

3493.500.02

Version 1.1 Edition August 2014

Caution and safety precautions

- Never use any other charger than the supplied or a type approved by Swiss Timing. This could destroy
 the battery, cause damage to unit, and possible cause personal injury due to fire or/and electrical
 shock.
- Never bypass a power cord ground lead by breaking off the ground pin, or by using inappropriate extension cords or adapters.
- Never plug a power cord into the AC power source until you have made sure that all installation, cabling and power levels, are proper, and that the applicable procedures in this manual have been followed.
- Protect the equipment against splashing, rain and excessive sun rays.
- Never use the device if it is damaged or insecure.
- Verify the selection of the power distribution.
- Verify that the voltage quoted on the rating plate is the same as your voltage. Connect the appliance only to power sockets with protective earth. The use of incorrect connection voids warranty.
- This program may be modified at any time without prior notification.
- Do not open the case; there is nothing that needs servicing inside it. Nevertheless, if the case must be opened, you must call for some qualified personnel. The power supply cable must be disconnected before opening the case.
- During the transport of all Swiss Timing equipment delivered with a reusable carry case, the said case should be used at all times. This is imperative to limit the damage, such as shocks or vibration that can be caused to the units during transport.
- The same cases should also be used when returning equipment to Swiss Timing for repair. Swiss Timing reserves the right to refuse all guarantees if this condition is not fulfilled.
- If the installation includes a horn, be sure to maintain a sufficient security distance from the public.

Documentation Updates

Swiss Timing Ltd. reserves the right to make improvements in the products described in this documentation at any time without prior notice. Furthermore, Swiss Timing Ltd. reserves the right to revise this documentation in its content at any time and without any obligation to notify any person or organization of such revision.

Disclaimer

The information provided in this documentation has been obtained from sources believed to be reliable, accurate and current. However, Swiss Timing Ltd. makes no representation or warranty, express or implied, with respect, but not limited to, the completeness, accuracy, correctness and actuality of the content of this documentation. Swiss Timing Ltd. specifically disclaims any implied warranty of merchantability, quality and/or fitness for any particular purpose. Swiss Timing Ltd. shall not be liable for errors contained in this documentation or for incidental or consequential damages in connection with the supply, performance or use of this documentation.

Environment



This symbol indicates that this product should not be disposed with household waste. It has to be returned to a local authorized collection system. By following this procedure you will contribute to the protection of the environment and human health. The recycling of the materials will help to conserve natural resources.

Copyright

© Swiss Timing Ltd.

All rights reserved.

This documentation may not, as a whole or in part, be copied, translated, reproduced, transmitted or reduced and/or stored to any electronic medium or machine-readable form without the prior written consent of Swiss Timing Ltd.



TABLE OF CONTENTS

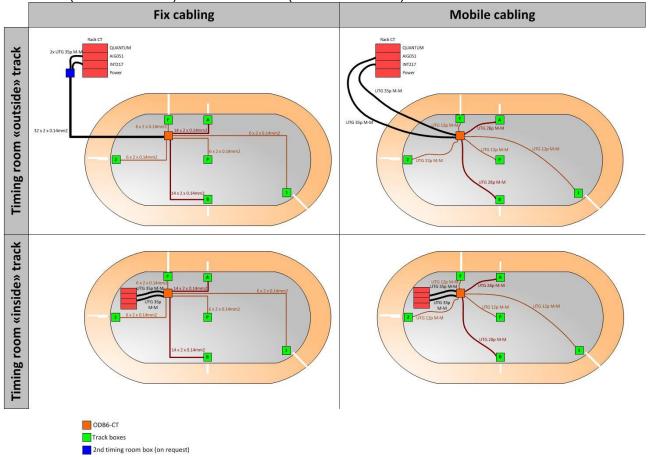
1	INTE	RODUCTION	1
2	INS	TALLATION	2
	2.1	Fix cabling for "outside" timing room	2
	2.2	Fix cabling for Pursuit boxes	3
	2.3	Fix cabling for 100m, 200m and Finish boxes	
	2.4	Fix cabling for Start Pursuit box	5
3	ОРТ	TIONS	6
4	PRC	PERTIES	7
	4.1	ODB6-CT	7
	4.2	Pursuit boxes	g
	4.3	100m, 200m & Finish boxes	10
5	APP	PENDIX	11
	5.1	Abbreviations and symbols	11
	5.2	Version history	

1 INTRODUCTION

This document explains the use and the connection about Track Cycling installation, using ODB6-CT connection box and CT-rack. CT-rack is composed of:

- QUANTUM timer
- AIG051 (pulse distributor)
- INT217 (serial line distributor)
- Power supply (with optional battery)

This system can be used with a fix or a mobile cabling and the timing room can be located near the finish line (inside the track) or in the tribune (outside the track).



