

BRCA Approved Zero-Timing 'Blinky' ESC's

The following list details the speed controllers approved for use in the stock class during the BRCA 1/12th Electric Circuit Nationals and the modes in which they must be run. This list is derived from the ROAR one used for events in North America and may be amended or added to as new speed controllers are added by ROAR and/or approved by the BRCA 12th Section Eligibility Officer.

To add a new speed controller, the manufacturer/UK importer/UK Distributor/UK Retailer must apply directly to the 12th Section Eligibility Officer. Contact details on the 12th Section of www.brca.org

Manufacturer	Part Number	Name / Description	Software Version	Special Notes
Calandra Racing Concepts	CRC4000	Advanced Electronics Black Diamond LV	2.1 software or higher	Has a blinking blue light when the throttle is in neutral and when set to the no-timing profile #1
Calandra Racing Concepts	CRC4002	Advanced Black Diamond	2.1 software or higher	Has a blinking blue light when the throttle is in neutral and when set to the no-timing profile #1
Castle Creations	P-CC6619 (1S)P-CC6600	Mamba Max Pro	V1.26	Blinking LED
Graupner GmbH & Co.	GM-Genius 120	Yellow, Red, and Green blink fast and at the same time in neutral position when the zero mode is active	V13.0	Users must use Mode 0-5 after factory reset or after delivery. Modes 6-9 have high speed timing, no LED blinking. No high speed timing is allowed to set with PC-software. Mode 2 is factory setting. If high speed timing, no LED blinking.
Graupner GmbH & Co.	GM-Genius 150	Yellow, Red, and Green blink fast and at the same time in neutral position when the zero mode is active	V13.0	Users must use Mode 0-5 after factory reset or after delivery. Modes 6-9 have high speed timing, no LED blinking. No high speed timing is allowed to set with PC-software. Mode 2 is factory setting. If high speed timing, no LED blinking.



Graupner GmbH & Co.	GM-Genius 75	Yellow, Red, and Green blink fast and at the same time in neutral position when the zero mode is active	Software Version V13.0	Users must use Mode 0-5 after factory reset or after delivery. Modes 6-9 have high speed timing, no LED blinking. No high speed timing is allowed to set with PC-software. Mode 2 is factory setting. If high speed timing, no LED blinking.
Graupner GmbH & Co.	GM-Genius 90	Yellow, Red, and Green blink fast and at the same time in neutral position when the zero mode is active	V13.0	Users must use Mode 0-5 after factory reset or after delivery. Modes 6-9 have high speed timing, no LED blinking. No high speed timing is allowed to set with PC-software. Mode 2 is factory setting. If high speed timing, no LED blinking.
Hobbico	DTXM1300	Duratrax DE10 Brushless Programable ESC		A blinking green LED will be displayed when the ESC is at 0 (zero) degrees of timing and the throttle is at neutral. Also, if the ESC is at any advancement in timing the LED will be solid green
Hobbywing	81020000 (blue) or 81020001 (black)	Justock Club SPEC	N/A	Zero timing and non-adjustable
Hobbywing	81020010 (blue) or 81020011 (black)	Xtreme Stock	508	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.
Hobbywing	81020050 (blue) 81020051 (black)	Xerun 60A-SD V2.1	508	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.
Hobbywing	81020170 (blue) 81020171 (black)	Xerun 120A-SD V2.1	508	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.



Hobbywing	81020210 (black) 81020211 (blue)	Xerun 120A-1S	508	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.
KO Propo	40051	VFS-1 BMC Ver 1.5	Contact Mfg for Firmware Upgrade	Must use zero timing and zero Advanced Profile signified by blinking LED on switch.
KO PROPO America	4100	BLZ-350 ESC		Set to zero timing in firmware. Cannot program any timing into ESC
Losi	LOSB9500	1/10th Xcelorin Brushless ESC	01.01.30	Must use zero timing and zero Advanced Profile signified by blinking color LED
LRP	LRP80705	SPX Zero		Non-updateable; Zero timing when power profile is set to 0. Red LED will flash in neutral to indicate zero timing
LRP	LRP80905	LRP SXX Comp V2	1.3,1.5	Mode 3 timing must be set to "0" signified by blinking blue LED in neutral
LRP	LRP809055	LRP SXX TC spec V2	1.3,1.5	Mode 3 timing must be set to "0" signified by blinking blue LED in neutral
LRP	LRP80910	SXX Stock Spec Brushless	N/A	Non-updateable. Mode 3 timing must be set to "0" signified by blinking blue LED when in neutral.
LRP	LRP80915	SXX Stock Spec V2	4.2,4.4	Desc: For Spec zero timing mode, both mode 2 (torque) and mode 3(timing) must be set to zero. Blue LED will blink in neutral
Nosram	90905	Pearl Evolution V2	1.3,1.5	Mode 3 timing must be set to "0" signified by blinking blue LED in neutral



