

User Guide

GPS Unik4 Rally Raid



☀ COMPETITOR ☀



V 2.1

December 2021

ERTF Compétition

User Guide

GPS Unik4

Evolutions of the document

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1 Presentation

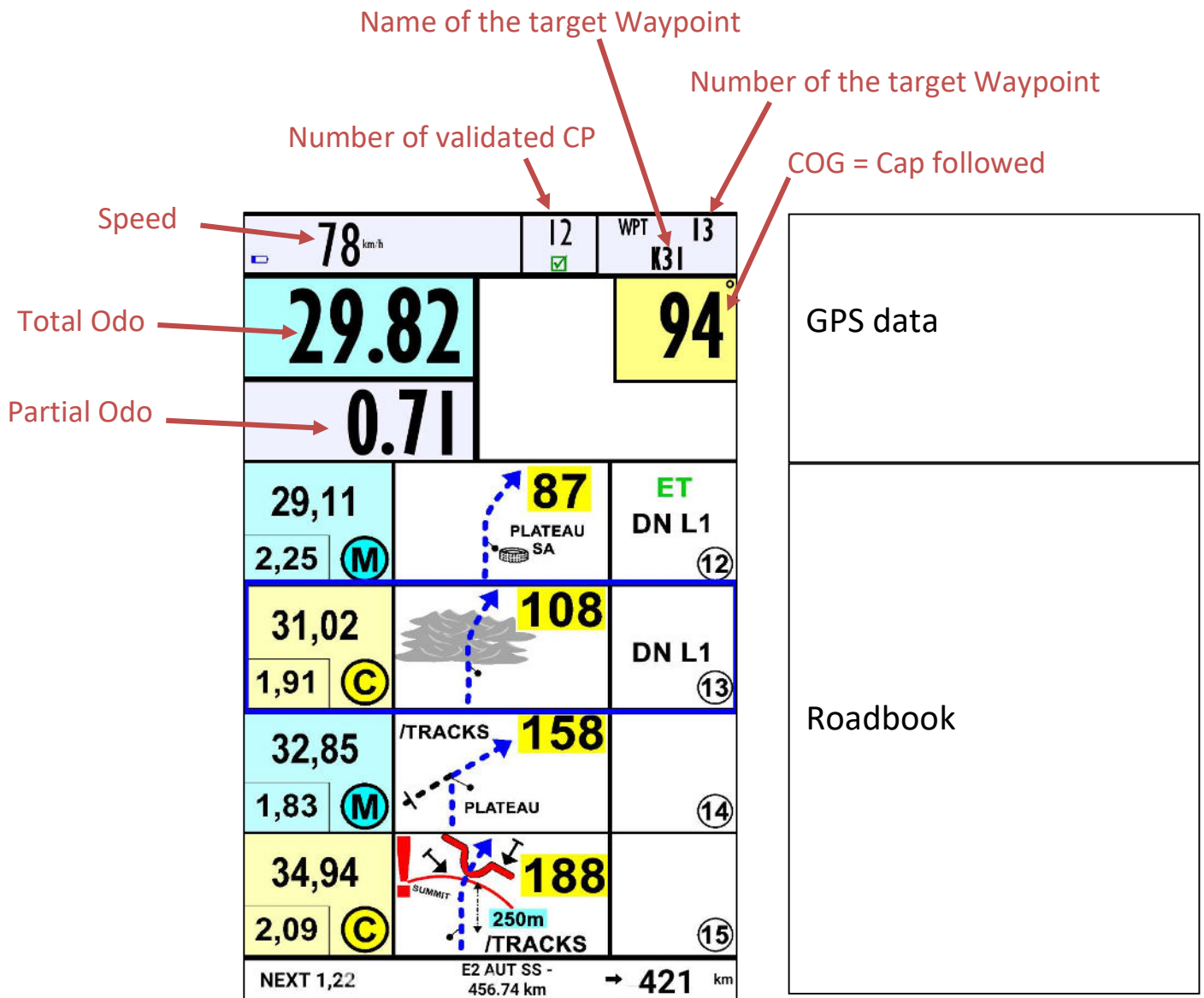
In the Rallye du Maroc 2021 and Dakar 2022, the Unik4 is a complete equipment that integrates the electronic RoadBook and the GPS Unik2 with Sentinel into.

The Unik4 does the functions: electronic RoadBook+GPS+Sentinel.



2 The screens


2.1 General screen




2.2 Power supply and Satellite icons

- The cell indicates the power supply status:

No icon: All clear, power supply from the vehicle battery.

 Fixed cell: Low battery, charging, power supply from the vehicle battery.

 Blinking cell: Power supply from the internal battery of the Unik4; quickly review your installation before battery discharge.

- The bell indicates the sat signal status:

No icon: All clear, good signal.




Fixed bell: No sat signal, check your installation.


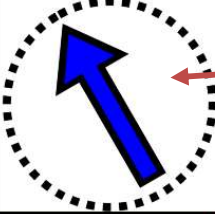
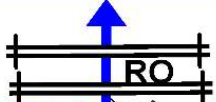




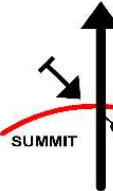


Blinking bell: Sat signal from the internal antenna of the Unik4, check your installation.

2.3 With Speed limit by category

176		180	4	WPT	15
30.97			K34		
2.20			32°		
29,11		87		ET	
2,25	(M)	PLATEAU SA		DN L1	(12)
31,02		108		DN L1	(13)
1,91	(C)				
32,85		158			
1,83	(M)	PLATEAU			(14)
34,94		188			
2,09	(C)	SUMMIT 250m			(15)
NEXT 1,22		E2 AUT SS - 456.73 km		→ 421 km	

2.4 With Speed limit zone

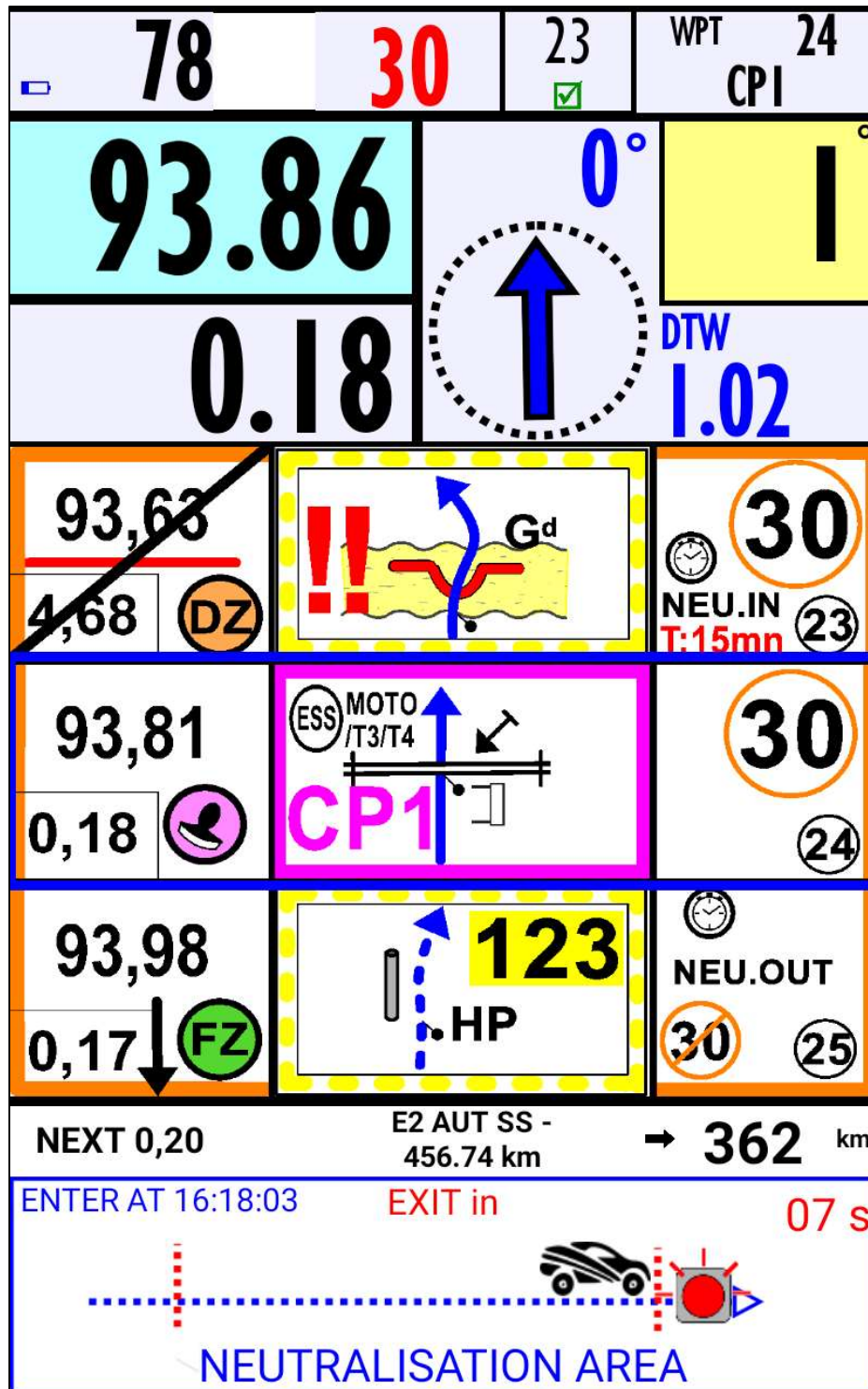
82		50	14	WPT	15
			<input checked="" type="checkbox"/>	CP2	
49.61			5°		32°
0.12				DTW	0.11
49,7					50
0,2		CP2	WHITE		15
50,5					50
0,8					16
50,9			90	ET à 350m	60
0,4					
51,7			65 Moy		
0,8		SUMMIT			
NEXT 1.50		!	E5 SS Auto - 353.6 km	→	301 km



