Welcome to the new digital era of competition
Digital technology makes all this possible:
- Race up to 6 cars at a time on a 2-lane track.
- Actual overtaking by changing to/from any lane.
- Constant information about the progress of the race, showing the leader, the lap count and more...
- Power Line technology allows connecting several accessories without the cars losing any power.

Important: The circuit you have just purchased may not include all the accessories described in this instruction manual.

Note: For this equipment to work properly, a transformer marked with the Tecnitoys ⟩⟨ and the phrase "This transformer should only be used with Digital System" must be used.
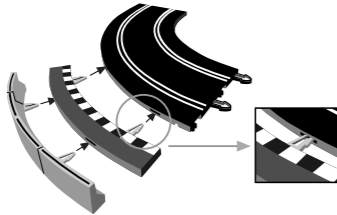
Important : In order to connect or disconnect any device on the circuit (with the exception of the speed controllers), you must first disconnect the Pit Box transformer.

1 Tracks
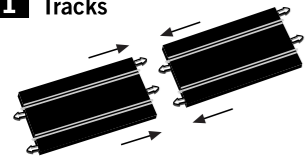
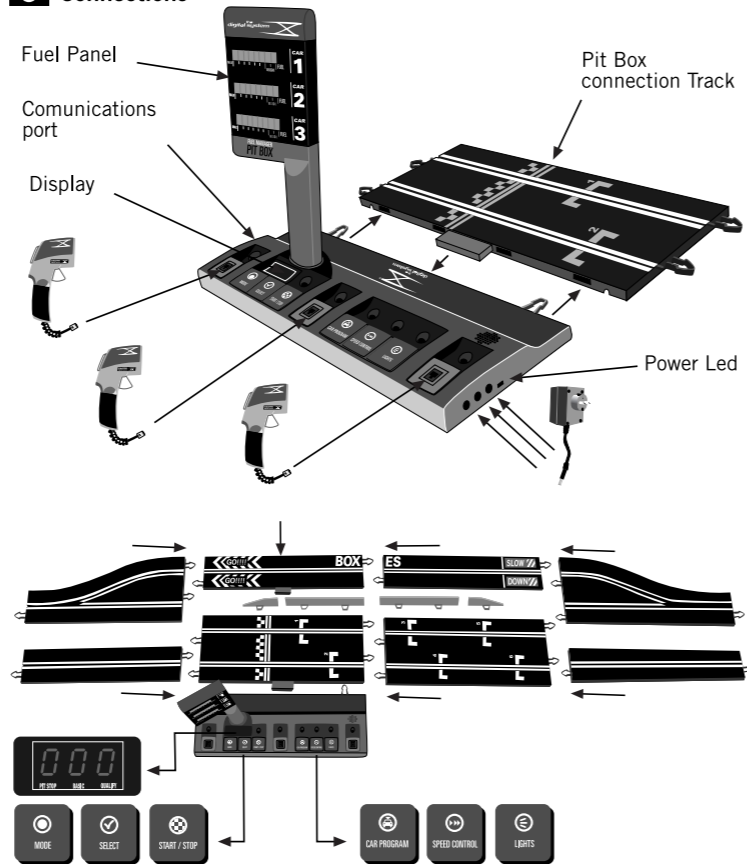For Digital System circuits to work properly, all tracks must be correctly put together.

CLEANING THE TRACKS
Scalextric Digital System track slots are impregnated with a special oil which protects them during manufacture and subsequent storage. Remove this protection by rubbing all slots with a clean cloth, slightly moistened with alcohol (never with water or oil). It is very important that the tracks are clean. Use the Track Cleaner (ref. 88580, sold separately) for this.

DISMANTLING AND STORAGE
Once the circuit has been dismantled, it is recommended that you keep it in its original box, in a dry place safe from high temperatures.

2 Barriers and borders
(in circuits which include them)

3 Connections

Fuel Panel

Comunications port

Display

Pit Box connection Track

Power Led

BOX   ES   SLOW
                       DOWN

0 0 0

PIT STOP   RACE   DISPLAY

MODE   SELECT   START / STOP   CAR PROGRAM   SPEED CONTROL   LIGHTS

Important : The Pit Box must ALWAYS be connected to your connection track (this is the track supplied with this circuit which has starting positions 1 and 2 marked on it). This connection track is exclusively for Pit Box and cannot be replaced by any other part. If the Pit Box is not connected to this exclusive track it will NOT work.

When you connect the Pit Box transformer the controller connection lights will flash intermittently. As you connect the controllers these lights will come on constantly. The transformers can be connected to any of the three connections on the side of the Pit Box.

Power LED: The power LED (a red light next to the transformer connections) shows whether the circuit requires more power. If the LED is flashing rapidly or slowly, this means that another transformer needs to be added to the circuit.

The circuit you have just purchased includes the transformer needed for it to work properly. Should you require further transformers, these are sold separately as ref. 20070.

PROGRAMMING THE CAR

Before programming:
Put the numbers on the cars in order from left to right:
   1. The first controller controls the car with number 1.
   2. The second controller controls the car with number 2.
   3. The third controller controls the car with number 3.
This avoids confusion in determining which controller controls which car and over the position of each car during the race. This circuit is supplied with a sheet with all the numbers.

To programme the cars, follow these steps **ALWAYS from the primary digital central unit (remember that the digital base unit is only used to connect the controllers for cars 4, 5 and 6).**

   1. Cars must always be programmed one at a time, **NEVER** all at once.
   2. Select the car and controller with which to race.
   3. Place the car on the track. There must not be any other cars in either of the two slots on the circuit, otherwise all the cars on the track would be programmed with the same controller and connection.

4. Press the red button down until the red light come on (see illustration **4**).
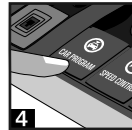
5. Press the change button at the back of the controller (see illustration **5**).