Nosram	90955	Pearl ISTC V2	1.3,1.5	Mode 3 timing must be set to "0" signified by blinking blue LED in neutral
Nosram	90910	Pearl SpecRacing	N/A	Non-updateable. Mode 3 timing must be set to "0" signified by blinking blue LED when in neutral.
Nosram	90915	Pearl SpecRacing V2	4.2,4.4	Desc: For Spec zero timing mode, both mode 2 (torque) and mode 3(timing) must be set to zero. Blue LED will blink in neutral
Novak	NOV1709	GTB 2 Sportsman Racing Brushless ESC		Desc: When all timing is OFF, then white LED will be OFF to indicate no timing active.
Novak	NOV1740	Kinetic Racing Brushless ESC	Version 1.0 software or higher	ESC must be set at Timing Level = 1 or Zero Timing (default). The white LED will blink during start up to "prove" it works, but will remain off during all normal Zero Timing operation to indicate that timing is "OFF"
Novak	NOV1741	Kinetic 1S Racing Brushless ESC	Version 1.0 software or higher	ESC must be set at Timing Level = 1 or Zero Timing (default). The white LED will blink during start up to "prove" it works, but will remain off during all normal Zero Timing operation to indicate that timing is "OFF"
Novak	NOV1745	Havoc Pro SC Brushless ESC	Version 1.0 software or higher	ESC must be set at Timing Level = 1 or Zero Timing (default). The white LED will blink during start up to "prove" it works, but will remain off during all normal Zero Timing operation to indicate that timing is "OFF"



Novak Electronics	1850	The Edge Brushless ESC w/Traxxas	000	There is NO timing in this ESC. The white LED will blink during start up to "prove" it works, but will remain off during all normal operation to indicate that timing is "OFF"
Novak Electronics	1851	The Edge Brushless ESC w/Tamiya	000	There is NO timing in this ESC. The white LED will blink during start up to "prove" it works, but will remain off during all normal operation to indicate that timing is "OFF"
Speed Passion	Cirtix Stock Club Race # 12280	No Timing adjustments-no LED	Non- Programmable	No Timing adjustments- Signified by blinking LED
Speed Passion	EXT98802LPF	LPF 2.1 ESC (Carbon, Silver, Blue)	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	EXT98802LPF	GT-LPF 2.0 ESC (Carbon, Silver or Blue Version)	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	EXT98802Pro	GT-Pro 2.0 ESC (Carbon, Silver or Blue Version)	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	EXT98802PR O	PRO 2.1 ESC (Carbon,Silver,B lue)	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	SPEXT98802S B	GT V2.1 ESC Pro Stock Edition – Blue Edition	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	SPEXT98802S CB	GT V2.1 ESC Pro Stock Edition – Black Edition	V508	Must use zero timing and zero Advanced Profile signified by blinking LED



Speed Passion	SPEXT98802E XB	GT V2.1 EX Brushless ESC - Blue	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	SPEXT98802E XC	GT V2.1 EX Brushless ESC - Carbon	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Speed Passion	SPEXT98802E XS	GT V2.1 EX Brushless ESC - Silver	V508	Must use zero timing and zero Advanced Profile signified by blinking LED
Viper RC Solutions	VTX10	#6VSVT10001 Sensored BL ESC w/ProGauge	A19	Non timing indicated by GREEN blinking status LED next to letter "S" on V-port switch housing. In Race Modified/Timing run modes the "S" LED will be off.
Viper RC Solutions	VTX10-Lite	#6VSVT10002 Sensored BL ESC w/o ProGauge	A19	Non timing indicated by GREEN blinking status LED next to letter "S" on V-port switch housing. In Race Modified/Timing run modes the "S" LED will be off.
Viper RC Solutions	VTX10R	#6VSVT10R01 Sensored BL ESC w/ProGauge	A19	Non timing indicated by GREEN blinking status LED next to letter "S" on V-port switch housing. In Race Modified/Timing run modes the "S" LED will be off.
Viper RC Solutions	VTX10R-Lite	#6VSVT10R02 Sensored BL ESC w/o ProGauge	A19	Non timing indicated by GREEN blinking status LED next to letter "S" on V-port switch housing. In Race Modified/Timing run modes the "S" LED will be off.
HPI	101830	Flux Pro Competition ESC	V1.1_120511_b eta	ESC must use Profile #2 which will have a green blinking LED the Power Button
Hacker Motor GmbH	TENSORIC10	Tensoric 10 Competition ESC (160A)	V3.0_120516	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.



Hobbywing	XERUN V3	Xerun 120A SD V3 Brushless ESC	V1.1_120511_b eta	ESC must use Profile #2 which will have a green blinking LED the Power Button
Novak	NOV1708	GTB2 Sportsman ESC Low Profile	000	There is NO timing in this ESC, the White LED will blink during the start up to "prove" it works, but will remain off during all normal operation to indicate that timing is "OFF".
Novak	NOV1743	OVAL SPEC 1S Brushless ESC	000	When NO timing in this ESC, the White LED will blink while powered on. If the white led is on then timing is active. NOTE: this is different than past Novak ESCs
Novak	NOV1748	GTB2 Low Profile W/XDRIVE ESC	000	There is NO timing in this ESC, the White LED will blink during the start up to "prove" it works, but will remain off during all normal operation to indicate that timing is "OFF".
Novak	NOV1749	GTB2 W/XDRIVE ESC	000	The White LED will blink during the start up to "prove" it works, but will remain off during all normal operation to indicate that timing is "OFF."
Team Orion	ORI65101	Vortex R10 Pro ESC (120A,1S- 2S)	1.68	Zero timing - the RED LED Flashes when the ESC is active and throttle in neutral position.
Team Orion	ORI65102	Vortex R10 Pro ESC (160A,2S- 3S)	1.68	Zero timing - the RED LED Flashes when the ESC is active and throttle in neutral position.
Team Orion	ORI65109	Vortex R10 Race ESC (90A,2S-3S)	1.68	Zero timing - the RED LED Flashes when the ESC is active and throttle in neutral position.
Tekin	TT1152	Tekin RS ESC	223 ** NOTE NEW SOFTWARE PROFILE*	When in LOCKED no timing mode LED 3, 4, 5 will be on and blinking.



