RAPIDOSE

Rapid Measurements – *with a super small footprint detector*

RAPID START

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Getting Started

If you purchased the UMPC sold by Radcal, this Rapid Start guide allows you to quickly and easily begin using your device to capture and analyze x-ray measurements. Detailed information regarding the operation of this device and the type of data it captures is found in the Rapidose User Guide.

To run reliably on the Radcal UMPC or another PC, no other application(s) should be active while measuring with Rapidose.

Running the Software on another PC

Although the Rapidose software can be installed on a PC other than the UMPC sold by Radcal, the user experience is greatly enhanced by using the UMPC's friendly touch screen and other unique features.

This Rapid Start manual does not cover software and device driver installation. If you choose to install the software on another PC, refer to Appendix A – Software and Device Driver Install within the Rapidose User Guide.

Taking a Measurement

To take a measurement:

1. Plug the sensor into either your UMPC's USB port or the USB port of the computer where you installed the Rapidose software and device driver.

2. Place the detector in the path of the x-ray beam.

3. Launch the Rapidose software.

4. Check the detector status to make sure the detector is online. As soon as the "Ready to Measure" message is displayed at the bottom of the screen, a measurement may be made. Activate the x-ray machine to capture the exposure data. Rapidose automatically displays all data for the measurement when the exposure is complete.
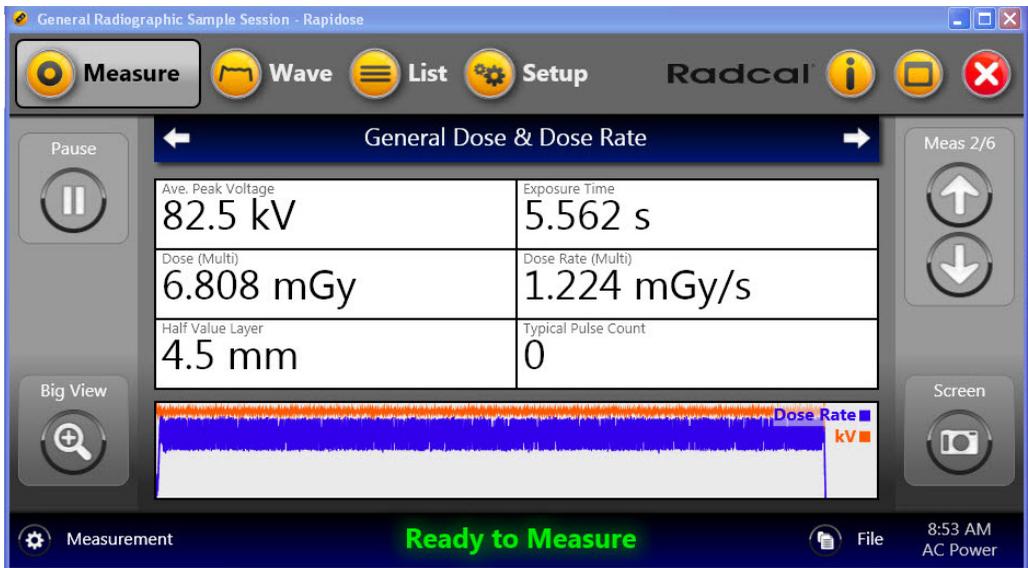
Note: You can click the **Big View** button to display the measurement data in the full-screen view if desired. To exit Big View, click anywhere on the screen.

5. Make additional exposures as necessary. No data will be lost and you can review the previous measurements by clicking the **Up** and **Down Meas** arrows on the right side of the Measure screen.

6. Click the **File** button and choose **Save As** to save your new session.

    You can continue to review the data in Wave or List view by clicking on the **Wave** or **List** buttons in the title bar. If additional changes are made, click the **File** button and choose **Save**.

7. If you need to reposition the sensor, click the **Pause** button to temporarily put the sensor offline and prevent any inadvertent null exposures from being added to your measurement. You can delete unwanted measurements at a later time.

