

# 20030010 GRID 'N GLORY

D	Montage- und Betriebsanleitung
GB USA	Assembly and operating instructions
<b>(</b>	Instructions de montage et d'utilisation
<b>■</b>	Instrucciones de uso y montaje
P	Instruções de montagem e modo de utilizaçã
	Istruzioni per il montaggio e l'uso
NL NL	Montage- en gebruiksaanwijzing
S	Monterings- och bruksanvisning
FIN	Asennus- ja käyttöohjeet
N	Montajse- og bruksanvisning
<b>(f)</b>	Ősszeszerelési és használati útmutató
PL	Instrukcja obsługi i montażu
SK	Návod na montáž a pre prevádzkuo
CZ	Návod na montáž a pro provoz
BG	Ръководство за монтаж и експлоатация
<b>G</b> R	Οδηγίες συναρμολόγησης και λειτουργίας
RO	Instrucțiuni de montaj și de utilizare
OK .	Monterings- og driftsvejledning
RC	安装和使用说明
J	取扱説明書
ROK	조립과 작동 방법
Arabic	ارشادات التركيب و الأستخدام

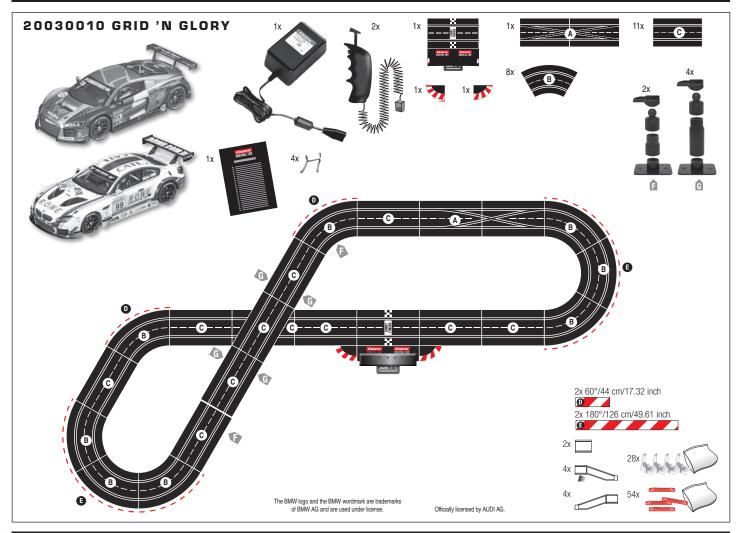
Montaj ve işletme kılavuzu

Инструкция по монтажу и эксплуатации

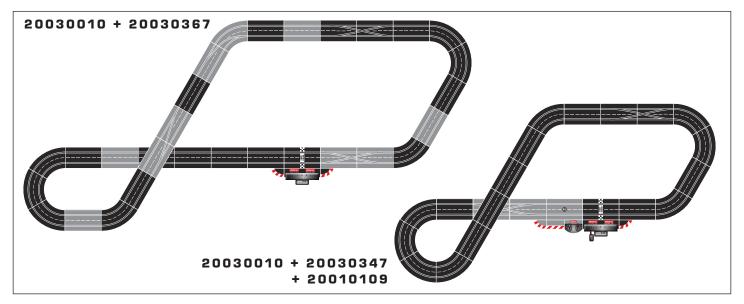
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Verpackungsinhalt · Contents of package · Contenu du carton · Contenido de la caja · Conteúdo da embalagem · Contenuto della confezione · Verpakkingsinhoud · Innehållet i förpackningen Pakkauksen sisältö · Innholdet i pakningen · A csomag tartalma · Zawartość opakowania Obsah balenia · Obsah balení · Съдържание на опаковката · Περιεχόμενα συσκευασίας Conţinutul ambalajului · Emballageindhold · 包装内容 · 梱包内容 · 포장내용물 · Ambalaj içeriği · Содержимое картона



Ausbauvorschläge · Proposals for extension · Suggestions d'extension · Propuestas de ampliación Propostas de expansão · Proposte di ampliamento · Uitbreidingsvoorstellen · Monteringsförslag Rakennelmaehdotuksia · Strekningsforslag · Kiépítési javaslatok · Propozycje rozbudowy Návrhy výstavby · Návrhy výstavby · Предложения за демонтаж · Протάσεις επέκτασης Propuneri de asamblare · Udvidelsesforslag · 多项扩充建议 · 拡張提案 · 기타 조립 예 · Віторомения во расширению





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#### Welcome

Welcome to the Team Carrera!

