



ENTELECHY
Realising potential.

T: +61 8 8251 7559
F: +61 8 8251 5519
sales@entelechyinternational.com.au

Unit 4 / 8 Aristotle Close
Golden Grove SA 5125
AUSTRALIA

evaluate

CONFIGURE • PREVIEW • EVALUATE

SOFTWARE MANUAL v1

Software Version 1.0.5-b1





SOFTWARE MANUAL v1

Software Version 1.0.5-b1

EnviroPro® Evaluate software provides users with a fast, simple way to evaluate the functionality of the probe, configure settings and perform upgrades. It allows users to view live data, troubleshoot and send direct commands to the probe.

Contents

- 1. Connecting the EnviroPro® hardware to your PC..... 1
- 2. Launching the Evaluate software 2
- 3. Connecting the Software to the Probe..... 3
 - Changing/Assigning SDI-12 Addresses 4
- 4. Using the Evaluate software 5
 - Plot / Log 5
 - File..... 6
 - View 7
 - Configure..... 8
 - Advanced..... 9

Copyright

All rights reserved. No part of this document may be reproduced, transcribed, translated into any language or transmitted in any form electronic or mechanical for any purpose whatsoever without the prior written consent of Entelechy Pty Ltd.

All intellectual and property rights remain with Entelechy Pty. Ltd. All information presented is subject to change without notice. EnviroPro® is a registered trademark of Entelechy Pty. Ltd.

© 2019 Entelechy Pty. Ltd.



1. Connecting the EnviroPro® hardware to your PC

Required:

- EnviroPro configuration dongle (EPCD)
- Cable with parrot clips
- PC with USB2 port

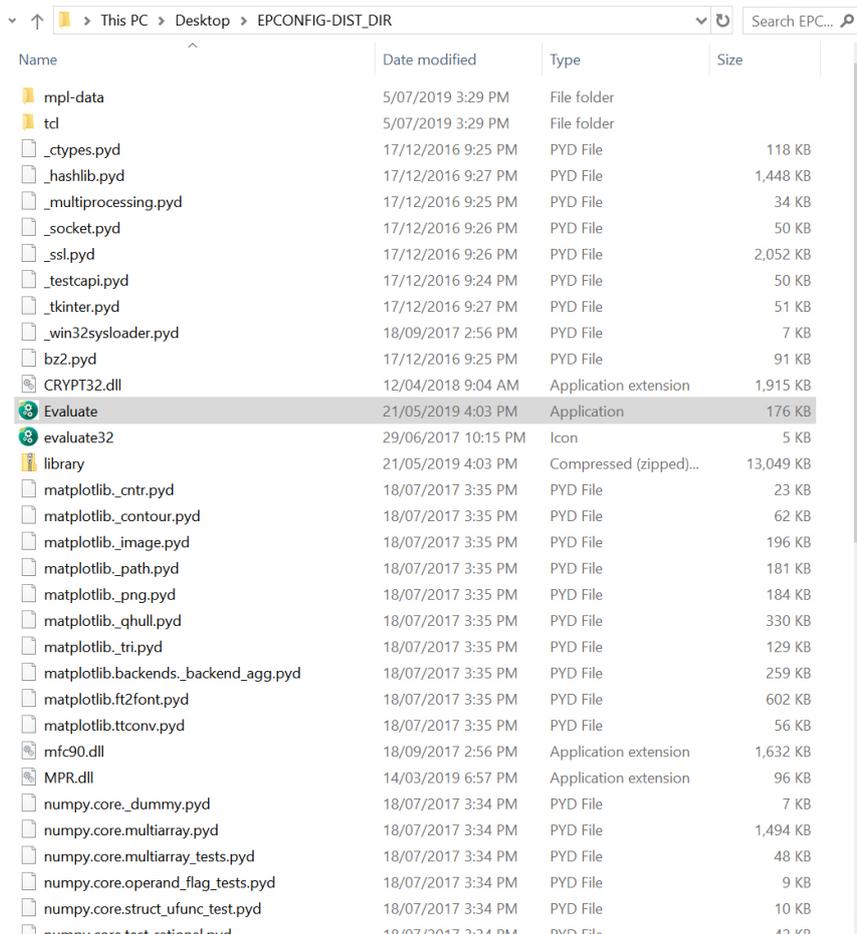


1. Plug the EPCD into a USB port on your PC
2. Depress the parrot clips and attach to the hook to exposed copper on the colour corresponding EnviroPro® cable

