WB JOHNSON Instruments

Spartan Pack
Radionuclide Identifier Backpack
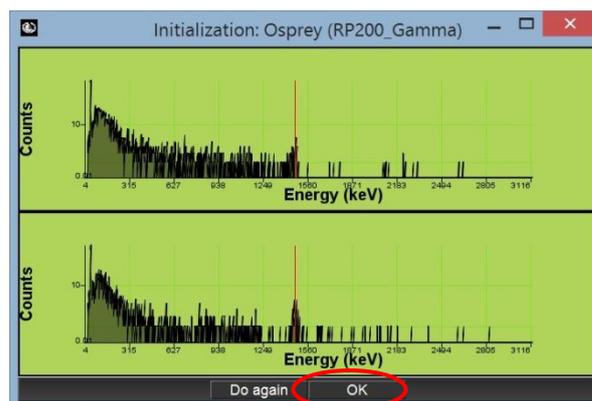
Quick Reference Quide

10/1/2019 Rev. 1

Starting Spartan Pack:

1. Open the cover of the computer.

2. Press the '**Power**' button until the power indicator lights are on and computer is starting-up.

3. Automatic start up procedure shows Spartan Pack-software start up main view.

4. Adjusting the energy calibration of the gamma detector displayed on the Initialization-window. Visually check that the red line is on correct energy on both displayed spectra. Correct energy NaI(Tl) detector is 1460.8keV and LaBr$_3$ detector energy is 1468keV.

    If the energy calibration is satisfactory, press the '**OK**' button to dismiss the initialization dialog.

    If the red line is on different energy the lower spectrum then the process will have to be repeated. Do this by painting an area containing the correct energy in the lower spectrum and press the '**Do again**' button.
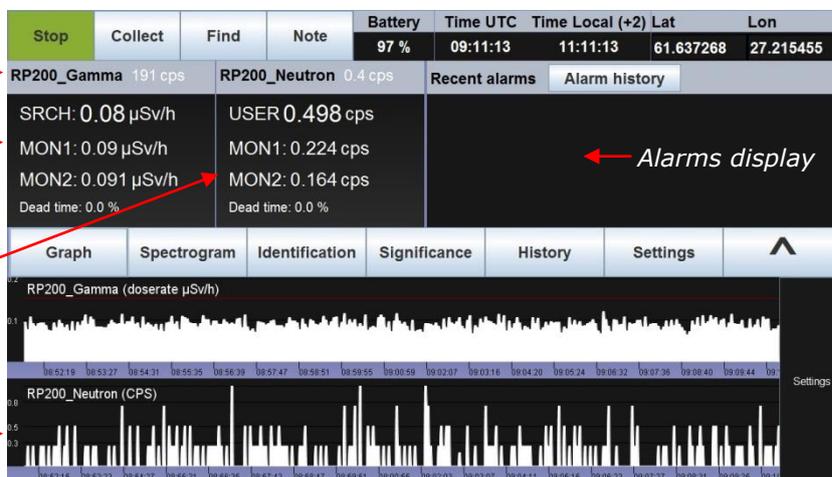
5. The data collection will begin automatically after the detector initialization.

Initialization: Osprey (RP200_Gamma)

Gamma detector counts per second view

Gamma radiation dose rate value of different monitoring times

Neutron detector counts per second value of different monitoring times

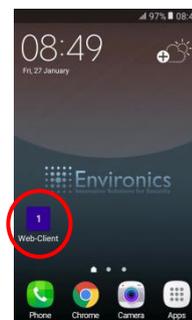*Neutron detector total counts per second view*

Alarms display

WB Johnson Instruments
4083 E 600 N   P. (208) 557-6945   sales@jradmeters.com
Rigby, ID 83442   F. (208) 557-6946   www.wbjohnsoninstruments.com

Spartan Pack
Radionuclide Identifier Backpack

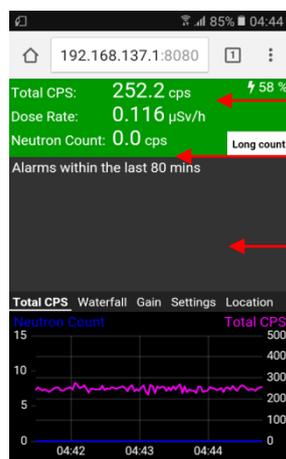### Connecting the Remote Control Unit:

1. Turn on the Remote Control Unit by pressing the '**Power**' button.

2. In the Main Screen of the Remote Control Unit press the '**Web Client**' –icon.

3. Web-browser opens and it will automatically connect to Spartan Pack web client.

Note: Make sure that the WI-FI is enabled from the Spartan Pack Computer and Remote Control Unit. The status of the WI-FI can be checked from the network settings of the devices.

