# International regulations RC-Bike 2013

## 1 Constructionrules

## 1.1 Scale

Motorcycle 1/5th scale

#### 1.2 Sizes

Wheelbase:

Maximum distance between axles: 320mm. Minimum distance between axles: 280mm.

Height of the bike including rider: Maximum height limit: 300mm. Minimum height limit: 240mm.

Back wheel diameter (including tire):

Maximum limit: 135mm. Minimum limit: 120mm.

Front wheel diameter (including tire):

Maximum limit: 120mm. Minimum limit: 105mm.

## 1.3 Appearance

The global aspect of the motorcycle must be realistic with a complete painted body shell including a painted rider with hands, feet and helmet.

Fairing, body shell and rider parts must fit a 1/5th scale size.

During the championship, the rider appearance must be complete for each race start.

Wheels with solid centre are not allowed.

## 1.4 Tires/Wheels

The tires must be:

Specifically designed for 1/5th scale motorcycle use.

Commercially available.

In black rubber with the exception of the sidewall.

New Tires must be available to everyone 30 days before the Warm-Up race.

Tires must feature an embossed manufacturer ID on the sidewall.

Every type of tire insert is allowed.

Foam tires are prohibited.

Only non-smelling tire additive is allowed except if prohibited by regulations of the track.

Tire additive has to be applied outside of the pits, in a designated area.

Tire warmers are allowed for all racing classes.

## 1.5 Transmission

Chain or belt drive is allowed.

Direct drive is prohibited.

## 1.6 Aerodynamics

Any aerodynamic add-on which does not conform to the real aspect of the represented real model is prohibited.

#### 1.7 Exhaust

The exhaust system must be fitted on the motorcycle in such a way that the risk of injury to mechanics and marshals is minimized.

#### 1.8 Crashbars

The crash bars must not be dangerous for the marshals.

The system to fix the crash bars to the chassis must not be articulated (use of hinges, springs, dampers is prohibited).

The system to fix the crash bars on the chassis can allow adjustment of the length of the crash bar.

Allowed systems:

Standards bars (nylon, steel) with one or two fixing points on each side.

Wheel based system.

Specifications for use of a wheel based system:

Maximum wheel diameter: 20 mm.

Material of the wheels used as crash bars must not give any adherence to the bike when in contact to the track: wood, steel, hard plastic are allowed while foam or O-rings are forbidden.

# **2 Racing Classes**

#### 2.1 Stock Bike:

Chassis	Choice of the chassis is free. It must be in accordance with the rules described in § 1.
Motor	1/10 Competition MMM series 13.5R Brushless #SP000038
	The motortiming must be fixed in middleposition. Any modifications of the motor is
	prohibited.
	Sensor-Unit: #SP000034
	Rotor: #RS13802
ESC	Cirtix Stock Club Race ESC #12280
Batteries	Every kind of NiMh, NiCd, LiPo and LiFe batteries up to 7.4V nominal Voltage are allowed.
	The voltage per cell must not exceed 4.27V. Random checks will be made before the start.
Weight	The minimum admitted weight is 1900g
Brake	The only braking system allowed is on the back wheel over ESC brake. Any other system
system	or mechanical brake on front or back wheel is prohibited.

Gearing	Free
TYRES	From Qualification on only 2 sets of "200 PMT Cuts" marked by technical inspection
	(marking all sets before beginning the Qualification)

## 2.2 Super Bike

Chassis	Choice of the chassis is free. It must be in accordance with the rules described in § 1.
Motor	Any type and size of motor is allowed.
ESC	ESC is free
Batteries	Every kind of NiMh, NiCd, LiPo and LiFe batteries up to 7.4V nominal Voltage are allowed.
	The voltage per cell must not exceed 4.27V. Random checks will be made before the start.
Weight	No weight limit.
Brake	Mechanical front and rear brakes are allowed.
system	
Gearing	Gearing is free.

## 2.3 Nitro Bike

Chassis	Choice of the Chassis is free. It must be in accordance with the rules described in § 1.
Motor	2 Stroke: maximum size is 3.5 CC
	4 Stroke: maximum size is 10 CC
Weight	No weight limit.
Brake	Mechanical front and rear brakes are allowed.
system	
Gearing	Gearing is free.
Gear	2 stroke engine < 2.11 cm <sup>3</sup> : gear box allowed
box:	2 stroke engine >= 2.11 cm <sup>3</sup> : gear box prohibited
	4 stroke engine: gear box allowed
Tank	There is no tank size limit
size	
Exhaust	Any driver facing an exhaust system failure during a race or timed practice must
system:	immediately go back to the pits to have the problem resolved. Further laps with a risky
	bike and/or noisy engine will make the result of such race invalid after first warning
	decided by the Race Director or Referee, whose decision is final.

# 3 Racing Rules

# 3.1 Free Practice (ALL CLASSES)

10 bikes on the track is a maximum during free practice.

To determine the training series, the result of the previous RC bike world championship will be used.

New entrants will be added in alphabetical order at the end.

The three best Laps in consecutive order will give the start positions for qualifying runs.

## 3.2 Race order and duration

#### 3.2.1 ALL CLASSES

Training and qualifying runs will be started by in "flying start" type.

