

Customer	Simtek (UK) Ltd
Project	Logic 1
Document	Model function list
Detail	Harness type Ra-System supports
Version	V1.01
Version date	18/09/2022
Revision	R3
Revision Date	01/10/2022

Note * = Dependent on other options selected or active

Note - Control input refers to the input needed to trigger the circuit control functions. The input/s can be from a hard input, a CAN input, a Data input (RF System) or any combination of the above



Dimensions
Width - 132mm
Length - 115mm
Height - 35mm
Weight - 350Grams

Aluminium casing options available

Line no's	Circuit	Associated Circuit	Logic - 1	Logic - 1H	Notes - 1
1					
2	Side lights	-	Yes	Yes	
3	-	Side lights - Left	Yes	Yes	
4	-	Side lights - Right	Yes	Yes	
5	-	Control input - Switch (On Off) input	Yes	Yes	
6	-	Control input - Variable resistance (Voltage) input	Yes	Yes	
7					
8	Day time running lights	-	Yes	Yes	
9		Left DRL with indicator defeat	Yes	Yes	
10		Right DRL with indicator defeat	Yes	Yes	
11		Configure DRL for other uses - 2 independent channels at 5 Amps Each	No	Yes *	Options configured in the UI (User interface) Via Computer
12					
13	Main lights	-	Yes	Yes	
14	-	Dipped beam	Yes	Yes	
15	-	Main beam	Yes	Yes	
16	-	Main beam warning light - Hardwire output	Yes	Yes	
17	-	Main beam warning light - on CAN	Yes	Yes	
18	-	Push to Pass (Overtake head lights flash)	Yes	Yes	
19	-	Control input - Switch (On Off) input	Yes	Yes	
20	-	Control input - Variable resistance (Voltage) input	Yes	Yes	
21					
22					
23	Indicators	Indicators Left	Yes	Yes	
24	-	Indicators Right	Yes	Yes	IVA Compliant with Self learn mode for bulb out warning settings
25	-	Control input - Switch (On Off) input	Yes	Yes	
26	-	Control input - Variable resistance (Voltage) input	Yes	Yes	
27	-	Generic warning light - Hardwire output	Yes	Yes	
28	-	Warning lights - On CAN	Yes	Yes	
29					
30	-	Hazard lights	Yes	Yes	
31	-	Warning lights - Hardwire output	Yes	Yes	
32	-	Warning lights - On CAN	Yes	Yes	
33					
34	Fog light	-	Yes	Yes	
35	-	Rain light	Yes	Yes	Fog light Or Rain light - Setup in user selection function
36	-	Control input - Switch (On Off) input	Yes	Yes	
37	-	Control input - Variable resistance (Voltage) input	Yes	Yes	
38					
39	Brake light	-	Yes	Yes	
40	-	Control input - Switch (On Off) input	Yes	Yes	
41	-	Control input - Variable voltage (Pressure sensor)	Yes	Yes	
42					
43	Reverse light	Reverse light output	Yes	Yes	

