

South Eastern Radio Controlled Car Club

Drivers Handbook

November 2021

SERCCC is an AARCMCC EP affiliated club

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1. Code of Conduct

1.1 Scope

1.1.1	This rule book has been put in place to ensure all members enjoy their hobby in a safe and fun environment.
1.1.2	This book applies to any person attending a club or event day using any part of the track or facilities.
1.1.3	The book has been designed to ensure the club moves in a positive direction to benefit all club members and those involved in this hobby.
1.1.4	The SERCCC Committee reserves the right to change / alter or update this book to benefit all members and non members alike, in accordance with the regulations stated in the Consumer Affairs Association Incorporation Reform Act 2012 (Model Rules for an Incorporated Association 2012)

1.2 Behaviour

- 1.2.1 The SERCCC Committee reserves the right to ask any person or persons to leave the facility if their behaviour is considered inappropriate.
- 1.2.2 In the event that a club members behaviour is inappropriate the committee may terminate that members current membership status. Undue rough driving, un-sportsman like behaviour, bad language, abuse of marshalls and officials, interference or abuse of other competitors will not be tolerated and considered as inappropriate behaviour.

1.3 Alcohol and Drugs

- 1.3.1 All club members, visitors, marshalls and drivers, are strictly prohibited from consuming or being under the influence of alcohol or illegal drugs during any race meeting, this will be considered as inappropriate behaviour.
- 1.3.2 Any drug related items found on the premises should not be picked up or touched in anyway. They should be reported to the committee who will remove and dispose of the dangerous items.

1.4 Participation

- 1.4.1 All members are expected to assist with helping setting up, packing up, and cleaning on race days and event days. This includes the following but not limited to: Track, canteen, race control, timing equipment, pit area, and all other areas of the club facility.
- 1.4.2 All members are expected to assist during working bees.
- 1.4.3 All members are expected to assist for some time during events.

1.5 Safety

- 1.5.1 Enclosed footwear MUST be worn by everyone within the race track area. No sandals, thongs or bare feet are allowed. If you can not wear the appropriate footwear for a medical reason, you can compete, but under no circumstances can you enter the race area.
- 1.5.2 No participant (Adult or Children) are to run, jump, swing off or over the drivers stand, ramps, steps, etc.
- 1.5.3 Only designated Marshalls can be on the track during a race and only to retrieve cars.
- 1.5.4 Drivers should be aware of where spectators are, and ensure they stay behind the barriers and clear of any danger. A safety check must be done by all participants before each race
- 1.5.5 Children under the age of 16 years must be accompanied by an adult.
- 1.5.6 At the end of the last race for any given race meeting or event all cars must be removed from the race track. Driving cars on the track is prohibited until the track area is cleared of volunteers who are packing up equipment.
- 1.5.7 All participants "MUST" charge LiPo batteries in a fire proof LiPo charge bag.

1.6 Cleaning

- 1.6.1 All participants are to assist with cleaning and the clearing of rubbish from facility.
- 1.6.2 Occasionally members may be asked to help the Volunteer canteen personnel with cleaning of cooking equipment restocking and any other general maintenance required.

1.6.3 All members are to help clean and sweep the pit area, track surface, race control room and any other area that may require attention as necessary.

1.7 Vandalism, Theft or Tampering

- 1.7.1 Anyone found vandalizing the facility in any way will be reported to the appropriate authorities.
- 1.7.2 Anyone found stealing from the club, members, visitors or spectators will be dealt with by the committee and reported to the appropriate authorities.