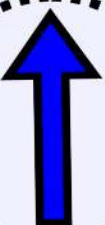

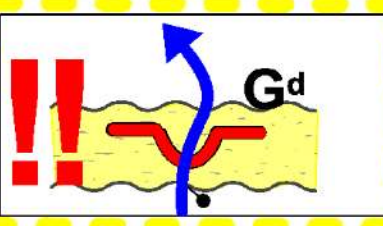



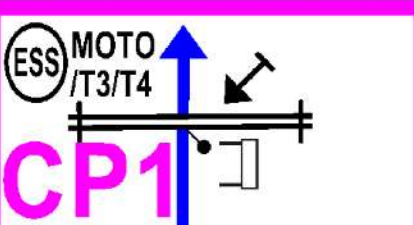








CTW = Cap to follow for the target Waypoint

Cap to follow

DTW = Distance to target Waypoint

2.5 Neutralization



78  30	23 	WPT 24 CPI
93.86	0°	I°
0.18		DTW 1.02
93,68 4,68 		 NEU.IN  T:15mn
93,81 0,18 		 
93,98 0,17 		 NEU.OUT  
NEXT 0,20	E2 AUT SS - 456.74 km	→ 362 km
ENTER AT 16:18:03		
		

3 The Unik4 buttons



To increase brightness



To put in standby or to wake from standby
More information in paragraph 6



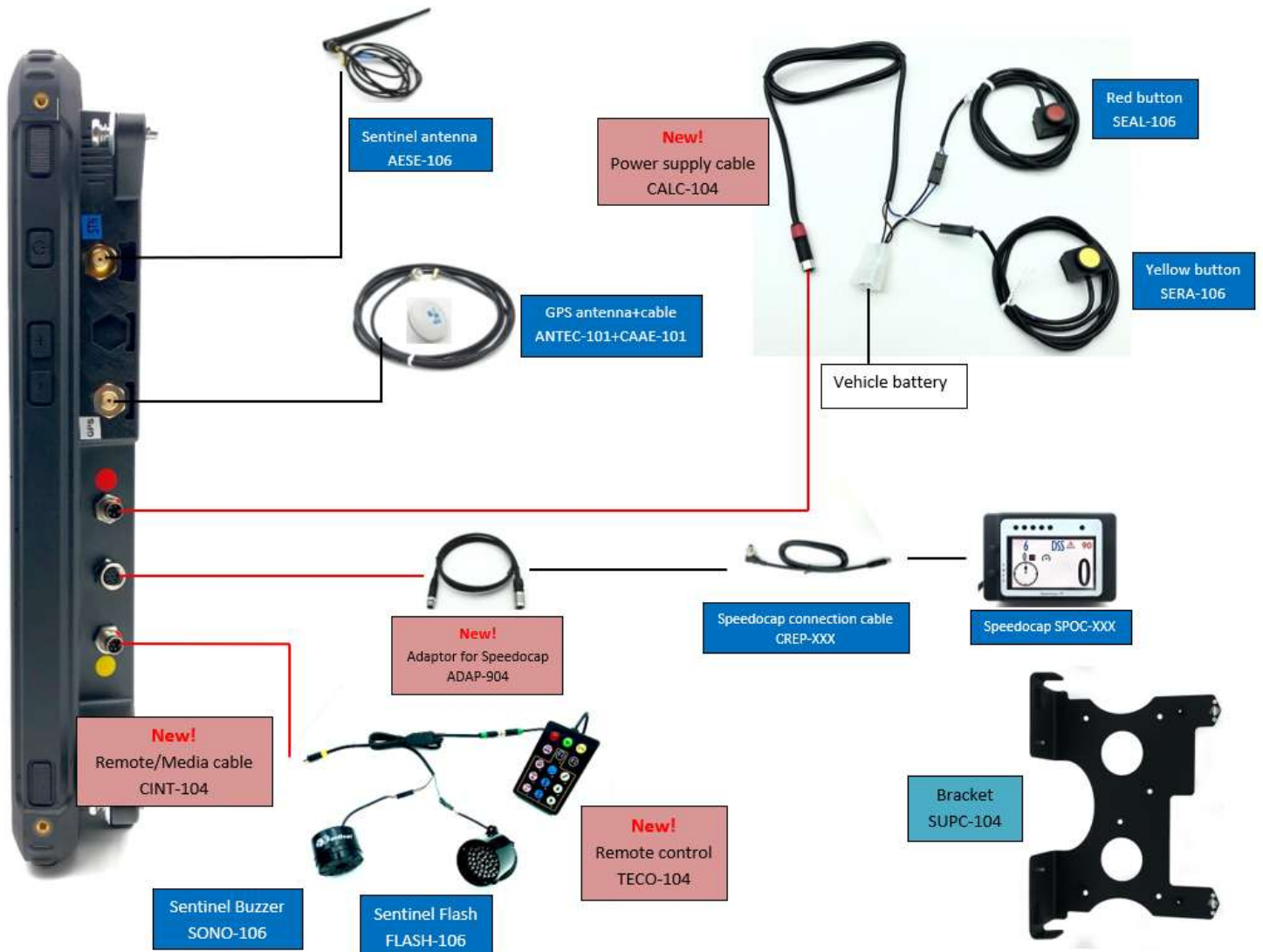
1 button, 2 functions:

A short press to decrease brightness

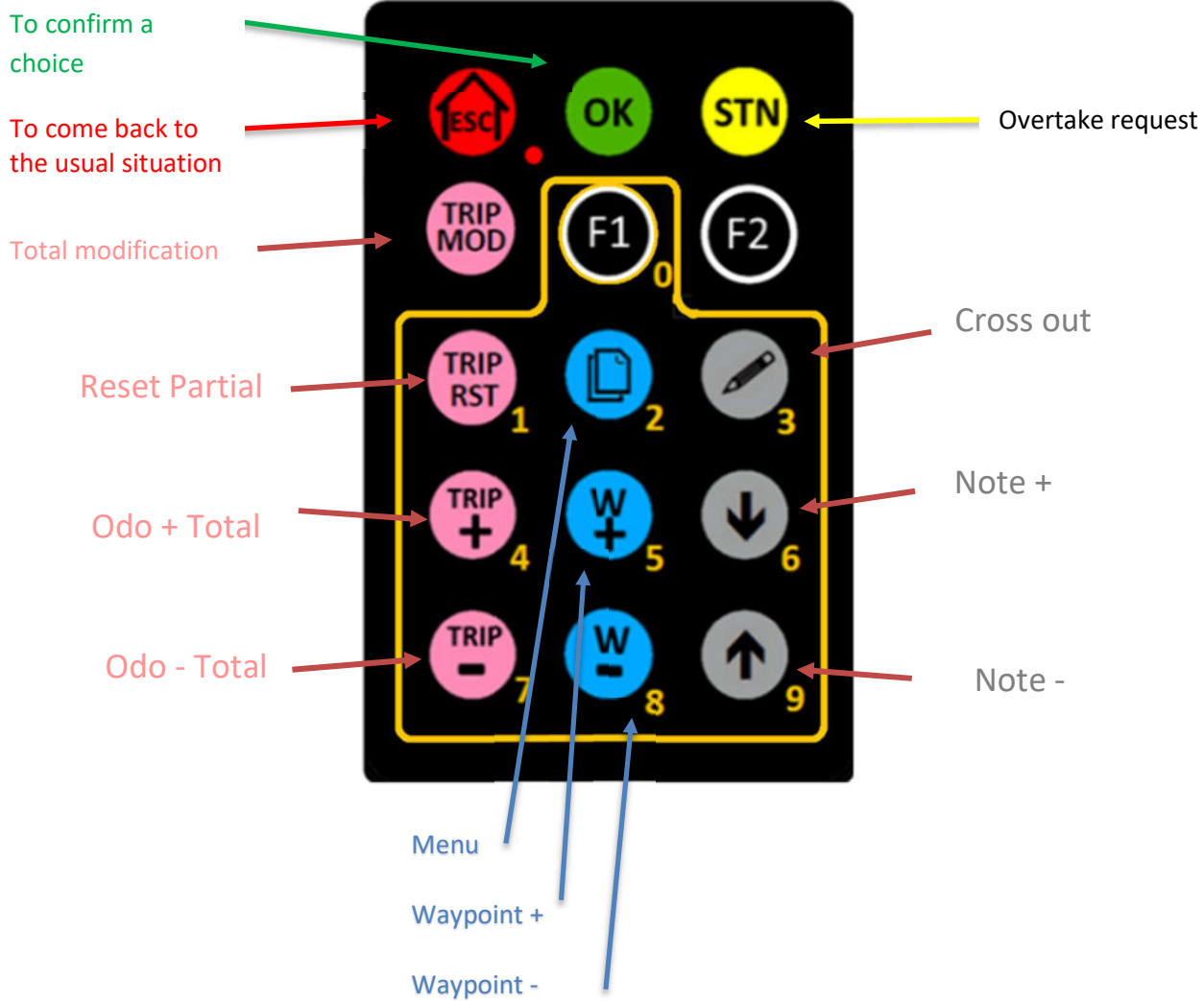
A long press to open the Parameters Menu;
more details in paragraph 11