6. The car's lights will automatically come on, showing that the car has been programmed. Then take the car off the track, replace it and the car will be ready to race. (see illustration **6**).

If the connection of the controller is changed, the car will still be programmed for the old connection. It is very important to remember that the car is programmed for the connection, not the controller.

SETTING THE SPEED

Speed modes:

   1. Expert: For experienced drivers (default speed programmed into the circuit)

   2. Junior: For novice drivers.

To set the speed to Junior, do the following:

   1. Put the car on the track (see illustration **1**). Remember that the car must first have been programmed (see previous section).

   2. Press the yellow button down for 4 seconds until the red light comes on (see illustration **2**).

3. Press the change button at the back of the controller and the green controller connection light will change to amber. The car is now set to Junior speed (see illustration ▪3▪).

4. To return to Expert speed, follow the same steps and the orange controller connection light will change to green.

If you wish to set the other two cars to Junior speed, you must repeat the same steps with each of them.

XENON EFFECT LIGHTS ON THE CARS

The cars can race with the xenon effect lights on or off. For this all you have to do is to press the blue button and the lights of all the cars on the track will come on. From this moment any car placed on the track will have its lights on. To switch all the cars' lights off just press the same button again.

CHANGING LANES

Changing lanes is very simple. As you are coming to a lane change track, simply hold down the rear button on the controller and the car will change lanes. This track is also sold separately (ref. 20030) and you can fit as many lane change tracks as you wish.
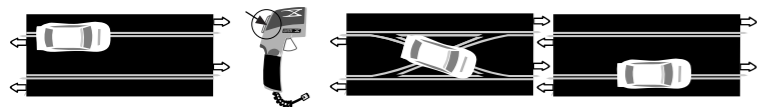
▪4▪ Testing the car

• Remember to clean the slots in the circuit before testing the operation of the car.
• Place the car on the track, programme it (see the section "Programming the Car") and operate the corresponding controller. If the car does not respond to the the controller or does not work properly:

   - Check that the track sections are properly fitted together.

   - Check that the transformer is properly plugged in and connected to the circuit.

   - Check the connection between the controllers and the central unit.

   - Check the car is properly programmed through the central unit.

   - Unplug the transformer and make sure there is no metallic object on the track which could cause a short circuit (a screw, pin, screwdriver, etc.) and no bent sections of the metal slot are touching each other and causing a short circuit.

The following Scalextric references are compatible with SCX Power Line Digital System:

Ref. 88580 Track cleaner
Ref. 86140 Braids
Ref. 88150 Type 1 rear axle
Ref. 88160 Type 2 rear axle
Ref. 88170 Type 3 rear axle
Ref. 88360 Type 6 rear axle
Ref. 87670 Type 1 tyres
Ref. 87680 Type 2 tyres
Ref. 87690 Type 3 tyres
Ref. 87700 Type 4 tyres

Ref. 87710 Type 5 tyres
Ref. 88370 Type 7 tyres
Ref. 88340 Type 8 tyres
Ref. 50020 Pro special braids
Ref. 50030 Pro tyres 1
Ref 50040 Pro tyres 2
Ref. 50050 Pro competition axle kit
Ref. 50230 Pro synthetic oil

The Pit Box enables you to compete in races with maximum realism. You can plan your own race strategy by setting the amount of fuel in your car, its braking level and the fuel tank capacity. At the same time, it also gives you the chance to play without personalising your car, so that you do not need to plan the race (you need not fill up with fuel).

Below is an explanation of how to play WITH the Pit Box (with fuel load) or WITHOUT the Pit Box (no fuel load).
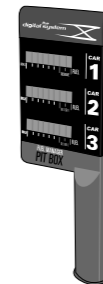
▪1▪ Race Mode WITH Pit Box (with fuel load)

This is the race mode automatically offered by the system

The main feature of this mode is that cars consume the fuel contained in their tanks as the race progresses, with fuel consumption varying depending on the use of the accelerator trigger on the controller. Before the fuel runs out the driver must refuel their car by going into the Pit Box.

You can decide each car's strategy for the race by planning the number of pit stops depending on how much fuel the car starts the race with. You should bear in mind that the car's performance will depend on the fuel load, i.e. more fuel means more weight, which will affect the car's top speed and increase response time (for accelerating and braking).

Once the cars have been programmed to each controller, you can start racing immediately with a full tank and 100% braking. The race will count the laps up. To start the race press the START / STOP key for 2 seconds. The green light will come on and you can begin the race.

To finish the race you need to follow these steps:

1. Warn the participants that this is to be the last lap.
2. Press the START/STOP key for 2 seconds. The green light in front of the key will begin to flash, showing that this is the last lap.
3. When the winning car passes the finishing line, the Pit Box fuel panel will show this by making the fuel lights flash in their box.
4. When the last car passes the finishing line the green light will stop flashing.

If you wish to start another race the same as the previous one, take the following steps:

1. Check that the green light in front of the START/STOP key is off. If it is not, press the START/STOP key for 2 seconds and it will go off.

2. Press the START/STOP key for 2 seconds; the green light will come on and you can start the race.

1.1 Personalising the Car

1.1.1 Personalising the size (capacity) of cars' tanks (all cars the same)

You may now set the size (capacity) of all the cars' fuel tanks.

This function is set equally for all cars taking part in the race. It is not necessary to place the cars on the track.This type of personalisation enables you to set the tank size according to the length of the race to allow a suitable number of pit stops. For example, in a 500-lap race cars may have a greater tank capacity in order not to have to stop for refuelling so often.

To personalise tank capacity, the following steps must be taken:

1. Press the MODE key down for 2 seconds to access the programming menu (the letters PIT will appear on the base unit's display).

