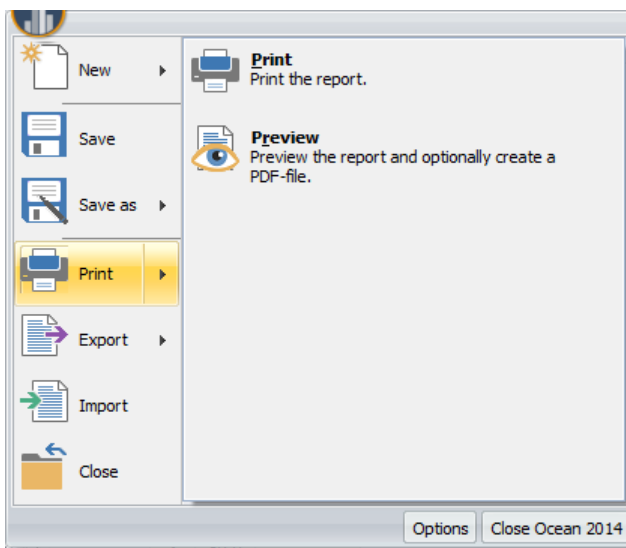
You can use Save as a Test template to convert a real-time display to a test template and save it in the **Library**. Any measured data will not be saved and future work will be saved in the test template.

↓ Save as function while in Design mode

Use Save as if you want to rename or change the location of a template you are working on currently.

3.7.4 Print

This function is used to **print** your current work. You can print on a printer or create PDF files.



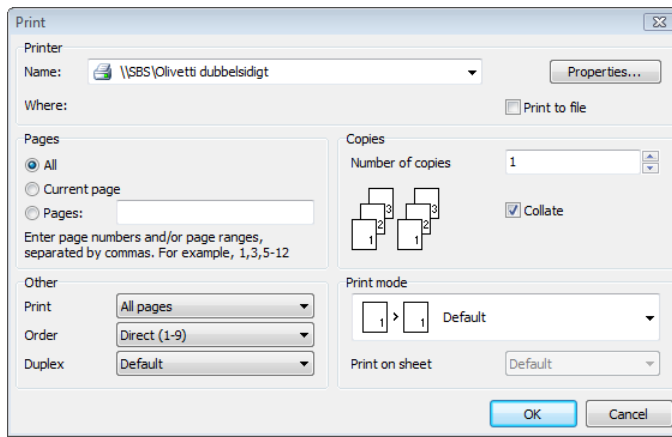
You can print or preview the following:

- Complete reports - if you are working with a session, the complete session is printed/previewed complete with a cover sheet, including all tests (with waveforms if so chosen) and checklists.
- Real-time display - the real-time display currently open in Ocean 2014 is printed.
- A test or a checklist during design work - we added this feature to allow you to print out the templates you are working with during design.

NOTE: You can only print or preview one item at a time.

↓ Print

It is important to remember that this function prints the current session/template you are working on and is open in Ocean. The print dialogue (see picture below) is shown when you choose the print function from the drop-down menu on the Application button:



You can select the following:

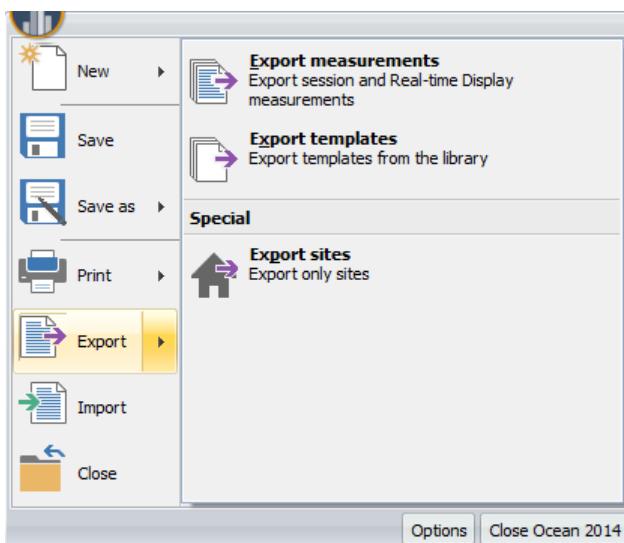
- the printer you want to use and set its properties
- which pages to print
- number of copies

Preview

The preview function can be found by hovering your mouse cursor over the print function in the drop-down menu on the Application button. Choose the preview option if you want to check your work before printing. You are able to print directly from the preview window, or you do have the option to store your work in a PDF file. If you choose to create a PDF file, a file save dialogue is shown, allowing you to give a name to your work and to specify a destination anywhere on your computer, network or mobile media.

3.7.5 Export

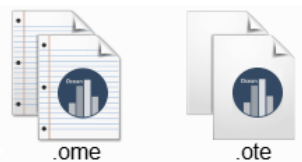
This function is used **export** items (sessions, real-time displays and templates) to an external file or via e-mail as an attachment. The export and import functions enable you to easily share your work with your colleagues and regulatory authorities.



There are three types of Ocean 2014 data you can export:

1. Measurements - (.ome) files
2. Templates - (.ote) files
3. Sites - (.ome) files

The files are identified by the following icons:



↓ Exporting measurements

Use this type of export when you want to export measurements; sessions and real-time displays.

To start the export process, click on the Application button, then hover the mouse over the export function from the drop-down menu (see picture above). You will be offered three choices (export measurements, export templates and export sites). To export measurements, follow the two easy steps as described below:

Step #1

When you select the "Export measurements" option a wizard starts automatically to allow you to select the items you want to export. Select all items you wish to export. You can select individual measurements or right click on a folder and select "Export...". In the later case, all measurements in that folder and below will be selected for export. Click on the Next button to continue.

Step #2

Once your selection is made, the next screen will offer you a choice between creating a file only, or send the export directly to another Ocean 2014 user as an e-mail attachment. You can also add an optional message to your file for the user or regulatory authority to whom you are sending the data. This message will be shown when the user imports the data.

Click Finish when you are ready and the export file will be generated with an ".ome" extension and you will be asked to choose a file name and location to store the file. If you chose the option to send the file via e-mail, your e-mail program will be opened and a blank e-mail started with the ".ome" file added as an attachment. All you have to do now is to complete the e-mail and then send it.

↓ Exporting templates

Use this type of export when you want to export templates; sessions, tests, checklists and real-time displays.

To start the export process, click on the Application button, then hover the mouse over the export function from the drop-down menu (see picture above). You will be offered three choices (export measurements, export templates and export sites). To export templates, follow the two easy steps as described below:

Step #1

When you select the "Export templates" option a wizard starts automatically to allow you to select the items from your library that will be exported. Select all items you wish to export. You can select individual templates or right click on a folder and select "Export...". In the later case, all templates in that folder and below will be selected for export. Click on the Next button to continue.

Step #2

Once your selection is made, the next screen will offer you a choice between creating a file only, or send the export directly to another Ocean 2014 user as an e-mail attachment. You can also add an optional message to your file for the user or regulatory authority to whom you are sending the data. This message will be shown when the user imports the data.

Click Finish when you are ready and the export file will be generated with an ".ote" extension and you will be asked to choose a file name and location to store the file. If you chose the option to send the file via e-mail, your e-mail program will be opened and a blank e-mail started with the ".ote" file added as an attachment. All you have to do now is to complete the e-mail and then send it.

↓ Exporting sites

Use this type of export when you want to export sites. It exports all site information (facility, departments, rooms and all equipment).

To start the export process, click on the Application button, then hover the mouse over the export function from the drop-down menu (see picture above). You will be offered three choices (export measurements, export templates and export sites). To export sites, follow the two easy steps as described below:

Step #1

When you select the "Export sites" option a wizard starts automatically to allow you to select the facilities. Select all items you wish to export. Click on the Next button to continue.

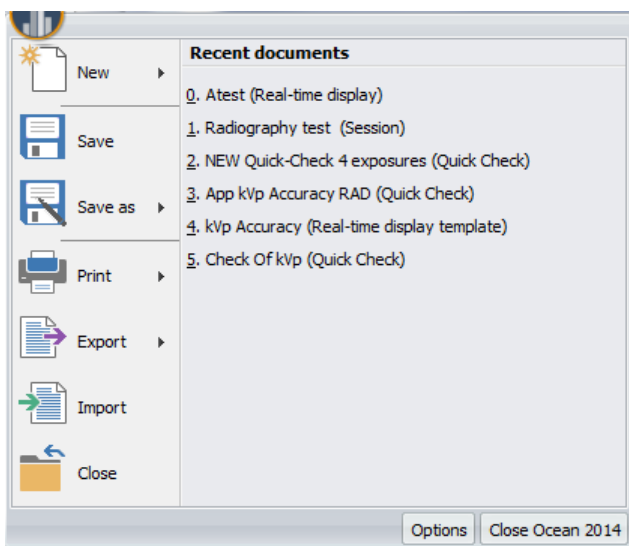
Step #2

Once your selection is made, the next screen will offer you a choice between creating a file only, or send the export directly to another Ocean 2014 user as an e-mail attachment. You can also add an optional message to your file for the user or regulatory authority to whom you are sending the data. This message will be shown when the user imports the data.

Click Finish when you are ready and the export file will be generated with an ".ome" extension and you will be asked to choose a file name and location to store the file. If you chose the option to send the file via e-mail, your e-mail program will be opened and a blank e-mail started with the ".ome" file added as an attachment. All you have to do now is to complete the e-mail and then send it.

3.7.6 Import

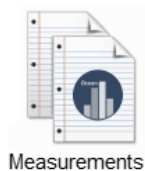
We added the **Import** function to give you the opportunity to share your work with other Ocean 2014 users. This is especially helpful in large organizations where more than one person is working on equipment at a site. To start the import process, click on the Application button, then select the import function from the drop-down menu (see picture below):



Import from the Application menu

After you selected Import, a dialogue box will appear to help you select the files you want to import. If you wish to exclude certain files from the import, just uncheck the item by clicking on the checkbox in front of the item. There are two types of Ocean 2014 files you can import:

(.ome) files -- these are the measurements



(.ote) files -- these are the templates



Once you made your selection, click Open. A new dialogue box is now shown with the number of items selected for import, the file type (such as session or real-time display) and the destination path.

When you finished making the choices for import, click the Finish button to complete the process.

Import directly from Windows

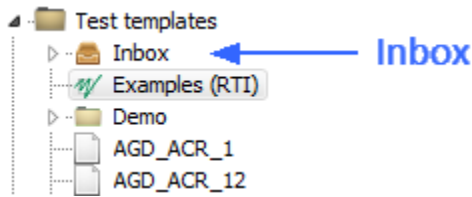
You can now import a file directly from Windows by double-clicking on the file. For this example, let's assume that we have a file with measurements or templates on the desktop:



When we double-click on the file icon, Ocean 2014 will start up and will automatically begin the import process.

Destination

- The **templates** are imported into the "templates" inbox and **real-time displays** are imported into the "real-time display" inbox.

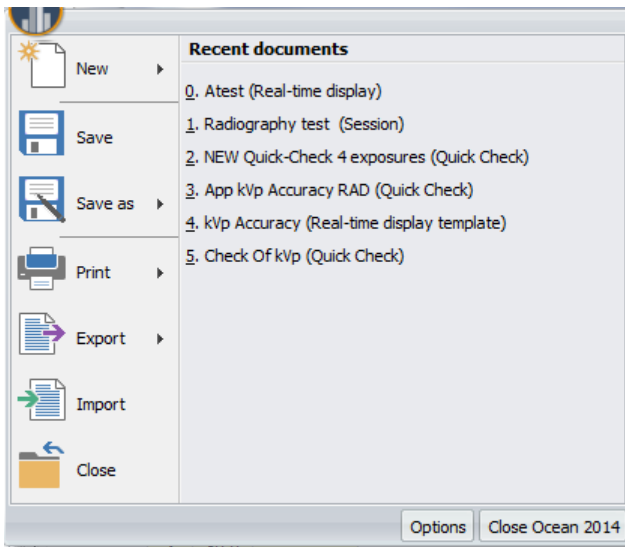


- **Sessions** are imported into the facility/department/room they belong to. If the site doesn't exist on your computer, Ocean 2014 will give the choice to create the site or skip the item from the import list.

3.7.7 Close

Click on this button if you want close what you currently are working with.

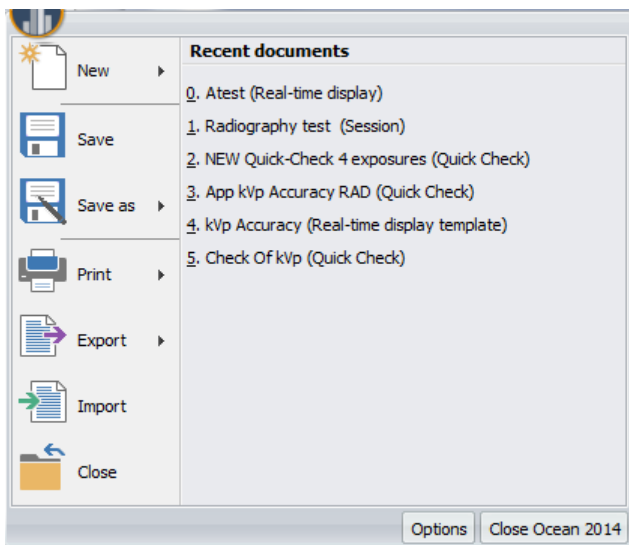
NOTE: The Close button will only close the current job you are working on but it will not exit Ocean.



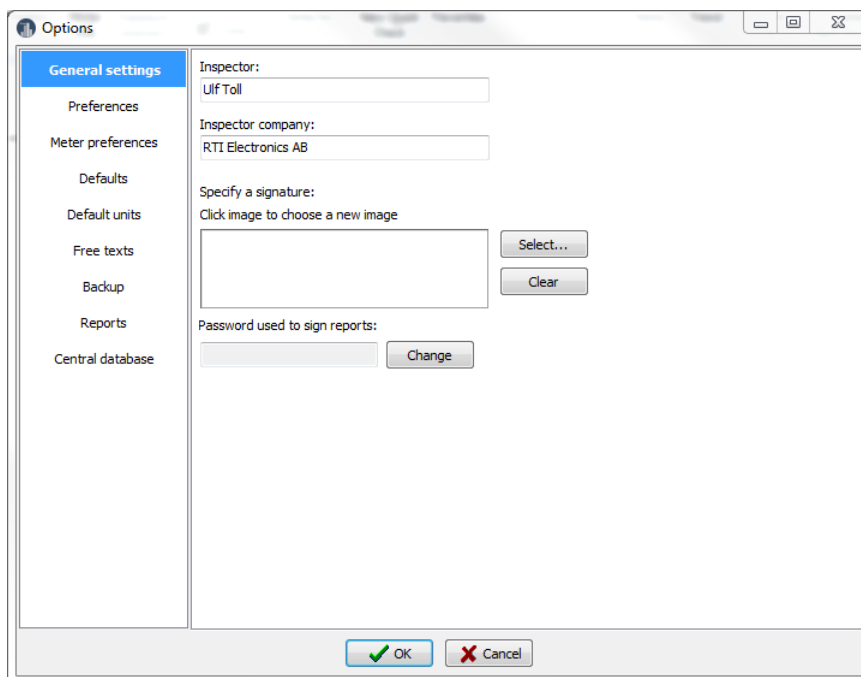
If you have unsaved work while trying to close the current task, you will be given the choice to save and then close.