1.8 Discipline

- 1.8.1 Incidents that are detrimental to the clubs ethical standards or are contrary to this handbook shall be handled and dealt with at the discretion of the committee in accordance with the Association Incorporation Reform Act 2012 by form of verbal warning, written warning and suspension. Incidents will be recorded against the offender's membership and do not expire.
- 1.8.2 Before disciplinary action is taken against a member, the Secretary shall give written notice to the member stating that the club proposes to take disciplinary action against the member, stating the grounds for the proposed disciplinary action The member may choose to attend the disciplinary meeting and address the committee at that meeting or give a written statement to the committee at any time before the disciplinary meeting
- 1.8.2 A person whose membership rights have been suspended or who has been expelled from the club may give notice to the effect that he or she wishes to appeal against the suspension or expulsion.
- 1.8.3 A member who wishes to appeal, the notice must be in writing and given to the committee immediately after the vote to suspend or expel the person is taken or to the Secretary not later than 48 hours after the vote.

2. General Rules

2.1 Race Director

2.1.1 A Race Director and an Assistant Race Director will be rostered from the SERCCC Committee to run club meetings & Events.

2.1.2 The Race Directors have the authority to impose any penalty sanction or other ruling they see fit within these rules, and may consult with the committee as necessary, their decision is final.

2.2 Marshalling

2.2.1	Drivers are to Marshall the race immediately after theirs. Exceptions may be given to those with physical or medical conditions and juniors under the age of 10 years. However these exceptions require you to nominate a substitute Marshall to the race director prior to your race.
2.2.2	If you have a stand in Marshall, you must nominate the substitute Marshall to the race director prior to your race.
2.2.3	Drivers are to Marshall the race immediately after theirs as stated in 2.1.1, however you may be required to Marshall additional races if a particular class has too few drivers to adequately marshall their following race.
2.2.4	Marshalling positions are to be filled in number order as marked one each witches hat (i.e. 1 1st, 2 2nd, 3 3rd and so on).
2.2.5	Marshalls must take position in the nominated Marshalling location as these positions are crucial areas which often need attending to.
2.2.6	Marshalls are not required to repair cars on the track, If a car can be quickly fixed on the side of the track, this will be acceptable however if another car needs Marshalling during this time the Marshall must attend to the running car first and the broken car second.
2.2.7	In the event that a car is broken and not quickly repairable the Marshall must place the car off the track and only return the car once the current race is complete.
2.2.8	Track Marshalls only on the track during races.
2.2.9	Marshalls must not leave their position to hand drivers their cars until the current race is finished. Drivers must not retrieve their broken down cars from the track until the race is complete.
2.2.10	Marshalls are to get clear of the race track as soon as possible after attending a car.
2.2.11	Marshalls are not to put themselves in danger when a car needs attending. Wait until there is a clearing of on coming traffic before attending the car.
2.2.12	Marshalls must not sit on the track, eat, drink, smoke or be on the phone while marshalling.

2.2.13	It is the Marshalls responsibility before during and after each race to
	ensure all boards, pipes and barriers are in the correct positions.

- 2.2.14 Discrepancies are to be reported to the race director, and warnings or penalties will be awarded at the discretion of the race director.
- 2.2.15 Marshalls are to remain in position until the computer calls all drivers finished.
- 2.2.16 Failure to Marshall or provide a substitute Marshall will result in being ineligible to compete in the next round / final.
- 2.2.17 When Marshalling return the car as close as practical to its original location ensuring the area is clear of on coming traffic and pointing in the correct direction.
- 2.2.18 Do not stay on the track any longer than you have to as drivers can not see through you.
- 2.2.19 Watch your area, and not the race, a 5 seconds delay by a Marshall will cost a competitor good percentage a lap time. Attending to their car within a few seconds may save someone their track position during the race.
- 2.2.20 Marshall other's cars as you would have them Marshall your own.

2.3 Results & Championship Points

2.3.1	Results of each race will be posted upon the notice board at the completion of each race or as soon as practical.
2.3.2	Result sheets must not be removed by competitors, in the event it has been the competitor may be penalized at the race director's discretion.
2.3.3	Current paid up members will be rewarded championship points in their respective classes. Points will be awarded as follows: 1st place 100 points, 2nd place 99 points, 3rd place 98 points, & so on.
2.3.4	If a car does not complete a single lap in any race for the day, it will not receive any points.
2.3.5	Non-members will receive championship points, however they will not be eligible for championship trophies. There will not be a count back after memberships have been paid. With the exception of the summer series which trophies will be awarded to all members and non-members 1 st , 2 nd , and 3 rd .