Tekin	TT1153	Tekin RS Pro ESC	223 ** NOTE: NEW SOFTWARE PROFILE	When in LOCKED no timing mode LED 3, 4, 5 will be on and blinking.
Viper RC Solutions	6VSVT01001	Viper VTX1 ESC	A30	Non timing indicated by GREEN blinking status LED next to letter 'S' on V-port switch housing. In Race Modified/Timing run modes the 'S' LED will be off.
Viper RC Solutions	6VSVT10001	Viper VTX10 ESC	A30	Non timing indicated by GREEN blinking status LED next to letter 'S' on V-port switch housing. In Race Modified/Timing run modes the 'S' LED will be off.
Viper RC Solutions	6VSVT10R01	Viper VTX10R ESC	A30	Non timing indicated by GREEN blinking status LED next to letter 'S' on V-port switch housing. In Race Modified/Timing run modes the 'S' LED will be off.
CORE RC	CR173	PACE-45R	N/A non updateable	Zero timing Profile #1 – the RED LED Flashes when the ESC is active and throttle in neutral position.
LRP	LRP80999	SXX Mod and Stock Upgrade board	V 3.1	Zero timing-BLUE LED flashing
LRP	LRP80960	Flow Competition	v1.4 (Std) v3.3 (OffRoad specific) v4.0 (OnRoad specific) v5.1 (Stock specific)	Boost 0 The blue LED will flash in neutral trigger position, to indicate that entire timing advancement is disabled. Boost 0 is enabled when mode 3+4 are set to #0 value (then Mode 5+6 will not be visible)



LRP	LRP80970	Flow Works Team	v1.4 (Std) v3.3 (OffRoad specific) v4.0 (OnRoad specific) v5.1 (Stock specific)	Boost 0 The blue LED will flash in neutral trigger position, to indicate that entire timing advancement is disabled. Boost 0 is enabled when mode 3+4 are set to #0 value (then Mode 5+6 will not be visible)
Nosram	NR90960	Comet Evo	v1.4 (Std) v3.3 (OffRoad specific) v4.0 (OnRoad specific) v5.1 (Stock specific)	Boost 0 The blue LED will flash in neutral trigger position, to indicate that entire timing advancement is disabled. Boost 0 is enabled when mode 3+4 are set to #0 value (then Mode 5+6 will not be visible)
Nosram	NR90970	Comet HD	v1.4 (Std) V3.3 (OffRoad specific) v4.0 (OnRoad specific) v5.1 (Stock specific)	Boost 0 The blue LED will flash in neutral trigger position, to indicate that entire timing advancement is disabled. Boost 0 is enabled when mode 3+4 are set to #0 value (then Mode 5+6 will not be visible)
Novak	1730	Impact Brushless Racing ESC	000	Zero timing mode indicated by blinking white LED. Note: this is different than previous Novak ESCs
ORCA	OES112V1	ORCA Vritra VX-1Titanium Color	V2	Zero timing mode indicated by BLINKING blue LED at neutral. Using ORCA program box, set the following settings: Timing 0 Degree, Turbo delay off, Turbo timing Off, Turbo interval to 0. Software version displayed on program box.

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ORCA	OES380VX	ORCA Vrita VX	V2	Zero timing mode indicated by
		Orange/Ti/Blue		blinking blue LED at neutral.
				Using ORCA Program box set
				the following ESC settings.
				Timing 0 degree, Turbo delay
				off, Turbo timing off, Turbo
				interval to 0. Software version
				displayed on program box.

Table 1 end

Table 2 Start

Savox	21ESC116000 1	Razor160A	V1	Zero timing mode indicated by BLINKING blue LED at neutral
Speed Passion	SF000060	Reventon "S"/ Reventon Series Orange Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SF000061	Reventon "S"/ Reventon Series Silver Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SF000162	Reventon "Pro"/ Reventon Series Blue Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SF000222	Reventon "Pro"/ Reventon Series Black Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SP000010	Reventon "S"/ Reventon Series Blue Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SP000043	Reventon "R"/ Reventon Series Orange Color	V20	Zero timing mode indicated by blinking Red LED at neutral



Speed passion	SP000048	Reventon Stock Club Race ESC ST0 (stock0)		There is no timing in this ESC, signified by blinking LED
Speed Passion	SP000063	Reventon "R"/ Reventon Series Blue Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Speed Passion	SP000064	Reventon "R"/ Reventon Series Silver Color	V20	Zero timing mode indicated by blinking Red LED at neutral
Team Powers	TP-XPS	EL-C40A ESC Hardware Ver. 1.2	V0	Zero timing mode indicated by BLINKING green LED at neutral
Team Powers	TP-XPS/Sport	Sport-C-70 ESC Hardware Ver. 1.2	V0	Zero timing mode indicated by BLINKING green LED at neutral
Viper RC Solutions	6VSVT01001	Viper VTX1	A55	GREEN LED Blinks on switch box in neutral
Viper RC Solutions	6VSVT10011	Viper VTX10	A55	GREEN LED Blinks on switch box in neutral
Viper RC Solutions	6VSVT10015	Viper VTX10 BE	A55	GREEN LED Blinks on switch box in neutral
Viper RC Solutions	6VSVT10R15	Viper VTX10 R	A55	GREEN LED Blinks on switch box in neutral
Viper RC Solutions	6VSVT10R20	Viper VTX10R BE	A55	GREEN LED Blinks on switch box in neutral
Team Orion	ORI65120	Vortex R10 Stock Zero Timing	1.71	Zero timing-the Red LED Flashes when the ESC is active and throttle in neutral position
Team Powers	TP-XPS	Pro-C-V1.2 ESC Hardware Ver. 1.2	V0	Zero timing mode indicated by BLINKING Green LRD at neutral. ESC not firmware updateable