Please refer to document 3493.502 for a full description of the track cycling cabling.



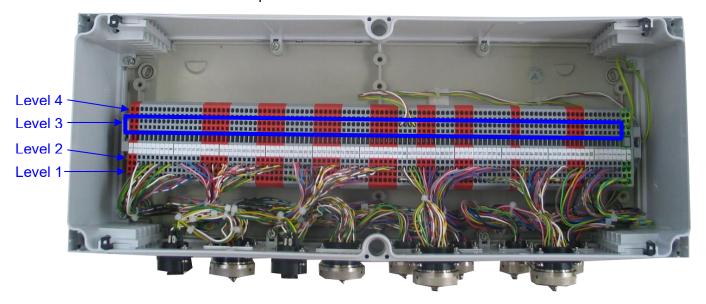
2 INSTALLATION

2.1 Fix cabling for "outside" timing room

When the timing room is "outside" the track, a second ODB6-CT is placed inside the timing room. A cable 32x2x0.25mm² (or two 16x2x0.25mm² cables) must link the two ODB6-CT. Each ODB6-CT must be drilled on one side to place a cable gland and pass the fix cable(s).

Cable gland #	Drill diameter	Cable diameter
9039.6994 + 9039.6995	25mm	9-17mm
9039.6990 + 9039.6991	32mm	17-25mm

The wires of the cable must be placed on the 3rd level of the terminal board:



- 1. Insert a screwdriver size 00 in the square opening.
- 2. Insert the wire (without isolation) on the round opening.
- 3. Remove the screwdriver; the wire is fixed.

Pinning with cable with DIN47100 colour code with two 16x2x0.25mm² cables:

1 st cable (SERIAL)					
1st ODB6-CT	Twisted	Colour	2 nd ODB6-CT		
25	-ww-	Wt	25		
26		Bn	26		
27	3	Gn	27		
28		ΥI	28		
49	2	Gy	49		
50		Pk	50		
51	~	BI	51		
52		Rd	52		
103	~	Bk	103		
104		Vt	104		
105	3	Gy-Pk	105		
106		Rd-Bl	106		
91	3	Wt-Gn	91		
92		Bn-Gn	92		
93		Wt-YI	93		
94		YI-Bn	94		
79	3	Wt-Gy	79		
80		Gy-Bn	80		
81	3	Wt-Pk	81		
82		Pk-Bn	82		
3	3	Wt-BI	3		
4		Bn-Bl	4		
5	3	Wt-Rd	5		
6		Bn-Rd	6		
7	8	Wt-Bk	7		
8		Bn-Bk	8		
9		Gy-Gn	9		
10		Yl-Gy	10		
67		Pk-Gn	67		
68		YI-Pk	68		
69		Gn-Bl	69		
70		YI-BI	70		

2 nd cable (PULSE)				
1st ODB6-CT	Twisted	Colour	2 nd ODB6-CT	
11		Wt	11	
12		Bn	12	
35	~~~	Gn	35	
36		ΥI	36	
87		Gy	87	
88		Pk	88	
85		BI	85	
86		Rd	86	
75		Bk	75	
76		Vt	76	
13		Gy-Pk	13	
14		Rd-Bl	14	
37		Wt-Gn	37	
38		Bn-Gn	38	
99		Wt-YI	99	
100		YI-Bn	100	
23		Wt-Gy	23	
24		Gy-Bn	24	
47		Wt-Pk	47	
48		Pk-Bn	48	
15		Wt-BI	15	
16		Bn-Bl	16	
39		Wt-Rd	39	
40		Bn-Rd	40	
89	~	Wt-Bk	89	
90		Bn-Bk	90	
77		Gy-Gn	77	
78		Yl-Gy	78	
101		Pk-Gn	101	
102		YI-Pk	102	
1		Gn-Bl	1	
2		YI-BI	2	

Colour of the terminal board

See chapter 5.1 for colour abbreviation.

