VEKTORACE
FORMULA 8

GAME SETUP
SAMPLE

Player 1
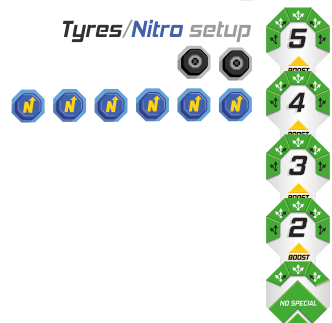
Tyres/Nitro setup

5
4
3
2
BOOST
NO SPECIAL

Player 2

Tyres/Nitro setup

5
4
3
2
BOOST
NO SPECIAL

Turn 2

2

Turn 3

3

Turn 4

4

Turn 1

1

Turn 5

5

Car 1

Car 3

Car 2

Car 4

STARTING GRID

FLYING START

3

1st 2nd 3rd 4th

TRACK

START/FINISH

Player 3

5
4
3
2
BOOST
NO SPECIAL

Tyres/Nitro setup

Player 4

5
4
3
2
BOOST
NO SPECIAL

Tyres/Nitro setup

VEKTORACE

PIT LANE

EXIT

ENTRANCE

PIT LANE

VEKTORACE *FORMULA 8* is a car racing game that does not require a pre-defined race track and uses a "vector movement" mechanism called **Octagon System©** to determine movements. Being a race, the goal is to be the first to cross the finish line..

From 2 to 4 players
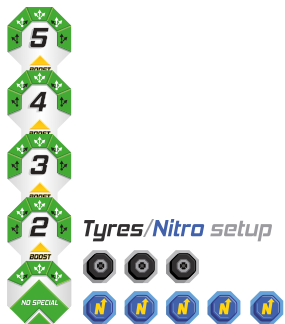
COMPONENTS

20 Movement vectors, numbered up to 5 (4 sets). The back of the vectors numbered up to 4 is referred to as "BOOST"

8 corners numbered from 1 to 8 in two different color settings, only for aestethical purposes

8 "car" octagons (showing the shape of a racing car seen from above)

8 "frame" rectangles, (to be used during the assembly of the cars)

A "Starting Grid" token

8 Position tokens numbered from 1 to 8

32 "Nitro Points" tokens

A "pitwall"

32 "Tyre Points" tokens

6 Lap tokens

A pre-cut cardboard "Formula8", containing eight "Formula8" (from now on **F8**) to be assembled

An "attack distance" token

The rules

ATTENTION: the assembly of the **F8** is illustrated at the end of the manual and needs the use of paper glue **NOT included** in the box. The number of **F8** included in the box is higher than the maximum number of players.

DRIVING SCHOOL

Each **F8** is "equipped" with 5 "gears", represented by movement vectors (from this moment simply "vectors"), determining its speed. Saying that an **F8** is in "third gear" is a short way to say that the movement of that car will be calculated by placing on the table the vector identified with the number 3. The yellow side of the vectors is identified as **"BOOST"** (described later) and it's used only during the race, so for the moment we won't take it into consideration.

A. Basic move

The basic move is resolved by placing a vector exactly in front of the car or slightly lateral either the right or on the left frontal sides of car ("side movement"). Note that in both cases the vector follows exactly the direction of the **F8**.

Exemple: Correct lateral placement on the right
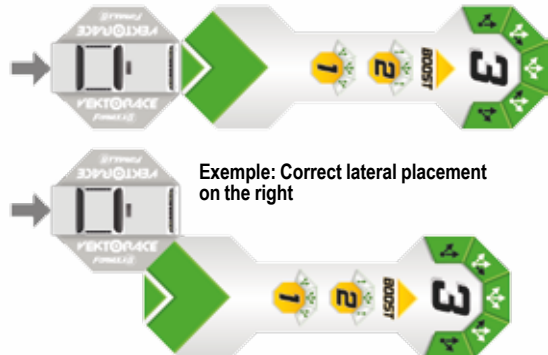
After choosing how to place the vector, the **F8** is moved touching one of the end points of the vector itself and here, if needed, rotated to perform a direction change. On each vector, white arrows indicate all the possible directions that the **F8** can freely take at the end of the move. Black arrows indicate special race moves described later. At the end of the move, the player removes the vector from the table.

ATTENTION! It is essential that the vector is never positioned in a different way than indicated and it is very important to remember that the direction of a **F8** can change only at the end of the movement and only by 45°, as shown by the arrows.

No exceptions to this rule, even during the race.

B. Changing gear

At the end of the movement it is possible to keep the same gear, upshift or downshift one gear. The decision must be taken without making any measurements on the table, but simply estimating the distances.