2. Launching the Evaluate software

- Evaluate software is supplied with every purchase of the EnviroPro® configuration dongle
- Evaluate software can also be downloaded at enviropsoilprobes.com/support

1. Plug the EnviroPro® USB flash drive (supplied with your EPCD) into your PC, or download a copy of the Evaluate software from the EnviroPro® website.
2. On your PC, use file explorer to navigate to the application called  Evaluate.exe and open. If an internet connection is available, Evaluate will check for any available updates and notify the user if any are found.



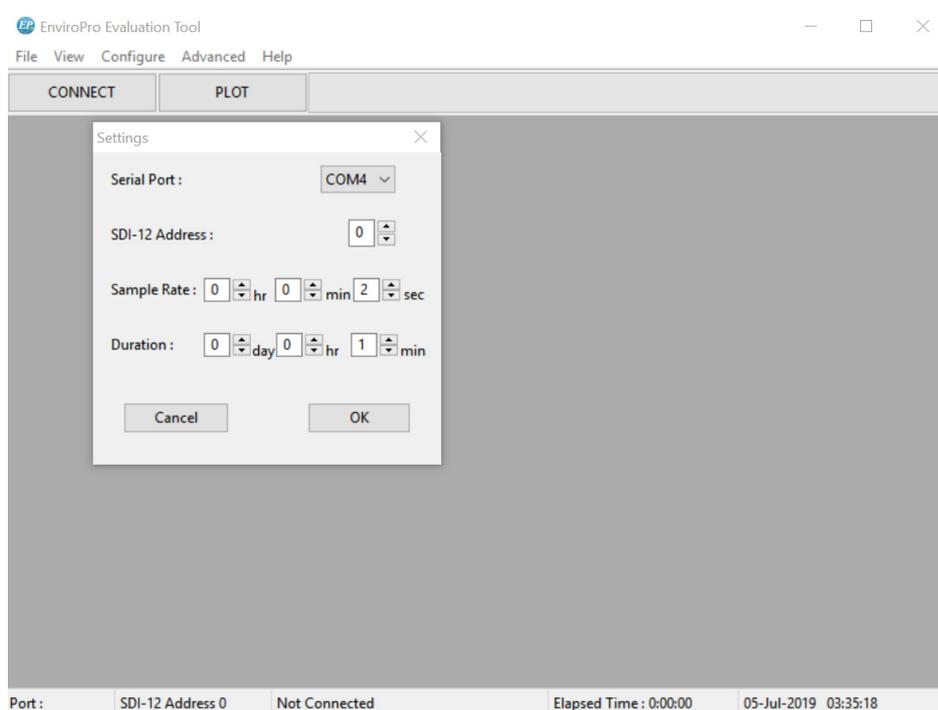
Name	Date modified	Type	Size
mpl-data	5/07/2019 3:29 PM	File folder	
tcl	5/07/2019 3:29 PM	File folder	
_ctypes.pyd	17/12/2016 9:25 PM	PYD File	118 KB
_hashlib.pyd	17/12/2016 9:27 PM	PYD File	1,448 KB
_multiprocessing.pyd	17/12/2016 9:25 PM	PYD File	34 KB
_socket.pyd	17/12/2016 9:26 PM	PYD File	50 KB
_ssl.pyd	17/12/2016 9:26 PM	PYD File	2,052 KB
_testcapi.pyd	17/12/2016 9:24 PM	PYD File	50 KB
_tkinter.pyd	17/12/2016 9:27 PM	PYD File	51 KB
_win32sysloader.pyd	18/09/2017 2:56 PM	PYD File	7 KB
bz2.pyd	17/12/2016 9:25 PM	PYD File	91 KB
CRYPT32.dll	12/04/2018 9:04 AM	Application extension	1,915 KB
Evaluate	21/05/2019 4:03 PM	Application	176 KB
evaluate32	29/06/2017 10:15 PM	Icon	5 KB
library	21/05/2019 4:03 PM	Compressed (zipped)...	13,049 KB
matplotlib._cntr.pyd	18/07/2017 3:35 PM	PYD File	23 KB
matplotlib._contour.pyd	18/07/2017 3:35 PM	PYD File	62 KB
matplotlib._image.pyd	18/07/2017 3:35 PM	PYD File	196 KB
matplotlib._path.pyd	18/07/2017 3:35 PM	PYD File	181 KB
matplotlib._png.pyd	18/07/2017 3:35 PM	PYD File	184 KB
matplotlib._qhull.pyd	18/07/2017 3:35 PM	PYD File	330 KB
matplotlib._tri.pyd	18/07/2017 3:35 PM	PYD File	129 KB
matplotlib.backends._backend_agg.pyd	18/07/2017 3:35 PM	PYD File	259 KB
matplotlib.ft2font.pyd	18/07/2017 3:35 PM	PYD File	602 KB
matplotlib.ttcconv.pyd	18/07/2017 3:35 PM	PYD File	56 KB
mfc90.dll	18/09/2017 2:56 PM	Application extension	1,632 KB
MPR.dll	14/03/2019 6:57 PM	Application extension	96 KB
numpy.core._dummy.pyd	18/07/2017 3:34 PM	PYD File	7 KB
numpy.core._multiarray.pyd	18/07/2017 3:34 PM	PYD File	1,494 KB
numpy.core._multiarray_tests.pyd	18/07/2017 3:34 PM	PYD File	48 KB
numpy.core._operand_flag_tests.pyd	18/07/2017 3:34 PM	PYD File	9 KB
numpy.core._struct_ufunc_test.pyd	18/07/2017 3:34 PM	PYD File	10 KB
numpy.core._test_rational.pyd	18/07/2017 3:34 PM	PYD File	10 KB

