

DragonEye Speed Data Logger (DLOG) Instructions

Description

The DragonEye Data Logger (DLOG) is an easy to use Windows based program allowing Speed, Range, Time and Date data to be either retrieved from your DragonEye Speed Lidar (DESL) memory or streamed live to a PC. The DragonEye Speed Lidar stores each speed and associated range and time information upon trigger release in its internal memory. If activated in the Lidar menu, the DESL also sends the speed data to the selected port (Bluetooth or RS232) upon trigger release/lock of an active speed. These speed readings along with the range, time, date vehicle ID, file name, and optional notes can be saved to a comma delimited text file which is easily imported into your data analysis software such as MS Excel.

Requirements

1. DLOG software and associated files located on the product disk that came with your Lidar unit.
2. Microsoft Windows based PC with either:
 - a. Bluetooth interface (recommended) or,
 - b. RS232 interface either through DB9 type connector or an RS232 to USB converter.

All newer DESL units come with an embedded Bluetooth interface capability. RS232 or converter cables must be purchased separately.

Software Installation

The software files simply need to be copied to a convenient directory on your computing device.

Find the file folder “DLOG Data Retrieval Program” on the disk and simply copy the entire folder (with all of its contents) to an easily accessible location on your PC.

Connecting the Lidar to the Computer

Install batteries in the Lidar unit and click the trigger to wake up the unit. Let the Lidar complete the self-test routine if necessary.

Use the Lidar Menu system and blue up/down arrows to find and select the “Data Ports” option; press the enter button to confirm. Then use the blue up/down arrows to select your method of connection (Bluetooth or RS232). Press enter to confirm. The Lidar will exit the menu system and display an icon on the rear panel to confirm your communication type.

Bluetooth Connection

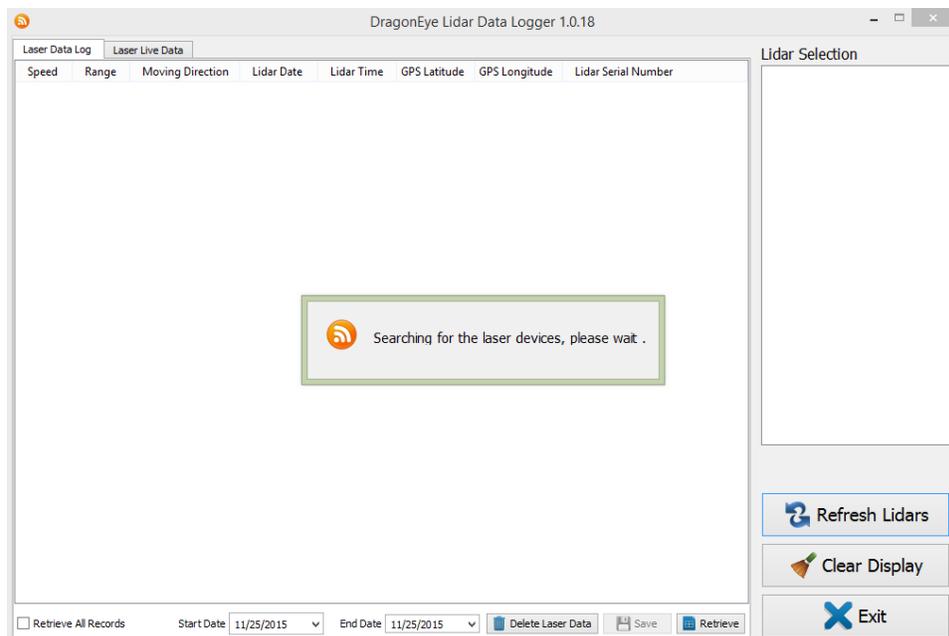
After setting the Lidar for Bluetooth connectivity, you must first pair the device with your PC. Use your PC's Bluetooth/Windows control panel to add and pair the DragonEye Device. Be sure your DESL is on and awake (click laser fire trigger if necessary). The DragonEye device will be identified as "DET XXXXX" where "XXXXX" will be the serial number of your device. Note: there will be no security code required for pairing.