These operating instructions contain important information regarding the assembly and operation of your Carrera DIGITAL 132 race-track. Please read them carefully and keep them in a safe place afterwards. If you have any queries, please do not hesitate to contact our distributor or visit our website:

carrera-toys.com

Please check the contents for completeness and possible transport damage. The packaging contains important information and should also be retained.

We hope you will derive a lot of pleasure from your new Carrera DIGITAL 132 track.

# Safety instructions

• WARNING! Not suitable for children under 36 months. Danger of suffocation due to small parts which may be swallowed. Caution: risk of pinching caused by function.

#### WARNING!

This toy contains magnets or magnetic components. Magnets attracting each other or a metallic object inside the human body may cause serious or fatal injuries. Seek medical attention immediately if magnets are swallowed or inhaled.

• The transformer is not a toy! Do not short-circuit the transformer's connections! Note to parents: Regularly inspect the transformer for damage to the cable, plug or housing! Only operate the toy with recommended transformers! The transformer may no longer be used if it is damaged! Only operate the racetrack with a transformer! If play is interrupted for longer periods, it is recommended to separate the transformer from the power supply. Do not open transformer or speed controller housings!

#### Important note to parents:

Transformers and power supply units are not suitable to be used as toys. The use of such products needs to be constantly supervised by the parents.

- Regularly check the track and cars for damage to cables, plugs and housings! Replace defective parts.
- The car racetrack is not suitable for outdoor operation or operation in wet locations! Keep away from liquids.
- Do not place any metal parts onto the track to avoid short-circuits. Do not place the track in the immediate vicinity of delicate objects, as these could be damaged by cars hurled from the track.
- Disconnect the plug before cleaning or servicing the racetrack! Only use a damp cloth for cleaning, no solvents or chemicals. When it is not in use, store the track in a dry and dust-protected location, preferably in the original cardboard box.
- Do not operate race track at face- or eye-level risk of injury due to cars being catapulted off the track.
- · Misuse of transformer can cause electrical shock.
- The toy is only to be connected to Class II equipment bearing the following symbol.
- The toy must only be used with a transformer for toys.
- Not to be used with controllable transformers.

 If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similary qualified persons in order to avoid danger.

#### Note:

The vehicle may only be operated again in a completely assembled condition. Assembly may only be carried out by an adult.

### Contents of package

- 1 Audi R8 LMS "No.22A"
- 1 BMW M6 GT3 "ROWE RACING, No.99"
- 11 Standard straights
- 1 Control Unit
- 1 Carrera DIGITAL 132 double lane change section (2 track parts)
- 8 Curves 1/60° 1 Transformer