4 Connection



5 Remote control



5.1 Note+ and Note-

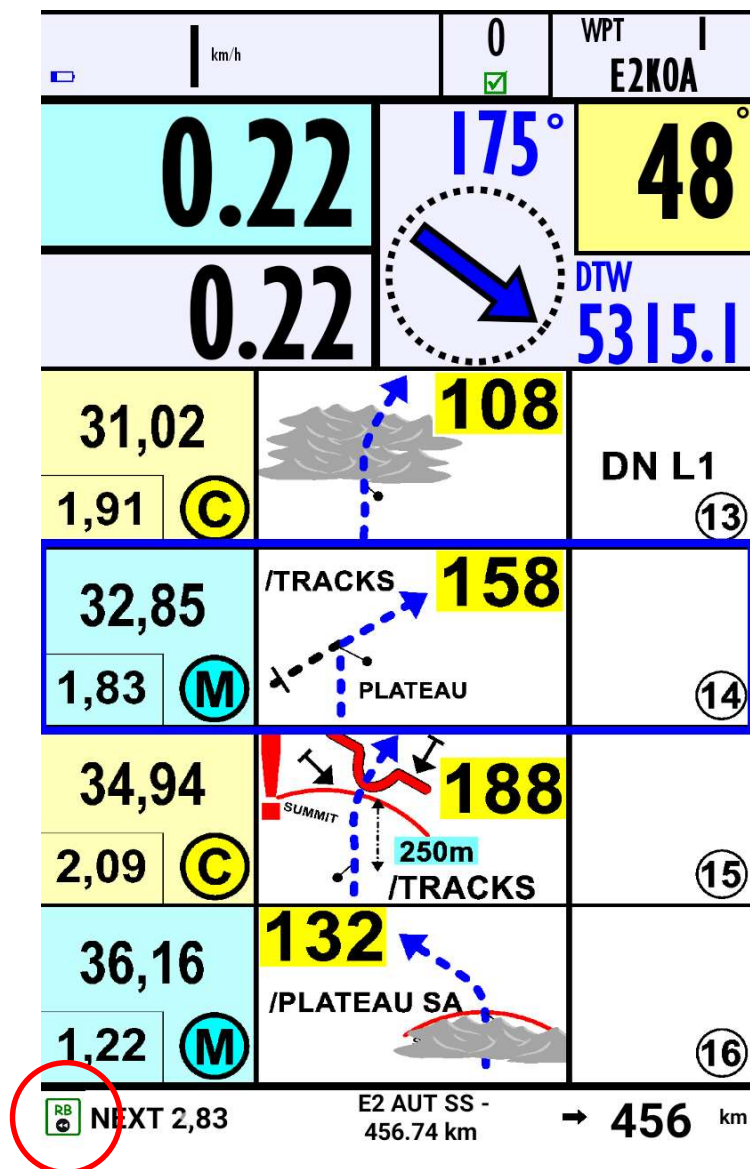


If the roadbook parameter is "Line": A short press will move 1 line a long press will move 1 page.

If the roadbook parameter is Page: A short press will move 1 page, a long press will do the same.



If fast forward, an icon appears. As long as this icon is visible, we can go back to the starting line before fast forward. After 1min or if we go to standby or if another function is activated, the icon disappears and it is no longer possible to return to the starting line.



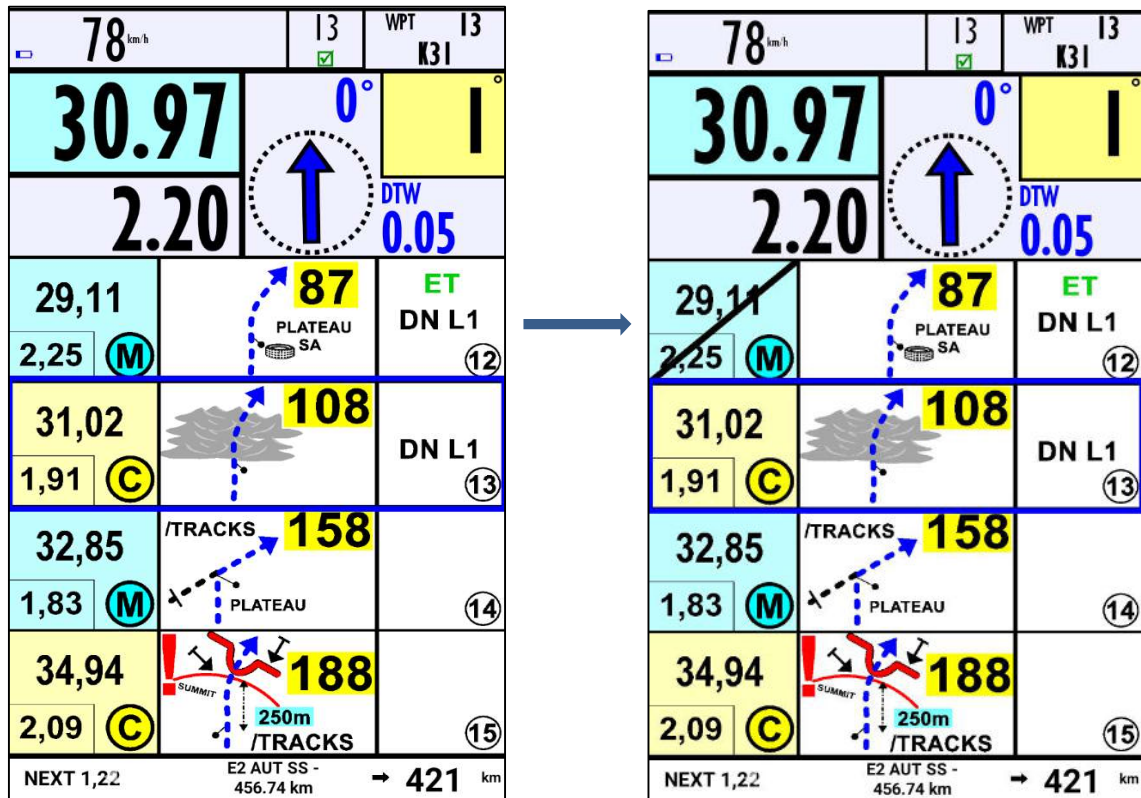
5.2 Cross out



There are two possible cases:

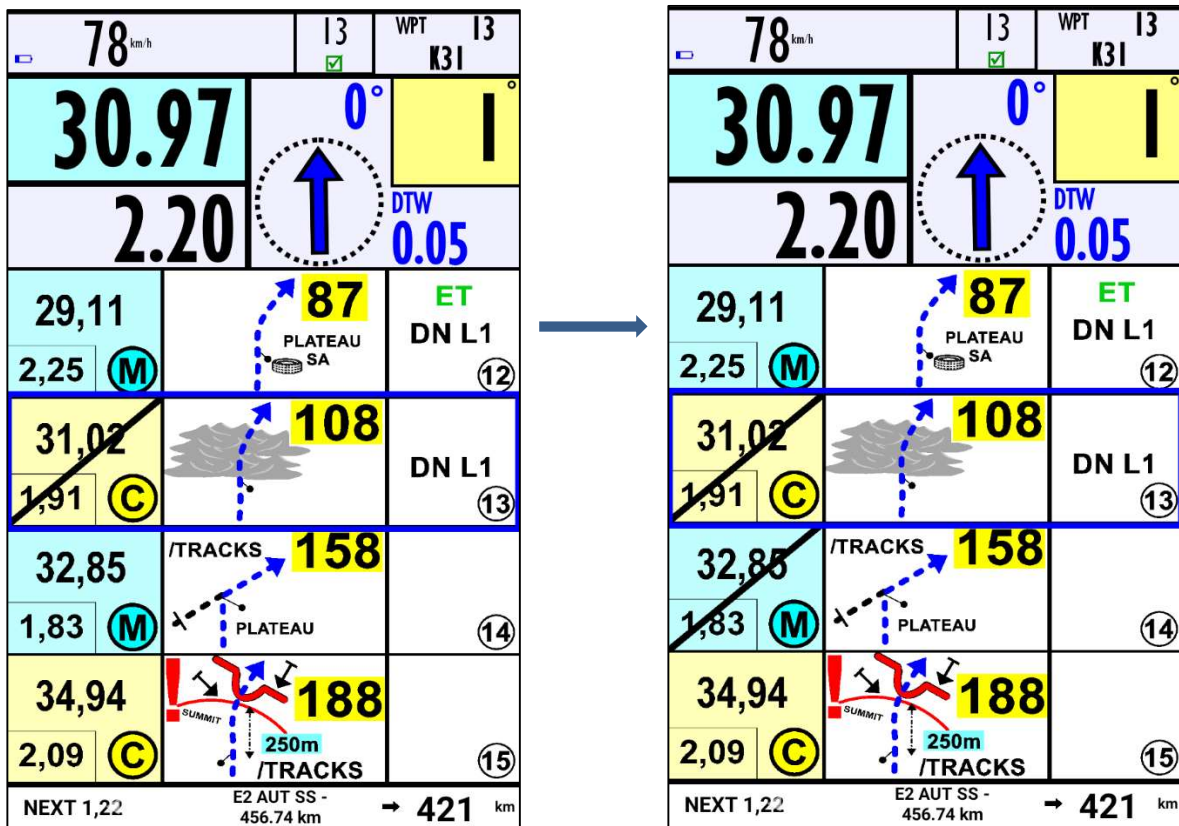
A – No box is yet crossed out on the visible page:

From the bottom of the RoadBook screen, the last unmarked box is crossed out.



