

AR22 PROTOCOL

Light Communication

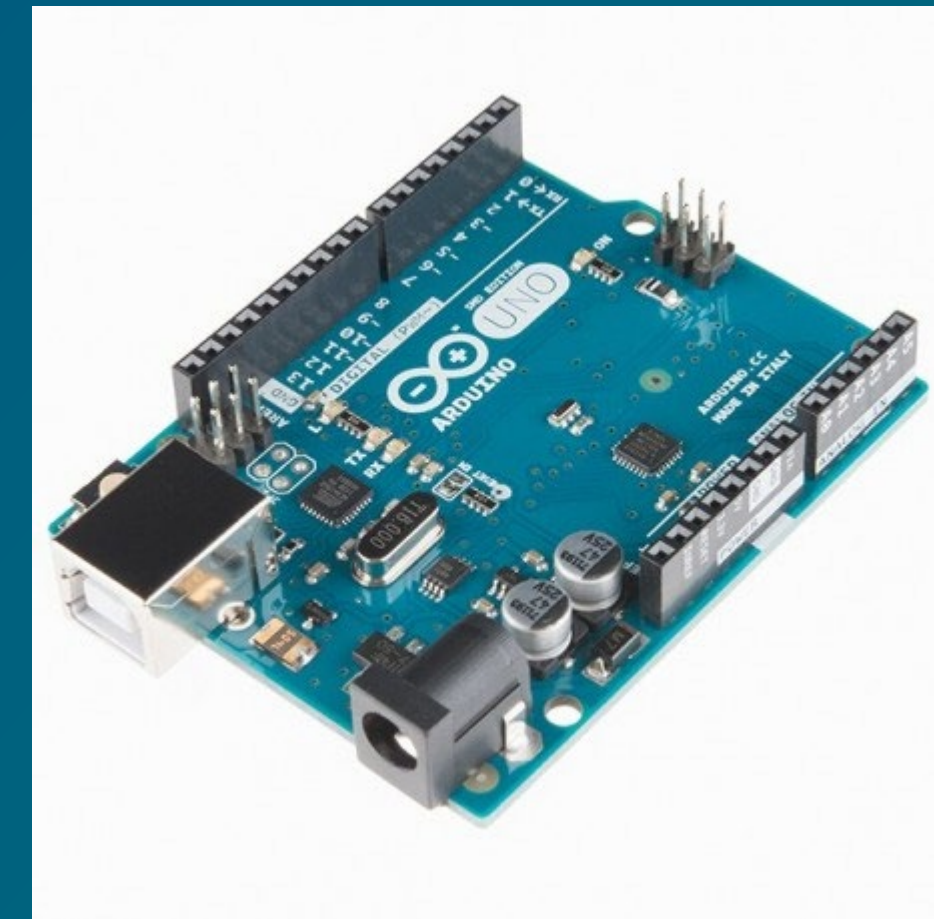
LIGHT COMMUNICATION PROTOCOL

The AR22 protocol must be implemented when an operational team needs help to manufacture a light communication device.

Hardware: the support team must use the standard Arduino kit.

Objective: to provide the operational team with a simple and robust protocol for communicating with light. The device must be able to emit a signal and pick up a response. Other constraints may be issued by the operational team.

Criteria: the devices must be as reliable as possible.



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The support team will follow a "competition mode" procedure working in multiple teams:

1. Each team designs a protection system and tests it to improve it as much as possible. It must also produce a user manual for the operational team.
2. An official test of the devices is then organised. All devices must be tested in real conditions: a message of 3 letters is given which must be sent and detected correctly.
3. The support team chooses the most reliable device and its instructions are sent to the operational team.