Guard rails

Replacement contacts

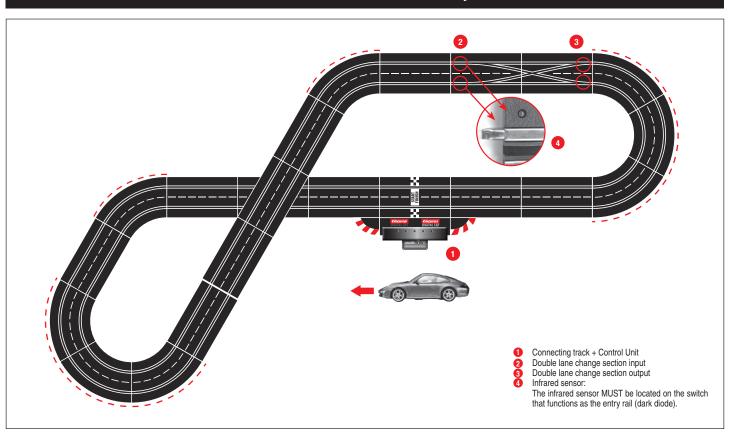
Shoulder end sections Instructions

Track section bolts

Track length: 23.95 ft./ 7,3 m

Dimensions when assembled: 10.01 x 5.58 ft./ 305 x 170 cm

### Technical advice for assembly







# **Important Information**

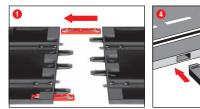




Please note that Evolution (analog system) and Carrera DIGITAL 132 (digital system) involve two separate and completely independent systems. We hereby expressly indicate that both systems must be kept separate when setting up the track, i.e. no connecting rail from Evolution may be used together with the connecting rail and Black Box of the Carrera DIGITAL 132, even if only one of the two connecting rails (Evolution connecting rail or Carrera DIGITAL 132 connecting rail and Black Box) is attached to the current supply. Furthermore, no other Carrera DIGITAL 132 components (switches, electronic lap counter, Pit Lane) may be built into an Evolution course, i.e. via analog operation.

Non-compliance with the above information may result in damage or destruction of the respective Carrera DIGITAL 132 components. In this case no warranty may be claimed.

### Assembly instructions





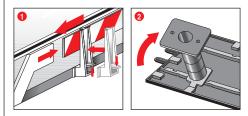
1 + 2 + 3 Before assembling please insert the connecting clips in the track as shown in figure 1. Stick tracks together on a flat base. Move the connecting clips according to figure 2 in direction of the arrow until they audibly snap in. The connecting clip may also be inserted later. The connecting clips can be removed into both directions by simply pressing down the clamped nose (see fig. 3).

4 Fastening: To fasten the track sections on a board, it is necessary to use the track section fasteners (Item no. 20085209, not contained in the package).

#### Note:

Carpeting is not a suitable foundation on which to build the track because of static charging, formation of fluff and ready inflammability.

# **Guard Rails and Supports**







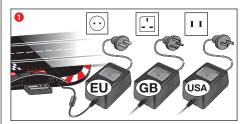
1 Guard rails: Guard rail mounts are fitted by tilting them upwards onto the verge of the track.

Supporting raised sections: The shank of the ball pivot is to be inserted into the square slots provided on the underside of the track. The supports can be made higher by using the extensions. The pedestal of the supports can be screwed to a base if required (screws not included).

#### 4 Supporting steep curves:

Slanting supports of the right height are provided to support steep curves. Fix the nonadjustable supports at the beginning and end of the curves. Insert the heads of the supports in the round slots of the underside of the track.

# **Electrical connection**





Connect the transformer plug with the Control Crim.
 Connect the enclosed speed controllers to the Control Unit.

Note: To avoid short-circuits and electrocution, the toy may not be connected using foreign devices, plugs, cables or other objects foreign to this toy. The Carrera DIGITAL 132 car racetrack only works properly with an original Carrera DIGITAL 132 transformer.

The PC interface (PC Unit) may only be operated together with the original Carrera PC Unit.

## Car components



Body, spoiler Engine 34567 Tyres

Rear axle Chassis

Guide keel Double sliding contact

Car board with reversing switch Front light board

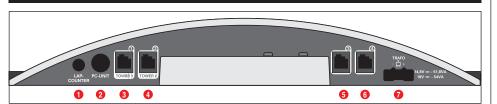
Rear light board

Note: vehicle construction depends on the model.

The designation of the individual parts may not be used as order numbers.



#### **Connections**



Connections (from left to right):

- 1 Connection for Lap Counter 20030342 2 Connection for PC-unit or Lap Counter 20030355 or App Connect 20030369
- 3 Connector 1 for speed controller, speed controller extension set or WIRELESS+ receiver
- Ocnnector 2 for WIRELESS Tower 20010108
- Connector 3 for speed controller
- G Connector 4 for speed controller
  Connection for DIGITAL 124 / DIGITAL 132 power supply

#### General information on connectors 1-4:

When a WIRELESS+ receiver is used, it must be plugged into connector 1. Optionally a Wireless Tower 20010108 can be plugged into connector 2. When only the WIRELESS+ receiver is used, connector 2 is to be left empty.