B – A box is already crossed out on the visible page:

From the bottom of the RoadBook screen, the last box not crossed out will be crossed out, without going beyond a box that has already been crossed out.



A short press cross out.

A long press uncrosses the last crossed box on the screen. If there is no crossed box on the screen, nothing happens.

If you stay pressing, it will uncross all the boxes.

Note: The Cross Out Button may only have an action on the visible boxes on the screen not on the other lines.

5.3 Trip+ and Trip-



A short press will increase/decrease the Odo with the value defined in the parameters.

A long press will increase/decrease the Odo more quickly.

5.4 W+ and W-



Work as Note+ and Note- and allow navigation in the Waypoints.

5.5 F1 and F2



These are programmable function keys, currently only F2 is used in the TRIP MOD function.






5.6 TRIP MOD



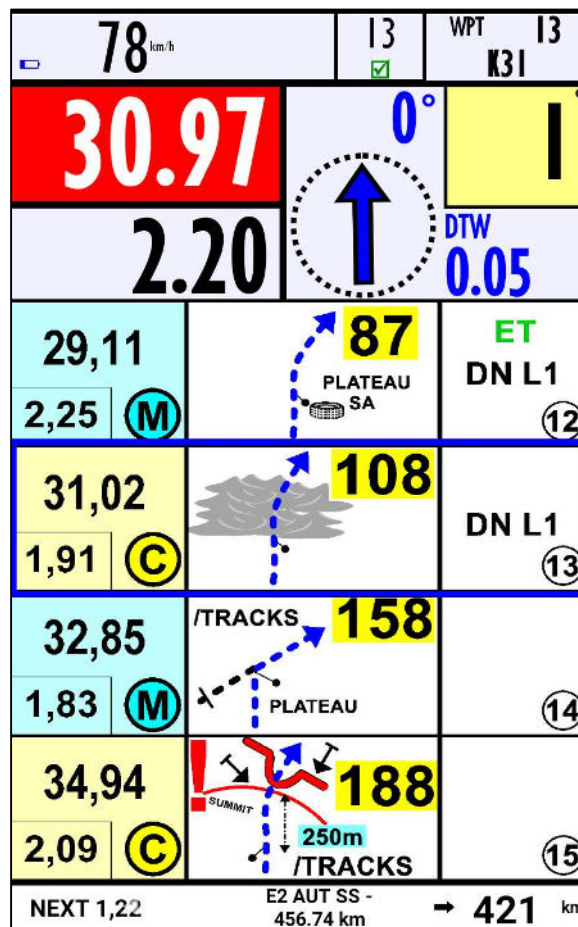
When you press TRIP MOD, the remote control keyboard becomes keypad to enter a digital value for the Odo.

78 km/h		13	WPT 13
30.97		0°	I°
2.20		DTW 0.05	
29,11		87	ET
2,25 (M)		PLATEAU SA	DN L1 (12)
31,02		108	DN L1
1,91 (C)			(13)
32,85	/TRACKS	158	
1,83 (M)		PLATEAU	(14)
NEXT 2,09 !		E2 AUT SS - 456.74 km	→ 423 km
NEW TOTAL	[Keypad]		TRIP ▶
			F2 ()
			◀ TRIP

Once in TRIP MOD, you can:


Actions on the remote control	
	Close the TRIP MOD window without doing anything
 (without inputting values)	Exit from TRIP MOD menu ⚠ If the countdown was activated, it is deactivated
0 then 	It is as doing a Total reset and you exit from the Menu
XX.XX then 	You enter the total XX.XX and you exit from the Menu
	You go in countdown mode and you exit the menu. If you were already in countdown mode, you pass in normal mode and you exit from the Menu.

5.6.1 Countdown mode following the press on F2 key




In countdown mode, total is white on red to show clearly that you are in countdown.

5.7 Menu




To access to GPS screens, press on Menu key  on the remote control.

- A first press goes to CP page
- A second press goes to Trace
- A third press goes to a Menu list

To navigate in a page, you have to assign the remote control to it. For that, press OK , the remote control is then assigned to the window and is in green.

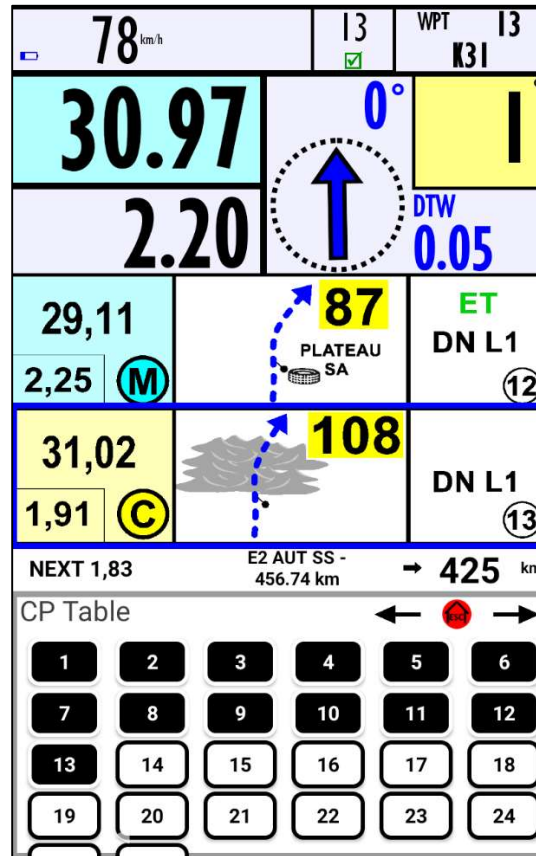
Note: Only 2 lines of the RoadBook remain visible.

Typical actions are then the following:

Actions on the remote control	
	Close the window
	Select/Unselect a window Assign/Unassign the remote control
	Goes to the next page Remote control reassigned to the RoadBook


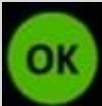


At any time, a press on ESC  goes back to the standard RoadBook

5.7.1 CP screen

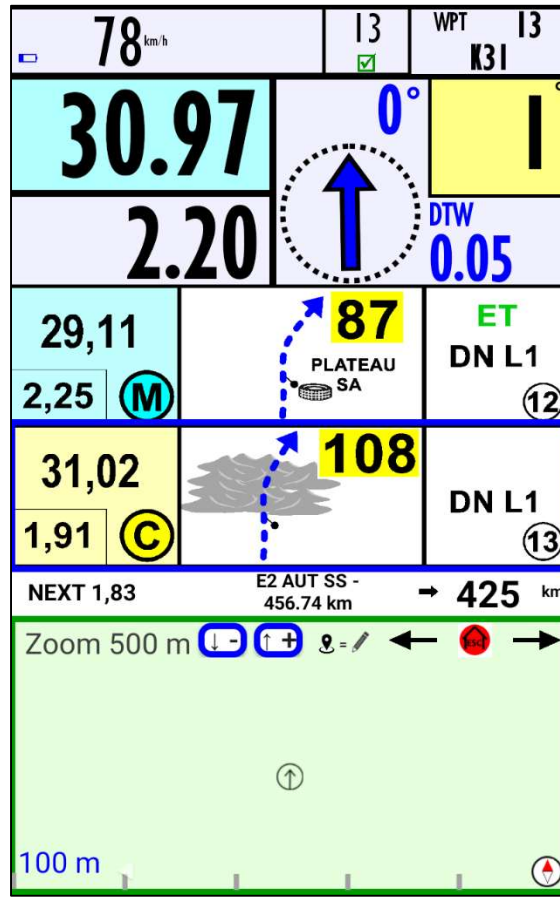


Following selection by OK









Actions on the remote control	
	Close the window = go back to the RoadBook
	Select/Unselect the window Assign/Unassign the remote control
	Go to Trace screen Remote control reassigned to the RoadBook
	Navigation in the table