PRE-RACE SET-UP

At the beginning of this manual you can see an image showing a standard set-up, with an example of a possible circuit. The numbers on the corners determine the sequence, while the curbs indicate the side of the corner the **F8** must travel around. Since VektoRace is not played on a board, the edges of the table will be the physical limits of the "track". You are free to create your own circuit by placing the corners wherever you like on the table.

Before starting the race, you must also decide the position of the pitwall and the number of laps. You can use the Lap tokens to keep track of them during the race.

Place the Tyre and Nitro tokens, the Starting Grid and the "attack distance" token within reach.

Give each player a set of five vectors and an **F8**.

STARTING GRID

The starting grid is determined by randomly picking the Position tokens. The player starting in "pole position" places his own **F8** wherever he wants, aligned to the starting lane. The second player places the Starting Grid token touching the **F8** in pole position with the "1st" white or black side and this token determines all the cars position on the grid. The Starting Grid token is then removed.

Starting from the one in pole position, each player in turn must now declare how many Nitro and Tyre points he wants to start with. Each player can take a total of 8 tokens (each worth one point) freely divided in the way he likes. The image at the beginning of this manual shows one of the possible configurations.

Starting player's configuration
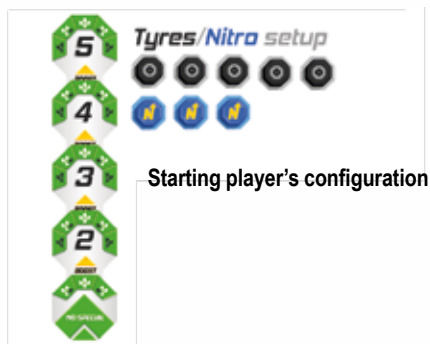
STARTING PROCEDURE

The race begins with a fly start in third gear, so each player first move will be performed using the vector 3.

However, all players, before the start, must secretly decide whether starting using a Nitro point to activate the **"BOOST"** (see later) or not and they do this by hiding one of their Nitro points in one hand and then simultaneously revealing their choice. The Nitro points played are immediately discarded

The race can now start.

START AND MOVEMENT DECLARATION

The game begins with the turn of the first player, who makes his move (using the vector 3 plus plus, eventually, the **"BOOST"**) and then declaring which gear he's going to use in his next turn, taking the relative vector in his hand.

This decision is :

➤ binding, cannot be changed and must always be clear to all

➤ must be done strictly at the end of the current movement turn

➤ must be done without any distance measurement

The game proceeds following the position order on the grid. Each player performs his own move (in third gear and possibly BOOST) and then declares the gear for his next playing turn.

GAME ORDER

The game is divided into rounds and each round is played following the position order of the cars. When the last player has played his own turn a new round is ready to start.

At the beginning of each round it may be necessary to redefine the playing order, taking into account any possible overtaking occurred during the previous round. An overtaking is "completed" when the front of the F8 completely passes the front of a preceding one. If two F8s are perfectly

aligned, overtaking is not yet completed and the play order between them remains the previous one. An **F8** can, of course, overtake more than one car in the same round, potentially passing from the last to the first place!!!

To determine the playing order, the distance or position of the cars related to corners are completely irrelevant, as the one thing taken into consideration is the imaginary line drawn perpendicularly using the frontal side of the **F8** car octagon".

OK! NO!
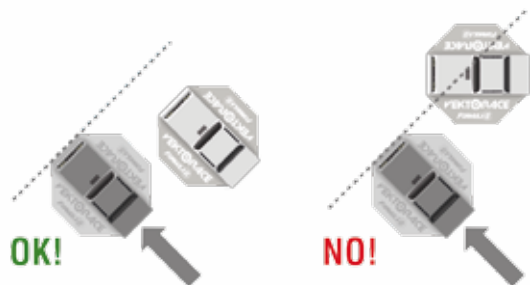
NITRO POINTS

Nitro Points are used for

➤ upshifting over the standard limit

➤ using the **"BOOST"** speed

➤ "slingshot passing" (see "Slipstream").

UPSHIFTING

As already seen, at the end of your move you can upshift by taking the vector corresponding to the gear immediately above the one just used. However, it is possible to upshift over this limit spending one Nitro point for each extra gear.

Eg: Olivia upshift from third to fourth gears and she doesn't spend any Nitro Points, while Marc chooses to upshift from second to fifth spending two Nitro Points.

This special upshift can, however, only take place at the end of a player turn, during the declaration phase.