RS232 Connection

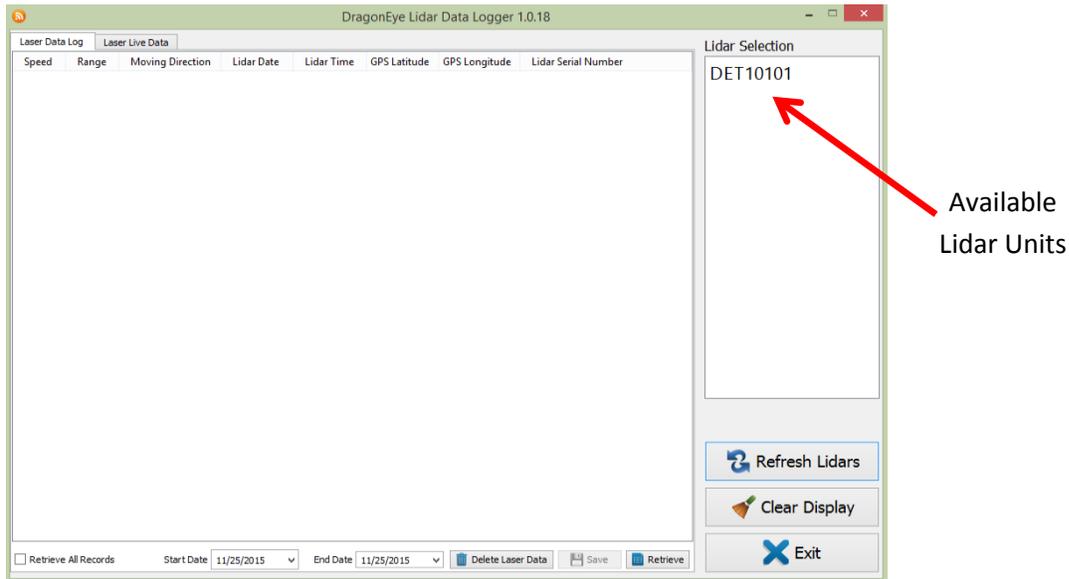
After setting the Lidar for RS232 connection, carefully connect the custom DESL RS232 cable connector into the side port of the Lidar and then connect the other end to your PC's RS232 connector or USB/RS232 converter cable.

Start the Data Logging Program

Find and double click the "DLOG.EXE" file in the "DLOG Data Retrieval" folder previously copied to the PC. The following screen should appear:



It may take a minute or two while the DLOG searches for all DESL units connected to your PC. After the search is complete, the DLOG program will show the available Lidar units in the right side panel as shown below:



Retrieving Stored Data from the Lidar Unit

1. Click the desired Lidar Unit serial number in the right side panel.
2. **Select the “Laser Data Log” tab** in the upper left corner of the DLOG program if not already selected.
3. Make sure the Lidar unit is on and awake.
4. Select the “Start Date” and “End Date” to define the date range for which you wish to retrieve data OR select “Retrieve All Records” to get all available data.

After retrieving the records, the DLOG screen should look similar to the following:

DragonEye Speed Lidar Data Logger 1.0.18 -- DET10101

Speed Range Moving Direction Lidar Date Lidar Time GPS Latitude GPS Longitude Lidar Serial Number