On the ODB6-CT of the timing room, only the two UTG 35p connectors are used to connect the CT-Rack.

For specific event, the CT-Rack can also be connected on the "inside" track ODB6-CT; in this case, nothing must be connected on the "outside" track ODB6-CT (except the fix cabling to the other ODB6-CT).

2.2 Fix cabling for Pursuit boxes



For each pursuit box a cable 14x2x0.25mm² should be used between the box and the ODB6-CT. Pinning with cable with DIN47100 colour code (see chapter 2.1 for level identification):

Pinning with cable with DIN47 100 colour code					
PURSUIT A					
ODB6-CT	Twisted	Level #	Colour	Box	
59		1	Wt	1	
60		1	Bn	2	
61		1	Gn	3	
62		1	YI	4	
11		2	Gy	5	
12		2	Pk	6	
13		2	BI	7	
14		2	Rd	8	
15		2	Bk	9	
16		2	Vt	10	
17	~	2	Gy-Pk	11	
18		2	Rd-Bl	12	
19	¬^^	2	Wt-Gn	13	
20		2	Bn-Gn	14	
21	¬^^	2	Wt-YI	15	
22		2	YI-Bn	16	
23		2	Wt-Gy	17	
24		2	Gy-Bn	18	
25		2	Wt-Pk	19	
26		2	Pk-Bn	20	
27	~	2	Wt-Bl	21	
28		2	Bn-Bl	22	
29	-ww-	2	Wt-Rd	23	
30		2	Bn-Rd	24	
31	¬^^	2	Wt-Bk	25	
32		2	Bn-Bk	26	
33		2	Gy-Gn	27	
34		2	Yl-Gy	28	

PURSUIT B					
ODB6-CT	Twisted	Level #	Colour	Box	
59		3	Wt	1	
60		3	Bn	2	
61		3	Gn	3	
62		3	ΥI	4	
35		2	Gy	5	
36		2	Pk	6	
37	2	2	BI	7	
38		2	Rd	8	
39	3	2	Bk	9	
40		2	Vt	10	
41	~	2	Gy-Pk	11	
42		2	Rd-Bl	12	
43	~	2	Wt-Gn	13	
44		2	Bn-Gn	14	
45		2	Wt-YI	15	
46		2	YI-Bn	16	
47		2	Wt-Gy	17	
48		2	Gy-Bn	18	
49	¬^^	2	Wt-Pk	19	
50		2	Pk-Bn	20	
51	~	2	Wt-Bl	21	
52		2	Bn-Bl	22	
53	¬~~	2	Wt-Rd	23	
54		2	Bn-Rd	24	
55	¬^^~	2	Wt-Bk	25	
56		2	Bn-Bk	26	
57		2	Gy-Gn	27	
58		2	Yl-Gy	28	

2.3 Fix cabling for 100m, 200m and Finish boxes

For each box a cable 6x2x0.25mm² should be used between the box and the ODB6-CT. Pinning with cable with DIN47100 colour code (see chapter **2.1** for level identification):

	100m				
ODB6-CT	Twisted	Level#	Colour	Box	
71		2	Wt	1	
72	~	2	Bn	2	
73	8	2	Gn	3	
74	_XXXX_	2	ΥI	4	
75	~	2	Gy	5	
76		2	Pk	6	
77	2	2	BI	7	
78	~	2	Rd	8	
79	8	2	Bk	9	
80	~	2	Vt	10	
81		2	Gy-Pk	11	
82		2	Rd-Bl	12	

200m				
ODB6-CT	Twisted	Level #	Colour	Box
83		2	Wt	1
84	_	2	Bn	2
85	~~~	2	Gn	3
86		2	ΥI	4
87		2	Gy	5
88		2	Pk	6
89		2	В	7
90		2	Rd	8
91		2	Bk	9
92		2	Vt	10
93	-ww-	2	Gy-Pk	11
94		2	Rd-Bl	12

FINISH

ODB6-CT	Twisted	Level#	Colour	Box
95		2	Wt	1
96		2	Bn	2
97	\$	2	Gn	3
98		2	ΥI	4
99	>	2	Gy	5
100		2	Pk	6
101	~	2	Bl	7
102		2	Rd	8
103	~	2	Bk	9
104		2	Vt	10
105		2	Gy-Pk	11
106	_,,,,,,	2	Rd-Bl	12

