





Data Viewer User's Manual

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DataViewer[™] is Trip Raw Data PC software (Windows OS) to manage your data for diversified applications. You can read and view the logged track data easily, and output your track records to GPX / NMEA / KML / CSV / BIN file for further analysis or use in integration with other software.

1. <Read From Device>

- 1.1 Firstly power off device. Connect the device to the computer via USB cable, click <Read from Device>, DataViewer software will automatically detect the data recorders and display records. If you cannot download normally, please try to re-plug the USB or re-install the SD card.
- 1.2 The record list will pop up, select the records you want to import.

				\times
Track T	уре: Waypo	oint	-	
	Reco	rd Name:]
2023-	11-21 03:08:41			1
2023-	11-21 02:59:17			
		OK	Cano	el

1.3 The track raw data will be displayed in the list, and the data of each waypoint can be obtained from the raw data list. $^\circ$

After Highlighting the POI, you can see that each point of interest is marked in yellow.

ECO	RDEF			94								
Read fro	m device	Erase device									Save to file	Read from file
_	Track Nam	e Start Time	End Time		Duration	Total Distance	POI Count	Track Color	Line Width	Waypoint Icon		
Track	2023/11/3	0 16:08 2023/11/30 16:0	08:35 2023/11/30 16:0	08:53	0 Days 00:00:18	0.0 km	4	v 🗖 💌	5 -			
											V Highli	ight POI «« «
	RCR	UTC	Local Time	millisec	Valid	Latitude	N/S	Longitude	E/W	Height(m)	Speed(km/h)	Headin
ex	110010											
lex 1	T	2023/11/30 08:08:35	2023/11/30 16:08:35	0	3D-Fix	25.069222*	N	121.591327*	E	84	0.519	178.5024
lex 1 2	T	2023/11/30 08:08:35 2023/11/30 08:08:36	2023/11/30 16:08:35 2023/11/30 16:08:36	0	3D-Fix 3D-Fix	25.069222* 25.069212*	N	121.591327* 121.591327*	E	84	0.519	178.5024 311.2199
ex 1 2 3	T T T	2023/11/30 08:08:35 2023/11/30 08:08:36 2023/11/30 08:08:37	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37	0	3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216*	N N	121.591327* 121.591327* 121.591323*	E	84 83 83	0.519 0.204 1.204	178.5024 311.2199 329.9187
ex 1 2 3 4	T T T T	2023/11/30 08:08:35 2023/11/30 08:08:36 2023/11/30 08:08:37 2023/11/30 08:08:37	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37 2023/11/30 16:08:38	0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.069219*	N N N	121.591327* 121.591327* 121.591323* 121.591321*	E E E	84 83 83 83	0.519 0.204 1.204 1.352	178.5024 311.2199 329.9187 174.8817
ex 1 2 3 4 5	T T T T B	2023/11/30 08:08:35 2023/11/30 08:08:36 2023/11/30 08:08:37 2023/11/30 08:08:38 2023/11/30 08:08:39	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37 2023/11/30 16:08:38 2023/11/30 16:08:38	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.069219* 25.069219* 25.069209*	N N N N	121.591327* 121.591327* 121.591323* 121.591321* 121.591322*	E E E E	84 83 83 83 83 82	0.519 0.204 1.204 1.352 0.352	178.5024 311.2199 329.9187 174.8817 198.8342