2.3.6	The best 2 finals for each driver will count towards a round win, championship points will be awarded accordingly (Ref: 2.3.3)
2.3.7	Each class will have its own championship points. The class champion will be decided based on the best total number of rounds less the set number of dropped rounds round for each respective class. See 2.3.8 & 2.3.9
2.3.8	Summer series will drop 1 round worst round.
2.3.9	Other series will drop 2 to 4 worst rounds.
2.3.10	A class will count towards championship points if the minimum of three (3) competitors enter to compete it the class on the day.
2.3.11	A class will only receive championship trophies if four (4) or more rounds have been run for a series, 3 rounds for Summer series.
2.3.12	A member will only receive championship trophies if they have participated in (4) or more rounds for a specific class for a series, 3 rounds for Summer series.

2.4 Entry & Membership

2.4.1	Memberships are \$40.00 for seniors \$20.00 for juniors under 16, and \$60.00 for families (2 Seniors & 3 Juniors) on or before the 1st January.
2.4.2	Memberships are deemed valid from the date of joining the club to and including the December 31st of the current year.
2.4.3	Senior Members Entry fees are \$10.00 per class, \$5.00 for each additional class.
2.4.4	Junior Members Entry fees are \$5.00 per class, \$5.00 for each additional.
2.4.5	Entry fee for Members of other clubs \$15.00 per class, \$8.00 for each additional class.
2.4.6	Entry fee for Non-members \$15.00 1st class, \$8.00 for each additional class.

2.5 Radio Equipment and Frequencies

2.5.1 It is highly recommended that all drivers use 2.4GHz radio transmitters to eliminate problems of interference with fellow competitors.

2.5.2	Competitors using AM/FM radios MUST register their frequency
	during race registration.

- 2.5.3 Competitors using AM/FM radios must have at least 3 different radio frequencies available for each car they enter. Otherwise if a frequency clash cannot be resolved, priority will first go to club members.
- 2.5.4 Allowances will be made for new members, but a grace period of 3 months applies.
- 2.5.5 If there is a frequency clash in a particular race then it is the competitor's responsibility to rectify the "clash". Race control will make every effort to avoid such issues however the responsibility remains with each competitor.
- 2.5.6 The frequency number stamped on the transmitter crystal (metal case) must be able to be checked at any time without the use of tools.

2.6 Disputes & Protests

- 2.6.1 The Race Director will be responsible for the resolution of any rule dispute. SERCCC, and RCMA rulebooks will be consulted as required.
- 2.6.2 Protests must be taken up with the race director and race control. The race director may consult with the committee as required and the race director's decision is final.

2.7 Penalties & Sanctions

- 2.7.1 Reversing is not permitted at any time before during or after a race has finished, a penalty may apply if done so.
- 2.7.2 Any competitor who hits another competitor's car from behind is at fault and must pull to the side of the track and wait, allowing the innocent competitor to re-take their position in front of you, no matter how many other cars pass you during this time. A penalty may apply if you do not stop.
- 2.7.3 A stop-go penalty may be issued for the following reasons jumping the start, cutting through barriers, or un-sportsman like driving etc.
- 2.7.4 If you are given a stop-go penalty you must drive your car into the stop-go box the very next lap.

- 2.7.5 It is the race director's discretion to how long the competitor is held in the stop-go box, minor offence shorter periods and larger offences longer periods.
- 2.7.6 If a black flag is given to a competitor they MUST stop racing immediately. A black flag may be issued for dangerous driving, damaged car, lose body or parts, experience of radio interference, breach of classes rules, or bad behaviour as outlined in the code of conduct. Page

2.8 Driver's Briefing

- 2.8.1 A Drivers briefing will be held in front of race control approximately 10 minutes before the beginning of a race meeting
- 2.8.2 All drivers MUST attend the drivers briefing, drivers arriving late will be allowed to race ONLY after seeing the race director.