Vampire	VR5002	SR1	V1.0	PTS - Power Timing System
Racing				menu setting 1. MENU LED
				flashes blue



Vampire Racing	VR5001	SR1+	V1.0	PTS - Power Timing System menu setting 1. MENU LED flashes blue
Muchmore	ME-FLK4	Fleta 4.0 Black	p-sto0V20-0b36	zero timing - blinking red LED at neutral position
Muchmore	ME-FLB4	Fleta 4.0 Blue	p-sto0V20-0b36	zero timing - blinking red LED at neutral position
Tekin	TT1154	Tekin RS Gen2 Electronic Speed Control	V238	Zero timing locked SPEC mode - LED's 3, 4, and 5 flash for ROAR events. Unlocked zero timing is LED's 3 and 5 flashing - not to be used for BRCA sanctioned events.
Hobbywing	81020310 81020320 81020330	XERUN-120A V3	Software V3.1_121129_b eta	ESC must use Profile #2, red LED on power button flashes when throttle is at neutral in non-timing mode
Hobbywing	81020340 81020350 81020360	XERUN-120A V3.1	Software V3.1_121129_b eta	ESC must use Profile #2, red LED on power button flashes when throttle is at neutral in non-timing mode
Team Novak	1755	Pulse Brushless Pro 2S Racing ESC	V0	Zero timing- the white LED flashes when the throttle is in the neutral position. Note: The WHITE LED blinking on this Novak ESC is different than previous Novak ESCs where the white LED would be OFF to indicate zero timing
Hobbywing	30112121051	XERUN-120A- 1S V3.1	Software V3.1_121129_b eta	ESC must use Profile #2, red LED on power button flashes when throttle is at neutral in non-timing mode
Mardave	V300	Octane 120 Amp 1S	Software - version 508	Zero timing – the RED LED Flashes when the ESC is active and throttle in neutral position.



Hobbywing	30112101001	Hobbywing V3.1 Stock Spec	Software V3.1_121129_b eta	ESC must use Profile #2, red LED on power button flashes when throttle is at neutral in non-timing mode
G-Force	G0014	G-Force 1s 120 Sensored ESC	Software Version 1.07	ESC LED will blink Red in Neutral to show blinky mode. Only available when no timing or boost is active.
G-Force	G0067	G-Force 2s TS120 Sensored ESC Black Metal Case	Software Version 1.05	ESC LED will blink Red in Neutral to show blinky mode. Only available when no timing or boost is active.
Muchmore Racing	ME-FLPK/ME- FLPB	FLETA PRO Brushless ESC Black Case / Blue Case	Software versions v1.0 v1.1	Blinky LED when Turbo/Boost settings OFF
Muchmore Racing	ME-FLSK/ME- FLSB	FLETA STOCK Brushless ESC Black Case / Blue Case	Software versions v1.0 v1.1	Blinky LED when Turbo/Boost settings OFF
Muchmore Racing	ME-FLEK	FLETA EURO Brushless ESC Black Case / Blue Case	Software versions v1.0 v1.1	Blinky LED
Team Wave	RB-0	Team Wave RB- 0 Zero Timing Brushless Racing Controller	Software v1.0	Flashing green LED at neutral throttle
Orca	OES620XO – Orange OES630XB – BlueOES610X T -Titanium	ORCA VRITRA VXX Competition ESC	SoftwareVersion v3.3	Zero timing is indicated by blinking blue LED. To set use the ORCA V3.3 Programming box and select Binky Mode in the menu, this disables all timing and Turbo settings.
	OES21BV1 OES12OV1 OES112V1	ORCA VRITRA VX-1		



Tekin	TT1158	RSX	V250	Blinks leds 3 and 5 when in spec mode. Blinks leds 3,4,5 when in locked spec mode.
Speed Passion	SP000150	Reventon Pro 1.1 EX – Black – 140A	Stock0 v21	Has a blinking red light when the throttle is in neutral.
SKY RC	SK-300048	SKY RC Toro 120A	SkyRC UsbLink.V1.07.r ar	Red LED flashes in neutral to indicate non-timing mode.
SKY RC	SK-300044-01	SKY RC TS 120 Competition	V1.05	Red LED flashes in neutral to indicate non-timing mode.
Core RC	CR199	Pace 60R	None adjustable	Blinking red light
Yeah Racing	HTN-E01	Yeah Racing Hacktronic Touring Turbo 120A Programmable ESC	Yeah Touring Ver 1.0	Zero timing is indicated by a blinking blue LED. To set, use the Hacktronic v1.0 programming box and select blinky mode in the menu. This disables all timing and Turbo settings.
Tianco (ORCA)	OES21BV1 OES12OV1 OES112V1 OES630XB OES620XO OES610XT	ORCA VX-1 – BLUE – ORANGE – TITANIUM ORCA VXX – BLUE – ORANGE – TITANIUM	V4.0	Zero timing is indicated by blinking blue LED. To set use the ORCA V4.0 Programming box and select Blinky Mode in the menu, this disables all timing and Turbo settings.
Tianco (ORCA)	OES21BV1 OES12OV1 OES112V1 OES630XB OES620XO OES610XT	ORCA VX-1 – BLUE – ORANGE – TITANIUM ORCA VXX – BLUE – ORANGE - TITANIUM	V4.1	Zero timing is indicated by blinking blue LED. To set use the ORCA V4.1 Programming box and select Blinky Mode in the menu, this disables all timing and Turbo settings.