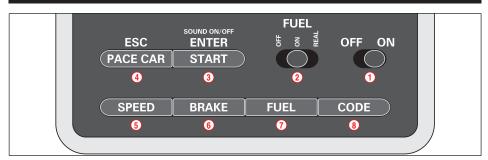
Additional wired speed controllers may be plugged into connectors 3 and 4. Please note that these will use address 5 and 6 then.

Using the speed controller extension set 20030348 it has to be plugged into connector 1. The cars' addresses will be allocated as follows:

- Speed controller extension set = address 1, 3 and 4
- connector 2 = address 2
- connector 3 = address 5
- connector 4 = address 6

a combination of WIRELESS and speed controller extension set is not possible!

# **Control elements**



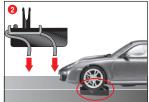
- On/off switch
- Switch for fuelling function
- Button to start the race / acknowledge programming
- Button for Pace Car / termination of programming
- Button for setting basic speed
- Button for setting braking performance
- Button for setting fuel tank capacity
- Programming button for cars

### General operating information

Some buttons are assigned with different tasks. In order to set a function you need to use key combinations. Any programming steps can be cancelled with button 4 "ESC/PACE CAR". You will find further details in the course of this manual.

# Preparation of start





This Carrera DIGITAL 132 vehicle ideally matches the Carrera track system scale 1:24

# 1 + 2 Optimally setting up the grinders:

To ensure proper and continuous driving, slightly fan out the ends of the contact brushes 1 and bend them towards the track as per fig. 2. Only the end of the contact brush should have contact to the track and may be cut off slightly in case of wear. Dust and abrasion should be removed from track material and sliding contacts from time to time.

During operation small car parts as spoilers or mirrors may get off or brake due to being original detailed parts of the car model. To avoid this it is possible to remove them before operation.

# **Encoding/programming** of cars to the according speed controllers





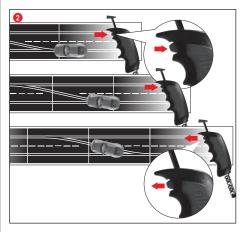




To encode a car place it on the track and swich on the Control Unit. Press "Code" button once (8), fig. (1); the first LED starts to light, fig. 2. Then push lane-change-button once on the relevant speed controller, fig. 3. In case the car is equipped with lights they will start to flash and the Control Unit's LEDs 2-4 will light successively. Once encoding has been carried out the middle LED lights permanently (fig. 4) and the car is allocated to the speed controller. Note: This kind of encoding requires to only have the car on the racetrack which shall be encoded.

#### **Points function**





1 Make sure that the car's guide keel is located inside the track slot and that the double sliding contact is in contact with the current carrying track.

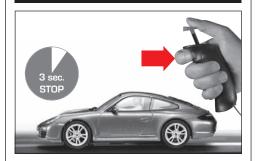
Place the cars onto the connecting track.

2 When changing lanes, you must keep the button on the speed controller depressed until the car has passed the point.





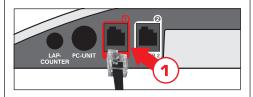
# Light function on/off



The car programmed to the speed controller will have to come to a stop for at least 3 seconds before the light can be switched on or off by the push of the lane-change-button.

Note: applies only to models fitted with lighting

# **Operating 6 cars**



Plug speed controller extension set (item no. 20030348) in connector 1 of the Control Unit. For next steps see section "Coding of cars to the according speed controller".

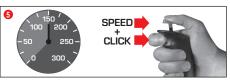
# **Encoding/programming** of Autonomous Car











Switch on the Control Unit, place the car to be encoded on the track and press "Code" 3 twice, fig. 1. The first two LEDs at the Control Unit start to light, fig. 2. Now push the lane-change button at the speed controller, fig. 3; LEDs 3-5 will light successively. Wait until the middle LED lights again, fig. 1. Activate the speed controller's tappet until the car has reached the desired speed. Now push lane-change button again, fig. 5. Autonomous Car's encoding is completed now.

