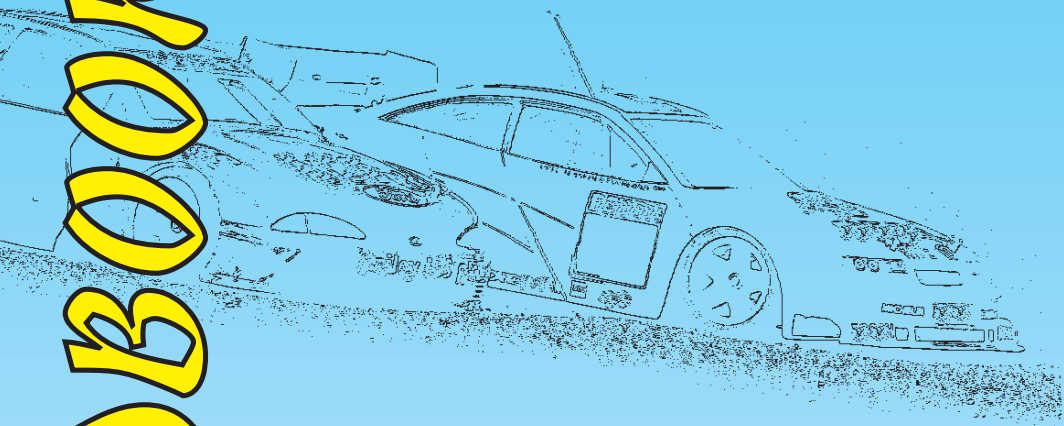


# HANDBOOK 2009



## *Appendix 6*



*European Federation of  
Radio-Operated  
Model Automobiles*

# APPENDIX 6

## 1/10TH I.C. TRACK CARS

### 1 GENERAL

The EC 40+ for 1/8ths scale will be combined with the open EC for 1/10th IC Track (235mm), (open drivers of all ages).  
One special EFRA medal will be awarded to the fastest driver under 17 years of age, so that everybody of 16 years, during the race dates, of younger, can compete for this medal.

### 2 RACING FORMAT EFRA EUROPEAN CHAMPIONSHIPS AND GRAND PRIX

See point 2.2 till 2.9 Appendix 7: 1/10th 200 MM SCALE IGNITION TRACK CARS

### 3 TRACK SPECIFICATIONS

See point 3.1 till 3.17 Appendix 7: 1/10th 200 MM SCALE IGNITION TRACK CARS

### 4 RACE PROCEDURES 1/10 235MM

See point 4.1 till 4.8 Appendix 7: 1/10th 200 MM SCALE IGNITION TRACK CARS

### 5a TECHNICAL INSPECTION

See point 5.18 till 5.19 Appendix 7: 1/10th 200 MM SCALE IGNITION TRACK CARS

### 5b TECHNICAL SPECIFICATIONS

#### 5.1. GENERAL ENGINE RULES

The engine shall be air-cooled with front rotary shaft valve. Two stroke induction type and may have a maximum of six (6) gas ports including the exhaust port. The outer edge of the piston must be the highest point of the piston itself, no form of forced induction is allowed or any form variable port timing. Only glow plug ignition is permitted. No holes in the piston are allowed.

#### 5.2. ENGINE DIMENSIONS

Any engine up to max 2.5 ccm allowed.

#### 5.3. FUEL TANK

The fuel tank including filter and fuel pipes up to the carburettor may hold a maximum of 75,00 ccm No loose inserts allowed.

#### 5.4. MUFFLERS

An EFRA homologated muffler, not producing more than 80 dB's at 10 meters distance and 1 meter high on a car equipped with an INS box, must be fitted. In case of water on the track the INS box may not be compulsory. The decision to be made by the race director and published on the result sheet.

This muffler must have the following dimensions:

Tail pipe maximum internal diameter (*)	5,20 mm
Tail pipe minimum length	15,00 mm

The tail pipe must be oriented n or below the horizontal.

(\*) This dimension includes a tolerance to account for manufacturing variations in commercially available tubing.