2.4 Fix cabling for Start Pursuit box

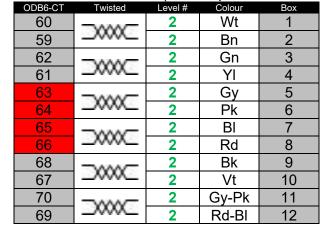
A cable 6x2x0.25mm² should be used between the box and the ODB6-CT. Pinning with cable with DIN47100 colour code (see chapter 2.1 for level identification):

ODB6-CT Twisted Level # Colour Box

60 — 2 Wt 1













3 OPTIONS

With specific timing room software, the SATURN main judge control can be suppressed; in this case, the TRACKERs have to be driven by the timing room using the CMD_PURSUIT & CountDown serial line. The following connection must be done:

or

On the	UTG	12p	START
PURSUI [*]	T conne	ector	
Connect			
Connect			
Connect	pin C to	o pin L	_
Connect	pin D to	o pin N	ΛI

On the terminal board inside the ODB6-CT
Connect 59 to 67
Connect 60 to 68
Connect 61 to 69
Connect 62 to 70

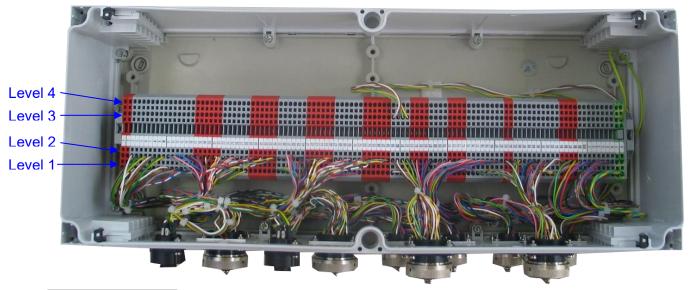
Page 6 3493.500.02 Version 1.1

4 PROPERTIES

4.1 ODB6-CT

Inside the ODB6-CT, the terminal boards have 4 levels.

- Level 1 is mainly used for connector to the timing room.
- Level 2 is used for fix cabling (3493.700) or connector connection (mobile cabling, 3493.701).
- Level 3 is mainly used to connect a second ODB6-CT (timing room outside the track).
- Level 4 is used for custom connection (cabling of spare connection depending of the cycling track size and options).



Grey terminal board indicates mandatory cabling.

Red terminal board indicates optional cabling (cable exists between ODB6-CT and track boxes but are not connected to timing room without specific additional patch cable).

Texts in blue in below table indicate factory cabled for device 3493.700 & 3493.701. Texts in violet in below table indicate factory cabled for device 3493.701.

# <u></u> 1	e u.b.s S Info 1+	Kind	Terminal board color	1 [eve] UTG 35p P	Level 2	E level 3	Level 4	Timing Serial [UTG 35p]	Timing Pulse [UTG 35p]	Finish [UTG 12p]	200m [UTG 12p]	100m [UTG 12p]	Pursuit A [UTG 28p]	Pursuit B [UTG 28p]	Start Pursuit [UTG 12p]	SCB [Tu 7pFT]	Lap Counter [Tu 7pFT]
2	Info 1-		Rd	UTG 35p P		2nd ODB			i								П
3	SCB-	RS422	Gy	UTG 35p S	Tu7p SCB	2nd ODB		X								3	
4	SCB+	RS422	Gy	UTG 35p S	Tu7p SCB	2nd ODB		Υ								4	
5	Spare track Tx-	RS422	Gy	UTG 35p S	Tu7p SCB	2nd ODB		Z								5	
6	Spare track Tx+	RS422	Gy	UTG 35p S	Tu7p SCB	2nd ODB		а								6	
7	Lap Counter Rx-	RS422	Gy	UTG 35p S	Tu7p LC	2nd ODB		b									3
8	Lap Counter Rx+	RS422	Gy	UTG 35p S	Tu7p LC	2nd ODB		С									4
9	Lap Counter Tx-	RS422	Gy	UTG 35p S	Tu7p LC	2nd ODB		d									5
10	Lap Counter Tx+	RS422	Gy	UTG 35p S	Tu7p LC	2nd ODB		е									6
11	Start Pursuit Tracker A-	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			Α				Е				
12	Start Pursuit Tracker A+	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			В				F				
13	Tape Pursuit A-	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			L				G				
14	Tape Pursuit A+	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			M				Η				
15	Starting Gate A-	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			X				J				
16	Starting Gate A+	Impulse	Gy	UTG 35p P	Pur A	2nd ODB			Υ				K				
17	Info 1 A-		Rd		Pur A								L				
18	Info 1 A+		Rd		Pur A								М				
19	Info 2 A-		Rd		Pur A								N				