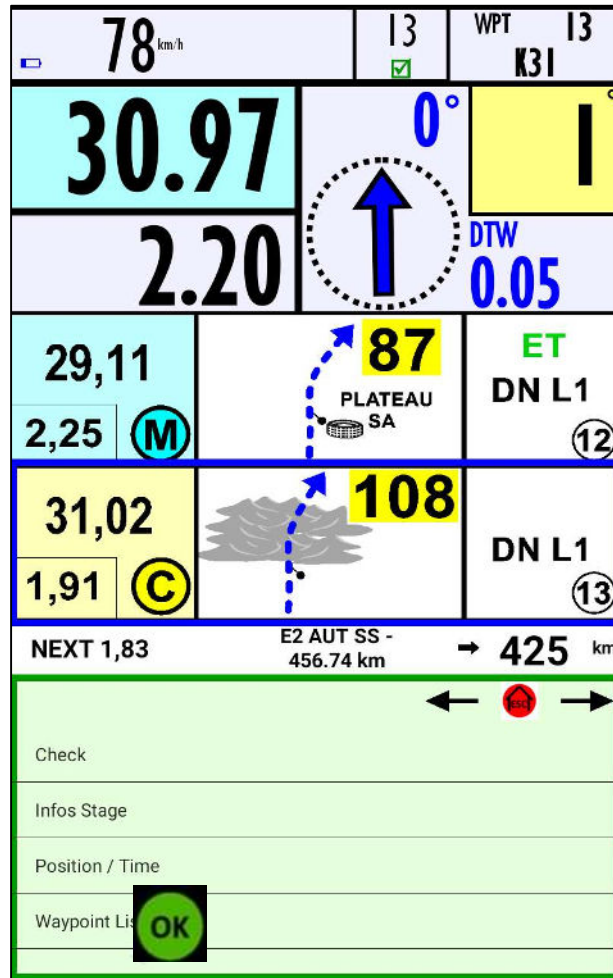
5.7.2 Trace screen





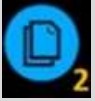
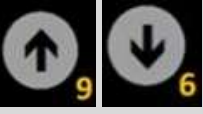

Following selection by OK

Actions on the remote control	
	 Select the window = go back to the RoadBook
	Select/Unselect the window Assign/Unassign the remote control
	Go to List screen Remote control reassigned to the RoadBook
	Change the zoom value
	Recenter the trace

5.7.3 List screen



Following selection by OK

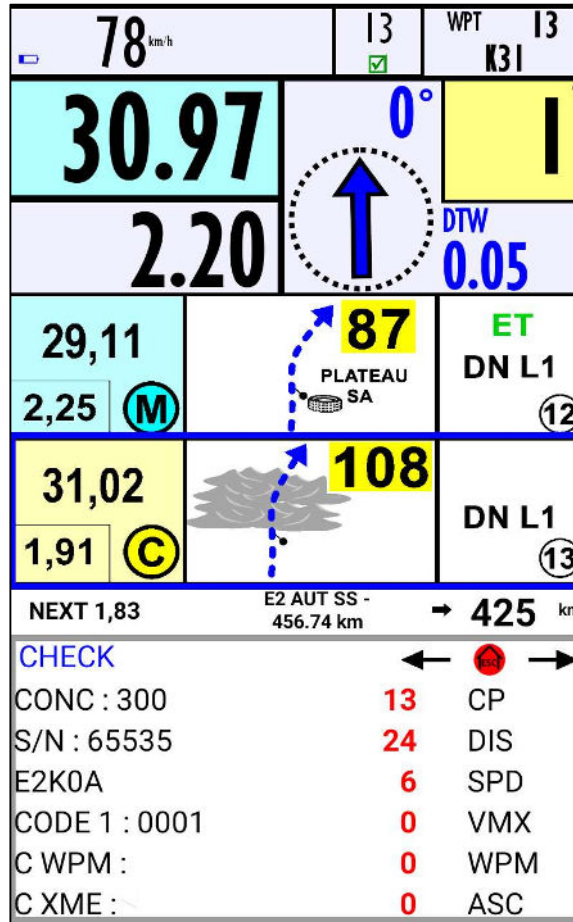
Actions on the remote control	
	Close the window = go back to the RoadBook
	Show the screen selected in the list
	Get out and come back to the RoadBook as it is the last screen (CP, Trace, List)
	Navigation in the list, validate the chosen screen by pressing on 

5.7.3.1 Check page





This is a summary page, no action is possible in this page except ESC to get out and Menu to go to the next page.



to get out and Menu



For the next control pages, you can:

Actions on the remote control	
	Close the window = go back to the RoadBook
	Select/Unselect the window Assign/Unassign the remote control
	Unselect the window and go to the next one
	Navigation in the list

78 km/h | 13 | WPT K31 | 13

30.97 | 0° | I

2.20 | DTW 0.05

29,11 | 87 | ET DN L1 (12)

2,25 (M) | PLATEAU SA

31,02 | 108 | DN L1 (13)

1,91 (C)

NEXT 1,83 | E2 AUT SS - 456.74 km → 425 km

CP

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24

78 km/h | 13 | WPT K31 | 13

30.97 | 0° | I

2.20 | DTW 0.05

29,11 | 87 | ET DN L1 (12)

2,25 (M) | PLATEAU SA

31,02 | 108 | DN L1 (13)

1,91 (C)

NEXT 1,83 | E2 AUT SS - 456.74 km → 425 km

DISC

START	DURATION	DISTANCE (Km)
14:28:08	0:0:1	1,9
14:28:14	0:0:1	1,7
14:28:20	0:0:1	52,1
14:28:20	0:0:1	53,7
14:28:29	0:0:1	1,5
14:28:35	0:0:1	55,8

78 km/h | 13 | WPT K31 | 13

30.97 | 0° | I

2.20 | DTW 0.05

29,11 | 87 | ET DN L1 (12)

2,25 (M) | PLATEAU SA

31,02 | 108 | DN L1 (13)

1,91 (C)

NEXT 1,83 | E2 AUT SS - 456.74 km → 425 km

SPEED

N°	SECTOR	WPT	TYPE	MAX
1	LIAISON	3	STP	
1	LIAISON	+3	VIL	50
2	LIAISON	+3	VIL	50
1	SPECIALE	5	VIL	50
2	SPECIALE	5	VIL	50
1	SPECIALE	+5	VIL	50

78 km/h | 13 | WPT K31 | 13

30.97 | 0° | I

2.20 | DTW 0.05

29,11 | 87 | ET DN L1 (12)

2,25 (M) | PLATEAU SA

31,02 | 108 | DN L1 (13)

1,91 (C)

NEXT 1,83 | E2 AUT SS - 456.74 km → 425 km

ASC

A1

78 km/h | 13 | WPT K31 | 13

30.97 | 0° | I

2.20 | DTW 0.05

29,11 | 87 | ET DN L1 (12)

2,25 (M) | PLATEAU SA

31,02 | 108 | DN L1 (13)

1,91 (C)

NEXT 1,83 | E2 AUT SS - 456.74 km → 425 km

TIME

WPT	TIME	TYPE
1	14:28:11	S
6	14:28:50	S
7	14:28:54	E
8	14:29:02	E
9	14:29:08	E
10	14:29:16	E

5.7.3.2 Infos Stage

0 km/h	0	WPT I E2K0A
231.56	179°	0
0.00		DTW 26.70

ETAPE / STAGE 2 - 04/01/2021 - BISHAH / WADI AD-DAWASIR
CAR / LIGHT VEHICLE / TRUCK

LIAISON 1 135.30 km
SS 456.74 km
LIAISON 2 93.08 km
TOTAL 685.12 km

LIAISON 1				LIAISON 2			
N°	KM	NATURE	PENAL	N°	KM	NATURE	PENAL
1	0.00	CHL	/	2	24.41	WPE	5'

SS				SS			
N°	KM	NATURE	PENAL	N°	KM	NATURE	PENAL
3	0.00	DSS	/	23	93.63	DESD	20'
4	5.03	WPM	20'	24	93.81	CPT	5'
5	9.94	WPC	20'	25	93.98	FZSD	20'
6	13.16	WPS	20'	26	96.37	WPM	20'
7	14.89	WPC	20'	27	103.85	WPS	20'
8	18.13	WPM	20'	28	107.33	WPM	20'
9	20.02	WPC	20'	29	110.63	WPM	20'
10	26.00	WPM	20'	30	112.38	WPC	20'
11	26.86	WPC	20'	31	114.97	WPC	20'
12	29.11	WPM	20'	32	115.63	WPS	20'
13	31.02	WPC	20'	33	115.32	WPC	20'
14	32.85	WPM	20'	34	119.13	WPM	20'
15	34.94	WPC	20'	35	120.26	WPS	20'
16	36.16	WPM	20'	36	124.08	WPM	20'
17	38.99	WPC	20'	37	127.24	WPC	20'

Sw:44 Apk:237 Type:CAM V:92

The Infos Stage menu goes directly to the information pages in the beginning of the RoadBook

Actions on the remote control	
	Close the window = go back to the RoadBook
	Select/Unselect the window Assign/Unassign the remote control
	Go back to the RoadBook with CP page displayed
	Navigation in the pages