BOOSTING

During your turn, however, after placing the vector for the movement, but strictly before moving the car, you can spend one Nitro Point to use the **"BOOST"**, increasing your **F8** speed without changing the gear..

The maximum speed increase is indicated on the vector just used, so turn only the indicated vectors to the **"BOOST"** side.

The chosen **"BOOST"** vector must be placed exactly in front of the movement vector just played (no exceptions), but the player is free to choose the best Boost vector among those available.

Eg: Lewis just placed his 4th gear vector on the table and declares he want to speed up his car using the BOOST and he discard one of his Nitro Point tokens. He can now turn on the BOOST side the vectors 1, 2 and 3 and choose the one he wants to use, placing it as shown in the example below.

The final position of the **F8** is determined exclusively by the arrows printed on the chosen **"BOOST"** vector, no exceptions. At the end of this move, the player is free to declare the gear for the next turn without any restrictions, still respecting the basic rule.

Note that using Nitro Points to over upshift takes place AT THE END of your turn, while using a Nitro Point to activate the **"BOOST"** takes place DURING your turn. There is no obligation to declare in advance the intention to use the **"BOOST"** (with the exception of the starting move).

TYRE POINTS

Tyre points can be spent for

➤ downshifting below the standard limit

➤ performing the "black arrows" special movements

DOWNSHIFTING

At the end of your turn, when you must declare next turn gear you can spend **Tyre Points** to downshift more than allowed. For each **Tyre point** spent you can decrease one extra gear.

> Eg: Lisa can downshift from fifth to first by spending a total of three Tyre Points (from fifth to fourth is free, while the other three reductions require one Tyre point each).

BLACK ARROWS MOVEMENTS

Tyre Points may be also used to perform the special movements shown on the vector by the black arrows, thus increasing the maneuverability of your car. Placing your **F8** in any of the directions indicated by a black arrow costs you a **TYRE POINT**.

MOVEMENT LIMIT AND PENALTY

The basic rule is that each element must be positioned without overlapping any of the others or without falling off the table. This applies to vectors and to the **F8s**.

The elements considered obstacles are: the **F8** themselves, the corners and the **"pitwall"**. Any other game component on the table must be moved away to let the **F8** freely drive.

In the event that using the declared gear is impossible, a player can perform an emergency downshift spending one Tyre Point for each gear decreasing. At the end of this emergency maneuver, however, no attack action (see later) is possible. If this emergency downshift doesn't allow any valid move, the penalty is losing the current turn, without moving the **F8**, and restarting next turn in first gear. Before restarting after this penalty, a 45° rotation of the **F8** is allowed.

A player can't voluntarily take the penalty if he can perform a valid move using the declared gear or an emergency downshift, no matter how unfavorable this may be.

The edge of the table is a natural limit to cars movement. If a car passes the edge of the table, the player loses his next game turn, then starts again in first gear placing his car in the direction he wants, as close as possible to the edge of the table where it fell over.

In the game there are no "accidents", so any obstacle to movement that is not covered by the rules will be resolved by using the penalty described above.

DRAFTING, PUSHING AND SLINGSHOT PASS

When a car finishes its movement with its own front (in whole or in part) inside the "slipstream" area of another car (that is less than one octagon away), in the same direction of travel and at least in second gear, it is possible to take advantage of drafting.
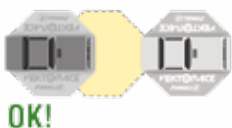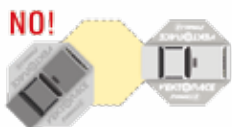
To determine if a **F8** is inside the "slipstream" area of the car in front of it you can use the "Attack Distance" token (particularly for edge cases): if on the table there is enough space to place the "Attack Distance" token between the two **F8**, that means that the distance is more than the one needed for the "slipstream" attack, that cannot therefore be performed."

The attacking **F8** is placed exactly behind the preceding one thus filling the gap separating them.

This type of attack is called **"pushing".**

The **"pushed" F8**, in its next turn, will not be allowed to downshift at the end of its move, no exceptions. The attacked player is free to declare the same gear or a higher one.