Viper R/C Solutions	6VSVT01001	VTX 1	A64	GREEN LED Blinks on switch box in neutral
Viper R/C Solutions	6VSVT10015	VTX10 BE	A64	GREEN LED Blinks on switch box in neutral
Viper R/C Solutions	6VSVT10R20	VTX10R BE	A64	GREEN LED Blinks on switch box in neutral
SKY RC	SK-300062-02	Toro TS 120A Alloy ESC - Black	V1.05	Red LED flashes in neutral to indicate non-timing mode.
Yokomo	#BL-PRO3N	YOKOMO BL- PRO-3 BRUSHLESS SPEED CONTROLLER	BL-PRO-3	The green LED will blink when the advanced timing setting is 0
Team Powers	SPORT- 95A	Team Powers Radeon Sport 95A ESC	RS-Code- V1.1.xup RS-Code- V2.0.xup	Blue LED flashes .65 seconds
Reedy	AS27000	Reedy Blackbox 410R 1S-2S Competition ESC	2.7	Green LED flashes in neutral with red LED off.
Turnigy	9052000046	Trackstar GenII 120A	V2.02	Red LED blinking in neutral when in no-timing mode. Set boost and turbo timing to zero degrees using the program box.
Turnigy	9052000060-0	Trackstar GenII One Cell 120A	V2.02	Red LED blinking in neutral when in no-timing mode. Set boost and turbo timing to zero degrees using the program box.
Tianco (ORCA)	OES920V1	ORCA VRITRA VX3 1S 1:12 scale ESC Black	V4.2	Zero timing is indicated by flashing blue LED. To set use the ORCA V4.2 programming box and selct 'Blinky Mode' in the menu. This disables all timing and Turbo settings.



Tianco (ORCA)	OES810V3	ORCA VRITRA VX3 ESC 2s Black	V4.2	Zero timing is indicated by flashing blue LED. To set use the ORCA V4.2 programming box and selct 'Blinky Mode' in the menu. This disables all timing and Turbo settings.
Reedy	AS27000	Reedy Blackbox 410R 1S-2S Competition ESC	v2.9 software	Has a blinking blue light when the throttle is in neutral and when set to the no-timing profile #1
SKY RC	SK-300064-01	SKY Toro TS 160	2.01	Red LED flashes in neutral to indicate non-timing mode.
Muchmore Racing	ME-FL1SK	FLETA 1S	Software versions v1.4	Flashing LED when Turbo/Boost Settings OFF
Muchmore Racing	ME-FLPK/ME- FLPB	FLETA PRO Brushless ESC Black Case / Blue Case	Software versions v 1.2 v1.3 v1.4	Flashing LED when Turbo/Boost Settings OFF
Muchmore Racing	ME-FLSK/ME- FLSB	FLETA STOCK Brushless ESC Black Case / Blue Case	Software versions v 1.2 v1.3 v1.4	Flashing LED when Turbo/Boost Settings OFF
Muchmore Racing	ME-FLEK	FLETA EURO Brushless ESC Black Case / Blue Case	Software versions v 1.2 v1.3 v1.4	Flashing LED when Turbo/Boost Settings OFF
G-Force	G0108	G-Force TS160 ESC	2.01	Has a blinking Red light when the throttle is in neutral and when set to the no-timing profile
RC Explorer Company (Team Powers)	RO-C-140A	TP- RADON/PRO-C	RS-Code- V1.1.xup RS-Code- V2.0.xup	Blue LED flashes 0.65 seconds.
REDS Racing	SPCO 0001	ESC REDS TX120 Team Edition	V1.05 V1.06 V1.07	LED flashes green at neutral and through rev range, turning red at full throttle.



Hobbywing	HW30112000	XR10 Juststock	508	LED flashes red in neutral
RC Explorer Company (Team Powers)	TP-Radon/ ProV2_1s-c	Radon Pro V2 (140A) 1s Speed Control (included USB device)	RS-Code- V2.1.xup	Blue LED flashes 0.65 seconds.
RC Explorer Company (Team Powers)	TP-XPS/ Sport-V2.0-c	XPS Sport V2 (95A) Speed Control	RS-Code- V2.1.xup	Blue LED flashes 0.65 seconds.
RC Explorer Company (Team Powers)	TP-XPS/ EL- V2.0-c	XPS EL V2 (45A) Speed Control	RS-Code- V2.1.xup	Blue LED flashes 0.65 seconds.
Hobbywing	HW30112600 HW30112601 HW30112602	Hobbywing XR10 Pro	4.1.05	LED flashes red in neutral
Hobbywing	HW30112603	Hobbywing XERUN XR10 PRO-1S 120A	XR-4.1.01	LED flashes red in Neutral
Corally	C-53001	CERIX PRO- 120 1S	CP120 2.03	LED flashes red in Neutral
Corally	C-53002	CERIX PRO- 120	CP120 2.04	LED flashes red in Neutral
Corally	C-53003	CERIX PRO- 160	CP160 2.04	LED flashes red in Neutral
RC Explorer Company (Team Powers)	TP-XPS/EL- V2-1S	XPS EL 1S Speed Control System V2.0 - 45A	RS-Code- V2.1.xup	Blue LED flashes 0.65 seconds.
RC Explorer Company (Team Powers)	TP-XPS V2 SERIES ESC	FIRMWARE	RS-Code- V2.2.xup	Blue LED flashes 0.65 seconds.
Hobbywing	HW30112401	Hobbywing XERUN-XR10 Stock Spec 80A	XR-4.1.02	LED flashes red in neutral