3. Connecting to the Probe

1. On opening the Evaluate software, the Settings window will appear. If your PC is successfully communicating with the configuration dongle, the **Serial Port** dropdown field will be automatically detected and filled.

Set the SDI-12 Address to that of the probe. If you do not know your probe's address, leave the SDI-12 Address as '0.' Each additional probe will need to be given a unique identifying address. You can assign up to 10 probes (0-9).

Adjust the sample rate at which the probe will measure and plot data and the duration of the log, then press **OK**.

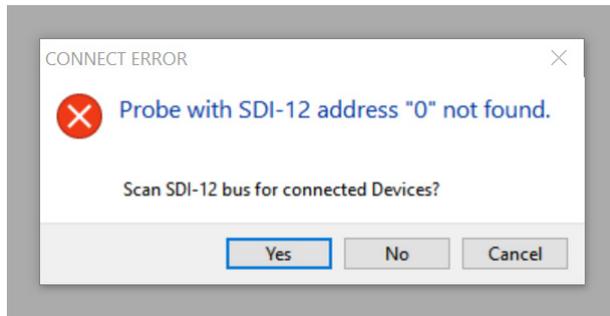


2. Press the **CONNECT** button.

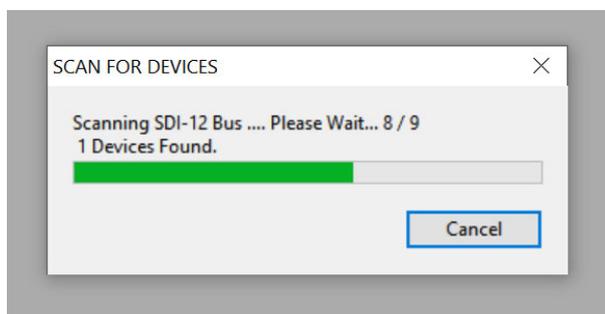
WARNING: Do not remove the USB dongle from your PC while connected to the probe.