32	501.1	Receding	2015-11-25	10:57:26			10101
32	723.5	Receding	2015-11-25	10:57:32			10101
26	834.3	Approaching	2015-11-25	10:57:45			10101
32	734.9	Approaching	2015-11-25	10:57:48			10101
36	624.3	Approaching	2015-11-25	10:57:50			10101
38	507.1	Approaching	2015-11-25	10:57:52			10101
40	344.4	Approaching	2015-11-25	10:57:55			10101
38	229.3	Approaching	2015-11-25	10:57:57			10101
33	1540.8	Approaching	2015-11-25	10:58:11			10101
32	1473.4	Approaching	2015-11-25	10:58:13			10101
31	1387.4	Approaching	2015-11-25	10:58:15			10101
31	1315.8	Approaching	2015-11-25	10:58:16			10101
31	1252.8	Approaching	2015-11-25	10:58:18			10101
22	1486.2	Approaching	2015-11-25	10:58:21			10101
24	1317.3	Approaching	2015-11-25	10:58:27			10101
22	1184.3	Approaching	2015-11-25	10:58:30			10101
25	1656.2	Approaching	2015-11-25	10:58:56			10101
25	1593.3	Approaching	2015-11-25	10:58:57			10101
25	1517.8	Approaching	2015-11-25	10:59:00			10101
27	1402.7	Approaching	2015-11-25	10:59:02			10101
29	1360.1	Approaching	2015-11-25	10:59:04			10101
28	1285.4	Approaching	2015-11-25	10:59:05			10101
23	1131.9	Approaching	2015-11-25	10:59:09			10101
20	1063.9	Approaching	2015-11-25	10:59:11			10101
28	160.1	Receding	2015-11-25	10:59:19			10101
31	283.0	Receding	2015-11-25	10:59:22			10101
33	368.4	Receding	2015-11-25	10:59:24			10101
34	437.3	Receding	2015-11-25	10:59:25			10101
23	772.5	Approaching	2015-11-25	10:59:26			10101
24	744.2	Approaching	2015-11-25	10:59:27			10101
32	592.1	Receding	2015-11-25	10:59:28			10101
39	208.1	Receding	2015-11-25	10:59:34			10101
40	289.8	Receding	2015-11-25	10:59:35			10101

Lidar Selection
DET10101

Refresh Lidars
Clear Display
Exit

Retrieve All Records Start Date 11/25/2015 End Date 11/25/2015 Delete Laser Data Save Retrieve

To save the data to a text file (*.txt), simply click the save button. The contents can be easily imported into MS Excel for further processing.

From the “Laser Data Log” tab you can also delete the contents of the Lidar memory by clicking the “Delete Laser Data” button. **Note: this action will permanently erase ALL stored readings in the Lidar unit, so be sure you have saved your data to a text file before proceeding with this option.**

Logging Data Directly to PC

Use the following instructions if you would like to log speed and range data directly to a PC while measuring speeds in the field.

1. Establish a Bluetooth or RS232 connection as described above.
2. Select the desired serial number Lidar unit from the right side panel of the DLOG program.
3. Select the **“Laser Live Data”** tab in the upper left corner of the DLOG program.
4. Click the “Data File” button and create a name and location to store data. NOTE 1: YOU MUST CREATE THIS FILE FIRST TO BE ABLE TO STREAM DATA LIVE TO THE PC. NOTE 2: IF AN EXISTING LOG FILE IS SELECTED, THE LOGGED DATA WILL BE APPENDED TO THE EXISTING DATA.
5. If desired, enter notes or other descriptive text in the “Free Note” box at the bottom left. This note will be appended to each record captured in the current log event. Typically this might be the location or other unique aspect of the data collection.
6. Click the “Start” Button
7. Measure vehicle speeds to collect data. NOTE: THE SPEED DATA IS ONLY SENT UPON TRIGGER RELEASE AND LOCKING OF A SPEED MEASUREMENT. SO BE SURE TO USE THIS “MEASURE AND RELEASE” METHOD WHEN COLLECTING LIVE DATA.
8. Press the “Stop” button to end your session. The data is saved in the predefined file in a comma delimited format ready for import to MS Excel or similar. NOTE: YOU MUST PRESS THE STOP BUTTON TO END THE SESSION BEFORE YOU CAN USE OTHER FEATURES OF THE DLOG PROGRAM SUCH AS RETREIVING STORED LASER DATA.

Importing Data to MS Excel

The logged data is saved in a *.txt file for easy importation into spreadsheet programs. In MS Excel, select the “Data” tab, then select “from TXT” under the “Get External Data” group. Follow the instructions selecting “comma delimited” when appropriate.