	1			-	i				i							
20	Info 2 A+		Rd		Pur A							Р			ļ!	
21	Info 3 A-		Rd		Pur A	1						R			<u> </u>	
22	Info 3 A+	 	Rd	UTO 05 D	Pur A	0.1000		_				S			-	
23	Start Transponder A-	Impulse	Gy	UTG 35p P	Pur A	2nd ODB		T				T			-	
24	Start Transponder A+	Impulse	Gy	UTG 35p P	Pur A	2nd ODB		U				U			<u> </u>	
25	TransPur A Rx-	RS422	Gy	UTG 35p S	Pur A	2nd ODB	A					V			<u> </u>	
26	TransPur A Rx+	RS422	Gy	UTG 35p S	Pur A	2nd ODB	В					W				
27	TransPur A Tx-	RS422	Gy	UTG 35p S	Pur A	2nd ODB	С					X			<u> </u>	
28	TransPur A Tx+	RS422	Gy	UTG 35p S	Pur A	2nd ODB	D					Y			<u> </u>	
29	Spare Start Transponder A-	Impulse	Rd		Pur A	-						Z			-	
30	Spare Start Transponder A+	Impulse	Rd		Pur A							a			<u> </u>	
31	Spare TransPur A Rx-	RS422	Rd		Pur A	+						b				
32	Spare TransPur A Rx+	RS422	Rd		Pur A							С			<u> </u>	
33	Spare TransPur A Tx-	RS422	Rd		Pur A							d			<u> </u>	
34	Spare TransPur A Tx+	RS422	Rd		Pur A							е			<u> </u>	
35	Start Pursuit Tracker B-	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		С					E		<u> </u>	
36	Start Pursuit Tracker B+	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		D					F		<u> </u>	
37	Tape Pursuit B-	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		N					G			
38	Tape Pursuit B+	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		Р					Н			
39	Starting Gate B-	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		Z					J			
40	Starting Gate B+	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		а	<u> </u>	<u> </u>			K	<u> </u>	<u> </u>	
41	Info 1 B-		Rd		Pur B								L	ļ	<u> </u>	
42	Info 1 B+		Rd		Pur B								M	ļ	<u> </u>	
43	Info 2 B-		Rd		Pur B								N	ļ	<u> </u>	
44	Info 2 B+		Rd		Pur B								Р	<u> </u>		
45	Info 3 B-		Rd		Pur B				ļ	ļ			R	<u> </u>		
46	Info 3 B+		Rd		Pur B								S			
47	Start Transponder B-	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		٧					Т			
48	Start Transponder B+	Impulse	Gy	UTG 35p P	Pur B	2nd ODB		W					Z			
49	TransPur B Rx-	RS422	Gy	UTG 35p S	Pur B	2nd ODB	Е						V			
50	TransPur B Rx+	RS422	Gy	UTG 35p S	Pur B	2nd ODB	F						W			
51	TransPur B Tx-	RS422	Gy	UTG 35p S	Pur B	2nd ODB	G						Χ			
52	TransPur B Tx+	RS422	Gy	UTG 35p S	Pur B	2nd ODB	Н						Υ			
53	Spare Start Transponder B-	Impulse	Rd		Pur B								Z		ļ	
54	Spare Start Transponder B+	Impulse	Rd		Pur B								а			
55	Spare TransPur B Rx-	RS422	Rd		Pur B								b			L
56	Spare TransPur B Rx+	RS422	Rd		Pur B								С			
57	Spare TransPur B Tx-	RS422	Rd		Pur B								d			
58	Spare TransPur B Tx+	RS422	Rd		Pur B								е			
59	RxTracker-	RS422	Gy	Pur A	Center	Pur B						Α	Α	В		
60	RxTracker+	RS422	Gy	Pur A	Center	Pur B						В	В	Α		
61	TxTracker-	RS422	Gy	Pur A	Center	Pur B						O	С	D		
62	TxTracker+	RS422	Gy	Pur A	Center	Pur B						D	D	С		
63	Spare Center 1-		Rd		Center									Е		
64	Spare Center 1+		Rd		Center									F		
65	Spare Center 2-		Rd		Center									G	ļ	
66	Spare Center 2+		Rd		Center									Н		
67	CMD_PURSUIT-	RS422	Gy	UTG 35p S	Center	2nd ODB	f							K		
68	CMD_PURSUIT+													IX		
69	O	RS422	Gy	UTG 35p S	Center	2nd ODB	g							J		
	CountDown-	RS422	Gy	UTG 35p S	Center Center	2nd ODB										
70	CountDown+		Gy Gy		Center Center		g							J		
70 71	CountDown+ Info 1 100m-	RS422	Gy Gy Rd	UTG 35p S	Center Center 100m	2nd ODB	g h				A			J M		
	CountDown+ Info 1 100m- Info 1 100m+	RS422	Gy Gy Rd Rd	UTG 35p S	Center Center 100m 100m	2nd ODB	g h				В			J M		
71 72 73	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m-	RS422	Gy Gy Rd Rd Rd	UTG 35p S	Center Center 100m 100m 100m	2nd ODB	g h				В			J M		
71 72	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+	RS422 RS422	Gy Gy Rd Rd Rd Rd	UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m	2nd ODB 2nd ODB	g h				B C D			J M		
71 72 73 74 75	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m-	RS422 RS422	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m	2nd ODB 2nd ODB	g h	J			B C D E			J M		
71 72 73 74 75 76	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+	RS422 RS422 Impulse Impulse	Gy Gy Rd Rd Rd Rd Gy Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m	2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB	g h	K			B C D E			J M		
71 72 73 74 75	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m-	RS422 RS422 Impulse Impulse Impulse	Gy Gy Rd Rd Rd Rd Gy Gy Gy Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB	g h	K d			B C D E F			J M		
71 72 73 74 75 76	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+	RS422 RS422 Impulse Impulse Impulse Impulse Impulse	Gy Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB 2nd ODB	g h i	K			B C D E F G H			J M		
71 72 73 74 75 76 77	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422	Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h	K d			B C D E F G H			J M		
71 72 73 74 75 76 77 78	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Rx+	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d			B C D E F G H J			J M		
71 72 73 74 75 76 77 78	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Rx+ Trans100m Tx-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d			B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Rx+ Trans100m Tx- Trans100m Tx+	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d			B C D E F G H J			J M		