Sub-finals and finals will be hand-started in the order of the start formation after qualifying at the start-finish line excepted for electric finals where the start order will remain the same for the 3 finals

based on the result of semi-finals.

The finals will be started in "Le mans" type with a 3 meter interval between each bike.

30 second warning at which time all bikes must be present for the starter to assemble the grid will be applied. Missing numbers or late arrival at the grid will result in a start from the back of the grid.

#### 3.2.2 ELECTRIC BIKES

Duration of each qualifying run will be 8 minutes. The best one counts.

Duration of the sub-finals and finals will be 10 minutes.

Sub-finals before semi-finals will be started one-time A and B. The 3 best drivers from each sub-final A and B go up to the next level (A-1/32 to A- 1/16 to -A- 1/8; B-1/32 to B- 1/16 to B- 1/8 and so on).

Semi-finals will be started 3 times and the 2 best results count.

The 5 first semi-finalists of each semi-final A and B move up to the Final grid to positions 1 to 10.

Main finals will be held 3 times and the 2 best results count.

Point system will be used for the semi-finals and the finals for Electric bikes

For example: First position in semifinal A is Pole in the Final, first position semifinal B is second position in the final, second position semifinal A is 3<sup>rd</sup> position in the final, Second position semifinal B is 4<sup>th</sup> position in final and so on.

#### 3.2.3 NITRO BIKES

Duration of each qualifying run will be 8 minutes. The best one counts.

Duration of sub-finals will be 10 minutes.

Sub-finals before semi-finals will be started one-time A and B. The 3 best drivers from each sub-final A and B go up to the next level (1/32 - 1/16 - 1/8 etc.).

Duration of the semi-final A and B will be 20 minutes. One refuelling is mandatory.

Duration of the final will be 30 minutes. One refuelling is mandatory.

Each (sub-/semi-) final will be started one-time.

The 4 first semi-finalists of each semi-final A and B move up to the Final grid to positions 1 to 8. Position 9 and 10 will be determined by the fastest time of the 12 remaining semi finalists.

## 3.3 Race timing:

Timing / race timing schedule / rolling forward procedure / warning time will be defined and communicated in ADDENDUM.

#### 3.4 Penalties

As, depending on the track, it can remain quite difficult for RC bikes to pass through the pits, penalties for Jumpstart, Shortcutting or Unfairness will be applied as time reduction and not with a pass through or stop go penalty:

#### Jumpstart:

10 seconds will be added during the race (qualifying heats and or finals)

#### Shortcutting:

1 lap will be reduced during the race (qualifying heats or and finals)

No immediate return to the pits while running a bike experiencing a failure risky for marshals" physical integrity (exhaust system failure, burning batteries...):

Cancellation of the heat after first warning.

Negligence of marshaling duty:

1 lap will be reduced from the best race.

**Unfairness:** 

10 seconds will be added during the race (qualifying heats or and finals),

#### 3.5 Miscellaneous

#### 3.5.1 Language

Official Language during the Event is English.

#### 3.5.2 Marshals

Marshal technique, duties and etiquette will be specified at the drivers briefing at which attendance is mandatory for all entrants.

Marshals must wear high visibility jackets and security gloves. Fluorescents jackets and gloves will be provided by the organization and are available at each marshalling point.

Marshals must recover and launch the machines as instructed at Drivers Briefing.

Marshals must be in place by the announcement of 2 minutes prior to race start, and remain in position until Race Control indicates that the race is over and all vehicles have finished.

Penalties (ranking of penalties at discretion of the Race Director from time penalty to exclusion of the meeting) will be made for being late or absent at the marshall position or leaving the marshal before the "Race-Over-Signal. The race will not start before every marshal is in place.

## 3.5.3 Other Specifications (Transponder, "Lipo-safe-bag" etc.)

Use of a personal transponder is mandatory. The same transponder number can be used in different categories. Fixing a damage of the model on the race track is strictly prohibited.

Always follow the assignments of the race director.

Each bike goes directly from the track to the technical inspection after each race.

## 4 Radio

Every type of remote control which is commercially available is allowed if it is according to the rules for radio equipment used in the country of the World Championship.

#### 5 Protests

Protests:

Appreciation is to give the drivers the possibility to demand on the adherence by the rules.

The Team manager committee will decide about the submitted protests by simple voting. Protest can only be submitted by the concerned driver. Protest must be submitted written lately 15 minutes after the last run. The protest must be submitted to the own Team manager first.

The Team manager informs the Race director and he will call a Team manager Meeting. Protest charge is € 25,00.

Is the protest declined by the Team managers, the protest charge will be deducted.

If the protest is approved, the protest submitter will get the protest charge back.

Against this decision no more protest is allowed.

The decision of the Team manager committee is final.

Protests must be decided immediately by the Team manager Committee.

For example: There is a protest because of violation against the rules in 1/8 Final B. If the decision is positive the up climbers would change. That means the decision must be made before the start of the 1/4 final B.

## 6 Position on the rostrum

Starting at the finals the fastest driver after qualification has free position choice at the rostrum, then the second fastest, then the 3rd fastest and so on.

# 7 Changing rules:

Changing the rules during the event is prohibited.

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