8. Click **Resume** when you are ready to take your next exposure.

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For mammographic sensors:

Before making an exposure, choose the Anode/Filter combination that best represents the machine being measured from the pulldown located in the lower left corner.
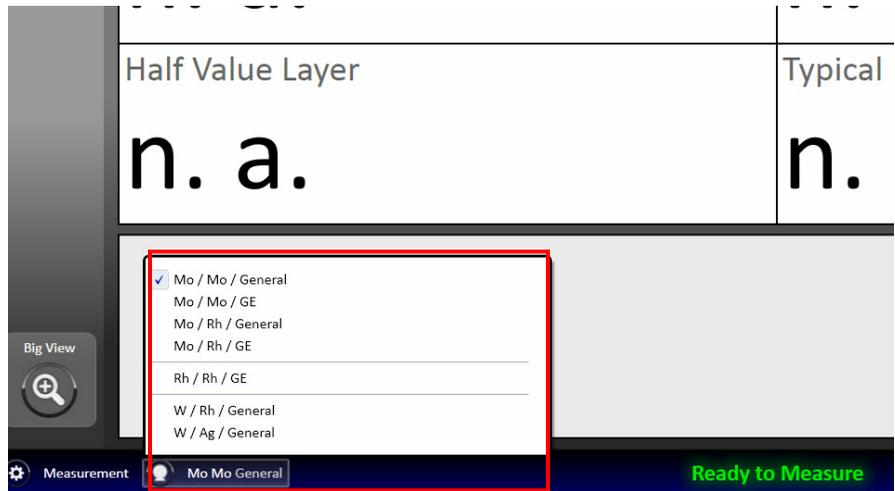
Selecting a Display Profile

In Measure view, you can view the measurement data using default or custom profiles. To display measurement data using the display profile:

1. Click the **Measure** button to show Measure view.

2. Select the measurement you want to view by clicking the **Up** and **Down Meas** arrows on the right side of the screen.

3. Click the display profile bar to select a profile for displaying the measurement data, or click the left and right arrows.

   Note: You can click the Screen button to take screen shots of any of the available views in the Measure screen. These screen shots are automatically saved to your desktop.
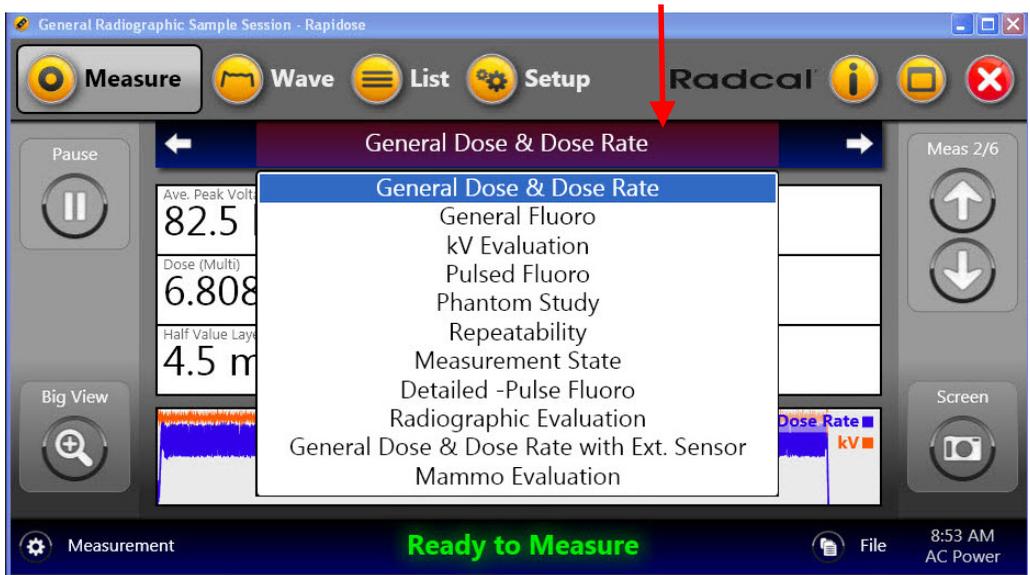

You can review the data in either Wave view or List view.