ex 1 2 3 4 5 6	T T T T B T	2023/11/30 08:08:35 2023/11/30 08:08:36 2023/11/30 08:08:37 2023/11/30 08:08:38 2023/11/30 08:08:39 2023/11/30 08:08:40	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37 2023/11/30 16:08:38 2023/11/30 16:08:39 2023/11/30 16:08:40	0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.069219* 25.069209* 25.069209*	N N N N N	121.591327* 121.591327* 121.591323* 121.591321* 121.591322* 121.591322* 121.591320*	E E E E E E	84 83 83 83 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077
ex 1 2 3 4 5 6 7	T T T T T B T T	2023/11/30 08:08:35 2023/11/30 08:08:36 2023/11/30 08:08:37 2023/11/30 08:08:38 2023/11/30 08:08:39 2023/11/30 08:08:40 2023/11/30 08:08:41	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37 2023/11/30 16:08:38 2023/11/30 16:08:39 2023/11/30 16:08:40 2023/11/30 16:08:41	0 0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.059219* 25.069209* 25.069205*	N N N N N	121.591327* 121.591327* 121.591323* 121.591321* 121.591322* 121.591322* 121.591320* 121.591318*	E E E E E E E	84 83 83 83 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823
ex 1 2 3 4 5 6 7 8	T T T T T B T T T	2023/11/30 08:08:35 2023/11/30 08:08:35 2023/11/30 08:08:37 2023/11/30 08:08:38 2023/11/30 08:08:39 2023/11/30 08:08:40 2023/11/30 08:08:41 2023/11/30 08:08:42	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:37 2023/11/30 16:08:38 2023/11/30 16:08:49 2023/11/30 16:08:40 2023/11/30 16:08:41 2023/11/30 16:08:42	0 0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.069209* 25.069205* 25.069205* 25.069205*	N N N N N N	121.591327* 121.591327* 121.591321* 121.591321* 121.591322* 121.591320* 121.591318* 121.591319*	E E E E E E E E	84 83 83 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063
ex 1 2 3 4 5 6 7 8 9	T T T T T B T T T B	2023/11/30 06:06:35 2023/11/30 06:06:36 2023/11/30 06:06:37 2023/11/30 06:06:38 2023/11/30 06:06:39 2023/11/30 06:06:40 2023/11/30 06:06:41 2023/11/30 06:06:43	2023/11/30 16:08:35 2023/11/30 16:08:36 2023/11/30 16:08:38 2023/11/30 16:08:39 2023/11/30 16:08:40 2023/11/30 16:08:40 2023/11/30 16:08:42 2023/11/30 16:08:43		30-Fix 3D-Fix 3D-Fix 3D-Fix 30-Fix 30-Fix 3D-Fix 30-Fix 30-Fix	25.069222* 25.069212* 25.069219* 25.069219* 25.069209* 25.069205* 25.069205* 25.069202*	N N N N N N N	121.591327* 121.591327* 121.591323* 121.591322* 121.591322* 121.591320* 121.591318* 121.591318* 121.591316*	E E E E E E E E	84 83 83 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796 0.778	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.69843
ex 1 2 3 4 5 6 7 7 8 9 9	T T T T T T T T T T T	2023/11/30 06:06:35 2023/11/30 06:06:36 2023/11/30 06:06:37 2023/11/30 06:06:38 2023/11/30 06:06:39 2023/11/30 06:06:40 2023/11/30 06:06:41 2023/11/30 06:06:42 2023/11/30 06:06:43 2023/11/30 06:06:44	2023/11/30 1E608:35 2023/11/30 1E608:35 2023/11/30 1E608:37 2023/11/30 1E608:39 2023/11/30 1E608:39 2023/11/30 1E608:40 2023/11/30 1E608:41 2023/11/30 1E608:42 2023/11/30 1E608:44		30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix	25.069222* 25.069212* 25.069219* 25.069209* 25.069209* 25.069205* 25.069202* 25.069202* 25.069202*	N N N N N N N N N	121.591327* 121.591327* 121.591323* 121.591321* 121.591322* 121.591320* 121.591318* 121.591319* 121.591316* 121.591317*	E E E E E E E E E	84 83 83 82 82 82 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796 0.778 1.204	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.69843 341.4467