2.9 Racing

2.9.1	Race entries must be paid prior to your first race.
2.9.2	Cars are not allowed to run solid bumpers
2.9.3	Any repairs must be carried out in the appropriate area and does not exempt you from marshalling.
2.9.4	Club transponders may only be picked up from race control at the 2 minutes remaining warning of the race prior to your own.
2.9.5	All club transponders must be returned immediately after your race finishes.
2.9.6	A club transponder must be mounted in a way so that it is completely protected by the car body, it will not be easily dislodged in a crash, and the mounting post will not scrape on the ground during a rollover.
2.9.7	If the club transponder does fall out during a race or your personal transponder fails to register, your car will not be manually lap counted and any damage to the transponder caused from due care not being taken will be paid for by the driver.
2.9.8	Transponders should be mounted as close to the front of the car as possible and as far away from receivers, speed controls, carbon fibre and aluminium as possible.
2.9.9	Competitors must register for racing at race control prior to the drivers briefing

- 2.9.10 Once racing has commenced the timing system will not be paused unless absolutely necessary.
- 2.9.11 The start of any race will not be delayed due to competitors not being ready.
- 2.9.12 Reverse is NOT to be used before during or after any race.
- 2.9.13 A class will not run if there are less than 3 competitors for its class.
- 2.9.14 A class will not be eligible for a championship if it has not completed 4 rounds for the current season.
- 2.9.15 A competitor may compete in a different class if a class is not running on a race day, however this will not count towards championship points, nor be eligible for championship points in the alternative class it has been allocated to.
- 2.9.16 Race format will consist of 2 qualifying rounds and 3 final rounds.
- 2.9.17 Maximum of 10 cars per race.
- 2.9.18 Only Drivers of the current race are allowed on the drivers stand.
- 2.9.19 In the event of 11 or more cars per class, the class will be split into A and B. Cars in B qualifying heat can qualify for A final, depending on results. Cars in each class will be split evenly between heats. For example, if there are 13 cars in a class there will be 7 in heat A and 6 in heat B.

2.10 Scrutineering

2.10.1	After each race all cars that start the race must be placed on the scrutineering table once the race is complete
2.10.2	The cars need to remain there until the next race has been completed. This is to allow the cars to be scrutineered by race control.
2.10.3	Check that transmitters are turned off, and that club transponders have been returned.

2.10.4 A club appointed scrutineer will make checks as required

2.11 Rain Days

- 2.11.1 The race meeting will be declared a Rain Day and cancelled if the first race hasn't started by 11:00am. Entry fees will be held over for the next race meeting.
- 2.11.2 In the event of rain during a race meeting points will be awarded to all finals that have been run up until the rain began. If prior to Finals points will be awarded to the best combined position of qualifiers which have been run.

3. Class Specifications

3.1 General

- 3.1.1 In case of the rules below not allowing a specific modification it will be assumed to be disallowed in all cases.
- 3.1.2 For all other technical specifications not listed below, cars and batteries must meet guidelines as per AARCMCC rule book.
- 3.1.3 Cars will be assigned to classes that they are most suited. If they do not meet all the specifications for that class, then they will be able to compete, but will not receive championship points. The aim will be to let all types of cars compete. However the final decision will be up to the Race Directors.

3.2 Dimensions

- 3.2.1 For all touring car classes the maximum body width is 190mm and designed specifically for touring cars. There are no width limits for Mini, Formula 1
- 3.2.2 All touring car classes the maximum wing height can not exceed the roof height

3.3 Weight

- 3.3.1 The minimum weight for all touring cars is 1350g ready to run with transponder.
- 3.3.2 The minimum weight for mini class is 1330g ready to run with transponder.