Hobbywing	HW30112751	Hobbywing XERUN-XR10 Pro-Stock Spec 1S V4-Black	XR-4.1.02	LED flashes red in neutral
Maclan Racing	MCL2003	MMAX PRO COMPETITION 160A ESC	V1.3	RED Led solid, Blue and Orange LED Alternate.
Orion	ORI65149	Vortex R10 PRO V2 120A 1S	V3.0_111208_M OD	At neutral RED LED Blinks. Must be set to one of the zero timing profiles.
R1 BRUSHLESS MOTOR LAB, LLC	R1DG200	R1 DIGITAL-2	B418106	GREEN LED Flashes When Boost and Turbo are set to Zero
Muchmore Racing Co. Ltd	ME-FLPK2	FLETA PRO V2 Brushless ESC BLACK	Blinky V1.40 Software	Green LED Blinks. Always in non timing mode.
Yokomo Ltd	BL-PRO4N BL-PRO4B	BL-PRO4 Brushless Speed controller	4.120 Software	Green LED Blinks when Throttle is neutral position and when set to non timing. Note: With this ESC, ABS function must not be enabled at BRCA sanctioned events.
SANWA	SA107A54413A	Super Vortex Generation 2 ESC SVZ G2	01.02.R005	Blue LED Blinks when throttle is in Neutral position, and when set to non timing. Note: This ESC Does not comply with BRCA General rule 14 when used with Sanwa SSL connector. SSL Must not be used at BRCA Sanctioned Events
RC Explorer Company, (Team Powers)	TP-XPS/PRO V2	XPS Speed Control System V2.0-120A	RS-Code- V2.3.xup	Blue LED flashes 0.65 seconds.



LRP Electronic GmbH	5000004	FLOW X TC SPEC	V4.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 5 (Torque Feel) and Mode 6 (Timing) are set to Zero
LRP Electronic GmbH	5000003	FLOW X OFF ROAD SPEC	V3.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 5 (Torque Feel) and Mode 6 (Timing) are set to Zero
LRP Electronic GmbH	9000004	NOSRAM HD TC SPEC	V4.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 5 (Torque Feel) and Mode 6 (Timing) are set to Zero
LRP Electronic GmbH	9000003	NOSRAM HD OFF ROAD SPEC	V3.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 5 (Torque Feel) and Mode 6 (Timing) are set to Zero
LRP Electronic GmbH	9000005	NOSRAM HD STOCK SPEC	V5.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 6 (Torque Feel) and Mode 7 (Timing) are set to Zero
LRP Electronic GmbH	5000005	FLOW X STOCK SPEC	V5.1 software	Has a blinking Blue LED when the throttle is in Neutral, and when Mode 6 (Torque Feel) and Mode 7 (Timing) are set to Zero
TEKIN	258	RX8, RX4, RSX and RS.	258 Firmware Update.	Blinky indication as per original ESC. This is an update, just to state 258 firmware is fully compliant. This does not affect other versions already approved.
Orion	ORI65133	HMX10	V4.0 ver 2.04	RED LED Blinks at approx 1Hz
Tianco (ORCA)	OES832VR OES862VR	ORCA R32 ESC 2s BLACK ORANGE	Ver 1.1 170304A	Zero timing is indicated by flashing blue LED 0.6S. To set use the ORCA programming box and select '1: Blinky Mode' in the menu. This disables all timing and Turbo settings.



MACLAN	MCL2005	MACLAN MMAX PICO 100A EXTREME STOCK	B1.0	RED Led solid, Blue and Orange LED Alternate. This firmware only operates in "blinky" mode
SKYRC	SK-300060-01	TORO TS50 SENSORED ESC	NA. Non Upgradeable	RED LED blinks in Neutral position.
TIANCO/ORCA	OESB32LC	ORCA LCG B32 Blinky ESC	21.10.171009A	Zero Timing is indicated by flashing BLUE LED
FREEMAX Technology co LTD	DA-770001	DASH AI PRO Competition ESC	21.11.171014A	Has Blinking BLUE LED when in zero timing mode.
TEKIN	TT1160	RSPro Black Edition	V258	Blinky mode is set when the ESC is in spec mode, and blinks LED's 3 and 5. ESC can also be set to "locked" spec mode, which is also Blinky, but timing can only be changed via the Hotwire interface. When locked, blinks LED's 3,4,5.
TEKIN	TT1161	RSPro 1S Black Edition	V258	Blinky mode is set when the ESC is in spec mode, and blinks LED's 3 and 5. ESC can also be set to "locked" spec mode, which is also Blinky, but timing can only be changed via the Hotwire interface. When locked, blinks LED's 3,4,5.
MuchMore	ME-FLEV2	Fleta Euro V2	Blinky V3.00	Green LED Blinks. Always in non timing mode. At full brake and full power red LED comes on as well