ex 1 2 3 4 5 6 7 8 9 10 11 12 12 12 12 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19	T T T T T T T B T T T	2023/11/30 06:06:35 2023/11/30 06:06:36 2023/11/30 06:06:37 2023/11/30 06:06:38 2023/11/30 06:06:39 2023/11/30 06:06:40 2023/11/30 06:06:41 2023/11/30 06:06:41 2023/11/30 06:06:41 2023/11/30 06:06:43	2023/11/30 16:08:35 2023/11/30 16:08:35 2023/11/30 16:08:37 2023/11/30 16:08:37 2023/11/30 16:08:38 2023/11/30 16:08:40 2023/11/30 16:08:41 2023/11/30 16:08:43 2023/11/30 16:08:45 2023/11/30 16:08:45	0 0 0 0 0 0 0 0 0 0 0 0 0	3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix 3D-Fix	25.069222* 25.069212* 25.069216* 25.069206* 25.069209* 25.069209* 25.069205* 25.069205* 25.069205* 25.069205* 25.069205*	N N N N N N N N N	121.591327* 121.591327* 121.591323* 121.591323* 121.591320* 121.591320* 121.591310* 121.591310* 121.591316* 121.591316* 121.591315*	E E E E E E E E E E E	84 83 83 82 82 82 82 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796 0.407 0.796 1.204	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.69843 341.4467 11.99010
ex 1 2 3 4 5 6 7 7 8 9 9 10 11 12	T T T T T T T T T T T	2023/11/30 06:08:35 2023/11/30 06:08:36 2023/11/30 06:08:37 2023/11/30 06:08:39 2023/11/30 06:08:40 2023/11/30 06:08:40 2023/11/30 06:08:41 2023/11/30 06:08:42 2023/11/30 06:08:42 2023/11/30 06:08:45 2023/11/30 06:08:45 2023/11/30 06:08:45	2023/11/30 16:00:35 2023/11/30 16:00:36 2023/11/30 16:00:36 2023/11/30 16:00:37 2023/11/30 16:00:38 2023/11/30 16:00:40 2023/11/30 16:00:40 2023/11/30 16:00:43 2023/11/30 16:00:43 2023/11/30 16:00:45 2023/11/30 16:00:45	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix	25.069222* 25.069212* 25.069219* 25.069205* 25.069205* 25.069205* 25.069202* 25.069202* 25.069202* 25.069215* 25.069228*	N N N N N N N N N N	121.591327* 121.591327* 121.591323* 121.591321* 121.591320* 121.59130* 121.591318* 121.591318* 121.591315* 121.591315* 121.591315* 121.591315*	E E E E E E E E E E E E	84 83 83 82 82 82 82 82 82 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.776 0.776 1.204 0.444 0.444 0.519	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.69843 341.4467 11.99011 208.9168
ex 1 2 3 4 5 6 7 8 9 10 11 12 13 14	T T T T T T T B T T T T T T T	2023/11/30 08:06:35 2023/11/30 08:06:36 2023/11/30 08:06:38 2023/11/30 08:06:38 2023/11/30 08:06:38 2023/11/30 08:06:48 2023/11/30 08:06:44 2023/11/30 08:06:44 2023/11/30 08:06:44 2023/11/30 08:06:44 2023/11/30 08:06:44	2023/11/30 1608.35 2023/11/30 1608.36 2023/11/30 1608.36 2023/11/30 1608.37 2023/11/30 1608.38 2023/11/30 1608.41 2023/11/30 1608.41 2023/11/30 1608.42 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45		30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix	25.069222* 25.069216* 25.069216* 25.069205* 25.069205* 25.069205* 25.069205* 25.069202* 25.069228* 25.069228* 25.069228*	N N N N N N N N N N	121.591327* 121.591327* 121.591327* 121.591323* 121.591320* 121.591320* 121.591310* 121.591316* 121.591316* 121.591316* 121.591316* 121.591316* 121.591316*	E E E E E E E E E E E E E E	84 83 83 82 82 82 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796 0.778 1.204 0.444 0.519 1.352 0.500	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.66943 341.4467 11.99010 208.9168 20.95922 169.4033