2. Press the MODE key 4 times until you can see the RAC option (race personalisation).

3. Press the SELECT key once (the letters CAP will appear on the base unit's display).

4. Press the SELECT key once (025 will appear on the base unit's display). You should now decide what **size (capacity) of tank** all the cars are to have. Each successive press of the SELECT key will offer you a different size (capacity) of tank in litres of fuel (025, 050, 100, 200 or 400).

5. When you have decided on the size (capacity) of tank all the cars taking part are to have, press the MODE key once, and (- - -) will appear on the base unit's display.

To give you an approximate idea, a full tank with a capacity of 025 will enable you to complete about 30 laps on our standard circuit. It is recommended that a race require one or two pit stops.

The next stage is to **personalise** the fuel level and braking level of each car.

1.1.2. Personalising each car's fuel level and braking level (individually)

Each user can choose their own strategy, planning pit stops to be made according to the initial fuel level and adjusting braking intensity according to their driving style. Remember the effect weight has on the car's performance (more weight means less speed, and less fuel means more pit stops).

It is **very important** to bear in mind that these two personalisation options, unlike that of the fuel capacity, must be carried out **individually** for each car, and that throughout this process the car must **always** be on the Pit Lane track (the track with the word BOXES on it) and must **never** be removed from it while personalisation in being carried out.

To set these two personalisation options, take the following steps:

1. Place the car to be personalised on the PIT LANE track (the track with the word BOXES printed on it).

2. Hold down the MODE key for 2 seconds to access the programming menu (the letters PIT will appear on the base unit's display).

3. Press the MODE key 3 times until the CAR option (for personalising the car) appears on the display.

4. Press the SELECT key once (the letters FUE will appear on the base unit's display). You are now going to select the **amount of fuel** for your car. Press the SELECT key once and (003) will appear on the Pit Box display. Each additional press of the SELECT key will add 1/8 of a tank. You can begin the race between levels 003 (before going into reserve) and 008 (full tank).

5. When you have decided the initial fuel level press the MODE key once (the letters BRA will appear on the base unit's display).

6. You may now select the car's **braking level.** Press the SELECT key once (000 will appear on the base unit's display). Each additional press of the SELECT key will offer you a different braking level (0%, 50% or 100%).

7. When you have decided on a suitable brake level, press the MODE key once (the letters CAR will appear flashing on the base unit's display).

8. Press the button on the back of your electronic controller once (the button which is also used for changing lanes) and the car will be personalised. (- - -) will appear on the Pit Box display.

9. To personalise the remaining cars, follow the same steps as with the first one.

The cars are now individually personalised. The next stage is to set the **number of laps** in the race.
Note: The braking level cannot be personalised on the following references of cars: 13000, 13010, 13020, 13030, 13040, 13050, or on the models included with circuits 10000 and 10010.

1.2. Setting the Number of Laps in the Race

To set the number of laps, you need to look at the PIT BOX base unit's display. During the race this display will show the laps completed by the leading car. You can programme the race to count the laps up or down.

1.2.1. Race counting laps up

This is the default race mode for the system.
Once the cars have been programmed to each controller, you can start to use them straight away: the cars are automatically set by the Pit Box itself with a full tank and 100% braking. To start the race, just press the START/STOP key down for 2 seconds; the green light will come on and you can start.

To finish the race, take the following steps:

1. Warn the participants that this is to be the last lap.

2. Press the START/STOP key for 2 seconds and the green light will flash.

3. When the cars pass the finishing line the green light will go out and the winner's fuel indicator will start flashing.

4. When the winning car passes the finishing line, the Pit Box fuel panel will show this by making the fuel lights flash in their box.

5. When the last car passes the finishing line the green light will stop flashing.

6. If you wish to begin another race the same as the previous one, just press the START/STOP key down for 2 seconds and you can start again.

In the event that each competitor has personalised their own car and this is the first race, after completing the personalisation procedure just press the START/STOP key down for 2 seconds. The green light will come on and you can start.

To finish the race, take the following steps:

1. Warn the participants that this is to be the last lap.

2. Press the START/STOP key for 2 seconds and the green light will flash.

3. When the winning car passes the finishing line, the Pit Box fuel panel will show this by making the fuel lights flash in their box.

4. When the last car passes the finishing line the green light will stop flashing.

If you wish to start another race the same as the previous one, take the following steps:

1. Check that the green light in front of the START/STOP key is off. If it is not, press the START/STOP key for 2 seconds and it will go off.

2. Press the START/STOP key for 2 seconds; the green light will come on and you can start the race.

Where you have had a race counting the laps down and you now want to have one counting them up, take the following steps:

1. Hold the MODE key down for 2 seconds to access the programming menu (the letters PIT will appear on the base unit's display).

2. Press the SELECT key once (the letters UP will appear on the base unit's display).

3. Press the SELECT key once more; (- - -) will appear on the base unit's display.

4. Press the START/STOP key down for 2 seconds. A green light in front of the key will come on, showing that the race is ready to start.

5. To finish the race, take the following steps:
   · Warn the participants that this is to be the last lap.
   · Press the START/STOP key for 2 seconds and the green light will flash.
   · When the winning car passes the finishing line, the Pit Box fuel panel will show this by making the fuel lights flash in their box.
   · When the last car passes the finishing line the green light will stop flashing.
   · When the cars pass the finishing line the green light will go out and the winner's fuel indicator will start flashing.
   · If you wish to begin another race the same as the previous one, just press the START/STOP key down for 2 seconds and you can start again.

At the beginning of the race, when the cars pass over the starting line (000) will appear on the Pit Box base unit's display. You can do up to 999 laps. When you reach 999 the counter will start again from zero.

1.2.2. Race counting laps down

To set the race to count laps down, you need to do the following:

1. Hold the MODE key down for 2 seconds to access the programming menu (the letters PIT will appear on the base unit's display).

2. Press the SELECT key once (the letters UP will appear on the base unit's display).

3. Press the MODE key once (the letters DO will appear on the base unit's display, showing that you are programming the laps to count down).