If the SDI-12 address is correct, and the probe connects successfully, the window will display the live sensor readings. The program will not start plotting on the graph until you press the **LOG** button. If the SDI-12 address is not correct and/or the probe fails to connect, go to Step 3.

3. If the probe fails to connect, the following dialogue will appear.



Press **Yes** to scan connected probes for their correct SDI-12 address.

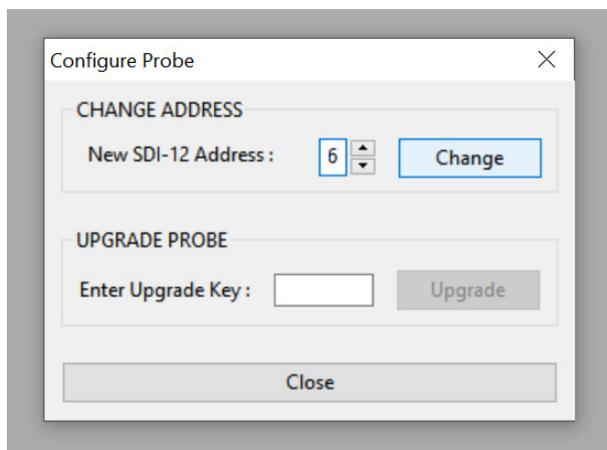


The Logging Settings will be automatically updated with the correct SDI-12 address, and the software will connect to the probe.

Changing/Assigning SDI-12 Addresses

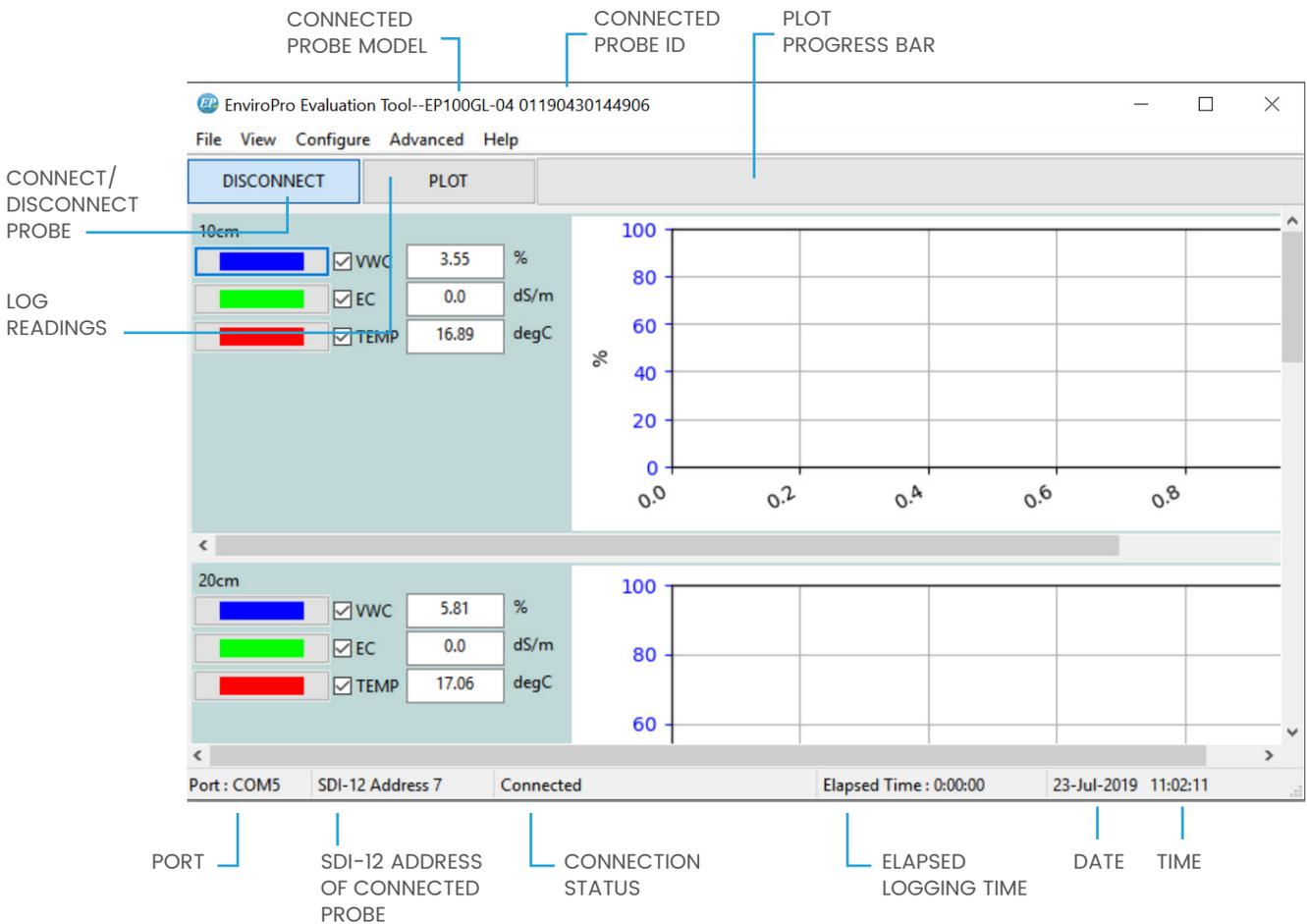
If you are connecting multiple probes, each probe must be assigned a unique SDI-12 address to avoid communication errors. If you are connecting probes that have previously been assigned the same address, you must change one to a different address.