ex 1 2 3 4 5 6 7 8 9 0 11 2 3 4 4 5 6 7 8 9 0 11 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	T T T T T T T T T T T T T T T T T T	2023/11/30 060-835 2023/11/30 060-836 2023/11/30 060-837 2023/11/30 060-838 2023/11/30 060-838 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-841 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848 2023/11/30 060-848	2023/11/30 1608.35 2023/11/30 1608.36 2023/11/30 1608.36 2023/11/30 1608.38 2023/11/30 1608.38 2023/11/30 1608.40 2023/11/30 1608.41 2023/11/30 1608.41 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45 2023/11/30 1608.45		30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix	25.08922* 25.089216* 25.089216* 25.089205* 25.089205* 25.089205* 25.089205* 25.089205* 25.089205* 25.089205* 25.089225* 25.089225* 25.089225* 25.089225* 25.089225*	N N N N N N N N N N N N N N N N N N N	121.591327* 121.591327* 121.591327* 121.591321* 121.591321* 121.591320* 121.591318* 121.591319* 121.591317* 121.591317* 121.591316* 121.591316* 121.591314* 121.591317*	E E E E E E E E E E E E E E	84 83 83 82 82 82 82 82 82 82 82 82 82 82 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.796 0.778 1.204 0.444 0.519 1.352 0.500 2.502	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 9.69843 341.4467 11.99010 208.9168 20.95922 169.4833 136.7390
lex 1 2 3 4 5 6 6 7 8 9 9 10 11 12 13 14 15 16 10 11 12 10 10 10 10 10 10 10 10 10 10	T T T T T B T T T B T T T B T T T	2023/11/30 060-835 2023/11/30 060-836 2023/11/30 060-837 2023/11/30 060-839 2023/11/30 060-839 2023/11/30 060-849 2023/11/30 060-847 2023/11/30 060-847 2023/11/30 060-845 2023/11/30 060-845 2023/11/30 060-845 2023/11/30 060-845 2023/11/30 060-845	2023/11/30 1608.35 2023/11/30 1608.36 2023/11/30 1608.36 2023/11/30 1608.37 2023/11/30 1608.37 2023/11/30 1608.38 2023/11/30 1608.34 2023/11/30 1608.41 2023/11/30 1608.44 2023/11/30 1608.45 2023/11/30 1608.46 2023/11/30 1608.46 2023/11/30 1608.46 2023/11/30 1608.46 2023/11/30 1608.46		30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix 30-Fix	25.069222* 25.069212* 25.069216* 25.069205* 25.069205* 25.069205* 25.069205* 25.069202* 25.069228* 25.069228* 25.069228* 25.069228* 25.069228*	N N N N N N N N N N N N N N N N N N N	121.591327* 121.591327* 121.591327* 121.591327* 121.591323* 121.591328* 121.591328* 121.591328* 121.59139* 121.591316* 121.591316* 121.591316* 121.591316* 121.591316* 121.591316*		84 83 83 83 82 82	0.519 0.204 1.204 1.352 0.352 0.778 0.407 0.776 0.776 0.776 0.776 0.776 0.778 1.204 0.444 0.519 1.352 0.500 2.593 2.315	178.5024 311.2199 329.9187 174.8817 198.8342 278.8077 169.2823 336.9063 3.9.69843 341.4467 11.99010 208.9168 20.95921 169.4833 126.7180 129.5125