The EFRA homologation number must be engraved on the sidewall of the muffler. The homologation specification (dimensions) of the INS box for scrutinizing purposes can be found at the end of Appendix 8.

5.5. OVERALL DIMENSIONS

	Minimum	Maximum
Wheel base	206,00 mm	280,00 mm
Track width		250,00 mm
Overall length		490,00 mm

5.6. WEIGHT

The weight limit will be checked with the cars ready to race, but with empty fuel tanks and including a transponder.

"15" engine size minimum weight: 1.950,00 grams.

5.7. FUEL

Fuel may only contain methanol, oil/lubricant and nitro methane. The specific gravity of the mixture may not be heavier than 0,87. Based on normal oil densities, this will give a maximum of 16% nitro. Verifying this will be done by a simple floater, called nitromax 16 which is commercially available. If the fuel is not within the specifications of this rule, the driver is immediately disqualified for the rest of the event.

5.8. TYRES

Tyres must be black, except for side wall detailing.

Tyre diameter front 75,00 mm maximum

Tyre diameter rear 80,00 mm maximum

Tyre width front 31,00 mm maximum

Tyre width rear 52,00 mm maximum

No tyres additives or cleaners allowed.

5.9. RIMS

Maximum diameter for front and rear rims is 51,00 mm.

An edge to reinforce the rim on the inside of 2,00 mm thickness and 3,00 mm height is allowed, flange diameter max. 57,00 mm. Any fixing bolts or other equipment installed in the wheel rims, may not extend beyond the exterior of the rim.

5.10. BODIES AND WINGS

EFRA approved Porsche GT3 bodies only. One cooling hole may be cut in the front windscreen with a maximum dimension in any direction of 50,00 mm. Only the front side windows and the rear window may be removed, partly or totally, other windows must remain clear.

All parts of the vehicle must be covered, except:

- Aerial (max. 10,00 mm).
- Outlet pipe of muffler (reasonable clearance).  
Only if these parts are extending the body.

In addition to this the following holes are allowed:

- For muffler outlet.
- For re-fuelling (max. 30,00 mm).
- For glow plug (20,00 mm).
- Fuel mixture valve (max. 10,00 mm).

Rear of the body may not be cut away higher than 45,00 mm, measured with a 10,00 mm spacer under the chassis plate, and rear sidelight details must remain. Roll-bars must be kept under the body.

Wings are allowed only if fitted to original car, and must be in the original position and may not project above the height of the roof line.

Side dams may be fitted but must be a reasonable representation of those fitted to the original car and may not be wider than 55,00 mm and higher than

25,00 mm, fit in a rectangle with these measurements, and may not project the height of the roof line.

	Maximum
Wing width	233,00 mm
Wing chord	55,00 mm

(20,00 mm extension is allowed, but must be clear and unpainted and still may not project above the height of the roof line).

A level meter should be used to verify that wings and the allowed 20,00 mm extension do not project above the height of the roof line with a 10,00 mm spacer under the chassis plate on level.

Cars must be equipped with a flexible "plastic" bumper to minimize injuries. The bumper may not protrude outside the body.

5.11. GENERAL

The cars will be 2wd or 4wd driven. Mechanically operated brakes must be fitted acting on the rear wheels only. Maximum two speed transmission to be used.

5.12. CLAIMING

Following the main final, the winner's engine may be claimed by another participant of the same final for the total claiming fee equal to the engines retail price, plus 10%.

The written claim must be made to the race director with the cash for the full amount of the claim within 20 (twenty) minutes of the race finish.

If more than one competitor wishes to place a claim, a simple lottery will be used to decide the claimant. All market devices such as heat sinks, motor mounts and air cleaners, are excluded from the claim. If the winner does not wish to surrender his/her engine, he/she must forfeit the race, there will be no protests.

5.13. TELEMETRY

It is not allowed to use any electronic device with the exception of:

- Two radio channels of the receiver which will be used to operate steering, throttle & brakes.
- A passive data recording system to record functions of the car.
- A feedback recording of information system can only be used to the end of controlled practice.