## CASTLE CREATIONS | 540 N. ROGERS RD. | OLATHE, KS 66062 | (913) 390-6939

1:10 SCALE ESC COMPARISON		COPPENIEND	EXTREME 1:10 SCALE WATERPROOF- ELECTRONIC-SPEED CONTROL
PRICE	\$	\$\$	\$\$\$
APPLICATION	1/10 <sup>TH</sup> SCALE VEHICLES WEIGHING UP TO 6.5 LBS (TOTAL VEHICLE WEIGHT).	1/10 <sup>TH</sup> SCALE VEHICLES WEIGHING UP TO 7.5 LBS (TOTAL VEHICLE WEIGHT).	1/10 <sup>TH</sup> SCALE VEHICLES AND 1/8 <sup>TH</sup> SCALE OFF- ROAD BUGGIES WEIGHING UP TO 9 LBS (TOTAL VEHICLE WEIGHT).
SENSORED CAPABLE	N/A	YES	YES
DATA LOGGING	N/A	DATA LOGGING LITE  BATTERY VOLTAGE, BATTERY  RIPPLE, CONTROLLER TEMP, MOTOR  RPM, MOTOR TEMP  Sample frequency - 1 or 5 samples per/sec	FULL DATA LOGGING  BATTERY VOLTAGE, BATTERY  RIPPLE, BATTERY CURRENT, CONTROLLER TEMP, INPUT THROTTLE, MOTOR POWER OUTPUT, MOTOR RPM, AUX WIRE MODE, BEC VOLTAGE, MOTOR TEMP  Sample frequency - 1, 2, 5 or 10 samples per/sec
AUXILIARY WIRE	N/A	N/A	YES
INPUT VOLTAGE	<b>2S-3S</b>	25-45	<b>2S-6S</b>
INTERNAL BEC	FIXED: 5.0 VOLTS (2A PEAK)	SELECTABLE: 5.5V OR 7.5V (6A PEAK)	ADJUSTABLE: 5.5V, 6.0V, 7.5V OR 8.0V (8A PEAK)
AUXILIARY WIRE	N/A	N/A	YES
CRYO-DRIVE™	YES	YES	N/A
PROGRAMMING OPTIONS	CASTLE LINK WINDOWS SOFTWARE AND CASTLE LINK USB ADAPTER, FIELD LINK CARD (LIMITED PROGRAMMING OPTIONS) OR WIRELESSLY WITH CASTLE B-LINK™ ADAPTER AND CASTLE LINK ANDROID OR IOS APP.		
COUPON INCLUDED?	N/A	YES, REDEEMABLE FOR FREE CASTLE LINK USB ADAPTER OR \$10 FIELD PROGRAMMING CARD	
SIZE (LXWXH) & WEIGHT	2.08" x 1.50" x 1.28" 64 g / 2.26 oz	2.19" x 1.39" x 1.33" 70.9 q / 2.50 oz	2.14" x 1.39" x 1.18" 101 g / 3.56 oz
CONSTRUCTION	WATERPROOF DESIGN, POTTED IN DURABLE INJECTION MOLDED CASE WITH 30MM REMOVABLE FAN.	WATERPROOF DESIGN, POTTED IN DURABLE INJECTION MOLDED CASE WITH 30MM REMOVABLE FAN AND DUAL USE FAN GUARD.	WATERPROOF DESIGN, POTTED IN RUGGED CNC ALUMINIUM CASE WITH TEMPERATURE REGULATED 30MM REMOVABLE FAN.
RUNNING MODES*	SENSORLESS BRUSHLESS AND BRUSHED MOTOR OPERATION	SMARTSENSE™, SENSORED ONLY; AND BRUSHED MOTOR OPERATION	

RECOMMENDED MOTORS**	14 SERIES (1406, 1410, 1412, 1415)	14 SERIES (1406,1410,1412, 1415)	14 SERIES (1406,1410,1412,1415) 15 SERIES (1515-2200, 1512-1800)
MOTOR CONNECTORS	4MM bullets	4MM bullets	4MM bullets
TELEMETRY COMPATIBLE	YES, REQUIRES PURCHASE OF TELEMETRY LINK FOR S.BUS2 (ITEM # 010-0152-00) AND COMPATIBLE FUTABA TRANSMITTER		
SERVICABLE ITEMS	ESC COOLING FAN	ESC COOLING FAN, RECEIVER HARNESS, SENSOR HARNESS	ESC COOLING FAN, RECEIVER HARNESS, WIRE HARNESS RETAINER, SENSOR HARNESS
ESC HIGHLIGHTS	The SIDEWINDER 4 SPORT 1:10 SCALE ESC builds upon Castle's most popular product family, SIDEWINDER 1:10 SCALE SERIES. The SIDEWINDER 4 (SW4) is a solid upgrade for a wide variety of 10th scale vehicles and is the first of its kind to include Castle's CRYO-DRIVETT technology with cutting-edge hardware and software advancements to increase thermal performance with COOLER TEMPS, LONGER RUNS and MORE POWER. SW4 offers a waterproof design, brushless and brushed motor support, and numerous programmable settings including throttle, brake curve, enhanced drag brake, punch control and more. Like every Castle ESC, the SIDEWINDER 4 is proudly designed and manufactured in the USA with American-made quality and Castle's "make-it-right" customer support!	The all-new COPPERHEAD 10 PERFORMANCE 1:10 SCALE ESC is ideal for those who want sensored motor support, data logging, a 6A peak selectable internal BEC (5.5V or 7.5V) and Castle's signature reliability and performance in the meanest looking ESC around! COPPERHEAD 10 will transform 1:10 scale stock vehicles from dull to dangerously fun with buttery smooth starts, CRYO-DRIVE enabled performance and up to 4S power in a compact, easy-to-install footprint.  The COPPERHEAD 10 will be offered with a dozen different Castle 4-POLE 12-SLOT brushless sensored motors to overpower most every application from crawling to bashing, on road and more!	The MAMBA X EXTREME 1:10 SCALE ESC, our flagship 1:10 scale ESC, is an incredibly robust and high-performance 2S-6S sensored controller. Encapsulated in a rugged, yet lightweight CNC aluminum case, the MAMBA X is ready for a wide variety of applications which demand premium features and the highest possible performance.  The MAMBA X includes a programmable auxiliary wire for adjusting driving parameters on-the-fly such as rock race / crawler mode, max power, torque control, drag brake, reverse and more. The MAMBA X also includes full data logging which measures up to ten different parameters up to ten times per second and has an internal 8A peak fully adjustable BEC (5.5V, 6.0V, 7.5V. or 8.0V).  These rich features combined with the smallest possible footprint enable the MAMBA X to offer the ultimate in versatility, reliability and pro-level performance!

- **\*** SMARTSENSE™ MODE FOR USE WITH A CASTLE SENSORED MOTOR AND ESC
- \*\* APPROPRIATE GEARING AND INPUT VOLTAGE REQUIRED!