3.7.8 Program options

The program options menu contains settings that control how Ocean 2014 works. This menu is available as a button called "Options" located on the bottom right of the **Application menu**.



Click on the button to open the Program options:



The following four sections are found under the Options button:

📌 General settings

These are global setting stored in Ocean.

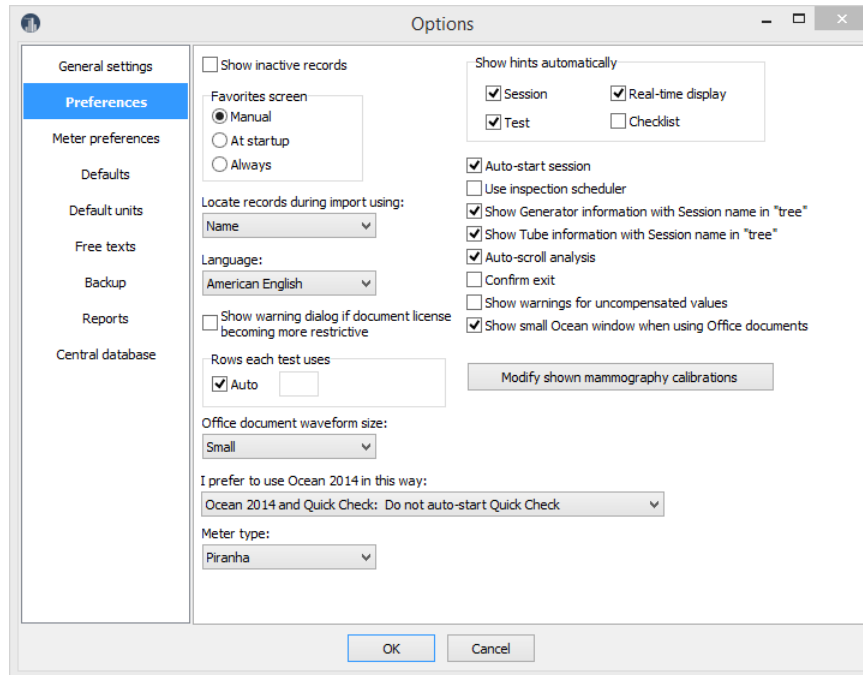
Inspector This is where you change the inspector name in Ocean. This name will appear as the inspector name when working on a session.

Company This is where you change the company name the inspector works for.

- Specify signature** This is a picture of your signature that can be added to the summary page of the report when you sign the report.
- Password used to sign the report** This password must be specified to be able to sign and close a report.

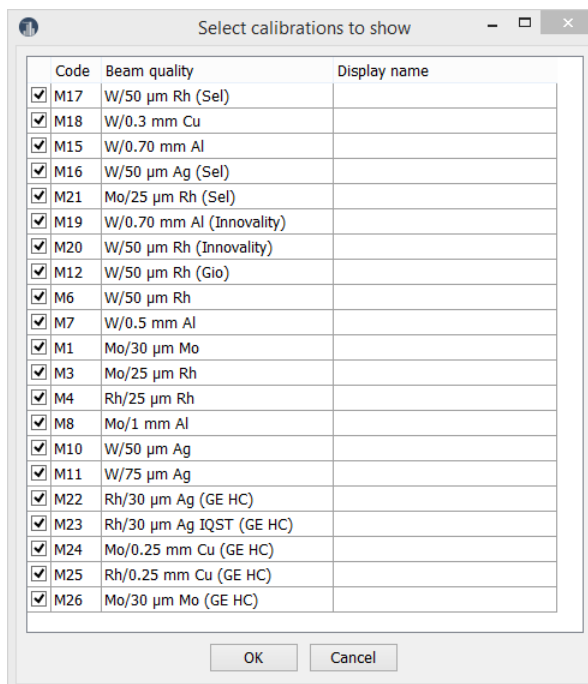
▼ **Preferences** - The settings below are user-chosen preferences to customize Ocean.

The settings listed here control how Ocean 2014 works.



- Show inactive records** The default is checked. If unchecked, items set to "inactive" in the database are not shown.
- Favorites screen** Defines when the user wants to see the Favorites list when you start Ocean 2014. Three choices are available: always, only at start up) or only when the Favorites button is clicked.
Note: There are two different Favorite functions, one for Ocean 2014 and one for Quick Check. This setting here only affects the Favorite function in Ocean 2014.
- Locate records during import using** User selection to locate items by "Name" or by "ID". Default is that items are located by "Name".
- Language** Select language (only American English is presently available).
- Backup of database at start up** If this box is checked, a back-up of the database will be performed every time you start Ocean.
- Show warning dialog if document license becoming more restrictive** A message is shown when saving a document if the required license level to open it again, is raised.
- Rows each test uses** Space allocated for each test when a complete session is dumped to Excel.
- Office document waveform size** Select size for waveform pictures that are exported to Excel.

- Show hints automatically** If this is checked, hints are shown automatically.
Note: Check these boxes to use the individual checkbox that is available for each hint.
- Auto start session** If checked, the session starts automatically when it is opened.
- Use inspection scheduler** Enable the option to set inspection dates. You will also be reminded to set the next date when you start an inspection.
- Show Generator name with session name in the "tree"** Show the generator name with the session name in the room's Measurements folder.
- Show Tube information with Session names in the "tree"** Show tube information with the session name in the room's Measurements folder.
- Auto-scroll analysis** When a "one row analysis" (AGD, CTDP(helical scan/in phantom), CTDP(helical scan/free-in-air) and QuickHVL) the analysis automatically scrolls to show the analysis.
- Confirm exit** Show a dialogue before Ocean 2014 closes. It allows you to return to quit Ocean 2014 Windows or quit Ocean 2014 and turn off the computer.
- Show warnings for uncompensated values** If checked, a warning is shown if a measured value is not auto compensated. Default value is unchecked.
- Show small Ocean 2014 window when using Office document** Show a minimized Ocean 2014 window when working with Excel workbooks.
- Modify shown mammography calibrations** By default are all available mammography calibrations shown. If you are not using all of them, you might want to reduce the list to the ones you use and/or change display names. You can do that by clicking on the button "Modify shown mammography calibrations". A list is shown, uncheck the calibrations you want to hide, You can also edit the name that will be shown:



You can enter a new name in the column to the right if you want another name to be shown for a calibration. However, be careful when using the renaming option

to avoid confusion about calibrations. The code given in front of each default name is the reference to the calibration record.

Each document has its own list stored when it is created. Each time it is used, the available choices are the ones stored. If you want to update it with the calibrations currently on your computer do the following:

1. Go to the Design page on the ribbon bar.
2. Click on "Refresh calibration list".

I prefer to use Ocean 2014 in this way This allows you to set up Ocean 2014 in three different ways:

Use Ocean 2014 and Quick Check: Do not auto-start Quick Check: You use Ocean 2014 mostly to run session or use real-time displays and you don't want Quick Check to auto-start if meter is available.

Use Ocean 2014 and Quick Check: Auto-start Quick Check: You use the Quick Check mostly and you want Quick Check to auto-start when you start Ocean 2014 if meter is available.

Use only Quick Check: You use only the Quick Check and never sessions or real-time displays.

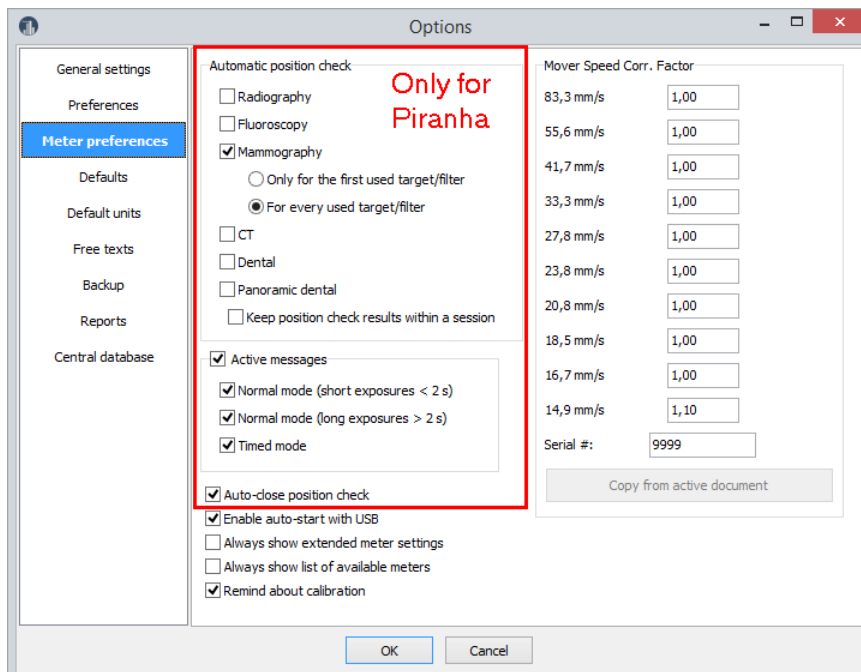
Meter type

When no meter is connected Ocean 2014 uses a "virtual" meter when you build templates. Select here the meter you intend to use if you have no meter connected when you build templates.

Note: Build the templates for Piranha if you intend to use templates for both Piranha and Cobia.

📌 **Meter preferences** - The settings below are user-chosen preferences for the meter.

The settings listed here controls the meter.



Automatic position check (Piranha)

Defines when user wants to be notified to do a position check.

You can select individual setting for each modality. For mammography you can also select that the position check shall be valid within a session. This assumes that you don't move the meter between different tests in the session.

Active messages (Piranha) If checked, active messages will be displayed for each measuring mode.

Auto-close position check (Piranha) If checked, position check closes automatically when it is successful.

Enable auto-start with USB If checked, Ocean 2014 starts automatically when meter is connected with USB. Ocean 2014 exits automatically when meter is disconnected or powered off.

Always show extended meter settings If checked, all meter settings are always visible on the Meter Adjust tabs and you don't need to click on the More button to see all settings.

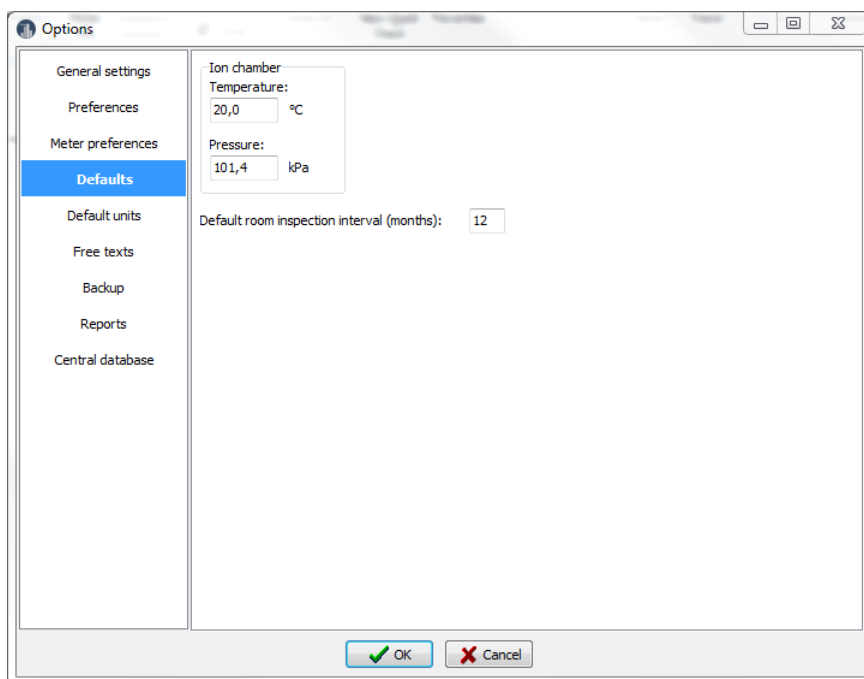
Always show a list of available meters If checked; Ocean 2014 shows a list of available meters when scanning for a device to connect to via Bluetooth. If unchecked, the list is now shown if the last used meter is found. Ocean 2014 then directly connects with it.

Remind about calibrations Uncheck this box if you don't want to see re-calibration reminders.

Mover Speed correction factors You can here specify correction factors for the Mover speed to increase accuracy when it is used. See the Mover manual for more info.

Defaults - These settings control functions within Ocean 2014 related to measurements and templates

These are the settings that will be the defaults related to measurements.



Temperature Reference temperature used when calculating the TP-factor for ion chambers.

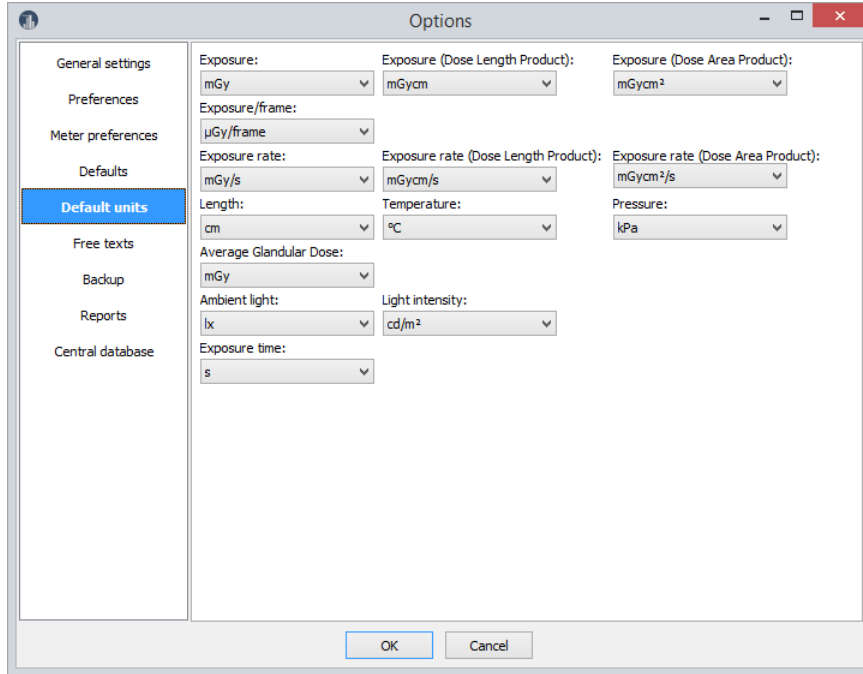
Pressure Reference pressure used when calculating the TP-factor for ion chambers.

Default inspection interval Default inspection interval (months) for room.

Default units - These settings control functions within Ocean 2014 related to measurements and templates

These are the default units, they can be changed "locally" in each template. The default units are used for the following cases:

- When a new template is created
- When using connect to Excel with fixed format mode in Quick Check.

