

# Ice Melter 2020

## Rules and Regulations (Updated 01.30.20)

### Race Format

#### Track and Timing

- RCP Tracks - Rough side.
- Corespeedway RFID timing system.
- Flipside Racing Software.
- RFID transponders.
- Missed laps will be corrected at race director's discretion.

#### Qualifying

- Three qualifying runs for each class. Two on Saturday 2/15 and one on Sunday 2/16.
- Each run will be six minutes.
- Minimum three cars, maximum ten cars per heat.
- For the first qualifying run the starting grid will be staggered in a random order. Race will be run as a staggered start, race the clock type.
- For the second and beyond qualifiers, races will be run heads up, start on the tone type.
- Racers will be re-shuffled each round into heats based on best qualifying results.
- Top Qualifier (TQ) will be awarded to the racer in each class with the highest lap count for any single qualifying heat.

#### Mains

- All classes one main.
- Length ten minutes.
- No bump ups.

## Stock Racer and Super Racer Classes

### Chassis

- 2 wheel drive only.
- Kyosho Mini-Z Racer MR01, MR015, MR02, MR03, MA-03F.
- PN Racing PNR2.5W.
- 90mm-102mm wheelbase.
- 170 grams minimum ready to race weight.

### Body

- Mini-Z Racer style hard body (white body or autoscale).
- Full windshield and side windows must be installed.
- No visible modifications to body or windows allowed except for clearance issues.
- Windows can have the unexposed internal areas removed.
- Lexan window allowed.
- Taping body on for racing is allowed.

- Le Mans body allowed.
- Stock rear wing encouraged. Lexan and 3D printed wings allowed.

## Motor

- Motors are to be run as is, any tampering with the motor will result in disqualification. If any race official suspects motor tampering, the driver will be subject to disqualification.
- Open gear ratio.

### Stock Racer Class;

- PN 70T ball bearing motor (#132370).
- 70T bushing motor.
- Brushless 2500KV - 3500KV. (PN 3500KV V3, P# 150035 motor not allowed).

### Super Racer Class;

- PN 50T ball bearing motor (#133250).
- Brushless 4500KV - 5500KV.

## ESC

- Any Kyosho, KO Propo, DasMikro, or PN DSM2 main board.
- FET stacking not allowed.
- No Gyro's.

## Battery

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- No other type of battery may be used.

## Wheels

- Plastic or Aluminum.
- Maximum front wheel width is 8.5mm.
- Maximum rear wheel width is 11mm.
- Maximum wheel diameter is 20mm.
- All wheels must be original design made for Mini-Z.
- Any modification is not allowed.

## Tires

- Rubber Mini-Z production tire only.
- Homemade tires, foam tires, silicon tires, urethane tires, ethyl carbamate tires NOT allowed.
- No traction compounds allowed on tire or on race surface.
- Tire warmers are allowed.
- Tires may be cleaned with a 70% alcohol solution only.

## Option Parts

- Aftermarket Mini-Z production parts allowed.
- Prototype parts not allowed.

## Stock F1 and Super F1 Classes

## Chassis

- Kyosho Mini-Z F1 MF01 and MF015 only.
- 130mm Wheelbase only.
- Rear wheel drive only.

## Body

- Kyosho Mini-Z F1 body only.
- Aftermarket front and rear wing allowed.
- Front bumper allowed, 85mm max width, 22mm max height from ground.
- Side roller/ball bearing allowed.

## Motor

- Motors are to be run as is, any tampering with the motor will result in disqualification. If any race official suspects motor tampering, the driver will be subject to disqualification.
- Open gear ratio.

### Stock F1 Class;

- PN 70T ball bearing motor (#132370).
- 70T bushing motor.
- Brushless 2500KV - 3500KV. PN 3500KV V3 (150035) motor not allowed.

### Super F1 Class;

- 50T ball bearing motor (#133250)
- Brushless 4500KV - 5500KV.

## ESC

- Any Kyosho, KO Propo, DasMikro, or PN DSM2 main board.
- FET stacking not allowed.
- No Gyro's.

## Battery

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- No other type of battery may be used.

## Option Parts

- Aftermarket Mini-Z production parts allowed.
- 3D Printed wings allowed.
- Prototype parts not allowed.