MuchMore	ME-FLP2K1S	Fleta Pro V2 1S	BLINK v1.50	Green LED Blinks. Always in non timing mode. At full brake and full power red LED comes on as well
Superior Matching Concepts (SMC)	RF170 1S	Superior Matching Concepts RF170 1S	B478202	Green LED, 0.41 seconds/flash. How to Activate Non-Timing Operation: Use Program Box to set 'Boost Timing' and 'Turbo Timing' to zero. Use Program Box to set 'Boost Timing' and 'Turbo Timing' to zero.
Superior Matching Concepts (SMC)	RF170 (2S)	Superior Matching Concepts RF170	B478107 B487106	Green LED, 0.41 seconds/flash. How to Activate Non-Timing Operation: Use Program Box to set 'Boost Timing' and 'Turbo Timing' to zero. Use Program Box to set 'Boost Timing' and 'Turbo Timing' to zero.
R1 BRUSHLESS MOTOR LAB, LLC	040007	R1 WURKS DIGITAL-3	V1.016	GREEN LED Flashes When Boost and Turbo are set to Zero
Tianco (ORCA)	ES180E12-4S	ORCA OE1 2s Black	V2.2	Zero timing is indicated by flashing blue LED. To set use the programming box and select 'Blinky Mode' in the menu. This disables all timing and Turbo settings.
TEKIN	272	RX8, RX4, RSX and RS.	722 Firmware Update.	Blinky indication as per original ESC. This is an update, just to state 272 firmware is fully compliant. This does not affect other versions already approved.
RC Explorer Company (Team Powers)	TP- Radon/ProV4_ 2s-c	Radon Pro V4 200A 2S Speed Control	RS-Code-V4.1	Blue Blinking LED every 0.5S

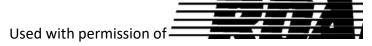


Reedy	AS27004	Reedy Blackbox 510R	B468316	Green LED Blinks when at Neutral and in blinky mode.
Hobbywing	HW30112608	Hobbywing XERUN-XR10 Pro G2	XR-4.4.01	LED flashes red in neutral
TEKIN	TT1156	RSgen3	276	Blinks leds 3+5 when in spec Mode. Blinks leds 3,4,5 when in "locked" spec mode. Note: When "locked" buttons do not allow changes to ESC.
TEKIN	TT1157	RSgen3 SPEC	276	Blinks leds 3+5 when in spec Mode. Blinks leds 3,4,5 when in "locked" spec mode. Note: When "locked" buttons do not allow changes to ESC.
TEKIN	TT1159	RSXpro	276	Blinks leds 3+5 when in spec Mode. Blinks leds 3,4,5 when in "locked" spec mode. Note: When "locked" buttons do not allow changes to ESC.
TEKIN	TT1160	RSpro BE	276	Blinks leds 3+5 when in spec Mode. Blinks leds 3,4,5 when in "locked" spec mode. Note: When "locked" buttons do not allow changes to ESC.
TEKIN	TT1161	RSpro BE 1S	276	Blinks leds 3+5 when in spec Mode. Blinks leds 3,4,5 when in "locked" spec mode. Note: When "locked" buttons do not allow changes to ESC.
Hobbywing	HW30112609	XERUN XR10 PRO 1S HEAVY DUTY V4.1 Black	XR-4.4.01	LED flashes red in neutral. Note: PCB Hardware is identical to XR10 Pro 1S
ORCA	ES190E1012S	OE101 STOCK ESC	3.0	Purple (RED+BLUE) Led blinks
ORCA	ES10E1011S	OE1011S "STOCK"	3.0	Purple (RED+BLUE) Led blinks



RC Explorer Company (Team Powers)	TP- Radon/ProV4- 1S	Radon Pro V4 200A 1S Speed Control	RS-Code-V4.2	Blue Blinking LED every 0.5S
ORCA	ES190E11-2S	OE1011S "MOD"	3.0	Purple (RED+BLUE) Led blinks
Associated Electrics, Inc	AS27009 and AS27010. (27010 includes programmer box)	Reedy Blackbox 510R 1S Competition ESC	B468101	Blinking green LED at neutral when boost and timing values are set to zero.
Maclan Racing	MCL2011	M32T PRO160	E21.17	RED Led solid, Blue and Orange LED Alternate.
RC Explorer Company (Team Powers)	TP-Radon- /PRO4-2S 200amp	Radon Pro V4.1 2S 200A Limited edition	RS-Code-V5.0	Blue Blinking LED every 0.5S
RC Explorer Company (Team Powers)	TP-RD- MSPEC	MS-Radon 100A	RS-Code-V4.2	Blue Blinking LED every 0.5S
RC Explorer Company (Team Powers)	TP-XPS/Pro- V3.0-c	XPS PRO V3 140A	RS-Code-V4.2	Blue Blinking LED every 0.5S
CORE RC	CR817	PACE-95R	OEM-4.0	Blue Blinking LED