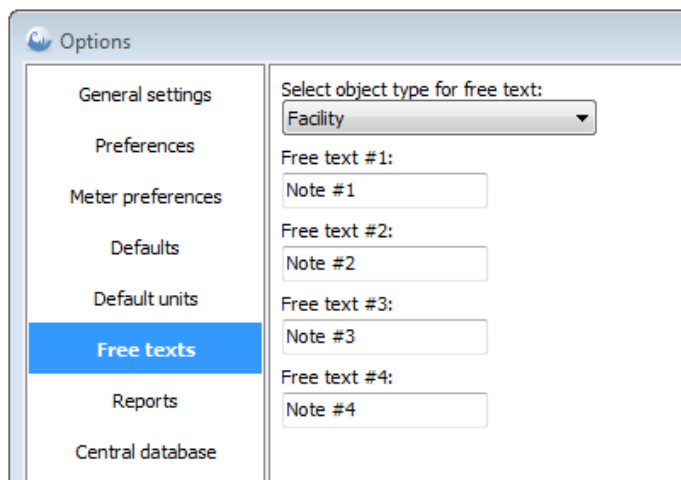


Units

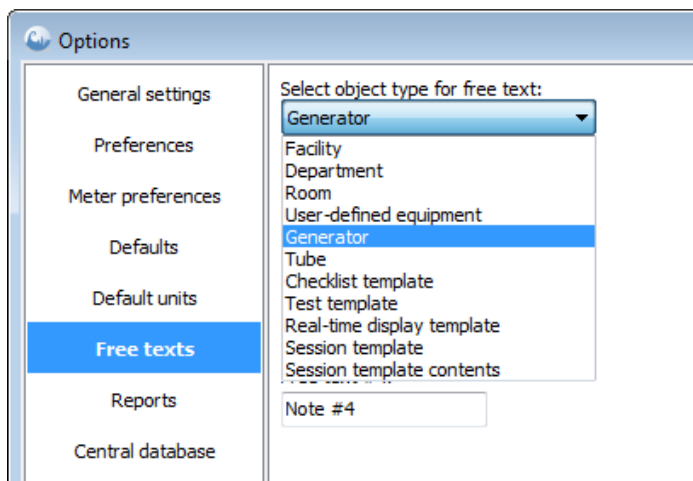
This is where you can define the default units you want to work with. The choice you make here will affect all new templates you design, but you can change them locally at any time.

Free texts - Edit user-defined labels

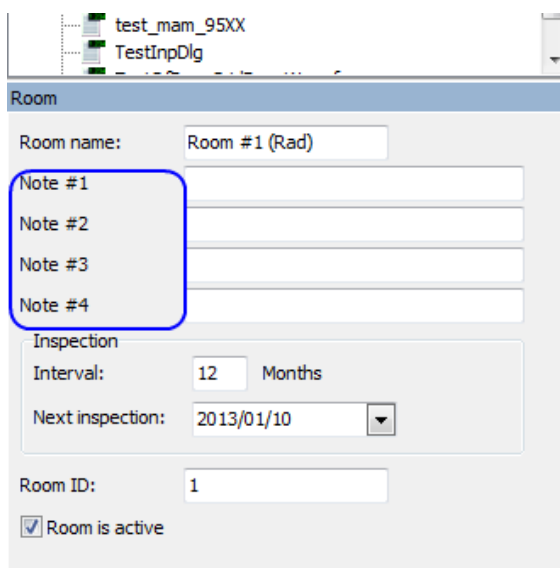
Here it is possible to specify the user-defined labels that are available for facility, department, room, generator, tube, user-defined equipment and all type of templates.



First select object type and then edit the free texts.



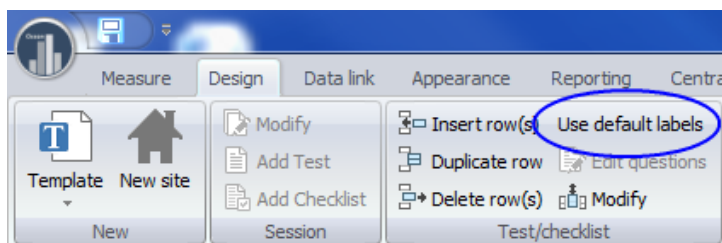
The free texts are labels for the user-defined fields that are available for all site objects:



These fields are also shown in the report and can be used to specify user-defined data.

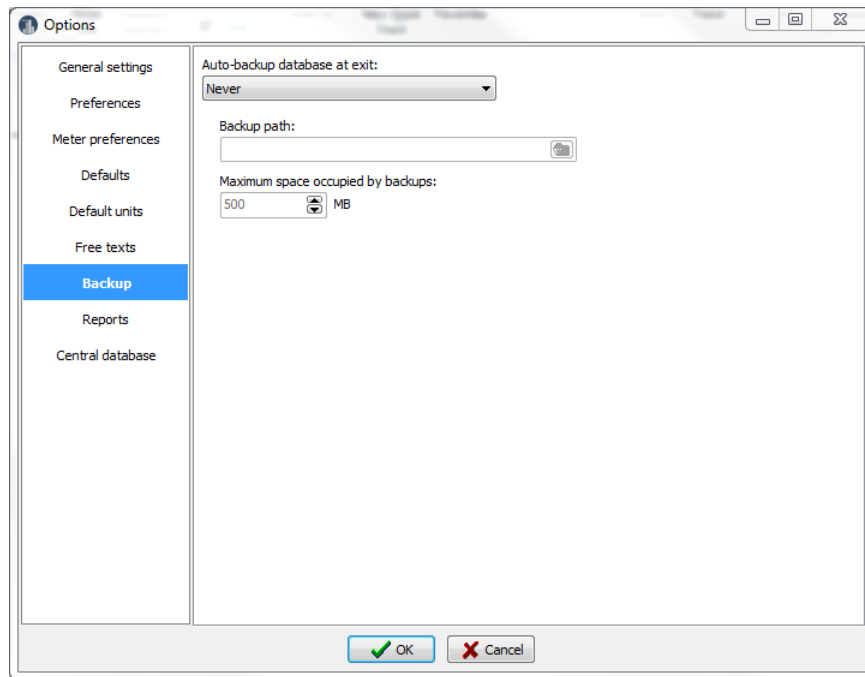
If you change the labels here it only affects the default labels that are used when you create new templates. If you want to use the new labels in already existing templates do the following:

1. Go to the design page.
2. Click on "Use default labels".



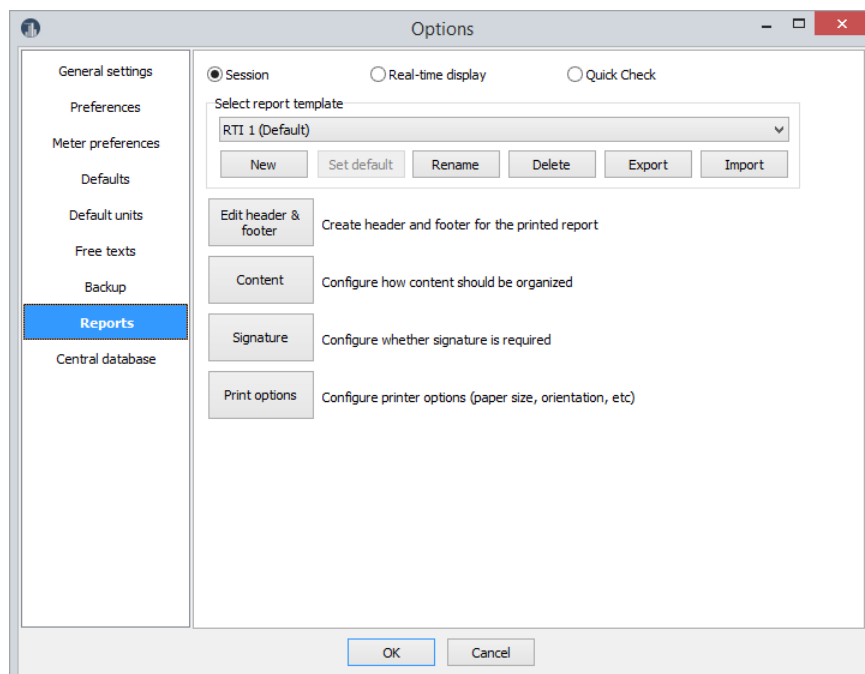
Backup - Automatic backup of the database

Here it is possible to define how backup of your database can be done automatically and where the backup is going to be saved.

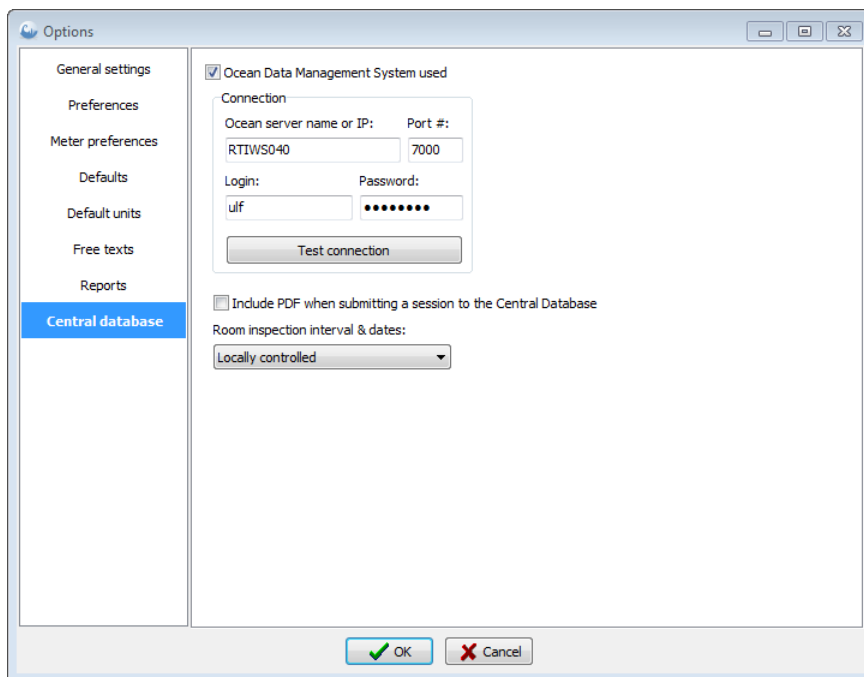


📌 Reports - Define different templates for the report

Here it is possible to define individual header and footer for cover page and test pages, content and print options. It is possible to use standard texts, user-defined texts and pictures (for example a logo). One report template can be set as "default" for each "type of document" (Session, Real-time Display and Quick Check) and will automatically be used when new session templates are created. Different report templates can be created and you can quickly choose between them when you create your report.



📌 Central database - Settings if you are going to connect to a central database



You will get instructions from the system administrator for Ocean 2014 Central how to set these parameters if this option is used.

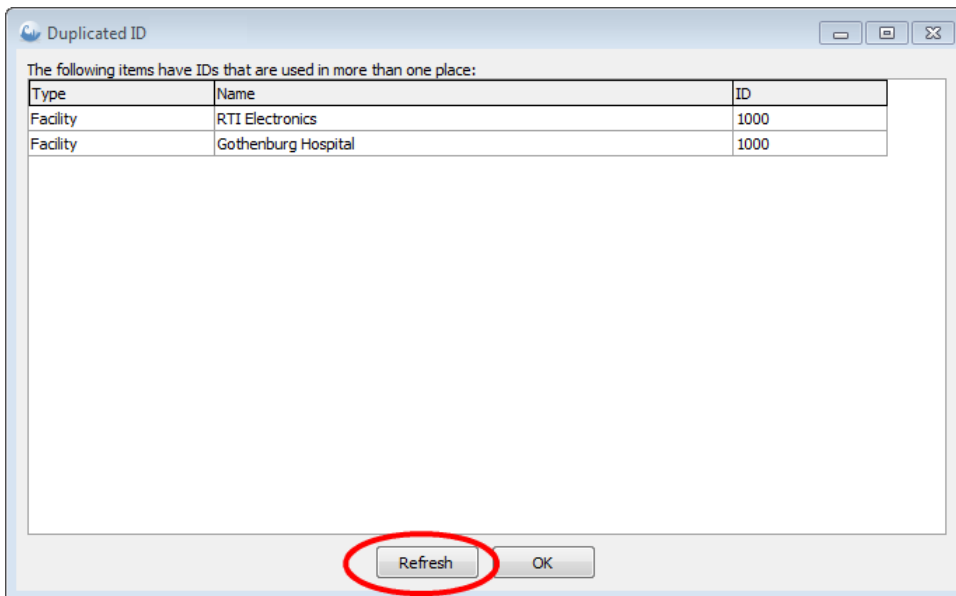
3.7.9 Locate data during import and export

There are two ways to locate session data when export and import is used between different users. This is applicable both the the standard import/export function when e-mail is used and when Ocean Central is used. Location of data can be done with "Name" or "ID". Measured session are organized based on the site information (facility, department and room). The session also includes information about tested equipment (generator, tube and any user-defined equipment). All these items are recognized either by its name or by an ID it has been given. The default way to locate data is by Name. If you want more data integrity you may use ID instead. In this case must a all items (facilities, departments, rooms and all equipment) that are used have an ID specified. This ID is then used to decided where data goes when it is imported/exported.

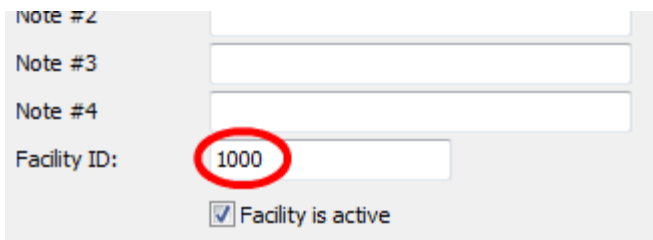
If you want to use ID instead of name, go to the Preference page in the Program Options and select ID.

ID can be any text string and it must for each level be unique (all facilities must have a unique ID, all departments within a facility must have unique ID, and so on). If ID is selected the uniqueness is checked every time you click on the button "Check IDs" on the Design page of the ribbon bar.

If there are duplicated IDs the following is shown:



All duplicated IDs will be shown. You can double-click on a row and the corresponding ID will be located and you can modify it:

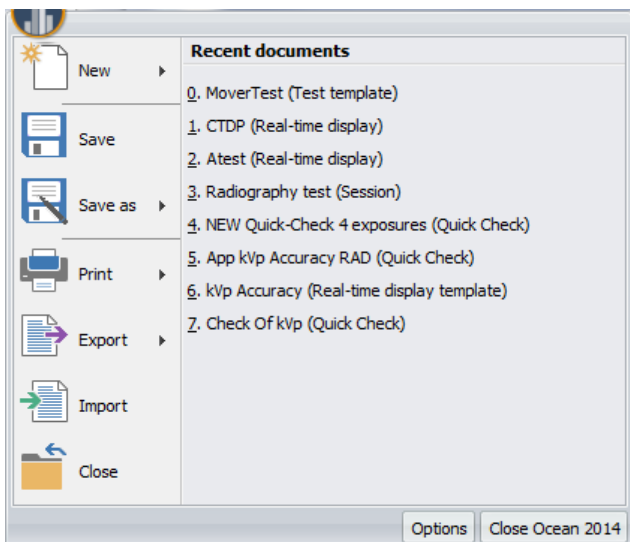


Modify the ID and click on the Refresh button to update the list.

3.7.10 Exit Ocean 2014

To exit Ocean, simply click on the Application button and then choose the Close Ocean 2014 button located on the bottom right of the Application menu.

NOTE: The Close button in the Application menu and on the Ribbon bar will only close the current job you are working on but it will not exit Ocean.