Note: This kind of encoding requires having only the car on the track which is to be encoded. The programming of the Autonomous Car will be maintained unless the car is not being recoded. The Autonomous Car is always displayed with address 7 in combination with the Position Tower.

### **Encoding/programming** Pace Car

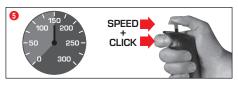












(only in combination with Pit Stop Lane #20030356)

Switch on the Control Unit, place the car to be encoded on the track and press "Code" (8) three times, fig. 1. The first three LEDs at the Control Unit start to light, fig. 2). Now push the lane-change button at the speed controller, fig. 3); LEDs 2-5 will light successively. Wait until the middle LED lights again, fig. 6). Activate the speed controller's tappet until the car has reached the desired speed. Now push lane-change button again, fig. **6**. The Pace Car's encoding is completed now and the car enters the Pit Stop Lane.

Note: This kind of encoding requires having only the car on the track **which is to be encoded**. The programming of the Pace Car will be maintained unless the car is not being recoded. The Pace Car is always displayed with address 8 in combination with the Position Tower.

#### **Extended Pace Car function**

After the Pace Car's encoding has been completed it will automatically enter the Pit Lane during the first laps. In order to start the Pace Car please push the button "Pace Car" 4 once. The LEDs 2 and 3 at the Control Unit will light and the Pace Car will leave the Pit Lane. The Pace Car will now drive as long as the button "Pace" Car" is pushed again. LED 2 stops lighting and the car automatically enters the Pit Lane within the current lap

# Setting of the cars' basic speed













The setting of the basic speed can be effected individually for one and/or several cars. The cars which are to be adjusted have to be positioned on the track. The setting can be carried out on 10 levels with the 5 LEDs indicating the different levels by flashing or permanent lighting.

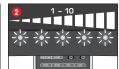
1 LED lights = low speed 2 5 LEDs light = high speed

Switch on the Control Unit, place the cars to be adjusted on the track and press "SPEED" (§) once. A certain number of LEDs will now light, showing the speed level last used. Push the "SPEED" button (§) as many times until you have reached the speed desired. Confirm by pressing "ENTER/START" (§). A short running light and the lighting of the problem. the lighting of the middle LED confirms completion of the setting,



# Setting of cars' braking performance













(only for cars operated with speed controllers)

The setting of the braking performance can be effected individually for one and/or several cars. The cars which are to be adjusted have to be positioned on the track. The setting can be carried out on 10 levels with the 5 LEDs indicating the different levels by flashing or permanent lighting.

1 LED lights = low braking effect

1 1 LED lights = low braking effect 2 5 LEDs light = high braking effect

Switch on the Control Unit, place the cars to be adjusted on the track and press "BRAKE" (6) once. A certain number of LEDs will now light, showing the brake step last used. Push the "BRAKE" button (6) as many times until you have reached the braking performance desired. Confirm by pressing "ENTER/START" (3). A short running light and the lighting of the middle LED confirms completion of the setting, fig. (6).

# Setting fuel tank capacity













(only for cars operated with speed controllers)

The setting of the fuel tank capacity in combination with the Pit Lane (20030356) is effected for all cars simultaneously. The setting can be carried out on 10 levels with the 5 LEDs indicating the different levels by flashing or permanent lighting.

1 1 LED lights = low fuel capacity 2 5 LEDs light = full tank

Switch on the Control Unit, place the cars to be adjusted on the track and activate the fuelling function by means of the slide switch (2), fig. (3). Press the "FUEL" button (7) once. A certain number of LEDs will now light, showing the fuel capacity last used. Push the "FUEL" button (7) as many times until you have reached the fuel capacity desired. Confirm by pressing "ENTER/START" (3). A short running light and the lighting of the middle LED confirms completion of the setting, fig (5).