Gamma radiation dose rate value and total counts/s

Neutron detector total counts/s

Alarms display

Gamma and neutron radiation total counts/s view

Shutting down the devices:

1. Shutdown the Spartan Pack by clicking the '**Power**' button in the upper right-hand corner of the Spartan Pack-software and confirm quitting by clicking the '**Yes**' button.

2. Shutdown the Remote Control Unit by pressing the '**Power´** button.

WB Johnson Instruments
4083 E 600 N
Rigby, ID 83442

P. (208) 557-6945
F. (208) 557-6946

sales@jradmeters.com
www.wbjohnsoninstruments.com

Spartan Pack
Radionuclide Identifier Backpack

Using the Spartan Pack Solo with the Remote Control Unit:

Note: Before starting to the radiation source locating make sure radiation level has growing enough high, it has to be at least two times background radiation's CPS or dose rate value.

1. Push on '**Location**' tab.

2. Start-up the Spartan Pack Solo device by '**Start**' button in '**Location**' tab.

3. Specify compass to be used:

   By pushing the '**Use compass**' button to use phone's compass.
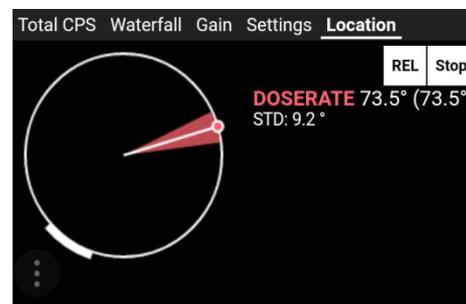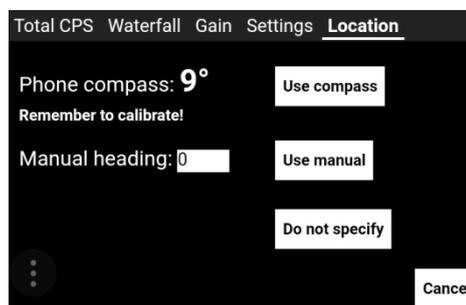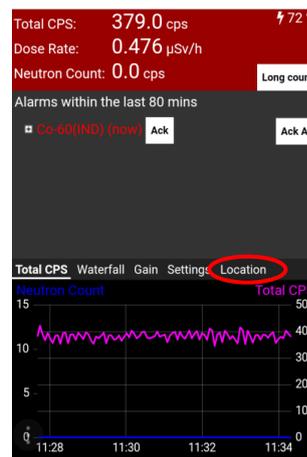
   To use external compass specify to compass value in box of '**Manual heading**' and then push the '**Use manual**' button.

   By pushing the '**Do not specify**' button to use device without compass.

Note: If '**Use compass**' will be select make sure the cell phone's compass is calibrated. To do this rotating the phone in the air in figure eight pattern.

4. The Spartan Pack software presents the compass direction and the cone, whom pointing to the direction of the source.

5. It is possible to change relative view of direction information to compass representation by pushing the **'REL'**-button.

6. Stop the radiation source locator device by '**Stop**' button.

Note: Usage of the Spartan Pack Solo with the tablet computer of Spartan Pack as described in the User

WB Johnson Instruments
4083 E 600 N   P. (208) 557-6945   sales@jradmeters.com
Rigby, ID 83442   F. (208) 557-6946   www.wbjohnsoninstruments.com

Spartan Pack

Radionuclide Identifier Backpack

Manual of the Spartan Pack.

WB Johnson Instruments

4083 E 600 N

Rigby, ID 83442

P. (208) 557-6945

F. (208) 557-6946

sales@jradmeters.com

www.wbjohnsoninstruments.com

Spartan Pack

Radionuclide Identifier Backpack

This page is intentionally blank