

DATAFLOW SYSTEMS PTY LTD

LOW COST DATA RECORDING SENSORS

www.odysseydatarecording.com

Multi-Profile Logger Quick Start Guide

For more detailed information please refer to the software manual or technical handbook.

- Install the Multi-Profile software on your computer.
- Unscrew top cap and remove the red insulating washer from the positive battery terminal.
- Replace the terminal screw but do not over tighten.

To ensure correct interpretation of the data recorded with your Odyssey logger, the software requires that you enter two sets of parameters. The 'Offset Values' and the 'Slope'.

Setting the 'Offset' and 'Slope' values.

The offset values are supplied on a sheet for each sensor rod and are specific to each rod. Each rod must be paired up with a logger.

<u>*Important:*</u> Match each logger and sensor rod up into pairs and keep them together. Write down the matched serial numbers for reference later.

- Start the Multi-Profile software.
- Create a new site file for your logger or edit an existing site file.

26164_01.key	Site Files
26165_01.key	C CREATE NEW site file
26166_01.key	CREATE NEW SITE THE
26167_01.key	
26168_01.key	C EDIT site file
26169_01.key	
26170_01.key	C DELETE site file
26171_01.key	UELETE SITE THE
26172_01.key	
26173_01.key	-Logger Operations
26174_01.key	Logger operations
26175_01.key	

• On the next screen fill in the 'Site Details' pertaining to your logger.

Create New Site File			X	3
Site D	<u>etails</u>			
Site Setup	Details]	Directory List	
Site name	GLRL	-	GLRLDATA	
Current data directory	GLRLDATA	-		
Odyssey serial number	26167	-		
GLRL site number	1	-		
Root feeder zone (mm)	500]		

• Set the desired measurement type.

	Boet feeder zone (mm)	U		
\leq	Measurement Type	Percentage 🗾 💌		
	Site File Identification			
	🔿 Site Name 🛛 🕤 Log	jger Serial Number	Remove this directory	

- At the bottom of the screen select the sensor depths that match the sensor rod that you paired up with the logger for this site. Default values will be set as follows:
 - o If measuring soil moisture as a percentage the software will default to:
 - Slope = 120.
 - Field Cap = 100.
 - Refill = 60.
 - o If measuring soil moisture as volumetric the software will default to:
 - Slope = 500.
 - Field Cap = 30.
 - Refill = 7.
- From the supplied offset sheet, enter the values for each sensor into the Offset column.

Profile Calibration Data							
Depth(cm)	Offset	Slope	Field Cap	Refill	Soil Type	ON/OFF	
20 💌	9570	120	100	60		ON	
40 🔻	9379	120	100	60		ON	
60 🔻	9412	120	100	60		ON	
80 🔻	9125	120	100	60		ON	
-						OFF	

• Click 'OK' to save your settings.

You are now ready to calibrate your sensor and logger.

Sensor and Logger Calibration.

- Set up an area of saturated soil around an access tube to simulate a 100% field capacity situation (see handbook for more information).
- Using the software, start your logger and insert it into the access tube. A short scan time will be desirable to record sufficient data. Leave the logger in place for an hour or two whilst maintaining the saturated soil.
- Once enough data has been recorded, download it to the computer.

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Logger Operations	
C START	
O DOWNLOAD	>
○ TRACE MODE	
Data Analysis	

• With the data downloaded you will be presented with a graph of the data otherwise you can view the data by selecting the 'Graph' option at a later time.

26195_01.key 26195_01.key 26197_01.key 26198_01.key 26199_01.key 26200_01.key 26201_01.key 26202_01.key 26203_01.key
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• At the top of the graph page adjust the slope value until each sensor reads approximately 100% for percentage measurements or the full volumetric value (default = 30) for volumetric measurements. Press the 'Enter' key to accept these new values. You can adjust each slope value separately by pressing the enter key in between adjustments if preferable.

ed Depths in												
<mark>▼ 50</mark>	F 90	Depth(cm)	Offset	Slope	Full	Refill]					
F 60	1 100	10			100							
	☐ 110	20	9954		100	60						
		30	9987		100	60						
F 80	🔲 120	40	9856		100	60	4					
		50	9854	118	100	60]					
GreenL	GreenLight-RedLight Site '26198'											
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• Your logger is now ready to use. The offset values and slope adjustments will be retained by the software.

Thank you for supporting Odyssey products. Proudly made in New Zealand.