## Wheels

- Plastic or Aluminum.
- All wheels must be original design made for Mini-Z F1.
- Any modification is not allowed.
- Any slot-car design wheel and 3D print wheel not allowed.

## Tires

- Rubber Mini-Z F1 production tires Only.
- Homemade tires, foam tires, silicon tires, urethane tires, ethyl carbamate tires NOT allowed.
- No traction compounds allowed on tire or on race surface.

- Tire warmers allowed.
- Tires may be cleaned with a 70% alcohol solution only.

## **Pan Car Class**

### **Chassis**

- Kyosho Mini-Z Racer MR01, MR015, MR02, MR03.
- PN Racing PNR2.5W.
- Rear wheel drive only.
- 98mm-102mm wheelbase only.

### **Body**

- Pan Car “Lola” style body only.
- Lexan or Hard plastic.
- No Modifications to body or windows except for clearance issues.

### **Motor**

- Open Motor.
- Open gear ratio.

### **ESC**

- Any Kyosho, KO Propo, DasMikro, or PN DSM2 main board.
- No Gyro's.

### **Battery**

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- No other type of battery may be used.

### **Wheels**

- Plastic or Aluminum.
- Maximum front wheel width is 11mm.
- Maximum rear wheel width is 14mm.
- Maximum wheel diameter is 20mm.
- All wheels must be original design made for Mini-Z.
- Any modification is not allowed.

### **Tires**

- Rubber Mini-Z production tire Only.
- Homemade tires, foam tires, silicon tires, urethane tires, ethyl carbamate tires NOT allowed.
- No traction compounds allowed on tire or on race surface.
- Tire warmers are allowed.
- Tires may be cleaned with a 70% alcohol solution only.

### **Option Parts**

- Aftermarket Mini-Z production parts allowed.
- 3D Printed wings allowed.
- Prototype parts not allowed.

**Porsche Cup** - The spirit is to keep the car mostly box stock.

## Chassis

- MR-03-N RM.
- 90mm wheelbase.
- Ready Set: - Kyosho MINI-Z MR03 Porsche 911 GT3 RS/RM.
- RWD Part Numbers 32321W-B, 32321OR-B, 32321S-B (these are the white, lava orange and silver).
- Sports 2 Part Numbers 32231OR-B, 32231S-B (these are the lava orange and silver, not sure about white).

## Radio

- Ready Set included transmitter only, no upgraded radio's.
- Perfex KT-531P FHSS 2.4GHz.
- Perfex KT-19 FHS 2.4GHz.

## Body

- Porsche 911 GT3 Autoscale Only.
- Mirrors may be removed (on purpose or accidentally).
- Windows may not be modified in any way, including cutting out the unexposed areas.
- Stickers and decals for the body allowed and encouraged.
- Headlight Kit - MZW429R - Not Required, but highly encouraged.
- Taping body on for racing is allowed.

## Suspension

### Front

- No front suspension modifications. May clean, polish and lubricate parts.
- Stock front springs, arms, and holders.
- Stock plastic knuckles, or aluminum Kyosho (R246-1310) 0 camber allowed.
- Stock king pins, in stock configuration, no reversed king pins etc.

### Rear

- Stock T-Plate, or PN Carbon T-Plate #4 Medium Soft (MR3006).
- Stock plastic motor pod.
- Stock rear shock and spring.
- No damper plates.
- No side springs.

## Motor & Gearing

- Kyosho MZ9P Motor from RTR.
- Motors are to be run as is, any tampering with the motor will result in disqualification. If any race official suspects motor tampering, the driver will be subject to disqualification.
- Fixed gearing: Stock 43 tooth gear diff.
- 6 tooth pinion for small track ( $\geq 2$  wide L).
- 7 Tooth Pinion for large track ( $\leq 2$  wide L) Ice Melter Race.

## Tires

- Front Tire PN X-15 (RXF15).
- Rear Tire PN KS Medium (KS2828).
- Taping allowed.

- Truing allowed.
- No Sauce or additives.
- Tires may be cleaned with a 70% alcohol solution.

## **Wheels**

- Stock or aftermarket plastic only.
- No aluminum wheels.
- Aluminum wheel nuts ok.
- Front wheels - Narrow +1-1.5 offset (stock is +1.5). Max 8.5mm width.
- Rear wheels - Wide +0 offset. Max 11mm width.
- Stock or PN600129 - No ceramic - Cleaning and re-lubricating ok.