44	-	Reverser motor control	Yes	Yes	
45	-	Control input - Switches (On Off) input	Yes	Yes	
46	-	Control input - Variable voltage (Position sensor)	Yes	Yes	
47					
48	Horn	-	Yes	Yes	
49					
50	Ignition switch input - Multi switch options	STD ignition Switch to 1 Button start options	Yes	Yes	Options configured in either of the User interface options -NOTE Variable voltage must be configured In the UI Via computer
51		Control input - Switch (On Off) input	Yes	Yes	
52		Control input - Variable resistance (Voltage) input	Yes	Yes	
53					
54	EFI Or Ignition position 1	3 Outputs	Yes	Yes	
55	Suggestions in BLUE	Injector feeds	Yes	Yes	
56		Coil feeds	Yes	Yes	
57		Auxiliary feed	Yes	Yes	
58					
59	Ignition position 2 (Run)	4 Outputs	Yes	Yes	
60	Suggestions in BLUE	Dash display	Yes	Yes	
61		ECU Ignition power	Yes	Yes	
62		Auxiliary feed - 1	Yes	Yes	
63		Auxiliary feed - 2	Yes	Yes	
64					
65	Ignition position 3 (Crank)	Output	Yes	Yes	
66					
67	Inhibit input	Used to control function such as cranking	Yes	Yes	Selectable function
68					
69	Fuel pump - Control and feed	2 x Common Outputs (10 Amp each)	Yes	Yes	Options configured in either of the User interface options
70		Control input - Switch (On Off) input	Yes	Yes	
71		Internal function - Control V engine speed	Yes	Yes	
72					
73	Cooling fan - Control & Feed	2 x Common Outputs (10 Amp each)	Yes	Yes	Options configured in User interface Via Computer
74		Control input - Switch (On Off) input	Yes	Yes	
75		Internal function - Control V engines	Yes	Yes	
76					
77	Customer - Configurable Outputs	2 x independent Outputs	No	Yes	Options configured in the UI (User interface) Via Computer
78		CCO-1 (8 Amp Each)	No	Yes	
79		CCO-2 (8 Amp Each)	No	Yes	
80		Control input - Switch (On Off) input	No	Yes	
81		Control input - Variable resistance (Voltage) input	No	Yes	
82					
83	Data coms - Channel 1	CAN - Hi	Yes	Yes	CAN used for data communications and Programming using the Customer setup UI - To use the customer setup UI the USB to CAN dongle is required
84		CAN - Low			
85					
86	Data coms - Channel 2	CAN - Hi	No	Yes	CAN used for data communications and Programming using the Customer setup UI - To use the customer setup UI the USB to CAN dongle is required
87		CAN - Low	No	Yes	
88					
89	LIN cons		No	Yes	Used for OEM and peripheral component communications
90					
91	Wiper motor	-	No	Yes	
92		Intermittent	No	Yes	
93		Speed 1	No	Yes	
94		Speed 2	No	Yes	
95		Park	No	Yes	
96		Control input - Switch (On Off) input	No	Yes	
97		Control input - Variable resistance (Voltage) input	No	Yes	
98					
99	Washer motor	Output	No	Yes	3 + 1 wipe with wash
100		Control input - Switch (On Off) input	No	Yes	
101					
102	Heater blower	PWM Speed output	Yes*	Yes*	PWM output used to control Blower motor speed controller
103		Control input - Switch (On Off) input	Yes*	Yes*	Momentary push toggles up through the speeds - Long push turns function off
104					
105	Heater control valve	Pulsed output - For water control valve	Yes*	Yes*	

106		Control input - Switch (On Off) input	Yes*	Yes*	Momentary push toggles up through the heat range - Long push turns function off
107					
108	EPB - Park brake	Single actuator control	No	Yes	Used for Electric over mechanical systems
109	-	Control input - Switch (On Off) input	No	Yes	
110	-	Adjustable application force	No	Yes	Easy customer adjustable apply force
111	-	Warning Light	No	Yes	
112					
113	Permanent Output - 1	-	Yes	Yes	
114					
115	Permanent Output - 2	-	Yes	Yes	
116					
117	Engine speed - Input	Used for multiple functions	Yes	Yes	
118					
119	Road Speed - Input	Used for multiple functions	Yes	Yes	
120					
121	Crash switch input	Control input - Switch (On Off) input	Yes	Yes	Cuts ignition and or activates hazard warning lights - Can also apply Hand Brake (If fitted)
122					
123	3 axis G Sensor	Internal sensor used for multiple functions	Yes	Yes	Used for Smart functions and CAN data broadcast cast
124					
125	Battery master relay - "Off" Control signal	Output	Yes	Yes	Used to turn battery "Off" during a crash or is battery volage is to low
126					
127	Diagnostics	On CAN	Yes	Yes	USB to CAN dongle required
128					
129	System configuration	Direct user input	Yes	Yes	
130					
131	System configuration	User interface	No	Yes	USB to CAN dongle required
132					
133		Options for either logic-1 or logic-1 H			Options available on all models
134					
135	Immobiliser	-			
136	-	Transponder - Bead			Two Beads supplied
137	-	Transponder - Plip fob			Two Plip fobs supplied
138		Transponder - Beed & Plip fob			Two Beads and two Plip fobs supplied
139					
140					With plip fob option additional functions can be accessed - EG Curtsy lights function
141					
142					
143	Alarm	-			Basic system, Sounds horn flashes lights immobilises engine systems
144					
145	RF switching control	-			
146		Basic control			
147		Bi-directional control			See separate RF function description
148		Bi-directional control with direct outputs			
149					
150	Direct RF switching outputs	6 Independent switching outputs			
151		Option - Shift paddle Up			
152		Option - Shift paddle Down			
153		Option - Shift Detent			
154	In BLUE Suggestions	Drinks bottom - Relay trigger			
155		Radio Push to talk (Pass through circuit) In and Out			
156		Go Pro "On Trigger" (Pass through circuit) In and Out			
157					