1. To change or assign an SDI-12 address, go to Configure > Configure Probe.



2. Enter a new SDI-12 address (0-9) and press Change. The address in the Logging Settings window will automatically update, and the software will attempt to connect and identify the probe.

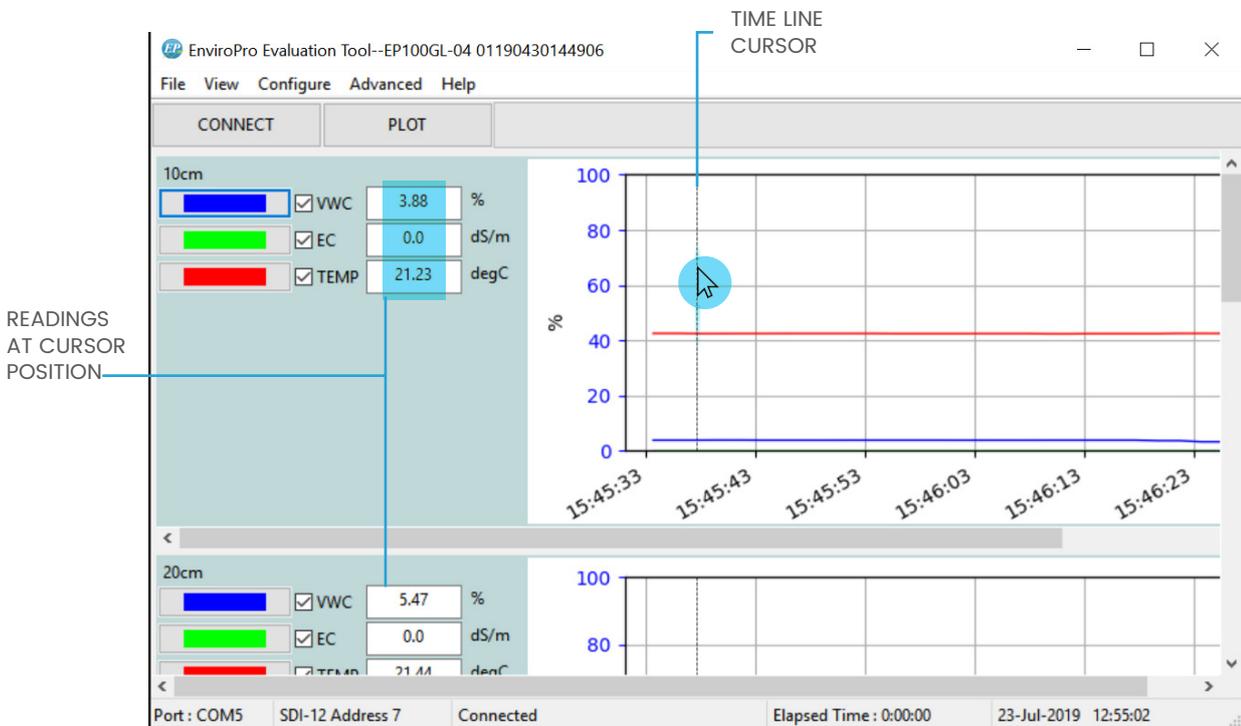
3. Using the Evaluate software:



