

3. Direct connection to data loggers

DataTrac 3 can be used to connect to Em50 series data loggers directly using either a USB or serial cable. For Em50R data loggers, an RM-1 can also be used to create a virtual cable from the data logger to computer (this should only be done temporarily since remote connection using the RM-1 drastically reduces the power efficiency) (Decagon Devices, Inc. 2013).

To connect directly using the Decagon USB or serial cable

- Open DataTrac 3.
- Connect the Em50 series logger or Em5b data logger to a computer via the Decagon serial cable or Decagon USB cable. To use Decagon's USB cable adapter, it is important to have the USB driver installed on the computer to use. The driver can be found at <http://www.decagon.com/support/decagon-usb-cable-adaptor-driver/>.
- From the drop down menu for the "Connect Via" option on the tool bar, select the appropriate communication Port. This port will have the port number followed by "Decagon UCA".
- Once you have selected the correct COM port, click on the Connect button on the tool bar.

To connect to an Em50R using RM-1 (Decagon Devices, Inc., 2013):

- Connect the RM-1 to your computer with the accompanying RS232 serial cable or USB cable.
- In DataTrac3, select which COM port the RM-1 is connected to from the "Connect Via" combo box, and select "Connect Via RM-1 on...".
- Click the "Connect" button on the Toolbar.
- If you have not already highlighted a logger in the device directory, DataTrac will ask you which channel and sub channel you would like to connect on. Enter a value for each, then click "OK".
- If you know which logger you want to connect to, select it in the display tree and then click "Connect". DataTrac 3 will not display the "RM-1 Settings Dialog", because these values are already set. However, if you try to connect to a non-radio enabled logger, DataTrac 3 will display an error message. This means that: (a) the device is not a radio logger (Em50R or Em5R), or (b) the device's radio is either not connected or not correctly configured (i.e. its radio mode is set to "Radio Off/ No Radio").

Make sure you are using a radio logger and that it is correctly configured, then connect again. If the connection is successful, the radio logger's information and RSSI data are displayed in the device status area. DataTrac 3 will also indicate that your logger has not been configured yet.

Downloading data directly from Em50 data loggers

Once direct connection is established, data can be downloaded directly from the Em50/Em5 data loggers using the step below.

- Select to download “New Data” or “All Data” from the “Download” option in Connections menu.
The “Download” button on the toolbar downloads new data only.