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Reviewing Data in Wave View

Wave view lets you see a representation of the measurement data as a waveform. From this screen you can perform the following:

- Switch between measurements using the Select Measurement arrows.
- Position your cursor on the Wave view to display details about that portion of the wave.
- Use the **Zoom +/-** buttons or click and drag the cursor across a portion of the Wave view to zoom into that portion of the wave.
- Turn specific wave views on or off by clicking the wave-type buttons listed directly above the wave graph.
- Take a screen shot of the wave graph by clicking the **Screen** button.
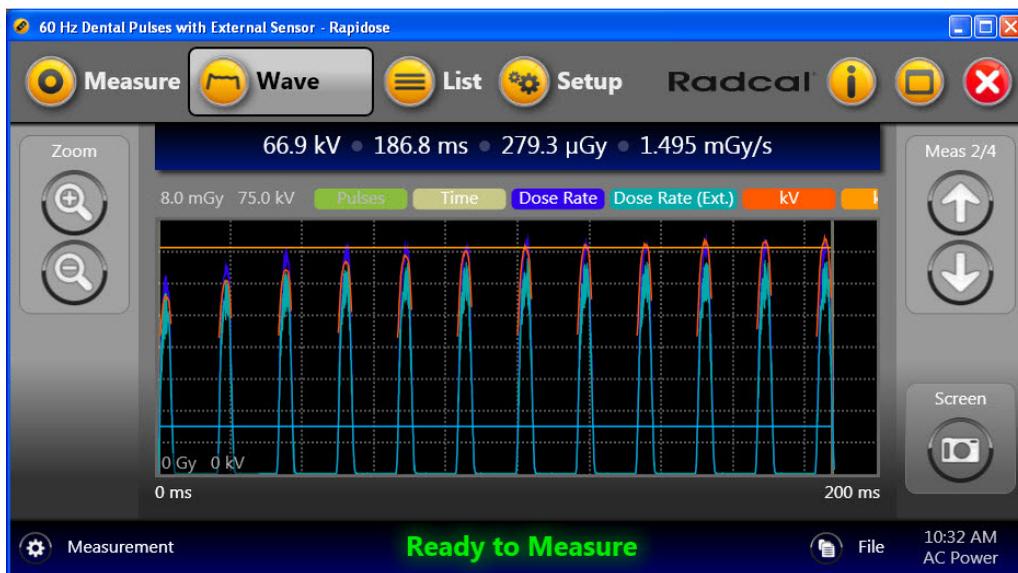
Reviewing Data in List View

List view lets you see the measurement data in either a Table or Card view. From this screen you can perform the following:

- Switch between measurements using the Select Measurement arrows.
- Switch between a Card or a Table view of the measurements.
- Delete measurements.
- Add comments and machine settings to the Card data.
- Export measurement data.

Index	kVp	Exp. Time	Dose	Dose Rate	HVL	Filtration
6	74.9 kV	21.5 ms	97.31 µGy	4.526 mGy/s	5.0 mm	8.9 mm
5	73.0 kV	3.173 s	510.6 µGy	160.9 µGy/s	5.5 mm	11.6 mm
4	60.8 kV	5.477 s	3.898 mGy	711.6 µGy/s	3.3 mm	6.0 mm
3	60.8 kV	6.410 s	4.521 mGy	705.3 µGy/s	3.3 mm	6.0 mm
2	82.5 kV	5.562 s	6.808 mGy	1.224 mGy/s	4.5 mm	5.8 mm
1	60.3 kV	2.060 s	1.013 mGy	491.9 µGy/s	2.4 mm	3.0 mm

Adding/Editing User Data

When viewing measurement data in Card view, you can add and edit user data to the measurements.

1. Click the **List** button to show Table view.

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General Radiographic Sample Session - Rapidose

◉ Measure   ⌓ Wave   ☰ List   ⚙ Setup   ⓘ ▢ ✕

←   **Table**   →   Meas 2/6

Delete ✕

| Index	kVp	Exp. Time	Dose	Dose Rate	HVL	Filtration
6	74.9 kV	21.5 ms	97.31 µGy	4.526 mGy/s	5.0 mm	8.9 mm
5	73.0 kV	3.173 s	510.6 µGy	160.9 µGy/s	5.5 mm	11.6 mm
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2	82.5 kV	5.562 s	6.808 mGy	1.224 mGy/s	4.5 mm	5.8 mm
1	60.3 kV	2.060 s	1.013 mGy	491.9 µGy/s	2.4 mm	3.0 mm