Log/Plot

- To initiate logging, press the **LOG/PLOT** button. The sample rate and duration of the log is set in Configure > Evaluate Settings.
- The plotting view can be switched between Sensor and Parameter mode. To change viewing mode, press the View in the top menu and choose from the dropdown options. You can switch views before, during logging or after a log is completed.
- At the end of the set duration, a Save Log window will appear, giving you the option to save logs for later reference. If you do not wish to save the log, press **Cancel**. To open a previously saved log, go to File > Open Log File.

- When viewing a saved log file, a time line cursor will appear in each view window and the recorded values of each parameter on the cursor time-line will be reflected on the left side of the viewing panel.



File

Open Log File - Open previously saved logged data. Log files are saved in .epl format.

Save Log - Save the current open log data in .epl format.

Save Log As - Save the current open log data as a new named file in .epl format.

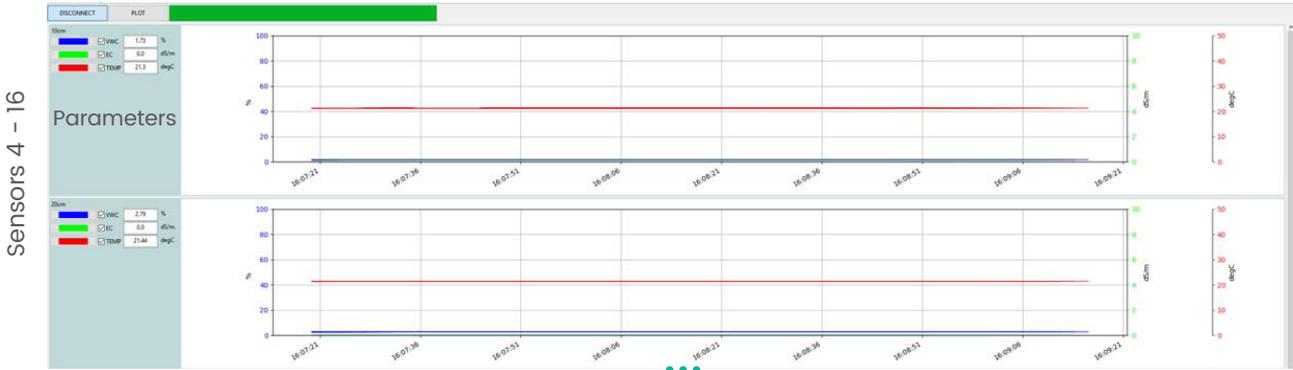
Note: Saved logging files can only be opened using in Evaluate.