The attacking car has however a second attack type, called **"slingshot pass"**. This special move requires the payment of a Nitro Point and let the player place his own F8 just in front of the other one, as shown in the figure. To perform this special attack move you must be able to physically fill the gap between the two cars. Any obstacle between them makes this attack impossible. Obviously, the car passed doesn't get any limitation to its next turn movement.
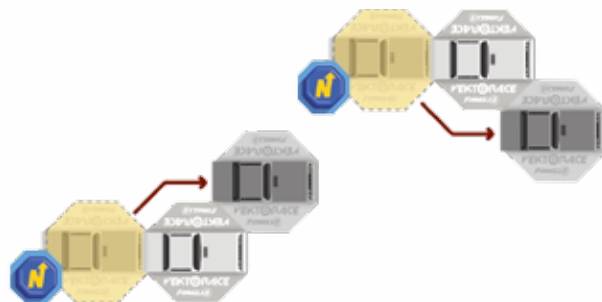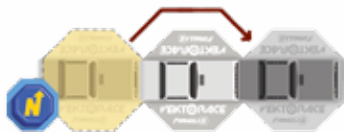

ATTENTION: Using Tyre Points during the current turn prevents you from performing this special attack moves.

The attack must be declared, so finding yourself right behind an opposing car does not automatically determine this special race situation.

LATERAL ATTACK (SHUNTING)

If a car finishes its movement with its front inside the side attack area of the preceding one, in the same direction of travel and at least in second gear, it can automatically fill the gap by positioning itself adjacent to the rear side of the opposing car, as indicated in the image.
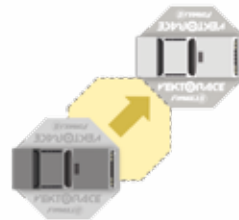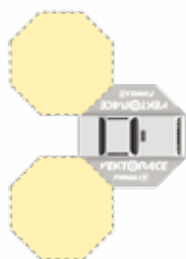
On his next turn, the attacked player will be subject to the following limitations: he can position the vector only on the front or on the opposite side to the one attacked of his car and can change direction only using the front side arrows or those opposed to the one under attack.
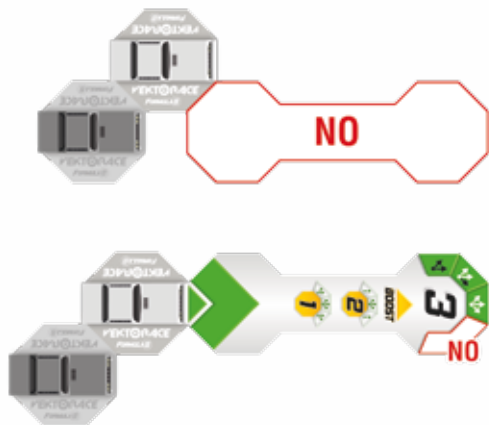
Note that a car may be at the same time under attack both from the right and from the left. In this case, the only possible move is the straight one, with possible direction change using the arrows in the front part of the vector.
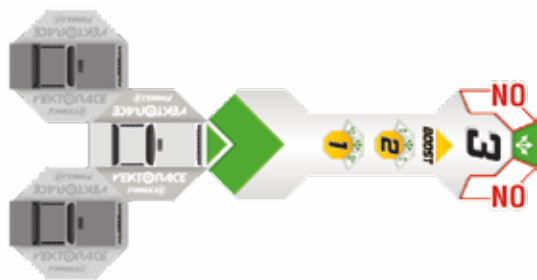
The shunting is always executable, regardless of whether or not you use Tyre points during your turn, but as for drafting it must be declared.

PIT-STOP

The **"pitwall"** positioned at the beginning of the race separates the competition area from the **"pit-stop" area**, which is in between the two lines printed at the entrance and at the end of the wall itself.

To perform a **Pit-Stop** it is necessary to transit within this at most in second gear and the speed limitation remains valid until the front of the car is ahead of the line that indicates the end of the **pit-stop area**.
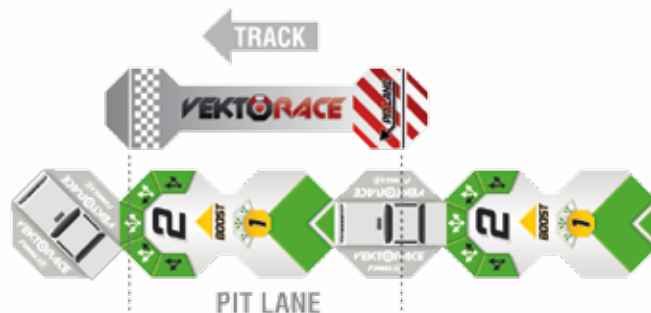
If the car entering the Pit-Stop area is not able to respect this limit, it will suffer the standard penalty (turn lost and restart in first gear).

It is not possible to enter the Pit-Stop area thanks to a sudden overtaking, as well as within the Pit-Stop area no attacks of any kind, changes of direction or lateral movements are allowed.