71 72 73 74 75 76 77 78 79 80	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx+ Info 1 200m-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422	Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy Gy Rd	UTG 35p S UTG 35p P UTG 35p S UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d		A	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m+	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 RS422	Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy Gy Rd Rd Rd	UTG 35p S UTG 35p P UTG 35p S UTG 35p S UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		В	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx+ Info 1 200m- Info 1 200m+ Tape 200m SDY-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse	Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy Rd Rd Rd Gy Gy Gy Gy Gy Gy Rd Rd	UTG 35p S UTG 35p P UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		В	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Tape 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx+ Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY+	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse Impulse Impulse	Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		B C D	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83 84	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY+ Tape 200m PRY-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse Impulse Impulse Impulse Impulse	Gy Rd Rd Rd Rd Rd Gy	UTG 35p S UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		B C D	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83 84	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m+ Start Transponder 100m+ Trans100m Rx- Trans100m Rx+ Trans100m Tx- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY+ Tape 200m PRY- Tape 200m PRY- Tape 200m PRY- Tape 200m PRY-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse Impulse Impulse Impulse Impulse Impulse Impulse Impulse Impulse	Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e e G H E F		B C D E	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	CountDown+ Info 1 100m- Info 1 100m- Info 1 100m- Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx+ Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m SDY- Tape 200m PRY+ Start Transponder 200m-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 Impulse	Gy Rd Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		B C D E F	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	CountDown+ Info 1 100m- Info 1 100m- Info 1 100m- Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse Impulse Impulse Impulse Impulse Impulse Impulse Impulse Impulse	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e e G H E F		B C D E	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans200m SDY- Tape 200m SDY- Tape 200m SDY- Tape 200m SPY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m+ Trans200m Rx-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse RS422	Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i i i i i i i i i i i i i i i i i i	K d e		B C D E F G H	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88	CountDown+ Info 1 100m- Info 1 100m- Info 1 100m- Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m- Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m-	RS422 RS422 Impulse Impulse Impulse Impulse Impulse RS422 RS422 RS422 RS422 Impulse	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i	K d e		B C D E F G	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans200m SDY- Tape 200m SDY- Tape 200m SDY- Tape 200m SPY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m+ Trans200m Rx-	RS422 RS422 Impulse Im	Gy Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy Gy Gy Rd Rd Gy Gy Gy Gy Rd Rd Gy Gy Gy Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p S UTG 35p P	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	9 h i	K d e		B C D E F G H J K	B C D E F G H J K			J M		
71 72 73 74 75 76 77 80 81 82 83 84 85 86 87 88 89 90	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m+ Trans200m Rx- Trans200m Rx- Trans200m Rx-	RS422 RS422 Impulse	Gy Gy Rd Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S UTG 35p P UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	g h i i i i i i i i i i i i i i i i i i	K d e		B C D E F G H J	B C D E F G H J K			J M		
71 72 73 74 75 76 77 80 81 82 83 84 85 86 87 88 90 91	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans200m Tx- Info 1 200m- Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m- Start Transponder 200m+ Trans200m Rx- Trans200m Rx+ Trans200m Rx+ Trans200m Rx+	RS422 RS422 Impulse Im	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S UTG 35p P UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	9 h i	K d e	A	B C D E F G H J K	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93	CountDown+ Info 1 100m- Info 1 100m+ Info 2 100m- Info 2 100m- Info 2 100m+ Tape 100m+ Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Trans100m Tx- Trans100m Tx+ Info 1 200m- Info 1 200m+ Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m+ Start Transponder 200m+ Trans200m Rx- Trans200m Rx- Trans200m Rx+ Trans200m Tx- Trans200m Tx- Trans200m Tx- Trans200m Tx-	RS422 RS422 Impulse Im	Gy Gy Rd Rd Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S UTG 35p P UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	9 h i	K d e	A	B C D E F G H J K	B C D E F G H J K			J M		
71 72 73 74 75 76 77 78 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	CountDown+ Info 1 100m- Info 1 100m- Info 1 100m- Info 2 100m- Info 2 100m- Tape 100m- Tape 100m- Start Transponder 100m- Start Transponder 100m- Start Transponder 100m+ Trans100m Rx- Trans100m Tx- Trans100m Tx- Info 1 200m- Info 1 200m- Info 1 200m- Info 1 200m- Tape 200m SDY- Tape 200m SDY- Tape 200m PRY- Tape 200m PRY- Start Transponder 200m- Start Transponder 200m- Start Trans200m Rx- Trans200m Rx- Trans200m Rx- Trans200m Tx- Info 1 Finish-	RS422 RS422 Impulse Im	Gy Gy Rd Rd Rd Rd Gy Gy Gy Gy Gy Gy Gy Gy Rd Rd Gy Gy Rd Rd Gy Gy Rd Rd Gy	UTG 35p S UTG 35p P UTG 35p P UTG 35p P UTG 35p P UTG 35p S UTG 35p P UTG 35p S UTG 35p S	Center Center 100m 100m 100m 100m 100m 100m 100m 100	2nd ODB	9 h i	K d e		B C D E F G H J K	B C D E F G H J K			J M		