## **Battery**

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- No other type of battery may be used.

## **ESC**

- Stock Board FHSS or FHS 2.4GHz.
- No Gyro's.

## **NASCAR Class**

### **Chassis**

- Kyosho Mini-Z MR-015 ONLY.
- Narrow front end only.
- 102 mm wheelbase only.
- 170 grams minimum ready to race weight.

### **Body**

- Kyosho Mini-Z NASCAR hard body (white body or NASCAR autoscale).
- Minimal modifications to body allowed for clearance issues with chassis or track.
- Taping body on for racing is allowed.
- Full windshield, right side window, and left side netting must be installed.
- Windows can have the unexposed internal areas removed.

### **Motor**

- Motors are to be run as is, any tampering with the motor will result in disqualification. If any race official suspects motor tampering, the driver will be subject to disqualification.
- Open gear ratio.
- PN 70T ball bearing motor (#132370).
- 70T bushing motor.

### **ESC**

- Any Kyosho, KO Propo, DasMikro, or PN DSM2 main board.
- FET stacking not allowed.
- No Gyro's.

## **Battery**

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- No other type of battery may be used.

## **Wheels**

- Plastic or Aluminum.
- Maximum front wheel width is 8.5mm.
- Maximum rear wheel width is 11mm.
- Maximum wheel diameter is 20mm.
- All wheels must be original design made for Mini-Z.
- Any modification is not allowed.

## **Tires**

- Rubber Mini-Z production tire Only.
- Homemade tires, foam tires, silicon tires, urethane tires, ethyl carbamate tires NOT allowed.
- No traction compounds allowed on tire or on race surface.
- Tire warmers are allowed.
- Tires may be cleaned with a 70% alcohol solution only.

## **Option Parts**

- Aftermarket Mini-Z production parts allowed.
- Prototype parts not allowed.

## **Off-Road Class**

### **Chassis**

- Kyosho Mini-Z Buggy.
- Kyosho Overland.
- Kyosho Comic Racer.
- Losi Micro Truggy.

### **Body**

- Appropriate lexan body for chassis

### **Motor**

- Open Motor.
- Open Gear ratio.

### **ESC**

- Any Kyosho, KO Propo, DasMikro, or PN DSM2 main board.
- FET stacking not allowed.
- No Gyro's.

### **Battery**

- Four (4) AAA size batteries.
- Alkaline, Ni-MH or Ni-Cd batteries.
- Lithium battery allowed for Losi Micro Truggy only.

## **Wheels**

- Open

## **Tires**

- Rubber or Foam.
- No traction compounds allowed on tire or on race surface.
- Tire warmers are allowed.

## **Option Parts**

- Aftermarket Mini-Z production parts allowed.
- Prototype parts not allowed.

## **GENERAL EVENT RULES**

### **Body Modifications**

Bodies may be functionally modified with minimal effect to external appearance. The following non-comprehensive list of body modifications are allowed:

- The rear bumper may be removed up to Maximum 20mm from the ground.
- Wheel wells may be cut forward or backward to accommodate different wheelbase chassis.
- Wheel wells may be cut or chamfered internally for tire clearance.
- Lower portions of the body may be cut for ground clearance in front, sides or rear.
- Body material may be shaved or thinned internally for weight reduction. Technical inspection officials reserve the right to disqualify any modified body deemed to be too fragile due to excessive material removal.
- Body panels may be reinforced or strengthened internally without affecting external appearance.
- Original windshield and windows or lexan windshield and windows must be installed but can be modified by cutting unexposed internal areas.
- Original headlight covers must be installed, but headlight buckets may be removed or omitted. In the event that a headlight cover is lost, the hole may be covered with a decal.
- Taillights and taillight covers may be removed or omitted.
- Small body parts such as mirrors, canards, exhausts may be omitted or removed to prevent racing damage and debris on the track.
- All original rear wings that come with the body may be installed according to the no height limited.
- Custom wings allow to use on the body, according to the height limited 45mm from the ground.

The above list is non-comprehensive. The purpose and spirit of the rules is to allow functional performance modifications to the body while preserving the scale appearance and realism. The technical inspector has final authority in the judgment of body modification legality.