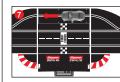
#### Extended fuelling function

You can choose between 3 modes via the sliding switch 2, fig. 3:

- OFF = cars don't consume any "petrol"
- ON = cars consume "petrol"
- REAL = maximum speed depending on fuel tank capacity / cars consume "petrol") (only in combination with Pit Lane 20030356 or Pit Stop Lane 20030346 and Pit Stop Adapter Unit 20030361)

When driving in "REAL-mode" the car with a full tank is "heavier", drives slowlier and shows a lower braking effect; a car with an empty tank is "lighter", drives faster and shows a higher braking effect. The current fuel tank capacity and the "fuel consumption" can only be displayed in combination with the Driver Display 20030353 and Pit Stop 20030356.

Refuelling of cars with Pit Lane 20030356 and Driver Display 20030353











The car's present tank capacity can be read via the bar display with 5 green and 2 red LEDs at the Driver Display. For refuelling drive your car into the Pit Lane across the refuelling sensor fig. 7. The bar display now starts to flash, fig. 3, and the car can be refuelby keeping the lane-change button pushed. fig. 3. The number of refuellings are indicated by flashing or lighting of the yellow LEDs, fig. 10 (also see Driver Display).

Note: cars with an empty tank are disregarded for lap-counting in combination with Position Tower 20030357.

Setting of tank capacity at the start of the race











(only in combination with Pit Lane 20030356 and Driver Display 20030353) Irrespective of the basic setting of the tank capacity it is possible to individually set the tank capacity for one or several cars at the race's start for the number of laps till the first pit stop. Push "START/ENTER" once 3; the 5 LEDs at the Control Unit will light permanently, fig. 10, and the Driver Display's bar display will flash, fig. 10. Clicking the lane-change button at the corresponding speed controller enables you to change the fill level, fig. 10.

# **Deactivating Settings Keys**







To deactivate the keys for setting Speed, Brake and Fuel, proceed as follows: Hold down the Code Key 8.

While holding down the Code Key 8, turn on the Control Unit and then release the Code Key. To reactivate the above keys, repeat the procedure just described.

#### **Extended Pit Lane function**

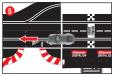














(only in combination with Pit Lane 20030356)

It is possible to activate/deactivate the lap counting function in the Pit Lane 20030356 or Pit Stop Lane 20030346 with the Pit Stop Adapter Unit 20030361. Switch off the Control Unit, keep "SPEED" button (5) pushed, switch on Control Unit and release "SPEED" button (5) By pushing the button again, 1 or 2 LEDs will light depending on the setting

- LED 1 = lap counting function deactivated
- LED 1 + 2 = lap counting function activated

Select the desired setting and push or drive a car across the Pit Lane Sensor, fig. **5**. The settings will now be adopted. Push "START/ENTER" **3** for leaving the settings again.

#### Sound ON/OFF







The confirmation sound when crossing the sensors and the key sound can be switched off. Switch off the Control Unit and keep the "START/ENTER" button (3) pushed, switch on the racetrack and release "START/ENTER" (3) again. The acknowledgement sound for switching on the Control Unit cannot be switched off however.

#### Reset function











To restore the Control Unit to factory settings the Control Unit offers a reset function

Switch off the Control Unit and keep the "ESC/PACE CAR" (4) button pushed; switch on the ractrack and release the button again. All previous settings for speed, braking performance, tank fuel capacity sound and lan counting will be restored to factory settings. The cars' settings will remain unaffected by this measure unless they are placed on the racetrack

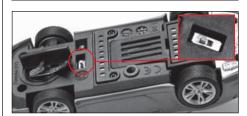
#### Factory settings:

- speed = 10
- braking performance = 10
- tank capacity = 7
- sound = ON
- display of position for Autonomous and Pace Car = OFF

# Energy-saving mode

After 20 minutes of non-usage the Control Unit switches to energy-saving mode and all displays such as Position Tower, Driver Displays and Startlight are turned off. To reactivate the controller, switch it off for 2 or 3 seconds, then switch it on again. All settings

# Car programming from DIGITAL 132 to Evolution (analogue)



Push the switch for changing the running direction acc. fig. 1 Place car on the Evolution track and push speed controller's tappet three times (thumb). For Carrera DIGITAL 132 operation mode return the switch to original position.