98	Info 2 Finish+		Rd		Finish		ĺ			D				ĺ
99	Tape Finish-	Impulse	Gy	UTG 35p P	Finish	2nd ODB			R	Е				
100	Tape Finish+	Impulse	Gy	UTG 35p P	Finish	2nd ODB			S	F				
101	Start Trans Finish-	Impulse	Gy	UTG 35p P	Finish	2nd ODB			f	G				
102	Start Trans Finish+	Impulse	Gy	UTG 35p P	Finish	2nd ODB			g	Н				
103	TransFinish Rx-	RS422	Gy	UTG 35p S	Finish	2nd ODB		J		J				
104	TransFinish Rx+	RS422	Gy	UTG 35p S	Finish	2nd ODB		K		K				
105	TransFinish Tx-	RS422	Gy	UTG 35p S	Finish	2nd ODB		L		Г				
106	TransFinish Tx+	RS422	Gy	UTG 35p S	Finish	2nd ODB		M		M				
107	GND		YI-Gn	UTG 35p S				m						
108	GND		YI-Gn	UTG 35p P		case			m					

4.2 Pursuit boxes

INFO 1, INFO 2, INFO 3 and TRANS. SPARE are connected to the ODB6-CT but then go nowhere. If you need to use these lines (for example to connect on INFO 1 the 100m tape) you need to place some wires inside the ODB6-CT (level 4).