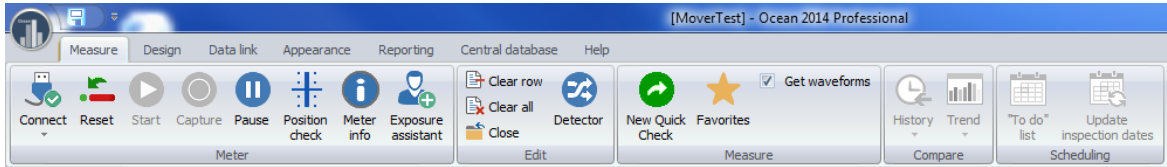
If you have unsaved work while trying to exit Ocean, you will be given the choice to save and then exit.

Chapter 4

Main functions

4 Main functions

In this topic the main functions on the Ribbon are described.



The main functions are:

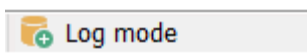
Measure	Functions you need when you do measurements
Design	Functions you need when you create or modify templates
Data link	Functions you need when you use Ocean 2014 with Microsoft Excel
Appearance	Functions you need when you want to change how things appear on the screen
Reporting	Functions you need for reporting
Central Database	Functions you need when you are connected to a central database
Help	Here you will find help on how to use Ocean 2014 topic by topic

Many of the functions are also available via a "right-click" with your mouse. Simply right-click on an object and a menu will be shown with the functions available to you.

4.1 Measure

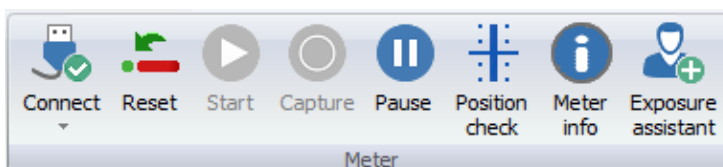
Most of the functions you will need when you make measurements are located on the Measure tab of the Ribbon bar. There are three groups of functions you will need to know about: Meter functions, Editing functions and Measure functions. See below a more detailed discussion on all three groups of functions.

When you are measuring, the lower status bar shows "Log mode".



This indicates that measures data are saved when you click on the save button.

Meter



These are functions related to controlling your instrument. The settings are also available on the Meter adjust tabs on the right of the Ocean 2014 Main screen.

NOTE: If you do not own a Piranha or Cobia, just ignore the meter adjust tabs.

Connect - This function establishes communication between your instrument and Ocean

Make sure that the meter is connected to the computer (via USB cable or Bluetooth). Read the section Connecting your meter the first time to see how you connect to a meter when using Bluetooth.

You can toggle between *Keyboard* and *Connected* by clicking on the upper part of the button. With *Keyboard* active you must enter all measured data manually via the keyboard. When the meter is connected the measured data is transferred automatically from the meter to the Main screen grid.

If you click on the lower part of the button a third option, *Disconnect*, is available. Use this option only in the event you need to:

- Turn your meter off and then back on again.
- If you need to restart meter communication (for example, if you want to switch from one meter to another one). See also Auto start and auto connect.
- If you want to stop meter communication (for example if another program should use the meter while Ocean 2014 still is running).

Note!

It is recommended that you turn off power save mode or sleep mode on your computer while you make your measurements with a meter connected. You may experience problems with meter communication if your computer goes to sleep mode or power save mode automatically.

↓ **Reset** - Manual reset (zero-adjust)

You click on this button when you need to reset the meter. This is normally done automatically but you may have to do it manually in certain situations, for example:

- When you measure at very low signals and use "Free run" measuring mode.
- When you suspect that the meter, for some reason, measured an incorrect zero-level.

↓ **Start** - Start measuring manually

This button is used in **Free run** and **Timed mode** to start the measuring sequence.

↓ **Capture** - Click this button to capture a value manually

You can use this button during long measuring sequences (for example when testing a fluoroscopy unit) to capture the data at a time of your choice. For example, you may wish to wait until the data is stable before capturing a value. You must always use this button to capture the measured data when **Free run** mode is used.

The waveform is also captured at the same time as you click on this button (if the checkbox **Get waveform** is checked). Note - free run mode doesn't provide a waveform.

↓ **Pause** - Pause measurement

This button is used if you don't want the meter to measure even if the detector gets radiation or trigger for some other reason. You can use it for example when you use fluoro and the monitor to position a detector on the image intensifier.

↓ **Position check** - Verify that your kVp detector is positioned correctly

You can use this to verify that the kVp detector is correctly positioned in the X-ray field. It is always recommended to use this function, but it is especially important in the situations described below:

- Whenever you measure on mammography (after every change of target/filter)
- For all small X-ray fields or when there is a risk that the entire detector may not be irradiated (for example CT and dental)
- If the detector is positioned very close to the focus point

The position check results are not stored with the measured data. If you wish to store this value, you can add a special column to your test and the position check results will be saved with the test in a column of its own.

Position check is always initiated automatically for mammography. This function can be turned of in the Program options.

↓ **Meter information** - Get meter information

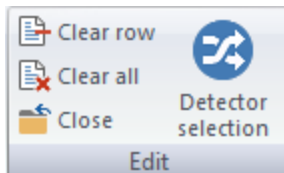
Click on this button if you want to know more about the connected meter and Ocean. The following information is provided:

- Meter DLL location and version
- Ocean 2014 version
- Meter serial number
- Hardware versions
- Model
- Calibrations

↓ **Exposure Assistant** - Capture a value automatically when measured values are stable

Click on this button if you want to use the Exposure assistant. Values are captured automatically when they are stable. This is especially useful for long exposures (fluoroscopy and for light measurements).

Edit



These functions are used for editing the measured data.

↓ **Clear row** - Clear current row (removes all measured data from current row)

Click on this button if you want to clear the current row. The set values will not be removed with this command.

↓ **Clear all** - erase all data in the object you are working with (removes all measured data from the entire grid)

Click on this button if you want to clear all the rows. The set values will not be removed with this command.

↓ **Close** - Close your current work (this command will not close Ocean)

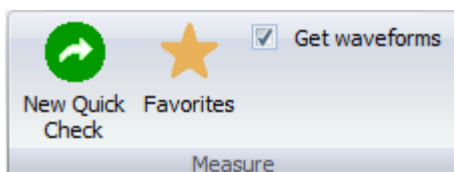
Click on this button if you want close the current job you are working on. You will be prompted to save any unsaved data before closing.

This is the same as **Close** on the **Application menu**.

↓ **Detector selection** - Change the detector

Use this button if you want to choose another detector for your current measurement. Read more in the topic Detector selection.

Measure



From here you can open the Favorites list and find some functions that control how measured data are acquired.

↓ **Quick Check** - Start Quick Check

Click on this button to go to Quick Check.

↓ **Favorites** - Shows the favorites list

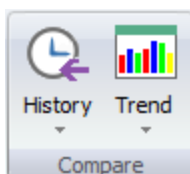
Click on this button to show the Favorites list.

↓ **Get waveform** - Enable waveform acquisition for every exposure

The default for this function is CHECKED. This means that a waveform will be acquired for every exposure. Uncheck this box if you don't want waveforms to be acquired for each exposure.

If you prefer to acquire waveforms sometimes but not all the time, you can specify in the test template whether or not you want to acquire the waveform. For example, if your test template contains four measurements, and you only want to acquire two waveforms, you can choose which two of the four measurements will acquire the waveform and which two will not. If you use this option it will override the **Get waveform** checkbox.

Compare



From here you can do trend analysis and easily look up previous measurements done earlier in the same room.

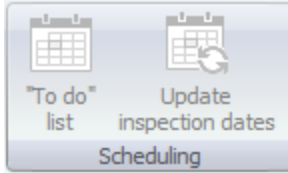
↓ **History** - Shows previous similar tests from the same room

Click on this button to view the history of similar measurements in current room.

↓ **Trend** - Trend analysis

Click on this button to start trend analysis. You can compare how different parameters change over time.

Scheduling



▼ **To do list** - Shows your To do list

Click on this button to show the To do list.

▼ **Update inspection dates** - Update inspection dates from the Central Database (only if Ocean 2014 Central is used)

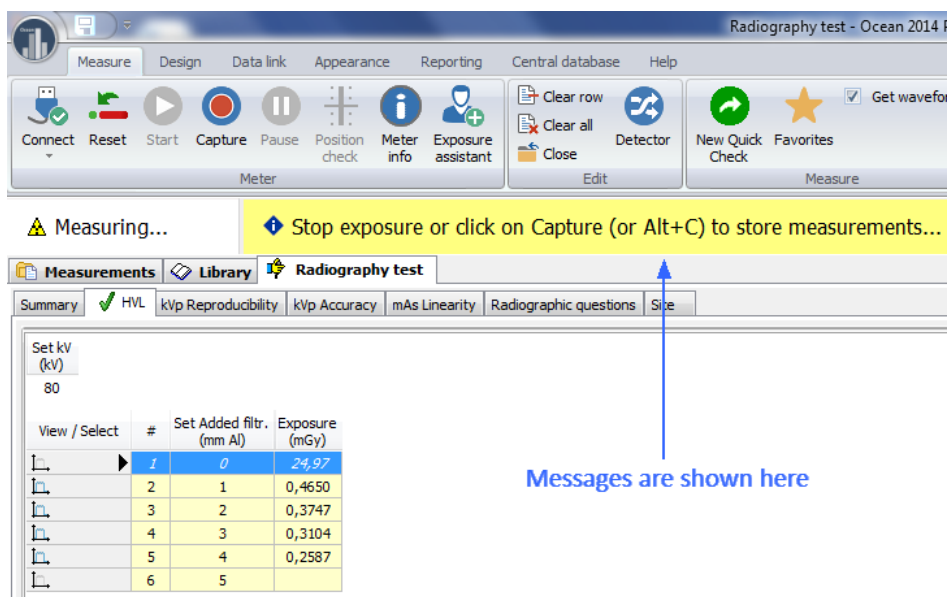
This button is only used if Ocean Central is used. Read more here.

4.1.1 Different measuring modes

There are three different measuring modes available using the Piranha and two for Cobia. They are as follows:

Measuring mode	Description and use
Normal	The Normal mode is used for short and long (fluoro) exposures. In this mode, your meter will sense automatically if there is a signal and when it is above a certain trigger level. If the signal is long, the displays/grid will be updated with new data every 2 seconds data. If the signal is short, the results are displayed after trigger is off.
Free run (not available with Cobia)	The free run mode has no trigger level. As soon as the meter is told to begin measuring, it starts to measure even if there is no signal. This measuring mode is useful when the signal you want to measure is very low. Free run is recommended for light measurements, especially when measuring "ambient" light (when no shutter is present).
Timed	The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode and it will further improve the meter's capability to measure very low signals.

The Message bar is used during measuring to assist you to collect data most efficiently:



Important!
 Read the "yellow" messages carefully and follow the instructions. This will ensure that you can maximize your productivity and collect data quickly and correctly.

4.1.1.1 Normal

This is the measuring mode you will use most frequently. It can be used for both short and long (fluoro) exposures. In this mode, the meter functions fully automatically. It will sense from the detector when there is an exposure and will start and stop the measurement automatically.

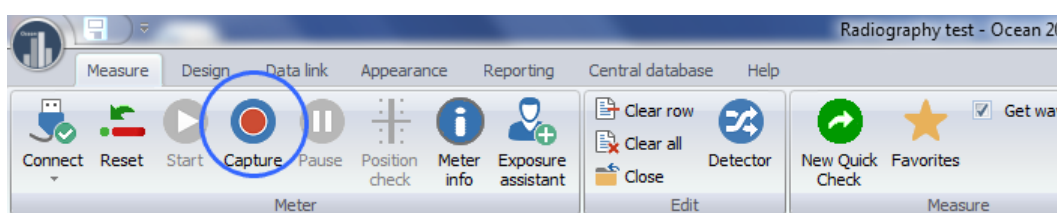
Short exposure (<2 seconds): Results are shown in the grid and the displays as soon as trigger is off.

Long exposure (>2 seconds): If the exposure is long the grid and displays are updated with new data every 2 seconds. Italic font is used in the grid to indicate an ongoing exposure.

View / Select	#	Exposure (norm) (mR)	Exposure time (ms)	Exposure rate (norm) (R/min)
	1	22810	2962	462,1
	2	5596	658,4	510,0
	3	<i>51930</i>	<i>6056</i>	<i>509,0</i>
	4			
	5			
	6			
	7			

As soon as the exposure is terminated, the final data is shown in the grid with normal font, and the meter is prepared for the next measurement. The cursor is moved to the next row in the grid.

It is possible to capture the data by clicking the capture button during a long exposure.



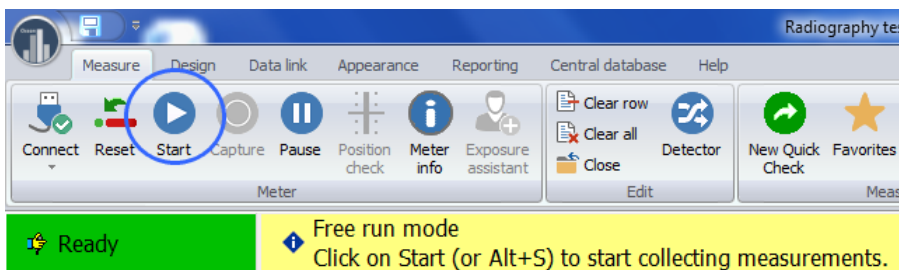
When you click the Capture button the data in the grid and the displays freeze and a waveform is acquired. Once you captured the data, you can either turn off the exposure or you can resume measuring by clicking the Start button (located to the left of the Capture button). If you turn off the exposure, the meter recognizes this and moves on to the next row.

4.1.1.2 Free run (only for Piranha)

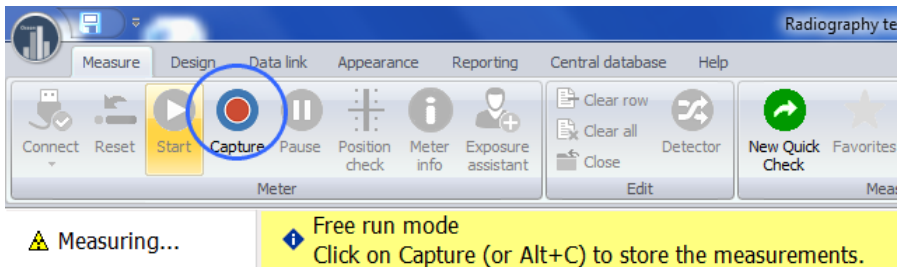
The free run mode has no trigger level, so it is ideally suited for measuring very low signals. In this mode, the meter will start measuring even if there is no signal. Use the Start button to begin the measurement. As soon as you pressed the Start button, Ocean will start to display measured data and you can use the Capture button to save it at any time. Free run gives you access to an additional sensitivity range called "Very high sensitivity" (see Meter Adjust for more information). A "Moving average" function is also available to further stabilize the readings. Note: No waveform is available when you use Free run mode.