Passing into the Pit-Stop area allows the player to gain a supply of 8 total Points, freely distributed among Tyre or Nitro. The points eventually saved are added to these eight, but under no circumstances is it possible to exit the Pit-Stop area with more than 8 Tyre points or 8 Nitro points.

When the car front passes the exit line, the player is free to declare the next move according to the standard rules.

MICRO ADJUSTMENTS OF POSITION AND RESOLUTION OF CONTROVERSIAL CASES

The "geometric" nature of the game should not let cars assume unnatural positions with according to the 45° rule. However, because during the game it is quite normal to perform involuntary micro-movements, in every possible situation players are allowed to slightly rotate their **F8** to align it to the two main axes (horizontal and vertical) of the table.

To do this, you can take into account the edges of the table or the sides of the corners, which should always be positioned orthogonally orthogonally to the starting line. to the starting line.
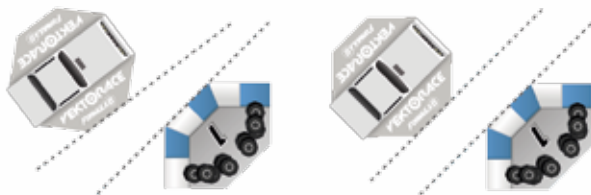
FOR THE REASONS ABOVE, DON'T BE TOO RIGOROUS WHEN CHOOSING IF A MOVE IS VALID OR NOT, ESPECIALLY IF THIS SHOULD LEAD TO A PENALTY.

However, when it's necessary to settle edge cases, if common sense is not enough, follow this simple rule: the player in the last position always takes the final decision. If he is involved in the doubt, then the first one will take it.

VICTORY

The race is won by the first F8 that crosses the finish line at the end of the last lap, regardless of whether the others have yet to complete their turn or not.
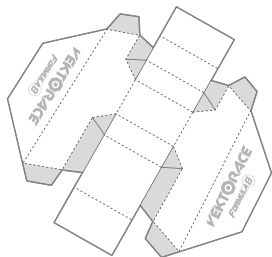
FORMULA 8

COSTRUISCI IL TUO BOLIDE!

Costruire le *Papecarz©* **Formula 8** è facile e divertente!
Piega con precisione per dare forma alla macchina.
Incolla con cura e precisione seguendo i numeri indicati sulle alette (utilizza una colla vinilica trasparente e densa).
Dopo l'applicazione della colla, attendi alcuni secondi prima di unire le parti.
Ricorda di aspettare che la colla sia asciutta prima di incollare il **rettangolo telaio** dentro la macchina e poi la macchina alla **base ottagonale**.

BUILD YOUR OWN CAR!

Assembling *Papecarz©* **Formula 8** is easy and fun!
Fold the tabs carefully right to their edges.
Glue the tabs together, carefully and accurately, following the numbers indicated on the car (use a clear, thick, vinyl glue).
After applying the glue, wait a few seconds before sticking the tabs together.
Remember to allow time for the glue to dry before sticking the **cardboard frame** into the car and then the car to the **octagonal base**.
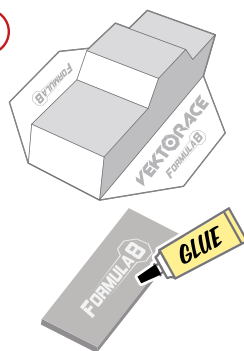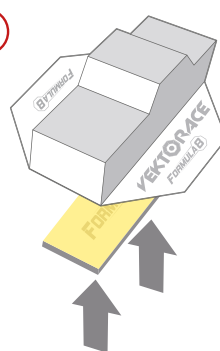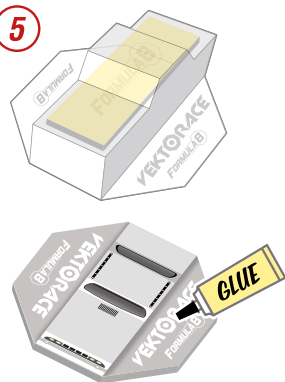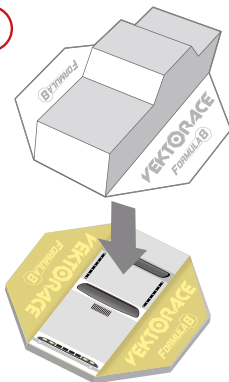

PAPECARZ

VEKTORACE
FORMULA 8

87 Jaws

4 DRAGON

54 ACE OF SPADES

8 Eight Ball

OCTAGON IS THE NEW WHEEL

61 Rose

71 Strike

12 Lucky Shot

93 Oktopus

OCTAGON
SYSTEM

powered by
PAPECARZ