# Replacement of double sliding contact and guide keel







- It is recommended to always take out and change only one grinder.
- · Never pull the vehicle backwards, because the grinders could be
- 1 Please carefully pull out the guide keel according to fig.

2 When changing the double contact brushes please take care that in stage one the upper contact brush 2 a is only pulled out partly and that in stage two the double contact brush can be pulled out completely with the contact brush 2 6. For inserting please proceed the same way.

### Changing the rear axle



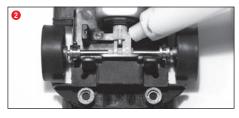




Take off the vehicle's upper part from the chassis as per fig. 1 Remove the axles from the bearings positions with pressure (2). Insert new axle. Pay attention to the correct position of the axle bearings (3)

#### Maintenance and care





To ensure a proper operation of the motor-racing circuit, all racetrack components should be regularly cleaned. Pull the plug prior to

1 Racetrack: Keep the track surface and track slots clean with a dry cloth. Do not use any solvents or chemicals for cleaning. When it is not in use, store the racetrack in a clean and dust-protected location, preferably in the original cardboard box

2 Car check: Clean axle and wheel bearings, pinion gears, gearwheels and bearings and lubricate using a resin- and acid-free grease. You can use a toothpick or similar as aid. Regularly check the condition of sliding contacts and tyres.

# **Troubleshooting Driving tips**

#### Troubleshooting

In case of any malfunctions, please check the following:

- · Has the connection to the power supply been established cor-
- Have transformer and speed controllers been connected correctly?
- Are the track connections faultless?
- · Are the racetrack and track slots clean and free of any foreign objects?
- · Are the sliding contacts in order and do they make contact with the track slot?
- Are the cars correctly coded to the according speed controller?
- The track's current feed will be switched off automatically for 5 seconds, if there is an electrical short circuit; this will be notified by audible and visual signals.
- · Are the cars placed on the track in running direction? In case of non-functioning push the running direction switch which is on the car's bottom.

During operation small car parts as spoilers or mirrors may get off or brake due to being original detailed parts of the car model. To avoid this it is possible to remove them before operation.

#### Driving technique:

- You can drive fast along the straight track but you should brake before the curve and then accelerate again when coming out of the
- Do not fasten or block the vehicles when the motor is running: overheating or damage to the motor could result otherwise

Note: When using track systems which are not manufactured by Carrera the existing guide keel has to be replaced by the special guide keel (#20085309). While using the Carrera crossing (#20020587) or high banked curve 1/30° (#20020574) slight driving noise might occur which is due to the full-scale genuineness and does not affect flawless operation.

# **Technical specifications**



#### Output voltage: Toy transformer



14,8 V === 51,8 VA

#### Electricity modes:

- 1.) Operating mode = cars are operated via speed controllers
- Idle mode = speed controllers not activated, no game
- 3.) Stand-by mode = after approx. 20 minutes idle mode the connecting section switches to stand-by mode. The LED is no longer lit.

#### CURRENT CONSUMPTION < 0,5 watt / 0,5w

To reactivate the controller, switch it off for 2 or 3 seconds, then switch it on again. The racetrack is then once again in standby mode.

4.) Off-state = power supply unit disconnected from mains supply





This device is marked by "selective sort throught" symbol related to sort through domestic, electric and electronic, waste. This means the product must be treated by a specialized "sorting/collecting" system in accordance with European directive 2012/19/EU, to reduce the impact upon environment. For more precise information, please contact your local administration. Electronical product which are not going through special collecting, are potentially dangerous for environment and human health, because of dangerous substance.



#### Output voltage: Toy transformer



14,8 V = = 42,9 VA

#### **Electricity modes:**

- 1.) Operating mode = cars are operated via speed controllers
- 2.) Idle mode = speed controllers not activated, no game
- 3.) Stand-by mode = after approx. 20 minutes idle mode the connecting section switches to stand-by mode.

# The LED is no longer lit. CURRENT CONSUMPTION < 0.5 watt / 0.5w

By switching it off and on again, the racetrack returns to

4.) Off-state = power supply unit disconnected from mains supply



Conforms to the safety requirements of ASTM F963.