When Free run mode is used, you must start the measurement manually by clicking the Start button. To use Free run mode:

1. When Free run is active the following is shown on the ribbon bar when you are on a new row:

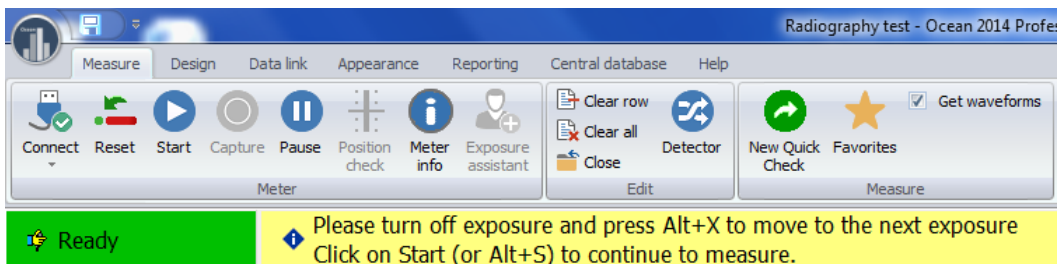


2. Click Start when you are ready to begin measuring.



3. Click Capture when the measured values are stable and you want to capture the data.

4. When you click the Capture button the data in the grid and the displays freeze. If you want to keep it, turn off exposure.



You can also click Start to resume measuring.

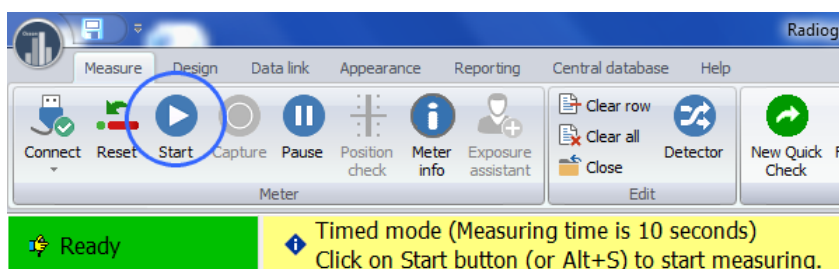
5. Click on the yellow field after you have turned off the exposure to move on to the next row in the grid.

4.1.1.3 Timed

The Timed mode setting measures during a pre-defined time period. Measurements in Timed mode must be started manually. This measuring mode is very useful when you want to measure a very low signal. You can use the "very high" sensitivity setting in Timed mode for the external detector and it will further improve the meter's capability to measure very low signals. The measuring time is defined on the Meter tab (see Meter Adjust for more information).

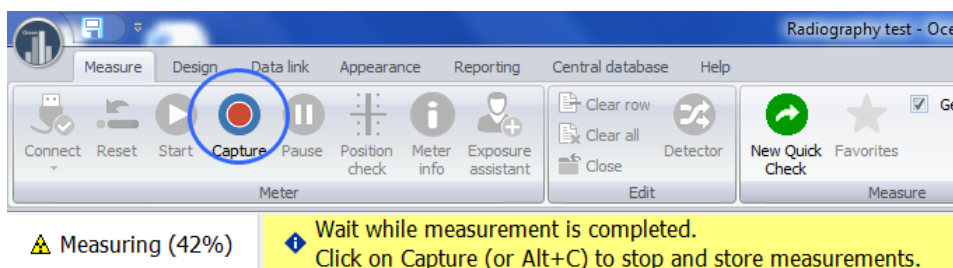
When Timed mode is used, you must start the measurement manually by clicking the Start button. To use Timed mode:

1. You may start the exposure at any time (before or after you click the Start button), depending on the situation:



When you click the Start button, the measurement starts.

2. The capture button now becomes active.



The meter will continue to measure according to the specified time setting. The progress is shown on the status bar. You can stop before the time expires by clicking the Capture button.

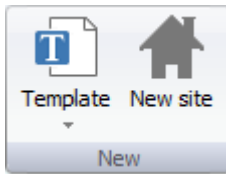
3. When the measurement is completed (after expired time or if you clicked Capture) you are asked to turn off the exposure before Ocean proceeds to the next row in the grid.

4.2 Design

Most of the functions you will need when you make templates are located on the Design tab of the Ribbon bar. There are six groups of functions you will need to know about: New, Session, Test/checklist, Real-time display, Miscellaneous and Analysis. See below a more detailed discussion on all of these groups of functions.

You can use the same templates for both Piranha and Cobia, a template built for Piranha can be used with Cobia and vice versa. It is recommended, if you intend to use your templates with both Piranha and Cobia, that you build your templates for Piranha. The reason for this is that Piranha has more settings and you can in this way setup the templates to work in the best way with Piranha. If you do the opposite, Ocean 2014 will select default settings for the Piranha when a value is missing (due to it doesn't exist for the Cobia). If you build templates without a meter connected; go to program options and select default "Meter type" in the Preference section.

New



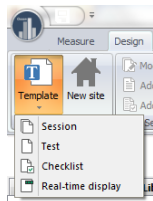
These two functions you use when you want to create something new (a template or a site).

↓ **Template** - Design a new template

A template is an object without any measured data. It is like a pre-defined test protocol without any actual measurements in it. A template has all the necessary information to perform a certain task (either a measurement, a group of measurements or a checklist). The template contains any or all of the following:

- set values
- meter settings
- analysis (with it's own pre-defined pass/fail criteria)
- pre-defined pass/fail answers to quality assurance compliance questions (checklists)

Using a template to perform a certain task, therefore, is a fast and efficient way of doing quality assurance compliance testing for X-ray systems. You can create four different types of templates that will be stored in the database for future use. They can be used individually (session and real-time display) to quickly repeat standard measurements. Test and checklist templates are used as "building blocks" for creating session templates containing a complete set of measurements and checklists to complete specific quality assurance compliance testing required by regulatory agencies responsible for X-ray system quality control. Once these templates are created, you can share them with your colleagues and regulatory agencies if you like.



When you click on the **Template button** you can select the type of template you want to create. The four template choices are listed below:

- New Session template
- New Test template
- New Checklist template
- New Real-time display template

New Session template

When you click on the Session template choice, it starts a wizard to help you create your new session template. A session template is a collection of tests and/or checklists that together define a complete job. When you make measurements with a session template, a report can be generated upon completion of all the measurements. The wizard lets you:

- Select test and checklist templates from the Library
- Specify a title and other information for the session template
- Specify options that control the report generation process

When the wizard is done the session template is created and opened. It is possible to add and remove tests and checklists "on the fly" after the session template has already been created and saved.

Click on Save to save the session template. You can find your new session template under the Library tab to the Left of the Main screen grid under Session templates. Read more about session templates in the topic Design a session template.

New Test template

When you click on the Test template choice, it starts a wizard to help you create your new test template. A test template is a table with a number of exposures. The measuring conditions, meter settings and required calculations are specified for each exposure. You can assign different types of analysis calculations to one or several of the exposures in the template. When you use the template, you will be able to see the analysis results on the right side of the screen below the grid. The analysis calculations will be made on the row or several rows you specify and will be saved with the measured data. The wizard will take you through a number of steps to create the basics of a test template.

When you start the Test template wizard it will help you do the following:

- Specify a name and other information for your new test template
- Select a modality
- Select the number of columns, detectors and calibrations you wish to use
- Select other general settings for your new template

Just follow the wizard's guidance and making a template will be easy. When the wizard is done the test template is created and opened. To complete your new test template you also have to do the following:

- Specify set values (generator, conditions and so on)
- Adjust the meter settings for each row if necessary
- Add one or more analysis with pass and fail criteria
- Modify appearance: you can change the order of columns, modify the number of decimal places for the numeric values, choose the measurement units to be used and you can change the size and location of the different windows on your screen

Click on Save to save the test template. You can find your new test template under the Library tab to the Left of the Main screen grid under Test templates.

You can go ahead and use your new template now if you have your instrument connected to Ocean and your instrument has the capability to make the measurements required by your template. This way you can try your new template and adjust the settings if necessary to make sure the template is exactly what you wanted.

NOTE: A test template cannot be stored with measured data. Read more about this in the topic Design a test template.

New Checklist template

When you click on the Checklist template choice, it starts a wizard to help you create a new checklist. A checklist is a number of questions and/or tasks that need to be performed and confirmed. For each row you can specify the following:

- A question or task text
- The type of answer (choose from yes/no, text, value or user-defined options)
- Additional information (extensive text and picture information related to the question or task you are working on)
- Add pass/fail criteria
- Recommendation in case of failure
- Name for the checklist and other additional information

Click on Save to save the checklist template. You can find your new checklist template under the Library tab to the Left of the Main screen grid under Checklist templates.

NOTE: A checklist template has no answers in it and it cannot be saved with results. Read more about this in the topic Design a checklist template.

New Real-time display template

When you click on the Real-time meter template choice, it starts a wizard to help you create your new real-time display. A real-time display is a template with a number of displays and a grid where

measurements are logged. The wizard will take you through the following steps to create the real-time display template:

- Select a modality the template will be used with
- Select the number of columns, detectors and calibrations you wish to have
- Select other general settings

Just follow the wizard's guidance and making a real-time display will be easy. When the wizard is done the real-time display template is created and opened. To complete your new real-time display you also have to do the following:

- Specify set values (generator, conditions and so on)
- Adjust the meter settings for each row as necessary
- Modify appearance: you can change the order of columns, modify the number of decimal places for the numeric values, choose the measurement units to be used and you can change the size and location of the different windows on your screen

Click on Save to save the real-time display template. You can find your new real-time display under the Library tab to the Left of the Main screen grid under Real-time display templates.

You can go ahead and use your new template now if you have your instrument connected to Ocean and your instrument has the capability to make the measurements required by your template. This way you can try your new template and adjust the settings if necessary to make sure the template is exactly what you wanted.

You may also choose to save your real-time display with the measured data. In this instance, the real-time display with the measurements will be saved under the Measurements tab to the left of the Main screen grid. Read more on this in the topic Design a real-time display template.

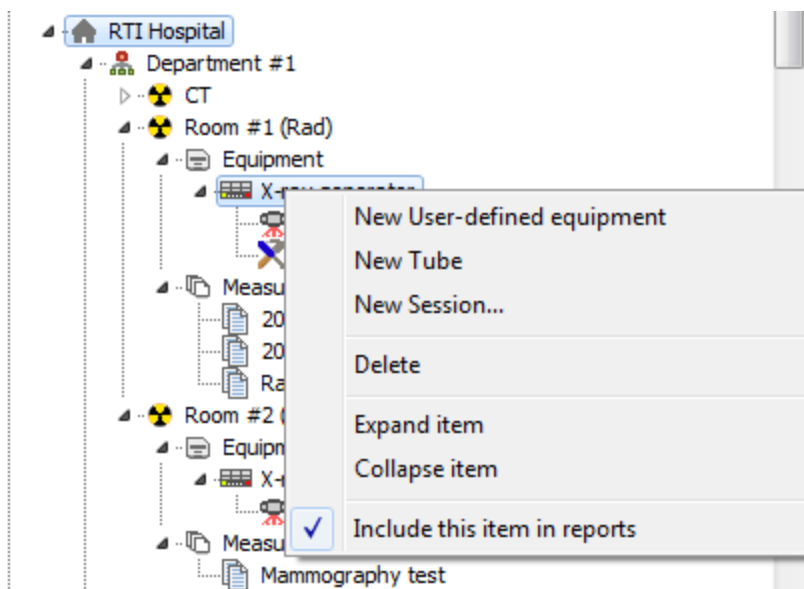
-End-

Site - Create a new site (facility/department/room/generator/tube)

When you click on the Site button, it starts a wizard that will help you create a new site. A site is a description of a location and equipment to be tested. The wizard will take you through a number of steps to do the following:

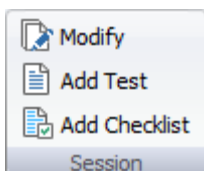
- Create a facility, department and room
- Create a generator and tube

When the wizard is done, a new site is created. To find your new site, look under the Measurements tab to the left of the Main screen grid. The equipment belonging to the new site you just created is found under the Equipment tab to the right of the Main screen grid. You can add more equipment to a room and more rooms to a site at any time by right-clicking on the room name or site name in the tree to which you wish to add new items (see picture below).



Read more in the topic [New site](#).

Session



These are the functions to use when you wish to edit a Session template.

↓ **Modify** - Modify current session

If you click the Modify button the session template building wizard starts. This wizard will let you modify the following:

- Session template information
- Add/remove test and checklist template
- Change settings for the report

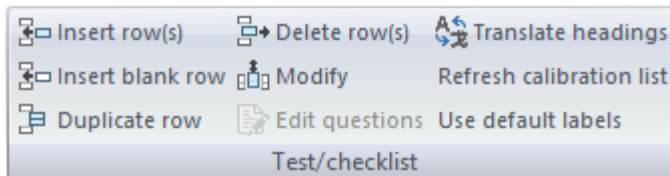
↓ **Add Test** - Add a new test to current session template

If you click on this button you can add an existing test template to the session template you are working with or build a completely new one and add it "on-the-fly". Read more in the topic [Add/Delete a test to a session](#).

↓ **Add Checklist** - Add a new checklist to current session template

When you click this button you can add an existing checklist template to the session template you are working with or build a completely new checklist and add it "on-the-fly". Read more in the topic [Add/Delete checklist to a session](#).

Test/Checklist



These functions are used to edit an existing test or checklist template.

▼ **Insert row(s)** - Add more rows to current test or checklist

With this function you can do the following:

- Number of rows to insert
- Insert first, last or before/after active row

Inserted rows will not be assigned to any analysis.

▼ **Insert blank row** - Add a blank row to the grid

Add a blank row in the grid. This row has no function, it is just used to increase readability.

▼ **Duplicate row** - Duplicates selected row

Selected row is duplicated, the new row(s) will be a copy of the selected row, including any analysis, cell formulas, background and font color.

▼ **Delete row(s)** - Delete selected rows

Delete the selected row(s). By default, this function deletes the current active row. You do have the option to select a range of rows for deletion by using multi-selection.

▼ **Modify** - Modify current test or checklist

When you click this button, the checklist design mode is enabled. You can go back to working mode again by clicking the Modify button again or by clicking the Close button.

▼ **Edit questions** - Edit questions in a checklist

Click this button if you want to edit a question in a checklist.

▼ **Translate headings** - Translate column heading texts

This button is to translate column heading texts if Ocean is used with more than one language.

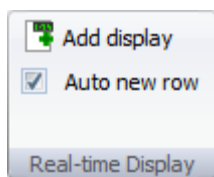
▼ **Refresh calibration list** - Refresh the calibration list stored in the document (only mammography)

This button is to load current (from Program options) calibration list for mammography into the open document.

▼ **Use default labels** - Force user-defined labels into the template

When you click this button is active template updated with default labels as they are specified in Program Options.

Real-time display



These functions are used when you want to edit a real-time display template.

↓ Add display - Modify current real-time display

Use this button if you want to add or delete displays in your real-time display template.

↓ Auto new row - Select if you want to add new rows automatically

If you have Display license level, this checkbox is always checked.

If you have Connect or Professional license level, you have the ability to create real-time display templates with a specific number of rows pre-defined. When you use a real-time display template, just make your measurements and when you wish to stop, uncheck this box and no further rows will be created.

Miscellaneous



These functions are used when editing a Session or Test template.

↓ Detector - Select or change the detectors to be used

When you click the Detector button, the detector selection dialogue will be shown and you may select any detector you have in the list to be used with your template. Read more about this in the topic Detector selection.

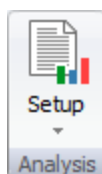
↓ Protection - Add protection to templates

A session or real-time template template can be protected from modification. Read more on this in topic Protection.

↓ Check ID-s - Check for duplicated IDs

A session or real-time template template can be protected from modification. Read more on this in topic Locate data during import and export.

Analysis



This function is to add or change analyses in the current test template.