If you have modified your body and have questions regarding the legality of the modifications, please submit the body in question to technical inspection PRIOR to racing qualification or main event round. This is in order to prevent any inadvertent disqualifications. The technical inspector will judge the legality of body modifications.

## **Marshaling**



### Responsibilities:

- To help maintain a clear race course for competitors.
- To assist cars that have become unable to move.
- To remove disabled cars from the track.
- Provide an open race course for the rest of the racers as QUICKLY and SAFELY as possible.

### Requirements:

- If you race you are required to marshal the race after yours. Disable your car and return it to your pit area, then go to your marshalling position as quickly as possible. If you are unable to marshal the race immediately after your race, it is your responsibility to find a replacement marshal and inform the track officials of the replacement. Competent marshals only, no young kids please.
- Be sure you are not standing in the drivers line of sight or blocking a view of a portion of the race track.
- Stay focused on your assigned portion of the racetrack. It is easy to get caught up in watching the race and miss clearing the track quickly.
- Be impartial- EVERY driver and car should be treated equally. (Don't reset a friend or family members car first if they were on the tail end of a crash.)
- For safety reasons... NEVER step into oncoming traffic to get a disabled car. These cars are small but are traveling at a speed that could easily injure you or break them if struck or stepped on. Check for oncoming racers and wait for a reasonably clear place to correct to the disabled car. MOVE QUICKLY.
- NEVER put a car in the path of oncoming traffic. The proper method is to wait until traffic is past and reset the car.
- ALWAYS set the car on the track headed in the RACE DIRECTION! Don't require the driver to make a large turn to get back in the racing direction. Set in a position that the driver can safely reenter the race on his own.
- BE AWARE OF CARS THAT HAVE JUMPED OVER BARRIERS!!! Put them on the track where they left the track. NOT WHERE THEY LANDED.
- Attempt to repair minor problems if you can do it quickly, such as a body that came off or loose batteries and/or clips. Remember... The Cars still in the race have priority!!!! If you have to, hand the car over to a friend or just shut it off and tend to the track.
- Treat people and their cars like you want to be treated.

### Cautions:

- Be conscience of areas of the cars that can harm you.
- Electric motors can get VERY HOT.
- Be cautious of moving parts.
- When on the drivers stand, please wait until the Marshal has released your car for their safety, before hitting the throttle.
- Make sure you don't have things in your pockets that can fall out on the track as you are marshaling.
- When you are marshalling a race, it is not the time to eat, be on your phone, distracted, talking, or listen to music.

### **Sportsmanship**

- Proper manners and good sportsmanship are expected from all drivers at all times. It is important to understand that general bad behavior like cursing, intentional bad driving, etc, will

not be accepted and can result in a driver being penalized, disqualified or even asked to leave in extreme cases.

- All participants will be expected to attend the drivers' meeting. Drivers will be expected to understand and comply with each rule by the time they leave the driver's meeting. Ask any questions at this time.
- If there is a rules dispute between drivers it must be brought to the attention of the race director. The officials at the track will do their best to resolve any issue to the satisfaction of everyone.
- If a racer notices an illegal item on another racer's car. Please report to a racing official after that racer's race, so the car can be inspected without interference.
- Substitute drivers are not allowed in any qualification or main event race.
- Reversing is only allowed when it is safe to do so. Do not reverse into oncoming cars.
- Please remember when you are driving, Don't scream at the marshals. Abusive language is not acceptable. If they don't see your car, then yes you can get their attention. But in a proper manner.

### **Jumped starts:**

A jumped start is any movement of a car between before the starting signal.

### **Penalties:**

If one or more cars jump the start, a false start will be declared, and the grid will be re-formed. If the same car moves a second time, it will be moved back the length of the grid from its original starting position.

If a jumped start is not called by the officials immediately at the start of a race but can be verified afterwards by at least two race officials using any recording device, a ten second penalty will be added to that offenders' particular qualifying time or if a main event, a one lap penalty will be assessed.

### **Clean Start**

A clean start is all cars clearing the first two corners without incident.

The race may be stopped and restarted for an unclean start at the race director's discretion.

### **Technical Inspections:**

All racers are required to submit their cars for technical inspection.