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V3.0 - Updated for 2013-2014 season - 28vii13 - PDW
                                                                  V3.1 - Novak 1755 added - 8x13 - PDW
                                V4 – non-blinking speedos to be removed highlighted in yellow – 10x13 – PDW
                                                  V4.1 - errors on Novak speedos corrected - 11x13 - PDW
                                                         V4.2 – re-formatted into a single table – 11x13 – MS
                                              V4.3 – Hobbywing v3.1 1S and Mardave added – 29x13 – PDW
                                                   V4.4 - Hobbywing v3.1 Stock Spec added - 26xi13 - PDW
                                V4.5 - G-Force, Muchmore (3) and Team Wave speedos added - 24i14 - PDW
                                                              V4.6 - Orca Vritra VXX added - 27i14 - PDW
                                                                  V4.7 - G-Force 2S added - 28i14 - PDW
 V4.8 – part numbers corrected for G-Force and Speed Passion controllers – 29i14 - PAL V4.9 – Tekin RSX and SP
                                                                  Reventon Pro 1.1 added - 12iii14 - PDW
                                 V5.0 - Sky RC Toro and TS, Core199 and Yeah Touring added - 23v14 - PAL
     V5.1 - ORCA 4.0 and 4.1 software for VX1 and VXX and 3.3 for VX1, Viper A64 software added -28vii14-PAL
       V5.2 - SKY RC Toro TS 120A Alloy ESC - Black added, correction made to software version for G-Force 2s
                        TS120 Sensored ESC Black Metal Case and SKY RC TS 120 Competition - 03ix14-PAL
                                                            V5.3 - YOKOMO BL-PRO-3 added - 24x14-PAL
                                                V5.4 - Team Powers Radeon Sport 95A added - 10xi14-PAL
                                   V5.5 - Reedy Blackbox 410R 1S-2S Competition ESC added - 10xii14-PAL
                    V5.6 – Turnigy Trackstar GenII 120A and Trackstar GenII One Cell 120A added – 24ii15-PAL
V5.7 - ORCA VRITRA VX3 1S and ORCA VRITRA VX3 ESC 2s added and Turnigy comments updated - 3iii15-PAL
              V5.8 - Reedy V2.9 software added for Reedy Blackbox 410R 1S-2S Competition ESC - 20iii15-PAL
   V5.9 - SKY RC Toro TS 160 and Muchmore Racing ME-FL1SK Fleta 1s added, Muchmore software version 1.4
                                                                                    added - 15iv15-PAL
                      V6.0 - G-Force TS 160 added, Muchmore software version 1.2 and 1.3 added - 7iv15-PAL
                                                       V6.1 - Team Powers RO-C-140A added - 5vi15-PAL
                                                     V6.2 - Team Powers V2.0 software added - 10vi15PAL
                                              V6.3 - REDS Racing TX120 Team Edition added - 25viii15PAL
                                           V6.4 - Hobbywing HW30112000 XR10 Juststock added - 8ii16PAL
      V6.5 – Team Powers TP-Radon/ProV2 1s-c, TP-XPS/Sport-V2.0-c, TP-XPS/EL-V2.0-c added – 16iii16PAL
                                                             V6.6 - Hobbywing XR10 Pro added - 2v16PAL
   V6.7 HW XR10 1S,CERIX PRO-120, CERIX PRO-120 1S, CERIX PRO-160, TP XPS EL 1S added.13xi16-DCG
                      V6.8 HW XR10 STOCK SPEC 1S and 2S. MACLAN MMAX PRO 160A added. 14i17-DCG
                               V6.9 Orion Vortex R10 PRO 1S and 2S.R1 Wurkz DIGITAL-2 added. 25i17-DCG
                                      V6.10 Muchmore Fleta Pro V2 and Yokomo BL-PRO 4 added. 4ii17-DCG
                                                      V6.11 Sanwa Super Vortex GEN2 added. 25ii17-DCG
                  V6.12 TP-XPS-PRO V2 and TC SPEC AND OFF ROAD SPEC LRP FLOW added. 18iii17-DCG
                                           V6.13 NOSRAM HD Versions of LRP FLOW-X added. 30iii17-DCG
                       V6.14 NOSRAM HD STOCK SPEC and LRP FLOW X STOCK SPEC added.17v17 -DCG
                                    V6.15 ORION HMX, TEKIN258 Firmware, ORCA R32 added. 17vii17-DCG
                                        V6.16 MACLAN PICO 100A and SKY TORO TS50 added. 12x17-DCG
V6.17 Tekin RSPro Black, Tekin RSPro Black 1S, Orca B32LCG, Arrowmax Dash Al Comp Pro added. 31i18-DCG
                                      V6.18 MuchMore FletaPro V2 1S and Fleta Euro V2 added. 07viii18-DCG
                                                                 V6.19 SMC RF170 1S added. 18ii19-DCG
            V6.20 SMC RF170, ORCA OE1, R1 WURKS DIGITAL 3, And Tekin 272 firmware added. 18iii19-DCG
                          V6.21 Team Powers Radon Pro V4 2S and Reedy Blackbox 510R added. 20v19-DCG
                                                       V6.22 Hobbywing XR10 PRO G2 added. 17vi19-DCG
     V6.23 Tekin RSgen3,RSgen3 Spec RSXPro, RSpro BE,RSpro BE 1S, and 276 Firmware added 19vii19-DCG
                                     V6.24 Hobbywing XERUN XR10 PRO 1S Heavy Duty added 21ix19-DCG
                                             V6.25 Orca OE101 and OE1011S "STOCK" added. 11xi19-DCG
                                  V6.26 Radon Pro V4 200A 1S added 17ii20-DCG (This List Never Published)
                                                           V6.27 ORCA OE1011S "MOD" added 1iii20-DCG
                                                         V6.28 Reedy Blackbox 510R 1S added. ivv20-DCG
                                                              V6.29 Maclan M32tPro160 added viivi21-DCG
                TP-RADON PRO V4.1 LE, TP-MS RADON, TP-XPS Pro V3.0, and Pace-95R Added. vvii21-DCG
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