2. < Erase Device>

Select the track record you want to delete and click OK to delete.



3. <Save to File>

Select the track record to save and save your track record to GPX / NMEA / KML / CSV / BIN file.

	Track Name	Start Time	End Time	Total Distance
	Track 2023/11/21 11:08	2023/11/21 11:08:42	2023/11/21 11:09:11	0.0 km
			OK	Cancel
			OK	Cancel
File n	iame:		OB	Cancel
File n Save as	iame: type: GPX File(*.gpx)		OK	Cancel

4. <Read from File>

You can read stored NMEA or BIN files.

NMEA0183 File(*.nmea)	<
NMEA0183 File(*.nmea)	
Bin File(*.bin)	

5. <Configure GPS module> (For BL-1000ST)

Configure GPS setting and automatically update AGPS at the same time.

Bootloader Version:BLS0.00.37	FW Version:FWS0.01.04
BLE SN:QSTARZ32290001	BLE Version:E0.00.09
Device Name:	1
Record conditions	econds Time Zone +0
Log over 5 1	m/h
	Sleep after 10 Mins 5 15
Update Firmware	Factory Reset
Device Memory Used Memor	ry: 0%

5.1 Record conditions

Log every () seconds:

If the criterion is checked, Data Recorder will not log if difference between current time and last logged time is less than the specified time.

Log every () meters:

If the criterion is checked, Data Recorder will not log if the distance of current position and last logged position is less than the specified distances.

Log over () km/h:

If the criterion is checked, Data Recorder will not log if the speed is under the setting.

How Data Recorder log waypoints with different settings

Log Setting	Description
Log every X seconds	Data Recorder would log one waypoint per X seconds.
Log every Y meters	Data Recorder would log one waypoint per Y meters.
Log over Z km/h	When the speed is above Z km/h, it would log one waypoint per second.

1. Log every X seconds	Data Recorder would log one waypoint per X seconds or per Y meters, depends on which
2. Log every Y meters	condition meets the setting (distance / time) first.
1. Log every X seconds	When the speed is below Z km/h, Data Recorder would log one waypoint per X seconds.
2. Log over Z km/h	When the speed is above Z km/h, it would log one waypoint per second.
1. Log every Y meters	When the speed is below Z km/h, Data Recorder would log one waypoint per Y meters.
2. Log over Z km/h	When the speed is above Z km/h, it would log one waypoint per second.
1 Log over V seconds	When the speed is below Z km/h, it would log one waypoint per Y meters or per X seconds, depends
1. Log every X seconds	on which condition meets the setting (distance /
2. Log every Y meters	time) first.
3. Log over Z km/h	When the speed is above Z km/h, it would log one point per second.

5.2 Device Memory

A bar shows how many percentages of memory is used in the Data Recorder.

5.3 Device Name

You can rename the device name.

5.4 Time Zone

The time zone can be set, and the record names will be named in local time.

5.5 G Sensor, buzzer, Bluetooth

The recorder can be set to turn on or off the G Sensor, buzzer, and Bluetooth.

5.6 Sleep after

You can set the recorder to enter sleep mode 5 to 15 minutes after it stops moving. When it moves again, the recorder will start recording tracks again.

5.7 Update Firmware

You can be updated to the latest version of firmware.

5.8 Factory Reset

All settings of the recorder will be reset to factory settings.

6. <Reset Device>

Resetting the recorder will delete all track records and settings on the recorder.



7. < Options>

Unit and Coordination	n			
Distance unit:	Metric	Lat/Long:	🔵 Degrees, Minutes, Seconds	Degrees
Track				
Separate tracks when v	vaypoint time di	fference is more than	1 minutes	
Time Zone — — —				
Display Time Zone:	(UTC+08:00)	台北	-	
	Deviate 9	auing Time		
	Dayngins	aving inne		
Display Language —				
Preferred Language:	Engli	sh		-
Preferred Language:	Engli	sh		
				1

<Unit and Coordination>

Distance unit:

Metric: Kilometer / meters will be used for displaying.

Imperial: Miles / feet will be used for displaying.

Lat/Long:

Degrees, minutes, seconds: Latitude and longitude will be display like 23°12'20"

Degrees: Latitude and longitude will be display like 23.22152°

<Track>

When the interval between two record points exceeds the number of minutes, the track will be divided into two segments for display.

<Time Zone>

Displays time zone and daylight saving time settings.

<Display Language>

Set the software language.