Connector	Pinning	Terminal board #	UTG 28p #1
TAPE	Black: Contact Tape Pursuit-	7	G
(Banana 4mm)	Red: Contact Tape Pursuit+	8	Н
STARTING GATE	Black: Start Starting Gate-	9	J
(Banana 4mm)	Red: Start Starting Gate+	10	K
INFO 1	Black: Pursuit Info 1-	11	L
(Banana 4mm)	Red: Pursuit Info 1+	12	M
INFO 2	Black: Pursuit Info 2-	13	N
(Banana 4mm)	Red: Pursuit Info 2+	14	Р
INFO 3	Black: Pursuit Info 3-	15	R
(Banana 4mm)	Red: Pursuit Info 3+	16	S
START TRACKER	1: not connected		
(Tu 4pF)	2: Start Pursuit Tracker+2	6	F
10 E 2 / 03	3: Start Pursuit Tracker- ³ 4: not connected	5	E
CMD TRACKER	1: Start Pursuit Tracker-4	5	Е
(Tu 7pF)	2: Start Pursuit Tracker+5	6	F
**	3: RxTracker-	1	Α
200 C	4: RxTracker+	2 3	В
30 OF O6	5: TxTracker-		С
4 5	6: TxTracker+	4	D
	7: not connected		
TRANSPONDER	1: Start Transponder-	17	T
(Tu 7pF)	2: Start Transponder+	18	U
	3: TransPur Rx-	19	V

 $^{^{\}rm 1}$ Only for mobile cabling (box 3493.711). $^{\rm 2}$ Also connected to pin 2 of CMD TRACKER.

 $^{^{\}rm 3}$ Also connected to pin 1 of CMD TRACKER.

⁴ Also connected to pin 3 of START TRACKER.

⁵ Also connected to pin 2 of START TRACKER.



200 300 400 400 5	4: TransPur Rx+ 5: TransPur Tx- 6: TransPur Tx+ 7: not connected	20 21 22	W X Y
TRANS. SPARE	1: Spare Start Transponder-	23	Z
(Tu 7pF)	2: Spare Start Transponder+	24	а
3	3: Spare TransPur Rx-	25	b
200	4: Spare TransPur Rx+	26	С
300€06	5: Spare TransPur Tx-	27	d
4 5	6: Spare TransPur Tx+	28	е
	7: not connected		

4.3 100m, 200m & Finish boxes

The same type of box is used for 100m, 200m and FINISH connection. At 200m location, INFO 2 is not available because it is used to connect a second contact tape.

INFO 1 and INFO 2 are connected to the ODB6-CT but then go nowhere (for example INFO 1 of 200m box is not connected to INFO 1 of FINISH box). If you need to use these lines you need to place some wires inside the ODB6-CT (level 4).



Connector	Pinning	Terminal board #	UTG 12p # ⁶
INFO 1	Black: Info 1-	1	Α
(Banana 4mm)	Red: Info 1+	2	В
INFO 2	Black: Info 2- (or Contact Tape-)	3	С
(Banana 4mm)	Red: Info 2+ (or Contact Tape+)	4	D
TAPE	Black: Contact Tape-	5	E
(Banana 4mm)	Red: Contact Tape+	6	F
TRANSPONDER	1: Start Transponder-	7	G
(Tu 7pF)	2: Start Transponder+	8	Н
③	3: Transponder Rx-	9	J
200	4: Transponder Rx+	10	K
30006	5: Transponder Tx-	11	L
4 5	6: Transponder Tx+	12	M
0	7: not connected		

Page 10

⁶ Only for mobile cabling (box 3493.713).

5 APPENDIX

5.1 Abbreviations and symbols

Cable coulour:

Black	Bk	
Blue	BI	
Brown	Bn	
Gray	Gy	
Green	Gn	

Pink	Pk	
Red	Rd	
Violet	Vt	
Yellow	YI	
White	Wt	

5.2 Version history

Version	Date	Modifications since last version
1.0	14.03.2012	Initial version
1.1	29.08.2014	Correction cabling Start Pursuit box



NOTES