

# CHECK-LIST Homologation guide


















Are my robots ready for the approval tests? Check it yourself!

Test these following points (non exhaustive list) before presenting your robots to the approval area.














## Robot #1 (controlled)

-   $\leq 120$  cm: **non deployed perimeter** (in vertical projection)
-   $\leq 130$  cm: **fully deployed perimeter** (in vertical projection)
-   $\leq 35$  cm: **height** (beacon support and emergency stop button excluded)
-   $\geq 5$  m: length of the **cable** control system - robot (optional if wireless controlled)
-   $\geq 2$  m: length of the **cable** between the electrical socket and the power supply (optional if wireless controlled)
-  Cable voltage  $\leq 13.8$  V.
-   $\emptyset \geq 2$  cm, height  $\leq 37.5$  cm and red coloured: **emergency stop button (if batteries inside)**
-  Voltage embedded in the robot  $\leq 48$  V.
-   $\leq 4$  bars at any point of non-commercial compressed air systems
-  **Lasers:** classes 1, 1M authorised; classes 2 accepted if the laser stays inside the playing area; higher classes forbidden. Provide the data-sheets.
-  All the **Lithium** batteries in safety bags (except LiFePO4 & Mindstorm); bring the chargers.
-  No forbidden equipments or **dangerous** for the persons or the goods (playing areas). File the projecting parts.
  
-  The robot(s) must stand in the starting area.
-   $\leq 205$  cm: **sum of the non-deployed perimeters** of the two robots
-   $\leq 220$  cm: **sum of the deployed perimeters** of the two robots



## Robot #2 (autonomous)

I do not have a second robot (skip the following)

-   $\leq 120$  cm: **non deployed perimeter** (in vertical projection)
-   $\leq 130$  cm: **fully deployed perimeter** (in vertical projection)
-   $\leq 35$  cm: **height** (beacon support and emergency stop button excluded)
-   $\geq 50$  cm: cord length (**starting system**)
-   $\emptyset \geq 2$  cm, height  $\leq 37.5$  cm and red coloured: **emergency stop button (if batteries inside)**
-  Voltage embedded in the robot  $\leq 48$  V.
- Autonomy: during the match, there is no wired or wireless communication between the secondary robot and the main robot or control system.**
-  Presence of an actuator that can be used for one action (not necessarily to move)
-   $\leq 4$  bars at any point of non-commercial compressed air systems
-  **Lasers:** classes 1, 1M authorised; classes 2 accepted if the laser stays inside the playing area; higher classes forbidden. Provide the data-sheets.
-  All the **Lithium** batteries in safety bags (except LiFePO4 & Mindstorm); bring the chargers.
-  No forbidden equipments or **dangerous** for the persons or the goods (playing areas). File the projecting parts.

## Additional constraints

### Display Cabinet

- Should be contained in the dedicated platform and with good visibility from the audience.



- **Width**  $\leq 22.2$  cm;

- **Length**  $\leq 45$  cm;

- **Height (not deployed)**  $\leq 30$  cm (and during the match, can be deployed up to 90 cm)



The basket count the cherry inside



$\leq 3$  kg : weight



Emergency button (if batteries)

Fixation: threaded rod of  $\varnothing 8$  mm & butterfly nut.



The score display is visible and easy to read. It is installed on the robot(s) or on the basket.

### Good to know!

- I anticipate my passage to the approval area. I do not wait until the last minute!
- I do not hesitate to homologate my systems individually when they are ready.
- When a substantial material modification is done, I must re-homologate what is necessary.