4. Press the SELECT key once more (001 will appear on the base unit's display). You now need to set the number of laps you want to do: each press of the SELECT key will add a lap to the race, and pressing it continuously adds laps in tens.

5. When you have set the number of laps to be completed, press the MODE key once and (- - -) will appear on the base unit's display, showing that it has been programmed.

6. Hold the START/STOP key down for 2 seconds; a green light will come on in front of the key and (- - -) will appear on the Pit Box base unit's display, showing that the race is ready to begin.

At the beginning of the race, when the cars pass over the starting line the number of laps to which the race has been set will appear on the Pit Box base unit's display, and every time the leading car passes over the line this counter will be reduced by one lap.

* When the race finishes, an acoustic signal will show that it is over, and the Pit Box fuel control panel will show the winner by making the winning car's whole line of lights flash.

* If when you finish the race you wish to start another with the same number of laps and counting down, simply press down the START/STOP key for 2 seconds again: the green light in front of it will come on and (- - -) will appear on the Pit Box base unit's display. You can now start another race the same as the previous one.

* Where you have had a race counting the laps up and you now want to have one counting the laps down, follow the steps below:

1. Check that the green light in front of the START/STOP key is off. If this is not the case, press the START/STOP key for 2 seconds and the light will go out.

2. Follow the steps for programming the number of laps exactly as shown at the beginning of this section.

**1.3 How to refuel during a race**

As the race progresses the cars will consume fuel and you will see the fuel level indicators going out one by one on the Pit Box panel. When the car goes down to reserve you will see the last 2 fuel levels on the panel change to amber, showing that you must come in to refuel soon. If you do not do this you will continue to use up fuel and when you get down to the bottom level the car will run in fits and starts; it can do this for up to four laps before stopping completely and being disqualified. If you are disqualified you are out of the race and must wait for it to finish and a new one begin.

The system for refuelling is simple, simply involving the following steps:

1. When the car is about to enter the PIT BOX access track, press the change button at the back of your controller to go into the PIT BOX. You must slow down to go in as there is a speed limit. As you enter you will hear a short acoustic signal showing you have entered the pits. If you go into the PIT BOX at high speed a long acoustic signal will sound and the fuel levels on the panel will begin to flash, indicating that you have been penalised and are not allowed to refuel, obliging you to complete another lap before you can refill your tank.
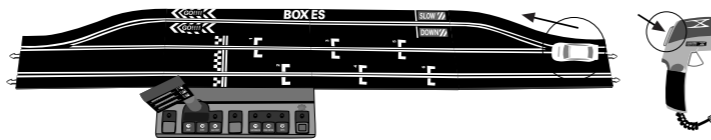
2. When you have entered and stopped in the PIT LANE (you must always stop between the SLOW DOWN and GO signs), press the button on the back of your controller again (the one that is also used to change lanes). This is as if you were opening the fuel cap.

3. Now, press the trigger on the controller to fill your tank slowly up to the level you want.
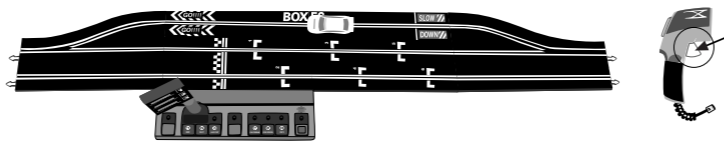
4. When you want to finish refuelling, press the button on the back of the controller once more (the one that is also used to change lanes). This is like replacing the fuel cap. Now accelerate by pressing the trigger to go back out on to the track and carry on with the race.

5. Now accelerate by pressing the trigger to go back out onto the track and carry on with the race.

To make sure you are in PIT BOX mode when you finish programming the race and before beginning it, check the display on the Pit Box base unit and you will see (-. - -) with the dot on the PIT STOP option.

2 **Race Mode WITHOUT Pit Box (without fuel load)**

This is for if you wish to race without Pit Box, i.e. without fuel consumption. In this mode you can programme the laps to count up or down and set the braking level. The only functions you cannot programme are those of fuel load and tank size (capacity).

The first thing you have to do is personalise the braking level. It is **very important** to bear in mind that these two personalisation options, unlike that of the fuel capacity, must be set **individually** for each car, and that throughout this process the car must **always** be on the Pit Lane track (the track with the word BOXES on it) and must **never** be removed from it while personalisation is underway.

Follow the steps below:

1. Place the car on the PIT LANE track (the track with the word BOXES marked on it).

2. Hold down the MODE key for 2 seconds (the letters PIT will appear on the base unit's display).

3. Press the MODE key 3 times (the letters CAR will appear on the Pit Box base unit's display).

4. Press the SELECT key once (the letters FUE will appear on the base unit's display).

5. Press the MODE key once (the letters BRA will appear on the Pit Box base unit's display).

6. Press the SELECT key once (000 will appear on the Pit Box base unit's display). You may now set the type of braking for your car. Do this by pressing the SELECT key to set it to 0%, 50% or 100%.

7. When you have decided on the brake level you want, press the MODE key once (the letters CAR will flash).

8. Press the button on the back of your controller (also used for changing lanes) and (- - -) will appear on the Pit Box base unit's display. Your car's braking level is now set.

9. To personalise the other competing cars, follow exactly the same steps as with the first one.

You now need to decide whether you want to have the race with the laps counting up or down.

If you wish to have the race with the **laps counting up**, follow the steps below:

1. Hold the MODE key down for 2 seconds (the letters PIT will appear on the Pit Box base unit's display).

2. Press the MODE key once (the letters BAS will appear on the Pit Box base unit's display). You are now set to race without Pit Box.

3. Press the SELECT key once. The letters UP will appear (laps will be counted up).

4. Press the SELECT key once. (- - -) will appear on the Pit Box base unit's display and 2 red lights only will be lit on the Pit Box fuel panel.