Exit - Exit Evaluate

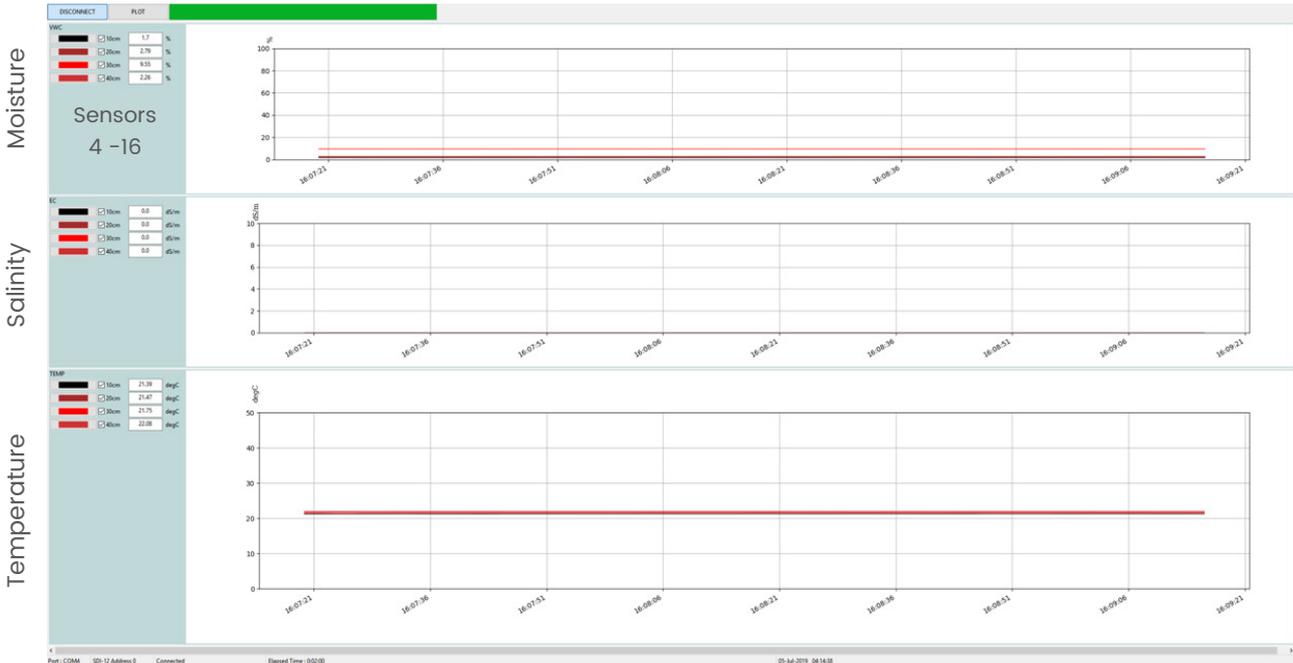
View

To initiate logging, press the LOG button. The plotting view can be switched between Sensor and Parameter mode. You can switch views before, during logging or after a log is completed under the View menu item.