3.4 Batteries

- 3.4.1 Any approved 6 cell NiCad or NiMH battery or Any 2 cell hard-case approved 7.4V LiPo ro LipoHV packs as listed on the ROAR website
- 3.4.2 All LiPo batteries MUST be charged in Lipo safe bags.

3.5 Tyre Treatment

3.5.1	Tyre treatment is allowed for all classes.
3.5.2	The use of any tyre treatment containing oil of wintergreen is forbidden.

3.6 (A) Novice combined with (B) 21.5T Junior Sportsman

(A) Novice (open to all ages)

- This class is designed for beginners and inexperienced drivers, most chassis are eligible to enter into this class providing they are On-road 1:10 scale electric RC cars.
- Any competitor entering this class with a touring car or mini will eventually be moved to the closest matching class for their RC car.
- Mini class cars must meet Mini class rules (Ref: 3.12)
- Experienced drivers CAN NOT enter novice class.

(B) 21.5 Junior Sportsman (13 years of age and under only)

 Chassis Chassis is open to all four wheel drive shaft or belt driven IFMAR legal ISTC 190mm touring cars.
 Motor Turnigy TrackStar 21.5T 1855KV sensored brushless motor. P/N:9192000034 ONLY. Motor end bell timing must be set to Zero "0". No motor modifications are allowed.

Note: Motors are available from: Hobbyking Australian Warehouse.

https://www.hobbyking.com/hobbyking/store/ 54843 Turnigy TrackStar 21 5T Sensored Brushless Motor 1855KV AU Warehouse .html

Body Shell Any 4 door sedan body shells.

Tyres	Rubber tyres only (24mm)
Hop-Ups	Any hop up available from any manufacturer.
ESC	Any ESC that does not have Dynamic timing ie; boost or turbo timing options, or any ESC that has a "Blinky" mode ie; a flashing light denotes that no dynamic timing is enabled, is allowed.
Batteries	Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
Gearing	Gearing is fixed to no less than 4.5 final drive ratio (FDR)
Weight	Minimum 1350 grams ready to run including transponder

3.7 1/10th ISTC Sportsman – 2S 21.5t non-boosted Brushless

Chassis	Two-wheel drive to front or rear wheels or four-wheel drive is allowed. Chassis must have independent suspension on all four wheels. Each driven wheel must have a flexible joint, eg: dog bone/s or universal joint/s in its driveshaft. Drive train and suspension design is free from restriction. Flat Pan (1/12th and 1/10th Track Style) chassis are not allowed. The Chassis must not be shaped to gain an aerodynamic advantage. In principle the underside of the chassis must be flat and parallel to the ground along the entire length of the body-shell. Aerodynamic shaped parts (splitters/diffusers/tunnels/etc) may not be fitted to the chassis.
Motor	Any ROAR or BRCA approved motor. All brushless motors for the Stock class will be wind rating of 21.5 turns, clearly indicated by the manufacture on the external casing.
	Stator, Stock Motor: Only three slot "Y" wound stators are permitted. No delta wound or slot less stators are allowed. Only circular (round) pure copper magnet wire permitted. The three slotted stator must be wound with 21.5 turns of 2 strands of a maximum diameter of 0.0724 mm per slot.
ESC	Speed Controllers as per ROAR BRCA list. Speed controllers eligible for Stock classes must provide zero timing advance, along with disabling advanced motor control functions (i.e. Boost, Cheat Mode, Turbo, etc). When the "0 Boost" profile is enabled, it shall be indicated by a blinking LED while the ESC is armed and in neutral position.
Body Shell	4 door sedan style bodies are allowed that are currently on the IFMAR, EFRA or ROAR body listings, and fit within the GLOBAL BODY SPECIFICATIONS for electric touring cars.