5. Press the START/STOP key down for 2 seconds and the green light in front of the key will come on. You may now begin the race with the laps set to count up.

To finish the race, take the following steps:

1. Warn the participants that this is to be the last lap.

2. Press the START/STOP key for 2 seconds and the green light will flash.

3. When the winning car passes the finishing line, the Pit Box fuel panel will show this by making the fuel lights flash in their box.

4. When the last car passes the finishing line the green light will stop flashing.

5. If you wish to begin another race the same as the previous one, follow the steps below:

  · Check that the green light in front of the START/STOP key is off. If this is not the case, press the START/STOP key for 2 seconds and the light will go out.

  · Press the START/STOP key for 2 seconds; the green light in front of it will come on and you can start the race.

If on the other hand you wish to have a race **counting laps down**, follow the steps below:

1. Hold the MODE key down for 2 seconds (the letters PIT will appear on the Pit Box base unit's display).

2. Press the MODE key once (the letters BAS will appear on the Pit Box base unit's display). You are now set to race without Pit Box.

3. Press the SELECT key once (the letters UP will appear on the Pit Box base unit's display).

4. Press the MODE key once (the letters DO will appear on the Pit Box base unit's display, indicating that laps will be counted down).

5. Press the SELECT key (001 will appear on the Pit Box base unit's display). You now need to set **the number of laps you want to do** in the race. Do this by pressing the SELECT key; each press of this key will add a lap to the race (pressing it continuously adds laps in tens).

6. When you have set the number of laps to be completed, press the MODE key once. (- - -) will appear on the display and 2 red lights only will be lit on the Pit Box fuel panel.

7. Press the START/STOP key down for 2 seconds and the green light in front of the key will come on, showing that you are ready to begin the race.

At the beginning of the race, when the cars pass over the starting line the number of laps to which the race has been set will appear on the Pit Box base unit's display, and every time the leading car passes over the line this counter will be reduced by one lap.

When the race finishes, an acoustic signal will sound several times to show that it is over and the Pit Box fuel control panel will show who the winner was by making the fuel indicator lights flash.

If when you finish the race you wish to start another with the same number of laps and counting down, simply press down the START/STOP key for 2 seconds again: the green light in front of it will come on and (- - -) will appear on the PIT BOX base unit's display. You can now start another race the same as the previous one.

If when you finish the race you wish to start another with the same way of counting the laps down but with a different number of laps from the previous race, follow the procedure for programming the number of laps exactly as shown at the beginning of this section.

* Where you have had a race counting the laps up and you now want to have one counting the laps down, follow the steps below:

1. Check that the green light in front of the START/STOP key is off. If this is not the case, press the START/STOP key for 2 seconds and the light will go out.

2. Follow the steps for programming the number of laps exactly as shown at the beginning of this section.

To make sure you are in "WITHOUT PIT BOX" mode when you have finished programming the race but before starting it, check the Pit Box base unit's display and you should see (- - .-) with the dot on the BASIC option.

3 **Qualifying Race Mode**

In order to present results it is ESSENTIAL that the Digital Chronometer be connected (this is sold separately as ref. 25040).

All programming is to be carried out using the Pit Box.

The qualifying heat can be held with the cars competing one by one or all at the same time. If the cars are to compete one by one the display on the Digital Chronometer will show their lap times, and when a competitor finishes the heat their fastest lap time will be displayed. Every time a player finishes their qualifying heat, their fastest lap will appear on the display. When the last player finishes their qualifying heat, the display will automatically show the final positions on the starting grid for the forthcoming race.
If on the other hand all the cars compete at once in the qualifying heat, the Chronometer will display all the players' lap times and when the last player finishes all the laps in the heat, the display will also automatically show the positions on the starting grid for the forthcoming race.

This function involves completing a qualifying race in order to determine the order of the cars on the starting grid for the forthcoming race. To programme this function, follow the steps below:

1. Connect the Digital Chronometer to its own contact track. This can be recognised because it has a red panel on the bottom. It is essential that the Digital Chronometer ALWAYS be connected to this track, otherwise it will not work.
2. Hold down the MODE key for 2 seconds. The letters PIT will appear on the base unit's display.
3. Press the MODE key twice until the letters QUA appear on the PIT BOX base unit's display. You are now in "Qualifying Race" mode.
4. Press the SELECT key once. The letters LAP will appear on the PIT BOX base unit's display.
5. Press the SELECT key once more. 001 will appear on the PIT BOX base unit's display. You now need to set the number of laps you want for the qualifying race. To do this press the SELECT key once for each lap you wish to programme. Alternatively, holding the key down adds laps in tens.
6. When you have set the number of laps you want to do, press the MODE key once. The letters PLA will appear on the base unit's display. You should now specify the number of cars taking part in the qualifying race.

7. To do this, press the SELECT key once and 001 will appear on the Pit Box base unit's display. You should then press the SELECT key as many times as there are participants in the race.

8. When you have set the number of competitors, press the MODE key once and (- - -) will appear on the PIT BOX base unit's display.
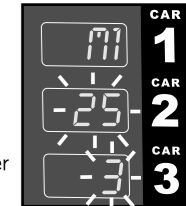
Also, the Digital Chronometer display will show M1, the number of laps programmed and the number of participants. This means that the Digital Chronometer is programmed.

9. Hold down the START/STOP key for 2 seconds and the green light in front of it will come on. (- - -) will appear on the Chronometer display.

10. You may now start the qualifying race.

To make sure you are in "QUALIFYING" mode when you have finished programming the race but before starting it, check the Pit Box base unit's display and you should see (- - -.) with the dot on the QUALIFY option.

During the race the Chronometer will give the lap times for each car. In the event of a fastest lap, the display will flash.