5.7.3.3 Position/ Time

78 ^{km/h}		13	WPT 13
30.97		0°	I
2.20			
29,11	2,25 (M)	87	ET
		PLATEAU SA	DN L1
31,02	1,91 (C)	108	DN L1
			(12)
NEXT 1,83		E2 AUT SS - 456.74 km	→ 425 km
POSITION / TIME			
← ESC →			
47°42.970N			
3°24.000W			
DATE		TIME	
29/09/2021		15:56:16	

No action is possible in this screen except ESC

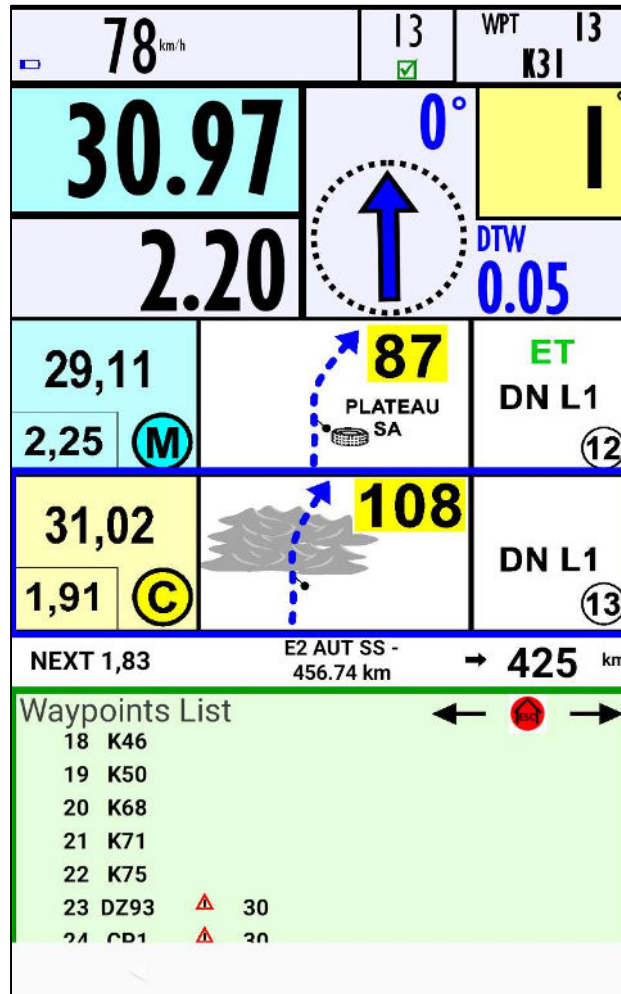






to get out and Menu



to come back to the first screen: CP

5.7.3.4 Waypoints List



Actions on the remote control	
	Close the window = go back to the RoadBook
	Select/Unselect the window Assign/Unassign the remote control
	Go back to the RoadBook with CP page displayed
	Navigation in the pages

6 Secondary screens

If you drive with two devices, the additional Unik4 will then be in « SECONDARY SCREEN » : the electronic RoadBook will not be displayed on the screen.

Just like the main Unik4, if you want to do an action in a window, first you have to assign the remote control.

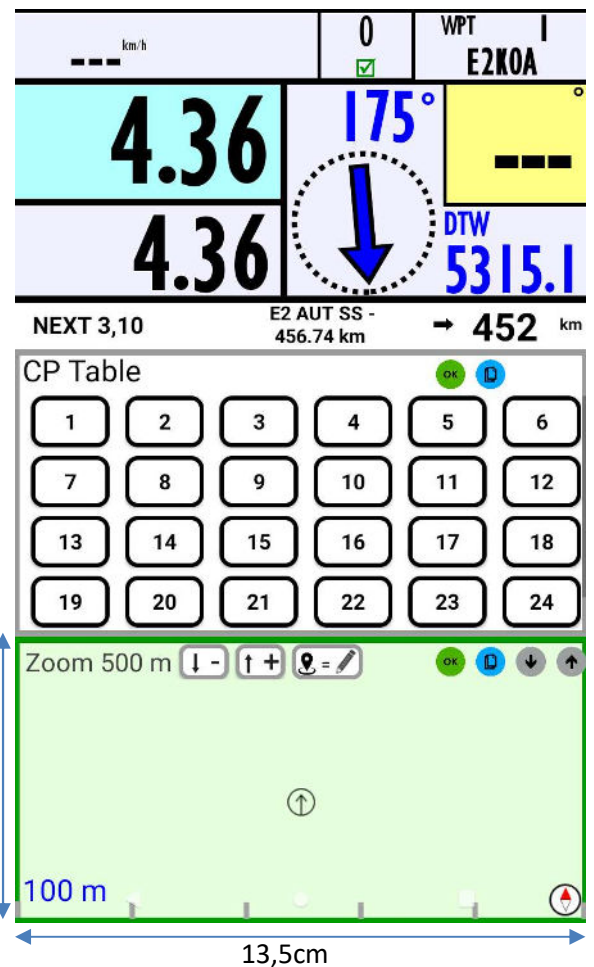
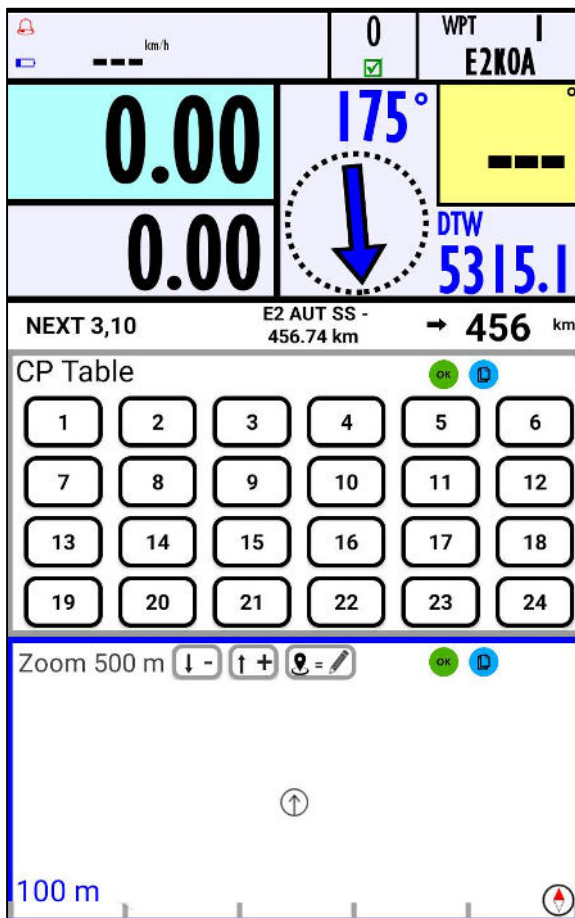
Select the desired window with the arrows



The frame turns blue, press



The window becomes green. The remote control is properly assigned to this window.



In our example, the arrows



act on the zoom. The key



will display the next page in the selected window. The order of the pages is as follows: PC list, trace, sub menu (Check, Info Stage, Position/Time, Waypoint list).


Generally,



returns to the original state.

7 Standby Mode

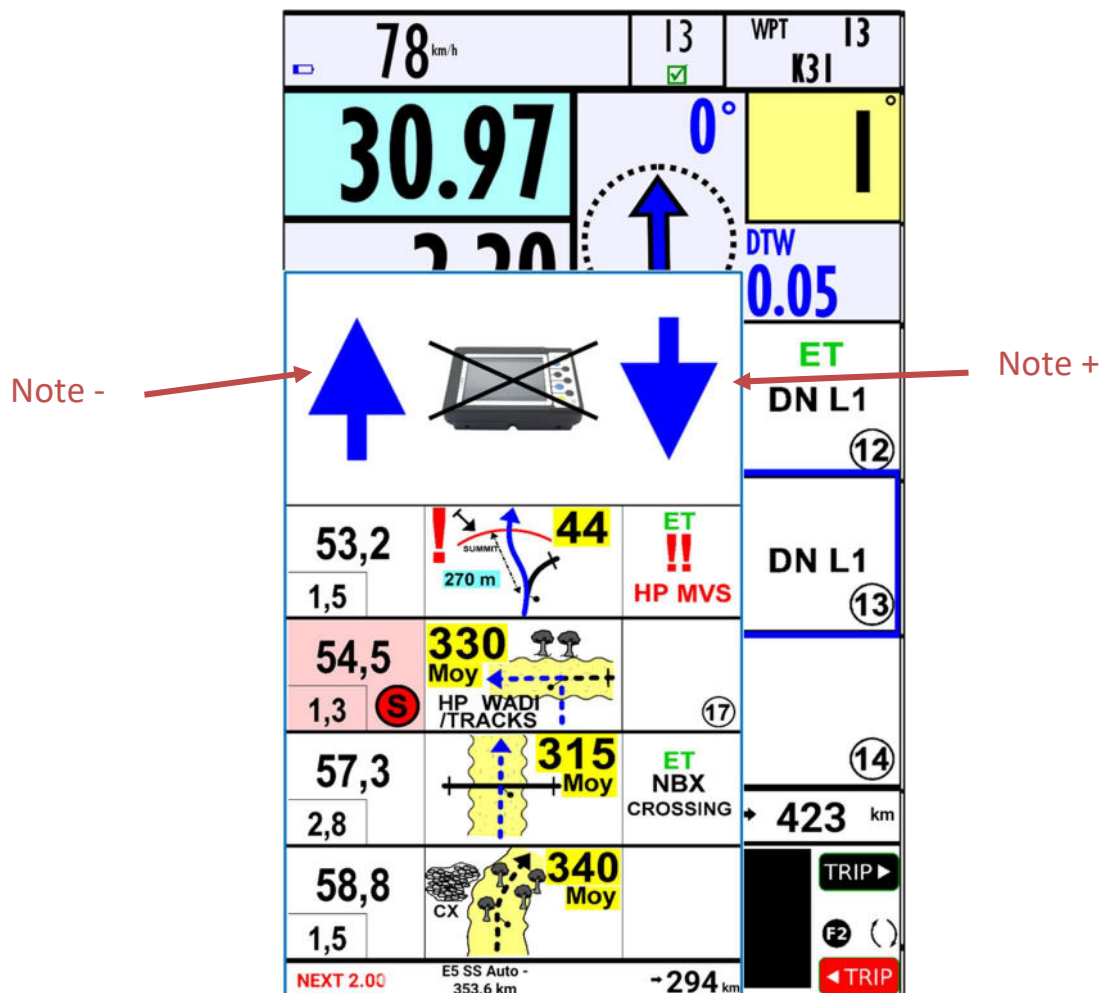
When you reach the bivouac, don't forget to put the Unik4 in standby. As a cell phone, you don't need to turn it off, put it in standby is enough. It is easier to restart immediately.