↓ **Setup** - Add/modify analysis in the current test template

Use this button if you wish to add an analysis to your test template, or if you want to change the current analysis to something else. Read more about this in the topic Analysis (Definitions).

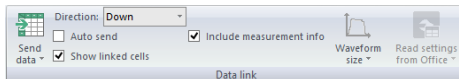
↓ **Translate** - Translate analysis texts

This button is to translate analysis texts if Ocean is used with more than one language.

4.3 Data link

The functions you need when you want to send data to Microsoft Excel are located on the Data link tab of the Ribbon bar. Functions are divided into two different groups:

Data link



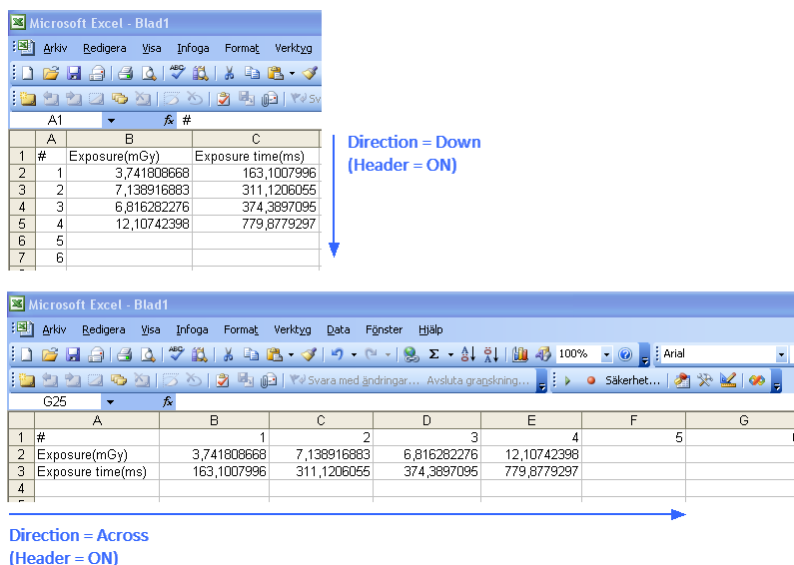
These functions are related to exporting data to a spreadsheet.

↓ **Send data** - Send data manually to a spreadsheet

You can manually send data to a spreadsheet by using this button. The data will be sent to the spreadsheet according to the currently selected data export mode. You can also read data from the spreadsheet into Ocean if you use linked cells. This makes it possible to import data from other meters into Ocean.

↓ **Direction** - Manually select direction to fill the spreadsheet (horizontal/vertical)

Data can be sent using the Down or Across direction. This is used only when you are not using direct linking between cells in Ocean and in Microsoft Excel.



↓ **Auto send** - Enable auto send

With auto send on, data is transferred automatically from your meter to the spreadsheet after each exposure. Auto send can be used with all link modes, but it's optional since the data can always be sent by using the "Data send" button.

↓ **Show linked cells** - Enable indication for linked cells

This is only used for cell-to-cell mode to indicate which Ocean cells that are linked to a spreadsheet.

↓ **Include measurement info** - Include information about the exposure

The following information is attached to each exposure:

- Date and time
- Inspector name
- Meter type and S/N
- External detector type and S/N

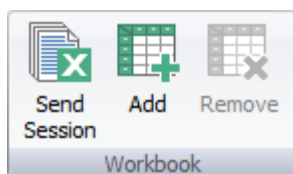
↓ **Waveform size** - Size of exported waveform graphs

You can select the size for the waveform graphs that are exported to the spreadsheet. Three different sizes are available.

↓ **Read meter settings from Office** - Read meter settings from the Excel workbook

You can define meter settings in your Excel workbook to control the meter. Read more in topic Read meter settings from Office.

Workbook



These functions are to help you quickly connect or disconnect a workbook to a session or to a real-time display.

↓ **Send Session** - Send a complete session to a workbook

You can send a complete session to a workbook.

Read more on this in topic Send Session.

↓ **Add** - "Link" a workbook to current session or real-time display

This button is used to "link" a workbook to a session or a real-time display. There are three ways to "link" workbooks:

Embed workbook: When you use this type of "link", a copy of the "linked" workbook is stored (embedded) inside the session or real-time display.

NOTE: In this case, Ocean works with the embedded copy of the workbook and the original file is not needed when you use the session template or real-time display template to which the workbook was "linked". Using this function gives users the benefit of never losing the workbook by accident.

Read more on this in topic Associate or embed a workbook.

Associate workbook: When you use this type of "link", it will be established to a user-specified workbook.

NOTE: Once you "linked" a workbook to a session template or a real-time display using the Associate function, that workbook must be available on your computer (or other media such as a CD or flash drive)

so Ocean can find it and create the link whenever you use the session template or real-time display to which the workbook was linked. It is, therefore, recommended that you either store your "linked" workbooks in a clearly identified folder on the computer you usually use Ocean with or on other media (such as a CD or flash drive) that is clearly marked and readily accessible when you use Ocean.

Read more on this in topic Associate or embed a workbook.

Free workbook: Use this type "link" when you just want to create a temporary link.

NOTE: In this case the link is not saved when you save the real-time display or the session.

Read more on this in topic Free workbook.

📌 **Remove** - Delete the link to the workbook

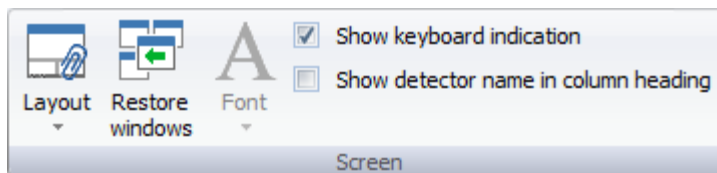
Use this function to delete a link to an associated workbook or remove an embedded workbook.

Read more on this in topic Associate or embed a workbook.

4.4 Appearance

The controls customize the Main screen layout (your workspace) are found on the Appearance tab of the Ribbon bar. There are screen layout functions, display layout functions and waveform appearance functions available on this tab. Each group of functions is discussed separately below.

Screen



These functions are related to the Main screen layout and appearance.

📌 **Layout** - Change the layout for the workspace

This button is used to toggle between the three different pre-defined layout choices Ocean offers. You can also arrange the screen layout manually if none of the three layout choices are to your liking. Read more screen layout in topic Screen layout.

📌 **Restore windows** - Restore windows

This button is used to restore the default screen layout Screen layout.

📌 **Font** - Select font size for the user-interface (Note: Not applicable for Quick Check in this version).

The font size in the user interface of Ocean 2014 (not Quick Check) can be enlarged to increase visibility. There are four different sizes to choose from. It is recommended that you use the default font size when you design templates. In this way, you can easier see how, especially the grid, will fit on the paper when you print the report.

Note that you can also enlarge objects in the settings for the screen in Windows.

📌 **Show keyboard indicator** - Indicates that a column needs manual keyboard input

#	Tube voltage (kV)	Exposure (norm) (mGy)	Tube mA
1			
2			

↑
Keyboard indicator

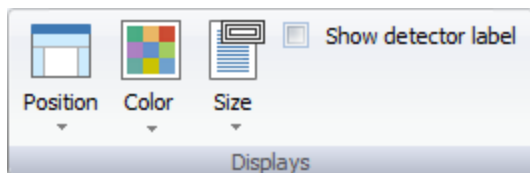
When you use Ocean without a Piranha or Cobia, or if you don't have a certain detector for the job, you have the option to use this function to mark columns that will need to have values entered into them manually. The special columns requiring input from you via the keyboard are marked with a green outline as you see on the above picture.

↓ **Show detector name in column heading** - Show the detector name in the column heading

This checkbox is used to show or hide the detector name in the column heading:

diff %	Set mAs	Tube mAs (Piranha MAS-1 Probe)	mAs diff %	Tube v (kV)
	25,00			
	50,00			
	50,00			
	60,00			

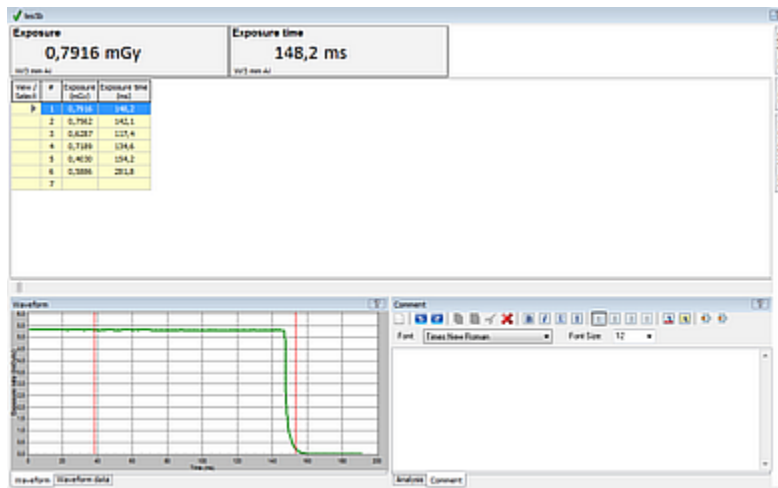
Displays



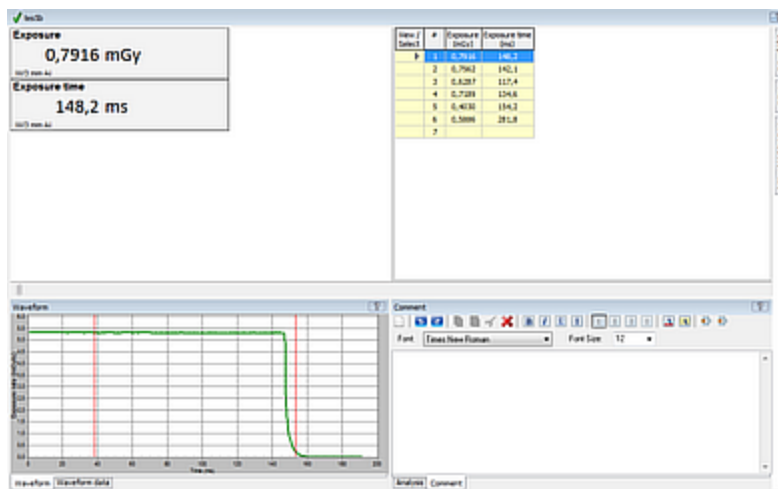
These are the functions you will use to connect or disconnect a workbook to a session or to a real-time display.

↓ **Position** - Select position for the displays

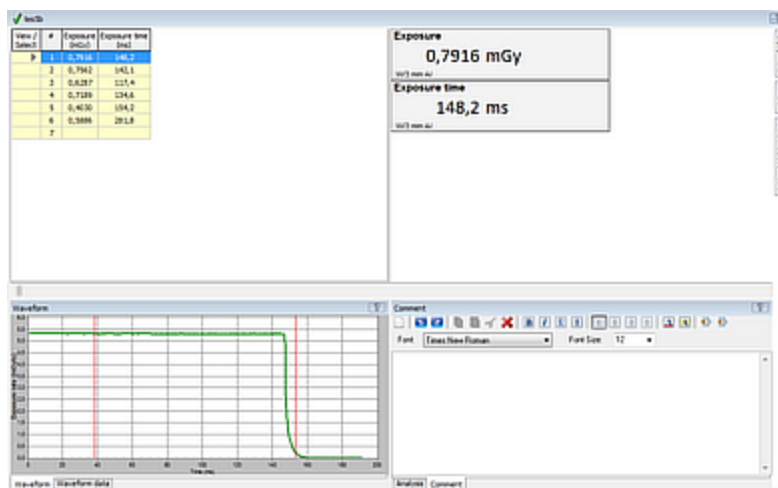
Ocean provides three options, Left, Right or Center for display positioning.



Top



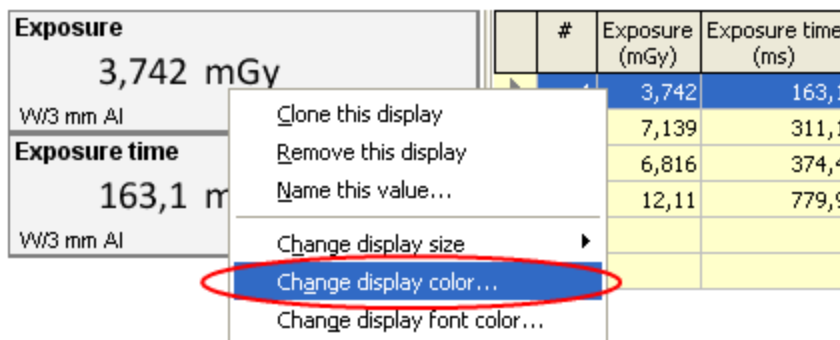
Left



Right

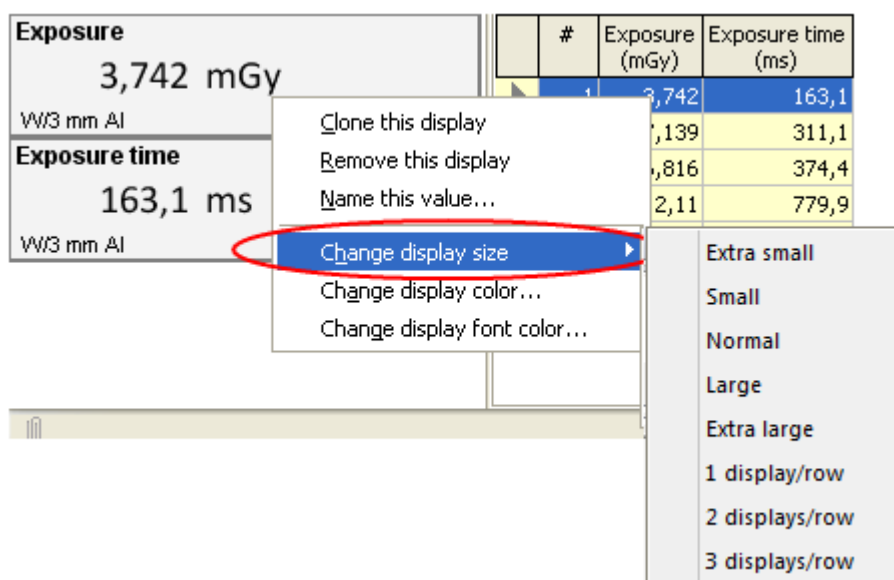
Color - Select color for the displays

You can change background and font color of the displays by clicking on this button. Any changes you make here will affect all of displays. However, if you want each of your displays to have a different font color, you can do that by right-clicking on each display and choose the change color option.



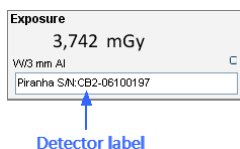
Size - Select size for the displays

You can change the font size of the displays by clicking on this button. Any changes you make here will affect all of displays. However, if you want each of your displays to have a font size, you can do that by right-clicking on each display and choose the change display font size option.



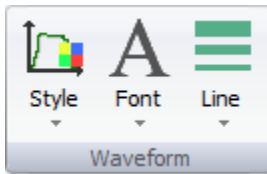
The sizes 1, 2 and 3 displays/row are scalable and adjust to the screen size.

Show detector label - Show detector name/serial number



When you are using several detectors at the same time, it would be very useful in some cases to see which display is showing readings from which detector. If you check this box, the detector information will be shown in the displays.

Waveform



These functions are related to the export feature of Ocean.