When the qualifying race is over, the Digital Chronometer's display will show the order in which the cars have finished and therefore the position in which they are to be placed on the starting grid to begin the race.

Car no. 1 third place
Car no. 2 winner
Car no. 3 second place

4 **Presenting Results**

In order to present results it is ESSENTIAL that the Digital Chronometer be connected (this is sold separately as ref. 25040).

All programming is to be carried out using the Pit Box.

To see all the information about the race (whether you are counting laps up or down), take the following steps:

1. When the race finishes, the display on the Digital Chronometer will automatically show the fastest lap time. Press the MODE key down for 2 seconds and PIT will appear on the Pit Box base unit's display.
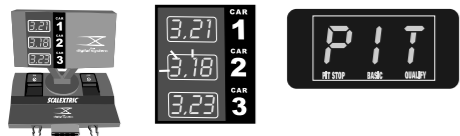
2. Press the MODE key 5 times. RES will appear on the Pit Box base unit's display. The Digital Chronometer's display will continue to show the fastest lap time.
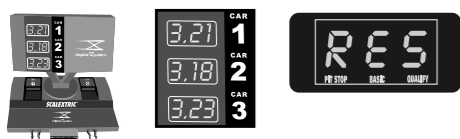
3. Press the SELECT key once. The Digital Chronometer's display will continue to show the fastest lap time.
4. Press the SELECT key once more. The Digital Chronometer's display will show the average lap time.

5. Press the SELECT key once again. The Digital Chronometer's display will show the total time the race lasted.

← Hours
← Minutes
← Seconds and tenths of a second
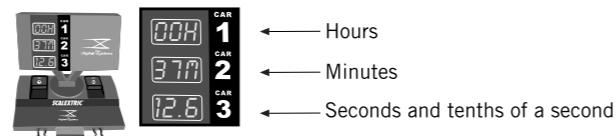
6. Press the SELECT key once more. The Digital Chronometer's display will show the winner (000 will be displayed in its box) and the time differences of the other competitors.

← 0.02 seconds behind the winner
← Winner time
← 1 lap behind the winner
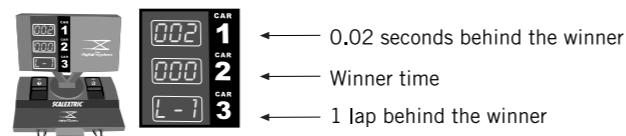
5 **Expanding the System to 6 Competitors**

It is possible to race with up to 6 competitors. To do this, proceed as follows:

5.1. Connection between the Pit Box and a Digital Power Line base unit

This mode enables you to race with up to 6 cars. If you wish to race with more than 3 cars you must have a Digital base unit (this is sold separately complete with the base unit connection cable, as ref. 25000).

Very important: Where you a Pit Box and a Digital base unit are connected to the curcuit, this base unit must ALWAYS be connected to the Pit Box by means of the Base Unit Connecting Cable and NEVER to a connection track, though it can be connected to a standard straight. Any programming of the cars or the race must ALWAYS be carried out from the Pit Box and NEVER from the Digital base unit. Where several transformers are needed, they must ALWAYS be connected to the Pit Box and NEVER to the Digital base unit.

The Pit Box and the Digital base unit must be connected by means of the Base Unit Connecting Cable (also sold separately as ref.20090), plugged into the side of each of them. If the correction is correct, the light next to the connection on each of them will be green, and if it is incorrect it will be red.

Pit Box

Digital Base Unit
POWER LINE

Control units
connecting cable
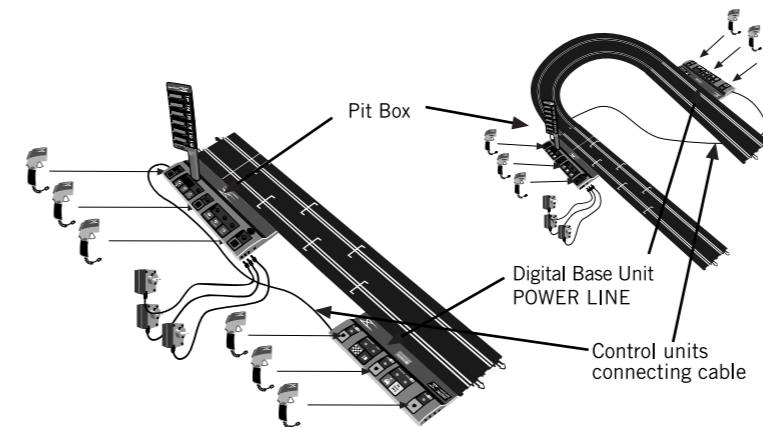
It is very important that you be aware of the following points:

- Any kind of programming of the cars or the race must ALWAYS be carried out from the Pit Box and NEVER from the Digital base unit. This Digital base unit is ONLY used to connect the controllers for cars 4, 5 and 6.

- The Pit Box has a connection track exclusively for it (it has starting positions 1 and 2 marked on it, and is included with the circuit) and you must ALWAYS connect it to this connection track and NEVER to any other.

- The Digital base unit must NEVER be connected to a connection track, but to a standard straight, and must ALWAYS be connected to the Pit Box by means of the base unit connecting cable.

The Digital base unit may be located anywhere on the circuit, as long as it is connected to the Pit Box. For example, it can be placed on the same side as the Pit Box or on the opposite side to it, as shown in the illustrations.

To programme car no. 4, for example, you should do the following:

- Plug the controller into connection 4 on the Digital base unit.
- Place the car on the track (remember that there must not be any other car in either of the two slots).
- Press the CAR PROGRAM key on the Pit Box for 4 seconds, until the red light comes on (remember that the Digital base unit is only used to plug in the controllers of cars 4, 5 and 6).
- Press the change button on the back of the controller in position 4.
- The car's lights will automatically come on. This means that the car is programmed to work with the controller connected to the digital base unit (connection no. 4). You must then lift up the car, then put it back in the slot and it is now ready to race. You should follow the same steps with cars no. 5 and 6.