Export ⤒

⚙ Measurement   **Ready to Measure**   ▤ File   8:58 AM AC Power

2. Click the **View** bar to switch to Card view.

Pulsed & continuous C-Arm - Rapidose

◉ Measure   ⌓ Wave   ☰ List   ⚙ Setup   Radcal ⓘ ▢ ✕

←   **Card View**   →   Meas 6/6

Delete ✕

	Table	
	Card View	

6 Trigger
Multi Sensor
n.a. (n.a.)   n.a.   n.a.   n.a.

kVp	Exp. Time	HVL	Filtration	Dose Ratio	Time
74.9 kV	**21.5 ms**	**5.0 mm**	**8.9 mm**	n.a.	6/11/2009 7:13 AM

Pulse Count	Typ. Pulse Rate	Typ. Pulse	Typ. Pulse Pause	
0	n.a.	n.a.	n.a.	

Set kV	Set mA	Set Exp. Time	Set mAs	Set SSD	Location
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Comments
n.a. ⊘

Export ⤒

⚙ Measurement   **Ready to Measure**   ▤ File   10:35 AM AC Power

3. Select the measurement you want to view by clicking the Select Measurement arrows.

4. Click the **Edit** button to display the Edit User Data dialog.

5. In the Edit User Data dialog, you can enter the following information:

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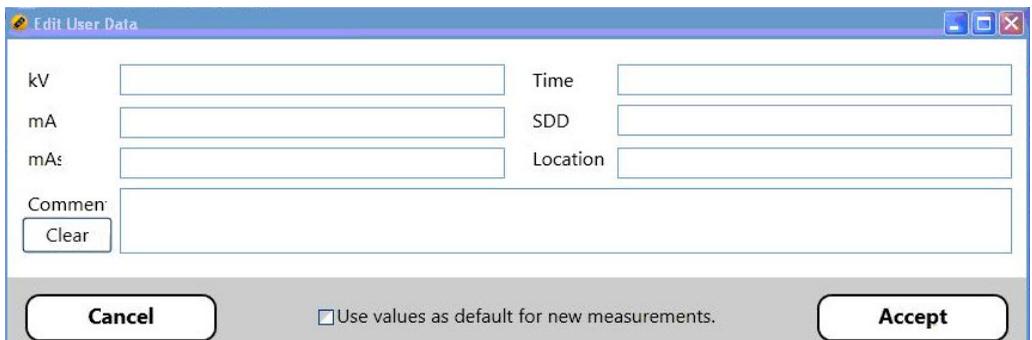
6. If you want this user data to be automatically associated with new measurements added to this session, check the **Use values as default for new measurements** checkbox.

7. Click **Accept** to save the changes and return to Card view.

Exporting Data

From List view, you can export measurement data by copying the data to the Windows clipboard and pasting it into an Excel file (recommended method) or saving the data to a CSV file:

1. Click the **List** button to display List view.

2. If you want to export a single measurement from your session, highlight that measurement in either Table or Card view and click **Export**. Otherwise, click **Export** to begin the process of exporting all measurements in your session.

    The Measurement Data Export dialog appears:
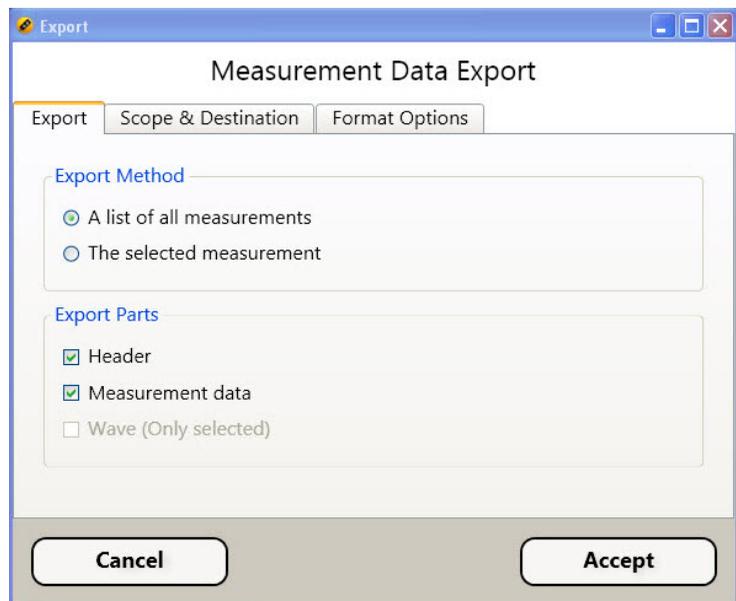
3. Click the Export tab and choose the export method and parts.