↓ **Style** - Change the style of the waveform graph

There are three pre-defined styles of waveform graphs to choose from: Normal, Paper and Scientific.

↓ **Font** - Select the font size for the waveform graph

There are three possible sizes for the text in the waveform graph: Small, Medium and Large.

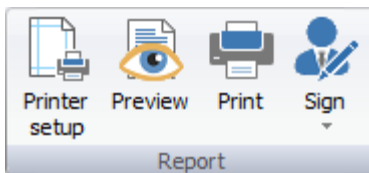
↓ **Line** - Select the line width for the waveform plot

There are three possible line widths for waveform plotting: "Thin", "Normal" and "Thick".

4.5 Reporting

The functions for creating and editing reports as well as print the reports are found on the Reporting tab of the Ribbon Bar. a report or print out are found on the Ribbon Reporting tab. The report control functions are divided into Report functions and Setup functions and each group is described below:

Report



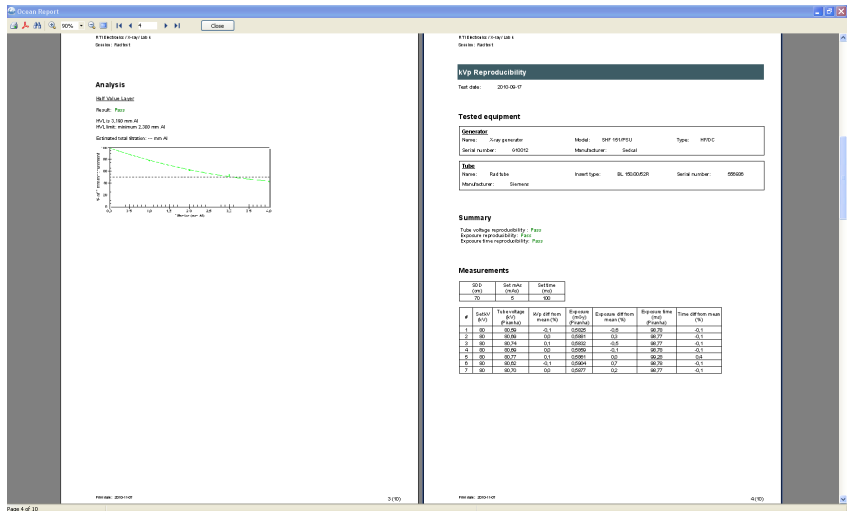
These are the functions you will use to generate a printed report.

↓ **Printer setup** - Opens the printer setup dialogue

Click here to open the printer set up dialogue.

↓ **Preview** - Preview the report on the screen

This is a print preview function that allows you to see what is in your report and how it will appear on the pages when it is printed.



There is a menu available at the top of the window picture below:



If you want to create a PDF file to send to someone, click the PDF button.

Print - Print the report

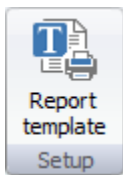
Use this button when you want to print your reports.

Sign - Click here to sign the report

You can specify a signature that can be used to digitally sign the report. A signed report is locked from further modification. Read more in section Signing.

If you click on this button and the report is already signed, you will be asked if you want to remove the signature.

Setup



Here you can modify the report template that defines the layout for the report.

You can here select report template or modify current report.

4.6 Central Database

This section is only relevant if you use Ocean Central. Ocean Central allows you to directly connect via a local network or internet to a computer that has a central Ocean database.

Functions are divided into two groups:



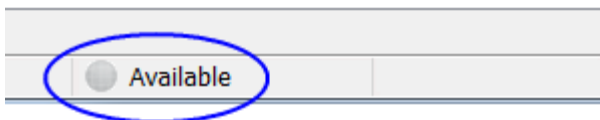
Submit

Functions for submitting measured data to Ocean Central.

Download

Functions for downloading templates from Ocean Central.

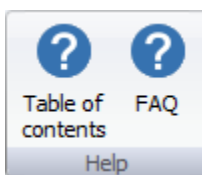
There is an indicator on the lower Status bar that shows when you are connected to Ocean Central (via a local network or via internet):



4.7 Help

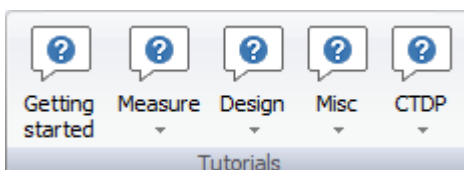
The help system contains topic by topic detailed information on Ocean's many features and functions to help you get the most out of Ocean. You can easily access the help system by clicking on the Help tab on the Ribbon bar if you are not sure how to use a certain function or feature.

Help



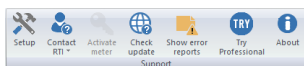
These two buttons give you quick access to the help system table of contents and the FAQ section.

Tutorials



We have added these tutorials to help you get started with Ocean quickly and efficiently.

Support



This section is for you to use if you need to report an error or get some example templates.

Setup

Click on this button to activate the Setup procedure. See topic Setup for more information.

Contact RTI

Use this button if you want to contact RTI or report a problem or suggest an improvement. There are two choices:

- **Review** - Send comments, suggest improvements and new functions.
- **Make support file** - Create a support file to report a problem or suggest an improvement. For further reading see topic Create support file.

Activate meter

Use this button to install a new license into your meter. For further reading see topic Activate meter.

Check update

This function will check if you are running the latest Ocean software and meter firmware. Note that the meter firmware is only checked when your meter is connected to Ocean. To use this feature your computer must be able to use the internet.

Show error report

All error reports that are generated are saved in a folder on your computer. Directly when one is generated, you are always asked if you want to send it to RTI. You may not be able to do that and it will be available in this folder. Click on this button to open the folder.

Trial

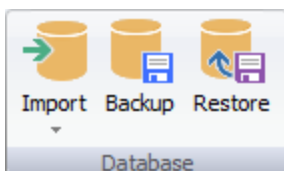
Click this button if you are using Display or Connect and want to try a higher license level with your meter. You then get a 45-day trial period. Please note that you can only do this once.

Note: You can click on this button at any time if you want to try another license level without a meter connected. For further reading see topic Trial.

About

Clicking this button shows the program version and contact information.

Database



We have added these features to manage your database.

Import

You can import site information from

- Facilities, rooms, generators and tubes from oRTIgo (or the Canadian version XR).
- Facilities, departments, rooms, generators, tubes and user-defined equipment from Excel.

oRTIgo is not using "Departments" as Ocean does. All departments for imported facilities in Ocean will be named "Department".

Backup

Click on this button when you want to make a backup of your database. A dialogue will be shown asking you to choose where you want to store the back-up file. It is highly recommended that you back up your data on regular basis.

You can also activate automatic backup every time you exit Ocean 2014. Read more in topic Program options.

Restore

Click on this button when you want to restore a backup of your database.

Location of the database file

You may want to search for the database file manually. Depending on the operating system you have, the database file can be found at the following location:

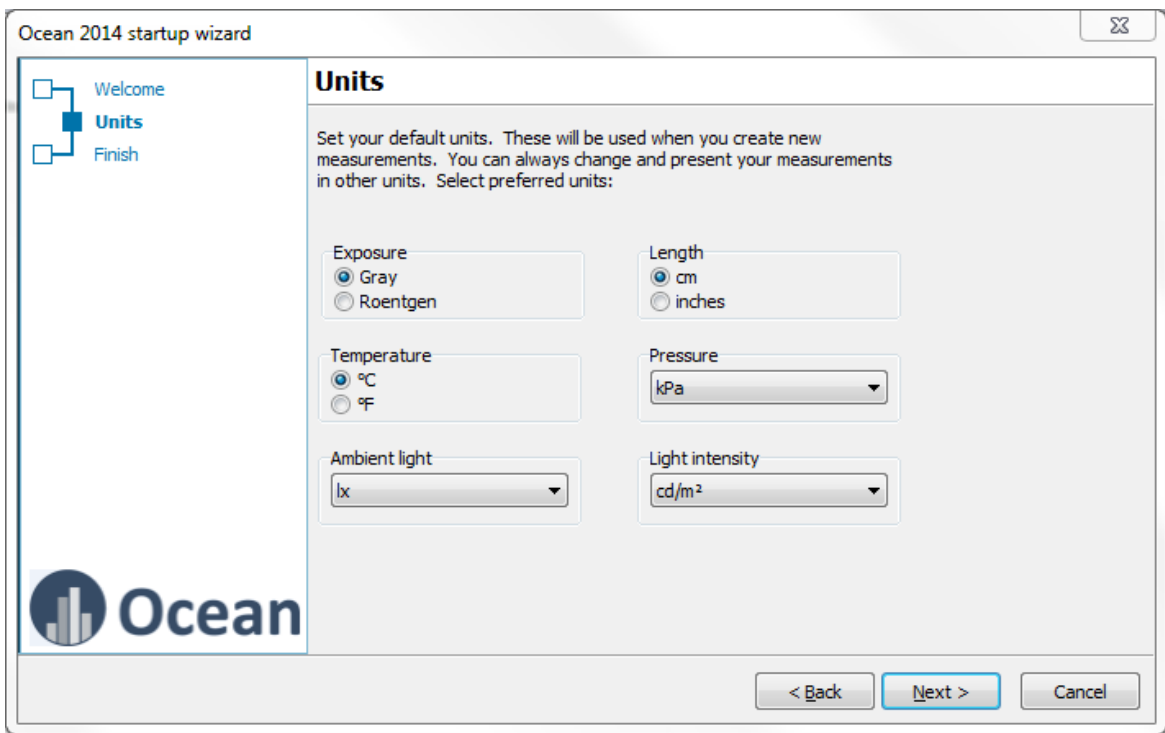
XP: Documents and Settings\All Users\Application Data\RTI Electronics\Ocean
Vista, Win7, Win8: ProgramData\RTI Electronics\Ocean

4.7.1 Setup

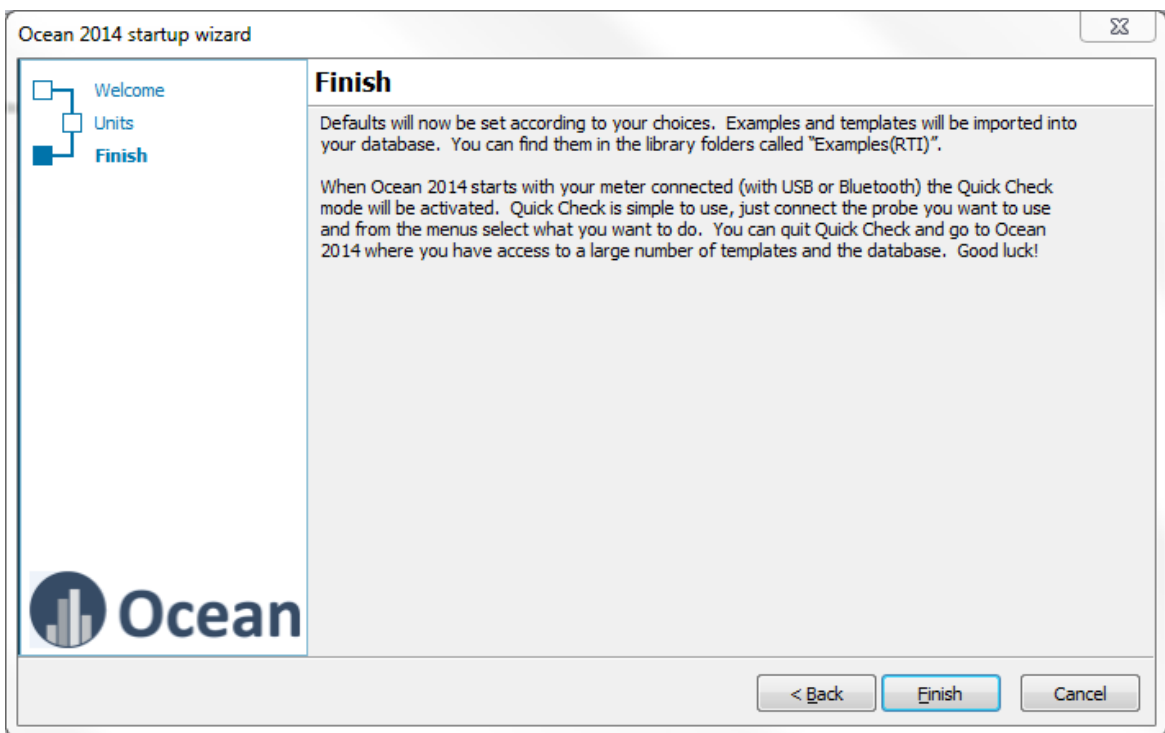
The Setup wizard is run automatically the first time you start Ocean 2014. After that you can run it at any time if you need.

When the wizard starts, the first step is to define license level and enter your name.

Click next when you are ready. Next decide the units of measure you want to use. This is to select default units. You can always, in templates, select any unit you want. The default units are used whenever you design a new template or measurement.



Click next when you are ready.



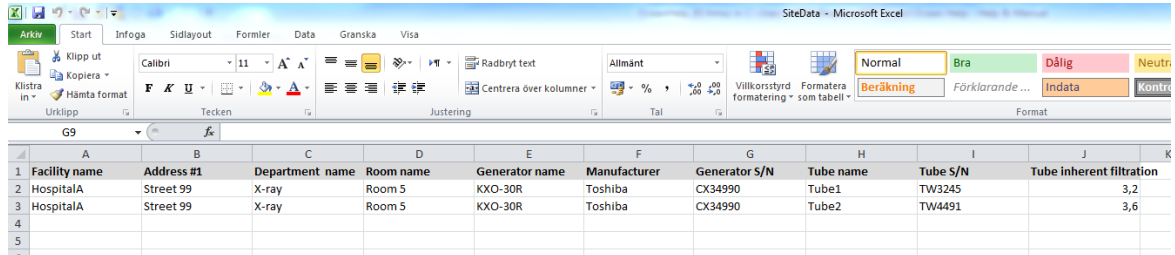
You are no ready, click on Finish.

4.7.2 Import site information

4.7.2.1 Import from Excel

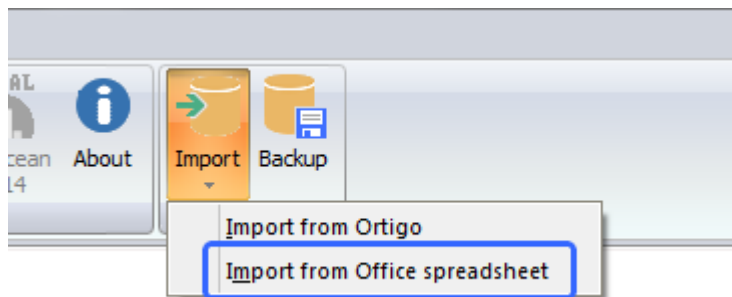
It is possible to import site information (facility, department, room, generator, tube and user-def equipment) from Excel (or Calc). This example uses Excel but the procedure is the same with Calc.