In the morning, when you turn on the GPS, press briefly the  button on the tablet to exit the standby mode.

8 If the GPS function is not working

In this case, you will still have the roadbook screen but not the GPS screen anymore. See example below.

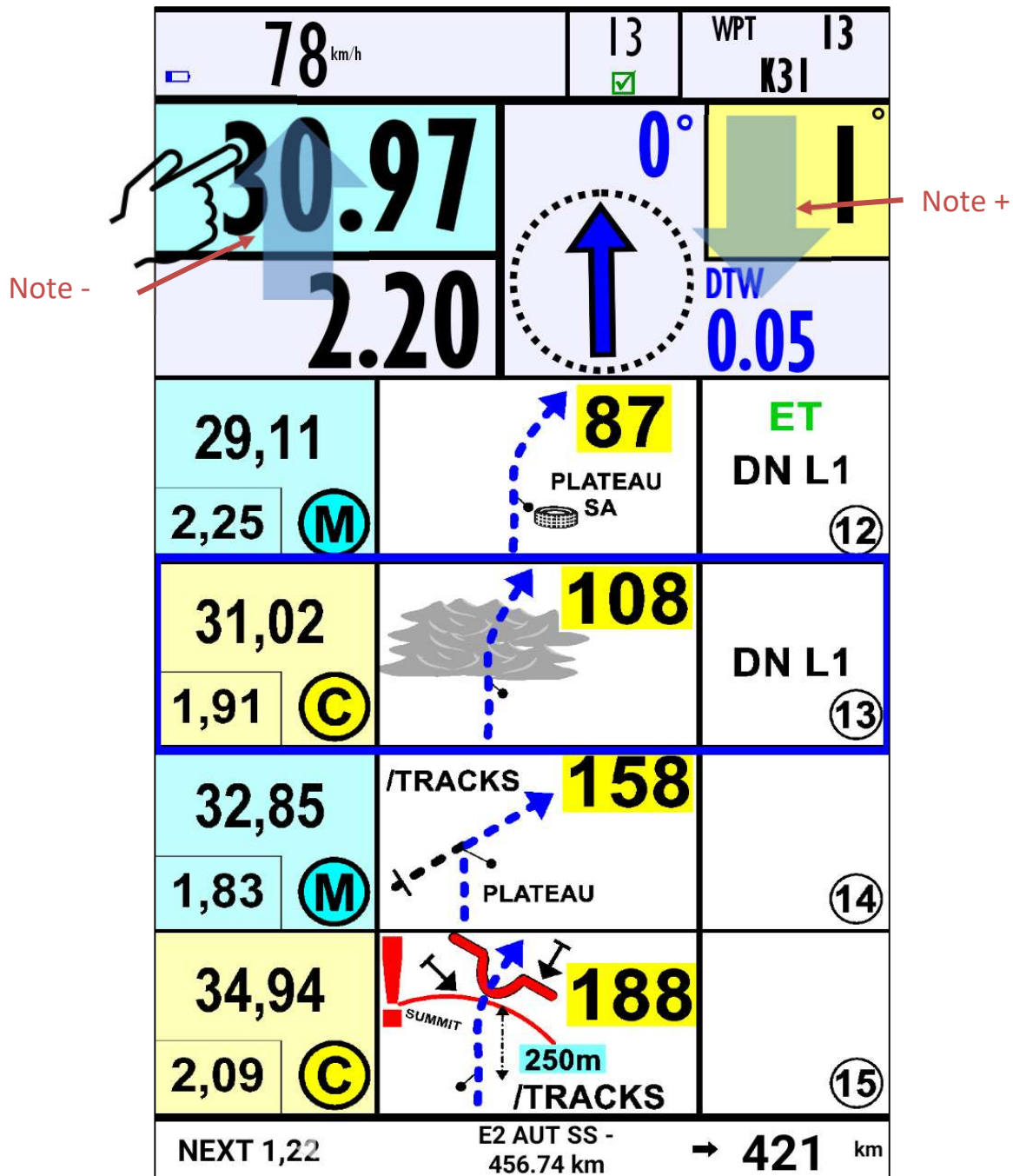
You will be able to navigate in the RoadBook using the two arrows.



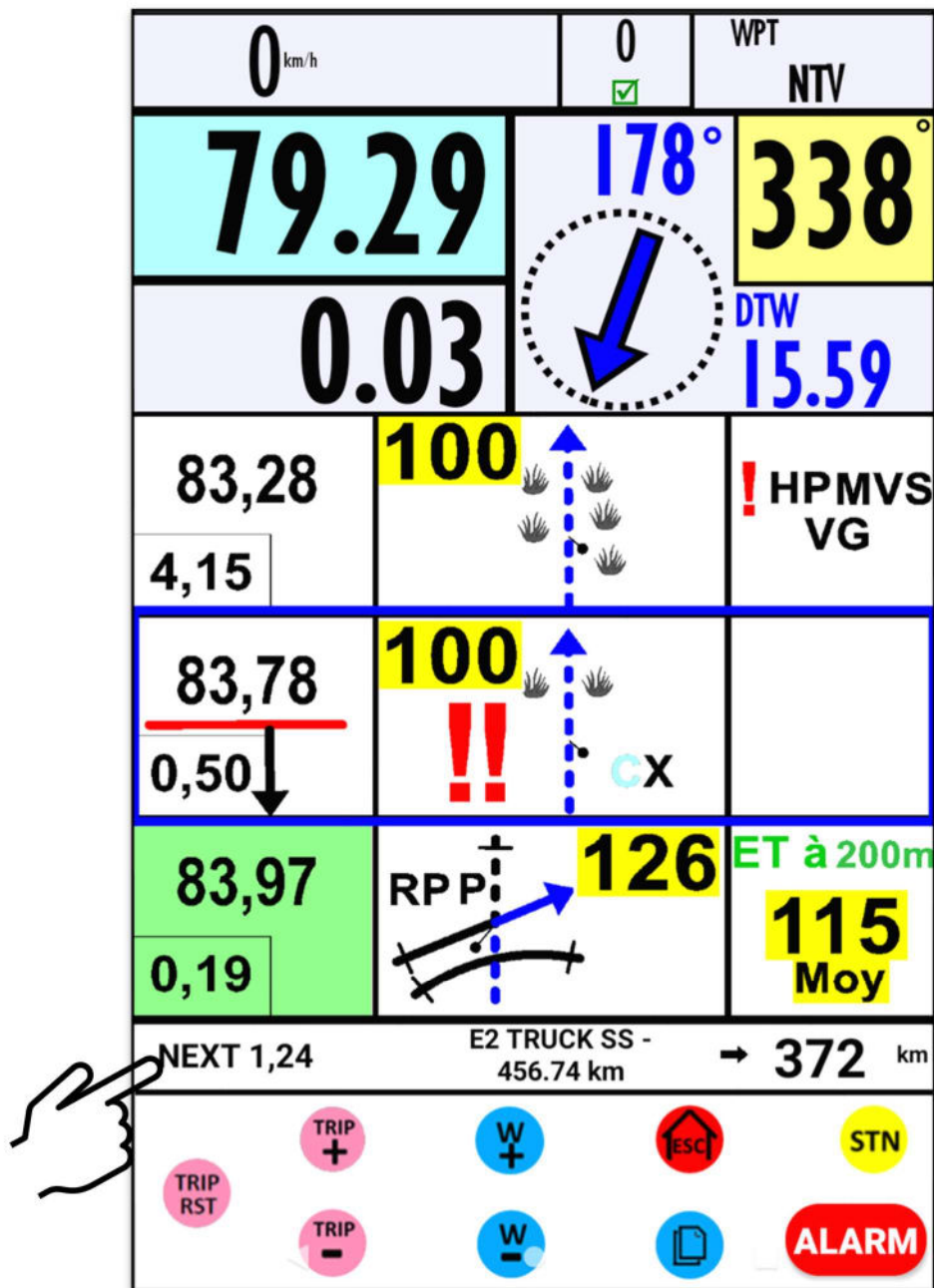
9 If the remote control is not working

If your remote control is broken, you have to select the No Remote Mode in the parameters menu. More details in paragraph 10.