Tyres	Rubber tyres only (24mm)
Hop-Ups	Any hop up available from any manufacturer.
Batteries	Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
Gearing	Gearing is not restricted.
Weight	Minimum 1350 grams ready to run including transponder

3.8 1/10th ISTC Stock – 2S 13.5t non-boosted Brushless

Chassis	Two-wheel drive to front or rear wheels or four-wheel drive is allowed. Chassis must have independent suspension on all four wheels. Each driven wheel must have a flexible joint, eg: dog bone/s or universal joint/s in its driveshaft. Drive train and suspension design is free from restriction. Flat Pan (1/12th and 1/10th Track Style) chassis are not allowed. The Chassis must not be shaped to gain an aerodynamic advantage. In principle the underside of the chassis must be flat and parallel to the ground along the entire length of the body-shell. Aerodynamic shaped parts (splitters/diffusers/tunnels/etc) may not be fitted to the chassis.
Motor	Any ROAR or BRCA approved motor. All brushless motors for the Stock class will be wind rating of 13.5 turns, clearly indicated by the manufacture on the external casing.
	Stator, Stock Motor: Only three slot "Y" wound stators are permitted. No delta wound or slot less stators are allowed. Only circular (round) pure copper magnet wire permitted. The three slotted stator must be wound with 13.5 turns of 2 strands of a maximum diameter of 0.0724 mm per slot.
ESC	Speed Controllers as per ROAR BRCA list. Speed controllers eligible for Stock classes must provide zero timing advance, along with disabling advanced motor control functions (i.e. Boost, Cheat Mode, Turbo, etc). When the "0 Boost" profile is enabled, it shall be indicated by a blinking LED while the ESC is armed and in neutral position.
Body Shell	4 door sedan style bodies are allowed that are currently on the IFMAR, EFRA or ROAR body listings, and fit within the GLOBAL BODY SPECIFICATIONS for electric touring cars.
Tyres	Rubber tyres only (24mm)
Hop-Ups	Any hop up available from any manufacturer.

Batteries	Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
Gearing	Gearing is not restricted.
Weight	Minimum 1350 grams ready to run including transponder

3.9 1/10th ISTC Modified – 2S Open Brushless

- Chassis Two-wheel drive to front or rear wheels or four-wheel drive is allowed. Chassis must have independent suspension on all four wheels. Each driven wheel must have a flexible joint, eg: dog bone/s or universal joint/s in its driveshaft. Drive train and suspension design is free from restriction. Flat Pan (1/12th and 1/10th Track Style) chassis are not allowed. The Chassis must not be shaped to gain an aerodynamic advantage. In principle the underside of the chassis must be flat and parallel to the ground along the entire length of the body-shell. Aerodynamic shaped parts (splitters/diffusers/tunnels/etc) may not be fitted to the chassis.
 Motor Only Brushless motors approved by IFMAR, ROAR, EFRA or BRCA may be used
- **Body Shell** 4 door sedan style bodies are allowed that are currently on the IFMAR, EFRA or ROAR body listings, and fit within the GLOBAL BODY SPECIFICATIONS for electric touring cars.
- Tyres Rubber tyres only (24mm)
- **Batteries** Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
- Hop-Ups Any hop-up from any manufacturer.
- Gearing Unrestricted gearing
- Weight Minimum 1350 grams ready to run including transponder

3.10 Formula One

Chassis Any commercially available 1:10 scale rear wheel drive F1 or Indy Car chassis with a T-bar, Pivot Ball Link or independent rear suspension. 4WD's must have drive to the front wheels disabled. Any hop ups specifically available for that chassis are allowed. Modellers may build their own Chassis following the rules in the "Appendix – Custom Chassis".