SENSOR VIEW

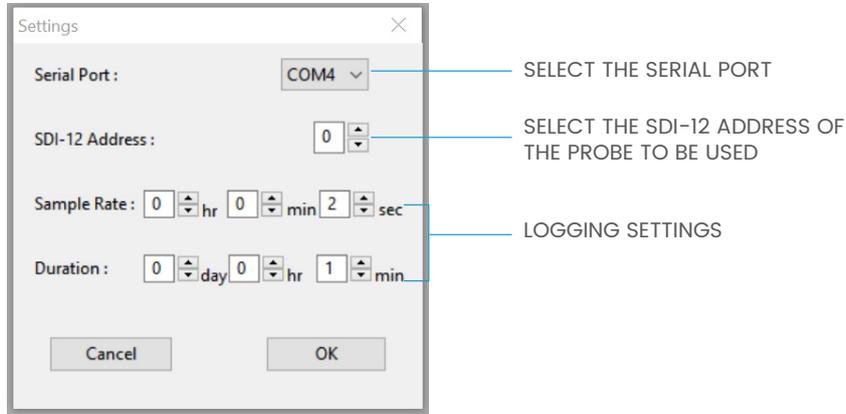


PARAMETER VIEW

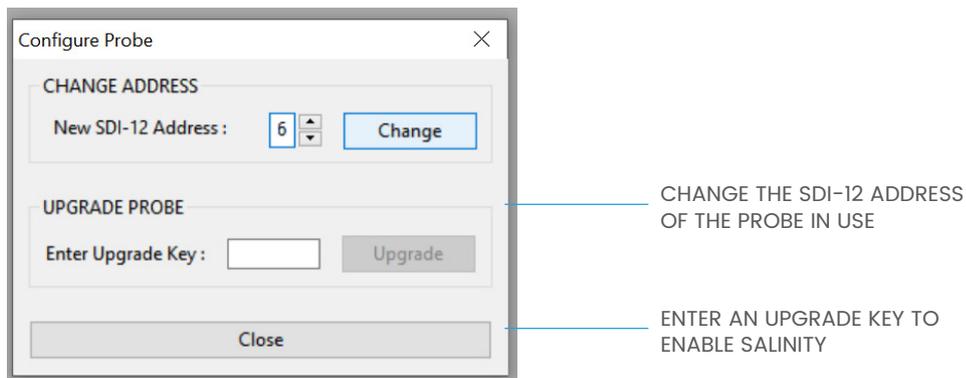


Configure

1. Evaluate Settings



2. Configure Probe



Changing/Assigning the Probe Address

If you are using multiple EnviroPro probes with the Evaluate program, you will need to assign each probe a unique address. This can be assigned/changed at any time.

1. Go to Configure > Configure Probe. Under 'Change Address,' next to New SDI-12 Address, adjust the address and press the **Change** button. This will automatically update the SDI-12 Address selected in the Evaluate Settings window, and the software will attempt to connect and identify the probe.

Upgrading the Probe to Enable Salinity (EC)

To upgrade the probe to enable salinity (EC) readings, you will need to purchase an upgrade key from Entelechy. If the probe is already salinity enabled, the Upgrade Probe section will be greyed out.

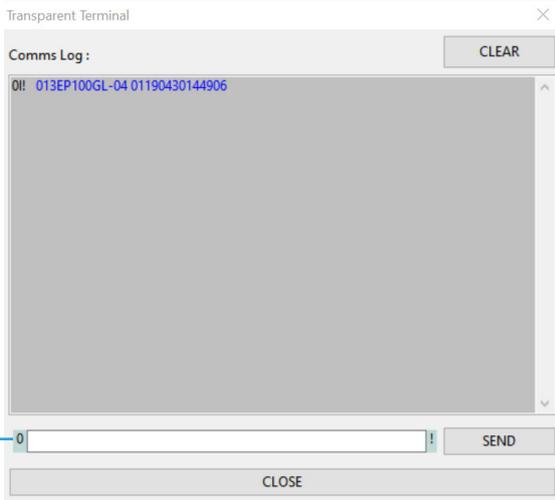
1. Go to Configure > Configure Probe. Under 'Upgrade Probe,' enter the upgrade key and press the **Upgrade** button.

Advanced

1. Transparent Terminal

The transparent terminal is for debugging purposes. It allows the user to send correctly assembled SDI-12 commands/packets directly to the probe to help troubleshoot common problems.

The terminal manages the use of breaks and inserts the configured address and termination character automatically.



1. Go to Advanced > Transparent Terminal. This will open a Comms Log window.
2. Enter SDI-12 commands into the dialog box and press **SEND**. Visit enviropsoilprobes.com/support for a list of SDI-12 Commands.

CURRENTLY SELECTED SDI-12 ADDRESS

2. Update Firmware

Updated firmware files can be obtained through Entelechy.

Note: Firmware updates are not supported on EP100G series or earlier.

1. Go to Advanced > Update Firmware
2. Press **Browse** to locate the firmware file on your PC. Select the file and press the **Open** button. Evaluate will check that it is a valid update file.
3. Press **Update** to begin the firmware update. This can take several minutes to complete. Do not disconnect or disturb the probe while updating firmware. If the process is interrupted or fails, repeat the update.