You will still have the GPS details, the RoadBook arrows will be invisibles but activated. If you press a high corner of the screen, the RoadBook arrows will appear briefly and the Note will change.



A simplify virtual keyboard is accessible by pressing in the left corner at bottom of screen where NEXT is written.



The functions are the same as on the remote control F1, F2, OK and TRIP MOD.

STN and ALARM functions appear only in the main Unik4.

ALARM function is available when the vehicle is under 6km/h.

10 Special display

At the departure if the first part of the stage is a liaison, the RoadBook will only display the liaison. When one Waypoint of the special will be validated, the RoadBook will allow the display of the whole stage.

11 Parameters



a long press on this button goes to the Parameters menu.

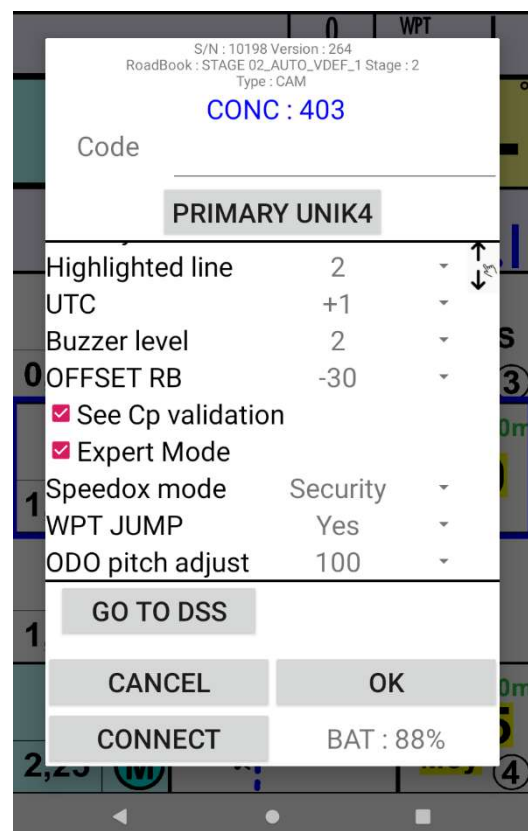
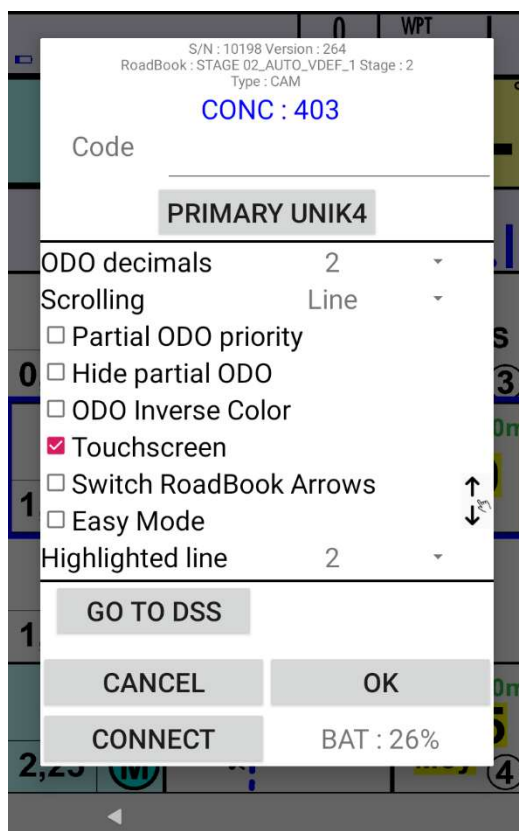
The screen is divided in 3 parts:

Information in the top and the stage code entry if there is one and the mode of the Unik4: PRIMARY UNIK4 / SECONDARY UNIK4.

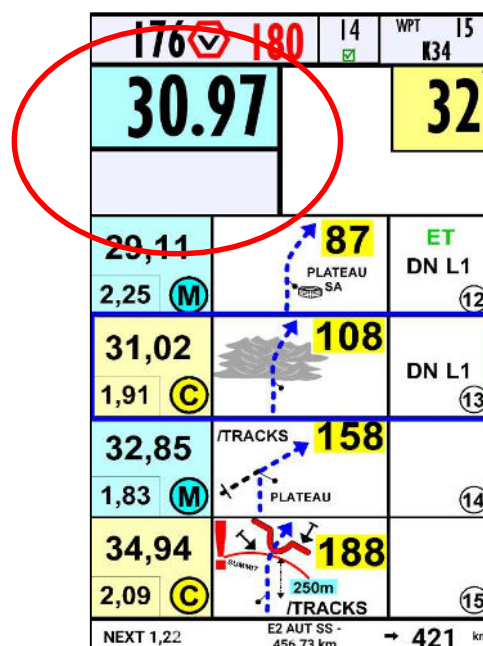
The parameters

And the actions (GO TO DSS, Cancel, OK and CONNECT). GO TO DSS allows you to position yourself directly on the 1st DSS.

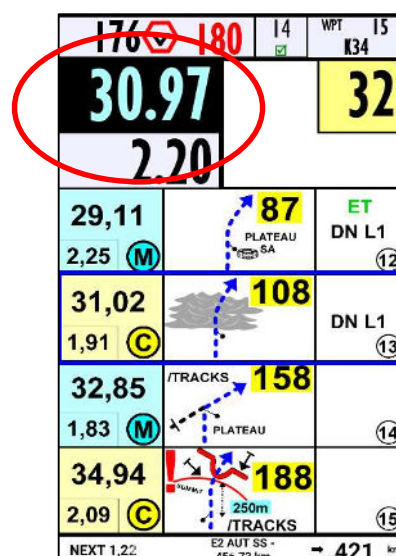
The central display area for parameters cannot display all of them. Make a swipe on the screen to navigate in this page.




- Code: Enter the stage code and validate with "OK".
- **PRIMARY/SECONDARY UNIK4**: In secondary mode, the electronic RoadBook is not displayed on the screen. To switch from one mode to another, simply press the box.
- ODO decimals: should be 2 for Auto/Truck and SSV.
- Scrolling: You can decide to move one line or one page when pressing Note + or Note -
- Partial ODO priority: if the Partial counter is more important for you, you should select this option. The Total will be smaller and the Partial bigger.
- Hide partial ODO: The partial will never appear on the screen but only the Total.



- ODO Inverse Color: To highlight the Odo Total, appears in reverse video on the screen.



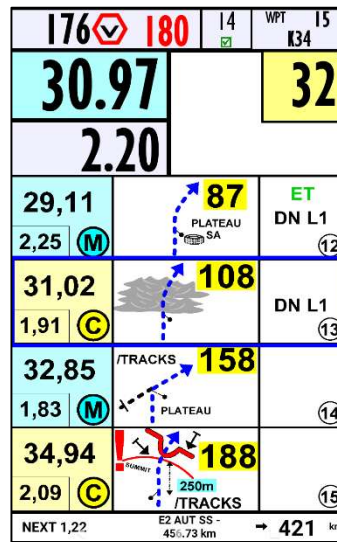
- **Touchscreen**: should be selected only if you break your remote control to have the virtual keyboard and the arrows available.
- **Switch RoadBook Arrows**: if you prefer the left corner for going forward in the RoadBook.
- **Easy Mode**: A press of TRIP RST  on the remote control does the following 3 actions at once: Reset the Odo+Note Cross Out+Go to the next Note.
- **Highlighted line**: to border the target line. You can choose:

0 → no border

1 → line 1 bordered

2 → line 2 bordered

Example with line 2



- **UTC**: gives the UTC difference to show the local hour in the position screen
- **Buzzer level**: to choose the sound intensity of the buzzer buzzer = 1, 2 or 3.
- **OFFSET RB**: 0 is the value by default. That means that the arrow will point to the next Waypoint when you are in the center of the Waypoint. You might want the arrow to point before or after, in this case you can enter -30, for example, if you want the arrow to point the next Waypoint 30m before and +30 if you want the arrow to point 30m after.
- **See CP validation**: A line is displayed at the top of the screen showing the last validated checkpoint
- **Expert Mode**: to see 3 more parameters:

- **Speedox mode**: to set the speed limit alert. 3 modes exist:

Stop: Inactive

Security: 1 bip every 2 seconds from the speed limit – 5 km/h; Continuous sound from the speed limit – 3 km/h

Performance: 1 bip every 30 seconds from the speed limit – 4 km/h; Continuous sound from the speed limit – 2 km/h

- WPT JUMP:

YES: if you miss a Waypoint, the Unik4 will offer to go directly to the next Waypoint.

NO: no offer will be done. The Unik4 still point the missed Waypoint.

- **ODO pitch adjust:** set with 100 meters by default. You can set the TRIP+ and TRIP- keys with 100m or 50m or 10m by press.