- Motor Any 21.5 turn brushless motor with any rotor. Any end bell timing is allowed. Brushed: Any 540 size 27 turn Johnson or Mabuchi silver can motor which may not be modified or tampered with in any way.
 ESC Any ESC that does not have dynamic timing i.e.; boost or turbo timing options, or any ESC that has a Blinky mode i.e.; a flashing light denotes that no dynamic timing is enabled, is al lowed.
 Body Shell Any F1 body shell. Painting your shell in past or current full scale F1
- **Body Shell** Any F1 body shell. Painting your shell in past or current full scale F1 team colours is encouraged but any paint scheme is allowed. Driver head / helmet must be fitted. Painting of the driver's helmet and overalls is encouraged.
- Wings Any wing designed for the chassis or body shell in use is allowed. Touring Car wings may not be used. Custom built wings are only allowed on a Custom Built Chassis (refer to Appendix). Width Maximum width 205mm.
- Weight Minimum weight 1000g (with transponder).
- Tyres Tyres Rubber or Foam F1 tyres. No wheels or tyres manufactured for a class other than F1 may be used unless the manufacturer lists it as the primary wheel/tyre for that chassis eg; Corally. Guidance to clubs: Rubber tyres are recommended, however, it is recognised that foam tyres are more practical for some surfaces including; car pet tracks that do not use traction compound, astro turf and some other surfaces. It is recommended that a track specify either Rubber tyres, or Foam tyres, when running an event.
- **Batteries** Any 2S hard case lipo that has ROAR or BRCA approval as stated in AARCMRCC rules or 6 cell Nimh or Nicd battery.
- **Driving Aids** No electronic driving aids (steering control by gyroscope, Drag Reduction System, wheel speed sensors, etc). Transmitter functions are allowed.
- Gearing Unrestricted gearing

3.11 Mini

<u>AUS R/C MINI Racers</u> <u>Weblink</u> June 14 · • Ruleset for Vic Mini racing, current as of 27/06/17

Chassis Eligible chassis – Tamiya M03/M05/M07 (M07 legal Oct 16 / 2017) series "Front Wheel Drive" chassis only, assembled as per Instruction Manual.

> No chassis/power train modifications allowed, with the exception of the differential which may be of any style (eg spool, ball diff, open

	gear diff, or sealed gear diff, except one way), from any manufacturer. Specifically excluded is the Yeah Racing TAMC-023 Diff, its use is prohibited.
Motor/ESC	Motor/ESC Combo – Hobbywing Max 10 Combo – 60 Amp ESC Model No 30102602, 3300kv Motor Model No 30402600 Or - 13T/3000KV Hobbywing OEM or re-branded COMPLETE SYSTEM with max 60 amp ESC and engraved /etched can. No modifications are permitted to motors. 3400kv max when tested.
Body Shell	Body shells are open, with the following restrictions – No Post 1980 4 door Touring Sedans, or 12th scale type Wedge/Can-am bodies
Tyres	Any commercially available rubber mini-sized tyre, in any combination and/or compound, with any insert.
Gearing Pini	on 20 Tooth pinion max
Batteries –	Any 2S, Hard-cased 7.4 Lipo packs that will fit the mini chassis (without modification to pack or chassis)
Minimum we	ight limit of 1330 grams (with transponder).

4WD Mini

Eligible chassis – Any standard M-Chassis-sized (210-240mm WB) 4WD Chassis		
Wheels/Tires –	Any commercially available rubber mini-sized tire, in any combination and/or compound, Max 60mm OD.	
Bodies –	Body shells are unrestricted	
Gearing Pinion -	No gearing restrictions	
Motor/ESC Combo	 Hobbywing Max 10 Combo – 60 Amp ESC Model No 30102602, 3300kv Motor Model No 30402600 Or - 13T/3000KV Hobbywing OEM or re-branded COMPLETE SYSTEM with max 60 amp ESC and engraved /etched can. No modifications are permitted to motors. 3400kv max when tested. 	
Batteries –	Any 2S, Hard-cased 7.4 Lipo packs.	
Weight	No Minimum weight limit	

3.12 17.5 GT PLEASE NOTE:

17.5 GT Class is not a sanctioned class and may not be run at all special events. Should you wish to compete at special events we recommend selection 21.5 Sportsman, 13.5 Stock, or Open. This class is based on a gentleman agreement to run the below specifications at club level.