The site information should be organized in a list format:



	A	B	C	D	E	F	G	H	I	J	K
1	Facility name	Address #1	Department name	Room name	Generator name	Manufacturer	Generator S/N	Tube name	Tube S/N	Tube inherent filtration	
2	HospitalA	Street 99	X-ray	Room 5	KXO-30R	Toshiba	CX34990	Tube1	TW3245	3,2	
3	HospitalA	Street 99	X-ray	Room 5	KXO-30R	Toshiba	CX34990	Tube2	TW4491	3,6	
4											
5											
6											

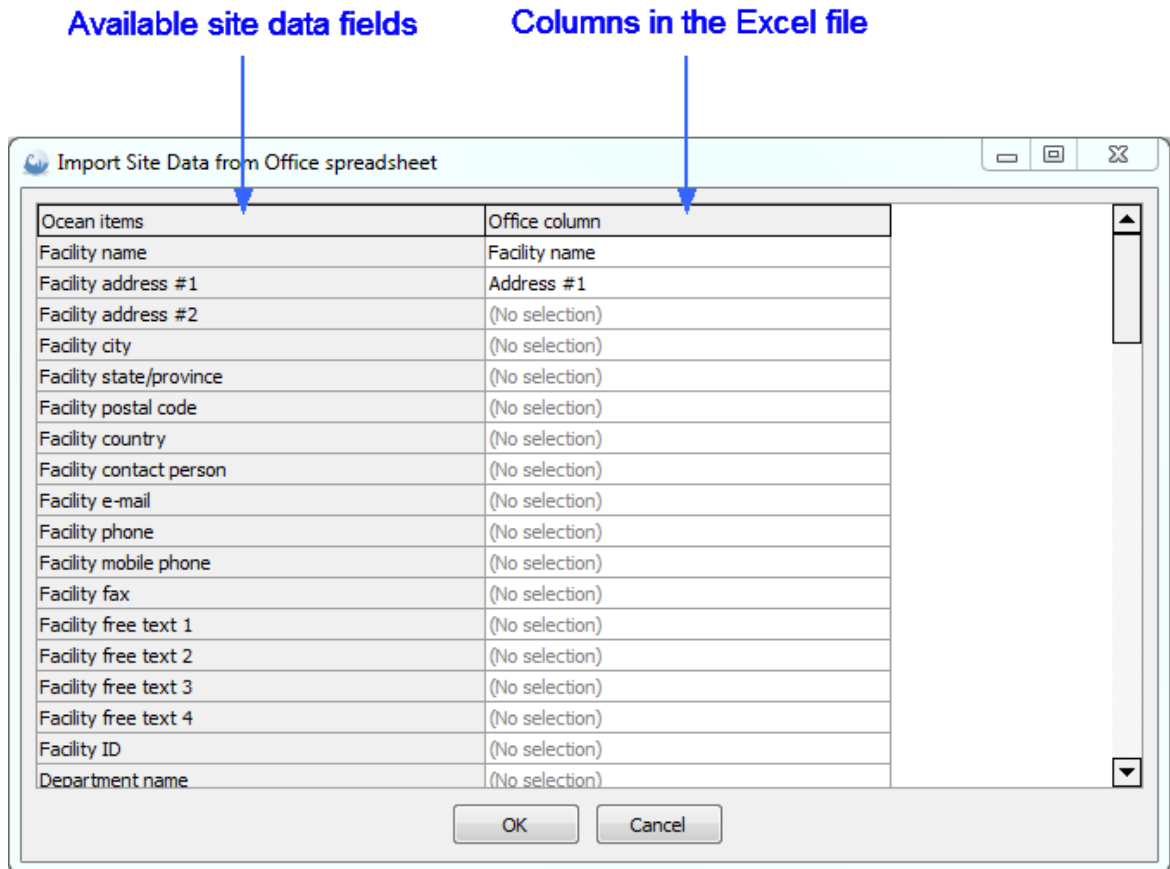
1. Select Import from Office Spreadsheet.



2. You are asked to do a backup of you database. It recommended to do so.

3. After the backup is completed a dialogue is shown that allows you to browse for the Excel file. Locate the Excel file and click Open.

4. The Excel file is loaded and a dialogue is shown.



To the left are all the available Ocean fields to define the site information (facilities, departments, rooms, generator, tubes and user-defined equipment) shown. To the right are the columns in the Excel document shown.

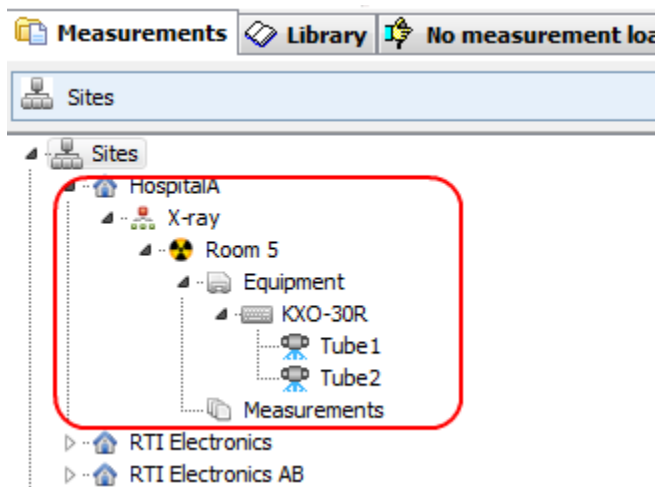
5. Click in a field in the right column to select which column that should be "tied" to an Ocean field in the left column:

Columns found in the Excel document

Ocean items	Office column
Facility name	Facility name
Facility address #1	(No selection)
Facility address #2	Facility name
Facility city	Address #1
Facility state/province	Department name
Facility postal code	Room name
Facility country	Generator name
Facility contact person	Manufacturer
Facility e-mail	Generator S/N
Facility phone	Tube name
Facility mobile phone	Tube S/N
Facility fax	Tube inherent filtration
Facility free text 1	(No selection)
Facility free text 2	(No selection)
Facility free text 3	(No selection)

6. When you are ready click on OK.

7. You can now see the imported site information in the database (Measurements).



The import is done "by name", if you repeat the import existing data will be overwritten (no duplicates are created).

4.7.2.2 Import from oRTIgo

If you are using oRTIgo you can import the sites (facilities, rooms, generators and tubes) you have in oRTIgo into Ocean. Since Ocean is a much more powerful tool with many more capabilities than oRTIgo was, we made the decision not to import old oRTIgo templates and measurements. We designed Ocean to be very user-friendly and you will find it will take a very short time to re-design any template to meet your measurement requirements that will give you the results oRTIgo gave and much more besides.

Follow the steps below to import your data from oRTIgo:

1. Go to the Help page on the ribbon bar.

2. Click on the button "Import from Ortigo".
3. Ocean will direct you to create a back-up of your database. It is always a good practice to back up your data before attempting to import, just in case something happens during the import process.
4. After the backup is finished, Ocean will try to locate your oRTIgo database. If Ocean finds the database, it will appear pre-selected. If not, you must find and select it manually.
5. Click on the Open button.
6. As soon as you clicked the Open button, the import starts and a progress bar is shown. The import may take some time if you have a large database.
7. If the import was successful, you can click on the Measurements tab to find your imported sites.
8. Ocean is using a "department" level in the database that oRTIgo doesn't have. Ocean automatically places all rooms in a department called "Department".

NOTE: If you attempt to import the same database twice or you keep your data in two different places containing some of the same information and attempt to import a second time, your sites will be duplicated.

Chapter 5

Frequently asked questions

5 Frequently asked questions

This topic covers questions frequently are asked by Ocean users. The questions are organized by category.

5.1 General

↓ I get a message about a missing screen layout when I open a measurement or a template. Why?

This happens if you have upgraded from Ocean to Ocean 2014 and you have designed your templates with a non-standard "Ocean screen layout". This is; you have manually moved and/or re-sized the Ocean screen panels (grid, waveform, waveform data, analysis and comment) and saved it. Your template is in this case not saved with one of our "Ocean layouts" ("Standard", "Netbook", "Paged", "Layout 1" and "Layout 2").

Ocean 2014 is using a new "engine" for handling these panels. Unfortunately, we where forced to select a new "engine", not compatible with the old one when we designed Ocean 2014. This means that we now only can recognize the screen layout in templates and measurements using the ones defined in Ocean ("Standard", "Netbook", "Paged", "Layout 1" and "Layout 2"). When this happens, the "Standard" screen layout is used. This means that a template may look different compared to what you are used to. This will in no way affect the measurements, results or myour final report only how things are shown on your computer screen.

The only way to restore your old screen layout is, unfortunately, to manually modify your templates. We are sorry for this inconvenience.

↓ Where can I find the reference manual?

Open the documentation folder on your product CD. Go to the Ocean folder and look up the file "Ocean 2014 - Reference Manual - English vX.XX.pdf".

↓ I don't have a licence in my meter. How can I get one?

Every meter must have a license to use Ocean 2014. If you want to purchase the Connect or Professional license for your existing Piranha, or if you wish to purchase a new meter and Ocean, please contact your local distributor.

↓ Can I make a back-up of the database?

Yes you can. Go to the help tab on the ribbon bar and click on the button Back-up. You can also set up Ocean 2014 to make a backup of your database every time you exit.

↓ Where is the Ocean database located?

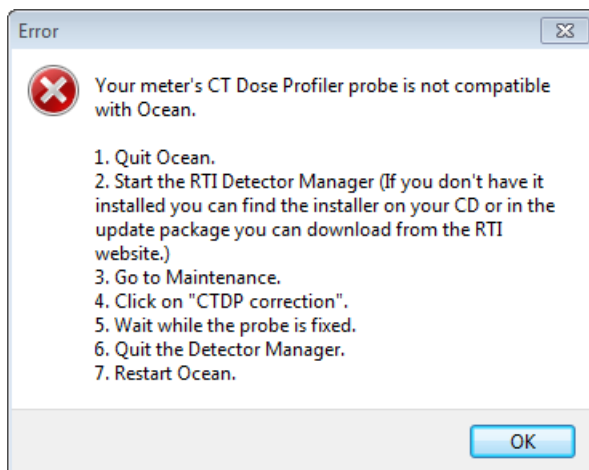
XP: Documents and Settings\All Users\Application Data\RTI Electronics\Ocean 2014
Vista, Win7, Win8: ProgramData\RTI Electronics\Ocean 2014

↓ Can I import data from Ortigo?

You can import site data (facilities, rooms, generators and tubes) but not templates and measurements.

↓ I get a strange message when I use my CT Dose Profiler probe?

Ocean says that the CT Dose profiler is not compatible and shows the following message:



Piranha CT Dose Profiler Probes delivered before March 2012 has incorrect detector type stored in its memory. This must be corrected before it can be used. This is done, as described in the message, with the Detector Manager.

↓ **I have a CT-SD16 probe, why can't I see it in Ocean 2014?**

Ocean is not supporting this probe. You have to upgrade to a CT Dose Profiler probe if you want to measure CT dose profiles with Ocean.

↓ **Can I use Barracuda with Ocean 2014?**

No it is not possible. You must continue to use Ocean if you have Barracuda.

↓ **I have a red Piranha, can I use Ocean 2014?**

Yes you can if you upgrade with new firmware.

↓ **Can I use Piranha and Cobia with the same templates?**

You can use the same templates for both Piranha and Cobia, a template built for Piranha can be used with Cobia and vice versa. It is recommended, if you intend to use your templates with both Piranha and Cobia, that you build your templates for Piranha. The reason for this is that Piranha has more settings and you can in this way setup the templates to work in the best way with Piranha. If you do the opposite (you build it for Cobia), Ocean 2014 will when you use it with Piranha select default settings for the Piranha when a set value is missing (due to it doesn't exist for the Cobia). If you build templates without a meter connected and intend to use it with both Piranha and Cobia; go to program options and select default "Meter type" in the Preference section.

5.2 Measuring

↓ **Why isn't the analysis giving a result, it is just showing "---"?**

The analysis cannot do the required calculations. This is normally caused by:

- A missing measured value (too few measurements).
- There is a measuring error of some kind.
- A set value is missing or not specified correctly.

↓ **Ocean is not connecting to my meter?**

If you are using USB, please check that the cable is connected properly. If you are using BLUETOOTH, open Windows BLUETOOTH device window and verify that your meter is listed as a known BLUETOOTH device. If it is listed but you still can't connect, delete it and use "Find nearby devices" to re-connect.

↓ **My measured data was not saved. Why?**

You are maybe working with a template in design mode. When you click on save in design mode, only the template is saved. You must be in Log mode if you want your measured data to be saved.

↓ **I cannot edit a set value in a test. Why?**

This normally happens when you are working with a session and the template you are trying to edit not open (active). You can look at all tests/checklists in a session, but you can only modify the one that is currently active.

↓ **Where can I specify the scatter factor?**

In Ocean the scatter factor is called "Beam correction factor". This factor can be used to apply a correction on the measured exposure or exposure rate. You can find this parameter on the meter adjust tabs for exposure detectors or in the grid if specified as column or general setting.

5.3 Data export to Excel or Calc

↓ **Can I export certain cells from an Ocean test to Excel?**

Yes you can. You can use something that is called "Cell-to-cell". You can then "link" individual cells in Ocean with individual cells in Excel. By doing this, you get full control over where your data appears in the spreadsheet. You can read more in the topic Link a session to Excel.

5.4 Design

↓ **I cannot edit a set value in a test. Why?**

This normally happens when you are working with a session and the template you are trying to edit not open (active). You can look at all tests/checklists in a session, but you can only modify the one that is currently active.

↓ **Can I change the acceptance limits in a test?**

Yes. Right-click on the analysis window and click on "Modify analysis", select the analysis you want to change the limits for. The limits are now shown and you can modify them. Read more in topic Acceptance limits.

↓ **Can I have different acceptance limits for each row in a test?**

Yes. Right-click on the analysis window and click on "Modify analysis", select the analysis you want to change the limits for. The limits are now shown and you can modify them for individual rows. Read more in topic Acceptance limits.

↓ **What is a template?**

There are four different types of templates:

- Test template
- Checklist template
- Session template
- Real-time display template

A template is an object without any measured data but with all other necessary information to perform a measurement and required analysis.

↓ **I want to see my exposure values both in "R" and "mGy". Can I do that?**

Yes. You can just right-click on the column head and select "Unit" from the menu. If you are working with a real-time display, just click on the unit in the display. A list with available units is shown, select the unit you want.

↓ **Where can I specify the scatter factor?**

In Ocean the scatter factor is called "Beam correction factor". This factor can be used to apply a correction on the measured exposure or exposure rate. You can find this parameter on the meter adjust tabs for exposure detectors or in the grid if specified as column or general setting.

↓ **Can I use the same templates for both Piranha and Cobia**

Yes, you can use the same templates for both Piranha and Cobia, a template built for Piranha can be used with Cobia and vice versa. It is recommended, if you intend to use your templates with both Piranha and Cobia, that you build your templates for Piranha. The reason for this is that Piranha has more settings and you can in this way setup the templates to work in the best way with Piranha. If you do the opposite, Ocean 2014 will select default settings for the Piranha when a value is missing (due to it doesn't exist for the Cobia). If you build templates without a meter connected; go to program options and select default "Meter type" in the Preference section.

5.5 Reporting

↓ **Why don't I get any waveforms in the report?**

There are no waveforms included in the report by default. You must select waveforms you want to appear in the report manually. To include a waveform in the report, right-click on a row in the grid and select "Include waveform(s) in report".

↓ **Can I exclude columns from the report?**

Yes. It is possible to exclude columns (and other items) from the report. To exclude a column from the report, right-click on the column heading. Uncheck "Include in report" to remove the column from the report.

↓ **Can I design my own report?**

No. The report template is fixed at this time.

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