

A Turn

- Players receive current positions of all robots, plus damage status, checkpoints reached, and last archive square.
- Players also receive the selection of program cards for their robot.
- Players program their robots and send their programs to the referee. They also send conditional orders about firing, repairing, and special abilities.
- The referee resolves the five phases of the programming, moving robots, and noting damage to them.

Information Received Each Turn

- Current position of each robot in the game, including the facing of each robot.
- Current damage of each robot in play.
- Any locked program cards for each robot.
- Set of program cards that the player can program his/her robot with. The number of cards given is 9 minus any damage points scored on robot. If less than five cards are given, some cards from last turn are locked (and are reported to everyone).

Program Cards

The program cards are of the following types:-

- Move forward 1, 2, or 3 spaces. (Cards denoted Move-1, Move-2, Move-3 in orders)
- Move backward 1 space. (Denoted Back in orders)
- Rotate 90 degrees left or right. (Denoted Left, Right in orders)
- Rotate 180 degrees. (Denoted U-Turn in orders)

(Note the rotate cards do NOT move the robot from the space it currently occupies).

As well as the type, a program card has a Priority. This resolves conflicts in moving simultaneously. Cards with HIGHER priorities are performed (fully) BEFORE cards with lower priorities. All cards have a different priority. Priorities are noted in orders as P123 (where 123 is the priority).

Card Mix:-

- 18 x Move-1
- 12 x Move-2
- 6 x Move-3
- 6 x Back
- 18 x Left
- 18 x Right
- 6 x U-Turn

Programming

- Five cards of program are needed. These must be specified in order (written as phases a-e).
- The cards must be taken from those provided for this turn.
- All five cards must be given (i.e. you cannot use a null program where the robot does nothing)
- Some cards may be locked due to damage. These cards cannot be overridden. E.g. If 5 points of damage have been scored upon the robot phase e card is locked, and only four cards are received, so these four cards must be placed in phases 1-5.

Turn On Factory Floor

Each turn is made of 5 phases (1 → 5), with robots performing one card, the elements of the race course moving, and firing of lasers to damage robots.

In detail a turn consists of five phases, each involving

- Robots move according to the card for the phase. Higher priority cards go first.
- Express conveyor belts move one square
- Express conveyor belts move their second movement. Normal Conveyor belts perform their one movement.
- Pushers push one square if active this phase.
- Gears turn 90 degrees.
- Board-mounted AND robot-mounted laser beams damage robots.
- Checkpoints touched. Robots still active and on checkpoints or repair sites are now deemed to have touched them.

After the fifth phase a special check is made. All robots on checkpoints or repair sites are repaired.

Damage

- Each robot can take 9 points of damage.
- The tenth point of damage destroys the robot.
- Each point of damage reduces the number of program cards the player receives by one.
- Each point of damage OVER 4 locks a card stopping it from being changed between turns. Other players can see the locked cards, so have an idea about what the robot will be doing at some point during the turn. Cards are locked in the order 5 → 1.
- A robot may lose an option card (if it has one) instead of receiving a point of damage.
- Damage can be repaired at the end of a turn, if the robot is sitting on a checkpoint or repair site. 1 or 2 points can be repaired this way.
- If a robot powers down for a turn it does not move. It repairs ALL its damage points BEFORE any movement of other robots, but will not move or fire. A player may decide to power down his robot when supplying orders for a new turn, knowing its position, damage and cards dealt, the power down takes place next turn..

- Destroyed robots come back (if the player has any lives left) at the LAST checkpoint or repair site that the robot touched at the end of a phase. Robots reactivated in this fashion come back with 2 points of damage. The robot also loses an option card. Players can choose to return powered down.
- Robots can also be destroyed by running into a pit or off the edge of the factory floor.

Factory Floor Guide

The races take part on a factory floor. This section details all the elements found on a factory floor and how they interact with robots.

Pits- These are bottomless shafts. Any robot entering one of these squares is destroyed. Open edges of the game area also act like bottomless shafts.

Walls- Factory walls. These block robot movement and laser fire. Robots that attempt to move through a wall simply stay where they are. No damage is incurred running into a wall.

Checkpoints- These are the targets that robots must touch in order to win the race. Each checkpoint is numbered and they must be touched in order. A checkpoint is only touched if the robot occupies it at the end of one of the movement phases. Passing through the checkpoint does NOT count. When a checkpoint is touched, it becomes the place where a destroyed robot will reactivate. If a robot is occupying at the end of a turn, ONE point of damage is repaired.

Repair Sites- If a robot occupies one of these at the end of a movement phase, the repair site becomes the place where the robot will be reactivated when destroyed. If a robot occupies one of these at the end of a turn, the robot is repaired. The number of spanners indicates the number of points repaired.

Express Conveyor Belts- These conveyor belts move robots two squares. They move robots in the direction of the arrow. This movement occurs at the end of each movement phase.

Turning Express Conveyor belts- As belts round corners robots being moved are also turned. If a conveyor belt pushes a robot onto this square, the robot is rotated 90 degrees in the indicated direction.

Conveyor Belts- These conveyor belts work exactly like express conveyor belts, except they only move robots one square at the end of each movement phase.

Pushers- If a robot is in the pusher square when the pusher activates, the robot is pushed into the adjacent square (in this example, the square above). Multiple robots can be pushed, so a chain of robots could be pushed by one pusher. Pushers only operate on certain phases. The race map will detail what phases pushers will operate on.

Gears- Robots sitting on gears at the end of a movement phase are rotated through 90 degrees, in the direction indicated by the arrows.

Crushers- Crushers exist on some conveyor belts. If a robot is on the square when a crusher activates, the robot is destroyed. Crushers only activate on certain phases. The race map will detail what phases crushers will operate on.

Lasers- Robots caught in a laser beam at the end of a phase receive a point of damage for each beam in the square. Robots are NOT damaged by moving through a laser beam, and laser beams are blocked by walls and other robots. If two robots are in line with a laser, the robot closer to the laser mount will be hit, but not the other.