Chassis	1/10th Scale Four-wheel drive is allowed. Chassis must have independent suspension on all four wheels. Each driven wheel must have a flexible joint, eg: dog bone/s or universal joint/s in its drive shaft. Drive train and suspension design is free from restriction.
	Flat Pan (1/12th and 1/10th Track Style) chassis are not allowed. The Chassis must not be shaped to gain an aerodynamic advantage.
	In principle the underside of the chassis must be flat and parallel to the ground along the entire length of the body-shell. Aerodynamic shaped parts (splitters / diffusers /tunnels/etc) may not be fitted to the chassis.
Motor	Muchmore Racing - Fixed Timing Spec Motor. FLETA ZX 17.5T Type W Brushless Motor with Zero timing.
	or Muchmore Racing - Fixed Timing Spec Motor. FLETA ZX V2 17.5T with standard rota - Brushless Motor with Zero timing.

Motor Modifications:

NO! modifications are allowed in any way at all. This includes any enhancements, improvements, tuning up, shimming, ceramic Bearings, Timing and winding alterations. **The Motor to be run is out of the box as is and tampering in any way at all is NOT ALLOWED!** General cleaning of motor and lubricating of original bearings is allowed.

Gearing Fixed Gearing - is to be set to 3.5 or as close as possible FDR

ESC Speed Controllers as per ROAR BRCA list. Speed controllers eligible for Stock classes must provide zero timing advance, along with disabling advanced motor control functions (i.e. Boost, Cheat Mode, Turbo, etc). When the "0 Boost" profile is enabled, it shall be indicated by a **blinking LED while the ESC is armed and in neutral position**.

Body Shell 2 Door GT Style Bodies ONLY - 190mm

- Tyres Volante 36 Rubber tyres only (24mm)
- **Hop-Ups** Any hop up available from any manufacturer.
- **Batteries** Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
- Weight Minimum weight 1350 grams

3.13 17.5 Blinky

PLEASE NOTE:

17.5 Blinky is not a sanctioned class and may not be run at all special events. Should you wish to compete at special events we recommend selection 21.5 Sportsman, 13.5 Stock, or Open. This class is based on a gentleman agreement to run the below specifications at club level.

Chassis

Two-wheel drive to front or rear wheels or four-wheel drive is allowed. Chassis must have independent suspension on all four wheels. Each driven wheel must have a flexible joint, eg: dog bone/s or universal joint/s in its driveshaft. Drive train and suspension design is free from restriction. Flat Pan (1/12th and 1/10th Track Style) chassis are not allowed. The Chassis must not be shaped to gain an aerodynamic advantage. In principle the underside of the chassis must be flat and parallel to the ground along the entire length of the body-shell. Aerodynamic shaped parts (splitters/diffusers/tunnels/etc) may not be fitted to the chassis.

Motor	Any ROAR or BRCA approved motor. All brushless motors for the Stock class will be wind rating of 17.5 turns, clearly indicated by the manufacture on the external casing.
	Stator, Stock Motor: Only three slot "Y" wound stators are permitted. No delta wound or slot less stators are allowed. Only circular (round) pure copper magnet wire permitted. The three slotted stator must be wound with 17.5 turns of 2 strands of a maximum diameter of 0.0724 mm per slot.
ESC	Speed Controllers as per ROAR BRCA list. Speed controllers eligible for Stock classes must provide zero timing advance, along with disabling advanced motor control functions (i.e. Boost, Cheat Mode, Turbo, etc). When the "0 Boost" profile is enabled, it shall be indicated by a blinking LED while the ESC is armed and in neutral position.
Body Shell	4 door sedan style bodies are allowed that are currently on the IFMAR, EFRA or ROAR body listings, and fit within the GLOBAL BODY SPECIFICATIONS for electric touring cars.
Tyres	Rubber tyres only (24mm)
Hop-Ups	Any hop up available from any manufacturer.
Batteries	Any 2 cell Hard-cased approved 7.4 Lipo packs as listed on the ROAR or EFRA websites.
Gearing	Gearing is not restricted.