

# **Dancing Robot Challenge**

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### **Disclaimer**

It is your responsibility to read and understand this document on a regular basis because we may update it from time to time.

If you have questions, please contact our Arduino Team at orcarduino@gmail.com.

#### **Dancing Robot Challenge**

Who says robots can't dance? The Dancing Robot Challenge combines the technical skills of engineering with the creative process of the arts. Throughout this challenge, not only will you get the chance to assemble and program a robot, but you'll also need to make it perform a dance routine accompanied by the music of your choice!

#### **Approved Kit**

The <u>Otto DIY Emotions Kit</u> is recommended, but any Arduino robot model or kit will be accepted as long as it conforms to the challenge rules.



# Challenge Rules

- 1. You must submit your robot's program prior to competition day and you will be unable to change your robot's program while competing.
- 2. The robot's performance must be autonomous. Any remote-control usage (electronic, Bluetooth, etc.) will result in disqualification.
- 3. The stage on which the robot will perform must be a flat 55 cm x 55 cm surface.
- 4. Your robot's starting position will be the center of the stage.
- 5. Your robot will have up to 2 minutes to showcase its dance performance.
- 6. Your robot must stay within the stage area while performing.

- 7. Your robot will be allowed one reset/retry to accommodate technical glitches.
- 8. Your robot's performance will be worth 70% of your final score. The other 30% will be based on the results of your Technical Component.

## Judging & Scoring

Due to the subjective nature of this challenge, your robot's performance will be scored by multiple judges and the final score will be recorded as the average of their overall marks. Here are elements to consider when orchestrating your robot's performance:

- Choreography, Rhythm, and Techniques
- Creativity and Originality
- Degree of Difficulty

A more detailed scoring rubric will be provided in the coming weeks.