To set Expert or Junior speed for cars 4, 5 and 6 you should do the following:

1. Place the car on the track. Remeber that the car must first have been programmed (see the section on programming the car).

2. Press the SPEED CONTROL on the Pit Box for 4 seconds, until the red light comes on.

3. Press the change button on the back of the controller and the green controller connection light will change to orange. The car is now set to Junior speed.

4. To go back to Expert speed, repeat the same steps and the orange controller connection light will turn green once more.

Programming the xenon-effect lights of the cars when there are 4 or more competitors is the same as when there are only three. All you have to do is press the LIGHTS key on the Pit Box (remember that the Digital base unit is only used to plug in the controllers for cars 4, 5 and 6) and the cars will race with their xenon-effect lights on.

5.2. The PIT BOX Expansion Module must be used (this is sold separately as ref. 25070). With this module you can monitor the fuel levels for cars 4, 5 and 6.
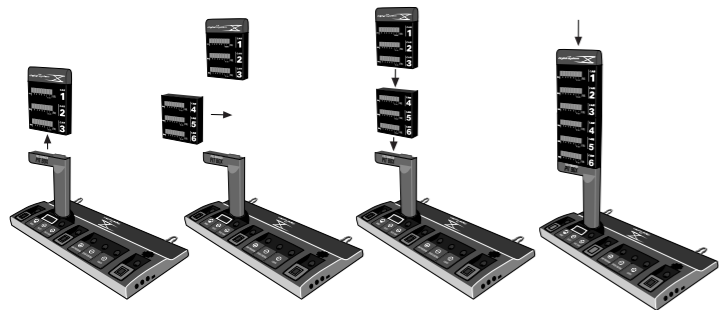
5.3. If you have a Digital Lap Counter (sold separately as ref. 25030) or a Digital Chronometer (ref. 25040), you need to connect them to the Lap Counter Expansion Module (sold separately as ref. 25010) and the Chronometer Expansion Module (sold separately as ref. 25080).

Lap counter contact track

Chronometer contact track
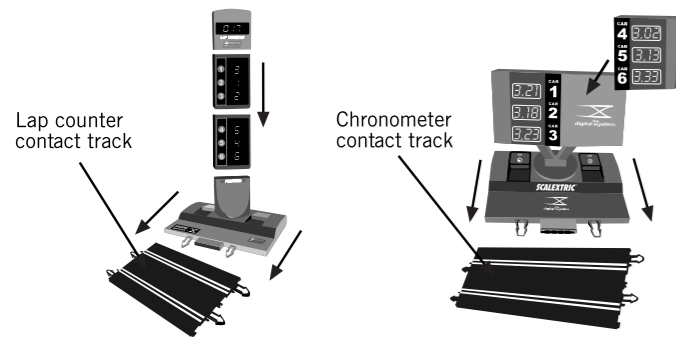
Advice on upgrading to races with more than three cars

			Recommended expansion		
4 players	1	1	2	2	—
5 players	2	2	4	3	4
6 players	3	3	6	4	6

ADVICE

1- If the system loses the power supply this may be due to some metal object in contact with the track. Once it has been removed and the track is clean, you can continue racing with all the information stored in the memory of the central unit.

2- It is important to keep the rails on the tracks and the prick up braids on the cars clean and in good condition at all times. You can use the Track Cleaner (sold separately, ref. 88580) to clean the rails.

3- If a car moves a few centimetres without pressing the trigger after coming off the track and being replaced, this is normal, not a problem.

4- On a single circuit only the exclusive Pit Box connection track can be used (one only)

5- A lane change track must not be placed after the Pit Box connection track

6- Ensure that nothing is plugged into the mains supply before setting up, changing, dismantling and connecting any part of the circuit.

7- In the event of any malfunction in the Pit Box, disconnect the transformer from the Pit Box and then connect it again.

8- Violent collisions between cars should be avoided.
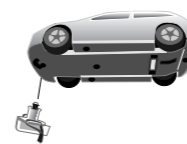
---

1 **Changing the pick-up braid**
(Ref. 86140)
(Sold separately)

Correct position

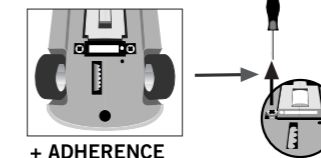**2** **Replacing the guide and braids**
(Ref. 20080)
(Sold separately)

3 **Setting the magnet**

A **Standard position**
This is the standard position with which the car is supplied. In the position the magnet may only be lowered (never raised) in ordered to give the car better road holding.
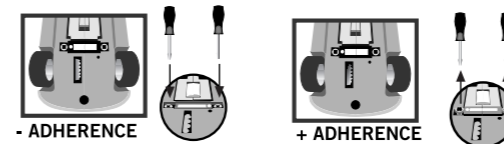
+ ADHERENCE

B **Adjustable position**
If you wish to adjut the position of the magnet car, you should follow the steps below:

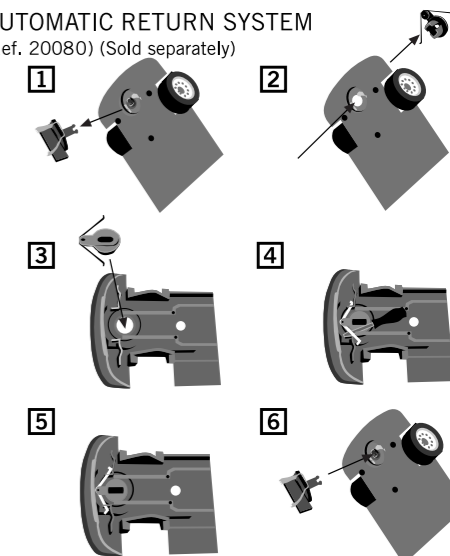1- Remove the screws   2- Turn the magnet 180º   3- Fit the screws