4. Click the Scope & Destination tab and choose the export subset and destination:
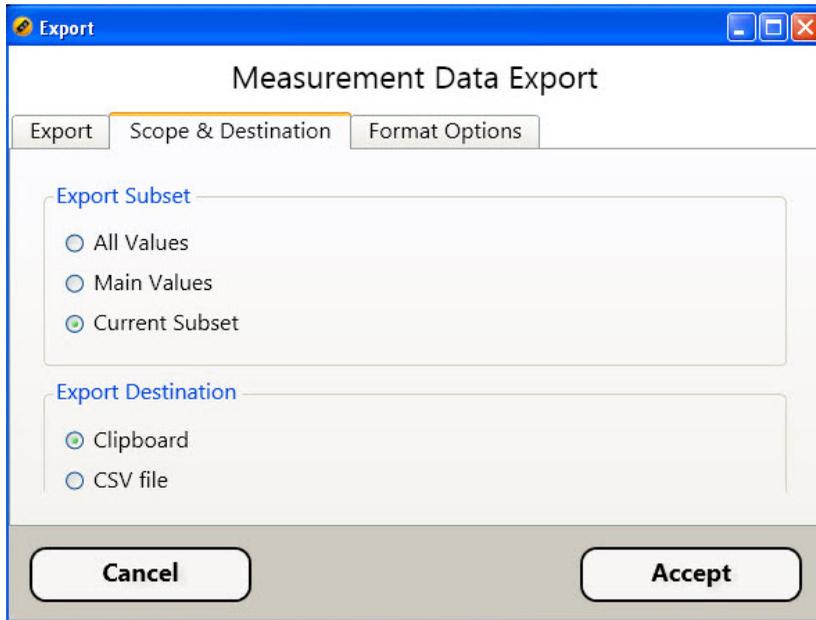
- **All Values** – Select to export all measurement values.
- **Main Values** – Select to export only the main measurement values.
- **Current Subset** – Select to only export the current Subset.
- **Clipboard** – Select to export the data to the Windows clipboard from which you can paste the data into an Excel spreadsheet.

  Note: This is the easiest and preferred method.

- **CSV file** – Select to export the data to a CSV file, which can be imported into a spreadsheet application such as Microsoft Excel.

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5. Click the Format Options tab and choose the format for the units and values.
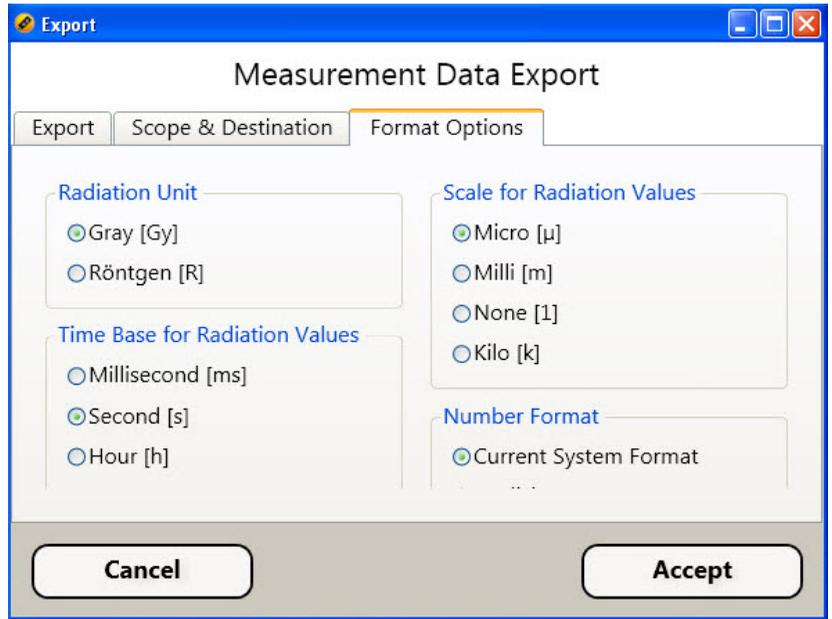
6. Click **Accept** to export the data.

7. Browse to where you wish to save your data and click **Save**.