- ADHERENCE   **+ ADHERENCE**

---

4 **Lubrication points**

Pro Synthetic Oil
(Ref. 50230)
Pro Grease (Ref. 50240)
(Sold separately)
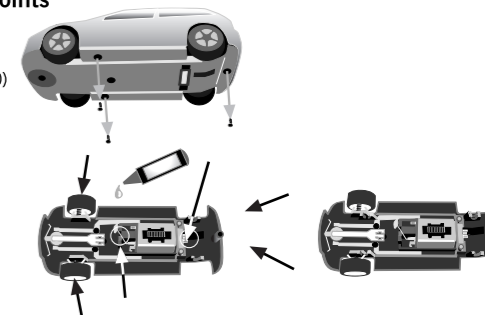
5 **A.R.S. Guide**   AUTOMATIC RETURN SYSTEM
(Ref. 20080) (Sold separately)

1   2

3   4

5   6

IMPORTANT NOTICES

· Disconnect the transformer from the mains power supply whenever the product is to be handled, its configuration is to be changed or extended, peripherals or other accessories or components are to be connected or disconnected and whenever the product is not in use.

· Do not use a transformer or cables other than those supplied in the box. Do not use extensions or make changes to the supplied cables.

· Do not use this product close to electric or electronic devices.

· Other electric or electronic equipment may affect the proper operation of this product.

· This product may affect the proper operation of other electric or electronic equipment.

· The transformer's tracks and connector are parts that are sensitive to static electricity discharges for operational reasons. Avoid direct contact with the rails and handle the transformer's connector by its protective plastic sheath.

· In the event of a drop in the power supply for any reason, the product may completely reboot.

· Do not modify or alter the product. Tecnitoys Juguetes S.A. accepts no responsibility for the consequences of any alteration, modification or improper use of the product.

· Use only SCX components, accessories and/or spare parts of the appropriate type. Tecnitoys Juguetes S.A. accepts no responsibility for the consequences of any use of components, accessories and/or spare parts which are not SCX and/or improper use of such items.

· If cars stop or their speed fluctuates under the influence of magnetic fields, this is considered to be acceptable functioning of the product.

· Not recommended for children under three years old as it contains small pieces which could be swallowed or inhaled.

· PRO motors may not be used.

CE COMPLIANCE STATEMENT

TecniToys Juguetes, S.A., Avda. Diagonal 545 7ª, 08029 Barcelona, hereby states that:

The Digital System   Ref.: 1002 / 10020

Complies with European Directives:

- 73/23/EEC amended by 92/59/EEC and 93/68/EEC. Low Tension Directive.
- 88/378/EEC amended by 92/59/EEC and 93/68/EEC. Toy Safety Directive.
- 89/336/EEC amended by 92/31/EEC, 92/59/EEC and 93/68/EEC. Electromagnetic Compatibility.

This statement is issued based on compliance with the following European Standards:

- EN 71
- EN 50088:1996 + A1: 1996 + A2: 1997 + A3: 2002
- EN 55014 - 1: 2002 + A1: 2002
- EN 55014 - 2: 1998 + A1: 2002
- EN 61000 - 3 - 2: 2001
- EN 61000 - 3 - 3: 1997 + CORR: 1999 + A1: 2002
- EN 61558
- EN 61558-2-7
- EN 61558-2-17

Any non-specified use of the instruction manual and/or the use of the product for any task or purpose other than that it was designed and manufactured for, will void this statement and be the user's entire responsibility.
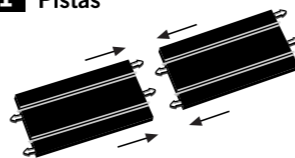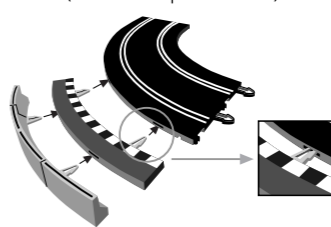
Bem-vindo à nova era digital da competição
A tecnologia digital torna tudo isso possível:
- Competir com até 6 carros, de uma vez, numa pista com somente 2 faixas;
- Ultrapassagens reais mudando-se de/para qualquer faixa;
- Informação constante sobre o avanço da corrida, mostrando o líder, o conta-voltas e mais...
- A tecnologia Power Line permite conectar vários acessórios sem que os carros percam potência.

Importante: este circuito que acaba de adquirir pode não incluir todos os acessórios descritos neste manual de instruções.

Atenção: para o bom funcionamento deste aparelho, é imprescindível utilizar um transformador, marcado com o logótipo da Tecnitoys, e a frase: Usar este transformador exclusivamente com o Digital System.

Importante: Sempre que quiser conectar ou desconectar qualquer elemento do circuito (à excepção dos comandos de velocidade), deve desconectar previamente o transformador do Pit Box.

1 Pistas

Para o correcto funcionamento dos circuitos Digital System todas as pistas devem estar perfeitamente encaixadas.

LIMPEZA DAS VIAS
As vias das pistas SCX Digital System estão impregnadas com um óleo especial que as protege durante a sua fabricação e posterior armazenagem. Elimine esta protecção esfregando todas as vias com um pano limpo, ligeiramente humedecido em álcool (nunca com água nem óleo). **É muito importante que as pistas estejam limpas. Para tanto, pode utilizar o "Limpa pistas" (ref. 88580, vendido separadamente).**

DESMONTAGEM E ARMAZENAMENTO
Recomenda-se, uma vez desmontado o circuito, guardá-lo na sua caixa original e mantê-lo num lugar seco protegido de altas temperaturas.

2 Valas e bordas (no circuito que os inclua)

3 Conexões

Painel de combustível
Porto comunicaçoes
Marcador
Pista conexões Pit Box
Led de Potência